CITY OF COLUMBIA

TENNESSEE

AGENDA

The Columbia Municipal Planning Commission will meet on Wednesday, December 11, 2024 at 4:00 PM in Council Chambers in the basement of City Hall, 700 N. Garden Street. The Planning Commission will consider the following:

I. Organization

1. Call to Order
2. Roll Call
3. Welcome of Visitors/Rules of Conduct
4. Acknowledgement of Official Communications of the Columbia City Council on Annexation and Zoning.
5. Approval of Minutes
6. Review of Bonds and Letters of Credit

II. Consent

1. Request from Allen O'Leary for Final Plat approval for a revision of three (3) lots in Wellington Section 2 on Rugby Court at Tax Map 101F Group K Parcels 68-70.
2. Request from Abigail Overstreet for Final Plat approval with surety in the amount of $370,000 for Hillcrest Village Phase 2 consisting of 24 lots on 6.308 acres being a portion of property at Tax Map 113 Parcel 80.54 off Morrow Lane.
3. Request from M2 Group, LLC for Final Plat approval with surety in the amount of $455,000 for Hampshire Hills Subdivision located off Hampshire Pike, being a portion of Tax Map 89P Group A Parcel 15, and consisting of 43 lots, four (4) open spaces with dedication of right-of-way and easements.

III. Discussion Items

1. Request from Greg Gamble to Rezone property at Tax Map 90 Parcel 7.12, being a five acre tract at River Road and Taylor Bend, from PUD (Planned Unit Development) to CD-5 (Urban Center Character District) with revocation of the Water's Edge at Taylor Bend PUD.
   THIS ITEM WAS DEFERRED FROM A PREVIOUS AGENDA.

2. Request from Allen O'Leary for Preliminary and Final Plat approval for a commercial three lot subdivision at Tax Map 89 Parcel 41.14 off N. James M. Campbell Blvd.
   THIS ITEM WAS DEFERRED FROM A PREVIOUS AGENDA.

3. Request from Crunk Engineering LLC for Annexation with a Plan of Services of a 98.34 ft. distance of right-of-way along Greens Mill Road and a 0.07 acre portion of Tax Map 51 Parcel 34.03 at 2622 Poplar Knoll Drive and Lot 1 of The Landings at Greens Mill.

4. Request from Crunk Engineering, LLC for Final Plat approval with surety in the amount of $440,000 for The Landings at Greens Mill PUD Subdivision Phase 1B located off Greens Mill Road and consisting of 40 lots, one open space, and including right-of-way dedication and easements on 10.50 acres at Tax Map 51 Parcel 55.

5. Request from Crunk Engineering, LLC for Final Plat approval with surety in the amount of $330,000 for The Landings at Greens Mill PUD Subdivision Phase 1C located off Greens Mill Road and consisting of 27 lots, right-of-way and easements on a 6.67 acre portion of Tax Map 51 Parcel 55.

6. Request from Jon Clark for Alternative Compliance Architectural Design Review approval at 2904 Cayce Lane, being Tax Map 112 Parcel 4.04.

7. Request from T-Square Engineering for Final Plat approval with surety in the amount of $375,000 for Carter's Station West Phase 3 consisting of 60 lots on a 14.88 acre portion of Tax Map 41 Parcel 15.05 off Fellowship Road.

8. Request from Allison Corolla for Preliminary and Final plat approval at 1400 Hampshire Pike, being Tax Map 88M Group B Parcels 7 and 7.01.

9. Request from Julia Lannon for Preliminary Plat approval of a three (3) lot subdivision known as Columbia Commons at 115 S. James M. Campbell Blvd, being Tax Map 113E Group B Parcel 4.

IV. Other Business

1. Election of Officers for 2025

V. Adjourn

The Planning Commission of the City of Columbia welcomes your presence and participation at this meeting. If you wish to address the Commission regarding any item on the Agenda, please sign the sign-up sheet and indicate which agenda item you would like to comment on. You will have the opportunity to comment on an item when it comes up on the Agenda and before the Commission votes on the item. Once recognized, you may then come to the podium and state your name and address. Anyone requesting accommodation due to disabilities should contact the ADA Coordinator, Wanda McClain, at 931-560-1570 prior to the meeting. For other questions, please contact the Department of Development Services at 931-560-1560.

Organization

Item I.1. - **Call to Order**

Chairman Charlie Goatz called the November Planning Commission Meeting for the City of Columbia to order at 4:00 P.M. The meeting was held in Council Chambers at City Hall.

Item I.2. - **Roll Call**

Planning Commission Chairman Charlie Goatz; Planning Commission Member Councilman Danny Coleman; Planning Commission Member Dr. Christa Martin; Planning Commission Member Mayor Chaz Molder; Planning Commission Member James Shannon; Planning Commission Member James Sloan; Planning Commission Member Nancy Williams.

Other Attendees: Mr. Robert Archibald, Planner II; Mr. Austin Brass, Principal Planner; Mr. Glenn Harper, City Engineer; Mr. Paul Keltner, Director of Development Services; Mr. Tony Massey, City Manager; Mr. Kevin McCarthy, City Planner; Mrs. Sandra Richardson, Recording Secretary; Mrs. Melissa Sanders, Planner I; Mr. Douglas Toney, Assistant City Engineer.

Item I.3. - **Welcome of Visitors/Rules of Conduct**

Chairman Charlie Goatz welcomed guests and applicants to the meeting. The Chairman discussed the meeting order and the process for speakers to be heard.

Item I.4. - **Acknowledgement of Official Communications of the Columbia City Council on Annexation and Zoning.**

Mr. Paul Keltner, Director of Development Services, gave the details of the Official Communications of the Columbia City Council on Annexation and Zoning.

Item I.5. - **Approval of Minutes**

Mayor Molder moved to approve the October 2024 minutes, and Dr. Martin second. The motion to approve the minutes passed six to zero, with all members present voting aye.

Item I.6. - **Review of Bonds and Letters of Credit**

Mr. Glenn Harper, City Engineer, stated that all Letters of Credit were in order, or in the process of being updated.

Consent

Item II.1. - **Request from Michael Williams for Final Plat approval with surety for Heritage Village Subdivision consisting of 1.67 acres at Santa Fe Pike and River Heights Drive, being Tax Map 89E Group B Parcels 17-20.**

Chairman Goatz read the consent item. Mr. Goatz moved to approve and Mayor Molder second. The motion to approve passed six to zero.

Discussion Items

Item III.1. - **Request from Steven Saenz for Alternative Compliance approval for property at 115 S. James M. Campbell Blvd., being Tax Map 113E Group B Parcel 4 regarding architectural design standards listed in Table 4.3.1.E of the Zoning Ordinance.**
THIS ITEM WAS DEFERRED FROM A PREVIOUS AGENDA

Mr. Brass gave the details of the staff report. Mr. Brass stated that at the last meeting there was a discussion about the use of EFIS as the primary material. The applicant has revised his elevations to show where there was EFIS, it will be brick, which is an approved material. Therefore, they will not be seeking alternative compliance. However, they are still seeking alternative compliance for the glazing.
Mr. Steven Saenz was present to answer questions. The discussion included glass, staff approval for variances, concerns, better elevated product, glazing, deviations, and internal approvals. Mayor Molder moved to approve subject to technical comments, and Dr. Martin second. The motion to approve passed seven to zero. Mr. Goatz stated for the record that Mr. Coleman is present.

Item III.2. - **Request from Allen O'Leary for Preliminary and Final Plat approval with surety for a commercial three lot subdivision at Tax Map 89 Parcel 41.14 off N. James M. Campbell Blvd.**
THIS ITEM WAS DEFERRED FROM A PREVIOUS AGENDA.

THE APPLICANT IS REQUESTING DEFERRAL.

Mr. Keltner stated that the applicant had requested a deferral. Mr. Goatz moved to defer, and Mr. Shannon second the motion. The motion to defer passed seven to zero.

Item III.3. - **Request from Jim Gilliam for Site Development Plan approval at 1224 Trotwood Avenue, being Tax Map 100J Group D Parcel 37.**

Mr. Brass presented the details of the staff report. There will be a new entrance, with a monument sign. He discussed the new parking lot in the front entrance, and ADA compliance. Mr. Jim Gilliam, Architect was present to answer questions. The discussion included the new entrance, site plan improvements, access flow, traffic perspective, the significant improvements, sidewalks, internal landscape island, and trees. Mr. Jim Gilliam stated that the goal is to add as much parking space as they can, and they definitely want to save the trees. Mr. Gilliam stated that there are four large oak trees along Trotwood Avenue, and they have made the islands larger. They are waiting to get

the comments back from the traffic study. He also stated that traffic signals, pedestrian walks, ramps, and signals are their desire. Mayor Molder stated on the advice of the City Attorney he would recuse himself. Mayor Molder asked about the approval process for a state route. Mr. Harper gave the details. Additional discussion included alternative compliance, alternative performance, if granted stating a reason that makes this request exceptional to grant, 8.5.6.J, and page 9. Mr. Sloan stated that accessible parking spots being adjacent to an entrance is very important, and grass is easier to grow than a tree. Mr. Goatz stated that with the improvements that are being proposed here, you can understand the need for ADA accessibility in front of the hospital, and the improvements will meet the criteria for a motion to be approved under those guidelines. Mr. Brass asked if that would be a motion to approve the interior island and the ADA parking. Mr. Goatz stated yes. Mr. Goatz moved to approve, and the second was by Councilman Coleman. Dr. Martin stated that she is not on the Board of Directors, but she is on the Foundation. She is a non-voting ambassador, and she plans to vote tonight. The motion passed six to zero and Mayor Molder abstained.

Item III.4. - **Request from Greg Gamble to Rezone property at Tax Map 90 Parcel 7.12, being a five acre tract at River Road and Taylor Bend, from PUD (Planned Unit Development) to CD-5 (Urban Center Character District) with revocation of the Water's Edge at Taylor Bend PUD.**

Mr. Goatz stated that the applicant has requested to defer that there has been an HOA change from developer to HOA, and he is planning to set up a meeting with the HOA and the members of the neighborhood. He did tell the Commission that he plans to make himself available outside the Chamber Council room for everybody here today to acknowledge. He stated give him your contact information and he could schedule a meeting. Based on the applicant's request, Mr. Goatz moved to defer. There was a second by Mr. Shannon. Mayor Molder stated that it seems like an opportunity to capture an audience that is available and ready to talk about this, and he would encourage this to occur. Mr. Goatz stated that the audience has another opportunity to come back to the next meeting to be heard in addition. The motion to defer passed seven to zero. Mr. McCarthy stated that this would have been his last staff report if it wasn't a deferral request, Mr. Keltner will be the designated staff representative moving forward with this request. Mr. Goatz asked Mr. Keltner to make sure Mr. Gamble is aware of the change. Mr. Keltner stated that he will get with Mr. Gamble.

Item III.5. - **Request from Gray Harrison for Preliminary PUD Master Plan approval for Honey Farms Subdivision consisting of 174 townhome lots and 9 open space lots at Tax Map 51 Parcel 58 off Honey Farm Way.**

THIS ITEM WAS REFERRED FROM CITY COUNCIL.

Mr. Brass gave the details of the staff report. He discussed the deviations and changes being made. Mr. Josh Rowland was present to answer questions. He gave a detailed presentation. The discussion included the alley way, the ordinance, fire accessibility,

setting a precedence for future developers, and meeting the fire code requirements. Mr. Keltner discussed engineering standards and allies. Additional discussion included sprinkles, more units, two different allies, the fire sprinklers are not required, utilities, fire trucks, hardship, not having an alley becoming a major road, not fronting the thoroughfare, providing the minimal width, not asking for variances, and trying to meet the intent of the ordinances. Mr. Rowland addressed the PUD alley deviation. Mayor Molder addressed the retaining wall and the reducing of the request for variance there. He also discussed the process of when changes are being made that is how the Commission and applicant are back here today. He asked what it is entitled to today so he could figure out the variance being requested, and he could justify it.

Further discussion included vested right, variance request, density, and the traffic light. Councilman Coleman inquired about conforming to the rules. Mr. Keltner discussed PUDs, density, and the general layout of it. He also stated that the Commission and staff have not seen the final plan yet. Councilman Coleman discussed conformity, a reworked plan, and the civic space. Mr. Rowland addressed the concerns, and stated that they had consulted a land use attorney, and they are submitting a letter to the City attorney. Mr. Keltner discussed the details of the PUD, and the finer points that the Commission is looking for. Chairman Goatz stated that the Commission needs to stay focused on what is presented today to decide upon, and not what could be. Mayor Molder inquired about wastewater. Mr. Keltner discussed sewer availability. Mayor Molder asked if this would affect the property across the street, and if this property would be able to tap into the pump station. Mr. Ryan Filipkowski, Wastewater Engineer, stated that it would not affect them, and he addressed the issue, and the availability letter. Further discussion included specific upgrade requirements, the pump station plan, Rutherford Creek, they will not go by the former PUD, satisfying capacity, there are two Honey Farm pump stations, the pump flow, TDEC approval, and enough capacity. Mr. Goatz asked Mr. Roland if they had looked at the direction of trying to eliminate some of the variances. Mr. Rowland stated that the retaining wall is not something that they could eliminate. The setback was one they felt was more appropriate to the scale. He also discussed the PUD-R standard and its rationale. Mr. Rowland discussed a few points about the sewer. Councilman Coleman asked Mr. Rowland to speak to the civic space. Mr. Rowland stated that they are right above the required five percent. Additional discussion included walking trails, driveways behind the unit, porches, pedestrian features, pavilion and playground area, open spaces, single driveway, people parking illegally in the alley, two car driveways, and green space between the driveways. Mr. Keltner offered a suggestion on the northern part to remove those units, and it would increase the green space. He further discussed that it would reduce the exceptions for the entire alley, it would increase the green space, and now the Commission would be just looking at the exception for the lower one. You could justify the fact that Fire would be fighting fires driving from Honey Farm Way, and now firefighters would have a reason to enter the alley, seeing that they would have a way to the back to service that set of units, and the Honey Farm Way. It opens up more green space, and it gives a reason why to adapt a new standard to the alley section. It is unique to this site and may not be applied to other sites. Councilman Coleman stated breaking

it up like Mr. Keltner stated would make a significant difference to him. Mr. Rowland stated that he wasn't authorized to approve a reduction in units, and he didn't know if removing the units would improve the quality of what they were looking at. He didn't see a qualifying benefit. Mr. Keltner stated that he was trying to reduce the exception on the part that there was no hardship. It was a want. He stated the other one is a hardship. Mr. Roland further discussed their proposal. Mr. Drew Smith discussed their hardships, and the waterline connectivity requirements. Mr. Keltner discussed the exceptions. Mr. Goatz moved to deny based on 8.5.21b. What's presented today does not conform to all the applicable standards of the Ordinance. Councilman Coleman gave the second. The motion to deny passed seven to zero. Mr. McCarthy discussed for point of clarification the vested right status, administrative determination, and current entitlement.

Other Business

Mr. McCarthy stated that the special Zoning Text meeting will be December 4th at 4:00 p.m. in Council Chambers.
Mr. Goatz pointed out that he noticed that in the Water Availability Letters, the Water department is promising water in phases now. This is concerning to him. The Commission may need to have a representative from the water department to come and discuss the issues.
Mayor Molder suggested reaching out and scheduling a meeting with Mr. Hardin.
Infrastructure updates. (State of Utilities).
Mayor Molder inquired about the Zoning Text meeting.
Mr. McCarthy stated that information would be drafted for the Commission to vote on.
Bethany Torino, 700 Baker Rd, Columbia, expressed concerns about homelessness, affordable housing, and campaign donation fliers.
Mr. Sloan will not be here on December 4th. He suggested a topic for a future meeting would be discussing elevations and high glazing, shopfront glazing, better definitions, calculations, and using more perimeters.
Mr. Brass gave clarifications.
Mr. Sloan stated looking at the understanding of the use driving the amount of glazing across the board, and how that glazing is calculated by the percentage.

Adjourn

With no further business to discuss Mayor Molder moved to adjourn, and Councilman Coleman seconded. The motion to adjourn passed seven to zero.

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Planning Commission Chairman, Charlie Goatz

Date

Organization

Item I.1. - **Call to Order**

Vice-Chairman Councliman Coleman called the December 4th, Special Meeting Session for the City of Columbia to order at 4:00 p.m. The meeting was held in Council Chambers at City Hall.

Item I.2. - **Roll Call**

Planning Commission Vice Chairman Danny Coleman; Planning Commission Member Dr. Christa Martin; Planning Commission Member Mayor Chaz Molder; Planning Commission Member James Shannon; Planning Commission Member James Sloan; Planning Commission Member Nancy Williams.

Absent Was: Planning Commission Member Charlie Goatz

Other Attendees: Mr. Robert Archibald, Planner II; Mr. Austin Brass, Principal Planner; Mr. Paul Keltner, Director of Development Services; Mr. Tony Massey, City Manager; Mr. Kevin McCarthy, City Planner; Kellye Murphy, Tourism Director; Mrs. Melissa Sanders, Planner I.

Item I.3. - **Welcome of Visitors/Rules of Conduct**

Vice Chairman Danny Coleman welcomed guests to the meeting. The Vice Chair discussed the meeting order and the process for speakers to be heard.

Discussion Items

Item II.1. - **Request from Development Services for review and recommendation of Zoning Text Amendments concerning Principal Uses, Accessory Uses, Temporary Uses, and Limited Use Standards contained in Article 4.**

Mayor Molder inquired about the voting process for the four items being heard under discussion item number one. Mr. McCarthy explained the process, and stated that there would be one vote on the item being presented.

Sub Item Number One.
Mr. McCarthy presented the details of the items for discussion and the text amendment process, important concepts, and the required criteria for review. First for consideration is the Home Occupation Permit process. He stated that currently, there is no allowance for employees or customers to come to the residential site. The proposal is for the Home Occupations to be divided into two separate use categories, Major and Minor. The Minor HOC process would stay the same and be reviewed administratively. If the HOC is determined to be major, then the request would move forward to the Board of Zoning

Appeals. Dr. Martin asked about the definition of Home Occupation in Article 9.3. Mr. McCarthy discussed the details of the definition. Mayor Molder asked about Professional Office and Beauty/Barber Shop uses. Mr. McCarthy addressed the question. The discussion included the BZA setting conditions and reviewing properties individually. Councilman Coleman asked about enforcement and current home-based businesses. Mr. McCarthy gave the clarification. Dr. Martin asked about the allowance of revocation and the notification to the business process. Mr. McCarthy explained the process and stated that a letter would be issued and non-compliance would result in revocation. Dr. Martin inquired about the location of the language. Mr. Keltner stated Line 79 reflected the language that was being discussed. Mayor Molder discussed BZA. Vice Chairman Coleman stated that this is a great step forward.

Sub Item Number Two.
The Commission reviewed the amendment concerning *Bars, Taverns, and Nightclubs*. Mr. McCarthy presented the current ordinance regulation and the proposed amendment. Dr. Martin asked about existing bars, taverns, and nightclubs in relation to the distance requirements. Mr. McCarthy replied that current establishments would not be affected by new religious facilities being established. This would affect new businesses. He reviewed all the regulations being proposed for this use. He brought attention to the two differently defined terms, Abutting and Adjacent. Commissioner Williams asked about the distance proximity a bar could be in relation to a residence. Mr. McCarthy discussed distances in relation to property lines and not structures. Mayor Molder stated that perhaps Adjacent could be the better place to start with the regulation and then follow with any needed modification. The discussion continued on distances, residential, adjoining, adjacent, abutting, one-way streets, traffic and parking. Coucilman Coleman asked Commissioner Shannon his opinion and reflection on his prior experience with the Police Department. Mr. McCarthy suggested that the Commission could modify the suggested amendment to specifically call out the Columbia arts district overlay area as an exception. Dr. Martin asked for clarification. Mayor Molder asked if the Arts Overlay could have a reduction in the distance requirement to 200'. The Mayor also recommended the term of Adjoining rather than Abutting. Mr. McCarthy asked if Line 22 remains as a strike-through recommendation. He also asked about Lines 8-19 that the distance of 200' be input. Additional discussion included fewer restrictions in the arts district, affordability, and keeping things central to downtown.

Sub Item Number Three.
Moving on to sub-item three for recommendation, which is the use category of *Vape, Tobacco & Cannabinoid Retailers*. Mr. McCarthy stated that staff reviewed several other jurisdictions and landed closely following the current regulations found in the Murfreesboro, TN Zoning Code. The suggested edits include distance separation between uses, zones and other establishments. The distance being 500'. Mayor Molder stated he would like to separate out other establishments and recommend 1,000 ft. distance minimum, thus keeping Section 1 and adding a new section with the 1,000

feet. Dr. Martin stated she agreed. Mr. McCarthy pointed out the current standards.

Sub Item Number Four.
The last sub-item is concerning Short Term Rental uses. Mr. McCarthy gave the details of the draft that was presented. He also discussed the permitting process. Additional discussion included, BZA the major Home Occupations, conditional use approval annual permits, the permit fee being $300.00, everything line up in the use table, cost recovery, reaching a limit, being effective, the monitoring process, possible new dedicated position, and public input.

Mr. David Eslinger thanked the Commission for addressing the issue. He asked that staff would handle the permitting process, he asked that the fee be for two years, and he asked that there be a least restrictive approach. Mayor Molder asked if there is any other restrictions that could be added to prevent the permits being sent to the BZA. He expressed concerns about over burdening the BZA. Mr. McCarthy explained the zoning districts and the CD-3 being exclusively single-family. Director Keltner explained more of the conditional use and regulations that could be placed on the property, and the BZA process.
Autumn Potter expressed concerns about increased crime and reduction of affordable living and segregation. She also expressed concerns about the Historic Guidelines and privacy. Mayor Molder spoke to her concern about privacy issues and the BZA placing an additional requirement on the STR applicant. He would also like to hear more about potential crime implications for surrounding areas. Mr. Keltner addressed the process. Ms. Seago and Ms. Roberts did not speak when called upon. Ms. Rachel Lentz wanted to speak about crime, the high standards on the STR platforms, would it have to be on a platform to avoid burden on staff and vet out hosts, the checklist that BZA would be using, the confusion the public may have in reviewing the requirements, violations of language on Page 18 number 7, and the fees. Mr. Jimmy Duger, Chairperson of BZA, asked about grandfathering, advertising deadlines, timeline, excessive requests from applicants, and applicants that may lose revenue. Mr. Keltner addressed the questions, and following the processes. Mayor Molder addressed legality. Mayor Molder followed up on Ms. Potter's concern about crime and notification.
Mayor Molder moved to approve Item one Home Occupations as recommended by staff. He moved to approve Bars, Taverns & Nightclubs Standards with the modifications to include, in addition to what staff has provided, that we allow for the Arts District Overlay to have a 200-foot minimum requirement and the special exception and everything else would remain the same. We would use the term adjoining not abutting with respect to bars, taverns, and nightclubs being located in a lot adjoining any of the residential lots being broader there, as opposed to being less broad. With respect to vape, tobacco & cannabinoids, he recommends to approve subject to one modification, adding the requirement that there is a 1,000 feet minimum distance required between the other existing tobacco, vape, & cannabinoid retailers. He does want schools and public parks to remain in place there, in the 500 limits, adding 1000 feet being located to a similar facility. He stated that he would like to have more discussion where the Commission can

recommend approval of the short-term rentals for Columbia as presented by staff. This is his motion. Dr. Martin seconded. Discussion included platform, regulations, renting, authority to regulate the use, collecting lodging tax, self reporting, and it will be online. Mayor Molder modified his motion to make the $150.00 fee for staff approval versus $300.00 for BZA approval. Dr. Martin seconded. Dr. Martin discussed the process and modifications at City Council. The amended motion to approve with conditions passed six to zero.

Item II.1. - **Home Occupations**
Map of Current Home Occupation Permits

Item II.1. - **Bars, Taverns & Nightclubs**
Map Illustrating Current Standards

Item II.1. - **Vape, Tobacco & Cannabinoid Retailers**

Item II.1. - **Short Term Rentals**
Map Comparing Current and Proposed Standards

Item II.2. - **Request from Development Services for review and recommendation of Zoning Text Amendments concerning minor administrative changes and corrections throughout the document.**

Mr. McCarthy gave the details of the request. This request is to clean things up and changes on the garage door. Mr. Shannon moved to approve, and Mayor Molder seconded. The motion to approve passed six to zero.

Adjourn

The Commission thanked Mr. McCarthy for his services, and stated that he is leaving Columbia better.
With no further business to discuss, Mr. Shannon moved to adjourn, and Mayor Molder seconded. The motion to adjourn passed six to zero. The meeting adjourned at 5:52 p.m.

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Planning Commission Chairman, Charlie Goatz

Date

Active Letters of Credit and Sureties

11/19/2024

DEVELOPMENT/SUBDIVISION	DEVELOPER	AMOUNT	EXP. DATE
Arlington Heights Subdivision, Phase 1, Section 2	Arlington Heights General Partnership	$106,000.00	05/09/2021
Arlington Heights Subdivision, Phase 2, Section 2	Arlington Heights General Partnership	$105,000.00	04/25/2021
Armstrong Meadow, Phase 1, Section 3 (roadsd/drainage)	General Homes of Columbia, LLC	$203,500.00	05/05/2019
Armstrong Meadows Subdivision, Section 4	Smith Douglas, LLC	$475,000.00	02/01/2023
Armstrong Street Subdivision (roads & drainage)	Tennessee Regional Holdings, LLC	$75,500.00	05/14/2023
Baker Creek Place (roads & drainage)	SDH Nashville, LLC	$360,000.00	04/28/2024
Bear Creek Glen, Phase 1 (roads and drainage)	CHR Land, LLC	$90,000.00	07/18/2025
Bear Creek Overlook Place Phase 1 (roads and drainage)	CHR Land, LLC	$203,000.00	07/18/2025
Bear Creek Overlook, Ph. 2	CHR Land, LLC	$120,000.00	06/12/2025
Colter Place Subidivison, Section 1 (rds/drainage)	Sterling Martin	$5,000.00	06/13/2025
Cottages at Bear Creek , Phase 1 (roads & drainage)	Riverstone Homes, LLC	$165,000.00	07/19/2022
Cottages at Bear Creek , Phase II (roads & drainage)	Riverstone Homes, LLC	$156,000.00	03/18/2023
Drumwright Phase 3A	Lennar Homes of Tenn, LLC	$135,000.00	11/22/2024
Drumwright Phase 3B	Lennar Homes of Tenn, LLC	$120,000.00	11/22/2024
Drumwright Phase 3C	Lennar Homes of Tenn, LLC	$190,000.00	11/22/2024
Drumwright TH, Phase 2D	Lennar Homes of Tenn, LLC	$265,000.00	05/23/2024
Drumwright, Phase 1 Family Section (roads & drainage)	Lennar Homes of Tenn, LLC	$890,000.00	08/11/2023
Drumwright, Phase 1 Townhomes Section (roads & drainage)	Lennar Homes of Tenn, LLC	$275,000.00	08/11/2023
Drumwright, Phase 2A	Lennar Homes of Tenn, LLC	$200,000.00	05/23/2024
Drumwright, Phase 2B	Lennar Homes of Tenn, LLC	$125,000.00	05/23/2024
Drumwright, Phase 2C	Lennar Homes of Tenn, LLC	$125,000.00	05/23/2024
Elan Subdivision, Phase 2 (roads and drainage)	Shaw Enterprises	$142,000.00	01/04/2022
Fieldstone Farms - Section 4 (roads & drainage)	Estate of Cyril Evers	$21,000.00	03/13/2022
Greystone Subdivision	LPT, LLC	$16,650.00	03/07/2021
Hatton Hills Subdivision (roads & drainage)	J & B Estate	$32,000.00	03/22/2022
Hillcrest Village, Phase 1A	M/I Homes of Nashville, LLC	$645,000.00	01/19/2025
Hillcrest Village, Phase 2	M/I Homes of Nashville, LLC	$370,000.00	07/16/2025
Homestead at Carter's Station, 5.2 and 6.1	Pulte Homes Tennessee Partnership	$254,000.00	04/16/2022
Homestead at Carters Station, Section 5, Phase 2	Pulte Homes Tennessee Partnership	$149,000.00	07/29/2023
Homestead South @ Carter's Station	Pulte Homes Tennessee Partnership	$125,000.00	07/13/2024
Honey Farms Subdivision, Phase 2, Section 10	Charles Raines Construction, LLC	$10,300.00	05/23/2020
Honey Farms Townhomes , Phase 2, Section 3	Lennar Homes of Tenn, LLC	$50,000.00	04/05/2022
Honey Lakes, Phase 1	Honey Lakes LLC	$295,000.00	07/18/2025
Horizon Park, Ph. 1	Burchell Properties, LLC	$195,000.00	03/01/2025
Independence @ Carter's Station, Section 3, Phase 4	Pulte Homes Tennessee Partnership	$140,000.00	07/13/2024
Independence @ Carter's Station, Section 3, Phase 5	Pulte Homes Tennessee Partnership	$35,000.00	07/19/2024
Independence @ Carter's Station, Section 6, Phase 4	Pulte Homes Tennessee Partnership	$160,000.00	07/13/2024
Independence @Carter's Station, Section 3, Phase 1	Pulte Homes Tennessee Partnership	$390,000.00	09/15/2021
Independence at Carters Section 3, Phase 3	Pulte Homes Tennessee Partnership	$155,000.00	08/05/2024
Independence at Carters Station Section6, Phase 3	Pulte Homes Tennessee Partnership	$197,000.00	07/14/2023
Independence at Carter's Station, Section 3, Phase 2	Pulte Homes Tennessee Partnership	$372,000.00	12/06/2022
Independence at Carter's Station, Section 6, Phase 2	Pulte Homes Tennessee Partnership	$207,000.00	11/08/2022
Independence at Carter's Station, Section 6, Phase 5	Pulte Homes Tennessee Partnership	$220,000.00	05/01/2025
Morgan Meadow Phase 2 (roads & drainage)	KCS Property, LLC	$13,500.00	12/06/2024
Morgan Meadow Phase 3 (roads & drainage)	KCS Property, LLC	$220,000.00	02/28/2025
Morgan Meadows Subdivision (roads & drainage)	KCS Property, LLC	$24,200.00	07/14/2024
Polk Place , Phase 2B (roads & drainage)	Columbia Properties, LLC	$56,000.00	11/12/2022
Polk Place PUD Subdivision, Phase 1 (roads & drainage)	Columbia Properties, LLC	$28,000.00	05/23/2021
Polk Place PUD Subdivsion, Section 2A (roads & drainage)	Columbia Properties, LLC	$55,000.00	02/03/2022
Polk Place, Phase 3 , (roads and drainage)	Columbia Properties, LLC	$79,000.00	06/17/2023
Preserve at Drumwright, Phase 1 and Phase 2	Lennar Corporation	$1,190,000.00	11/14/2024
Quail Run Development Phase 1 (roads & drainage)	Quail Run Development Co., LLC	$15,700.00	01/04/2025
Quail Run Development, Phase 1B (roads and drainage)	Quail Run Development Co., LLC	$18,500.00	02/21/2025
Quail Run Development, Phase 2 (roads and drainage)	Quail Run Development Co., LLC	$18,200.00	05/02/2025
Quail Run Meadows, Phase 3	Quail Run Development Co., LLC	$185,000.00	05/21/2025
Quail Run Meadows, Phase 4	Quail Run Development Co., LLC	$210,000.00	05/03/2025
Ridge at Carter's Station, Phase 1B (roads & drainage)	Richmond American Homes of Tenn	$260,000.00	03/31/2023
Ridge at Carter's Station, Phase 2 (roads & drainage)	Richmond American Homes of Tenn	$645,000.00	10/31/2024
Ridgeview Oaks, Phase 1 (roads and drainage)	A1 Home Builders, Inc.	$45,000.00	08/22/2025

Active Letters of Credit and Sureties

11/19/2024

DEVELOPMENT/SUBDIVISION	DEVELOPER	AMOUNT	EXP. DATE
Ridgeview Oaks, Phase 2 (roads and drainage)	A-1 Home Builders, Inc.	$33,500.00	02/28/2025
Rutherford Subdivision, Phase 1	Regent Homes, LLC	$400,000.00	12/21/2024
Savannah Cove Subdivision - roads/drainage	Campbell and Lovell Rentals	$45,000.00	09/28/2021
Summerdale Subdivision, Phase 2 (roads & drainage)	P & L Development, LLC	$105,000.00	05/29/2025
Summerdale Subdivision, Phase 3 (roads & drainage)	P & L Development	$97,000.00	12/22/2023
Summerdale Subdivision, Phase 3B (roads & drainage)	P & L Development, LLC	$17,000.00	01/27/2024
Summerdale Subdivision, Phase 4 (roads & drainage)	P & L Development	$64,000.00	03/08/2025
Summerdale Subdivision, Phase 5 (roads & drainage)	P & L Development, LLC	$55,000.00	10/12/2024
Summerdale Subdivision, Phase 6 (roads & drainage)	P & L Development, LLC	$103,000.00	02/07/2024
Summerdale Subdivision, Phase 7 (roads & drainage)	P & L Development, LLC	$66,000.00	03/08/2025
Summerdale, Phase 1 (roads & drainage)	P & L Development	$135,000.00	11/13/2024
Summit at Carter's Station Phase 1 (roads & drainage)	Tamarack Land - Carter's Station LLC	$465,000.00	03/17/2024
Summit at Carter's Station Phase 2	Tamarack Land - Carter's Station LLC	$175,000.00	06/14/2024
Summit at Carter's Station West, Phase 1	Pulte Homes Tennessee Partnership	$120,000.00	10/06/2024
Summit at Carter's Station West, Phase 2	Pulte Homes Tennessee Partnership	$470,000.00	04/25/2025
Summit at Carter's Station,East_Phase 4	Tamarack Land Carters Station LLC	$260,000.00	06/12/2025
Summit West, Ph. 1B	Pulte Homes Tennessee Partnership	$435,000.00	04/25/2025
Taylor Bend Road - roads & drainage	Meritage Homes of Tenn., Inc.	$120,000.00	06/30/2025
Taylor Landing - Phase 2 (roads & drainage)	Meritage Homes of Tenn., Inc.	$18,800.00	04/30/2025
Taylor Landing Subdivision, Phase 4B, (roads & drainage)	Meritage Homes of Tenn., Inc.	$78,000.00	06/30/2025
Taylor Landing Subdivision, Phase 5A (roads & drainage)	Meritage Homes of Tenn., Inc.	$48,000.00	06/30/2025
Taylor Landing Subdivision, Phase 5B (roads & drainage)	Meritage Homes of Tenn., Inc.	$72,000.00	06/30/2025
Taylor Landing, Phase 4A (roads & drainage)	Meritage Homes of Tenn., Inc.	$12,100.00	11/30/2025
The Landings at Greens Mill_Phase 1A	First Bank	$1,040,000.00	03/11/2025
The Ridge at Carter's Station, Phase 1A	Richmond American Homes of Tenn	$121,000.00	12/03/2022
The Summit at Carter's Station, Phase 3 (East)	Tamarack Land-Carter's Station, LLC	$610,000.00	12/20/2024
Vesper Court (completion of the work)	P-R Vesper, LLC	$18,500.00	04/18/2023
Vesper Court (completion of the work) 2	P-R Vesper, LLC	$10,000.00	06/16/2024
Vulcan Quary Site Restoration	Vulcan Construction Materials, LLC	$62,000.00	03/01/2024
Williamsport Landing, Phase 1	KCS Property LLC	$310,000.00	08/17/2024
Williamsport Landing, Phase 2	KCS Property LLC	$290,000.00	05/17/2025
Honey Farms Townhomes, Phase 1A	K2 Development, LLC	$130,000.00	08/14/2025
Quail Run Meadows, Phase 5	Quail Run Development Co., LLC	$175,000.00	08/14/2025
Honey Farm Townhomes, Phase 1B	Lennar Homes of Tenn, LLC	$550,000.00	09/11/2025
Honey Farm Townhomes, Phase 1A	Lennar Homes of Tenn, LLC	$130,000.00	09/08/2025
Hampshire Hills	Cypress Homes, LLC	$455,000.00	10/16/2025
The Landings at Greens Mill_Phase 1C	2558 Green Mill, LLC	$330,000.00	11/04/2025
The Landings at Greens Mill_Phase 1B	2558 Greens Mill, LLC	$440,000.00	11/04/2025
Honey Farm Townhomes_Phase 3	Lennar Homes of Tenn, LLC	$300,000.00	10/21/2025

1608 Rugby Ct (Wellington Pl) Final Plat Revision

Project #:	24-0469	Location:	Map 101F K Parcel(s) 68/70
Applicant:	W-E-S Engineers & Surveyors	Case Type(s):	Final Plat Revision
Staff Planner:	Robert Archibald, Planner II	Proposed Use:	Single-Family

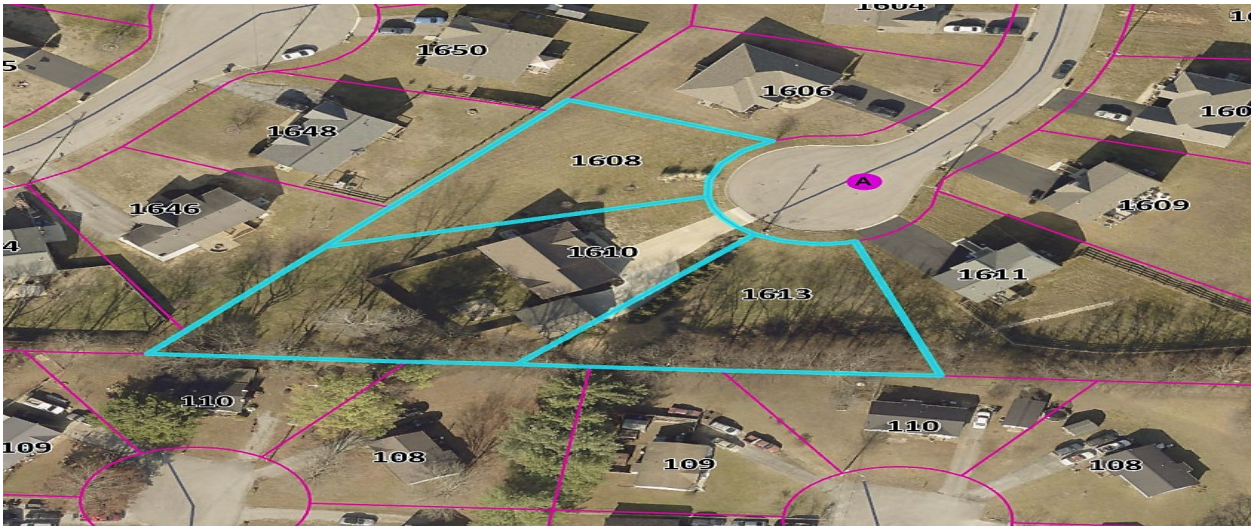
PROJECT SUMMARY

The applicant requests Final Plat approval to revise the common property lines between lots 103, 104, and 105 in Wellington Place Section 2 subdivision for the purpose of re-aligning the lots.

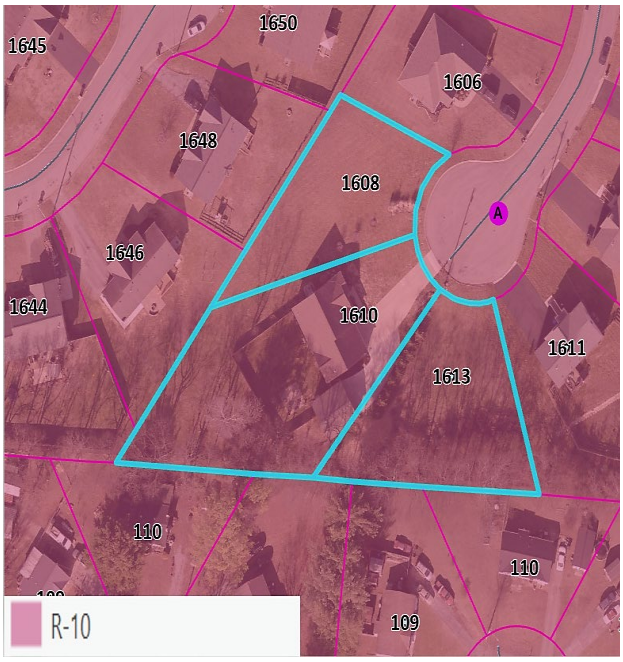
- The development is subject to Ordinance 1507, the pre-October 2006 zoning ordinance.
- The Final Plat revision conforms to the previously approved Final Plat recorded 7/6/2005.
- The property is subject to the Final Plat based and R-10 standards of the previous Zoning Ordinance.
- No surety was required.
- No development agreement was required.
- The applicant has provided a stormwater maintenance agreement.
- The Final Plat revision request conforms to Wellington Place Section 2 Final Plat, approved on July 6, 2005.
- The DRC reviewed this proposal at its November 2024 meeting. Staff review included standard comments and requests for technical corrections. Full technical comments are provided in the agenda packet.
- The Planning Commission is the **Decision-Making Authority** for the Final PUD Master Plan.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

SITE INFORMATION

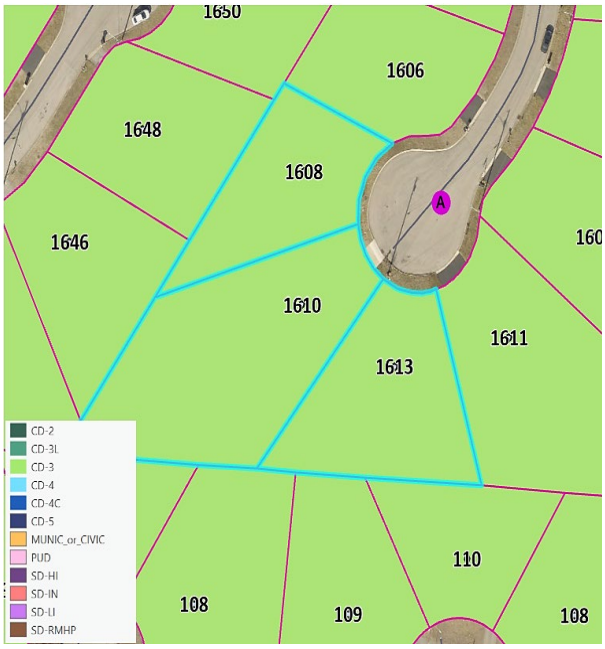
CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
CD-3	Single-Family	Lot Line Adjustment	+/-1.08 Acres



PREVIOUS ZONING MAP



ZONING MAP



SITE CONTEXT/ADJACENT PROPERTIES			
	Previous Land Use	Zoning	Current Use
Subject Property	R-10	CD-3	Single-family
North	R-10	CD-3	Single-family
South	R-10	CD-3	Single-family
East	RS-40/RS-20	CD-2/CD-3L	Single-family/Vacant
West	R-10	CD-3	Single-family

The subject site is part of the larger established development consisting of single-family construction and amenities associated with the development. The minor revision of lot lines on lots 103-105 will align the properties more uniformly and further protect future construction on lots 103 and 105 from encountering or causing encroachments on lot 104, which is already occupied with a single-family home. This requested revision will not reduce the required setbacks or lot size of the previously recorded plat. Staff is supportive of this request.

CONFORMITY WITH ZONING ORDINANCE

The proposed revisions conform to the Final Plat and the R-10 standards of the applicable zoning ordinance (1507).

- The proposed structures conform to the setbacks and other bulk standards of the Final Plat, recorded July 6, 2005.

REVIEW PROCESS

The Development Review Committee reviewed the proposed Final Plat at its November 2024 meeting, as directed by **§ 8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package and summarized above.

Section **§ 8.5.24** of the Zoning Ordinance directs the Planning Commission to review Subdivision Plats for conformity with the standards of the Ordinance and the City Subdivision Regulations. The Ordinance indicates that all Preliminary and Final Plats must be prepared, submitted, reviewed and acted upon in accordance with the Subdivision Regulations.

The Planning Commission is the Decision-Making Authority for Final Plats under **§ 8.3.3.B.1** of the Zoning Ordinance and **§ 2.3** of the Subdivision Regulations.
Section **§ 2.3.6** of the Subdivision Regulations establishes the review criteria for approval of Final Plats.

A. Recommendations and final action on a Final Plat shall be based on consideration of the following criteria:

1. Whether the proposed Final Plat complies with the applicable zoning district and overlay districts;

2. Whether the proposed Final Plat is consistent with all standards of the Subdivision Regulations and other related codes and ordinances enforced by the City; and

3. Whether the proposed Final Plat meets all the requirements or conditions of any applicable development approvals, such as development plans or associated modification of standards.

B. Final Plat approval shall be subject to the completion of required improvements, or in lieu, the CMPC may approve a Performance Agreement.

In the event of a denial, **§ 2.3.5** of the Subdivision Regulations requires the Planning Commission to identify the specific parts of applicable plans and regulations with which the plat does not comply.

SAMPLE MOTIONS

Approve:

Move to approve the Final Plat as presented and find that it conforms to the applicable zoning ordinance, the Subdivision Regulations, and the Preliminary Plat [subject to remaining technical comments from staff].

Approve with Conditions:

Move to approve the Final Plat as presented and find that the plat conforms to the applicable zoning ordinance, the Subdivision Regulations, and the Preliminary Plat, subject to the following conditions: [list conditions of approval crafted by Planning Commission].

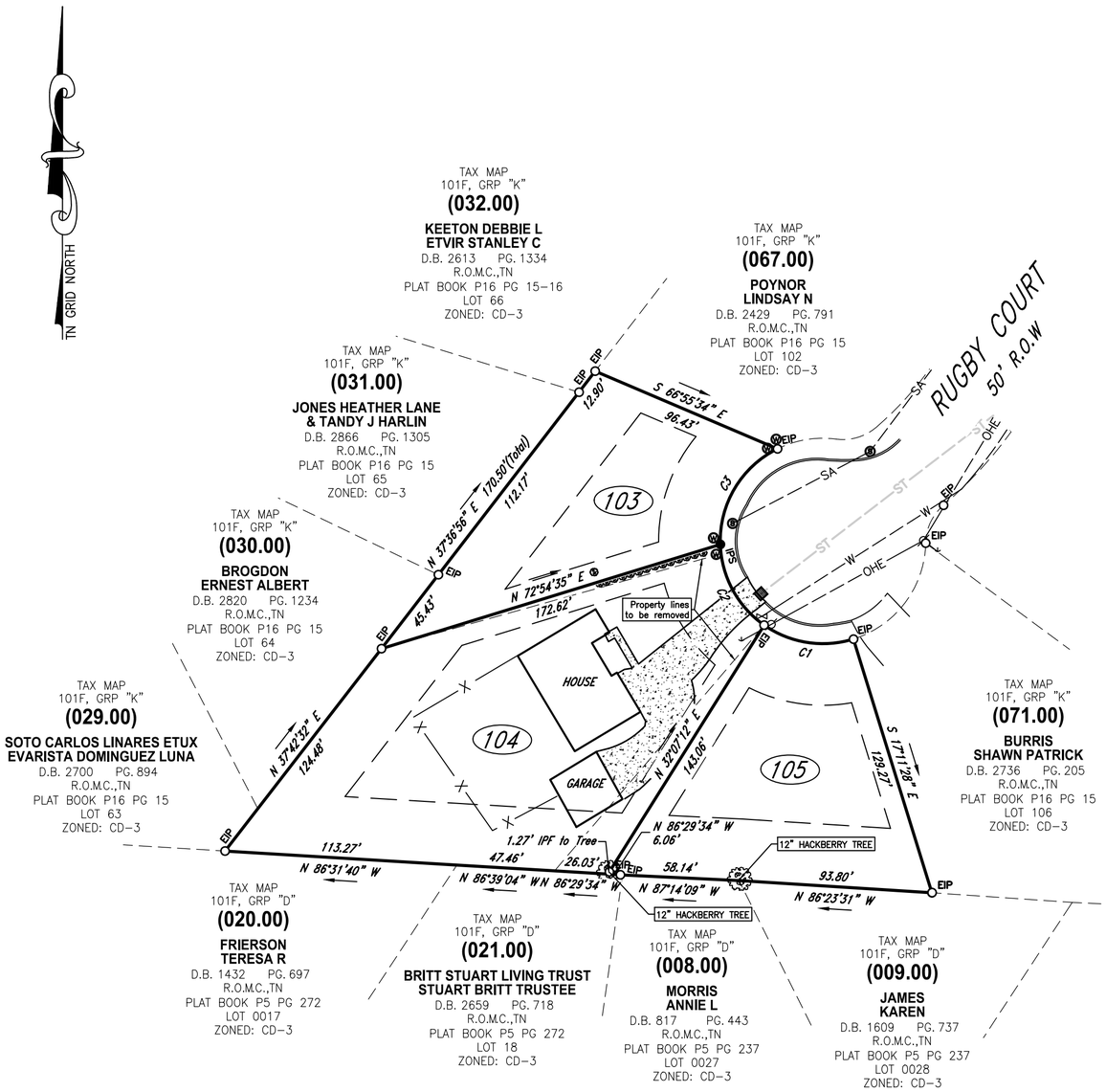
Defer for Continued Review:

Move to find that there is insufficient information to make a decision, defer the application for continued review, and request that the applicant provide: [list additional

information] for review at the next regularly scheduled meeting of the Planning Commission.

Deny:

Move to find that the Final Plat as presented does not conform to the applicable zoning ordinance, the Subdivision Regulations, or the approved Preliminary Plat, and deny the request due to [list specific deficiencies].



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Curve Table

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	50.00'	45.54'	43.98'	S 81°10'33" E	52°11'00"
C2	50.00'	46.34'	44.70'	N 28°31'57" W	53°06'11"
C3	50.00'	57.27'	54.19'	N 30°50'03" E	65°37'49"

Legend

- EIP Iron Rod Found
- IPS Iron Rod Set
- I.P.F. Iron Pipe Found
- AXLE Axle Found
- ECM Fence Post
- Concrete Monument Existing
- P.K.F. PK Nail Found
- P.K.S. PK Nail Set
- R.R.S..F Railroad Spike Found
- R.R.S.S. Railroad Spike Set
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Catch Basin
- Curb Inlet
- Storm Pipe
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Cable Riser
- Electric Riser
- Telephone Riser
- Telephone Booth
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Flag Pole
- Guy Wire
- Mailbox
- Parking Block
- Satellite Dish
- Handicap Parking
- Water Spigot
- Bollard
- Evergreen Tree
- Deciduous Tree
- Bush
- Sign

- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

PARCEL NUMBER:
TAX MAP 101F, GROUP "K", PARCEL 069.00

DEED BOOK:
R2852, PAGE 1487

PARCEL ADDRESS:
1610 RUGBY COURT

PROPERTY OWNER:
PAMELA L BRADLEY & RANDY GENE LOAGUE
1610 RUGBY COURT
COLUMBIA TN, 38401

PARCEL NUMBER:
TAX MAP 101F, GROUP "K", PARCEL 068.00 & 070.00

DEED BOOK:
R1459, PAGE 893

PARCEL ADDRESS:
1608 & 1613 RUGBY COURT

PROPERTY OWNER:
MCBROOM FAMILY PARTNERSHIP
943 RIVERVIEW LANE
COLUMBIA TN, 38401

RECORDED PLAT ZONING: R-10
CURRENT ZONING: CD-3

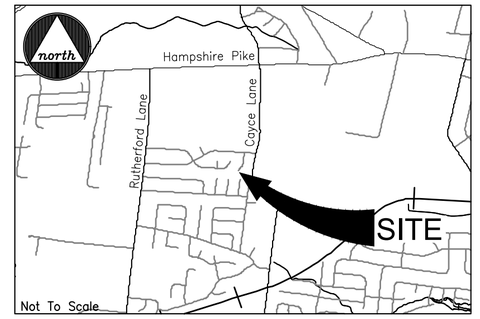
BUILDING SETBACKS (RECORDED PLAT):
FRONT – 30'
SIDE – 10'
REAR – 30'

ACREAGE OF PARCELS:
LOT 103 – ±0.25 ACRES – 10,798.2 S.F
LOT 104 – ±0.55 ACRES – 24,086.9 S.F.
LOT 105 – ±0.28 ACRES – 12,266.6 S.F.

Surveyor's Notes

1. All distances were measured with E.D.M. equipment and have been adjusted for temperature and pressure, portions of the survey were done utilizing a Carlson BRX7, utilizing Base and Rover.
2. The property (Boundary) Line Survey exceeds the minimum requirements of an Urban Land Survey Category IV as per Standards of Practice adopted by the State Board of Examiners for Land Surveyors for the State of Tennessee, and the precision of the unadjusted survey is greater than 1 foot in 10,000 feet.
3. Information concerning site utility services and appurtenances shown hereon is based on visible evidence noted during the survey, information provided by utility representatives or information shown on original construction plans by other. Information and location of service lines on site should be considered approximate and there may be underground utility lines that are not shown on the survey. Owner(s) and contractor(s) should assume responsibility of locating all underground utility service lines prior to any construction, excavation or any disturbance of the existing ground elevation to avoid hazard of unnecessary expense.
4. Information concerning major utilities or appurtenances shown hereon are based on visible evidence noted during the survey or information provided by utility representatives. Verification of existence, size, location, depth and availability of service should be confirmed by local utility agencies.
5. The property shown hereon is located within the City of Columbia, Maury County, TN. All matters pertaining to construction, use location of improvements, signage, parking, noise, vibration, emissions, fire hazards, radiation, illumination, setback provisions, etc., are subject to the City of Columbia's Zoning Regulation as interpreted and regulated by the Department of Development Services.
6. The area of the parcels are as shown hereon.
7. This property currently identified as Tax Map No. 101F, Group "K" Parcel No. 068.00, 069.00, & 070.00, Maury County. For designation shown thus ( ) indicates Parcel Numbers for said map.
8. Plat reference: P16, Page 15, Lots 103, 104, & 105.
9. Deed reference: Book R2852, Page 1487 & R1459, Page 893.
10. Bearings based on: Tennessee State Plane (NAD83).
11. This drawing was prepared in accordance with our field survey notes. It shows improvements as they exist to the best of our knowledge, but is not guaranteed to be correct in each and every detail.
12. This survey was prepared from current deeds of record and does not represent a title search or a guarantee of title, and is subject to any state of facts a current and accurate search may reveal.
13. This survey was prepared for the exclusive use of the person, persons, or entity, if any, named on the certification hereon. Said certificate does not extend to any unnamed person without an express re-certification by the surveyor naming said person.
14. The certification as provided on this survey, is purely a statement of professional opinion based on knowledge, information and belief, based on existing field evidence and documentary evidence provided by others.
15. The certification is not an expressed or implied warranty or guarantee.
16. This property is not located in a Special Flood Hazard Area as shown on F.E.M.A. Flood Insurance Rate Map, Community Panel No. 47119C0280E, dated April 16, 2007, and shown hereon graphically.
17. There is a 10' Public Utility and Drainage Easement along the front and rear property lines and 5' on all interior side property lines.

Location Map



©2024

PURPOSE NOTE:
The purpose of this plat is to revise the common property lines between lots 103, 104, and lots 104, 105.

DRIVEWAY NOTE:
All driveways shall be constructed to contain gutter flow within the street and right-of-way, particularly lots that do not have a sidewalk.

GENERAL NOTE:
The recording of this final plat voids, vacates, and superceded the previous plat of record in Plat Book 16, pages 15 and 16, for lots 103, 104, and 105 as shown hereon.

CERTIFICATE OF OWNERSHIP AND DEDICATION

I, (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon as evidenced in Book Number *See Below, Page *See Below, Maury County Registers Office, and that I (we) hereby adopt this plan of subdivision with my (our) free consent, establish the minimum building restriction lines, and that offers of irrevocable dedication for all public ways, utilities, and other facilities have been filed.

Book Number R2852, Page 1487

Date _____ Pamela L Bradley _____

Date _____ Randy Gene Loague _____

Book Number R1459, Page 893

Date _____ McBroom Family Partnership _____

CERTIFICATE OF COMPLIANCE

I hereby certify that the subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations and other adopted ordinances and policies.

Date _____ City Engineer
Columbia, Tennessee

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations, with the exception of such variances, if any, as are noted in the minutes of the Planning Commission, and that it has been approved for recording in the Office of the County Register:

Date _____ Secretary, Planning Commission
Columbia, Tennessee

SURVEYOR'S CERTIFICATION (TENNESSEE)

I hereby certify that to the best of my knowledge and belief this is a true and accurate survey of the property shown hereon; that this is a category "I" Land Survey as defined in Title 62, Chapter 18, Tennessee Code Annotated, and that the ratio of precision is greater than or equal to 1:10,000.

11/18/24 Date — Allen B. O'Leary — TN RLS #1987 Number

Register of Deed Recording Stamp

ALLEN B. O'LEARY
REGISTERED LAND SURVEYOR
XVI
AGRICULTURE
TENNESSEE NO. 1987

WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
McBroom Family Partnership
943 Riverview Lane
Columbia TN, 38401

FINAL PLAT

WELLINGTON PLACE SECTION 2, REVISION TO LOTS 103, 104, & 105
1608, 1610, & 1613 RUGBY COURT, COLUMBIA TN, 38401

REVISIONS	DATE
TECH REVIEW COMMENTS ADDRESSED	11-18-2024

Drawn: CG
Checked: EB
Approved: AO
Date: 10-21-2024

Job. no. 20514-2
Scale: Vertical: 1"=50' Horizontal:

1 of 1

FILE:J:\ WES_Engineers_Surveyors 2020\20514 - Building Lots - McBroom\20514-2 Wellington 107-108\Dwg\Survey\20514-2 Wellington.dwg

November 18, 2024

City of Columbia
Development Services
700 North Garden Street
Columbia, TN 38401

RE: Project Name: Wellington Place, Section 2 Revision to Lots 103, 104, & 105, Final Plat
City of Columbia Staff Review Submittal

On behalf of McBroom Family Partnership, the owner of existing lots 103 & 105 and Pamela L Bradley & Randy Gene Loague, the owners of existing lot 104, **WES Engineers & Surveyors** would like to resubmit this Final Plat revising the common property lines between lots 103-105 to the City of Columbia for Planning Commission approval. Comments are addressed below in red.

Planning

1. The lead staff person for this case is Robert Archibald; he will prepare the staff report for this item. Please contact rarachibald@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff. Noted.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal. Noted.
3. Show all footprints of existing structures on adjacent lots. (disregard) Noted.
4. Please add adjacent property owner's signature to the application. (disregard) Noted.
5. Please contact E911 if your project requires assignment of new addresses or street names. Noted.

Engineering

6. No comments Noted.

Fire

7. No comments Noted.

Columbia Water

8. No comments, lot line adjustment only. Noted.

Columbia Power

9. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development. Noted.

Maury County Schools

10. No comment. Noted.

Duck River Electric Membership Corp

11. No comments. Noted.

Building

12. No comments. Noted.

Maury County Highway Dept.

13. No comment. Noted.

ATT

14. No comment. Noted.

Police

15. No comments provided. Noted.

Public Works

16. No comments. Noted.

Atmos Energy

17. No comments provided. Noted.

Maury County E911

18. No comments provided. Noted.

If you have any questions or comments with this submittal, please do not hesitate to contact me directly.

Sincerely,
WES Engineers & Surveyors



Allen B. O'Leary, RLS
Principal

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, November 12, 2024

ITEM NO.
24-0469

DESCRIPTION: 1608 Rugby Ct

COMMENTS:

Planning

1. The lead staff person for this case is Robert Archibald; he will prepare the staff report for this item. Please contact rarachibald@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
3. Show all footprints of existing structures on adjacent lots.
4. Please add adjacent property owner's signature to the application.

Engineering

5. No comments

Maury County Schools

6. No comment.

Duck River Electric Membership Corp

7. No comments.

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Fire

8. No comments

Building

9. No comments.

Columbia Power

10. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

Maury County Highway Dept.

11. No comment.

ATT

12. No comment.

Police

13. No comments provided.

Public Works

14. No comments.

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Columbia Water

15. "No comments, lot line adjustment only."

Atmos Energy

16. No comments provided.

Maury County E911

17. No comments provided.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.

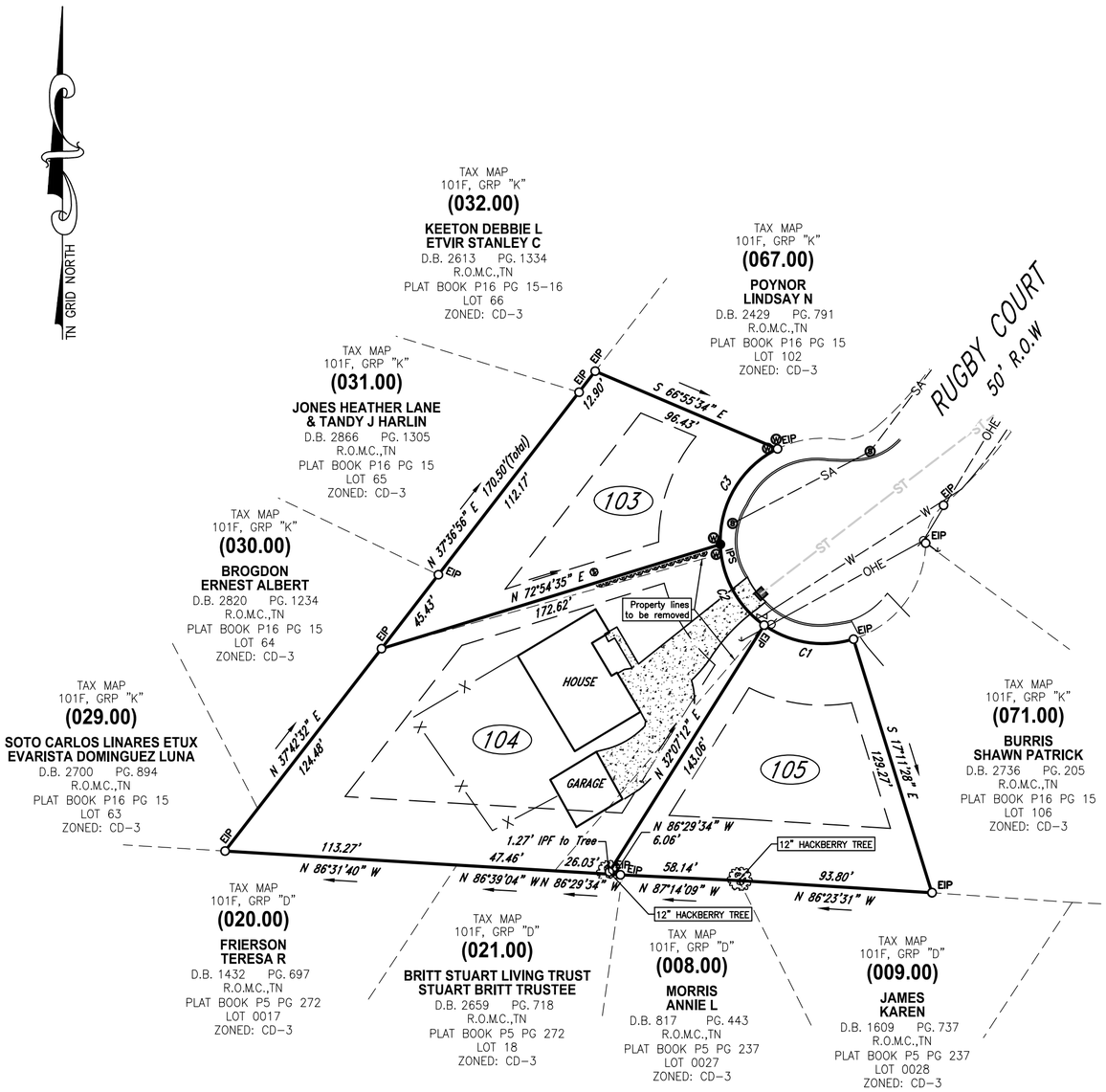
You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.

Current Enrollment / Capacity

	Facility Name	Constructed	Sq. Ft.	Acreage	Capacity
Elementary	Baker	1960	43,920	12	340
	Battle Creek	2019	90,000	30	700
	Brown	1968	56,720	20	405
	Highland	1986	47,800	4.5	380
	Howell	1999	81,600	17.5	700
	Mt. Pleasant	1978	80,021	22	630
	Riverside	1984	71,150	14	500
	Spring Hill	1984	69,000	10	540
	Woodard	1990	76,200	17	600
	Wright	2005	97,765	18	740
					5535
Middle	Battle Creek	2019	125,000	45	900
	Cox	1997	137,200	25	900
	Mt. Pleasant	2001	113,938	29.2	550
	Spring Hill	2010	158,106	39.49	950
	Whitthorne	1979	175,600	17	1050
					4350
High	Battle Creek	2024	305,675	51	2000
	Central	2016	296,740	55	1700
	Mt. Pleasant	1969	110,759	31	600
	Spring Hill	1993	181,800	57	1200
					5500
Unit	Culleoka	1969	205,800	34	1020
	Hampshire	1978	83,410	13.12	500
	Santa Fe	1964	94,225	24	650
					2170
Other	Central Office	1960	15,400	1.5	
	College Hill	1958	42,211	2.26	
	Maintenance	1987	9,400	4.7	
	McDowell		46,165	7	
			2,815,605	**601.27**	**17555**

Current Enrollment	Capacity Used
282	82.9%
682	97.4%
340	84.0%
311	81.8%
581	83.0%
543	86.2%
378	75.6%
465	86.1%
586	97.7%
617	83.4%
4785	***86.4%***
758	84.2%
630	70.0%
386	70.2%
556	58.5%
948	90.3%
3278	***75.4%***
394	19.7%
1393	81.9%
369	61.5%
905	75.4%
3061	***55.7%***
863	84.6%
414	82.8%
548	84.3%
1825	***84.1%***
148	
13097	



PARCEL NUMBER:
TAX MAP 101F, GROUP "K", PARCEL 069.00

DEED BOOK:
R2852, PAGE 1487

PARCEL ADDRESS:
1610 RUGBY COURT

PROPERTY OWNER:
PAMELA L BRADLEY & RANDY GENE LOAGUE
1610 RUGBY COURT
COLUMBIA TN, 38401

PARCEL NUMBER:
TAX MAP 101F, GROUP "K", PARCEL 068.00 & 070.00

DEED BOOK:
R1459, PAGE 893

PARCEL ADDRESS:
1608 & 1613 RUGBY COURT

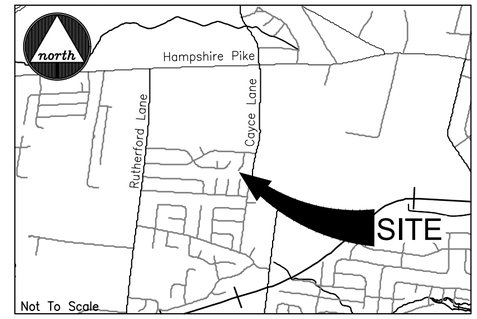
PROPERTY OWNER:
MCBROOM FAMILY PARTNERSHIP
943 RIVERVIEW LANE
COLUMBIA TN, 38401

RECORDED PLAT ZONING: R-10
CURRENT ZONING: CD-3

BUILDING SETBACKS (RECORDED PLAT):
FRONT – 30'
SIDE – 10'
REAR – 30'

ACREAGE OF PARCELS:
LOT 103 – ±0.25 ACRES – 10,798.2 S.F
LOT 104 – ±0.55 ACRES – 24,086.9 S.F.
LOT 105 – ±0.28 ACRES – 12,266.6 S.F.

Location Map



©2024

PURPOSE NOTE: The purpose of this plat is to revise the common property lines between lots 103, 104, and lots 104, 105.
DRIVEWAY NOTE: All driveways shall be constructed to contain gutter flow within the street and right–of–way, particularly lots that do not have a sidewalk.
GENERAL NOTE: The recording of this final plat voids, vacates, and superceded the previous plat of record in Plat Book 16, pages 15 and 16, for lots 103, 104, and 105 as shown hereon.

Surveyor's Notes

1. All distances were measured with E.D.M. equipment and have been adjusted for temperature and pressure, portions of the survey were done utilizing a Carlson BRX7, utilizing Base and Rover.
2. The property (Boundary) Line Survey exceeds the minimum requirements of an Urban Land Survey Category IV as per Standards of Practice adopted by the State Board of Examiners for Land Surveyors for the State of Tennessee, and the precision of the unadjusted survey is greater than 1 foot in 10,000 feet.
3. Information concerning site utility services and appurtenances shown hereon is based on visible evidence noted during the survey, information provided by utility representatives or information shown on original construction plans by other. Information and location of service lines on site should be considered approximate and there may be underground utility lines that are not shown on the survey. Owner(s) and contractor(s) should assume responsibility of locating all underground utility service lines prior to any construction, excavation or any disturbance of the existing ground elevation to avoid hazard of unnecessary expense.
4. Information concerning major utilities or appurtenances shown hereon are based on visible evidence noted during the survey or information provided by utility representatives. Verification of existence, size, location, depth and availability of service should be confirmed by local utility agencies.
5. The property shown hereon is located within the City of Columbia, Maury County, TN. All matters pertaining to construction, use location of improvements, signage, parking, noise, vibration, emissions, fire hazards, radiation, illumination, setback provisions, etc., are subject to the City of Columbia's Zoning Regulation as interpreted and regulated by the Department of Development Services.
6. The area of the parcels are as shown hereon.
7. This property currently identified as Tax Map No. 101F, Group "K" Parcel No. 068.00, 069.00, & 070.00, Maury County. For designation shown thus ( ) indicates Parcel Numbers for said map.
8. Plat reference: P16, Page 15, Lots 103, 104, & 105.
9. Deed reference: Book R2852, Page 1487 & R1459, Page 893.
10. Bearings based on: Tennessee State Plane (NAD83).
11. This drawing was prepared in accordance with our field survey notes. It shows improvements as they exist to the best of our knowledge, but is not guaranteed to be correct in each and every detail.
12. This survey was prepared from current deeds of record and does not represent a title search or a guarantee of title, and is subject to any state of facts a current and accurate search may reveal.
13. This survey was prepared for the exclusive use of the person, persons, or entity, if any, named on the certification hereon. Said certificate does not extend to any unnamed person without an express re–certification by the surveyor naming said person.
14. The certification as provided on this survey, is purely a statement of professional opinion based on knowledge, information and belief, based on existing field evidence and documentary evidence provided by others.
15. The certification is not an expressed or implied warranty or guarantee.
16. This property is not located in a Special Flood Hazard Area as shown on F.E.M.A. Flood Insurance Rate Map, Community Panel No. 47119C0280E, dated April 16, 2007, and shown hereon graphically.
17. There is a 10' Public Utility and Drainage Easement along the front and rear property lines and 5' on all interior side property lines.

CERTIFICATE OF OWNERSHIP AND DEDICATION

I, (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon as evidenced in Book Number *See Below, Page *See Below, Maury County Registers Office, and that I (we) hereby adopt this plan of subdivision with my (our) free consent, establish the minimum building restriction lines, and that offers of irrevocable dedication for all public ways, utilities, and other facilities have been filed.

Book Number R2852, Page 1487

Date _____ Pamela L Bradley _____

Date _____ Randy Gene Loague _____

Book Number R1459, Page 893

Date _____ McBroom Family Partnership _____

CERTIFICATE OF COMPLIANCE

I hereby certify that the subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations and other adopted ordinances and policies.

Date _____ City Engineer
Columbia, Tennessee

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations, with the exception of such variances, if any, as are noted in the minutes of the Planning Commission, and that it has been approved for recording in the Office of the County Register:

Date _____ Secretary, Planning Commission
Columbia, Tennessee

SURVEYOR'S CERTIFICATION (TENNESSEE)

I hereby certify that to the best of my knowledge and belief this is a true and accurate survey of the property shown hereon; that this is a category "I" Land Survey as defined in Title 62, Chapter 18, Tennessee Code Annotated, and that the ratio of precision is greater than or equal to 1:10,000.

10/21/24 Date — Allen B. O'Leary — TN RLS #1987 Number

Register of Deed Recording Stamp

ALLEN B. O'LEARY REGISTERED LAND SURVEYOR XVI AGRICULTURE OR COMMERCE TENNESSEE NO. 1987

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Curve Table

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	50.00'	45.54'	43.98'	S 81°10'33" E	52°11'00"
C2	50.00'	46.34'	44.70'	N 28°31'57" W	53°06'11"
C3	50.00'	57.27'	54.19'	N 30°50'03" E	65°37'49"

Legend

- EIP Iron Rod Found
- IPS Iron Rod Set
- I.P.F. Iron Pipe Found
- AXLE Axle Found
- ECM Fence Post
- Concrete Monument Existing
- P.K.F. PK Nail Found
- P.K.S. PK Nail Set
- R.R.S..F Railroad Spike Found
- R.R.S.S. Railroad Spike Set
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Catch Basin
- Curb Inlet
- Storm Pipe
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Cable Riser
- Electric Riser
- Telephone Riser
- Telephone Booth
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Flag Pole
- Guy Wire
- Mailbox
- Parking Block
- Satellite Dish
- Handicap Parking
- Water Spigot
- Bollard
- Evergreen Tree
- Deciduous Tree
- Bush
- Sign
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com

ENGINEERS & SURVEYORS

Client
McBroom Family Partnership
943 Riverview Lane
Columbia TN, 38401

FINAL PLAT

WELLINGTON PLACE SECTION 2, REVISION TO LOTS 103, 104, & 105
1608, 1610, & 1613 RUGBY COURT, COLUMBIA TN, 38401

DATE	REVISIONS

Drawn: CG
Checked: EB
Approved: AO
Date: 10-21-2024

Job. no. 20514-2
Scale: Vertical: 1"=50' Horizontal:

1 of 1

FILE:J:\ WES_Engineers_Surveyors 2020\20514 – Building Lots – McBroom\20514–2 Wellington 107–108\Dwg\Survey\20514–2 Wellington.dwg

Not Applicable

October 21, 2024

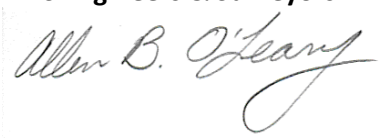
City of Columbia
Development Services
700 North Garden Street
Columbia, TN 38401

RE: **Project Name: Wellington Place, Section 2 Revision to Lots 103, 104, & 105, Final Plat**
City of Columbia Staff Review Submittal

On behalf of McBroom Family Partnership, the owner of existing lots 103 & 105 and Pamela L Bradley & Randy Gene Loague, the owners of existing lot 104, **WES Engineers & Surveyors** would like to submit this Final Plat revising the common property lines between lots 103-105 to the City of Columbia for Planning Commission approval.

If you have any questions or comments with this submittal, please do not hesitate to contact me directly.

Sincerely,
WES Engineers & Surveyors



Allen B. O'Leary, RLS
Principal

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * *1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*
Fold hard copy submittals larger than 8½"x11"
All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	Rugby Court, Columbia, TN 38401		
	TAX MAP: 101F	GROUP: K	PARCEL: 068.00, 069.00, & 070.00
SUMMARY OF NATURE OF REQUEST AND WORK	Request final plat approval for revision to the shared property lines between lots 103, 104, and 105 for Wellington Place Section 2.		

DATE OF PRE-APPLICATION CONFERENCE		*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
❑ Comprehensive Plan Amendment ❑ Annexation ❑ Rezoning ❑ Preliminary Plat ☑ Final Plat ❑ PUD Preliminary Master Plan ❑ PUD Final Site Plan ❑ Site Development Plan ❑ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ❑ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ❑ Requested Zone Listed ❑ Statement of Compliance with Comprehensive Plan ❑ Concept Plan **Preliminary Plats/Site Development Plans:** ❑ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ❑ Receipt of Payment for Pre-Application Meeting ❑ Written Legal Description copy ❑ Columbia Water System Availability Letter ❑ Columbia Waste Water Department Will Serve Letter

Rev. 2/7/2024

	Plats/PUDs: ☑ Project Name (include Sections & Phases) Wellington Place Section 2 ☑ Total Number of Lots/Residential Units 3 ☐ Square Footage of Non-Residential Floor Space ☑ Total acreage ±1.08

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME	Allen B. O'Leary	PHONE	931-388-2329
ADDRESS	2486 Nashville Hwy, Columbia, TN	EMAIL	allen@wesengineers.com

PROPERTY OWNER NAME	McBroom Family Partnership	PHONE	
ADDRESS	943 Riverview Ln, Columbia, TN 38401	EMAIL	

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Allen B O'Leary — APPLICANT NAME

Allen B O'Leary — APPLICANT SIGNATURE

10/16/24 — DATE

Randy McBroom — PROPERTY OWNER NAME

Randy McBroom — PROPERTY OWNER SIGNATURE

10/15/24 — DATE

	Plats/PUDs: ☑ Project Name (include Sections & Phases) Wellington Place Section 2 ☑ Total Number of Lots/Residential Units 3 ☐ Square Footage of Non-Residential Floor Space ☑ Total acreage ±1.08

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME	Allen B. O'Leary	PHONE	931-388-2329
ADDRESS	2486 Nashville Hwy, Columbia, TN	EMAIL	allen@wesengineers.com

PROPERTY OWNER NAME	Bradley Pamela L & Randy Gene League	PHONE	
ADDRESS	1610 Rugby Ct, Columbia, Tn 38401	EMAIL	

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Allen B O'Leary — APPLICANT NAME

APPLICANT SIGNATURE

10/16/24 — DATE

PROPERTY OWNER NAME

Pamela L League — PROPERTY OWNER SIGNATURE

10/15/24 — DATE

Rev. 2/7/2024

Hillcrest Village Ph. 2 Final Plat

Project #:	24-0471	Location:	Map 113 Parcel 80.50
Applicant:	Abigail Overstreet	Case Type(s):	Final Plat
Staff Planner:	Robert Archibald, Planner II	Proposed Use:	Single-Family

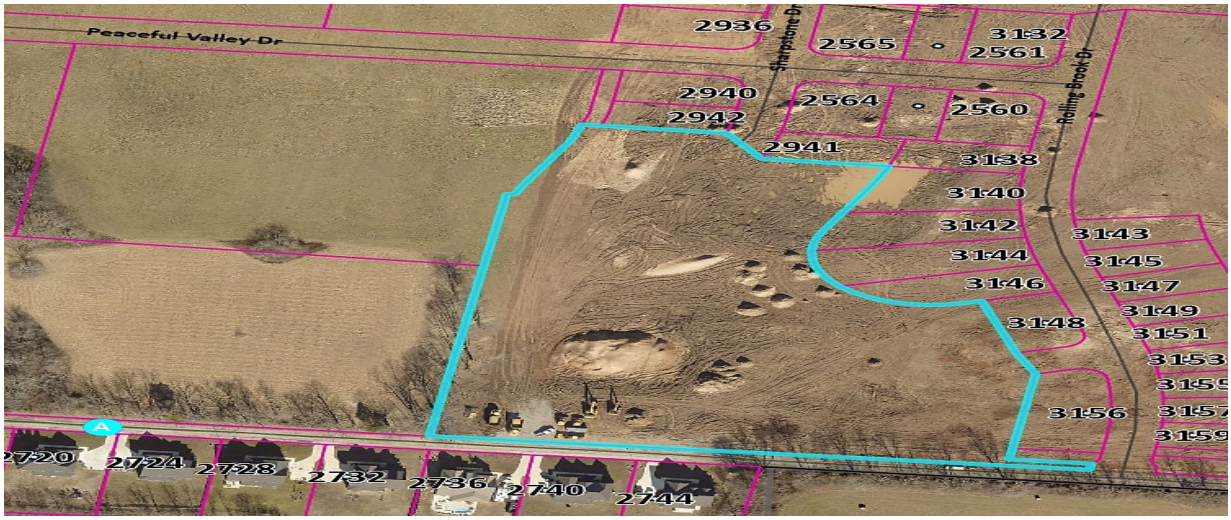
PROJECT SUMMARY

The applicant requests Final Plat approval to create 24 single-family lots and two open spaces. This is part of a multi-phased development consisting of 129 single-family lots with accompanying infrastructure, required open space, and right-of-way improvements.

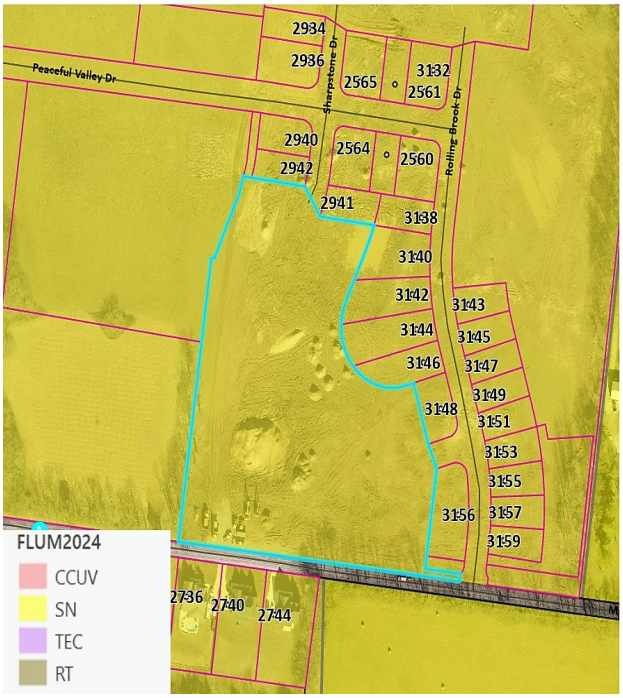
- The development is subject to Ordinance 3638, the pre-July 2022 zoning ordinance.
- The Final Plat conforms to the previously approved Preliminary Plat (21-0138).
- The property is subject to the Preliminary Plat based on RM-1 standards of the previous Zoning Ordinance.
- A $370,000 Letter of Credit has been provided for this phase.
- A developer agreement has been submitted per the Subdivision Regulations.
- The applicant has provided a stormwater maintenance agreement per the Subdivision Regulations.
- The Final Plat revision request conforms to Preliminary Plat (21-0138) based on RM-1 standards of the previous zoning ordinance, approved on September 8, 2021.
- Engineering has noted that Peace Valley Drive shall be completed to Pulaski Hwy with Phase 3 single-family plat or townhomes final plat.
- Wastewater has noted that completion of the pump station, pump station access drive shall immediately be executable after Final Plat approval and prior to signature deadline.
- The DRC reviewed this proposal at its November 2024 meeting. Staff review included standard comments and requests for technical corrections. Full technical comments are provided in the agenda packet.
- The Planning Commission is the **Decision-Making Authority** for the Final Plat.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

SITE INFORMATION

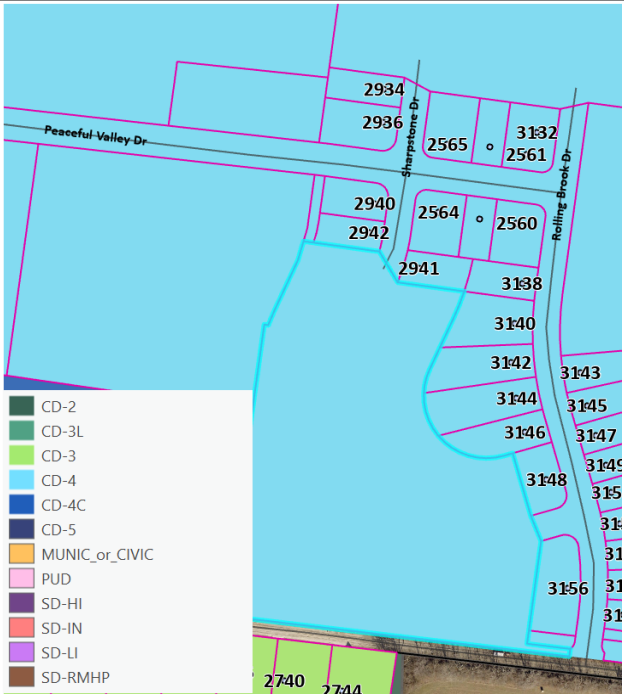
CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
CD-4	Single-Family	Infrastructure for Development	+/-6.308 Acres



FUTURE LAND USE MAP



ZONING MAP



SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	Suburban Neighborhood	CD-4	Single-family
North	Suburban Neighborhood	CD-4	Vacant/Developing
South	Suburban Neighborhood	CD-3	Single-family
East	Suburban Neighborhood	Outside Jurisdiction	Single-family/Vacant
West	Suburban Neighborhood	CD-4C	Vacant/Developing

The subject site is part of the larger multi-phase development consisting of single-family construction and amenities associated with the development. Each lot will have a minimum of 6,000-sf with a 50-ft lot width. Access points for ingress/egress are from Pulaski Hwy. and Morrow Lane.

CONFORMITY WITH ZONING ORDINANCE

The proposed revisions conform to the Final Plat and the RM-1 standards of the applicable zoning ordinance (3638).

- The proposed structures conform to the setbacks and other bulk standards of the Preliminary Plat, previously approved September 8, 2021.

REVIEW PROCESS

The Development Review Committee reviewed the proposed Final Plat at its November 2024 meeting, as directed by **§ 8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package and summarized above.

Section **§ 8.5.24** of the Zoning Ordinance directs the Planning Commission to review Subdivision Plats for conformity with the standards of the Ordinance and the City Subdivision Regulations. The Ordinance indicates that all Preliminary and Final Plats must be prepared, submitted, reviewed and acted upon in accordance with the Subdivision Regulations.

The Planning Commission is the Decision-Making Authority for Final Plats under **§ 8.3.3.B.1** of the Zoning Ordinance and **§ 2.3** of the Subdivision Regulations.
Section **§ 2.3.6** of the Subdivision Regulations establishes the review criteria for approval of Final Plats.

A. Recommendations and final action on a Final Plat shall be based on consideration of the following criteria:

1. Whether the proposed Final Plat complies with the applicable zoning district and overlay districts;

2. Whether the proposed Final Plat is consistent with all standards of the Subdivision Regulations and other related codes and ordinances enforced by the City; and

3. Whether the proposed Final Plat meets all the requirements or conditions of any applicable development approvals, such as development plans or associated modification of standards.

B. Final Plat approval shall be subject to the completion of required improvements, or in lieu, the CMPC may approve a Performance Agreement.

In the event of a denial, **§ 2.3.5** of the Subdivision Regulations requires the Planning Commission to identify the specific parts of applicable plans and regulations with which the plat does not comply.

SAMPLE MOTIONS

Approve:

Move to approve the Final Plat as presented and find that it conforms to the applicable zoning ordinance, the Subdivision Regulations, and the Preliminary Plat [subject to remaining technical comments from staff].

Approve with Conditions:

Move to approve the Final Plat as presented and find that the plat conforms to the applicable zoning ordinance, the Subdivision Regulations, and the Preliminary Plat, subject to the following conditions: [list conditions of approval crafted by Planning Commission].

Defer for Continued Review:

Move to find that there is insufficient information to make a decision, defer the application for continued review, and request that the applicant provide: [list additional

information] for review at the next regularly scheduled meeting of the Planning Commission.

Deny:

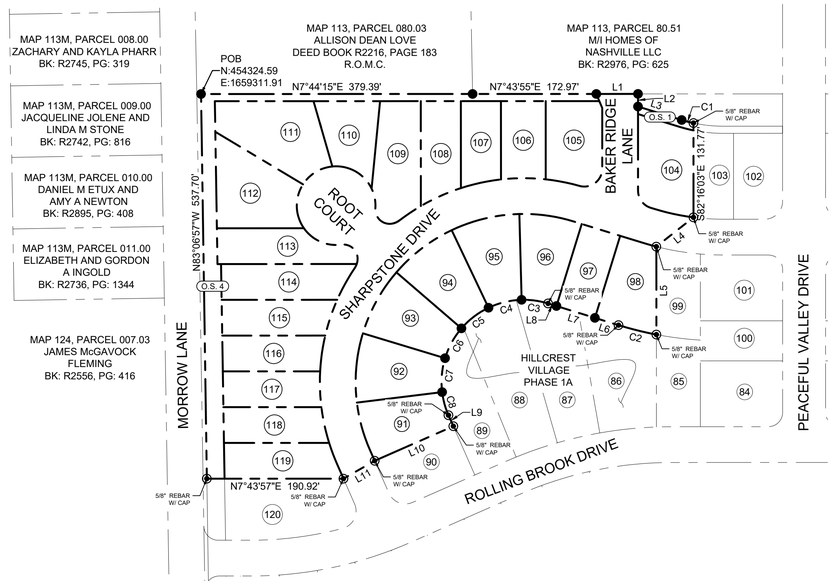
Move to find that the Final Plat as presented does not conform to the applicable zoning ordinance, the Subdivision Regulations, or the approved Preliminary Plat, and deny the request due to [list specific deficiencies].

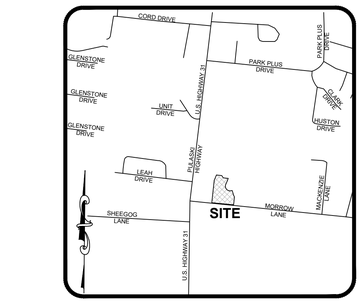
LEGEND

IRON PIN FOUND	FIRE HYDRANT	UTILITY POLE	PUBLIC UTIL. & DRAIN ESMT.	P.U.D.E.	BOUNDARY
IRON PIN SET	SANITARY SEWER MH	GUY ANCHOR	ADDRESSES	1234	CENTERLINE
CONC. MON. FOUND	SANITARY SEWER CO	COMMUNICATION BOX	HANDICAP SPACE		BUFFER
CONC. MON. SET	AREA DRAIN	COMMUNICATION MH	SANITARY SEWER	8" SA / 8" SA	WATER FEATURE
CONTROL POINT FOUND	CURB INLET	GAS METER	WATER	4" W / 4" W	TREE LINE
CONTROL POINT SET	STORM MH	GAS VALVE	UNDERGROUND ELEC	UGE / UGE	R.O.W.	RIGHT OF WAY
BENCH MARK	ELECTRIC METER-BOX	EVERGREEN TREE	OVERHEAD ELEC	OHE / OHE	PVMT.	EDGE OF PAVEMENT
WATER METER	ELECTRIC MH	SIDEWALK	GAS	4" G / 4" G	PUDE	PUBLIC UTILITY AND DRAINAGE EASEMENT
WATER VALVE	LIGHT POLE	MIN. BUIDLING SETBACK M.B.S.L	COMMUNICATIONS	COM / COM	G.I.E.	GREEN INFRASTRUCTURE EASEMENT

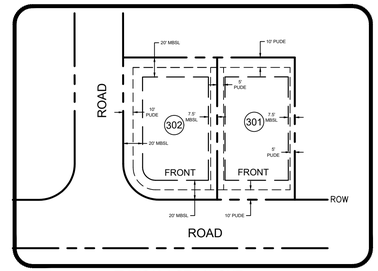
PLAT NOTES

1. THE PURPOSE OF THIS PLAT IS TO CREATE 24 SINGLE-FAMILY RESIDENTIAL LOTS AND 2 OPEN SPACES.
2. SUBJECT PROPERTY IS PRESENTLY IDENTIFIED AS PARCEL 80.54, ON MAURY COUNTY TAX MAP 113. SAID PARCEL IS FURTHER IDENTIFIED AS THE PROPERTY DESCRIBED IN BOOK R2874, PAGE 1163, REGISTERS OFFICE OF MAURY COUNTY, TENNESSEE.
3. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN THE CITY OF COLUMBIA, MAURY COUNTY, TN. ALL MATTERS PERTAINING TO CONSTRUCTION, USE, LOCATION OF IMPROVEMENTS, SIGNAGE, PARKING, NOISE, VIBRATION, EMISSIONS, FIRE HAZARDS, RADIATION, ILLUMINATION, SETBACK PROVISIONS, ETC,. ARE SUBJECT TO THE CITY OF COLUMBIA'S ZONING REGULATIONS AS INTERPRETED AND REGULATED BY THE DEPARTMENT OF DEVELOPMENT SERVICES.
4. EXISTING ZONING: RM-1
5. I HEREBY CERTIFY THAT THIS IS A CATEGORY IV SURVEY AND WAS CONDUCTED IN ACCORDANCE WITH RULE 0820-03.11 (GLOBAL POSITION SYSTEMS SURVEYS) ACCORDING TO THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE AS PROMULGATED BY THE TENNESSEE STATE BOARD OF EXAMINERS FOR LAND SURVEYORS. THIS SURVEY WAS CONDUCTED WITH DUAL-FREQUENCY RTK GPS EQUIPMENT BASED ON THE TDOT CORPS NETWORK.
   a. POSITIONAL ACCURACY: 0.07'
   b. DATE OF SURVEY: 3/16/2023
   c. DATUM/EPOCH: TENNESSEE STATE PLANE (NAD83). OCCUPATIONS FOR CONTROL POINTS ARE 3 MINUTES EACH, SIDE SHOTS ARE 3 SECONDS.
   d. GEOID 3, ZONE 7 REVISED
6. NO COMBINED GRID FACTORS WERE USED.
7. BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83). ELEVATIONS SHOWN HEREON ARE BASED ON NAVD88.
8. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN ZONE "X" AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47119C0285E, WITH AN EFFECTIVE DATE OF APRIL 16, 2007, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE PROGRAM. ZONE "X" IS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. ZONE "X" HAS TWO DESCRIPTIONS. PLEASE SEE FLOOD PLAIN MAP IF ZONE "X" IS SHADED. ***IF FIELD RUN CONTOURS ARE ESTABLISHED YOU MUST PLOT THE FLOOD LINE BASED ON BFE UNLESS THE PROPERTY IS IN ZONE A.
9. ALL CORNERS SHOWN ON THE FACE OF THE SURVEY WILL BE SET WITH 5/8 IRON ROD WITH CAP BEARING THIS SURVEYORS COMPANY NAME.
10. THE DEVELOPER ACKNOWLEDGES THAT ALL LOTS HAVE ADEQUATE BUILDING ENVELOPES AND NO VARIANCES WILL BE REQUIRED.
11. STORMWATER MAINTENANCE AGREEMENT RECORDED IN DEED BOOK.
12. ALL STREETS AND ALLEYS ARE DESIGNATED AS PUBLIC RIGHT-OF-WAY; THE CITY OF COLUMBIA IS NOT RESPONSIBLE FOR THE REPLACEMENT OR REPAIR OF ANY PRIVATE STRUCTURES WITHIN PUBLIC EASEMENTS SHOULD THE STRUCTURES BE DISTURBED IN THE PROCESS OF THE CITY EXERCISING ITS EASEMENT RIGHTS.
13. STREETS, DRAINAGE EASEMENTS, STRUCTURES, AND CULVERTS SHALL BE MAINTAINED BY THE CITY OF COLUMBIA. DETENTION PONDS AND OUTLET STRUCTURES WITHIN PUBLIC DRAINAGE EASEMENTS ARE TO BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
14. STORMWATER QUALITY SHALL BE ADDRESSED WITH EACH SITE PLAN.
15. OPEN SPACE AREAS, ROADWAY MEDIANS, BRICK PEDESTRIAN CROSSWALKS, BIKE PATHS, SIDEWALKS OUTSIDE OF RIGHT-OF-WAYS, TRAILS AND DETENTION FACILITIES SHALL BE MAINTAINED BY THE HOME OWNER'S ASSOCIATION AND SHALL BE PUBLIC UTILITY, DRAINAGE AND ACCESS EASEMENTS.
16. WITHIN NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO, THE NEW DEVELOPMENT, ALL UTILITIES, (INCLUDING CABLE TELEVISION, ELECTRICAL, NATURAL GAS, SEWER, TELEPHONE AND WATER LINES) SHALL BE PLACED UNDERGROUND.
17. AT ALL TEMPORARY TURNAROUNDS, A SIGN SHALL BE PLACED STATING, "STREET TO BE EXTENDED BY AUTHORITY OF THE CITY OF COLUMBIA."
18. MAINTENANCE OF ALL STORMWATER MANAGEMENT FEATURES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER(S) OR HOA.
19. NO OBSTRUCTIONS OR ENCROACHMENTS WHICH IMPEDE THE FLOW OF STORMWATER SHALL BE PERMITTED WITHIN PUBLIC DRAINAGE EASEMENTS BETWEEN LOTS. THE CITY OF COLUMBIA IS NOT RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY ENCROACHMENTS THAT ARE DAMAGED OR REMOVED IN THE COURSE OF MAINTENANCE ACTIVITY WITHIN EASEMENTS.
20. THE CITY OF COLUMBIA WATER MANAGEMENT DEPARTMENT HAS UNRESTRICTED ACCESS TO ITS DOMESTIC WATER, SANITARY SEWER, RECLAIM WATER LINES OR SYSTEM IMPROVEMENTS LOCATED WITHIN ITS EXCLUSIVE EASEMENTS WITHIN THE DEVELOPMENT. IN THE EVENT LANDSCAPING, FENCING, CONCRETE OR OTHER STRUCTURES ARE INSTALLED OR PLACED WITHIN A CITY OF COLUMBIA EASEMENT, THE CITY OF COLUMBIA SHALL HAVE THE RIGHT TO REMOVE SUCH ENCROACHMENTS WITHIN THE EASEMENT AS MAY BE NECESSARY FOR THE CITY OF COLUMBIA TO REPAIR, MAINTAIN OR REPLACE ITS INFRASTRUCTURE WHICH IS NOW OR IN THE FUTURE MAY BE LOCATED WITHIN THE EASEMENT WITHOUT OBTAINING ANY FURTHER PERMISSION FROM THE PROPERTY OWNER OR HOA. THE PROPERTY OWNER OR HOA SHALL BE RESPONSIBLE FOR REPAIRING AND/OR REPLACING ANY SUCH LANDSCAPING, FENCING, CONCRETE, OR OTHER STRUCTURES REMOVED OR DISTURBED BY THE CITY OF COLUMBIA IN COMMON OPEN SPACE LOTS AND IN AREAS OWNED BY THE PROPERTY OWNER OR HOA AT NO EXPENSE TO THE CITY OF COLUMBIA. INDIVIDUAL HOMEOWNERS SHALL BE RESPONSIBLE FOR STRUCTURES REMOVED OR DISTURBED BY THE CITY OF COLUMBIA WITHIN AN EASEMENT ON THE HOMEOWNER'S LOT AT THE HOMEOWNER'S EXPENSE.
21. ALL LOTS WITHIN PHASE 2 REQUIRE A FIRE SPRINKLER SYSTEM INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS. A HORN AND STROBE WILL BE REQUIRED ON THE FRONT OF THE HOUSE. IT WILL ACTIVATE WHEN THE SPRINKLER SYSTEM IS ACTIVATED.
22. PUBLIC UTILITY AND DRAINAGE EASEMENTS (PUDE) SHALL BE REQUIRED AND BE TEN (10) FEET IN WIDTH ON ALL PROPERTY LINES PARALLEL AND ABUTTING PUBLIC ROADS OR RIGHTS-OF-WAY, AND FIVE (5) FEET IN WIDTH ON ALL INTERIOR LOT LINES, EXCEPT FOR INTERIOR LOT LINES WITH A ZERO LOT LINE OR A COMMON WALL ALONG A LOT LINE.





VICINITY MAP
NOT TO SCALE



TYPICAL LOT LAYOUT
N.T.S.

Parcel Area Table		
Parcel #	Area (SF)	Area (AC)
91	8151.84'	0.187
92	8749.01'	0.201
93	8749.01'	0.201
94	8749.01'	0.201
95	8749.01'	0.201
96	8311.55'	0.191
97	6749.24'	0.155
98	8508.34'	0.195
104	9581.86'	0.220
105	8987.85'	0.206
106	6765.74'	0.155
107	6413.32'	0.147

Parcel Area Table		
Parcel #	Area (SF)	Area (AC)
108	7441.65'	0.171
109	10289.34'	0.236
110	7349.02'	0.169
111	12636.20'	0.290
112	11519.94'	0.264
113	8297.76'	0.190
114	8746.33'	0.201
115	7592.80'	0.174
116	6961.38'	0.160
117	6787.93'	0.156
118	7059.12'	0.162
119	7800.48'	0.179

Open Space Area Table		
Parcel #	Area (SF)	Area (AC)
O.S. 1	808.64'	0.019
O.S. 4	17281.89'	0.397

Parcel Line Table		
Line #	Length	Direction
L1	58.18'	N7°43'55"E
L2	17.63'	S82°16'03"E
L3	63.95'	N24°52'05"E
L4	66.09'	S30°29'48"E
L5	122.90'	S82°16'03"E
L6	34.52'	S24°52'05"W

Parcel Line Table		
Line #	Length	Direction
L7	56.24'	S24°52'05"W
L8	12.30'	S24°52'05"W
L9	16.80'	N73°59'42"E
L10	120.00'	S16°00'18"E
L11	50.28'	S22°01'41"E

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	16.95'	195.00'	4° 58' 44"	N22° 22' 43"E	16.94'
C2	54.51'	495.00'	6° 18' 33"	S21° 42' 49"W	54.48'
C3	37.43'	115.00'	18° 38' 55"	S15° 32' 38"W	37.27'
C4	47.91'	115.00'	23° 52' 14"	S5° 42' 57"E	47.57'
C5	47.91'	115.00'	23° 52' 14"	S29° 35' 11"E	47.57'
C6	47.91'	115.00'	23° 52' 14"	S53° 27' 25"E	47.57'
C7	47.91'	115.00'	23° 52' 14"	S77° 19' 39"E	47.57'
C8	33.60'	115.00'	16° 44' 32"	N82° 21' 58"E	33.48'

OWNER: M/I HOMES OF NASHVILLE LLC
4131 WORTH AVE STE 500
COLUMBUS OH 43219

ENGINEER: CRUNK ENGINEERING, LLC
7112 CROSSROADS BLVD STE 201
BRENTWOOD, TN 37027
615-873-1795

SURVEYOR: JOEY C. WILSON II, PE, RLS
WILSON & ASSOCIATES, P.C.
108 BEASLEY DRIVE
FRANKLIN, TN 37064
(615)794-2275
JWILSON@WILSONPC.COM

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

NAME, TITLE, AGENCY OF AUTHORIZED APPROVING AGENT _____ DATE _____

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF SURVEY ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CLASS "IV" LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS GREATER THAN OR EQUAL TO 1:10,000.

09/30/24
DATE

JOEY C. WILSON II, TENNESSEE RLS NO. 2089
WILSON & ASSOCIATES, P.C.
ENGINEERING/SURVEYING/ENVIRONMENTAL
108 BEASLEY DRIVE, FRANKLIN, TN 37064
OFFICE: 615.794.2275 FAX 615.794.2176
JWILSON@WILSONPC.COM

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN BOOK NUMBER R2874, PAGE 1163, MAURY COUNTY REGISTERS OFFICE, AND THAT I (WE) HEREBY ADOPT THIS FINAL SUBDIVISION PLAT OF THE PROPERTY AS SHOWN HEREON AND DEDICATE ALL PUBLIC WAYS AND EASEMENTS AS NOTED WITH MY (OUR) FREE CONSENT.

OWNER _____ DATE _____

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE & UTILITIES

I HEREBY CERTIFY THAT THE STREETS, DRAINAGE, AND UTILITIES OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAVE BEEN INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS, OR A PERFORMANCE SURETY IN THE AMOUNT OF $_____ FOR STREETS AND DRAINAGE HAS BEEN POSTED WITH THE CITY OF COLUMBIA, TENNESSEE, TO ASSURE COMPLETION OF SUCH IMPROVEMENTS.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL FOR SANITARY SEWER SYSTEM

I HEREBY CERTIFY THAT THE SANITARY SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DIRECTOR OF WASTEWATER DEPARTMENT _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS, WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS NOTED IN THE MINUTES OF THE COLUMBIA MUNICIPAL PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE MAURY COUNTY REGISTER OF DEEDS.

SECRETARY, PLANNING COMMISSION _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME & STREET NAMES

SUBDIVISION NAME AND STREET NAMES APPROVED BY THE CITY ENGINEERING DEPARTMENT AND BY E-911 MAURY COUNTY.

MAURY COUNTY E911 _____ DATE _____

RECORDING STAMP HERE

IF YOU CAN READ THIS YOU ARE HOLDING AN UNRECORDED COPY



WILSON & ASSOCIATES, PC.
Engineering/Surveying/Environmental



GRAPHIC SCALE: 1" = 100'

HILLCREST VILLAGE

PHASE 2

FINAL SUBDIVISION PLAT

CITY OF COLUMBIA - MAURY COUNTY - TENNESSEE

TOTAL ACRES:	6.320	TOTAL NO. OF LOTS:	24
ACRES NEW RD/ST:	1.279 (ROW)	L.F. OF NEW RD/ST:	57371.45 +/-
ACRES OPEN SPACE:	0.416	CIVIL DISTRICT:	3RD
DRAWN BY:	AS	CLOSURE ERROR:	> 1:10,000
SCALE:	1" = 100'	DATE:	09/30/2024

WA PROJECT NO. 22-1861 SHEET 1 OF 2

LEGEND

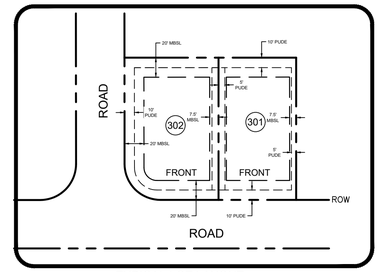
IRON PIN FOUND		FIRE HYDRANT		UTILITY POLE		PUBLIC UTIL. & DRAIN ESMT.	P.U.D.E.	BOUNDARY	
IRON PIN SET		SANITARY SEWER MH	SS	GUY ANCHOR		ADDRESSES	1234	CENTERLINE	
CONC. MON. FOUND		SANITARY SEWER CO	CO	COMMUNICATION BOX	C	HANDICAP SPACE		BUFFER	
CONC. MON. SET		AREA DRAIN		COMMUNICATION MH	C	SANITARY SEWER	8" SA	WATER FEATURE	
CONTROL POINT FOUND		CURB INLET		GAS METER	G	WATER	4" W	TREE LINE	
CONTROL POINT SET		STORM MH	ST	GAS VALVE		UNDERGROUND ELEC	UGE	R.O.W.	RIGHT OF WAY
BENCH MARK		ELECTRIC METER-BOX	E	EVERGREEN TREE		OVERHEAD ELEC	OHE	PVMT.	EDGE OF PAVEMENT
WATER METER	W	ELECTRIC MH	E	SIDEWALK		GAS	4" G	PUDE	PUBLIC UTILITY AND DRAINAGE EASEMENT
WATER VALVE		LIGHT POLE		MIN. BUIDLING SETBACK	M.B.S.L	COMMUNICATIONS	COM	G.I.E.	GREEN INFRASTRUCTURE EASEMENT

HATCH LEGEND

LANDSCAPE BUFFER



VICINITY MAP
NOT TO SCALE



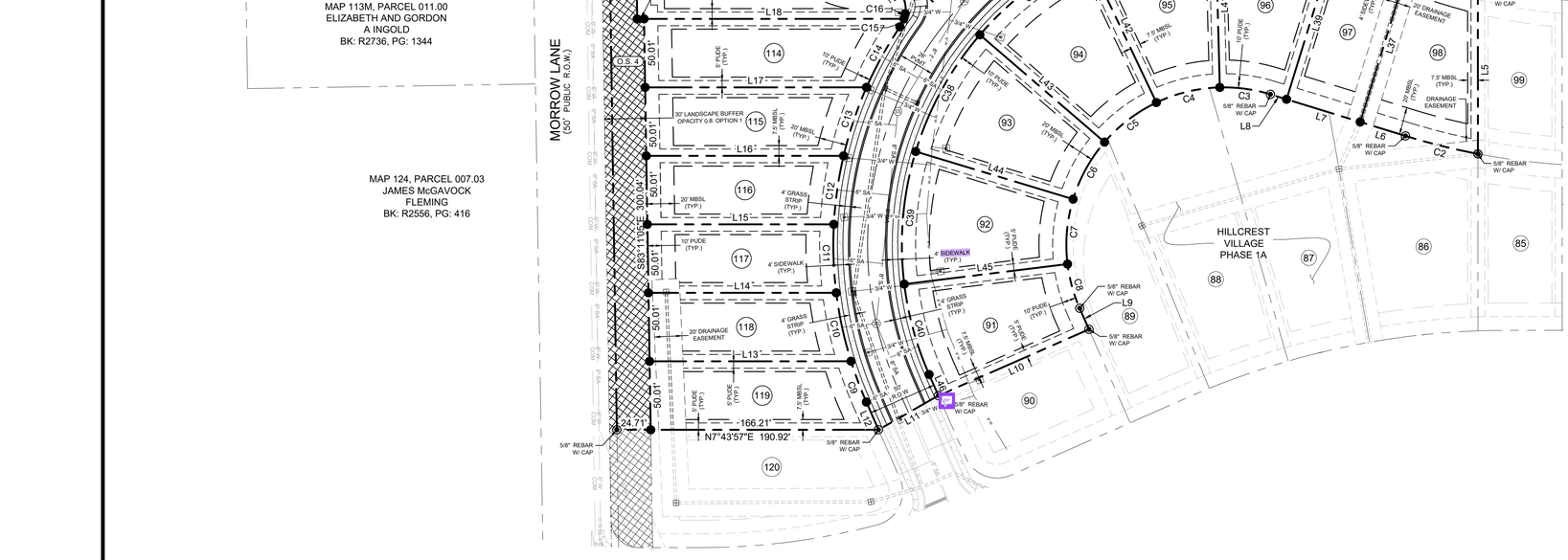
TYPICAL LOT LAYOUT
N.T.S.

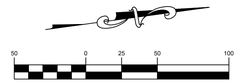
Parcel Line Table		
Line #	Length	Direction
L1	58.18'	N7°43'55"E
L2	17.63'	S82°16'03"E
L3	63.95'	N24°52'05"E
L4	66.09'	S30°29'48"E
L5	122.90'	S82°16'03"E
L6	34.52'	S24°52'05"W
L7	56.24'	S24°52'05"W
L8	12.30'	S24°52'05"W
L9	16.80'	N73°59'42"E
L10	120.00'	S16°00'18"E
L11	50.28'	S22°01'41"E
L12	22.07'	N73°59'42"E
L13	146.97'	N7°43'57"E
L14	136.97'	N7°43'57"E
L15	136.02'	N7°43'57"E
L16	143.95'	N7°43'57"E
L17	161.48'	N7°43'57"E
L18	189.56'	N7°43'57"E
L19	5.00'	S6°48'55"W
L20	121.59'	N7°43'57"E
L21	142.84'	N38°39'45"E
L22	94.98'	N81°38'54"E
L23	122.82'	S76°45'15"E

Parcel Line Table		
Line #	Length	Direction
L24	146.64'	S82°16'03"E
L25	121.55'	S82°16'03"E
L26	109.46'	S82°16'03"E
L27	109.33'	S82°16'03"E
L28	10.83'	S75°11'35"W
L29	13.97'	N7°43'59"E
L30	10.52'	N75°11'35"E
L31	84.74'	S82°16'03"E
L32	10.46'	S82°16'03"E
L33	60.87'	S24°52'05"W
L34	107.12'	S82°16'03"E
L35	5.41'	N24°52'05"E
L36	34.52'	N24°52'05"E
L37	120.00'	S65°07'55"E
L38	56.24'	N24°52'05"E
L39	120.00'	S65°07'55"E
L40	12.30'	N24°52'05"E
L41	120.00'	S83°46'50"E
L42	120.00'	N72°20'56"E
L43	120.00'	N48°28'42"E
L44	120.00'	N24°36'28"E
L45	120.00'	N0°44'14"E
L46	16.80'	S73°59'42"W

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	16.95'	195.00'	4° 58' 44"	N22° 22' 43"E	16.94'
C2	54.51'	495.00'	6° 18' 33"	S21° 42' 49"W	54.48'
C3	37.43'	115.00'	18° 38' 55"	S15° 32' 38"W	37.27'
C4	47.91'	115.00'	23° 52' 14"	S5° 42' 57"E	47.57'
C5	47.91'	115.00'	23° 52' 14"	S29° 35' 11"E	47.57'
C6	47.91'	115.00'	23° 52' 14"	S53° 27' 25"E	47.57'
C7	47.91'	115.00'	23° 52' 14"	S77° 19' 39"E	47.57'
C8	33.60'	115.00'	16° 44' 32"	N82° 21' 58"E	33.48'
C9	31.84'	285.00'	6° 24' 00"	N77° 11' 42"E	31.82'
C10	51.22'	285.00'	10° 17' 51"	N85° 32' 38"E	51.15'
C11	50.10'	285.00'	10° 04' 16"	S84° 16' 19"E	50.03'
C12	50.57'	285.00'	10° 10' 01"	S74° 09' 11"E	50.51'
C13	52.80'	285.00'	10° 36' 55"	S63° 45' 43"E	52.73'
C14	50.51'	285.00'	10° 09' 18"	S53° 22' 37"E	50.45'
C15	6.53'	25.00'	14° 58' 31"	S55° 47' 14"E	6.52'
C16	3.93'	25.00'	9° 01' 00"	S67° 46' 59"E	3.93'
C17	37.58'	20.00'	107° 40' 10"	N53° 52' 26"E	32.29'
C18	60.12'	55.00'	62° 37' 56"	N31° 21' 19"E	57.17'
C19	65.13'	55.00'	67° 50' 46"	S83° 24' 20"E	61.39'
C20	49.71'	55.00'	51° 47' 23"	S23° 35' 16"E	48.04'
C21	67.04'	55.00'	69° 50' 03"	S37° 13' 27"W	62.96'

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C22	28.59'	55.00'	29° 47' 03"	S87° 02' 00"W	28.27'
C23	37.58'	20.00'	107° 40' 10"	S48° 05' 27"W	32.29'
C24	10.47'	25.00'	23° 59' 31"	S17° 44' 24"E	10.39'
C25	35.60'	285.00'	7° 09' 22"	S26° 09' 28"E	35.57'
C26	61.48'	285.00'	12° 21' 37"	S16° 23' 59"E	61.36'
C27	57.39'	285.00'	11° 32' 13"	S4° 27' 04"E	57.29'
C28	62.63'	285.00'	12° 35' 25"	S7° 36' 45"W	62.50'
C29	48.11'	285.00'	9° 40' 22"	S18° 44' 39"W	48.06'
C30	46.18'	25.00'	105° 50' 53"	S29° 20' 36"E	39.89'
C31	31.79'	25.00'	72° 51' 52"	N61° 18' 01"E	29.69'
C32	56.02'	325.00'	9° 52' 36"	N19° 55' 47"E	55.95'
C33	19.97'	205.00'	5° 34' 49"	S22° 04' 41"W	19.96'
C34	18.19'	375.00'	2° 46' 47"	N23° 28' 42"E	18.19'
C35	76.49'	235.00'	18° 38' 55"	N15° 32' 38"E	76.15'
C36	97.91'	235.00'	23° 52' 14"	N5° 42' 57"W	97.20'
C37	97.91'	235.00'	23° 52' 14"	N29° 35' 11"W	97.20'
C38	97.91'	235.00'	23° 52' 14"	N53° 27' 25"W	97.20'
C39	97.91'	235.00'	23° 52' 14"	N77° 19' 39"W	97.20'
C40	68.67'	235.00'	16° 44' 32"	S82° 21' 58"W	68.42'





GRAPHIC SCALE: 1" = 50'



HILLCREST VILLAGE

PHASE 2

RECORDING STAMP HERE

IF YOU CAN READ THIS YOU ARE HOLDING AN UNRECORDED COPY

FINAL SUBDIVISION PLAT

CITY OF COLUMBIA - MAURY COUNTY - TENNESSEE

TOTAL ACRES:	6.320	TOTAL NO. OF LOTS:	24
ACRES NEW RD/ST:	1.279 (ROW)	L.F. OF NEW RD/ST:	57371.45 +/-
ACRES OPEN SPACE:	0.416	CIVIL DISTRICT:	3RD
DRAWN BY:	AS	CLOSURE ERROR:	> 1:10,000
SCALE:	1" = 50'	DATE:	09/30/2024

WA PROJECT NO. 22-1861 SHEET 2 OF 2

Hillcrest Village Phase 2 Resubmittal Letter

ITEM NO.
24-0274

DESCRIPTION: Morrow Ln – Hillcrest Village Ph 2

COMMENTS (Responses in RED)

Planning

1. The lead staff person for this case is Robert Archibald; he will prepare the staff report for this item. Please contact rarachibald@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff. Acknowledged
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal. Acknowledged
3. No new comments. Previous comments have been addressed in new submittal. Acknowledged.
4. Please contact E911 if your project requires assignment of new addresses or street names. Acknowledged.

Engineering

1. LOC in the amount of $370,000 provided. Acknowledged.
2. Peace Valley Drive shall be completed to Pulaski Hwy with Phase 3 single-family plat or townhomes final plat. Acknowledged.
3. Record and reference stormwater maintenance. Completed.

Fire

1. No comments. Acknowledged.

Wastewater

1. Columbia Wastewater is requiring completion of the pump station, the pump station access drive and other items. Developer should confirm this will be executable after plat approval and before signature deadline. Developer should submit the other items in addition to those mentioned here which are also required for release of building permit. Acknowledged.

Columbia Water

1. Make corrections described in notes shown on the attached PDF. Completed.

2. Be prepared to deed infrastructure to CPWS at plat signing, water system must be active at time of plat signing. Acknowledged.

Columbia Power

1. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development. Acknowledged.

Maury County Schools

1. The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of Brown Elementary School, Whitthorne Middle School, and Central High School to accommodate new students. (See Attached Capacity)
   * Due to numbers, MCPS will be rezoning all Spring Hill and Columbia elementary schools for the 25/26 SY. Acknowledged.

Duck River Electric Membership Corp

1. No comment.

Maury County Highway Dept.

1. Provide documentation detailing the annexation by the City of Columbia of the portion of Morrow Lane ROW shown in the attached document. Acknowledged.

ATT

1. No comment. Acknowledged.

Building

1. No comment. Acknowledged.

Public Works

1. No comment. Acknowledged.

Police

1. No comment. Acknowledged.

Atmos Energy

1. No comments provided. Acknowledged.

Maury County E911

1. No comments provided. Acknowledged.

MILL AND OVERLAY AGREEMENT

This Mill and Overlay Agreement (the "Agreement") is made and entered into as of the Effective Date.

WHEREAS, M/I Homes of Nashville, LLC ("M/I Homes") is currently developing property within the City of Columbia, Tennessee (the "City") known as Hillcrest Village (the "Project");

WHEREAS, the City is in the process of annexing from the Maury County, Tennessee (the "County") that certain portion of Morrow Lane depicted on Exhibit A hereto (the "ROW"); and

WHEREAS, in connection with M/I Homes' development of the Project, the City has requested that M/I Homes mill and overlay the ROW (the "Work") at the same time M/I Homes installs the final surface course of asphalt for Phase 1A of the Project.

NOW, THEREFORE, for the good and valuable consideration of the promises and covenants contained here, the receipt and sufficiency of which is hereby acknowledged, it is agreed:

1. Incorporation of Recitals. The above recitals are made part of this Agreement as if fully restated herein.

2. Performance of the Work. M/I Homes agrees to perform, or cause to be performed, the Work in a good, workmanlike and lien-free manner, and in conformance with all applicable laws and specifications for the Work. At all times M/I Homes shall maintain, and shall cause any contractors involved in the performance of the Work to maintain, a commercial general liability policy of insurance with limits commercially reasonable and proportional to the Work.

3. Surety. The Surety provided for the Hillcrest Village Phase 1A final plat will also ensure the completion of milling and paving the portion of Morrow Lane depicted on Exhibit A.

4. Acceptance. Upon M/I Homes' completion of the Work, M/I Homes shall notify the City and provide the City an opportunity to inspect the Work (the "Completion Notice"). The City shall have fourteen (14) days from its receipt of the Completion Notice (the "Inspection Period") to accept or reject the Work. The City's failure to reject or otherwise request correction of the Work during the Inspection Period shall be deemed acceptance of the Work.

5. Warranty. Upon the City's acceptance of the Work as provided herein, M/I Homes hereby assigns to the City any and all contractor warranties covering the Work.

6. Authorization. The City has undertaken or shall have undertaken, as the case may be, all necessary votes, approvals, and/or authorizations required for this Agreement, including but not limited to securing exemptions for the Work from public bidding or prevailing wage laws, if applicable.

(REST OF PAGE LEFT INTENTIONALLY BLANK, SIGNATURE PAGE TO FOLLOW)

IN WITNESS WHEREOF, this Agreement has been executed as of the _____ day of _____ 2023 (the "Effective Date").

M/I HOMES OF NASHVILLE, LLC

By: DAVID M. CUMMING

Its: VP of Land 11/14/23

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, November 12, 2024

ITEM NO.
24-0471

DESCRIPTION: 2463 Pulaski Hwy Hillcrest Village Phase 2 Parcel: 113 080.50

COMMENTS:

Planning

1. The lead staff person for this case is Robert Archibald; he will prepare the staff report for this item. Please contact rarachibald@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
3. No new comments. Previous comments have been addressed in new submittal.

Wastewater

4. Columbia Wastewater is requiring completion of the pump station, the pump station access drive and other items. Developer should confirm this will be executable after plat approval and before signature deadline. Developer should submit the other items in addition to those mentioned here which are also required for release of building permit.

Engineering

5. LOC in the amount of $370,000 provided
6. Peace Valley Drive shall be completed to Pulaski Hwy with Phase 3 single-family plat or townhomes final plat
7. Record and reference stormwater maintenance

CITY OF
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TENNESSEE

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Maury County Schools

8. Brown Elementary School, Whitthorne Middle School, Central High School
   See Attached Capacity Numbers
   The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.
   * Due to numbers, MCPS will be rezoning all Columbia and Spring Hill elementary schools for the 25/26 SY.

Fire

9. No comments

Columbia Power

10. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

Duck River Electric Membership Corp

11. No comment.

Maury County Highway Dept.

12. Provide documentation detailing the annexation by the City of Columbia of the portion of Morrow Lane ROW shown in the attached document.

ATT

13. No comment.

CITY OF
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TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Building

14. No comment.

Public Works

15. No comment.

Police

16. No comment.

Columbia Water

17. Make corrections described in notes shown on the attached PDF.

    Be prepared to deed infrastructure to CPWS at plat signing, water system must be active at time of plat signing.

Atmos Energy

18. No comments provided.

Maury County E911

19. No comments provided.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

CITY OF
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TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or msanders@columbiatn.gov if you encounter difficulties with the online portal.

You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.

Current Enrollment / Capacity

	Facility Name	Constructed	Sq. Ft.	Acreage	Capacity
Elementary	Baker	1960	43,920	12	340
	Battle Creek	2019	90,000	30	700
	Brown	1968	56,720	20	405
	Highland	1986	47,800	4.5	380
	Howell	1999	81,600	17.5	700
	Mt. Pleasant	1978	80,021	22	630
	Riverside	1984	71,150	14	500
	Spring Hill	1984	69,000	10	540
	Woodard	1990	76,200	17	600
	Wright	2005	97,765	18	740
					5535
Middle	Battle Creek	2019	125,000	45	900
	Cox	1997	137,200	25	900
	Mt. Pleasant	2001	113,938	29.2	550
	Spring Hill	2010	158,106	39.49	950
	Whitthorne	1979	175,600	17	1050
					4350
High	Battle Creek	2024	305,675	51	2000
	Central	2016	296,740	55	1700
	Mt. Pleasant	1969	110,759	31	600
	Spring Hill	1993	181,800	57	1200
					5500
Unit	Culleoka	1969	205,800	34	1020
	Hampshire	1978	83,410	13.12	500
	Santa Fe	1964	94,225	24	650
					2170
Other	Central Office	1960	15,400	1.5	
	College Hill	1958	42,211	2.26	
	Maintenance	1987	9,400	4.7	
	McDowell		46,165	7	
			2,815,605	**601.27**	**17555**

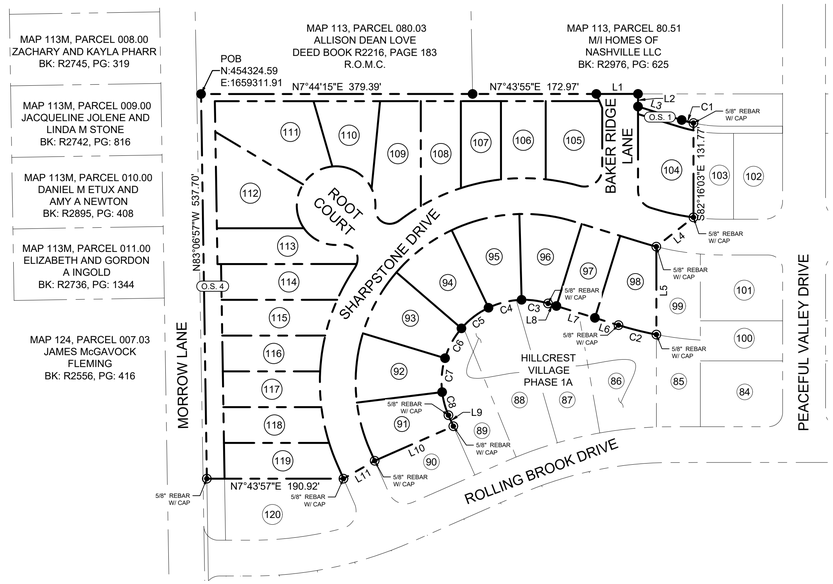
Current Enrollment	Capacity Used
282	82.9%
682	97.4%
340	84.0%
311	81.8%
581	83.0%
543	86.2%
378	75.6%
465	86.1%
586	97.7%
617	83.4%
4785	***86.4%***
758	84.2%
630	70.0%
386	70.2%
556	58.5%
948	90.3%
3278	***75.4%***
394	19.7%
1393	81.9%
369	61.5%
905	75.4%
3061	***55.7%***
863	84.6%
414	82.8%
548	84.3%
1825	***84.1%***
148	
13097	

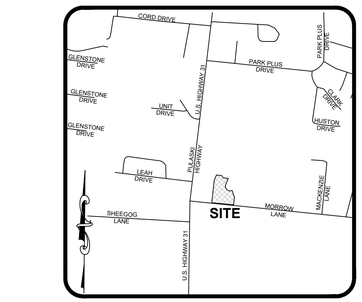
LEGEND

IRON PIN FOUND		FIRE HYDRANT		UTILITY POLE		PUBLIC UTIL. & DRAIN ESMT.	P.U.D.E.	BOUNDARY	
IRON PIN SET		SANITARY SEWER MH	SS	GUY ANCHOR		ADDRESSES	1234	CENTERLINE	
CONC. MON. FOUND		SANITARY SEWER CO	CO	COMMUNICATION BOX	C	HANDICAP SPACE		BUFFER	
CONC. MON. SET		AREA DRAIN		COMMUNICATION MH	C	SANITARY SEWER	8" SA / 8" SA	WATER FEATURE	
CONTROL POINT FOUND		CURB INLET		GAS METER	G	WATER	4" W / 4" W	TREE LINE	
CONTROL POINT SET		STORM MH	ST	GAS VALVE		UNDERGROUND ELEC	UGE / UGE	R.O.W.	RIGHT OF WAY
BENCH MARK		ELECTRIC METER-BOX	E	EVERGREEN TREE		OVERHEAD ELEC	OHE / OHE	PVMT.	EDGE OF PAVEMENT
WATER METER	W	ELECTRIC MH	E	SIDEWALK		GAS	4" G / 4" G	PUDE	PUBLIC UTILITY AND DRAINAGE EASEMENT
WATER VALVE		LIGHT POLE		MIN. BUIDLING SETBACK	M.B.S.L	COMMUNICATIONS	COM / COM	G.I.E.	GREEN INFRASTRUCTURE EASEMENT

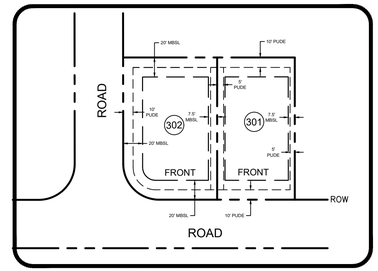
PLAT NOTES

1. THE PURPOSE OF THIS PLAT IS TO CREATE 24 SINGLE-FAMILY RESIDENTIAL LOTS AND 2 OPEN SPACES.
2. SUBJECT PROPERTY IS PRESENTLY IDENTIFIED AS PARCEL 80.54, ON MAURY COUNTY TAX MAP 113. SAID PARCEL IS FURTHER IDENTIFIED AS THE PROPERTY DESCRIBED IN BOOK R2874, PAGE 1163, REGISTERS OFFICE OF MAURY COUNTY, TENNESSEE.
3. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN THE CITY OF COLUMBIA, MAURY COUNTY, TN. ALL MATTERS PERTAINING TO CONSTRUCTION, USE, LOCATION OF IMPROVEMENTS, SIGNAGE, PARKING, NOISE, VIBRATION, EMISSIONS, FIRE HAZARDS, RADIATION, ILLUMINATION, SETBACK PROVISIONS, ETC,. ARE SUBJECT TO THE CITY OF COLUMBIA'S ZONING REGULATIONS AS INTERPRETED AND REGULATED BY THE DEPARTMENT OF DEVELOPMENT SERVICES.
4. EXISTING ZONING: RM-1
5. I HEREBY CERTIFY THAT THIS IS A CATEGORY IV SURVEY AND WAS CONDUCTED IN ACCORDANCE WITH RULE 0820-03.11 (GLOBAL POSITION SYSTEMS SURVEYS) ACCORDING TO THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE AS PROMULGATED BY THE TENNESSEE STATE BOARD OF EXAMINERS FOR LAND SURVEYORS. THIS SURVEY WAS CONDUCTED WITH DUAL-FREQUENCY RTK GPS EQUIPMENT BASED ON THE TDOT CORPS NETWORK.
   a. POSITIONAL ACCURACY: 0.07'
   b. DATE OF SURVEY: 3/16/2023
   c. DATUM/EPOCH: TENNESSEE STATE PLANE (NAD83). OCCUPATIONS FOR CONTROL POINTS ARE 3 MINUTES EACH, SIDE SHOTS ARE 3 SECONDS.
   d. GEOID 3, ZONE 7 REVISED
6. NO COMBINED GRID FACTORS WERE USED.
7. BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83). ELEVATIONS SHOWN HEREON ARE BASED ON NAVD88.
8. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN ZONE "X" AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47119C0285E, WITH AN EFFECTIVE DATE OF APRIL 16, 2007, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE PROGRAM. ZONE "X" IS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. ZONE "X" HAS TWO DESCRIPTIONS. PLEASE SEE FLOOD PLAIN MAP IF ZONE "X" IS SHADED. ***IF FIELD RUN CONTOURS ARE ESTABLISHED YOU MUST PLOT THE FLOOD LINE BASED ON BFE UNLESS THE PROPERTY IS IN ZONE A.
9. ALL CORNERS SHOWN ON THE FACE OF THE SURVEY WILL BE SET WITH 5/8 IRON ROD WITH CAP BEARING THIS SURVEYORS COMPANY NAME.
10. THE DEVELOPER ACKNOWLEDGES THAT ALL LOTS HAVE ADEQUATE BUILDING ENVELOPES AND NO VARIANCES WILL BE REQUIRED.
11. STORMWATER MAINTENANCE AGREEMENT RECORDED IN DEED BOOK.
12. ALL STREETS AND ALLEYS ARE DESIGNATED AS PUBLIC RIGHT-OF-WAY; THE CITY OF COLUMBIA IS NOT RESPONSIBLE FOR THE REPLACEMENT OR REPAIR OF ANY PRIVATE STRUCTURES WITHIN PUBLIC EASEMENTS SHOULD THE STRUCTURES BE DISTURBED IN THE PROCESS OF THE CITY EXERCISING ITS EASEMENT RIGHTS.
13. STREETS, DRAINAGE EASEMENTS, STRUCTURES, AND CULVERTS SHALL BE MAINTAINED BY THE CITY OF COLUMBIA. DETENTION PONDS AND OUTLET STRUCTURES WITHIN PUBLIC DRAINAGE EASEMENTS ARE TO BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
14. STORMWATER QUALITY SHALL BE ADDRESSED WITH EACH SITE PLAN.
15. OPEN SPACE AREAS, ROADWAY MEDIANS, BRICK PEDESTRIAN CROSSWALKS, BIKE PATHS, SIDEWALKS OUTSIDE OF RIGHT-OF-WAYS, TRAILS AND DETENTION FACILITIES SHALL BE MAINTAINED BY THE HOME OWNER'S ASSOCIATION AND SHALL BE PUBLIC UTILITY, DRAINAGE AND ACCESS EASEMENTS.
16. WITHIN NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO, THE NEW DEVELOPMENT, ALL UTILITIES, (INCLUDING CABLE TELEVISION, ELECTRICAL, NATURAL GAS, SEWER, TELEPHONE AND WATER LINES) SHALL BE PLACED UNDERGROUND.
17. AT ALL TEMPORARY TURNAROUNDS, A SIGN SHALL BE PLACED STATING, "STREET TO BE EXTENDED BY AUTHORITY OF THE CITY OF COLUMBIA."
18. MAINTENANCE OF ALL STORMWATER MANAGEMENT FEATURES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER(S) OR HOA.
19. NO OBSTRUCTIONS OR ENCROACHMENTS WHICH IMPEDE THE FLOW OF STORMWATER SHALL BE PERMITTED WITHIN PUBLIC DRAINAGE EASEMENTS BETWEEN LOTS. THE CITY OF COLUMBIA IS NOT RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY ENCROACHMENTS THAT ARE DAMAGED OR REMOVED IN THE COURSE OF MAINTENANCE ACTIVITY WITHIN EASEMENTS.
20. THE CITY OF COLUMBIA WATER MANAGEMENT DEPARTMENT HAS UNRESTRICTED ACCESS TO ITS DOMESTIC WATER, SANITARY SEWER, RECLAIM WATER LINES OR SYSTEM IMPROVEMENTS LOCATED WITHIN ITS EXCLUSIVE EASEMENTS WITHIN THE DEVELOPMENT. IN THE EVENT LANDSCAPING, FENCING, CONCRETE OR OTHER STRUCTURES ARE INSTALLED OR PLACED WITHIN A CITY OF COLUMBIA EASEMENT, THE CITY OF COLUMBIA SHALL HAVE THE RIGHT TO REMOVE SUCH ENCROACHMENTS WITHIN THE EASEMENT AS MAY BE NECESSARY FOR THE CITY OF COLUMBIA TO REPAIR, MAINTAIN OR REPLACE ITS INFRASTRUCTURE WHICH IS NOW OR IN THE FUTURE MAY BE LOCATED WITHIN THE EASEMENT WITHOUT OBTAINING ANY FURTHER PERMISSION FROM THE PROPERTY OWNER OR HOA. THE PROPERTY OWNER OR HOA SHALL BE RESPONSIBLE FOR REPAIRING AND/OR REPLACING ANY SUCH LANDSCAPING, FENCING, CONCRETE, OR OTHER STRUCTURES REMOVED OR DISTURBED BY THE CITY OF COLUMBIA IN COMMON OPEN SPACE LOTS AND IN AREAS OWNED BY THE PROPERTY OWNER OR HOA AT NO EXPENSE TO THE CITY OF COLUMBIA. INDIVIDUAL HOMEOWNERS SHALL BE RESPONSIBLE FOR STRUCTURES REMOVED OR DISTURBED BY THE CITY OF COLUMBIA WITHIN AN EASEMENT ON THE HOMEOWNER'S LOT AT THE HOMEOWNER'S EXPENSE.
21. ALL LOTS WITHIN PHASE 2 REQUIRE A FIRE SPRINKLER SYSTEM INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS. A HORN AND STROBE WILL BE REQUIRED ON THE FRONT OF THE HOUSE. IT WILL ACTIVATE WHEN THE SPRINKLER SYSTEM IS ACTIVATED.
22. PUBLIC UTILITY AND DRAINAGE EASEMENTS (PUDE) SHALL BE REQUIRED AND BE TEN (10) FEET IN WIDTH ON ALL PROPERTY LINES PARALLEL AND ABUTTING PUBLIC ROADS OR RIGHTS-OF-WAY, AND FIVE (5) FEET IN WIDTH ON ALL INTERIOR LOT LINES, EXCEPT FOR INTERIOR LOT LINES WITH A ZERO LOT LINE OR A COMMON WALL ALONG A LOT LINE.





VICINITY MAP
NOT TO SCALE



TYPICAL LOT LAYOUT
N.T.S.

Parcel Area Table		
Parcel #	Area (SF)	Area (AC)
91	8151.84'	0.187
92	8749.01'	0.201
93	8749.01'	0.201
94	8749.01'	0.201
95	8749.01'	0.201
96	8311.55'	0.191
97	6749.24'	0.155
98	8508.34'	0.195
104	9581.86'	0.220
105	8987.85'	0.206
106	6765.74'	0.155
107	6413.32'	0.147

Parcel Area Table		
Parcel #	Area (SF)	Area (AC)
108	7441.65'	0.171
109	10289.34'	0.236
110	7349.02'	0.169
111	12636.20'	0.290
112	11519.94'	0.264
113	8297.76'	0.190
114	8746.33'	0.201
115	7592.80'	0.174
116	6961.38'	0.160
117	6787.93'	0.156
118	7059.12'	0.162
119	7800.48'	0.179

Open Space Area Table		
Parcel #	Area (SF)	Area (AC)
O.S. 1	808.64'	0.019
O.S. 4	17281.89'	0.397

Parcel Line Table		
Line #	Length	Direction
L1	58.18'	N7°43'55"E
L2	17.63'	S82°16'03"E
L3	63.95'	N24°52'05"E
L4	66.09'	S30°29'48"E
L5	122.90'	S82°16'03"E
L6	34.52'	S24°52'05"W

Parcel Line Table		
Line #	Length	Direction
L7	56.24'	S24°52'05"W
L8	12.30'	S24°52'05"W
L9	16.80'	N73°59'42"E
L10	120.00'	S16°00'18"E
L11	50.28'	S22°01'41"E

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	16.95'	195.00'	4° 58' 44"	N22° 22' 43"E	16.94'
C2	54.51'	495.00'	6° 18' 33"	S21° 42' 49"W	54.48'
C3	37.43'	115.00'	18° 38' 55"	S15° 32' 38"W	37.27'
C4	47.91'	115.00'	23° 52' 14"	S5° 42' 57"E	47.57'
C5	47.91'	115.00'	23° 52' 14"	S29° 35' 11"E	47.57'
C6	47.91'	115.00'	23° 52' 14"	S53° 27' 25"E	47.57'
C7	47.91'	115.00'	23° 52' 14"	S77° 19' 39"E	47.57'
C8	33.60'	115.00'	16° 44' 32"	N82° 21' 58"E	33.48'

OWNER: M/I HOMES OF NASHVILLE LLC
4131 WORTH AVE STE 500
COLUMBUS OH 43219

ENGINEER: CRUNK ENGINEERING, LLC
7112 CROSSROADS BLVD STE 201
BRENTWOOD, TN 37027
615-873-1795

SURVEYOR: JOEY C. WILSON II, PE, RLS
WILSON & ASSOCIATES, P.C.
108 BEASLEY DRIVE
FRANKLIN, TN 37064
(615)794-2275
JWILSON@WILSONPC.COM

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

NAME, TITLE, AGENCY OF AUTHORIZED APPROVING AGENT _____ DATE _____

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF SURVEY ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CLASS "IV" LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS GREATER THAN OR EQUAL TO 1:10,000.

09/30/24
DATE

JOEY C. WILSON II, TENNESSEE RLS NO. 2089
WILSON & ASSOCIATES, P.C.
ENGINEERING/SURVEYING/ENVIRONMENTAL
108 BEASLEY DRIVE, FRANKLIN, TN 37064
OFFICE: 615.794.2275 FAX 615.794.2176
JWILSON@WILSONPC.COM

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN BOOK NUMBER R2874, PAGE 1163, MAURY COUNTY REGISTERS OFFICE, AND THAT I (WE) HEREBY ADOPT THIS FINAL SUBDIVISION PLAT OF THE PROPERTY AS SHOWN HEREON AND DEDICATE ALL PUBLIC WAYS AND EASEMENTS AS NOTED WITH MY (OUR) FREE CONSENT.

OWNER _____ DATE _____

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE & UTILITIES

I HEREBY CERTIFY THAT THE STREETS, DRAINAGE, AND UTILITIES OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAVE BEEN INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS, OR A PERFORMANCE SURETY IN THE AMOUNT OF $_____ FOR STREETS AND DRAINAGE HAS BEEN POSTED WITH THE CITY OF COLUMBIA, TENNESSEE, TO ASSURE COMPLETION OF SUCH IMPROVEMENTS.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL FOR SANITARY SEWER SYSTEM

I HEREBY CERTIFY THAT THE SANITARY SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DIRECTOR OF WASTEWATER DEPARTMENT _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS, WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS NOTED IN THE MINUTES OF THE COLUMBIA MUNICIPAL PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE MAURY COUNTY REGISTER OF DEEDS.

SECRETARY, PLANNING COMMISSION _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME & STREET NAMES

SUBDIVISION NAME AND STREET NAMES APPROVED BY THE CITY ENGINEERING DEPARTMENT AND BY E-911 MAURY COUNTY.

MAURY COUNTY E911 _____ DATE _____

RECORDING STAMP HERE

IF YOU CAN READ THIS YOU ARE HOLDING AN UNRECORDED COPY

100 0 50 100 200
GRAPHIC SCALE: 1" = 100'

WILSON & ASSOCIATES, PC.
Engineering/Surveying/Environmental

HILLCREST VILLAGE

PHASE 2

FINAL SUBDIVISION PLAT

CITY OF COLUMBIA - MAURY COUNTY - TENNESSEE

TOTAL ACRES:	6.320	TOTAL NO. OF LOTS:	24
ACRES NEW RD/ST:	1.279 (ROW)	L.F. OF NEW RD/ST:	57371.45 +/-
ACRES OPEN SPACE:	0.416	CIVIL DISTRICT:	3RD
DRAWN BY:	AS	CLOSURE ERROR:	> 1:10,000
SCALE:	1" = 100'	DATE:	09/30/2024

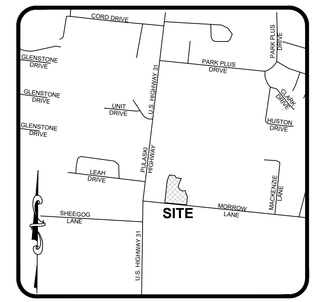
WA PROJECT NO. 22-1861 SHEET 1 OF 2

LEGEND

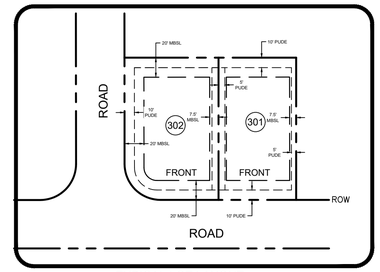
IRON PIN FOUND		FIRE HYDRANT		UTILITY POLE		PUBLIC UTIL. & DRAIN ESMT.	P.U.D.E.	BOUNDARY	
IRON PIN SET		SANITARY SEWER MH	SS	GUY ANCHOR		ADDRESSES	1234	CENTERLINE	
CONC. MON. FOUND		SANITARY SEWER CO	CO	COMMUNICATION BOX	C	HANDICAP SPACE		BUFFER	
CONC. MON. SET		AREA DRAIN		COMMUNICATION MH	C	SANITARY SEWER	8" SA 8" SA	WATER FEATURE	
CONTROL POINT FOUND		CURB INLET		GAS METER	G	WATER	4" W 4" W	TREE LINE	
CONTROL POINT SET		STORM MH	ST	GAS VALVE		UNDERGROUND ELEC	UGE UGE	R.O.W.	RIGHT OF WAY
BENCH MARK		ELECTRIC METER-BOX	E	EVERGREEN TREE		OVERHEAD ELEC	OHE OHE	PVMT.	EDGE OF PAVEMENT
WATER METER	W	ELECTRIC MH	E	SIDEWALK		GAS	4" G 4" G	PUDE	PUBLIC UTILITY AND DRAINAGE EASEMENT
WATER VALVE		LIGHT POLE		MIN. BUIDLING SETBACK	M.B.S.L	COMMUNICATIONS	COM COM	G.I.E.	GREEN INFRASTRUCTURE EASEMENT

HATCH LEGEND

LANDSCAPE BUFFER



VICINITY MAP
NOT TO SCALE



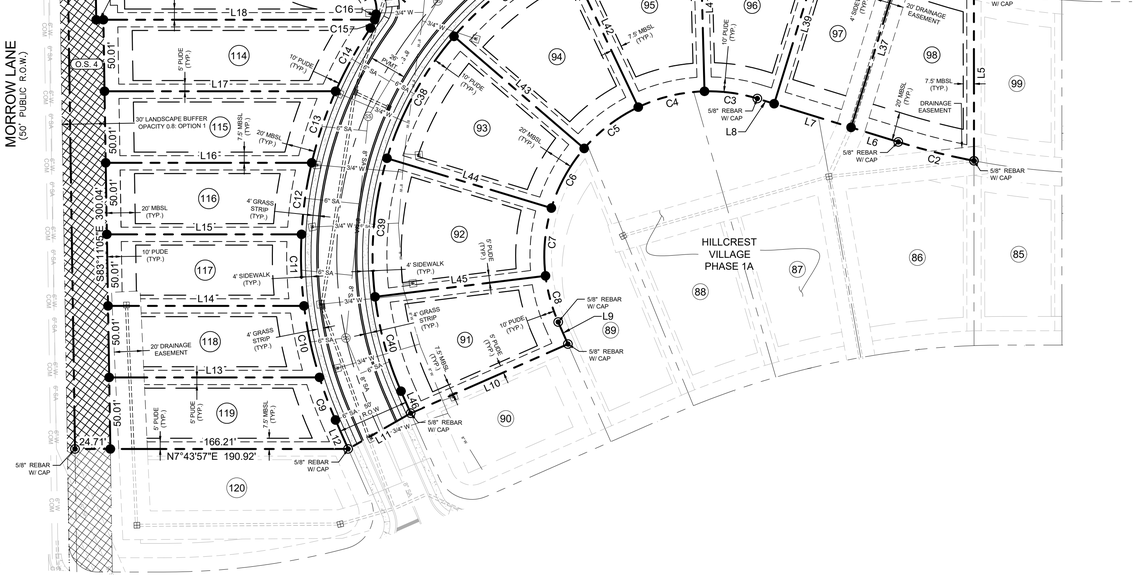
TYPICAL LOT LAYOUT
N.T.S.

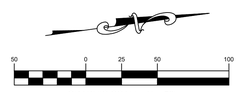
Parcel Line Table		
Line #	Length	Direction
L1	58.18'	N7°43'55"E
L2	17.63'	S82°16'03"E
L3	63.95'	N24°52'05"E
L4	66.09'	S30°29'48"E
L5	122.90'	S82°16'03"E
L6	34.52'	S24°52'05"W
L7	56.24'	S24°52'05"W
L8	12.30'	S24°52'05"W
L9	16.80'	N73°59'42"E
L10	120.00'	S16°00'18"E
L11	50.28'	S22°01'41"E
L12	22.07'	N73°59'42"E
L13	146.97'	N7°43'57"E
L14	136.97'	N7°43'57"E
L15	136.02'	N7°43'57"E
L16	143.95'	N7°43'57"E
L17	161.48'	N7°43'57"E
L18	189.56'	N7°43'57"E
L19	5.00'	S6°48'55"W
L20	121.59'	N7°43'57"E
L21	142.84'	N38°39'45"E
L22	94.98'	N81°38'54"E
L23	122.82'	S76°45'15"E

Parcel Line Table		
Line #	Length	Direction
L24	146.64'	S82°16'03"E
L25	121.55'	S82°16'03"E
L26	109.46'	S82°16'03"E
L27	109.33'	S82°16'03"E
L28	10.83'	S75°11'35"W
L29	13.97'	N7°43'59"E
L30	10.52'	N75°11'35"E
L31	84.74'	S82°16'03"E
L32	10.46'	S82°16'03"E
L33	60.87'	S24°52'05"W
L34	107.12'	S82°16'03"E
L35	5.41'	N24°52'05"E
L36	34.52'	N24°52'05"E
L37	120.00'	S65°07'55"E
L38	56.24'	N24°52'05"E
L39	120.00'	S65°07'55"E
L40	12.30'	N24°52'05"E
L41	120.00'	S83°46'50"E
L42	120.00'	N72°20'56"E
L43	120.00'	N48°28'42"E
L44	120.00'	N24°36'28"E
L45	120.00'	N0°44'14"E
L46	16.80'	S73°59'42"W

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	16.95'	195.00'	4° 58' 44"	N22° 22' 43"E	16.94'
C2	54.51'	495.00'	6° 18' 33"	S21° 42' 49"W	54.48'
C3	37.43'	115.00'	18° 38' 55"	S15° 32' 38"W	37.27'
C4	47.91'	115.00'	23° 52' 14"	S5° 42' 57"E	47.57'
C5	47.91'	115.00'	23° 52' 14"	S29° 35' 11"E	47.57'
C6	47.91'	115.00'	23° 52' 14"	S53° 27' 25"E	47.57'
C7	47.91'	115.00'	23° 52' 14"	S77° 19' 39"E	47.57'
C8	33.60'	115.00'	16° 44' 32"	N82° 21' 58"E	33.48'
C9	31.84'	285.00'	6° 24' 00"	N77° 11' 42"E	31.82'
C10	51.22'	285.00'	10° 17' 51"	N85° 32' 38"E	51.15'
C11	50.10'	285.00'	10° 04' 16"	S84° 16' 19"E	50.03'
C12	50.57'	285.00'	10° 10' 01"	S74° 09' 11"E	50.51'
C13	52.80'	285.00'	10° 36' 55"	S63° 45' 43"E	52.73'
C14	50.51'	285.00'	10° 09' 18"	S53° 22' 37"E	50.45'
C15	6.53'	25.00'	14° 58' 31"	S55° 47' 14"E	6.52'
C16	3.93'	25.00'	9° 01' 00"	S67° 46' 59"E	3.93'
C17	37.58'	20.00'	107° 40' 10"	N53° 52' 26"E	32.29'
C18	60.12'	55.00'	62° 37' 56"	N31° 21' 19"E	57.17'
C19	65.13'	55.00'	67° 50' 46"	S83° 24' 20"E	61.39'
C20	49.71'	55.00'	51° 47' 23"	S23° 35' 16"E	48.04'
C21	67.04'	55.00'	69° 50' 03"	S37° 13' 27"W	62.96'

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C22	28.59'	55.00'	29° 47' 03"	S87° 02' 00"W	28.27'
C23	37.58'	20.00'	107° 40' 10"	S48° 05' 27"W	32.29'
C24	10.47'	25.00'	23° 59' 31"	S17° 44' 24"E	10.39'
C25	35.60'	285.00'	7° 09' 22"	S26° 09' 28"E	35.57'
C26	61.48'	285.00'	12° 21' 37"	S16° 23' 59"E	61.36'
C27	57.39'	285.00'	11° 32' 13"	S4° 27' 04"E	57.29'
C28	62.63'	285.00'	12° 35' 25"	S7° 36' 45"W	62.50'
C29	48.11'	285.00'	9° 40' 22"	S18° 44' 39"W	48.06'
C30	46.18'	25.00'	105° 50' 53"	S29° 20' 36"E	39.89'
C31	31.79'	25.00'	72° 51' 52"	N61° 18' 01"E	29.69'
C32	56.02'	325.00'	9° 52' 36"	N19° 55' 47"E	55.95'
C33	19.97'	205.00'	5° 34' 49"	S22° 04' 41"W	19.96'
C34	18.19'	375.00'	2° 46' 47"	N23° 28' 42"E	18.19'
C35	76.49'	235.00'	18° 38' 55"	N15° 32' 38"E	76.15'
C36	97.91'	235.00'	23° 52' 14"	N5° 42' 57"W	97.20'
C37	97.91'	235.00'	23° 52' 14"	N29° 35' 11"W	97.20'
C38	97.91'	235.00'	23° 52' 14"	N53° 27' 25"W	97.20'
C39	97.91'	235.00'	23° 52' 14"	N77° 19' 39"W	97.20'
C40	68.67'	235.00'	16° 44' 32"	S82° 21' 58"W	68.42'





GRAPHIC SCALE: 1" = 50'



WILSON & ASSOCIATES, PC.
Engineering/Surveying/Environmental

HILLCREST VILLAGE

PHASE 2

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FINAL SUBDIVISION PLAT

CITY OF COLUMBIA - MAURY COUNTY - TENNESSEE

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DRAWN BY:	AS	CLOSURE ERROR:	> 1:10,000
SCALE:	1" = 50'	DATE:	09/30/2024

WA PROJECT NO. 22-1861 SHEET 2 OF 2

DOCUMENT PREPARED BY:
Name: Alexander Mollica
Company Crunk Engineering
Address: 7112 Crossroads Blvd.
Brentwood, TN 37027
After recording return copy to City of Columbia, Development Services

INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES

Map & Parcel Number: Map 113, Parcel 87.40
Project Name: Jim Baker Property, Phase 1

Recorded by deed in the Register of Deeds Office of Maury County in Deed Book R2874, Page(s) 1163 - 1170

THIS AGREEMENT, made this 8 day of August, 2023, by and between M/I Homes of Nashville LLC hereinafter referred to as the "OWNER(S)" of the following property and City of Columbia, Tennessee, hereinafter referred to as the "CITY",

WE, the OWNER(S), with full authority to execute deeds, mortgages, other covenants, all rights, titles, and interests in the property described above, do hereby covenant with the CITY and agree as follows:

1. The OWNER(S) covenant and agree with the CITY that the OWNER(S) shall provide for adequate long term maintenance and continuation of stormwater control measures described in the Long Term Maintenance Plan and shown on the location map, deed of easement drawing or plat attached hereto to ensure that the facilities, are and remain in proper working condition in accordance with approved design standards, rules and regulations, and applicable laws. The OWNER(S) shall perform preventative maintenance activities at intervals described in the schedule attached hereto along with necessary landscaping (grass cutting, etc.) and trash removal as part of regular maintenance.

2. The OWNER(S) shall perform routine inspections to ensure that all long term stormwater management facilities are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. The OWNER(S) or operators shall maintain documents of these inspections.

3. The OWNER(S) shall perform comprehensive inspections of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect.

4. The OWNER(S) shall grant to the CITY or its agent or contractor the right of entry at reasonable times and in a reasonable manner for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining or repairing the facility within the CITY.

5. The OWNER(S) shall record and grant to the CITY the necessary easements and rights-of-way and maintain perpetual access from public rights-of-way to the facility for the CITY or its agent and contractor.

6. If, upon inspection, the CITY finds that the OWNER(S) has failed to properly maintain the facilities, the CITY may order the work performed within ten (10) days. In the event the work is not performed within the specified time, the ONWER(S) agrees to allow the CITY to enter the property and take whatever steps it deems necessary to maintain the stormwater control facilities. This provision shall not be construed to allow the CITY to erect any structure of a permanent nature on the PROPERTY without first obtaining written approval of the OWNER(S)

7. The CITY is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any obligation on the CITY. The OWNER(S) shall reimburse the CITY upon demand the costs incurred in the maintenance of the facilities.

8. If the OWNER(S) fails to pay the CITY for the above expensive after forty-five (45) days written notice, the OWNER(S) authorizes the CITY to collect said expenses from the OWNER(S) through appropriate legal action and the OWNER(S) shall be liable for the reasonable expenses of collection, court costs, and attorney fees.

9. The OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successor in interest shall indemnify and hold harmless the CITY and its officers, agents and employees for any and all damages, accidents, casualties, occurrences, claims or attorney's fees which might arise or be asserted, in whole or in part,

against the CITY from the construction, presence, existence, or maintenance of the stormwater control facilities subject to this AGREEMENT. In the event a claim is asserted against the CITY, its officers, agents or employees, the CITY shall notify OWNER(S) and the OWNER(S) shall defend at OWNER(S) expense any suit based on such claim. If any judgment or claims against the CITY, its officers, agents or employees, shall be allowed, the OWNER(S) shall pay all costs and expenses in connection therewith. The CITY will not indemnify, defend or hold harmless in any fashion the OWNER(S) from any claims arising from any failure, regardless of any language in any attachment or other document that the OWNER(S) may provide

10. The OWNER(S) shall not be able to transfer, assign or modify its responsibilities with respect to this agreement **without the CITY's written prior consent. Nothing herein shall be construed to prohibit a transfer by OWNER(S)** to subsequent owners and assigns.

11. No waiver of any provision of this AGREEMENT shall affect the right of any party thereafter to enforce such provision or to exercise any right or remedy available to it in the event of any default.

12. The OWNER(S) shall record a plat showing and accurately defining the easements for stormwater control facilities. The plat must reference the Instrument Number where this AGREEMENT and its attachments are recorded and contain a note that the OWNER(S) is responsible for maintaining the stormwater management facilities.

13. The OWNER(S) shall record this AGREEMENT in the office of the Register of Deeds for the county of Maury, Tennessee, and the AGREEMENT shall constitute a covenant running with the land, and shall be binding upon the OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successors in interest

ATTEST BY OWNER(S):

Print Name DAVID M. CUMMING

Title VP of Land

Signature

Owner M/I Homes of Nashville, LLC

Address 3020 Stansberry Ln.
Suite 202

City, State ZIP Franklin, TN 37069

STATE OF Tennessee
COUNTY OF Maury

Before me, Erika Root of the state and county mentioned, personally appeared David M. Cumming, with whom I am personally acquainted and who acknowledged that he/she executed the foregoing instrument of the purposes therein contained.

Witness my hand this the 14th day of August, 2023.

Notary Public

My Commission Expires: 6-26-2027

ERIKA ROOT
STATE OF TENNESSEE
NOTARY PUBLIC
MAURY COUNTY
My Commission Expires 06-26-2027

CITY OF COLUMBIA, TENNESSEE
ENGINEERING DEPARTMENT

APPROVED BY :_____

STATE OF TENNESSEE
COUNTY OF MAURY

Before me, _____ of the state and county mentioned, personally appeared _____, with whom I am personally acquainted, and who acknowledged themselves to be the City Engineer of the City of Columbia or his designee and as such, being authorized so to do, executed the foregoing instrument of the purposes therein contained.

Witness my hand this the _____ day of _____, 20_____.

Notary Public
My Commission Expires:_____

Post Construction Long Term Maintenance Plan

Project Name: Jim Baker Property

Columbia, TN

August 7, 2023

Table of Contents

Section Name

System Description
Maintenance Procedures

System Description

The site consists of a series of stormwater conveyances both open channel and piped, detention / retention and water quality ponds.

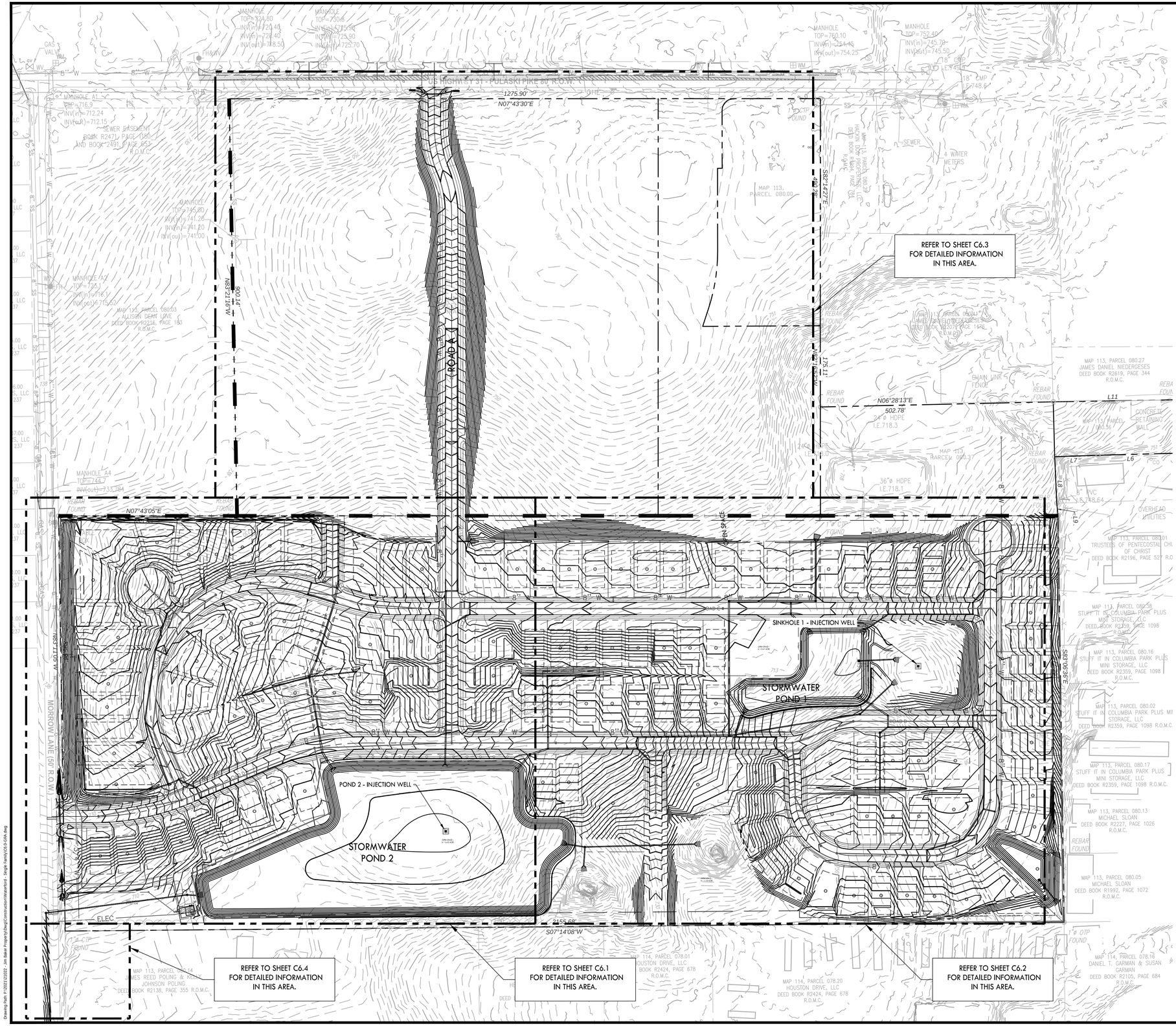
- There are two stormwater detention ponds sized to detain through the 100 year peak event. The orifice is designed to contain the first flush, 1 inch, for 24 hour.
- 2,925 feet of grass lined open channel.
- 67 feet of 36 in ADS pipe, 1658 feet 30 in ADS pipe, 670 feet of 24 in ADS pipe, 5,617 feet of 18 in ADS pipe and 72 storm inlets.

Upon completion of the site construction, 'Record Drawings' in a version not less than AutoCAD 2006 LT (NAD83, NAVD88) of the stormwater controls will be provided to the City of Columbia for verification.

A copy of the INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES that has been completed, notarized, and recorded in the Land Records of the County of Maury, Tennessee will be kept on site with this document.

Maintenance Procedures

1. **STORMWATER DETENTION PONDS**
    - **a.** The outlet structures shall be checked regularly for clogging and shall be cleaned and repaired as necessary---monthly after it is first built then a regular sequence should be established or at least quarterly or after a large rain event.
    - **b.** Check banks and bottom surface of basins for erosion and correct as necessary.
    - **c.** Check at least quarterly and after each extreme storm event, the facility should be cleaned of accumulated debris. The banks of surface ponds should be checked and areas of erosion repaired. Remove nuisance wetland species and take appropriate measures to control mosquitos.
    - **d.** This maintenance typically includes sediment, floatable, and debris removal from inlets, outlets and skimmers.
    - **e.** Pond vegetation to be trimmed or harvested as appropriate, grassy areas, frequently mowed. Grass should be mowed so that it does not get over 12.
    - **f.** Remove sediment when accumulation reached 6 inches, or if re-suspension is observed or probable.
    - **g.** Some sediment may contain contaminants which the Tennessee Department of Environment and Conservation (TDEC) requires special disposal procedure. If there is any uncertainty about what the sediment contains or it is known to contain contaminants, then TDEC should be consulted and their disposal recommendations followed. The TDEC Division of Water Pollution Control should be contacted at (931) 380-3371. Generally, special attention or sampling should be given to sediment accumulated in facilities serving industrial, manufacturing or heavy commercial sites, Page 2 of 4 Rev. 9/26/2016 fueling centers or automotive maintenance areas, large parking areas, or other areas where pollutants (other than clean soil) are suspected to accumulate and be conveyed by storm runoff.
    - **h.** Some sediment collected may be innocuous (free of pollutants) and can be used as fill material, cover or land spreading. It is important that this material not be placed in any way that will promote or allow re-suspension in storm runoff.
2. **67 LF OF 36" ADS, 1658 LF OF 30" ADS, 670 LF OF 24" ADS, 5617 LF OF 18" ADS AND 72 STORM INLETS**
    - **a.** These structures will be inspected and cleaned quarterly to ensure pipes and drain inlets do not fill with sediment or trash.



NOTES:

1. GRADING TO MATCH BUILDING TYPE AND ANY LOTS OVER 20% GRADE SHALL BE LABELED AS CRITICAL.
2. A GEOTECHNICAL INVESTIGATION WILL BE REQUIRED TO INVESTIGATE THE EXISTENCE OF SINKHOLES. ANY SINKHOLES DISCOVERED WILL BE REMEDIATED AS NECESSARY.

CRUNK ENGINEERING LLC
7112 CROSSROADS BOULEVARD
SUITE 201
BRENTWOOD, TN 37027
(615) 873-1795
WWW.CRUNKENG.COM

ENGINEERING CRUNK

ANDREW WILSON CRUNK
REGISTERED PROFESSIONAL ENGINEER
AGRICULTURE
COMMERCE
No. 114180
STATE OF TENNESSEE
4/4/23

JIM BAKER PROPERTY

COLUMBIA, TENNESSEE

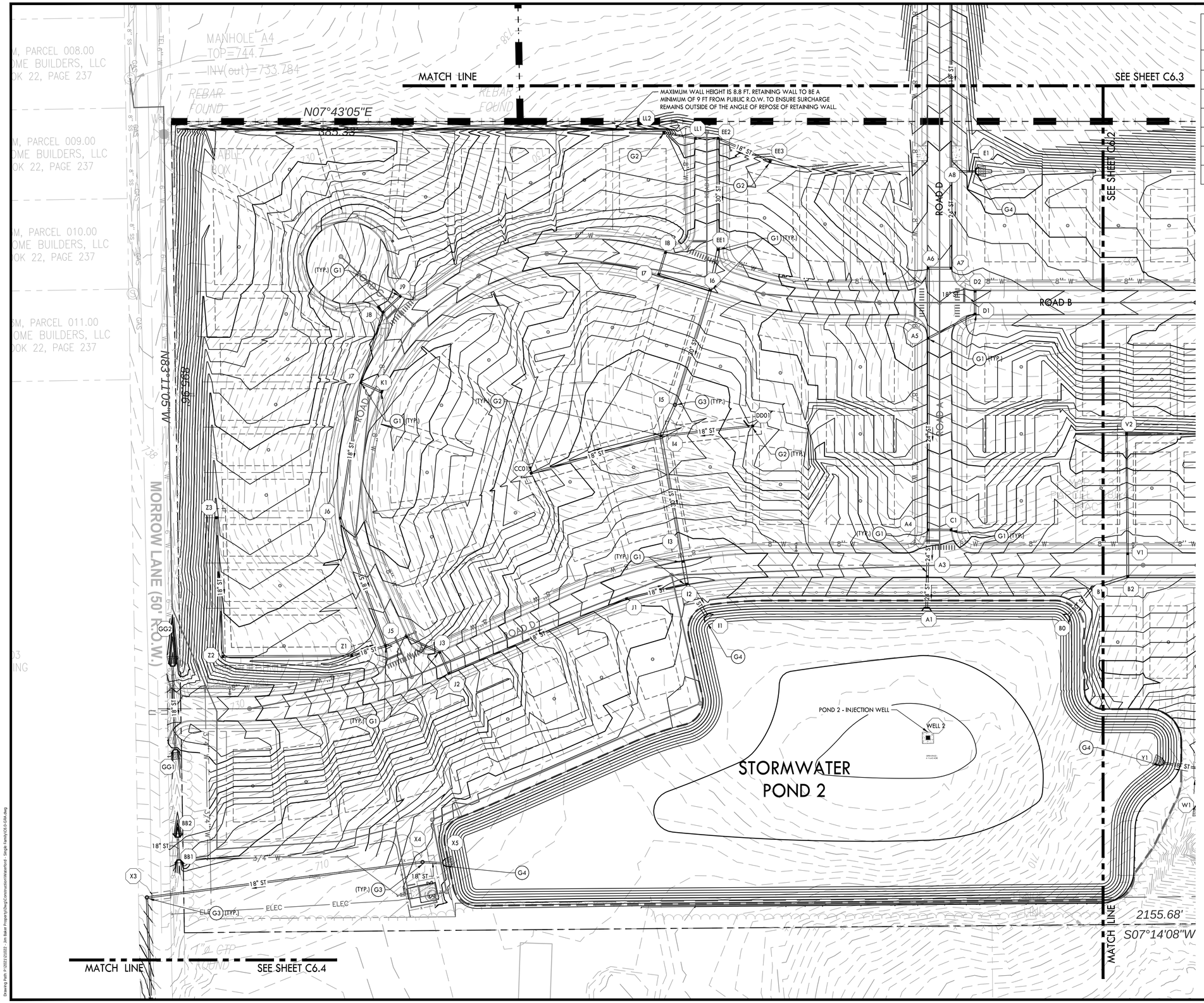
REVISIONS		
No.	DATE	
1	08/29/22	
2	09/13/22	
3	03/16/23	

04/04/23 21022

C6.0

OVERALL GRADING & DRAINAGE PLAN

Drawing Path: P:\2021\21022 - Jim Baker Property\Dwg\Construction\Waterford - Single Family\C6.0-GRA.dwg



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C8.1 - 3
G2	SINGLE CATCH BASIN	C8.1 - 4
G3	JUNCTION BOX	C8.1 - 2
G4	CONCRETE HEADWALL	C8.1 - 6
G5	POND 1 OUTLET STRUCTURE	C8.1 - 9
G6	POND 3 OUTLET STRUCTURE	C8.4 - 1

NOTES:
1. REFER TO SHEET C6.0 FOR NOTES.
2. ADS PIPE TO BE BACKFILLED WITH #57 STONE TO A DEPTH OF 18" ABOVE RIM ELEVATION.
3. LOTS 15-22, CRITICAL LOTS, WILL REQUIRE INDIVIDUAL GRADING PLAN WITH BUILDING PERMIT AND ELEVATION CERTIFICATION.
4. LOTS WITH OVER 2 FT OF GRADE DIFFERENCE BETWEEN SIDE LOT SETBACKS WILL REQUIRE A CRITICAL LOT GRADING PLAN.

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- +55.10 — PROPOSED SPOT ELEVATION
- A1 — STORM STRUCTURE LABEL
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

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ENGINEERING CRUNK

ANDREW WILSON CRUNK
REGISTERED PROFESSIONAL ENGINEER
AGRICULTURE
COMMERCE
114,180
STATE OF TENNESSEE
4/4/23

JIM BAKER PROPERTY

COLUMBIA, TENNESSEE

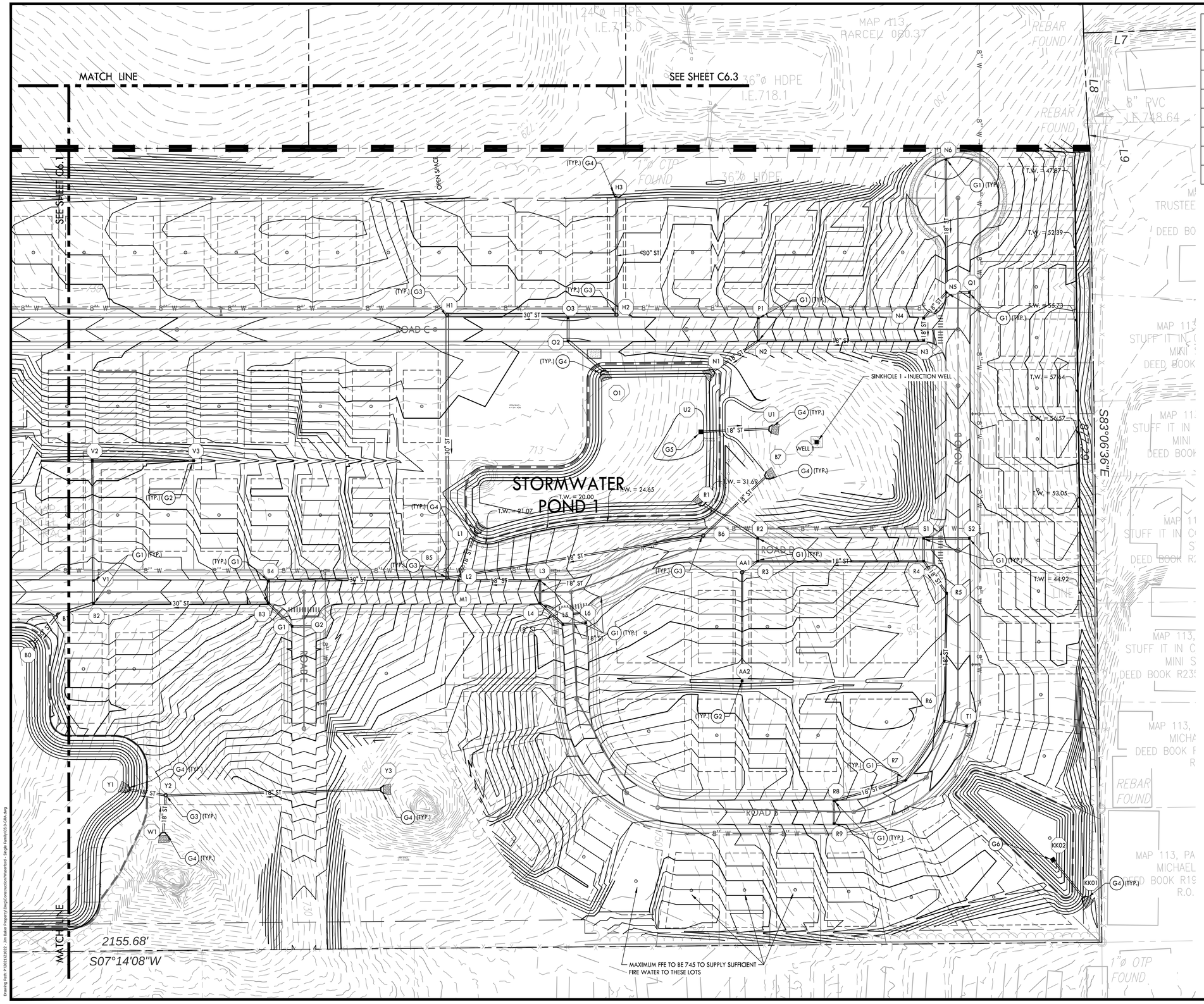
REVISIONS		
No.	DATE	
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2	09/13/22	
3	03/16/23	

04/04/23 21022

C6.1

GRADING & DRAINAGE PLAN

Drawing Path: P:\2021\21022 - Jim Baker Property\Dwg\Construction\Waterford - Single Family\C6.0-GDA.dwg



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C8.1 - 3
G2	SINGLE CATCH BASIN	C8.1 - 4
G3	JUNCTION BOX	C8.1 - 2
G4	CONCRETE HEADWALL	C8.1 - 6
G5	POND 1 OUTLET STRUCTURE	C8.1 - 9
G6	POND 3 OUTLET STRUCTURE	C8.4 - 1

NOTES:
1. REFER TO SHEET C6.0 FOR NOTES.
2. ADS PIPE TO BE BACKFILLED WITH #57 STONE TO A DEPTH OF 18" ABOVE RIM ELEVATION.
3. LOTS 15-22, CRITICAL LOTS, WILL REQUIRE INDIVIDUAL GRADING PLAN WITH BUILDING PERMIT AND ELEVATION CERTIFICATION.
4. LOTS WITH OVER 2 FT OF GRADE DIFFERENCE BETWEEN SIDE LOT SETBACKS WILL REQUIRE A CRITICAL LOT GRADING PLAN.

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- +55.10 — PROPOSED SPOT ELEVATION
- A1 — STORM STRUCTURE LABEL
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

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BRENTWOOD, TN 37027
(615) 873-1795
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ENGINEERING CRUNK

ALAN WILSON CRUNK — REGISTERED AGRICULTURE — COMMERCE — LAND — 114,180 — STATE OF TENNESSEE — 4/4/23

JIM BAKER PROPERTY

COLUMBIA, TENNESSEE

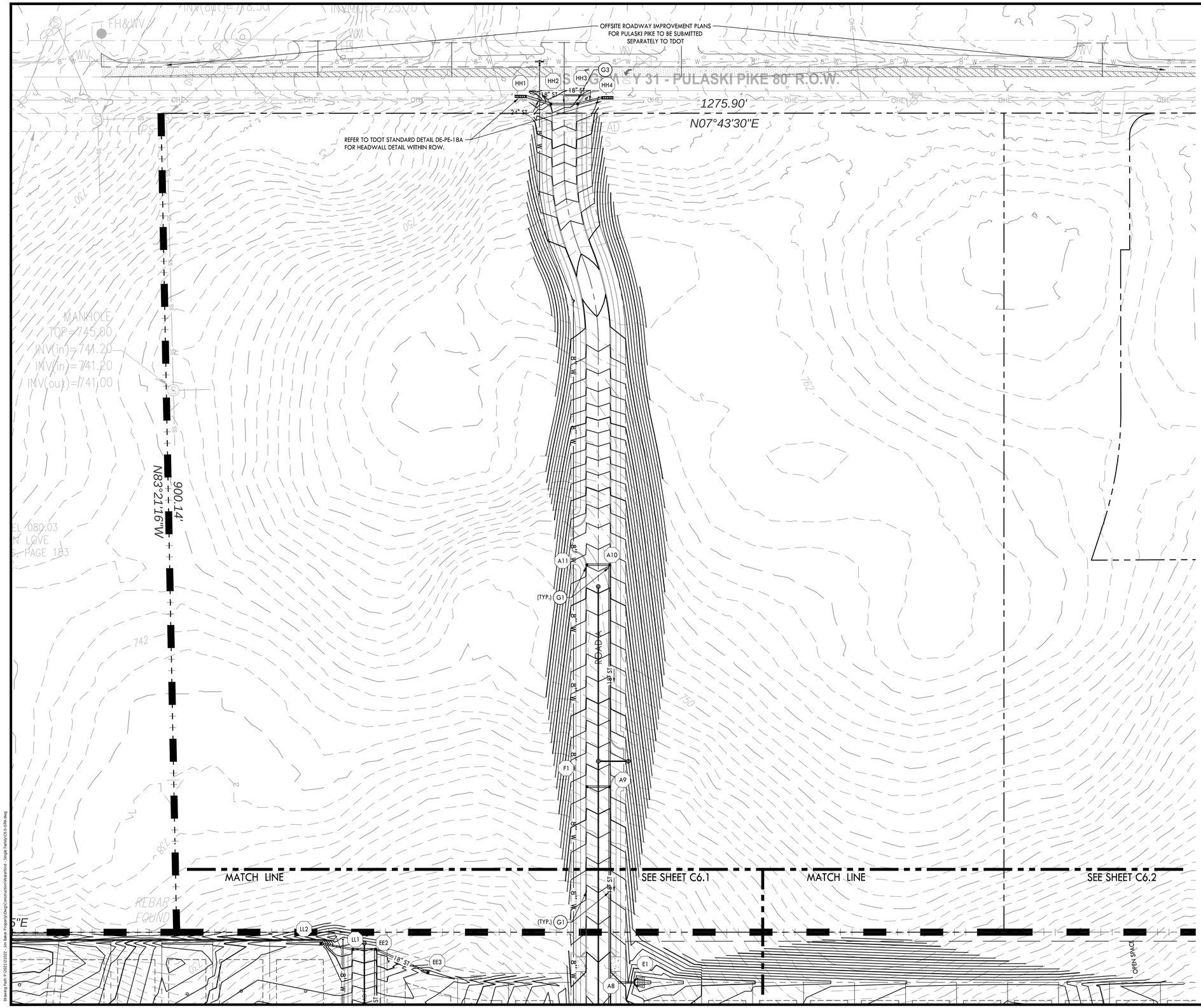
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C6.2

GRADING & DRAINAGE PLAN

Drawing Path: P:\2021\212022 - Jim Baker Property\Dwg\Construction\Waterfront - Single Family\C6.0-GRA.dwg



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C8.1 - 3
G2	SINGLE CATCH BASIN	C8.1 - 4
G3	JUNCTION BOX	C8.1 - 2
G4	CONCRETE HEADWALL	C8.1 - 6
G5	POND 1 OUTLET STRUCTURE	C8.1 - 9
G6	POND 3 OUTLET STRUCTURE	C8.4 - 1

NOTES:
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- +55.10 — PROPOSED SPOT ELEVATION
- A1 — STORM STRUCTURE LABEL
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

0 10 20 30 40 50 100
GRAPHIC SCALE

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ENGINEERING CRUNK

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JIM BAKER PROPERTY

COLUMBIA, TENNESSEE

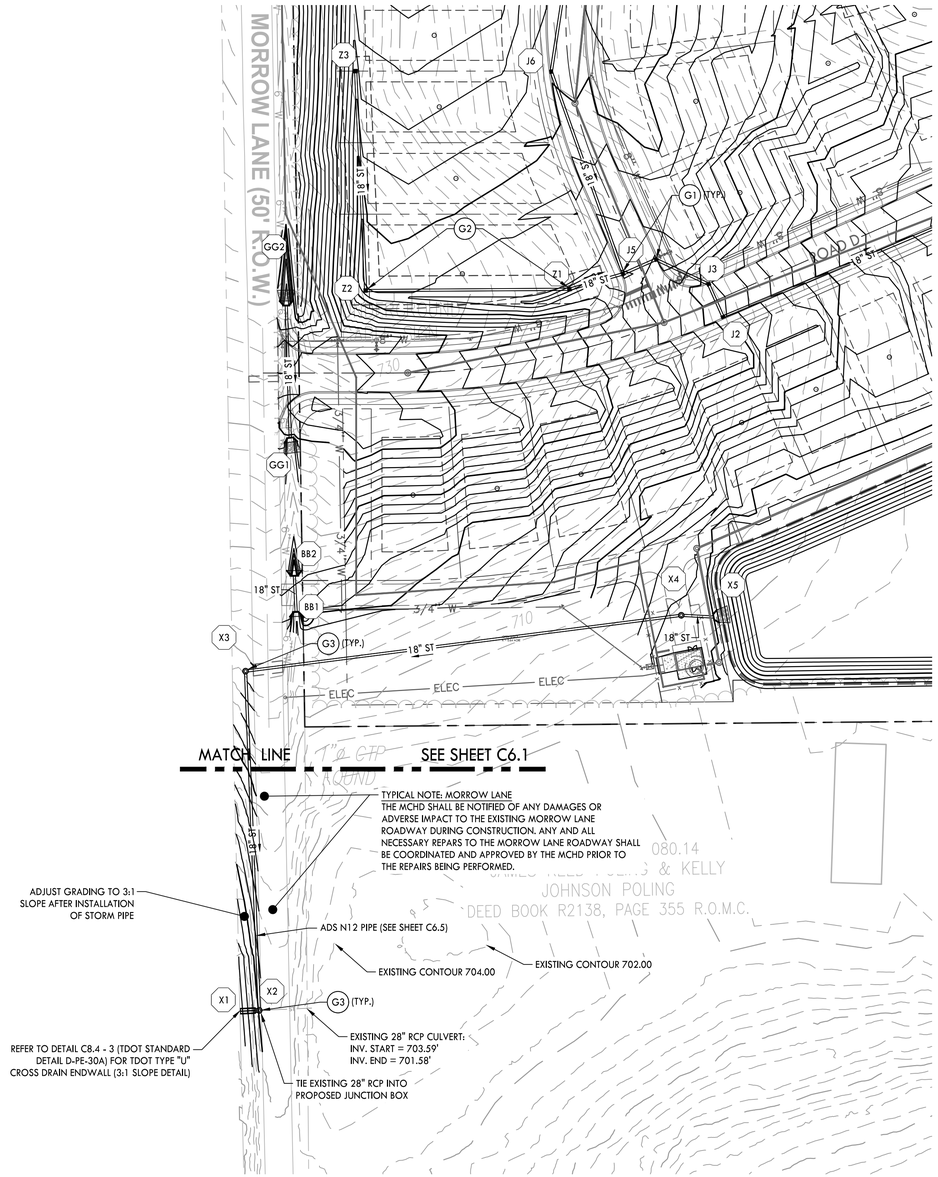
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C6.3

GRADING & DRAINAGE PLAN

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GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C8.1 - 3
G2	SINGLE CATCH BASIN	C8.1 - 4
G3	JUNCTION BOX	C8.1 - 2
G4	CONCRETE HEADWALL	C8.1 - 6
G5	POND 1 OUTLET STRUCTURE	C8.1 - 9
G6	POND 3 OUTLET STRUCTURE	C8.4 - 1

NOTES:
1. REFER TO SHEET C6.0 FOR NOTES.
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PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
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- A1 — STORM STRUCTURE LABEL
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

0 10 20 30 40 50 100
GRAPHIC SCALE

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ENGINEERING CRUNK

ADAM WILSON CRUNK
REGISTERED ENGINEER
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JIM BAKER PROPERTY

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C6.4

GRADING & DRAINAGE PLAN

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STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
A1	698.90	696.00	CONCRETE HEADWALL
A3	709.66	700.00	SINGLE CURB INLET
A4	710.58	706.60	SINGLE CURB INLET
A5	720.54	714.90	SINGLE CURB INLET
A6	722.59	717.40	SINGLE CURB INLET
A7	722.59	717.90	SINGLE CURB INLET
A8	724.29	719.40	SINGLE CURB INLET
A9	730.99	727.00	SINGLE CURB INLET
A10	741.06	737.00	SINGLE CURB INLET
A11	741.06	737.50	SINGLE CURB INLET
AA1	731.80	726.20	JUNCTION MANHOLE
AA2	734.59	731.60	SINGLE CATCH BASIN
B0	699.46	696.00	CONCRETE HEADWALL
B1	705.94	698.40	JUNCTION MANHOLE
B2	705.03	699.50	SINGLE CURB INLET
B3	709.97	704.40	SINGLE CURB INLET
B4	709.97	705.00	SINGLE CURB INLET
B5	723.86	710.00	JUNCTION MANHOLE
B6	731.86	722.10	JUNCTION MANHOLE
B7	725.32	723.18	CONCRETE HEADWALL
BB1	717.33	714.00	CONCRETE HEADWALL
BB2	718.33	715.00	CONCRETE HEADWALL
C1	710.58	707.00	SINGLE CURB INLET
CC01	711.02	706.90	SINGLE CATCH BASIN
D1	721.80	716.70	SINGLE CURB INLET
D2	721.80	717.60	SINGLE CURB INLET

STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
DD01	710.90	706.90	SINGLE CATCH BASIN
E1	723.72	721.50	CONCRETE HEADWALL
EE1	713.33	708.11	SINGLE CURB INLET
EE2	720.91	711.90	SINGLE CURB INLET
EE3	716.40	713.10	SINGLE CATCH BASIN
F1	730.99	727.50	SINGLE CURB INLET
G1	713.68	708.80	SINGLE CURB INLET
G2	713.67	710.40	SINGLE CURB INLET
GG1	723.65	721.50	CONCRETE HEADWALL
GG2	728.15	726.00	CONCRETE HEADWALL
H1	725.75	711.50	JUNCTION MANHOLE
H2	724.79	714.70	JUNCTION MANHOLE
H3	721.13	716.80	CONCRETE HEADWALL
HH1	746.24	743.50	CONCRETE HEADWALL
HH2	747.39	743.80	SINGLE CURB INLET
HH3	748.11	744.50	SINGLE CURB INLET
HH4	748.22	746.00	CONCRETE HEADWALL
I1	699.80	696.00	CONCRETE HEADWALL
I2	703.87	696.90	SINGLE CURB INLET
I3	703.87	699.10	SINGLE CURB INLET
I4	707.18	702.50	SINGLE CATCH BASIN
I5	708.84	703.10	JUNCTION MANHOLE
I6	712.88	707.40	SINGLE CURB INLET
I7	712.49	708.80	SINGLE CURB INLET
I8	712.49	709.20	SINGLE CURB INLET
J1	704.54	700.60	SINGLE CURB INLET

STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
J2	714.16	709.90	SINGLE CURB INLET
J3	714.16	710.50	SINGLE CURB INLET
J4	716.94	711.70	SINGLE CURB INLET
J5	716.94	712.10	SINGLE CURB INLET
J6	720.12	713.90	SINGLE CURB INLET
J7	720.02	715.60	SINGLE CURB INLET
J8	719.50	716.70	SINGLE CURB INLET
J9	719.33	717.10	SINGLE CURB INLET
K1	720.02	717.00	SINGLE CURB INLET
KK01	733.56	731.18	CONCRETE HEADWALL
KK02	736.32	732.00	OUTLET STRUCTURE
L1	722.33	719.00	CONCRETE HEADWALL
L2	724.21	719.40	SINGLE CURB INLET
L3	730.06	726.10	SINGLE CURB INLET
L4	730.06	726.70	SINGLE CURB INLET
L5	732.26	727.80	SINGLE CURB INLET
L6	732.26	728.80	SINGLE CURB INLET
LL1	720.91	713.60	SINGLE CURB INLET
LL2	717.62	714.20	SINGLE CATCH BASIN
M1	724.21	720.80	SINGLE CURB INLET
N1	721.76	719.30	CONCRETE HEADWALL
N2	729.00	723.10	SINGLE CURB INLET
N3	740.29	731.10	SINGLE CURB INLET
N4	740.29	731.60	SINGLE CURB INLET
N5	740.82	732.00	SINGLE CURB INLET
N6	736.88	733.70	SINGLE CURB INLET

STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
O1	722.17	719.00	CONCRETE HEADWALL
O2	723.94	719.20	SINGLE CURB INLET
O3	723.94	720.00	SINGLE CURB INLET
P1	729.00	724.60	SINGLE CURB INLET
Q1	740.83	735.80	SINGLE CURB INLET
R1	722.17	719.00	CONCRETE HEADWALL
R2	731.13	720.00	SINGLE CURB INLET
R3	731.13	724.90	SINGLE CURB INLET
R4	736.34	728.30	SINGLE CURB INLET
R5	736.60	728.90	SINGLE CURB INLET
R6	734.36	730.40	SINGLE CURB INLET
R7	735.24	732.20	SINGLE CURB INLET
R8	738.04	734.20	SINGLE CURB INLET
R9	738.04	734.70	SINGLE CURB INLET
S1	736.34	731.00	SINGLE CURB INLET
S2	738.17	732.00	SINGLE CURB INLET
T1	734.36	731.00	SINGLE CURB INLET
U1	722.88	717.36	CONCRETE HEADWALL
U2	720.78	716.34	OUTLET STRUCTURE
V1	705.03	701.40	SINGLE CURB INLET
V2	708.51	704.90	SINGLE CATCH BASIN
V3	710.13	706.83	SINGLE CATCH BASIN
W1	712.00	709.50	CONCRETE HEADWALL
X1	704.30	700.79	TDOT ENDWALL D-PE-30A
X2	705.14	701.10	JUNCTION MANHOLE
X3	714.25	701.50	JUNCTION MANHOLE

STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
X4	705.77	702.60	JUNCTION MANHOLE
X5	705.44	703.00	CONCRETE HEADWALL
Y1	698.51	696.00	CONCRETE HEADWALL
Y2	717.26	698.00	JUNCTION MANHOLE
Y3	722.00	719.50	CONCRETE HEADWALL
Z1	716.64	712.90	SINGLE CATCH BASIN
Z2	718.42	714.50	SINGLE CATCH BASIN
Z3	721.50	718.30	SINGLE CATCH BASIN

STORM PIPE TABLE								
INLET	INVERT	OUTLET	INVERT	LENGTH (FT)	SLOPE (%)	SHAPE	DIAMETER (IN)	MATERIAL
A3	700.00	A1	696.00	34.27	11.67%	CIRCULAR	24	ADS
A4	706.60	A3	702.70	51.43	7.58%	CIRCULAR	24	ADS
A4	706.70	C1	707.00	25.00	1.20%	CIRCULAR	18	ADS
A5	714.90	A4	706.70	211.83	3.87%	CIRCULAR	24	ADS
A6	717.40	A5	715.00	77.25	3.11%	CIRCULAR	24	ADS
A7	717.90	A6	717.50	25.00	1.60%	CIRCULAR	24	ADS
A8	719.40	A7	718.00	107.00	1.31%	CIRCULAR	24	ADS
A9	727.00	A8	719.50	215.00	3.49%	CIRCULAR	18	ADS
A10	737.00	A9	727.10	244.00	4.06%	CIRCULAR	18	ADS
A11	737.50	A10	737.10	25.00	1.60%	CIRCULAR	18	ADS
AA1	726.20	R3	725.00	21.36	5.62%	CIRCULAR	18	ADS
AA2	731.60	AA1	726.30	120.00	4.42%	CIRCULAR	18	HDPE
B1	698.40	B0	696.00	40.69	5.90%	CIRCULAR	30	ADS
B2	699.50	B1	698.50	40.93	2.44%	CIRCULAR	30	ADS
B3	704.40	B2	699.60	193.28	2.48%	CIRCULAR	30	ADS
B4	705.00	B3	704.50	25.00	2.00%	CIRCULAR	30	ADS
B5	710.00	B4	705.10	197.44	2.48%	CIRCULAR	30	ADS
B6	722.10	B5	715.40	286.59	2.34%	CIRCULAR	18	ADS
B7	723.18	B6	722.20	94.64	1.03%	CIRCULAR	18	HDPE
BB2	715.00	BB1	714.00	25.29	3.95%	CIRCULAR	18	HDPE
CC01	706.90	I4	703.50	149.12	2.28%	CIRCULAR	18	HDPE
D1	716.70	A5	715.90	58.25	1.37%	CIRCULAR	18	ADS
D2	717.60	D1	716.80	25.00	3.20%	CIRCULAR	18	ADS
DD01	706.90	I4	703.50	101.97	3.33%	CIRCULAR	18	HDPE
E1	721.50	A8	719.50	27.49	7.28%	CIRCULAR	18	ADS
EE1	708.11	I6	707.85	45.63	0.57%	CIRCULAR	30	ADS
EE2	711.90	EE1	708.11	122.92	3.08%	CIRCULAR	30	ADS
EE3	713.10	EE2	712.00	62.77	1.75%	CIRCULAR	18	HDPE
F1	727.50	A9	727.10	25.00	1.60%	CIRCULAR	18	ADS
G1	708.80	B3	706.60	36.60	6.01%	CIRCULAR	18	ADS
G2	710.40	G1	708.90	25.50	5.88%	CIRCULAR	18	ADS
GG2	726.00	GG1	721.50	92.47	4.87%	CIRCULAR	18	HDPE
H1	711.50	B5	710.00	290.47	0.52%	CIRCULAR	30	HDPE
H2	714.70	H1	711.60	187.09	1.66%	CIRCULAR	30	ADS
H3	716.80	H2	714.80	130.44	1.53%	CIRCULAR	30	HDPE

STORM PIPE TABLE								
INLET	INVERT	OUTLET	INVERT	LENGTH (FT)	SLOPE (%)	SHAPE	DIAMETER (IN)	MATERIAL
HH2	743.80	HH1	743.50	28.40	1.06%	CIRCULAR	24	ADS
HH3	744.50	HH2	743.90	29.21	2.05%	CIRCULAR	18	ADS
HH4	746.00	HH3	744.60	27.53	5.09%	CIRCULAR	18	ADS
I2	696.90	I1	696.00	41.05	2.19%	CIRCULAR	36	ADS
I3	699.10	I2	698.80	25.00	1.20%	CIRCULAR	36	ADS
I4	702.50	I3	699.20	140.91	2.34%	CIRCULAR	30	HDPE
I5	703.10	I4	702.60	37.66	1.33%	CIRCULAR	30	HDPE
I6	707.40	I5	703.20	132.50	3.17%	CIRCULAR	30	HDPE
I7	708.80	I6	707.50	59.52	2.18%	CIRCULAR	24	ADS
I8	709.20	I7	708.90	25.00	1.20%	CIRCULAR	18	ADS
J1	700.60	I2	698.60	68.59	2.92%	CIRCULAR	18	ADS
J2	709.90	J1	700.70	212.86	4.32%	CIRCULAR	18	ADS
J3	710.50	J2	710.00	25.00	2.00%	CIRCULAR	18	ADS
J4	711.70	J3	710.60	40.72	2.70%	CIRCULAR	18	ADS
J5	712.10	J4	711.80	24.99	1.20%	CIRCULAR	18	ADS
J6	713.90	J5	712.10	149.95	1.20%	CIRCULAR	18	ADS
J7	715.60	J6	714.00	151.24	1.06%	CIRCULAR	18	ADS
J8	716.70	J7	715.70	81.86	1.22%	CIRCULAR	18	ADS
J9	717.10	J8	716.80	25.35	1.18%	CIRCULAR	18	ADS
K1	717.00	J7	716.60	25.00	1.60%	CIRCULAR	18	ADS
KK02	732.00	KK01	731.18	53.59	1.53%	CIRCULAR	18	ADS
L2	719.40	L1	719.00	56.59	0.71%	CIRCULAR	18	HDPE
L3	726.10	L2	719.50	90.37	7.30%	CIRCULAR	18	ADS
L4	726.70	L3	726.20	25.00	2.00%	CIRCULAR	18	ADS
L5	727.80	L4	726.80	34.62	2.89%	CIRCULAR	18	ADS
L6	728.80	L5	727.90	25.00	3.60%	CIRCULAR	18	ADS
LL1	713.60	EE2	713.00	25.00	2.40%	CIRCULAR	18	ADS
LL2	714.20	LL1	713.70	35.60	1.40%	CIRCULAR	18	HDPE
M1	720.80	L2	720.10	25.00	2.80%	CIRCULAR	18	ADS
N2	723.10	N1	719.30	59.51	6.39%	CIRCULAR	18	HDPE
N3	731.10	N2	723.20	182.58	4.33%	CIRCULAR	18	ADS
N4	731.60	N3	731.20	25.00	1.60%	CIRCULAR	18	ADS
N5	732.00	N4	731.70	38.33	0.78%	CIRCULAR	18	ADS
N6	733.70	N5	732.60	146.43	0.75%	CIRCULAR	18	ADS
O2	719.20	O1	719.00	50.99	0.39%	CIRCULAR	30	HDPE

STORM PIPE TABLE								
INLET	INVERT	OUTLET	INVERT	LENGTH (FT)	SLOPE (%)	SHAPE	DIAMETER (IN)	MATERIAL
O3	720.00	O2	719.70	25.00	1.20%	CIRCULAR	24	ADS
P1	724.60	N2	724.10	25.00	2.00%	CIRCULAR	18	ADS
Q1	735.80	N5	734.40	25.00	5.60%	CIRCULAR	18	ADS
R2	720.00	R1	719.00	70.12	1.43%	CIRCULAR	30	HDPE
R3	724.90	R2	724.20	25.00	2.80%	CIRCULAR	24	ADS
R4	728.30	R3	725.00	183.18	1.80%	CIRCULAR	18	ADS
R5	728.90	R4	728.40	43.89	1.14%	CIRCULAR	18	ADS
R6	730.40	R5	729.00	141.18	0.99%	CIRCULAR	18	ADS
R7	732.20	R6	730.50	78.04	2.18%	CIRCULAR	18	ADS
R8	734.20	R7	732.30	82.34	2.31%	CIRCULAR	18	ADS
R9	734.70	R8	734.30	25.00	1.60%	CIRCULAR	18	ADS
S1	731.00	R4	730.00	25.00	4.00%	CIRCULAR	18	ADS
S2	732.00	S1	731.10	50.50	1.78%	CIRCULAR	18	ADS
T1	731.00	R6	730.50	25.00	2.00%	CIRCULAR	18	ADS
U2	717.66	U1	717.36	75.35	0.40%	CIRCULAR	18	ADS
V1	701.40	B2	701.00	25.00	1.60%	CIRCULAR	24	ADS
V2	704.90	V1	701.50	132.51	2.57%	CIRCULAR	18	HDPE
V3	706.83	V2	705.00	112.00	1.63%	CIRCULAR	18	HDPE
W1	709.50	Y2	707.00	41.48	6.03%	CIRCULAR	18	ADS
X2	701.10	X1	701.00	2.99	3.35%	CIRCULAR	30	ADS N12
X3	701.50	X2	701.10	237.29	0.17%	CIRCULAR	18	ADS N12
X4	702.60	X3	701.50	306.91	0.36%	CIRCULAR	18	HDPE
X5	703.00	X4	702.60	22.61	1.77%	CIRCULAR	18	HDPE
Y2	698.00	Y1	696.00	40.80	4.90%	CIRCULAR	18	ADS
Y3	719.50	Y2	710.00	237.61	4.00%	CIRCULAR	18	ADS
Z1	712.90	J5	712.10	39.06	2.05%	CIRCULAR	18	ADS
Z2	714.50	Z1	713.00	142.37	1.05%	CIRCULAR	18	HDPE
Z3	718.30	Z2	714.60	153.52	2.41%	CIRCULAR	18	HDPE

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ENGINEERING CRUNK

ANDREW WILSON CRUNK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
114190
4/4/23
STATE OF TENNESSEE

JIM BAKER PROPERTY

COLUMBIA, TENNESSEE

REVISIONS		
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1	08/29/22	
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STORM STRUCTURE & PIPE TABLES

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Appendix B: Subdivision Development Agreement

This DEVELOPMENT AGREEMENT is made and entered into on this

Fourteenth day of July, 2023,
between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and

M/I Homes of Nashville, LLC., the DEVELOPER (hereinafter the "DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made a part hereof (hereinafter the "ADDENDUM").

WITNESSETH:

WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM (hereinafter the "PROJECT"); and,

WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal Planning Commission (hereinafter the “CMPC”) on the

8th day of September, 2021,
pursuant to Tennessee Code Annotated Title 13, Chapter 4, and the Subdivision Regulations of Columbia, Tennessee (hereinafter the "SUBDIVISION REGULATIONS”); and,

WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such development; and,

WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,

WHEREAS, in order to provide for the health, safety, and welfare of future residents of the PROJECT, it will be necessary for certain improvements to the CITY'S utility systems, public infrastructure, and common areas to be constructed within and to serve the PROJECT including but not be limited to roads, bridges, sidewalks, pedestrian facilities, stormwater facilities, street signs, markings, signals, street lighting, recreation and park facilities, landscaping, and the like (hereinafter the “IMPROVEMENTS”); and,

WHEREAS, in order for the IMPROVEMENTS to be fully integrated with the utility systems and public infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to construct, in accordance with the Subdivision Regulations and other rules, regulations, and ordinances of the CITY, the IMPROVEMENTS in said PROJECT and extend utilities to the PROJECT at their own cost; and,

WHEREAS, the CITY is willing to accept the dedication of the streets, utilities, and other improvements as determined in the Development Plan of the PROJECT, subject to the City of Columbia City Council approval by resolution, and subject to the applicant's compliance with all requirements in this agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,

NOW, THEREFORE, it is agreed and understood as follows:

B1 General Conditions

B1.1 Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities, and other facilities in accordance with this agreement.

B1.2 City Ordinances, Rules and Regulations

All currently existing CITY ordinances, rules and regulations, and the Subdivision Regulations adopted by the CMPC are made a part of this agreement. In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans and specifications approved by the City and made a part, hereof.

B1.3 Fees

Review fees, inspection fees, and other amounts established by the CITY shall be paid prior to any review of the plans. If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees, inspection fees, or other amounts paid to the CITY shall be refundable to the DEVELOPER.

B1.4 Inspection

The CITY shall have a continuous right to inspect the work and facilities to assure that the work and facilities are in accordance with the Subdivision Regulations, approved Construction Plans, and other rules, regulations, and ordinances of the CITY.

B1.5 Right of Entry

The CITY shall have the right, in case of breach of the Performance Agreement, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

B1.6 Easements

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER further agrees to grant the necessary easements and rights-of-way across the DEVELOPER’s properties without expense to the CITY and waive any claim for damages.

B1.7 Stormwater Maintenance Agreement

If the PROJECT includes any detention or retention ponds, common drainage ditches, water quality facilities, or stormwater facilities outside of the CITY rights-of-way, the DEVELOPER will submit a Stormwater Maintenance Agreement, to be filed with and recorded with the Final Plat.

B1.8 Attorney Fees and Other Expenses

The DEVELOPER shall pay all reasonable costs and expenses incurred by the CITY in enforcing or completing this agreement. The DEVELOPER shall pay all costs and expenses, including the CITY'S attorney fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

B1.9 Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

B1.10 Revocation and Interpretation

This agreement shall bind the DEVELOPER when executed by the DEVELOPER and may not be revoked by the DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

B1.11 No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments, or understandings.

B1.12 Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect, or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

B 1.13 Transferability

The DEVELOPER agrees to not transfer the property on which this PROJECT is to be located without first providing the CITY with written notice. The transferee shall provide the CITY an Assumption Agreement of this Agreement, whereby the transferee agrees to perform the IMPROVEMENTS required under this agreement and to provide a performance surety. The DEVELOPER understands that if the DEVELOPER transfers said property without providing the notice of transfer and Assumption Agreement as required herein, they will be in breach of this agreement and in violation of the Subdivision Regulations.

B1.14 Indemnity

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties, or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the IMPROVEMENTS by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

B1.15 Binding Effect

This agreement shall be binding upon the DEVELOPER and the DEVELEPOR's heirs, administrators, executors, assigns, and any other successors in interest.

B1.16 Entire Agreement

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them. No variations or alterations of the terms of this agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

B1.17 Headings

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the agreement and in no way shall define, limit, extend, or describe the scope or intent of any provision, hereof.

B2 Performance Surety

At the time of execution of this agreement, the DEVELOPER shall provide the CITY a performance surety, in an amount determined by the City Engineer for the IMPROVEMENTS and other items specified by the Construction Plans, plats, and plans approved by the CMPC. This performance surety shall secure performance of all obligations of the DEVELOPER under this agreement. The performance surety shall meet all requirements established in Chapter 4: Performance Agreement of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement. The performance surety may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the performance surety. The performance surety will not be released, except and until there has been full compliance with this agreement.

B3 Construction

B3.1 Construction Plans

The DEVELOPER shall submit to the CITY, Construction Plans describing in reasonable detail all utility systems, all storm water management systems, all street systems, pedestrian facilities, and all IMPROVEMENTS. The Construction Plans shall be designed according to the Engineering Standards and Specifications, all other codes and ordinances enforced by the City, and sound engineering judgment. The design of all utility systems shall follow the State of Tennessee and utility provider design criteria and specifications. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. The Construction Plans shall be prepared by a design professional licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date, and license number of the professional preparing the Construction Plans.

B3.2 Commencement of Construction

Construction of IMPROVEMENTS may not begin until the following events have occurred:

A. The Preliminary Plat has been approved by the CMPC;
B. The Construction Plans are approved by the CITY;
C. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing;
D. The CITY shall have received an appropriately executed Development Agreement; and
E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

B3.3 Site Grading

The DEVELOPER, hereby, agrees to construct all site grading to comply with the approved Construction Plans, including the approved Erosion Control Plan for the PROJECT and to comply with the Engineering Standards and Specifications, Stormwater Ordinance, and all other codes and ordinances enforced by the CITY.

B3.4 Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work made necessary by the development of this PROJECT. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order, and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

B3.5 Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Construction Plans to comply with the CITY's specifications and to the satisfaction and approval of the City Engineer by grading, draining, subgrade preparation, base preparation, curbing, signage, striping, signalization, sidewalk installation, and paving with the required preparation, amounts, and types of material. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas directed by the CITY Engineer, prior to application of final surface.

B3.6 Time Period for Construction

The DEVELOPER agrees to be bound to complete, within three (3) years of commencement of construction, all IMPROVEMENTS shown on the plat and plans and all things required by this agreement.

The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, the DEVELOPER shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for the DEVELOPER's failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the performance surety executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is determined to be inadequate by the City Engineer to secure the cost of said IMPROVEMENTS at the time an extension is sought, the DEVELOPER will provide the additional security to bring the performance surety amount in line with current cost projections as made by the CITY. The DEVELOPER understands that the DEVELOPER's failure to follow the extension procedure constitutes a breach of this agreement and places the DEVELOPER in violation of the Subdivision Regulations. The DEVELOPER further understands, that should the DEVELOPER fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved, the CITY shall reserve the right to withhold and withdraw all building permits within the PROJECT until all items of this Agreement have been fulfilled by the DEVELOPER.

B3.7 Off-Site Improvements

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the PROJECT. Unless specifically noted in the Construction Plans and made a part of separate agreement with the CITY, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site improvements.

B3.9 Inspection and Compliance

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to ensure that all work is performed and completed in accordance with the Construction Plans, CITY specifications, and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Construction Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

B3.10 Testing

The DEVELOPER agrees to pay the cost of all engineering, inspection, and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material, and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

B3.11 Scrap Removal

The DEVELOPER agrees to comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

B3.12 Traffic Control

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including

signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

B3.13 Temporary Facilities

The DEVELOPER shall provide all temporary facilities including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

B4 Acceptance of Improvements

B4.1 Completion of Improvements

At such time as the improvements have been constructed and installed, in accordance with the Constructions Plans and specifications, required testing and inspections completed and found satisfactory, and all clean-up and cover-up has been done to the satisfaction the City Engineer, a letter requesting preliminary acceptance of the PROJECT will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees the DEVELOPER shall have no claim, direct or implied, in the title or ownership of the IMPROVEMENTS specified in this agreement when the IMPROVEMENTS are complete and thereafter accepted by the CITY. The DEVELOPER will be responsible for construction failures and defects in PROJECT prior to final acceptance. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

B4.2 As-Built Drawings and Post-Completion Items

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system, and streets within the subdivision before the CITY shall accept the subdivision.

B4.3 Acceptance of Facilities

Upon final acceptance of all or part of the IMPROVEMENTS in the PROJECT, then those IMPROVEMENTS shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

B4.4 Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the IMPROVEMENTS in the PROJECT. Should the CITY choose to accept all or a portion of these IMPROVEMENTS, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register’s Office of Maury County, Tennessee. No further writing or deed shall be required.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

Hillcrest Village (Baker Property)
PROJECT

Completed by the Developer	*Completed by the City*
M/I Homes of Nashville, LLC. DEVELOPER NAME	
David Cumming, P.E. AUTHORIZED AGENT NAME	CITY ENGINEER
SIGNATURE	SIGNATURE
7/14/23 DATE	DATE
3020 Stansberry Ln. St. 202 STREET	
Franklin, TN 37069 CITY, STATE, ZIP	
(919) 763-4630 PHONE	
EJordon@mihomes.com EMAIL	
Attest	*Attest*
Eli Jordon ATTEST NAME	ATTEST NAME
ATTEST SIGNATURE	ATTEST SIGNATURE
7/14/23 DATE	DATE

OWNER AFFIDAVIT
CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

I/we, DAVID M. CUMMINGS
(Print Name(s) in Full)

being duly sworn, depose and say(s) that I/we am/are the owner(s) of the property described as:

Tax Map 113, Parcel 80.50
(Property Parcel/Tax ID Number)

and located at:

2643 Pulaski Hwy, Columbia, TN 38401
(Street Address)

am fully aware of the request for development approval in the City of Columbia, Tennessee. Furthermore, I/we hereby appoint:

Wilson & Associates - Joey Wilson, Sean McGowan, Abigail Overstreet
(Print Name(s) in Full)

to act as my/our authorized agent on my/our behalf on all matters pertaining to the processing and obtaining the application with the exception of legal documents for recording purposes.

Signature

3020 Stansberry Lane, Suite 202
Property Owner Mailing Address

Franklin, TN 37069
City, State, & Zip

Subscribed and sworn to before me this 11 day of July, 2023.

Notary Public

My Commission Expires: 11-19-2025

PAIGE SELLERS
STATE OF TENNESSEE NOTARY PUBLIC
WILLIAMSON COUNTY
My Commission Expires 11-19-2025

DocuSign Envelope ID: A65CD640-417C-421F-934C-E1E716D94AB5

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * *1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*

Fold hard copy submittals larger than 8½"x11"

All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	2643 Pulaski Hwy, Columbia, TN 38401		
	TAX MAP: 113	GROUP:	PARCEL: 80.50
SUMMARY OF NATURE OF REQUEST AND WORK	The purpose of this plat is to create 24 single-family residential lots and 2 open spaces.		

DATE OF PRE-APPLICATION CONFERENCE		*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
❑ Comprehensive Plan Amendment ❑ Annexation ❑ Rezoning ❑ Preliminary Plat ☑ Final Plat ❑ PUD Preliminary Master Plan ❑ PUD Final Site Plan ❑ Site Development Plan ❑ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ❑ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ❑ Requested Zone Listed ❑ Statement of Compliance with Comprehensive Plan ❑ Concept Plan **Preliminary Plats/Site Development Plans:** ❑ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ❑ Receipt of Payment for Pre-Application Meeting ❑ Written Legal Description copy ❑ Columbia Water System Availability Letter ❑ Columbia Waste Water Department Will Serve Letter

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	Plats/PUDs: ☑ Project Name (include Sections & Phases) Hillcrest Village - Phase 2 ☑ Total Number of Lots/Residential Units 24 ☑ Square Footage of Non-Residential Floor Space 18086.68 ☑ Total acreage 6.308

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT
All communications go to the Applicant's email that is provided.

NAME	Abigail Overstreet	PHONE	615-794-2275
ADDRESS	108 Beasley Dr, Franklin, TN 37064	EMAIL	aoverstreet@wilsonpc.com

PROPERTY OWNER NAME	M/I Homes of Nashville, LLC	PHONE	919-763-4630
ADDRESS	725 Cool Springs Blvd. St 180 Franklin, TN 37067	EMAIL	ejordon@mihomes.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Abigail Overstreet	Abigail Overstreet	6/14/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
M/I Homes of Nashville, LLC	DocuSigned by: Elias Jordon IV 23D401CDBF9423...	6/14/2024
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

Rev. 2/7/2024

Hampshire Hills Final Plat

Project #:	24-0472	Location:	Map 89P A Parcel 15.00
Applicant:	M2 Group, LLC	Case Type(s):	Final Plat
Staff Planner:	Robert Archibald, Planner II	Proposed Use:	Single-Family

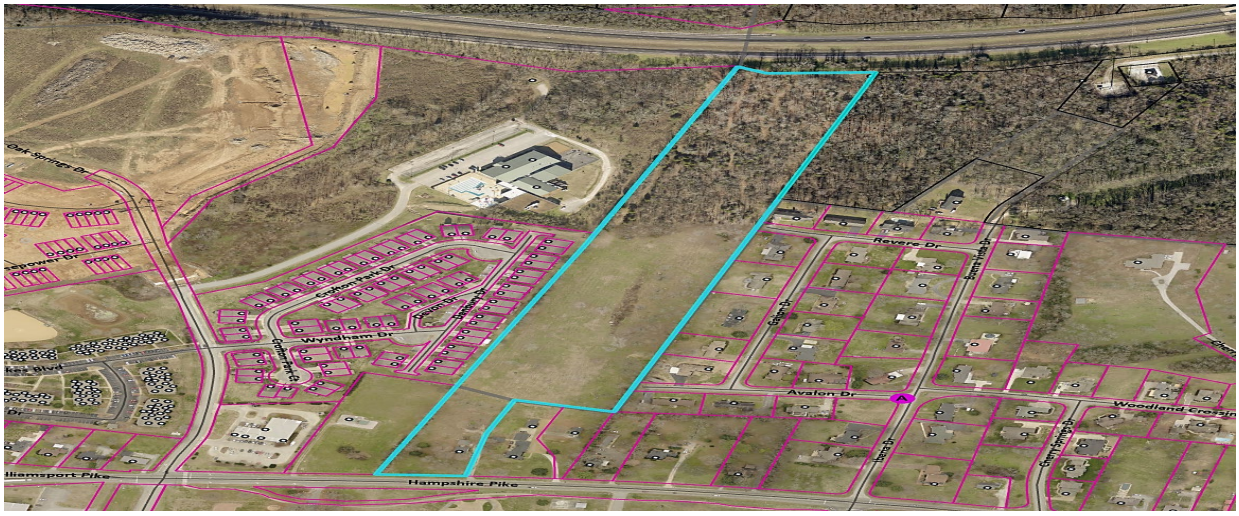
PROJECT SUMMARY

The applicant requests Final Plat approval to create 43 single-family lots, four open spaces and dedication of public right-of-way and utility/drainage easements.

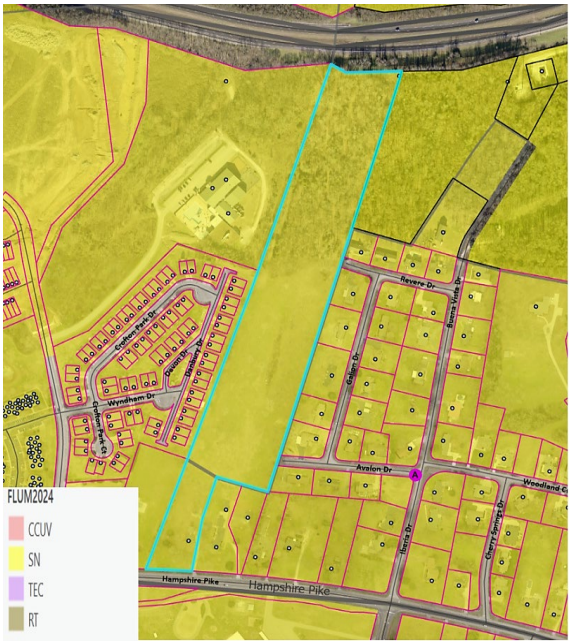
- The development is subject to Ordinance 3638, the pre-July 2022 zoning ordinance.
- The property is subject to the Preliminary Plat based on RS-10 standards of the previous Zoning Ordinance.
- A revision of the Preliminary Plat (24-0094) was previously approved on April 10, 2024 for an additional lot changing the total lot count from 42 to 43.
- A $455,000 Letter of Credit has been provided for this development.
- A developer agreement has been submitted per the Subdivision Regulations.
- The applicant has provided a stormwater maintenance agreement per the Subdivision Regulations.
- The Final Plat conforms to Preliminary Plat (22-0125) based on RS-10 standards, approved on July 13, 2022.
- The DRC reviewed this proposal at its November 2024 meeting. Staff review included standard comments and requests for technical corrections. Full technical comments are provided in the agenda packet.
- The Planning Commission is the **Decision-Making Authority** for the Final Plat.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

SITE INFORMATION

CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
CD-3	Single-Family	Infrastructure for Development	+/-15.65 Acres



FUTURE LAND USE MAP	ZONING MAP





SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	Suburban Neighborhood	CD-3	Single-family
North	Suburban Neighborhood	Outside Jurisdiction	Single-family
South	Suburban Neighborhood	CD-4C/CD-3	Comm/Single-family
East	Suburban Neighborhood	CD-3	Single-family
West	Suburban Neighborhood	CD-4/CIVIC	Mixed Residential

The subject site is a development consisting of single-family construction and amenities associated with the development. Each lot will consist of single-family homes with direct access from Hampshire Pike.

CONFORMITY WITH ZONING ORDINANCE

The proposed revisions conform to the Final Plat and the RS-10 standards of the applicable zoning ordinance (3638).

- The proposed structures conform to the setbacks and other bulk standards of the Preliminary Plat, approved July 13, 2022, and the Revised Preliminary Plat (24-0094) approved April 10, 2024.

REVIEW PROCESS

The Development Review Committee reviewed the proposed Final Plat at its November 2024 meeting, as directed by **§ 8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package and summarized above.

Section **§ 8.5.24** of the Zoning Ordinance directs the Planning Commission to review Subdivision Plats for conformity with the standards of the Ordinance and the City Subdivision Regulations. The Ordinance indicates that all Preliminary and Final Plats must be prepared, submitted, reviewed and acted upon in accordance with the Subdivision Regulations.

The Planning Commission is the Decision-Making Authority for Final Plats under **§ 8.3.3.B.1** of the Zoning Ordinance and **§ 2.3** of the Subdivision Regulations.
Section **§ 2.3.6** of the Subdivision Regulations establishes the review criteria for approval of Final Plats.

A. Recommendations and final action on a Final Plat shall be based on consideration of the following criteria:

1. Whether the proposed Final Plat complies with the applicable zoning district and overlay districts;

2. Whether the proposed Final Plat is consistent with all standards of the Subdivision Regulations and other related codes and ordinances enforced by the City; and

3. Whether the proposed Final Plat meets all the requirements or conditions of any applicable development approvals, such as development plans or associated modification of standards.

B. Final Plat approval shall be subject to the completion of required improvements, or in lieu, the CMPC may approve a Performance Agreement.

In the event of a denial, **§ 2.3.5** of the Subdivision Regulations requires the Planning Commission to identify the specific parts of applicable plans and regulations with which the plat does not comply.

SAMPLE MOTIONS

Approve:

Move to approve the Final Plat as presented and find that it conforms to the applicable zoning ordinance, the Subdivision Regulations, and the Preliminary Plat [subject to remaining technical comments from staff].

Approve with Conditions:

Move to approve the Final Plat as presented and find that the plat conforms to the applicable zoning ordinance, the Subdivision Regulations, and the Preliminary Plat, subject to the following conditions: [list conditions of approval crafted by Planning Commission].

Defer for Continued Review:

Move to find that there is insufficient information to make a decision, defer the application for continued review, and request that the applicant provide: [list additional

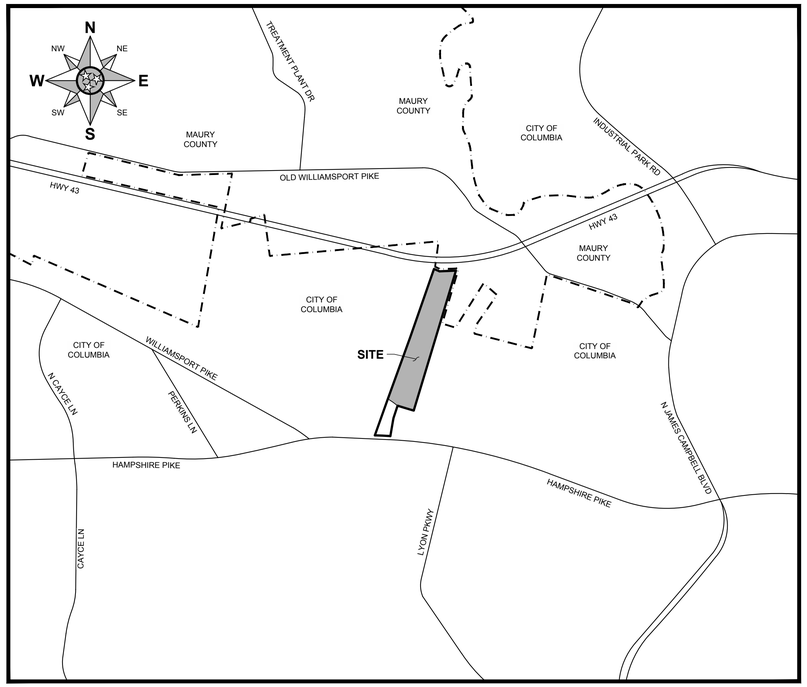
information] for review at the next regularly scheduled meeting of the Planning Commission.

Deny:

Move to find that the Final Plat as presented does not conform to the applicable zoning ordinance, the Subdivision Regulations, or the approved Preliminary Plat, and deny the request due to [list specific deficiencies].

FINAL PLAT FOR:
HAMPSHIRE HILLS

1316 HAMPSHIRE PIKE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE
P/O TAX MAP 89P, GROUP A, PARCEL 15.00
NOVEMBER 18, 2024



VICINITY MAP
SCALE: 1"=1000'

FINAL SUBDIVISION PLAT MAURY COUNTY, TENNESSEE	
TOTAL ACRES: 15.65	TOTAL LOTS: 43
ACRES NEW STREETS: 2.78	FEET NEW STREETS: 2,471
CIVIL DISTRICT: 9TH	CLOSURE ERROR: 1:10,000±
MILES OF NEW ROADS: 0.47	DATE: NOVEMBER 18, 2024

SUBJECT PROPERTY INFORMATION:

- OWNER: CYPRESS HOMES, LLC
- PARCEL ID: TAX MAP 89P, GROUP A, PARCEL 15.00
- INSTRUMENT: RB 2957, PG 1146
- TOTAL AREA = 15.65 AC. (681,596 S.F.)±
- ZONING: RS-10 (PER PREVIOUS ZONING ORDINANCE, DATED JULY 14, 2022)

CONTACT LIST

OWNER/DEVELOPER

CYPRESS HOMES, LLC
P.O. BOX 682447
FRANKLIN, TN 37068
CONTACT: BEN BEASLEY
PHONE: 615-497-1511
E-MAIL: ben@cypresshomestn.com

SURVEYOR

M2 GROUP, LLC
P.O. BOX 2543
BRENTWOOD, TN 37024
PHONE: 615-656-0257 (EXT. 2000)
CONTACT: STEPHEN VANDER HORST, RLS, CFS
E-MAIL: stephen@m2grouplc.com

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAT IS TO CREATE 43 LOTS AND 4 OPEN SPACES.
2. BEARINGS ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83).
3. SURVEY FIELD WORK WAS COMPLETED ON AUGUST 29, 2024.
4. THIS SURVEY WAS PREPARED USING THE CURRENT DEEDS AND PLATS OF RECORD FOR THE SUBJECT PROPERTY.
5. ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
6. ADJOINING PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED DESCRIPTION, RECORD PLATS, OR TAX MAPS.
7. PROPERTY CORNERS SET THIS SURVEY ARE 18" #4 REBAR WITH ORANGE PLASTIC CAP STAMPED "M2 GROUP", 18" #5 REBAR WITH YELLOW PLASTIC CAP STAMPED "M2 GROUP, LLC", OR PK NAIL WITH STAINLESS STEEL WASHER STAMPED "M2 GROUP, LLC", UNLESS NOTED OTHERWISE.
8. UNDERGROUND UTILITIES, IF SHOWN, HAVE BEEN PLOTTED FROM PLANS AND MARKINGS COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES (CI/ASCE 38-2, QUALITY LEVEL C). OTHER UNDERGROUND UTILITIES MAY EXIST WHICH ARE NOT SHOWN AS A RESULT OF INFORMATION NOT BEING PROVIDED BY THE UTILITY OWNER. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT OR CONTRACTOR IS ADVISED THAT EXCAVATION MAY BE NECESSARY. CALL 811 BEFORE YOU DIG.
9. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. MAP "MAURY COUNTY, TENNESSEE" PANELS 165 & 280 OF 440, MAP NUMBER 47119C0165E & 47119C0280E, EFFECTIVE APRIL 16, 2007.
10. THE SUBJECT PROPERTY SHOWN HEREON HAS A ZONING DESIGNATION OF "RS-10", RESIDENTIAL DISTRICT ACCORDING TO THE PREVIOUS CITY OF COLUMBIA OFFICIAL ZONING MAP, DATED JULY 14, 2022. SETBACK REQUIREMENTS ARE AS FOLLOWS:
    FRONT = 30 FEET
    SIDE = 10 FEET
    REAR = 30 FEET
11. ALL OPEN SPACE IS TO SERVE AS A PUBLIC UTILITY, DRAINAGE, AND ACCESS EASEMENT (PUDAE).

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN BOOK R2069, PAGE 668, MAURY COUNTY REGISTERS OFFICE, AND ADOPT THIS FINAL SUBDIVISION PLAT OF THE PROPERTY AS SHOWN HEREON AND DEDICATE ALL PUBLIC WAYS AND EASEMENTS AS NOTED WITH MY (OUR) FREE CONSENT.

OWNER(S) _____ DATE _____

TITLE (IF ACTION FOR CORPORATION OR PARTNERSHIP) _____

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

NAME _____ DATE _____

TITLE _____ AUTHORIZING AGENCY _____

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE, AND UTILITIES

I HEREBY CERTIFY THAT THE STREETS, DRAINAGE, AND UTILITIES OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAVE BEEN INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS, OR A PERFORMANCE SURETY IN THE AMOUNT OF $ _____ FOR STREETS AND DRAINAGE HAS BEEN POSTED WITH THE CITY OF COLUMBIA, TENNESSEE, TO ASSURE COMPLETION OF SUCH IMPROVEMENTS.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS, WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS NOTED IN THE MINUTES OF THE COLUMBIA MUNICIPAL PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE MAURY COUNTY REGISTER OF DEEDS.

PLANNING DIRECTOR _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF SUBDIVISION NAME AND STREET NAMES

SUBDIVISION NAME AND STREET NAMES APPROVED BY THE CITY ENGINEERING DEPARTMENT AND BY E-911 MAURY COUNTY.

MAURY COUNTY E-911 _____ DATE _____

CERTIFICATE OF ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CLASS "I" LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS GREATER THAN OR EQUAL TO 1:10,000.

REGISTERED LAND SURVEYOR _____ NUMBER _____ DATE _____

CERTIFICATE OF SANITARY SEWER SYSTEM

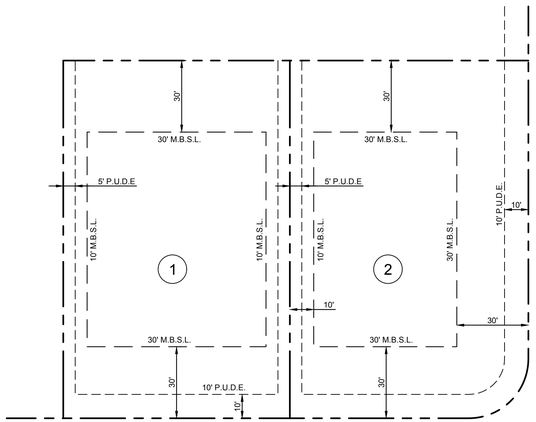
I HEREBY CERTIFY THAT THE SANITARY SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DIRECTOR OF WASTEWATER DEPARTMENT _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE



TYPICAL LOT LAYOUT
SCALE: 1" = 30'
(TYPICAL UNLESS NOTED OTHERWISE)

REVISION # | DATE | DESCRIPTION

STEPHEN VANDER HORST
REGISTERED LAND SURVEYOR
TENNESSEE NO. 3024
COMMISSIONED
11/16/24

FINAL PLAT
HAMPSHIRE HILLS
1316 HAMPSHIRE PIKE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

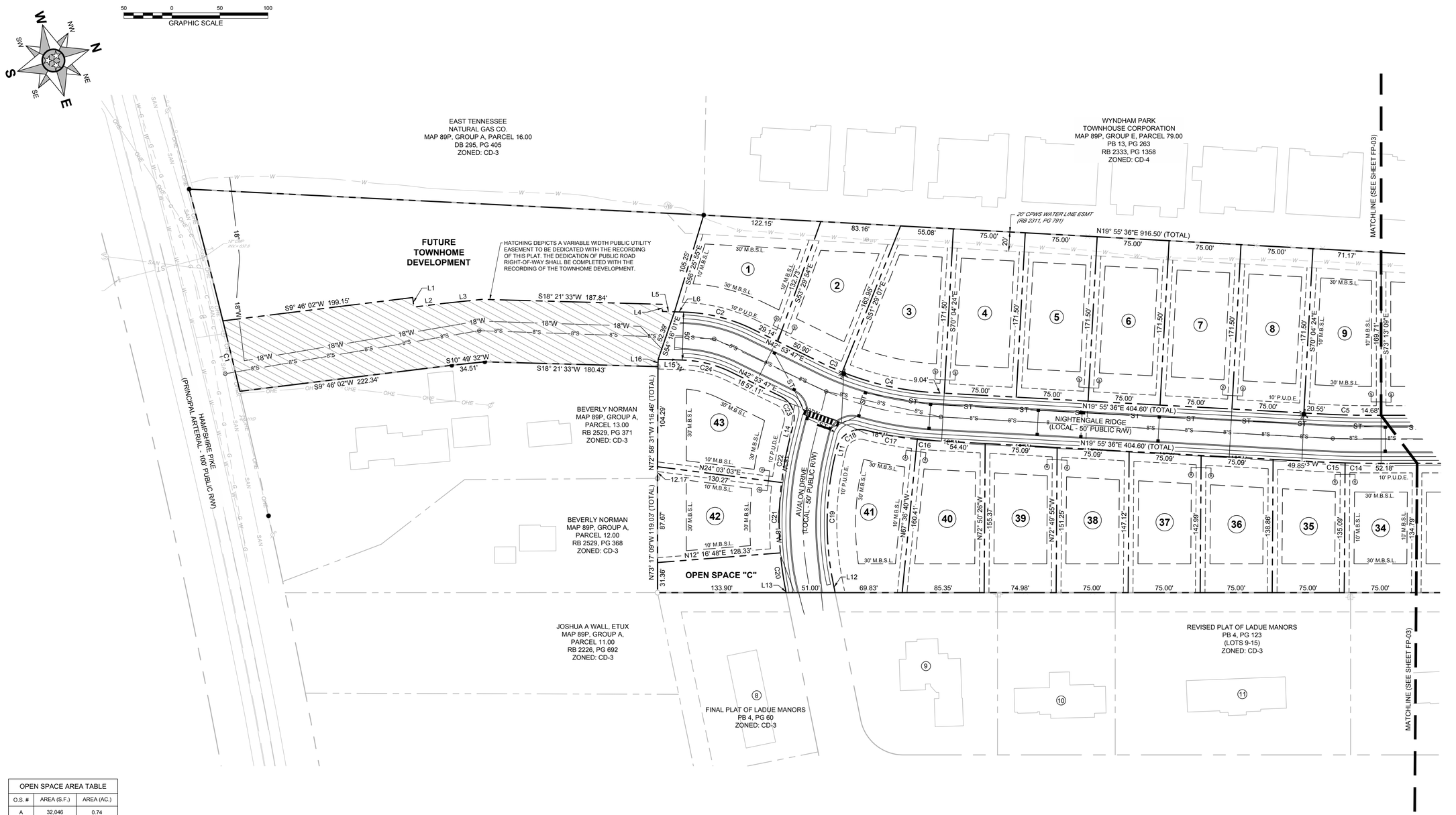
M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
WWW.M2GROUPLLC.COM

COVER SHEET

DRAWN BY: ERG
CHECKED BY: SVH
DATE: NOVEMBER 18, 2024
PROJECT NO.: 23-081

SHEET NUMBER:
FP-01

23-081 - FP - COVER SHEET.DWG / Monday, November 18, 2024 3:32:18 PM



OPEN SPACE AREA TABLE		
O.S. #	AREA (S.F.)	AREA (AC.)
A	32,046	0.74
B	34,715	0.80
C	4,761	0.11

LOT AREA TABLE		
LOT #	AREA (S.F.)	AREA (AC.)
1	13,102	0.30
2	11,395	0.26
3	13,827	0.32
4	12,862	0.30
5	12,862	0.30
6	12,862	0.30
7	12,862	0.30
8	12,862	0.30
9	12,972	0.30
10	12,573	0.29
11	12,264	0.28
12	11,954	0.27
13	11,623	0.27
14	11,281	0.26
15	10,246	0.24

LOT AREA TABLE		
LOT #	AREA (S.F.)	AREA (AC.)
16	10,041	0.23
17	10,095	0.23
18	10,133	0.23
19	10,153	0.23
20	10,034	0.23
21	12,601	0.29
22	10,101	0.23
23	10,102	0.23
24	10,103	0.23
25	10,103	0.23
26	10,104	0.23
27	10,104	0.23
28	10,105	0.23
29	13,120	0.30
30	10,243	0.24

LOT AREA TABLE		
LOT #	AREA (S.F.)	AREA (AC.)
31	10,108	0.23
32	10,108	0.23
33	10,109	0.23
34	10,112	0.23
35	10,263	0.24
36	10,569	0.24
37	10,879	0.25
38	11,189	0.26
39	11,496	0.26
40	12,296	0.28
41	13,573	0.31
42	11,043	0.25
43	14,471	0.33

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	10.00	N80° 13' 58"W
L2	32.41	S09° 46' 02"W
L3	39.39	S10° 49' 32"W
L4	7.46	N71° 38' 27"W
L5	12.52	S18° 21' 33"W
L6	9.21	S18° 21' 33"W
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L10	32.17	S67° 26' 13"E
L11	4.93	N59° 17' 53"W
L12	11.60	N84° 34' 31"W
L13	1.57	S84° 34' 31"E
L14	18.40	S59° 17' 53"E
L15	24.85	N18° 21' 33"E
L16	7.54	N71° 38' 27"W

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BRNG	CHORD LENGTH
C1	75.49	7690.00	N86° 47' 04"W	75.49
C2	74.95	175.00	S30° 37' 40"W	74.37
C3	23.43	308.00	S40° 43' 02"W	23.42
C4	100.05	308.00	S29° 13' 56"W	99.61
C5	45.30	825.00	S18° 21' 14"W	45.29
C6	47.12	30.00	N28° 13' 09"W	42.43
C7	47.12	30.00	N61° 46' 52"E	42.43
C8	38.66	25.00	N27° 31' 23"W	34.92
C9	27.43	358.00	N69° 37' 56"W	27.43
C10	31.12	308.00	N70° 19' 52"W	31.10
C11	36.17	358.00	S70° 19' 52"E	36.15
C12	20.96	308.00	S69° 23' 10"E	20.95

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BRNG	CHORD LENGTH
C13	40.09	25.00	N62° 43' 22"E	35.93
C14	22.82	875.00	N17° 31' 41"E	22.82
C15	25.22	875.00	N19° 06' 04"E	25.22
C16	16.44	358.00	N21° 14' 32"E	16.44
C17	53.99	358.00	N26° 52' 41"E	53.94
C18	39.49	25.00	N14° 02' 59"W	35.51
C19	135.88	308.00	N71° 56' 12"W	134.78
C20	40.30	358.00	S81° 21' 02"E	40.28
C21	73.43	358.00	S72° 14' 58"E	73.30
C22	44.21	358.00	S62° 50' 09"E	44.18
C23	33.95	25.00	N81° 47' 57"E	31.40
C24	53.53	125.00	N30° 37' 40"E	53.12

LEGEND:

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING ADJACENT PROPERTY LINE
- MUNICIPLE / TOWNSHIP / DISTRICT LINE
- EXISTING EASEMENT
- MBSL MINIMUM BUILDING SETBACK LINE
- EXISTING WATER LINE
- IRON REBAR FOUND (IRF)
- IRON PIPE FOUND (IPF)
- WV WATER VALVE
- FIRE HYDRANT

REVISION #	DATE	DESCRIPTION

STEPHEN VAN DERHORST — REGISTERED LAND SURVEYOR — TENNESSEE NO. 2041 — 11/6/24

FINAL PLAT
HAMPSHIRE HILLS
1316 HAMPSHIRE PIKE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

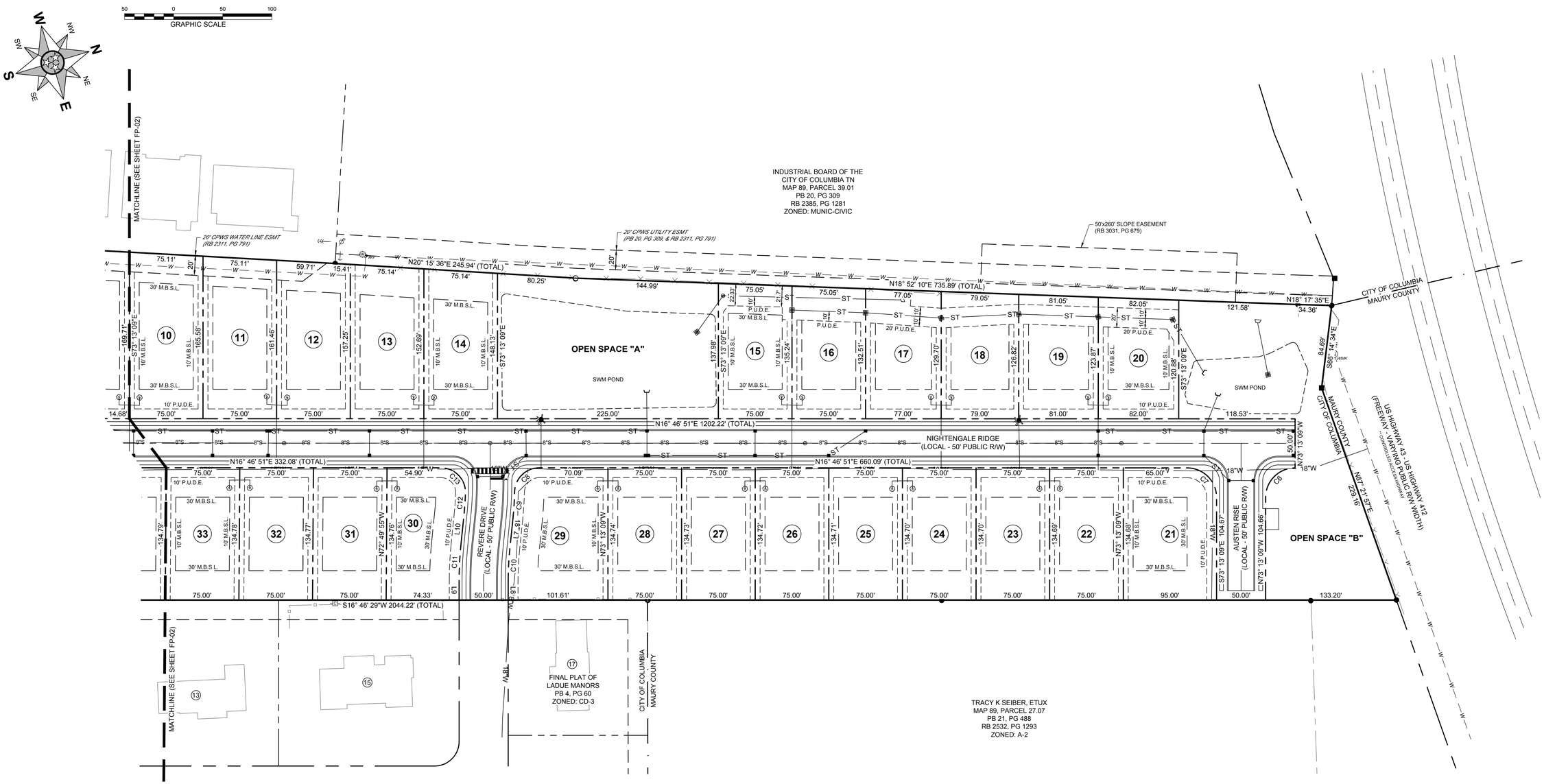
M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
WWW.M2GROUPLLC.COM

FINAL PLAT

DATE : NOVEMBER 18, 2024 | DRAWN BY : ERG | CHECKED BY : SVH
PROJECT NO. : 23-081

SHEET NUMBER:
FP-02

23-081 - FP- FINAL PLAT.DWG / Monday, November 18, 2024 3:32:21 PM



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- EXISTING ADJACENT PROPERTY LINE
- MUNICIPLE / TOWNSHIP / DISTRICT LINE
- EXISTING EASEMENT
- MBSL — MINIMUM BUILDING SETBACK LINE
- W — W — EXISTING WATER LINE
- IRON REBAR FOUND (IRF)
- IRON PIPE FOUND (IPF)
- WV — WATER VALVE
- FIRE HYDRANT

REVISION #	DATE	DESCRIPTION

FINAL PLAT
HAMPSHIRE HILLS
1316 HAMPSHIRE PIKE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

STEPHEN VAN DER HORST — REGISTERED LAND SURVEYOR — TENNESSEE NO. 2634 — 11/6/24

M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
WWW.M2GROUPLLC.COM

FINAL PLAT

DRAWN BY : ERG
CHECKED BY : SVH
DATE : NOVEMBER 18, 2024
PROJECT NO. : 23-081

SHEET NUMBER:
FP-03

23-081 - FP - FINAL PLAT.DWG / Monday, November 18, 2024 3:32:24 PM

November 18, 2024

City of Columbia
700 North Garden St.
Columbia, TN 38401

RE: Item No. 24-0472
1316 Hampshire Pike
Hampshire Hills Final Plat
Comment Response Letter

Dear Planning Staff,
In regard to the project referenced above and as part of our re-submittal for said project, please see the responses below in red to comments received on November 15, 2024. Feel free to contact me directly if you have any questions that need to be addressed.

Sincerely,



Stephen Vander Horst, RLS, CFS
M2 Group, LLC
stephen@m2groupllc.com

COMMENTS:

Planning

1. The lead staff person for this case is Robert Archibald; he will prepare the staff report for this item. Please contact rarachibald@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff. – Acknowledged

2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal. – Acknowledged

3. Lots 17-20 are identified on the Preliminary Plat as Critical Lots. Label and identify all Critical Lots on Final Plat. – The critical lot requirement was previously due to a retaining wall designed across said lots. - The client has negotiated a slope easement with the adjoining property, which will negate the need for retaining walls (or basement foundations across said lots). It is the surveyor's understanding that exhibits have been provided to the City which depict this change. The slope easement agreement has been uploaded to the project submittal portal.

4. Add Surveyor's stamp and signature. – Acknowledged

5. Include a tabulation of all Open Space and use as identified on Plat. – Corrected

6. Please contact E911 if your project requires assignment of new addresses or street names. - Acknowledged

Engineering

7. LOC in the amount of $455,000 provided – Acknowledged

8. Provide subdivision development agreement by resubmittal date. (Appendix B subdivision regulations) – Development agreement has been uploaded to the project submittal portal.

9. Record and reference stormwater maintenance agreement. – To be submitted prior to December 11th, per direction from Engineering.

10. Install asphalt binder course and curbing by resubmittal date. – Acknowledged

11. Grading shall be substantially in compliance with the approved construction plans. – Acknowledged

12. Provide drainage easement on storm sewer behind lots 16-20. 20 feet in width, centered on pipe. – Drainiage easement has been provided, as requested, also across the back of lot 15 as well.

13. Gray out the portion of roadway and development associated with the future townhomes. – Townhome section has been grayed back. Also, acreage for the public right-of-way within the Townhome section has been removed from this single-family phase of the development. A public utility easement has been dedicated along the Townhome right-of-way for water and sewer access to site.

14. Show location of retaining on lots 18-20. – Retaining wall has been removed, as shown on the exhibit drawings submitted to the City.

15. Lots 17-20 are critical lots. - The client has negotiated a slope easement with the adjoining property, which will negate the need for retaining walls (or basement foundations across said lots). It is the surveyor's understanding that exhibits have been provided to the City which depict this change. The slope easement agreement has been uploaded to the project submittal portal.

16. Correct the north arrow. – Corrected

17. Public Utility and Drainage Easements (PUDE) shall be required and be ten (10) feet in width on all property lines parallel and abutting public roads or rights-of-way, and five (5) feet in width on all interior lot lines, except for interior lot lines with a zero-lot line or a common wall along a lot line, unless mentioned below. - Corrected

Fire

18. No comments - Acknowledged

Building

19. No comments. - Acknowledged

Wastewater

20. Columbia Wastewater is still looking for CCTV, testing and as-builts prior to building permits being released. Included with that is a maintenance LOC. This can be done after signing of plat. - Acknowledged

Columbia Water

21. Complete all infrastructure per the approved plans including the following items:

    Still need to tie 18" line to the 12" existing at north side of property
    Set Meter Boxes and Line setters at proper locations and to final grade
    Need to run 18" main through the town homes section and tie into existing 16" at south west side of property
    Fill Line and Pressure test
    Pull Bac T samples
    - Acknowledged

22. Correct plat to show 18" main rather than a 16" main. – Corrected

23. Be prepared to deed infrastructure to CPWS at plat signing, water system must be active at time of plat signing. - Acknowledged

Maury County Schools

24. The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of Baker Elementary School, Whitthorne Middle School, and Central High School to accommodate new students. (See Attached Capacity)
    - Acknowledged

* Due to numbers, MCPS will be rezoning all Spring Hill and Columbia elementary schools for the 25/26 SY. – Acknowledged

Police

25. No comments provided. - Acknowledged

Duck River Electric Membership Corp

26. No comment. - Acknowledged

Maury County Highway Dept.

27. No comment. - Acknowledged

ATT

28. No comment. - Acknowledged

Public Works

29. No comments. - Acknowledged

Atmos Energy

30. No comments provided. - Acknowledged

Maury County E911

31. No comments provided. - Acknowledged

CPWS BB

32. Plan to serve. - Acknowledged

Plu Benjamin Beasley

Map 089 Parcel 039.01
$0.00 Consideration

This Instrument Was Prepared By:
Williamson County Escrow and Title, Inc.
109 Westpark Drive, Suite 230
Brentwood, TN 37027
(615) 794-8780

SLOPE EASEMENT AGREEMENT

THIS SLOPE EASEMENT AGREEMENT (hereinafter referred to as this "Agreement") is entered into effective this 18th day of November, 2024, by and between BAXTER ENTERPRISES, a Tennessee general partnership (hereinafter referred to as "Grantor"), and CYPRESS HOMES, a Tennessee limited liability company (hereinafter referred to as "Grantee").

WITNESSETH:

WHEREAS, Grantor is the current owner of certain unimproved real property in the City of Columbia, Maury County, Tennessee, located at 1100 Hatcher Lane, Columbia, Tennessee 38401 (Map 089 Parcel 039.01) and being further described in that certain Quitclaim Deed of record in Record Book 2385, page 1281, in the Register's Office for Maury County, Tennessee, dated July 21, 2016, and recorded on August 12, 2016, being more particularly described on **Exhibit A**, attached hereto (hereinafter the "Grantor Property"); and

WHEREAS, Grantee has requested that Grantor grant, and Grantor has agreed to grant subject to the terms and conditions hereafter set forth to Grantee, a certain Slope Easement (the "Easement"), on and about a portion of the Grantor Property as depicted on **Exhibit B** attached hereto and being more particularly described on **Exhibit C**, incorporated herein by reference (the "Easement Area"); and

WHEREAS, the Easement granted hereunder is for the benefit of certain real property owned by Grantee which Grantee has developed or is developing as a single-family residential subdivision known as Hampshire Hills (the "Grantee's Development"), located on real property (the "Grantee Property") described in that certain deed of record in Record Book R2957 page 1146 Register's Office for Maury County, Tennessee; and

WHEREAS, said Easement shall run with the land in perpetuity, be binding on Grantor, its successors, assigns, and representatives, and inure to the benefit of Grantee, its successors, assigns and representatives, subject to the terms and conditions hereof; and

WHEREAS, Grantee and Grantee's successors and assigns shall be solely responsible for all maintenance of the Easement and the Easement Area, including the installation, maintenance, repair and replacement of any necessary culverts and drainage pipes to facilitate the flow of ground water so as not to cause a nuisance or otherwise result in an increase in stormwater runoff or drainage upon the Grantor Property; and

WHEREAS, the parties hereto desire to enter into this Agreement to memorialize the agreements and purposes above recited.

NOW, THEREFORE, for and in consideration of the recitals above set forth, which are incorporated herein by reference, and other good and valuable consideration exchanged by and between the parties, Grantor hereby transfers and conveys, for the benefit of the Grantee's Development on the Grantee Property, to Grantee, together with its successors and assigns, the Easement, along with temporary access to such areas adjacent to the Easement as are reasonably necessary for the construction of slopes as contemplated herein, and in accordance with the conditions set forth in this Agreement.

Grantor covenants with Grantee that Grantor is lawfully seized and possessed of said Grantor Property in fee simple, has a right to convey it, and the same is unencumbered except pursuant to any liens, easements or other encumbrances of record.

The terms of this Agreement are covenants running with the land and inure to the benefit of, and are binding upon, the parties hereto and their respective successors, assigns, and representatives.

Grantee shall be solely responsible for (i) all installation, maintenance and repair of the Easement and all improvements installed by Grantee in the Easement Area, including, without limitation, culverts and drainage pipes installed to facilitate the flow of ground water so as not to cause a nuisance or otherwise result in an increase in stormwater runoff or drainage upon the Grantor Property and (ii) routine maintenance of the Easement Area. Grantee shall cause such installation, maintenance and repair to be performed in strict compliance with all applicable laws, regulations and ordinances, and in that regard, Grantee shall not allow any lien(s) or claim(s) to be lodged against the Grantor Property as a result of such performance or otherwise.

Grantee, for itself and on behalf of its successors and assigns, including without limitation, any homeowners' association created to manage the operations of the Grantee's Development (herein, the "Hampshire Hills HOA", which, together with the Grantee are collectively referred to herein as the "Grantee Parties"), agrees that the Grantee Parties shall, at all times that the Easement is in force, maintain the Easement Area and all improvements constructed therein in good operating condition and repair so as to (i) insure that stormwater drainage is flowing in and through the Easement in the manner intended, and (ii) prevent any damage or physical waste to occur on the Grantor Property.

Grantee, for itself and on behalf of the Grantee Parties, hereby agree to release, defend, indemnify and hold Grantor harmless from and against any and all liabilities, claims, demands, damages or costs of any kind whatsoever (including attorneys' fees, expert and consultant fees and costs of litigation) arising from or in connection with the exercise by the Grantee Parties (or their respective contractors, representatives and/or authorized agents) of the Grantee's rights under this Agreement, unless such liabilities, claims, demands, damages or costs are incurred as a direct result of the gross negligence or willful misconduct of Grantor and/or its successors, assigns, employees or contractors. Without limiting the foregoing, Grantee, for itself and the Grantee Parties, shall indemnify, defend and hold harmless Grantor from and against any and all damages and losses incurred as a result of the construction or installation of any stormwater improvements on the Grantor Property pursuant to the Easement.

In the event that the use of the Easement Area by the Grantee Parties shall cause any physical damage or destruction to the Grantor Property, Grantee Parties shall promptly repair such damage or destruction to the Grantor Property so that it is restored to at least as good a condition as existed prior to the occurrence of such damage or destruction (normal wear and tear excepted).

This Agreement may be amended only by a writing executed by all parties. If any action or proceeding is brought by either party against the other pertaining to or arising out of this Agreement, the prevailing party will be entitled to recover all costs and expenses, including attorneys' fees, incurred on account of such action or proceeding. This Agreement may be enforced by injunctive and other equitable relief, in addition to all

other legal remedies. This Agreement will be construed and enforced in accordance with the laws of the State of Tennessee. A final determination by a court of competent jurisdiction that any provision of this Agreement is invalid will not affect the validity of any other provision, and any provision so determined to be invalid will, to the extent possible, be construed to accomplish its intended effect. No delay or omission in the exercise of any right or remedy of a party upon any default by another party will impair such right or remedy or be construed as a waiver of such default. Any waiver by a party of any default must be in writing and will not be a waiver of any other default concerning the same or any other provision of the Agreement. The exercise or failure to exercise any one of the rights and remedies of a party will not be deemed to be instead of, or a waiver of, any other right or remedy in this Agreement. This Agreement may be signed in two or more counterparts, each of which will be deemed to be an original agreement, but all of which will constitute one and the same document.

[Remainder of this page is intentionally left blank, signature pages to follow]

SIGNATURE PAGE(S) TO SLOPE EASEMENT AGREEMENT

IN WITNESS WHEREOF the Parties have hereunto set their hands as of the day and date first above written.

GRANTOR:

BAXTER ENTERPRISES,
a Tennessee general partnership

By: _____
Name: David Baxter
Title: Partner

STATE OF TENNESSEE)
COUNTY OF Maury)

Before me, the undersigned, a Notary Public within and for the State and County aforesaid, personally appeared David Baxter with whom I am personally acquainted or proved to me on the basis of satisfactory evidence and upon oath acknowledged himself to be a Partner of BAXTER ENTERPRISES, a Tennessee general partnership, and that as such Partner of BAXTER ENTERPRISES, a Tennessee general partnership, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the said company.

Witness my hand and official seal this the 18th day of November, 2024.

_____
Notary Public

Commission Expires: _____



SIGNATURE PAGE(S) TO SLOPE EASEMENT AGREEMENT

GRANTEE:

CYPRESS HOMES, LLC,
a Tennessee limited liability company

By: _____
Name: Benjamin Beasley
Title: Member

STATE OF TENNESSEE)
COUNTY OF Maury, acting in Williamson

Before me, the undersigned, a Notary Public within and for the State and County aforesaid, personally appeared Ben Beasley with whom I am personally acquainted or proved to me on the basis of satisfactory evidence and upon oath acknowledged himself to be a Member of Cypress Homes, LLC, a Tennessee limited liability company and that as such Member of Cypress Homes, LLC, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the said company.

Witness my hand and official seal this the 18th day of November, 2024.

_____
Notary Public

Commission Expires: 9-20-28

FRANK E. EVANS
STATE OF TENNESSEE NOTARY PUBLIC
MAURY COUNTY

EXHIBIT A

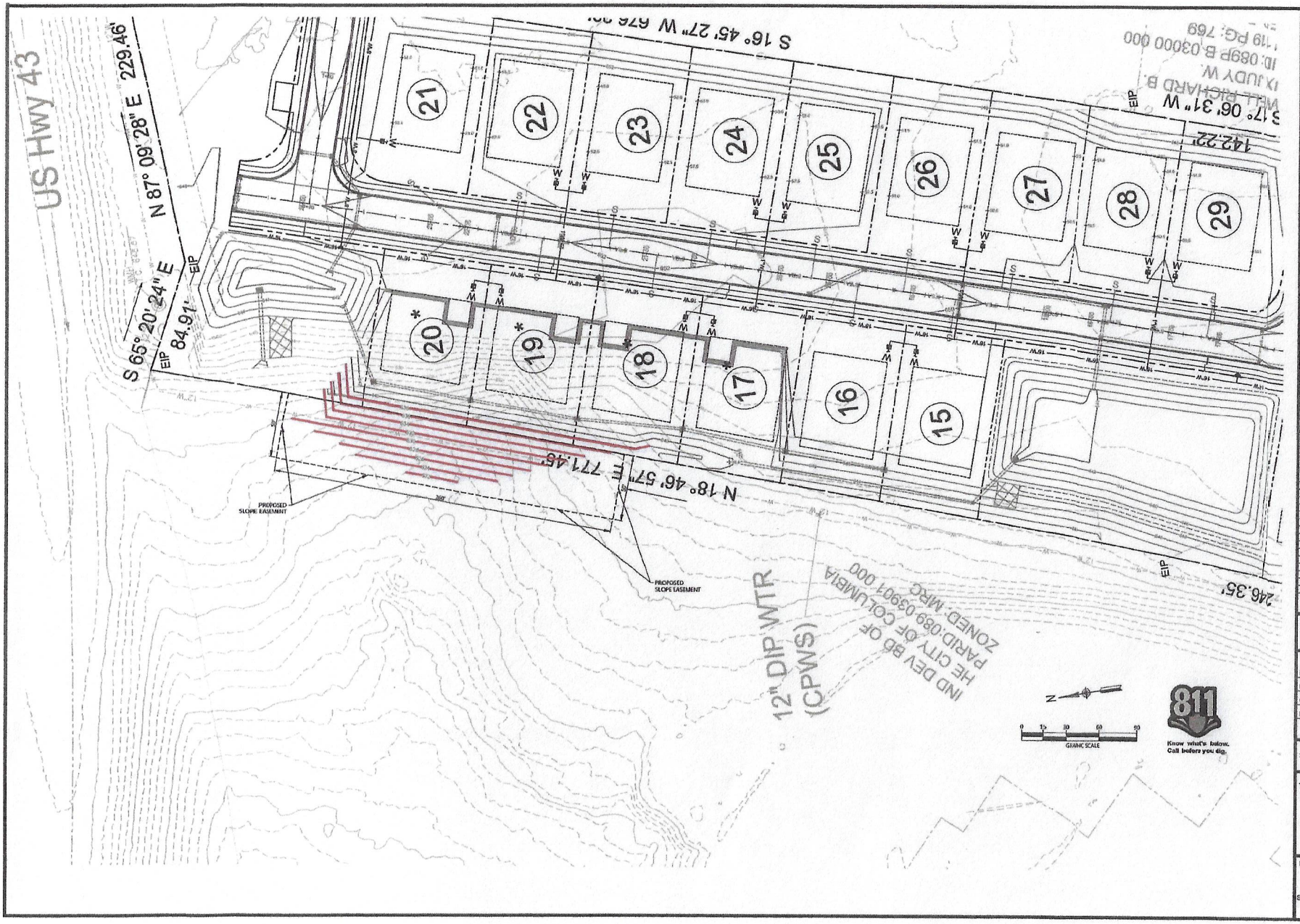
Grantor Property Description

Land in Maury County, Tennessee, being all that property shown on the Plat of Survey – 20.64 Acre Tract of record in Plat Book P20, Page 309, Register's Office for Maury County, Tennessee, to which plat reference is hereby made for a more complete description.

Being the same property conveyed to BAXTER ENTERPRISES, a Tennessee general partnership by Quitclaim Deed from THE INDUSTRIAL DEVELOPMENT BOARD OF THE CITY OF COLUMBIA, TENNESSEE, of record in Record Book 3009, page 1266, Register's Office for Maury County, Tennessee

EXHIBIT B

Easement Depiction
[Attached Hereto]



McNeely Civil Engineering, LLC
254 Belgian Road
Nolensville, TN 37135

Permit-Seal:

Client/Project:
CYPRESS HOMES
PO BOX 682447
FRANKLIN, TN 37068
615-497-1611
HAMPSHIRE HILLS SLOPE EASEMENT EXHIBIT

Revisions:
Item: Date:

Project No.: MCE 240904

Designed By:
Drawn By:
Checked By: E. MCNEELY
Date: 07-22-2024

Scale:

Title:
HAMPSHIRE HILLS SLOPE EXHIBIT

Drawing No.
EXHIBIT
Sheet: of

EXHIBIT C

Easement Description

Located in the 9th Civil District of Maury County, Tennessee, being a portion of BAXTER ENTERPRISES, a Tennessee general partnership, Tennessee property, as referenced in Record Book 3009, Page 1266 of the Register's Office for Maury County, Tennessee (ROMCT), and being more particularly described as follows:

Commencing at an iron rebar (found) in the southerly right-of-way of US Highway 43 – US Highway 412, said rebar being the northwesterly corner of the Cypress Homes, LLC property, Record Book 2957, Page 1146 (ROMCT), having the following Tennessee State Plane coordinate value; Northing: 472,389.74 US feet, Easting: 1,648,006.82 US feet (NAD83, 2011);

Thence, with the westerly line of Cypress Homes, the following two (2) calls:

1) South 18° 17' 35" West 34.36 feet;
2) South 18° 52' 10" West 63.83 feet, to the True Point of Beginning;

Thence, continuing with the westerly line of Cypress Homes, South 18° 52' 10" West 260.00 feet;

Thence, severing said Baxter Enterprises property, the following three (3) calls:

1) North 71° 07' 50" West 50.00 feet;
2) North 18° 52' 10" East 260.00 feet;
3) South 71° 07' 50" East 50.00 feet, to the Point of Beginning, containing in all 0.30 acres, more or less.

The description provided hereon was prepared by Stephen Vander Horst, TN RLS 3041, and is derived from an exhibit drawing by M2 Group, LLC entitled "Slope Easement Exhibit", dated October 16, 2024, which is an integral part of this description and hereby incorporated by reference.

BK/PG: R3031/679-687
24015542

9 PGS:AL-AGREEMENT	
JANE BATCH: 339924	11/18/2024 - 12:59 PM
VALUE	0.00
MORTGAGE TAX	0.00
TRANSFER TAX	0.00
RECORDING FEE	45.00
ARCHIVE FEE	0.00
DP FEE	2.00
REGISTER'S FEE	0.00
TOTAL AMOUNT	47.00

STATE OF TENNESSEE, MAURY COUNTY
JOHN FLEMING
REGISTER OF DEEDS

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, November 12, 2024

ITEM NO.
24-0472

DESCRIPTION: 1316 Hampshire Pike

COMMENTS:

Planning

1. The lead staff person for this case is Robert Archibald; he will prepare the staff report for this item. Please contact rarachibald@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
3. Lots 17-20 are identified on the Preliminary Plat as Critical Lots. Label and identify all Critical Lots on Final Plat.
4. Add Surveyor's stamp and signature.
5. Include a tabulation of all Open Space and use as identified on Plat.

Maury County Schools

6. Baker Elementary School, Whitthorne Middle, Central High School
   See Attached Capacity Numbers
   The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.
   * Due to numbers, MCPS will be rezoning all Spring Hill and Columbia elementary schools for the 25/26 SY.

Police

7. No comments provided.

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Building

8. No comments.

Wastewater

9. Columbia Wastewater is still looking for CCTV, testing and as-builts prior to building permits being released. Included with that is a maintenance LOC. This can be done after signing of plat.

Engineering

10. LOC in the amount of $455,000 provided
11. Provide subdivision development agreement by resubmittal date. (Appendix B subdivision regulations)
12. Record and reference stormwater maintenance agreement
13. Install asphalt binder course and curbing by resubmittal date.
14. Grading shall be substantially in compliance with the approved construction plans.
15. Provide drainage easement on storm sewer behind lots 16-20. 20 feet in width, centered on pipe.
16. Gray out the portion of roadway and development associated with the future townhomes.
17. Show location of retaining on lots 18-20
18. Lots 17-20 are critical lots.
19. Correct the north arrow.
20. Public Utility and Drainage Easements (PUDE) shall be required and be ten (10) feet in width on all property lines parallel and abutting public roads or rights-of-way, and five (5) feet in width on all interior lot lines, except for interior lot lines with a zero-lot line or a common wall along a lot line, unless mentioned below.

Fire

21. No comments

Duck River Electric Membership Corp

22. No comment.

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Columbia Power

23. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

Maury County Highway Dept.

24. No comment.

ATT

25. No comment.

Public Works

26. No comments.

Columbia Water

27. Complete all infrastructure per the approved plans including the following items:

- Still need to tie 18" line to the 12" existing at north side of property
- Set Meter Boxes and Line setters at proper locations and to final grade
- Need to run 18" main through the town homes section and tie into existing 16" at south west side of property
- Fill Line and Pressure test
- Pull Bac T samples

Correct plat to show 18" main rather than a 16" main.

Be prepared to deed infrastructure to CPWS at plat signing, water system must be active at time of plat signing.

Atmos Energy

28. No comments provided.

Maury County E911

29. No comments provided.

CPWS BB

30. Plan to serve.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.

You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.

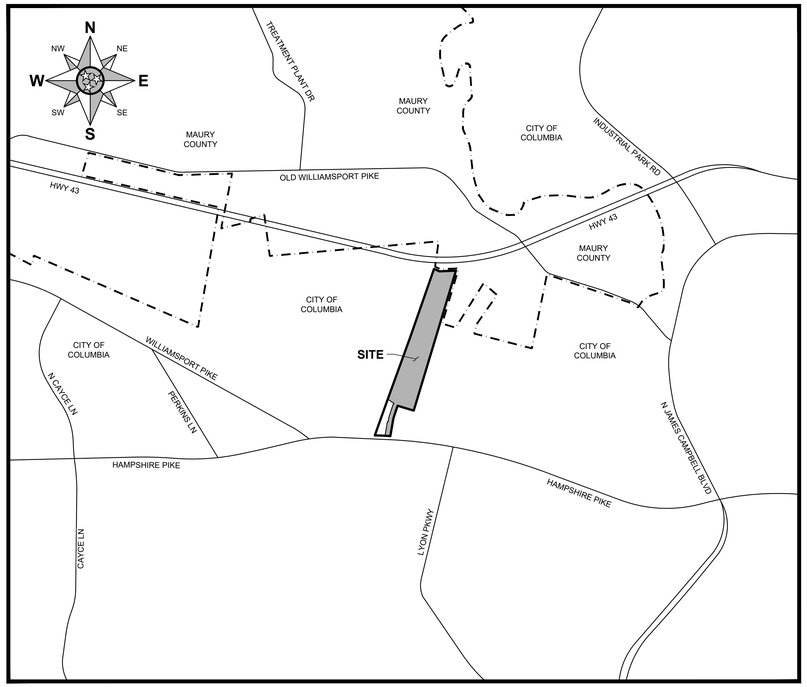
Current Enrollment / Capacity

	Facility Name	Constructed	Sq. Ft.	Acreage	Capacity
Elementary	Baker	1960	43,920	12	340
	Battle Creek	2019	90,000	30	700
	Brown	1968	56,720	20	405
	Highland	1986	47,800	4.5	380
	Howell	1999	81,600	17.5	700
	Mt. Pleasant	1978	80,021	22	630
	Riverside	1984	71,150	14	500
	Spring Hill	1984	69,000	10	540
	Woodard	1990	76,200	17	600
	Wright	2005	97,765	18	740
					5535
Middle	Battle Creek	2019	125,000	45	900
	Cox	1997	137,200	25	900
	Mt. Pleasant	2001	113,938	29.2	550
	Spring Hill	2010	158,106	39.49	950
	Whitthorne	1979	175,600	17	1050
					4350
High	Battle Creek	2024	305,675	51	2000
	Central	2016	296,740	55	1700
	Mt. Pleasant	1969	110,759	31	600
	Spring Hill	1993	181,800	57	1200
					5500
Unit	Culleoka	1969	205,800	34	1020
	Hampshire	1978	83,410	13.12	500
	Santa Fe	1964	94,225	24	650
					2170
Other	Central Office	1960	15,400	1.5	
	College Hill	1958	42,211	2.26	
	Maintenance	1987	9,400	4.7	
	McDowell		46,165	7	
			2,815,605	**601.27**	**17555**

Current Enrollment	Capacity Used
282	82.9%
682	97.4%
340	84.0%
311	81.8%
581	83.0%
543	86.2%
378	75.6%
465	86.1%
586	97.7%
617	83.4%
4785	***86.4%***
758	84.2%
630	70.0%
386	70.2%
556	58.5%
948	90.3%
3278	***75.4%***
394	19.7%
1393	81.9%
369	61.5%
905	75.4%
3061	***55.7%***
863	84.6%
414	82.8%
548	84.3%
1825	***84.1%***
148	
13097	

FINAL PLAT FOR:
HAMPSHIRE HILLS

1316 HAMPSHIRE PIKE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE
P/O TAX MAP 89P, GROUP A, PARCEL 15.00
OCTOBER 21, 2024



VICINITY MAP
SCALE: 1"=1000'

SUBJECT PROPERTY INFORMATION:

- OWNER: CYPRESS HOMES, LLC
- PARCEL ID: TAX MAP 89P, GROUP A, PARCEL 15.00
- INSTRUMENT: RB 2957, PG 1146
- TOTAL AREA = 17.62 AC. (15,988 S.F.)±
- ZONING: RS-10 (PER PREVIOUS ZONING ORDINANCE, DATED JULY 14, 2022)

CONTACT LIST

OWNER/DEVELOPER

CYPRESS HOMES, LLC
P.O. BOX 682447
FRANKLIN, TN 37068
CONTACT: BEN BEASLEY
PHONE: 615-497-1511
E-MAIL: ben@cypresshomestn.com

SURVEYOR

M2 GROUP, LLC
P.O. BOX 2543
BRENTWOOD, TN 37024
PHONE: 615-656-0257 (EXT. 2000)
CONTACT: STEPHEN VANDER HORST, RLS, CFS
E-MAIL: stephen@m2grouplc.com

FINAL SUBDIVISION PLAT MAURY COUNTY, TENNESSEE	
TOTAL ACRES: 16.42	TOTAL LOTS: 43
ACRES NEW STREETS: 3.50	FEET NEW STREETS: 2,975
CIVIL DISTRICT: 9TH	CLOSURE ERROR: 1:10,000±
MILES OF NEW ROADS: 0.56	DATE: OCTOBER 21, 2024

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAT IS TO CREATE 43 LOTS AND 4 OPEN SPACES.
2. BEARINGS ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83).
3. SURVEY FIELD WORK WAS COMPLETED ON AUGUST 29, 2024.
4. THIS SURVEY WAS PREPARED USING THE CURRENT DEEDS AND PLATS OF RECORD FOR THE SUBJECT PROPERTY.
5. ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
6. ADJOINING PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED DESCRIPTION, RECORD PLATS, OR TAX MAPS.
7. PROPERTY CORNERS SET THIS SURVEY ARE 18" #4 REBAR WITH ORANGE PLASTIC CAP STAMPED "M2 GROUP", 18" #5 REBAR WITH YELLOW PLASTIC CAP STAMPED "M2 GROUP, LLC", OR PK NAIL WITH STAINLESS STEEL WASHER STAMPED "M2 GROUP, LLC", UNLESS NOTED OTHERWISE.
8. UNDERGROUND UTILITIES, IF SHOWN, HAVE BEEN PLOTTED FROM PLANS AND MARKINGS COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES (CI/ASCE 38-2, QUALITY LEVEL C). OTHER UNDERGROUND UTILITIES MAY EXIST WHICH ARE NOT SHOWN AS A RESULT OF INFORMATION NOT BEING PROVIDED BY THE UTILITY OWNER. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT OR CONTRACTOR IS ADVISED THAT EXCAVATION MAY BE NECESSARY. CALL 811 BEFORE YOU DIG.
9. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. MAP "MAURY COUNTY, TENNESSEE" PANELS 165 & 280 OF 440, MAP NUMBER 47119C0165E & 47119C0280E, EFFECTIVE APRIL 16, 2007.
10. THE SUBJECT PROPERTY SHOWN HEREON HAS A ZONING DESIGNATION OF "RS-10", RESIDENTIAL DISTRICT ACCORDING TO THE PREVIOUS CITY OF COLUMBIA OFFICIAL ZONING MAP, DATED JULY 14, 2022. SETBACK REQUIREMENTS ARE AS FOLLOWS:
    FRONT = 30 FEET
    SIDE = 10 FEET
    REAR = 30 FEET
11. ALL OPEN SPACE IS TO SERVE AS A PUBLIC UTILITY, DRAINAGE, AND ACCESS EASEMENT (PUDAE).

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN BOOK R2069, PAGE 668, MAURY COUNTY REGISTERS OFFICE, AND ADOPT THIS FINAL SUBDIVISION PLAT OF THE PROPERTY AS SHOWN HEREON AND DEDICATE ALL PUBLIC WAYS AND EASEMENTS AS NOTED WITH MY (OUR) FREE CONSENT.

OWNER(S) _____ DATE _____

TITLE (IF ACTION FOR CORPORATION OR PARTNERSHIP) _____

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

NAME _____ DATE _____

TITLE _____ AUTHORIZING AGENCY _____

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE, AND UTILITIES

I HEREBY CERTIFY THAT THE STREETS, DRAINAGE, AND UTILITIES OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAVE BEEN INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS, OR A PERFORMANCE SURETY IN THE AMOUNT OF $ _____ FOR STREETS AND DRAINAGE HAS BEEN POSTED WITH THE CITY OF COLUMBIA, TENNESSEE, TO ASSURE COMPLETION OF SUCH IMPROVEMENTS.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS, WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS NOTED IN THE MINUTES OF THE COLUMBIA MUNICIPAL PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE MAURY COUNTY REGISTER OF DEEDS.

PLANNING DIRECTOR _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF SUBDIVISION NAME AND STREET NAMES

SUBDIVISION NAME AND STREET NAMES APPROVED BY THE CITY ENGINEERING DEPARTMENT AND BY E-911 MAURY COUNTY.

MAURY COUNTY E-911 _____ DATE _____

CERTIFICATE OF ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CLASS "I" LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS GREATER THAN OR EQUAL TO 1:10,000.

REGISTERED LAND SURVEYOR _____ NUMBER _____ DATE _____

CERTIFICATE OF SANITARY SEWER SYSTEM

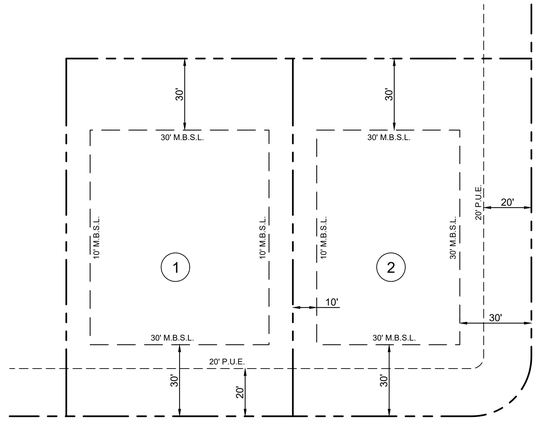
I HEREBY CERTIFY THAT THE SANITARY SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DIRECTOR OF WASTEWATER DEPARTMENT _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE



TYPICAL LOT LAYOUT
SCALE: 1"=30'
(TYPICAL UNLESS NOTED OTHERWISE)

REVISION #	DATE	DESCRIPTION

FINAL PLAT
HAMPSHIRE HILLS
1316 HAMPSHIRE PIKE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

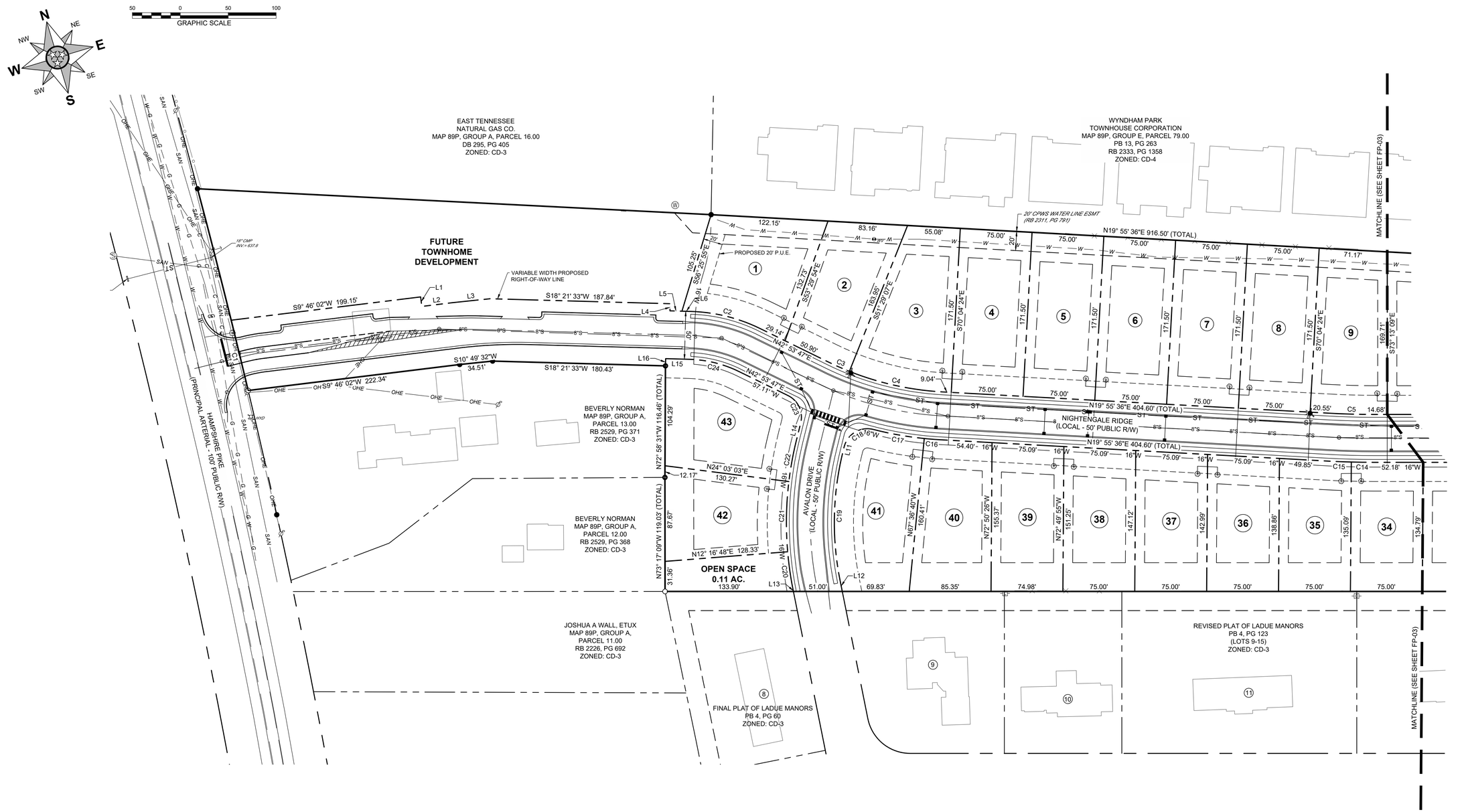
M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
WWW.M2GROUPLLC.COM

COVER SHEET

DRAWN BY : ERG
CHECKED BY : SVH
DATE : OCTOBER 21, 2024
PROJECT NO. : 23-081

SHEET NUMBER:
FP-01

23-081 - FP - COVER SHEET.DWG | Monday, October 21, 2024 2:43:10 PM



LOT AREA TABLE		
LOT #	AREA (S.F.)	AREA (AC.)
1	13,102	0.30
2	11,395	0.26
3	13,827	0.32
4	12,862	0.30
5	12,862	0.30
6	12,862	0.30
7	12,862	0.30
8	12,862	0.30
9	12,972	0.30
10	12,573	0.29
11	12,264	0.28
12	11,954	0.27
13	11,623	0.27
14	11,281	0.26
15	10,246	0.24

LOT AREA TABLE		
LOT #	AREA (S.F.)	AREA (AC.)
16	10,041	0.23
17	10,095	0.23
18	10,133	0.23
19	10,153	0.23
20	10,034	0.23
21	12,601	0.29
22	10,101	0.23
23	10,102	0.23
24	10,103	0.23
25	10,103	0.23
26	10,104	0.23
27	10,104	0.23
28	10,105	0.23
29	13,120	0.30
30	10,243	0.24

LOT AREA TABLE		
LOT #	AREA (S.F.)	AREA (AC.)
31	10,108	0.23
32	10,108	0.23
33	10,109	0.23
34	10,112	0.23
35	10,263	0.24
36	10,569	0.24
37	10,879	0.25
38	11,189	0.26
39	11,496	0.26
40	12,296	0.28
41	13,573	0.31
42	11,043	0.25
43	14,471	0.33

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	10.00	N80° 13' 58"W
L2	32.41	S09° 46' 02"W
L3	39.39	S10° 49' 32"W
L4	7.46	N71° 38' 27"W
L5	12.52	S18° 21' 33"W
L6	9.21	S18° 21' 33"W
L7	32.17	N67° 26' 13"W
L8	19.91	N73° 13' 31"W
L9	19.91	S73° 13' 31"E
L10	32.17	S67° 26' 13"E
L11	4.93	N59° 17' 53"W
L12	11.60	N84° 34' 31"W
L13	1.57	S84° 34' 31"E
L14	18.40	S59° 17' 53"E
L15	24.85	N18° 21' 33"E
L16	7.54	N71° 38' 27"W

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BRNG	CHORD LENGTH
C1	75.49	7690.00	N86° 47' 04"W	75.49
C2	74.95	175.00	S30° 37' 40"W	74.37
C3	23.43	308.00	S40° 43' 02"W	23.42
C4	100.05	308.00	S29° 13' 56"W	99.61
C5	45.30	825.00	S18° 21' 14"W	45.29
C6	47.12	30.00	N28° 13' 09"W	42.43
C7	47.12	30.00	N61° 46' 52"E	42.43
C8	38.66	25.00	N27° 31' 23"W	34.92
C9	27.43	358.00	N69° 37' 56"W	27.43
C10	31.12	308.00	N70° 19' 52"W	31.10
C11	36.17	358.00	S70° 19' 52"E	36.15
C12	20.96	308.00	S69° 23' 10"E	20.95

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BRNG	CHORD LENGTH
C13	40.09	25.00	N62° 43' 22"E	35.93
C14	22.82	875.00	N17° 31' 41"E	22.82
C15	25.22	875.00	N19° 06' 04"E	25.22
C16	16.44	358.00	N21° 14' 32"E	16.44
C17	53.99	358.00	N26° 52' 41"E	53.94
C18	39.49	25.00	N14° 02' 59"W	35.51
C19	135.88	308.00	N71° 56' 12"W	134.78
C20	40.30	358.00	S81° 21' 02"E	40.28
C21	73.43	358.00	S72° 14' 58"E	73.30
C22	44.21	358.00	S62° 50' 09"E	44.18
C23	33.95	25.00	N81° 47' 57"E	31.40
C24	53.53	125.00	N30° 37' 40"E	53.12

LEGEND:

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING ADJACENT PROPERTY LINE
- MUNICIPLE / TOWNSHIP / DISTRICT LINE
- EXISTING EASEMENT
- MBSL — MINIMUM BUILDING SETBACK LINE
- EXISTING WATER LINE
- IRON REBAR FOUND (IRF)
- IRON PIPE FOUND (IPF)
- WV — WATER VALVE
- FIRE HYDRANT

REVISION #	DATE	DESCRIPTION

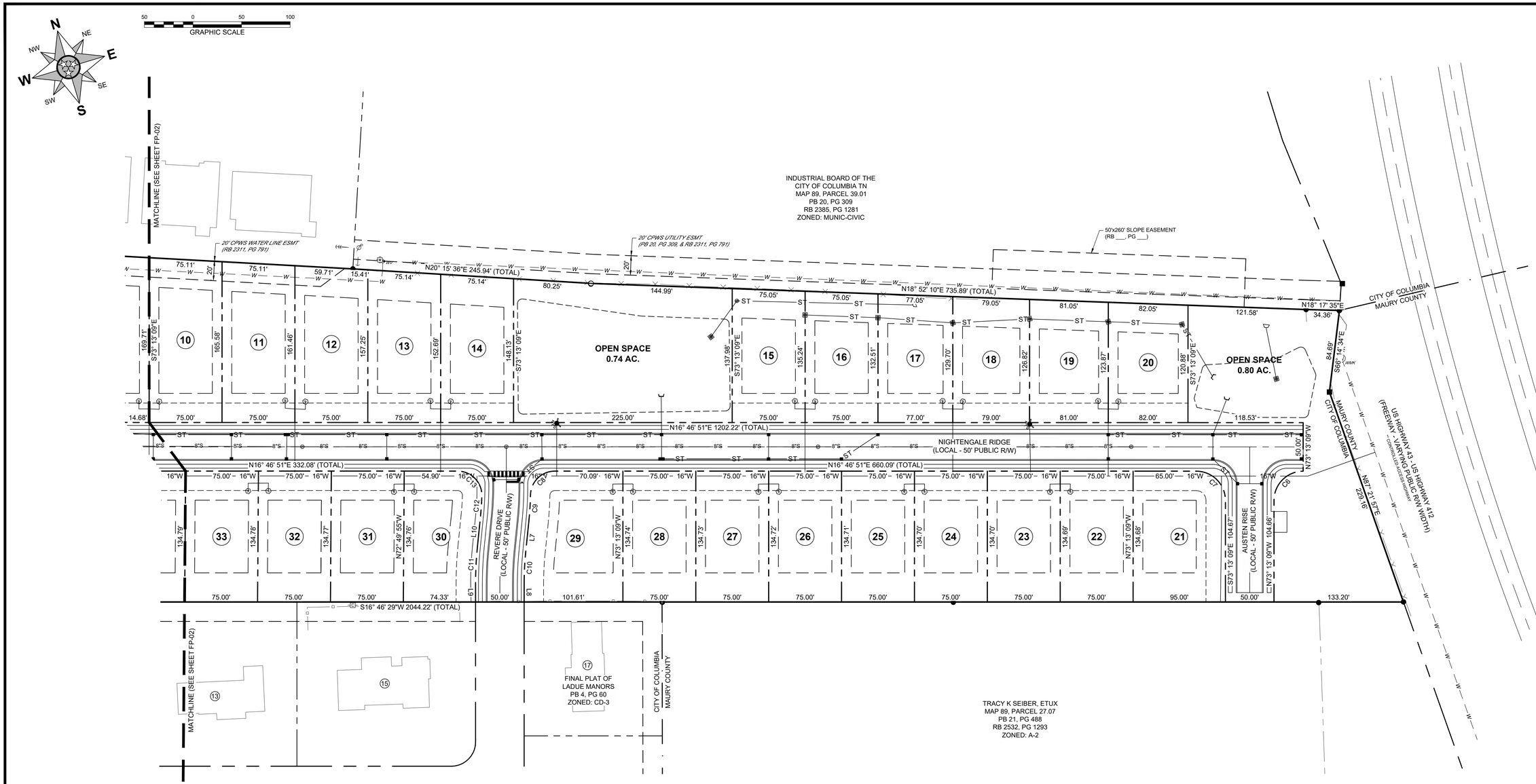
FINAL PLAT
HAMPSHIRE HILLS
1316 HAMPSHIRE PIKE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

MZ GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
WWW.MZGROUPLLC.COM

FINAL PLAT

DATE: OCTOBER 21, 2024 | DRAWN BY: ERG
PROJECT NO.: 23-081 | CHECKED BY: SVH

SHEET NUMBER:
FP-02



LOT AREA TABLE		
LOT #	AREA (S.F.)	AREA (AC.)
1	13,102	0.30
2	11,395	0.26
3	13,827	0.32
4	12,862	0.30
5	12,862	0.30
6	12,862	0.30
7	12,862	0.30
8	12,862	0.30
9	12,972	0.30
10	12,573	0.29
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- IRON REBAR FOUND (IRF)
- IRON PIPE FOUND (IPF)
- WV — WATER VALVE
- FIRE HYDRANT

REVISION #	DATE	DESCRIPTION

FINAL PLAT
HAMPSHIRE HILLS
1316 HAMPSHIRE PIKE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
WWW.M2GROUPLLC.COM

FINAL PLAT

DATE : OCTOBER 21, 2024
PROJECT NO. : 23-081
DRAWN BY : ERG
CHECKED BY : SVH

SHEET NUMBER:
FP-03

23-081 - FP - FINAL PLAT.DWG | Monday, October 21, 2024 2:43:15 PM

CITY OF COLUMBIA
TENNESSEE

WASTEWATER DEPARTMENT

20 June 2024

Benjamin Beasley, Member
Cypress Homes LLC
1805 Gunnerson Ln
Franklin, TN 37064

RE: Project Name: Hampshire Hills
TDEC Project Number (Project ID): 23-0381

This letter serves as your notification to proceed with the construction of the sewer extension referenced above. Start of construction is expected in the obligated time schedule specified in the extension agreement and installation is expected as designed in the approved plans. (Start date, per agreement, is to be on or before 9/20/2024.)

This notice to proceed shall be in addition to, and shall not replace, any responsibility to obtain required permits that may be related to the commencement of construction or to the connection of sanitary sewer lines. This notice to proceed is issued solely for the Sanitary Sewer of the above referenced project.

The City of Columbia is authorized to inspect the construction work to verify compliance with the approved plans and specifications which are on the site. The engineer shall notify the City of Columbia Wastewater Department before the start of construction.

If you have any questions, contact our office at (931) 560-1001 between the hours of 7:30am and 4:00pm, Monday - Friday.

Sincerely,

Donald J. Boshers, Director
Columbia Wastewater System
DB/mds

CITY OF COLUMBIA
TENNESSEE

WASTEWATER DEPARTMENT

6 May 2024

Benjamin Beasley
Cypress Homes LLC
1805 Gunnerson Ln
Franklin, TN 37064

RE: Project Name: Hampshire Hills (2340 linear feet)
TDEC Project Number (Project ID): 23-0381

Dear Benjamin Beasley:

Columbia Wastewater System has received notification from the Tennessee Department of Environment and Conservation of the design approval for the sewer line extension subject project. **Please submit, no later than 6/30/2024, the following items:**

- Surety for Sewer Improvements ($ 226,980.00)
- Inspection Fees ($ 4,680.00 - Payable to City of Columbia)
- Contractor Information
- Executed Agreement for Sewer Line Extension (Two-Paged Attachment to this letter) (9/20/2023- 9/20/2024)
- Confirmation & Status of Any Related Permits (See Notes)

The approved plans and the Notice to Proceed will be issued upon the successful completion of the items stated.

Notes
Approval of these construction documents should not be construed as a permit for any activities related to this project. Activities which may require a permit under the WQC Act and Regulations include, but are not limited to, the following: stream bank vegetation removal; creek crossing(s) for equipment or utility lines; construction within twenty (20) feet of a stream bank; construction in or near a marshy area or wetland, and/or land disturbance greater than one acre. The Water Pollution Control Office should be contacted for determination regarding whether an Aquatic Resource Alteration Permit (ARAP) and/or a National Pollutant Discharge Elimination System (NPDES) Construction Storm water permit will need to be obtained prior to the beginning of construction of this project.

Sincerely,

Donnie Boshers, Director

Columbia Wastewater System

AGREEMENT FOR SEWER LINE EXTENSION

WHEREAS, the undersigned, _____, hereinafter referred to as the Owner of property mentioned below herein; and

WHEREAS, the undersigned Owner plans to make sanitary sewer improvements to the development property known as __Hampshire Hills__ located in the City of Columbia, Tennessee, and which shall be served by the public sewer system of the City of Columbia, Tennessee.

NOW, THEREFORE, for and in consideration of the unilateral covenants herein made, the Owner agrees as follows:

1) The Owner shall install sewer facility improvements in accordance with the specific plans and specifications that have received approval of the City of Columbia Wastewater System and the Tennessee Department of Environment and Conservation. The Owner understands the construction of sewer facilities is subject to provisions of the Tennessee Code Annotated regarding contractor's license and penalties for non-compliance.

2) The Owner shall install the sewer taps during construction of the sewer lines, bringing the service line to the property line. Therefore, there will be no tap installation charge upon the builder's connection of sewer service, however, notwithstanding the provision, if for any reason, the Columbia Wastewater System should be requested or required to install a sewer tap, the Person requesting the tap installation shall pay in accordance with the rules and regulations in force at the time of installation.

3) The sewer improvements installed by the Owner shall connect to the Columbia Wastewater System's existing sewer infrastructure however no physical connection shall be made to the existing City wastewater infrastructure until the additional line extension improvements have passed all inspections and surety has been established. It shall be the Owner's responsibility and expense to make such connections in a manner acceptable to the Columbia Wastewater System. In the event that the Columbia Wastewater System should perform any part of making said connections, the Owner shall pay to the Columbia Wastewater System for its labor, materials, and equipment costs, complete with appropriate overhead costs. Owner understands all workmanship, materials, labor, etc., related to the construction of sewer facilities is warranted against defect for one year from date of acceptance by the City Council of the City of Columbia.

4) Owner agrees to construct acceptable sewer system improvements within said development in accordance with applicable Columbia Wastewater System and State of Tennessee guidelines within a 12 month period beginning on 9/20/2023 and ending on 9/20/2024. Surety shall be pledged to secure the improvements before the wastewater utility signs the final subdivision plat. The amount of surety required for wastewater improvements and maintenance shall be in addition to any other surety requirements required by the City of Columbia.

5) Upon Owner's completion of the installation of the sewer lines, and completion of connections to the existing sewer infrastructure, all in a manner acceptable to the Columbia Wastewater System and the Tennessee Department of Environment and Conservation, the Owner shall submit to the Columbia Wastewater System the following:

a) Testing of the sewer as specified in the City of Columbia Standard Sewer Specifications

b) As-built drawings of the system as installed, drawn as specified by the Standard Sewer Specifications or the Wastewater Civil Engineer, including the recording of any public easements to any property on which said sewer improvements are located. Said easement shall be no less than 20 feet in width

c) CCTV video of the sanitary sewer system installed as according to the Standard Sewer Specifications

d) An adequate surety instrument to warrant the improvements against defect for one year from date of acceptance by the City Council of the City of Columbia

e) An affidavit documenting no liens against the sewer improvements and an agreement to indemnify and hold harmless from any liens which may be asserted against same

f) An offer of dedication of the sewer improvements, including a request to the Director of Wastewater to be put on the next Council Agenda, subject to City Council acceptance

g) This agreement shall be binding upon the heirs and assigns of Owner

This the _____ day of _____, _____.

_____ _____
Signature Date

_____
Print Name

STATE OF _____ COUNTY OF _____

Personally appeared before me, the undersigned authority, a Notary Public in and for said County and State, the within named _____, the Owner with whom I am personally acquainted or proved to me on the basis of satisfactory evidence and who acknowledged that _____ signed the foregoing (Agreement for Sewer Line Extension) instrument for the purposes therein contained.

WITNESS OUR HANDS AND OFFICIAL SEAL AT _____, this the _____ day of _____, _____.

_____
Notary Public

My Commission Expires:

_____ SEAL

AGREEMENT

This Agreement between Cypress Homes, hereinafter referred to as "Developer", and Columbia Power System, hereinafter referred to as "CPS", is in words and figures as follows:

WITNESSETH

WHEREAS, Developer desires CPS to extend or expand its existing electric power distribution facilities so as to serve the proposed project of Developer which is described as follows: Hampshire Hills (43 meters)

WHEREAS, Developer agrees to provide certain financial commitments to CPS to induce CPS to extend its electric power distribution facilities to said project, and

WHEREAS, CPS agrees to extend or expand its electric power distribution facilities to serve said proposed project.

NOW, therefore for and in consideration of CPS's promise to extend and expand its electric power distribution facilities to serve the proposed project and Developers promise to provide to CPS certain financial commitments, the parties agree as follows:

1. This agreement is drawn according to a policy adopted by the Board of Public Utilities on September 29, 1986, as amended June 25, 2014, which policy governs the extension or expansion of CPS electric power distribution facilities. Developer acknowledges that he has examined said policy or has been provided the opportunity to examine said policy and said policy is incorporated into this Agreement and made a part hereof by reference.

2. Developer shall pay that portion of the total expenditures by CPS for materials, supplies, labor, engineering, and overhead incurred in providing electrical service to the project that will not be recovered through the revenue generated by the sale of electricity generated by the project. The parties agree that said contribution will be determined based on the estimated electric sales revenues projected and the estimated cost of the project. Attached hereto are calculations of the preliminary estimate in the amount of $ *$ 79,865.00 to be paid upon execution of this Agreement by Developer. The final contribution in aid of construction shall be determined after completion of all work by CPS to provide electrical power distribution facilities to the project.

*Street light installation not included in the above amount: $34,832.00

3. In the event that Developer's plans are delayed, cancelled or changed in any way, Developer further agrees that execution of this Agreement constitutes a commitment to reimburse CPS for all non-recoverable expenses incurred in connection with this project.

Agreed this the 27th day of June, 2024.

COLUMBIA POWER SYSTEM

Jonathan Hardin, President/CEO

SIGN HERE

Cypress Homes

1805 Gunnerson Ln

P.O. Box 682447

Franklin, TN 37064

EXTENSIONS TO SUBDIVISIONS, MULTI-FAMILY DEVELOPMENTS OR MOBILE HOME PARKS

CPWS investments in labor, overhead, materials, equipment, or other facilities to service new residential developements must be amortized within a period of ten (10) years based upon expected revenue, wholesale power cost, and operating expenses as calculated by the CPWS Engineering Department.

The developer (customer) will be required to make a cash contricbution in aid of construction to offset any CPWS investment, which will not be amortized through electric revenues as outlined above.

CPWS

Remit To Columbia Power & Water Systems P.O. Box 379 Columbia, TN 38402-0379 Attn: Kathy Walker Phone: (931) 375-7748	Page: Type: Invoice: 111921 Date: 06/11/2024

Sold To: Cypress Homes
P.O Box 682447
1805 Gunnerson Ln
Franklin, TN 37064

Customer No.	Contract No.	Customer No.	Terms	Ship Date

Item No.	Qty	Description	Unit Price	Total Price
		Hampshire Hills Subdivision (43 lots)		$79,865.00
		Street lights (11 lights)		$34,832.00
			Invoice Total:	**$114,697.00**

CPWS

January 23, 2024

Mr. Ben Beasley
Cypress Homes LLC
1805 Gunnerson Lane
Franklin, TN 37064
Sent via email: ben@cypresshomestn.com

RE: Water Availability Letter
Hampshire Hills – 43 Units
Hampshire Pike
Tax Map 89P, Parcel 15
Columbia, Maury County, TN

Dear Mr. Beasley:

Columbia Power and Water Systems ("the Utility"/CPWS) is a municipal corporation authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation, various Planning Commissions and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies, water service will be made available on a first-come, first-served basis, subject to availability of all CPWS furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development consists of 43 single-family lots. CPWS has evaluated the projected water demands for the proposed residential development in the water system hydraulic model and is able to meet a fire-flow capacity of 1,000 gpm at 20 psi while maintaining the existing level of service and pressures in this portion of the distribution system. CPWS can provide water for the proposed development according to the following requirements:

- Domestic waterline connections will be made to: the existing 12-inch water main located along U.S. Highway 43; the existing 16-main water main located along the West property boundary; the existing 6-inch water mains on Avalon Drive and Rever Drive.
- An 18-inch diameter CL 51 ductile iron water main will be installed through the property along "Nightingale Ridge", with connections to the existing 12- and 16- mains adjacent to the property.
- A 30-ft permanent utility easement with 10-ft temporary construction easement is required at the North boundary of the property.
- A 20-ft permanent utility easement is required at the south boundary of the property, centered on the property line and running from East to West, to accommodate connection of the new 18-inch main to the existing 16-inch main.

- CPWS will pay to the developer a betterment fee for the difference in cost of materials between 8-inch C900 DR14 and 18-inch CL51 DIP water mains, including valves and fittings.

All of the above requirements are to be constructed and paid for by the Applicant and dedicated to CPWS once complete up to and including the meter. No construction of CPWS infrastructure shall be initiated until final construction plans have been approved by TDEC and all parties have fully executed a water service agreement.

Once you have received this Water Availability Letter, next steps in the process to obtain water service from CPWS are as follows:

- Finalize previously transmitted comments for the water infrastructure construction drawings.
- Upon resolution of all comments, CPWS will provide hydraulic calculations and an approval letter to support submittal of the drawings to TDEC by the applicant for construction approval.
- Upon approval by TDEC, applicant may then schedule a pre-construction meeting with CPWS. Meter and capacity fees will be due 48 hours prior to the pre-construction meeting. Meter fees are subject to change based on market costs at time of purchase.

Meter Fee: $540 per 3/4" meter (43 meters)	$23,220.00
Impact Fee: $875 per 3/4" meter (43 meters)	$37,625.00
Total Meter and Impact Fees Due =	**$60,845.00**

- After the pre-construction meeting, CPWS will then issue a formal notice to proceed. No construction of CPWS infrastructure may take place prior to the pre-construction meeting.
- Applicant is then required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure.

If you have any questions, please feel free to contact me at 423-774-0349 or eric.king@inflodesign.com. This letter is valid for one-hundred twenty (120) days from the date of this letter.

Sincerely,

Eric King, P.E.
Inflo Design Group, LLC
on behalf of Columbia Power and Water Systems

cc: Jonathan Hardin, CPWS
File 22-001

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * *1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*
Fold hard copy submittals larger than 8½"x11"
All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	1316 Hampshire Pike		
	TAX MAP: 89P	GROUP: A	PARCEL: p/o 15.00
SUMMARY OF NATURE OF REQUEST AND WORK	Plat will create 43 single-family lots and 4 open space lots. Also, plat will dedicate public right-of-way and utility/drainage easements		

DATE OF PRE-APPLICATION CONFERENCE	9/25/2024	*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
❑ Comprehensive Plan Amendment ❑ Annexation ❑ Rezoning ❑ Preliminary Plat ☒ Final Plat ❑ PUD Preliminary Master Plan ❑ PUD Final Site Plan ❑ Site Development Plan ❑ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ❑ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ❑ Requested Zone Listed ❑ Statement of Compliance with Comprehensive Plan ❑ Concept Plan **Preliminary Plats/Site Development Plans:** ❑ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ❑ Receipt of Payment for Pre-Application Meeting ❑ Written Legal Description copy ❑ Columbia Water System Availability Letter ❑ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs: ❑ Project Name (include Sections & Phases) ❑ Total Number of Lots/Residential Units ❑ Square Footage of Non-Residential Floor Space ❑ Total acreage

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME	M2 Group, LLC	PHONE	615-656-0257
ADDRESS	PO Box 2543 Brentwood, TN 37025	EMAIL	stephen@m2groupllc.com

PROPERTY OWNER NAME	Cypress Homes LLC	PHONE	615-497-1511
ADDRESS	PO Box 682447 Franklin, TN 37068	EMAIL	ben@cypresshomestn.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

M2 Group, LLC Stephen Vander Horst, RLS, CFS		10/21/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
Cypress Homes LLC Benjamin Beasley, Member		10/9/2024
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

Melissa Sanders

From: Kevin McCarthy
Sent: Friday, December 6, 2024 1:40 PM
To: Melissa Sanders; Austin Brass; Sandra Richardson; Robert Archibald
Subject: FW: Taylors Bend Rezoning - Deferral Request

Thanks!

Kevin C. McCarthy, AICP
City Planner & Zoning Administrator
700 N. Garden Street
Columbia, TN 38401
kmccarthy@columbiatn.gov

CITY OF COLUMBIA
TENNESSEE

From: Keli Frymire <keli@gdc-tn.com>
Sent: Friday, December 6, 2024 1:35 PM
To: Kevin McCarthy <KMcCarthy@Columbiatn.gov>; Greg Gamble <greg.gamble@gdc-tn.com>
Cc: Paul Keltner <PKeltner@Columbiatn.gov>
Subject: [Caution External Email] - Taylors Bend Rezoning - Deferral Request

Good afternoon Paul and Kevin,

The Taylors Bend team is still working through the feedback that we've received and would like to request a deferral of the Taylors Bend Rezoning from the December Planning Commission meeting to the January Planning Commission meeting.
Please confirm receipt of this email request and let me know if you need additional information.

Thank you,

GAMBLE DESIGN COLLABORATIVE
Keli Frymire | PLA
Mailing: 3020 Stansberry Lane, Suite 201; Franklin, TN 37069
Physical: Freeport, FL
keli@gdc-tn.com
Mobile: (706) 566-6480
www.gdc-tn.com

From: Kevin McCarthy <KMcCarthy@Columbiatn.gov>
Sent: Friday, November 15, 2024 10:58 AM
To: Keli Frymire <keli@gdc-tn.com>; Greg Gamble <greg.gamble@gdc-tn.com>
Cc: Paul Keltner <PKeltner@Columbiatn.gov>
Subject: RE: Taylors Bend Rd property - deferral follow up

Hi Keli. Thank you for the update. We appreciate the information. There's nothing more that you need to submit to be on the December agenda. However, we would appreciate any summary of the neighborhood conversation that you can provide prior to the CMPC meeting. That will help us update the staff report and answer any questions from CMPC members. Paul will take over as the case planner for this item; please include him in communications.

Thank you!

Please note that our email addresses have changed from a ".com" to ".gov" domain. My email is now kmccarthy@columbiatn.gov

Kevin C. McCarthy, AICP
City Planner
700 N. Garden Street
Columbia, TN 38401
kmccarthy@columbiatn.gov

CITY OF COLUMBIA
TENNESSEE

From: Keli Frymire <keli@gdc-tn.com>
Sent: Friday, November 15, 2024 10:32 AM
To: Greg Gamble <greg.gamble@gdc-tn.com>; Kevin McCarthy <KMcCarthy@Columbiatn.gov>
Subject: [Caution External Email] - Taylors Bend Rd property - deferral follow up

Good morning Kevin,
Just wanted to follow up with you on a few items for the Taylor's Bend Rd rezoning request project that was deferred at PC this week.

First, we have scheduled the neighborhood meeting. This will be on November 26, 2024 from 6:30 pm to 8pm. The format will be a drop-in style open house. This will be held at the Northside Baptist Church, in the basement meeting room.

Do you a resubmittal or any other documentation from us in order to proceed to the December 11, 2024 Planning Commission meeting?

Thanks!

Keli Frymire | PLA
Mailing: 3020 Stansberry Lane, Suite 201; Franklin, TN 37069
Physical: Freeport, FL
keli@gdc-tn.com
Mobile: (706) 566-6480
www.gdc-tn.com

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Water's Edge Property

Project #:	24-0418	Location:	Map 90 Parcels 7.12
Applicant:	Greg Gamble	Case Type(s):	Rezoning
Staff Planner:	Kevin C. McCarthy, AICP	Proposed Use:	Mixed-Use

PROJECT SUMMARY

The applicant requests to rezone a 5.0-acre parcel located at the intersection of Taylor Bend Road and River Road from MU-PUD (Mixed Use Planned Unit Development) to CD-5 (Urban Center Character District). The PUD was approved under a previous ordinance. The attendant Master Plan has expired. The applicant request that the Planning Commission recommend revocation of the Planned Unit Development and rezoning to the CD-5 character district. The requested zoning designation consists of higher density Mixed Use areas.

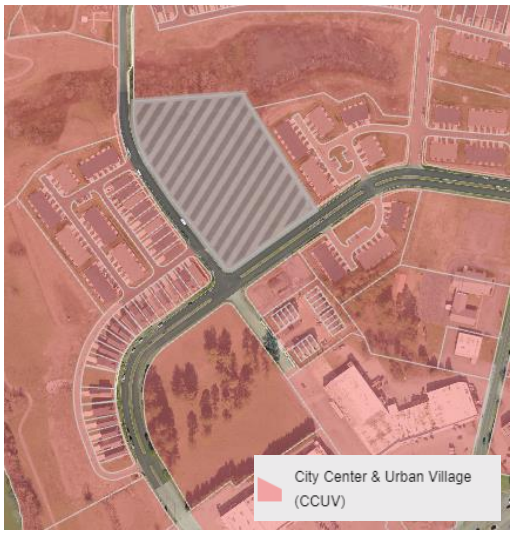
- The requested zoning is consistent with the City Center Urban Village (CCUV) future land use classification in Connect Columbia.
- The property is located adjacent to a CD-5 property which was subject to a nearly identical request in 2023.
- In support of the requested rezoning, the applicant provided a concept plan which depicts multifamily housing on the site.
- Subsequent development and division of the property will require review and approval by the Planning Commission or the Zoning Administrator.
- The Planning Commission is a **recommending body** for rezoning requests; City Council is the decision-making authority.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

SITE INFORMATION

CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
PUD	Vacant	Vacant	+/- 5.0 acre



FUTURE LAND USE MAP	ZONING MAP

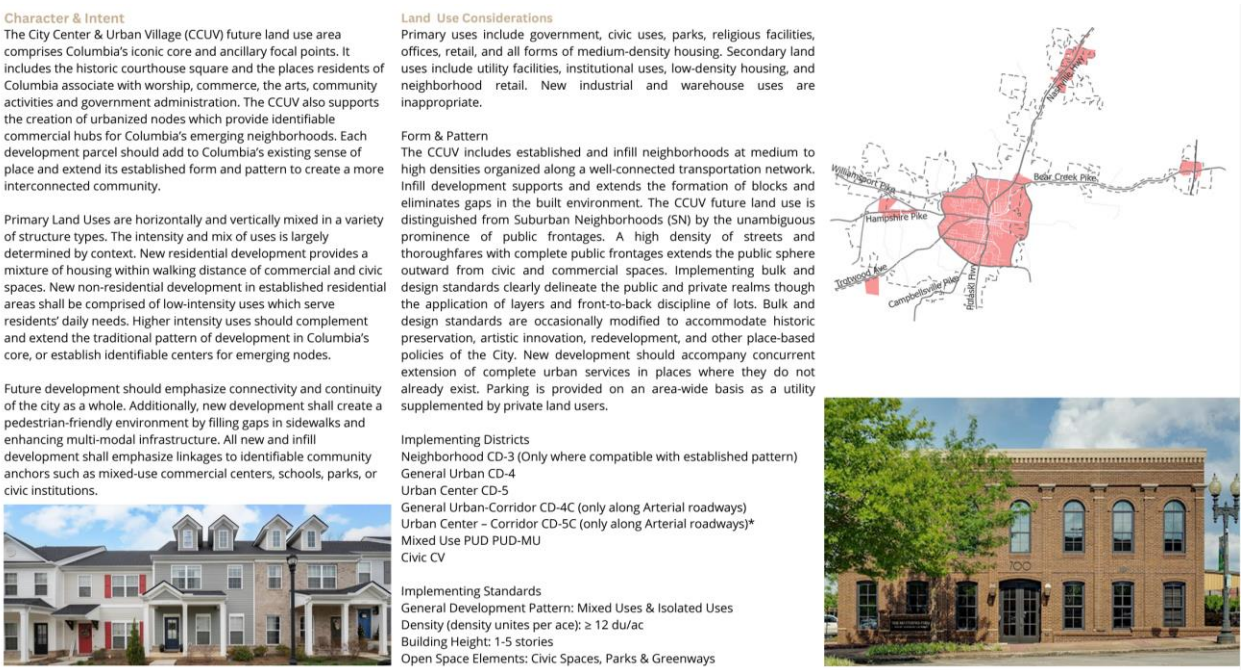




SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	CCUV	PUD	Vacant
North	CCUV	PUD	Open Space
South	CCUV	CD4C/CD5	Office/Vacant
East	CCUV	PUD	Single Family
West	CCUV	PUD	Single Family

CONSISTENCY WITH CONNECT COLUMBIA

City Center Urban Village: The requested rezoning is consistent with the future land use map. The future land use of most of the subject site is CCUV. The City Center & Urban Village (CCUV) future land use area comprises Columbia's iconic core and ancillary focal points (Connect Columbia, p. 35). It includes the historic courthouse square and the places residents of Columbia associate with worship, commerce, the arts, community activities and government administration. The CCUV also supports the creation of urbanized nodes which provide identifiable commercial hubs for Columbia's emerging neighborhoods. Each development parcel should add to Columbia's existing sense of place and extend its established form and pattern to create a more interconnected community. The future land use classification is implemented by the CD-4 and CD-5 character districts, as well as CV and PUDs. In some cases, the Planning Commission may determine that CD-3 and CD-4C are also appropriate implementing zones.



Character & Intent

The City Center & Urban Village (CCUV) future land use area comprises Columbia's iconic core and ancillary focal points. It includes the historic courthouse square and the places residents of Columbia associate with worship, commerce, the arts, community activities and government administration. The CCUV also supports the creation of urbanized nodes which provide identifiable commercial hubs for Columbia's emerging neighborhoods. Each development parcel should add to Columbia's existing sense of place and extend its established form and pattern to create a more interconnected community.

Primary Land Uses are horizontally and vertically mixed in a variety of structure types. The intensity and mix of uses is largely determined by context. New residential development provides a mixture of housing within walking distance of commercial and civic spaces. New non-residential development in established residential areas shall be comprised of low-intensity uses which serve residents' daily needs. Higher intensity uses should complement and extend the traditional pattern of development in Columbia's core, or establish identifiable centers for emerging nodes.

Future development should emphasize connectivity and continuity of the city as a whole. Additionally, new development shall create a pedestrian-friendly environment by filling gaps in sidewalks and enhancing multi-modal infrastructure. All new and infill development shall emphasize linkages to identifiable community anchors such as mixed-use commercial centers, schools, parks, or civic institutions.

Land Use Considerations

Primary uses include government, civic uses, parks, religious facilities, offices, retail, and all forms of medium-density housing. Secondary land uses include utility facilities, institutional uses, low-density housing, and neighborhood retail. New industrial and warehouse uses are inappropriate.

Form & Pattern

The CCUV includes established and infill neighborhoods at medium to high densities organized along a well-connected transportation network. Infill development supports and extends the formation of blocks and eliminates gaps in the built environment. The CCUV future land use is distinguished from Suburban Neighborhoods (SN) by the unambiguous prominence of public frontages. A high density of streets and thoroughfares with complete public frontages extends the public sphere outward from civic and commercial spaces. Implementing bulk and design standards clearly delineate the public and private realms though the application of layers and front-to-back discipline of lots. Bulk and design standards are occasionally modified to accommodate historic preservation, artistic innovation, redevelopment, and other place-based policies of the City. New development should accompany concurrent extension of complete urban services in places where they do not already exist. Parking is provided on an area-wide basis as a utility supplemented by private land users.

Implementing Districts
Neighborhood CD-3 (Only where compatible with established pattern)
General Urban CD-4
Urban Center CD-5
General Urban-Corridor CD-4C (only along Arterial roadways)
Urban Center – Corridor CD-5C (only along Arterial roadways)*
Mixed Use PUD PUD-MU
Civic CV

Implementing Standards
General Development Pattern: Mixed Uses & Isolated Uses
Density (density unites per ace): ≥ 12 du/ac
Building Height: 1-5 stories
Open Space Elements: Civic Spaces, Parks & Greenways

CONFORMITY WITH ZONING ORDINANCE

As required by **§ 8.5.19** of the Zoning Ordinance, the applicant provided a concept plan (i.e. "Sketch Development Plan"). The current request establishes the applicable standards for future reviews. The concept plan is not a plan of development and approval of the rezoning request does not establish a vested right.

- **The concept demonstrates that it is possible to develop the site in conformity with the bulk and design standard of the Ordinance at Table 4.3.1-F.**
    - The plan depicts development of the property with six Large Multifamily buildings, one small multifamily building, and amenities.
    - All parking is located in the third layer and notes on the cocept plan indicate that the design of buildings will conform to the CD-5 standards.
    - The concept plan is very similar to the previously approved PUD Master Plan.
- Development of the property will require a detailed site development plan which will inevitably differ from the concept plan. At the building permit stage, Planning staff will review facades for compliance with the CD-5 design standards. However, the concept plan does demonstrate that it is possible to develop the site in conformity with the standards for the requested character district.
- If the rezoning is successful and the site develops, Planning staff will perform zoning compliance review to determine conformity with the standards of the Ordinance.



Concept Plan Provided for Rezoning (subject to Site Development Plan Review)



2020 PUD Master Plan

REVIEW PROCESS

The Development Review Committee evaluated the proposed rezoning at its August 2024 meeting, as directed by section **8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package.

Section **8.5.19** of the Zoning Ordinance directs the Planning Commission to review and make a recommendation on all proposed changes to the Official Zoning Map. The Planning Commission is the recommending body for rezonings under **§ 8.3.3.B.3** of the Zoning Ordinance. The City Council is the decision-making authority.

Section **8.5.19.H.4** of the Zoning Ordinance establishes the review criteria for approval of all changes to the Official Zoning Map:

a. The Rezoning is consistent and not in conflict with the Comprehensive Plan or other applicable approved local plans for the area;
b. It has been determined that the legal purposes for which zoning exists, as set forth in Section 1.5 [, are not contravened];
c. It has been determined that there will be no adverse effect upon Adjoining property owners unless such effect can be justified by the overwhelming public good or welfare;
d. It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public;
e. It has been determined that conditions affecting the area have changed to a sufficient to warrant the Zoning Map Amendment or that the existing zoning of the property was the result of a mistake;
f. It has been determined that adequate school, road, parks, wastewater treatment, water supply, and stormwater drainage facilities are available

SUMMARY OF DEVELOPMENT REVIEW COMMITTEE COMMENTS

The DRC reviewed this proposal at its October 2024 meeting. A full list of comments, and the applicant's responses, is provided in the agenda packet. Some key comments are noted below.

- **Planning** directed the applicant to provide a narrative response to criterion at **§ 8.5.19.H.4(e)** explaining why the applicant believes conditions affecting the area have changed sufficiently to warrant the Zoning Map Amendment.
- Planning asked the applicant to clarify add notes to the concept for future reference.
- **Engineering** advised the applicant that a Traffic Impact Study will be required at the time Site Development Plan.

COMMENTARY FROM PROFESSIONAL PLANNING STAFF

The requested CD-5 zoning is consistent with Connect Columbia. As discussed above, the Planning Commission has previously approved a PUD plan for a density and intensity of development similar to that proposed in the concept plan. Last year, the Planning Commission recommended approval of a very similar PUD to CD-5 rezoning request on an adjacent property.

SAMPLE MOTIONS

Recommend to Approve:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in sections **8.5.19.H** of the City of Columbia Zoning Ordinance have been satisfied and recommend approval of the proposed rezoning *[, subject to technical comments and other conditions presented by planning staff*].

Recommend to Deny:

Move to recommend denial of the requested rezoning having found, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in section **8.5.19.H** of the City of Columbia Zoning Ordinance are not satisfied [*list specific reasons for denial*].

Defer:

Move to find that there is insufficient information to decide, defer the matter to the next regularly scheduled meeting of the Planning Commission, and request that the [*applicant/staff*] provide: [*list additional information*] for review at a future meeting.

November 10, 2024

Mr. McCarthy,

My name is Todd Wilson. I'm a resident and homeowner at Taylor Landing in Columbia, TN. I recently learned that the Columbia Planning Commission will consider a rezoning application to change Parcel 7.12 (Tax Map 90) at the corner of River Road and Taylor Bend from PUD (Planned Unit Development) to CD—5 (Urban Character District).

I'm writing to voice my questions and concerns about this rezoning and, as importantly, the potential for allowing significantly higher-density housing within the footprint of Taylor Landing. I will be out of state on November 13, 2024, when the Planning Commission meets, and during public hearings on December 12, 2024. I'm asking that you do a phone call with me before the November 13th Planning Commission meeting.

As a steward of the community's best interests, I hope you and your team will take the time to hear my concerns and those of the large number of homeowners in Taylor Landing you will also be hearing from.

Should the Planning Commission recommend that the City Council consider the rezoning, I also ask that you meet with representatives from the Taylor Landing community before the December 5th study session. We have a Taylor Landing Transition Team working to ensure a smooth transition from the developer (Meritage) to a community-led homeowner's association (HOA). We are very sensitive to community issues and are keenly aware of the potential negative impacts of this rezoning and the allowance for significantly higher housing density in our community. It would be best if you heard our concerns as soon as possible.

This is not an issue of some "nearby" zoning action. This is a rezoning directly within our community's footprint and will undoubtedly harm our community. I know your team has a thankless job. We need to know that you will work with us, hear us, and have our best interests as a primary consideration in your work.

I'm confident the other members of our Taylor Landing Transition Team share my concerns. The community will undoubtedly also share our concerns as they begin learning about the significance of this change and the resulting negative impact it would have on us.

Taylor Landing is a new neighborhood situated on approximately 70 acres in Columbia, TN. It is zoned PUD and features a mix of single-family homes, townhomes, and community amenities such as a children's playground area, walking trails, and a dog park. We have nearly 300 housing units representing over 500 residents. Many of us moved to Taylor Landing because of its residential, not urban, context. We love the convenient location and our residential space. Green space along the Duck River is a large part of the attraction of our neighborhood.

For perspective, Parcel 7.12, being considered for rezoning, is approximately 5 acres. We understand this rezoning would allow over 125 additional housing units in just 5 acres. This rezoning activity essentially "squeezes" these 5 acres directly into the 70 acres of Taylor Landing (a 7% increase in land but an over 40% increase in housing units within the footprint of Taylor Landing).

My primary concern is the allowance of this significantly higher housing density that exists within the 70 acres of Taylor Landing.

For additional perspective, throughout Taylor Landing, where there are housing units (not counting fields and green space along the Duck River), there are approximately 20 to 30 housing units, on average, in areas the size of Parcel 7.12 (compared with adding over 125 in CD-5 zoning). Hence, to remain PUD zoning, we would see a 20 to 30 housing unit increase. This 7% to 10% increase in housing units is consistent with the 7% increase in acreage represented by Parcel 7.12 being included within the Taylor Landing footprint.

This prompts these key questions:

First, what is the compelling reason for changing the zoning from PUD to CD–5 and/or allowing significantly higher housing density that would outweigh the negative impacts to homeowners in Taylor Landing? Homeowners purchased their homes with the understanding that Parcel 7.12 would be PUD zoning with housing consistent with Taylor Landing. Are there any positive impacts on the residents of Taylor Landing with the rezoning? (I can only identify negative consequences.)

Second, how is changing the PUD zoning within the footprint of an established PUD-zoned neighborhood consistent with the Master Plan for this area of Columbia? What other examples exist in Columbia where an established PUD-zoned neighborhood had a CD-5-zoned urban center inserted within its footprint? While I understand the city recently allowed the rezoning of another nearby property, and the developer of Parcel 7.12 is now trying to use that as partial justification, two wrongs don't make a right.

Third, what rules and Planning Commission considerations apply to changing the zoning within the footprint of an established neighborhood and allowing significantly higher housing density than what exists all around it, especially when the change would impact the neighborhood's character?

Fourth, what standard does the Planning Commission use to (1) decide to even consider a rezoning, (2) allowable housing density in a specific context, and (3) discern whether a rezoning is appropriate when it's inconsistent with the community directly surrounding it?

Fifth, what negative, unintended consequences should be considered when discerning the wisdom of changing the zoning from PUD to CD-5 and/or allowing a significantly higher housing density?

I want to discuss all five questions and share my concerns on the fifth question with you. My specific concerns include, but are not limited to:

1. **The Burden on Our Existing Taylor Landing Amenities**: We have a small children's playground/park area, hiking trails, a dog park, and open space along the Duck River, all funded by the current members of our community. Parcel 7.12, within the footprint of Taylor Landing, is closer in distance to all these amenities than it is for the average resident of Taylor Landing. These amenities will be a significant attraction to the people living on Parcel 7.12, and there will be no way of keeping them from using them. As such, the value of these amenities to the HOA-paying members of Taylor Landing will be significantly diminished. This would also likely increase our insurance fees and liability exposure.

2. **The Impact on Our Parking**: Our community has a parking shortage. With a mix of single-family and townhomes (most are single-car garages), we already have residents parking illegally relative to designated parking spots and HOA covenants. Putting over 120 new housing units onto 5 acres within the footprint of Taylor Landing will undoubtedly stress our current parking shortage.

   How many parking spots will be required on Parcel 7.12 per new housing unit? Functionally, there needs to be at least 2 per housing unit to avoid impact overflow into our Taylor Landing Community. Only a parking garage can achieve that parking density on this lot with the footprint of 135 new housing units. The lack of adequate parking caused by putting high-density housing within a lower-density residential area can only negatively impact the existing Taylor Landing community.

   Finally, there are at least 12 Taylor Landing housing units along the east side of Parcel 7.12 that will be directly exposed to the parcel's parking lot. The lights in that lot will likely be overbearing to adjacent homeowners.

3. **The Traffic Impact**: The primary entrance to our area is via Theta Pike and River Road. Theta Pike is a two-lane road that has seen significant increases in traffic in recent years. It is unlikely this two-lane road will be widened; hence, adding 120+ new units along an already busy thoroughfare will undoubtedly increase the congestion.

   Even more importantly, the only entrance and exit to the suggested development on Parcel 7.12 is via Taylor Bend. The 135 new housing units, representing over 200 cars, will add significant traffic in and out of Taylor Landing.

4. **Uncertainty of Type of Housing**: With Taylor Landing having nearly 70 acres of existing residential housing units and Parcel 7.12 only having 5 acres, the type of housing allowed on Parcel 7.12 should be entirely consistent with the existing homes in Taylor Landing. Allowing 5 acres of "to be developed" land within the footprint of Taylor Landing to impact the community's character is simply a bad idea. It's impossible to add this high-density housing within the footprint of Taylor Landing without overbearing the existing community. The housing types and density allowed on Parcel 7.12 should be

consistent and in harmony with Taylor Landing.

5. **Negative Impact on Taylor Landing Property Values**: I see no positive impacts for the residents of Taylor Landing with this rezoning. Unfortunately, this would be a rezoning within the footprint of our community, and hence, it would undoubtedly have negative consequences, including lowering our property values. Our community would become less desirable based on issues like those addressed above, which would put downward pressure on home values.

I request that you and the Planning Commission not move forward with the rezoning and allowing higher-density housing on this property. The negative impacts of this potential rezoning and allowing higher-density housing far outweigh any benefits. The location of Parcel 7.12 within the footprint of Taylor Landing should make denial of the rezoning a simple one.

I also request a phone meeting with you as soon as possible to discuss my questions and concerns. We need to understand the process and your perspective to discern how quickly, broadly, and vocally we mobilize the Taylor Landing community against allowing higher-density housing on Parcel 7.12.

Please include this letter in the record of the official feedback you are receiving.

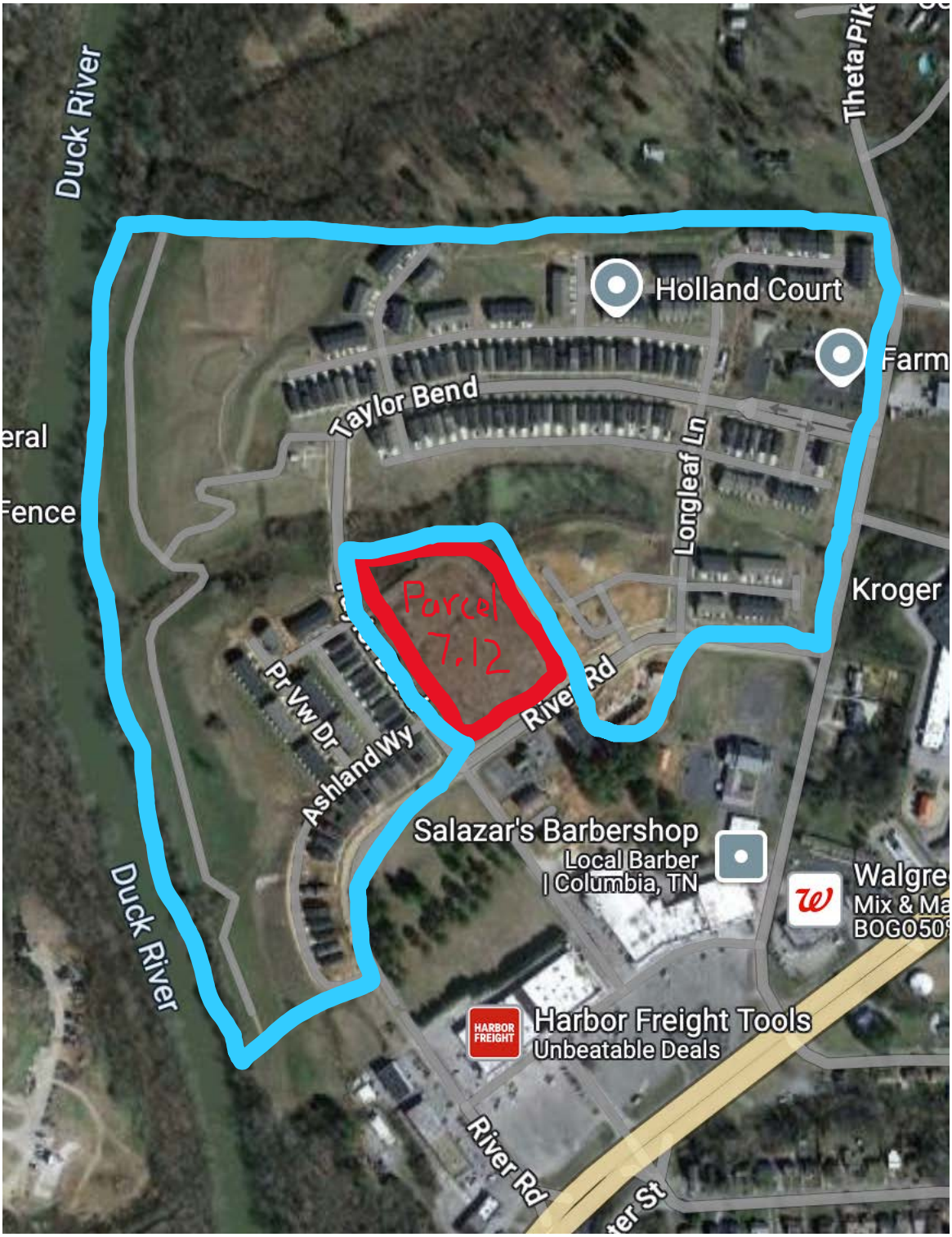
My cell is 703.304.8324, and my email is tlwfamily@gmail.com. Please let me know when we can talk.

Sincerely,

Todd Wilson

Todd Wilson

Parcel 7.12 is essentially within the footprint of the Taylor Landing community.
Blue outline – Taylor Landing
Red outline – Parcel 7.12



November 10, 2024

Mr. McCarthy,

My name is Marieva Walsh. I'm a resident and homeowner at Taylor Landing in Columbia, TN. I recently learned that the Columbia Planning Commission will consider a rezoning application to change Parcel 7.12 (Tax Map 90) at the corner of River Road and Taylor Bend from PUD (Planned Unit Development) to CD—5 (Urban Character District).

I'm writing to voice my questions and concerns about this rezoning. I will not be able to attend on November 13, 2024, due to me working business hours 9-5, I do have several concerns some I will share below. I am not adjacent to the property involved so I was not sent a letter with the pertinent info but do live in the neighborhood of Taylor Landing where this property is located smack in the middle of our neighborhood.

Should the Planning Commission recommend that the City Council consider the rezoning, I ask that you meet with representatives from the Taylor Landing community before the December 5th study session. We have a Taylor Landing Transition Team working to ensure a smooth transition from the developer (Meritage) to a community-led homeowner's association (HOA).
We are very sensitive to community issues and are keenly aware of the potential negative impacts of this rezoning on our community. It would be best if you heard our concerns as soon as possible.

The members of our Taylor Landing Transition Team share concerns. The community will undoubtedly also share our concerns as they begin learning about the significance of this change and the resulting negative impact it would have on us.

Taylor Landing is a new neighborhood situated on approximately 70 acres in Columbia, TN. It is zoned PUD and features a mix of single-family homes, townhomes, and community amenities such as a children's playground area, walking trails, and a dog park. We have nearly 300 housing units representing over 500 residents. Many of us moved to Taylor Landing because of its residential, not urban, context. We love the convenient location and our residential space. Green space along the Duck River is a large part of the attraction of our neighborhood.

For perspective, Parcel 7.12, being considered for rezoning, is approximately 5 acres. We understand this rezoning would allow over 125 additional housing units in just 5 acres. **This rezoning activity essentially "squeezes" these 5 acres directly into the 70 acres of Taylor Landing.**

This prompts these key questions:

First, what is the compelling reason for changing the zoning from PUD to CD – 5 that would outweigh the negative impacts to homeowners in Taylor Landing who purchased their homes with the understanding that Parcel 7.12 would be PUD zoning? I do not see any positive impacts on the residents of Taylor Landing with the proposed rezoning? I can only identify negative consequences to all of the Taylor Landing Homeowners.

Second, how is changing the PUD zoning within the footprint of an established PUD-zoned neighborhood consistent with the Master Plan for this area of Columbia? What other examples exist in Columbia where an established PUD-zoned neighborhood had a CD-5-zoned urban center inserted within its footprint? Currently our City Emergency Response teams are overwhelmed with the calls they receive which impacts response times. We are Not in the Downtown area where high density homes/apartments would be necessary, we have a lot of open green space our HOA is responsible for and that includes Insurance Liabilities which would then include coverage for people outside our neighborhood – which I never would have purchased knowing this Liability would be our financial responsibility moving forward.

Third, what rules and Planning Commission considerations apply to changing the zoning within our established neighborhood, especially when the change would impact the neighborhood's character?

Fourth, what standard does the Planning Commission use to (1) decide to even consider a rezoning and (2) to discern whether a rezoning is appropriate when it's inconsistent with the community directly surrounding it?

Fifth, what negative, unintended consequences should be considered when discerning the wisdom of changing the zoning from PUD to CD-5?
This outlines the areas of concern many of us have:

The Burden on Our Existing Taylor Landing Amenities: We have a small children's playground/park area, hiking trails, a dog park, and open space along the Duck River, all funded by the current members of our community. Parcel 7.12, within the footprint of Taylor Landing, is closer in distance to all these amenities than it is for the average resident of Taylor Landing. These amenities will be a significant attraction to the people living on Parcel 7.12, and there will be no way of keeping them from using them. As such, the value of these amenities to the HOA-paying members of Taylor Landing will be significantly diminished. This would also likely increase our insurance fees and liability exposure.

The Impact on Our Parking: Our community has a parking shortage. With a mix of single-family and townhomes (most are single-car garages), we already have residents parking illegally relative to designated parking spots and HOA covenants. Putting over 120 new housing units onto 5 acres within the footprint of Taylor Landing will undoubtedly stress our current parking shortage.

The Traffic Impact: The primary entrance to our area is via Theta Pike and River Road. Theta Pike is a two-lane road that has seen significant increases in traffic in recent years. It is unlikely this two-lane road will be widened; hence, adding 120+ new units along an already busy thoroughfare will undoubtedly increase the congestion.

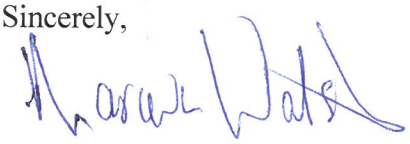
Uncertainty of Type of Housing: Leaving the zoning at PUD almost guarantees that the housing built on Parcel 7.12 will be of consistent value and character as those already in the Taylor Landing community. This is especially important because the Parcel 7.12 is within the footprint of Taylor Landing.

Negative Impact on Taylor Landing Property Values: I see no positive impacts for the residents of Taylor Landing with this rezoning. Unfortunately, this would be a rezoning within the footprint of our community, and hence, it would undoubtedly have negative consequences, including lowering our property values. Our community would become less desirable based on issues like those addressed above, which would put downward pressure on home values.

I request that you and the Planning Commission NOT move forward with the rezoning. The negative impacts of this potential rezoning far outweigh any benefits. The location of Parcel 7.12 within the footprint of Taylor Landing should make denial of the rezoning a simple one.

Please also include this letter in the record of the official feedback you are receiving.

Sincerely,



Marieva Walsh

Joshua D. Moore
360 Coleman Ct.
Columbia, TN 38401
Email: moorejd@rose-hulman.edu
Phone: (317) 503-1223

November 10, 2024

Kevin McCarthy, AICP
City Planner
Development Services
City of Columbia
700 N Garden Street
Columbia, TN 38401

Dear Mr. McCarthy,

I am writing as a new homeowner at Taylor Landing to express my strong opposition to the proposed rezoning of Parcel 7.12 (Tax Map 90) at the corner of River Road and Taylor Bend from PUD (Planned Unit Development) to CD-5 (Urban Center). Unfortunately, I cannot attend the upcoming zoning meeting as I am preparing to move from my apartment in Franklin, TN, to the townhome I recently purchased in Taylor Landing. However, I want to ensure my concerns are heard.

Notification Issue

I closed on my townhome on October 3, 2024, and the City of Columbia was notified of my ownership through the filing of my deed with the Columbia Register of Deeds on October 4, 2024. Despite this, the certified letters regarding the rezoning were addressed to the previous homeowners and mailed on October 29, 2024.

Through USPS Informed Delivery, I was notified that a certified letter from the City of Columbia had been sent to my address (see attached USPS scan). Upon checking my mailbox, I found only the notice of the certified letter, which was addressed to the previous homeowners. I promptly returned the notice to the post office to indicate that the certified letter was not for me. Consequently, I have not received my copy of this critical notice, even though I am an adjacent property owner directly affected by the rezoning.

While Tennessee Code Annotated § 13-7-105 requires public notice via newspaper publication at least 15 days before a public hearing, the City of Columbia goes beyond this legal standard by notifying adjacent property owners through certified mail. This additional step is commendable, as it enhances transparency and ensures affected residents are directly informed.

However, in my case, the City's failure to correctly address the certified letter to me raises significant procedural concerns. Unlike other adjacent property owners, I was effectively denied proper notice and, therefore, an opportunity to participate in the zoning process. This inconsistency in notification undermines the fairness and equity of the process.

Legal and Procedural Implications

- **Denial of Due Process**: By not receiving proper notice, I was unable to engage meaningfully in the public hearing process, which could be seen as a denial of due process in this matter.
- **Potential for Legal Challenge**: If the rezoning is approved, the lack of consistent notification to all affected property owners could serve as grounds for an appeal or challenge, potentially delaying or invalidating the decision.
- **Procedural Precedent**: This oversight sets a troubling precedent that could erode public trust in the City's zoning procedures. Ensuring that all property owners are notified equally is critical to maintaining transparency and legitimacy in future zoning actions.

Given the procedural flaws in this case, I respectfully urge the City to deny or delay the rezoning request to ensure that all affected property owners, including myself, receive proper notice and an opportunity to participate in the process. Failing to address this oversight risks undermining the legitimacy of the rezoning and could expose the City to legal challenges.

Financial and Community Impact

Since purchasing my home, I've learned about the serious financial challenges facing our HOA, which is currently under developer control. These include:

- A $100,000 deficit due to skyrocketing insurance premiums.
- The likelihood of substantial increases in HOA dues and special assessments, placing a financial burden on homeowners.

Introducing a high-density, 4-story apartment complex in the middle of our community will significantly increase liability risks, further raising insurance premiums. This will exacerbate the financial strain on homeowners, who are already facing steep increases in dues and assessments.

Incompatibility with Existing Community

Taylor Landing was developed as a PUD, with a mix of single-family homes, townhomes, and carefully planned community amenities such as a playground, walking trails, and a dog park. Placing a high-density apartment complex in the heart of our neighborhood undermines the residential character that attracted many of us to this community. Specifically:

- Parcel 7.12 represents just a 7% increase in land area but would bring a 40% increase in housing units, resulting in an extreme and disproportionate density increase.
- This will create severe strain on our amenities, which were designed for a lower-density community, and diminish their value to HOA-paying residents.
- Increased traffic and parking overflow will compromise safety and accessibility, particularly near our playground and open spaces.

Impact on Property Values

Over the past two years, property values in Taylor Landing have already decreased by more than $40,000 for my townhome alone. Allowing a large apartment complex in the middle of our development will likely drive property values even lower.

This apartment complex will:

- Reduce the neighborhood's desirability, making it harder to attract buyers who prefer the community's current residential character.
- Lead to further depreciation of property values, especially as issues like increased traffic, parking shortages, and strained amenities become apparent.

For homeowners like me, this trend represents a significant financial loss. Our homes are not just places to live but major investments, and the rezoning threatens the stability and growth of these investments.

Key Concerns and Questions

1. **What is the compelling reason for this rezoning?**
   Homeowners purchased their properties with the understanding that Parcel 7.12 would be developed under PUD zoning. What benefits, if any, does this rezoning offer to our community?
2. **How does this rezoning align with Columbia's Master Plan?**
   Rezoning within an established PUD sets a concerning precedent. Are there other examples in Columbia where CD-5 zoning was inserted within a PUD?
3. **What standards are being applied?**
   What criteria will the Planning Commission use to evaluate whether this rezoning is appropriate, especially given its inconsistency with the surrounding community?
4. **What are the potential unintended consequences?**
   Increased density within our development will negatively impact quality of life, reduce property values, and strain community resources.

Request for Action

Given the significant negative impacts this rezoning would have on Taylor Landing, and in light of the procedural oversight that denied me proper notification, I urge the Planning Commission to deny or delay the request to rezone Parcel 7.12 to CD-5. This development, as proposed, is incompatible with the character, infrastructure, and financial health of our community.

Please include this letter in the official record of feedback regarding this rezoning. I welcome the opportunity to discuss my concerns further and can be reached via email or phone.

Attachment: USPS Informed Delivery scan of certified letter addressed to previous homeowners, which I did not receive as a result.

Sincerely,

Joshua D. Moore

Joshua D. Moore

Attachment:

USPS Informed Delivery scan of certified letter addressed to previous homeowners, which I did not receive as a result.



November 12, 2024

Mr. McCarthy,

I live on Taylor Bend Road, across the street from Map 90 Parcel 7.12 and oppose the Rezoning to CD-5 Mixed Use.

Taylor Bend Road is a main entry into the community with school busses and UPS on a daily basis. Garbage trucks weekly also need to maneuver through the cars as-is. If cars are parked on both sides of the street, it will be nearly impossible for vehicles to get through. My SIL's parked car was hit on November 6, 2022 due to someone going to fast down Taylor Bend. (Police report can be provided upon request.)



In addition, other than a STOP sign on the corner of Taylor Bend and River, there is no striping on the road on all four sides to indicate a stop. And Parcel 7.12 is overgrown, which also makes it hard to see when making a left turn from TB to River. Imagine a 2-4 story building! I see cars every day drive right through this stop sign. There is also no sidewalk on River, forcing people to walk in the street to get their mail, etc. If cars park on River pedestrians will be walking in the middle of the street. This is a dangerous situation even before Waters Edge is built. Inviting Columbia residents to a Mixed-Use plan encourages more unnecessary traffic.

Please consider the safety of our moms with strollers, kids on bikes, joggers and friends out for a walk in our beautiful community and decline the request for rezoning.

Thank you for your time,

Bonnie Froehlich

Kevin McCarthy
City Planning Commission
700 North Garden St.
Columbia, TN 38401

Mr. McCarthy,

My name is Gerald Haase and live in a townhome in Taylor Landing, Columbia, TN. I have been made aware of the proposed rezoning of Parcel 7.12 at the corner of Taylor Bend and River Rd. from PUD to CD5. I am opposed to this change and very concerned about the impact to our community.

I strongly urge you to deny this rezoning.

Sincerely,



Gerald Haase
737 Prairie View Drive
561.291.7006

Kevin McCarthy, City Planning Commission
700 North Garden St.
Columbia, TN 38401

Mr. McCarthy,

My name is Rose Marie Arnold and I live in a townhome in Taylor Landing, Columbia, TN. I have been made aware of the proposed rezoning of Parcel 7.12 at the corner of Taylor Bend and River Rd. from PUD to CD5. I am opposed to this change and very concerned about the impact to our community.

Taylor Landing is a small, fairly new community of approximately 300 homes and townhomes with 500 residents. We surround the parcel of land being considered for a zoning change on 3 sides. We have a children's playground, adjacent dog park, walking trails and there is access to the Duck River. These are our green common areas and are maintained through the dues we pay to our HOA One immediate concern is that there would be no way to keep anyone living on parcel 7.12 from trespassing on Taylor Landing areas. Your rezoning would greatly increase the density of people who would be allowed to live on parcel 7.12. The negative effect on our community would be great.

Other concerns are:

- Taylor Landing currently has a shortage of parking spaces and many residents are parking illegally which has prompted many calls to the police department. Adding those new units will add stress to this situation.

- The negative effect this would have on our property values as we are now a residential community with PUD zoning restrictions. A change to CD5 on parcel 7.12 with higher density, supposedly allowing 125 units on such a small parcel of land, is irresponsible.

The planning commission needs to look at the many negative effects of making this zoning change and how it would directly affect the 500 residents currently living in Taylor Landing.

I strongly urge you to deny this rezoning.

Sincerely,

Rose Marie Arnold

Rose Marie Arnold

From: MELCENIA BRADY
To: Kevin McCarthy; cc.srichardson@columbiatn.gov
Subject: [External - USE CAUTION] Taylor landing neighborhood proposed new apartment building and business
Date: Wednesday, November 13, 2024 1:44:24 PM

I'm opposed to the new building plan, I own my townhome right in back of the proposed building project. It would add noise and traffic issues, parking and obstruct my view. It will probably bring down property value, which would be a loss for property owners, please keep this in mind before passing this project.

Thank you, Melcenia Brady
Sent from my iPhone

From:	Steve Baker
To:	Kevin McCarthy; Sandra Richardson
Subject:	[External - USE CAUTION] Concerns regarding the proposed re-zoning of the area at the corner of Taylor Bend and River Road in Columbia
Date:	Wednesday, November 13, 2024 7:05:04 PM

Kevin & Sandra,

I hope this message finds you both well.

I am writing to formally express my strong concerns regarding the proposed re-zoning of the area at the corner of Taylor Bend and River Road, adjacent to our Taylor Bend neighborhood under CD-5 (Urban Center) zoning and the subsequent possible development of a 4-story apartment complex.

As a resident of the Taylor Bend community, I feel strongly that this zoning change is incompatible with the existing character of our neighborhood and will have significant negative impacts on both our community and the surrounding environment.

My wife and I built our townhome in Taylor Landings four years ago, during the first phase of the buildout of the subdivision. We love the closeness of the neighborhood and the cohesive look and feel of the houses and the townhomes therein. It's very walkable and the playground & dog park are never crowded.

A couple of weeks ago, I was surprised to learn that the corner lot at Taylor Bend and River Road was being considered for re-zoning and that a 4-story apartment complex with possible retail space was being proposed. This prompted this e-mail to you.

I would like to outline several key points of major concern for your consideration:

1. **Incompatibility with Existing Community**
   The proposed development, with its 4-story apartment complex, is fundamentally incompatible with the surrounding two-story single-family homes and townhomes. The stark contrast in height and density will disrupt the cohesive aesthetic and character of our neighborhood, undermining the suburban residential feel that current residents value.
2. **CD-5 Zoning Is Inappropriate for This Location**
   CD-5 zoning is designed for high-density, mixed-use developments in urban centers, not suburban neighborhoods like ours. This zoning change is incompatible with the residential focus of our PUD and could result in future re-zoning requests, permanently altering the character of our community and further straining our infrastructure and finances.
3. **Traffic and Parking Concerns**
   Additionally, the CD-5 zoning would dramatically increase vehicle traffic and parking in the area. This will lead to greater safety issues for the kids and families that walk and ride their bikes & scooters as the traffic on Taylor Bend would definitely increase. Additionally, I'm concerned that any additional street overflow parking would possibly impede emergency and fire crew travel and access in the event of an emergency situation.
4. **Liability and Safety Issues**
   The proximity of the proposed development to our community's playground and open spaces raises significant liability concerns. Non-residents using these facilities increases the risk of accidents, vandalism, and potential damage to these shared spaces. This could lead to higher insurance premiums and legal

exposure for our HOA.

5. **Environmental Impact on Farm Pond**
   Farm Pond, a protected waterway, lies directly behind the proposed development site. The construction process and increased density pose risks to the pond through runoff, pollution, and sedimentation. These risks could have long-term detrimental effects on local wildlife and ecosystems, which we must protect.
6. **Decline in Quality of Life**
   The higher density allowed under CD-5 will introduce more noise, light pollution, and congestion, significantly diminishing the quality of life for current residents. The construction process itself will bring ongoing disruption for years, including noise, dust, and heavy machinery, further disturbing the peace and serenity of our community.
7. **Negative Impact on Property Values**
   The introduction of a large-scale apartment complex is likely to decrease property values in our area, particularly considering the current trends in the real estate market. Potential buyers may be deterred by the proximity to high-density rental housing, high traffic and scarcity of parking, negatively impacting resale opportunities for current homeowners.
8. **Financial and Insurance Strain on HOA**
   Our HOA has already been under significant financial strain, with property and liability insurance premiums rising by over 100% in recent years. The proposed development will exacerbate this burden, increasing liability risks and potentially raising insurance costs further. Without major financial contributions from the new development, these costs will be passed on to current residents through higher HOA dues or reduced services.
9. **Unfair Burden on HOA Amenities**
   The residents of the new apartment complex are likely to use our HOA-maintained playgrounds and open spaces, increasing wear and tear on these amenities. This will not only lead to overcrowding but also higher maintenance costs, further burdening our community's finances.
10. **Lack of Community Benefits**

    The proposed development offers no tangible benefits to our community, such as infrastructure improvements or public services. Instead, it presents significant costs, risks, and burdens that will be placed on current residents without any clear offset or enhancement in return.

Given these concerns, I respectfully request that the Zoning Commission consider the following recommendations:

- **Require Mitigation Measures**: Ask the developer to provide financial contributions or shared maintenance agreements with the HOA to help offset the increased costs.
- **Environmental Review**: Conduct a detailed environmental impact assessment to assess and mitigate any risks to Farm Pond, the Duck River and the surrounding ecosystem.
- **Traffic and Parking Study**: Request a comprehensive traffic impact study to evaluate the feasibility of the proposed density without compromising local infrastructure or safety.
- **Alternative Development Proposals**: Consider lower-density alternatives, such

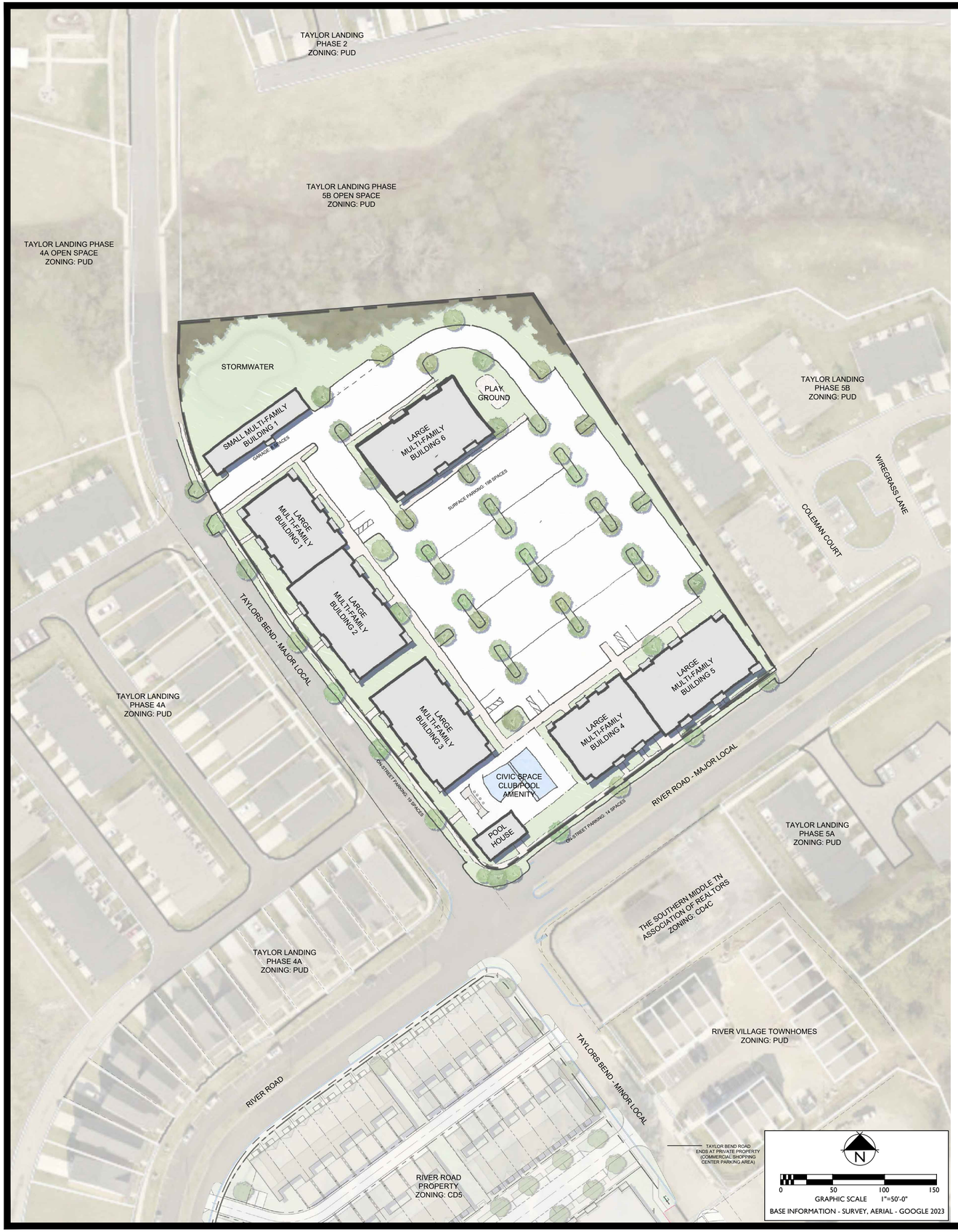
as single family homes, townhomes or smaller multi-family units, which would definitely better align with the character and needs of our community.

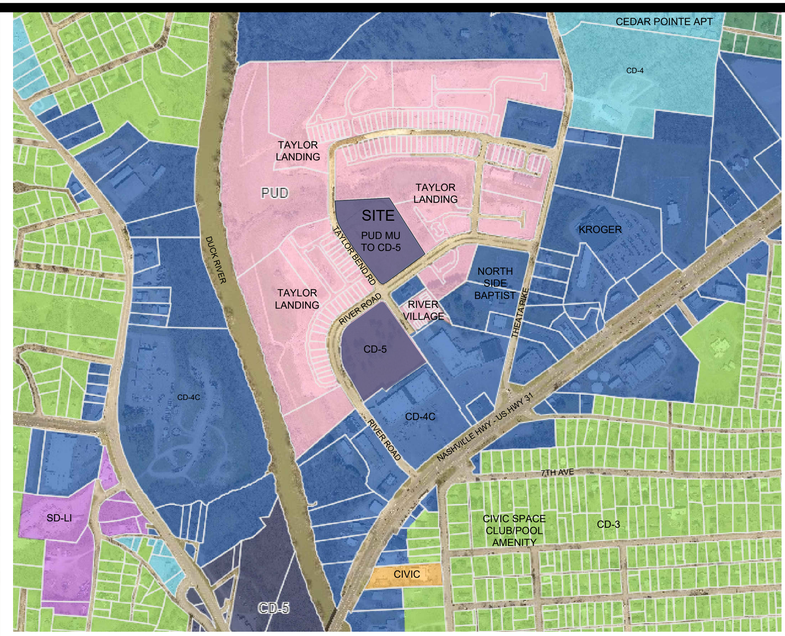
I appreciate your attention to these concerns and hope that you and the Zoning Commission will take them into account when reviewing the proposed re-zoning and development plans. I would welcome the opportunity to discuss this matter further, if you would like, at your convenience.

Thank you for your time and consideration.

Sincerely,

Steve Baker
1003 McKee Ct.
Columbia, TN 38401
615-419-0886





LOCATION MAP - ZONING MAP

PROJECT INFORMATION:

PARCEL: MAP 90 PARCEL 7.12
ADDRESS: RIVER ROAD
AREA: +/-5.0 AC

APPLICANT/LANDSCAPE ARCHITECT:
GREG GAMBLE OR KELI FRYMIRE
GAMBLE DESIGN COLLABORATIVE
3020 STANSBERRY LANE, SUITE 201
FRANKLIN, TN 37069
615-975-5765
greg.gamble@gdc-tn.com
keli@gdc-tn.com

DEVELOPER:
CLIFF SMITH
CPS LAND
213 OVERLOOK CIRCLE, SUITE B2
BRENTWOOD, TN 37027
615.477.3186

LEGAL DESCRIPTION OF PROPERTY:

WATERS EDGE AT TAYLOR BEND
PROPERTY MAP 090, PARCEL 007.03
RIVER ROAD
CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

Being a certain tract or parcel of land lying and being in the Ninth (9th) Civil District of Maury County, city of Columbia, Tennessee and being more particularly described as follows:

Being Tract 24, a 5.026-acre tract as shown on the final plat entitled “Waters Edge at Taylor Bend” of record in Plat Book P17, page 319, Register's Office for Maury County, Tennessee to which plat reference is hereby made for a more complete description of the subject property.

No field work has been performed by Kimley-Horn Associates to verify the accuracy of the property lines, corners or areas shown on said recorded plats.

REZONING REQUEST:

EXISTING ZONING: PUD
FUTURE LAND USE: CCUV - CITY CENTER URBAN VILLAGE
REQUESTED ZONING: CD-5

THE SITE IS CURRENTLY ZONED PUD. HOWEVER, THE PUD PLAN HAS EXPIRED. THE APPLICANT SEEKS TO REZONE THE PROPERTY TO A CHARACTER AREA SUPPORTED BY THE CCUV LAND USE POLICY AND CREATE A RESIDENTIAL INFILL DEVELOPMENT. THE LAND USE POLICY REQUESTS "URBAN NODES", "NEW RESIDENTIAL WITHIN WALKING DISTANCE TO COMMERCIAL AND CIVIC SPACES", "INFILL WITH MEDIUM AND HIGH DENSITY", AND "INFILL THAT SUPPORTS AND EXTENDS THE FORMATION OF BLOCKS AND ELIMINATES GAPS IN THE BUILDING ENVIRONMENT. THE APPLICANTS PROPOSAL WILL SATISFY THESE LAND USE POLICY REQUESTS.

HISTORY: THE APPROVED/EXPIRED PUD WAS APPROVED ON NOV. 14, 2019 AND CALLED WATERS EDGE. THIS PROJECT WAS A MULTI-FAMILY DEVELOPMENT THAT CONSISTED OF 5 BUILDINGS WITH 27 UNITS PER BUILDING, FOR A TOTAL OF 135 DWELLING UNITS.

THE PROPOSED CONCEPT PLAN SEEKS TO USE THE SAME USE AND DENSITY AS THE PREVIOUSLY APPROVED PUD AND DEVELOP IT WITHIN THE GUIDELINES OF THE CD-5 CHARACTER DISTRICT. THE APPLICANT PROPOSES TO USE SIMILAR BUILDINGS TO THE RIVER ROAD DEVELOPMENT ON THE SOUTHWEST CORNER OF THIS SAME INTERSECTION PUSHED UP TO THE STREET FRONTAGES WITH ALL PARKING ON-STREET OR BEHIND THE BUILDINGS. THIS PLAN ARRANGEMENT LEAVES NATURAL AREA/STORMWATER AREA TO THE NORTH OF THE SITE, ADJACENT TO THE TAYLOR LANDING OPEN SPACE. PARKING AND LANDSCAPE AREA ARE PROPOSED TO THE BOUNDARY WITH THE TOWNHOMES TO THE EAST.

THIS PROPERTY IS IN AN AREA OF CHANGE, AS DESIGNATED BY CONNECT COLUMBIA. THIS AREA IS ENCOURAGED TO USE CITY POLICIES TO FOSTER PROACTIVE CHANGE AND CREATE SIGNIFICANT AND BENEFICIAL CHANGE. DEVELOPING WITH THE FUNCTIONAL AND AESTHETIC REQUIREMENTS OF THE CD-5 DISTRICT, THIS PROPERTY WILL COMPLETE THE NEIGHBORHOOD DEVELOPMENT FOR THIS AREA. IT COMPLIMENTS THE RANGE OF HOUSING OPTIONS AVAILABLE FOR THIS AREA AND PLACES RESIDENTIAL DEVELOPMENT WITHIN WALKING DISTANCE OF THE CIVIC SPACE PARK AT THE RIVER ROAD PROPERTY TO THE SOUTHWEST AND THE COMMERCIAL DEVELOPMENT TO THE SOUTH ALONG NASHVILLE HIGHWAY.

ROADWAYS: THE FRONTAGE OF THE PROPERTY IS ON RIVER ROAD (MAJOR LOCAL) AND TAYLOR BEND ROAD (MAJOR LOCAL).

NOTE:

THE SUBJECT PARCEL IS LESS THAN 10 ACRES IN SIZE, DOES NOT INCLUDE THE CREATION OF A NEW THOROUGHFARE OR INTERNAL DRIVE, AND THEREFORE IS NOT A DEVELOPMENT PARCEL.

SKETCH PLAN CD-5 DESIGN CRITERIA:

GROSS SITE AREA: +/-5.0 AC
GROSS DENSITY: 27 DUA
TOTAL UNITS: 135 UNITS

PROVIDED CIVIC SPACE: 0.25 AC MIN (5% GROSS AREA)

CONCEPT PLAN LOT DIMENSIONS:

MULTI-FAMILY BUILDING
FRONT SETBACK: 0-15'
SIDE SETBACK: 0-24'
REAR SETBACK: NOT REGULATED
MAXIMUM BUILDING WIDTH: 120'
MAXIMUM UNITS PER BUILDING: 24
PARKING PROVIDED IN SURFACE PARKED LOT (THIRD LAYER), OR ON STREET

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

RIVER ROAD PARCEL
REZONING REQUEST & CONCEPTUAL DEVELOPMENT PLAN
Columbia, Tennessee

GREGORY GAMBLE — REGISTERED — AGRICULTURE — TENNESSEE — LANDSCAPE ARCHITECT — 10.21.24

Date: September 9, 2024

Revision Date
1 10-21-2024 Staff Comments
2
3

REZONING REQUEST
SHEET
L1.0

October 21, 2024

Paul Keltner, Director
Kevin McCarthy, City Planner
Development Services
City of Columbia, TN

RE: Re-Submittal Taylor's Bend Road Rezoning Request – **City of Columbia Project #24-0418**

Dear Mr. Keltner and Mr. McCarthy,
The accompanying documents are for the re-submittal associated with the Taylor's Bend Road Rezoning Request, on the property with a PUD formerly known as Waters Edge at Taylor's Bend. A response to Zoning Ordinance Section 8.5.19.H.4 has been provided below, as requested. The Technical Review Comment responses can be found below.

Resubmittal Items uploaded to the online portal:

1. Sheet L1.0 (24x36 PDF) Rezoning Request and Conceptual Plan
2. Comment Response Letter.

Rezoning Request Justification:
The following criteria from Zoning Ordinance 8.5.19.H.4 have been addressed/met as follows:

a. *The Rezoning is consistent and not in conflict with the Comprehensive Plan or other applicable approved local plans for the area, provided the Planning Commission is not obligated to recommend approval of requests which would bring existing zoning into conformity with the Comprehensive Plan prior to the time such change is warranted by the findings of 8.5.19.H.4.e and f.* **Response: The applicant seeks to rezone the property to CD-5; which is consistent with the Comprehensive Plan Future Land Use of City Center Urban Village. The property is also within an Area of Change, as designated by Connect Columbia. This area is encouraged to use City policies to foster proactive change and create significant and beneficial change. Developing with the functional and aesthetic requirements of the CD-5 district, this property will complete the neighborhood development for the area. It compliments the range of housing options available for this area and placed residential development within walking distance of the civic space park at the river road property to the southwest and the commercial development to the south along Nashville Highway.**
b. *It has been determined that the legal purposes for which zoning exists, as set forth in Section 1.5.* **Response: As currently zoned, this property cannot be developed. The existing zoning is PUD, which has expired and the existing PUD plan would not conform to the current requirements of the zoning ordinance. A rezoning is necessary in order to create a development plan that will comply with the City standards and provide the compatible development character that the Comprehensive Plan and Zoning Code require.**

DEVELOPMENT PLANNING | DESIGN | MANAGEMENT
greg.gamble@gdc-tn.com | 615.975.5765 cell | 3020 Stansberry Lane, Suite 201, Franklin, TN 37069

greg.gamble@gdc-tn.com
615.975.5765 cell
3020 Stansberry Lane, Suite 201
Franklin, TN 370

c. *It has been determined that there will be no adverse effect upon adjoining property owners unless such effect can be justified by the overwhelming public good or welfare.* **Response: Providing a rezoning to a character district that is consistent with the Comprehensive Plan provides no adverse effect on adjoining property. Additionally, the Conceptual Plan provided in with this request demonstrates the developer's intent to develop the property with the same use and density as was identified in the previously approved PUD development. The applicant can achieve this through a character district consistent with the Comprehensive Plan Future Land Use policy for this property, which provides clear guides for character and aesthetic.**

d. *It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public.* **Response: The applicant seeks to rezone to a character district consistent with the Comprehensive Plan and develop within the requirements of the character district. This request would not be a detriment to the general public.**

e. *It has been determined that conditions affecting the area have changed to a sufficient degree to warrant the Zoning Map Amendment or that the existing Zoning of the property was the result of a mistake.* **Response: The existing zoning designation of PUD was established on November 14, 2019. At this time, the approved PUD has expired and it cannot be reapproved under the current Zoning criteria. The applicant is seeking to rezone the property to a character district that is consistent with the Comprehensive Plan and development the same use and density as the previous approved PUD; however, with a plan that is consistent with the current Zoning Ordinance requirements.**

f. *It has been determined that the adequate school, road, parks, wastewater treatment, water supply, and stormwater facilities are available.* **Response: Water and waste water availability letters have been provided with this submittal. No additional comments were provided from these utility providers or school district during the Technical Review Process. No additional roadways will be created with this future development plan and stormwater facilities will be provided on site with the development plan.**

Technical Review Comments – Dated Oct. 8, 2024
Planning:

1. *The lead staff person for this case is City Planner Kevin McCarthy, AICP; he will prepare the staff report for this item. Please contact kmccarthy@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.* **Response: Noted.**
2. *At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.* **Response: Noted.**
3. *Please add a note to the concept plan indicating that the subject site is less than 10 acres in size, does not include the creation of a new Thoroughfare or Internal Drive, and therefore is not a development parcel.* **Response: Please see Sheet L1.0. This note has been added.**

greg.gamble@gdc-tn.com
615.975.5765 cell
3020 Stansberry Lane, Suite 201
Franklin, TN 370

4. *The description of the rezoning request included on the concept plan explains the rationale. In the response to DRC comments, please provide additional information, if any, that will aid the CMPC's evaluation of the criteria at 8.5.19.H of the zoning ordinance.* **Response: Please see the above response to this section of the zoning ordinance. Additionally, a narrative concerning the rezoning request is on the L1.0 Sheet.**

Engineering:

5. *No Comments on Rezoning* **Response: Noted.**
6. *TIS required at Site Development Plan.* **Response: noted.**

Fire:

7. *Need to get a water availability letter from CPWS, if you have one, please upload it.* **Response: This letter was received and uploaded on October 8, 2024.**

Columbia Water:

8. *A water availability letter was issued on October 7, 2024, it remains valid for 120 days. The availability of capacity to serve is based on a determination by the Fire Marshal of fire flow requirements and the information submitted on the Water Service Availability Request application. Any off-site improvements detailed in the availability letter are the responsibility of the developer/owner. All public water system improvements are subject to the preparation and approval of detailed construction plans prepared in accordance with CPWS and Tennessee Department of Environment and Conservation requirements.* **Response: Noted**

Columbia Power:

9. *Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.* **Response: Noted**
10. *CPWS BB Plan to Serve* **Response: Noted**

ATT

11. *ATT to Serve.* **Response: Noted**

Wastewater:

12. *No Comments provided.* **Response: Noted**

Public Works:

13. *No comments on the rezoning. Private sanitation services may be utilized. Please retain the attached City of Columbia Dumpster Guidelines & Accessibility Requirements for your reference.* **Response: Noted**

DEVELOPMENT PLANNING
DESIGN
MANAGEMENT

greg.gamble@gdc-tn.com
615.975.5765 cell
3020 Stansberry Lane, Suite 201
Franklin, TN 370

Maury County E911:

14. *No comments provided.* **Response: Noted**

Maury County Schools:

15. *No Comment.* **Response: Noted**

Duck River Electric Membership Corp:

16. *No comments.* **Response: Noted**

Maury County Highway Dept:

17. *No comments.* **Response: Noted.**

If there are any questions or additional information needed, please feel free to reach out to me, or Keli Frymire (keli@gdc-tn.com) in my office.

Thank you,



Gamble Design Collaborative
Greg Gamble

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, October 8, 2024

ITEM NO.
24-0418

DESCRIPTION: Waters Edge at Taylors Bend

COMMENTS:

Planning

1. The lead staff person for this case is City Planner Kevin McCarthy, AICP; he will prepare the staff report for this item. Please contact kmccarthy@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
3. Please add a note to the concept plan indicating that the subject site is less than 10 acres in size, does not include the creation of a new Thoroughfare or Internal Drive, and therefore is not a development parcel.
4. The description of the rezoning request included on the concept plan explains the rationale. In the response to DRC comments, please provide additional information, if any, that will aid the CMPC's evaluation of the criteria at 8.5.19.H of the zoning ordinance.

Engineering

5. No Comments on rezoning
6. TIS required at site development plan.

Fire

7. Need to get a water availability letter from CPWS, if you have one, please upload it

Columbia Water

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

8. A water availability letter was issued on October 7, 2024, it remains valid for 120 days. The availability of capacity to serve is based on a determination by the Fire Marshal of fire flow requirements and the information submitted on the Water Service Availability Request application. Any off-site improvements detailed in the availability letter are the responsibility of the developer/owner. All public water system improvements are subject to the preparation and approval of detailed construction plans prepared in accordance with CPWS and Tennessee Department of Environment and Conservation requirements.

Columbia Power

9. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

10. CPWS BB Plan to Serve

ATT

11. ATT TO SERVE

Wastewater

12. No comments provided.

Public Works

13. No comments on the rezoning. Private sanitation services may be utilized. Please retain the attached City of Columbia Dumpster Guidelines & Accessibility Requirements for your reference.

Maury County E911

14. No comments provided.

Maury County Schools

15. No comment.

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Duck River Electric Membership Corp

16. No comments.

Maury County Highway Dept.

17. No comments.

Resubmittal Guidelines

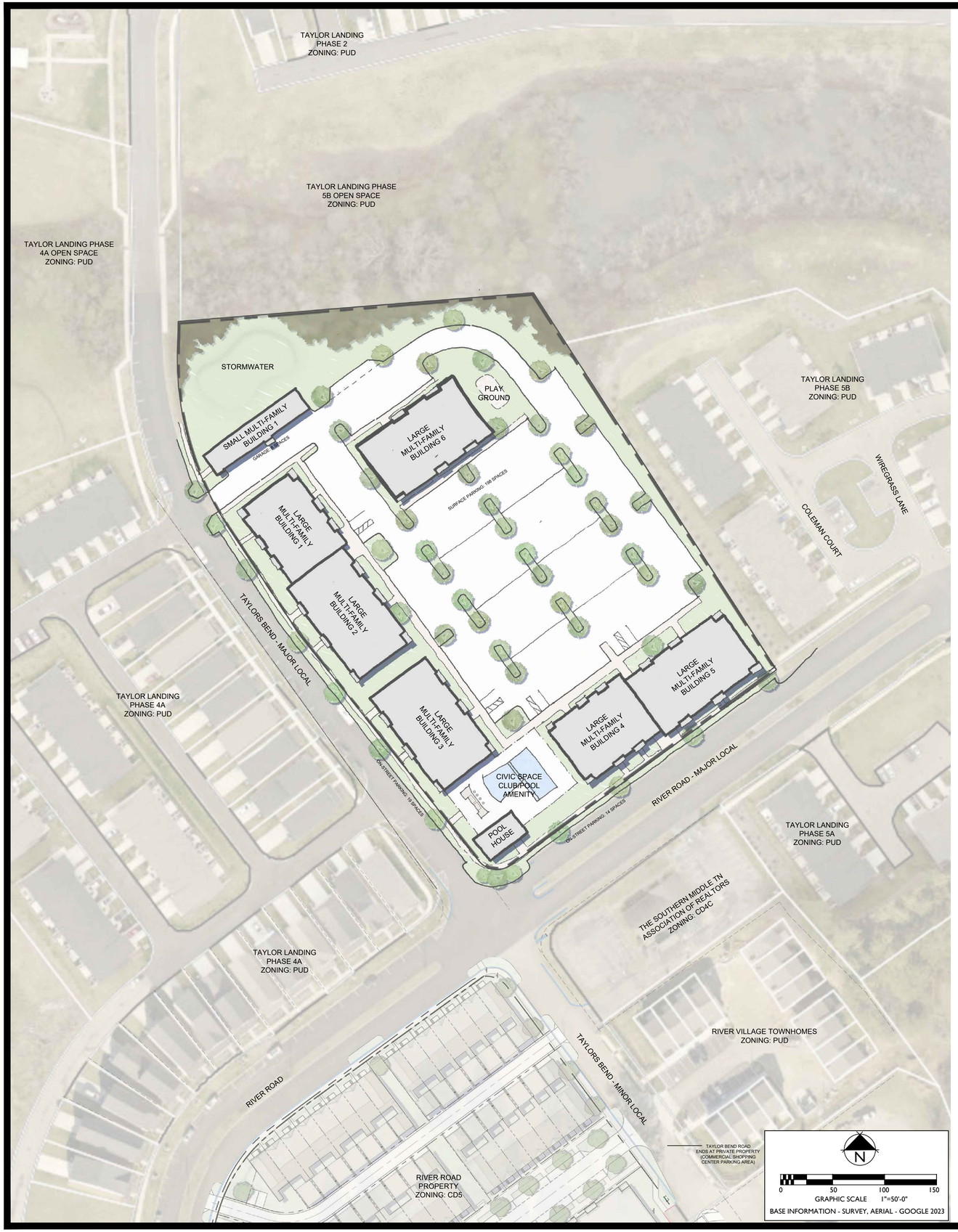
Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

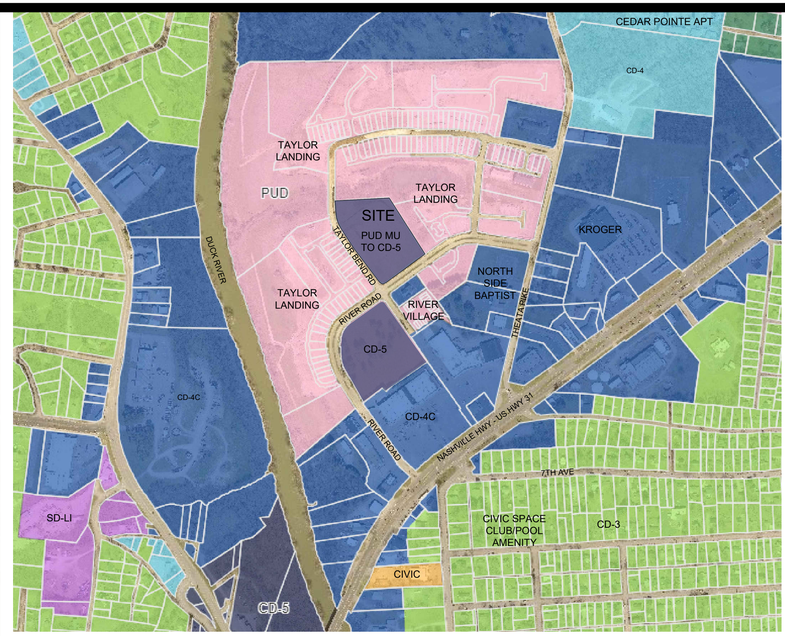
Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.

You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.





LOCATION MAP - ZONING MAP

PROJECT INFORMATION:

PARCEL: MAP 90 PARCEL 7.12
ADDRESS: RIVER ROAD
AREA: +/-5.0 AC

APPLICANT/LANDSCAPE ARCHITECT:
GREG GAMBLE OR KELI FRYMIRE
GAMBLE DESIGN COLLABORATIVE
3020 STANSBERRY LANE, SUITE 201
FRANKLIN, TN 37069
615-975-5765
greg.gamble@gdc-tn.com
keli@gdc-tn.com

DEVELOPER:
CLIFF SMITH
CPS LAND
213 OVERLOOK CIRCLE, SUITE B2
BRENTWOOD, TN 37027
615.477.3186

LEGAL DESCRIPTION OF PROPERTY:

WATERS EDGE AT TAYLOR BEND
PROPERTY MAP 090, PARCEL 007.03
RIVER ROAD
CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

Being a certain tract or parcel of land lying and being in the Ninth (9th) Civil District of Maury County, city of Columbia, Tennessee and being more particularly described as follows:

Being Tract 24, a 5.026-acre tract as shown on the final plat entitled “Waters Edge at Taylor Bend” of record in Plat Book P17, page 319, Register's Office for Maury County, Tennessee to which plat reference is hereby made for a more complete description of the subject property.

No field work has been performed by Kimley-Horn Associates to verify the accuracy of the property lines, corners or areas shown on said recorded plats.

REZONING REQUEST:

EXISTING ZONING: PUD
FUTURE LAND USE: CCUV - CITY CENTER URBAN VILLAGE
REQUESTED ZONING: CD-5

THE SITE IS CURRENTLY ZONED PUD. HOWEVER, THE PUD PLAN HAS EXPIRED. THE APPLICANT SEEKS TO REZONE THE PROPERTY TO A CHARACTER AREA SUPPORTED BY THE CCUV LAND USE POLICY AND CREATE A RESIDENTIAL INFILL DEVELOPMENT. THE LAND USE POLICY REQUESTS "URBAN NODES", "NEW RESIDENTIAL WITHIN WALKING DISTANCE TO COMMERCIAL AND CIVIC SPACES", "INFILL WITH MEDIUM AND HIGH DENSITY", AND "INFILL THAT SUPPORTS AND EXTENDS THE FORMATION OF BLOCKS AND ELIMINATES GAPS IN THE BUILDING ENVIRONMENT. THE APPLICANTS PROPOSAL WILL SATISFY THESE LAND USE POLICY REQUESTS.

HISTORY: THE APPROVED/EXPIRED PUD WAS APPROVED ON NOV. 14, 2019 AND CALLED WATERS EDGE. THIS PROJECT WAS A MULTI-FAMILY DEVELOPMENT THAT CONSISTED OF 5 BUILDINGS WITH 27 UNITS PER BUILDING, FOR A TOTAL OF 135 DWELLING UNITS.

THE PROPOSED CONCEPT PLAN SEEKS TO USE THE SAME USE AND DENSITY AS THE PREVIOUSLY APPROVED PUD AND DEVELOP IT WITHIN THE GUIDELINES OF THE CD-5 CHARACTER DISTRICT. THE APPLICANT PROPOSES TO USE SIMILAR BUILDINGS TO THE RIVER ROAD DEVELOPMENT ON THE SOUTHWEST CORNER OF THIS SAME INTERSECTION PUSHED UP TO THE STREET FRONTAGES WITH ALL PARKING ON-STREET OR BEHIND THE BUILDINGS. THIS PLAN ARRANGEMENT LEAVES NATURAL AREA/STORMWATER AREA TO THE NORTH OF THE SITE, ADJACENT TO THE TAYLOR LANDING OPEN SPACE. PARKING AND LANDSCAPE AREA ARE PROPOSED TO THE BOUNDARY WITH THE TOWNHOMES TO THE EAST.

THIS PROPERTY IS IN AN AREA OF CHANGE, AS DESIGNATED BY CONNECT COLUMBIA. THIS AREA IS ENCOURAGED TO USE CITY POLICIES TO FOSTER PROACTIVE CHANGE AND CREATE SIGNIFICANT AND BENEFICIAL CHANGE. DEVELOPING WITH THE FUNCTIONAL AND AESTHETIC REQUIREMENTS OF THE CD-5 DISTRICT, THIS PROPERTY WILL COMPLETE THE NEIGHBORHOOD DEVELOPMENT FOR THIS AREA. IT COMPLIMENTS THE RANGE OF HOUSING OPTIONS AVAILABLE FOR THIS AREA AND PLACES RESIDENTIAL DEVELOPMENT WITHIN WALKING DISTANCE OF THE CIVIC SPACE PARK AT THE RIVER ROAD PROPERTY TO THE SOUTHWEST AND THE COMMERCIAL DEVELOPMENT TO THE SOUTH ALONG NASHVILLE HIGHWAY.

ROADWAYS: THE FRONTAGE OF THE PROPERTY IS ON RIVER ROAD (MAJOR LOCAL) AND TAYLOR BEND ROAD (MAJOR LOCAL).

SKETCH PLAN CD-5 DESIGN CRITERIA:

GROSS SITE AREA: +/-5.0 AC
GROSS DENSITY: 27 DUA
TOTAL UNITS: 135 UNITS

PROVIDED CIVIC SPACE: 0.25 AC MIN (5% GROSS AREA)

CONCEPT PLAN LOT DIMENSIONS:

MULTI-FAMILY BUILDING
- FRONT SETBACK: 0-15'
- SIDE SETBACK: 0-24'
- REAR SETBACK: NOT REGULATED
- MAXIMUM BUILDING WIDTH: 120'
- MAXIMUM UNITS PER BUILDING: 24
- PARKING PROVIDED IN SURFACE PARKED LOT (THIRD LAYER), OR ON STREET

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

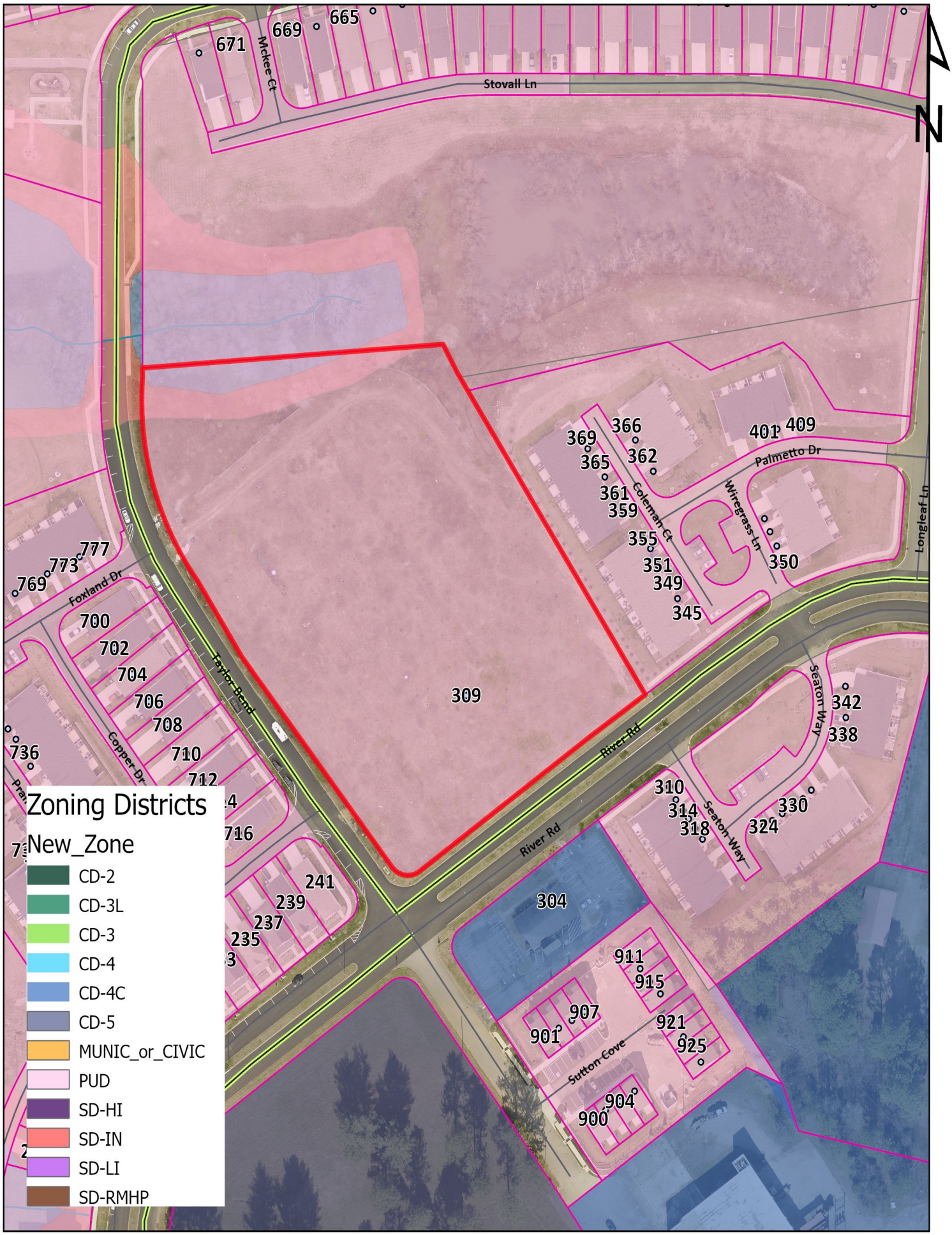
RIVER ROAD PARCEL
REZONING REQUEST & CONCEPTUAL DEVELOPMENT PLAN
Columbia, Tennessee

GREGORY C. GAMBLE — REGISTERED LANDSCAPE ARCHITECT — TENNESSEE

Date: September 9, 2024

Revision Date
1.

REZONING REQUEST
SHEET
L1.0



Case #24-0418
River Rd. & Taylor Bend
Tax Map 90 Parcel 7.12

City of Columbia
Development Services
700 N. Garden Street
Columbia, TN 38401
www.columbiatn.gov

WATERS EDGE AT TAYLOR BEND
PROPERTY MAP 090, PARCEL 007.03
RIVER ROAD
CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

Being a certain tract or parcel of land lying and being in the Ninth (9^{th}) Civil District of Maury County, city of Columbia, Tennessee and being more particularly described as follows:

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No field work has been performed by Kimley-Horn Associates to verify the accuracy of the property lines, corners or areas shown on said recorded plats.

CPWS

October 7, 2024
Mr. Keyshawn Gallon
Kimley-Horn
4031 Aspen Grove Drive Suite 200
Franklin, TN 37067
Sent via email: keyshaw.gallon@kimley-horn.com
RE: Water Availability Letter
Waters Edge
Northeast Intersection at Taylors Bend and River Rd
Tax Map 90, Parcel 7.12
Columbia, Maury County, TN

Dear Mr. Gallon:

Columbia Power and Water Systems ("the Utility"/CPWS) is a municipal corporation authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation, various Planning Commissions and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies, water service will be made available on a first-come, first-served basis, subject to availability of all CPWS furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development consists of 135 multi-family units in 7 buildings, with an amenity center. CPWS has evaluated the projected water demands for the proposed development in the water system hydraulic model and is able to meet a fire-flow capacity of 1,650 gpm at 20 psi while maintaining the existing level of service and pressures in this portion of the distribution system. CPWS can provide water for the proposed development according to the following requirements:

- Domestic waterline connections will be made to the existing 8-inch water mains located on Taylors Bend and/or River Rd.
- Dual domestic and fire master meters will be required.

All of the above requirements are to be constructed and paid for by the Applicant and dedicated to CPWS once complete up to and including the meter. No construction of CPWS infrastructure shall be initiated until final construction plans have been approved by TDEC and all parties have fully executed a water service agreement.

Once you have received this Water Availability Letter, next steps in the process to obtain water service from CPWS are as follows:

- Prior to expiration of this letter in 120 days, remit to CPWS new water service fees:

New Water Service Fee: $1,500 + $370 per SFU (135 SFUs)	$51,450.00

- Provide for review and comment site utility drawings, including the proposed locations of all meters and backflow devices.
- Upon resolution of all comments, applicant may then schedule a pre-construction meeting with CPWS. Pre-construction meeting will be canceled and re-scheduled unless all meter and impact fees are paid at least 48 hours prior, or surety is provided in lieu of full payment. Final meter and impact fees are subject to change based on final design and the prevailing Board-approved rates at time of payment. If surety is provided in lieu of payment, meters are not ordered until fees are paid and may result in extended lead-times.

Meter Fee: TBD per 3" domestic meter (2 meters)	TBD
Meter Fee: TBD per 6" fire meter (2 meters)	TBD
Impact Fee: $84,000 per 3" meter (1 meter)	$84,000.00
Total Meter and Impact Fees Due =	**$84,000.00**

- After the pre-construction meeting, CPWS will then issue a formal notice to proceed. No construction of CPWS infrastructure may take place prior to the pre-construction meeting.
- Applicant is then required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure.

If you have any questions, please feel free to contact me at 423-774-0349 or eric.king@inflodesign.com. This letter is valid for one-hundred twenty (120) days from the date of this letter.

Sincerely,



Eric King, P.E.
Inflo Design Group, LLC
on behalf of Columbia Power and Water Systems

cc: Matt Wheeler, CPWS
File 24-062

CITY OF COLUMBIA
TENNESSEE

WASTEWATER DEPARTMENT

30 August 2024

Keyshawn Gallon
4031 Aspen Grove Drive, Suite 200
Franklin, TN 37067

RE: Waters Edge, 090 007.12; Intersection of Taylor Bend Rd and River Road, Columbia, TN 38401

Keyshawn,

This letter serves as confirmation that the City of Columbia Wastewater Department has the available capacity to service the subject development. Any extension to the existing sewer infrastructure will be initiated by the owner/developer, reviewed by our department and approved by the State of Tennessee. The project must be advanced in accordance with local, state and federal rules, regulations and policies. Funding and construction of those improvements will remain the responsibility of the owner/developer. New customers will be required to pay all fees applicable at the time of connection. Any Final Plat approval and Dedication are both subject to installation and function, as determined by our Department. No detailed design plan for an extension of the sewer has been proposed at this time.

Donnie Boshers, Director
City of Columbia, TN
Wastewater Department

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * *1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*
Fold hard copy submittals larger than 8½"x11"
All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	corner of River Rd & Taylors Bend		
	TAX MAP: 90	GROUP:	PARCEL: 7.12
SUMMARY OF NATURE OF REQUEST AND WORK	The applicant is seeking a rezoning from PUD to CD-5 for a 5 acre vacant parcel located at the NE corner of River Rd and Taylors Bend and identified as parcel 090-00712-000. The PUD plan associated with the existing zoning is expired. The applicant would like to proposed CD-5 zoning to match the parcel at the SW of this same intersection and develop per the existing Zoning Code.		

DATE OF PRE-APPLICATION CONFERENCE	8/21/2024	*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
☐ Comprehensive Plan Amendment ☐ Annexation ☒ Rezoning ☐ Preliminary Plat ☐ Final Plat ☐ PUD Preliminary Master Plan ☐ PUD Final Site Plan ☐ Site Development Plan ☐ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ☐ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ☒ Requested Zone Listed ☒ Statement of Compliance with Comprehensive Plan ☒ Concept Plan **Preliminary Plats/Site Development Plans:** ☐ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ☒ Receipt of Payment for Pre-Application Meeting ☒ Written Legal Description copy ☒ Columbia Water System Availability Letter ☒ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs: ☐ Project Name (include Sections & Phases) ☐ Total Number of Lots/Residential Units ☐ Square Footage of Non-Residential Floor Space ☐ Total acreage

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

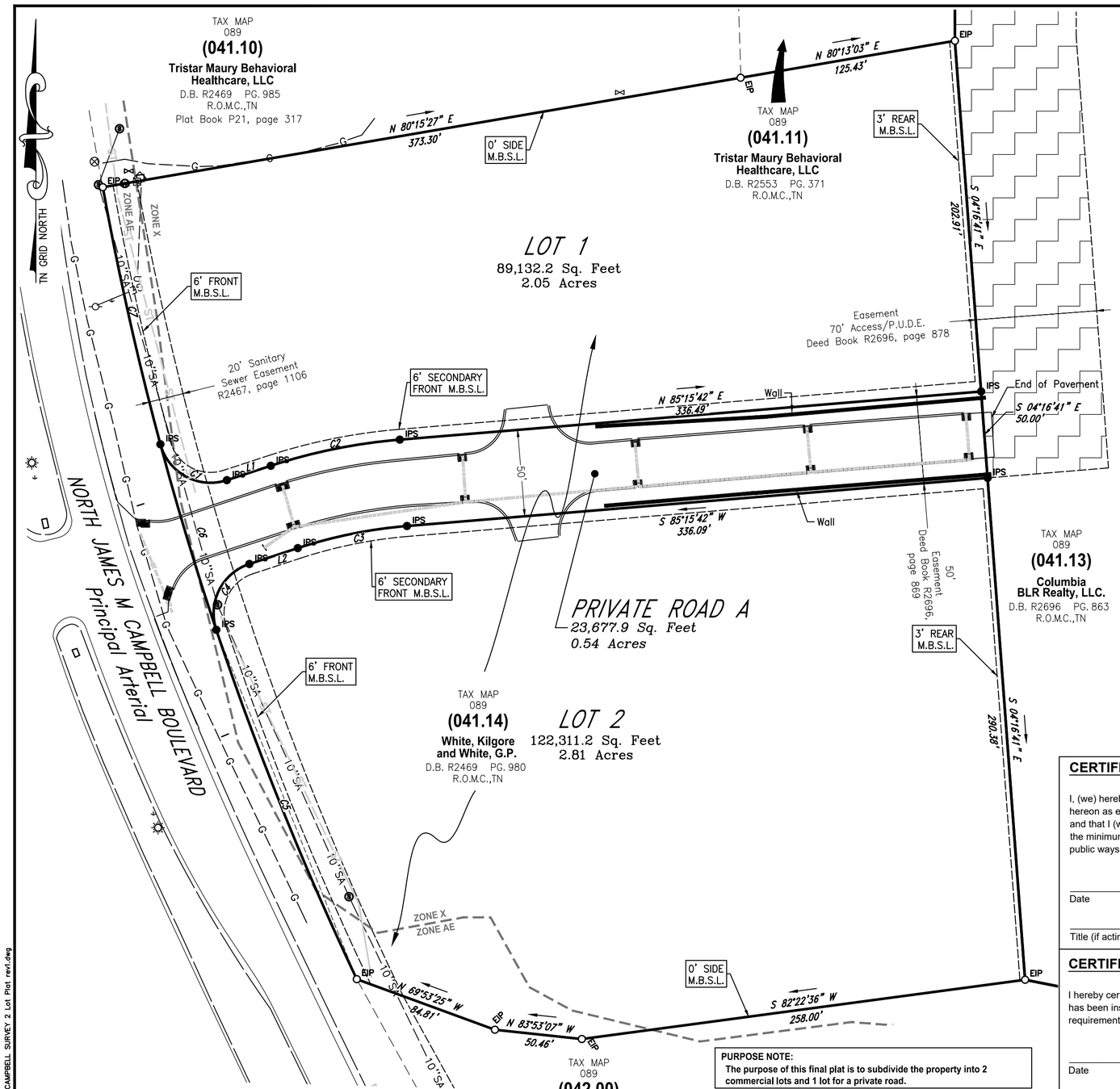
All communications go to the Applicant's email that is provided.

NAME	Greg Gamble - Gamble Design Collaborative	PHONE	615-975-5765
ADDRESS	3020 Stansberry Lane, Ste 201, Franklin TN	EMAIL	info@gdc-tn.com

PROPERTY OWNER NAME	Brent Campbell	PHONE	615-476-8000
ADDRESS	211 Great Park, 37067	EMAIL	Nashbrent@gmail.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Greg Gamble		9/16/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
Brent Campbell		9-4-'24
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

PARCEL NUMBER:
TAX MAP 089, PARCEL 41.14

DEED BOOK:
R2469, PAGE 980

PARCEL ADDRESS:
N JAMES M CAMPBELL BOULEVARD

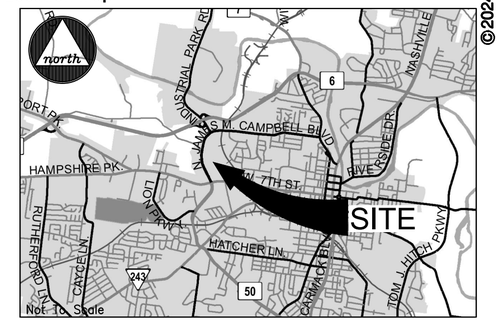
EXISTING ZONING:
CD-4C

BUILDING SETBACKS:
FRONT - 6'
SECONDARY FRONT - 6'
SIDE - 0'
REAR - 3'

ACREAGE OF PARCEL:
±5.40 ACRES (±235,121.3 SQFT) TOTAL
±4.86 ACRES (±211,443.4 SQFT) 2 COMMERCIAL LOTS
±0.54 ACRES (±23,667.9 SQFT) LOT PRIVATE ROAD A

PROPERTY OWNER:
ROGER WITHERROW, DANIEL FAMILY PARTNERSHIP & WHITE, KILGORE AND WHITE, G.P.
P.O. BOX 375
COLUMBIA, TN 38402

Location Map



©2024

Surveyor's Notes

1. All distances were measured with E.D.M. equipment and have been adjusted for temperature and pressure.
2. The property (Boundary) Line Survey exceeds the minimum requirements of an Urban Land Survey Category 1 as per Standards of Practice adopted by the State Board of Examiners for Land Surveyors for the State of Tennessee, and the precision of the unadjusted survey is greater than 1 foot in 10,000 feet.
3. Information concerning site utility services and appurtenances shown hereon is based on visible evidence noted during the survey, information provided by utility representatives or information shown on original construction plans by other. Information and location of service lines on site should be considered approximate and there may be underground utility lines that are not shown on the survey. Owner(s) and contractor(s) should assume responsibility of locating all underground utility service lines prior to any construction, excavation or any disturbance of the existing ground elevation to avoid hazard of unnecessary expense.
4. Information concerning major utilities or appurtenances shown hereon are based on visible evidence noted during the survey or information provided by utility representatives. Verification of existence, size, location, depth and availability of service should be confirmed by local utility agencies.
5. The property shown hereon is located within the City of Columbia, Maury County, TN. All matters pertaining to construction, use location of improvements, signage, parking, noise, vibration, emissions, fire hazards, radiation, illumination, setback provisions, etc., are subject to the City of Columbia's Zoning Regulation as interpreted and regulated by the Department of Planning and Codes.
6. The area of the parcels as shown hereon.
7. This property currently identified as Tax Map No. 089, Parcel No. 41.14, Maury County. For designation shown thus ( ) indicates Parcel Numbers for said map.
8. Plat reference: NA
9. Deed reference: Book R2469, Page 980
10. Bearings based on: Tennessee State Plane (NAD83).
11. This drawing was prepared in accordance with our field survey notes. It shows improvements as they exist to the best of our knowledge, but is not guaranteed to be correct in each and every detail.
12. This survey was prepared from current deeds of record and does not represent a title search or a guarantee of title, and is subject to any state of facts a current and accurate search may reveal.
13. This survey was prepared for the exclusive use of the person, persons, or entity, if any, named on the certification hereon. Said certificate does not extend to any unnamed person without an express re-certification by the surveyor naming said person.
14. The certification as provided on this survey, is purely a statement of professional opinion based on knowledge, information and belief, based on existing field evidence and documentary evidence provided by others.
15. The certification is not an expressed or implied warranty or guarantee.
16. A portion of this property is located in a Special Flood Hazard Area (Zone AE) as shown on F.E.M.A. Flood Insurance Rate Map, Community Panel No. 47119C0280E, dated April 16, 2007, and shown hereon graphically.
17. All public utility and drainage easements located on proposed lots are to be maintained by the individual property owner for said lot.
18. All property corners are ½" rebar with cap reading "WES 1987" unless otherwise noted.

CERTIFICATE OF OWNERSHIP AND DEDICATION

I, (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon as evidenced in Book Number R2469, Page 980, Maury County Registers Office, and that I (we) hereby adopt this plan of subdivision with my (our) free consent, establish the minimum building restriction lines, and that offers of irrevocable dedication for all public ways, utilities, and other facilities have been filed.

Date

White, Kilgore & White, G.P.

Title (if acting for partnership or corporation)

CERTIFICATE OF APPROVAL OF SEWER SYSTEM

I hereby certify that the sewer system outlined or indicated on this final subdivision plat has been installed in accordance with the current local and state government requirements, or a sufficient bond or other has been filed to guarantee said installation.

Date

Director of Wastewater Department
Columbia, Tennessee

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I, (we) hereby certify that the water system(s) outlined or indicated on the final subdivision plat entitled 3 Lots - N James M Campbell Boulevard has/have been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

Date

Columbia Power & Water Systems
Columbia, Tennessee

CERTIFICATE OF APPROVAL FOR SUBDIVISION NAME, STREET NAMES, AND STREET SIGNS

Subdivision name and street names approved by the City Engineering Department and by E-911 Maury County.

Date

Maury County E-911
Columbia, Tennessee

CERTIFICATE OF COMPLIANCE

I hereby certify that the subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations and other adopted ordinances and policies.

Date

City Engineer
Columbia, Tennessee

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations, with the exception of such variances, if any, as are noted in the minutes of the Planning Commission, and that it has been approved for recording in the Office of the County Register:

Date

Secretary, Planning Commission

SURVEYOR'S CERTIFICATION (TENNESSEE)

I hereby certify that to the best of my knowledge and belief this is a true and accurate survey of the property shown hereon; that this is a category "I" Land Survey as defined in Title 62, Chapter 18, Tennessee Code Annotated, and that the ratio of precision is greater than or equal to 1:10,000.

Date

Allen B. O'Leary

TN RLS #1987
Number

ALLEN B. O'LEARY
REGISTERED LAND SURVEYOR
XVI
AGRICULTURE
COMMERCE
TENNESSEE NO. 1987

Register of Deed Recording Stamp

PRIVATE ROAD A

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 71°50'42" E	26.68'
L2	S 71°50'42" W	29.37'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	30.00'	48.77'	43.58'	S 61°34'47" E	93°09'02"
C2	325.00'	76.10'	75.93'	N 78°33'12" E	13°25'01"
C3	275.00'	64.40'	64.25'	S 78°33'12" W	13°25'01"
C4	30.00'	47.31'	42.56'	S 26°40'11" W	90°21'03"
C6	1,830.82'	111.88'	111.87'	N 16°45'18" W	3°30'05"

PROPERTY

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C5	1,830.82'	217.39'	217.26'	N 21°54'26" W	6°48'11"
C7	1,830.82'	152.02'	151.97'	N 12°37'32" W	4°45'27"

Legend

- Angle Iron Found (EIP)
- Iron Rod Found (EIP)
- Iron Rod Set (IPS)
- Iron Pipe Found (I.P.F.)
- Axle Found (AXLE)
- Fence Post (ECM)
- Concrete Monument Existing (P.K.F.)
- PK Nail Found (P.K.S.)
- PK Nail Set (R.R.S..F.)
- Railroad Spike Found (R.R.S.S.)
- Railroad Spike Set
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Catch Basin
- Curb Inlet
- Storm Pipe
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Cable Riser
- Electric Riser
- Telephone Riser
- Telephone Booth
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Flag Pole
- Guy Wire
- Mailbox
- Parking Block
- Satellite Dish
- Handicap Parking
- Water Spigot
- Bollard
- Water Irrigation
- Evergreen Tree
- Deciduous Tree
- Bush
- Sign
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line
- Rail-Road Track

PURPOSE NOTE:
The purpose of this final plat is to subdivide the property into 2 commercial lots and 1 lot for a private road.

WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
W. ROGER WITHEROW
1617 HATCHER LANE
COLUMBIA, TN 38401

FINAL PLAT

3 LOTS - N JAMES M CAMPBELL BOULEVARD
COLUMBIA, MAURY COUNTY, TENNESSEE

REVISIONS	DATE

Drawn: BD
Checked:
Approved:
Date: 07-25-2024

Job. no. 19641
Scale: Vertical: 1" = 50'
Horizontal:

1 of 1

FILE:J:\WES_Engineers_Surveyors 2019\19641 - James Campbell - Witherow\Dwg\Survey\19641-2 JAMES CAMPBELL SURVEY 2 Lot Plat rev1.dwg

none

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

** 1 hard copy of all materials for submittal + PDF copy on a USB thumb drive or CD (no multiple applications on one storage device)*
Fold hard copy submittals larger than 8½"x11"

ADDRESS/LOCATION	North James M Campbell Boulevard		
	TAX MAP: 089	GROUP:	PARCEL: 041.14
SUMMARY OF NATURE OF REQUEST AND WORK	Request Preliminary Plat approval for subdividing the current tract into 2 commercial lots and 1 private road lot.		

DATE OF PRE-APPLICATION CONFERENCE		*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
☐ Annexation ☐ Rezoning ☑ Preliminary Plat ☐ Final Plat ☐ PUD Preliminary Master Plan ☐ PUD Final Site Plan ☐ Multi-Family Site Plan ☐ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations/Rezoning/PUD's:** ☐ Written Legal Description copy ☐ Requested Zone Listed ☐ Compliance with Comprehensive Plan ☐ Annexation Permission Form ☐ Plans and/or Plats conforming to City standards with check list completed ☐ Columbia Water System Availability Letter **Plats/PUDs:** ☑ Project Name (include Sections & Phases) 3 Lots - N James M Campbell Boulevard ☑ Total Number of Lots 3 ☑ Total acreage ±5.40

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application.

Any requests to defer or move the item to future meetings dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME	Allen B. O'Leary	PHONE	931-388-2329
ADDRESS	2486 Nashville Hwy, Columbia, TN	EMAIL	allen@wesengineers.com

Roger Witherow, Daniel Family Partnership

PROPERTY OWNER NAME	White, Kilgore and White, G.P.	PHONE	
ADDRESS	P.O. Box 375 Columbia, TN 38402	EMAIL	

In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

APPLICANT NAME	APPLICANT SIGNATURE	DATE
Roger Witherow	Roger Witherow	8.15.24
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

STAFF USE ONLY

DOCKET NO.		FEE PAID	
RECEIPT NO.		REQUESTED AGENDA	

DATE NOTICES SENT TO ADJACENT PROPERTY OWNERS	
DATE OF PUBLIC NOTICES IN DAILY HERALD	
BOARD ACTION	

Greens Mill Road Annexation

Project #:	24-0466	Location:	Tax Map 51 Parcel 55.00
Applicant:	Crunk Engineering	Case Type(s):	Annexation
Staff Planner:	Paul Keltner, AICP	Proposed Use:	N/A

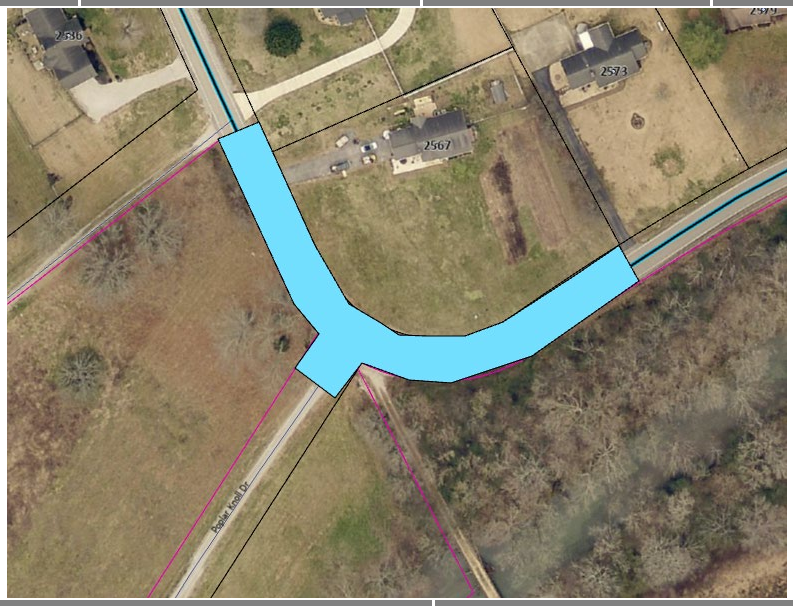
PROJECT SUMMARY

The applicant requests annexation with a plan of services for 0.63 acres of Greens Mill Road for areas associated with road improvements for The Landings at Greens Mill Road subdivision. In addition to the 0.63 acre request, further property to the southwest being 0.07 acres has been included with a base zone of CD-3L in order to annex the road improvements entirely.

- The subject site is located in the area of 2567 Greens Mill Road.
- The Development Review Committee (DRC) evaluated this application on 11/12/24 with minor comments associated with a complete submittal.
- The proposed development is consistent with the future land use element of the comprehensive plan, *Connect Columbia* being Suburban Neighborhood.
- The proposed initial base zoning of CD-3L conforms to the standards of the Zoning Ordinance Section 2.3 for newly annexed properties. Detailed analysis is provided in the conformity section below.
- The Planning Commission is a **recommending body** for the annexation in which Section 8.5.20.F of the Zoning Ordinance lists the criteria for Planning Commission action.
- Commentary from professional planning staff is provided below. The commentary identifies recommended conditions of approval.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

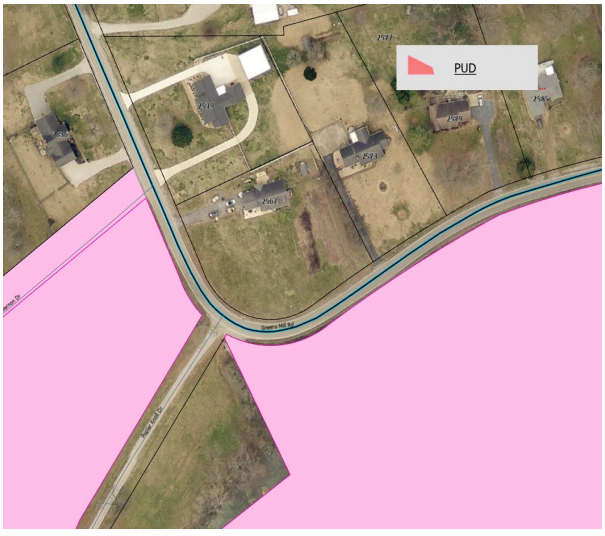
SITE INFORMATION

CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
County	Vacant	Road Infrastructure	+/- 0.70 acres



FUTURE LAND USE MAP	ZONING MAP





SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	Suburban Neighborhood	County	Vacant
North	Suburban Neighborhood	County	Single Family Detached
South	Suburban Neighborhood	PUD	Single Family Detached
East	Suburban Neighborhood	County	Single Family Detached
West	Suburban Neighborhood	PUD\County	Single Family Detached

CONSISTENCY WITH CONNECT COLUMBIA

Suburban Neighborhood: The intent of the Suburban Neighborhoods (SN) future land use is to enhance existing suburban areas and create new neighborhoods that will improve the quality of life in Columbia. Each development parcel should add to Columbia's existing sense of place and extend the established form and pattern to create a more interconnected community. Future development should emphasize connectivity and continuity of the city as whole. The density and intensity of residential development increases in proximity to areas under the CCUV future land use classification. In the same way, density and intensity decrease in proximity to areas under the Rural Transition (RT) future land use classification. New development enhances pedestrian infrastructure with sidewalks and other multimodal routes. Over time, new and infill development connects neighborhoods and community anchors such as libraries, neighborhood centers, health facilities, retail uses, parks, and schools.

Character & Intent

The intent of the Suburban Neighborhoods (SN) future land use is to enhance existing suburban areas and create new neighborhoods that will improve the quality of life in Columbia. Where appropriate, the SN future land use area also establishes mixed-use and commercial centers which serve residents' retail needs and provide a wider range of housing options. Each development parcel should add to Columbia's existing sense of place and extend the established form and pattern to create a more interconnected community. Future development should emphasize connectivity and continuity of the city as whole. The density and intensity of residential development increases in proximity to areas under the CCUV future land use classification. In the same way, density and intensity decrease in proximity to areas under the Rural Transition (RT) future land use classification. New development enhances pedestrian infrastructure with sidewalks and other multimodal routes. Public frontages may include sidewalks and street trees. Over time, new and infill development connects neighborhoods and community anchors such as libraries, neighborhood centers, health facilities, retail uses, parks, and schools.

Land Use Considerations

The primary land use is low-density detached housing. Along arterial roadways, primary uses may include offices, retail, and all forms of medium-density housing. Secondary land uses include accessory dwellings, two-family homes, civic uses, institutional uses, schools, religious facilities, utility facilities, parks and open space. New industrial and warehouse uses are inappropriate.



Form & Pattern

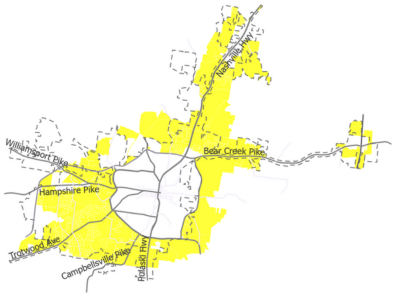
The SN future land use area is characterized by the organization of the built environment to extend a succession of large-lot neighborhoods and compact walkable neighborhoods. Development parcels extend established neighborhood patterns. Leap-frogging development is inappropriate. The SN future land use is distinguished from RT in the organization of lots and thoroughfares to form blocks. Physically separated developments which do not extend established block formation and roadway networks are inappropriate. The density of streets and blocks increases with proximity to CCUV and community anchors. Implementing bulk and design standards loosely delimit the public and domestic realms though the application of layers and front-to-back discipline of lots. Along arterial roadways, commercial corridors of varying intensities emerge over time with a high-quality built environment typified by a mix of building types and a balance between automobile-oriented and pedestrian-oriented design. The physical intensity of development along arterial corridors varies based on the surrounding residential density and the roadway's place in the transportation network. New development should accompany concurrent extension of complete urban services. Parking is provided on-site by private land users, supplemented by on-street spaces.

Implementing Districts

Neighborhood-Large Lot CD-3L
Neighborhood CD-3
General Urban-Corridor CD-4C (only along Arterial roadways)
Manufactured Home Park SD-MHP
Residential PUD PUD-R
Mixed Use PUD PUD-MU
Civic CV

Implementing Standards

General Development Pattern: Mixed Uses & Isolated Uses
Density (density unites per ace): 4 - 24 du/ac
Building Height: 1 - 4 stories
Open Space Elements: Civic Spaces, Parks & Greenways





CONFORMITY WITH ZONING ORDINANCE

As required by **§ 8.5.19.F.3** of the Zoning Ordinance, the applicant would have normally provided a concept plan. The purpose of the concept plan is to demonstrate that it may be possible to develop the site in conformity with the standards of the requested character district. This request though is to annex portions of roadway for future local authority and maintenance items so no structures are depicted. The existing improvements where approved and installed to city standards.

SUMMARY OF DEVELOPMENT REVIEW COMMITTEE COMMENTS

The DRC reviewed this proposal at its meeting in November 2024. A full list of comments, and the applicant's responses, is provided in the agenda packet. Some key comments are noted below.

- **Engineering:** No comments
- **Planning:** Acknowledgement from Maury County Highway Department is needed that is requesting the city to take over maintenance for this section of Green Mills Road.
    - A Comprehensive Plan compliance statement relating to the requested zone that relays more than the provided content of this is a letter to make a statement. Clarify the accompanying page from New Spring Church and how it relates to this letter or request to annex.
    - Please provide property owner signature on the application.
    - Applications list Safe Harbor as the owner of parcel 34.03, annexation permission form states Conway, clarify and or correct ownership.
    - Please contact E911 if your project requires assignment of new addresses or street names.
- **Fire Marshal:** No comments
- **Public Works:** No comments
- **Wastewater:** No comments

REVIEW PROCESS

The Development Review Committee evaluated the proposed rezoning at its November 2024 meeting, as directed by **Section 8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package.

Section 8.5.19 of the Zoning Ordinance directs the Planning Commission to review and make a recommendation on all proposed changes to the Official Zoning Map. The Planning Commission is the recommending body for rezonings under **§ 8.3.3.B.3** of the Zoning Ordinance.

Section 8.5.19.H.4 of the Zoning Ordinance establishes the review criteria for approval of all changes to the Official Zoning Map:

a. *The Rezoning[1] is consistent and not in conflict with the Comprehensive Plan or other applicable approved local plans for the area;*

[1] **Rezoning**: A change in the district boundaries or district classifications of the Zoning map pursuant to Section 8.5.19. **For the purposes of the Ordinance, rezoning also includes the initial zoning of a property that occurs with annexation.**

b. It has been determined that the legal purposes for which zoning exists, as set forth in Section 1.5 [, are not contravened];

c. It has been determined that there will be no adverse effect upon Adjoining property owners unless such effect can be justified by the overwhelming public good or welfare;

d. It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public;

e. It has been determined that conditions affecting the area have changed to a sufficient to warrant the Zoning Map Amendment or that the existing zoning of the property was the result of a mistake;

f. It has been determined that adequate school, road, parks, wastewater treatment, water supply, and stormwater drainage facilities are available.

COMMENTARY FROM PROFESSIONAL PLANNING STAFF

This request has been pursued by the County Highway Department which is being initiated by the developer Safe Harbor and is for only a portion of the road network. Greens Mill Road itself will have a series of ownership types as you travel from Nashville Highway (city then county back to city before county again). The improvements as presented to planning commission and council have been constructed. There were additional improvements presented by the applicant to the county for an outside agreement but those not being facilitated by the city. There were no comments from emergency services or E911 about the responding agency for these in\out situations.

SAMPE MOTIONS

Approve:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in section **8.5.19.H.4** of the City of Columbia Zoning Ordinance have been satisfied and recommend approval of the request to annex with plan of services as presented, subject to technical comments and other conditions presented by planning staff.

Deny:

Move to recommend denial of the requested annexation with a plan of services and zoning having found, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in section **8.5.19.H.4** of the City of Columbia Zoning Ordinance are not satisfied [*list specific reasons for denial*].

Defer:

Move to find that there is insufficient information to make a decision, defer the matter to the next regularly scheduled meeting of the Planning Commission, and request that the [applicant/staff] provide: [list additional information] for review at a future meeting.

RESOLUTION 25-02

A RESOLUTION TO ANNEX AND APPROVE A PLAN OF SERVICES FOR A PORTION OF RIGHT OF WAY ALONG GREENS MILL ROAD WITH ALSO A 0.07 ACRE PORTION OF TAX MAP 51 PARCEL 34.03, LOCATED OFF GREENS MILL ROAD, INTO THE CITY OF COLUMBIA, TENNESSEE.

WHEREAS, pursuant to the authority of Tennessee Code Annotated Section §6-51-1 et.seq., the City of Columbia has the power to annex property into such City when petitioned by the owner; and

WHEREAS, the property owner(s) have requested and petitioned the City Council of the City of Columbia to annex into the City of Columbia as illustrated in Exhibit "B" which is attached hereto and incorporated herein by reference; and

WHEREAS, it appears to the City Council of the City of Columbia that the prosperity of the City of Columbia and the property described in Exhibit "A" attached hereto and incorporated herein by reference will be materially retarded and the safety and welfare of the inhabitants and property endangered unless said property is annexed.

NOW THEREFORE, BE IT HEREBY RESOLVED BY THE CITY OF COLUMBIA:

Section 1. The City of Columbia hereby annexes into the City of Columbia, Tennessee and incorporates within the boundaries thereof, a portion of right of way along Greens Mill Road, with also a 0.07 acre portion of Tax Map 51 Parcel 34.03, located off Greens Mill Road, lying between the present corporate limits and the new corporate limits. A location map depicting the proposed annexation area is identified as Exhibit "C" and is attached hereto and incorporated herein by reference; and

Section 2. This Resolution was passed after a public hearing relative to this proposed annexation held by the Mayor and City Council of the City of Columbia, at the City Hall at 5:30 p.m. on the 9th day of January 2025, with notice of said hearing being given in The Daily Herald of Columbia, Tennessee, fifteen (21) days or more before said hearing. The Columbia Municipal Planning Commission recommended approval for the said annexation on the 11th day of December, 2024; and

Section 3. It appearing to the City Council of the City of Columbia, Tennessee, that in accordance with Tennessee Code Annotated, Section §6-51-102, a Plan of Services is required for the territory to be annexed. The City Council of the City of Columbia adopted a Plan of Services for the above described property on the 9th day of January, 2025, following a duly advertised public hearing, setting forth the identification and projected timing of municipal services to be extended in the above described area to be annexed. It further appearing that said Plan of Services as adopted by the City Council of the City of Columbia was previously submitted to the Columbia Municipal Planning Commission which studied said Plan of Services and rendered a written report to the City Council of the City of Columbia on the 11th day of December, 2024; and

Section 4. This Resolution shall become effective thirty (30) days after its passage.

Section 5. That all Resolutions or parts of Resolutions in conflict herewith are hereby repealed; and

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF COLUMBIA, TENNESSEE THIS 9TH DAY OF JANUARY, 2025.

_____

CHARLES (CHAZ) M. MOLDER, MAYOR

ATTEST:

_____

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:

_____

C. TIM TISHER, CITY ATTORNEY

12" CMP

12" CMP

12" CMP
INV START: 637.52'
INV END: 636.81'

12" CMP
INV START: 634.28'
INV END: 633.35'

CLYDE & SHERYL HOWELL
051G-A-002.00
DEED BK R2147 PG. 670
PLAT BK. 7 PG. 12
R.O.M.C., TN.

GENE ISOM
051G-A-003.00
DEED BK R2387 PG. 1257
PLAT BK. 7 PG. 12
R.O.M.C., TN.

R.O.M.C., TN.

APPROXIMATE AREA = 0.63 ACRES

LENNAR HOMES OF TN
051-034.00
DEED BK. R2871 PG. "1405
R.O.M.C., TN.

T BK. 11 PGS. 26-27
R.O.M.C., TN.
BOOK 11 PGS. 26-27

S 47°56'39" E
18.35'

N 07°14'16" W
24.38'

N 29°02'01" W

S 83°10'19" E
92.13'

N 66°58'45" E
87.33'

N 57°18'58" E
240.63'

GREENS MI
(50' R.O.

UTHERFORD CREEK

DEE

24" SS

12" CMP

12" CMP

12" CMP
INV START: 637.52'
INV END: 636.81'

12" CMP
INV START: 634.28'
INV END: 633.35'

CLYDE & SHERYL HOWELL
051G-A-002.00
DEED BK R2147 PG. 670
PLAT BK. 7 PG. 12
R.O.M.C., TN.

GENE ISOM
051G-A-003.00
DEED BK R2387 PG. 1257
PLAT BK. 7 PG. 12
R.O.M.C., TN.

R.O.M.C., TN.

APPROXIMATE AREA = 0.07 ACRES

LENNAR HOMES OF TN
051-034.00
DEED BK. R2871 PG. 1405
R.O.M.C., TN.

RCP

12" CMP

N 07°14'16" W
24.38'

S 47°56'39" E
18.35'

N 57°18'58" E
240.63'

N 66°58'45" E
87.33'

S 83°10'19" E
92.13'

N 29°02'01" W

GREENS MILL

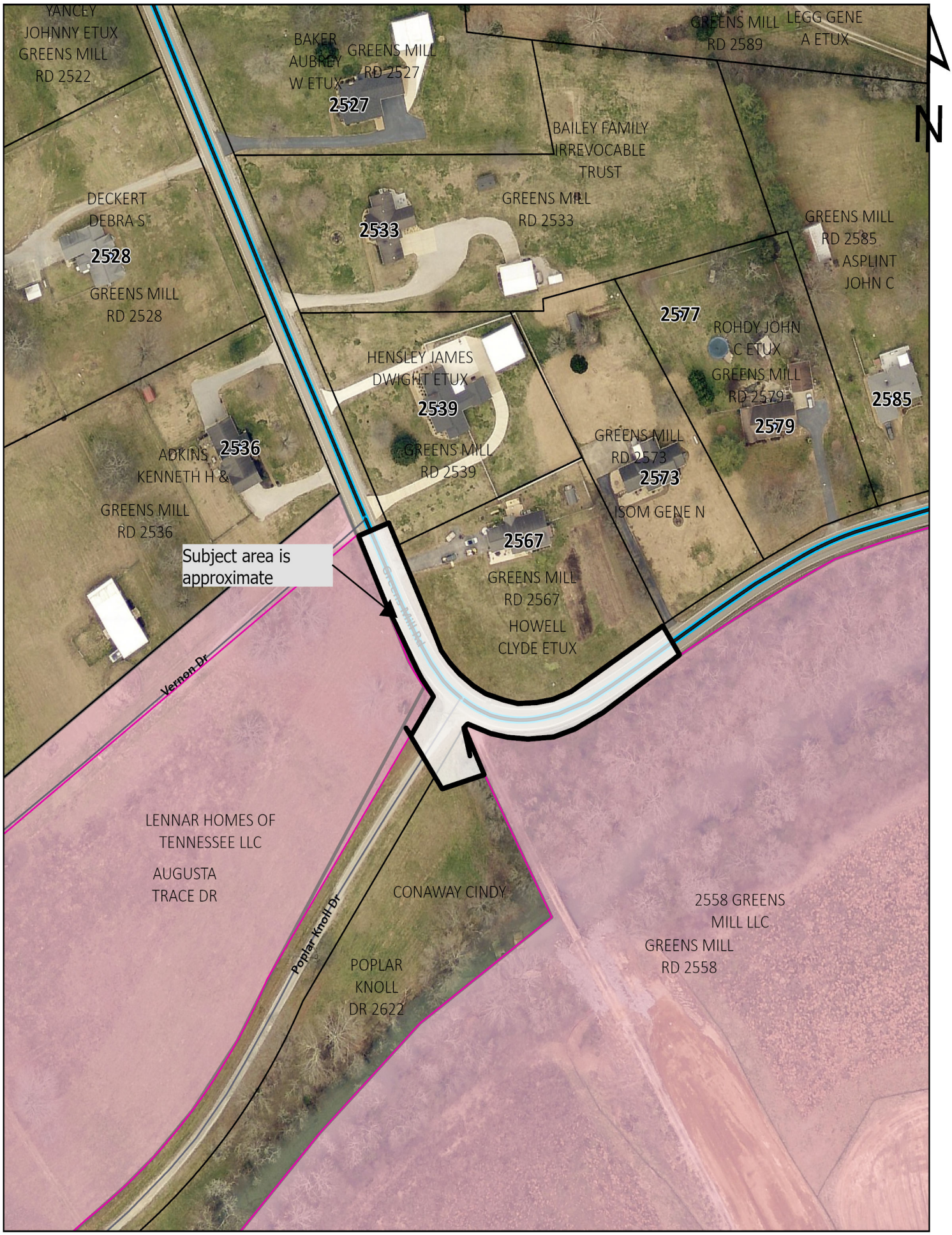
(50' R.O.W.)

RUTHERFORD CREEK

T BK. 11 PGS. 26-27
R.O.M.C., TN.
BOOK 11 PGS. 26-27

DEE

24" SS



Case #24-0466
Greens Mill Road
+/- 98 LF Greens Mill Rd. ROW and
Tax Map 51 Parcel 34.03, 0.07 portion of

City of Columbia
Development Services
700 N. Garden Street
Columbia, TN 38401
www.columbiatn.gov

PLAN OF SERVICES

FOR ANNEXATION

2558 Greens Mill Road PROPERTY

+/-.61 ACRES,

BEING

TAX MAP 51 PARCEL 55.00, 034.03

Fire Department Service Delivery Plan: *98.34 ft. distance or right-of-way along Greens Mill Road Tax Map 51 Parcel 034.03 at 2622 Popular Knoll Drive and Lot 1 of The Landings at Greens Mill.*

A. Water

"The project is within Columbia Power and Water's service area. The availability of capacity to serve will be based on a determination by the Fire Marshal of fire flow requirements and the information submitted on the Water Service Availability Request application. Any off-site improvements detailed in the availability letter are the responsibility of the developer/owner. All public water system improvements are subject to the preparation and approval of detailed construction plans prepared in accordance with CPWS and Tennessee Department of Environment and Conservation requirements."

B. Sewer

All sewer improvements including but not limited to off-site improvements, on-site improvements, and pump station and equipment installation shall be completed and functioning to the satisfaction of the Director of the Wastewater Department prior to the filing of any Final Plat with the City of Columbia Municipal Planning Commission, unless specific approval is granted by the Director and a surety of sufficient amount is provided. Note: Pump stations will require a building permit and all other required permits from additional entities. All inspections must be completed and certificates of completion granted before Council Agenda Deadline. Please contact the Wastewater Department for standard design details and equipment.

C. Police

The jurisdiction of the Columbia Police Department will be extended to the areas annexed immediately upon the effective date of annexation.

D. Fire and Rescue

1. The City of Columbia Fire & Rescue provides an array of services to the citizens and visitors of the City of Columbia. These services include but may not be limited to non-emergency services such as fire prevention and codes enforcement, pre-incident planning, public education programs, smoke alarm check/replacement, emergency management preparedness, and emergency services such as fire suppression, heavy rescue, emergency medical first response, and hazardous materials response. The City of Columbia Fire Department currently holds an Insurance Service Organization (ISO) class 1 rating.

   Columbia Fire & Rescue strives to provide all services in a timely, courteous, and professional manner. Due to the nature of emergency services, we strive to arrive at the incident scene as quickly as possible but without posing additional dangers to the residents/visitors we meet while responding to your location.

Infrastructure:

The infrastructure put in place is like the foundation of your development. If the infrastructure is designed and constructed with the present needs and future plans in mind, your development will be prepared for the future.

Water:

Columbia Fire & Rescue requires that there be sufficient water provided through the municipal water system to meet the needed fire flow requirements for your facility. These flows are calculated by the Fire Marshal. These flows are based on many factors dealing with your buildings' construction type, fire load in the building, square footages, and etc. If you install fire sprinkler systems in your facilities, Columbia Fire & Rescue can drastically reduce fire flow requirements.

Roadway and Bridges: Columbia Fire & Rescue serves the residents and visitors of our jurisdiction by utilizing highly trained firefighters and modern fire apparatus. A minimum response to a structure fire in your development will be four fire apparatus. One of the fire apparatus that will respond to your development will be a ladder truck with a gross vehicle weight rating of approximately 80,000 pounds. Roadways and bridges must be designed and constructed not only with light vehicle traffic in mind but with the emergency service vehicles that will be servicing your development.

Damage Free Property Access: Columbia Fire & Rescue requires all gates automatic or manual that will be or may be locked to be equipped with Knox Rapid Entry system. You can research this product at www.knoxbox.com or

your gate vendor will be familiar with the product. Our department would also be happy to work with you to find what Knox Rapid Entry product is best suited for your application.

Damage Free Home/Facility Access: Currently, Columbia Fire & Rescue does not require residential occupancies to be equipped with the Knox Rapid Entry system. However, this product is a very wise investment for your future development. The Knox Rapid Entry System products allow homes to be secured but also allow the Columbia Fire & Rescue Department access to your property and/or homes without any delay or property damage. The system has an armored key lock safe recess mounted to the exterior of the homes with the key to the residence inside. Firefighters access the residence key during an emergency to gain entry into the home without causing any property damage. Again, our department would be happy to provide you with information and education on this program and its many positive attributes.

Emergency Response to Your Location: The proposed annex will be at Greens Mill Road (Tax Map 51 Parcel 034.03 at 2622 Popular Knoll Drive and Lot 1 of The Landings at Greens Mill) in Columbia, Tennessee. This location is approximately 2.7 miles from Columbia Fire Station #5 located at 2633 Nashville Hwy, 8.0 miles from Fire Station #3 located at 705 Firefighters Dr, and 8.0 miles from Fire Station #1 located at 1000 South Garden in downtown Columbia. These distances are used to calculate an estimated response time to your development for the different levels of emergency response that may be needed at your facilities.

Medical Emergency Response: Columbia Fire & Rescue normally responds a minimum of one fire apparatus from Station #5 to service your location for a medical emergency. From the time you dial 911 until the fire department will arrive at your location will be within 4.00 minutes. Should your property experience a mass casualty incident where additional fire apparatus/firefighters would need to respond, then Fire Station #1 or Fire Station #3 could arrive on-scene within 10.00 minutes of your 911 call.

Fire Incident Response: Columbia Fire & Rescue recommends a multi-faceted fire suppression approach. First, future homes should be constructed to meet or exceed all applicable fire and life safety codes. Secondly, even if not required by building, fire, or life safety codes, we encourage the installation and use of fire sprinkles in future homes. Columbia Fire & Rescue's normal fire incident response to a single family residential development is three fire apparatus with a minimum 15 firefighters and 1 Chief Officer. Response times will be similar to the times estimated in the emergency medical response section. Your first fire apparatus should be on-scene within approximately 4 minutes, the second fire apparatus should be on-scene within 10.00 minutes, and the third/fourth apparatus should be on-scene within 10.00 minutes. Due to OSHA standards that require at least four firefighters to arrive on-scene prior to initiating an interior

fire attack and Columbia Fire & Rescue's minimum staffing policy, it could take the 5.5 minutes to get the minimum number of firefighters to the scene to begin an interior fire attack.

In summary, the members of the Columbia Fire & Rescue consider it an honor to serve the residents and visitors in our community each and every day. When an emergency occurs, time is our worst enemy. Columbia firefighters train to reduce every second while not posing any additional undue risk to firefighters and/or the public when responding to or working at an emergency incident. The times estimated in the referenced examples are a combination of averages and estimations. Our department has very little data to support incident responses to your location. The time estimations are based on the fire companies being at their regular station, time it takes for Maury 911 to process a 911 call, the time it takes for Columbia firefighters to board the apparatus and leave the station, and the travel time from the station to your location is an estimate based on road miles, probable traffic conditions, and road conditions. You can see by the examples referenced above that it will take time for Columbia Fire & Rescue to receive your call for help and then respond to your location. The roadways have considerable driveway/cross street connections, hills, curves, and reduced speed zones that contribute to a long response time for fire apparatus to arrive.

E. Development Services

1. The planning and zoning jurisdiction of the City will extend to the annexed areas immediately upon the effective date of the annexation.

2. The property shall be zoned CD-3L (Neighborhood Large Lot Character District) upon the effective date of the annexation.

3. The code administration jurisdiction of the City will extend to the annexed areas immediately upon the effective date of the annexation.

4. Upon the effective date of annexation, all development will be required to abide by the Columbia Zoning Ordinance.

F. Streets

1. Upon acceptance by City Council and all warranties have expired; all streets and drainage systems will be maintained by Public Works. Service will include street sweeping, catch basin cleaning, street repair and snow removal drainage maintenance, and sidewalk repair.

2. Upon acceptance by City Council, all approved street signs will be maintained by Public Works.

G. Parks and Recreation

Residents of the annexed areas may use all existing recreational facilities, parks, etc., on the effective date of annexation. The same standards and policies now used in the present City will be followed in expanding the recreational program and facilities in the enlarged City.

H. Refuse Collection

Single family homes will receive City of Columbia trashcan service.
Residential customers will be issued one 96-gallon garbage receptacle with the option to purchase up to two additional garbage receptacles. The Sanitation Department will provide weekly curbside garbage collection. Bi-weekly curbside recycling will be offered on a subscription basis. Brush collection will be provided on a bi-weekly basis. Residents are allotted three free bulk item pickups per year.

I. Power

Columbia Power System has an existing power line near your proposed development. We are willing to serve this commercial development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

J. Schools

This property falls under the jurisdiction of Maury County Public School System.
The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.

November 18, 2024

City of Columbia
Development Review Committee
700 N Garden Street
Columbia, TN 38401

RE: Greens Mill Road – Annexation

Below are our responses to comments received on November 12, 2024. We believe we have satisfied all comments, but if you have additional concerns or questions, please do not hesitate to contact us. Our responses are as follows:

COMMENTS:

Planning

1. The lead staff person for this case is Director of Development Services Paul Keltner, AICP; he will prepare the staff report for this item. Please contact pkeltner@columbiatn.gov with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
   Response: Understood.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
   Response: This document will serve as the comment response letter.
3. Acknowledgement from Maury County Highway Department is needed that is requesting the city to take over maintenance for this section of Green Mills Road.
   Response: This acknowledgment and coordination has been received by Douglas Toney from Ken McKee at MCHD.
4. A Comprehensive Plan compliance statement relating to the requested zone that relays more than the provided content of this is a letter to make a statement. Clarify the accompanying page from New Spring Church and how it relates to this letter or request to annex.
   Response: The provided contact information referencing New Spring Church was a misplaced pdf included in the document submitted through the onlama portal. Please disregard. A corrected statement of compliance has been resubmitted.
5. Please provide property owner signature on the application.
   Response: In meetings between Paul Keltner and Patrick Carroll, it was discussed that the property owner permission form with Cindy Conway's signature and description of the property / request would be sufficient for this application. Property owner information has been clarified on the resubmitted application.
6. Applications list Safe Harbor as the owner of parcel 34.03, annexation permission form states Conway, clarify and or correct ownership.

Response: **Ownership of parcel 34.03 has been corrected and clarified on the annexation application.**

7. Please contact E911 if your project requires assignment of new addresses or street names.
   Response: **Understood.**

Fire

8. No comments

Maury County Schools

9. Roundabout is not school bus friendly-radius is too tight

Columbia Power

10. Columbia Power System has an existing power line near your proposed development.
    We are willing to serve this commercial development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.
    Response: **Understood.**

Maury County Highway Dept.

11. Currently, the Maury County Highway Department (MCHD) understands that no further information or documentation is needed from the MCHD. Applicant should continue coordination and collaboration with the MCHD should additional information or documentation be needed.
    Response: **Understood.**

Engineering

12. No comment.

Columbia Water

13. No comment.

We believe that all comments have been addressed. If you have any questions or need additional information, please do not hesitate to contact me at adam@crunkeng.com or 615-873-1795.

Sincerely,



Adam Crunk, PE
Crunk Engineering LLC

PLAN OF SERVICES

FOR ANNEXATION

2558 Greens Mill Road PROPERTY

+/-.61 ACRES,

BEING

TAX MAP 51 PARCEL 55.00, 034.03

Fire Department Service Delivery Plan: *98.34 ft. distance or right-of-way along Greens Mill Road Tax Map 51 Parcel 034.03 at 2622 Popular Knoll Drive and Lot 1 of The Landings at Greens Mill.*

A. Water

"The project is within Columbia Power and Water's service area. The availability of capacity to serve will be based on a determination by the Fire Marshal of fire flow requirements and the information submitted on the Water Service Availability Request application. Any off-site improvements detailed in the availability letter are the responsibility of the developer/owner. All public water system improvements are subject to the preparation and approval of detailed construction plans prepared in accordance with CPWS and Tennessee Department of Environment and Conservation requirements."

B. Sewer

All sewer improvements including but not limited to off-site improvements, on-site improvements, and pump station and equipment installation shall be completed and functioning to the satisfaction of the Director of the Wastewater Department prior to the filing of any Final Plat with the City of Columbia Municipal Planning Commission, unless specific approval is granted by the Director and a surety of sufficient amount is provided. Note: Pump stations will require a building permit and all other required permits from additional entities. All inspections must be completed and certificates of completion granted before Council Agenda Deadline. Please contact the Wastewater Department for standard design details and equipment.

C. Police

The jurisdiction of the Columbia Police Department will be extended to the areas annexed immediately upon the effective date of annexation.

D. Fire and Rescue

1. The City of Columbia Fire & Rescue provides an array of services to the citizens and visitors of the City of Columbia. These services include but may not be limited to non-emergency services such as fire prevention and codes enforcement, pre-incident planning, public education programs, smoke alarm check/replacement, emergency management preparedness, and emergency services such as fire suppression, heavy rescue, emergency medical first response, and hazardous materials response. The City of Columbia Fire Department currently holds an Insurance Service Organization (ISO) class 1 rating.

   Columbia Fire & Rescue strives to provide all services in a timely, courteous, and professional manner. Due to the nature of emergency services, we strive to arrive at the incident scene as quickly as possible but without posing additional dangers to the residents/visitors we meet while responding to your location.

Infrastructure:

The infrastructure put in place is like the foundation of your development. If the infrastructure is designed and constructed with the present needs and future plans in mind, your development will be prepared for the future.

Water:

Columbia Fire & Rescue requires that there be sufficient water provided through the municipal water system to meet the needed fire flow requirements for your facility. These flows are calculated by the Fire Marshal. These flows are based on many factors dealing with your buildings' construction type, fire load in the building, square footages, and etc. If you install fire sprinkler systems in your facilities, Columbia Fire & Rescue can drastically reduce fire flow requirements.

Roadway and Bridges: Columbia Fire & Rescue serves the residents and visitors of our jurisdiction by utilizing highly trained firefighters and modern fire apparatus. A minimum response to a structure fire in your development will be four fire apparatus. One of the fire apparatus that will respond to your development will be a ladder truck with a gross vehicle weight rating of approximately 80,000 pounds. Roadways and bridges must be designed and constructed not only with light vehicle traffic in mind but with the emergency service vehicles that will be servicing your development.

Damage Free Property Access: Columbia Fire & Rescue requires all gates automatic or manual that will be or may be locked to be equipped with Knox Rapid Entry system. You can research this product at www.knoxbox.com or

your gate vendor will be familiar with the product. Our department would also be happy to work with you to find what Knox Rapid Entry product is best suited for your application.

Damage Free Home/Facility Access: Currently, Columbia Fire & Rescue does not require residential occupancies to be equipped with the Knox Rapid Entry system. However, this product is a very wise investment for your future development. The Knox Rapid Entry System products allow homes to be secured but also allow the Columbia Fire & Rescue Department access to your property and/or homes without any delay or property damage. The system has an armored key lock safe recess mounted to the exterior of the homes with the key to the residence inside. Firefighters access the residence key during an emergency to gain entry into the home without causing any property damage. Again, our department would be happy to provide you with information and education on this program and its many positive attributes.

Emergency Response to Your Location: The proposed annex will be at Greens Mill Road (Tax Map 51 Parcel 034.03 at 2622 Popular Knoll Drive and Lot 1 of The Landings at Greens Mill) in Columbia, Tennessee. This location is approximately 2.7 miles from Columbia Fire Station #5 located at 2633 Nashville Hwy, 8.0 miles from Fire Station #3 located at 705 Firefighters Dr, and 8.0 miles from Fire Station #1 located at 1000 South Garden in downtown Columbia. These distances are used to calculate an estimated response time to your development for the different levels of emergency response that may be needed at your facilities.

Medical Emergency Response: Columbia Fire & Rescue normally responds a minimum of one fire apparatus from Station #5 to service your location for a medical emergency. From the time you dial 911 until the fire department will arrive at your location will be within 4.00 minutes. Should your property experience a mass casualty incident where additional fire apparatus/firefighters would need to respond, then Fire Station #1 or Fire Station #3 could arrive on-scene within 10.00 minutes of your 911 call.

Fire Incident Response: Columbia Fire & Rescue recommends a multi-faceted fire suppression approach. First, future homes should be constructed to meet or exceed all applicable fire and life safety codes. Secondly, even if not required by building, fire, or life safety codes, we encourage the installation and use of fire sprinkles in future homes. Columbia Fire & Rescue's normal fire incident response to a single family residential development is three fire apparatus with a minimum 15 firefighters and 1 Chief Officer. Response times will be similar to the times estimated in the emergency medical response section. Your first fire apparatus should be on-scene within approximately 4 minutes, the second fire apparatus should be on-scene within 10.00 minutes, and the third/fourth apparatus should be on-scene within 10.00 minutes. Due to OSHA standards that require at least four firefighters to arrive on-scene prior to initiating an interior

fire attack and Columbia Fire & Rescue's minimum staffing policy, it could take the 5.5 minutes to get the minimum number of firefighters to the scene to begin an interior fire attack.

In summary, the members of the Columbia Fire & Rescue consider it an honor to serve the residents and visitors in our community each and every day. When an emergency occurs, time is our worst enemy. Columbia firefighters train to reduce every second while not posing any additional undue risk to firefighters and/or the public when responding to or working at an emergency incident. The times estimated in the referenced examples are a combination of averages and estimations. Our department has very little data to support incident responses to your location. The time estimations are based on the fire companies being at their regular station, time it takes for Maury 911 to process a 911 call, the time it takes for Columbia firefighters to board the apparatus and leave the station, and the travel time from the station to your location is an estimate based on road miles, probable traffic conditions, and road conditions. You can see by the examples referenced above that it will take time for Columbia Fire & Rescue to receive your call for help and then respond to your location. The roadways have considerable driveway/cross street connections, hills, curves, and reduced speed zones that contribute to a long response time for fire apparatus to arrive.

E. Development Services

1. The planning and zoning jurisdiction of the City will extend to the annexed areas immediately upon the effective date of the annexation.

2. The property shall be zoned CD-3L (Neighborhood Large Lot Character District) upon the effective date of the annexation.

3. The code administration jurisdiction of the City will extend to the annexed areas immediately upon the effective date of the annexation.

4. Upon the effective date of annexation, all development will be required to abide by the Columbia Zoning Ordinance.

F. Streets

1. Upon acceptance by City Council and all warranties have expired; all streets and drainage systems will be maintained by Public Works. Service will include street sweeping, catch basin cleaning, street repair and snow removal drainage maintenance, and sidewalk repair.

2. Upon acceptance by City Council, all approved street signs will be maintained by Public Works.

G. Parks and Recreation

Residents of the annexed areas may use all existing recreational facilities, parks, etc., on the effective date of annexation. The same standards and policies now used in the present City will be followed in expanding the recreational program and facilities in the enlarged City.

H. Refuse Collection

Single family homes will receive City of Columbia trashcan service.
Residential customers will be issued one 96-gallon garbage receptacle with the option to purchase up to two additional garbage receptacles. The Sanitation Department will provide weekly curbside garbage collection. Bi-weekly curbside recycling will be offered on a subscription basis. Brush collection will be provided on a bi-weekly basis. Residents are allotted three free bulk item pickups per year.

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The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.

Current Enrollment / Capacity

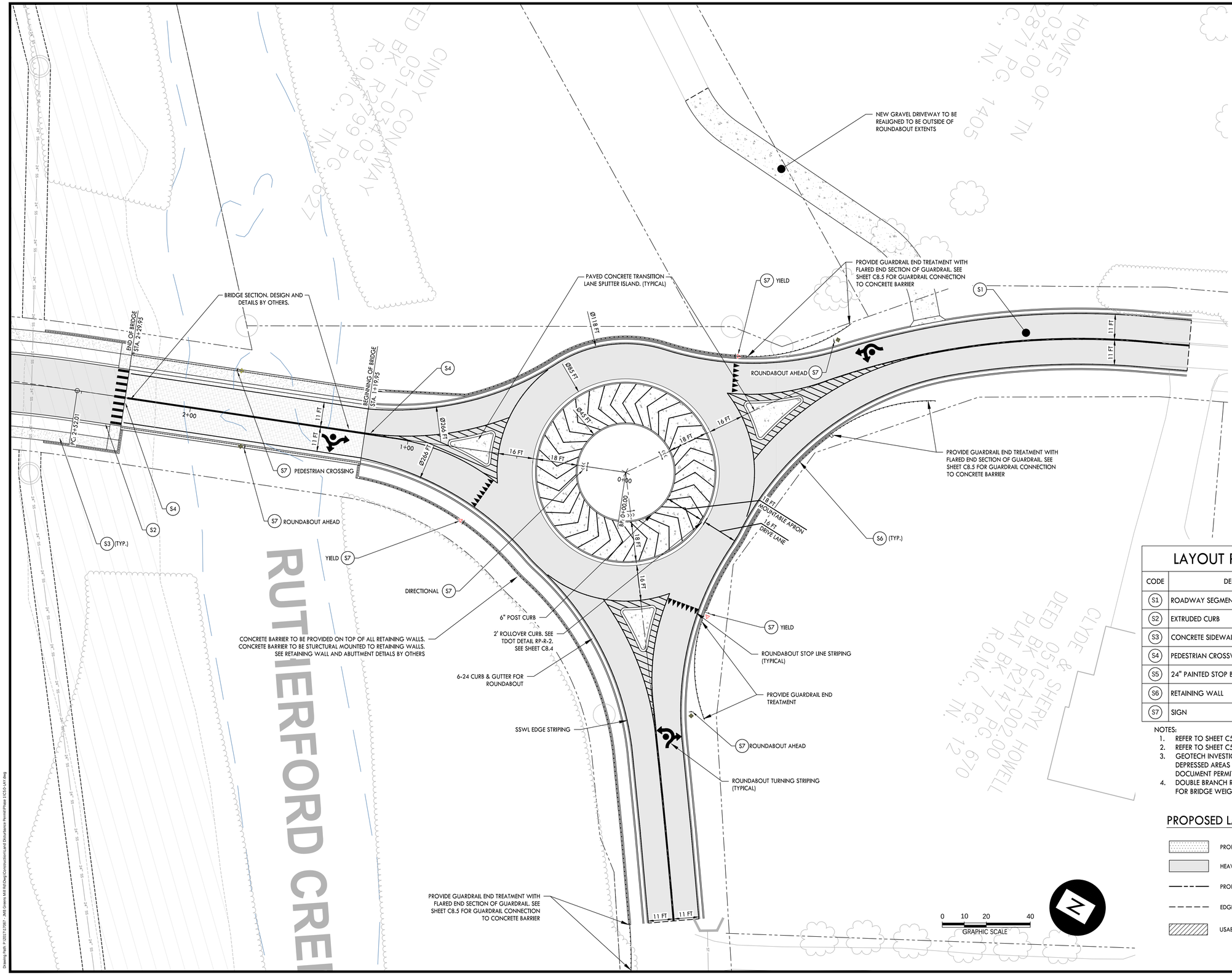
	Facility Name	Constructed	Sq. Ft.	Acreage	Capacity
Elementary	Baker	1960	43,920	12	340
	Battle Creek	2019	90,000	30	700
	Brown	1968	56,720	20	405
	Highland	1986	47,800	4.5	380
	Howell	1999	81,600	17.5	700
	Mt. Pleasant	1978	80,021	22	630
	Riverside	1984	71,150	14	500
	Spring Hill	1984	69,000	10	540
	Woodard	1990	76,200	17	600
	Wright	2005	97,765	18	740
					5535
Middle	Battle Creek	2019	125,000	45	900
	Cox	1997	137,200	25	900
	Mt. Pleasant	2001	113,938	29.2	550
	Spring Hill	2010	158,106	39.49	950
	Whitthorne	1979	175,600	17	1050
					4350
High	Battle Creek	2024	305,675	51	2000
	Central	2016	296,740	55	1700
	Mt. Pleasant	1969	110,759	31	600
	Spring Hill	1993	181,800	57	1200
					5500
Unit	Culleoka	1969	205,800	34	1020
	Hampshire	1978	83,410	13.12	500
	Santa Fe	1964	94,225	24	650
					2170
Other	Central Office	1960	15,400	1.5	
	College Hill	1958	42,211	2.26	
	Maintenance	1987	9,400	4.7	
	McDowell		46,165	7	
			2,815,605	**601.27**	**17555**

Current Enrollment	Capacity Used
282	82.9%
682	97.4%
340	84.0%
311	81.8%
581	83.0%
543	86.2%
378	75.6%
465	86.1%
586	97.7%
617	83.4%
4785	***86.4%***
758	84.2%
630	70.0%
386	70.2%
556	58.5%
948	90.3%
3278	***75.4%***
394	19.7%
1393	81.9%
369	61.5%
905	75.4%
3061	***55.7%***
863	84.6%
414	82.8%
548	84.3%
1825	***84.1%***
148	
13097	

Current Enrollment / Capacity

	Facility Name	Constructed	Sq. Ft.	Acreage	Capacity
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148	
13097	



LAYOUT PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
S1	ROADWAY SEGMENT	C8.0 - 1
S2	EXTRUDED CURB	C8.0 - 2
S3	CONCRETE SIDEWALK	C8.0 - 3
S4	PEDESTRIAN CROSSWALK	C8.0 - 7
S5	24" PAINTED STOP BAR	C8.0 - 8
S6	RETAINING WALL	SEE DESIGN BY OTHERS
S7	SIGN	-

NOTES:
1. REFER TO SHEET C5.0 FOR PARCEL AREA TABLES.
2. REFER TO SHEET C5.6 FOR TYPICAL LOT LAYOUT.
3. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.
4. DOUBLE BRANCH ROAD BRIDGE TO INCLUDE SIGNAGE FOR BRIDGE WEIGHT MAXIMUM.

PROPOSED LAYOUT LEGEND

- PROPOSED BUILDING
- HEAVY DUTY ASPHALT PAVEMENT
- PROPERTY LINE
- EDGE OF NEW PAVEMENT
- USABLE OPEN SPACE

CRUNK ENGINEERING LLC
7112 CROSSROADS BOULEVARD
SUITE 201
FRANKLIN, TN 37027
(615) 873-1795
WWW.CRUNKENG.COM

ENGINEERING CRUNK

ADAM WILSON CRUNK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
114180
2/29/24
STATE OF TENNESSEE

GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS		
No.	DATE	

02/29/24 17067

C5.1
ROUNDABOUT LAYOUT PLAN

Drawing Path: P:\2021\21067 - Mill Greens Mill Rd\Dwg\Construction\Land Disturbance Permit\Phase 1\C5.0-LAY.dwg

Metes and Bounds Description – Greens Mill Road Annexation

BEGINNING at a rebar rod in the southeast corner of Parcel Number: 051G A 002.00;

THENCE S32° 41’ 02”E a distance of 50.53 feet;

THENCE S57° 18’ 58”W a distance of 102.66 feet;

THENCE S66° 58’ 45”W a distance of 87.33 feet;

THENCE N83° 10’ 19”W a distance of 92.13 feet;

THENCE N48° 19’ 25”W a distance of 41.59 feet;

THENCE S32° 00’ 07”W a distance of 12.55 feet;

THENCE N47° 58’ 00”W a distance of 48.94 feet;

THENCE N28° 39’ 46”W a distance of 50.82 feet;

THENCE N24° 17’ 36”W a distance of 106.22 feet;

THENCE N49° 09’ 17”E a distance of 9.57 feet;

THENCE N65° 39’ 17”E a distance of 48.95 feet;

THENCE S24° 20’ 43”E a distance of 29.33 feet;

THENCE S29° 16’ 54”E a distance of 82.12 feet;

THENCE S47° 54’ 38”E a distance of 78.57 feet;

THENCE S83° 00’ 39”E a distance of 63.00 feet;

THENCE N67° 08’ 25”E a distance of 69.78 feet;

THENCE N48° 19’ 25”W a distance of 41.59 feet;

THENCE N57° 28’ 38”E a distance of 98.34 feet TO THE POINT OF BEGINNING

The total area of said portion of R.O.W. will be 27,508 square feet or 0.61 acres.

Metes and Bounds Description

BEGINNING at a rebar rod in the northeast corner of Parcel Number: 051 03403;

THENCE S32° 00’ 07”W a distance of 29.52 feet;

THENCE N47° 56’ 39”W a distance of 38.15 feet;

THENCE N48° 19’ 25”W a distance of 32.91 feet;

THENCE N32° 00’ 07”E a distance of 50.72 feet;

THENCE N48° 19’ 25”W a distance of 41.59 feet;

THENCE S48° 19’ 25”W a distance of 41.59 feet;

THENCE S07° 14’ 16”E a distance of 24.38 feet;

THENCE S29° 02’ 01”E a distance of 15.52 feet TO THE POINT OF BEGINNING

The total area of said parcel will be 3,174 square feet or 0.07 acres.

October 18, 2024

City of Columbia
Planning Department
700 N Garden St.
Columbia, TN 38401

RE: Statement of Compliance with Comprehensive Plan

The purpose of this letter is to make a statement of compliance with the City of Columbia's planning and zoning regulations.

Thank you,



Adam Crunk, PE
Crunk Engineering LLC
615-873-1795
adam@crunkeng.com

Acknowledgment

Name/Company:

Suzanne Swift – NewSpring Church

Title:

Risk and Legal Services Director

Address:

2940 Concord Rd., Anderson, SC 29621

Phone:

864-328-1632

Email:

Suzanne.swift@newsprings.cc

Signature:

Date: _____

CITY OF COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES

I, CINDY CONAWAY being the sole owner of the property more particularly described as Lot 1 on Plat of Record in Plat Book 11 Page 27 in the Maury County Register of Deeds office, do hereby, formally, request that the City of Columbia, Tennessee annex a portion of such property into such City as described in the attached legal description.

CINDY CONAWAY
Print Name

10/18/2024
Date

Signature

STAFF USE ONLY	
Docket Number:	Requested Agenda:

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * *1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*
Fold hard copy submittals larger than 8½"x11"
All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	2558 Greens Mill Rd., Columbia, TN 38401		
	TAX MAP: 51	GROUP:	PARCEL: 55.00
SUMMARY OF NATURE OF REQUEST AND WORK	This application is for the annexation of a portion of Greens Mill Rd. and a portion of the parcel 051 03403 for the development of The Landings at Greens Mill Road Subdivision.		

DATE OF PRE-APPLICATION CONFERENCE		*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
❑ Comprehensive Plan Amendment ☒ Annexation ❑ Rezoning ❑ Preliminary Plat ❑ Final Plat ❑ PUD Preliminary Master Plan ❑ PUD Final Site Plan ❑ Site Development Plan ❑ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ☒ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ☒ Requested Zone Listed ☒ Statement of Compliance with Comprehensive Plan ☒ Concept Plan **Preliminary Plats/Site Development Plans:** ❑ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ❑ Receipt of Payment for Pre-Application Meeting ☒ Written Legal Description copy ❑ Columbia Water System Availability Letter ❑ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs: ❑ Project Name (include Sections & Phases) ❑ Total Number of Lots/Residential Units ❑ Square Footage of Non-Residential Floor Space ❑ Total acreage

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT
All communications go to the Applicant's email that is provided.

NAME	Crunk Engineering, LLC	PHONE	615-873-1795
ADDRESS	7112 Crossroads Blvd., #201, Brentwood, TN 37027	EMAIL	patrick@crunkeng.com

PROPERTY OWNER NAME	Safe Harbor Residential	PHONE	865-622-1774
ADDRESS	105 Westpark Dr., #365, Brentwood, TN 37027	EMAIL	taylor@safeharborresidential.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Crunk Engineering LLC		10/18/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

The Landings at Greens Mill Phase 1B Final Plat

Project #:	24-0422	Location:	2558 Greens Mill Road
Applicant:	Crunk Engineering, LLC	Case Type(s):	Final Plat
Staff Planner:	Austin Brass, AICP	Proposed Use:	Single Family Homes

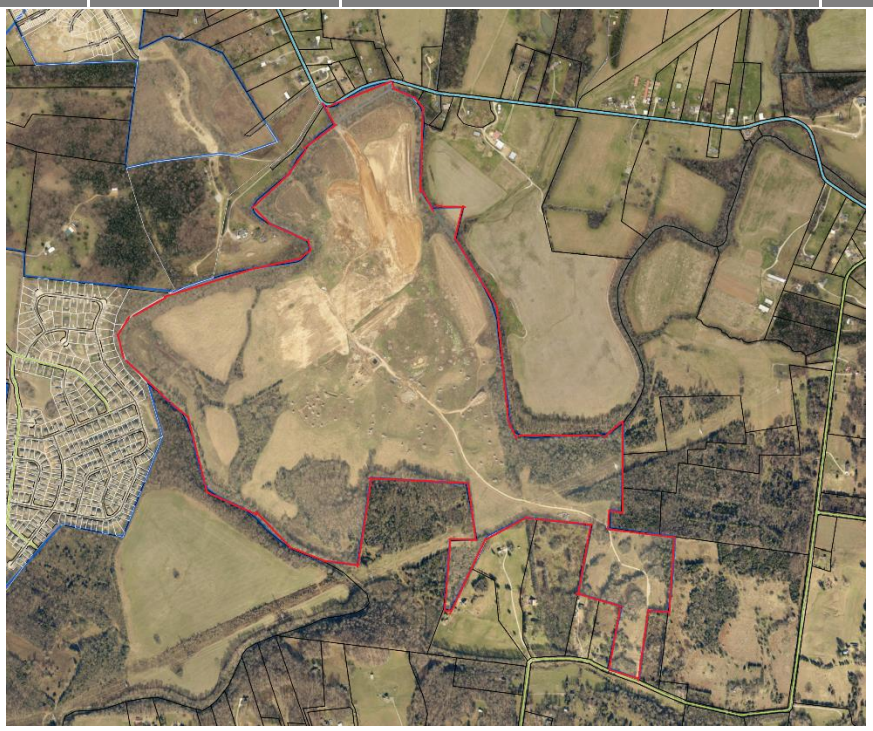
PROJECT SUMMARY

The applicant requests Final Plat approval for the creation of 40 lots and one open space. This Final Plat is part of an approved Planned Unit Development Master Plan & Preliminary Plat for the development of 550 homes on a 376.96-acre site. The Planning Commission approved a Final PUD Master Plan revision (*24-0146*) on July 10th, 2024 conforming to the Preliminary PUD Master Plan of an RS-10 Planned Unit Development with Phase 1 containing 100 lots.

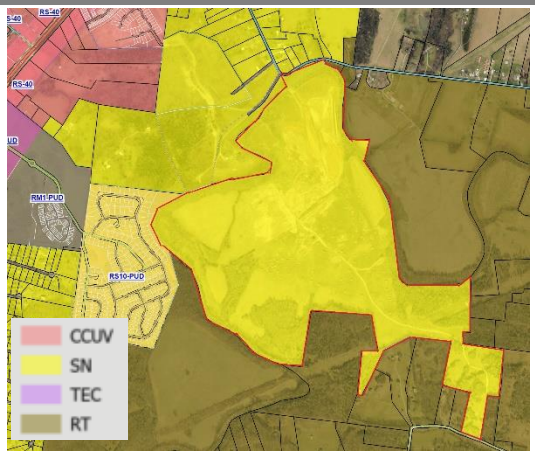
- A letter of credit in the amount of $440,000 has been provided for this Final Plat.
- A Land Disturbance Permit has been approved with Phase 1B being in construction. It shall be noted that this first phase contained no changes from the previously approved Preliminary Plat as approved in the Final PUD master plan on March 9th, 2022. The first phase included the Clubhouse and pool amenity.
- The Development Review Committee evaluated the proposal at its November 2024 meeting. Historically, staff concerns were lots that did not conform to the lot width typical of 73' as shown on all approved Master PUD documents. Planning Commission has since evaluated that all lot widths of 73' can be measured at the minimum building line and not the ROW. All lots have at least 73' at the ROW with the exception of lots 1065-1070 & lots 1014-1012 where the 73' measurement will be from the minimum building line.
- The Planning Commission is the **decision-making authority** for the Final Plat.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

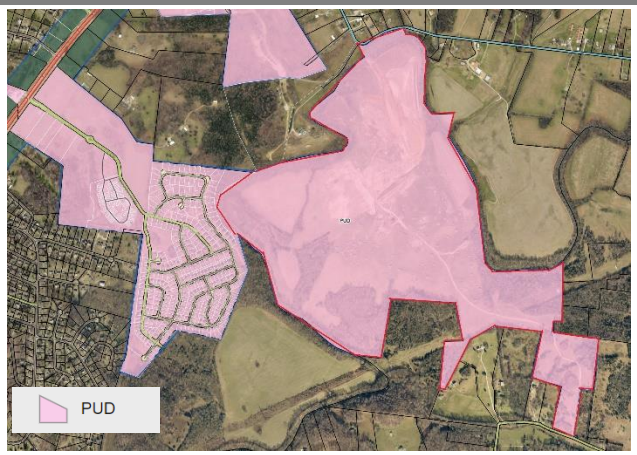
SITE INFORMATION

CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
R-PUD	In-Development	Infrastructure for Development	+/- 14.13 Acres



FUTURE LAND USE MAP	ZONING MAP





SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	Suburban Neighborhoods	PUD	In Development (*SF Homes)*
North	N/A	County Zoning (A-2)	Rural Residential
South	Rural Transition	County Zoning (A-1)	Vacant Land
East	Rural Transition	County Zoning (A-1)	Vacant Land
West	Suburban Neighborhoods	County Zoning (A-1) PUD (*Honey Farms*)	Vacant Land/ Residential

CONFORMITY WITH ZONING ORDINANCE

The Final Plat does not conform to the PUD Master Plan lot width typical indicating all lot widths of 73’ at the right-of-way.

RS-10 PUD Standards (*Approved Under Zoning Ordinance 3638*)		
Standard:	**Preliminary PUD Master**	**Approved Final PUD Master Plan**
Lots:	Phase 1 Lots: 174 Phase 2 Lots: 175 Phase 3 Lots: 156 Phase 4 Lots: 45 Total Lots: 550	Phase 1 Lots: 100 Phase 2 Lots: 218 Phase 3 Lots: 232 Phase 4 Lots: None Total Lots: 550
Setbacks / Yards -	Front Setback / Yard, Minor Collector: 30’	Front Setback / Yard, Minor Collector: 30’
	Front Setback / Yard, Local Street: 25’	Front Setback / Yard, Local Street: 25’
	Side Setback / Yard: 10’	Side Setback / Yard: 10’
	Rear Setback/ Yard: 20’	Rear Setback/ Yard: 20’
Min Lot Size & Width:	Min Lot Size: 10,000 SF	Min Lot Size: 10,000 SF
	Min Lot Width: 73 ft.	Min Lot Width: 73 ft.

Open Space:	Required: 6% (376 acres) Provided: 169 acres (25%)	Required: 6% (376 acres) Provided: 178 acres (47%) Usable Open Space (33%): 7.46 acres Provided: 9.20 acres

REVIEW PROCESS

The Development Review Committee evaluated the proposed Final Plat at its November 2024 meeting, as directed by section **8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package and summarized above.

Section **8.5.24** of the Zoning Ordinance directs the Planning Commission to review Subdivision Plats for conformity with the standards of the Ordinance and the City Subdivision Regulations. The Ordinance indicates that all Preliminary and Final Plats must be prepared, submitted, reviewed and acted upon in accordance with the Subdivision Regulations.

The Planning Commission is the Decision-Making Authority for Final Plats under **§ 8.3.3.B.1** of the Zoning Ordinance and **§ 2.3** of the Subdivision Regulations.

Section **2.3.6** of the Subdivision Regulations establishes the review criteria for approval of Final Plats.

> *A. Recommendations and final action on a Final Plat shall be based on consideration of the following criteria:*
>
> *1. Whether the proposed Final Plat complies with the applicable zoning district and overlay districts;*
>
> *2. Whether the proposed Final Plat is consistent with all standards of these Subdivision Regulations and other related codes and ordinances enforced by the City; and*
>
> *3. Whether the proposed Final Plat meets all the requirements or conditions of any applicable development approvals, such as development plans or associated modification of standards.*
>
> *B. Final Plat approval shall be subject to the completion of required improvements, or in lieu, the CMPC may approve a Performance Agreement.*

In the event of a denial, **§ 2.3.5** of the Subdivision Regulations requires the Planning Commission to identify the specific parts of applicable plans and regulations with which the plat does not comply.

COMMENTARY FROM PROFESSIONAL PLANNING STAFF

This Final Plat conforms to the previously approved Final PUD Master Plan. Several lot will have a minimum width 73' measured from the MBSL line as previously evaluated by Planning Commission.

SUMMARY OF DEVELOPMENT REVIEW COMMITTEE COMMENTS

The DRC reviewed this proposal at its November meeting. A full list of comments, and the applicant's responses, is provided in the agenda packet.

SAMPLE MOTIONS

Approve:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in section 1.24.7 of the City of Columbia Zoning Ordinance, and Section 2.2.6 of the Subdivision Regulations, have been satisfied and approve revised Preliminary Plat as presented [, subject to technical comments and other conditions presented by planning staff].

Approve Subject to Conditions:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in section 1.24.7 of the City of Columbia Zoning Ordinance, and Section 2.2.6 of the Subdivision Regulations, have been satisfied and approve the revised Preliminary Plat subject to the following conditions: [list conditions of approval crafted by Planning Commission].

Deny:

Move to deny the Site Development Plan and Preliminary Plat having found, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in section 1.24.7 of the City of Columbia Zoning Ordinance, and Section 2.2.6 of the Subdivision Regulations are not satisfied [list specific reasons for denial].

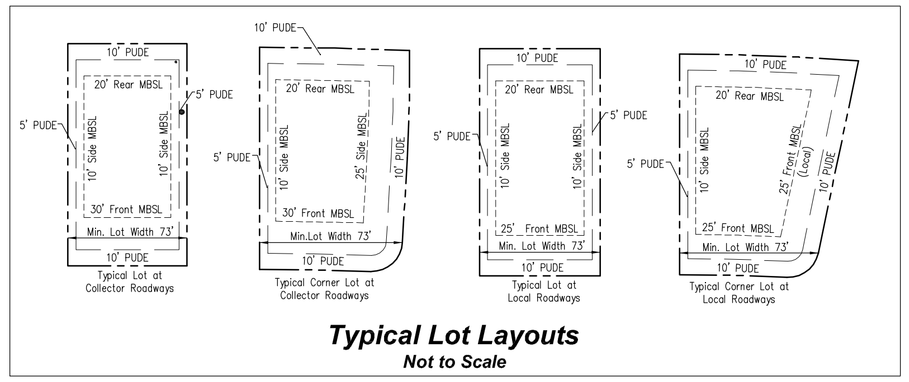
Defer:

Move to find that there is insufficient information to make a decision, defer the matter to the next regularly scheduled meeting of the Planning Commission, and request that the [applicant/staff] provide: [list additional information] for review at that future meeting.

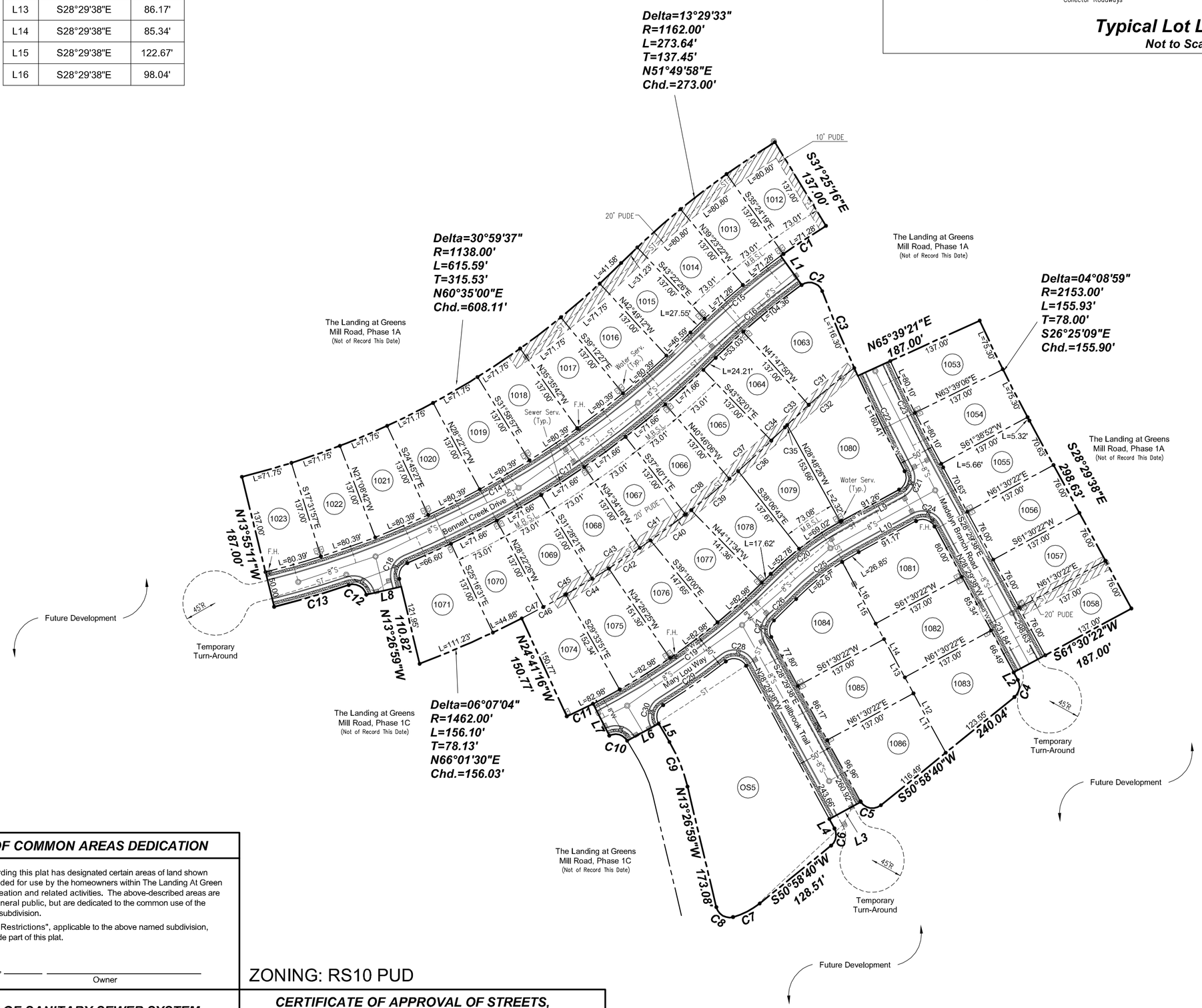
Curve Table						
Curve #	DELTA	RADIUS	TANGENT	LENGTH	CDH BEARING	CHORD
C1	04°14'22"	1025.00'	37.94'	75.84'	S56°27'33"W	75.83'
C2	104°27'39"	19.00'	24.52'	34.64'	S73°26'02"E	30.04'
C3	03°08'27"	2340.00'	64.15'	128.27'	S22°46'26"E	128.26'
C4	79°28'18"	19.00'	15.79'	26.35'	S11°14'31"W	24.29'
C5	96°53'54"	19.00'	21.44'	32.13'	N80°34'23"W	28.44'
C6	79°28'18"	19.00'	15.79'	26.35'	S11°14'31"W	24.29'
C7	24°03'37"	100.00'	21.31'	41.99'	S63°00'28"W	41.69'
C8	91°30'45"	19.00'	19.51'	30.35'	N59°12'21"W	27.22'
C9	17°09'58"	225.00'	33.96'	67.41'	N22°01'58"W	67.16'
C10	86°27'42"	19.00'	17.86'	28.67'	N73°50'48"W	26.03'
C11	02°23'23"	975.00'	20.33'	40.66'	S64°07'03"W	40.66'
C12	95°09'53"	19.00'	20.79'	31.56'	N61°01'55"W	28.05'
C13	04°41'40"	1325.00'	54.31'	108.56'	S73°43'58"W	108.53'
C14	30°59'37"	1275.00'	353.51'	689.70'	N60°35'00"E	681.32'
C15	09°15'10"	1025.00'	82.95'	165.53'	N49°42'47"E	165.35'
C16	09°14'57"	975.00'	78.87'	157.39'	S49°42'40"W	157.22'
C17	22°31'06"	1325.00'	263.78'	520.75'	S56°20'44"W	517.41'
C18	81°03'16"	19.00'	16.24'	26.88'	S27°04'39"W	24.69'
C19	18°09'03"	975.00'	155.74'	308.87'	N53°50'50"E	307.58'
C20	16°44'03"	425.00'	62.51'	124.13'	N53°08'20"E	123.69'
C21	89°29'06"	19.00'	18.83'	29.67'	N16°45'49"E	26.75'
C22	3°38'04"	2340.00'	74.24'	148.44'	N26°09'41"W	148.41'
C23	4°08'59"	2290.00'	82.96'	165.85'	S26°25'09"E	165.82'
C24	90°00'00"	19.00'	19.00'	29.85'	N73°29'38"W	26.87'
C25	16°44'03"	375.00'	55.16'	109.53'	S53°08'20"W	109.14'
C26	2°24'40"	1025.00'	21.57'	43.13'	S45°58'39"W	43.13'
C27	75°40'37"	19.00'	14.76'	25.10'	S09°20'40"W	23.31'
C28	99°23'13"	19.00'	22.40'	32.96'	N78°11'14"W	28.98'
C29	05°58'17"	1025.00'	53.46'	106.83'	S55°06'18"W	106.78'
C30	88°42'23"	19.00'	18.58'	29.42'	S13°44'15"W	26.57'
C31	05°35'50"	838.00'	40.96'	81.86'	S51°00'05"W	81.83'
C32	08°25'06"	838.00'	61.67'	123.13'	S49°35'27"W	123.02'
C33	03°06'59"	838.00'	22.79'	45.58'	S46°38'41"W	45.57'
C34	01°02'48"	1462.00'	13.35'	26.71'	S45°36'35"W	26.71'
C35	00°17'42"	838.00'	2.16'	4.32'	S45°14'02"W	4.32'
C36	03°30'46"	1462.00'	44.83'	89.64'	S46°50'35"W	89.62'
C37	03°05'55"	1462.00'	39.54'	79.07'	S47°40'57"W	79.06'
C38	03°05'55"	1462.00'	39.54'	79.07'	S50°46'52"W	79.06'
C39	03°20'16"	1462.00'	42.60'	85.17'	S50°16'06"W	85.16'
C40	02°46'49"	1462.00'	35.48'	70.95'	S53°19'38"W	70.94'
C41	03°05'55"	1462.00'	39.54'	79.07'	S53°52'47"W	79.06'
C42	02°45'24"	1462.00'	35.18'	70.34'	S56°05'45"W	70.33'
C43	03°05'55"	1462.00'	39.54'	79.07'	S56°58'42"W	79.06'
C44	02°44'43"	1462.00'	35.03'	70.05'	S58°50'48"W	70.05'
C45	03°05'55"	1462.00'	39.54'	79.07'	S60°04'37"W	79.06'
C46	02°44'48"	1462.00'	35.05'	70.08'	S61°35'34"W	70.08'
C47	01°20'24"	1462.00'	17.10'	34.19'	S62°17'46"W	34.19'

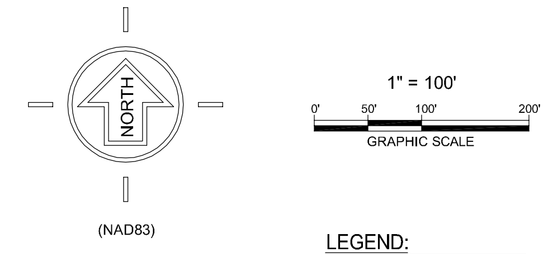
LINE TABLE		
LINE	BEARING	LENGTH
L1	S35°35'14"E	50.00'
L2	S28°29'38"E	12.06'
L3	S61°30'22"W	50.04'
L4	S28°29'38"E	15.15'
L5	N30°36'57"W	29.79'
L6	S61°21'33"W	50.03'
L7	N27°04'39"W	50.00'
L8	S76°49'28"W	50.00'
L9	N61°30'22"E	91.26'
L10	S61°30'22"W	91.17'
L11	S28°29'38"E	94.35'
L12	S28°29'38"E	119.82'
L13	S28°29'38"E	86.17'
L14	S28°29'38"E	85.34'
L15	S28°29'38"E	122.67'
L16	S28°29'38"E	98.04'

TOTAL AREA THIS RECORDING = 615,680 S.F. or 14.13 Acres ±



Typical Lot Layouts
Not to Scale





(NAD83)

LEGEND:

- IP(0)○ Existing Iron Pipe – IP(0)
- #(0)○ Existing Iron Rod – IR(0)
- IR(N)● Iron Rod (New) – IR(N)
- Sanitary Manhole
- Fire Hydrant (F.H.)
- Catch Basin
- Storm Manhole
- Concrete Headwall
- PUDE Public Utility & Drainage Easement
- MBSL Minimum Building Setback Line
- R.O.M.C. Registers' Office Maury County

AREA SUMMARY		
LOT	SQ. FT.	ACREAGE
1012	10,417	0.24
1013	10,417	0.24
1014	10,417	0.24
1015	10,066	0.23
1016	10,422	0.24
1017	10,422	0.24
1018	10,422	0.24
1019	10,422	0.24
1020	10,422	0.24
1021	10,422	0.24
1022	10,422	0.24
1023	10,422	0.24
1053	10,645	0.24
1054	10,645	0.24
1055	10,428	0.24
1056	10,412	0.24
1057	10,412	0.24
1058	10,412	0.24
1063	14,209	0.33
1064	10,242	0.24
1065	10,325	0.24
1066	10,325	0.24
1067	10,325	0.24
1068	10,325	0.24
1069	10,325	0.24
1070	10,325	0.24
1071	13,240	0.30
1074	11,614	0.27
1075	11,632	0.27
1076	11,468	0.26
1077	11,118	0.26
1078	10,741	0.25
1079	11,609	0.27
1080	19,233	0.44
1081	13,477	0,31
1082	11,692	0.27
1083	14,621	0.34
1084	15,013	0.34
1085	11,805	0.27
1086	14,551	0.33
OS5	49,797	1.14

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAT IS TO CREATE 40 BUILDABLE LOTS, 1 OPEN SPACE LOT, DEDICATION OF RIGHT OF WAY AND EASEMENTS.
2. PROPERTY SHOWN HEREON IS PART OF PARCEL (55.00) ON MAURY COUNTY PROPERTY MAP 51.
3. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPZONE 4100, NAD 83 DATUM.
4. BEING PART OF THE SAME PROPERTY CONVEYED TO 2558 GREENS MILL, LLC AS OF RECORD IN BOOK R2799, PAGE 298 REGISTERS' OFFICE, MAURY COUNTY, TENNESSEE.
5. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, A PORTION OF THIS PROPERTY IS LOCATED WITHIN AN AREA OF FLOOD INUNDATION AS SHOWN ON FEMA MAP NUMBER: 47119C0180E, DATED: 4/16/2007. CITY OF COLUMBIA NUMBER 475423 - PANEL 0180 - SUFFIX E FLOOD ZONES "AE" AND "X"
6. THIS PROPERTY IS CURRENTLY ZONED: RS 10 PUD.
7. WATER AND SANITARY SEWER SERVICES TO BE PROVIDED BY COLUMBIA PUBLIC UTILITIES.
8. THERE IS A 10' PUBLIC UTILITY & DRAINAGE EASEMENT RUNNING PARALLEL TO THE REAR PROPERTY LINE AND ALL STREET R.O.W. UNLESS SHOWN OTHERWISE. THERE IS A 5' PUBLIC UTILITY & DRAINAGE EASEMENT RUNNING PARALLEL TO THE SIDE PROPERTY LINE UNLESS SHOWN OTHERWISE.
9. XXX INDICATES STREET ADDRESS.
10. ALL UTILITIES ARE TO BE UNDERGROUND.
11. NO MOBILE HOMES SHALL BE PERMITTED.
12. NO DRIVEWAY TO BE CONSTRUCTED OVER SANITARY SEWER SERVICE LINE.
13. FOR MINIMUM YARD LINES SEE THE TYPICAL LOT DETAILS.
14. ALL NOTES AND CERTIFICATES APPLY TO ALL SHEETS.
15. SIDEWALKS ARE 5' WIDE, UNLESS OTHERWISE NOTED.
16. EXISTING USE: VACANT, PROPOSED USE : ONE-FAMILY, DETACHED DWELLINGS
17. ALL OPEN SPACE TRACTS SHALL BE OWNED AND MAINTAINED BY THE LANDING AT GREENS MILL ROAD HOMEOWNERS ASSOCIATION.
18. ROADS, UTILITIES, AND OTHER FACILITIES HAVE BEEN FILED AS REQUIRED BY THE CITY OF COLUMBIA SUBDIVISION REGULATIONS.
19. THIS SUBDIVISION IS SUBJECT TO THE TERMS AND CONDITIONS OF THE RECORDED STORMWATER INSPECTION AND MAINTENANCE AGREEMENT FOR THESE FACILITIES AS RECORDED IN BOOK _____, PAGE _____, R.O.M.C., TN.
20. A STREAM BUFFER AS SHOWN ON THIS PLAN IS TO BE A PERMANENT WATER QUALITY BUFFER IN ACCORDANCE WITH ARTICLE 6 SECTION 9 OF THE CITY OF COLUMBIA STORMWATER ORDINANCE. THIS STREAM BUFFER IS TO REMAIN IN A NATURAL VEGETATED STATE FREE OF OBSTRUCTIONS, STRUCTURES, AND INTRUSIONS. BUFFER IS TO BE A NO MOW BUFFER AREA, AND THE MAINTENANCE WITHIN STREAM BUFFERS TO BE LIMITED TO HAND OPERATED TOOLS AND BE PERFORMED IN ACCORDANCE WITH CURRENT CITY OF COLUMBIA STORMWATER ORDINANCE AND OR AT THE DIRECTION OF THE CITY OF COLUMBIA ENGINEERING DIVISION.
21. NO OBSTRUCTIONS OR ENCROACHMENTS WHICH IMPEDE THE FLOW OF STORMWATER SHALL BE PERMITTED WITHIN PUBLIC DRAINAGE EASEMENTS. THE CITY OF COLUMBIA IS NOT RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY ENCROACHMENTS THAT ARE DAMAGED OR REMOVED IN THE COURSE OF MAINTENANCE ACTIVITY WITHIN EASEMENTS AS REFERENCED IN THE COLUMBIA GENERAL MANAGEMENT CODE, CHAPTER 15, ARTICLE 1, SECTION 15-8.
22. THE FINAL PLAT SHOWN HEREON IS VESTED UNDER THE PREVIOUS ZONING CODE WITHIN ZONING ORDINANCE 3638 AS AN RS-10 PLANNED UNIT DEVELOPMENT.
23. THE AMENTITY CENTER AND ASSOCIATED PARKING WILL REQUIRE SEPERATE PERMIT AND SITE PLAN REVIEW.

ZONING: RS10 PUD

CERTIFICATE OF SUBDIVISION NAME AND STREET NAMES

Subdivision name and street names approved by the City Engineering Department and by E-911 Maury County.

Maury County E-911 — Date

CERTIFICATE OF COMMON AREAS DEDICATION

2558 Greens Mill, LLC, in recording this plat has designated certain areas of land shown hereon as common areas intended for use by the homeowners within The Landing At Green Mills Road - Phase 1B, for recreation and related activities. The above-described areas are not dedicated for use by the general public, but are dedicated to the common use of the homeowners within the named subdivision.

"Declaration of Covenants and Restrictions", applicable to the above named subdivision, is hereby incorporated and made part of this plat.

Date — Owner

CERTIFICATE OF COMPLIANCE

I hereby certify that the final subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations and other adopted ordinances and policies.

City Engineer, Columbia, Tennessee — Date

CERTIFICATE OF SANITARY SEWER SYSTEM

I hereby certify that the sanitary sewer system outlined or indicated on this final subdivision plat has been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

Director of Wastewater Department, Columbia,Tennessee — Date

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE AND UTILITIES

I hereby certify that the streets, drainage and utilities outlined or indicated on this final subdivision plat have been installed in accordance with City specifications, or a performance surety in the amount of $_____ for streets and drainage has been posted with the City of Columbia, Tennessee to assure completion of such improvements.

City Engineer, Columbia, Tennessee — Date

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the final subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations, with the exception of such variances, if any, as noted in the minutes of the Columbia Municipal Planning Commission, and that it has been approved for recording in the Office of the Maury County Register of Deeds.

Planning Director, Columbia, Tennessee — Date

CERTIFICATE OF SURVEY ACCURACY

I (we) do hereby certify that to the best of my (our) knowledge and belief this is a true and accurate survey of the property shown hereon; that this is a Category "1" Land Survey as defined in Rule 0820-3-.01(4)(a), Chapter 18, Tennessee Code Annotated, and the ratio of precision is greater than or equal to 1:10,000.

M. Trevor Gorman, RLS #2076, Registered Land Surveyor, Tennessee License Number

10-21-24

Last Revised: 10-21-2024
~~9-13-2024~~
Date

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon as evidenced in Book R2799, Page 298, Maury County Register's Office, and adopt this final subdivision plat of the property as shown hereon and dedicate all public ways and easements as noted with my (our) free consent.

Owner(s) — Date

Title (if acting for corporation or partnership)

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I hereby certify that the water system(s) outlined or indicated on this final subdivision plat entitled The Landing at Greens Mill Road - Phase 1B has / have been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

Date — Name, Title, and Agency or Authorized Approving Agent

REVISIONS:

1 By:MTG Date: 10-21-2024. Revise per staff comments.

Prepared By:
JTA LAND SURVEYING, INC.
3384 N. Mt. Juliet Road, Suite 900
Mt. Juliet, TN. 37122

FINAL PLAT
THE LANDING AT GREENS MILL ROAD
PHASE 1B
GREEN MILLS ROAD
Property Map # 51 - Parcel (55.00)

CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

DRAWN BY: MTG, TMF, RR — *Scale : 1" = 100'* — (See Revisions) DATE: SEPTEMBER 13, 2024 — Job No. 2024-469

SHEET 1 OF 1

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, November 12, 2024

ITEM NO.
24-0422

DESCRIPTION: 2558 Greens Mill Rd Phase 1B

COMMENTS:

Planning

1. Provide street names for all road sections unlisted with approval by E-911.
2. The lead staff person for this case is Austin Brass, AICP; he will prepare the staff report for this item. Please contact abrass@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
3. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.

Fire

4. Please add existing roads so I can tell where all connections are. All dead end roads over 150', in length, will need an approved turnaround. Please show on the plans.

Engineering

5. Show adjoining properties.
6. Provide LOC in the amount of $440,000 prior to resubmittal date.
7. Reference stormwater maintenance agreement prior to resubmittal date. (R3024/1279)
8. Grading shall substantially conform to approved construction plans (within 1 ft.)
9. Binder and curbing shall be installed prior to resubmittal date.
10. Label roads as Public, include ROW width, and classification (minor local, major local, etc.)

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Building

11. No comments provided.

Police

12. No comments provided.

Maury County Highway Dept.

13. The Maury County Highway Department has not had any contact with the developer of this project with regard to connection to the Maury County R.O.W.

14. Provide executed Development Agreement to the Maury County Highway Department detailing agreed upon impact fee schedule. Draft Development Agreement is attached for review / use.
15. The Maury County Highway Department (MCHD) understands a revised development agreement is being drafted for review / approval by the MCHD with the intent to present the approved agreement to the County Commission in January 2025. Applicant should continue coordination and collaboration with the MCHD during the finalization of the development agreement.

Duck River Electric Membership Corp

16. No comments.

Maury County Schools

17. Battle Creek Elementary, Battle Creek Middle, Battle Creek High 9/10 (24/25 SY), 9-11 (25/26 SY) 9-12 (26/27 SY). Spring Hill High 11-12 (24/25 SY) 12 (25/26 SY).
    See Attached Capacity Numbers
    The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.
    * Due to numbers, MCPS will be rezoning all Columbia and Spring Hill elementary schools for the 25/26 SY.

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Columbia Power

18. CPWS BB Plan to Serve

19. Columbia Power System has an existing power line near your proposed development. We are willing to serve this commercial development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

Columbia Water

20. "Coordinate walk-through with CPWS.

    Be prepared to deed infrastructure to CPWS at time of plat signing, water system must be active at the time of plat signing."

Atmos Energy

21. No comments provided.

Maury County E911

22. No comments provided.

ATT

23. ATT TO SERVE

Public Works

24. No comments.

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Wastewater

25. Columbia Wastewater requires submittal of testing, as-builts, CCTV and a reduced maintenance LOC for review and approval by our Department before we approve building permits.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or msanders@columbiatn.gov if you encounter difficulties with the online portal.

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Surveyors Response Letter – October 21, 2024 - By: M. Trevor Gorman - RLS # 2875
For: Final Plat – The Landing at Greens Mill, Phase 1B (Item No. 24-0422)
JTA Land Surveying, Inc. – Job No. 2024-469

We have made the following corrections / revisions to the Final Plats. JTA responses are in RED as follows:

Planning

1. Lots 1012-1014, 1079, 1070-1065 are less than 73' at ROW line. Please provide MBSL on these lots noting the width of the MBSL to be at least 73'. A line was added at the rear of lots 1017-1012 indicating length of lots at rear that may not be necessary for this review. Corrected on Plat.
2. Provide street names for all road sections unlisted with approval by E-911. Corrected on Plat.

Fire

3. All dead end roads over 150' will need an approved turnaround, please show on plans. Added to Plat.

Engineering

4. Show adjoining properties. Added to Plat.
5. Provide LOC in the amount of $440,000 prior to resubmittal date. Acknowledged.
6. Record and reference stormwater maintenance agreement prior to resubmittal date. Acknowledged.
7. Grading shall substantially conform to approved construction plans (within 1 ft.) Acknowledged.
8. Binder and curbing shall be installed prior to resubmittal date. Acknowledged.
9. Provide all road names on final plat. Added to Plat.
10. Include open space lots in lot table. Added to Plat.
11. Show easements for storm as hatched area (20 ft width). See lots 1075-1080 and 1057/1058, 1012-1017. Added to Plat.
12.
13. Please provide the correct certificates and language as provide in Appendix A - Subdivision Regulations. Corrected on Plat.

Building

14. No comments provided. Acknowledged.

Police

15. No comments provided. Acknowledged.

Maury County Highway Dept.

16. The Maury County Highway Department has not had any contact with the developer of this project with regard to connection to the Maury County R.O.W. Acknowledged.

17. Provide executed Development Agreement to the Maury County Highway Department detailing agreed upon impact fee schedule. Draft Development Agreement is attached for review / use. Acknowledged.

Duck River Electric Membership Corp

18. No comments. Acknowledged.

Maury County Schools

19. Battle Creek Elementary, Battle Creek Middle, Battle Creek High 9/10 (24/25 SY), 9-11 (25/26 SY) 9-12 (26/27 SY). Spring Hill High 11-12 (24/25 SY) 12 (25/26 SY). The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.
    See Attached Capacity Numbers. Acknowledged.

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    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development. Acknowledged.
21. CPWS BB Plan to Serve. Acknowledged.

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Be prepared to deed infrastructure to CPWS at time of plat signing, water system must be active at the time of plat signing." Acknowledged.

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Maury County E911

24. No comments provided. Acknowledged.

ATT

25. ATT TO SERVE. Acknowledged.

Public Works

26. No comments. Acknowledged.

Wastewater

27. No comments. Acknowledged.

Please let us know if you have any questions, or if we need to get you anything else.

Thanks,

Trevor Gorman
JTA Land Surveying, Inc.
3384 N Mt. Juliet Road – Suite 900
Mt. Juliet, Tennessee 37122
Phone: (615) 490-6920
Email: trevor.jta@comcast.net

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DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, October 8, 2024

ITEM NO.
24-0422

DESCRIPTION: 2558 Greens Mill Rd Phase 1B

COMMENTS:

Planning

1. Lots 1012-1014, 1079, 1070-1065 are less than 73' at ROW line. Please provide MBSL on these lots noting the width of the MBSL to be at least 73'. A line was added at the rear of lots 1017-1012 indicating length of lots at rear that may not be necessary for this review.
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Current Enrollment / Capacity

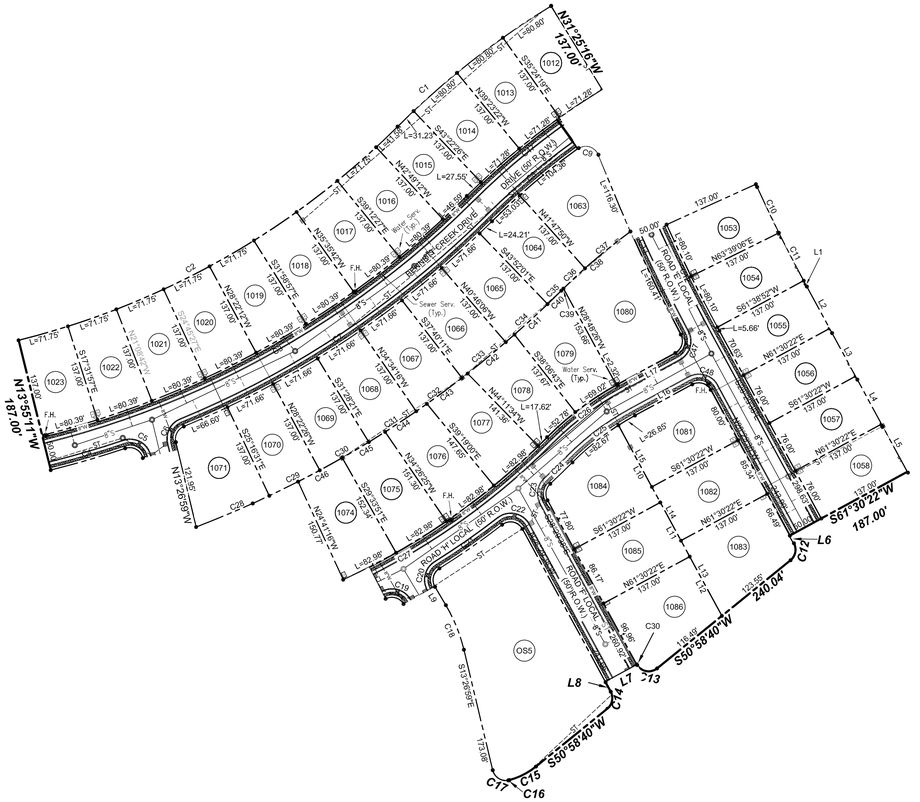
	Facility Name	Constructed	Sq. Ft.	Acreage	Capacity
Elementary	Baker	1960	43,920	12	340
	Battle Creek	2019	90,000	30	700
	Brown	1968	56,720	20	405
	Highland	1986	47,800	4.5	380
	Howell	1999	81,600	17.5	700
	Mt. Pleasant	1978	80,021	22	630
	Riverside	1984	71,150	14	500
	Spring Hill	1984	69,000	10	540
	Woodard	1990	76,200	17	600
	Wright	2005	97,765	18	740
					5535
Middle	Battle Creek	2019	125,000	45	900
	Cox	1997	137,200	25	900
	Mt. Pleasant	2001	113,938	29.2	550
	Spring Hill	2010	158,106	39.49	950
	Whitthorne	1979	175,600	17	1050
					4350
High	Battle Creek	2024	305,675	51	2000
	Central	2016	296,740	55	1700
	Mt. Pleasant	1969	110,759	31	600
	Spring Hill	1993	181,800	57	1200
					5500
Unit	Culleoka	1969	205,800	34	1020
	Hampshire	1978	83,410	13.12	500
	Santa Fe	1964	94,225	24	650
					2170
Other	Central Office	1960	15,400	1.5	
	College Hill	1958	42,211	2.26	
	Maintenance	1987	9,400	4.7	
	McDowell		46,165	7	
			2,815,605	**601.27**	**17555**

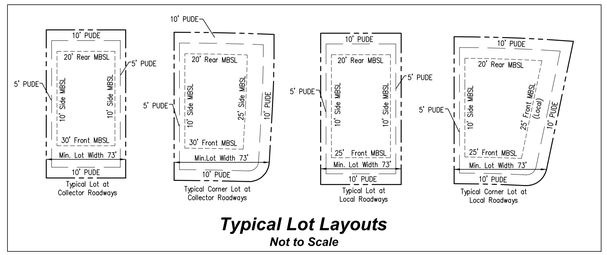
Current Enrollment	Capacity Used
282	82.9%
682	97.4%
340	84.0%
311	81.8%
581	83.0%
543	86.2%
378	75.6%
465	86.1%
586	97.7%
617	83.4%
4785	***86.4%***
758	84.2%
630	70.0%
386	70.2%
556	58.5%
948	90.3%
3278	***75.4%***
394	19.7%
1393	81.9%
369	61.5%
905	75.4%
3061	***55.7%***
863	84.6%
414	82.8%
548	84.3%
1825	***84.1%***
148	
13097	

TOTAL AREA THIS RECORDING = 457,380 S.F. or 10.50 Acres ±

Curve Table						
Curve #	DELTA	RADIUS	TANGENT	LENGTH	CDH BEARING	CHORD
C1	022°08'22"	1162.00'	227.34	449.006	S56°09'23"W	446.218
C2	030°59'37"	1138.00'	315.53	615.591	N60°35'00"E	608.113
C3	030°59'37"	1275.00'	353.51	689.700	S60°35'00"W	681.322
C4	004°41'40"	1325.00'	54.31	108.563	S73°43'58"W	108.533
C5	095°09'53"	19.00'	20.79	31.558	N61°01'55"W	28.053
C6	081°03'16"	19.00'	16.24	26.879	S27°04'39"W	24.693
C7	022°31'06"	1325.00'	263.78	520.750	S56°20'44"W	517.405
C8	009°14'57"	975.00'	78.87	157.392	S49°42'40"W	157.221
C9	104°27'39"	19.00'	24.52	34.641	N73°26'02"W	30.038
C10	002°00'14"	2153.00'	37.66	75.304	S25°20'46"E	75.301
C11	002°00'14"	2153.00'	37.66	75.304	S27°21'01"E	75.301
C12	079°28'18"	19.00'	15.79	26.354	S11°14'31"W	24.291
C13	096°53'54"	19.00'	21.44	32.133	N80°34'23"W	28.438
C14	079°28'18"	19.00'	15.79	26.354	S11°14'31"W	24.291
C15	024°03'37"	100.00'	21.31	41.993	S63°00'28"W	41.685
C16	004°43'34"	19.00'	0.78	1.567	S77°24'03"W	1.570
C17	086°47'11"	19.00'	17.96	28.779	N56°50'34"W	26.106
C18	017°09'58"	225.00'	33.96	67.411	N22°01'58"W	67.159
C19	086°27'42"	19.00'	17.86	28.672	N73°50'48"W	26.028
C20	088°42'23"	19.00'	18.58	29.416	N13°44'15"E	26.565
C21	005°58'17"	1025.00'	53.46	106.827	N55°06'18"E	106.779
C22	099°23'13"	19.00'	22.40	32.958	S78°11'14"E	28.979
C23	075°40'37"	19.00'	14.76	25.095	N09°20'40"E	23.311
C24	002°24'40"	1025.00'	21.57	43.134	N45°58'39"E	43.131
C25	016°44'03"	375.00'	55.16	109.526	N53°08'20"E	109.137
C26	016°44'03"	424.00'	62.36	123.837	N53°08'20"E	123.397
C27	030°16'04"	976.00'	263.97	515.595	N59°54'21"E	509.621
C28	004°21'32"	1462.00'	55.64	111.226	N66°54'15"E	111.199
C29	003°05'55"	1462.00'	39.54	79.066	N63°10'32"E	79.056
C30	003°05'55"	1462.00'	39.54	79.066	N60°04'37"E	79.056
C31	003°05'55"	1462.00'	39.54	79.066	N56°58'42"E	79.056
C32	003°04'57"	1469.81'	39.55	79.072	N53°53'01"E	79.063
C33	003°04'55"	1469.81'	39.54	79.060	N50°46'37"E	79.050
C34	003°05'55"	1462.00'	39.54	79.066	N47°40'57"E	79.056
C35	001°02'48"	1462.00'	13.35	26.708	N45°36'35"E	26.708
C36	003°06'59"	838.00'	22.79	45.578	N46°38'41"E	45.572
C37	005°35'50"	838.00'	40.96	81.864	N51°00'05"E	81.831
C38	008°25'06"	838.00'	61.67	123.126	S49°35'27"W	123.015
C39	000°17'42"	838.00'	2.16	4.316	S45°14'02"W	4.316
C40	001°02'48"	1462.00'	13.35	26.708	S45°36'35"W	26.708
C41	002°27'58"	1462.00'	31.47	62.929	S47°21'59"W	62.924
C42	003°20'16"	1462.00'	42.60	85.169	S50°16'06"W	85.157
C43	002°46'49"	1462.00'	35.48	70.946	S53°19'38"W	70.939
C44	002°45'24"	1462.00'	35.18	70.339	S56°05'45"W	70.332
C45	002°44'43"	1461.98'	35.03	70.052	S58°50'48"W	70.045
C46	002°44'48"	1461.98'	35.05	70.084	S61°35'34"W	70.078
C47	089°29'06"	19.00'	18.83	29.674	N16°45'49"E	26.749
C48	090°00'00"	19.00'	19.00	29.845	S73°29'38"E	26.870

LINE TABLE		
LINE	BEARING	LENGTH
L1	S28° 29' 37.87"E	3.96
L2	S28° 29' 37.87"E	74.00
L3	S28° 29' 37.87"E	74.00
L4	S28° 29' 37.87"E	74.08
L5	S28° 29' 37.87"E	73.92
L6	S28° 29' 37.87"E	12.06
L7	N61° 30' 22.13"E	50.04
L8	S28° 29' 37.87"E	15.15
L9	N30° 36' 56.66"W	29.79
L10	S28° 29' 37.87"E	122.67
L11	S28° 29' 37.87"E	86.17
L12	S28° 29' 37.87"E	94.35
L15	N28° 29' 37.87"W	119.82
L16	N28° 29' 37.87"W	85.34
L17	N28° 29' 37.87"W	98.04
L18	N61° 30' 22.13"E	91.17
L19	N61° 30' 22.13"E	91.26





Typical Lot Layouts
Not to Scale

(NAD83)

1" = 100'
0' 50' 100' 200'
GRAPHIC SCALE

LEGEND:

IP(0)○	Existing Iron Pipe – IP(0)
IR(0)○	Existing Iron Rod – IR(0)
IR(N)●	Iron Rod (New) – IR(N)
	Sanitary Manhole
	Fire Hydrant (F.H.)
	Catch Basin
	Storm Manhole
	Concrete Headwall
PUDE	Public Utility & Drainage Easement
MBSL	Minimum Building Setback Line
R.O.M.C.	Registers' Office Maury County

AREA SUMMARY		
LOT	SQ. FT.	ACREAGE
1012	10,417	0.24
1013	10,417	0.24
1014	10,417	0.24
1015	10,066	0.23
1016	10,422	0.24
1017	10,422	0.24
1018	10,422	0.24
1019	10,422	0.24
1020	10,422	0.24
1021	10,422	0.24
1022	10,422	0.24
1023	10,422	0.24
1053	10,645	0.24
1054	10,645	0.24
1055	10,428	0.24
1056	10,412	0.24
1057	10,412	0.24
1058	10,412	0.24
1063	14,209	0.33
1064	10,242	0.24
1065	10,325	0.24
1066	10,325	0.24
1067	10,325	0.24
1068	10,325	0.24
1069	10,325	0.24
1070	10,325	0.24
1071	13,240	0.30
1074	11,614	0.27
1075	11,632	0.27
1076	11,468	0.26
1077	11,118	0.26
1078	10,741	0.25
1079	11,609	0.27
1080	19,233	0.44
1081	13,477	0.31
1082	11,692	0.27
1083	14,621	0.34
1084	14,553	0.33
1085	11,805	0.27
1086	15,013	0.34

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAT IS TO CREATE 40 BUILDABLE LOTS, 1 OPEN SPACE LOT, DEDICATION OF RIGHT OF WAY AND EASEMENTS.
2. PROPERTY SHOWN HEREON IS PART OF PARCEL (55.00) ON MAURY COUNTY PROPERTY MAP 51.
3. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPZONE 4100, NAD 83 DATUM.
4. BEING PART OF THE SAME PROPERTY CONVEYED TO 2558 GREENS MILL, LLC AS OF RECORD IN BOOK R2799, PAGE 298 REGISTERS' OFFICE, MAURY COUNTY, TENNESSEE.
5. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, A PORTION OF THIS PROPERTY IS LOCATED WITHIN AN AREA OF FLOOD INUNDATION AS SHOWN ON FEMA MAP NUMBER: 47119C0180E, DATED: 4/16/2007, CITY OF COLUMBIA NUMBER 475423 - PANEL 0180 - SUFFIX E FLOOD ZONES "AE" AND "X"
6. THIS PROPERTY IS CURRENTLY ZONED: RS 10.
7. WATER AND SANITARY SEWER SERVICES TO BE PROVIDED BY COLUMBIA PUBLIC UTILITIES.
8. THERE IS A 10' PUBLIC UTILITY & DRAINAGE EASEMENT RUNNING PARALLEL TO THE REAR PROPERTY LINE AND ALL STREET R.O.W. UNLESS SHOWN OTHERWISE. THERE IS A 5' PUBLIC UTILITY & DRAINAGE EASEMENT RUNNING PARALLEL TO THE SIDE PROPERTY LINE UNLESS SHOWN OTHERWISE.
9. XXX INDICATES STREET ADDRESS.
10. ALL UTILITIES ARE TO BE UNDERGROUND.
11. NO MOBILE HOMES SHALL BE PERMITTED.
12. NO DRIVEWAY TO BE CONSTRUCTED OVER SANITARY SEWER SERVICE LINE.
13. FOR MINIMUM YARD LINES SEE THE TYPICAL LOT DETAILS.
14. ALL NOTES AND CERTIFICATES APPLY TO ALL SHEETS.
15. SIDEWALKS ARE 5' WIDE, UNLESS OTHERWISE NOTED.
16. EXISTING USE: VACANT, PROPOSED USE : ONE-FAMILY, DETACHED DWELLINGS
17. ALL OPEN SPACE TRACTS SHALL BE OWNED AND MAINTAINED BY THE LANDING AT GREENS MILL ROAD HOMEOWNERS ASSOCIATION.
18. ROADS, UTILITIES, AND OTHER FACILITIES HAVE BEEN FILED AS REQUIRED BY THE CITY OF COLUMBIA SUBDIVISION REGULATIONS.
19. THIS SUBDIVISION IS SUBJECT TO THE TERMS AND CONDITIONS OF THE RECORDED STORMWATER INSPECTION AND MAINTENANCE AGREEMENT FOR THESE FACILITIES AS RECORDED IN BOOK _____ PAGE _____ R.O.M.C., TN.
20. SEE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR THE LANDING AT GREENS MILL ROAD, AS RECORDED IN BOOK _____, PAGE _____, REGISTERS' OFFICE FOR MAURY COUNTY, TENNESSEE.
21. A STREAM BUFFER AS SHOWN ON THIS PLAN IS TO BE A PERMANENT WATER QUALITY BUFFER IN ACCORDANCE WITH ARTICLE 6 SECTION 9 OF THE CITY OF COLUMBIA STORMWATER ORDINANCE. THIS STREAM BUFFER IS TO REMAIN IN A NATURAL VEGETATED STATE FREE OF OBSTRUCTIONS, STRUCTURES, AND INTRUSIONS. BUFFER IS TO BE A NO MOW BUFFER AREA, AND THE MAINTENANCE WITHIN STREAM BUFFERS TO BE LIMITED TO HAND OPERATED TOOLS AND BE PERFORMED IN ACCORDANCE WITH CURRENT CITY OF COLUMBIA STORMWATER ORDINANCE AND OR AT THE DIRECTION OF THE CITY OF COLUMBIA ENGINEERING DIVISION.
22. NO OBSTRUCTIONS OR ENCROACHMENTS WHICH IMPEDE THE FLOW OF STORMWATER SHALL BE PERMITTED WITHIN PUBLIC DRAINAGE EASEMENTS. THE CITY OF COLUMBIA IS NOT RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY ENCROACHMENTS THAT ARE DAMAGED OR REMOVED IN THE COURSE OF MAINTENANCE ACTIVITY WITHIN EASEMENTS AS REFERENCED IN THE COLUMBIA GENERAL MANAGEMENT CODE, CHAPTER 15, ARTICLE 1, SECTION 15-8.
23. THE FINAL PLAT SHOWN HEREON IS VESTED UNDER THE PREVIOUS ZONING CODE WITHIN ZONING ORDINANCE 3638 AS AN RS-10 PLANNED UNIT DEVELOPMENT.
23. THE FINAL PLAT SHOWN HEREON IS VESTED UNDER THE PREVIOUS ZONING CODE WITHIN ZONING ORDINANCE 3638 AS AN RS-10 PLANNED UNIT DEVELOPMENT.
24. THE AMENITY CENTER AND ASSOCIATED PARKING WILL REQUIRE SEPERATE PERMIT AND SITE PLAN REVIEW.

E-911 PROGRAM CERTIFICATION OF APPROVAL

This is to certify that this plat has been reviewed and is in compliance with the Maury County E-911 Program.

(Date) E-911 Director

CERTIFICATE OF COMMON AREAS DEDICATION

2558 Greens Mill, LLC, in recording this plat has designated certain areas of land shown hereon as common areas intended for use by the homeowners within The Landing At Green Mills Road - Phase 1, for recreation and related activities. The above-described areas are not dedicated for use by the general public, but are dedicated to the common use of the homeowners within the named subdivision.

"Declaration of Covenants and Restrictions", applicable to the above named subdivision, is hereby incorporated and made part of this plat.

Date Owner

CERTIFICATE OF APPROVAL OF PUBLIC WAYS OR BOND POSTING

I hereby certify; (1) that all designated public ways on this final subdivision plat have been installed in an acceptable manner and according to the specifications of the Maury County Subdivision Regulations, or (2) that a performance bond or other surety has been posted with the Planning Commission to guarantee completion of all required improvements in case of default.

(Date) Appropriate Governmental Representative

CERTIFICATE OF APPROVAL OF PUBLIC SEWER SYSTEM

I hereby certify that the sewer system(s) outlined or indicated on the final subdivision plat entitled The Landing at Greens Mill has/have been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

(Date) Name, Title, and Agency or Authorized Approving Agent

ZONING: RS10

CERTIFICATE FOR APPROVAL FOR RECORDING

I hereby certify that the subdivision plat shown hereon has been found to comply with the Maury County Subdivision Regulations, with the exception of such variances, if any, as are noted in the minutes of the Planning Commission, and that it has been approved for recording in the office of the County Register.

Date Secretary
Maury County Regional Planning Commission

CERTIFICATE OF SURVEY ACCURACY

I hereby certify that to the best of my knowledge and belief the hereon shown subdivision plat represents a Category "1" Survey having an unadjusted ration of precision of 1:10,000 and is true and correct. Approved monuments have been placed as indicated. All side lot lines are at right angles or radial to a street unless otherwise noted.

9-13-2024 (Date)
James G. Terry, R.L.S. # 2287

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (we) hereby certify that I am (we are) the owners of the property shown and described hereon as evidenced in Book R2799, Page 298, Maury County Register's Office and I (we) adopt this plan of subdivision with my (our) free consent, establish the minimum building restriction lines, and that offers of irrevocable dedication for all public ways, public easements, utilities, and other facilities have been filed.

(Date) (Owner)

Title (If Acting for Partnership or Corporation)

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I hereby certify that the water system(s) outlined or indicated on the final subdivision plat entitled The Landing at Greens Mill Road - Phase 1 has / have been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

(Date) Name, Title, and Agency or Authorized Approving Agent

REVISIONS:
1
2
3
4
5
6
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JAMES G. TERRY TENNESSEE NO. 2287 REGISTERED LAND SURVEYOR AGRICULTURAL COMMERCIAL 9-13-24

FINAL PLAT
THE LANDING AT GREENS MILL ROAD
PHASE 1B
GREEN MILLS ROAD
Property Map # 51 - Parcel (55.00)
CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE
Scale : 1" = 100'

Prepared By:
JTA LAND SURVEYING, INC.
2403 Elm Hill Pike, Suite K Nashville, TN. 37214 Phone: 615 490-9920

(See Revisions)
DATE: SEPTEMBER 16, 2024 Job No. 2023-507

DRAWN BY: MTG, TMF, RR

SHEET 1 OF 1

Appendix B: Subdivision Development Agreement

This DEVELOPMENT AGREEMENT is made and entered into on this

16th day of September, 20 24,
between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and

Safe Harbor Residential, the DEVELOPER (hereinafter the "DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made a part hereof (hereinafter the "ADDENDUM").

WITNESSETH:

WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM (hereinafter the "PROJECT"); and,

WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal Planning Commission (hereinafter the "CMPC") on the

_____ day of _____, 20_____,
pursuant to Tennessee Code Annotated Title 13, Chapter 4, and the Subdivision Regulations of Columbia, Tennessee (hereinafter the "SUBDIVISION REGULATIONS"); and,

WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such development; and,

WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,

WHEREAS, in order to provide for the health, safety, and welfare of future residents of the PROJECT, it will be necessary for certain improvements to the CITY'S utility systems, public infrastructure, and common areas to be constructed within and to serve the PROJECT including but not be limited to roads, bridges, sidewalks, pedestrian facilities, stormwater facilities, street signs, markings, signals, street lighting, recreation and park facilities, landscaping, and the like (hereinafter the "IMPROVEMENTS"); and,

WHEREAS, in order for the IMPROVEMENTS to be fully integrated with the utility systems and public infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to construct, in accordance with the Subdivision Regulations and other rules, regulations, and ordinances of the CITY, the IMPROVEMENTS in said PROJECT and extend utilities to the PROJECT at their own cost; and,

WHEREAS, the CITY is willing to accept the dedication of the streets, utilities, and other improvements as determined in the Development Plan of the PROJECT, subject to the City of Columbia City Council approval by resolution, and subject to the applicant's compliance with all requirements in this agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,

NOW, THEREFORE, it is agreed and understood as follows:

B1 General Conditions

B1.1 Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities, and other facilities in accordance with this agreement.

B1.2 City Ordinances, Rules and Regulations

All currently existing CITY ordinances, rules and regulations, and the Subdivision Regulations adopted by the CMPC are made a part of this agreement. In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans and specifications approved by the City and made a part, hereof.

B1.3 Fees

Review fees, inspection fees, and other amounts established by the CITY shall be paid prior to any review of the plans. If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees, inspection fees, or other amounts paid to the CITY shall be refundable to the DEVELOPER.

B1.4 Inspection

The CITY shall have a continuous right to inspect the work and facilities to assure that the work and facilities are in accordance with the Subdivision Regulations, approved Construction Plans, and other rules, regulations, and ordinances of the CITY.

B1.5 Right of Entry

The CITY shall have the right, in case of breach of the Performance Agreement, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

B1.6 Easements

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER further agrees to grant the necessary easements and rights-of-way across the DEVELOPER's properties without expense to the CITY and waive any claim for damages.

B1.7 Stormwater Maintenance Agreement

If the PROJECT includes any detention or retention ponds, common drainage ditches, water quality facilities, or stormwater facilities outside of the CITY rights-of-way, the DEVELOPER will submit a Stormwater Maintenance Agreement, to be filed with and recorded with the Final Plat.

B1.8 Attorney Fees and Other Expenses

The DEVELOPER shall pay all reasonable costs and expenses incurred by the CITY in enforcing or completing this agreement. The DEVELOPER shall pay all costs and expenses, including the CITY'S attorney fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

B1.9 Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

B1.10 Revocation and Interpretation

This agreement shall bind the DEVELOPER when executed by the DEVELOPER and may not be revoked by the DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

B1.11 No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments, or understandings.

B1.12 Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect, or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

B 1.13 Transferability

The DEVELOPER agrees to not transfer the property on which this PROJECT is to be located without first providing the CITY with written notice. The transferee shall provide the CITY an Assumption Agreement of this Agreement, whereby the transferee agrees to perform the IMPROVEMENTS required under this agreement and to provide a performance surety. The DEVELOPER understands that if the DEVELOPER transfers said property without providing the notice of transfer and Assumption Agreement as required herein, they will be in breach of this agreement and in violation of the Subdivision Regulations.

B1.14 Indemnity

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties, or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the IMPROVEMENTS by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

B1.15 Binding Effect

This agreement shall be binding upon the DEVELOPER and the DEVELEPOR's heirs, administrators, executors, assigns, and any other successors in interest.

B1.16 Entire Agreement

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them. No variations or alterations of the terms of this agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

B1.17 Headings

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the agreement and in no way shall define, limit, extend, or describe the scope or intent of any provision, hereof.

B2 Performance Surety

At the time of execution of this agreement, the DEVELOPER shall provide the CITY a performance surety, in an amount determined by the City Engineer for the IMPROVEMENTS and other items specified by the Construction Plans, plats, and plans approved by the CMPC. This performance surety shall secure performance of all obligations of the DEVELOPER under this agreement. The performance surety shall meet all requirements established in Chapter 4: Performance Agreement of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement. The performance surety may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the performance surety. The performance surety will not be released, except and until there has been full compliance with this agreement.

B3 Construction

B3.1 Construction Plans

The DEVELOPER shall submit to the CITY, Construction Plans describing in reasonable detail all utility systems, all storm water management systems, all street systems, pedestrian facilities, and all IMPROVEMENTS. The Construction Plans shall be designed according to the Engineering Standards and Specifications, all other codes and ordinances enforced by the City, and sound engineering judgment. The design of all utility systems shall follow the State of Tennessee and utility provider design criteria and specifications. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. The Construction Plans shall be prepared by a design professional licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date, and license number of the professional preparing the Construction Plans.

B3.2 Commencement of Construction

Construction of IMPROVEMENTS may not begin until the following events have occurred:

A. The Preliminary Plat has been approved by the CMPC;
B. The Construction Plans are approved by the CITY;
C. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing;
D. The CITY shall have received an appropriately executed Development Agreement; and
E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

B3.3 Site Grading

The DEVELOPER, hereby, agrees to construct all site grading to comply with the approved Construction Plans, including the approved Erosion Control Plan for the PROJECT and to comply with the Engineering Standards and Specifications, Stormwater Ordinance, and all other codes and ordinances enforced by the CITY.

B3.4 Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work made necessary by the development of this PROJECT. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order, and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

B3.5 Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Construction Plans to comply with the CITY's specifications and to the satisfaction and approval of the City Engineer by grading, draining, subgrade preparation, base preparation, curbing, signage, striping, signalization, sidewalk installation, and paving with the required preparation, amounts, and types of material. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas directed by the CITY Engineer, prior to application of final surface.

B3.6 Time Period for Construction

The DEVELOPER agrees to be bound to complete, within three (3) years of commencement of construction, all IMPROVEMENTS shown on the plat and plans and all things required by this agreement.

The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, the DEVELOPER shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for the DEVELOPER's failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the performance surety executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is determined to be inadequate by the City Engineer to secure the cost of said IMPROVEMENTS at the time an extension is sought, the DEVELOPER will provide the additional security to bring the performance surety amount in line with current cost projections as made by the CITY. The DEVELOPER understands that the DEVELOPER's failure to follow the extension procedure constitutes a breach of this agreement and places the DEVELOPER in violation of the Subdivision Regulations. The DEVELOPER further understands, that should the DEVELOPER fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved, the CITY shall reserve the right to withhold and withdraw all building permits within the PROJECT until all items of this Agreement have been fulfilled by the DEVELOPER.

B3.7 Off-Site Improvements

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the PROJECT. Unless specifically noted in the Construction Plans and made a part of separate agreement with the CITY, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site improvements.

B3.9 Inspection and Compliance

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to ensure that all work is performed and completed in accordance with the Construction Plans, CITY specifications, and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Construction Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

B3.10 Testing

The DEVELOPER agrees to pay the cost of all engineering, inspection, and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material, and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

B3.11 Scrap Removal

The DEVELOPER agrees to comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

B3.12 Traffic Control

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including

signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

B3.13 Temporary Facilities

The DEVELOPER shall provide all temporary facilities including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

B4 Acceptance of Improvements

B4.1 Completion of Improvements

At such time as the improvements have been constructed and installed, in accordance with the Constructions Plans and specifications, required testing and inspections completed and found satisfactory, and all clean-up and cover-up has been done to the satisfaction the City Engineer, a letter requesting preliminary acceptance of the PROJECT will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees the DEVELOPER shall have no claim, direct or implied, in the title or ownership of the IMPROVEMENTS specified in this agreement when the IMPROVEMENTS are complete and thereafter accepted by the CITY. The DEVELOPER will be responsible for construction failures and defects in PROJECT prior to final acceptance. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

B4.2 As-Built Drawings and Post-Completion Items

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system, and streets within the subdivision before the CITY shall accept the subdivision.

B4.3 Acceptance of Facilities

Upon final acceptance of all or part of the IMPROVEMENTS in the PROJECT, then those IMPROVEMENTS shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

B4.4 Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the IMPROVEMENTS in the PROJECT. Should the CITY choose to accept all or a portion of these IMPROVEMENTS, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register's Office of Maury County, Tennessee. No further writing or deed shall be required.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

The Landings at Greens Mill Road

PROJECT

Completed by the Developer	*Completed by the City*
SH Residential DEVELOPER NAME	
Koby DuMont AUTHORIZED AGENT NAME	 CITY ENGINEER
 SIGNATURE	 SIGNATURE
9-16-2024 DATE	 DATE
105 westpark drive ste. 305 STREET	
Brentwood, TN 37027 CITY, STATE, ZIP	
865-507-0220 PHONE	
Koby@SaltharborResidential.com EMAIL	
Attest	*Attest*
Lisa Drzezgowski ATTEST NAME	 ATTEST NAME
Lisa Drzezgowski ATTEST SIGNATURE	 ATTEST SIGNATURE
9-16-2024 DATE	 DATE

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: ** 1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*

Fold hard copy submittals larger than 8½"x11"

All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	2558 Greens Mill Rd., Columbia, TN 38401		
	TAX MAP: 51	GROUP:	PARCEL: 55.00
SUMMARY OF NATURE OF REQUEST AND WORK	The purpose of this plat is to create 40 build-able lots, 1 open space lots, dedication of Right of Way, and Easements.		

DATE OF PRE-APPLICATION CONFERENCE	08/28/2024	*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
❑ Comprehensive Plan Amendment ❑ Annexation ❑ Rezoning ❑ Preliminary Plat ☒ Final Plat ❑ PUD Preliminary Master Plan ❑ PUD Final Site Plan ❑ Site Development Plan ❑ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ❑ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ❑ Requested Zone Listed ❑ Statement of Compliance with Comprehensive Plan ❑ Concept Plan **Preliminary Plats/Site Development Plans:** ❑ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ❑ Receipt of Payment for Pre-Application Meeting ❑ Written Legal Description copy ❑ Columbia Water System Availability Letter ❑ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs: ❑ Project Name (include Sections & Phases) The Landing at Greens Mill Rd. - Phase 1B ❑ Total Number of Lots/Residential Units 40 ❑ Square Footage of Non-Residential Floor Space ❑ Total acreage 10.50 acres

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME	Crunk Engineering, LLC	PHONE	615-873-1795
ADDRESS	7112 Crossroads Blvd., #201, Brentwood, TN 37027	EMAIL	adam@crunkeng.com

PROPERTY OWNER NAME	Safe Harbor Residential	PHONE	865-622-1774
ADDRESS	105 Westpark Dr., #365, Brentwood, TN 37027	EMAIL	taylor@safeharborresidential.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Adam Crunk, PE		09/16/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
Koby DuMont		9-16-2024
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

DOCUMENT PREPARED BY:
Name: Alexander Mollica
Company Crunk Engineering

Address: 7112 Crossroads Blvd.
Brentwood, TN 37027

After recording return copy to City of Columbia, Development Services

INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES

Map & Parcel Number: Map 051, Parcel 55.00
Project Name: Landing at Greens Mill - Phase 1B

Recorded by deed in the Register of Deeds Office of Maury County in Deed Book _____, Page(s) _____.

THIS AGREEMENT, made this 16 day of September, 20 24, by and between Safe Harbor Residential hereinafter referred to as the "OWNER(S)" of the following property and City of Columbia, Tennessee, hereinafter referred to as the "CITY",

WE, the OWNER(S), with full authority to execute deeds, mortgages, other covenants, all rights, titles, and interests in the property described above, do hereby covenant with the CITY and agree as follows:

1. The OWNER(S) covenant and agree with the CITY that the OWNER(S) shall provide for adequate long term maintenance and continuation of stormwater control measures described in the Long Term Maintenance Plan and shown on the location map, deed of easement drawing or plat attached hereto to ensure that the facilities, are and remain in proper working condition in accordance with approved design standards, rules and regulations, and applicable laws. The OWNER(S) shall perform preventative maintenance activities at intervals described in the schedule attached hereto along with necessary landscaping (grass cutting, etc.) and trash removal as part of regular maintenance.

2. The OWNER(S) shall perform routine inspections to ensure that all long term stormwater management facilities are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. The OWNER(S) or operators shall maintain documents of these inspections.

3. The OWNER(S) shall perform comprehensive inspections of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect.

4. The OWNER(S) shall grant to the CITY or its agent or contractor the right of entry at reasonable times and in a reasonable manner for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining or repairing the facility within the CITY.

5. The OWNER(S) shall record and grant to the CITY the necessary easements and rights-of-way and maintain perpetual access from public rights-of-way to the facility for the CITY or its agent and contractor.

6. If, upon inspection, the CITY finds that the OWNER(S) has failed to properly maintain the facilities, the CITY may order the work performed within ten (10) days. In the event the work is not performed within the specified time, the ONWER(S) agrees to allow the CITY to enter the property and take whatever steps it deems necessary to maintain the stormwater control facilities. This provision shall not be construed to allow the CITY to erect any structure of a permanent nature on the PROPERTY without first obtaining written approval of the OWNER(S)

7. The CITY is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any obligation on the CITY. The OWNER(S) shall reimburse the CITY upon demand the costs incurred in the maintenance of the facilities.

8. If the OWNER(S) fails to pay the CITY for the above expensive after forty-five (45) days written notice, the OWNER(S) authorizes the CITY to collect said expenses from the OWNER(S) through appropriate legal action and the OWNER(S) shall be liable for the reasonable expenses of collection, court costs, and attorney fees.

9. The OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successor in interest shall indemnify and hold harmless the CITY and its officers, agents and employees for any and all damages, accidents, casualties, occurrences, claims or attorney's fees which might arise or be asserted, in whole or in part,

against the CITY from the construction, presence, existence, or maintenance of the stormwater control facilities subject to this AGREEMENT. In the event a claim is asserted against the CITY, its officers, agents or employees, the CITY shall notify OWNER(S) and the OWNER(S) shall defend at OWNER(S) expense any suit based on such claim. If any judgment or claims against the CITY, its officers, agents or employees, shall be allowed, the OWNER(S) shall pay all costs and expenses in connection therewith. The CITY will not indemnify, defend or hold harmless in any fashion the OWNER(S) from any claims arising from any failure, regardless of any language in any attachment or other document that the OWNER(S) may provide

10. The OWNER(S) shall not be able to transfer, assign or modify its responsibilities with respect to this agreement without the CITY's written prior consent. Nothing herein shall be construed to prohibit a transfer by OWNER(S) to subsequent owners and assigns.

11. No waiver of any provision of this AGREEMENT shall affect the right of any party thereafter to enforce such provision or to exercise any right or remedy available to it in the event of any default.

12. The OWNER(S) shall record a plat showing and accurately defining the easements for stormwater control facilities. The plat must reference the Instrument Number where this AGREEMENT and its attachments are recorded and contain a note that the OWNER(S) is responsible for maintaining the stormwater management facilities.

13. The OWNER(S) shall record this AGREEMENT in the office of the Register of Deeds for the county of Maury, Tennessee, and the AGREEMENT shall constitute a covenant running with the land, and shall be binding upon the OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successors in interest

ATTEST BY OWNER(S):

Print Name Koby DuMont

Title Division President

Signature _____

Owner Greens Mill, LLC

Address 308 Letterman Drive

Knoxville, TN 37919

City, State ZIP _____

STATE OF Tennessee
COUNTY OF Robertson

Before me, Lisa Dziezgowski of the state and county mentioned, personally appeared Koby DuMont, with whom I am personally acquainted and who acknowledged that he/she executed the foregoing instrument of the purposes therein contained.

Witness my hand this the 16th day of September, 2024.

Lisa Dziezgowski
Notary Public

My Commission Expires: August 18 2026

CITY OF COLUMBIA, TENNESSEE
ENGINEERING DEPARTMENT

APPROVED BY :_____

STATE OF TENNESSEE
COUNTY OF MAURY

Before me, _____ of the state and county mentioned, personally appeared _____, with whom I am personally acquainted, and who acknowledged themselves to be the City Engineer of the City of Columbia or his designee and as such, being authorized so to do, executed the foregoing instrument of the purposes therein contained.

Witness my hand this the _____ day of _____, 20_____.

_____
Notary Public
My Commission Expires:_____

Appendix B: Subdivision Development Agreement

This DEVELOPMENT AGREEMENT is made and entered into on this

16th day of September, 20 24,
between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and

Safe Harbor Residential, the DEVELOPER (hereinafter the "DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made a part hereof (hereinafter the "ADDENDUM").

WITNESSETH:

WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM (hereinafter the "PROJECT"); and,

WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal Planning Commission (hereinafter the "CMPC") on the

_____ day of _____, 20_____,
pursuant to Tennessee Code Annotated Title 13, Chapter 4, and the Subdivision Regulations of Columbia, Tennessee (hereinafter the "SUBDIVISION REGULATIONS"); and,

WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such development; and,

WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,

WHEREAS, in order to provide for the health, safety, and welfare of future residents of the PROJECT, it will be necessary for certain improvements to the CITY'S utility systems, public infrastructure, and common areas to be constructed within and to serve the PROJECT including but not be limited to roads, bridges, sidewalks, pedestrian facilities, stormwater facilities, street signs, markings, signals, street lighting, recreation and park facilities, landscaping, and the like (hereinafter the "IMPROVEMENTS"); and,

WHEREAS, in order for the IMPROVEMENTS to be fully integrated with the utility systems and public infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to construct, in accordance with the Subdivision Regulations and other rules, regulations, and ordinances of the CITY, the IMPROVEMENTS in said PROJECT and extend utilities to the PROJECT at their own cost; and,

WHEREAS, the CITY is willing to accept the dedication of the streets, utilities, and other improvements as determined in the Development Plan of the PROJECT, subject to the City of Columbia City Council approval by resolution, and subject to the applicant's compliance with all requirements in this agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,

NOW, THEREFORE, it is agreed and understood as follows:

B1 General Conditions

B1.1 Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities, and other facilities in accordance with this agreement.

B1.2 City Ordinances, Rules and Regulations

All currently existing CITY ordinances, rules and regulations, and the Subdivision Regulations adopted by the CMPC are made a part of this agreement. In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans and specifications approved by the City and made a part, hereof.

B1.3 Fees

Review fees, inspection fees, and other amounts established by the CITY shall be paid prior to any review of the plans. If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees, inspection fees, or other amounts paid to the CITY shall be refundable to the DEVELOPER.

B1.4 Inspection

The CITY shall have a continuous right to inspect the work and facilities to assure that the work and facilities are in accordance with the Subdivision Regulations, approved Construction Plans, and other rules, regulations, and ordinances of the CITY.

B1.5 Right of Entry

The CITY shall have the right, in case of breach of the Performance Agreement, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

B1.6 Easements

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER further agrees to grant the necessary easements and rights-of-way across the DEVELOPER's properties without expense to the CITY and waive any claim for damages.

B1.7 Stormwater Maintenance Agreement

If the PROJECT includes any detention or retention ponds, common drainage ditches, water quality facilities, or stormwater facilities outside of the CITY rights-of-way, the DEVELOPER will submit a Stormwater Maintenance Agreement, to be filed with and recorded with the Final Plat.

B1.8 Attorney Fees and Other Expenses

The DEVELOPER shall pay all reasonable costs and expenses incurred by the CITY in enforcing or completing this agreement. The DEVELOPER shall pay all costs and expenses, including the CITY'S attorney fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

B1.9 Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

B1.10 Revocation and Interpretation

This agreement shall bind the DEVELOPER when executed by the DEVELOPER and may not be revoked by the DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

B1.11 No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments, or understandings.

B1.12 Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect, or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

B 1.13 Transferability

The DEVELOPER agrees to not transfer the property on which this PROJECT is to be located without first providing the CITY with written notice. The transferee shall provide the CITY an Assumption Agreement of this Agreement, whereby the transferee agrees to perform the IMPROVEMENTS required under this agreement and to provide a performance surety. The DEVELOPER understands that if the DEVELOPER transfers said property without providing the notice of transfer and Assumption Agreement as required herein, they will be in breach of this agreement and in violation of the Subdivision Regulations.

B1.14 Indemnity

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties, or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the IMPROVEMENTS by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

B1.15 Binding Effect

This agreement shall be binding upon the DEVELOPER and the DEVELEPOR's heirs, administrators, executors, assigns, and any other successors in interest.

B1.16 Entire Agreement

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them. No variations or alterations of the terms of this agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

B1.17 Headings

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the agreement and in no way shall define, limit, extend, or describe the scope or intent of any provision, hereof.

B2 Performance Surety

At the time of execution of this agreement, the DEVELOPER shall provide the CITY a performance surety, in an amount determined by the City Engineer for the IMPROVEMENTS and other items specified by the Construction Plans, plats, and plans approved by the CMPC. This performance surety shall secure performance of all obligations of the DEVELOPER under this agreement. The performance surety shall meet all requirements established in Chapter 4: Performance Agreement of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement. The performance surety may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the performance surety. The performance surety will not be released, except and until there has been full compliance with this agreement.

B3 Construction

B3.1 Construction Plans

The DEVELOPER shall submit to the CITY, Construction Plans describing in reasonable detail all utility systems, all storm water management systems, all street systems, pedestrian facilities, and all IMPROVEMENTS. The Construction Plans shall be designed according to the Engineering Standards and Specifications, all other codes and ordinances enforced by the City, and sound engineering judgment. The design of all utility systems shall follow the State of Tennessee and utility provider design criteria and specifications. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. The Construction Plans shall be prepared by a design professional licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date, and license number of the professional preparing the Construction Plans.

B3.2 Commencement of Construction

Construction of IMPROVEMENTS may not begin until the following events have occurred:

A. The Preliminary Plat has been approved by the CMPC;
B. The Construction Plans are approved by the CITY;
C. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing;
D. The CITY shall have received an appropriately executed Development Agreement; and
E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

B3.3 Site Grading

The DEVELOPER, hereby, agrees to construct all site grading to comply with the approved Construction Plans, including the approved Erosion Control Plan for the PROJECT and to comply with the Engineering Standards and Specifications, Stormwater Ordinance, and all other codes and ordinances enforced by the CITY.

B3.4 Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work made necessary by the development of this PROJECT. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order, and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

B3.5 Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Construction Plans to comply with the CITY's specifications and to the satisfaction and approval of the City Engineer by grading, draining, subgrade preparation, base preparation, curbing, signage, striping, signalization, sidewalk installation, and paving with the required preparation, amounts, and types of material. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas directed by the CITY Engineer, prior to application of final surface.

B3.6 Time Period for Construction

The DEVELOPER agrees to be bound to complete, within three (3) years of commencement of construction, all IMPROVEMENTS shown on the plat and plans and all things required by this agreement.

The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, the DEVELOPER shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for the DEVELOPER's failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the performance surety executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is determined to be inadequate by the City Engineer to secure the cost of said IMPROVEMENTS at the time an extension is sought, the DEVELOPER will provide the additional security to bring the performance surety amount in line with current cost projections as made by the CITY. The DEVELOPER understands that the DEVELOPER's failure to follow the extension procedure constitutes a breach of this agreement and places the DEVELOPER in violation of the Subdivision Regulations. The DEVELOPER further understands, that should the DEVELOPER fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved, the CITY shall reserve the right to withhold and withdraw all building permits within the PROJECT until all items of this Agreement have been fulfilled by the DEVELOPER.

B3.7 Off-Site Improvements

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the PROJECT. Unless specifically noted in the Construction Plans and made a part of separate agreement with the CITY, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site improvements.

B3.9 Inspection and Compliance

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to ensure that all work is performed and completed in accordance with the Construction Plans, CITY specifications, and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Construction Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

B3.10 Testing

The DEVELOPER agrees to pay the cost of all engineering, inspection, and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material, and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

B3.11 Scrap Removal

The DEVELOPER agrees to comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

B3.12 Traffic Control

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including

signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

B3.13 Temporary Facilities

The DEVELOPER shall provide all temporary facilities including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

B4 Acceptance of Improvements

B4.1 Completion of Improvements

At such time as the improvements have been constructed and installed, in accordance with the Constructions Plans and specifications, required testing and inspections completed and found satisfactory, and all clean-up and cover-up has been done to the satisfaction the City Engineer, a letter requesting preliminary acceptance of the PROJECT will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees the DEVELOPER shall have no claim, direct or implied, in the title or ownership of the IMPROVEMENTS specified in this agreement when the IMPROVEMENTS are complete and thereafter accepted by the CITY. The DEVELOPER will be responsible for construction failures and defects in PROJECT prior to final acceptance. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

B4.2 As-Built Drawings and Post-Completion Items

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system, and streets within the subdivision before the CITY shall accept the subdivision.

B4.3 Acceptance of Facilities

Upon final acceptance of all or part of the IMPROVEMENTS in the PROJECT, then those IMPROVEMENTS shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

B4.4 Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the IMPROVEMENTS in the PROJECT. Should the CITY choose to accept all or a portion of these IMPROVEMENTS, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register's Office of Maury County, Tennessee. No further writing or deed shall be required.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

The Landings at Greens Mill Road

PROJECT

Completed by the Developer	*Completed by the City*
SH Residential DEVELOPER NAME	
Koby DuMont AUTHORIZED AGENT NAME	CITY ENGINEER
 SIGNATURE	SIGNATURE
9-16-2024 DATE	DATE
105 westpark drive ste. 305 STREET	
Brentwood, TN 37027 CITY, STATE, ZIP	
865-507-0220 PHONE	
Koby@saltharborresidential.com EMAIL	
Attest	*Attest*
Lisa Drzezgowski ATTEST NAME	ATTEST NAME
Lisa Drzezgowski ATTEST SIGNATURE	ATTEST SIGNATURE
9-16-2024 DATE	DATE

Post Construction Long Term Maintenance Plan

Project Name: Landing at Greens Mill – Phase 1B

Columbia, TN

September 16, 2024

Table of Contents

Section Name

System Description
Maintenance Procedures

System Description

The site consists of a series of stormwater conveyances both open channel and piped, detention / retention and water quality ponds. The previous Stormwater Detention Ponds Maintenance Plans were recorded during the platting of Phase 1A.

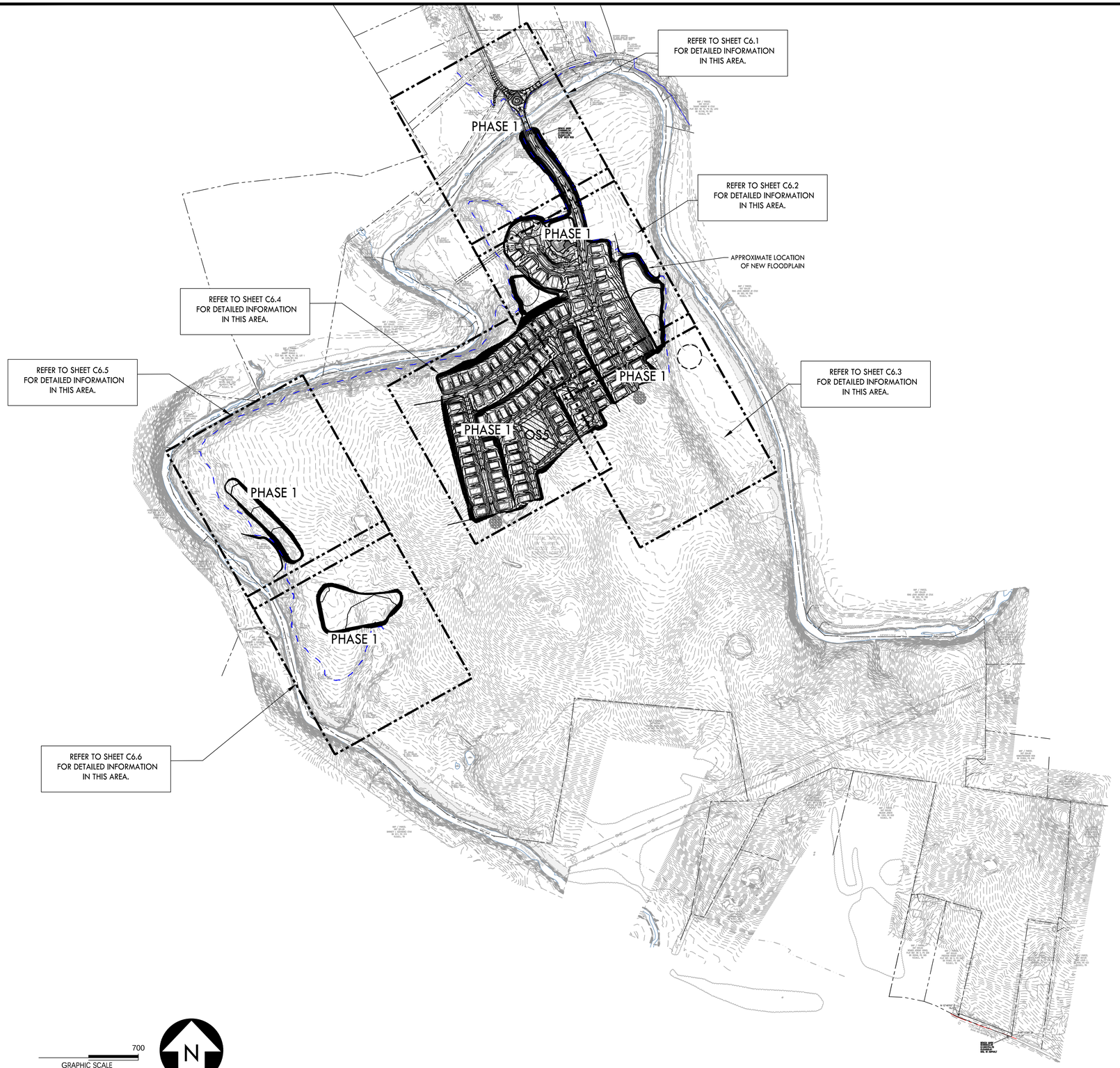
- There are 5 stormwater detention ponds sized to detain through the 100 year peak event. The orifice is designed to contain the first flush, 1 inch, for 24 hour.
- 2,282 feet of grass lined open channel.
- 2,752 feet of 18 in ADS pipe and 36 storm inlets.

Upon completion of the site construction, 'Record Drawings' in a version not less than AutoCAD 2006 LT (NAD83, NAVD88) of the stormwater controls will be provided to the City of Columbia for verification.

A copy of the INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES that has been completed, notarized, and recorded in the Land Records of the County of Maury, Tennessee will be kept on site with this document.

Maintenance Procedures

1. **STORMWATER DETENTION PONDS**
    - **a.** The outlet structures shall be checked regularly for clogging and shall be cleaned and repaired as necessary---monthly after it is first built then a regular sequence should be established or at least quarterly or after a large rain event.
    - **b.** Check banks and bottom surface of basins for erosion and correct as necessary.
    - **c.** Check at least quarterly and after each extreme storm event, the facility should be cleaned of accumulated debris. The banks of surface ponds should be checked and areas of erosion repaired. Remove nuisance wetland species and take appropriate measures to control mosquitos.
    - **d.** This maintenance typically includes sediment, floatable, and debris removal from inlets, outlets and skimmers.
    - **e.** Pond vegetation to be trimmed or harvested as appropriate, grassy areas, frequently mowed. Grass should be mowed so that it does not get over 12.
    - **f.** Remove sediment when accumulation reached 6 inches, or if re-suspension is observed or probable.
    - **g.** Some sediment may contain contaminants which the Tennessee Department of Environment and Conservation (TDEC) requires special disposal procedure. If there is any uncertainty about what the sediment contains or it is known to contain contaminants, then TDEC should be consulted and their disposal recommendations followed. The TDEC Division of Water Pollution Control should be contacted at (931) 380-3371. Generally, special attention or sampling should be given to sediment accumulated in facilities serving industrial, manufacturing or heavy commercial sites, Page 2 of 4 Rev. 9/26/2016 fueling centers or automotive maintenance areas, large parking areas, or other areas where pollutants (other than clean soil) are suspected to accumulate and be conveyed by storm runoff.
    - **h.** Some sediment collected may be innocuous (free of pollutants) and can be used as fill material, cover or land spreading. It is important that this material not be placed in any way that will promote or allow re-suspension in storm runoff.
2. **2,752 feet of 18 in ADS pipe and 36 storm inlets.**
    a. These structures will be inspected and cleaned quarterly to ensure pipes and drain inlets do not fill with sediment or trash.



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ENGINEERING CRUNK

ANDREW L. WILSON 134180 REGISTERED ENGINEER AGRICULTURE COMMERCE STATE OF TENNESSEE 9/21/23

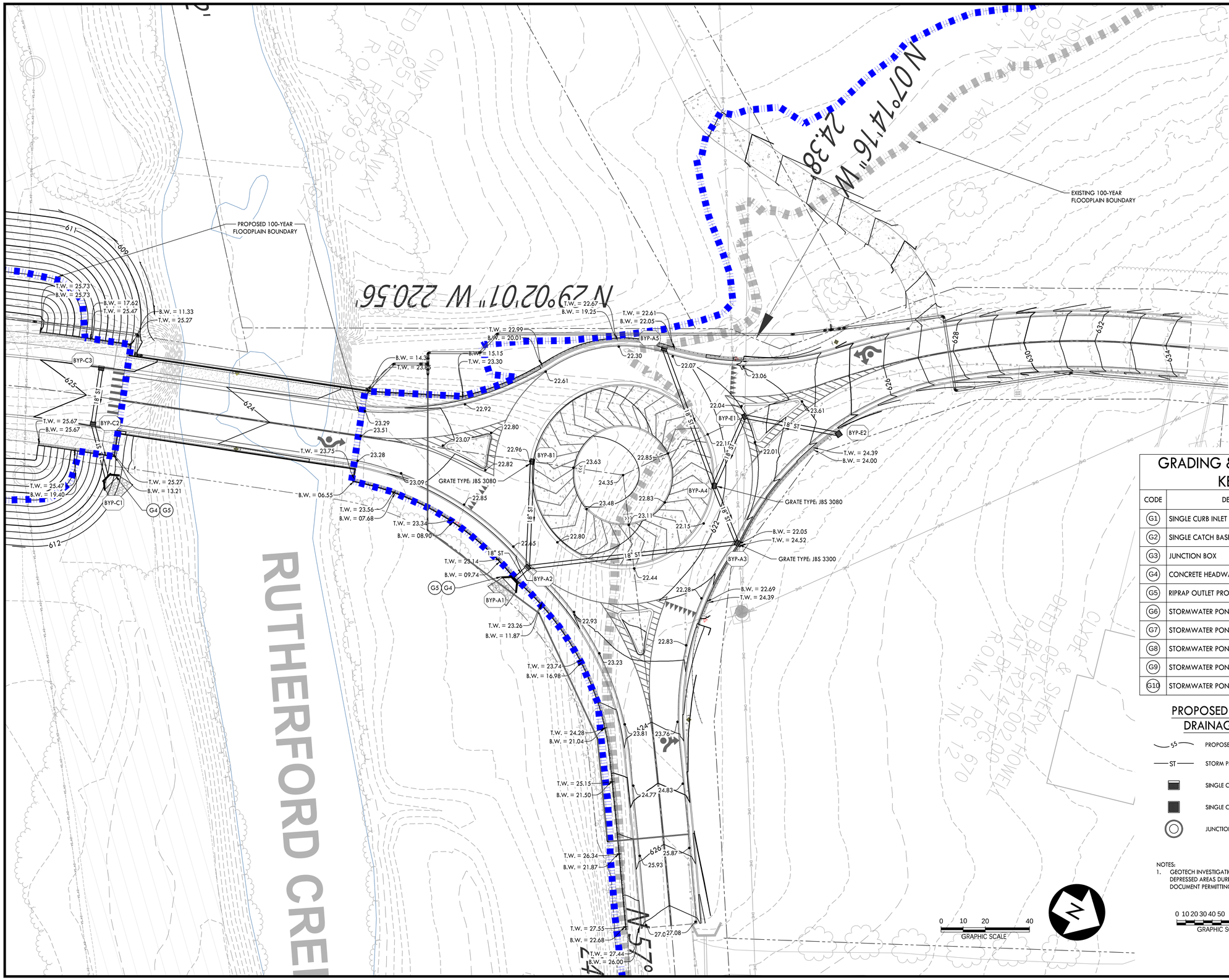
GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.0
OVERALL GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- PROPOSED CONTOUR
- STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

0 10 20 30 40 50 100
GRAPHIC SCALE

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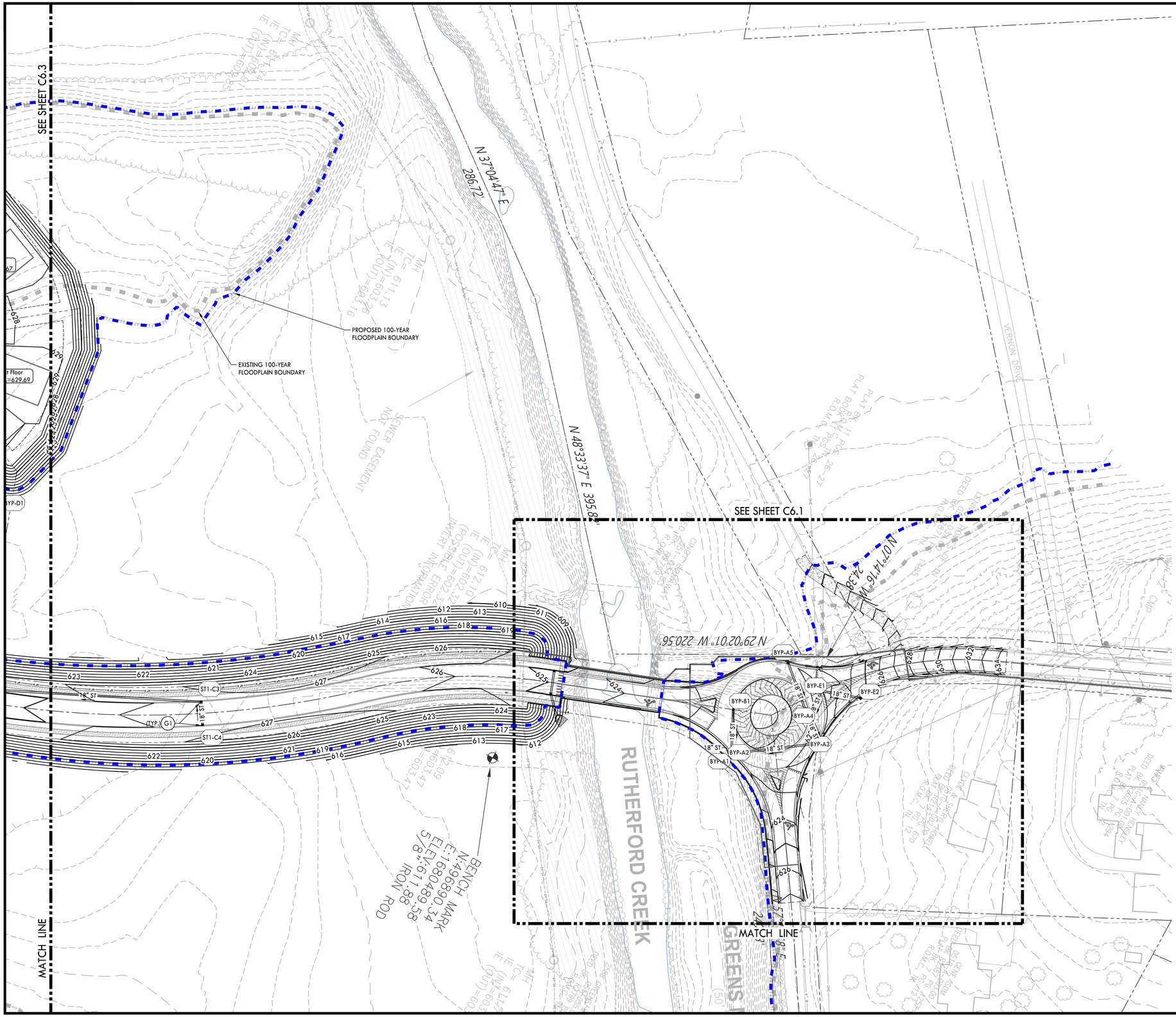
ANDREW L. SCHLOSSER
REGISTERED LANDSCAPE ARCHITECT
AGRICULTURE
9/21/23
STATE OF TENNESSEE

GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS	
No.	DATE

09/21/23 17067

C6.1
ROUNDABOUT GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

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ANDREW L. WILSON 134180 REGISTERED ENGINEER AGRICULTURE COMMERCE 9/21/23 STATE OF TENNESSEE

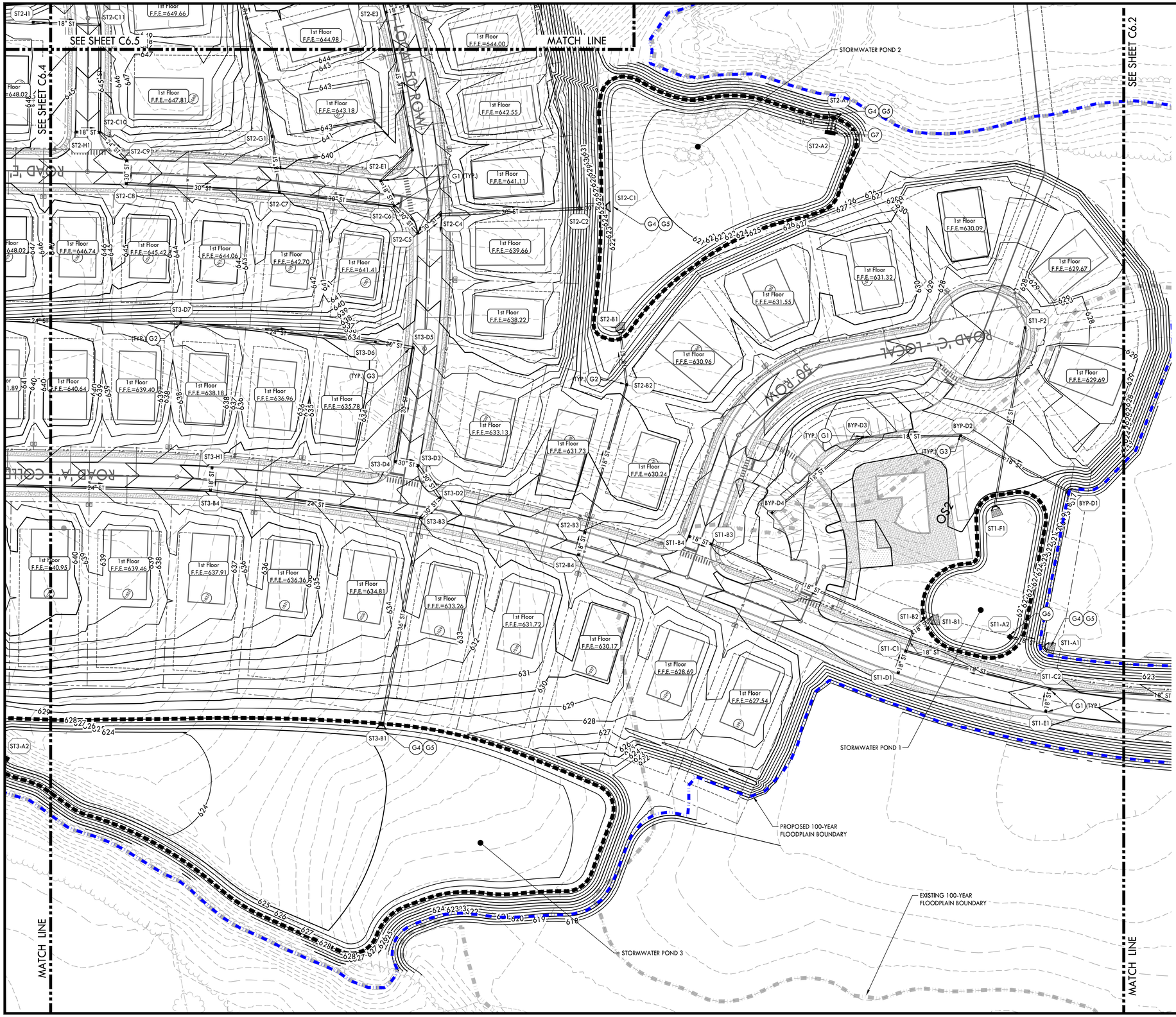
GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.2
GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
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G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
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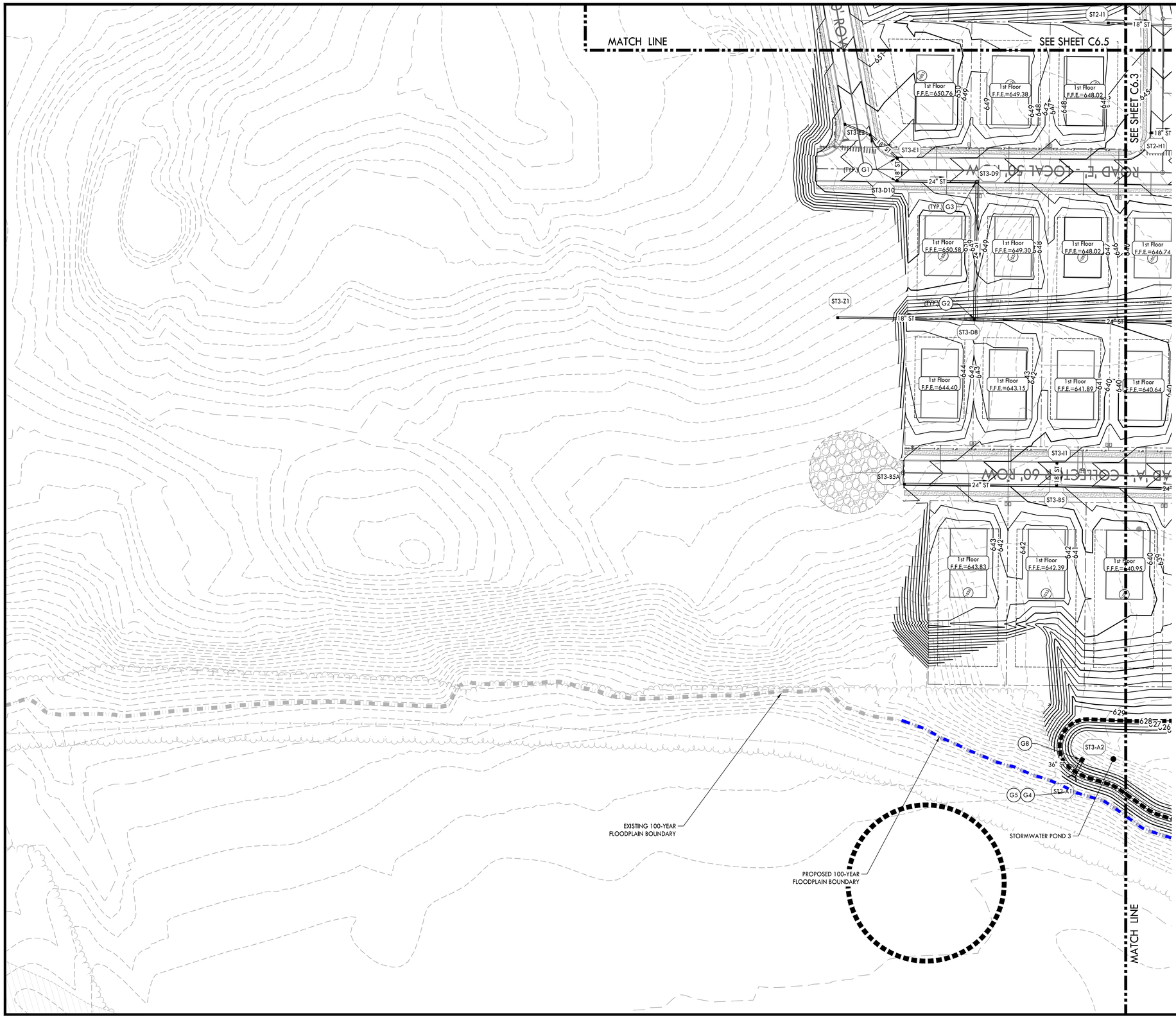
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GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS	
No.	DATE

09/21/23 17067

C6.3
GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
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G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- PROPOSED CONTOUR
- STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
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WILSON COUNTY TENNESSEE DEPARTMENT OF AGRICULTURE 9/21/23 COMMERCE NO. 114180 STATE OF TENNESSEE

GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.4
GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

0 10 20 30 40 50 100
GRAPHIC SCALE

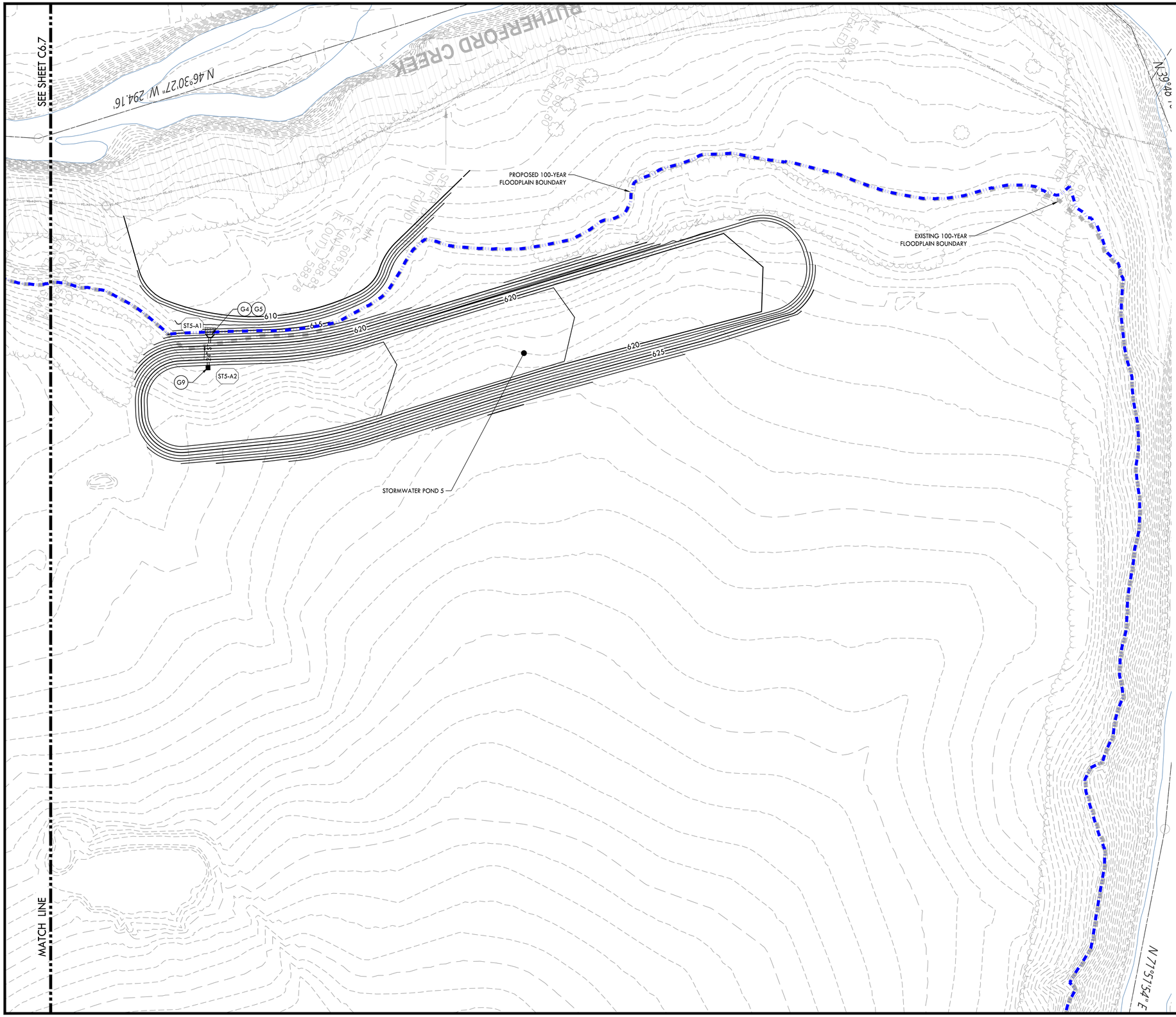
CRUNK ENGINEERING LLC
7112 CROSSROADS BOULEVARD
SUITE 201
FRANKLIN, TN 37027
(615) 873-1795
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GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS		
No.	DATE	

09/21/23 17067

C6.5
GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

0 10 20 30 40 50 100
GRAPHIC SCALE

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ENGINEERING CRUNK

ANDREW L. WILSON 134180 REGISTERED ENGINEER AGRICULTURE COMMERCE STATE OF TENNESSEE 9/21/23

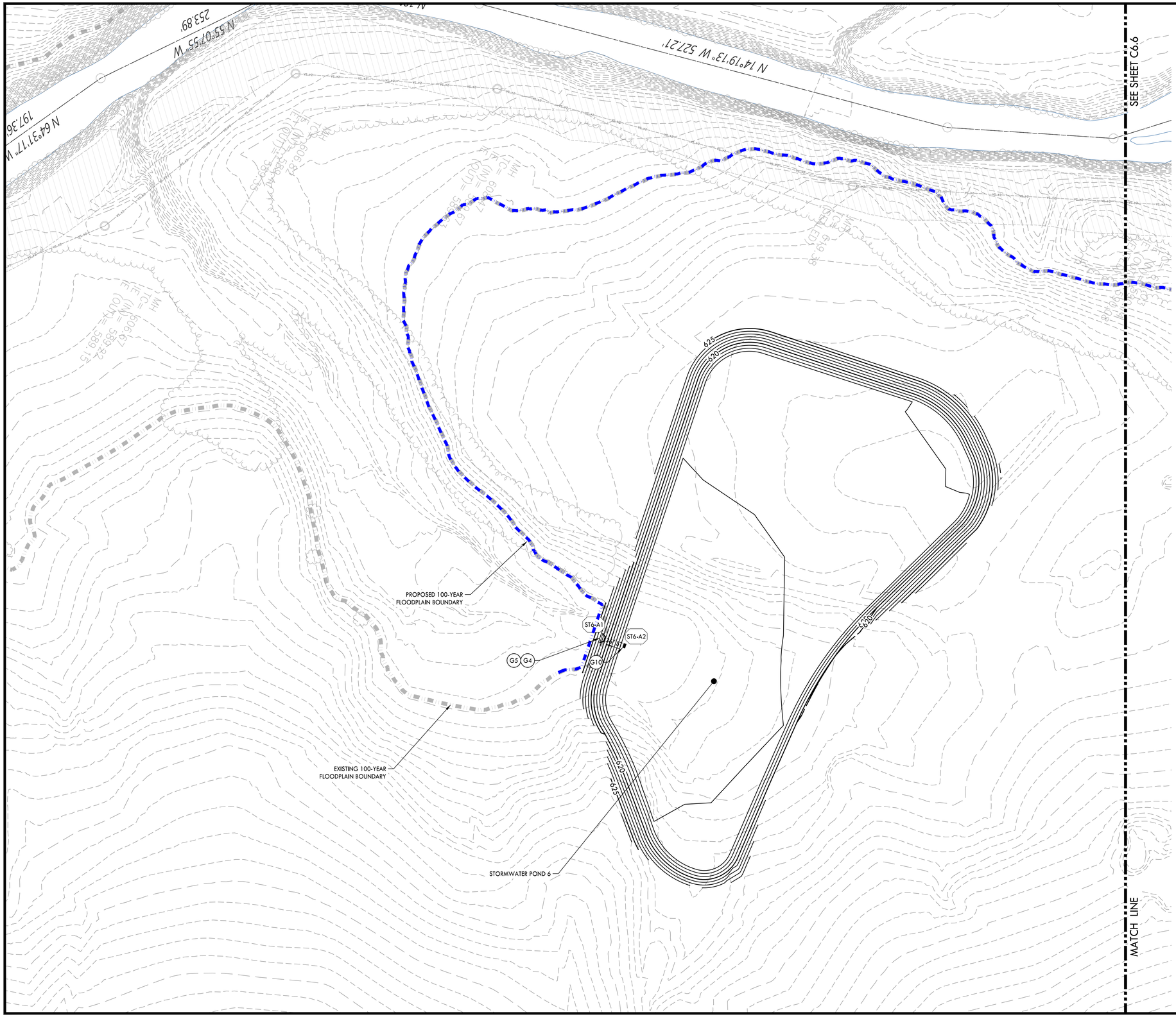
GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.6
GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

0 10 20 30 40 50 100
GRAPHIC SCALE

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ENGINEERING CRUNK

ANDREW WILSON CRUNK
REGISTERED
AGRICULTURE
9/21/23
ENGINEER
134180
STATE OF TENNESSEE

GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS	
No.	DATE

09/21/23 17067

C6.7
GRADING & DRAINAGE PLAN

STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
BYP-A1	611.93	18" ADS (IN): 610.30	18" - 24" CONCRETE HEADWALL
BYP-A2	622.50	18" ADS (IN): 618.00 18" ADS (IN): 614.00 18" ADS (OUT): 611.00	SINGLE CURB INLET
BYP-A3	621.59	18" ADS (IN): 616.00 18" ADS (OUT): 615.90	SINGLE CURB INLET
BYP-A4	622.10	18" ADS (IN): 617.45 18" ADS (IN): 617.45 18" ADS (OUT): 617.45	ROLL OVER INLET
BYP-A5	622.02	18" ADS (OUT): 618.80	SINGLE CURB INLET
BYP-B1	622.94	18" ADS (OUT): 618.50	ROLL OVER INLET
BYP-C1	613.63	18" ADS (IN): 612.00	18" - 24" CONCRETE HEADWALL
BYP-C2	624.69	18" ADS (IN): 621.00 18" ADS (OUT): 621.00	SINGLE CURB INLET
BYP-C3	624.68	18" ADS (OUT): 621.25	SINGLE CURB INLET
BYP-D1	618.46	18" ADS (IN): 616.82	18" - 24" CONCRETE HEADWALL
BYP-D2	625.71	18" ADS (IN): 618.10 18" ADS (OUT): 618.00	SINGLE CATCH BASIN
BYP-D3	622.69	18" ADS (IN): 619.35 18" ADS (OUT): 619.25	SINGLE CURB INLET
BYP-D4	623.20	18" ADS (OUT): 620.00	SINGLE CURB INLET
BYP-E1	621.63	18" ADS (IN): 618.50 18" ADS (OUT): 618.40	SINGLE CURB INLET
BYP-E2	624.30	18" ADS (OUT): 621.00	SINGLE CATCH BASIN
ST1-A1	618.08	18" ADS (IN): 616.44	18" - 24" CONCRETE HEADWALL
ST1-A2	623.85	18" ADS (OUT): 620.00	POND 1 OUTLET STRUCTURE
ST1-B1	621.63	18" ADS (IN): 620.00	18" - 24" CONCRETE HEADWALL
ST1-B2	624.05	18" ADS (IN): 620.15 18" ADS (IN): 620.20 18" ADS (OUT): 620.15	JUNCTION MANHOLE
ST1-B3	625.54	18" ADS (IN): 622.10 18" ADS (OUT): 622.00	SINGLE CURB INLET
ST1-B4	625.54	18" ADS (OUT): 622.40	SINGLE CURB INLET
ST1-C1	623.26	18" ADS (IN): 620.20 18" ADS (IN): 620.30 18" ADS (OUT): 620.20	SINGLE CURB INLET
ST1-C2	624.17	18" ADS (IN): 620.90 18" ADS (IN): 620.90 18" ADS (OUT): 620.90	SINGLE CURB INLET
ST1-C3	626.27	18" ADS (IN): 622.73 18" ADS (OUT): 622.79	SINGLE CURB INLET
ST1-C4	626.27	18" ADS (OUT): 622.98	SINGLE CURB INLET
ST1-D1	623.26	18" ADS (OUT): 620.26	SINGLE CURB INLET
ST1-E1	624.17	18" ADS (OUT): 621.20	SINGLE CURB INLET
ST1-F1	622.29	18" ADS (IN): 620.66	18" - 24" CONCRETE HEADWALL
ST1-F2	626.10	18" ADS (OUT): 622.90	SINGLE CURB INLET
ST2-A1	623.00	36" ADS (IN): 619.79 36" ADS (IN): 619.79	60" - 72" CONCRETE HEADWALL
ST2-A2	623.76	36" ADS (OUT): 620.00 36" ADS (OUT): 620.00	OUTLET STRUCTURE
ST2-B1	623.22	18" ADS (IN): 621.59	18" - 24" CONCRETE HEADWALL
ST2-B2	629.60	18" ADS (IN): 622.10 18" ADS (OUT): 622.00	SINGLE CATCH BASIN
ST2-B3	627.47	18" ADS (IN): 623.30 18" ADS (OUT): 623.20	SINGLE CURB INLET
ST2-B4	627.47	18" ADS (OUT): 623.60	SINGLE CURB INLET
ST2-C1	624.23	30" ADS (IN): 621.52	30" - 36" CONCRETE HEADWALL
ST2-C2	632.91	18" ADS (IN): 628.00 30" ADS (IN): 628.00 30" ADS (OUT): 625.00	JUNCTION MANHOLE
ST2-C4	636.93	30" ADS (IN): 630.50 30" ADS (OUT): 630.40	SINGLE CURB INLET
ST2-C5	636.53	30" ADS (IN): 631.10 30" ADS (OUT): 631.10	SINGLE CURB INLET
ST2-C6	637.46	18" ADS (IN): 631.80 30" ADS (IN): 631.80 30" ADS (OUT): 631.70	SINGLE CURB INLET
ST2-C7	639.58	30" ADS (IN): 634.00 18" ADS (IN): 634.00 30" ADS (OUT): 633.87	SINGLE CURB INLET
ST2-C8	642.40	30" ADS (IN): 635.60 30" ADS (OUT): 635.60	SINGLE CURB INLET
ST2-C9	642.40	24" ADS (IN): 636.00 30" ADS (OUT): 635.90	SINGLE CURB INLET
ST2-C10	643.49	18" ADS (IN): 639.60 24" ADS (IN): 636.50 24" ADS (OUT): 636.40	SINGLE CURB INLET

STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
ST2-C11	645.97	24" ADS (IN): 642.00 18" ADS (IN): 640.70 24" ADS (OUT): 637.70	SINGLE CURB INLET
ST2-C12	648.86	24" ADS (IN): 644.60 24" ADS (OUT): 644.50	SINGLE CURB INLET
ST2-C13	648.86	24" ADS (IN): 645.10 24" ADS (OUT): 645.00	SINGLE CURB INLET
ST2-C14	649.70	18" ADS (IN): 645.50 24" ADS (IN): 645.50 24" ADS (OUT): 645.40	SINGLE CURB INLET
ST2-C15	653.84	18" ADS (IN): 650.00 18" ADS (OUT): 649.90	SINGLE CURB INLET
ST2-C16	654.10	18" ADS (IN): 650.40 18" ADS (OUT): 650.30	SINGLE CURB INLET
ST2-C17	659.20	18" ADS (IN): 655.50 18" ADS (IN): 654.80 18" ADS (OUT): 654.70	SINGLE CURB INLET
ST2-C18	659.25	18" ADS (IN): 655.30 18" ADS (OUT): 655.20	SINGLE CURB INLET
ST2-C19	659.25	18" ADS (OUT): 655.70	SINGLE CURB INLET
ST2-D1	647.65	18" ADS (OUT): 644.50	SINGLE CATCH BASIN
ST2-E1	637.76	18" ADS (IN): 632.40 18" ADS (OUT): 632.30	SINGLE CURB INLET
ST2-E2	638.44	18" ADS (IN): 633.10 18" ADS (OUT): 633.00	SINGLE CURB INLET
ST2-E3	641.66	18" ADS (IN): 636.10 18" ADS (IN): 636.10 18" ADS (OUT): 636.00	SINGLE CURB INLET
ST2-E4	646.85	18" ADS (IN): 642.60 18" ADS (OUT): 642.50	SINGLE CURB INLET
ST2-E5	646.85	18" ADS (OUT): 643.00	SINGLE CURB INLET
ST2-G1	640.27	18" ADS (IN): 635.30 18" ADS (OUT): 635.20	SINGLE CATCH BASIN
ST2-G2	646.26	18" ADS (IN): 640.80 18" ADS (OUT): 640.70	SINGLE CATCH BASIN
ST2-G3	649.71	18" ADS (OUT): 645.00	SINGLE CATCH BASIN
ST2-H1	643.50	18" ADS (OUT): 640.00	SINGLE CURB INLET
ST2-I1	645.17	18" ADS (OUT): 642.00	SINGLE CATCH BASIN
ST2-J1	649.99	24" ADS (IN): 646.00 24" ADS (OUT): 645.90	SINGLE CURB INLET
ST2-J2	654.14	24" ADS (IN): 649.50 24" ADS (OUT): 649.40	SINGLE CURB INLET
ST2-J3	654.10	24" ADS (IN): 649.80 24" ADS (OUT): 649.70	SINGLE CURB INLET
ST2-J4	654.68	18" ADS (IN): 650.50 24" ADS (IN): 650.10 24" ADS (OUT): 650.00	SINGLE CURB INLET
ST2-J5	656.82	24" ADS (IN): 651.50 18" ADS (IN): 653.30 24" ADS (OUT): 651.40	SINGLE CURB INLET
ST2-J6	659.34	18" ADS (IN): 655.30 18" ADS (OUT): 655.20	SINGLE CURB INLET
ST2-J7	659.21	18" ADS (OUT): 655.70	SINGLE CURB INLET
ST2-K1	654.68	18" ADS (OUT): 651.00	SINGLE CURB INLET
ST2-L1	655.39	18" ADS (IN): 652.20 24" ADS (OUT): 652.10	SINGLE CATCH BASIN
ST2-L2	661.32	18" ADS (OUT): 658.00	SINGLE CATCH BASIN
ST2-M1	659.22	18" ADS (OUT): 656.20	SINGLE CURB INLET
ST2-N1	641.66	18" ADS (OUT): 637.00	SINGLE CURB INLET
ST3-A1	626.09	36" ADS (IN): 622.87	30" - 36" CONCRETE HEADWALL
ST3-A2	627.75	36" ADS (OUT): 623.00	POND 3 OUTLET STRUCTURE
ST3-B1	626.21	36" ADS (IN): 623.00	30" - 36" CONCRETE HEADWALL
ST3-B3	630.48	24" ADS (IN): 625.40 30" ADS (IN): 625.70 36" ADS (OUT): 625.30	SINGLE CURB INLET
ST3-B4	634.42	24" ADS (IN): 630.60 18" ADS (IN): 630.60 24" ADS (OUT): 630.50	SINGLE CURB INLET
ST3-B5	638.66	24" ADS (IN): 634.50 18" ADS (IN): 635.20 24" ADS (OUT): 634.40	SINGLE CURB INLET
ST3-B5A	641.47	24" ADS (OUT): 637.42	SINGLE CURB INLET
ST3-D2	630.20	30" ADS (IN): 626.00 30" ADS (OUT): 625.90	SINGLE CURB INLET
ST3-D3	631.27	30" ADS (IN): 626.40 30" ADS (OUT): 626.30	SINGLE CURB INLET
ST3-D4	631.27	30" ADS (IN): 626.70 30" ADS (OUT): 626.60	SINGLE CURB INLET
ST3-D5	633.90	30" ADS (IN): 627.60 30" ADS (OUT): 627.50	SINGLE CURB INLET
ST3-D6	633.12	24" ADS (IN): 628.10 30" ADS (OUT): 628.00	SINGLE CATCH BASIN

STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
ST3-D7	636.44	24" ADS (IN): 631.00 24" ADS (OUT): 630.90	SINGLE CATCH BASIN
ST3-D8	641.53	24" ADS (IN): 636.50 18" ADS (IN): 636.50 24" ADS (OUT): 636.40	SINGLE CATCH BASIN
ST3-D9	646.51	24" ADS (IN): 641.70 24" ADS (OUT): 641.60	JUNCTION MANHOLE
ST3-D10	647.97	18" ADS (IN): 644.30 24" ADS (OUT): 643.50	SINGLE CURB INLET
ST3-E1	647.97	18" ADS (IN): 644.70 18" ADS (OUT): 644.60	SINGLE CURB INLET
ST3-E2	648.81	18" ADS (IN): 645.60 18" ADS (OUT): 645.50	SINGLE CURB INLET
ST3-F1	649.13	18" ADS (OUT): 645.90	SINGLE CURB INLET
ST3-H1	634.42	18" ADS (OUT): 631.00	SINGLE CURB INLET
ST3-I1	638.66	18" ADS (OUT): 635.45	SINGLE CURB INLET
ST3-Z1	644.05	18" ADS (OUT): 640.00	SINGLE CATCH BASIN
ST5-A1	617.80	24" ADS (IN): 613.64	18" - 24" CONCRETE HEADWALL
ST5-A2	621.88	24" ADS (OUT): 617.00	POND 5 OUTLET STRUCTURE
ST5-C12	648.95	18" ADS (IN): 644.60 18" ADS (IN): 644.10 24" ADS (IN): 644.60 24" ADS (OUT): 644.00	SINGLE CURB INLET
ST5-C13	650.05	18" ADS (IN): 645.10 18" ADS (OUT): 645.00	JUNCTION MANHOLE
ST5-C14	651.04	18" ADS (IN): 645.80 18" ADS (IN): 645.80 18" ADS (OUT): 645.70	SINGLE CURB INLET
ST5-C15	658.77	18" ADS (IN): 653.80 18" ADS (IN): 653.80 18" ADS (OUT): 653.70	SINGLE CURB INLET
ST5-C16	664.61	18" ADS (IN): 661.10 18" ADS (OUT): 661.00	SINGLE CURB INLET
ST5-C17	664.61	18" ADS (OUT): 662.00	SINGLE CURB INLET
ST5-Q1	648.95	18" ADS (OUT): 645.00	SINGLE CURB INLET
ST5-R1	648.48	24" ADS (IN): 645.00 24" ADS (OUT): 644.90	SINGLE CATCH BASIN
ST5-R2	658.98	24" ADS (OUT): 656.20	SINGLE CATCH BASIN
ST5-S1	650.68	18" ADS (OUT): 646.20	SINGLE CURB INLET
ST5-T1	658.77	18" ADS (OUT): 654.50	SINGLE CURB INLET
ST6-A1	619.64	36" ADS (IN): 614.43	30" - 36" CONCRETE HEADWALL
ST6-A2	618.30	36" ADS (OUT): 615.00	POND 6 OUTLET STRUCTURE
ST6-L1	658.80	18" ADS (OUT): 652.60	SINGLE CATCH BASIN
ST6-M3	664.10	18" ADS (IN): 659.10	JUNCTION MANHOLE
ST6-M4	665.26	18" ADS (IN): 660.50 18" ADS (OUT): 660.40	SINGLE CURB INLET
ST6-M5	665.26	18" ADS (OUT): 660.80	SINGLE CURB INLET

STORM PIPE TABLE								
INLET	INVERT	OUTLET	INVERT	LENGTH (FT)	SLOPE (%)	SHAPE	DIAMETER (IN)	MATERIAL
BYP-A2	611.00	BYP-A1	610.30	8	8.39%	CIRCULAR	18	ADS
BYP-A3	615.90	BYP-A2	614.00	95	1.99%	CIRCULAR	18	ADS
BYP-A4	617.45	BYP-A3	616.00	28	5.20%	CIRCULAR	18	ADS
BYP-A5	618.80	BYP-A4	617.45	66	2.05%	CIRCULAR	18	ADS
BYP-B1	618.50	BYP-A2	618.00	48	1.04%	CIRCULAR	18	ADS
BYP-C2	621.00	BYP-C1	612.00	25	35.97%	CIRCULAR	18	ADS
BYP-C3	621.25	BYP-C2	621.00	26	0.98%	CIRCULAR	18	ADS
BYP-D2	618.00	BYP-D1	616.82	131	0.90%	CIRCULAR	18	ADS
BYP-D3	619.25	BYP-D2	618.10	107	1.08%	CIRCULAR	18	ADS
BYP-D4	620.00	BYP-D3	619.35	128	0.51%	CIRCULAR	18	ADS
BYP-E1	618.40	BYP-A4	617.45	34	2.77%	CIRCULAR	18	ADS
BYP-E2	621.00	BYP-E1	618.50	43	5.77%	CIRCULAR	18	ADS
ST1-A2	620.00	ST1-A1	616.44	39	9.01%	CIRCULAR	18	ADS
ST1-B2	620.20	ST1-B3	622.00	240	0.75%	CIRCULAR	18	ADS
ST1-B2	620.15	ST1-B1	620.00	21	0.71%	CIRCULAR	18	ADS
ST1-B3	622.10	ST1-B4	622.40	25	1.20%	CIRCULAR	18	ADS
ST1-C1	620.20	ST1-B2	620.15	22	0.22%	CIRCULAR	18	ADS
ST1-C2	620.90	ST1-C1	620.30	162	0.37%	CIRCULAR	18	ADS
ST1-C3	622.79	ST1-C2	620.90	246	0.77%	CIRCULAR	18	ADS
ST1-C4	622.98	ST1-C3	622.73	25	1.00%	CIRCULAR	18	ADS
ST1-D1	620.26	ST1-C1	620.20	25	0.22%	CIRCULAR	18	ADS
ST1-E1	621.20	ST1-C2	620.90	25	1.20%	CIRCULAR	18	ADS
ST1-F2	622.90	ST1-F1	620.66	198	1.13%	CIRCULAR	18	ADS
ST2-A2	620.00	ST2-A1	619.79	14	1.47%	CIRCULAR	36	ADS
ST2-A2	620.00	ST2-A1	619.79	14	1.44%	CIRCULAR	36	ADS
ST2-B2	622.00	ST2-B1	621.59	57	0.72%	CIRCULAR	18	ADS
ST2-B3	623.20	ST2-B2	622.10	167	0.66%	CIRCULAR	18	ADS
ST2-B4	623.60	ST2-B3	623.30	25	1.20%	CIRCULAR	18	ADS
ST2-C2	625.00	ST2-C1	621.52	30	11.77%	CIRCULAR	30	ADS
ST2-C4	630.50	ST2-C5	631.10	32	1.90%	CIRCULAR	30	ADS
ST2-C4	630.40	ST2-C2	628.00	152	1.58%	CIRCULAR	30	ADS
ST2-C6	631.70	ST2-C5	631.10	39	1.52%	CIRCULAR	30	ADS
ST2-C7	633.87	ST2-C6	631.80	126	1.65%	CIRCULAR	30	ADS
ST2-C8	635.60	ST2-C7	634.00	167	0.96%	CIRCULAR	30	ADS
ST2-C9	635.90	ST2-C8	635.60	25	1.20%	CIRCULAR	30	ADS
ST2-C10	636.40	ST2-C9	636.00	43	0.93%	CIRCULAR	24	ADS
ST2-C11	637.70	ST2-C10	636.50	117	1.03%	CIRCULAR	24	ADS
ST2-C12	644.50	ST2-C11	642.00	138	1.82%	CIRCULAR	24	ADS
ST2-C13	645.00	ST2-C12	644.60	25	1.60%	CIRCULAR	24	ADS
ST2-C14	645.40	ST2-C13	645.10	37	0.80%	CIRCULAR	24	ADS
ST2-C15	649.90	ST2-C14	645.50	263	1.67%	CIRCULAR	18	ADS
ST2-C16	650.30	ST2-C15	650.00	30	1.01%	CIRCULAR	18	ADS
ST2-C17	654.70	ST2-C16	650.40	207	2.08%	CIRCULAR	18	ADS
ST2-C18	655.20	ST2-C17	654.80	43	0.92%	CIRCULAR	18	ADS
ST2-C19	655.70	ST2-C18	655.30	25	1.60%	CIRCULAR	18	ADS
ST2-D1	644.50	ST2-C2	628.00	459	3.60%	CIRCULAR	18	ADS
ST2-E1	632.30	ST2-C6	631.80	31	1.61%	CIRCULAR	18	ADS
ST2-E2	633.00	ST2-E1	632.40	48	1.24%	CIRCULAR	18	ADS
ST2-E3	636.00	ST2-E2	633.10	153	1.90%	CIRCULAR	18	ADS
ST2-E4	642.50	ST2-E3	636.10	252	2.54%	CIRCULAR	18	ADS
ST2-E5	643.00	ST2-E4	642.60	25	1.60%	CIRCULAR	18	ADS
ST2-G1	635.20	ST2-C7	634.00	61	1.96%	CIRCULAR	18	ADS
ST2-G2	640.70	ST2-G1	635.30	289	1.87%	CIRCULAR	18	ADS
ST2-G3	645.00	ST2-G2	640.80	201	2.09%	CIRCULAR	18	ADS
ST2-H1	640.00	ST2-C10	639.60	25	1.60%	CIRCULAR	18	ADS
ST2-I1	642.00	ST2-C11	640.70	73	1.79%	CIRCULAR	18	ADS
ST2-J1	645.90	ST2-C14	645.50	31	1.30%	CIRCULAR	24	ADS
ST2-J2	649.40	ST2-J1	646.00	172	1.98%	CIRCULAR	24	ADS
ST2-J3	649.70	ST2-J2	649.50	25	0.80%	CIRCULAR	24	ADS
ST2-J4	650.00	ST2-J3	649.80	42	0.48%	CIRCULAR	24	ADS
ST2-J5	651.40	ST2-J4	650.10	101	1.28%	CIRCULAR	24	ADS
ST2-J6	655.20	ST2-J5	653.30	116	1.64%	CIRCULAR	18	ADS
ST2-J7	655.70	ST2-J6	655.30	25	1.59%	CIRCULAR	18	ADS
ST2-K1	651.00	ST2-J4	650.50	25	2.00%	CIRCULAR	18	ADS
ST2-L1	652.10	ST2-J5	651.50	55	1.08%	CIRCULAR	24	ADS

STORM PIPE TABLE								
INLET	INVERT	OUTLET	INVERT	LENGTH (FT)	SLOPE (%)	SHAPE	DIAMETER (IN)	MATERIAL
ST2-L2	658.00	ST2-L1	652.20	260	2.23%	CIRCULAR	18	ADS
ST2-M1	656.20	ST2-C17	655.50	25	2.80%	CIRCULAR	18	ADS
ST2-N1	637.00	ST2-E3	636.10	25	3.60%	CIRCULAR	18	ADS
ST3-A2	623.00	ST3-A1	622.87	20	0.62%	CIRCULAR	36	ADS
ST3-B3	625.30	ST3-B1	623.00	231	1.00%	CIRCULAR	36	ADS
ST3-B4	630.50	ST3-B3	625.40	231	2.21%	CIRCULAR	24	ADS
ST3-B5	634.40	ST3-B4	630.60	249	1.52%	CIRCULAR	24	ADS
ST3-B5A	637.42	ST3-B5	634.50	166	1.76%	CIRCULAR	24	ADS
ST3-D2	625.90	ST3-B3	625.70	30	0.67%	CIRCULAR	30	ADS
ST3-D3	626.30	ST3-D2	626.00	43	0.70%	CIRCULAR	30	ADS
ST3-D4	626.60	ST3-D3	626.40	25	0.80%	CIRCULAR	30	ADS
ST3-D5	627.50	ST3-D4	626.70	126	0.64%	CIRCULAR	30	ADS
ST3-D6	628.00	ST3-D5	627.60	42	0.96%	CIRCULAR	30	ADS
ST3-D7	630.90	ST3-D6	628.10	213	1.32%	CIRCULAR	24	ADS
ST3-D8	636.40	ST3-D7	631.00	307	1.76%	CIRCULAR	24	ADS
ST3-D9	641.60	ST3-D8	636.50	149	3.41%	CIRCULAR	24	ADS
ST3-D10	643.50	ST3-D9	641.70	87	2.07%	CIRCULAR	24	ADS
ST3-E1	644.60	ST3-D10	644.30	25	1.20%	CIRCULAR	18	ADS
ST3-E2	645.50	ST3-E1	644.70	39	2.05%	CIRCULAR	18	ADS
ST3-F1	645.90	ST3-E2	645.60	30	1.01%	CIRCULAR	18	ADS
ST3-H1	631.00	ST3-B4	630.60	25	1.60%	CIRCULAR	18	ADS
ST3-I1	635.45	ST3-B5	635.20	25	1.00%	CIRCULAR	18	ADS
ST3-Z1	640.00	ST3-D8	636.50	149	2.35%	CIRCULAR	18	ADS
ST5-A2	617.00	ST5-A1	613.64	33	10.09%	CIRCULAR	24	ADS
ST5-C12	644.00		640.50	204	1.71%	CIRCULAR	24	ADS
ST5-C13	645.00	ST5-C12	644.10	117	0.77%	CIRCULAR	18	ADS
ST5-C14	645.70	ST5-C13	645.10	47	1.29%	CIRCULAR	18	ADS
ST5-C15	653.70	ST5-C14	645.80	232	3.41%	CIRCULAR	18	ADS
ST5-C16	661.00	ST5-C15	653.80	257	2.80%	CIRCULAR	18	ADS
ST5-C17	662.00	ST5-C16	661.10	25	3.60%	CIRCULAR	18	ADS
ST5-Q1	645.00	ST5-C12	644.60	25	1.60%	CIRCULAR	18	ADS
ST5-R1	644.90	ST5-C12	644.60	33	0.90%	CIRCULAR	24	ADS
ST5-R2	656.20	ST5-R1	645.00	304	3.68%	CIRCULAR	24	ADS
ST5-S1	646.20	ST5-C14	645.80	27	1.47%	CIRCULAR	18	ADS
ST5-T1	654.50	ST5-C15	653.80	25	2.80%	CIRCULAR	18	ADS
ST6-A2	615.00	ST6-A1	614.43	22	2.61%	CIRCULAR	36	ADS
ST6-L1	652.60		650.80	171	1.05%	CIRCULAR	18	ADS
ST6-M4	660.40	ST6-M3	659.10	126	1.03%	CIRCULAR	18	ADS
ST6-M5	660.80	ST6-M4	660.50	25	1.20%	CIRCULAR	18	ADS

CRUNK ENGINEERING LLC
7112 CROSSROADS BOULEVARD
SUITE 201
FRANKLIN, TN 37027
(615) 873-1795
WWW.CRUNKENG.COM

ENGINEERING CRUNK



GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.8

STORM PIPE & STRUCTURE TABLES

DOCUMENT PREPARED BY:
Name: Alexander Mollica
Company Crunk Engineering
Address: 7112 Crossroads Blvd.
Brentwood, TN 37027
After recording return copy to City of Columbia, Development Services

INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES

Map & Parcel Number: Map 051, Parcel 55.00
Project Name: Landing at Greens Mill - Phase 1B

Recorded by deed in the Register of Deeds Office of Maury County in Deed Book _____, Page(s) _____.

THIS AGREEMENT, made this 16 day of September, 20 24, by and between Safe Harbor Residential hereinafter referred to as the "OWNER(S)" of the following property and City of Columbia, Tennessee, hereinafter referred to as the "CITY",

WE, the OWNER(S), with full authority to execute deeds, mortgages, other covenants, all rights, titles, and interests in the property described above, do hereby covenant with the CITY and agree as follows:

1. The OWNER(S) covenant and agree with the CITY that the OWNER(S) shall provide for adequate long term maintenance and continuation of stormwater control measures described in the Long Term Maintenance Plan and shown on the location map, deed of easement drawing or plat attached hereto to ensure that the facilities, are and remain in proper working condition in accordance with approved design standards, rules and regulations, and applicable laws. The OWNER(S) shall perform preventative maintenance activities at intervals described in the schedule attached hereto along with necessary landscaping (grass cutting, etc.) and trash removal as part of regular maintenance.

2. The OWNER(S) shall perform routine inspections to ensure that all long term stormwater management facilities are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. The OWNER(S) or operators shall maintain documents of these inspections.

3. The OWNER(S) shall perform comprehensive inspections of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect.

4. The OWNER(S) shall grant to the CITY or its agent or contractor the right of entry at reasonable times and in a reasonable manner for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining or repairing the facility within the CITY.

5. The OWNER(S) shall record and grant to the CITY the necessary easements and rights-of-way and maintain perpetual access from public rights-of-way to the facility for the CITY or its agent and contractor.

6. If, upon inspection, the CITY finds that the OWNER(S) has failed to properly maintain the facilities, the CITY may order the work performed within ten (10) days. In the event the work is not performed within the specified time, the ONWER(S) agrees to allow the CITY to enter the property and take whatever steps it deems necessary to maintain the stormwater control facilities. This provision shall not be construed to allow the CITY to erect any structure of a permanent nature on the PROPERTY without first obtaining written approval of the OWNER(S)

7. The CITY is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any obligation on the CITY. The OWNER(S) shall reimburse the CITY upon demand the costs incurred in the maintenance of the facilities.

8. If the OWNER(S) fails to pay the CITY for the above expensive after forty-five (45) days written notice, the OWNER(S) authorizes the CITY to collect said expenses from the OWNER(S) through appropriate legal action and the OWNER(S) shall be liable for the reasonable expenses of collection, court costs, and attorney fees.

9. The OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successor in interest shall indemnify and hold harmless the CITY and its officers, agents and employees for any and all damages, accidents, casualties, occurrences, claims or attorney's fees which might arise or be asserted, in whole or in part,

against the CITY from the construction, presence, existence, or maintenance of the stormwater control facilities subject to this AGREEMENT. In the event a claim is asserted against the CITY, its officers, agents or employees, the CITY shall notify OWNER(S) and the OWNER(S) shall defend at OWNER(S) expense any suit based on such claim. If any judgment or claims against the CITY, its officers, agents or employees, shall be allowed, the OWNER(S) shall pay all costs and expenses in connection therewith. The CITY will not indemnify, defend or hold harmless in any fashion the OWNER(S) from any claims arising from any failure, regardless of any language in any attachment or other document that the OWNER(S) may provide

10. The OWNER(S) shall not be able to transfer, assign or modify its responsibilities with respect to this agreement without the CITY's written prior consent. Nothing herein shall be construed to prohibit a transfer by OWNER(S) to subsequent owners and assigns.

11. No waiver of any provision of this AGREEMENT shall affect the right of any party thereafter to enforce such provision or to exercise any right or remedy available to it in the event of any default.

12. The OWNER(S) shall record a plat showing and accurately defining the easements for stormwater control facilities. The plat must reference the Instrument Number where this AGREEMENT and its attachments are recorded and contain a note that the OWNER(S) is responsible for maintaining the stormwater management facilities.

13. The OWNER(S) shall record this AGREEMENT in the office of the Register of Deeds for the county of Maury, Tennessee, and the AGREEMENT shall constitute a covenant running with the land, and shall be binding upon the OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successors in interest

ATTEST BY OWNER(S):

Print Name Koby DuMont

Title Division President

Signature _____

Owner Greens Mill, LLC

Address 308 Letterman Drive

Knoxville, TN 37919

City, State ZIP _____

STATE OF Tennessee
COUNTY OF Robertson

Before me, Lisa Dziezgowski of the state and county mentioned, personally appeared Koby Dumont, with whom I am personally acquainted and who acknowledged that he/she executed the foregoing instrument of the purposes therein contained.

Witness my hand this the 16th day of September, 2024.

Lisa Dziezgowski
Notary Public

My Commission Expires: August 18 2026

CITY OF COLUMBIA, TENNESSEE
ENGINEERING DEPARTMENT

APPROVED BY : _____

STATE OF TENNESSEE
COUNTY OF MAURY

Before me, _____ of the state and county mentioned, personally appeared _____, with whom I am personally acquainted, and who acknowledged themselves to be the City Engineer of the City of Columbia or his designee and as such, being authorized so to do, executed the foregoing instrument of the purposes therein contained.

Witness my hand this the _____ day of _____, 20_____.

_____
Notary Public
My Commission Expires: _____

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: ** 1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*

Fold hard copy submittals larger than 8½"x11"

All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	2558 Greens Mill Rd., Columbia, TN 38401		
	TAX MAP: 51	GROUP:	PARCEL: 55.00
SUMMARY OF NATURE OF REQUEST AND WORK	The purpose of this plat is to create 40 build-able lots, 1 open space lots, dedication of Right of Way, and Easements.		

DATE OF PRE-APPLICATION CONFERENCE	08/28/2024	*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
❑ Comprehensive Plan Amendment ❑ Annexation ❑ Rezoning ❑ Preliminary Plat ☒ Final Plat ❑ PUD Preliminary Master Plan ❑ PUD Final Site Plan ❑ Site Development Plan ❑ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ❑ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ❑ Requested Zone Listed ❑ Statement of Compliance with Comprehensive Plan ❑ Concept Plan **Preliminary Plats/Site Development Plans:** ❑ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ❑ Receipt of Payment for Pre-Application Meeting ❑ Written Legal Description copy ❑ Columbia Water System Availability Letter ❑ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs: ☐ Project Name (include Sections & Phases) The Landing at Greens Mill Rd. - Phase 1B ☐ Total Number of Lots/Residential Units 40 ☐ Square Footage of Non-Residential Floor Space ☐ Total acreage 10.50 acres

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT
All communications go to the Applicant's email that is provided.

NAME	Crunk Engineering, LLC	PHONE	615-873-1795
ADDRESS	7112 Crossroads Blvd., #201, Brentwood, TN 37027	EMAIL	adam@crunkeng.com

PROPERTY OWNER NAME	Safe Harbor Residential	PHONE	865-622-1774
ADDRESS	105 Westpark Dr., #365, Brentwood, TN 37027	EMAIL	taylor@safeharborresidential.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Adam Crunk, PE		09/16/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
Kirby DuMont		9-16-2024
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

The Landings at Greens Mill Phase 1C Final Plat

Project #:	24-0421	Location:	2558 Greens Mill Road
Applicant:	Crunk Engineering, LLC	Case Type(s):	Final Plat
Staff Planner:	Austin Brass, AICP	Proposed Use:	Single Family Homes

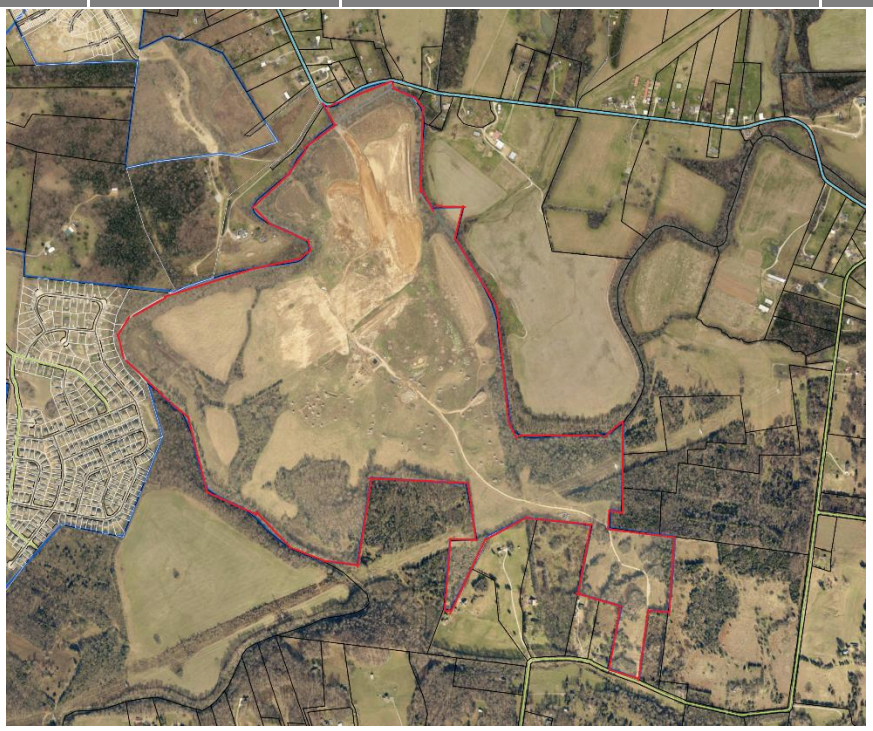
PROJECT SUMMARY

The applicant requests Final Plat approval for the creation of 27 lots. This Final Plat is part of an approved Planned Unit Development Master Plan & Preliminary Plat for the development of 550 homes on a 376.96-acre site. The Planning Commission approved a Final PUD Master Plan revision (*24-0146*) on July 10th, 2024 conforming to the Preliminary PUD Master Plan of an RS-10 Planned Unit Development with Phase 1 containing 100 lots.

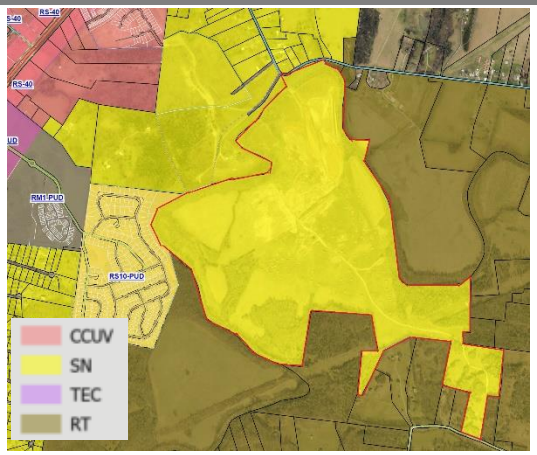
- A letter of credit in the amount of $330,000 has been provided for this Final Plat.
- A Land Disturbance Permit has been approved with Phase 1C being in construction. It shall be noted that this first phase contained no changes from the previously approved Preliminary Plat as approved in the Final PUD master plan on March 9th, 2022. This phase included the Clubhouse and pool amenity.
- The Development Review Committee evaluated the proposal at its November 2024 meeting. Historically, staff concerns were lots that did not conform to the lot width typical of 73' as shown on all approved Master PUD documents. Planning Commission has since evaluated that all lot widths of 73' can be measured at the minimum building line and not the ROW. All lots have at least 73' at the ROW with the exception of lot 1104 where the 73' measurement will be from the building line.
- The Planning Commission is the **decision-making authority** for the Final Plat.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

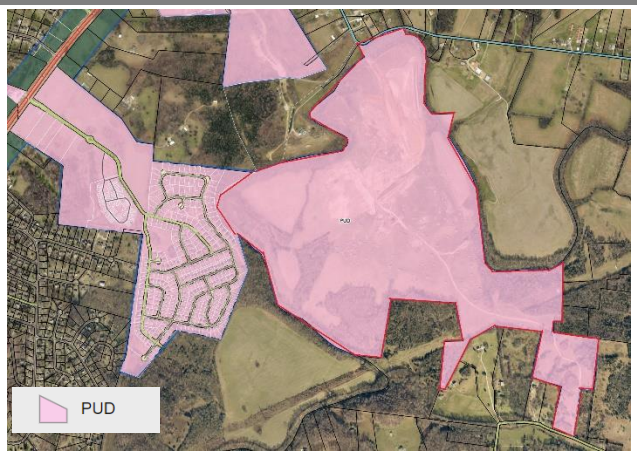
SITE INFORMATION

CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
R-PUD	In-Development	Infrastructure for Development	+/- 6.67 Acres



FUTURE LAND USE MAP	ZONING MAP





SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	Suburban Neighborhoods	PUD	In Development (*SF Homes)*
North	N/A	County Zoning (A-2)	Rural Residential
South	Rural Transition	County Zoning (A-1)	Vacant Land
East	Rural Transition	County Zoning (A-1)	Vacant Land
West	Suburban Neighborhoods	County Zoning (A-1) PUD (*Honey Farms*)	Vacant Land/ Residential

CONFORMITY WITH ZONING ORDINANCE

The Final Plat does not conform to the PUD Master Plan lot width typical indicating all lot widths of 73’ at the right-of-way.

RS-10 PUD Standards (*Approved Under Zoning Ordinance 3638*)		
Standard:	**Preliminary PUD Master**	**Approved Final PUD Master Plan**
Lots:	Phase 1 Lots: 174 Phase 2 Lots: 175 Phase 3 Lots: 156 Phase 4 Lots: 45 Total Lots: 550	Phase 1 Lots: 100 Phase 2 Lots: 218 Phase 3 Lots: 232 Phase 4 Lots: None Total Lots: 550
Setbacks / Yards -	Front Setback / Yard, Minor Collector: 30’	Front Setback / Yard, Minor Collector: 30’
	Front Setback / Yard, Local Street: 25’	Front Setback / Yard, Local Street: 25’
	Side Setback / Yard: 10’	Side Setback / Yard: 10’
	Rear Setback/ Yard: 20’	Rear Setback/ Yard: 20’
Min Lot Size & Width:	Min Lot Size: 10,000 SF	Min Lot Size: 10,000 SF
	Min Lot Width: 73 ft.	Min Lot Width: 73 ft.

Open Space:	Required: 6% (376 acres) Provided: 169 acres (25%)	Required: 6% (376 acres) Provided: 178 acres (47%) Usable Open Space (33%): 7.46 acres Provided: 9.20 acres

REVIEW PROCESS

The Development Review Committee evaluated the proposed Final Plat at its November 2024 meeting, as directed by section **8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package and summarized above.

Section **8.5.24** of the Zoning Ordinance directs the Planning Commission to review Subdivision Plats for conformity with the standards of the Ordinance and the City Subdivision Regulations. The Ordinance indicates that all Preliminary and Final Plats must be prepared, submitted, reviewed and acted upon in accordance with the Subdivision Regulations.

The Planning Commission is the Decision-Making Authority for Final Plats under **§ 8.3.3.B.1** of the Zoning Ordinance and **§ 2.3** of the Subdivision Regulations.

Section **2.3.6** of the Subdivision Regulations establishes the review criteria for approval of Final Plats.

> *A. Recommendations and final action on a Final Plat shall be based on consideration of the following criteria:*
>
> *1. Whether the proposed Final Plat complies with the applicable zoning district and overlay districts;*
>
> *2. Whether the proposed Final Plat is consistent with all standards of these Subdivision Regulations and other related codes and ordinances enforced by the City; and*
>
> *3. Whether the proposed Final Plat meets all the requirements or conditions of any applicable development approvals, such as development plans or associated modification of standards.*
>
> *B. Final Plat approval shall be subject to the completion of required improvements, or in lieu, the CMPC may approve a Performance Agreement.*

In the event of a denial, **§ 2.3.5** of the Subdivision Regulations requires the Planning Commission to identify the specific parts of applicable plans and regulations with which the plat does not comply.

COMMENTARY FROM PROFESSIONAL PLANNING STAFF

This Final Plat conforms to the previously approved Final PUD Master Plan. One lot 1104 will have a minimum width 73' measured from the MBSL line.

SUMMARY OF DEVELOPMENT REVIEW COMMITTEE COMMENTS

The DRC reviewed this proposal at its November meeting. A full list of comments, and the applicant's responses, is provided in the agenda packet.

SAMPLE MOTIONS

Approve:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in section 1.24.7 of the City of Columbia Zoning Ordinance, and Section 2.2.6 of the Subdivision Regulations, have been satisfied and approve revised Preliminary Plat as presented [, subject to technical comments and other conditions presented by planning staff].

Approve Subject to Conditions:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in section 1.24.7 of the City of Columbia Zoning Ordinance, and Section 2.2.6 of the Subdivision Regulations, have been satisfied and approve the revised Preliminary Plat subject to the following conditions: [list conditions of approval crafted by Planning Commission].

Deny:

Move to deny the Site Development Plan and Preliminary Plat having found, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in section 1.24.7 of the City of Columbia Zoning Ordinance, and Section 2.2.6 of the Subdivision Regulations are not satisfied [list specific reasons for denial].

Defer:

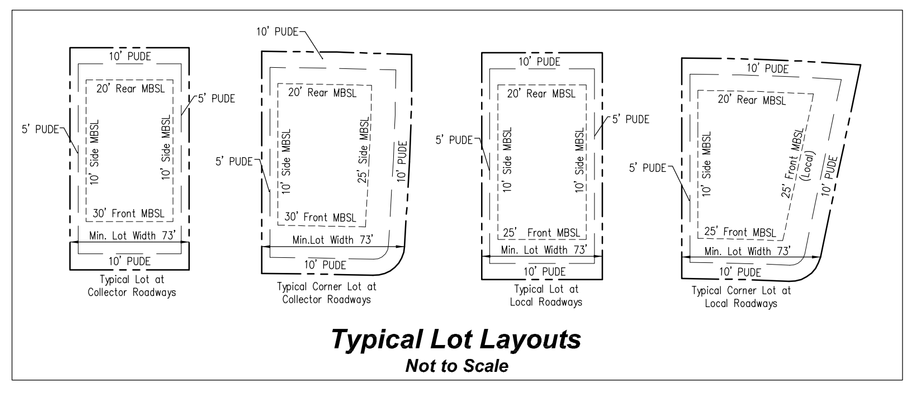
Move to find that there is insufficient information to make a decision, defer the matter to the next regularly scheduled meeting of the Planning Commission, and request that the [applicant/staff] provide: [list additional information] for review at that future meeting.

TOTAL AREA THIS RECORDING = 373,700 S.F. or 8.58 Acres ±

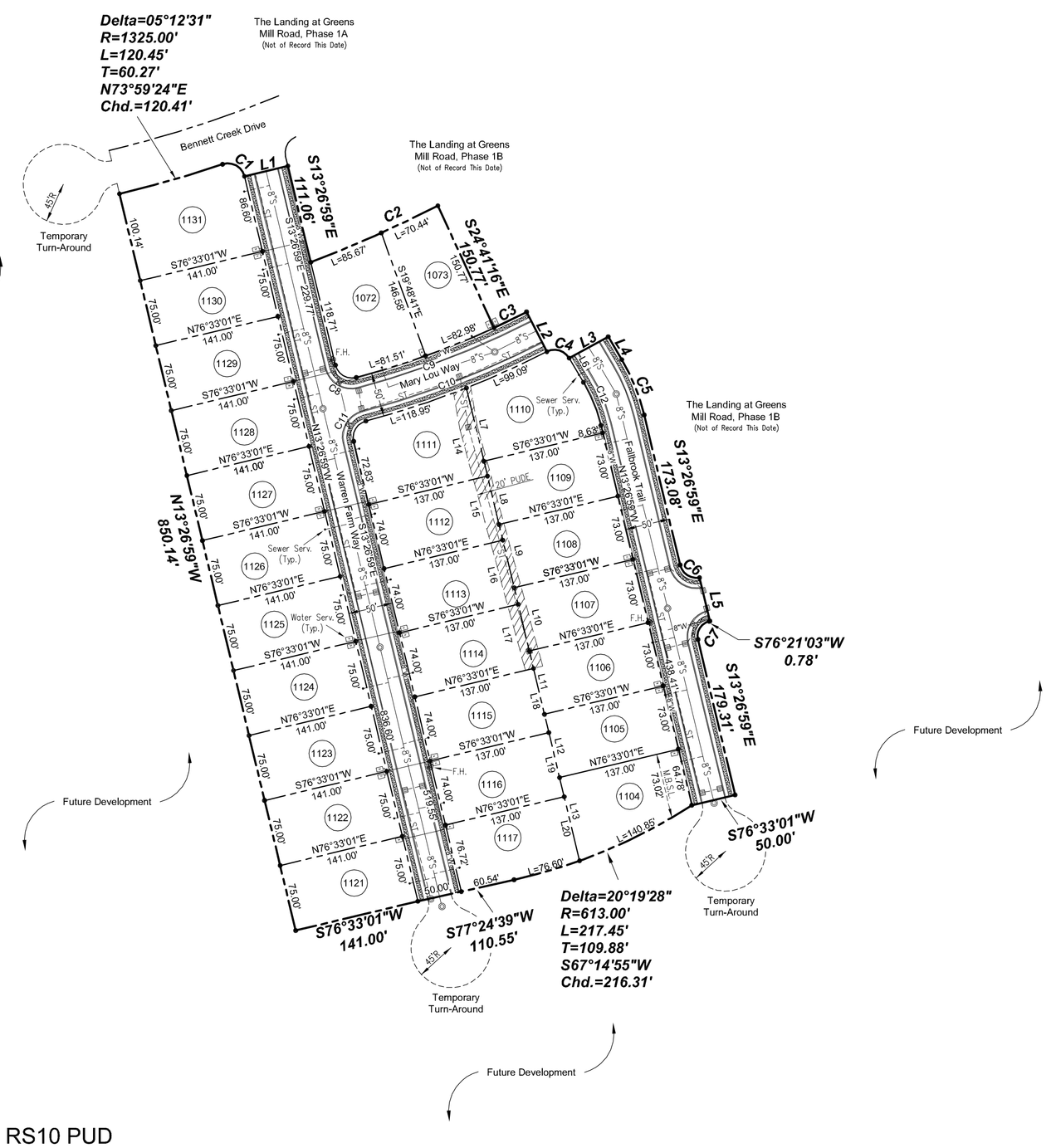
CURVE TABLE						
CURVE	DELTA	RADIUS	TANGENT	LENGTH	CHD BEARING	CHORD
C1	95°09'53"	19.00'	20.79'	31.56'	S61°01'55"E	28.05
C2	06°07'04"	1462.00'	78.13'	156.10'	N66°01'30"E	156.03'
C3	02°23'23"	975.00'	20.33'	40.66'	N64°07'03"E	40.66'
C4	86°27'42"	19.00'	17.86'	28.67'	S73°50'48"E	26.03'
C5	17°09'58"	225.00'	33.96'	67.41'	S22°01'58"E	67.16'
C6	86°47'11"	19.00'	17.96'	28.78'	S56°50'34"E	26.11'
C7	89°57'56"	17.00'	16.99'	26.69'	S31°31'59"W	24.03'
C8	91°34'20"	19.00'	19.53'	30.37'	S59°14'09"E	27.24'
C9	09°39'57"	975.00'	82.44'	164.48'	N70°08'43"E	164.29'
C10	12°11'17"	1025.00'	109.43'	218.04'	S69°01'00"E	217.63'
C11	88°33'37"	19.00'	18.53'	29.37'	S30°49'50"W	26.53'
C12	17°09'58"	175.00'	26.41'	52.43'	N22°01'58"W	52.23'

LINE TABLE		
LINE	BEARING	LENGTH
L1	N76°33'01"E	50.00'
L2	S27°04'38"E	50.00'
L3	N61°21'33"E	50.03'
L4	S30°36'57"E	29.79'
L5	S13°13'58"E	50.06'
L6	S30°36'57"E	31.51'
L7	S13°26'59"E	84.58'
L8	S13°26'59"E	73.00'
L9	S13°26'59"E	73.00'
L10	S13°26'59"E	73.00'
L11	S13°26'59"E	73.00'
L12	S13°26'59"E	73.00'
L13	S13°26'59"E	96.11'
L14	S13°26'59"E	101.70'
L15	S13°26'59"E	74.00'
L16	S13°26'59"E	74.00'
L17	S13°26'59"E	74.00'
L18	S13°26'59"E	74.00'
L19	S13°26'59"E	74.00'
L20	S13°26'59"E	74.00'

AREA SUMMARY		
LOT	SQ. FT.	ACREAGE
1072	13,199	0.30
1073	11,412	0.26
1104	11,400	0.26
1105	10,001	0.23
1106	10,001	0.23
1107	10,001	0.23
1108	10,001	0.23
1109	10,001	0.23
1110	12,377	0.28
1111	12,950	0.30
1112	10,138	0.23
1113	10,138	0.23
1114	10,138	0.23
1115	10,138	0.23
1116	10,138	0.23
1117	10,530	0.24
1121	10,575	0.24
1122	10,575	0.24
1123	10,575	0.24
1124	10,575	0.24
1125	10,575	0.24
1126	10,575	0.24
1127	10,575	0.24
1128	10,575	0.24
1129	10,575	0.24
1130	10,575	0.24
1131	14,369	0.33



Typical Lot Layouts
Not to Scale



ZONING: RS10 PUD

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAT IS TO CREATE 40 BUILDABLE LOTS, 1 OPEN SPACE LOT, DEDICATION OF RIGHT OF WAY AND EASEMENTS.
2. PROPERTY SHOWN HEREON IS PART OF PARCEL (55.00) ON MAURY COUNTY PROPERTY MAP 51.
3. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPZONE 4100, NAD 83 DATUM.
4. BEING PART OF THE SAME PROPERTY CONVEYED TO 2558 GREENS MILL, LLC AS OF RECORD IN BOOK R2799, PAGE 298 REGISTERS' OFFICE, MAURY COUNTY, TENNESSEE.
5. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, A PORTION OF THIS PROPERTY IS LOCATED WITHIN AN AREA OF FLOOD INUNDATION AS SHOWN ON FEMA MAP NUMBER: 47119C0180E, DATED: 4/16/2007. CITY OF COLUMBIA NUMBER 475423 - PANEL 0180 - SUFFIX E FLOOD ZONES "AE" AND "X"
6. THIS PROPERTY IS CURRENTLY ZONED: RS 10 PUD.
7. WATER AND SANITARY SEWER SERVICES TO BE PROVIDED BY COLUMBIA PUBLIC UTILITIES.
8. THERE IS A 10' PUBLIC UTILITY & DRAINAGE EASEMENT RUNNING PARALLEL TO THE REAR PROPERTY LINE AND ALL STREET R.O.W. UNLESS SHOWN OTHERWISE. THERE IS A 5' PUBLIC UTILITY & DRAINAGE EASEMENT RUNNING PARALLEL TO THE SIDE PROPERTY LINE UNLESS SHOWN OTHERWISE.
9. XXX INDICATES STREET ADDRESS.
10. ALL UTILITIES ARE TO BE UNDERGROUND.
11. NO MOBILE HOMES SHALL BE PERMITTED.
12. NO DRIVEWAY TO BE CONSTRUCTED OVER SANITARY SEWER SERVICE LINE.
13. FOR MINIMUM YARD LINES SEE THE TYPICAL LOT DETAILS.
14. ALL NOTES AND CERTIFICATES APPLY TO ALL SHEETS.
15. SIDEWALKS ARE 5' WIDE, UNLESS OTHERWISE NOTED.
16. EXISTING USE: VACANT, PROPOSED USE : ONE-FAMILY, DETACHED DWELLINGS
17. ALL OPEN SPACE TRACTS SHALL BE OWNED AND MAINTAINED BY THE LANDING AT GREENS MILL ROAD HOMEOWNERS ASSOCIATION.
18. ROADS, UTILITIES, AND OTHER FACILITIES HAVE BEEN FILED AS REQUIRED BY THE CITY OF COLUMBIA SUBDIVISION REGULATIONS.
19. THIS SUBDIVISION IS SUBJECT TO THE TERMS AND CONDITIONS OF THE RECORDED STORMWATER INSPECTION AND MAINTENANCE AGREEMENT FOR THESE FACILITIES AS RECORDED IN BOOK _____, PAGE _____, R.O.M.C., TN.
20. A STREAM BUFFER AS SHOWN ON THIS PLAN IS TO BE A PERMANENT WATER QUALITY BUFFER IN ACCORDANCE WITH ARTICLE 6 SECTION 9 OF THE CITY OF COLUMBIA STORMWATER ORDINANCE. THIS STREAM BUFFER IS TO REMAIN IN A NATURAL VEGETATED STATE FREE OF OBSTRUCTIONS, STRUCTURES, AND INTRUSIONS. BUFFER IS TO BE A NO MOW BUFFER AREA, AND THE MAINTENANCE WITHIN STREAM BUFFERS TO BE LIMITED TO HAND OPERATED TOOLS AND BE PERFORMED IN ACCORDANCE WITH CURRENT CITY OF COLUMBIA STORMWATER ORDINANCE AND OR AT THE DIRECTION OF THE CITY OF COLUMBIA ENGINEERING DIVISION.
21. NO OBSTRUCTIONS OR ENCROACHMENTS WHICH IMPEDE THE FLOW OF STORMWATER SHALL BE PERMITTED WITHIN PUBLIC DRAINAGE EASEMENTS. THE CITY OF COLUMBIA IS NOT RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY ENCROACHMENTS THAT ARE DAMAGED OR REMOVED IN THE COURSE OF MAINTENANCE ACTIVITY WITHIN EASEMENTS AS REFERENCED IN THE COLUMBIA GENERAL MANAGEMENT CODE, CHAPTER 1, ARTICLE 1, SECTION 15-8.
22. THE FINAL PLAT SHOWN HEREON IS VESTED UNDER THE PREVIOUS ZONING CODE WITHIN ZONING ORDINANCE 3638 AS AN RS-10 PLANNED UNIT DEVELOPMENT.
23. THE AMENTITY CENTER AND ASSOCIATED PARKING WILL REQUIRE SEPERATE PERMIT AND SITE PLAN REVIEW.

(NAD83)

1" = 100'
0' 50' 100' 200'
GRAPHIC SCALE

LEGEND:

IP(0)	Existing Iron Pipe – IP(O)
IR(0)	Existing Iron Rod – IR(O)
IR(N)	Iron Rod (New) – IR(N)
	Sanitary Manhole
	Fire Hydrant (F.H.)
	Catch Basin
	Storm Manhole
	Concrete Headwall
PUDE	Public Utility & Drainage Easement
MBSL	Minimum Building Setback Line
R.O.M.C.	Registers' Office Maury County

CERTIFICATE OF SUBDIVISION NAME AND STREET NAMES

Subdivision name and street names approved by the City Engineering Department and by E-911 Maury County.

Maury County E-911 — Date

CERTIFICATE OF COMMON AREAS DEDICATION

2558 Greens Mill, LLC, in recording this plat has designated certain areas of land shown hereon as common areas intended for use by the homeowners within The Landing At Green Mills Road - Phase 1C, for recreation and related activities. The above-described areas are not dedicated for use by the general public, but are dedicated to the common use of the homeowners within the named subdivision.

"Declaration of Covenants and Restrictions", applicable to the above named subdivision, is hereby incorporated and made part of this plat.

Date — Owner

CERTIFICATE OF COMPLIANCE

I hereby certify that the final subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations and other adopted ordinances and policies.

City Engineer, Columbia, Tennessee — Date

CERTIFICATE OF SANITARY SEWER SYSTEM

I hereby certify that the sanitary sewer system outlined or indicated on this final subdivision plat has been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

Director of Wastewater Department, Columbia,Tennessee — Date

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE AND UTILITIES

I hereby certify that the streets, drainage and utilities outlined or indicated on this final subdivision plat have been installed in accordance with City specifications, or a performance surety in the amount of $_____ for streets and drainage has been posted with the City of Columbia, Tennessee to assure completion of such improvements.

City Engineer, Columbia, Tennessee — Date

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the final subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations, with the exception of such variances, if any, as noted in the minutes of the Columbia Municipal Planning Commission, and that it has been approved for recording in the Office of the Maury County Register of Deeds.

Planning Director, Columbia, Tennessee — Date

CERTIFICATE OF SURVEY ACCURACY

I (we) do hereby certify, to the best of my (our) knowledge and belief this is a true and accurate survey of the property shown hereon; that this is a Category "1" Land Survey as defined in Tennessee Chapter 38, Tennessee Code Annotated, and the ratio of precision of unadjusted survey is 1:10,000 or greater; and that the survey was completed on 10-21-24 to 1:10,000.

M. Trevor Gordon, Registered Land Surveyor — Tennessee License Number

Last Revised: 10-21-2024
~~9-13-2024~~
Date

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon as evidenced in Book R2799, Page 298, Maury County Register's Office, and adopt this final subdivision plat of the property as shown hereon and dedicate all public ways and easements as noted with my (our) free consent.

Owner(s) — Date

Title (if acting for corporation or partnership)

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I hereby certify that the water system(s) outlined or indicated on this final subdivision plat entitled The Landing at Greens Mill Road - Phase 1C has / have been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

Date — Name, Title, and Agency or Authorized Approving Agent

REVISIONS:
1 By:MTG Date: 10-21-2024. Revise per staff comments.

Prepared By:
JTA LAND SURVEYING, INC.
3384 N. Mt. Juliet Road, Suite 900
Mt. Juliet, TN. 37122

FINAL PLAT
THE LANDING AT GREENS MILL ROAD
PHASE 1C
GREEN MILLS ROAD
Property Map # 51 - Parcel (55.00)

CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

DRAWN BY: MTG, TMF, RR — Scale : 1" = 100' — (See Revisions) DATE: SEPTEMBER 16, 2024 — Job No. 2023-507

SHEET 1 OF 1

November 18, 2024

City of Columbia
Development Review Committee
700 N Garden Street
Columbia, TN 38401

RE: Greens Mill Road – Phase 1C – Final Plat

Below are our responses to comments received on November 12, 2024. We believe we have satisfied all comments, but if you have additional concerns or questions, please do not hesitate to contact us. Our responses are as follows:

COMMENTS:

Fire

1. Please add existing roads so I can tell where all connections are. All dead end roads over 150', in length, will need an approved turnaround. Please show on the plans.
   Response: Existing roads and temporary turnarounds have been shown on the plans where necessary.

Engineering

2. Provide LOC in the amount of $330,000 prior to resubmittal date.
   Response: LOC has been provided ahead of the resubmittal date.
3. Record and reference stormwater maintenance agreement prior to resubmittal date. (R3024/1309)
   Response: Stormwater Maintenance Agreement has been provided with this resubmittal.
4. Grading shall substantially conform to approved construction plans (within 1 ft.)
   Response: Understood.
5. Binder and curbing shall be installed prior to resubmittal date.
   Response: Understood.
6. Show all adjoining properties.
   Response: Adjoining properties shown on the plat.
7. Label roads as Public, include ROW width, and classification (minor local, major local, etc.)
   Response: Roadway classifications labelled on the plans.

Maury County Highway Dept.

8. The Maury County Highway Department (MCHD) understands a revised development agreement is being drafted for review/ approval by the MHD with the intent to present the approved agreement to the County Commission in January 2025. Applicant should continue coordination and collaboration with the MCHD during the finalization of the development agreement.
   Response: Understood.

Building

9. No comments.

Police

10. No comments provided.

Duck River Electric Membership Corp

11. No comments.

Maury County E911

12. Battle Creek Elementary, Battle Creek Middle, Battle Creek High 9/10 (24/25 SY), 9-11 (25/26 SY) 9-12 (26/27 SY). Spring Hill High 11-12 (24/25 SY) 12 (25/26 SY). See Attached Capacity Numbers
    The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students
    Response: Understood.

Columbia Power

13. CPWS BB Plan to Serve
14. Columbia Power System has an existing power line near your proposed development. We are willing to serve this commercial development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

Columbia Water

15. Make corrections described in notes shown on the attached PDF.

    Be prepared to deed infrastructure to CPWS at plat signing, water system must be active at time of plat signing.
    Response: Understood.

Atmos Energy

16. No comments provided.

Maury County Schools

17. Battle Creek Elementary, Battle Creek Middle, Battle Creek High 9/10 (24/25 SY), 9-11 (25/26 SY) 9-12 (26/27 SY). Spring Hill High 11-12 (24/25 SY) 12 (25/26 SY).
    See Attached Capacity Numbers
    The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.
    * Due to numbers, MCPS will be rezoning all Columbia and Spring Hill elementary schools for the 25/26 SY.

Response: **Understood.**

ATT

18. ATT TO SERVE

Public Works

19. No comments .

Wastewater

20. Columbia Wastewater requires submittal of testing, as-builts, CCTV and a reduced maintenance LOC for review and approval by our Department before we approve building permits.
    Response: **Understood.**

Planning

21. The lead staff person for this case is Austin Brass, AICP; he will prepare the staff report for this item. Please contact abrass@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
    Response: **Understood.**
22. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
    Response: **This document will serve as the comment response letter.**

We believe that all comments have been addressed. If you have any questions or need additional information, please do not hesitate to contact me at adam@crunkeng.com or 615-873-1795.

Sincerely,



Adam Crunk, PE
Crunk Engineering LLC

Surveyors Response Letter – October 21, 2024 - By: M. Trevor Gorman - RLS # 2875
For: Final Plat – The Landing at Greens Mill, Phase 1C (Item No. 24-0421)
JTA Land Surveying, Inc. – Job No. 2024-470

We have made the following corrections / revisions to the Final Plats. JTA responses are in RED as follows:

Planning

1. Lot 1104. Please provide MBSL on these lots noting the width of the MBSL to be at least 73'. Corrected on Plat.
2. Provide street names for all road sections unlisted with approval by E-911. Corrected on Plat.

Fire

3. All dead end roads over 150' will need an approved turnaround, please show on plans. Added to Plat.

Engineering

4. Provide LOC in the amount of $330,000 prior to resubmittal date. Acknowledged.
5. Record and reference stormwater maintenance agreement prior to resubmittal date. Acknowledged.
6. Grading shall substantially conform to approved construction plans (within 1 ft.) Acknowledged.
7. Binder and curbing shall be installed prior to resubmittal date. Acknowledged.
8. Show all adjoining properties. Added to Plat.
9. Provide all road names. Added to Plat.
10. Show easements for storm as hatched area (20 ft width). See lots 1111-1114. Added to Plat.
11. Please provide the correct certificates and language as provide in Appendix A - Subdivision Regulations. Corrected on Plat.

Maury County Highway Dept.

12. The Maury County Highway Department has not had any contact with the developer of this project with regard to connection to the Maury County R.O.W. Acknowledged.
13. Provide executed Development Agreement to the Maury County Highway Department detailing agreed upon impact fee schedule. Draft Development Agreement is attached for review / use. Acknowledged.

Building

14. No comments. Acknowledged.

Police

15. No comments provided. Acknowledged.

Duck River Electric Membership Corp

16. The Maury County Highway Department has not had any contact with the developer of this project with regard to connection to the Maury County R.O.W. Acknowledged.

Maury County E911

17. Battle Creek Elementary, Battle Creek Middle, Battle Creek High 9/10 (24/25 SY), 9-11 (25/26 SY) 9-12 (26/27 SY). Spring Hill High 11-12 (24/25 SY) 12 (25/26 SY).
    See Attached Capacity Numbers
    The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students. Acknowledged.

Columbia Power

18. Columbia Power System has an existing power line near your proposed development.
    We are willing to serve this commercial development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development. Acknowledged.

19. CPWS BB Plan to Serve. Acknowledged.

Columbia Water

20. "Coordinate walk-through with CPWS.
    Be prepared to deed infrastructure to CPWS at time of plat signing, water system must be active at the time of plat signing." Acknowledged.

Atmos Energy

21. No comments provided. Acknowledged.

Maury County Schools

22. Battle Creek Elementary, Battle Creek Middle, Battle Creek High 9/10 (24/25 SY), 9-11 (25/26 SY) 9-12 (26/27 SY). Spring Hill High 11-12 (24/25 SY) 12 (25/26 SY). See Attached Capacity Numbers. The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students. Acknowledged.

ATT

23. ATT TO SERVE. Acknowledged.

Public Works

24. No comments. Acknowledged.

Wastewater

25. No comments. Acknowledged.

Please let us know if you have any questions, or if we need to get you anything else.

Thanks,

Trevor Gorman
JTA Land Surveying, Inc.
3384 N Mt. Juliet Road – Suite 900
Mt. Juliet, Tennessee 37122
Phone: (615) 490-6920
Email: trevor.jta@comcast.net

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, November 12, 2024

ITEM NO.
24-0422

DESCRIPTION: 2558 Greens Mill Rd Phase 1B

COMMENTS:

Planning

1. Provide street names for all road sections unlisted with approval by E-911.
2. The lead staff person for this case is Austin Brass, AICP; he will prepare the staff report for this item. Please contact abrass@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
3. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.

Fire

4. Please add existing roads so I can tell where all connections are. All dead end roads over 150', in length, will need an approved turnaround. Please show on the plans.

Engineering

5. Show adjoining properties.
6. Provide LOC in the amount of $440,000 prior to resubmittal date.
7. Reference stormwater maintenance agreement prior to resubmittal date. (R3024/1279)
8. Grading shall substantially conform to approved construction plans (within 1 ft.)
9. Binder and curbing shall be installed prior to resubmittal date.
10. Label roads as Public, include ROW width, and classification (minor local, major local, etc.)

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
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COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Building

11. No comments provided.

Police

12. No comments provided.

Maury County Highway Dept.

13. The Maury County Highway Department has not had any contact with the developer of this project with regard to connection to the Maury County R.O.W.

14. Provide executed Development Agreement to the Maury County Highway Department detailing agreed upon impact fee schedule. Draft Development Agreement is attached for review / use.
15. The Maury County Highway Department (MCHD) understands a revised development agreement is being drafted for review / approval by the MCHD with the intent to present the approved agreement to the County Commission in January 2025. Applicant should continue coordination and collaboration with the MCHD during the finalization of the development agreement.

Duck River Electric Membership Corp

16. No comments.

Maury County Schools

17. Battle Creek Elementary, Battle Creek Middle, Battle Creek High 9/10 (24/25 SY), 9-11 (25/26 SY) 9-12 (26/27 SY). Spring Hill High 11-12 (24/25 SY) 12 (25/26 SY).
    See Attached Capacity Numbers
    The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.
    * Due to numbers, MCPS will be rezoning all Columbia and Spring Hill elementary schools for the 25/26 SY.

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Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

Columbia Water

20. "Coordinate walk-through with CPWS.

    Be prepared to deed infrastructure to CPWS at time of plat signing, water system must be active at the time of plat signing."

Atmos Energy

21. No comments provided.

Maury County E911

22. No comments provided.

ATT

23. ATT TO SERVE

Public Works

24. No comments.

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Wastewater

25. Columbia Wastewater requires submittal of testing, as-builts, CCTV and a reduced maintenance LOC for review and approval by our Department before we approve building permits.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or msanders@columbiatn.gov if you encounter difficulties with the online portal.

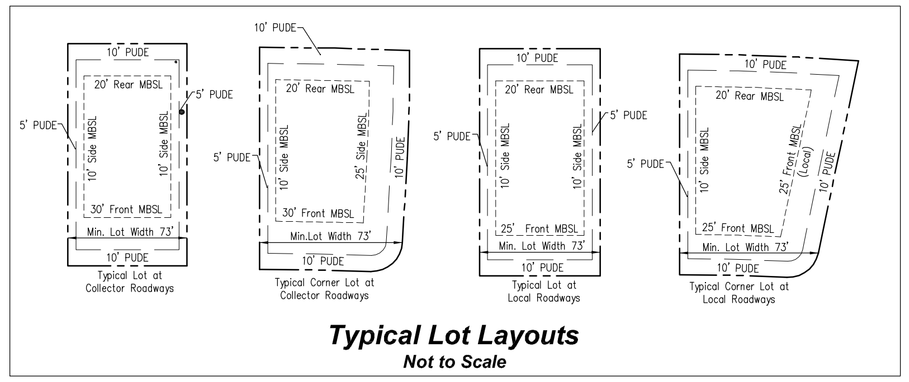
You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.

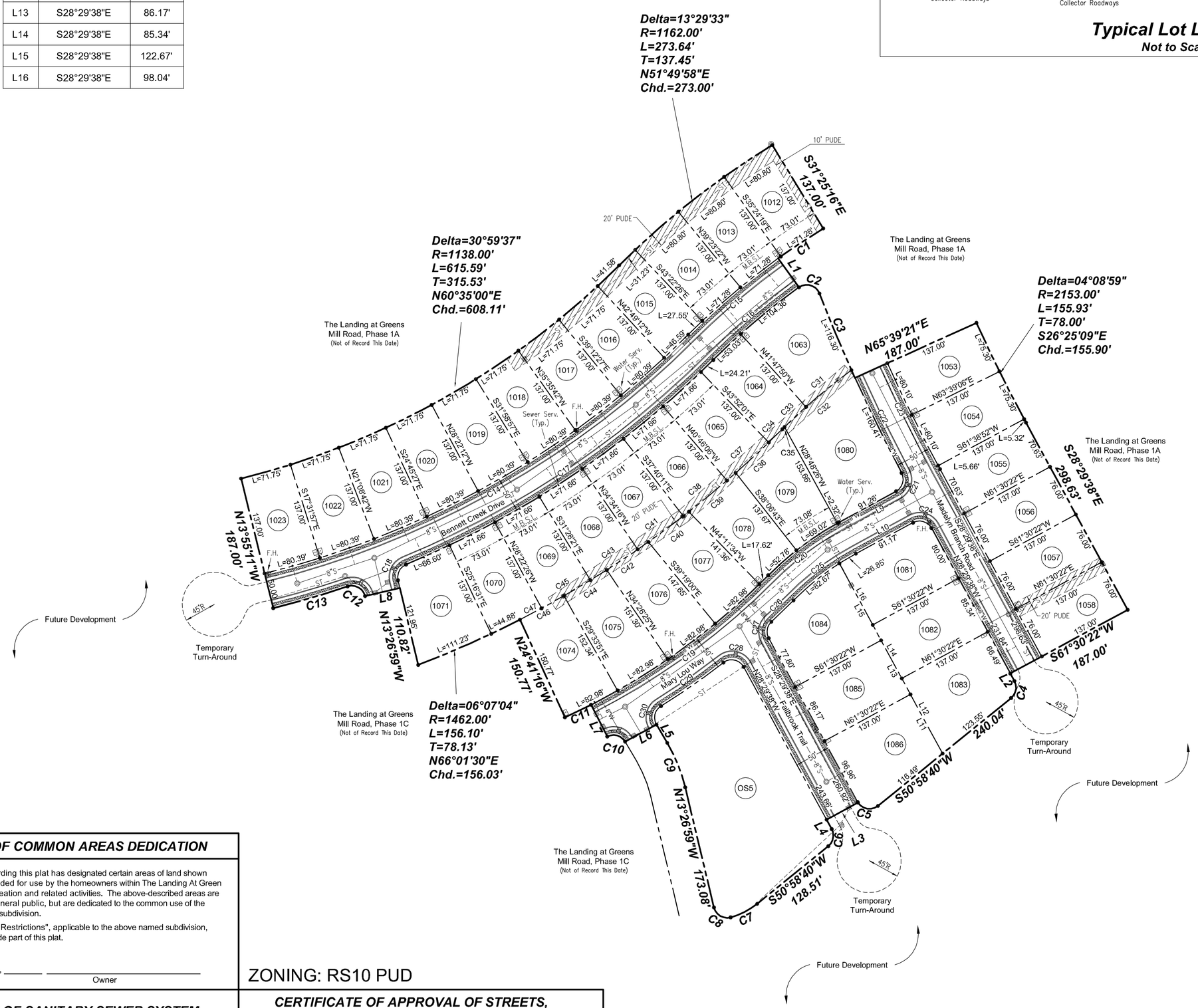
Curve Table						
Curve #	DELTA	RADIUS	TANGENT	LENGTH	CDH BEARING	CHORD
C1	04°14'22"	1025.00'	37.94'	75.84'	S56°27'33"W	75.83'
C2	104°27'39"	19.00'	24.52'	34.64'	S73°26'02"E	30.04'
C3	03°08'27"	2340.00'	64.15'	128.27'	S22°46'26"E	128.26'
C4	79°28'18"	19.00'	15.79'	26.35'	S11°14'31"W	24.29'
C5	96°53'54"	19.00'	21.44'	32.13'	N80°34'23"W	28.44'
C6	79°28'18"	19.00'	15.79'	26.35'	S11°14'31"W	24.29'
C7	24°03'37"	100.00'	21.31'	41.99'	S63°00'28"W	41.69'
C8	91°30'45"	19.00'	19.51'	30.35'	N59°12'21"W	27.22'
C9	17°09'58"	225.00'	33.96'	67.41'	N22°01'58"W	67.16'
C10	86°27'42"	19.00'	17.86'	28.67'	N73°50'48"W	26.03'
C11	02°23'23"	975.00'	20.33'	40.66'	S64°07'03"W	40.66'
C12	95°09'53"	19.00'	20.79'	31.56'	N61°01'55"W	28.05'
C13	04°41'40"	1325.00'	54.31'	108.56'	S73°43'58"W	108.53'
C14	30°59'37"	1275.00'	353.51'	689.70'	N60°35'00"E	681.32'
C15	09°15'10"	1025.00'	82.95'	165.53'	N49°42'47"E	165.35'
C16	09°14'57"	975.00'	78.87'	157.39'	S49°42'40"W	157.22'
C17	22°31'06"	1325.00'	263.78'	520.75'	S56°20'44"W	517.41'
C18	81°03'16"	19.00'	16.24'	26.88'	S27°04'39"W	24.69'
C19	18°09'03"	975.00'	155.74'	308.87'	N53°50'50"E	307.58'
C20	16°44'03"	425.00'	62.51'	124.13'	N53°08'20"E	123.69'
C21	89°29'06"	19.00'	18.83'	29.67'	N16°45'49"E	26.75'
C22	3°38'04"	2340.00'	74.24'	148.44'	N26°09'41"W	148.41'
C23	4°08'59"	2290.00'	82.96'	165.85'	S26°25'09"E	165.82'
C24	90°00'00"	19.00'	19.00'	29.85'	N73°29'38"W	26.87'
C25	16°44'03"	375.00'	55.16'	109.53'	S53°08'20"W	109.14'
C26	2°24'40"	1025.00'	21.57'	43.13'	S45°58'39"W	43.13'
C27	75°40'37"	19.00'	14.76'	25.10'	S09°20'40"W	23.31'
C28	99°23'13"	19.00'	22.40'	32.96'	N78°11'14"W	28.98'
C29	05°58'17"	1025.00'	53.46'	106.83'	S55°06'18"W	106.78'
C30	88°42'23"	19.00'	18.58'	29.42'	S13°44'15"W	26.57'
C31	05°35'50"	838.00'	40.96'	81.86'	S51°00'05"W	81.83'
C32	08°25'06"	838.00'	61.67'	123.13'	S49°35'27"W	123.02'
C33	03°06'59"	838.00'	22.79'	45.58'	S46°38'41"W	45.57'
C34	01°02'48"	1462.00'	13.35'	26.71'	S45°36'35"W	26.71'
C35	00°17'42"	838.00'	2.16'	4.32'	S45°14'02"W	4.32'
C36	03°30'46"	1462.00'	44.83'	89.64'	S46°50'35"W	89.62'
C37	03°05'55"	1462.00'	39.54'	79.07'	S47°40'57"W	79.06'
C38	03°05'55"	1462.00'	39.54'	79.07'	S50°46'52"W	79.06'
C39	03°20'16"	1462.00'	42.60'	85.17'	S50°16'06"W	85.16'
C40	02°46'49"	1462.00'	35.48'	70.95'	S53°19'38"W	70.94'
C41	03°05'55"	1462.00'	39.54'	79.07'	S53°52'47"W	79.06'
C42	02°45'24"	1462.00'	35.18'	70.34'	S56°05'45"W	70.33'
C43	03°05'55"	1462.00'	39.54'	79.07'	S56°58'42"W	79.06'
C44	02°44'43"	1462.00'	35.03'	70.05'	S58°50'48"W	70.05'
C45	03°05'55"	1462.00'	39.54'	79.07'	S60°04'37"W	79.06'
C46	02°44'48"	1462.00'	35.05'	70.08'	S61°35'34"W	70.08'
C47	01°20'24"	1462.00'	17.10'	34.19'	S62°17'46"W	34.19'

LINE TABLE		
LINE	BEARING	LENGTH
L1	S35°35'14"E	50.00'
L2	S28°29'38"E	12.06'
L3	S61°30'22"W	50.04'
L4	S28°29'38"E	15.15'
L5	N30°36'57"W	29.79'
L6	S61°21'33"W	50.03'
L7	N27°04'39"W	50.00'
L8	S76°49'28"W	50.00'
L9	N61°30'22"E	91.26'
L10	S61°30'22"W	91.17'
L11	S28°29'38"E	94.35'
L12	S28°29'38"E	119.82'
L13	S28°29'38"E	86.17'
L14	S28°29'38"E	85.34'
L15	S28°29'38"E	122.67'
L16	S28°29'38"E	98.04'

TOTAL AREA THIS RECORDING = 615,680 S.F. or 14.13 Acres ±

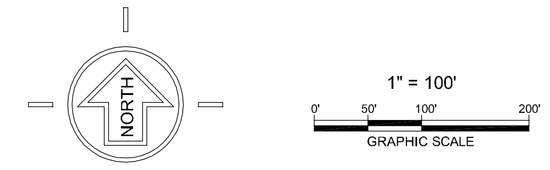


Typical Lot Layouts
Not to Scale



ZONING: RS10 PUD

AREA SUMMARY		
LOT	SQ. FT.	ACREAGE
1012	10,417	0.24
1013	10,417	0.24
1014	10,417	0.24
1015	10,066	0.23
1016	10,422	0.24
1017	10,422	0.24
1018	10,422	0.24
1019	10,422	0.24
1020	10,422	0.24
1021	10,422	0.24
1022	10,422	0.24
1023	10,422	0.24
1053	10,645	0.24
1054	10,645	0.24
1055	10,428	0.24
1056	10,412	0.24
1057	10,412	0.24
1058	10,412	0.24
1063	14,209	0.33
1064	10,242	0.24
1065	10,325	0.24
1066	10,325	0.24
1067	10,325	0.24
1068	10,325	0.24
1069	10,325	0.24
1070	10,325	0.24
1071	13,240	0.30
1074	11,614	0.27
1075	11,632	0.27
1076	11,468	0.26
1077	11,118	0.26
1078	10,741	0.25
1079	11,609	0.27
1080	19,233	0.44
1081	13,477	0.31
1082	11,692	0.27
1083	14,621	0.34
1084	15,013	0.34
1085	11,805	0.27
1086	14,551	0.33
OS5	49,797	1.14



LEGEND:

- IP(0) ○ Existing Iron Pipe – IP(0)
- IR(0) ○ Existing Iron Rod – IR(0)
- IR(N) ● Iron Rod (New) – IR(N)
- Sanitary Manhole
- Fire Hydrant (F.H.)
- Catch Basin
- Storm Manhole
- Concrete Headwall
- PUDE Public Utility & Drainage Easement
- MBSL Minimum Building Setback Line
- R.O.M.C. Registers' Office Maury County

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAT IS TO CREATE 40 BUILDABLE LOTS, 1 OPEN SPACE LOT, DEDICATION OF RIGHT OF WAY AND EASEMENTS.
2. PROPERTY SHOWN HEREON IS PART OF PARCEL (55.00) ON MAURY COUNTY PROPERTY MAP 51.
3. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPZONE 4100, NAD 83 DATUM.
4. BEING PART OF THE SAME PROPERTY CONVEYED TO 2558 GREENS MILL, LLC AS OF RECORD IN BOOK R2799, PAGE 298 REGISTERS' OFFICE, MAURY COUNTY, TENNESSEE.
5. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, A PORTION OF THIS PROPERTY IS LOCATED WITHIN AN AREA OF FLOOD INUNDATION AS SHOWN ON FEMA MAP NUMBER: 47119C0180E, DATED: 4/16/2007. CITY OF COLUMBIA NUMBER 475423 - PANEL 0180 - SUFFIX E FLOOD ZONES "AE" AND "X"
6. THIS PROPERTY IS CURRENTLY ZONED: RS 10 PUD.
7. WATER AND SANITARY SEWER SERVICES TO BE PROVIDED BY COLUMBIA PUBLIC UTILITIES.
8. THERE IS A 10' PUBLIC UTILITY & DRAINAGE EASEMENT RUNNING PARALLEL TO THE REAR PROPERTY LINE AND ALL STREET R.O.W. UNLESS SHOWN OTHERWISE. THERE IS A 5' PUBLIC UTILITY & DRAINAGE EASEMENT RUNNING PARALLEL TO THE SIDE PROPERTY LINE UNLESS SHOWN OTHERWISE.
9. XXX INDICATES STREET ADDRESS.
10. ALL UTILITIES ARE TO BE UNDERGROUND.
11. NO MOBILE HOMES SHALL BE PERMITTED.
12. NO DRIVEWAY TO BE CONSTRUCTED OVER SANITARY SEWER SERVICE LINE.
13. FOR MINIMUM YARD LINES SEE THE TYPICAL LOT DETAILS.
14. ALL NOTES AND CERTIFICATES APPLY TO ALL SHEETS.
15. SIDEWALKS ARE 5' WIDE, UNLESS OTHERWISE NOTED.
16. EXISTING USE: VACANT, PROPOSED USE : ONE-FAMILY, DETACHED DWELLINGS
17. ALL OPEN SPACE TRACTS SHALL BE OWNED AND MAINTAINED BY THE LANDING AT GREENS MILL ROAD HOMEOWNERS ASSOCIATION.
18. ROADS, UTILITIES, AND OTHER FACILITIES HAVE BEEN FILED AS REQUIRED BY THE CITY OF COLUMBIA SUBDIVISION REGULATIONS.
19. THIS SUBDIVISION IS SUBJECT TO THE TERMS AND CONDITIONS OF THE RECORDED STORMWATER INSPECTION AND MAINTENANCE AGREEMENT FOR THESE FACILITIES AS RECORDED IN BOOK _____, PAGE _____, R.O.M.C., TN.
20. A STREAM BUFFER AS SHOWN ON THIS PLAN IS TO BE A PERMANENT WATER QUALITY BUFFER IN ACCORDANCE WITH ARTICLE 6 SECTION 9 OF THE CITY OF COLUMBIA STORMWATER ORDINANCE. THIS STREAM BUFFER IS TO REMAIN IN A NATURAL VEGETATED STATE FREE OF OBSTRUCTIONS, STRUCTURES, AND INTRUSIONS. BUFFER IS TO BE A NO MOW BUFFER AREA, AND THE MAINTENANCE WITHIN STREAM BUFFERS TO BE LIMITED TO HAND OPERATED TOOLS AND BE PERFORMED IN ACCORDANCE WITH CURRENT CITY OF COLUMBIA STORMWATER ORDINANCE AND OR AT THE DIRECTION OF THE CITY OF COLUMBIA ENGINEERING DIVISION.
21. NO OBSTRUCTIONS OR ENCROACHMENTS WHICH IMPEDE THE FLOW OF STORMWATER SHALL BE PERMITTED WITHIN PUBLIC DRAINAGE EASEMENTS. THE CITY OF COLUMBIA IS NOT RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY ENCROACHMENTS THAT ARE DAMAGED OR REMOVED IN THE COURSE OF MAINTENANCE ACTIVITY WITHIN EASEMENTS AS REFERENCED IN THE COLUMBIA GENERAL MANAGEMENT CODE, CHAPTER 15, ARTICLE 1, SECTION 15-8.
22. THE FINAL PLAT SHOWN HEREON IS VESTED UNDER THE PREVIOUS ZONING CODE WITHIN ZONING ORDINANCE 3638 AS AN RS-10 PLANNED UNIT DEVELOPMENT.
23. THE AMENTITY CENTER AND ASSOCIATED PARKING WILL REQUIRE SEPERATE PERMIT AND SITE PLAN REVIEW.

CERTIFICATE OF SUBDIVISION NAME AND STREET NAMES

Subdivision name and street names approved by the City Engineering Department and by E-911 Maury County.

Maury County E-911 — Date

CERTIFICATE OF COMMON AREAS DEDICATION

2558 Greens Mill, LLC, in recording this plat has designated certain areas of land shown hereon as common areas intended for use by the homeowners within The Landing At Green Mills Road - Phase 1B, for recreation and related activities. The above-described areas are not dedicated for use by the general public, but are dedicated to the common use of the homeowners within the named subdivision.

"Declaration of Covenants and Restrictions", applicable to the above named subdivision, is hereby incorporated and made part of this plat.

Date — Owner

CERTIFICATE OF COMPLIANCE

I hereby certify that the final subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations and other adopted ordinances and policies.

City Engineer, Columbia, Tennessee — Date

CERTIFICATE OF SANITARY SEWER SYSTEM

I hereby certify that the sanitary sewer system outlined or indicated on this final subdivision plat has been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

Director of Wastewater Department, Columbia,Tennessee — Date

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE AND UTILITIES

I hereby certify that the streets, drainage and utilities outlined or indicated on this final subdivision plat have been installed in accordance with City specifications, or a performance surety in the amount of $_____ for streets and drainage has been posted with the City of Columbia, Tennessee to assure completion of such improvements.

City Engineer, Columbia, Tennessee — Date

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the final subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations, with the exception of such variances, if any, as noted in the minutes of the Columbia Municipal Planning Commission, and that it has been approved for recording in the Office of the Maury County Register of Deeds.

Planning Director, Columbia, Tennessee — Date

CERTIFICATE OF SURVEY ACCURACY

I (we) do hereby certify that to the best of my (our) knowledge and belief this is a true and accurate survey of the property shown hereon; that this is a Category "1" Land Survey as defined in Title 62, Chapter 18, Tennessee Code Annotated, and the ratio of precision is greater than or equal to 1:10,000.

M. Trevor Gorman, RLS #2076, Registered Land Surveyor, State of Tennessee, License Number

Last Revised: 10-21-2024
~~9-13-2024~~
Date

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon as evidenced in Book R2799, Page 298, Maury County Register's Office, and adopt this final subdivision plat of the property as shown hereon and dedicate all public ways and easements as noted with my (our) free consent.

Owner(s) — Date

Title (if acting for corporation or partnership)

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I hereby certify that the water system(s) outlined or indicated on this final subdivision plat entitled The Landing at Greens Mill Road - Phase 1B has / have been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

Date — Name, Title, and Agency or Authorized Approving Agent

REVISIONS:

1. By:MTG Date: 10-21-2024. Revise per staff comments.

Prepared By:
JTA LAND SURVEYING, INC.
3384 N. Mt. Juliet Road, Suite 900
Mt. Juliet, TN. 37122

FINAL PLAT
THE LANDING AT GREENS MILL ROAD
PHASE 1B
GREEN MILLS ROAD
Property Map # 51 - Parcel (55.00)

CITY OF COLUMBIA,
MAURY COUNTY, TENNESSEE

DRAWN BY: MTG, TMF, RR — Scale : 1" = 100' — (See Revisions) DATE: SEPTEMBER 13, 2024 — Job No. 2024-469

SHEET 1 OF 1

Surveyors Response Letter – October 21, 2024 - By: M. Trevor Gorman - RLS # 2875
For: Final Plat – The Landing at Greens Mill, Phase 1B (Item No. 24-0422)
JTA Land Surveying, Inc. – Job No. 2024-469

We have made the following corrections / revisions to the Final Plats. JTA responses are in RED as follows:

Planning

1. Lots 1012-1014, 1079, 1070-1065 are less than 73' at ROW line. Please provide MBSL on these lots noting the width of the MBSL to be at least 73'. A line was added at the rear of lots 1017-1012 indicating length of lots at rear that may not be necessary for this review. Corrected on Plat.
2. Provide street names for all road sections unlisted with approval by E-911. Corrected on Plat.

Fire

3. All dead end roads over 150' will need an approved turnaround, please show on plans. Added to Plat.

Engineering

4. Show adjoining properties. Added to Plat.
5. Provide LOC in the amount of $440,000 prior to resubmittal date. Acknowledged.
6. Record and reference stormwater maintenance agreement prior to resubmittal date. Acknowledged.
7. Grading shall substantially conform to approved construction plans (within 1 ft.) Acknowledged.
8. Binder and curbing shall be installed prior to resubmittal date. Acknowledged.
9. Provide all road names on final plat. Added to Plat.
10. Include open space lots in lot table. Added to Plat.
11. Show easements for storm as hatched area (20 ft width). See lots 1075-1080 and 1057/1058, 1012-1017. Added to Plat.
12.
13. Please provide the correct certificates and language as provide in Appendix A - Subdivision Regulations. Corrected on Plat.

Building

14. No comments provided. Acknowledged.

Police

15. No comments provided. Acknowledged.

Maury County Highway Dept.

16. The Maury County Highway Department has not had any contact with the developer of this project with regard to connection to the Maury County R.O.W. Acknowledged.

17. Provide executed Development Agreement to the Maury County Highway Department detailing agreed upon impact fee schedule. Draft Development Agreement is attached for review / use. Acknowledged.

Duck River Electric Membership Corp

18. No comments. Acknowledged.

Maury County Schools

19. Battle Creek Elementary, Battle Creek Middle, Battle Creek High 9/10 (24/25 SY), 9-11 (25/26 SY) 9-12 (26/27 SY). Spring Hill High 11-12 (24/25 SY) 12 (25/26 SY). The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.
    See Attached Capacity Numbers. Acknowledged.

Columbia Power

20. Columbia Power System has an existing power line near your proposed development. We are willing to serve this commercial development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development. Acknowledged.
21. CPWS BB Plan to Serve. Acknowledged.

Columbia Water

22. “Coordinate walk-through with CPWS.
Be prepared to deed infrastructure to CPWS at time of plat signing, water system must be active at the time of plat signing.” Acknowledged.

Atmos Energy

23. No comments provided. Acknowledged.

Maury County E911

24. No comments provided. Acknowledged.

ATT

25. ATT TO SERVE. Acknowledged.

Public Works

26. No comments. Acknowledged.

Wastewater

27. No comments. Acknowledged.

Please let us know if you have any questions, or if we need to get you anything else.

Thanks,

Trevor Gorman
JTA Land Surveying, Inc.
3384 N Mt. Juliet Road – Suite 900
Mt. Juliet, Tennessee 37122
Phone: (615) 490-6920
Email: trevor.jta@comcast.net

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, October 8, 2024

ITEM NO.
24-0421

DESCRIPTION: 2558 Greens Mill Rd Phase 1C

COMMENTS:

Planning

1. Lot 1104- Please provide MBSL on these lots noting the width of the MBSL to be at least 73’
2. Provide street names for all road sections unlisted with approval by E-911.

Fire

3. All dead end roads over 150' will need an approved turnaround, please show on plans

Engineering

4. Provide LOC in the amount of $330,000 prior to resubmittal date.
5. Record and reference stormwater maintenance agreement prior to resubmittal date.
6. Grading shall substantially conform to approved construction plans (within 1 ft.)
7. Binder and curbing shall be installed prior to resubmittal date.
8. Show all adjoining properties.
9. Provide all road names.
10. Show easements for storm as hatched area (20 ft width). See lots 1111-1114
11. Please provide the correct certificates and language as provide in Appendix A - Subdivision Regulations

Maury County Highway Dept.

12. The Maury County Highway Department has not had any contact with the developer of this project with regard to connection to the Maury County R.O.W.

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

13. Provide executed Development Agreement to the Maury County Highway Department detailing agreed upon impact fee schedule. Draft Development Agreement is attached for review / use.

Building

14. No comments.

Police

15. No comments provided.

Duck River Electric Membership Corp

16. The Maury County Highway Department has not had any contact with the developer of this project with regard to connection to the Maury County R.O.W.

Maury County E911

17. Battle Creek Elementary, Battle Creek Middle, Battle Creek High 9/10 (24/25 SY), 9-11 (25/26 SY) 9-12 (26/27 SY). Spring Hill High 11-12 (24/25 SY) 12 (25/26 SY).
    See Attached Capacity Numbers
    The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students

Columbia Power

18. Columbia Power System has an existing power line near your proposed development. We are willing to serve this commercial development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

19. CPWS BB Plan to Serve

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Columbia Water

20. "Coordinate walk-through with CPWS.

    Be prepared to deed infrastructure to CPWS at time of plat signing, water system must be active at the time of plat signing."

Atmos Energy

21. No comments provided.

Maury County Schools

22. Battle Creek Elementary, Battle Creek Middle, Battle Creek High 9/10 (24/25 SY), 9-11 (25/26 SY) 9-12 (26/27 SY). Spring Hill High 11-12 (24/25 SY) 12 (25/26 SY). See Attached Capacity Numbers. The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.

ATT

23. ATT TO SERVE

Public Works

24. No comments .

Wastewater

25. No comments .

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.

You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

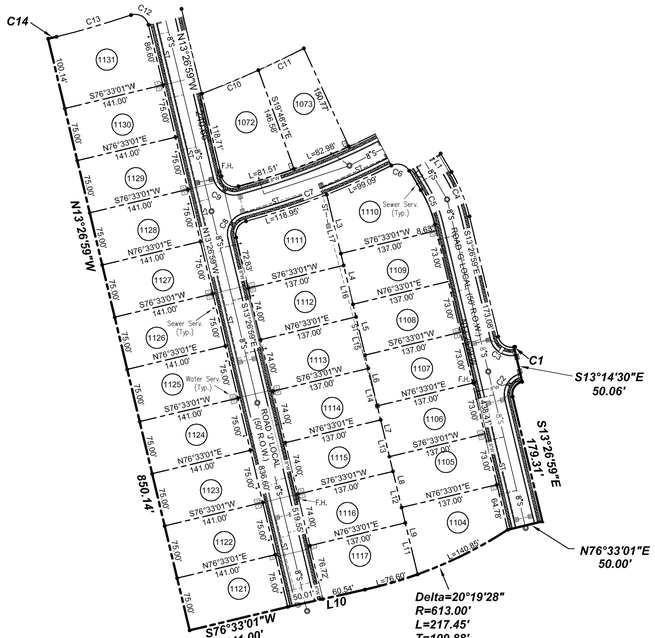
NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.

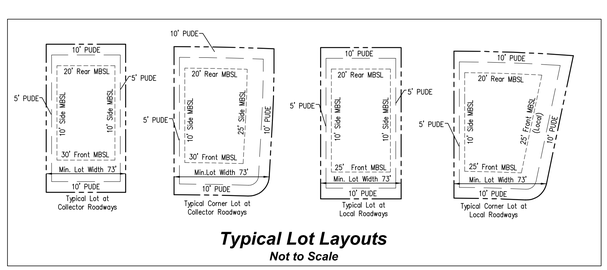
TOTAL AREA THIS RECORDING = 290,545 S.F. or 6.67 Acres ±

CURVE TABLE						
CURVE	DELTA	RADIUS	TANGENT	LENGTH	CHD BEARING	CHORD
C1	04°43'34"	19.00'	0.78'	1.56'	S77°24'03"E	1.57'
C2	89°57'56"	17.00'	16.99'	26.69'	N31°31'59"E	24.03'
C3	86°47'11"	19.00'	17.86'	28.78'	N56°50'34"W	26.11'
C4	17°09'58"	225.00'	33.96'	67.41'	N22°01'58"W	67.16'
C5	17°09'58"	175.00'	26.41'	52.43'	N22°01'58"W	52.23'
C6	86°27'42"	19.00'	17.86'	28.67'	N73°50'48"W	26.03'
C7	12°11'17"	1025.00'	109.43'	218.04'	S69°01'00"W	217.63'
C8	08°33'37"	19.00'	18.53'	29.37'	S30°49'50"W	26.53'
C9	91°34'20"	19.00'	19.53'	30.36'	S59°14'09"E	27.24'
C10	03°21'26"	1462.00'	42.85'	85.66'	N67°24'18"E	85.65'
C11	02°45'37"	1462.00'	35.22'	70.43'	N64°20'46"E	70.43'
C12	95°09'53"	19.00'	20.79'	31.56'	N61°01'55"W	28.05'
C13	04°41'40"	1325.00'	54.31'	108.56'	S73°43'58"W	108.53'
C14	00°30'51"	1325.00'	5.94'	11.89'	S76°20'14"W	11.89'

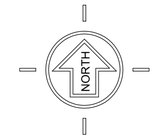
LINE TABLE		
LINE	BEARING	LENGTH
L1	S28°29'38"E	28.04'
L2	S13°26'58"E	56.88'
L3	S13°26'58"E	54.88'
L4	S13°26'58"W	53.88'
L5	S13°26'58"E	52.88'
L6	S13°26'58"E	51.88'
L7	S13°26'58"E	74.00'
L8	S13°26'58"E	101.70'
L9	S13°26'58"E	74.00'
L10	S13°26'58"E	74.00'
L11	S13°26'58"E	74.00'
L12	S13°26'58"E	74.00'
L13	S13°26'58"E	74.00'
L14	S13°26'58"E	74.00'
L15	S13°26'58"E	101.69
L16	S13°26'58"E	74.00'
L17	S13°26'58"E	74.00'

AREA SUMMARY		
LOT	SQ. FT.	ACREAGE
1072	13,199	0.30
1073	11,412	0.26
1101	12,377	0.28
1102	10,001	0.23
1103	10,001	0.23
1104	10,001	0.23
1105	10,001	0.23
1106	10,001	0.23
1107	11,400	0.26
1111	10,530	0.24
1112	10,138	0.23
1113	10,138	0.23
1114	10,138	0.23
1115	10,138	0.23
1116	10,138	0.23
1117	12,950	0.29
1118	14,369	0.32
1119	10,575	0.24
1120	10,575	0.24
1121	10,575	0.24
1122	10,575	0.24
1123	10,575	0.24
1124	10,575	0.24
1125	10,575	0.24
1126	10,575	0.24
1127	10,575	0.24
1128	10,575	0.24





Typical Lot Layouts
Not to Scale



(NAD83)

1" = 100'
0' 50' 100' 200'
GRAPHIC SCALE

LEGEND:

- IP(0)○ Existing Iron Pipe – IP(0)
- IR(0)○ Existing Iron Rod – IR(0)
- IR(N)● Iron Rod (New) – IR(N)
- Sanitary Manhole
- Fire Hydrant (F.H.)
- Catch Basin
- Storm Manhole
- Concrete Headwall
- PUDE Public Utility & Drainage Easement
- MBSL Minimum Building Setback Line
- R.O.M.C. Registers' Office Maury County

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAT IS TO CREATE 27 BUILDABLE LOTS, DEDICATION OF RIGHT OF WAY, AND EASEMENTS.
2. PROPERTY SHOWN HEREON IS PART OF PARCEL (55.00) ON MAURY COUNTY PROPERTY MAP 51.
3. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPZONE 4100, NAD 83 DATUM.
4. BEING PART OF THE SAME PROPERTY CONVEYED TO 2558 GREENS MILL, LLC AS OF RECORD IN BOOK R2799, PAGE 298 REGISTERS' OFFICE, MAURY COUNTY, TENNESSEE.
5. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, A PORTION OF THIS PROPERTY IS LOCATED WITHIN AN AREA OF FLOOD INUNDATION AS SHOWN ON FEMA MAP NUMBER: 47119C0180E, DATED: 4/16/2007, CITY OF COLUMBIA NUMBER 475423 - PANEL 0180 - SUFFIX E FLOOD ZONES "AE" AND "X"
6. THIS PROPERTY IS CURRENTLY ZONED: RS 10.
7. WATER AND SANITARY SEWER SERVICES TO BE PROVIDED BY COLUMBIA PUBLIC UTILITIES.
8. THERE IS A 10' PUBLIC UTILITY & DRAINAGE EASEMENT RUNNING PARALLEL TO THE REAR PROPERTY LINE AND ALL STREET R.O.W. UNLESS SHOWN OTHERWISE. THERE IS A 5' PUBLIC UTILITY & DRAINAGE EASEMENT RUNNING PARALLEL TO THE SIDE PROPERTY LINE UNLESS SHOWN OTHERWISE.
9. XXX INDICATES STREET ADDRESS.
10. ALL UTILITIES ARE TO BE UNDERGROUND.
11. NO MOBILE HOMES SHALL BE PERMITTED.
12. NO DRIVEWAY TO BE CONSTRUCTED OVER SANITARY SEWER SERVICE LINE.
13. FOR MINIMUM YARD LINES SEE THE TYPICAL LOT DETAILS.
14. ALL NOTES AND CERTIFICATES APPLY TO ALL SHEETS.
15. SIDEWALKS ARE 5' WIDE, UNLESS OTHERWISE NOTED.
16. EXISTING USE: VACANT, PROPOSED USE : ONE-FAMILY, DETACHED DWELLINGS
17. ALL OPEN SPACE TRACTS SHALL BE OWNED AND MAINTAINED BY THE LANDING AT GREENS MILL ROAD HOMEOWNERS ASSOCIATION.
18. ROADS, UTILITIES, AND OTHER FACILITIES HAVE BEEN FILED AS REQUIRED BY THE CITY OF COLUMBIA SUBDIVISION REGULATIONS.
19. THIS SUBDIVISION IS SUBJECT TO THE TERMS AND CONDITIONS OF THE RECORDED STORMWATER INSPECTION AND MAINTENANCE AGREEMENT FOR THESE FACILITIES AS RECORDED IN BOOK _____, PAGE _____, R.O.M.C., TN.
20. SEE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR THE LANDING AT GREENS MILL ROAD, AS RECORDED IN BOOK _____, PAGE _____, REGISTERS' OFFICE FOR MAURY COUNTY, TENNESSEE.
21. A STREAM BUFFER AS SHOWN ON THIS PLAN IS TO BE A PERMANENT WATER QUALITY BUFFER IN ACCORDANCE WITH ARTICLE 6 SECTION 9 OF THE CITY OF COLUMBIA STORMWATER ORDINANCE. THIS STREAM BUFFER IS TO REMAIN IN A NATURAL VEGETATED STATE FREE OF OBSTRUCTIONS, STRUCTURES, AND INTRUSIONS. BUFFER IS TO BE A NO MOW BUFFER AREA, AND THE MAINTENANCE WITHIN STREAM BUFFERS TO BE LIMITED TO HAND OPERATED TOOLS AND BE PERFORMED IN ACCORDANCE WITH CURRENT CITY OF COLUMBIA STORMWATER ORDINANCE AND OR AT THE DIRECTION OF THE CITY OF COLUMBIA ENGINEERING DIVISION.
22. NO OBSTRUCTIONS OR ENCROACHMENTS WHICH IMPEDE THE FLOW OF STORMWATER SHALL BE PERMITTED WITHIN PUBLIC DRAINAGE EASEMENTS. THE CITY OF COLUMBIA IS NOT RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY ENCROACHMENTS THAT ARE DAMAGED OR REMOVED IN THE COURSE OF MAINTENANCE ACTIVITY WITHIN EASEMENTS AS REFERENCED IN THE COLUMBIA GENERAL MANAGEMENT CODE, CHAPTER 15, ARTICLE 1, SECTION 15-8.
23. THE FINAL PLAT SHOWN HEREON IS VESTED UNDER THE PREVIOUS ZONING CODE WITHIN ZONING ORDINANCE 3638 AS AN RS-10 PLANNED UNIT DEVELOPMENT.

23. THE FINAL PLAT SHOWN HEREON IS VESTED UNDER THE PREVIOUS ZONING CODE WITHIN ZONING ORDINANCE 3638 AS AN RS-10 PLANNED UNIT DEVELOPMENT.
24. THE AMENTITY CENTER AND ASSOCIATED PARKING WILL REQUIRE SEPERATE PERMIT AND SITE PLAN REVIEW.

E-911 PROGRAM CERTIFICATION OF APPROVAL

This is to certify that this plat has been reviewed and is in compliance with the Maury County E-911 Program.

_____ _____
(Date) E-911 Director

CERTIFICATE OF COMMON AREAS DEDICATION

2558 Greens Mill, LLC, in recording this plat has designated certain areas of land shown hereon as common areas intended for use by the homeowners within The Landing At Green Mills Road - Phase 1, for recreation and related activities. The above-described areas are not dedicated for use by the general public, but are dedicated to the common use of the homeowners within the named subdivision.

"Declaration of Covenants and Restrictions", applicable to the above named subdivision, is hereby incorporated and made part of this plat.

_____, _____, _____
Date Owner

CERTIFICATE OF APPROVAL OF PUBLIC WAYS OR BOND POSTING

I hereby certify; (1) that all designated public ways on this final subdivision plat have been installed in an acceptable manner and according to the specifications of the Maury County Subdivision Regulations, or (2) that a performance bond or other surety has been posted with the Planning Commission to guarantee completion of all required improvements in case of default.

_____ _____
(Date) Appropriate Governmental Representative

CERTIFICATE OF APPROVAL OF PUBLIC SEWER SYSTEM

I hereby certify that the sewer system(s) outlined or indicated on the final subdivision plat entitled The Landing at Greens Mill has/have been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

_____ _____
(Date) Name, Title, and Agency or Authorized Approving Agent

CERTIFICATE FOR APPROVAL FOR RECORDING

I hereby certify that the subdivision plat shown hereon has been found to comply with the Maury County Subdivision Regulations, with the exception of such variances, if any, as are noted in the minutes of the Planning Commission, and that it has been approved for recording in the office of the County Register.

_____, _____, _____
Date Secretary Maury County Regional Planning Commission

CERTIFICATE OF SURVEY ACCURACY

I hereby certify that to the best of my knowledge and belief the hereon shown subdivision plat represents a Category "1" Survey having an unadjusted ration of precision of 1:10,000 and is true and correct. Approved monuments have been placed as indicated. All side lot lines are at right angles or radial to a street unless otherwise noted.

9-13-2024 _____
(Date) James G. Terry, R.L.S. # 2287

ZONING: RS10

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (we) hereby certify that I am (we are) the owners of the property shown and described hereon as evidenced in Book R2799, Page 298, Maury County Register's Office and I (we) adopt this plan of subdivision with my (our) free consent, establish the minimum building restriction lines, and that offers of irrevocable dedication for all public ways, public easements, utilities, and other facilities have been filed.

_____ _____
(Date) (Owner)

_____
Title (If Acting for Partnership or Corporation)

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I hereby certify that the water system(s) outlined or indicated on the final subdivision plat entitled The Landing at Greens Mill Road - Phase 1 has / have been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

_____ _____
(Date) Name, Title, and Agency or Authorized Approving Agent

REVISIONS:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

JAMES G. TERRY, REGISTERED LAND SURVEYOR, STATE OF TENNESSEE, AGRICULTURE, COMMERCE, 9-13-24, TENNESSEE NO. 2287

FINAL PLAT
THE LANDING AT GREENS MILL ROAD
PHASE 1C
GREEN MILLS ROAD
Property Map # 51 - Parcel (55.00)
CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

Scale : 1" = 100'

DRAWN BY: MTG, TMF, RR

Prepared By:
JTA LAND SURVEYING, INC.
2403 Bee Hill Pike, Suite K · Nashville, TN. 37214
Phone: 615-490-0920

(See Revisions)
DATE: SEPTEMBER 16, 2024 Job No. 2023-507

SHEET 1 OF 1

Appendix B: Subdivision Development Agreement

This DEVELOPMENT AGREEMENT is made and entered into on this

16th day of September, 20 24,
between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and

Safe Harbor Residential, the DEVELOPER (hereinafter the "DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made a part hereof (hereinafter the "ADDENDUM").

WITNESSETH:

WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM (hereinafter the "PROJECT"); and,

WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal Planning Commission (hereinafter the "CMPC") on the

_____ day of _____, 20_____,
pursuant to Tennessee Code Annotated Title 13, Chapter 4, and the Subdivision Regulations of Columbia, Tennessee (hereinafter the "SUBDIVISION REGULATIONS"); and,

WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such development; and,

WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,

WHEREAS, in order to provide for the health, safety, and welfare of future residents of the PROJECT, it will be necessary for certain improvements to the CITY'S utility systems, public infrastructure, and common areas to be constructed within and to serve the PROJECT including but not be limited to roads, bridges, sidewalks, pedestrian facilities, stormwater facilities, street signs, markings, signals, street lighting, recreation and park facilities, landscaping, and the like (hereinafter the "IMPROVEMENTS"); and,

WHEREAS, in order for the IMPROVEMENTS to be fully integrated with the utility systems and public infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to construct, in accordance with the Subdivision Regulations and other rules, regulations, and ordinances of the CITY, the IMPROVEMENTS in said PROJECT and extend utilities to the PROJECT at their own cost; and,

WHEREAS, the CITY is willing to accept the dedication of the streets, utilities, and other improvements as determined in the Development Plan of the PROJECT, subject to the City of Columbia City Council approval by resolution, and subject to the applicant's compliance with all requirements in this agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,

NOW, THEREFORE, it is agreed and understood as follows:

B1 General Conditions

B1.1 Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities, and other facilities in accordance with this agreement.

B1.2 City Ordinances, Rules and Regulations

All currently existing CITY ordinances, rules and regulations, and the Subdivision Regulations adopted by the CMPC are made a part of this agreement. In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans and specifications approved by the City and made a part, hereof.

B1.3 Fees

Review fees, inspection fees, and other amounts established by the CITY shall be paid prior to any review of the plans. If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees, inspection fees, or other amounts paid to the CITY shall be refundable to the DEVELOPER.

B1.4 Inspection

The CITY shall have a continuous right to inspect the work and facilities to assure that the work and facilities are in accordance with the Subdivision Regulations, approved Construction Plans, and other rules, regulations, and ordinances of the CITY.

B1.5 Right of Entry

The CITY shall have the right, in case of breach of the Performance Agreement, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

B1.6 Easements

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER further agrees to grant the necessary easements and rights-of-way across the DEVELOPER's properties without expense to the CITY and waive any claim for damages.

B1.7 Stormwater Maintenance Agreement

If the PROJECT includes any detention or retention ponds, common drainage ditches, water quality facilities, or stormwater facilities outside of the CITY rights-of-way, the DEVELOPER will submit a Stormwater Maintenance Agreement, to be filed with and recorded with the Final Plat.

B1.8 Attorney Fees and Other Expenses

The DEVELOPER shall pay all reasonable costs and expenses incurred by the CITY in enforcing or completing this agreement. The DEVELOPER shall pay all costs and expenses, including the CITY'S attorney fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

B1.9 Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

B1.10 Revocation and Interpretation

This agreement shall bind the DEVELOPER when executed by the DEVELOPER and may not be revoked by the DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

B1.11 No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments, or understandings.

B1.12 Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect, or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

B 1.13 Transferability

The DEVELOPER agrees to not transfer the property on which this PROJECT is to be located without first providing the CITY with written notice. The transferee shall provide the CITY an Assumption Agreement of this Agreement, whereby the transferee agrees to perform the IMPROVEMENTS required under this agreement and to provide a performance surety. The DEVELOPER understands that if the DEVELOPER transfers said property without providing the notice of transfer and Assumption Agreement as required herein, they will be in breach of this agreement and in violation of the Subdivision Regulations.

B1.14 Indemnity

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties, or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the IMPROVEMENTS by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

B1.15 Binding Effect

This agreement shall be binding upon the DEVELOPER and the DEVELEPOR's heirs, administrators, executors, assigns, and any other successors in interest.

B1.16 Entire Agreement

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them. No variations or alterations of the terms of this agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

B1.17 Headings

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the agreement and in no way shall define, limit, extend, or describe the scope or intent of any provision, hereof.

B2 Performance Surety

At the time of execution of this agreement, the DEVELOPER shall provide the CITY a performance surety, in an amount determined by the City Engineer for the IMPROVEMENTS and other items specified by the Construction Plans, plats, and plans approved by the CMPC. This performance surety shall secure performance of all obligations of the DEVELOPER under this agreement. The performance surety shall meet all requirements established in Chapter 4: Performance Agreement of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement. The performance surety may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the performance surety. The performance surety will not be released, except and until there has been full compliance with this agreement.

B3 Construction

B3.1 Construction Plans

The DEVELOPER shall submit to the CITY, Construction Plans describing in reasonable detail all utility systems, all storm water management systems, all street systems, pedestrian facilities, and all IMPROVEMENTS. The Construction Plans shall be designed according to the Engineering Standards and Specifications, all other codes and ordinances enforced by the City, and sound engineering judgment. The design of all utility systems shall follow the State of Tennessee and utility provider design criteria and specifications. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. The Construction Plans shall be prepared by a design professional licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date, and license number of the professional preparing the Construction Plans.

B3.2 Commencement of Construction

Construction of IMPROVEMENTS may not begin until the following events have occurred:

A. The Preliminary Plat has been approved by the CMPC;
B. The Construction Plans are approved by the CITY;
C. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing;
D. The CITY shall have received an appropriately executed Development Agreement; and
E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

B3.3 Site Grading

The DEVELOPER, hereby, agrees to construct all site grading to comply with the approved Construction Plans, including the approved Erosion Control Plan for the PROJECT and to comply with the Engineering Standards and Specifications, Stormwater Ordinance, and all other codes and ordinances enforced by the CITY.

B3.4 Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work made necessary by the development of this PROJECT. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order, and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

B3.5 Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Construction Plans to comply with the CITY's specifications and to the satisfaction and approval of the City Engineer by grading, draining, subgrade preparation, base preparation, curbing, signage, striping, signalization, sidewalk installation, and paving with the required preparation, amounts, and types of material. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas directed by the CITY Engineer, prior to application of final surface.

B3.6 Time Period for Construction

The DEVELOPER agrees to be bound to complete, within three (3) years of commencement of construction, all IMPROVEMENTS shown on the plat and plans and all things required by this agreement.

The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, the DEVELOPER shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for the DEVELOPER's failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the performance surety executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is determined to be inadequate by the City Engineer to secure the cost of said IMPROVEMENTS at the time an extension is sought, the DEVELOPER will provide the additional security to bring the performance surety amount in line with current cost projections as made by the CITY. The DEVELOPER understands that the DEVELOPER's failure to follow the extension procedure constitutes a breach of this agreement and places the DEVELOPER in violation of the Subdivision Regulations. The DEVELOPER further understands, that should the DEVELOPER fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved, the CITY shall reserve the right to withhold and withdraw all building permits within the PROJECT until all items of this Agreement have been fulfilled by the DEVELOPER.

B3.7 Off-Site Improvements

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the PROJECT. Unless specifically noted in the Construction Plans and made a part of separate agreement with the CITY, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site improvements.

B3.9 Inspection and Compliance

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to ensure that all work is performed and completed in accordance with the Construction Plans, CITY specifications, and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Construction Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

B3.10 Testing

The DEVELOPER agrees to pay the cost of all engineering, inspection, and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material, and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

B3.11 Scrap Removal

The DEVELOPER agrees to comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

B3.12 Traffic Control

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including

signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

B3.13 Temporary Facilities

The DEVELOPER shall provide all temporary facilities including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

B4 Acceptance of Improvements

B4.1 Completion of Improvements

At such time as the improvements have been constructed and installed, in accordance with the Constructions Plans and specifications, required testing and inspections completed and found satisfactory, and all clean-up and cover-up has been done to the satisfaction the City Engineer, a letter requesting preliminary acceptance of the PROJECT will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees the DEVELOPER shall have no claim, direct or implied, in the title or ownership of the IMPROVEMENTS specified in this agreement when the IMPROVEMENTS are complete and thereafter accepted by the CITY. The DEVELOPER will be responsible for construction failures and defects in PROJECT prior to final acceptance. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

B4.2 As-Built Drawings and Post-Completion Items

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system, and streets within the subdivision before the CITY shall accept the subdivision.

B4.3 Acceptance of Facilities

Upon final acceptance of all or part of the IMPROVEMENTS in the PROJECT, then those IMPROVEMENTS shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

B4.4 Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the IMPROVEMENTS in the PROJECT. Should the CITY choose to accept all or a portion of these IMPROVEMENTS, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register's Office of Maury County, Tennessee. No further writing or deed shall be required.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

The Landings at Greens Mill Road

PROJECT

Completed by the Developer	*Completed by the City*
SH Residential DEVELOPER NAME	
Koby DuMont AUTHORIZED AGENT NAME	 CITY ENGINEER
 SIGNATURE	 SIGNATURE
9-16-2024 DATE	 DATE
105 Westpark Drive Ste. 305 STREET	
Brentwood, TN, 37027 CITY, STATE, ZIP	
865-507-0220 PHONE	
koby@sacherborresidential.com EMAIL	
Attest	*Attest*
Lisa Dzierzgowski ATTEST NAME	 ATTEST NAME
Lisa Dzierzgowski ATTEST SIGNATURE	 ATTEST SIGNATURE
9-16-2024 DATE	 DATE

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * *1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*

Fold hard copy submittals larger than 8½"x11"

All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	2558 Greens Mill Rd., Columbia, TN 38401		
	TAX MAP: 51	GROUP:	PARCEL: 55.00
SUMMARY OF NATURE OF REQUEST AND WORK	The purpose of this plat is to create 27 build-able lots, dedication of Right of Way, and Easements.		

DATE OF PRE-APPLICATION CONFERENCE	08/28/2024	*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
❑ Comprehensive Plan Amendment ❑ Annexation ❑ Rezoning ❑ Preliminary Plat ☒ Final Plat ❑ PUD Preliminary Master Plan ❑ PUD Final Site Plan ❑ Site Development Plan ❑ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ❑ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ❑ Requested Zone Listed ❑ Statement of Compliance with Comprehensive Plan ❑ Concept Plan **Preliminary Plats/Site Development Plans:** ❑ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ❑ Receipt of Payment for Pre-Application Meeting ❑ Written Legal Description copy ❑ Columbia Water System Availability Letter ❑ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs: ❑ Project Name (include Sections & Phases) The Landing at Greens Mill Rd. - Phase 1C ❑ Total Number of Lots/Residential Units 27 ❑ Square Footage of Non-Residential Floor Space ❑ Total acreage 6.67 acres

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME	Crunk Engineering, LLC	PHONE	615-873-1795
ADDRESS	7112 Crossroads Blvd., #201, Brentwood, TN 37027	EMAIL	adam@crunkeng.com

PROPERTY OWNER NAME	Safe Harbor Residential	PHONE	865-622-1774
ADDRESS	105 Westpark Dr., #365, Brentwood, TN 37027	EMAIL	taylor@safeharborresidential.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Adam Crunk, PE		09/16/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
Thomas D Mont		9-16-2024
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

DOCUMENT PREPARED BY:
Name: Alexander Mollica
Company Crunk Engineering

Address: 7112 Crossroads Blvd.
Brentwood, TN 37027

After recording return copy to City of Columbia. Development Services

INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES

Map & Parcel Number: Map 051, Parcel 55.00
Project Name: Landing at Greens Mill - Phase 1C

Recorded by deed in the Register of Deeds Office of Maury County in Deed Book _____, Page(s) _____.

THIS AGREEMENT, made this 16 day of September, 20 24 , by and between Safe Harbor Residential hereinafter referred to as the "OWNER(S)" of the following property and City of Columbia, Tennessee, hereinafter referred to as the "CITY",

WE, the OWNER(S), with full authority to execute deeds, mortgages, other covenants, all rights, titles, and interests in the property described above, do hereby covenant with the CITY and agree as follows:

1. The OWNER(S) covenant and agree with the CITY that the OWNER(S) shall provide for adequate long term maintenance and continuation of stormwater control measures described in the Long Term Maintenance Plan and shown on the location map, deed of easement drawing or plat attached hereto to ensure that the facilities, are and remain in proper working condition in accordance with approved design standards, rules and regulations, and applicable laws. The OWNER(S) shall perform preventative maintenance activities at intervals described in the schedule attached hereto along with necessary landscaping (grass cutting, etc.) and trash removal as part of regular maintenance.

2. The OWNER(S) shall perform routine inspections to ensure that all long term stormwater management facilities are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. The OWNER(S) or operators shall maintain documents of these inspections.

3. The OWNER(S) shall perform comprehensive inspections of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect.

4. The OWNER(S) shall grant to the CITY or its agent or contractor the right of entry at reasonable times and in a reasonable manner for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining or repairing the facility within the CITY.

5. The OWNER(S) shall record and grant to the CITY the necessary easements and rights-of-way and maintain perpetual access from public rights-of-way to the facility for the CITY or its agent and contractor.

6. If, upon inspection, the CITY finds that the OWNER(S) has failed to properly maintain the facilities, the CITY may order the work performed within ten (10) days. In the event the work is not performed within the specified time, the ONWER(S) agrees to allow the CITY to enter the property and take whatever steps it deems necessary to maintain the stormwater control facilities. This provision shall not be construed to allow the CITY to erect any structure of a permanent nature on the PROPERTY without first obtaining written approval of the OWNER(S)

7. The CITY is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any obligation on the CITY. The OWNER(S) shall reimburse the CITY upon demand the costs incurred in the maintenance of the facilities.

8. If the OWNER(S) fails to pay the CITY for the above expensive after forty-five (45) days written notice, the OWNER(S) authorizes the CITY to collect said expenses from the OWNER(S) through appropriate legal action and the OWNER(S) shall be liable for the reasonable expenses of collection, court costs, and attorney fees.

9. The OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successor in interest shall indemnify and hold harmless the CITY and its officers, agents and employees for any and all damages, accidents, casualties, occurrences, claims or attorney's fees which might arise or be asserted, in whole or in part,

against the CITY from the construction, presence, existence, or maintenance of the stormwater control facilities subject to this AGREEMENT. In the event a claim is asserted against the CITY, its officers, agents or employees, the CITY shall notify OWNER(S) and the OWNER(S) shall defend at OWNER(S) expense any suit based on such claim. If any judgment or claims against the CITY, its officers, agents or employees, shall be allowed, the OWNER(S) shall pay all costs and expenses in connection therewith. The CITY will not indemnify, defend or hold harmless in any fashion the OWNER(S) from any claims arising from any failure, regardless of any language in any attachment or other document that the OWNER(S) may provide

10. The OWNER(S) shall not be able to transfer, assign or modify its responsibilities with respect to this agreement without the CITY's written prior consent. Nothing herein shall be construed to prohibit a transfer by OWNER(S) to subsequent owners and assigns.

11. No waiver of any provision of this AGREEMENT shall affect the right of any party thereafter to enforce such provision or to exercise any right or remedy available to it in the event of any default.

12. The OWNER(S) shall record a plat showing and accurately defining the easements for stormwater control facilities. The plat must reference the Instrument Number where this AGREEMENT and its attachments are recorded and contain a note that the OWNER(S) is responsible for maintaining the stormwater management facilities.

13. The OWNER(S) shall record this AGREEMENT in the office of the Register of Deeds for the county of Maury, Tennessee, and the AGREEMENT shall constitute a covenant running with the land, and shall be binding upon the OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successors in interest

ATTEST BY OWNER(S):

Print Name Koby DuMont

Title Division President

Signature

Owner Greens Mill, LLC

Address 308 Letterman Drive

City, State ZIP Knoxville, TN 37919

STATE OF Tennessee
COUNTY OF Robertson

Before me, Lisa Dziezgowski of the state and county mentioned, personally appeared Koby DuMont, with whom I am personally acquainted and who acknowledged that he/she executed the foregoing instrument of the purposes therein contained.

Witness my hand this the 16th day of September 2024.

Lisa Dziezgowski
Notary Public

My Commission Expires: August 18 2026

CITY OF COLUMBIA, TENNESSEE
ENGINEERING DEPARTMENT

APPROVED BY : _____

STATE OF TENNESSEE
COUNTY OF MAURY

Before me, _____ of the state and county mentioned, personally appeared _____, with whom I am personally acquainted, and who acknowledged themselves to be the City Engineer of the City of Columbia or his designee and as such, being authorized so to do, executed the foregoing instrument of the purposes therein contained.

Witness my hand this the _____ day of _____, 20_____.

_____
Notary Public
My Commission Expires: _____

PER ITEM 1 OF THIS AGREEMENT:

A post construction long term maintenance plan shall be recorded with this agreement.

The plan shall include a reduced grading and drainage sheet, location map, and deed of easement drawing or plat.

REMOVE THIS SHEET

REPLACE WITH THE REQUIREMENTS LISTED ABOVE.

Appendix B: Subdivision Development Agreement

This DEVELOPMENT AGREEMENT is made and entered into on this

16th day of September, 20 24,
between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and

Safe Harbor Residential, the DEVELOPER (hereinafter the "DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made a part hereof (hereinafter the "ADDENDUM").

WITNESSETH:

WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM (hereinafter the "PROJECT"); and,

WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal Planning Commission (hereinafter the "CMPC") on the

_____ day of _____, 20_____,
pursuant to Tennessee Code Annotated Title 13, Chapter 4, and the Subdivision Regulations of Columbia, Tennessee (hereinafter the "SUBDIVISION REGULATIONS"); and,

WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such development; and,

WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,

WHEREAS, in order to provide for the health, safety, and welfare of future residents of the PROJECT, it will be necessary for certain improvements to the CITY'S utility systems, public infrastructure, and common areas to be constructed within and to serve the PROJECT including but not be limited to roads, bridges, sidewalks, pedestrian facilities, stormwater facilities, street signs, markings, signals, street lighting, recreation and park facilities, landscaping, and the like (hereinafter the "IMPROVEMENTS"); and,

WHEREAS, in order for the IMPROVEMENTS to be fully integrated with the utility systems and public infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to construct, in accordance with the Subdivision Regulations and other rules, regulations, and ordinances of the CITY, the IMPROVEMENTS in said PROJECT and extend utilities to the PROJECT at their own cost; and,

WHEREAS, the CITY is willing to accept the dedication of the streets, utilities, and other improvements as determined in the Development Plan of the PROJECT, subject to the City of Columbia City Council approval by resolution, and subject to the applicant's compliance with all requirements in this agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,

NOW, THEREFORE, it is agreed and understood as follows:

B1 General Conditions

B1.1 Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities, and other facilities in accordance with this agreement.

B1.2 City Ordinances, Rules and Regulations

All currently existing CITY ordinances, rules and regulations, and the Subdivision Regulations adopted by the CMPC are made a part of this agreement. In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans and specifications approved by the City and made a part, hereof.

B1.3 Fees

Review fees, inspection fees, and other amounts established by the CITY shall be paid prior to any review of the plans. If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees, inspection fees, or other amounts paid to the CITY shall be refundable to the DEVELOPER.

B1.4 Inspection

The CITY shall have a continuous right to inspect the work and facilities to assure that the work and facilities are in accordance with the Subdivision Regulations, approved Construction Plans, and other rules, regulations, and ordinances of the CITY.

B1.5 Right of Entry

The CITY shall have the right, in case of breach of the Performance Agreement, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

B1.6 Easements

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER further agrees to grant the necessary easements and rights-of-way across the DEVELOPER's properties without expense to the CITY and waive any claim for damages.

B1.7 Stormwater Maintenance Agreement

If the PROJECT includes any detention or retention ponds, common drainage ditches, water quality facilities, or stormwater facilities outside of the CITY rights-of-way, the DEVELOPER will submit a Stormwater Maintenance Agreement, to be filed with and recorded with the Final Plat.

B1.8 Attorney Fees and Other Expenses

The DEVELOPER shall pay all reasonable costs and expenses incurred by the CITY in enforcing or completing this agreement. The DEVELOPER shall pay all costs and expenses, including the CITY'S attorney fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

B1.9 Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

B1.10 Revocation and Interpretation

This agreement shall bind the DEVELOPER when executed by the DEVELOPER and may not be revoked by the DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

B1.11 No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments, or understandings.

B1.12 Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect, or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

B 1.13 Transferability

The DEVELOPER agrees to not transfer the property on which this PROJECT is to be located without first providing the CITY with written notice. The transferee shall provide the CITY an Assumption Agreement of this Agreement, whereby the transferee agrees to perform the IMPROVEMENTS required under this agreement and to provide a performance surety. The DEVELOPER understands that if the DEVELOPER transfers said property without providing the notice of transfer and Assumption Agreement as required herein, they will be in breach of this agreement and in violation of the Subdivision Regulations.

B1.14 Indemnity

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties, or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the IMPROVEMENTS by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

B1.15 Binding Effect

This agreement shall be binding upon the DEVELOPER and the DEVELEPOR's heirs, administrators, executors, assigns, and any other successors in interest.

B1.16 Entire Agreement

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them. No variations or alterations of the terms of this agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

B1.17 Headings

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the agreement and in no way shall define, limit, extend, or describe the scope or intent of any provision, hereof.

B2 Performance Surety

At the time of execution of this agreement, the DEVELOPER shall provide the CITY a performance surety, in an amount determined by the City Engineer for the IMPROVEMENTS and other items specified by the Construction Plans, plats, and plans approved by the CMPC. This performance surety shall secure performance of all obligations of the DEVELOPER under this agreement. The performance surety shall meet all requirements established in Chapter 4: Performance Agreement of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement. The performance surety may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the performance surety. The performance surety will not be released, except and until there has been full compliance with this agreement.

B3 Construction

B3.1 Construction Plans

The DEVELOPER shall submit to the CITY, Construction Plans describing in reasonable detail all utility systems, all storm water management systems, all street systems, pedestrian facilities, and all IMPROVEMENTS. The Construction Plans shall be designed according to the Engineering Standards and Specifications, all other codes and ordinances enforced by the City, and sound engineering judgment. The design of all utility systems shall follow the State of Tennessee and utility provider design criteria and specifications. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. The Construction Plans shall be prepared by a design professional licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date, and license number of the professional preparing the Construction Plans.

B3.2 Commencement of Construction

Construction of IMPROVEMENTS may not begin until the following events have occurred:

A. The Preliminary Plat has been approved by the CMPC;
B. The Construction Plans are approved by the CITY;
C. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing;
D. The CITY shall have received an appropriately executed Development Agreement; and
E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

B3.3 Site Grading

The DEVELOPER, hereby, agrees to construct all site grading to comply with the approved Construction Plans, including the approved Erosion Control Plan for the PROJECT and to comply with the Engineering Standards and Specifications, Stormwater Ordinance, and all other codes and ordinances enforced by the CITY.

B3.4 Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work made necessary by the development of this PROJECT. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order, and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

B3.5 Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Construction Plans to comply with the CITY's specifications and to the satisfaction and approval of the City Engineer by grading, draining, subgrade preparation, base preparation, curbing, signage, striping, signalization, sidewalk installation, and paving with the required preparation, amounts, and types of material. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas directed by the CITY Engineer, prior to application of final surface.

B3.6 Time Period for Construction

The DEVELOPER agrees to be bound to complete, within three (3) years of commencement of construction, all IMPROVEMENTS shown on the plat and plans and all things required by this agreement.

The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, the DEVELOPER shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for the DEVELOPER's failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the performance surety executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is determined to be inadequate by the City Engineer to secure the cost of said IMPROVEMENTS at the time an extension is sought, the DEVELOPER will provide the additional security to bring the performance surety amount in line with current cost projections as made by the CITY. The DEVELOPER understands that the DEVELOPER's failure to follow the extension procedure constitutes a breach of this agreement and places the DEVELOPER in violation of the Subdivision Regulations. The DEVELOPER further understands, that should the DEVELOPER fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved, the CITY shall reserve the right to withhold and withdraw all building permits within the PROJECT until all items of this Agreement have been fulfilled by the DEVELOPER.

B3.7 Off-Site Improvements

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the PROJECT. Unless specifically noted in the Construction Plans and made a part of separate agreement with the CITY, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site improvements.

B3.9 Inspection and Compliance

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to ensure that all work is performed and completed in accordance with the Construction Plans, CITY specifications, and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Construction Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

B3.10 Testing

The DEVELOPER agrees to pay the cost of all engineering, inspection, and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material, and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

B3.11 Scrap Removal

The DEVELOPER agrees to comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

B3.12 Traffic Control

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including

signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

B3.13 Temporary Facilities

The DEVELOPER shall provide all temporary facilities including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

B4 Acceptance of Improvements

B4.1 Completion of Improvements

At such time as the improvements have been constructed and installed, in accordance with the Constructions Plans and specifications, required testing and inspections completed and found satisfactory, and all clean-up and cover-up has been done to the satisfaction the City Engineer, a letter requesting preliminary acceptance of the PROJECT will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees the DEVELOPER shall have no claim, direct or implied, in the title or ownership of the IMPROVEMENTS specified in this agreement when the IMPROVEMENTS are complete and thereafter accepted by the CITY. The DEVELOPER will be responsible for construction failures and defects in PROJECT prior to final acceptance. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

B4.2 As-Built Drawings and Post-Completion Items

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system, and streets within the subdivision before the CITY shall accept the subdivision.

B4.3 Acceptance of Facilities

Upon final acceptance of all or part of the IMPROVEMENTS in the PROJECT, then those IMPROVEMENTS shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

B4.4 Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the IMPROVEMENTS in the PROJECT. Should the CITY choose to accept all or a portion of these IMPROVEMENTS, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register's Office of Maury County, Tennessee. No further writing or deed shall be required.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

The Landings at Greens Mill Road

PROJECT

Completed by the Developer	*Completed by the City*
SH Residential DEVELOPER NAME	
Koby DuMont AUTHORIZED AGENT NAME	 CITY ENGINEER
 SIGNATURE	 SIGNATURE
9-16-2024 DATE	 DATE
105 Westpark Drive Ste. 365 STREET	
Brentwood, TN, 37027 CITY, STATE, ZIP	
865-507-0220 PHONE	
koby@sacherborresidential.com EMAIL	
Attest	*Attest*
Lisa Dzierzgowski ATTEST NAME	 ATTEST NAME
Lisa Dzierzgowski ATTEST SIGNATURE	 ATTEST SIGNATURE
9-16-2024 DATE	 DATE

Post Construction Long Term Maintenance Plan

Project Name: Landing at Greens Mill – Phase 1C

Columbia, TN

September 16, 2024

Table of Contents

Section Name

System Description
Maintenance Procedures

System Description

The site consists of a series of stormwater conveyances both open channel and piped, detention / retention and water quality ponds. The previous Stormwater Detention Ponds Maintenance Plans were recorded during the platting of Phase 1A.

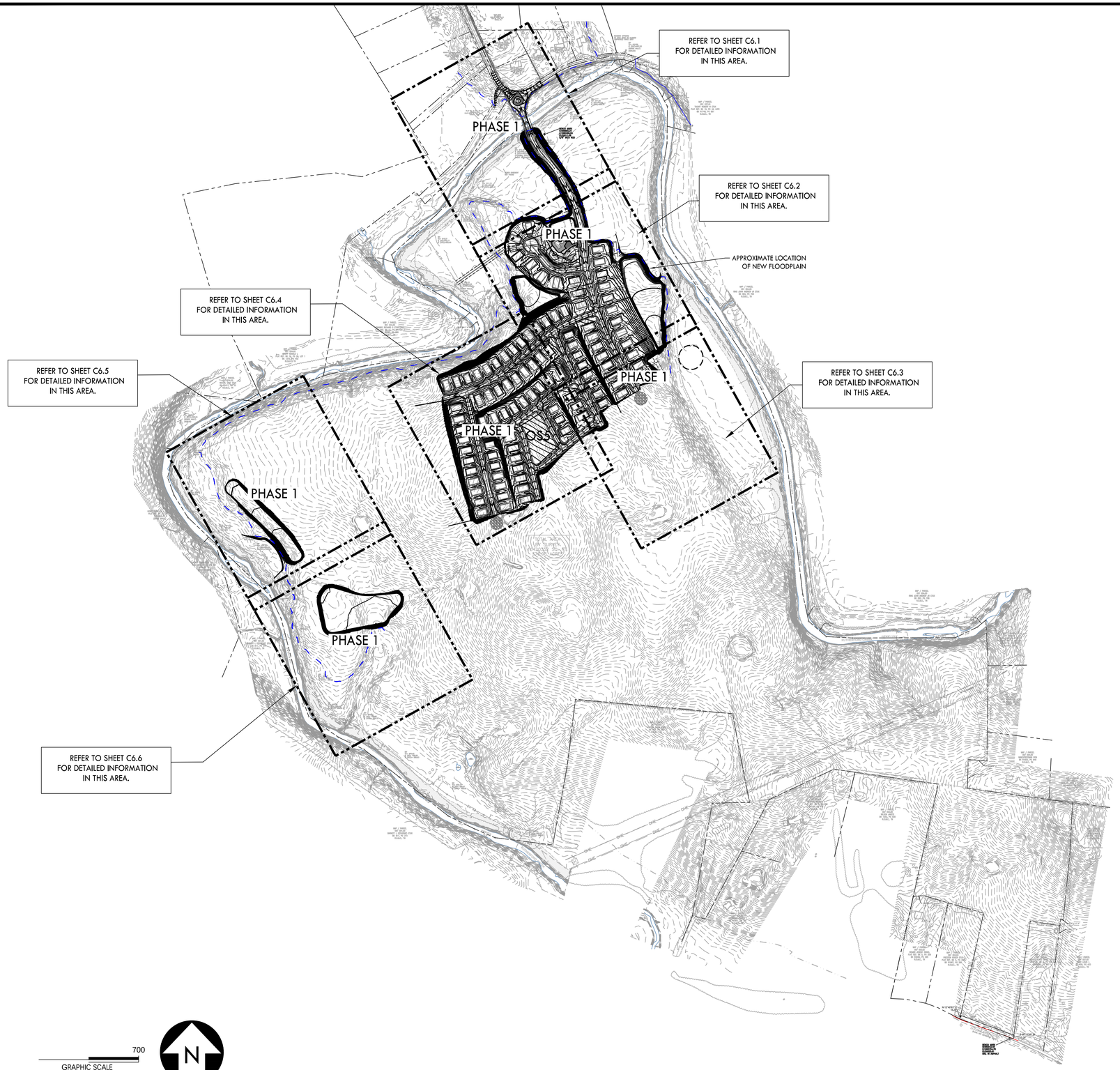
- There are 5 stormwater detention ponds sized to detain through the 100 year peak event. The orifice is designed to contain the first flush, 1 inch, for 24 hour.
- 1,332 feet of grass lined open channel.
- 1,386 feet of 18 in ADS pipe and 12 storm inlets.

Upon completion of the site construction, 'Record Drawings' in a version not less than AutoCAD 2006 LT (NAD83, NAVD88) of the stormwater controls will be provided to the City of Columbia for verification.

A copy of the INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES that has been completed, notarized, and recorded in the Land Records of the County of Maury, Tennessee will be kept on site with this document.

Maintenance Procedures

1. **STORMWATER DETENTION PONDS**
    - **a.** The outlet structures shall be checked regularly for clogging and shall be cleaned and repaired as necessary---monthly after it is first built then a regular sequence should be established or at least quarterly or after a large rain event.
    - **b.** Check banks and bottom surface of basins for erosion and correct as necessary.
    - **c.** Check at least quarterly and after each extreme storm event, the facility should be cleaned of accumulated debris. The banks of surface ponds should be checked and areas of erosion repaired. Remove nuisance wetland species and take appropriate measures to control mosquitos.
    - **d.** This maintenance typically includes sediment, floatable, and debris removal from inlets, outlets and skimmers.
    - **e.** Pond vegetation to be trimmed or harvested as appropriate, grassy areas, frequently mowed. Grass should be mowed so that it does not get over 12.
    - **f.** Remove sediment when accumulation reached 6 inches, or if re-suspension is observed or probable.
    - **g.** Some sediment may contain contaminants which the Tennessee Department of Environment and Conservation (TDEC) requires special disposal procedure. If there is any uncertainty about what the sediment contains or it is known to contain contaminants, then TDEC should be consulted and their disposal recommendations followed. The TDEC Division of Water Pollution Control should be contacted at (931) 380-3371. Generally, special attention or sampling should be given to sediment accumulated in facilities serving industrial, manufacturing or heavy commercial sites, Page 2 of 4 Rev. 9/26/2016 fueling centers or automotive maintenance areas, large parking areas, or other areas where pollutants (other than clean soil) are suspected to accumulate and be conveyed by storm runoff.
    - **h.** Some sediment collected may be innocuous (free of pollutants) and can be used as fill material, cover or land spreading. It is important that this material not be placed in any way that will promote or allow re-suspension in storm runoff.
2. **1,386 feet of 18 in ADS pipe and 12 storm inlets.**
    - a. These structures will be inspected and cleaned quarterly to ensure pipes and drain inlets do not fill with sediment or trash.



CRUNK ENGINEERING LLC
7112 CROSSROADS BOULEVARD
SUITE 201
FRANKLIN, TN 37027
(615) 873-1795
WWW.CRUNKENG.COM

ENGINEERING CRUNK

ANDREW L. WILSON 134180 REGISTERED ENGINEER AGRICULTURE COMMERCE STATE OF TENNESSEE 9/21/23

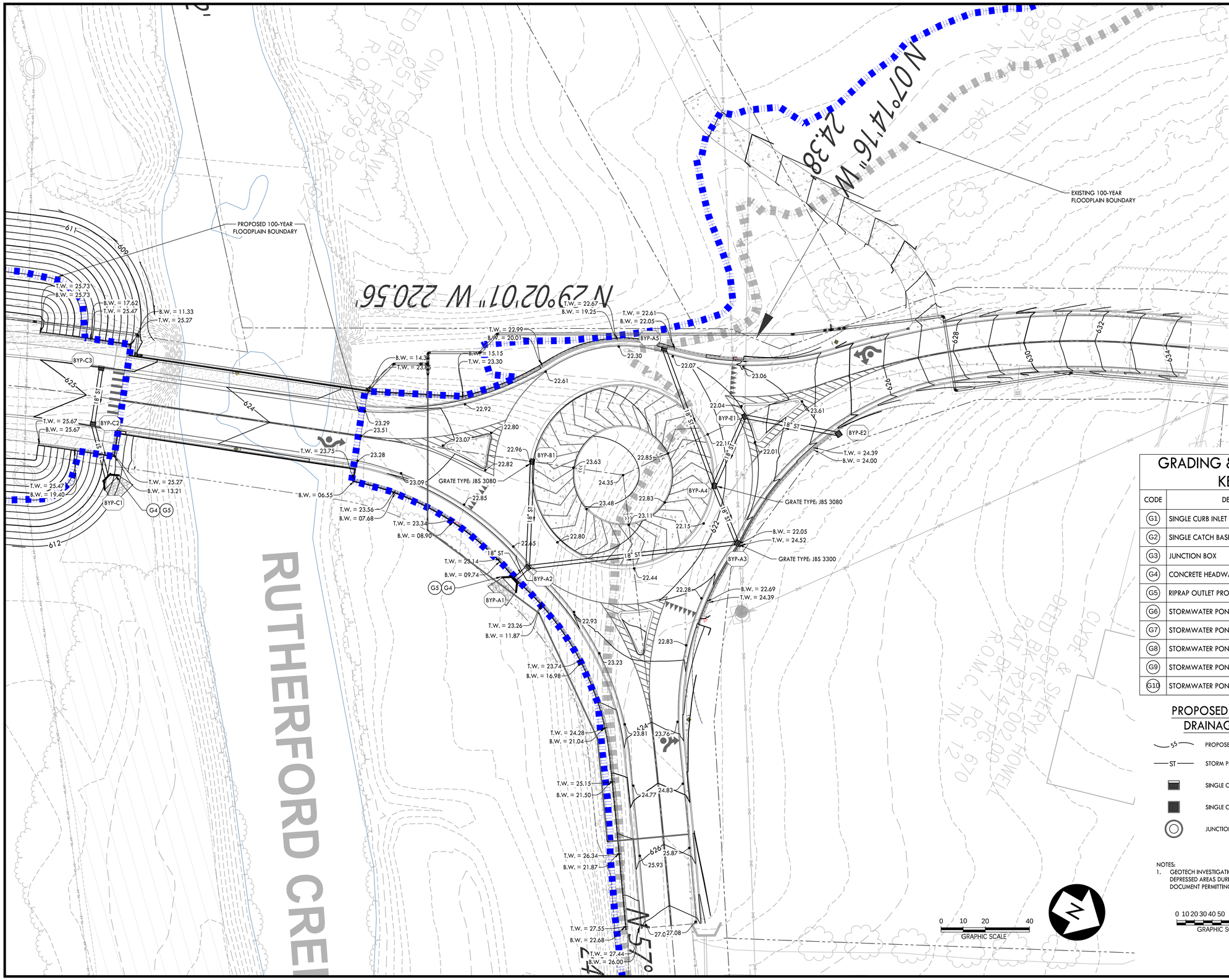
GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.0
OVERALL GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- PROPOSED CONTOUR
- STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

CRUNK ENGINEERING LLC
7112 CROSSROADS BOULEVARD
SUITE 201
FRANKLIN, TN 37027
(615) 873-1795
WWW.CRUNKENG.COM

ENGINEERING CRUNK

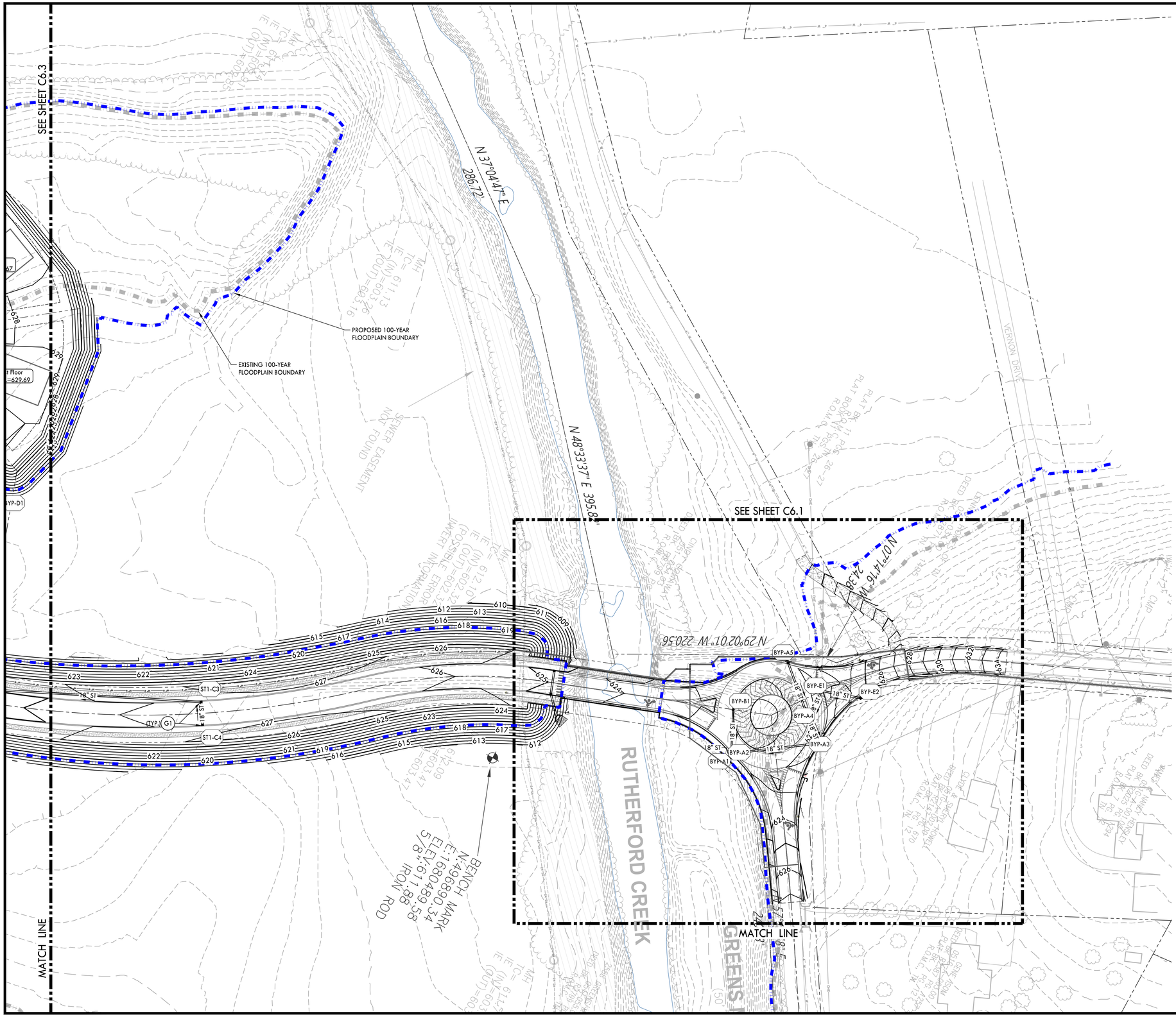
ANDREW L. SCHLOSSER
REGISTERED LANDSCAPE ARCHITECT
AGRICULTURE
COMMERCE
HOMES
LIVABILITY
STATE OF TENNESSEE
9/21/23

GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PERMIT PLANS
COLUMBIA, TENNESSEE

REVISIONS	
No.	DATE

09/21/23 17067

C6.1
ROUNDABOUT GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

0 10 20 30 40 50 100
GRAPHIC SCALE

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(615) 873-1795
WWW.CRUNKENG.COM

ENGINEERING CRUNK

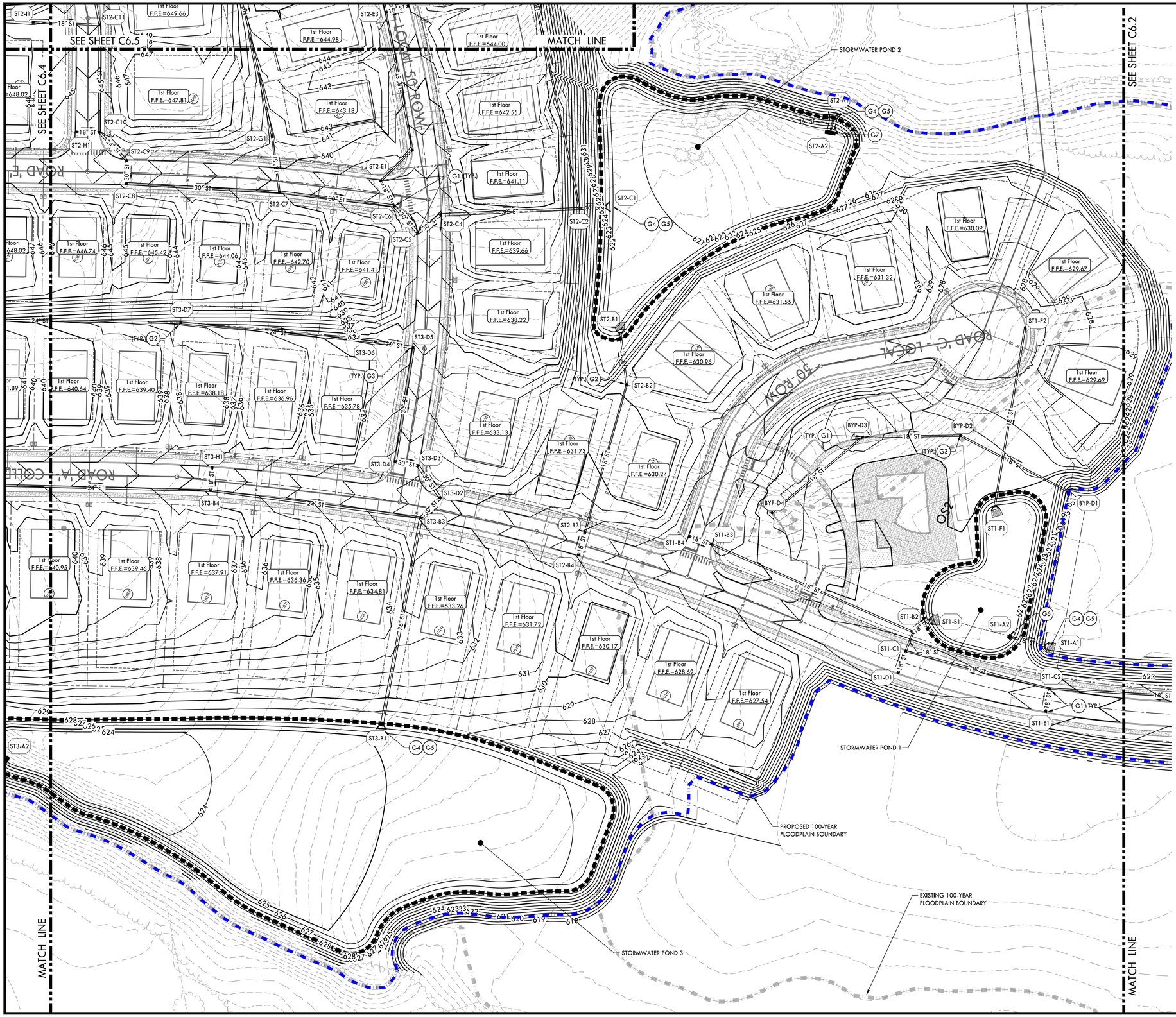
ANNA WILSON CAMPBELL REGISTERED LANDSCAPE ARCHITECT AGRICULTURE 1134180 STATE OF TENNESSEE 9/21/23

GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS	
No.	DATE

09/21/23 17067

C6.2
GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

0 10 20 30 40 50 100
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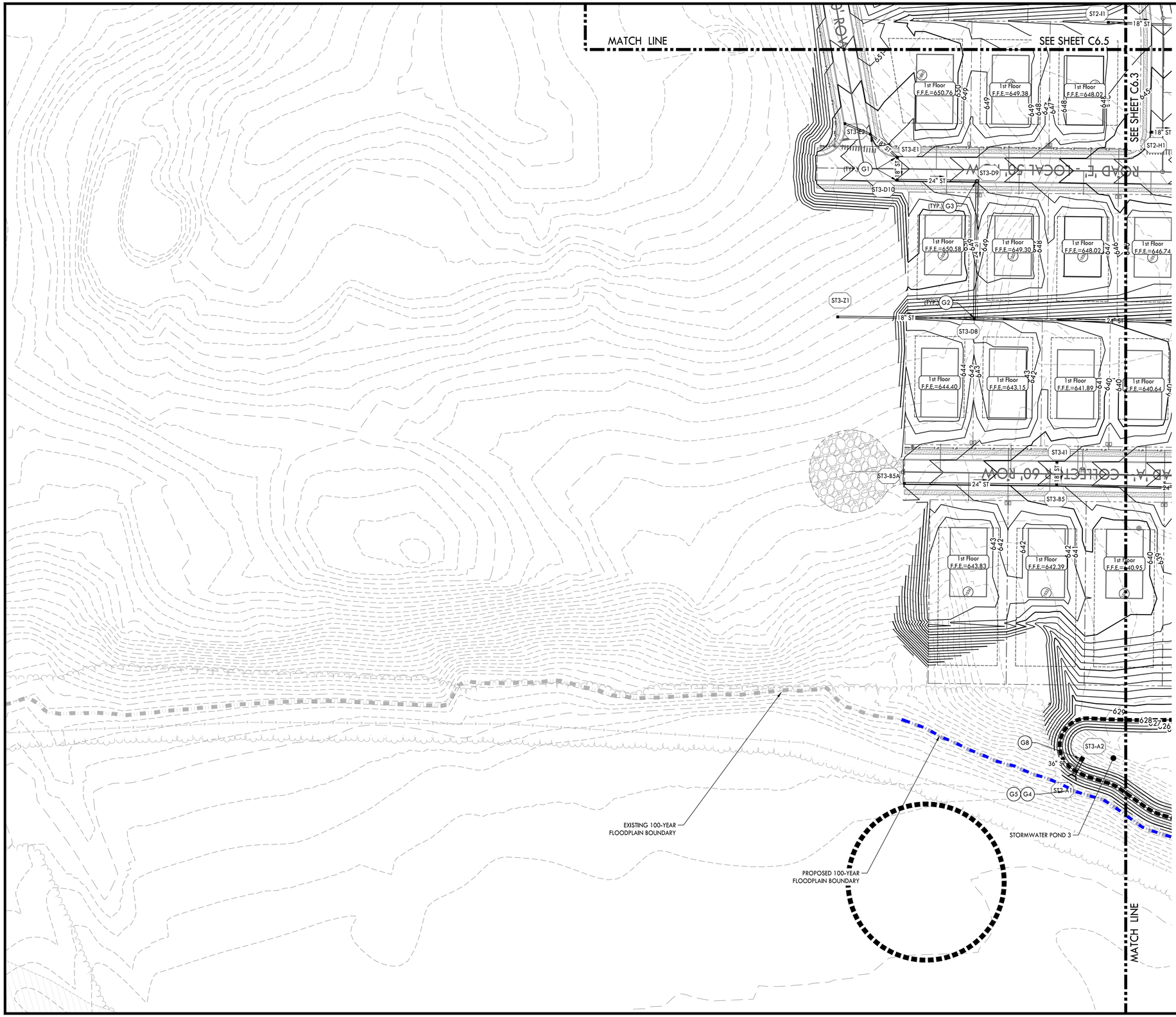
GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.3
GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- PROPOSED CONTOUR
- STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

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WILSON COUNTY TENNESSEE DEPARTMENT OF AGRICULTURE 9/21/23 COMMERCE NO. 114180 STATE OF TENNESSEE

GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.4
GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

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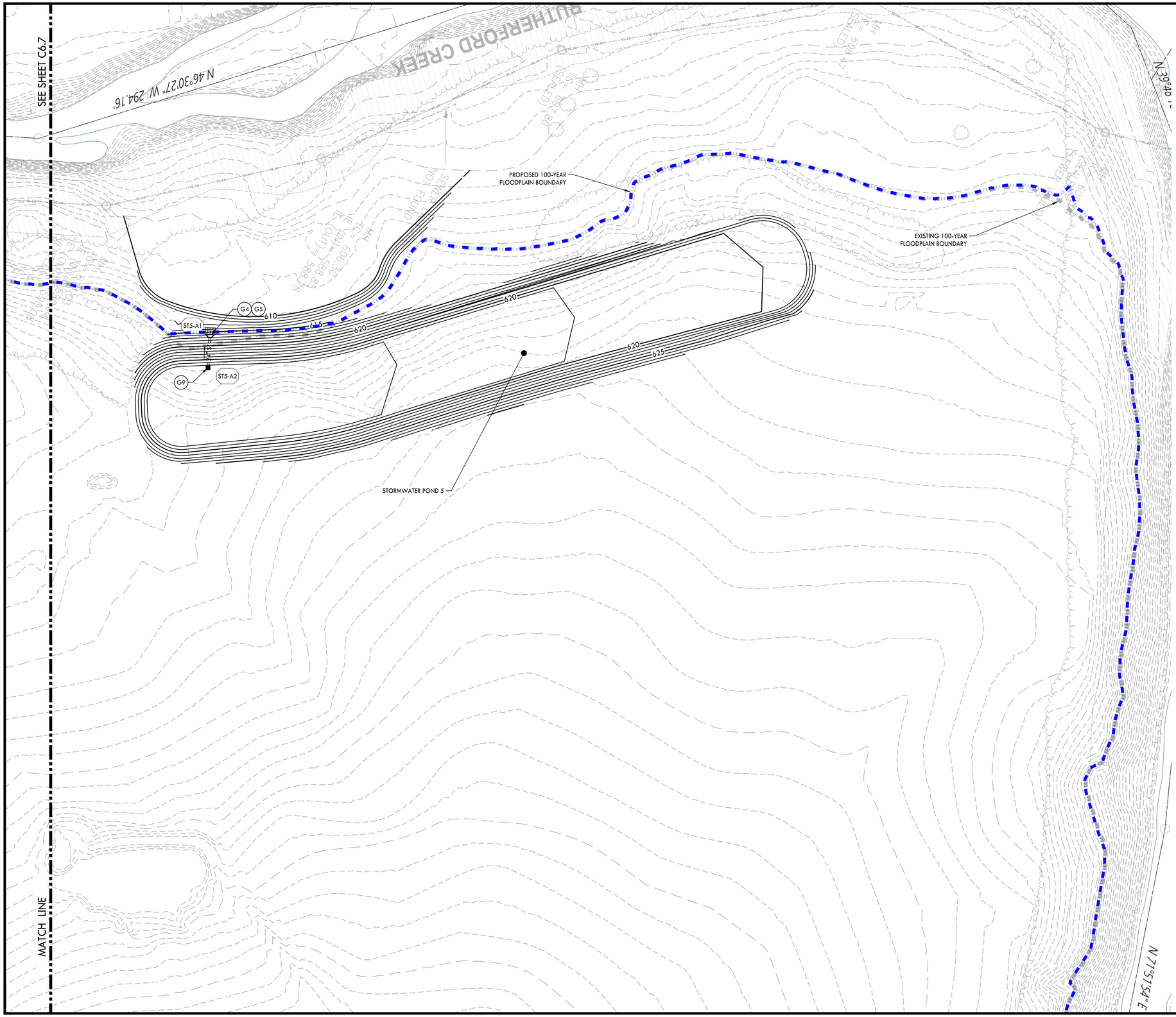
GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.5
GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

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ENGINEERING CRUNK

ANDREW L. WILSON 134180 REGISTERED ENGINEER AGRICULTURE COMMERCE STATE OF TENNESSEE 9/21/23

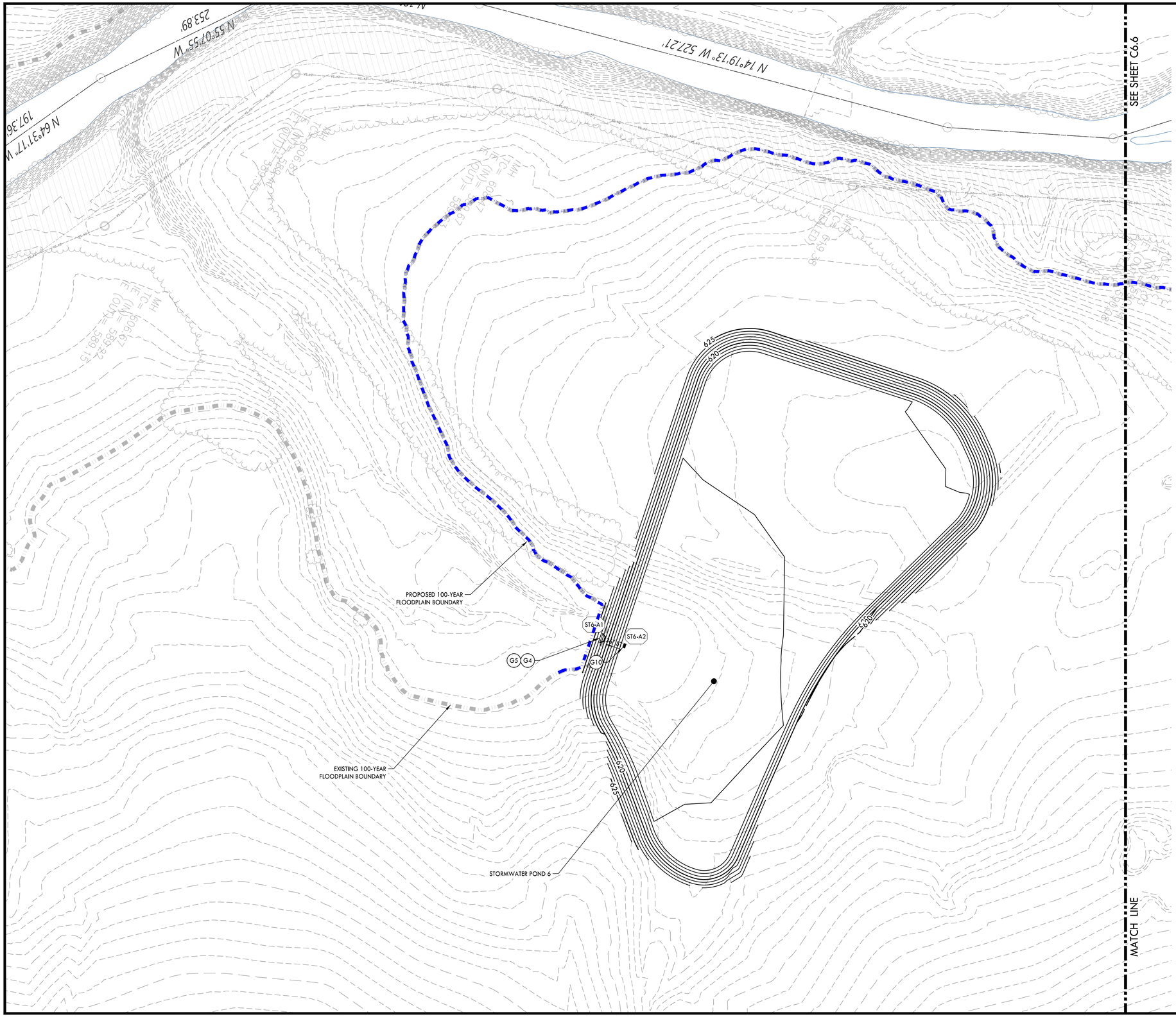
GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.6
GRADING & DRAINAGE PLAN



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C6.9 - 4
G2	SINGLE CATCH BASIN	C6.9 - 3
G3	JUNCTION BOX	C6.9 - 6
G4	CONCRETE HEADWALL	-
G5	RIPRAP OUTLET PROTECTION	C6.9 - 5
G6	STORMWATER POND 1 OUTLET STRUCTURE	C6.8 - 1
G7	STORMWATER POND 2 OUTLET STRUCTURE	C6.8 - 3
G8	STORMWATER POND 3 OUTLET STRUCTURE	C6.8 - 2
G9	STORMWATER POND 5 OUTLET STRUCTURE	C6.9 - 1
G10	STORMWATER POND 6 OUTLET STRUCTURE	C6.9 - 2

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

NOTES:
1. GEOTECH INVESTIGATION TO BE PERFORMED ON ALL DEPRESSED AREAS DURING CONSTRUCTION DOCUMENT PERMITTING.

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GRAPHIC SCALE

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ENGINEERING CRUNK

ANDREW WILSON CRUNK
REGISTERED
AGRICULTURE
9/21/23
ENGINEER
134180
STATE OF TENNESSEE

GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS	
No.	DATE

09/21/23 17067

C6.7
GRADING & DRAINAGE PLAN

STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
BYP-A1	611.93	18" ADS (IN): 610.30	18" - 24" CONCRETE HEADWALL
BYP-A2	622.50	18" ADS (IN): 618.00 18" ADS (IN): 614.00 18" ADS (OUT): 611.00	SINGLE CURB INLET
BYP-A3	621.59	18" ADS (IN): 616.00 18" ADS (OUT): 615.90	SINGLE CURB INLET
BYP-A4	622.10	18" ADS (IN): 617.45 18" ADS (IN): 617.45 18" ADS (OUT): 617.45	ROLL OVER INLET
BYP-A5	622.02	18" ADS (OUT): 618.80	SINGLE CURB INLET
BYP-B1	622.94	18" ADS (OUT): 618.50	ROLL OVER INLET
BYP-C1	613.63	18" ADS (IN): 612.00	18" - 24" CONCRETE HEADWALL
BYP-C2	624.69	18" ADS (IN): 621.00 18" ADS (OUT): 621.00	SINGLE CURB INLET
BYP-C3	624.68	18" ADS (OUT): 621.25	SINGLE CURB INLET
BYP-D1	618.46	18" ADS (IN): 616.82	18" - 24" CONCRETE HEADWALL
BYP-D2	625.71	18" ADS (IN): 618.10 18" ADS (OUT): 618.00	SINGLE CATCH BASIN
BYP-D3	622.69	18" ADS (IN): 619.35 18" ADS (OUT): 619.25	SINGLE CURB INLET
BYP-D4	623.20	18" ADS (OUT): 620.00	SINGLE CURB INLET
BYP-E1	621.63	18" ADS (IN): 618.50 18" ADS (OUT): 618.40	SINGLE CURB INLET
BYP-E2	624.30	18" ADS (OUT): 621.00	SINGLE CATCH BASIN
ST1-A1	618.08	18" ADS (IN): 616.44	18" - 24" CONCRETE HEADWALL
ST1-A2	623.85	18" ADS (OUT): 620.00	POND 1 OUTLET STRUCTURE
ST1-B1	621.63	18" ADS (IN): 620.00	18" - 24" CONCRETE HEADWALL
ST1-B2	624.05	18" ADS (IN): 620.15 18" ADS (IN): 620.20 18" ADS (OUT): 620.15	JUNCTION MANHOLE
ST1-B3	625.54	18" ADS (IN): 622.10 18" ADS (OUT): 622.00	SINGLE CURB INLET
ST1-B4	625.54	18" ADS (OUT): 622.40	SINGLE CURB INLET
ST1-C1	623.26	18" ADS (IN): 620.20 18" ADS (IN): 620.30 18" ADS (OUT): 620.20	SINGLE CURB INLET
ST1-C2	624.17	18" ADS (IN): 620.90 18" ADS (IN): 620.90 18" ADS (OUT): 620.90	SINGLE CURB INLET
ST1-C3	626.27	18" ADS (IN): 622.73 18" ADS (OUT): 622.79	SINGLE CURB INLET
ST1-C4	626.27	18" ADS (OUT): 622.98	SINGLE CURB INLET
ST1-D1	623.26	18" ADS (OUT): 620.26	SINGLE CURB INLET
ST1-E1	624.17	18" ADS (OUT): 621.20	SINGLE CURB INLET
ST1-F1	622.29	18" ADS (IN): 620.66	18" - 24" CONCRETE HEADWALL
ST1-F2	626.10	18" ADS (OUT): 622.90	SINGLE CURB INLET
ST2-A1	623.00	36" ADS (IN): 619.79 36" ADS (IN): 619.79	60" - 72" CONCRETE HEADWALL
ST2-A2	623.76	36" ADS (OUT): 620.00 36" ADS (OUT): 620.00	OUTLET STRUCTURE
ST2-B1	623.22	18" ADS (IN): 621.59	18" - 24" CONCRETE HEADWALL
ST2-B2	629.60	18" ADS (IN): 622.10 18" ADS (OUT): 622.00	SINGLE CATCH BASIN
ST2-B3	627.47	18" ADS (IN): 623.30 18" ADS (OUT): 623.20	SINGLE CURB INLET
ST2-B4	627.47	18" ADS (OUT): 623.60	SINGLE CURB INLET
ST2-C1	624.23	30" ADS (IN): 621.52	30" - 36" CONCRETE HEADWALL
ST2-C2	632.91	18" ADS (IN): 628.00 30" ADS (IN): 628.00 30" ADS (OUT): 625.00	JUNCTION MANHOLE
ST2-C4	636.93	30" ADS (IN): 630.50 30" ADS (OUT): 630.40	SINGLE CURB INLET
ST2-C5	636.53	30" ADS (IN): 631.10 30" ADS (OUT): 631.10	SINGLE CURB INLET
ST2-C6	637.46	18" ADS (IN): 631.80 30" ADS (IN): 631.80 30" ADS (OUT): 631.70	SINGLE CURB INLET
ST2-C7	639.58	30" ADS (IN): 634.00 18" ADS (IN): 634.00 30" ADS (OUT): 633.87	SINGLE CURB INLET
ST2-C8	642.40	30" ADS (IN): 635.60 30" ADS (OUT): 635.60	SINGLE CURB INLET
ST2-C9	642.40	24" ADS (IN): 636.00 30" ADS (OUT): 635.90	SINGLE CURB INLET
ST2-C10	643.49	18" ADS (IN): 639.60 24" ADS (IN): 636.50 24" ADS (OUT): 636.40	SINGLE CURB INLET

STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
ST2-C11	645.97	24" ADS (IN): 642.00 18" ADS (IN): 640.70 24" ADS (OUT): 637.70	SINGLE CURB INLET
ST2-C12	648.86	24" ADS (IN): 644.60 24" ADS (OUT): 644.50	SINGLE CURB INLET
ST2-C13	648.86	24" ADS (IN): 645.10 24" ADS (OUT): 645.00	SINGLE CURB INLET
ST2-C14	649.70	18" ADS (IN): 645.50 24" ADS (IN): 645.50 24" ADS (OUT): 645.40	SINGLE CURB INLET
ST2-C15	653.84	18" ADS (IN): 650.00 18" ADS (OUT): 649.90	SINGLE CURB INLET
ST2-C16	654.10	18" ADS (IN): 650.40 18" ADS (OUT): 650.30	SINGLE CURB INLET
ST2-C17	659.20	18" ADS (IN): 655.50 18" ADS (IN): 654.80 18" ADS (OUT): 654.70	SINGLE CURB INLET
ST2-C18	659.25	18" ADS (IN): 655.30 18" ADS (OUT): 655.20	SINGLE CURB INLET
ST2-C19	659.25	18" ADS (OUT): 655.70	SINGLE CURB INLET
ST2-D1	647.65	18" ADS (OUT): 644.50	SINGLE CATCH BASIN
ST2-E1	637.76	18" ADS (IN): 632.40 18" ADS (OUT): 632.30	SINGLE CURB INLET
ST2-E2	638.44	18" ADS (IN): 633.10 18" ADS (OUT): 633.00	SINGLE CURB INLET
ST2-E3	641.66	18" ADS (IN): 636.10 18" ADS (IN): 636.10 18" ADS (OUT): 636.00	SINGLE CURB INLET
ST2-E4	646.85	18" ADS (IN): 642.60 18" ADS (OUT): 642.50	SINGLE CURB INLET
ST2-E5	646.85	18" ADS (OUT): 643.00	SINGLE CURB INLET
ST2-G1	640.27	18" ADS (IN): 635.30 18" ADS (OUT): 635.20	SINGLE CATCH BASIN
ST2-G2	646.26	18" ADS (IN): 640.80 18" ADS (OUT): 640.70	SINGLE CATCH BASIN
ST2-G3	649.71	18" ADS (OUT): 645.00	SINGLE CATCH BASIN
ST2-H1	643.50	18" ADS (OUT): 640.00	SINGLE CURB INLET
ST2-I1	645.17	18" ADS (OUT): 642.00	SINGLE CATCH BASIN
ST2-J1	649.99	24" ADS (IN): 646.00 24" ADS (OUT): 645.90	SINGLE CURB INLET
ST2-J2	654.14	24" ADS (IN): 649.50 24" ADS (OUT): 649.40	SINGLE CURB INLET
ST2-J3	654.10	24" ADS (IN): 649.80 24" ADS (OUT): 649.70	SINGLE CURB INLET
ST2-J4	654.68	18" ADS (IN): 650.50 24" ADS (IN): 650.10 24" ADS (OUT): 650.00	SINGLE CURB INLET
ST2-J5	656.82	24" ADS (IN): 651.50 18" ADS (IN): 653.30 24" ADS (OUT): 651.40	SINGLE CURB INLET
ST2-J6	659.34	18" ADS (IN): 655.30 18" ADS (OUT): 655.20	SINGLE CURB INLET
ST2-J7	659.21	18" ADS (OUT): 655.70	SINGLE CURB INLET
ST2-K1	654.68	18" ADS (OUT): 651.00	SINGLE CURB INLET
ST2-L1	655.39	18" ADS (IN): 652.20 24" ADS (OUT): 652.10	SINGLE CATCH BASIN
ST2-L2	661.32	18" ADS (OUT): 658.00	SINGLE CATCH BASIN
ST2-M1	659.22	18" ADS (OUT): 656.20	SINGLE CURB INLET
ST2-N1	641.66	18" ADS (OUT): 637.00	SINGLE CURB INLET
ST3-A1	626.09	36" ADS (IN): 622.87	30" - 36" CONCRETE HEADWALL
ST3-A2	627.75	36" ADS (OUT): 623.00	POND 3 OUTLET STRUCTURE
ST3-B1	626.21	36" ADS (IN): 623.00	30" - 36" CONCRETE HEADWALL
ST3-B3	630.48	24" ADS (IN): 625.40 30" ADS (IN): 625.70 36" ADS (OUT): 625.30	SINGLE CURB INLET
ST3-B4	634.42	24" ADS (IN): 630.60 18" ADS (IN): 630.60 24" ADS (OUT): 630.50	SINGLE CURB INLET
ST3-B5	638.66	24" ADS (IN): 634.50 18" ADS (IN): 635.20 24" ADS (OUT): 634.40	SINGLE CURB INLET
ST3-B5A	641.47	24" ADS (OUT): 637.42	SINGLE CURB INLET
ST3-D2	630.20	30" ADS (IN): 626.00 30" ADS (OUT): 625.90	SINGLE CURB INLET
ST3-D3	631.27	30" ADS (IN): 626.40 30" ADS (OUT): 626.30	SINGLE CURB INLET
ST3-D4	631.27	30" ADS (IN): 626.70 30" ADS (OUT): 626.60	SINGLE CURB INLET
ST3-D5	633.90	30" ADS (IN): 627.60 30" ADS (OUT): 627.50	SINGLE CURB INLET
ST3-D6	633.12	24" ADS (IN): 628.10 30" ADS (OUT): 628.00	SINGLE CATCH BASIN

STORM STRUCTURE TABLE			
ID	RIM	INVERT	TYPE
ST3-D7	636.44	24" ADS (IN): 631.00 24" ADS (OUT): 630.90	SINGLE CATCH BASIN
ST3-D8	641.53	24" ADS (IN): 636.50 18" ADS (IN): 636.50 24" ADS (OUT): 636.40	SINGLE CATCH BASIN
ST3-D9	646.51	24" ADS (IN): 641.70 24" ADS (OUT): 641.60	JUNCTION MANHOLE
ST3-D10	647.97	18" ADS (IN): 644.30 24" ADS (OUT): 643.50	SINGLE CURB INLET
ST3-E1	647.97	18" ADS (IN): 644.70 18" ADS (OUT): 644.60	SINGLE CURB INLET
ST3-E2	648.81	18" ADS (IN): 645.60 18" ADS (OUT): 645.50	SINGLE CURB INLET
ST3-F1	649.13	18" ADS (OUT): 645.90	SINGLE CURB INLET
ST3-H1	634.42	18" ADS (OUT): 631.00	SINGLE CURB INLET
ST3-I1	638.66	18" ADS (OUT): 635.45	SINGLE CURB INLET
ST3-Z1	644.05	18" ADS (OUT): 640.00	SINGLE CATCH BASIN
ST5-A1	617.80	24" ADS (IN): 613.64	18" - 24" CONCRETE HEADWALL
ST5-A2	621.88	24" ADS (OUT): 617.00	POND 5 OUTLET STRUCTURE
ST5-C12	648.95	18" ADS (IN): 644.60 18" ADS (IN): 644.10 24" ADS (IN): 644.60 24" ADS (OUT): 644.00	SINGLE CURB INLET
ST5-C13	650.05	18" ADS (IN): 645.10 18" ADS (OUT): 645.00	JUNCTION MANHOLE
ST5-C14	651.04	18" ADS (IN): 645.80 18" ADS (IN): 645.80 18" ADS (OUT): 645.70	SINGLE CURB INLET
ST5-C15	658.77	18" ADS (IN): 653.80 18" ADS (IN): 653.80 18" ADS (OUT): 653.70	SINGLE CURB INLET
ST5-C16	664.61	18" ADS (IN): 661.10 18" ADS (OUT): 661.00	SINGLE CURB INLET
ST5-C17	664.61	18" ADS (OUT): 662.00	SINGLE CURB INLET
ST5-Q1	648.95	18" ADS (OUT): 645.00	SINGLE CURB INLET
ST5-R1	648.48	24" ADS (IN): 645.00 24" ADS (OUT): 644.90	SINGLE CATCH BASIN
ST5-R2	658.98	24" ADS (OUT): 656.20	SINGLE CATCH BASIN
ST5-S1	650.68	18" ADS (OUT): 646.20	SINGLE CURB INLET
ST5-T1	658.77	18" ADS (OUT): 654.50	SINGLE CURB INLET
ST6-A1	619.64	36" ADS (IN): 614.43	30" - 36" CONCRETE HEADWALL
ST6-A2	618.30	36" ADS (OUT): 615.00	POND 6 OUTLET STRUCTURE
ST6-L1	658.80	18" ADS (OUT): 652.60	SINGLE CATCH BASIN
ST6-M3	664.10	18" ADS (IN): 659.10	JUNCTION MANHOLE
ST6-M4	665.26	18" ADS (IN): 660.50 18" ADS (OUT): 660.40	SINGLE CURB INLET
ST6-M5	665.26	18" ADS (OUT): 660.80	SINGLE CURB INLET

STORM PIPE TABLE								
INLET	INVERT	OUTLET	INVERT	LENGTH (FT)	SLOPE (%)	SHAPE	DIAMETER (IN)	MATERIAL
BYP-A2	611.00	BYP-A1	610.30	8	8.39%	CIRCULAR	18	ADS
BYP-A3	615.90	BYP-A2	614.00	95	1.99%	CIRCULAR	18	ADS
BYP-A4	617.45	BYP-A3	616.00	28	5.20%	CIRCULAR	18	ADS
BYP-A5	618.80	BYP-A4	617.45	66	2.05%	CIRCULAR	18	ADS
BYP-B1	618.50	BYP-A2	618.00	48	1.04%	CIRCULAR	18	ADS
BYP-C2	621.00	BYP-C1	612.00	25	35.97%	CIRCULAR	18	ADS
BYP-C3	621.25	BYP-C2	621.00	26	0.98%	CIRCULAR	18	ADS
BYP-D2	618.00	BYP-D1	616.82	131	0.90%	CIRCULAR	18	ADS
BYP-D3	619.25	BYP-D2	618.10	107	1.08%	CIRCULAR	18	ADS
BYP-D4	620.00	BYP-D3	619.35	128	0.51%	CIRCULAR	18	ADS
BYP-E1	618.40	BYP-A4	617.45	34	2.77%	CIRCULAR	18	ADS
BYP-E2	621.00	BYP-E1	618.50	43	5.77%	CIRCULAR	18	ADS
ST1-A2	620.00	ST1-A1	616.44	39	9.01%	CIRCULAR	18	ADS
ST1-B2	620.20	ST1-B3	622.00	240	0.75%	CIRCULAR	18	ADS
ST1-B2	620.15	ST1-B1	620.00	21	0.71%	CIRCULAR	18	ADS
ST1-B3	622.10	ST1-B4	622.40	25	1.20%	CIRCULAR	18	ADS
ST1-C1	620.20	ST1-B2	620.15	22	0.22%	CIRCULAR	18	ADS
ST1-C2	620.90	ST1-C1	620.30	162	0.37%	CIRCULAR	18	ADS
ST1-C3	622.79	ST1-C2	620.90	246	0.77%	CIRCULAR	18	ADS
ST1-C4	622.98	ST1-C3	622.73	25	1.00%	CIRCULAR	18	ADS
ST1-D1	620.26	ST1-C1	620.20	25	0.22%	CIRCULAR	18	ADS
ST1-E1	621.20	ST1-C2	620.90	25	1.20%	CIRCULAR	18	ADS
ST1-F2	622.90	ST1-F1	620.66	198	1.13%	CIRCULAR	18	ADS
ST2-A2	620.00	ST2-A1	619.79	14	1.47%	CIRCULAR	36	ADS
ST2-A2	620.00	ST2-A1	619.79	14	1.44%	CIRCULAR	36	ADS
ST2-B2	622.00	ST2-B1	621.59	57	0.72%	CIRCULAR	18	ADS
ST2-B3	623.20	ST2-B2	622.10	167	0.66%	CIRCULAR	18	ADS
ST2-B4	623.60	ST2-B3	623.30	25	1.20%	CIRCULAR	18	ADS
ST2-C2	625.00	ST2-C1	621.52	30	11.77%	CIRCULAR	30	ADS
ST2-C4	630.50	ST2-C5	631.10	32	1.90%	CIRCULAR	30	ADS
ST2-C4	630.40	ST2-C2	628.00	152	1.58%	CIRCULAR	30	ADS
ST2-C6	631.70	ST2-C5	631.10	39	1.52%	CIRCULAR	30	ADS
ST2-C7	633.87	ST2-C6	631.80	126	1.65%	CIRCULAR	30	ADS
ST2-C8	635.60	ST2-C7	634.00	167	0.96%	CIRCULAR	30	ADS
ST2-C9	635.90	ST2-C8	635.60	25	1.20%	CIRCULAR	30	ADS
ST2-C10	636.40	ST2-C9	636.00	43	0.93%	CIRCULAR	24	ADS
ST2-C11	637.70	ST2-C10	636.50	117	1.03%	CIRCULAR	24	ADS
ST2-C12	644.50	ST2-C11	642.00	138	1.82%	CIRCULAR	24	ADS
ST2-C13	645.00	ST2-C12	644.60	25	1.60%	CIRCULAR	24	ADS
ST2-C14	645.40	ST2-C13	645.10	37	0.80%	CIRCULAR	24	ADS
ST2-C15	649.90	ST2-C14	645.50	263	1.67%	CIRCULAR	18	ADS
ST2-C16	650.30	ST2-C15	650.00	30	1.01%	CIRCULAR	18	ADS
ST2-C17	654.70	ST2-C16	650.40	207	2.08%	CIRCULAR	18	ADS
ST2-C18	655.20	ST2-C17	654.80	43	0.92%	CIRCULAR	18	ADS
ST2-C19	655.70	ST2-C18	655.30	25	1.60%	CIRCULAR	18	ADS
ST2-D1	644.50	ST2-C2	628.00	459	3.60%	CIRCULAR	18	ADS
ST2-E1	632.30	ST2-C6	631.80	31	1.61%	CIRCULAR	18	ADS
ST2-E2	633.00	ST2-E1	632.40	48	1.24%	CIRCULAR	18	ADS
ST2-E3	636.00	ST2-E2	633.10	153	1.90%	CIRCULAR	18	ADS
ST2-E4	642.50	ST2-E3	636.10	252	2.54%	CIRCULAR	18	ADS
ST2-E5	643.00	ST2-E4	642.60	25	1.60%	CIRCULAR	18	ADS
ST2-G1	635.20	ST2-C7	634.00	61	1.96%	CIRCULAR	18	ADS
ST2-G2	640.70	ST2-G1	635.30	289	1.87%	CIRCULAR	18	ADS
ST2-G3	645.00	ST2-G2	640.80	201	2.09%	CIRCULAR	18	ADS
ST2-H1	640.00	ST2-C10	639.60	25	1.60%	CIRCULAR	18	ADS
ST2-I1	642.00	ST2-C11	640.70	73	1.79%	CIRCULAR	18	ADS
ST2-J1	645.90	ST2-C14	645.50	31	1.30%	CIRCULAR	24	ADS
ST2-J2	649.40	ST2-J1	646.00	172	1.98%	CIRCULAR	24	ADS
ST2-J3	649.70	ST2-J2	649.50	25	0.80%	CIRCULAR	24	ADS
ST2-J4	650.00	ST2-J3	649.80	42	0.48%	CIRCULAR	24	ADS
ST2-J5	651.40	ST2-J4	650.10	101	1.28%	CIRCULAR	24	ADS
ST2-J6	655.20	ST2-J5	653.30	116	1.64%	CIRCULAR	18	ADS
ST2-J7	655.70	ST2-J6	655.30	25	1.59%	CIRCULAR	18	ADS
ST2-K1	651.00	ST2-J4	650.50	25	2.00%	CIRCULAR	18	ADS
ST2-L1	652.10	ST2-J5	651.50	55	1.08%	CIRCULAR	24	ADS

STORM PIPE TABLE								
INLET	INVERT	OUTLET	INVERT	LENGTH (FT)	SLOPE (%)	SHAPE	DIAMETER (IN)	MATERIAL
ST2-L2	658.00	ST2-L1	652.20	260	2.23%	CIRCULAR	18	ADS
ST2-M1	656.20	ST2-C17	655.50	25	2.80%	CIRCULAR	18	ADS
ST2-N1	637.00	ST2-E3	636.10	25	3.60%	CIRCULAR	18	ADS
ST3-A2	623.00	ST3-A1	622.87	20	0.62%	CIRCULAR	36	ADS
ST3-B3	625.30	ST3-B1	623.00	231	1.00%	CIRCULAR	36	ADS
ST3-B4	630.50	ST3-B3	625.40	231	2.21%	CIRCULAR	24	ADS
ST3-B5	634.40	ST3-B4	630.60	249	1.52%	CIRCULAR	24	ADS
ST3-B5A	637.42	ST3-B5	634.50	166	1.76%	CIRCULAR	24	ADS
ST3-D2	625.90	ST3-B3	625.70	30	0.67%	CIRCULAR	30	ADS
ST3-D3	626.30	ST3-D2	626.00	43	0.70%	CIRCULAR	30	ADS
ST3-D4	626.60	ST3-D3	626.40	25	0.80%	CIRCULAR	30	ADS
ST3-D5	627.50	ST3-D4	626.70	126	0.64%	CIRCULAR	30	ADS
ST3-D6	628.00	ST3-D5	627.60	42	0.96%	CIRCULAR	30	ADS
ST3-D7	630.90	ST3-D6	628.10	213	1.32%	CIRCULAR	24	ADS
ST3-D8	636.40	ST3-D7	631.00	307	1.76%	CIRCULAR	24	ADS
ST3-D9	641.60	ST3-D8	636.50	149	3.41%	CIRCULAR	24	ADS
ST3-D10	643.50	ST3-D9	641.70	87	2.07%	CIRCULAR	24	ADS
ST3-E1	644.60	ST3-D10	644.30	25	1.20%	CIRCULAR	18	ADS
ST3-E2	645.50	ST3-E1	644.70	39	2.05%	CIRCULAR	18	ADS
ST3-F1	645.90	ST3-E2	645.60	30	1.01%	CIRCULAR	18	ADS
ST3-H1	631.00	ST3-B4	630.60	25	1.60%	CIRCULAR	18	ADS
ST3-I1	635.45	ST3-B5	635.20	25	1.00%	CIRCULAR	18	ADS
ST3-Z1	640.00	ST3-D8	636.50	149	2.35%	CIRCULAR	18	ADS
ST5-A2	617.00	ST5-A1	613.64	33	10.09%	CIRCULAR	24	ADS
ST5-C12	644.00		640.50	204	1.71%	CIRCULAR	24	ADS
ST5-C13	645.00	ST5-C12	644.10	117	0.77%	CIRCULAR	18	ADS
ST5-C14	645.70	ST5-C13	645.10	47	1.29%	CIRCULAR	18	ADS
ST5-C15	653.70	ST5-C14	645.80	232	3.41%	CIRCULAR	18	ADS
ST5-C16	661.00	ST5-C15	653.80	257	2.80%	CIRCULAR	18	ADS
ST5-C17	662.00	ST5-C16	661.10	25	3.60%	CIRCULAR	18	ADS
ST5-Q1	645.00	ST5-C12	644.60	25	1.60%	CIRCULAR	18	ADS
ST5-R1	644.90	ST5-C12	644.60	33	0.90%	CIRCULAR	24	ADS
ST5-R2	656.20	ST5-R1	645.00	304	3.68%	CIRCULAR	24	ADS
ST5-S1	646.20	ST5-C14	645.80	27	1.47%	CIRCULAR	18	ADS
ST5-T1	654.50	ST5-C15	653.80	25	2.80%	CIRCULAR	18	ADS
ST6-A2	615.00	ST6-A1	614.43	22	2.61%	CIRCULAR	36	ADS
ST6-L1	652.60		650.80	171	1.05%	CIRCULAR	18	ADS
ST6-M4	660.40	ST6-M3	659.10	126	1.03%	CIRCULAR	18	ADS
ST6-M5	660.80	ST6-M4	660.50	25	1.20%	CIRCULAR	18	ADS

CRUNK ENGINEERING LLC
7112 CROSSROADS BOULEVARD
SUITE 201
FRANKLIN, TN 37027
(615) 873-1795
WWW.CRUNKENG.COM

ENGINEERING CRUNK

AGRICULTURE — REGISTERED LANDSCAPE ARCHITECT — 9/21/23 — 1134189 — TENNESSEE — STATE OF TENNESSEE

GREENS MILL ROAD - PHASE 1
LAND DISTURBANCE PLANS
COLUMBIA, TENNESSEE

REVISIONS

No.	DATE

09/21/23 17067

C6.8
STORM PIPE & STRUCTURE TABLES

DOCUMENT PREPARED BY:
Name: Alexander Mollica
Company Crunk Engineering
Address: 7112 Crossroads Blvd.
Brentwood, TN 37027
After recording return copy to City of Columbia. Development Services

INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES

Map & Parcel Number: Map 051, Parcel 55.00
Project Name: Landing at Greens Mill - Phase 1C

Recorded by deed in the Register of Deeds Office of Maury County in Deed Book _____, Page(s) _____.

THIS AGREEMENT, made this 16 day of September, 20 24 , by and between Safe Harbor Residential hereinafter referred to as the "OWNER(S)" of the following property and City of Columbia, Tennessee, hereinafter referred to as the "CITY",

WE, the OWNER(S), with full authority to execute deeds, mortgages, other covenants, all rights, titles, and interests in the property described above, do hereby covenant with the CITY and agree as follows:

1. The OWNER(S) covenant and agree with the CITY that the OWNER(S) shall provide for adequate long term maintenance and continuation of stormwater control measures described in the Long Term Maintenance Plan and shown on the location map, deed of easement drawing or plat attached hereto to ensure that the facilities, are and remain in proper working condition in accordance with approved design standards, rules and regulations, and applicable laws. The OWNER(S) shall perform preventative maintenance activities at intervals described in the schedule attached hereto along with necessary landscaping (grass cutting, etc.) and trash removal as part of regular maintenance.

2. The OWNER(S) shall perform routine inspections to ensure that all long term stormwater management facilities are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. The OWNER(S) or operators shall maintain documents of these inspections.

3. The OWNER(S) shall perform comprehensive inspections of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect.

4. The OWNER(S) shall grant to the CITY or its agent or contractor the right of entry at reasonable times and in a reasonable manner for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining or repairing the facility within the CITY.

5. The OWNER(S) shall record and grant to the CITY the necessary easements and rights-of-way and maintain perpetual access from public rights-of-way to the facility for the CITY or its agent and contractor.

6. If, upon inspection, the CITY finds that the OWNER(S) has failed to properly maintain the facilities, the CITY may order the work performed within ten (10) days. In the event the work is not performed within the specified time, the ONWER(S) agrees to allow the CITY to enter the property and take whatever steps it deems necessary to maintain the stormwater control facilities. This provision shall not be construed to allow the CITY to erect any structure of a permanent nature on the PROPERTY without first obtaining written approval of the OWNER(S)

7. The CITY is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any obligation on the CITY. The OWNER(S) shall reimburse the CITY upon demand the costs incurred in the maintenance of the facilities.

8. If the OWNER(S) fails to pay the CITY for the above expensive after forty-five (45) days written notice, the OWNER(S) authorizes the CITY to collect said expenses from the OWNER(S) through appropriate legal action and the OWNER(S) shall be liable for the reasonable expenses of collection, court costs, and attorney fees.

9. The OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successor in interest shall indemnify and hold harmless the CITY and its officers, agents and employees for any and all damages, accidents, casualties, occurrences, claims or attorney's fees which might arise or be asserted, in whole or in part,

against the CITY from the construction, presence, existence, or maintenance of the stormwater control facilities subject to this AGREEMENT. In the event a claim is asserted against the CITY, its officers, agents or employees, the CITY shall notify OWNER(S) and the OWNER(S) shall defend at OWNER(S) expense any suit based on such claim. If any judgment or claims against the CITY, its officers, agents or employees, shall be allowed, the OWNER(S) shall pay all costs and expenses in connection therewith. The CITY will not indemnify, defend or hold harmless in any fashion the OWNER(S) from any claims arising from any failure, regardless of any language in any attachment or other document that the OWNER(S) may provide

10. The OWNER(S) shall not be able to transfer, assign or modify its responsibilities with respect to this agreement without the CITY's written prior consent. Nothing herein shall be construed to prohibit a transfer by OWNER(S) to subsequent owners and assigns.

11. No waiver of any provision of this AGREEMENT shall affect the right of any party thereafter to enforce such provision or to exercise any right or remedy available to it in the event of any default.

12. The OWNER(S) shall record a plat showing and accurately defining the easements for stormwater control facilities. The plat must reference the Instrument Number where this AGREEMENT and its attachments are recorded and contain a note that the OWNER(S) is responsible for maintaining the stormwater management facilities.

13. The OWNER(S) shall record this AGREEMENT in the office of the Register of Deeds for the county of Maury, Tennessee, and the AGREEMENT shall constitute a covenant running with the land, and shall be binding upon the OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successors in interest

ATTEST BY OWNER(S):

Print Name Koby DuMont

Title Division President

Signature

Owner Greens Mill, LLC

Address 308 Letterman Drive

City, State ZIP Knoxville, TN 37919

STATE OF Tennessee
COUNTY OF Robertson

Before me, Lisa Drzezgowski of the state and county mentioned, personally appeared Koby DuMont, with whom I am personally acquainted and who acknowledged that he/she executed the foregoing instrument of the purposes therein contained.

Witness my hand this the 16th day of September 2024.

Lisa Drzezgowski
Notary Public

My Commission Expires: August 18 2026

CITY OF COLUMBIA, TENNESSEE
ENGINEERING DEPARTMENT

APPROVED BY :_____

STATE OF TENNESSEE
COUNTY OF MAURY

Before me, _____ of the state and county mentioned, personally appeared _____, with whom I am personally acquainted, and who acknowledged themselves to be the City Engineer of the City of Columbia or his designee and as such, being authorized so to do, executed the foregoing instrument of the purposes therein contained.

Witness my hand this the _____ day of _____, 20_____.

_____
Notary Public
My Commission Expires:_____

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: ** 1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*

Fold hard copy submittals larger than 8½"x11"

All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	2558 Greens Mill Rd., Columbia, TN 38401		
	TAX MAP: 51	GROUP:	PARCEL: 55.00
SUMMARY OF NATURE OF REQUEST AND WORK	The purpose of this plat is to create 27 build-able lots, dedication of Right of Way, and Easements.		

DATE OF PRE-APPLICATION CONFERENCE	08/28/2024	*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
❑ Comprehensive Plan Amendment ❑ Annexation ❑ Rezoning ❑ Preliminary Plat ☒ Final Plat ❑ PUD Preliminary Master Plan ❑ PUD Final Site Plan ❑ Site Development Plan ❑ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ❑ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ❑ Requested Zone Listed ❑ Statement of Compliance with Comprehensive Plan ❑ Concept Plan **Preliminary Plats/Site Development Plans:** ❑ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ❑ Receipt of Payment for Pre-Application Meeting ❑ Written Legal Description copy ❑ Columbia Water System Availability Letter ❑ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs: ❑ Project Name (include Sections & Phases) The Landing at Greens Mill Rd. - Phase 1C ❑ Total Number of Lots/Residential Units 27 ❑ Square Footage of Non-Residential Floor Space ❑ Total acreage 6.67 acres

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT
All communications go to the Applicant's email that is provided.

NAME	Crunk Engineering, LLC	PHONE	615-873-1795
ADDRESS	7112 Crossroads Blvd., #201, Brentwood, TN 37027	EMAIL	adam@crunkeng.com

PROPERTY OWNER NAME	Safe Harbor Residential	PHONE	865-622-1774
ADDRESS	105 Westpark Dr., #365, Brentwood, TN 37027	EMAIL	taylor@safeharborresidential.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Adam Crunk, PE		09/16/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
Thomas DeMont		9-16-2024
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

2904 Cayce Lane/ Design Review, Alternative Compliance

Project #:	24-0468	Location:	2904 Cayce Lane
Applicant:	Jon Clark/Pranay Patel	Case Type(s):	Design Review
Staff Planner:	Robert Archibald	Proposed Use:	Retail Center

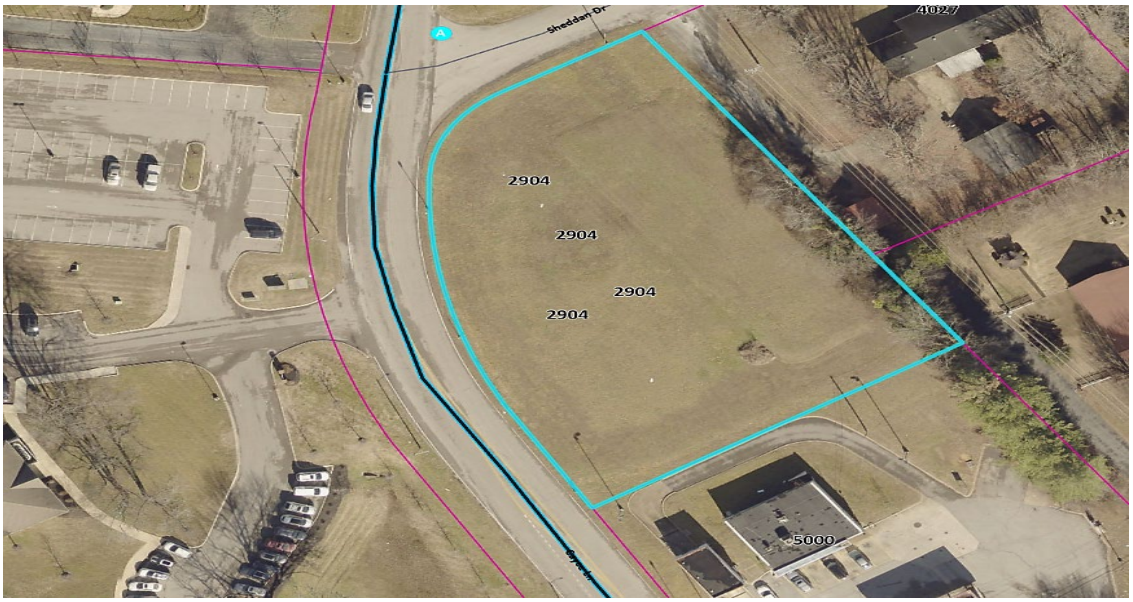
PROJECT SUMMARY

The applicant is seeking Design Review approval with Alternative Compliance for the exterior facade of a new one-story Retail Center located at 2904 Cayce Lane. More specifically, the applicant is seeking an alternative compliance deviation to provide a different architectural elevation than previously approved. This is a deviation from original elevations that were provided at submittal to the Architectural Review Team in May 2022.

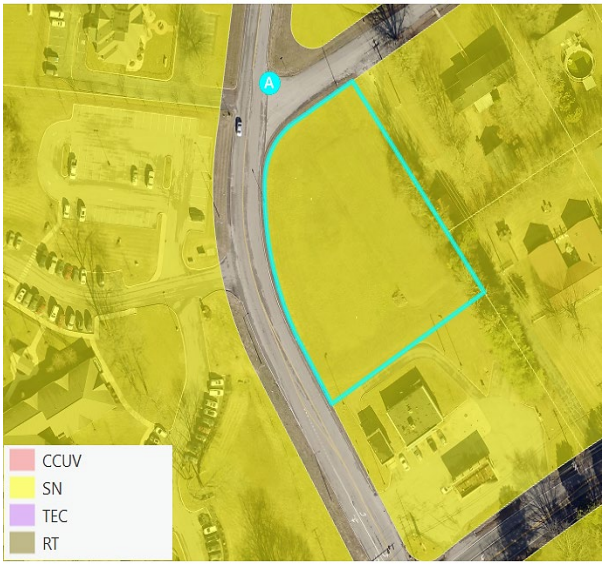
- This alternative compliance request is for design elevations only. Subsequently, the structure being reviewed is already constructed and does not reflect the previously approved exterior elevations.
- This submittal is subject to the previous zoning ordinance (3638).
- This request proposes all brick for exterior elevations and omits cast stone at the base of the pilasters, stone medallion elements near the top of the pilasters and brick soldier/rowlock course the entire length of the upper elevation.
- The DRC reviewed this proposal at its November 2024 meeting. Staff review included standard comments. Full technical comments are provided in the agenda packet.
- The Planning Commission is the **Decision-Making Authority** for this Design Review Alternative Compliance.

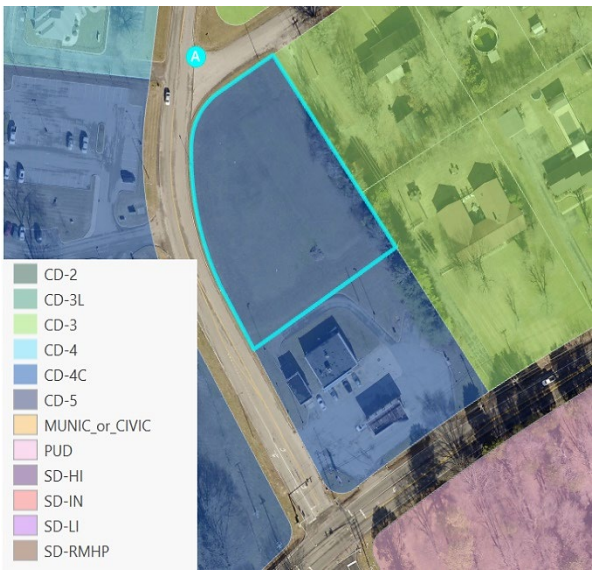
SITE INFORMATION

CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
CD-4C	Retail Center	Retail Center	+/- 2.18 Acres



FUTURE LAND USE MAP	ZONING MAP





SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	Suburban Neighborhoods	CD-4C	Commercial
North	Suburban Neighborhoods	CD-4/CD-3	E-911/Single-family
South	Suburban Neighborhoods	CD-4C	Convenience Store
East	Suburban Neighborhoods	CD-3	Single-family
West	Suburban Neighborhoods	CD-4C	NHC Nursing Home

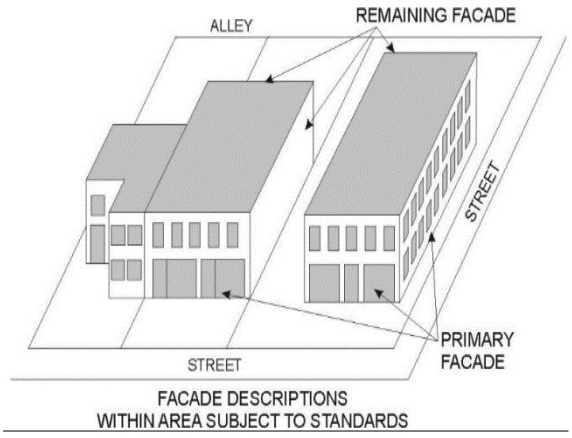
CONFORMITY WITH ZONING ORDINANCE

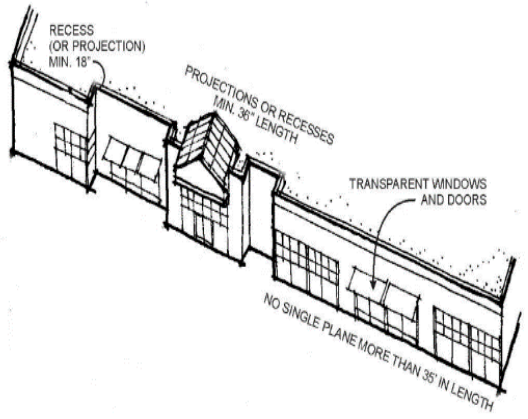
Ordinance 3638 §6.1.6 Building Façade Standards

B. Standards

1. All facades shall be constructed of one or a combination of the following materials: concrete aggregate, stucco, brick, stone, glass or wood, faced concrete block.
2. No portion of the building constructed of unadorned (un-faced) concrete masonry units or corrugated and/or sheet metal shall be used.
3. Monolithic buildings are prohibited and no single façade extending unbroken more than approximately 35 feet in a horizontal plane may be visible from a public roadway. Compliance may be obtained through the following:

    i. The use of projections or recesses (articulation).
    ii. The use of architectural detail to provide visual interest including but not limited to: columns, large windows, entry ways, beams, poles, or glass.





STAFF ANALYSIS

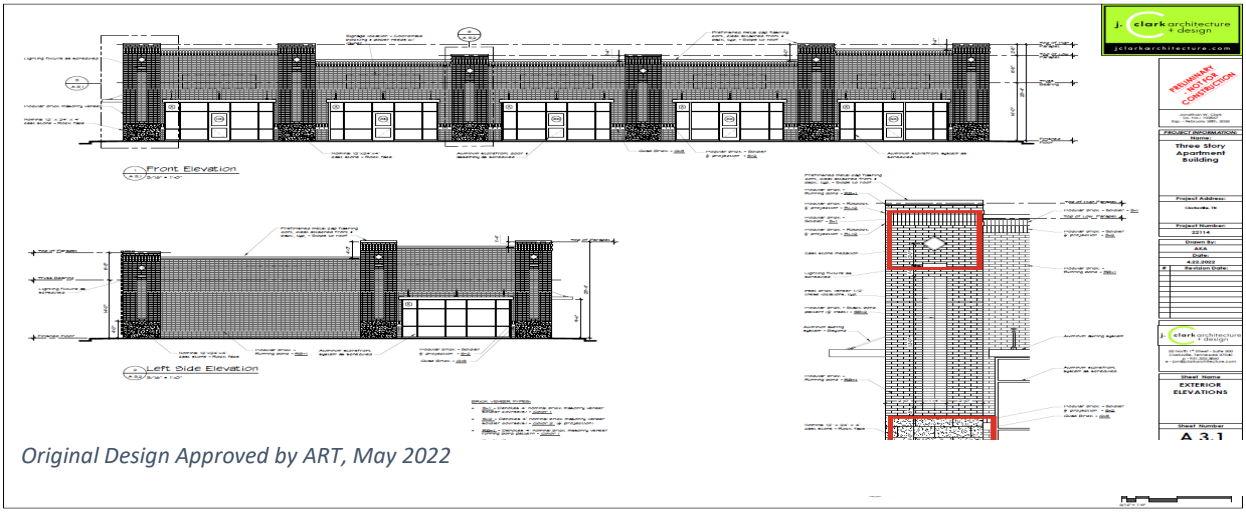
This construction of a single-story 7,500 square foot retail center is located within a mixed-use Commercial/Residential area with frontage along a Collector Roadway situated in close proximity to the intersection of Trotwood and Cayce Lane. This proposal reviewed by the Architectural Design Review Team in May 2022 approved the original design as presented with the following articulation and details:

- Stone medallion insets above light fixtures installed near top of pilasters having frontage parallel to Cayce Lane.
- A cast-stone rock base at bottom of pilasters along frontage parallel to Cayce Lane.

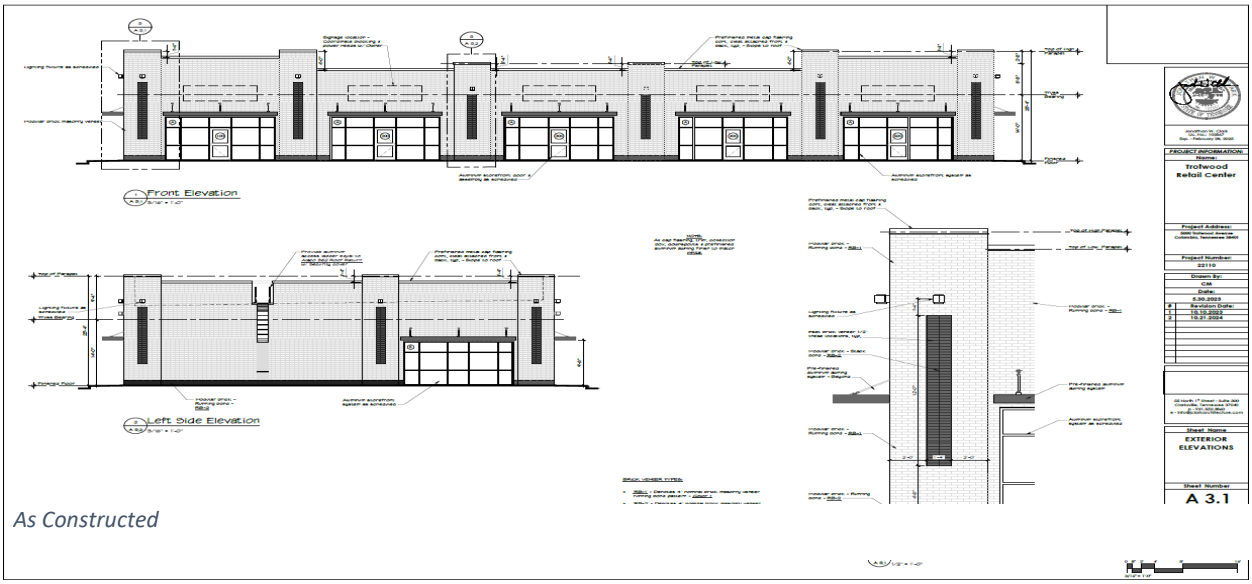
A brick soldier, running bond, and brick rowlock installed the entire length of the top elevation with the frontage parallel to Cayce Lane.

When staff performed the final inspection, these items were noted to be non-compliant with the previous approval. The construction materials used meet the requirements of the Building Façade Design Standards and the overall articulation of the frontage has not changed (building recesses of the frontage have been retained during construction); however, the articulation in the design has not been followed upon construction. The stone medallions featured in the original approval add a façade detail that enhances the appearance of the façade in conjunction with the pilasters as do the brick/rowlock detail at the top of the frontage elevation. In addition, the cast-stone at the base of the pilasters further separated the Base from the Middle. This feature provided a separation of materials and further defined the frontage of the Building.

It has been noted in the perspective standards above those overall materials and articulation would adhere to the code; however, there are several unique differences that have been omitted in the construction of the building that would have added overall definition, articulation and design of the façade to further enhance the elevation fronting Cayce Lane.



Original Design Approved by ART, May 2022



As Constructed

REVIEW PROCESS

The Development Review Committee evaluated the proposed Design Review request at its November 2024 meeting, as directed by section **8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package and summarized above. This review is subject to the standards and review criteria of the Zoning Ordinance per section **8.3.6** described below.

8.3.6 ARCHITECTURAL DESIGN REVIEW COMMISSION

A. Creation

1. There is hereby created the Architectural Design Review Commission for the purpose of reviewing Development applications that are subject to design review pursuant to this Ordinance.

2. As authorized by T.C.A. Section 6-54-133, the Columbia Municipal Planning Commission is designated the city's Architectural Design Review Commission, with the authority to develop, adopt, and apply general guidelines for the exterior appearance of properties within the City of Columbia.

B. Design Standards In addition to the design standards incorporated in this ordinance, the Planning Commission may develop and adopt exterior appearance guidelines that are applicable throughout the city as well as exterior appearance guidelines that are applicable only to specified areas within the city.

C. Powers & Duties

1. The Architectural Design Review Commission shall be responsible for reviewing proposals for Site Development Plan, Building Permit, or Planned Unit Development approval for compliance with the applicable architectural design standards.

2. The Architectural Design Review Commission may approve alternative materials and methods of compliance which, in the determination of the Planning Commission, provide aesthetic value which meets or exceeds the prescribed standards.

3. The Zoning Administrator may approve alternative materials and methods of compliance with design standards for existing structures and Site Development Plans for which the Zoning Administrator is the Decision-Making Authority. The alternative means of compliance must provide aesthetic value which meets or exceeds the prescribed standards. The Zoning Administrator may refer any determination of alternative compliance to the Architectural Design Review Commission. Any property owner may appeal the Zoning Administrator's determination to the Architectural Design Review Commission. The appeal shall be by a written notice to the Zoning Administrator, stating: the guideline at issue; the alternative compliance proposed; and, the owner's reasons for seeking relief from the guideline. The appeal shall be treated as a site development plan for purposes of assessing fees and application requirements.

Appeals

1. Any property owner affected by the guidelines for exterior appearance may appeal a decision under those guidelines to the City Council. The appeal shall be by a written notice to the Zoning Administrator, stating: the guideline at issue; the alternative compliance proposed; and, the owner's reasons for seeking relief from the guideline. The appeal shall be treated as a site development plan for purposes of assessing fees and application requirements.

SAMPLE MOTIONS

Approve:

Move to approve the façade elevations with alternative compliance as presented and find that the design confirms to the applicable standards of the Zoning Ordinance per section 8.3.6, and [subject to remaining technical comments from staff & staff conditions of approval as listed].

Approve with Conditions:

Move to approve the façade elevations with alternative compliance as presented and find that design conforms to the applicable zoning ordinance, subject to the following conditions: [list any additional conditions of approval crafted by Planning Commission].

Defer for Continued Review:

Move to find that there is insufficient information to make a decision, defer the application for continued review, and request that the applicant provide: [list additional information] for review at the next regularly scheduled meeting of the Planning Commission.

Deny:

Move to find that the façade elevations with alternative compliance as presented does not conform to the applicable Zoning Ordinance, and deny the request due to [list specific deficiencies].






2804


2904



55 North First Street
Suite 300
Clarksville, TN 37040

931-552-3860 telephone

jon@jclarkarchitecture.com email

November 19th 2024

Attn: Mr. Robert Archibald, Lead Staff Person
Columbia Development Services
RE: ***Design Review Comment Responses***
For 2904 Cayce Lane
Project 24-0468
Columbia, TN

Mr. Archibald,

Please see attached comment responses based upon the Design Review Board for the above referenced project.

1 - Cast stone medallions at top of columns has been excluded from all elevations.

Response: Yes, the JPEG format photos uploaded immediately following the meeting represent what has been constructed and these medallions were not included.

2 - Cast stone rock face at base of columns has been changed to standard brick and the height of base is less than on original elevation.

Response: Yes, the originally proposed rock face cast stone was not incorporated into the project.

3 - Soldier course has been removed from facade wall at base of columns and replaced with standard running bond brick with no delineation between facade base and remainder of facade wall.

Response: Yes, the originally proposed soldier course has not been incorporated into the project.

4 - Soldier course has been excluded on column top elevations having no delineation between middle and cap. New elevation is standard running bond brick.

Response: Yes, the originally proposed soldier course has not been incorporated into the project and the current constructed project is running bond pattern.

5 - Updated color rendering still shows soldier course at top of pilasters. Remove soldier course and match true elevations.

Response: Yes, the originally proposed rendering differs somewhat from the JPEG images uploaded that reflect the actual construction in place.

It was my understanding while online in the virtual meeting that the design review board understood that my render person had a hard drive crash not too long after this project was originally submitted in 2022 that resulted in the inability of providing an "exact match" of the current construction.

Without spending quite a bit of time, effort and energy reproducing a new rendering at the cost to the owner, we would appreciate the board reviewing the current existing building JPEG's presented immediately following the meeting along with our revised 2d elevations, which do reflect the changes the Owner has made to the building.

End of Response Comments

Please let me know if you require further information.

Thank you,



Jonathan W. Clark, AIA, NCARB

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING

Tuesday, November 12, 2024

ITEM NO.
24-0468

DESCRIPTION: 2904 Cayce Ln

COMMENTS:

Planning

1. The lead staff person for this case is Robert Archibald; he will prepare the staff report for this item. Please contact rarachibald@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
3. Cast stone medallions at top of columns has been excluded from all elevations.
4. Cast stone rock face at base of columns has been changed to standard brick and the height of base is less than on original elevation.
5. Soldier course has been removed from facade wall at base of columns and replaced with standard running bond brick with no delineation between facade base and remainder of facade wall.
6. Soldier course has been excluded on column top elevations having no delineation between middle and cap. New elevation is standard running bond brick.
7. Updated color rendering still shows soldier course at top of pilasters. Remove soldier course and match true elevations.

Engineering

8. No comments

Building

9. No comments.

CITY OF
COLUMBIA
TENNESSEE

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COLUMBIA, TN 38401
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Maury County Schools

10. No Comment.

Duck River Electric Membership Corp

11. No comment.

Fire

12. No comments

Columbia Power

13. Columbia Power System has an existing power line near your proposed development.
We are willing to serve this commercial development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

Maury County Highway Dept.

14. No comment.

Police

15. No comments.

Public Works

16. No comments.

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DEVELOPMENT SERVICES
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COLUMBIA, TN 38401
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Columbia Water

17. "No comments, architectural changes to previously approved project."

Atmos Energy

18. No comments provided.

Maury County E911

19. No comments provided.

ATT

20. No comments provided.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.

You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

CITY OF
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TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
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NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.







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PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * *1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*
Fold hard copy submittals larger than 8½"x11"

All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	2904 Cayce Lane Columbia TN 38401		
	TAX MAP:	GROUP:	PARCEL:
SUMMARY OF NATURE OF REQUEST AND WORK			

DATE OF PRE-APPLICATION CONFERENCE		*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
☐ Comprehensive Plan Amendment ☐ Annexation ☐ Rezoning ☐ Preliminary Plat ☐ Final Plat ☐ PUD Preliminary Master Plan ☐ PUD Final Site Plan ☐ Site Development Plan ☐ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ☐ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ☐ Requested Zone Listed ☐ Statement of Compliance with Comprehensive Plan ☐ Concept Plan **Preliminary Plats/Site Development Plans:** ☐ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ☐ Receipt of Payment for Pre-Application Meeting ☐ Written Legal Description copy ☐ Columbia Water System Availability Letter ☐ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs:
	☐ Project Name (include Sections & Phases)
	☐ Total Number of Lots/Residential Units
	☐ Square Footage of Non-Residential Floor Space
	☐ Total acreage

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME		PHONE	
ADDRESS		EMAIL	

PROPERTY OWNER NAME	Pragnay Patel	PHONE	931-626-5244
ADDRESS	2904 Cayce Lane Columbia TN 38401	EMAIL	bhavin711849@yahoo.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

APPLICANT NAME	APPLICANT SIGNATURE	DATE
Pragnay Patel	Pragnay Patel	10/23/24
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

Summit at Carters West Phase 3 Final Plat

Project #:	24-0417	Location:	Map 41 Parcel 15.05
Applicant:	T-Square Engineering	Case Type(s):	Final Plat
Staff Planner:	Paul Keltner, AICP	Proposed Use:	Single Family Homes

PROJECT SUMMARY

The applicant requests approval of a Final Plat to create 61 single-family residential lots. The Planning Commission approved the revised Preliminary Plat (24-0377) in October 2024. The preliminary plat was for 399 single-family residential lots that included an R-10 cluster alternative within a 113-acre site. The preliminary plat was revised to add an amenity center and relocate some of the lots.

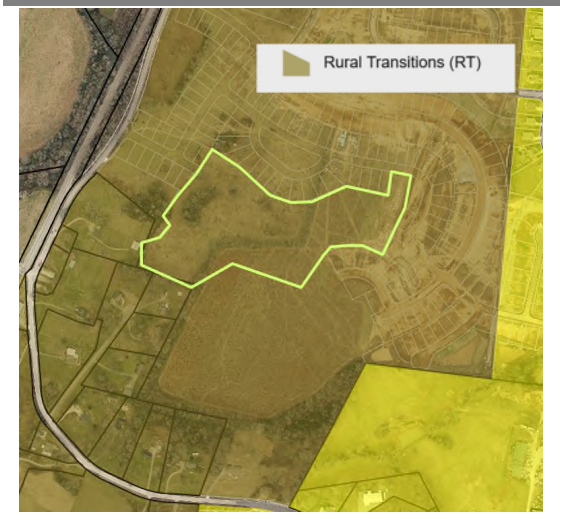
- The development is subject to Ordinance 3638, the pre-July 2022 zoning ordinance.
- The Final Plat conforms to the approved Preliminary Plat.
- The DRC reviewed this proposal at its November 2024 meeting. Staff review included standard comments and requests for technical corrections. Full technical comments are provided in the agenda packet.
- A letter of credit for the amount of $375,000 has been provided for this Final Plat.
- The Planning Commission is the **Decision-Making Authority** for the Final Plat.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

SITE INFORMATION

CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
CD-3	In Development	Infrastructure for Development	+/- 15 Acres



FUTURE LAND USE MAP	ZONING MAP





SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	Rural Transitions	CD-3	Vacant/Developing
North	Rural Transitions	CD-3	Developing Single Family Homes
South	Rural Transitions	CD-3	Single Family Homes
East	Rural Transitions	County	Vacant\ Rural
West	Suburban Neighborhood	CD-3	Single Family Homes

CONFORMITY WITH ZONING ORDINANCE

The Final Plat conforms to the approved Preliminary Plat of the applicable Zoning Ordinance (3638), and the Subdivision Regulations.

REVIEW PROCESS

The Development Review Committee evaluated the proposed Final Plat at its November 2024 meeting, as directed by section **8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package and summarized above.

Section **8.5.24** of the Zoning Ordinance directs the Planning Commission to review Subdivision Plats for conformity with the standards of the Ordinance and the City Subdivision Regulations. The Ordinance indicates that all Preliminary and Final Plats must be prepared, submitted, reviewed and acted upon in accordance with the Subdivision Regulations.

The Planning Commission is the Decision-Making Authority for Final Plats under **§ 8.3.3.B.1** of the Zoning Ordinance and **§ 2.3** of the Subdivision Regulations.

Section **2.3.6** of the Subdivision Regulations establishes the review criteria for approval of Final Plats.

> *A. Recommendations and final action on a Final Plat shall be based on consideration of the following criteria:*
>
> > *1. Whether the proposed Final Plat complies with the applicable zoning district and overlay districts;*
> >
> > *2. Whether the proposed Final Plat is consistent with all standards of these Subdivision Regulations and other related codes and ordinances enforced by the City; and*

3. Whether the proposed Final Plat meets all the requirements or conditions of any applicable development approvals, such as development plans or associated modification of standards.

B. Final Plat approval shall be subject to the completion of required improvements, or in lieu, the CMPC may approve a Performance Agreement.

In the event of a denial, **§ 2.3.5** of the Subdivision Regulations requires the Planning Commission to identify the specific parts of applicable plans and regulations with which the plat does not comply.

SAMPLE MOTIONS

Approve:

Move to approve the Final Plat as presented and find that the plat conforms to the applicable zoning ordinance, the Subdivision Regulations, and the Preliminary Plat [subject to remaining technical comments from staff].

Approve with Conditions:

Move to approve the Final Plat as presented and find that the plat conforms to the applicable zoning ordinance, the Subdivision Regulations, and the Preliminary Plat, subject to the following conditions: [list conditions of approval crafted by Planning Commission].

Defer for Continued Review:

Move to find that there is insufficient information to make a decision, defer the application for continued review, and request that the applicant provide: [list additional information] for review at the next regularly scheduled meeting of the Planning Commission.

Deny:

Move to find that the Final Plat as presented does not conform to the applicable zoning ordinance, the Subdivision Regulations, or the approved Preliminary Plat, and deny the request due to [list specific deficiencies



VICINITY MAP - NOT TO SCALE

SCALE 1" = 100'

TN SPCS NAD 83

LEGEND

- FIRE HYDRANT
- WATER METER
- SEWER SERVICE
- SEWER MANHOLE
- CURB INLET
- AREA DRAIN
- 8" W — PROP. WATER LINE (TYP.)
- 8" SS — PROP. SEWER LINE (TYP.)
- 18" ST — PROP. STORMWATER LINE (TYP.)

JAMES ARTHUR MILLS
MAP 41 PARCEL 23.00
D.B. 411, PAGE 286, R.O.M.C.

SUMMIT AT CARTERS WEST, PHASE 1B
PB. 23, PG. 446, R.O.M.C.
(AS APPROVED UNDER ORDINANCE 3638)

SUMMIT AT CARTERS WEST, PHASE 2
PB. 23, PG. 270, R.O.M.C.
ZONE R-6 (AS APPROVED UNDER ORDINANCE 3638)

SUMMIT AT CARTERS STATION, PHASE 3
PB 23, PG 372, R.O.M.C.
ZONE R-6 (AS APPROVED UNDER ORDINANCE 3638)

SUMMIT AT CARTERS STATION, PHASE 4
PB 23, PG 475, R.O.M.C.
ZONE R-6 (AS APPROVED UNDER ORDINANCE 3638)

FUTURE PHASE
ZONE R-6 (AS APPROVED UNDER ORDINANCE 3638)

OLIVIA SMITH & JUDSON
MAP 041 PARCEL 017.01
R.B. 2514, PAGE 1293, R.O.M.C.

KENNETH JOHNSON
MAP 041 PARCEL 017.06
R.B. 1922, PAGE 728, R.O.M.C.

FELLOWSHIP ROAD — 50' PUBLIC ROW
CHISEL OAK PASS — 50' PUBLIC ROW
COBBLER COURT — 50' PUBLIC ROW
WELLWISH ROAD — 50' PUBLIC ROW
AMENITY CENTER
OS-D
OS-G
OS-H

FP TCI CCS LLC
TAX MAP 041, PARCEL 015.00
ZONE MCD (AS APPROVED UNDER ORDINANCE 3638)

SUMMIT AT CARTERS WEST, PHASE 1A
PB. 23, PG. 394, R.O.M.C.
ZONE R-6
(AS APPROVED UNDER ORDINANCE 3638)

TIMPPER TRACE — 50' PUBLIC ROW

TN SPCS NAD 83
SCALE 1" = 100'

ADDITIONAL LOTS TO BE PLATTED WITH THIS PHASE

LOT	SQ. FT.
8	7186.1
9	7186.1
10	7186.1
11	7186.1
12	6600.0
13	6600.0
14	6877.1
15	7450.4
16	8278.1
17	10230.9
18	9771.0
19	7544.1
20	7215.7
21	6962.1
22	6804.0
23	6739.9
24	6919.0
25	6967.4
26	8112.8
28	12071.3
29	8588.7
30	7250.1
31	8175.5
32	11640.1
33	9881.3
34	10781.4
125	7037.1
126	7037.1
127	7357.0
128	7228.4
129	7826.5

LOT	SQ. FT.
130	9617.4
131	10567.4
132	10189.4
133	7979.2
134	7225.1
135	7589.1
136	7485.1
137	7370.4
138	7217.2
139	6695.4
140	8197.5
144	9083.3
145	9655.4
146	8399.3
147	6990.7
148	7156.1
149	7511.4
150	7460.7
151	7411.6
152	7365.7
153	6736.2
154	6714.3
155	6799.5
156	6905.3
157	6905.3
158	6905.3
159	6905.3
229	9635.7
230	6469.4
231	6001.9

LOT	SQ. FT.
OS-D	18639.2
OS-G	11332.7
OS-H	407011.1
OS-I	7358.0

LINE	BEARING	DISTANCE
L1	N 32°35'59" E	120.00'
L2	N 34°02'33" E	120.00'
L3	N 35°29'08" E	120.00'
L4	N 36°55'42" E	120.00'
L5	N 38°22'17" E	120.00'
L6	N 38°38'07" E	119.54'
L7	N 38°38'07" E	117.75'
L8	N 34°59'29" E	116.78'
L9	N 24°07'30" E	117.62'
L10	N 13°15'31" E	118.55'
L11	N 02°23'32" E	119.52'
L12	N 08°28'28" W	120.52'
L13	N 14°20'46" W	122.72'
L14	N 14°18'12" W	131.69'
L15	N 07°56'14" W	147.37'
L16	N 01°34'16" W	158.03'
L17	N 04°47'43" E	140.97'
L18	N 11°09'41" E	132.09'
L21	S 10°13'29" W	30.41'
L22	S 30°15'36" W	120.00'
L23	N 10°13'29" E	142.36'
L25	N 10°13'29" E	151.01'
L26	S 79°46'31" E	55.00'
L27	S 79°46'31" E	38.87'
L31	S 74°35'15" E	83.87'
L32	N 74°35'15" W	67.36'
L33	N 74°35'15" W	68.49'
L34	N 74°35'15" W	71.41'
L35	N 74°35'15" W	20.42'
L36	S 65°57'42" W	53.54'

LINE	BEARING	DISTANCE
L37	S 65°57'42" W	70.02'
L38	S 65°57'42" W	40.63'
L39	S 30°50'05" W	110.86'
L40	S 25°03'08" W	114.40'
L41	S 15°20'28" W	117.58'
L42	S 05°37'48" W	120.27'
L43	S 04°04'52" E	122.40'
L44	S 13°47'33" E	123.95'
L45	S 14°20'46" E	129.75'
L46	S 10°44'33" E	146.62'
L47	N 59°11'42" W	128.42'
L48	S 03°33'59" E	149.25'
L49	N 59°11'42" W	30.91'
L50	S 59°11'42" E	59.33'
L51	S 46°07'34" E	130.10'
L52	S 38°02'28" E	125.00'
L53	S 40°09'42" E	125.00'
L54	S 42°19'12" E	125.00'
L55	S 44°23'03" E	125.00'
L56	S 46°26'55" E	125.00'
L62	N 44°03'54" W	45.18'
L63	S 43°28'14" W	73.24'
L64	S 43°28'14" W	7.64'
L65	S 49°24'46" W	51.25'
L66	S 49°24'46" W	59.54'
L67	S 43°28'14" W	80.88'
L68	S 49°24'46" W	11.19'
L69	N 41°43'48" W	122.66'
L70	S 38°15'50" W	41.11'
L71	N 17°19'35" W	143.63'
L72	S 49°24'46" W	106.88'

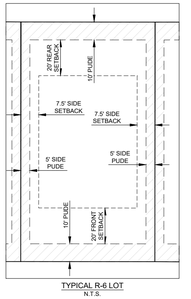
LINE	BEARING	DISTANCE
L73	S 49°24'46" W	38.24'
L74	N 68°18'42" W	84.62'
L75	N 07°13'43" E	127.45'
L76	N 24°27'29" E	120.08'
L77	N 68°18'42" W	86.24'
L78	N 68°18'42" W	55.00'
L79	N 21°37'48" E	114.39'
L80	N 50°35'13" E	22.55'
L81	N 68°23'01" W	55.00'
L82	N 21°37'48" E	141.42'
L83	N 69°24'06" E	38.46'
L84	N 68°23'01" W	60.12'
L85	N 23°41'15" E	178.74'
L86	N 82°37'53" E	71.27'
L87	N 34°58'42" W	60.87'
L88	N 31°34'35" E	172.19'
L89	S 33°28'46" W	134.81'
L90	S 13°01'47" E	34.64'
L91	N 08°55'09" E	13.89'
L92	N 33°42'15" E	120.02'
L93	S 34°18'37" W	120.18'
L94	S 38°06'43" W	120.00'
L95	S 39°43'26" W	120.37'
L96	S 51°21'53" E	39.07'
L97	S 51°21'53" E	57.88'
L98	S 41°20'09" W	122.28'
L99	S 51°21'53" E	58.03'
L100	S 42°56'52" W	125.83'
L101	S 51°21'53" E	58.28'
L102	S 44°01'06" E	37.72'
L103	S 44°33'34" W	131.03'
L104	S 45°58'54" W	137.84'
L105	S 51°21'53" E	58.23'
L106	S 51°21'53" E	75.45'
L108	S 38°39'08" W	128.73'
L109	N 51°21'53" W	37.49'

LINE	BEARING	DISTANCE
L109	N 51°21'53" W	37.49'
L110	N 51°21'53" W	70.90'
L111	N 51°21'53" W	67.94'
L112	N 51°21'53" W	60.62'
L113	S 35°26'10" W	120.87'
L114	N 51°21'53" W	29.32'
L115	S 38°38'07" W	120.00'
L116	N 51°21'53" W	60.00'
L117	N 51°21'53" W	55.00'
L118	S 38°38'07" W	120.00'
L119	N 51°21'53" W	55.00'
L120	N 51°21'53" W	55.00'
L121	N 38°38'04" E	120.00'
L122	S 37°00'44" W	120.00'
L123	S 35°23'24" W	120.00'
L124	S 33°46'04" W	120.00'
L125	S 32°08'44" W	120.00'
L126	N 51°21'53" W	46.20'
L127	S 51°21'53" E	46.54'
L128	N 51°21'53" W	36.56'
L129	S 75°39'14" W	25.28'
L130	S 75°39'14" W	54.99'
L131	S 75°39'14" W	53.84'
L132	S 75°39'14" W	26.07'
L133	N 68°17'43" W	14.48'
L134	S 42°37'33" W	5.65'
L135	S 45°47'33" W	40.82'
L136	N 45°47'33" W	55.00'
L137	N 45°47'33" W	147.25'
L138	S 44°11'06" E	73.87'
L139	S 70°35'27" E	74.51'
L140	N 44°07'18" E	104.93'
L141	S 70°35'27" E	60.54'
L142	N 44°07'18" E	130.32'
L143	S 70°35'27" E	65.51'

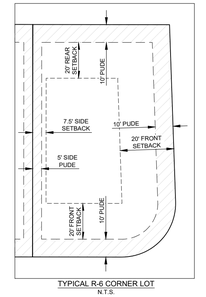
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	2225.00'	56.03'	56.03'	N 56°40'44" W
C2	2345.00'	59.06'	59.05'	S 56°40'44" E
C3	2345.00'	59.06'	59.05'	S 55°14'09" E
C4	2225.00'	56.03'	56.03'	N 55°14'09" W
C5	2345.00'	59.06'	59.05'	S 53°47'35" E
C6	2225.00'	56.03'	56.03'	N 53°47'35" W
C7	2345.00'	59.06'	59.05'	S 52°21'00" E
C8	2225.00'	56.03'	56.03'	N 52°21'00" W
C9	2345.00'	57.00'	57.00'	S 50°55'56" E
C10	2225.00'	10.25'	10.25'	S 51°29'48" E
C11	2345.00'	56.57'	56.57'	S 49°32'42" E
C12	2345.00'	18.70'	18.70'	S 48°37'31" E
C13	270.00'	35.27'	35.24'	S 52°08'20" E
C14	390.00'	24.80'	24.80'	N 53°11'12" W
C15	270.00'	51.75'	51.67'	S 61°22'17" E
C16	390.00'	73.97'	73.85'	N 60°26'30" W
C17	270.00'	51.58'	51.50'	S 72°20'05" E
C18	390.00'	73.97'	73.85'	N 71°18'30" W
C19	270.00'	51.40'	51.32'	S 83°15'40" E
C20	390.00'	73.97'	73.85'	N 82°10'29" W
C21	270.00'	51.21'	51.14'	N 85°51'05" E
C22	390.00'	73.97'	73.85'	S 86°57'32" W
C23	270.00'	52.94'	52.85'	N 74°48'02" E
C24	390.00'	39.97'	39.95'	S 78°35'23" W
C25	270.00'	15.18'	15.18'	N 67°34'21" E
C26	475.00'	52.78'	52.75'	N 78°52'47" E
C27	475.00'	52.78'	52.75'	S 85°14'45" W
C28	475.00'	52.78'	52.75'	N 88°23'16" W
C29	475.00'	52.78'	52.75'	N 82°01'18" W
C30	475.00'	158.33'	157.60'	S 69°17'21" E
C33	425.00'	65.14'	65.07'	S 60°33'26" E
C34	425.00'	72.03'	71.95'	S 69°48'12" E
C35	325.00'	53.77'	53.71'	N 63°54'18" W
C36	325.00'	52.46'	52.41'	N 73°16'10" W

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C37	325.00'	51.94'	51.88'	N 82°28'20" W
C38	425.00'	72.03'	71.95'	S 79°30'52" E
C39	425.00'	72.03'	71.95'	S 89°13'32" E
C40	325.00'	51.50'	51.45'	S 88°24'34" W
C41	425.00'	72.03'	71.95'	N 81°03'47" E
C42	325.00'	51.17'	51.12'	S 79°21'31" W
C43	425.00'	4.11'	4.11'	N 75°55'51" E
C44	325.00'	57.12'	57.05'	S 69°48'46" W
C45	1500.00'	49.22'	49.22'	S 61°04'34" W
C46	325.00'	15.66'	15.66'	S 63°23'49" W
C47	440.00'	27.67'	27.67'	N 77°27'20" E
C48	1500.00'	53.77'	53.76'	S 59°06'34" W
C49	440.00'	55.11'	55.07'	N 82°50'44" E
C50	440.00'	49.69'	49.66'	N 89°40'07" E
C51	25.00'	34.76'	32.02'	N 53°04'31" E
C52	225.00'	68.95'	68.68'	N 22°01'33" E
C53	225.00'	51.32'	51.21'	N 37°20'22" E
C54	1500.00'	89.03'	89.02'	S 56°22'55" W
C55	225.00'	34.34'	34.31'	N 48°14'47" E
C56	1625.08'	18.72'	18.72'	N 82°10'29" W
C57	1500.00'	71.29'	71.28'	S 53°19'13" W
C58	1625.08'	60.14'	60.14'	N 50°53'55" E
C59	1500.00'	55.51'	55.51'	S 50°53'55" W
C60	1625.08'	61.21'	61.21'	N 48°45'33" E
C61	1500.00'	56.50'	56.50'	S 48°45'33" W
C62	1625.08'	58.55'	58.55'	N 46°38'52" E
C63	1500.00'	54.05'	54.04'	S 46°38'52" W
C64	1625.08'	58.55'	58.55'	N 44°35'01" E
C65	1500.00'	54.05'	54.04'	S 44°35'01" W

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C73	30.00'	45.77'	41.46'	S 00°00'05" W
C74	1885.00'	46.93'	46.92'	N 44°44'11" W
C75	1885.00'	109.99'	109.98'	N 47°06'52" W
C76	18.00'	29.20'	26.10'	S 84°44'17" W
C77	115.00'	20.08'	20.06'	S 43°16'01" W
C78	115.00'	48.98'	48.61'	S 60°28'19" W
C79	115.00'	49.35'	48.97'	S 84°58'04" W
C80	115.00'	28.99'	28.91'	N 75°31'00" W
C81	115.00'	5.53'	5.53'	N 66°50'07" W
C82	115.00'	52.44'	51.99'	N 52°28'39" W
C83	115.00'	50.40'	50.00'	N 26°51'26" W
C84	115.00'	50.40'	50.00'	N 01°44'43" W
C85	115.00'	44.05'	43.78'	S 65°59'46" W
C86	2055.00'	60.75'	60.75'	S 57°34'36" E
C87	2055.00'	55.46'	55.46'	S 55°57'24" E
C88	115.00'	44.05'	43.78'	S 87°56'41" W
C89	2055.00'	56.55'	56.55'	S 54°23'42" E
C90	115.00'	50.96'	50.55'	N 68°23'07" W
C91	2055.00'	61.64'	61.64'	S 52°45'50" E
C92	115.00'	4.72'	4.72'	N 54°30'49" W
C93	1935.00'	48.95'	48.95'	N 52°36'46" W
C94	2055.00'	18.74'	18.74'	S 51°37'36" E
C95	1935.00'	54.44'	54.44'	N 51°04'56" W
C96	1935.00'	54.44'	54.44'	N 49°28'13" W
C97	1935.00'	54.44'	54.44'	N 47°51'30" W
C98	1935.00'	54.44'	54.44'	N 46°14'47" W
C99	1935.00'	48.02'	48.02'	N 44°43'46" W
C100	30.00'	46.38'	41.90'	N 81°58'26" E
C101	1675.00'	118.48'	118.45'	S 49°25'49" W
C102	1675.00'	33.98'	33.98'	S 52°02'16" W
C103	175.00'	111.79'	109.90'	S 34°19'10" W
C104	25.00'	39.58'	35.58'	S 29°20'18" E
C105	440.00'	49.39'	49.36'	S 71°28'51" E
C106	440.00'	52.61'	52.58'	S 64°50'23" E
C107	440.00'	52.61'	52.58'	S 57°59'21" E
C108	440.00'	24.57'	24.56'	S 52°57'52" E
C109	2175.00'	61.58'	61.58'	S 52°10'36" E
C110	2175.00'	61.58'	61.58'	S 53°47'56" E
C111	2175.00'	61.58'	61.58'	S 55°25'16" E
C112	2175.00'	61.58'	61.58'	S 57°02'36" E
C113	100.00'	16.60'	16.58'	S 75°01'06" E
C114	925.00'	121.94'	121.85'	S 38°50'57" W
C115	30.00'	47.95'	43.01'	S 88°25'00" W
C116	1025.00'	19.24'	19.24'	N 46°19'48" W



TYPICAL R-6 LOT
N.T.S.



TYPICAL R-6 CORNER LOT
N.T.S.

GENERAL NOTES

1. THE PURPOSE OF THIS PLAT IS TO CREATE 61 LOTS, 4 OPEN SPACES AND DEDICATE RIGHT-OF-WAY.
2. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN THE CITY OF COLUMBIA, MAURY COUNTY, TN. ALL MATTERS PERTAINING TO CONSTRUCTION, USE, LOCATION OF IMPROVEMENTS, SIGNAGE, PARKING, NOISE, VIBRATION, EMISSIONS, FIRE HAZARDS, RADIATION, ILLUMINATION, SETBACK PROVISIONS, ETC. ARE SUBJECT TO THE CITY OF COLUMBIA'S ZONING REGULATIONS AS INTERPRETED AND REGULATED BY THE DEPARTMENT OF DEVELOPMENT SERVICES.
3. SUBJECT PROPERTY IS PARCEL 15.05 AS SHOWN ON MAURY COUNTY TAX MAP 41.
4. THE HORIZONTAL LOCATION DATA SHOWN ON THIS SURVEY WAS GATHERED USING STANDARD RADIAL SURVEYING TECHNIQUES WITH AN ELECTRONIC TOTAL STATION AND DATA COLLECTOR AND IS BASED UPON A POSITIONAL SOLUTION DERIVED FROM GLOBAL POSITIONING SYSTEM (GPS) OBSERVATIONS) USING THE TDOT NETWORK. TENNESSEE STATE PLANE COORDINATE SYSTEM ZONE 4100, NAD83. DRONE AERIAL PHOTOMETRY WAS ALSO USED TO SURVEY SOME ELEMENTS.
5. NO TITLE REPORT HAS BEEN FURNISHED, THEREFORE THIS SURVEY IS SUBJECT TO THE FINDINGS OF AN ACCURATE TITLE SEARCH.
6. THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE REQUIREMENTS OF A GENERAL PROPERTY SURVEY AND CONFORMS TO THE ACCURACY OF A CATEGORY 1 SURVEY AS CURRENTLY DEFINED AND ADOPTED BY THE TENNESSEE STATE BOARD OF EXAMINERS FOR LAND SURVEYORS, AND THE RATIO OF PRECISION IS LESS THAN 1:10,000.
7. ALL PLOT AND DEED RECORDATION REFERENCES SHOWN HEREON ARE AS RECORDED IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
8. COLUMBIA POWER AND WATER SYSTEMS IS THE POWER PROVIDER.
9. STORMWATER MANAGEMENT OPERATION & MAINTENANCE WILL BE GOVERNED BY THE INSPECTION & MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES, DATED 9-12-2024, RECORDED IN DEED BOOK R3030, PAGE 1471, REGISTER'S OFFICE OF MAURY COUNTY, TN.
10. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN FLOOD ZONE "X", AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47119C0180E WITH AN EFFECTIVE DATE OF 4/16/2007, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT; COMMUNITY NO. 119C, PANEL NO. 0180 SUFFIX E, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED. SAID MAP DEFINES ZONE "X" UNDER "OTHER AREAS" AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD PLAIN.
11. ACCORDING TO THE TYPICAL LOT DETAIL, ALL LOTS ARE TO HAVE A 10' PUDE IN THE FRONT AND REAR OF THE LOTS, AS WELL AS A 5' PUDE IN THE SIDE OF THE LOTS.
12. CURRENT ZONING OF THE SUBJECT PROPERTY IS CD-3. THE SUBJECT PROPERTY AS SHOWN IS BASED ON A PRELIMINARY PLAT APPROVED UNDER ZONING ORDINANCE 3638 AND IS SUBJECT TO ALL VESTING OF THAT APPROVAL UNDER THE PREVIOUS ZONING OF R-6.
13. PRIOR TO CERTIFICATE OF OCCUPANCY, ALL GRADING SHALL BE IN ACCORDANCE WITH THE CITY OF COLUMBIA CODES FOR SWALES AND SLOPES. THIS WILL BE UNDERTAKEN DURING VERTICAL CONSTRUCTION AFTER BUILDING PERMITS ARE RELEASED

SITE DATA	
CURRENT ZONING:	R6
MINIMUM BUILDING SETBACKS:	R6
FRONT:	20'
REAR:	20'
SIDE:	7.5'
TOTAL PHASE AREA:	15.56 ACRES
OPEN SPACE:	1.79 ACRES
NEW ROW:	2.80 ACRES

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN RECORD BOOK NUMBERS R2806, PAGE 535, MAURY COUNTY REGISTER'S OFFICE, AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINE, AND THAT OFFERS OF IRREVOCABLE DEDICATION FOR ALL PUBLIC WAYS, UTILITIES AND OTHER FACILITIES HAVE BEEN FILED.

_____, 20____
DATE — OWNER

_____, 20____
DATE — OWNER

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

_____, 20____
DATE — CITY ENGINEER

CERTIFICATE OF APPROVAL OF SUBDIVISION AND STREET NAMES

SUBDIVISION NAME AND STREET NAMES ARE APPROVED BY THE CITY ENGINEERING DEPARTMENT AND MAURY COUNTY E911.

_____, 20____
DATE — MAURY E911

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE COLUMBIA SUBDIVISION REGULATIONS WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE COUNTY REGISTER.

_____, 20____
DATE — NAME, TITLE, AGENCY OF AUTHORIZED AGENT

CERTIFICATE OF SURVEY ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CATEGORY I LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS LESS THAN OR EQUAL TO 1:10,000.

_____, 20____
DATE — MARK CANTRELL, R.L.S

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

_____, 20____
DATE — DIRECTOR OF COLUMBIA WATER DEPARTMENT

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE AND UTILITIES

I HEREBY CERTIFY THAT THE STREETS, DRAINAGE AND UTILITIES DESIGNATED IN SUMMIT AT CARTER'S WEST, PHASE 3 HAVE BEEN INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS, OR A PERFORMANCE SURETY IN THE AMOUNT OF $_____ FOR STREETS AND DRAINAGE HAS BEEN POSTED WITH THE CITY OF COLUMBIA TO ASSURE COMPLETION OF SUCH IMPROVEMENTS.

_____, 20____
DATE — CITY ENGINEER

CERTIFICATE OF APPROVAL OF SEWER SYSTEM

I HEREBY CERTIFY THAT THE SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

_____, 20____
DATE — DIRECTOR OF COLUMBIA WASTEWATER DEPARTMENT

J. MARK CANTRELL XVI
PROFESSIONAL LAND SURVEYOR
AGRICULTURE
COMMERCE
TENNESSEE NO. 1859

OWNER OF RECORD
PULTE HOMES TENNESSEE LIMITED PARTNERSHIP DEED BK. R2806 PG. 535, MAP 041 PARCEL 015.05
APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT FRANKLIN, TN 37064 615.678.8212

PROJECT
21-0515

SHEET
1 OF 1

NO.	DATE	REVISIONS
1	11-14-24	REVISED PER CITY COMMENTS

DATE: 11-14-2024
SCALE: 1" = 100'
DRAWN BY: DSW
REVIEWER:

SUMMIT AT CARTER'S WEST

PHASE 3 FINAL PLAT

MAP 041, P/O PARCEL 015.05
MAURY COUNTY, TENNESSEE

T-SQUARE ENGINEERING
111 SOUTHEAST PKWY CT • FRANKLIN, TN • 615-678-8212 • www.T2-ENG.COM

T-SQUARE ENGINEERING
CIVIL-SITE | TRAFFIC | WASTEWATER

111 Southeast Parkway Court
Franklin, TN 37064
615.678.8212

www.T2-eng.com

November 18th, 2024

City of Columbia Staff

Comment Response Letter – Final Plat – Summit at Carter's Station West, Phase 3

Engineering

1. Provide surety in the amount of $375,000 by resubmittal date

   Owner to provide 11-18-2024

2. Asphalt binder and curbing to be installed by resubmittal date

   Completed

3. Grading shall substantially meet construction plans (within 1 foot of proposed grades)

   Noted. Contractor to ensure final grade meets design prior to building permit.

4. Record/reference stormwater maintenance agreement

   Revised. See Note 9.

5. Complete offsite traffic improvement along Carters Creek Station Rd @ Old Hwy 31 prior to resubmittal date

   Per conversation with Glenn Harper, improvements to be completed prior to December 11th CMPC meeting

6. previous recorded plat to the north (Summit at Carters Station, Phase 2) should reference "West"

   Revised

7. Cobbler Court was recorded in the previous plat for Summit at Carter's West Phase 2.

   Revised

8. General note references creation of 64 lots. Lot table shows 58. Include open space lots in lot table.

   Note and lot tables revised to show 61 lots and 4 open spaces.

Maury County Schools

13. Spring Hill Elementary, Spring Hill Middle School, Spring Hill High School
    See Attached Capacity Numbers
    The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.
    * Due to numbers, MCPS will be rezoning all Columbia and Spring Hill elementary schools for the 25/26 SY.

    Acknowledged

Columbia Power

17. CPWS BB Plan to Serve

    Acknowledged

18. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

    Acknowledged

Planning

19. The lead staff person for this case is City Planner Kevin McCarthy, AICP; he will prepare the staff report for this item. Please contact kmccarthy@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff. Please also cc abrass@columbiatn.gov.

    Acknowledged

20. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.

    Provided

21. The Final Plat does not conform to the approved Preliminary Plat. A revision to the plat is pending on the October 15th CMPC meeting. This application will be reviewed at the November DRC meeting for conformity to that approval or, in the event of denial by the CMPC, conformity with the current vested plat.

    Final Plat has been revised to conform to newly approved Preliminary Plat

22. Please indicate whether households in Phases 2 and 3 will benefit from the new amenity space.

    Phases 2 & 3 will both benefit from the new amenity space.

23. Please consult with the City Engineer to confirm the appropriate wording of note 13.

    No engineering comment provided.

24. Complete offsite traffic improvements identified by the City Engineer prior to November resubmittal date.

    Per conversation with Glenn Harper, improvements to be completed prior to December 11th CMPC meeting

25. Please clarify the total number of lots. Notes, tables, and application should match.

    In total, there are 61 lots and 4 open spaces. Notes, tables, and applications have been revised to reflect this count.

26. Please revise the plat to show the noncontiguous Open Space and Commercial properties immediately north of Phase 1.

    Noncontiguous lots and open space added. Commercial property is not a part of this Final Plat approval as it is on a separate parcel from residential development and is owned by others.

Columbia Water

27. Make corrections to final plat per the notes shown on the drawings at the following link: https://acrobat.adobe.com/id/urn:aaid:sc:va6c2:87ec910b-0c6b-4922-aec7-d620dbddfeca

    See attached PDF for CPWS's GPS as-built layer for this subdivision.

    "Coordinate walk-through, Bacteria pressure testing with CPWS."

    Be prepared to deed infrastructure to CPWS at plat signing, water system must be active at time of plat signing.

    Revised

Wastewater

9. Columbia Wastewater requires submittal of as-builts and reduced maintenance LOC which are to be reviewed and approved by our Department before we approve building permits.

    Acknowledged

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, November 12, 2024

ITEM NO.
24-0417

DESCRIPTION: Summit West Ph 3

COMMENTS:

Engineering

1. Provide surety in the amount of $375,000 by resubmittal date
2. Asphalt binder and curbing to be installed by resubmittal date
3. Grading shall substantially meet construction plans (within 1 foot of proposed grades)
4. Record/reference stormwater maintenance agreement
5. Complete offsite traffic improvement along Carters Creek Station Rd @ Old Hwy 31 prior to resubmittal date
6. previous recorded plat to the north (Summit at Carters Station, Phase 2) should reference "West"
7. Cobbler Court was recorded in the previous plat for Summit at Carter's West Phase 2.
8. General note references creation of 64 lots. Lot table shows 58. Include open space lots in lot table.

Fire

9. No comments

Building

10. No comments.

Police

11. No comments provided.

Public Works

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

12. No comments.

Maury County Schools

13. Spring Hill Elementary, Spring Hill Middle School, Spring Hill High School
    See Attached Capacity Numbers
    The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students.
    * Due to numbers, MCPS will be rezoning all Columbia and Spring Hill elementary schools for the 25/26 SY.

Duck River Electric Membership Corp

14. No comments.

Maury County Highway Dept.

15. No comments.

ATT

16. ATT TO SERVE

Columbia Power

17. CPWS BB Plan to Serve

18. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

CITY OF COLUMBIA TENNESSEE

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Planning

19. The lead staff person for this case is City Planner Kevin McCarthy, AICP; he will prepare the staff report for this item. Please contact kmccarthy@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff. Please also cc abrass@columbiatn.gov.
20. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
21. The Final Plat does not conform to the approved Preliminary Plat. A revision to the plat is pending on the October 15th CMPC meeting. This application will be reviewed at the November DRC meeting for conformity to that approval or, in the event of denial by the CMPC, conformity with the current vested plat.
22. Please indicate whether households in Phases 2 and 3 will benefit from the new amenity space.
23. Please consult with the City Engineer to confirm the appropriate wording of note 13.
24. Complete offsite traffic improvements identified by the City Engineer prior to November resubmittal date.
25. Please clarify the total number of lots. Notes, tables, and application should match.
26. Please revise the plat to show the noncontiguous Open Space and Commercial properties immediately north of Phase 1.

Columbia Water

27. Make corrections to final plat per the notes shown on the drawings at the following link: https://acrobat.adobe.com/id/urn:aaid:sc:va6c2:87ec910b-0c6b-4922-aec7-d620dbddfeca

    See attached PDF for CPWS's GPS as-built layer for this subdivision.

    "Coordinate walk-through, Bacteria pressure testing with CPWS."

    Be prepared to deed infrastructure to CPWS at plat signing, water system must be active at time of plat signing.

Atmos Energy

28. No comments provided.

CITY OF COLUMBIA TENNESSEE

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Maury County E911

29. No comments provided.

Wastewater

30. Columbia Wastewater requires submittal of as-builts and reduced maintenance LOC which are to be reviewed and approved by our Department before we approve building permits.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.

You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.

Current Enrollment / Capacity

	Facility Name	Constructed	Sq. Ft.	Acreage	Capacity
Elementary	Baker	1960	43,920	12	340
	Battle Creek	2019	90,000	30	700
	Brown	1968	56,720	20	405
	Highland	1986	47,800	4.5	380
	Howell	1999	81,600	17.5	700
	Mt. Pleasant	1978	80,021	22	630
	Riverside	1984	71,150	14	500
	Spring Hill	1984	69,000	10	540
	Woodard	1990	76,200	17	600
	Wright	2005	97,765	18	740
					5535
Middle	Battle Creek	2019	125,000	45	900
	Cox	1997	137,200	25	900
	Mt. Pleasant	2001	113,938	29.2	550
	Spring Hill	2010	158,106	39.49	950
	Whitthorne	1979	175,600	17	1050
					4350
High	Battle Creek	2024	305,675	51	2000
	Central	2016	296,740	55	1700
	Mt. Pleasant	1969	110,759	31	600
	Spring Hill	1993	181,800	57	1200
					5500
Unit	Culleoka	1969	205,800	34	1020
	Hampshire	1978	83,410	13.12	500
	Santa Fe	1964	94,225	24	650
					2170
Other	Central Office	1960	15,400	1.5	
	College Hill	1958	42,211	2.26	
	Maintenance	1987	9,400	4.7	
	McDowell		46,165	7	
			2,815,605	**601.27**	**17555**

Current Enrollment	Capacity Used
282	82.9%
682	97.4%
340	84.0%
311	81.8%
581	83.0%
543	86.2%
378	75.6%
465	86.1%
586	97.7%
617	83.4%
4785	***86.4%***
758	84.2%
630	70.0%
386	70.2%
556	58.5%
948	90.3%
3278	***75.4%***
394	19.7%
1393	81.9%
369	61.5%
905	75.4%
3061	***55.7%***
863	84.6%
414	82.8%
548	84.3%
1825	***84.1%***
148	
13097	

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
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DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, October 8, 2024

ITEM NO.
24-0417

DESCRIPTION: Summit West Ph 3

COMMENTS:

Planning

1. The lead staff person for this case is City Planner Kevin McCarthy, AICP; he will prepare the staff report for this item. Please contact kmccarthy@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
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4. Please indicate whether households in Phases 2 and 3 will benefit from the new amenity space.
5. Please consult with the City Engineer to confirm the appropriate wording of note 13.
6. Complete offsite traffic improvements identified by the City Engineer prior to November resubmittal date.
7. Please clarify the total number of lots. Notes, tables, and application should match.
8. Please revise the plat to show the noncontiguous Open Space and Commercial properties immediately north of Phase 1.

Engineering

9. Provide surety in the amount of $375,000 by resubmittal date
10. Asphalt binder and curbing to be installed by resubmittal date
11. Grading shall substantially meet construction plans (within 1 foot of proposed grades)
12. Record/reference stormwater maintenance agreement
13. Complete offsite traffic improvement along Carters Creek Station Rd @ Old Hwy 31 prior to resubmittal date

DEVELOPMENT SERVICES
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14. Contingent on preliminary plat revision
15. previous recorded plat to the north (Summit at Carters Station, Phase 2) should reference "West"
16. Cobbler Court was recorded in the previous plat for Summit at Carter's West Phase 2.
17. General note references creation of 64 lots. Lot table shows 58. Include open space lots in lot table.

Maury County Schools

18. Spring Hill Elementary, Spring Hill Middle School, Spring Hill High School
    See Attached Capacity Numbers
    The development combined with current neighborhoods and additional approved developments in these zones may require either new construction or realignment of school zones to accommodate new students

Columbia Water

19. Complete water infrastructure including meter setters and show meter box locations accurately on the plat.
20. Revise plat to show water infrastructure as-built conditions. Several hydrants and other system component not shown correctly on plat. See hyperlink below for specific comments
    https://acrobat.adobe.com/id/urn:aaid:sc:va6c2:2ba70958-3fd8-4dbc-a01b-3a9c76226357
21. Be prepared to deed infrastructure to CPWS at time of plat signing, water system must be active at time of plat signing.

Columbia Power

22. Columbia Power System has an existing power line near your proposed development.
    We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

Fire

23. No comments

Public Works

24. No comments.

ATT

25. ATT TO SERVE

CPWS BB

26. Plan to Serve

Maury County Highway Dept.

27. No comments.

Wastewater

28. No comments.

Atmos Energy

29. No comments provided.

Maury County E911

30. No comments provided.

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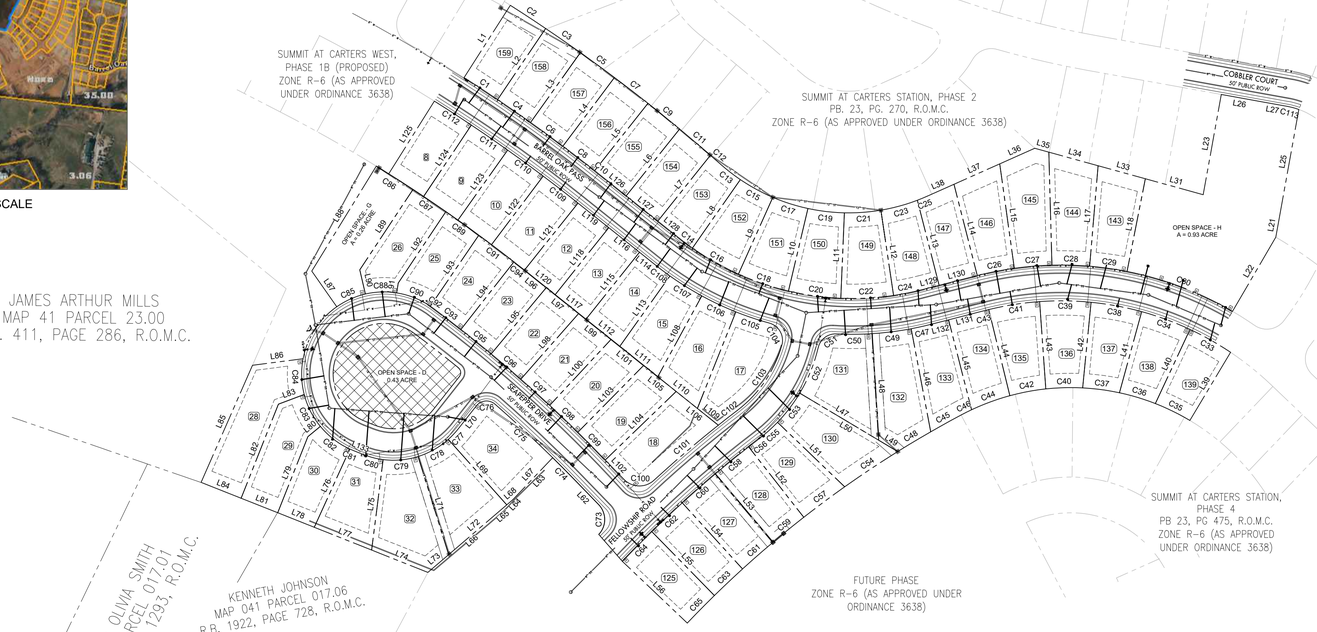
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VICINITY MAP - NOT TO SCALE



LEGEND

- FIRE HYDRANT
- WATER METER
- SEWER SERVICE
- SEWER MANHOLE
- CURB INLET
- AREA DRAIN
- 8" W — PROP. WATER LINE (TYP.)
- 8" SS — PROP. SEWER LINE (TYP.)
- 18" ST — PROP. STORMWATER LINE (TYP.)

TN SPCS NAD 83

SCALE 1" = 100'

100 0 50 100 200

LOT	SQ. FT.
8	7186.1
9	7186.1
10	7186.1
11	7186.1
12	6600.0
13	6600.0
14	6877.1
15	7450.4
16	8278.1
17	10230.9
18	9771.0
19	7544.1
20	7215.7
21	6962.1
22	6804.0
23	6739.9
24	6919.0
25	6967.4
26	8112.8
28	12071.3
29	8588.7
30	7250.1
31	8175.5
32	11640.1
33	9881.3
34	10781.4
125	7037.1
126	7037.1
127	7357.0
128	7228.4

LOT	SQ. FT.
129	7826.5
130	9617.4
131	10511.6
132	10189.4
133	7979.2
134	7225.1
135	7589.1
136	7495.1
137	7370.4
138	7217.2
139	6695.4
143	8197.5
144	9083.3
145	9655.4
146	8399.3
147	6990.7
148	7156.1
149	7511.4
150	7460.7
151	7411.6
152	7365.7
153	6736.2
154	6714.3
155	6799.5
156	6905.3
157	6905.3
158	6905.3
159	6905.3

LINE	BEARING	DISTANCE
L1	N 32°35'59" E	120.00'
L2	N 34°02'33" E	120.00'
L3	N 35°29'08" E	120.00'
L4	N 36°55'42" E	120.00'
L5	N 38°22'17" E	120.00'
L6	N 38°38'07" E	119.54'
L7	N 38°38'07" E	117.75'
L8	N 34°59'29" E	116.76'
L9	N 24°07'30" E	117.62'
L10	N 13°15'31" E	118.55'
L11	N 02°23'32" E	119.52'
L12	N 08°28'28" W	120.52'
L13	N 14°20'46" W	122.72'
L14	N 14°18'12" W	131.69'
L15	N 07°56'14" W	147.37'
L16	N 01°34'16" W	158.03'
L17	N 04°47'43" E	140.97'
L18	N 11°09'41" E	132.09'
L21	S 10°13'29" W	30.41'
L22	S 30°15'36" W	120.00'
L23	N 10°13'29" E	142.36'
L25	N 10°13'29" E	151.01'
L26	S 79°46'31" E	55.00'
L27	S 79°46'31" E	38.87'
L31	S 74°35'15" E	83.87'
L32	N 74°35'15" W	67.36'
L33	N 74°35'15" W	68.49'
L34	N 74°35'15" W	71.41'
L35	N 74°35'15" W	20.42'
L36	S 65°57'42" W	53.54'

LINE	BEARING	DISTANCE
L37	S 65°57'42" W	70.02'
L38	S 65°57'42" W	40.63'
L39	S 30°50'05" W	110.96'
L40	S 25°03'08" W	114.40'
L41	S 15°20'28" W	117.58'
L42	S 05°37'48" W	120.27'
L43	S 04°04'52" E	122.40'
L44	S 13°47'33" E	123.93'
L45	S 14°20'46" E	129.75'
L46	S 10°44'33" E	146.62'
L47	N 59°11'42" W	128.42'
L48	S 03°33'59" E	149.25'
L49	N 59°11'42" W	30.91'
L50	S 59°11'42" E	159.33'
L51	S 46°07'34" E	130.10'
L52	S 38°02'28" E	125.00'
L53	S 40°09'42" E	125.00'
L54	S 42°19'12" E	125.00'
L55	S 44°23'03" E	125.00'
L56	S 46°26'55" E	125.00'
L62	N 44°03'54" W	45.18'
L63	S 43°28'14" W	73.24'
L64	S 43°28'14" W	7.64'
L65	S 49°24'46" W	51.25'
L66	S 49°24'46" W	59.54'
L67	S 43°28'14" W	80.88'
L68	S 49°24'46" W	11.19'
L69	N 41°43'48" W	122.66'
L70	S 38°15'50" W	41.11'
L71	N 17°19'35" W	143.63'
L72	S 49°24'46" W	106.88'

LINE	BEARING	DISTANCE
L73	S 49°24'46" W	38.24'
L74	N 68°18'42" W	84.62'
L75	N 07°15'43" E	127.45'
L76	N 24°27'29" E	120.08'
L77	N 68°18'42" W	86.24'
L78	N 68°18'42" W	55.00'
L79	N 21°37'48" E	114.39'
L80	N 50°35'13" E	22.55'
L81	N 68°23'01" W	55.00'
L82	N 21°37'48" E	141.42'
L83	N 69°24'06" E	38.46'
L84	N 68°23'01" W	60.12'
L85	N 23°41'15" E	178.74'
L86	N 82°37'53" E	71.27'
L87	N 34°58'42" W	60.87'
L88	N 31°34'35" E	172.19'
L89	S 33°28'46" W	134.81'
L90	S 13°01'47" E	34.64'
L91	N 08°55'09" E	13.89'
L92	N 33°42'15" E	120.02'
L93	S 34°18'37" W	120.18'
L94	S 38°06'43" W	120.00'
L95	S 39°43'26" W	120.37'
L96	S 51°21'53" E	39.07'
L97	S 51°21'53" E	57.88'
L98	S 41°20'09" W	122.28'
L99	S 51°21'53" E	58.03'
L100	S 42°56'52" W	125.83'
L101	S 51°21'53" E	58.28'
L102	S 44°01'06" E	37.72'
L103	S 44°33'34" W	131.03'
L104	S 45°58'54" W	137.84'
L105	S 51°21'53" E	58.23'
L106	S 51°21'53" E	75.45'
L108	S 28°35'08" W	128.75'
L109	N 51°21'53" W	37.49'

LINE	BEARING	DISTANCE
L110	N 51°21'53" W	70.90'
L111	N 51°21'53" W	67.94'
L112	N 51°21'53" W	60.62'
L113	S 35°26'10" W	120.87'
L114	N 51°21'53" W	29.32'
L115	S 38°38'07" W	120.00'
L116	N 51°21'53" W	55.00'
L117	N 51°21'53" W	55.00'
L118	S 38°38'07" W	120.00'
L119	N 51°21'53" W	55.00'
L120	N 51°21'53" W	55.00'
L121	N 38°38'04" E	120.00'
L122	S 37°00'44" W	120.00'
L123	S 35°23'24" W	120.00'
L124	S 33°46'04" W	120.00'
L125	S 32°08'44" W	120.00'
L126	N 51°21'53" W	46.20'
L127	N 51°21'53" W	56.54'
L128	N 51°21'53" W	36.56'
L129	S 75°39'14" W	25.28'
L130	S 75°39'14" W	54.99'
L131	S 75°39'14" W	53.84'
L132	S 75°39'14" W	26.07'
L133	N 68°17'43" W	14.48'

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	2225.00'	56.03'	56.03'	N 56°40'44" W
C2	2345.00'	59.06'	59.05'	S 56°40'44" E
C3	2345.00'	59.06'	59.05'	S 55°14'09" E
C4	2225.00'	56.03'	56.03'	N 55°14'09" W
C5	2345.00'	59.06'	59.05'	S 53°47'35" E
C6	2225.00'	56.03'	56.03'	N 53°47'35" W
C7	2345.00'	59.06'	59.05'	S 52°21'00" E
C8	2225.00'	56.03'	56.03'	N 52°21'00" W
C9	2345.00'	57.00'	57.00'	S 50°55'56" E
C10	2225.00'	10.25'	10.25'	S 51°29'48" E
C11	2345.00'	56.57'	56.57'	S 49°32'42" E
C12	2345.00'	18.70'	18.70'	S 48°37'13" E
C13	270.00'	35.27'	35.24'	S 52°08'20" E
C14	390.00'	24.80'	24.80'	N 53°11'12" W
C15	270.00'	51.75'	51.67'	S 61°22'17" E
C16	390.00'	73.97'	73.85'	N 60°26'30" W
C17	270.00'	51.58'	51.50'	S 72°20'05" E
C18	390.00'	73.97'	73.85'	N 71°19'30" W
C19	270.00'	51.40'	51.32'	S 83°15'40" E
C20	390.00'	73.97'	73.85'	N 82°10'29" W
C21	270.00'	51.21'	51.14'	N 85°51'05" E
C22	390.00'	73.97'	73.85'	S 86°57'32" W
C23	270.00'	52.94'	52.85'	N 74°48'02" E
C24	390.00'	39.97'	39.95'	S 78°35'23" W
C25	270.00'	15.18'	15.18'	N 67°34'21" E
C26	475.00'	52.78'	52.75'	N 78°52'47" E
C27	475.00'	52.78'	52.75'	S 85°14'45" W
C28	475.00'	52.78'	52.75'	N 88°23'16" W
C29	475.00'	52.78'	52.75'	N 82°01'18" W
C30	475.00'	158.33'	157.60'	S 69°17'21" E
C33	425.00'	65.14'	65.07'	S 60°33'26" E
C34	425.00'	72.03'	71.95'	S 69°48'12" E
C35	325.00'	53.77'	53.71'	N 63°54'18" W
C36	325.00'	52.46'	52.41'	N 73°16'10" W

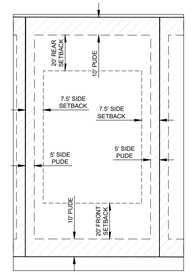
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C37	325.00'	51.94'	51.88'	N 82°28'20" W
C38	425.00'	72.03'	71.95'	S 79°30'52" E
C39	425.00'	72.03'	71.95'	S 89°13'32" E
C40	325.00'	51.50'	51.45'	S 88°24'34" W
C41	425.00'	72.03'	71.95'	N 81°03'47" E
C42	325.00'	51.17'	51.12'	S 79°21'31" W
C43	425.00'	4.11'	4.11'	N 75°50'51" E
C44	325.00'	57.12'	57.05'	S 69°48'46" W
C45	1500.00'	49.22'	49.22'	S 61°04'34" W
C46	325.00'	15.66'	15.66'	S 63°23'49" W
C47	440.00'	27.67'	27.67'	N 77°27'20" E
C48	1500.00'	53.75'	53.76'	S 59°09'34" W
C49	440.00'	55.11'	55.07'	N 82°50'44" E
C50	440.00'	49.69'	49.66'	N 89°40'07" E
C51	25.00'	34.76'	32.02'	N 53°04'31" E
C52	225.00'	68.95'	68.68'	N 22°01'33" E
C53	225.00'	51.32'	51.21'	N 37°20'22" E
C54	1500.00'	89.03'	89.02'	S 56°22'55" W
C55	225.00'	34.34'	34.31'	N 48°14'47" E
C56	1625.00'	18.72'	18.72'	N 52°17'20" E
C57	1500.00'	71.29'	71.28'	S 53°19'13" W
C58	1625.00'	60.14'	60.14'	N 50°53'55" E
C59	1500.00'	55.51'	55.51'	S 50°53'55" W
C60	1625.00'	61.21'	61.21'	N 48°45'33" E
C61	1500.00'	56.50'	56.50'	S 48°45'33" W
C62	1625.00'	58.55'	58.55'	N 46°38'52" E
C63	1500.00'	54.05'	54.04'	S 46°38'52" W
C64	1625.00'	58.55'	58.55'	N 44°35'01" E
C65	1500.00'	54.05'	54.04'	S 44°35'01" W

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C73	30.00'	45.77'	41.46'	S 00°00'05" W
C74	1885.00'	46.93'	46.92'	N 44°44'11" W
C75	1885.00'	109.99'	109.98'	N 47°06'52" W
C76	18.00'	29.20'	26.10'	S 84°44'17" W
C77	115.00'	20.08'	20.06'	S 43°16'01" W
C78	115.00'	48.98'	48.61'	S 60°28'19" W
C79	115.00'	49.35'	48.97'	S 84°58'04" W
C80	115.00'	28.99'	28.91'	N 75°31'00" W
C81	115.00'	5.53'	5.53'	N 66°55'07" W
C82	115.00'	52.44'	51.99'	N 52°28'39" W
C83	115.00'	50.40'	50.00'	N 26°51'26" W
C84	115.00'	50.40'	50.00'	N 01°44'43" W
C85	115.00'	44.05'	43.78'	S 65°59'46" W
C86	2055.00'	60.75'	60.75'	S 57°34'36" E
C87	2055.00'	55.46'	55.46'	S 55°57'24" E
C88	115.00'	44.05'	43.78'	S 87°56'41" W
C89	2055.00'	56.55'	56.55'	S 54°23'42" E
C90	115.00'	50.96'	50.55'	N 68°23'07" W
C91	2055.00'	61.64'	61.64'	S 52°44'50" E
C92	115.00'	4.72'	4.72'	N 54°30'49" W
C93	1935.00'	48.95'	48.95'	N 52°36'46" W
C94	2055.00'	18.74'	18.74'	S 51°37'36" E
C95	1935.00'	54.44'	54.44'	N 51°04'56" W
C96	1935.00'	54.44'	54.44'	N 49°28'13" W
C97	1935.00'	54.44'	54.44'	N 47°51'30" W
C98	1935.00'	54.44'	54.44'	N 46°14'47" W
C99	1935.00'	48.02'	48.02'	N 44°43'46" W
C100	30.00'	46.38'	41.90'	N 88°18'26" W
C101	1675.00'	118.48'	118.45'	S 49°25'49" W
C102	1675.00'	33.98'	33.98'	S 52°02'16" W
C103	175.00'	111.79'	109.90'	S 34°19'10" W
C104	25.00'	39.58'	35.58'	S 29°20'18" E
C105	440.00'	49.39'	49.36'	S 71°28'51" E
C106	440.00'	52.61'	52.58'	S 64°50'23" E
C107	440.00'	52.61'	52.58'	S 57°59'21" E
C108	440.00'	24.57'	24.56'	S 52°57'52" E
C109	2175.00'	61.58'	61.58'	S 52°10'36" E
C110	2175.00'	61.58'	61.58'	S 53°47'56" E
C111	2175.00'	61.58'	61.58'	S 55°25'16" E
C112	2175.00'	61.58'	61.58'	S 57°02'36" E
C113	100.00'	16.60'	16.58'	S 75°01'06" E

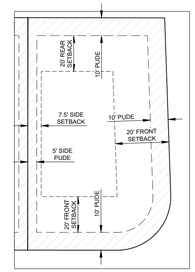
GENERAL NOTES

1. THE PURPOSE OF THIS PLAT IS TO CREATE 64 LOTS AND DEDICATE RIGHT-OF-WAY AND OPEN SPACES.
2. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN THE CITY OF COLUMBIA, MAURY COUNTY, TN. ALL MATTERS PERTAINING TO CONSTRUCTION, USE, LOCATION OF IMPROVEMENTS, SIGNAGE, PARKING, NOISE, VIBRATION, EMISSIONS, FIRE HAZARDS, RADIATION, ILLUMINATION, SETBACK PROVISIONS, ETC. ARE SUBJECT TO THE CITY OF COLUMBIA'S ZONING REGULATIONS AS INTERPRETED AND REGULATED BY THE DEPARTMENT OF DEVELOPMENT SERVICES.
3. SUBJECT PROPERTY IS PARCEL 15.05 AS SHOWN ON MAURY COUNTY TAX MAP 41.
4. THE HORIZONTAL LOCATION DATA SHOWN ON THIS SURVEY WAS GATHERED USING STANDARD RADIAL SURVEYING TECHNIQUES WITH AN ELECTRONIC TOTAL STATION AND DATA COLLECTOR AND IS BASED UPON A POSITIONAL SOLUTION DERIVED FROM GLOBAL POSITIONING SYSTEM (GPS) OBSERVATIONS) USING THE TDOT NETWORK. TENNESSEE STATE PLANE COORDINATE SYSTEM ZONE 4100, NAD83. DRONE AERIAL PHOTOMETRY WAS ALSO USED TO SURVEY SOME ELEMENTS.
5. NO TITLE REPORT HAS BEEN FURNISHED, THEREFORE THIS SURVEY IS SUBJECT TO THE FINDINGS OF AN ACCURATE TITLE SEARCH
6. THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE REQUIREMENTS OF A GENERAL PROPERTY SURVEY AND CONFORMS TO THE ACCURACY OF A CATEGORY 1 SURVEY AS CURRENTLY DEFINED AND ADOPTED BY THE TENNESSEE STATE BOARD OF EXAMINERS FOR LAND SURVEYORS, AND THE RATIO OF PRECISION IS LESS THAN 1:10,000.
7. ALL PLOT AND DEED RECORDATION REFERENCES SHOWN HEREON ARE AS RECORDED IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
8. COLUMBIA POWER AND WATER SYSTEMS IS THE POWER PROVIDER.
9. STORMWATER MANAGEMENT OPERATION & MAINTENANCE WILL BE GOVERNED BY THE INSPECTION & MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES, DATED _____, RECORDED IN DEED BOOK _____, PAGE ___, REGISTER'S OFFICE OF MAURY COUNTY, TN.
10. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN FLOOD ZONE "X", AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47119C0180E WITH AN EFFECTIVE DATE OF 4/16/2007, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT; COMMUNITY NO. 119C, PANEL NO. 0180 SUFFIX E, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED. SAID MAP DEFINES ZONE "X" UNDER "OTHER AREAS" AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD PLAIN.
11. ACCORDING TO THE TYPICAL LOT DETAIL, ALL LOTS ARE TO HAVE A 10' PUDE IN THE FRONT AND REAR OF THE LOTS, AS WELL AS A 5' PUDE IN THE SIDE OF THE LOTS.
12. CURRENT ZONING OF THE SUBJECT PROPERTY IS CD-3, THE SUBJECT PROPERTY AS SHOWN IS BASED ON A PRELIMINARY PLAT APPROVED UNDER ZONING ORDINANCE 3638 AND IS SUBJECT TO ALL VESTING OF THAT APPROVAL UNDER THE PREVIOUS ZONING OF R-6.
13. PRIOR TO CERTIFICATE OF OCCUPANCY, ALL GRADING SHALL BE IN ACCORDANCE WITH THE CITY OF COLUMBIA CODES FOR SWALES AND SLOPES. THIS WILL BE UNDERTAKEN DURING VERTICAL CONSTRUCTION AFTER BUILDING PERMITS ARE RELEASED

SITE DATA	
CURRENT ZONING:	R6
MINIMUM BUILDING SETBACKS:	
FRONT:	20'
REAR:	20'
SIDE:	7.5'
TOTAL PHASE AREA:	14.88 ACRES
OPEN SPACE:	1.62 ACRES
NEW ROW:	2.80 ACRES



TYPICAL R-6 LOT
N.T.S.



TYPICAL R-6 CORNER LOT
N.T.S.

J. MARK CANTRELL
XVI
PROFESSIONAL LAND SURVEYOR
AGRICULTURE
COMMERCE
TENNESSEE NO. 1859

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN RECORD BOOK NUMBERS R2806, PAGE 535, MAURY COUNTY REGISTER'S OFFICE, AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINE, AND THAT OFFERS OF IRREVOCABLE DEDICATION FOR ALL PUBLIC WAYS, UTILITIES AND OTHER FACILITIES HAVE BEEN FILED.

_____, 20____
DATE — OWNER

_____, 20____
DATE — OWNER

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

_____, 20____
DATE — CITY ENGINEER

CERTIFICATE OF APPROVAL OF SUBDIVISION AND STREET NAMES

SUBDIVISION NAME AND STREET NAMES ARE APPROVED BY THE CITY ENGINEERING DEPARTMENT AND MAURY COUNTY E911.

_____, 20____
DATE — MAURY E911

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE COLUMBIA SUBDIVISION REGULATIONS WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE COUNTY REGISTER.

_____, 20____
DATE — NAME, TITLE, AGENCY OF AUTHORIZED AGENT

CERTIFICATE OF SURVEY ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CATEGORY I LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS LESS THAN OR EQUAL TO 1:10,000.

_____, 20____
DATE — MARK CANTRELL, R.L.S

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

_____, 20____
DATE — DIRECTOR OF COLUMBIA WATER DEPARTMENT

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE AND UTILITIES

I HEREBY CERTIFY THAT THE STREETS, DRAINAGE AND UTILITIES DESIGNATED IN SUMMIT AT CARTER'S WEST, PHASE 3 HAVE BEEN INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS, OR A PERFORMANCE SURETY IN THE AMOUNT OF $_____ FOR STREETS AND DRAINAGE HAS BEEN POSTED WITH THE CITY OF COLUMBIA TO ASSURE COMPLETION OF SUCH IMPROVEMENTS.

_____, 20____
DATE — CITY ENGINEER

CERTIFICATE OF APPROVAL OF SEWER SYSTEM

I HEREBY CERTIFY THAT THE SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

_____, 20____
DATE — DIRECTOR OF COLUMBIA WASTEWATER DEPARTMENT

OWNER OF RECORD
PULTE HOMES TENNESSEE LIMITED PARTNERSHIP
DEED BK. R2806 PG. 535, MAP 041 PARCEL 015.05
APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT FRANKLIN, TN 37064 615.678.8212

REVISIONS		
NO.	DATE	

DATE: 9-16-2024
SCALE: 1" = 100'
DRAWN BY: DSW
REVIEWER:

SUMMIT AT CARTER'S WEST

PHASE 3 FINAL PLAT

MAP 041, P/O PARCEL 015.05
MAURY COUNTY, TENNESSEE

PROJECT
21-0515

SHEET
1 OF 1

T-SQUARE ENGINEERING
111 SOUTHEAST PKWY CT • FRANKLIN, TN • 615-678-8212 • www.T2-ENG.COM

DOCUMENT PREPARED BY:
Name: Alexander Mollica
Company Crunk Engineering
Address: 7112 Crossroads Blvd.
Brentwood, TN 37027
After recording return copy to City of Columbia, Development Services

INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES

Map & Parcel Number: Map 041, Parcel 15.50
Project Name: Summit at Carter's West - Phase 3

Recorded by deed in the Register of Deeds Office of Maury County in Deed Book _____, Page(s) _____.

THIS AGREEMENT, made this 12 day of September, 2024 , by and between Pulte Group hereinafter referred to as the "OWNER(S)" of the following property and City of Columbia, Tennessee, hereinafter referred to as the "CITY",

WE, the OWNER(S), with full authority to execute deeds, mortgages, other covenants, all rights, titles, and interests in the property described above, do hereby covenant with the CITY and agree as follows:

1. The OWNER(S) covenant and agree with the CITY that the OWNER(S) shall provide for adequate long term maintenance and continuation of stormwater control measures described in the Long Term Maintenance Plan and shown on the location map, deed of easement drawing or plat attached hereto to ensure that the facilities, are and remain in proper working condition in accordance with approved design standards, rules and regulations, and applicable laws. The OWNER(S) shall perform preventative maintenance activities at intervals described in the schedule attached hereto along with necessary landscaping (grass cutting, etc.) and trash removal as part of regular maintenance.

2. The OWNER(S) shall perform routine inspections to ensure that all long term stormwater management facilities are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. The OWNER(S) or operators shall maintain documents of these inspections.

3. The OWNER(S) shall perform comprehensive inspections of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect.

4. The OWNER(S) shall grant to the CITY or its agent or contractor the right of entry at reasonable times and in a reasonable manner for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining or repairing the facility within the CITY.

5. The OWNER(S) shall record and grant to the CITY the necessary easements and rights-of-way and maintain perpetual access from public rights-of-way to the facility for the CITY or its agent and contractor.

6. If, upon inspection, the CITY finds that the OWNER(S) has failed to properly maintain the facilities, the CITY may order the work performed within ten (10) days. In the event the work is not performed within the specified time, the ONWER(S) agrees to allow the CITY to enter the property and take whatever steps it deems necessary to maintain the stormwater control facilities. This provision shall not be construed to allow the CITY to erect any structure of a permanent nature on the PROPERTY without first obtaining written approval of the OWNER(S)

7. The CITY is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any obligation on the CITY. The OWNER(S) shall reimburse the CITY upon demand the costs incurred in the maintenance of the facilities.

8. If the OWNER(S) fails to pay the CITY for the above expensive after forty-five (45) days written notice, the OWNER(S) authorizes the CITY to collect said expenses from the OWNER(S) through appropriate legal action and the OWNER(S) shall be liable for the reasonable expenses of collection, court costs, and attorney fees.

9. The OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successor in interest shall indemnify and hold harmless the CITY and its officers, agents and employees for any and all damages, accidents, casualties, occurrences, claims or attorney's fees which might arise or be asserted, in whole or in part,

against the CITY from the construction, presence, existence, or maintenance of the stormwater control facilities subject to this AGREEMENT. In the event a claim is asserted against the CITY, its officers, agents or employees, the CITY shall notify OWNER(S) and the OWNER(S) shall defend at OWNER(S) expense any suit based on such claim. If any judgment or claims against the CITY, its officers, agents or employees, shall be allowed, the OWNER(S) shall pay all costs and expenses in connection therewith. The CITY will not indemnify, defend or hold harmless in any fashion the OWNER(S) from any claims arising from any failure, regardless of any language in any attachment or other document that the OWNER(S) may provide

10. The OWNER(S) shall not be able to transfer, assign or modify its responsibilities with respect to this agreement without the CITY's written prior consent. Nothing herein shall be construed to prohibit a transfer by OWNER(S) to subsequent owners and assigns.

11. No waiver of any provision of this AGREEMENT shall affect the right of any party thereafter to enforce such provision or to exercise any right or remedy available to it in the event of any default.

12. The OWNER(S) shall record a plat showing and accurately defining the easements for stormwater control facilities. The plat must reference the Instrument Number where this AGREEMENT and its attachments are recorded and contain a note that the OWNER(S) is responsible for maintaining the stormwater management facilities.

13. The OWNER(S) shall record this AGREEMENT in the office of the Register of Deeds for the county of Maury, Tennessee, and the AGREEMENT shall constitute a covenant running with the land, and shall be binding upon the OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successors in interest

ATTEST BY OWNER(S):

Print Name Jason Demuth

Title Division President

Signature _____

Owner PulteGroup

Address 100 Westwood Place

City, State ZIP Brentwood, TN 37027

STATE OF Tennessee
COUNTY OF Williamson

Before me, Farrah Burgett of the state and county mentioned, personally appeared Jason Demuth, with whom I am personally acquainted and who acknowledged that he/she executed the foregoing instrument of the purposes therein contained.

Witness my hand this the 12 day of September, 2024.

Farrah Burgett
Notary Public

My Commission Expires: 4/10/2027

FARRAH BURGETT NOTARY PUBLIC STATE OF TENNESSEE COUNTY OF WILLIAMSON

CITY OF COLUMBIA, TENNESSEE
ENGINEERING DEPARTMENT

APPROVED BY :_____

STATE OF TENNESSEE
COUNTY OF MAURY

Before me, _____ of the state and county mentioned, personally appeared _____, with whom I am personally acquainted, and who acknowledged themselves to be the City Engineer of the City of Columbia or his designee and as such, being authorized so to do, executed the foregoing instrument of the purposes therein contained.

Witness my hand this the _____ day of _____, 20_____.

_____
Notary Public
My Commission Expires:_____

Post Construction Long Term Maintenance Plan

Project Name: Summit at Carter's Station North – Phase 3

Columbia, TN

September 12, 2024

Table of Contents

Section Name

System Description
Maintenance Procedures

System Description

The site consists of a series of stormwater conveyances both open channel and piped. There are no detention/retention ponds associated with this Phase.

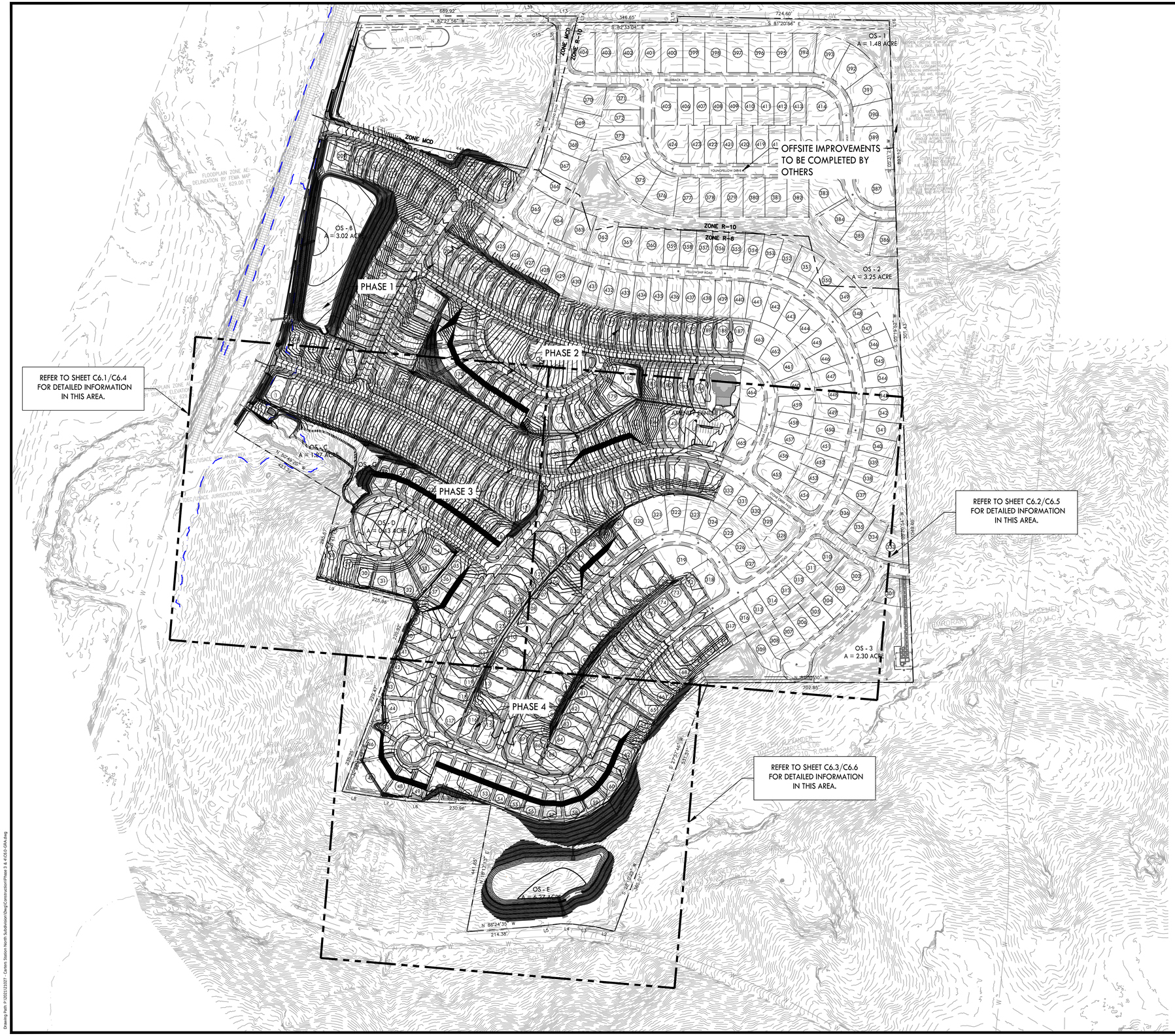
- 1,907 feet of grass lined open channel.
- 1,970 feet of 18 in ADS pipe, 89 feet of 15 in ADS pipe 1,526 feet of 12 in HDPE pipe and 45 storm inlets.

Upon completion of the site construction, 'Record Drawings' in a version not less than AutoCAD 2006 LT (NAD83, NAVD88) of the stormwater controls will be provided to the City of Columbia for verification.

A copy of the INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES that has been completed, notarized, and recorded in the Land Records of the County of Maury, Tennessee will be kept on site with this document.

Maintenance Procedures

1. **STORMWATER DETENTION PONDS**
    - **a.** The outlet structures shall be checked regularly for clogging and shall be cleaned and repaired as necessary---monthly after it is first built then a regular sequence should be established or at least quarterly or after a large rain event.
    - **b.** Check banks and bottom surface of basins for erosion and correct as necessary.
    - **c.** Check at least quarterly and after each extreme storm event, the facility should be cleaned of accumulated debris. The banks of surface ponds should be checked and areas of erosion repaired. Remove nuisance wetland species and take appropriate measures to control mosquitos.
    - **d.** This maintenance typically includes sediment, floatable, and debris removal from inlets, outlets and skimmers.
    - **e.** Pond vegetation to be trimmed or harvested as appropriate, grassy areas, frequently mowed. Grass should be mowed so that it does not get over 12.
    - **f.** Remove sediment when accumulation reached 6 inches, or if re-suspension is observed or probable.
    - **g.** Some sediment may contain contaminants which the Tennessee Department of Environment and Conservation (TDEC) requires special disposal procedure. If there is any uncertainty about what the sediment contains or it is known to contain contaminants, then TDEC should be consulted and their disposal recommendations followed. The TDEC Division of Water Pollution Control should be contacted at (931) 380-3371. Generally, special attention or sampling should be given to sediment accumulated in facilities serving industrial, manufacturing or heavy commercial sites, Page 2 of 4 Rev. 9/26/2016 fueling centers or automotive maintenance areas, large parking areas, or other areas where pollutants (other than clean soil) are suspected to accumulate and be conveyed by storm runoff.
    - **h.** Some sediment collected may be innocuous (free of pollutants) and can be used as fill material, cover or land spreading. It is important that this material not be placed in any way that will promote or allow re-suspension in storm runoff.
2. **1,970 feet of 18 in ADS pipe, 89 feet of 15 in ADS pipe 1,526 feet of 12 in HDPE pipe and 45 storm inlets.**
    a. These structures will be inspected and cleaned quarterly to ensure pipes and drain inlets do not fill with sediment or trash.



NOTES:

1. GRADING TO MATCH BUILDING TYPE AND ANY LOTS OVER 20% GRADE SHALL BE LABELED AS CRITICAL.
2. A GEOTECHNICAL INVESTIGATION WILL BE REQUIRED TO INVESTIGATE THE EXISTENCE OF SINKHOLES. ANY SINKHOLES DISCOVERED WILL BE REMEDIATED AS NECESSARY.

0 50 100 150 300
GRAPHIC SCALE

CRUNK ENGINEERING LLC
7112 CROSSROADS BOULEVARD
SUITE 201
BRENTWOOD, TN 37027
(615) 873-1795
WWW.CRUNKENG.COM

ENGINEERING CRUNK

WILSON COUNTY TENNESSEE AGRICULTURE COMMERCE 114-1091 STATE OF TENNESSEE 6/4/24

SUMMIT AT CARTERS STATION NORTH
PHASE 3 & 4

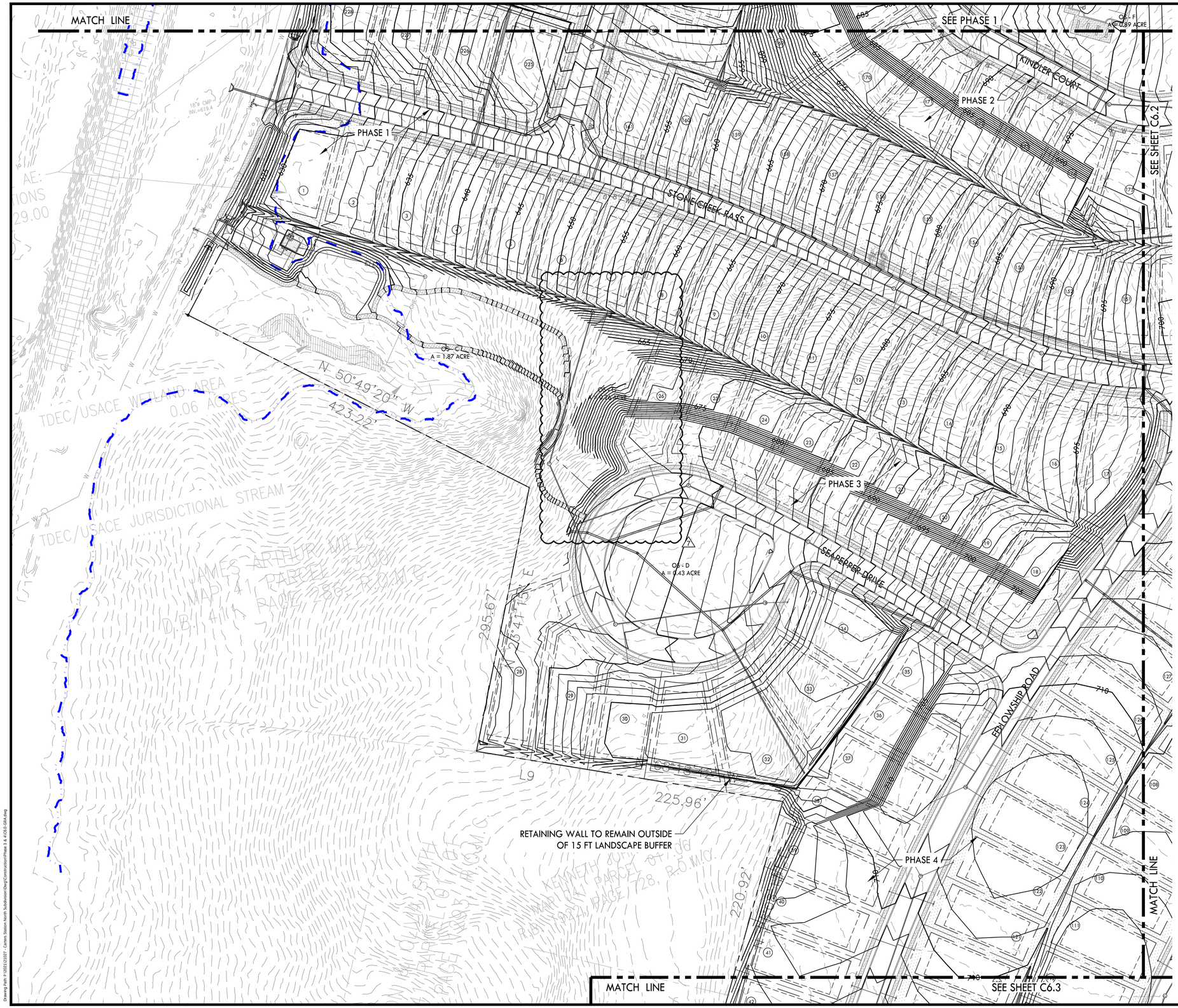
CARTERS CREEK STATION ROAD
MAURY COUNTY, TENNESSEE

REVISIONS	
No.	DATE
2	11/17/23
3	01/18/24
4	03/01/24
5	04/12/24
6	05/24/24
7	06/04/24

07/12/23 21027

C6.0
OVERALL GRADING & DRAINAGE PLAN

Drawing Path: P:\2021\21027 - Carters Station North Subdivision\Dwg\Construction\Phase3 & 4\C6.0-GRA.dwg



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C8.1 - 3
G2	SINGLE CATCH BASIN	C8.1 - 4
G3	JUNCTION BOX	C8.1 - 2
G4	CONCRETE HEADWALL	C8.1 - 6
G5	RIPRAP OUTLET	C8.2 - 3
G6	SOUTH POND OUTLET STRUCTURE	C8.2 - 1
G7	12" NYOPLAST DRAIN	-
G8	PRECAST HEADWALL WITH ENERGY DISSIPATORS	C8.2 - 2

NOTES:
1. REFER TO SHEET C2.0 FOR NOTES.

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- +55.10 — PROPOSED SPOT ELEVATION
- A1 — STORM STRUCTURE LABEL
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

CRUNK ENGINEERING LLC
7112 CROSSROADS BOULEVARD
SUITE 201
BRENTWOOD, TN 37027
(615) 873-1795
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SUMMIT AT CARTERS STATION NORTH
PHASE 3 & 4

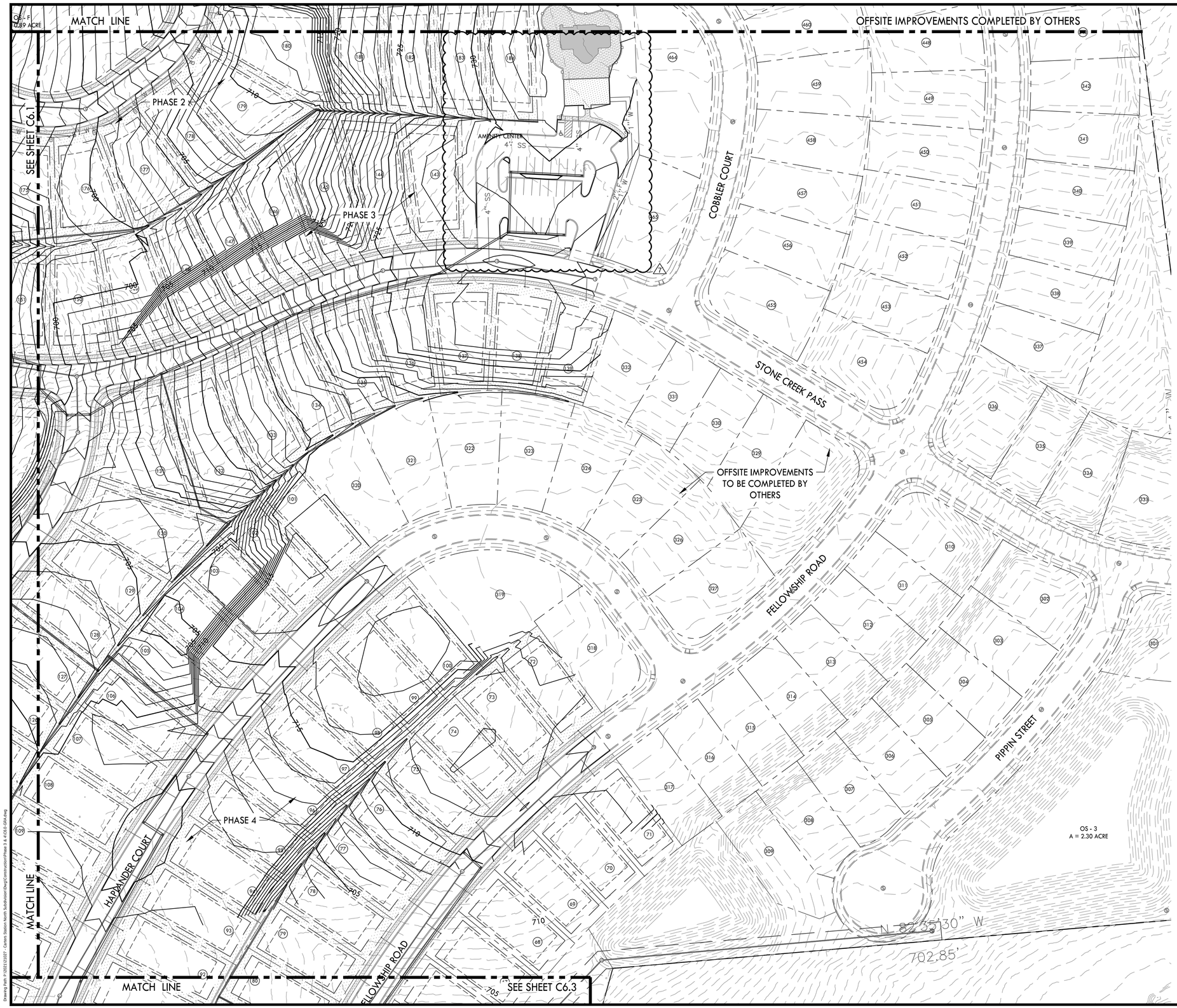
CARTERS CREEK STATION ROAD
MAURY COUNTY, TENNESSEE

REVISIONS	
No.	DATE
2	11/17/23
3	01/18/24
4	03/01/24
5	04/12/24
6	05/24/24
7	06/04/24

07/12/23 21027

C6.1
GRADING PLAN

Drawing Path: P:\2021\21027 - Carters Station North Subdivision\Civil\Construction\Phase 3 & 4\C6.0-GRA.dwg



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C8.1 - 3
G2	SINGLE CATCH BASIN	C8.1 - 4
G3	JUNCTION BOX	C8.1 - 2
G4	CONCRETE HEADWALL	C8.1 - 6
G5	RIPRAP OUTLET	C8.2 - 3
G6	SOUTH POND OUTLET STRUCTURE	C8.2 - 1
G7	12" NYOPLAST DRAIN	-
G8	PRECAST HEADWALL WITH ENERGY DISSIPATORS	C8.2 - 2

NOTES:
1. REFER TO SHEET C2.0 FOR NOTES.

PROPOSED GRADING & DRAINAGE LEGEND

- 55 — PROPOSED CONTOUR
- +55.10 — PROPOSED SPOT ELEVATION
- A1 — STORM STRUCTURE LABEL
- ST — STORM PIPE
- SINGLE CURB INLET
- SINGLE CATCH BASIN
- JUNCTION BOX

0 10 20 30 40 50 100
GRAPHIC SCALE

CRUNK ENGINEERING LLC
7112 CROSSROADS BOULEVARD
SUITE 201
BRENTWOOD, TN 37027
(615) 873-1795
WWW.CRUNKENG.COM

ENGINEERING CRUNK

TENNESSEE LICENSED PROFESSIONAL ENGINEER ANDREW WILSON CRUNK 6/4/24 AGRICULTURE COMMERCE No. 114189 STATE OF TENNESSEE

SUMMIT AT CARTERS STATION NORTH
PHASE 3 & 4

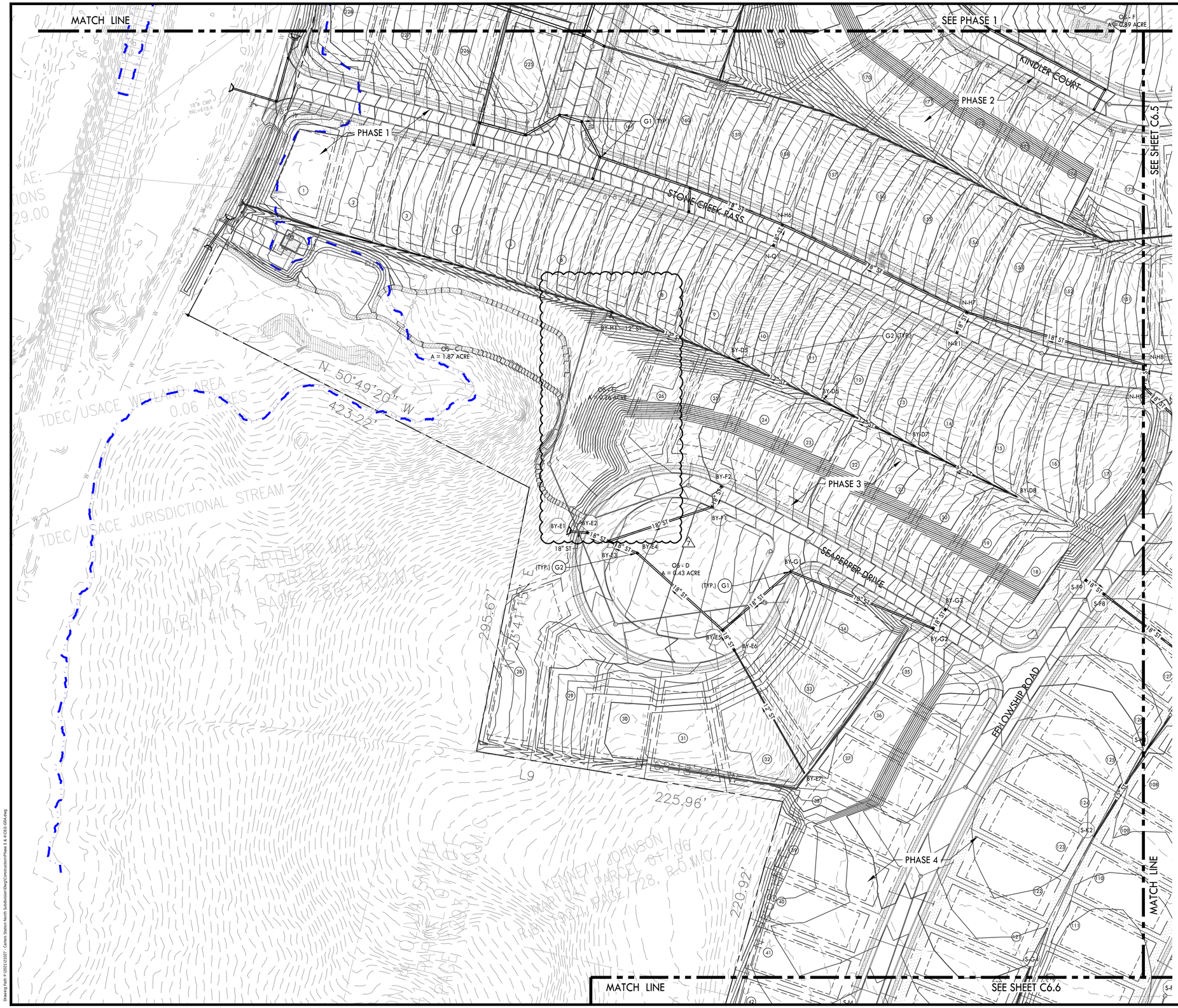
CARTERS CREEK STATION ROAD
MAURY COUNTY, TENNESSEE

REVISIONS	
No.	DATE
2	11/17/23
3	01/18/24
4	03/01/24
5	04/12/24
6	05/24/24
7	06/04/24

07/12/23 21027

C6.2
GRADING PLAN

Drawing Path: P:\2021\21027 - Carters Station North Subdivision\Dwg\Construction\Phase 3 & 4\C6.0-GRA.dwg



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C8.1 - 3
G2	SINGLE CATCH BASIN	C8.1 - 4
G3	JUNCTION BOX	C8.1 - 2
G4	CONCRETE HEADWALL	C8.1 - 6
G5	RIPRAP OUTLET	C8.2 - 3
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G8	PRECAST HEADWALL WITH ENERGY DISSIPATORS	C8.2 - 2

NOTES:
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- A1 — STORM STRUCTURE LABEL
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0 10 20 30 40 50 100
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SUMMIT AT CARTERS STATION NORTH
PHASE 3 & 4

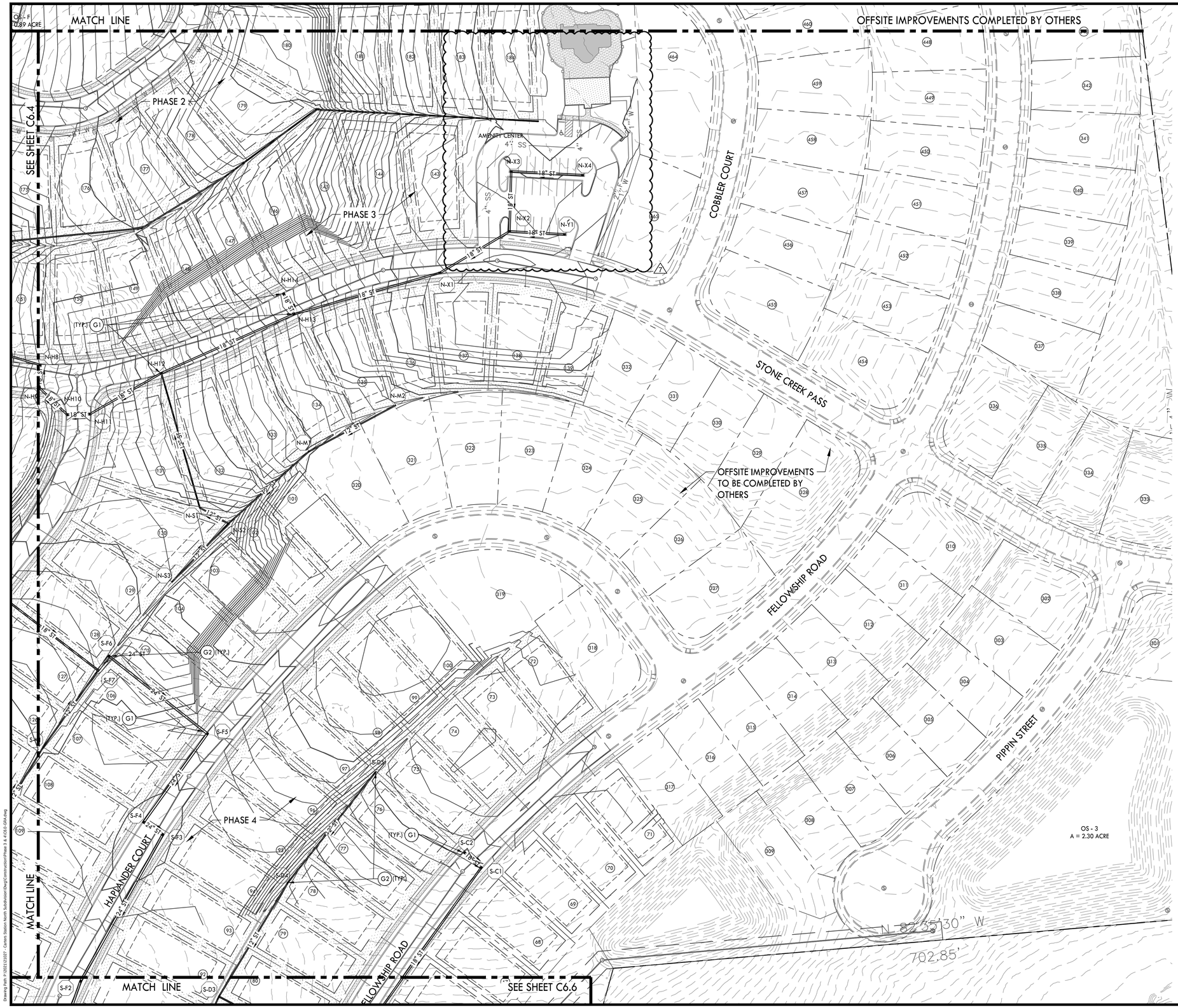
CARTERS CREEK STATION ROAD
MAURY COUNTY, TENNESSEE

REVISIONS	
No.	DATE
2	11/17/23
3	01/18/24
4	03/01/24
5	04/12/24
6	05/24/24
7	06/04/24

07/12/23 21027

C6.4
DRAINAGE PLAN

Drawing Path: P:\2021\21027 - Carters Station North Subdivision\Dwgs\Construction\Phase 3 & 4\C6.5-GRA.dwg



GRADING & DRAINAGE PLAN KEYNOTES

CODE	DESCRIPTION	DETAIL LOCATION
G1	SINGLE CURB INLET	C8.1 - 3
G2	SINGLE CATCH BASIN	C8.1 - 4
G3	JUNCTION BOX	C8.1 - 2
G4	CONCRETE HEADWALL	C8.1 - 6
G5	RIPRAP OUTLET	C8.2 - 3
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NOTES:
1. REFER TO SHEET C2.0 FOR NOTES.

PROPOSED GRADING & DRAINAGE LEGEND

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- A1 — STORM STRUCTURE LABEL
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ENGINEERING CRUNK



SUMMIT AT CARTERS STATION NORTH
PHASE 3 & 4

CARTERS CREEK STATION ROAD
MAURY COUNTY, TENNESSEE

REVISIONS	
No.	DATE
2	11/17/23
3	01/18/24
4	03/01/24
5	04/12/24
6	05/24/24
7	06/04/24

07/12/23 — 21027

C6.5
DRAINAGE PLAN

Drawing Path: P:\2021\21027 - Carters Station North Subdivision\Dwg\Construction\Phase 3 & 4\C6.5-GRA.dwg

Appendix B: Subdivision Development Agreement

This DEVELOPMENT AGREEMENT is made and entered into on this

_____ day of _____, 20_____ ,
between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and

Pulte Homes Tennessee Limited Partnership, the DEVELOPER (hereinafter the "DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made a part hereof (hereinafter the "ADDENDUM").

WITNESSETH:

WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM (hereinafter the "PROJECT"); and,

WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal Planning Commission (hereinafter the "CMPC") on the

_____ day of _____, 20_____ ,
pursuant to Tennessee Code Annotated Title 13, Chapter 4, and the Subdivision Regulations of Columbia, Tennessee (hereinafter the "SUBDIVISION REGULATIONS"); and,

WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such development; and,

WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,

WHEREAS, in order to provide for the health, safety, and welfare of future residents of the PROJECT, it will be necessary for certain improvements to the CITY'S utility systems, public infrastructure, and common areas to be constructed within and to serve the PROJECT including but not be limited to roads, bridges, sidewalks, pedestrian facilities, stormwater facilities, street signs, markings, signals, street lighting, recreation and park facilities, landscaping, and the like (hereinafter the "IMPROVEMENTS"); and,

WHEREAS, in order for the IMPROVEMENTS to be fully integrated with the utility systems and public infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to construct, in accordance with the Subdivision Regulations and other rules, regulations, and ordinances of the CITY, the IMPROVEMENTS in said PROJECT and extend utilities to the PROJECT at their own cost; and,

WHEREAS, the CITY is willing to accept the dedication of the streets, utilities, and other improvements as determined in the Development Plan of the PROJECT, subject to the City of Columbia City Council approval by resolution, and subject to the applicant's compliance with all requirements in this agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,

NOW, THEREFORE, it is agreed and understood as follows:

B1 General Conditions

B1.1 Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities, and other facilities in accordance with this agreement.

B1.2 City Ordinances, Rules and Regulations

All currently existing CITY ordinances, rules and regulations, and the Subdivision Regulations adopted by the CMPC are made a part of this agreement. In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans and specifications approved by the City and made a part, hereof.

B1.3 Fees

Review fees, inspection fees, and other amounts established by the CITY shall be paid prior to any review of the plans. If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees, inspection fees, or other amounts paid to the CITY shall be refundable to the DEVELOPER.

B1.4 Inspection

The CITY shall have a continuous right to inspect the work and facilities to assure that the work and facilities are in accordance with the Subdivision Regulations, approved Construction Plans, and other rules, regulations, and ordinances of the CITY.

B1.5 Right of Entry

The CITY shall have the right, in case of breach of the Performance Agreement, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

B1.6 Easements

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER further agrees to grant the necessary easements and rights-of-way across the DEVELOPER's properties without expense to the CITY and waive any claim for damages.

B1.7 Stormwater Maintenance Agreement

If the PROJECT includes any detention or retention ponds, common drainage ditches, water quality facilities, or stormwater facilities outside of the CITY rights-of-way, the DEVELOPER will submit a Stormwater Maintenance Agreement, to be filed with and recorded with the Final Plat.

B1.8 Attorney Fees and Other Expenses

The DEVELOPER shall pay all reasonable costs and expenses incurred by the CITY in enforcing or completing this agreement. The DEVELOPER shall pay all costs and expenses, including the CITY'S attorney fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

B1.9 Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

B1.10 Revocation and Interpretation

This agreement shall bind the DEVELOPER when executed by the DEVELOPER and may not be revoked by the DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

B1.11 No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments, or understandings.

B1.12 Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect, or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

B 1.13 Transferability

The DEVELOPER agrees to not transfer the property on which this PROJECT is to be located without first providing the CITY with written notice. The transferee shall provide the CITY an Assumption Agreement of this Agreement, whereby the transferee agrees to perform the IMPROVEMENTS required under this agreement and to provide a performance surety. The DEVELOPER understands that if the DEVELOPER transfers said property without providing the notice of transfer and Assumption Agreement as required herein, they will be in breach of this agreement and in violation of the Subdivision Regulations.

B1.14 Indemnity

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties, or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the IMPROVEMENTS by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

B1.15 Binding Effect

This agreement shall be binding upon the DEVELOPER and the DEVELEPOR's heirs, administrators, executors, assigns, and any other successors in interest.

B1.16 Entire Agreement

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them. No variations or alterations of the terms of this agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

B1.17 Headings

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the agreement and in no way shall define, limit, extend, or describe the scope or intent of any provision, hereof.

B2 Performance Surety

At the time of execution of this agreement, the DEVELOPER shall provide the CITY a performance surety, in an amount determined by the City Engineer for the IMPROVEMENTS and other items specified by the Construction Plans, plats, and plans approved by the CMPC. This performance surety shall secure performance of all obligations of the DEVELOPER under this agreement. The performance surety shall meet all requirements established in Chapter 4: Performance Agreement of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement. The performance surety may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the performance surety. The performance surety will not be released, except and until there has been full compliance with this agreement.

B3 Construction

B3.1 Construction Plans

The DEVELOPER shall submit to the CITY, Construction Plans describing in reasonable detail all utility systems, all storm water management systems, all street systems, pedestrian facilities, and all IMPROVEMENTS. The Construction Plans shall be designed according to the Engineering Standards and Specifications, all other codes and ordinances enforced by the City, and sound engineering judgment. The design of all utility systems shall follow the State of Tennessee and utility provider design criteria and specifications. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. The Construction Plans shall be prepared by a design professional licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date, and license number of the professional preparing the Construction Plans.

B3.2 Commencement of Construction

Construction of IMPROVEMENTS may not begin until the following events have occurred:

A. The Preliminary Plat has been approved by the CMPC;
B. The Construction Plans are approved by the CITY;
C. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing;
D. The CITY shall have received an appropriately executed Development Agreement; and
E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

B3.3 Site Grading

The DEVELOPER, hereby, agrees to construct all site grading to comply with the approved Construction Plans, including the approved Erosion Control Plan for the PROJECT and to comply with the Engineering Standards and Specifications, Stormwater Ordinance, and all other codes and ordinances enforced by the CITY.

B3.4 Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work made necessary by the development of this PROJECT. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order, and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

B3.5 Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Construction Plans to comply with the CITY's specifications and to the satisfaction and approval of the City Engineer by grading, draining, subgrade preparation, base preparation, curbing, signage, striping, signalization, sidewalk installation, and paving with the required preparation, amounts, and types of material. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas directed by the CITY Engineer, prior to application of final surface.

B3.6 Time Period for Construction

The DEVELOPER agrees to be bound to complete, within three (3) years of commencement of construction, all IMPROVEMENTS shown on the plat and plans and all things required by this agreement.

The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, the DEVELOPER shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for the DEVELOPER's failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the performance surety executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is determined to be inadequate by the City Engineer to secure the cost of said IMPROVEMENTS at the time an extension is sought, the DEVELOPER will provide the additional security to bring the performance surety amount in line with current cost projections as made by the CITY. The DEVELOPER understands that the DEVELOPER's failure to follow the extension procedure constitutes a breach of this agreement and places the DEVELOPER in violation of the Subdivision Regulations. The DEVELOPER further understands, that should the DEVELOPER fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved, the CITY shall reserve the right to withhold and withdraw all building permits within the PROJECT until all items of this Agreement have been fulfilled by the DEVELOPER.

B3.7 Off-Site Improvements

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the PROJECT. Unless specifically noted in the Construction Plans and made a part of separate agreement with the CITY, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site improvements.

B3.9 Inspection and Compliance

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to ensure that all work is performed and completed in accordance with the Construction Plans, CITY specifications, and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Construction Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

B3.10 Testing

The DEVELOPER agrees to pay the cost of all engineering, inspection, and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material, and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

B3.11 Scrap Removal

The DEVELOPER agrees to comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

B3.12 Traffic Control

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including

signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

B3.13 Temporary Facilities

The DEVELOPER shall provide all temporary facilities including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

B4 Acceptance of Improvements

B4.1 Completion of Improvements

At such time as the improvements have been constructed and installed, in accordance with the Constructions Plans and specifications, required testing and inspections completed and found satisfactory, and all clean-up and cover-up has been done to the satisfaction the City Engineer, a letter requesting preliminary acceptance of the PROJECT will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees the DEVELOPER shall have no claim, direct or implied, in the title or ownership of the IMPROVEMENTS specified in this agreement when the IMPROVEMENTS are complete and thereafter accepted by the CITY. The DEVELOPER will be responsible for construction failures and defects in PROJECT prior to final acceptance. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

B4.2 As-Built Drawings and Post-Completion Items

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system, and streets within the subdivision before the CITY shall accept the subdivision.

B4.3 Acceptance of Facilities

Upon final acceptance of all or part of the IMPROVEMENTS in the PROJECT, then those IMPROVEMENTS shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

B4.4 Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the IMPROVEMENTS in the PROJECT. Should the CITY choose to accept all or a portion of these IMPROVEMENTS, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register's Office of Maury County, Tennessee. No further writing or deed shall be required.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

Summit at Carter's West, Phase 3
PROJECT

Completed by the Developer	*Completed by the City*
Pulte Homes Tennessee Limited Partnership DEVELOPER NAME	
BRAD GARETO AUTHORIZED AGENT NAME	CITY ENGINEER
Brad Garreto SIGNATURE	SIGNATURE
9/16/2024 DATE	DATE
100 Westwood Place Suite 100 STREET	
Brentwood, TN 37027 CITY, STATE, ZIP	
615-435-2297 PHONE	
Kim.Storch@pultegroup.com EMAIL	
Attest	*Attest*
Kimberly Storch ATTEST NAME	ATTEST NAME
Kimberly Storch ATTEST SIGNATURE	ATTEST SIGNATURE
9/16/2024 DATE	DATE

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

** 1 hard copy of all materials for submittal + PDF copy on a USB thumb drive or CD (no multiple applications on one storage device)*
Fold hard copy submittals larger than 8½"x11"

ADDRESS/LOCATION	Carter's Creek Station Road, Columbia, TN		
	TAX MAP: 41	GROUP:	PARCEL: 15.05
SUMMARY OF NATURE OF REQUEST AND WORK	This application is to approve the final plat for phases of Summit at Carter's West, Phase 3.		

DATE OF PRE-APPLICATION CONFERENCE		*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
☐ Annexation ☐ Rezoning ☐ Preliminary Plat ☒ Final Plat ☐ PUD Preliminary Master Plan ☐ PUD Final Site Plan ☐ Multi-Family Site Plan ☐ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations/Rezoning/PUD's:** ☐ Written Legal Description copy ☐ Requested Zone Listed ☐ Compliance with Comprehensive Plan ☐ Annexation Permission Form ☐ Plans and/or Plats conforming to City standards with check list completed ☐ Columbia Water System Availability Letter **Plats/PUDs:** ☒ Project Name (include Sections & Phases) Summit at Carter's West, Phase 3 ☒ Total Number of Lots 64 ☒ Total acreage 14.88

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application.

Any requests to defer or move the item to future meetings dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME	T-Square Engineering	PHONE	615.678.8212
ADDRESS	111 SE Pkwy. Ct., Franklin, TN 37064	EMAIL	daniel.wolterman@T2-Eng.com

PROPERTY OWNER NAME	Pulte Homes Tennessee Limited Partnership	PHONE	615.435.2297
ADDRESS	100 Westwood Place, Suite 100 Brentwood, TN 37027	EMAIL	Kim.Storch@PulteGroup.com

In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Daniel Wolterman	Daniel Wolterman	9/16/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
Brad Garnto	Brad Garnto	9/16/2024
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

STAFF USE ONLY

DOCKET NO.		FEE PAID	
RECEIPT NO.		REQUESTED AGENDA	

DATE NOTICES SENT TO ADJACENT PROPERTY OWNERS	
DATE OF PUBLIC NOTICES IN DAILY HERALD	

BOARD ACTION	

1400 Hampshire Pike/ Preliminary & Final Plat

Project #:	24-0415	Location:	1400 Hampshire Pike
Applicant:	Allison Corolla	Case Type(s):	Preliminary Plat/ Final Plat
Staff Planner:	Austin Brass, AICP	Proposed Use:	Commercial

PROJECT SUMMARY

The applicant is seeking approval for a Final & Preliminary Plat for the dedication of right-of-way and consolidation of 5 lots into one contiguous lot situated at the intersection of Hampshire & Williamsport Pike. It shall be noted that this review is for the Preliminary and Final plat only, with the site development plan being approved at the staff level for any future building sites and site orientation.

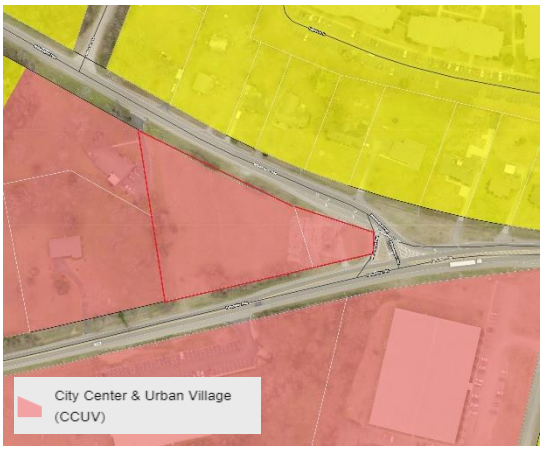
- The Final & Preliminary Plat is for the consolidation of 5 lots into a contiguous tract for future building sites and the dedication of public right-of-way along Hampshire Pike & Williamsport Pike.
- A surety is not applicable for this final plat as there is no new public infrastructure associated with this final plat that is being created.
- The DRC reviewed this proposal at its October and November 2024 meeting. Staff review included standard comments. Full technical comments are provided in the agenda packet.
- The Planning Commission is the **Decision-Making Authority** for this Final & Preliminary Plat.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

SITE INFORMATION

CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
CD-4C	Vacant Lot	None	+/- 1.69 Acres



FUTURE LAND USE MAP	ZONING MAP





SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	City Center & Urban Village	CD-4C	Vacant
North	Suburban Neighborhoods	CD-3	Single-Family Residential
South	City Center & Urban Village	CD-4C	Office
East	City Center & Urban Village	CD-4C	Commercial
West	City Center & Urban Village	CD-3	Single-Family Home

CONFORMITY WITH ZONING ORDINANCE

The Final Plat and associated Preliminary Plat comply with the Zoning Ordinance standards for the consolidation of 5 lots into one contiguous lot including the dedication of right-of-way strip along Williamsport & Hampshire Pike. It has been noted that additional standards will be required under Zoning Ordinance 4400 when the property is reviewed for any subsequent development as an Administrative Site Development Plan.

REVIEW PROCESS

The Development Review Committee evaluated the proposed Preliminary & Final Plat at its October & November 2024 meeting, as directed by section **8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package and summarized above.

2.2.7 Property Vestment In accordance with TCA 13-4-310, approval by the CMPC of a Preliminary Plat on or after January 1, 2015, will cause a vested property right to be established. Vestment rights and periods shall be in accordance with TCA 13-4-310 and the Zoning Ordinance.

Section **8.5.24** of the Zoning Ordinance directs the Planning Commission to review Subdivision Plats for conformity with the standards of the Ordinance and the City Subdivision Regulations. The Ordinance indicates that all Preliminary and Final Plats must be prepared, submitted, reviewed and acted upon in accordance with the Subdivision Regulations.

The Planning Commission is the Decision-Making Authority for Preliminary & Final Plats under **§ 8.3.3.B.1** of the Zoning Ordinance and **§ 2.3 (Final) & § 2.2.6 (Preliminary)** of the Subdivision Regulations.

Section **2.3.6** of the Subdivision Regulations establishes the review criteria for approval of Final Plats.

A. Recommendations and final action on a Preliminary Plat shall be based on consideration of the following criteria:

1. Whether the proposed Preliminary Plat complies with the applicable zoning district and overlay districts;

2. Whether the proposed Preliminary Plat is consistent with all standards of these Subdivision Regulations and other related codes and ordinances enforced by the City; and

3. Whether the CMPC determines that the particular site is suitable for the type of platting and development proposed.

B. Recommendations and final action on a Final Plat shall be based on consideration of the following criteria:

1. Whether the proposed Final Plat complies with the applicable zoning district and overlay districts;

2. Whether the proposed Final Plat is consistent with all standards of these Subdivision Regulations and other related codes and ordinances enforced by the City; and

3. Whether the proposed Final Plat meets all the requirements or conditions of any applicable development approvals, such as development plans or associated modification of standards.

Final Plat approval shall be subject to the completion of required improvements, or in lieu, the CMPC may approve a Performance Agreement.

Staff recommends approval of Preliminary & Final Plat 23-0532 with the following conditions:

1. *That final plat be recorded at the Register of Deeds within sixty (60) days of Planning Commission approval per 2.3.5, Final Action of the City of Columbia Subdivision Regulations.*
2. *Approval subject to any technical comments as listed.*

In the event of a denial, **§ 2.3.5** of the Subdivision Regulations requires the Planning Commission to identify the specific parts of applicable plans and regulations with which the plat does not comply.

SAMPLE MOTIONS

Approve:

Move to approve the Preliminary & Final Plat as presented and find that the plat conforms to the applicable zoning ordinance, the Subdivision Regulations, and the Preliminary Plat [subject to remaining technical comments from staff & staff conditions of approval as listed].

Approve with Conditions:

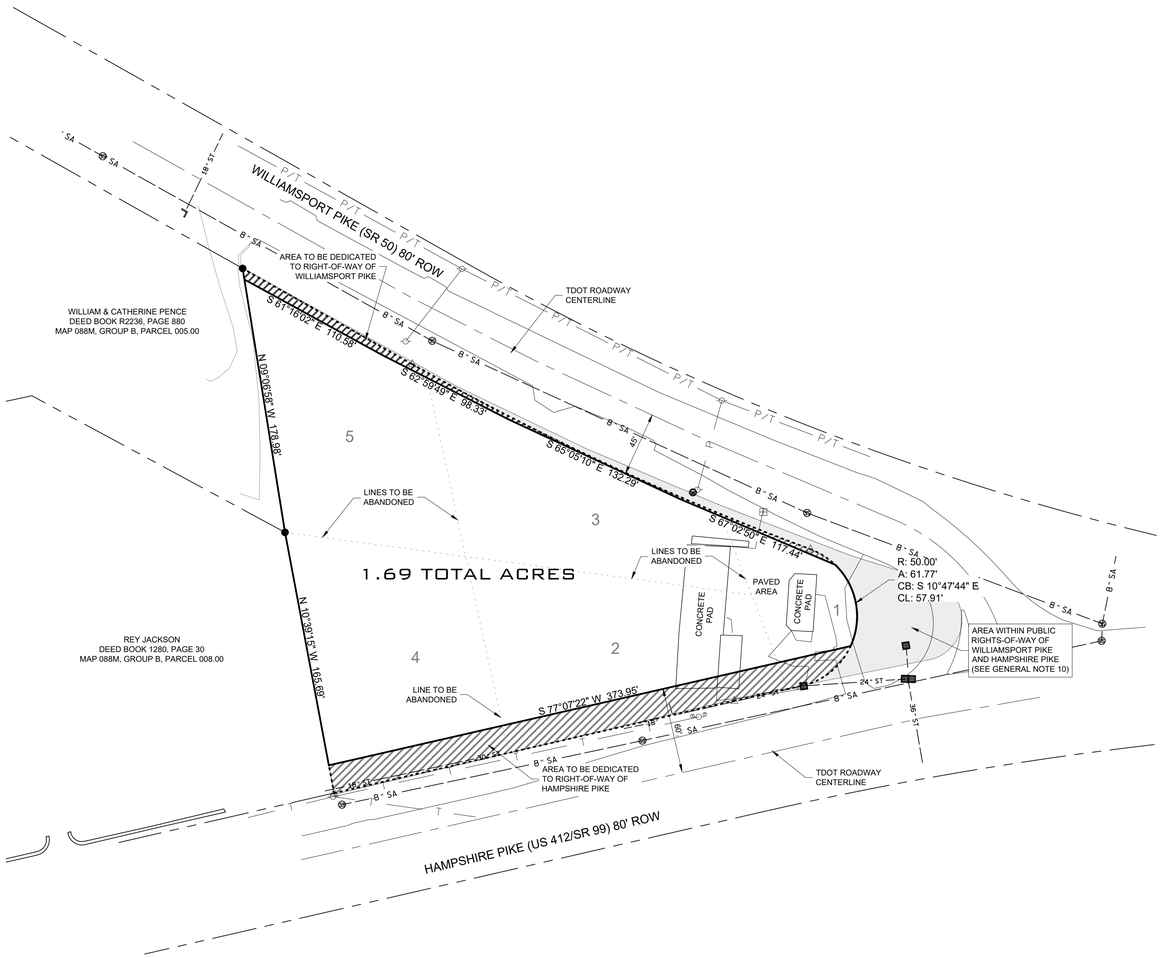
Move to approve the Preliminary & Final Plat as presented and find that the plat conforms to the applicable zoning ordinance, the Subdivision Regulations, and the Preliminary Plat, subject to the following conditions: [list any additional conditions of approval crafted by Planning Commission].

Defer for Continued Review:

Move to find that there is insufficient information to make a decision, defer the application for continued review, and request that the applicant provide: [list additional information] for review at the next regularly scheduled meeting of the Planning Commission.

Deny:

Move to find that the Preliminary & Final Plat as presented does not conform to the applicable zoning ordinance, the Subdivision Regulations, or the approved Preliminary Plat, and deny the request due to [list specific deficiencies].



TN SPCS NAD 83

SCALE 1" = 50'

50 0 25 50 100

LEGEND

- CALCULATED POINT
- IRON PIN FOUND
- UTILITY POLE
- WATER METER
- MISCELLANEOUS UTILITY BOX
- ELECTRIC ACCESS BOX
- SEWER MANHOLE
- DROP INLET
- T — OVERHEAD COMMUNICATION LINE
- P/T — OVERHEAD ELEC./COMM. LINE
- P — OVERHEAD ELECTRIC LINE
- 8" SA — SANITARY SEWER LINE
- 24" ST — STORMWATER PIPE

GENERAL NOTES

1. THE PURPOSE OF THIS PLAT IS TO CONSOLIDATE LOTS 1-5 OF PERKINS HILL SUBDIVISION (PLAT BOOK 2, PAGE 31) INTO ONE LOT AND DEDICATE RIGHT-OF-WAY.
2. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN THE CITY OF COLUMBIA, MAURY COUNTY, TN. ALL MATTERS PERTAINING TO CONSTRUCTION, USE, LOCATION OF IMPROVEMENTS, SIGNAGE, PARKING, NOISE, VIBRATION, EMISSIONS, FIRE HAZARDS, RADIATION, ILLUMINATION, SETBACK PROVISIONS, ETC. ARE SUBJECT TO THE CITY OF COLUMBIA'S ZONING REGULATIONS AS INTERPRETED AND REGULATED BY THE DEPARTMENT OF DEVELOPMENT SERVICES.
3. SUBJECT PROPERTY IS PARCELS 007.00 & 007.01 AS SHOWN ON MAURY COUNTY TAX MAP 088M, GROUP B.
4. THE HORIZONTAL LOCATION DATA SHOWN ON THIS SURVEY WAS GATHERED USING STANDARD RADIAL SURVEYING TECHNIQUES WITH AN ELECTRONIC TOTAL STATION AND DATA COLLECTOR AND IS BASED UPON A POSITIONAL SOLUTION DERIVED FROM GLOBAL POSITIONING SYSTEM (GPS) OBSERVATIONS) USING THE TDOT NETWORK. TENNESSEE STATE PLANE COORDINATE SYSTEM ZONE 4100, NAD83. DRONE AERIAL PHOTOMETRY WAS ALSO USED TO SURVEY SOME ELEMENTS.
5. NO TITLE REPORT HAS BEEN FURNISHED, THEREFORE THIS SURVEY IS SUBJECT TO THE FINDINGS OF AN ACCURATE TITLE SEARCH.
6. THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE REQUIREMENTS OF A GENERAL PROPERTY SURVEY AND CONFORMS TO THE ACCURACY OF A CATEGORY 1 SURVEY AS CURRENTLY DEFINED AND ADOPTED BY THE TENNESSEE STATE BOARD OF EXAMINERS FOR LAND SURVEYORS, AND THE RATIO OF PRECISION IS LESS THAN 1:10,000.
7. ALL PLOT AND DEED RECORDATION REFERENCES SHOWN HEREON ARE AS RECORDED IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
8. COLUMBIA POWER AND WATER SYSTEMS IS THE POWER PROVIDER.
9. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN FLOOD ZONE "X", AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47119C0280E WITH AN EFFECTIVE DATE OF 4/16/2007, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT; COMMUNITY NO. 119C, PANEL NO. 0280 SUFFIX E, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED. SAID MAP DEFINES ZONE "X" UNDER "OTHER AREAS" AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD PLAIN.
10. A PORTION OF THE SUBJECT PROPERTY AS DESCRIBED IN THE CURRENT DEED OF RECORD LIES WITHIN AN AREA RESERVED FOR THE PUBLIC RIGHTS-OF-WAY OF WILLIAMSPORT PIKE (SR 50) AND HAMPSHIRE PIKE (US 412/SR 99) AS THEY ARE SHOWN ON THEIR RESPECTIVE TENNESSEE DEPARTMENT OF TRANSPORTATION HIGHWAY PLANS. SAID AREA IS AS SHOWN HEREON.

SITE DATA	
CURRENT ZONING:	CD-4C
MINIMUM BUILDING SETBACKS:	CD-4C
FRONT:	6'
REAR:	3'
SIDE:	0'
TOTAL PHASE AREA:	1.69 ACRES

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

_____, 20____
DATE CITY ENGINEER

CERTIFICATE OF APPROVAL OF SEWER SYSTEM

I HEREBY CERTIFY THAT THE SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

_____, 20____
DATE DIRECTOR OF COLUMBIA WASTEWATER DEPARTMENT

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN RECORD BOOK NUMBERS R2991, PAGE 1036, MAURY COUNTY REGISTER'S OFFICE, AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINE, AND THAT OFFERS OF IRREVOCABLE DEDICATION FOR ALL PUBLIC WAYS, UTILITIES AND OTHER FACILITIES HAVE BEEN FILED.

_____, 20____
DATE OWNER

_____, 20____
DATE OWNER

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE COLUMBIA SUBDIVISION REGULATIONS WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE COUNTY REGISTER.

_____, 20____
DATE NAME, TITLE, AGENCY OF AUTHORIZED AGENT

CERTIFICATE OF SURVEY ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CATEGORY I LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS LESS THAN OR EQUAL TO 1:10,000.

_____, 20____
DATE MARK CANTRELL, R.L.S

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

_____, 20____
DATE DIRECTOR OF COLUMBIA WATER DEPARTMENT

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE AND UTILITIES

I HEREBY CERTIFY THAT THE STREETS, DRAINAGE AND UTILITIES DESIGNATED IN SUMMIT AT CARTER'S WEST, PHASE 2 HAVE BEEN INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS, OR A PERFORMANCE SURETY IN THE AMOUNT OF $_____ FOR STREETS AND DRAINAGE HAS BEEN POSTED WITH THE CITY OF COLUMBIA TO ASSURE COMPLETION OF SUCH IMPROVEMENTS.

_____, 20____
DATE CITY ENGINEER

T-SQUARE ENGINEERING
SURVEY DIVISION
111 SOUTHEAST PKWY CT, FRANKLIN, TN. 37064

MARK CANTRELL
PROFESSIONAL LAND SURVEYOR
XVI
AGRICULTURE
COMMERCE
TENNESSEE NO. 1859

FINAL PLAT

1400 HAMPSHIRE PIKE
W & M LLC, OWNERS
DEED BOOK R2991, PAGE 1036
PLAT BOOK 2, PAGE 31
MAP 088M, GROUP B, PARCELS 007.00 & 007.01
MAURY COUNTY, TENNESSEE

PROJECT:
23-0333

REVISIONS

NO.	DATE

DATE:
18 NOV 2024

SCALE:
1" = 50'

DRAWN BY:
DSW

REVIEWER:

SHEET:
1 OF 1

1400 HAMPSHIRE PIKE

PRELIMINARY PLAT

MAURY COUNTY, TENNESSEE
MAP 88M, GROUP 8, PARCEL 7.00 & 7.01

ENGINEER: T-SQUARE ENGINEERING
ALLISON B. COROLLA, P.E.
111 SOUTHEAST PARKWAY COURT
FRANKLIN, TN 37064
(615) 678-8212

SURVEYOR: T-SQUARE SURVEYING
111 SOUTHEAST PARKWAY COURT
FRANKLIN, TN 37064
(615) 678-8212

WATER: COLUMBIA POWER AND WATER SYSTEMS
201 PICKENS LANE
COLUMBIA, TN 38401
(931) 388-4833

POWER: COLUMBIA POWER AND WATER SYSTEMS
201 PICKENS LANE
COLUMBIA, TN 38401
(931) 388-4833

SEWER: COLUMBIA WASTEWATER DEPARTMENT
1244 TREATMENT PLANT ROAD
COLUMBIA, TN 38401
(931) 560-1001



VICINITY MAP
N.T.S.

N

SHEET SCHEDULE

C-0.0	COVER SHEET
C-1.0	EXISTING CONDITIONS
C-2.0	SITE PLAN
C-2.1	CIVIC SPACE PLAN
C-2.2	SITE DETAILS
C-3.0	INITIAL EROSION CONTROL PLAN
C-3.1	TEMPORARY EROSION CONTROL PLAN
C-3.2	FINAL EROSION CONTROL PLAN
C-3.3	EROSION CONTROL DETAILS
C-3.4	EROSION CONTROL DETAILS
C-5.0	GRADING PLAN
C-5.1	DRAINAGE PLAN
C-7.0	UTILITY PLAN
C-7.1	UTILITY PLAN DETAILS

FLOOD NOTE
NO PORTION OF THIS PROPERTY IS LOCATED IN AN AREA DESIGNATED AS A 100 YEAR FLOOD ZONE AS EVIDENCED ON PEMA PANEL #47119C0280E OF MAURY COUNTY, TN, DATED 04/16/2007.
OWNER OF RECORD
W & M LLC 2050 BELSHIRE WAY SPRING HILL, TN 37174
APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

REVISIONS

NO.	DATE

DATE: 11/18/2024
SCALE: AS SHOWN
DRAWN BY: T-SQUARE
REVIEWER: ABC

COVER SHEET
MAP 88M, GROUP B, PARCEL 7.00 & 7.01
COLUMBIA, TENNESSEE

1400 HAMPSHIRE PIKE

ALLISON B. COROLLA
REGISTERED ENGINEER
No. 117399
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

SHEET
C-0.0

T-SQUARE ENGINEERING

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CINDY SHAW
MAP 88M, PARCEL 9.00
ZONING: CD-3

JONATHON SHAW
MAP 88M, PARCEL 8.00
ZONING: CD-3

ZACH BOGARD
MAP 88M, PARCEL 7.00
ZONING: CD-3

TIMOTHY SCOTT
MAP 88M, PARCEL 6.00
ZONING: CD-3

WILLIAM & CATHERINE PENCE
MAP 88M, PARCEL 5.00
ZONING: CD-3

REY DEL JACKSON
MAP 88M, PARCEL 8.00
ZONING: CD-3

W & M LLC
MAP 88M, PARCEL 7.00
ZONING: CD-4C

W & M LLC
MAP 88M, PARCEL 7.01
ZONING: CD-4C

REALCO-TN LLC
MAP 101D, PARCEL 6.00
ZONING: CD-3

WILLIAMSPORT PIKE
(MINOR ARTERIAL: 90' R.O.W.)

HAMPSHIRE PIKE
(PRINCIPLE ARTERIAL: 125' R.O.W.)

R.O.W. RESERVATION (VARIES)

45' FROM CENTERLINE

RIM:686.6
INV(SE):680.1
INV(NW):680.1

RIM:679.6
INV(SE):670.9
INV(NW):671.6

LOTS TO BE CONSOLIDATED;
PROPERTY LINE TO BE REMOVED

EXISTING CONCRETE
PAD TO BE REMOVED

EXISTING TREE CANOPY
(0.10 ACRES TOTAL)

EXISTING STORM
NETWORK

EXISTING
PAVEMENT TO
BE REMOVED

EX-INLET
RIM:676.4
INV:673.5

EX-INLET
RIM:676.8
INV:672.7

EX-INLET
RIM:676.9
INV:674.3

18" PIPE
INV:679.0

24" PIPE
INV:676.1

BENCHMARK
HOR. NAD 83
VERT. NAVD 88
RIM:685.2
INV(W):672.9
INV(E):672.8

18" PIPE
INV:679.7

36" PIPE
INV:671.2

RIM:699.5
INV(W):691.3
INV(E):690.7

EXISTING UTILITY POLE

EXISTING OVERHEAD ELECTRIC

GRAPHIC SCALE
(IN FEET)
20 0 10 20 40
SCALE: 1" = 20'

LEGEND
- 500 — EXISTING MAJOR CONTOURS
- 499 — EXISTING MINOR CONTOURS
- EXISTING PROPERTY BOUNDARY
- ADJACENT PROPERTY LINES
- ROW RESERVATION
- EXISTING UTILITY POLE
- OE — EXISTING OVERHEAD POWER
- SS — EXISTING SANITARY
- STM — EXISTING STORM
- EXISTING TREE CANOPY

FLOOD NOTE
NO PORTION OF THIS PROPERTY IS LOCATED IN AN AREA DESIGNATED AS A 100 YEAR FLOOD ZONE AS EVIDENCED ON PEMA PANEL #47119C0280E OF MAURY COUNTY, TN, DATED 04/16/2007.
OWNER OF RECORD
W & M LLC 2050 BELSHIRE WAY SPRING HILL, TN 37174
APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

ALLISON B. CORDELL
REGISTERED ENGINEER
No. 127369
STATE OF TENNESSEE
11/18/2024

REVISIONS

NO.	DATE

DATE: 11/18/2024
SCALE: AS SHOWN
DRAWN BY: T-SQUARE
REVIEWER: ABC

EXISTING CONDITIONS
MAP 88M, GROUP B, PARCEL 7.00 & 7.01
COLUMBIA, TENNESSEE

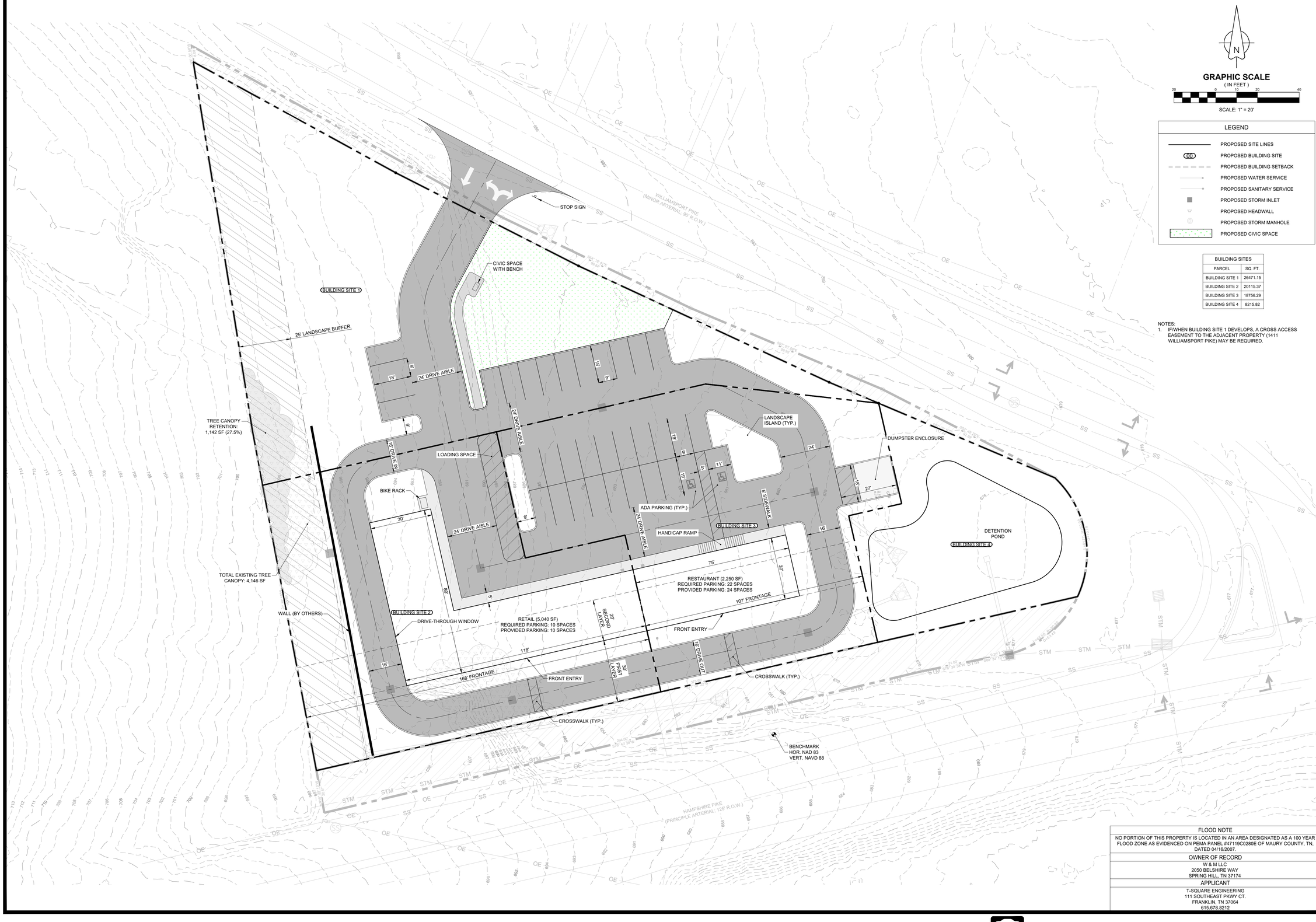
1400 HAMPSHIRE PIKE

PROJECT
23-0333

SHEET
C-1.0

T-SQUARE ENGINEERING

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BUILDING SITES	
PARCEL	SQ. FT.
BUILDING SITE 1	26471.15
BUILDING SITE 2	20115.37
BUILDING SITE 3	18756.29
BUILDING SITE 4	8215.82

NOTES:
1. IF/WHEN BUILDING SITE 1 DEVELOPS, A CROSS ACCESS EASEMENT TO THE ADJACENT PROPERTY (1411 WILLIAMSPORT PIKE) MAY BE REQUIRED.

FLOOD NOTE
NO PORTION OF THIS PROPERTY IS LOCATED IN AN AREA DESIGNATED AS A 100 YEAR FLOOD ZONE AS EVIDENCED ON PEMA PANEL #47119C0280E OF MAURY COUNTY, TN, DATED 04/16/2007.
OWNER OF RECORD
W & M LLC 2050 BELSHIRE WAY SPRING HILL, TN 37174
APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

REVISIONS

NO.	DATE

DATE: 11/18/2024
SCALE: AS SHOWN
DRAWN BY: T-SQUARE
REVIEWER: ABC

PRELIMINARY PLAT

MAP 88M, GROUP B, PARCEL 7.00 & 7.01
COLUMBIA, TENNESSEE

1400 HAMPSHIRE PIKE

ALLISON B. CORDELL
REGISTERED ENGINEER
No. 127369
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

SHEET
C-2.0

T-SQUARE ENGINEERING

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FLOOD NOTE
NO PORTION OF THIS PROPERTY IS LOCATED IN AN AREA DESIGNATED AS A 100 YEAR FLOOD ZONE AS EVIDENCED ON PEMA PANEL #47119C0280E OF MAURY COUNTY, TN, DATED 04/16/2007.
OWNER OF RECORD
W & M LLC 2050 BELSHIRE WAY SPRING HILL, TN 37174
APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

T-SQUARE ENGINEERING

REVISIONS

NO.	DATE

DATE: 11/18/2024
SCALE: AS SHOWN
DRAWN BY: T-SQUARE
REVIEWER: ABC

CIVIC SPACE PLAN

MAP 88M, GROUP B, PARCEL 7.00 & 7.01
COLUMBIA, TENNESSEE

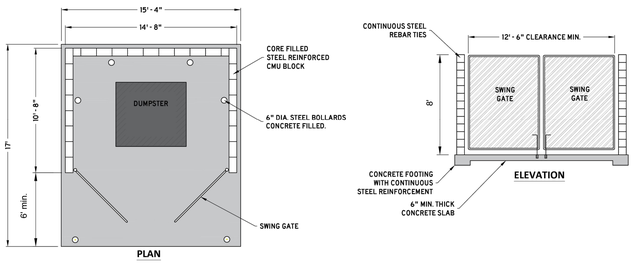
1400 HAMPSHIRE PIKE

ALLISON B. CORDELL
REGISTERED ENGINEER
No. 127399
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

SHEET
C-2.1

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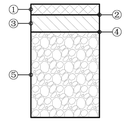
NOTES:

1. MATERIALS, CONSTRUCTION AND QUANTITY CONTROL OF MASONRY SHALL BE IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE (IBC).
2. MATERIALS USED SHOULD BE CONSISTENT WITH THOSE USED IN THE CONSTRUCTION OF AND ARCHITECTURAL STYLE OF THE PRINCIPAL BUILDING. SHALL BE COMPLIANT WITH THE ZONING ORDINANCE AND ALL OTHER APPLICABLE REGULATIONS
3. CONCRETE SLAB: MONOLITHIC, MIN. 6" THICKNESS W/IMBEDDED 6"X6"/ 10X10 WELDED WIRE FABRIC (W.W.F.), CLASS A 3000 P.S.I. CONCRETE FILLED CELLS: WITH 1-#5 VERTICAL REBAR TIED TO FOOTER STEEL AT EACH CORNER AND EVERY 4' O.C.
4. BOLLARD: 3'-6" HIGH, 6" DIAMETER STEEL PIPE BOLLARD FILLED WITH CONCRETE, PAINTED TRAFFIC YELLOW
5. ELEMENTS OF THIS DETAIL MAY BE ALTERED AND APPROVED BY THE CITY ENGINEER

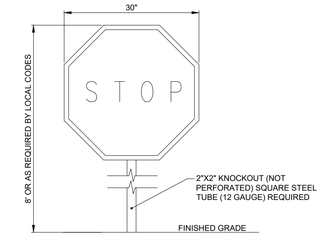
CITY OF COLUMBIA DEVELOPMENT SERVICES DEPARTMENT ENGINEERING DIVISION		DATE
STANDARD DETAILS	**DUMPSTER PAD AND ENCLOSURE** (NTS)	6/9/2022
		MD-01

PAVEMENT SCHEDULE

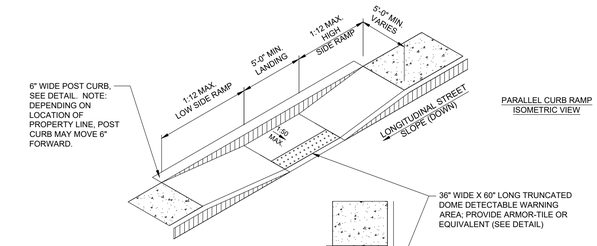
①	**SURFACE @ 1.5" THICK** 411-01.01 ASPHALT CONCRETE MIX (PG64-22) (ACS) GRADING D (SURFACE), OR 307-01.01 ASPHALT CONCRETE MIX (PG64-22) (ACS) GRADING C-W (SURFACE)
②	**TACK COAT (GENERAL USE)** 402-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (0.05 - 0.10 GAL/SY)
③	**BIT. BINDER @ 2" THICK** 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2
④	**PRIME COAT** 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) (0.30-0.35 GAL/SY) 402-02 AGGREGATE FOR COVER MATERIAL (PC) (#10 LSDT)
⑤	**MINERAL AGGREGATE BASE @ 6" THICK** 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D



CITY OF COLUMBIA DEVELOPMENT SERVICES DEPARTMENT ENGINEERING DIVISION		DATE
STANDARD DETAILS	**PARKING LOT PAVEMENT SECTION** (NTS)	6/9/2022
		MD-02



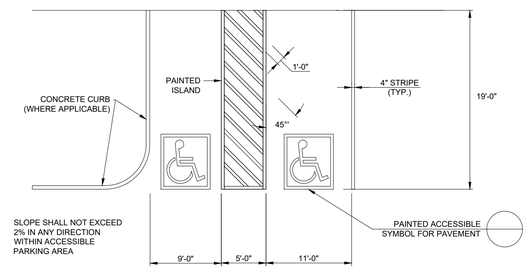
MUTCD R1-1 STOP SIGN DETAIL
N.T.S



STREET SLOPE	REQUIRED MINIMUM RAMP LENGTH	
	LOW SIDE	HIGH SIDE
1%	5'-6"	7'-2"
2%	5'-0"	8'-4"
3%	4'-6"	10'-0"
4%	4'-2"	12'-6"
5%	3'10"	16-8"

NOTE: SLOPE ON LANDING SHALL NOT EXCEED 2.0% IN ANY DIRECTION.

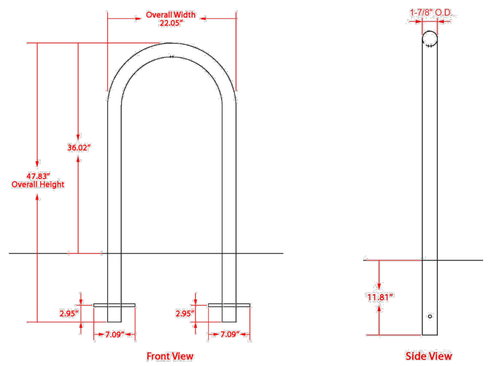
ADA CURB RAMP
N.T.S



TYPICAL ACCESSIBLE PARKING SPACE
N.T.S

Specification Sheet

Park-It 2 Bike Rack, Inground



Material	Finish	Dimensions	Weight
Steel tubing	Powder-coated black	22.05" w x 47.83" h Above ground: 22.05" w x 36.02" h	24 lbs.

Type of Mount: Inground mount

Size of Tubing: 1-7/8" O.D. x 11-gauge

NO.	DATE	REVISIONS

DATE: 11/18/2024
SCALE: AS SHOWN
DRAWN BY: T-SQUARE
REVIEWER: ABC

SITE DETAILS
MAP 88M, GROUP B, PARCEL 7.00 & 7.01
COLUMBIA, TENNESSEE

1400 HAMPSHIRE PIKE

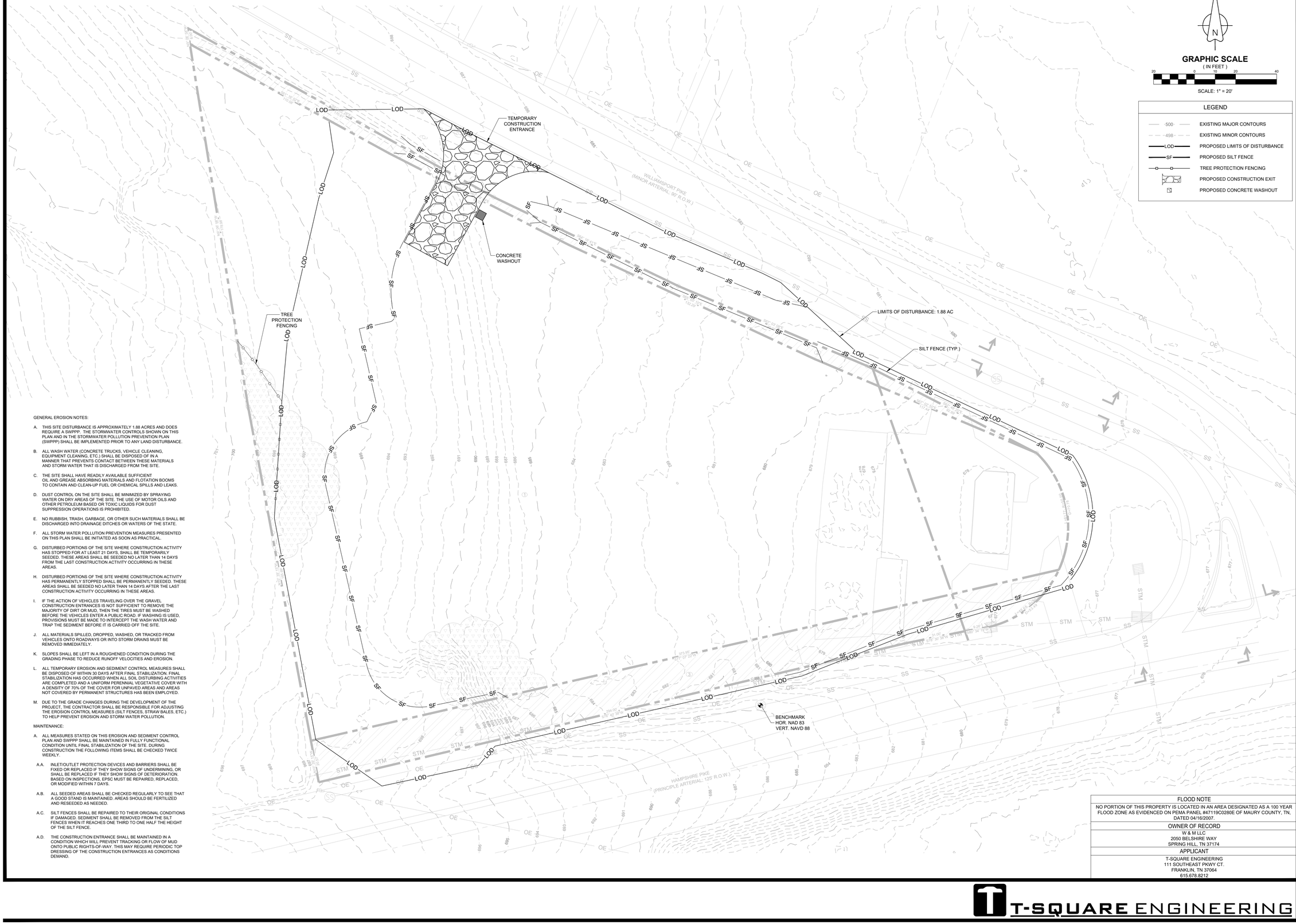
ALLISON B. CORCORAN
LICENSED PROFESSIONAL ENGINEER
No. 127369
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

SHEET
C-2.2

T-SQUARE ENGINEERING

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GENERAL EROSION NOTES:

A. THIS SITE DISTURBANCE IS APPROXIMATELY 1.88 ACRES AND DOES REQUIRE A SWPPP. THE STORMWATER CONTROLS SHOWN ON THIS PLAN AND IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE IMPLEMENTED PRIOR TO ANY LAND DISTURBANCE.

B. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTACT BETWEEN THESE MATERIALS AND STORM WATER THAT IS DISCHARGED FROM THE SITE.

C. THE SITE SHALL HAVE READILY AVAILABLE SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.

D. DUST CONTROL ON THE SITE SHALL BE MINIMIZED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

E. NO RUBBISH, TRASH, GARBAGE, OR OTHER SUCH MATERIALS SHALL BE DISCHARGED INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

F. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN SHALL BE INITIATED AS SOON AS PRACTICAL.

G. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 21 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.

H. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.

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J. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

K. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

L. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN 30 DAYS AFTER FINAL STABILIZATION. FINAL STABILIZATION HAS OCCURRED WHEN ALL SOIL DISTURBING ACTIVITIES ARE COMPLETED AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OF THE COVER FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES HAS BEEN EMPLOYED.

M. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BALES, ETC.) TO HELP PREVENT EROSION AND STORM WATER POLLUTION.

MAINTENANCE:

A. ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN AND SWPPP SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL FINAL STABILIZATION OF THE SITE. DURING CONSTRUCTION THE FOLLOWING ITEMS SHALL BE CHECKED TWICE WEEKLY.

A.A. INLET/OUTLET PROTECTION DEVICES AND BARRIERS SHALL BE FIXED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR SHALL BE REPLACED IF THEY SHOW SIGNS OF DETERIORATION. BASED ON INSPECTIONS, EPSC MUST BE REPAIRED, REPLACED, OR MODIFIED WITHIN 7 DAYS.

A.B. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.

A.C. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE THIRD TO ONE HALF THE HEIGHT OF THE SILT FENCE.

A.D. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.

FLOOD NOTE
NO PORTION OF THIS PROPERTY IS LOCATED IN AN AREA DESIGNATED AS A 100 YEAR FLOOD ZONE AS EVIDENCED ON PEMA PANEL #47119C0280E OF MAURY COUNTY, TN, DATED 04/16/2007.
OWNER OF RECORD
W & M LLC 2050 BELSHIRE WAY SPRING HILL, TN 37174
APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

REVISIONS

NO.	DATE

DATE: 11/18/2024
SCALE: AS SHOWN
DRAWN BY: T-SQUARE
REVIEWER: ABC

INITIAL EROSION CONTROL PLAN

MAP 88M, GROUP B, PARCEL 7.00 & 7.01
COLUMBIA, TENNESSEE

1400 HAMPSHIRE PIKE

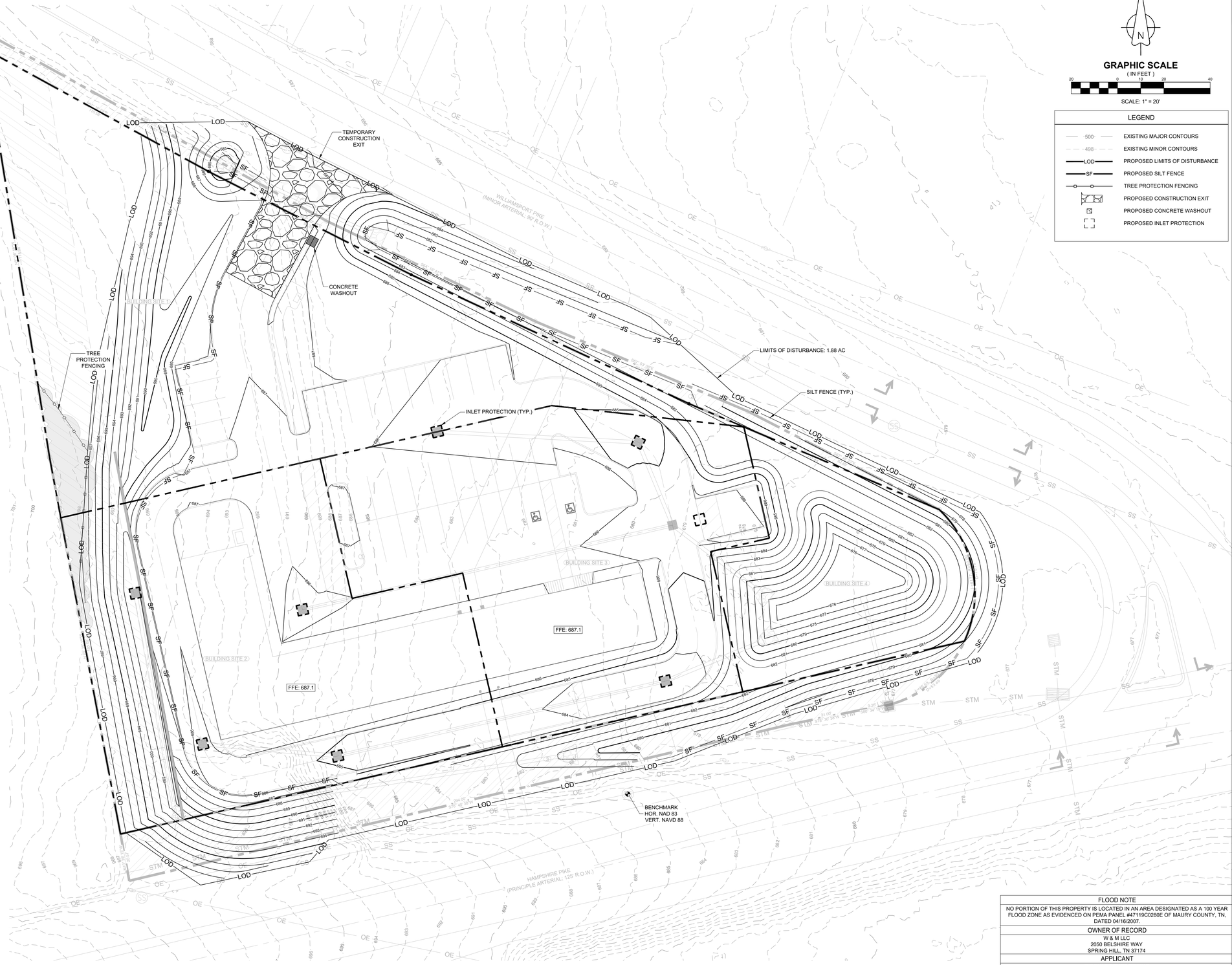
ALLISON B. CORDELL
REGISTERED ENGINEER
No. 127599
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

SHEET
C-3.0

T-SQUARE ENGINEERING

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GRAPHIC SCALE
(IN FEET)
20 0 10 20 40
SCALE: 1" = 20'

LEGEND

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED SILT FENCE
- TREE PROTECTION FENCING
- PROPOSED CONSTRUCTION EXIT
- PROPOSED CONCRETE WASHOUT
- PROPOSED INLET PROTECTION

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OWNER OF RECORD
W & M LLC 2050 BELSHIRE WAY SPRING HILL, TN 37174
APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

REVISIONS

NO.	DATE

DATE: 11/18/2024
SCALE: AS SHOWN
DRAWN BY: T-SQUARE
REVIEWER: ABC

TEMPORARY EROSION CONTROL PLAN

MAP 88M, GROUP B, PARCEL 7.00 & 7.01
COLUMBIA, TENNESSEE

1400 HAMPSHIRE PIKE

ALLISON B. CORDELL
REGISTERED ENGINEER
No. 127390
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

SHEET
C-3.1

T-SQUARE ENGINEERING

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GRAPHIC SCALE
(IN FEET)
20 0 10 20 40
SCALE: 1" = 20'

LEGEND	
500	EXISTING MAJOR CONTOURS
498	EXISTING MINOR CONTOURS
	PROPOSED MAJOR CONTOURS
498	PROPOSED MINOR CONTOURS
	PROPOSED PERMANENT SEEDING
	PROPOSED EROSION CONTROL MAT

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APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

T-SQUARE ENGINEERING

REVISIONS

NO.	DATE

DATE: 11/18/2024
SCALE: AS SHOWN
DRAWN BY: T-SQUARE
REVIEWER: ABC

PERMANENT EROSION CONTROL PLAN

MAP 88M, GROUP B, PARCEL 7.00 & 7.01
COLUMBIA, TENNESSEE

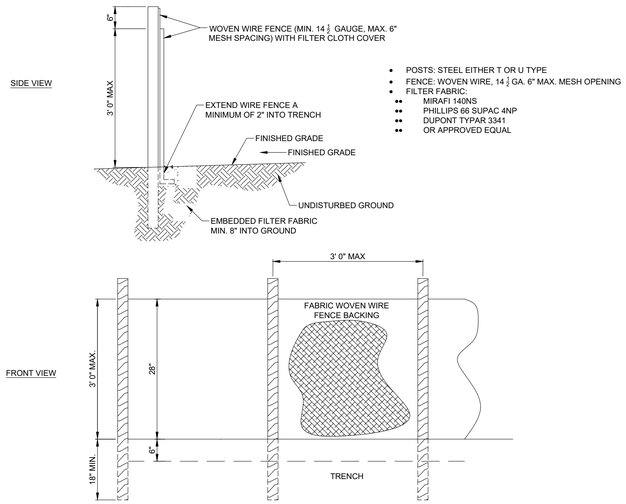
1400 HAMPSHIRE PIKE

ALLISON B. CORDELL
REGISTERED ENGINEER
No. 127369
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

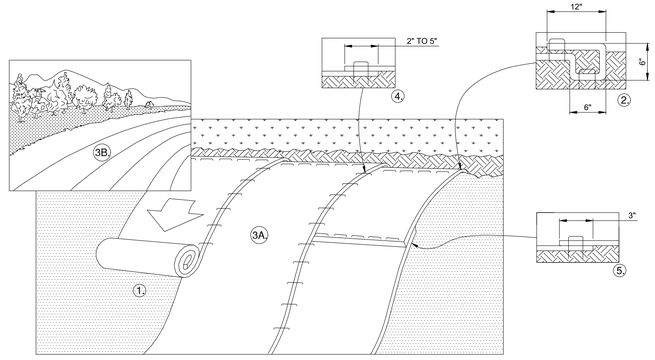
SHEET
C-3.2

P:\Projects\2023\23-0333 (1400 Hampshire Pike - Roy Dale)\Production\23-0333 3 Erosion Control Plan.dwg, 11/18/2024 8:15:36 AM



1. WOVEN WIRE CE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR WHEN TOP LINE IS NOT VISIBLE.
5. J-HOOK METHOD IS REQUIRED WHEN CROSSING CONTOURS PERPENDICULARLY.

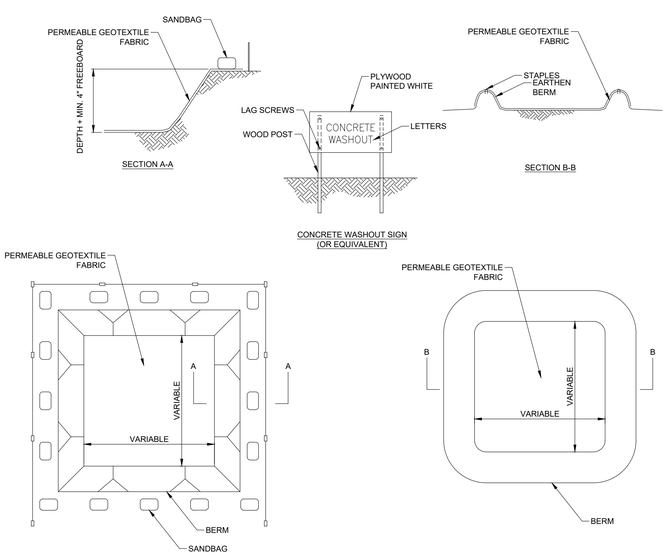
TYPE "C" SEDIMENT/SILT FENCE
N.T.S



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
   1.1. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5 CM-12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BEE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL MATTING DETAIL
N.T.S



NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. SIGNAGE IDENTIFYING THE CONCRETE WASHOUT AREA SHALL BE INSTALLED WITHIN 5FT.OF THE WASHOUT FACILITY.

CONCRETE WASHOUT
N.T.S

Manufactured by:
Agri Drain CORPORATION

PO Box 458 · 1462 340th Street · Adair, Iowa 50002
Phone: 1-800-232-4742 · Fax: 1-800-282-3353
www.agridrain.com · email: info@agridrain.com

Anti-Seep Collars

Keep your pipe from being washed out.

- The Anti-Seep Collar works with any smoothwall pipe or corrugated plastic tubing.
- 1/16" gum rubber.
- Easy to install.
- Tan floating stock has superior resilience, elongation, and tear strength.
- Resistant to water, most salts, mild acids, and many other chemicals.
- Wood frame.
- Economical to buy.

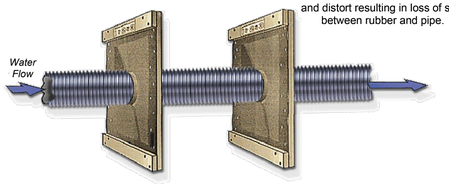
Anti-Seep Flanges—
1/16" Gum Rubber
with Wood Frame

ASC02 .....2' x 2'
ASC03 .....3' x 3'
ASC04 .....4' x 4'
ASC05 .....5' x 5'
ASC06 .....6' x 6'



Recommended Anti-Seep Collar

Pipe Size	Item#
3"	ASC02
4", 5", 6", 8", 10", 12"	ASC03
15", 18", 24"	ASC04
30", 36"	ASC05
42", 48", 60"	ASC06



Backfill material to be structure soil; gravel is not required

Directions for Using The Anti-Seep Collar

1. Unroll the Anti-Seep Collar and align the boards to form a square. Attach metal brackets to the corner of the boards with the screws provided. Attach the rubber to the frame with the nails provided.
2. ***IMPORTANT—Cut a round hole** in the center of the rubber that is smaller than the pipe size (approx. 33% smaller). This will allow the rubber to stretch over the pipe when the Anti-Seep Collar is installed on the pipe. This will provide a tight seal between the pipe and the Anti-Seep Collar.

   ***Cutting an "X" or slit will cause the rubber to tear.**
3. Slip the pipe through the Anti-Seep Collar, inspect the seal between the pipe and the Anti-Seep Collar, carefully backfill, and compact with suitable soil.

CAUTION: Excessive compaction or downward pressure on wooden frame will cause rubber to stretch and distort resulting in loss of seal between rubber and pipe.

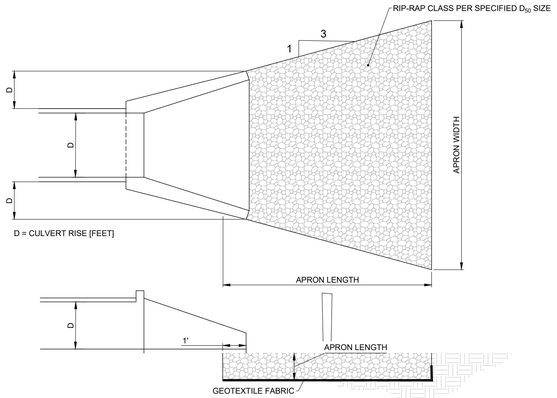


Table 10.1. Example Riprap Classes and Apron Dimensions

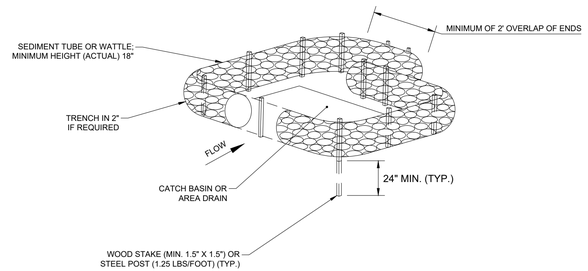
Class	D_{50} (mm)	D_{50} (in)	Apron Length[1]	Apron Depth
1	125	5	4D	$3.5D_{50}$
2	150	6	4D	$3.3D_{50}$
3	250	10	5D	$2.4D_{50}$
4	350	14	6D	$2.2D_{50}$
5	500	20	7D	$2.0D_{50}$
6	550	22	8D	$2.0D_{50}$

[1]D is the culvert rise.

RIP-RAP APRON DIMENSIONS (per HEC-14, SECTION 10)

STRUCTURE	D_{50} [inches]	APRON LENGTH [feet]	APRON DEPTH [inches]	APRON WIDTH [feet]
HW-A1	3.7	6	11	9
HW-A2	3.7	6	11	9
HW-B1	1	6	3	9
HW-C1	1	6	3	9
HW-C2	1	6	3	9

OUTLET PROTECTION
N.T.S



INLET PROTECTION
N.T.S

FLOOD NOTE
NO PORTION OF THIS PROPERTY IS LOCATED IN AN AREA DESIGNATED AS A 100 YEAR FLOOD ZONE AS EVIDENCED ON PEMA PANEL #47119C0280E OF MAURY COUNTY, TN, DATED 04/16/2007.
OWNER OF RECORD
W & M LLC 2050 BELSHIRE WAY SPRING HILL, TN 37174
APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

REVISIONS

NO.	DATE

DATE: 11/18/2024
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DRAWN BY: T-SQUARE
REVIEWER: ABC

EROSION CONTROL DETAILS

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COLUMBIA, TENNESSEE

1400 HAMPSHIRE PIKE

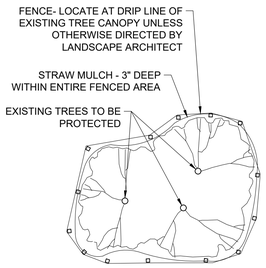
ALLISON B. COROLLA
REGISTERED ENGINEER
No. 127369
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

SHEET
C-3.3

T-SQUARE ENGINEERING

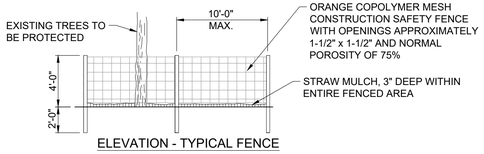
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PLAN - TYPICAL FENCE

NOTES:

1. INSTALL TREE PROTECTION PRIOR TO CLEARING AND GRUBBING.
2. ALL TREES DESIGNATED TO BE SAVED SHALL BE PROTECTED.
3. REMOVE ALL EXISTING CONCRETE OR ASPHALT PAVEMENT WITHIN THE LIMITS OF THE FENCED AREA. IF REMOVAL CREATES A POTENTIAL FOR STANDING WATER, AREA SHALL BE FILLED TO PROVIDE POSITIVE DRAINAGE, OR AREA OUTSIDE FENCE SHALL BE GRADED TO PROVIDE FOR POSITIVE DRAINAGE.
4. REMOVE ALL VINES FROM PROTECTED TREES.
5. DEAD OR DAMAGED LIMBS SHALL BE REMOVED BY AN ARBORIST.
6. NO GRADING SHALL TAKE PLACE WITHIN THE DRIP LINE OF PROTECTED TREES.
7. CONTRACTOR SHALL MAINTAIN TREE PROTECTION THROUGHOUT CONSTRUCTION.



ELEVATION - TYPICAL FENCE

TREE PROTECTION

N.T.S.

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APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

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EROSION CONTROL DETAILS

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COLUMBIA, TENNESSEE

1400 HAMPSHIRE PIKE

ALLISON B. COROLLA
REGISTERED ENGINEER
No. 127369
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

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T-SQUARE ENGINEERING

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APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

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REVIEWER: ABC

GRADING PLAN

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COLUMBIA, TENNESSEE

1400 HAMPSHIRE PIKE

ALLISON B. COROLLA
REGISTERED ENGINEER
No. 127389
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

SHEET
C-5.0

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N

GRAPHIC SCALE

(IN FEET)

20 0 10 20 40

SCALE: 1" = 20'

LEGEND	
500	EXISTING MAJOR CONTOURS
498	EXISTING MINOR CONTOURS
	PROPOSED MAJOR CONTOURS
498	PROPOSED MINOR CONTOURS
	PROPOSED HEADWALL
	PROPOSED AREA DRAIN
	PROPOSED STORM PIPE

STRUCTURE TABLE

STRUCTURE NAME	DESCRIPTION	DETAILS	PIPES IN	PIPES OUT
RISER-1	RISER			INV. OUT =674.60
ST-A1	AREA DRAIN	RIM = 685.59 FG = 685.59	INV. IN = 680.29 INV. IN = 680.29	INV. OUT =680.29
ST-A1A	AREA DRAIN	RIM = 684.69 FG = 684.69	INV. IN = 680.72	INV. OUT =680.72
ST-A1B	AREA DRAIN	RIM = 685.67 FG = 685.67		INV. OUT =681.62
ST-A2	AREA DRAIN	RIM = 685.77 FG = 685.77		INV. OUT =681.77
ST-A3	AREA DRAIN	RIM = 683.45 FG = 683.45	INV. IN = 679.43	INV. OUT =679.43
ST-A3A	AREA DRAIN	RIM = 684.91 FG = 684.91	INV. IN = 680.88	INV. OUT =680.88
ST-A3B	AREA DRAIN	RIM = 685.57 FG = 685.57		INV. OUT =681.47
ST-B1A	MANHOLE	RIM = 692.41 FG = 692.41	INV. IN = 683.59	INV. OUT =683.59
ST-B1B	AREA DRAIN	RIM = 691.21 FG = 691.00		INV. OUT =688.00
ST-HW-A1	HEADWALL		INV. IN = 678.00	
ST-HW-A2	HEADWALL		INV. IN = 679.00	
ST-HW-B1	HEADWALL		INV. IN = 681.25	
ST-HW-C1	HEADWALL			INV. OUT =684.50
ST-HW-C2	HEADWALL		INV. IN = 682.00	

PIPE TABLE

NAME	SIZE	LENGTH	SLOPE
RISER-1 TO EX-DROP INLET	18" RCP	45.60	0.64%
ST-A1 TO ST-HW-A1	18" RCP	43.45	5.18%
ST-A1A TO ST-A1	18" RCP	37.25	1.10%
ST-A1B TO ST-A1A	18" RCP	85.61	1.04%
ST-A2 TO ST-A1	18" RCP	162.77	0.90%
ST-A3 TO ST-HW-A2	18" RCP	42.48	1.00%
ST-A3A TO ST-A3	18" RCP	144.09	1.00%
ST-A3B TO ST-A3A	18" RCP	57.21	1.00%
ST-B1A TO ST-HW-B1	18" RCP	165.08	1.40%
ST-B1B TO ST-B1A	18" RCP	95.54	4.50%
ST-HW-C1 TO ST-HW-C2	18" RCP	62.32	4.01%

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APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

REVISIONS

NO.	DATE

DATE: 11/18/2024
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REVIEWER: ABC

DRAINAGE PLAN

MAP 88M, GROUP B, PARCEL 7.00 & 7.01
COLUMBIA, TENNESSEE

1400 HAMPSHIRE PIKE

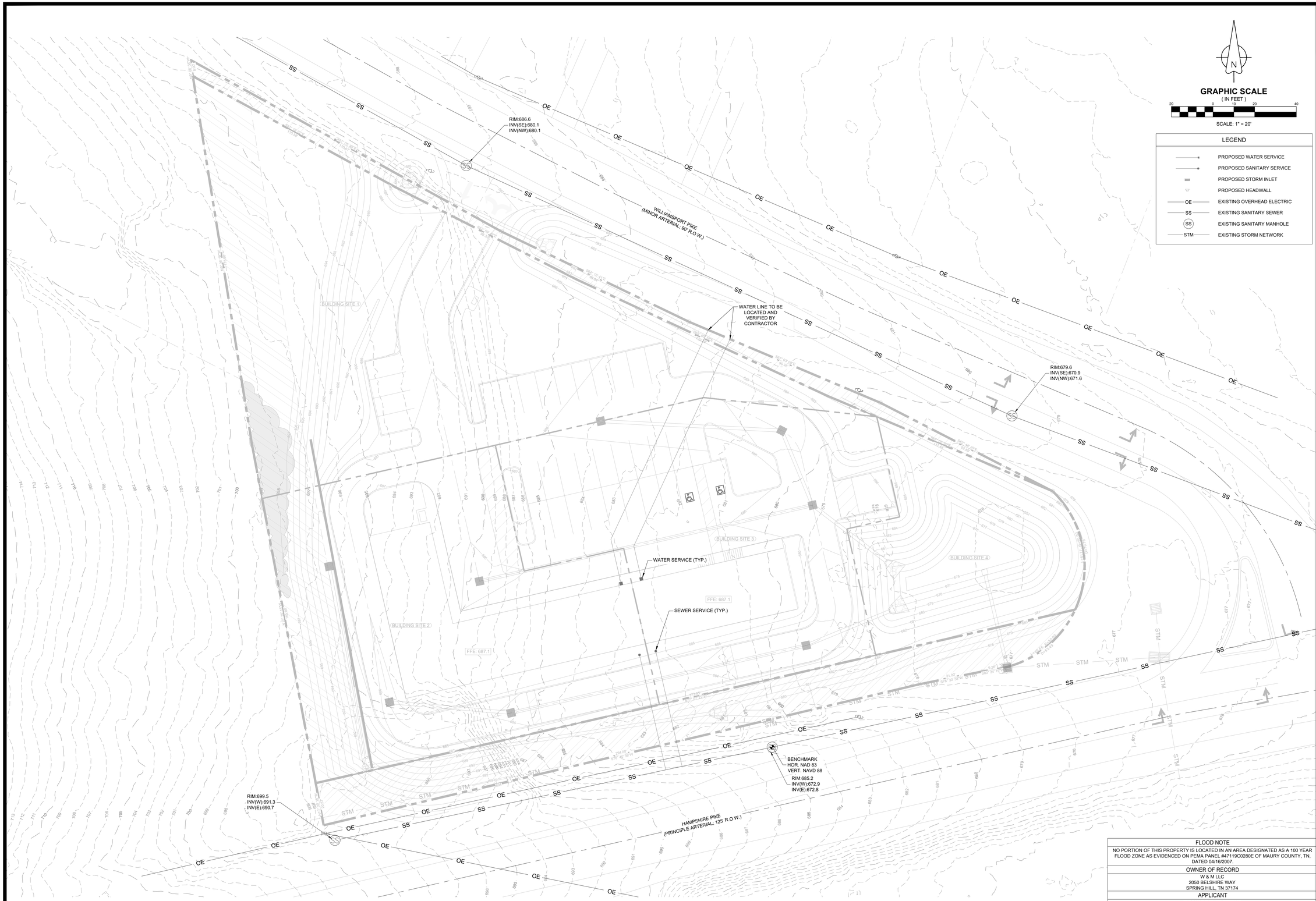
ALLISON B. COROLLA
REGISTERED ENGINEER
No. 127369
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

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C-5.1

T-SQUARE ENGINEERING

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APPLICANT
T-SQUARE ENGINEERING 111 SOUTHEAST PKWY CT. FRANKLIN, TN 37064 615.678.8212

T-SQUARE ENGINEERING

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UTILITY PLAN

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COLUMBIA, TENNESSEE

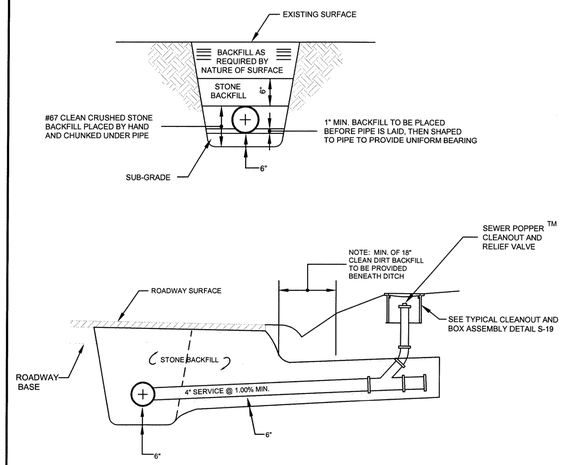
1400 HAMPSHIRE PIKE

ALLISON B. COROLLA
REGISTERED ENGINEER
No. 127369
STATE OF TENNESSEE
11/18/2024

PROJECT
23-0333

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C-7.0

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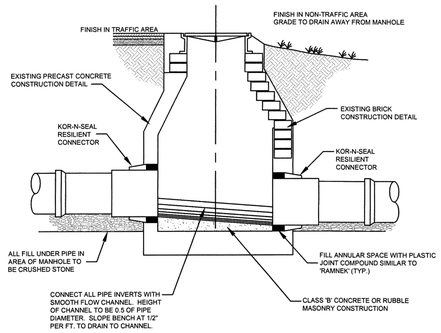
SERVICE LINE

NOT TO SCALE

CITY OF COLUMBIA, TENNESSEE

WMS# 21101

STANDARD SEWER DETAIL NO: S4



CONNECTION TO EXISTING MANHOLE

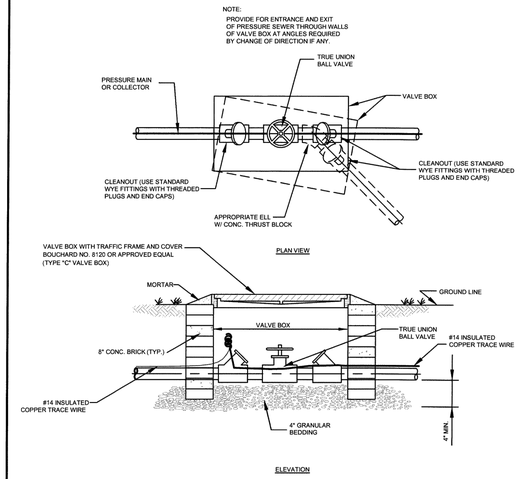
NOT TO SCALE

NOTE: THE CONTRACTOR SHALL NOT CONNECT TO EXISTING MANHOLE UNTIL ALL NEW SEWAGE FACILITIES HAVE BEEN INSTALLED, TESTED AND RELEASED FOR SERVICE.

CITY OF COLUMBIA, TENNESSEE

WMS# 21101

STANDARD SEWER DETAIL NO: S5



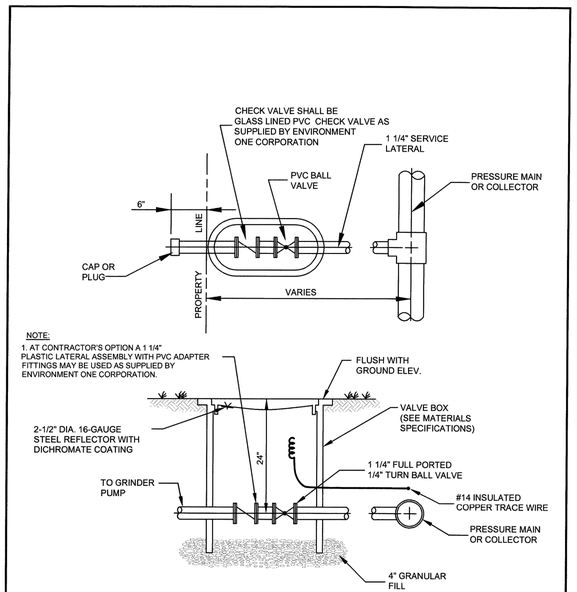
TYPICAL VALVE BOX AND CLEANOUT ARRANGEMENT ALONG STRAIGHT RUNS AND AT CHANGES IN DIRECTION

NOT TO SCALE

CITY OF COLUMBIA, TENNESSEE

WMS# 21101

STANDARD SEWER DETAIL NO: S6



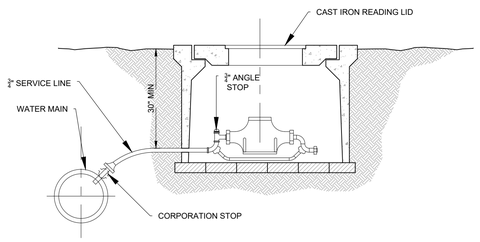
TYPICAL SERVICE LINE CONNECTION (1 1/4")

NOT TO SCALE

CITY OF COLUMBIA, TENNESSEE

WMS# 21101

STANDARD SEWER DETAIL NO: S7



MANUFACTURERS AND MODELS:

- CORPORATION VALVE (MUELLER H-15008)
- MANETIC DRIVE METER (ROCKWELL OR EQUAL)
- METER YOKE (MUELLER H-1418 w/ H-14227 INLET)
- METER BOX (BROOKS PRODUCTS NO 36 METER BOX, 16" DEEP w/ NO.36 COVER, OR EQUAL.)
- SERVICE SADDLE (MUELLER H-13400)

NOTES:

1. USE SADDLE FOR TAPS IN METAL PIPE LESS THAN 4" IN DIAMETER.
2. PLACE CLEAN CRUSHED STONE 3" DEEP IN BOTTOM OF METER BOX.

COLUMBIA WATER SYSTEM	REVISED: JUNE 1997	WATER SERVICE ASSEMBLY 5/8" X 3/4" METER	DRAWING NO. WSA 1

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REVISIONS

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REVIEWER: ABC

UTILITY PLAN DETAILS

MAP 88M, GROUP B, PARCEL 7.00 & 7.01
COLUMBIA, TENNESSEE

1400 HAMPSHIRE PIKE

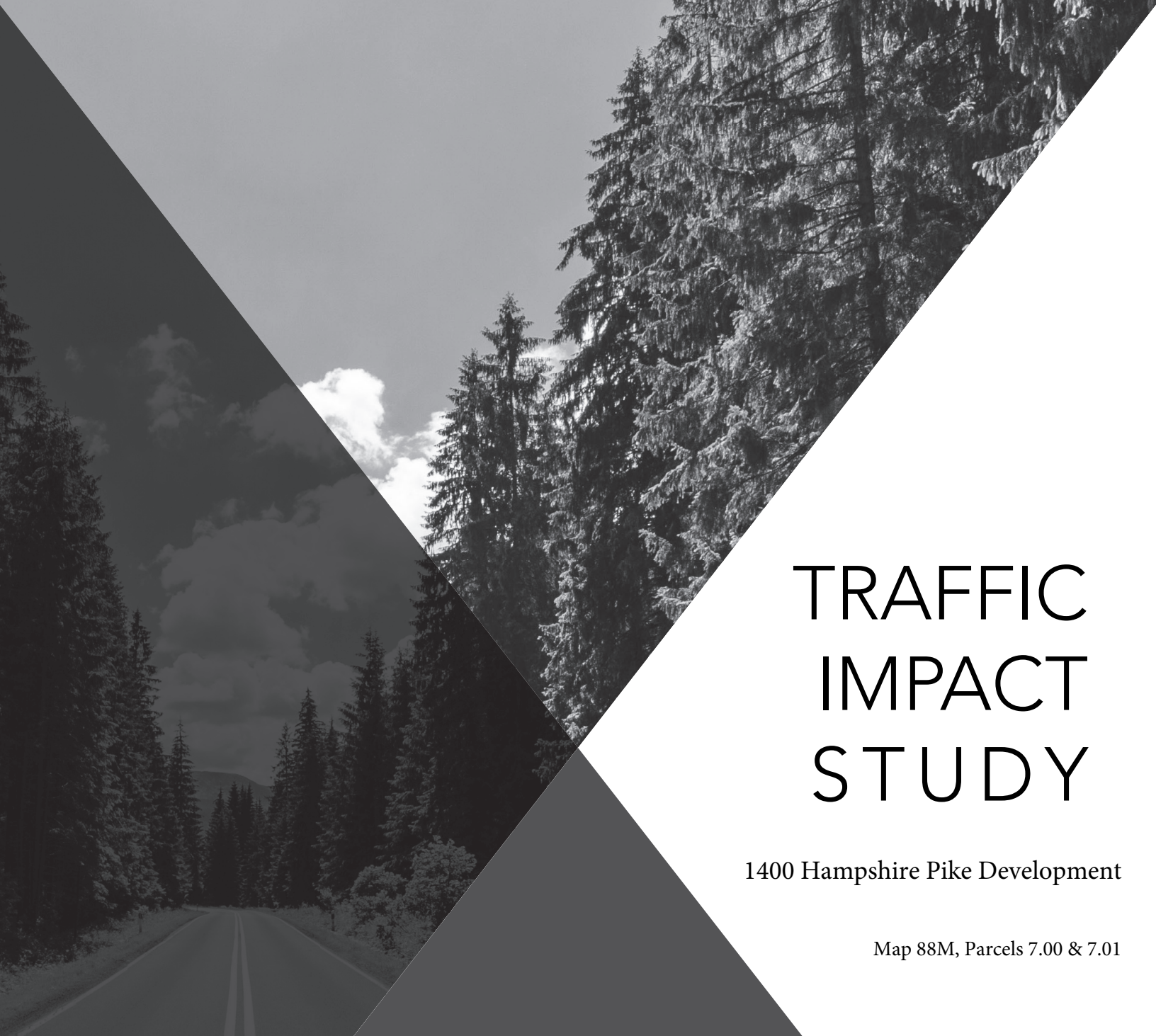
ALLISON B. CORDELL
REGISTERED ENGINEER
No. 127369
STATE OF TENNESSEE
11/18/2024

PROJECT 23-0333

SHEET C-7.1

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TRAFFIC IMPACT STUDY

1400 Hampshire Pike Development

Map 88M, Parcels 7.00 & 7.01

Columbia, TN

T2-Eng.com

T-SQUARE ENGINEERING

TRAFFIC IMPACT STUDY

1400 Hampshire Pike
Map 88M, Parcels 7.00 & 7.01
Columbia, TN

Prepared for:

Malak Salama

Prepared by:

T-SQUARE ENGINEERING
111 SE Parkway Ct
Franklin, TN 37064
615.678.8212
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111 SE Parkway Ct
Franklin, TN 37064
615-678-8212

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Certification

I certify that this Traffic Impact Study has been prepared by me and under my immediate supervision and that I have the experience and training in the field of traffic and transportation engineering.

James O. Ensley, III, P.E., PTOE
T-Square Engineering, Inc.
Project Manager – Traffic Division

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Introduction

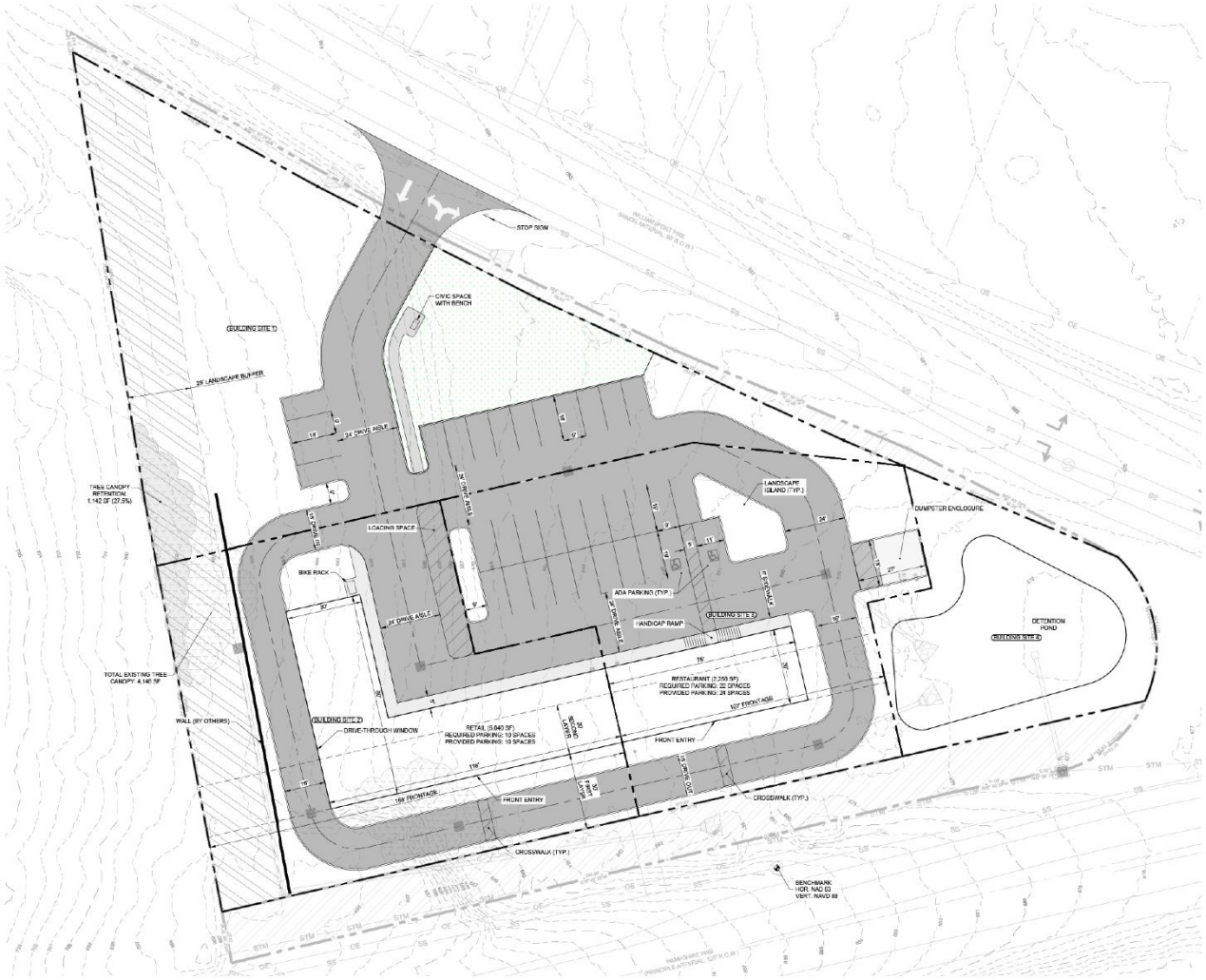
The purpose of this study is to analyze the traffic impacts on the surrounding roadway network associated with the proposed development along Hampshire Pike in Columbia, TN. The proposed development will consist of a Convenience Store of approximately 5,040 SF and a Fast Casual Restaurant of approximately 2,250 SF.

As shown on the Location Map and Preliminary Site Plan on Figures 1 and 2, respectively, the proposed development is located along the north side of Hampshire Pike west of Williamsport Pike in Columbia, TN. The development is proposing one (1) full access along Williamsport Pike. The surrounding area is predominantly residential and commercial.

This study analyzes the existing and projected traffic operations of the roadway networks and intersections surrounding the proposed development. To evaluate the projected traffic operations, existing traffic volumes were grown (background traffic volumes) to a 2025 design year based on average traffic growth rates and combined with the generated traffic volumes from nearby background developments and estimated trips generated from the proposed development. Lastly, improvement recommendations were presented to alleviate the anticipated traffic volumes' effect on the existing roadway network near the site.



Figure 1
Location Map



N.T.S.

Figure 2
Preliminary Site Plan

Existing Study Area

Existing Roadway Network

The existing roadway network surrounding the proposed development on Hampshire Pike includes Hampshire Pike, Williamsport Pike, and Oak Springs Drive. Below is a description of each roadway serving the proposed development:

Hampshire Pike

Hampshire Pike is functionally classified by the City of Columbia as a Principal Arterial. Near the project site, Hampshire Pike is oriented in an east-west direction and provides a connection between US-412 to the west and N James Campbell Boulevard to the east. Near the project site, Hampshire Pike is a two (2) lane roadway with one (1) twelve (12) foot travel lane in each direction (eastbound and westbound) with nine (9) foot shoulders. The posted speed limit along Hampshire Pike is 40 MPH.


Looking west along Hampshire Pike

Williamsport Pike

Williamsport Pike is functionally classified by the City of Columbia as a Minor Arterial. Near the project site, Williamsport Pike is oriented in a north-south direction and provides a connection from US-412 to the north and Hampshire Pike to the south. Near the project site, Williamsport Pike is a two (2) lane roadway with one (1) twelve (12) foot travel lane in each direction (northbound and southbound) with four (4) foot shoulders. The posted speed limit along Williamsport Pike is 45 MPH.


Looking north along Williamsport Pike

Oak Springs Drive

Oak Springs Drive is functionally classified by the City of Columbia as a Minor Local Road. Oak Springs Drive is oriented in a north-south direction and provides a connection between Hampshire Pike to the south and terminates to the north. Near the project site, Oak Springs Drive is a two (2) lane roadway with one (1) twelve (12) foot travel lane in each direction (northbound and southbound) with curb and gutter. The posted speed limit along Oak Springs Drive is 25 MPH.



Looking north along Oak Springs Drive

Existing Intersections

This study analyzed two (2) existing intersections within the vicinity of the project site. The intersections analyzed are listed below with a brief description of each, and Figure 3 shows the existing lane geometry at the intersections.

Hampshire Pike and Williamsport Pike

The existing intersection of Hampshire Pike and Williamsport Pike is an unsignalized intersection with three (3) approaches. The southbound approach of Williamsport Pike has one (1) exclusive lane for left-turn movements operating under a stop condition and one (1) channelized lane for right-turn movements with approximately 235 feet of storage operating under a yield condition. The eastbound approach of Hampshire Pike has one (1) exclusive lane for left-turn movements with approximately ninety (90) feet of storage and one (1) exclusive lane for through movements operating under a free-flow condition. The westbound approach of Hampshire Pike has one (1) exclusive lane for through movements and one (1) exclusive lane for right-turn movements with approximately 175 feet of storage operating under a free-flow condition.



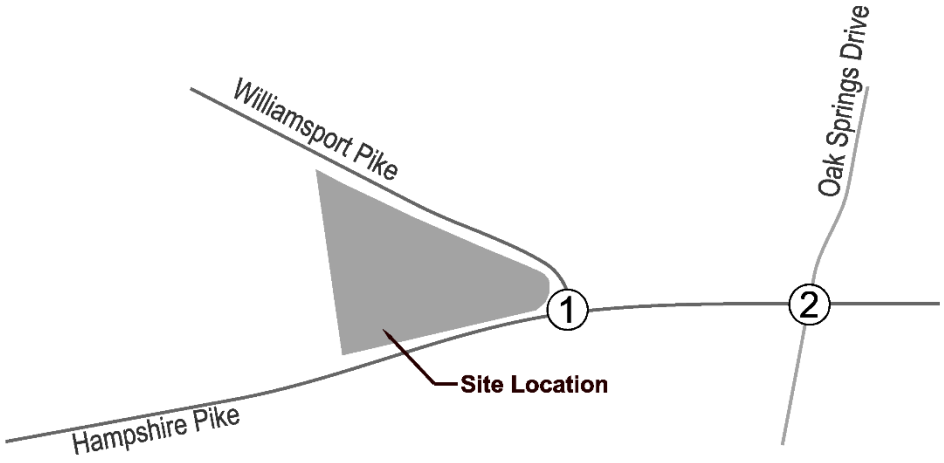
Looking south along Williamsport Pike towards its intersection with Hampshire Pike

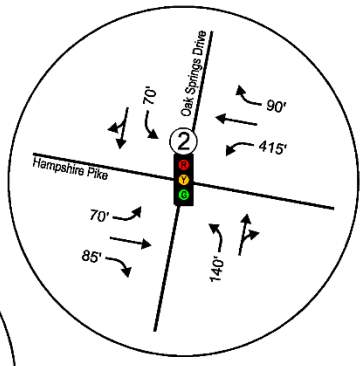
Hampshire Pike and Oak Springs Drive

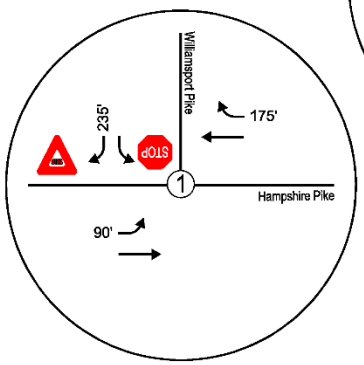


Looking west along Hampshire Pike toward its intersection with Oak Springs Drive

The existing intersection of Hampshire Pike and Oak Springs Drive is a signalized intersection with four (4) approaches. The northbound approach of Oak Springs Drive has one (1) exclusive lane for left-turn movements with approximately 140 feet of storage and one (1) shared lane for through and right-turn movements. The southbound approach of Oak Springs Drive has one (1) exclusive lane for left-turn movements with approximately seventy (70) feet of storage and one (1) shared lane for through and right-turn movements. The eastbound approach of Hampshire Pike has one (1) exclusive lane for left-turn movements with approximately seventy (70) feet of storage, one (1) exclusive lane for through movements, and one (1) exclusive lane for right-turn movements with approximately eighty-five (85) feet of storage. The westbound approach of Hampshire Pike has one (1) exclusive lane for left-turn movements with approximately 415 feet of storage which transitions into a two-way-left-turn-lane, one exclusive lane for through movements, and one (1) exclusive lane for right-turn movements with approximately ninety (90) feet of storage.







LEGEND

XX' - Storage Length

N.T.S.

Figure 3
Existing Lane Geometry

Existing Traffic Volumes

To establish existing traffic volumes within the study area, T-Square Engineering conducted turning movement counts at the study intersections on a typical weekday in October 2024 while Maury County Schools were in session. The turning movement counts were conducted over a total of twelve (12) hours from 6:00 AM – 6:00 PM. From the turning movement counts, the AM and PM peak hour traffic volumes for all intersections were established and determined to occur between 6:45 AM – 7:45 AM and 4:15 PM – 5:15 PM, respectively. Existing hourly turning movement counts are shown in the tables below. Figure 4 shows the existing peak hour totals at the study intersections for the AM and PM peak hour periods. Appendix A contains the detailed turning movement counts at each intersection.

Table 1. Turning Movement Counts, Hampshire Pike and Williamsport Pike

Time	SOUTHBOUND			WESTBOUND			EASTBOUND		
	Williamsport Pike			Hampshire Pike			Hampshire Pike		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6:00 – 7:00 AM	135	0	1	0	99	58	0	365	0
7:00 – 8:00 AM	117	0	5	0	313	111	6	562	0
8:00 – 9:00 AM	142	0	5	0	227	93	3	405	0
9:00 – 10:00 AM	127	0	8	0	267	110	2	395	0
10:00 – 11:00 AM	140	0	7	0	263	116	1	308	0
11:00 AM – 12:00 PM	145	0	9	0	327	133	4	331	0
12:00 – 1:00 PM	109	0	3	0	370	165	3	348	0
1:00 – 2:00 PM	138	0	9	0	344	143	7	368	0
2:00 – 3:00 PM	125	0	6	0	451	136	1	412	0
3:00 – 4:00 PM	113	0	5	0	600	210	8	408	0
4:00 – 5:00 PM	146	0	3	0	591	227	7	417	0
5:00 – 6:00 PM	127	0	3	0	544	229	7	397	0
TOTAL	**1,564**	**0**	**64**	**0**	**4,396**	**1,731**	**49**	**4,716**	**0**

Table 2. Turning Movement Counts, Hampshire Pike and Oak Springs Drive

Time	SOUTHBOUND			NORTHBOUND			WESTBOUND			EASTBOUND		
	Oak Springs Drive			Oak Springs Drive			Hampshire Pike			Hampshire Pike		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6:00 – 7:00 AM	21	0	2	2	0	0	22	152	11	7	458	27
7:00 – 8:00 AM	32	24	15	119	2	7	192	291	46	10	489	185
8:00 – 9:00 AM	38	1	26	6	0	6	17	290	43	25	516	12
9:00 – 10:00 AM	47	0	36	5	0	7	15	333	54	25	484	11
10:00 – 11:00 AM	40	1	27	3	0	14	13	348	47	16	422	9
11:00 AM – 12:00 PM	47	1	36	4	4	16	15	422	58	37	434	5
12:00 – 1:00 PM	61	3	41	8	1	15	19	487	73	32	422	4
1:00 – 2:00 PM	48	4	51	7	1	12	24	427	53	34	463	9
2:00 – 3:00 PM	59	1	58	53	3	19	55	477	71	30	468	30
3:00 – 4:00 PM	56	1	77	34	2	7	24	699	126	37	486	8
4:00 – 5:00 PM	65	1	74	18	0	15	6	727	106	49	501	13
5:00 – 6:00 PM	72	0	81	10	0	20	11	683	109	60	455	12
TOTAL	**586**	**37**	**524**	**269**	**13**	**138**	**413**	**5,336**	**797**	**362**	**5,598**	**325**

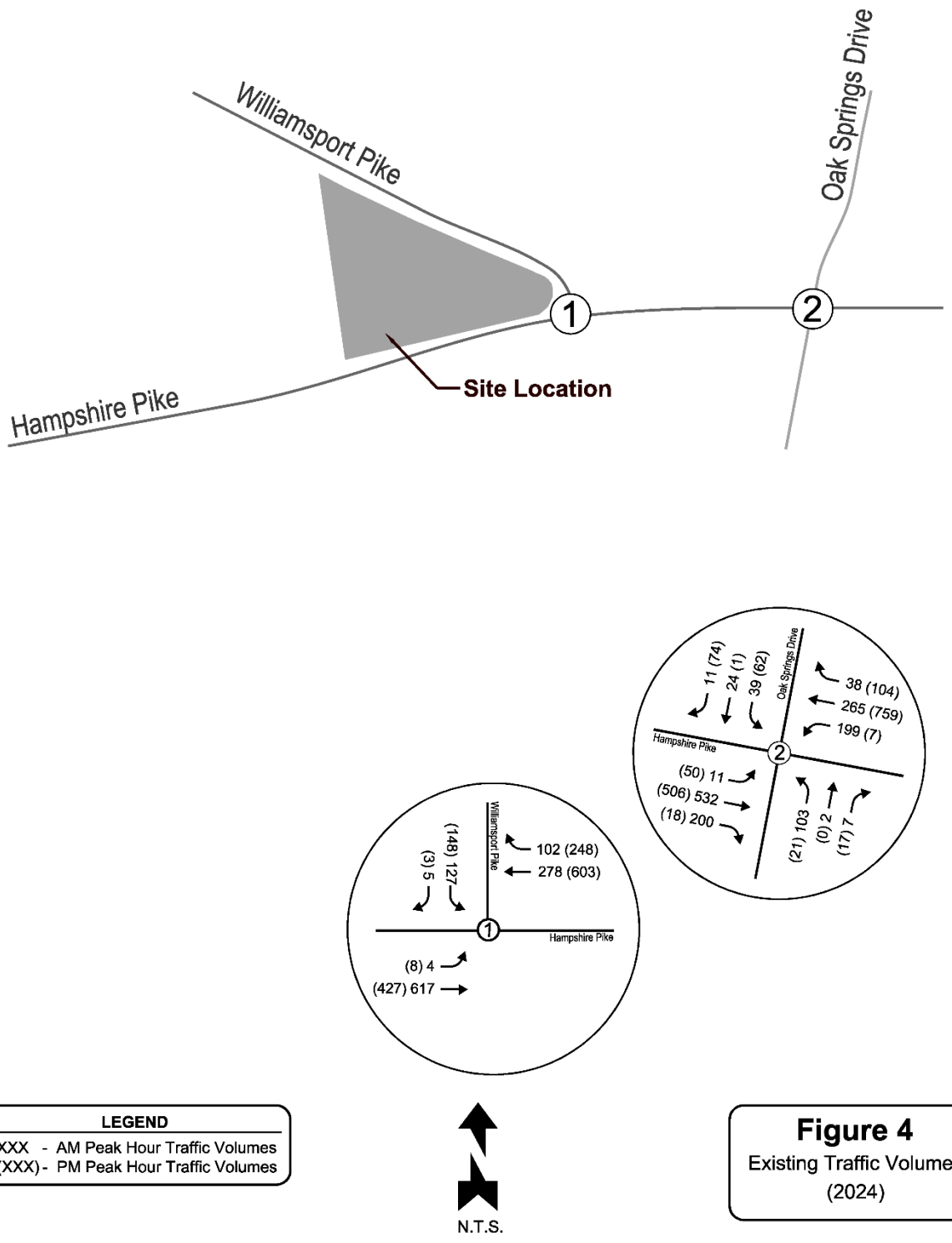


Figure 4
Existing Traffic Volumes
(2024)

Existing Capacity Analysis

To evaluate the existing traffic operations at the study intersections within the vicinity of the project site, AM and PM peak hour capacity analyses were performed per the calculations outlined in the *Highway Capacity Manual*[1](HCM). Levels of service (LOS), corresponding average delays, and 95th percentile queues were calculated for each turning movement. An LOS is a qualitative measure or grade used to distinguish how traffic is serviced at an intersection or along a roadway. The range of LOS is A to F, with A being the highest and F the lowest. The 95th percentile queue is the queue length (in vehicles) that has only a five (5) percent probability of being exceeded during the analysis period. The 95th percentile queue is not typical of what an average driver would experience, and driver experiences would be better characterized by the mean queue length. The table below details each LOS for signalized and unsignalized intersections, as specified within the HCM.

Table 3. Level of Service (LOS) Details

Level of Service*	Average Control Delay (seconds per vehicle)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50
Source: HCM 2010, Exhibits 18-4 and 19-1		

To determine the effectiveness of traffic operations within the study area a minimum LOS or baseline needs to be established. Any LOS below the established baseline will be considered unsatisfactory. LOS C is generally acceptable for typical roadway function while LOS D is typically considered to be the minimum acceptable LOS. According to the City of Columbia's *Connect Columbia Transportation Plan (2024)*, "In urban areas, LOS D is typically considered to be the minimum acceptable level of service." The following conditions shall be considered unsatisfactory for the purposes of this study:

1. Overall intersections with an LOS E or F.
2. Individual traffic movements with an LOS E or F.

The study intersections were analyzed with existing traffic volumes under existing roadway conditions/geometries. It should be noted that existing traffic signal timings were utilized at the intersection of Hampshire Pike and Oak Springs Drive. The existing capacity analyses were conducted using *Synchro* software by Trafficware for both signalized and unsignalized intersections. Appendix B contains the detailed capacity analyses results.

[1] Transportation Research Board (TRB). Highway Capacity Manual, 5th Edition (2010). Washington, DC: 2010

Table 4. 2024 Existing Capacity Analyses

Study Intersection	Control	Approach	2024 Existing Conditions					
			AM Peak Hour			PM Peak Hour		
			LOS	Delay (s)	Queue (feet)	LOS	Delay (s)	Queue (feet)
1. **Hampshire Pike and Williamsport Pike**	TWSC	SB Left	C	19.1	50	C	23.3	75
		SB Right	A	9.9	0	B	12.8	0
		EB Left	A	8.2	0	A	9.9	0
2. **Hampshire Pike and Oak Springs Drive**	Signalized	NB Left	E	58.6	143	E	62.9	45
		NB Thru/Right	E	60.0	20	E	66.2	0
		SB Left	E	63.1	65	E	60.3	101
		SB Thru/Right	E	70.4	61	E	69.3	54
		EB Left	A	5.8	9	A	7.1	20
		EB Thru	A	8.9	246	A	5.1	116
		EB Right	A	8.9	0	A	5.1	0
		WB Left	A	5.9	88	A	4.5	5
		WB Thru	A	6.1	153	B	10.5	517
		WB Right	A	5.1	0	A	5.3	17
		Overall	**B**	**14.7**	**--**	**B**	**14.1**	**--**

The following assessments are based on the results of the 2024 Existing Capacity Analyses as shown in the table above:

Hampshire Pike and Williamsport Pike

- All critical movements for this intersection currently operate at an acceptable minimum LOS C during the AM and PM peak with existing traffic volumes.

Hampshire Pike and Oak Springs Drive

- The exclusive northbound left-turn movement currently operates at LOS E during both the AM and PM peak hour periods with existing traffic volumes.
- The shared northbound through/right-turn movement currently operates at LOS E during both the AM and PM peak hour periods with existing traffic volumes.
- The exclusive southbound left-turn movement currently operates at LOS E during both the AM and PM peak hour periods with existing traffic volumes.
- The shared southbound through/right-turn movement currently operates at LOS E during both the AM and PM peak hour periods with existing traffic volumes.
- All other critical movements for this intersection currently operate at an acceptable minimum LOS B during the AM and PM peak with existing traffic volumes.

Background Traffic Volumes

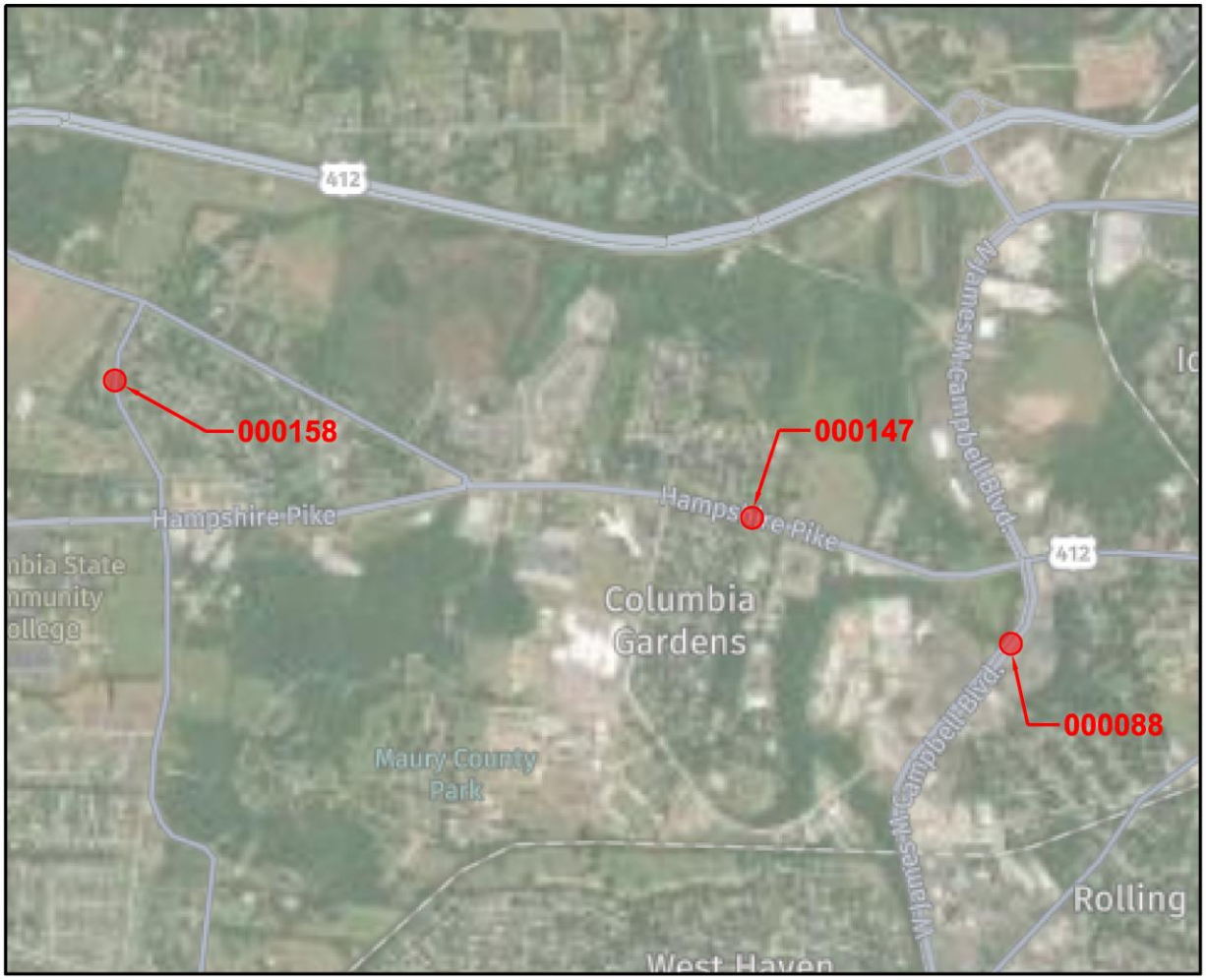
To account for traffic growth within the vicinity of the project site prior to the completion of the proposed development, background traffic volumes were established. Average annual daily traffic (AADT) volumes were obtained from Tennessee Department of Transportation (TDOT) count stations, and an average growth trend per year was established. This growth trend was used as a multiplication factor to grow the existing traffic volumes to the 2026 design year (development completion). Figure 5 displays the locations of the TDOT Count Stations within the surrounding area.

As shown in Figure 5, the average yearly percentage change in traffic over a six (6) year period from 2018 - 2023 was 2.22%. Therefore, the existing traffic volumes were grown by +2.22% per year for one (1) year. Figure D1 in Appendix D shows the background peak hour totals at the study intersections for the AM and PM peak hour periods.

To account for the additional traffic growth within the vicinity of the project site, the generated traffic volumes from previously conducted Traffic Studies near the project site were added to the grown background traffic volumes. The following traffic studies were used:

- The Williamsport Pike Development (KCI Technologies – December 2020)
- The Steadfast Hampshire Pike Development (Kimley-Horn – July 2022)

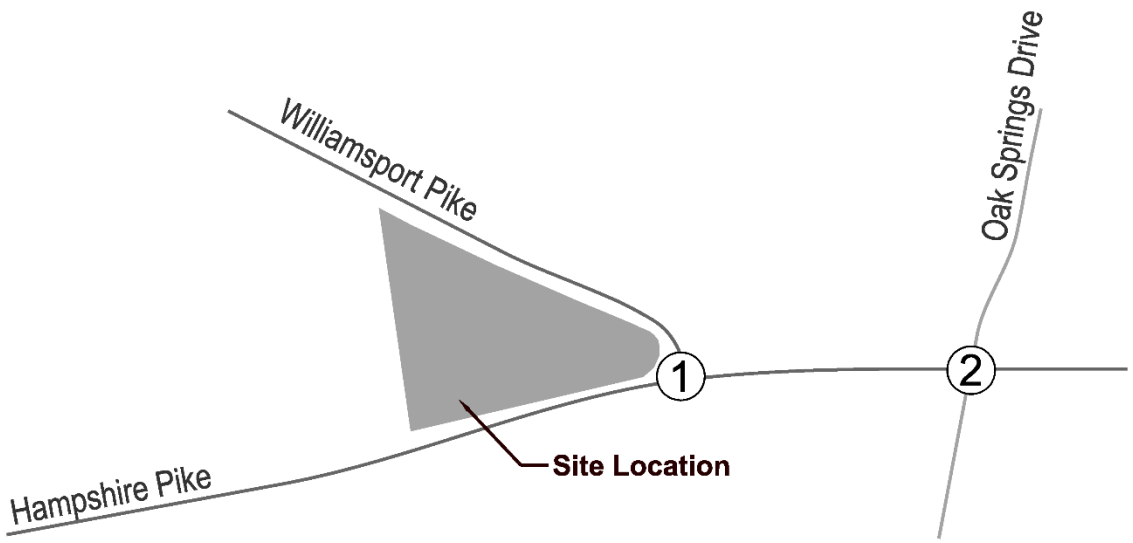
The generated traffic volumes from each background development are shown on Figures D2 and D3 in Appendix D. The background 2025 traffic volumes shown in Figure D1 were added to the generated background development volumes, resulting in the combined background peak hour traffic volumes for the study intersections, as shown on Figure 6.

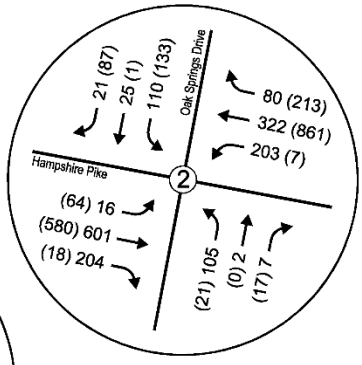


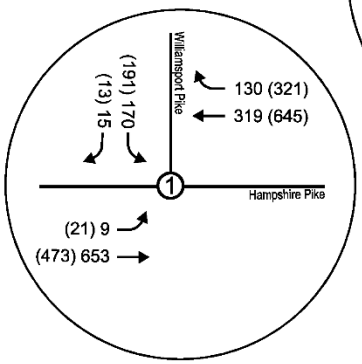
TDOT Count Station:	Maury 000158		Maury 000088		Maury 000147		Average % Growth
Year	AADT	% Change	AADT	% Change	AADT	% Change	
2023	2,717	--	20,287	--	11,705	--	--
2022	2,666	1.91%	19,501	6.80%	11,472	2.03%	3.58%
2021	2,438	5.72%	19,661	2.97%	11,402	1.33%	3.34%
2020	2,316	5.77%	18,906	3.39%	13,534	-4.50%	1.55%
2019	2,065	7.89%	21,205	-0.45%	12,187	-0.99%	2.15%
2018	2,773	-0.40%	19,254	1.63%	11,555	0.26%	0.49%
Average % Change	**4.18%**		**2.87%**		**-0.37%**		**2.22%**

N.T.S.

Figure 5
TDOT Count Locations & Background Traffic Growth Trends







LEGEND

XXX - AM Peak Hour Traffic Volumes
(XXX) - PM Peak Hour Traffic Volumes

N.T.S.

Figure 6
Combined Background Traffic Volumes (2025)

Background Capacity Analyses

To evaluate the background traffic operations at the study intersections within the vicinity of the project site, the AM and PM peak hour capacity analyses were performed based on calculations outlined in the Highway Capacity Manual (HCM). Levels of service (LOS), corresponding average delays, and 95th percentile queues were calculated for each turning movement.

The previously conducted Traffic Studies for the background developments resulted in recommended roadway improvements to a study intersection. These recommended improvements will be utilized as part of the background roadway conditions and have been included in the background capacity analyses. The improvement is listed below.

<u>Hampshire Pike and Williamsport Pike</u>

- Preliminary signal warrant analysis indicates that a traffic signal is warranted at this intersection under existing conditions. The City of Columbia and the developer should coordinate on responsibility for installation of this traffic signal. (Williamsport Pike Development)
- A full signal warrant analysis should be conducted before the installation of a traffic signal occurs at this location. (Williamsport Pike Development)

Based on the recommendations in the previously conducted studies, it is unclear at this time if a traffic signal installation was required by the City of Columbia for the proposed Williamsport Pike Development. Therefore, the study intersections were analyzed with background traffic volumes and existing roadway conditions. It should be noted that existing traffic signal timings were utilized at the intersection of Hampshire Pike and Oak Springs Drive for this analysis. The background capacity analyses were conducted using *Synchro* software by Trafficware for both signalized and unsignalized intersections. Appendix B contains the detailed capacity analyses results.

Table 5. 2025 Background Capacity Analyses

Study Intersection	Control	Approach	2025 Background Conditions					
			AM Peak Hour			PM Peak Hour		
			LOS	Delay (s)	Queue (feet)	LOS	Delay (s)	Queue (feet)
1. **Hampshire Pike and Williamsport Pike**	TWSC	SB Left	C	24.8	75	E	35.3	125
		SB Right	B	10.3	25	B	13.5	25
		EB Left	A	8.4	0	B	10.6	25
2. **Hampshire Pike and Oak Springs Drive**	Signalized	NB Left	E	59.6	144	E	63.3	44
		NB Thru/Right	E	65.3	21	E	67.1	0
		SB Left	E	59.0	151	E	57.5	190
		SB Thru/Right	E	69.8	67	E	62.6	57
		EB Left	A	6.2	12	B	13.1	27
		EB Thru	B	10.0	298	A	7.1	145
		EB Right	B	10.1	0	A	7.1	0
		WB Left	A	6.8	92	A	6.1	6
		WB Thru	A	7.1	193	B	16.3	720
		WB Right	A	5.9	9	A	7.9	66
		Overall	**B**	**17.0**	**--**	**B**	**18.2**	**--**

The following assessments are based on the results of the 2025 Background Capacity Analyses as shown in the table above:

Hampshire Pike and Williamsport Pike

- The exclusive southbound left-turn movement will operate at LOS E during the PM peak hour period with background traffic volumes.
- All critical movements for this intersection will operate at an acceptable minimum LOS C during the AM and PM peak with background traffic volumes.

Hampshire Pike and Oak Springs Drive

- The exclusive northbound left-turn movement will operate at LOS E during both the AM and PM peak hour periods with background traffic volumes.
- The shared northbound through/right-turn movement will operate at LOS E during both the AM and PM peak hour periods with background traffic volumes.
- The exclusive southbound left-turn movement will operate at LOS E during both the AM and PM peak hour periods with background traffic volumes.
- The shared southbound through/right-turn movement will operate at LOS E during both the AM and PM peak hour periods with background traffic volumes.
- All other critical movements for this intersection will operate at an acceptable minimum LOS B during the AM and PM peak with background traffic volumes.

Impacts

Traffic Generation

Trips were generated to establish projected traffic volumes for the proposed development. Daily and peak hour trips were generated by formulas presented in the *Trip Generation Manual*[2] based on the land uses proposed by the development. As previously stated, the proposed development will consist of a Convenience Store of approximately 5,040 SF and a Fast Casual Restaurant of approximately 2,250 SF. The Convenience Store (851) and Fast Casual Restaurant (930) ITE Land Uses were used to estimate the generated traffic volumes.

Pass-By Trips

Studies have shown that new retail and restaurant developments generate relatively low "new" traffic. Traffic entering or exiting the new development are considered pass-by or captured trips. Pass-by or captured trips are vehicles that would have already been on the roadway regardless of the new development being constructed. The current edition of the *ITE Trip Generation Handbook* provides typical pass-by percentages for various land uses based on the size of each land use. Based on the *ITE Trip Generation Handbook* and assumptions made by T-Square Engineering for this study, **50% pass-by** reductions were assumed for both the convenience store and restaurant land uses. The table below provides a summary of the pass-by and new trips generated for the proposed development.

Table 6. 1400 Hampshire Pike Development Trip Generation

Land Use (ITE Code)	Size	Generated Traffic Volumes				
		Daily	AM Peak		PM Peak	
			Enter	Exit	Enter	Exit
Convenience Store (851)	5,040 SF	3,842	158	157	126	122
Internal Trips		0	0	0	0	0
External Trips (Raw – Internal)		3,842	158	157	126	122
Pass-By Trips		1,921	79	79	63	61
New Trips (External – Pass-By)		**1,921**	**79**	**78**	**63**	**61**
Fast Casual Restaurant (930)	2,250 SF	219	2	1	16	12
Internal Trips		0	0	0	0	0
External Trips		219	2	1	16	12
Pass-By Trips		110	1	1	8	6
New Trips		**109**	**1**	**0**	**8**	**6**
TOTAL GENERATED TRIPS		4,061	160	158	142	134
TOTAL GENERATED INTERNAL TRIPS		0	0	0	0	0
TOTAL GENERATED EXTERNAL TRIPS		4,061	160	158	142	134
TOTAL GENERATED PASS-BY TRIPS		**2,031**	**80**	**80**	**71**	**67**
TOTAL GENERATED NEW TRIPS		**2,030**	**80**	**78**	**71**	**67**

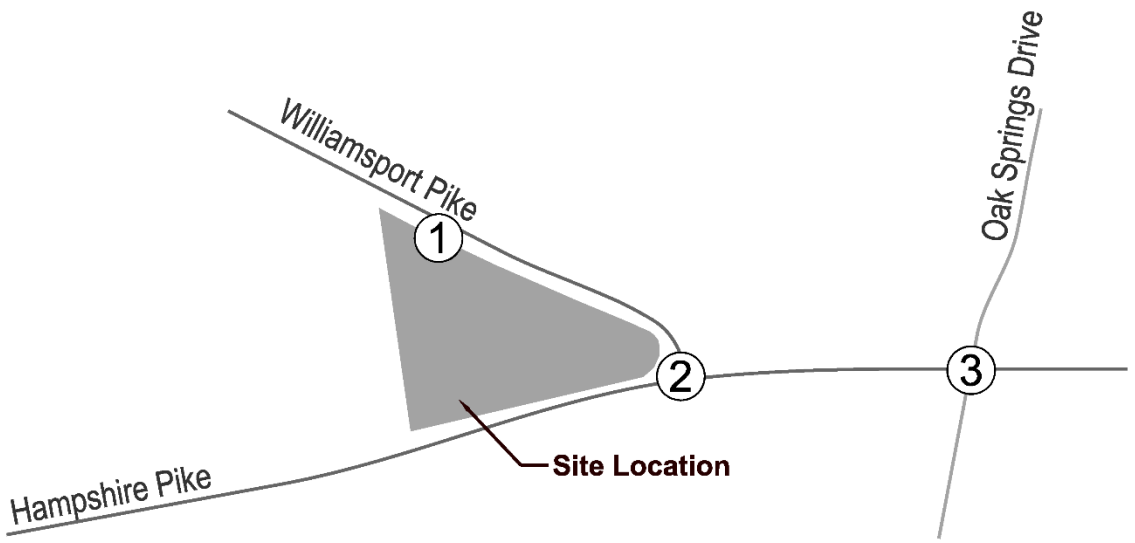
[2] Institute of Transportation Engineers (ITE). Trip Generation Manual, 11th Edition. Washington, DC: ITE, 2022

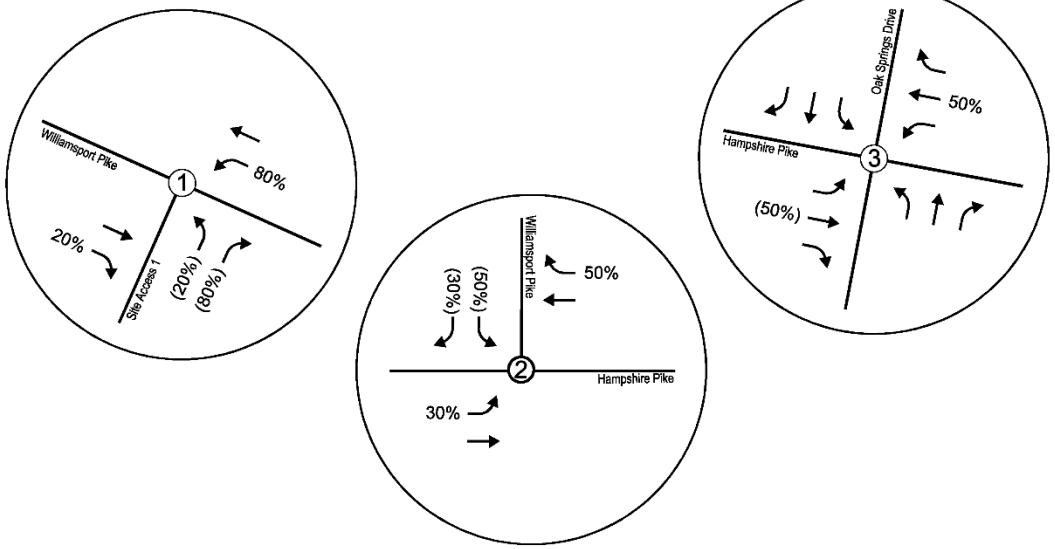
Projected Traffic Distribution and Assignments

For the purposes of this study, estimated directional distributions shown on Figures 7A and 7B were made for the proposed development's primary and pass-by generated traffic volumes, respectively. The development of these directional distributions were established based on the following:

- Conducted hourly turning movement counts.
- Proposed land use characteristics.
- Existing roadway network.
- Existing lane geometry of surrounding intersections.
- The access locations of the proposed development.
- Locations of populations centers within the surrounding area.

Figure 8A shows the primary generated trips which were assigned to the existing roadway network per the distributions shown on Figure 7A. Figure 8B shows the pass-by generated trips which were assigned to the existing roadway network per the distributions shown on Figure 7B. The generated peak hour traffic volumes (primary and pass-by) were added to the combined background volumes shown on Figure 6, resulting in the total projected peak hour traffic volumes shown on Figure 9.



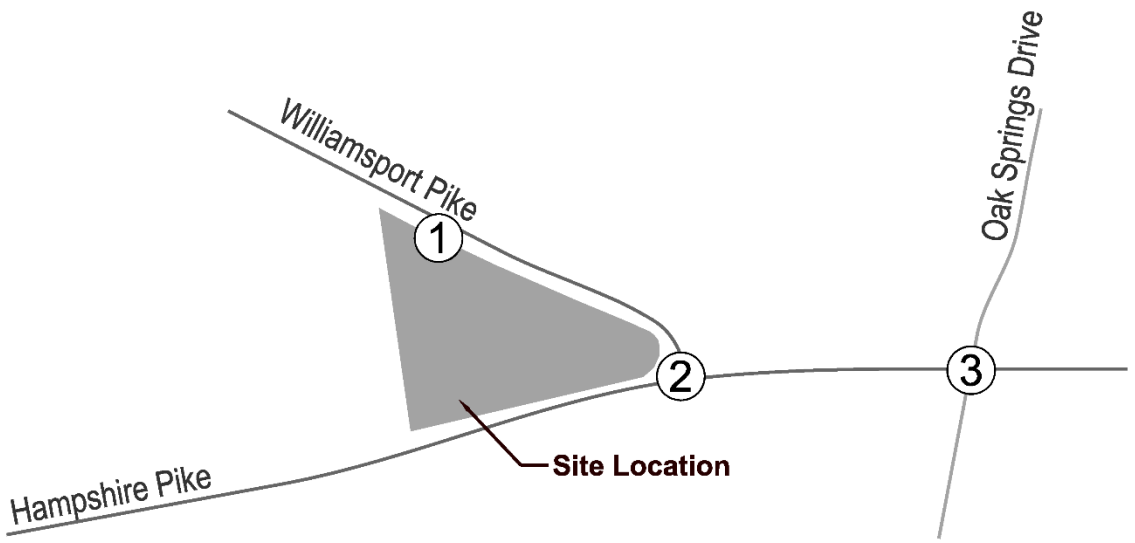


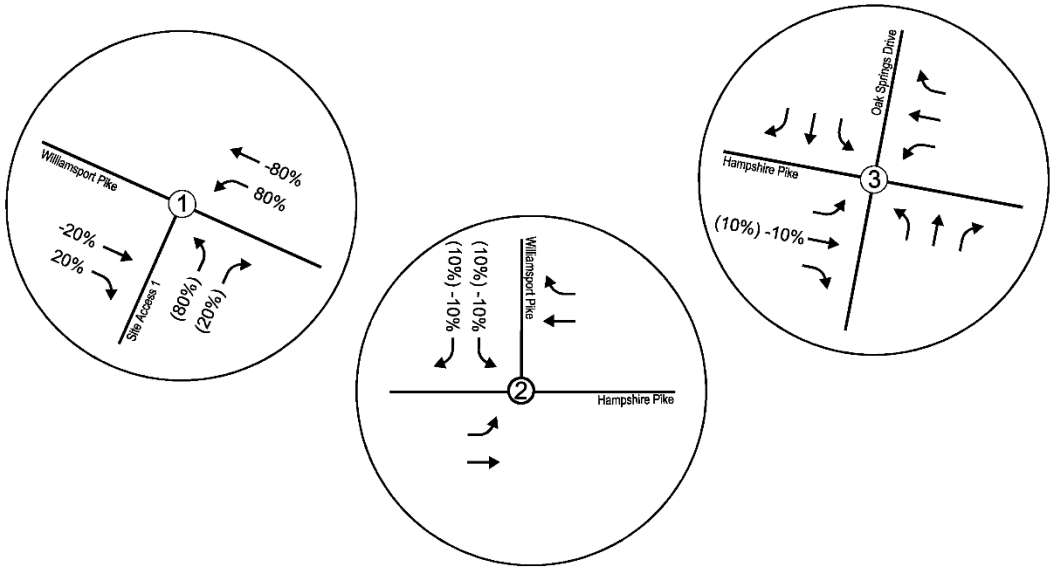
LEGEND

XX% - Entering Traffic Volumes
(XX%) - Exiting Traffic Volumes

N.T.S.

Figure 7A
Distribution of Generated Peak Hour Traffic Volumes (Primary)



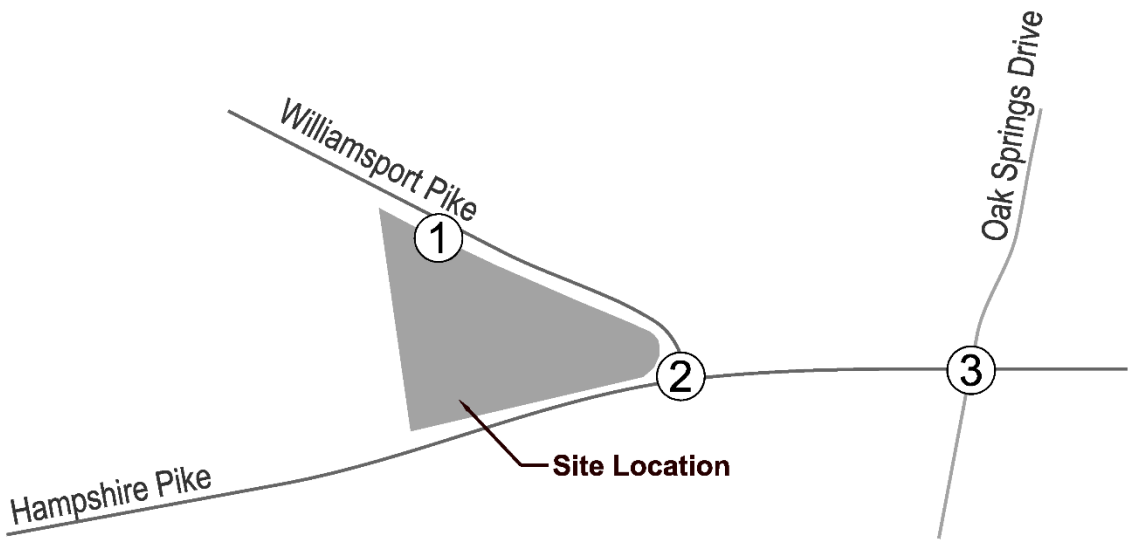


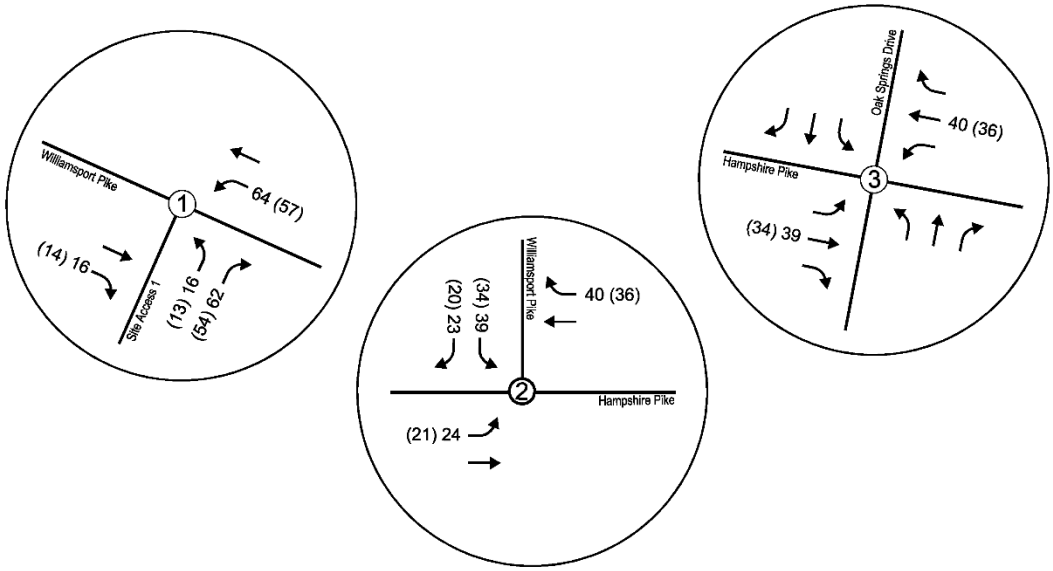
LEGEND

XX% - Entering Traffic Volumes
(XX%) - Exiting Traffic Volumes

N.T.S.

Figure 7B
Distribution of Generated Peak Hour Traffic Volumes (Pass-By)



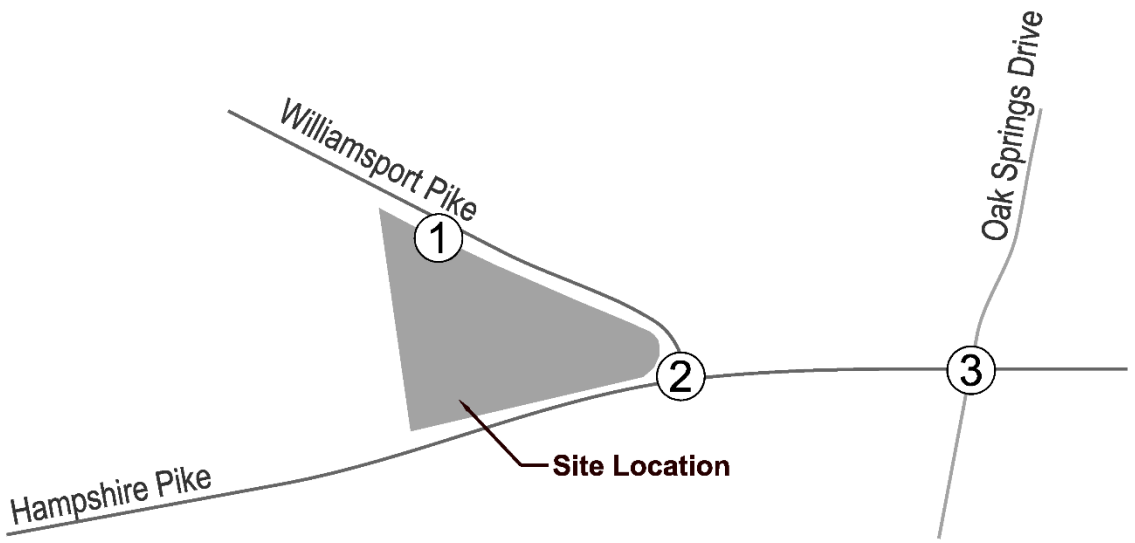


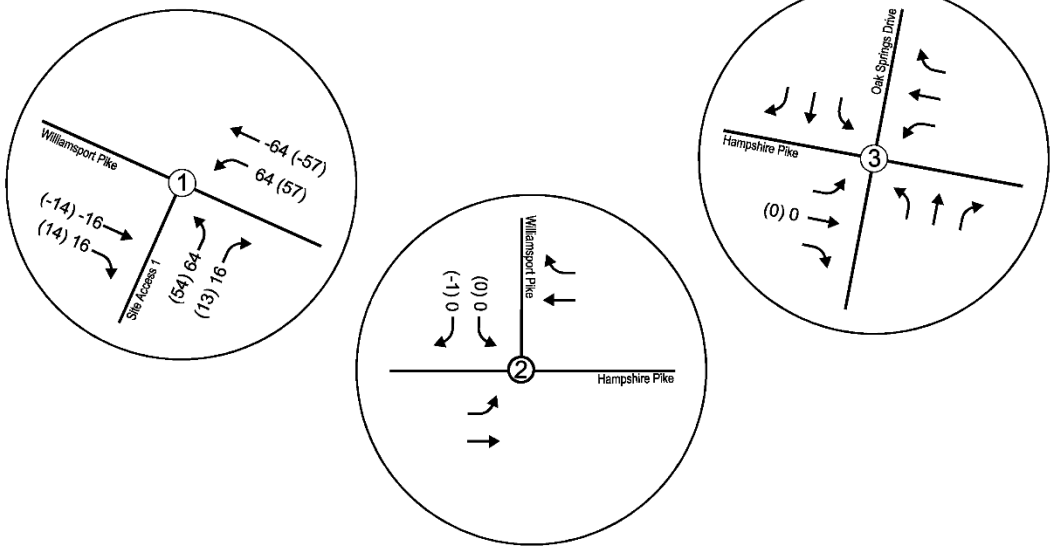
LEGEND

XXX - AM Peak Hour Traffic Volumes
(XXX) - PM Peak Hour Traffic Volumes

N.T.S.

Figure 8A
Assignment of Generated Peak Hour Traffic Volumes (Primary)





LEGEND

XX% - Entering Traffic Volumes
(XX%) - Exiting Traffic Volumes

N.T.S.

Figure 8B
Assignment of Generated Peak Hour Traffic Volumes (Pass-By)

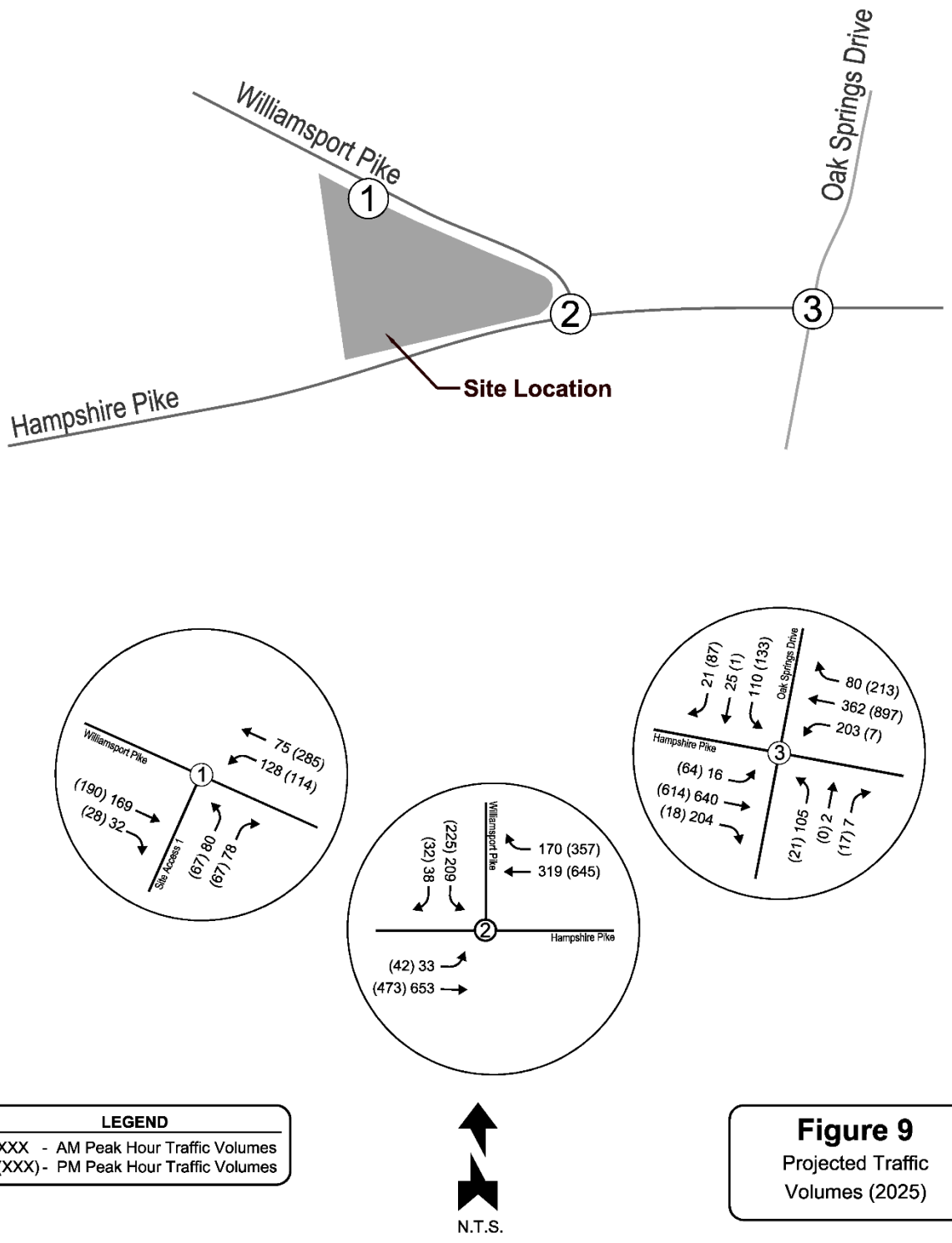


Figure 9
Projected Traffic Volumes (2025)

Projected Capacity Analysis

To evaluate the projected traffic operations at the study intersections within the vicinity of the project site, AM and PM peak hour capacity analyses were performed. The capacity analyses include the total projected traffic volumes generated from the proposed development in addition to background traffic volumes. Levels-of-service (LOS), corresponding average delays, and 95th percentile queues were calculated for each turning movement. The intersections were analyzed based on background roadway conditions and lane geometries as outlined previously with projected traffic volumes.

The intersections were analyzed with projected traffic volumes and existing roadway conditions. It should be noted that existing traffic signal timings were utilized at the intersection of Hampshire Pike and Oaks Springs Drive for this analysis. The projected capacity analyses were conducted using *Synchro* software by Trafficware for both signalized and unsignalized intersections. Appendix B contains the detailed capacity analyses results.

Table 7. 2025 Projected Capacity Analyses

Study Intersection	Control	Approach	2025 Projected Conditions					
			AM Peak Hour			PM Peak Hour		
			LOS	Delay (s)	Queue (feet)	LOS	Delay (s)	Queue (feet)
1. **Hampshire Pike and Williamsport Pike**	TWSC	SB Left	D	34.3	125	F	53.7	175
		SB Right	B	10.5	25	B	13.9	25
		EB Left	A	8.6	25	B	11.0	25
2. **Hampshire Pike and Oak Springs Drive**	Signalized	NB Left	E	59.6	144	E	63.3	44
		NB Thru/Right	E	65.3	21	E	67.1	0
		SB Left	E	59.0	151	E	57.5	190
		SB Thru/Right	E	69.8	67	E	62.6	57
		EB Left	A	6.3	12	B	14.7	27
		EB Thru	B	10.2	325	A	7.2	154
		EB Right	B	10.3	0	A	7.2	0
		WB Left	A	7.1	92	A	6.2	6
		WB Thru	A	7.4	219	B	17.5	786
		WB Right	A	5.9	9	A	7.9	66
		Overall	**B**	**16.8**	--	**B**	**18.6**	--
3. **Williamsport Pike and Site Access**	TWSC	NB Left	B	14.0	50	C	16.3	50
		WB Left/Right	A	8.0	25	A	8.0	25

The following assessments are based on the results of the 2025 Projected Capacity Analyses as shown in the table above:

Hampshire Pike and Williamsport Pike

- The exclusive southbound left-turn movement will operate at LOS F during the PM peak hour period with projected traffic volumes.
- All critical movements for this intersection will operate at an acceptable minimum LOS D during the AM and PM peak with projected traffic volumes.

Hampshire Pike and Oak Springs Drive

- The exclusive northbound left-turn movement will operate at LOS E during both the AM and PM peak hour periods with projected traffic volumes.
- The shared northbound through/right-turn movement will operate at LOS E during both the AM and PM peak hour periods with projected traffic volumes.
- The exclusive southbound left-turn movement will operate at LOS E during both the AM and PM peak hour periods with projected traffic volumes.
- The shared southbound through/right-turn movement will operate at LOS E during both the AM and PM peak hour periods with projected traffic volumes.
- All other critical movements for this intersection will operate at an acceptable minimum LOS B during the AM and PM peak with projected traffic volumes.

Williamsport Pike and Site Access

- All critical movements for this intersection will operate at an acceptable minimum LOS C during the AM and PM peak with projected traffic volumes.

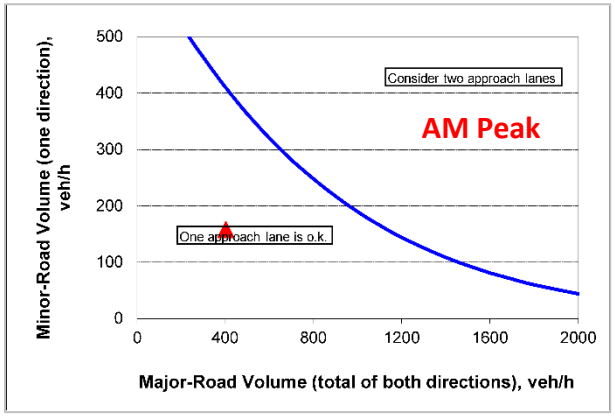
Intersection Assessments (Projected Conditions)

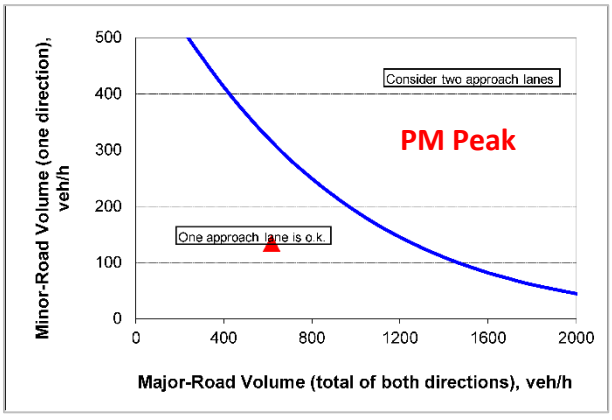
Engineering assessments were performed on the intersections within the study area to identify underlying inefficiencies and solutions to alleviate any concerns associated with intersection geometries and projected traffic volumes along the roadway network. Minor-road approach right-turn lane warrants were performed based on Figure 2-4 in the *NCHRP Report 457 – Evaluating Intersection Improvements: An Engineering Study Guide* [3] and projected traffic volumes. The results of the warrants are shown below.

Williamsport Pike and Site Access

Table 8. Projected, Minor-Road Approach Geometry, EBR Site Access at Williamsport Pike

Variable	AM Peak Hour	PM Peak Hour
Major-road volume (total both directions), veh/h:	404	617
Percentage of right-turns on minor road, %:	49%	50%
Minor-road volume (one direction), veh/h:	158	134
Limiting minor-road volume (one direction), veh/h:	408	315
Right-turn bay warranted:	**One (1) approach lane is sufficient**	**One (1) approach lane is sufficient**
Source: *NCHRP Report 457: Evaluating Intersection Improvements: An Engineering Study Guide*		





As shown in the table above and the corresponding graphs, it was determined that one (1) shared lane for left-turning and right-turning movements on the eastbound approach of the proposed Site Access at Williamsport Pike is sufficient with projected traffic volumes.

[3] Transportation Research Board (TRB). Evaluating Intersection Improvements: An Engineering Study Guide. Washington, DC: 2001

Conclusions

Existing Conditions

Intersection Capacity Analyses

Hampshire Pike and Williamsport Pike

- All critical movements for this intersection currently operate at an acceptable minimum LOS C during the AM and PM peak with existing traffic volumes.

Hampshire Pike and Oak Springs Drive

- The exclusive northbound left-turn movement currently operates at LOS E during both the AM and PM peak hour periods with existing traffic volumes.
- The shared northbound through/right-turn movement currently operates at LOS E during both the AM and PM peak hour periods with existing traffic volumes.
- The exclusive southbound left-turn movement currently operates at LOS E during both the AM and PM peak hour periods with existing traffic volumes.
- The shared southbound through/right-turn movement currently operates at LOS E during both the AM and PM peak hour periods with existing traffic volumes.
- All other critical movements for this intersection currently operate at an acceptable minimum LOS B during the AM and PM peak with existing traffic volumes.

Background Conditions

Intersection Capacity Analyses

Hampshire Pike and Williamsport Pike

- The exclusive southbound left-turn movement will operate at LOS E during the PM peak hour period with background traffic volumes.
- All critical movements for this intersection will operate at an acceptable minimum LOS C during the AM and PM peak with background traffic volumes.

Hampshire Pike and Oak Springs Drive

- The exclusive northbound left-turn movement will operate at LOS E during both the AM and PM peak hour periods with background traffic volumes.
- The shared northbound through/right-turn movement will operate at LOS E during both the AM and PM peak hour periods with background traffic volumes.
- The exclusive southbound left-turn movement will operate at LOS E during both the AM and PM peak hour periods with background traffic volumes.
- The shared southbound through/right-turn movement will operate at LOS E during both the AM and PM peak hour periods with background traffic volumes.
- All other critical movements for this intersection will operate at an acceptable minimum LOS B during the AM and PM peak with background traffic volumes.

Projected Conditions

Intersection Capacity Analyses

Hampshire Pike and Williamsport Pike

- The exclusive southbound left-turn movement will operate at LOS F during the PM peak hour period with projected traffic volumes.
- All critical movements for this intersection will operate at an acceptable minimum LOS D during the AM and PM peak with projected traffic volumes.

Hampshire Pike and Oak Springs Drive

- The exclusive northbound left-turn movement will operate at LOS E during both the AM and PM peak hour periods with projected traffic volumes.
- The shared northbound through/right-turn movement will operate at LOS E during both the AM and PM peak hour periods with projected traffic volumes.
- The exclusive southbound left-turn movement will operate at LOS E during both the AM and PM peak hour periods with projected traffic volumes.
- The shared southbound through/right-turn movement will operate at LOS E during both the AM and PM peak hour periods with projected traffic volumes.
- All other critical movements for this intersection will operate at an acceptable minimum LOS B during the AM and PM peak with projected traffic volumes.

Williamsport Pike and Site Access

- All critical movements for this intersection will operate at an acceptable minimum LOS C during the AM and PM peak with projected traffic volumes.

Turn Lane Analyses

Williamsport Pike and Site Access

- It was determined that the westbound approach of the proposed Site Access at its intersection with Williamsport Pike is sufficient with one (1) shared lane for left-turning and right-turning movements with projected traffic volumes.

Recommendations

Based on the analyses within this study, and a review of the proposed development's access plan, the recommendations below have been presented to be implemented as part of the proposed 1400 Hampshire Pike Development in Columbia, TN. These recommendations will be constructed in addition to the additional improvements at the study intersections outlined in previously conducted traffic studies within the area.

Improvement Recommendations for the 1400 Hampshire Pike Development

Hampshire Pike and Williamsport Pike

- No additional improvements are recommended for this intersection as part of the construction of this development.

Hampshire Pike and Oak Springs Drive

- No additional improvements are recommended for this intersection as part of the construction of this development.

Williamsport Pike and Site Access

- Construct the proposed Site Access along Williamsport Pike with one (1) inbound lane and one (1) outbound lane operating under a stop condition according to MUTCD, AASHTO, TDOT, and City of Columbia standards.
- All radii for the proposed access shall be designed to accommodate the largest turning requirements of either an SU-30 truck (garbage) or an emergency vehicle (fire apparatus) that will service the development according to MUTCD, AASHTO, TDOT, and City of Columbia standards.
- Ensure the departure sight distance triangles for all driveways, internal intersections, and site access intersections are designed to be clear of all sight obstructions (including grade) as specified by AASHTO. The design of proposed internal roadway system should be completed according to the MUTCD, AASHTO, TDOT, and City of Columbia standards.



Figure 10 - Recommended Improvements

1400 Hampshire Pike Development ● Columbia, TN ● Scale: 1" = 200'

Prepared by T-Square Engineering, Inc.

111 SE Parkway Ct ● Franklin, TN 37064 ● www.T2-Eng.com

0' 200' 400' 800'

1 inch = 200 feet

APPENDIX

APPENDIX A – DETAILED TURNING MOVEMENT COUNTS AND SIGNAL TIMINGS

Location: Columbia, TN
Count Type: Turning Movement Counts

Count Sites: 2
Intersection #: 1
Intersection: Williamsport Pike and Hampshire Pike

Southbound: Williamsport Pike
Westbound: Hampshire Pike
Northbound: N/A
Eastbound: Hampshire Pike

Lat/Long: N/A

Count Date: 10/15/2024

Time Period: 0600 - 0900 (Weekday AM Peak)

Figure 1 - Turning Movement Designation

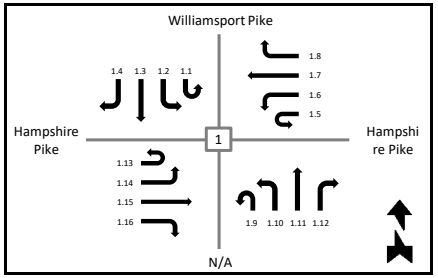
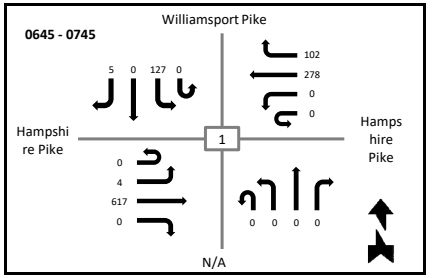


Figure 2 - AM Peak Hour TMC



T-SQUARE ENGINEERING

	Southbound						Westbound						Northbound						Eastbound					
	Williamsport Pike						Hampshire Pike						N/A						Hampshire Pike					
Time	U-Turn 1.1	Left 1.2	Thru 1.3	Right 1.4	Peds X-Walk	App Total	U-Turn 1.5	Left 1.6	Thru 1.7	Right 1.8	Peds X-Walk	App Total	U-Turn 1.9	Left 1.10	Thru 1.11	Right 1.12	Peds X-Walk	App Total	U-Turn 1.13	Left 1.14	Thru 1.15	Right 1.16	Peds X-Walk	App Total
0600 - 0615	0	24	0	0	0	24	0	0	23	9	0	32	0	0	0	0	0	0	0	0	58	0	0	58
0615 - 0630	0	31	0	0	0	31	0	0	17	15	0	32	0	0	0	0	0	0	0	0	73	0	0	73
0630 - 0645	1	34	0	0	0	35	0	0	22	16	0	38	0	0	0	0	0	0	0	0	82	0	0	82
0645 - 0700	0	46	0	1	0	47	0	0	37	18	0	55	0	0	0	0	0	0	0	0	152	0	0	152
0700 - 0715	0	32	0	1	0	33	0	0	63	20	0	83	0	0	0	0	0	0	0	2	152	0	0	154
0715 - 0730	0	31	0	1	0	32	0	0	82	22	0	104	0	0	0	0	0	0	0	1	156	0	0	157
0730 - 0745	0	18	0	2	0	20	0	0	96	42	0	138	0	0	0	0	0	0	0	1	157	0	0	158
0745 - 0800	0	36	0	1	0	37	0	0	72	27	0	99	0	0	0	0	0	0	0	2	97	0	0	99
0800 - 0815	0	29	0	1	0	30	0	0	55	21	0	76	0	0	0	0	0	0	0	1	110	0	0	111
0815 - 0830	0	34	0	2	0	36	0	0	62	20	0	82	0	0	0	0	0	0	0	2	108	0	0	110
0830 - 0845	0	42	0	0	0	42	0	0	57	27	0	84	0	0	0	0	0	0	0	0	91	0	0	91
0845 - 0900	0	37	0	2	0	39	0	0	53	25	0	78	0	0	0	0	0	0	0	0	96	0	0	96
Grand Total	**1**	**394**	**0**	**11**	**0**	**406**	**0**	**0**	**639**	**262**	**0**	**901**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**1332**	**0**	**0**	**1341**
Peak Hour Total																								
0645 - 0745	**0**	**127**	**0**	**5**	**0**	**132**	**0**	**0**	**278**	**102**	**0**	**380**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**617**	**0**	**0**	**621**
App %	0.25%	97.04%	0.00%	2.71%			0.00%	0.00%	70.92%	29.08%			0.00%	0.00%	0.00%	0.00%			0.00%	0.67%	99.33%	0.00%		
Int %	0.04%	14.88%	0.00%	0.42%		15.33%	0.00%	0.00%	24.13%	9.89%		34.03%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.34%	50.30%	0.00%		50.64%
Cars Total	0	386	0	11			0	0	614	240			0	0	0	0			0	8	1303	0		
Heavy Total	1	8	0	0			0	0	25	22			0	0	0	0			0	1	29	0		
% Cars	**0.00%**	**97.97%**	**0.00%**	**100.00%**			**0.00%**	**0.00%**	**96.09%**	**91.60%**			**0.00%**	**0.00%**	**0.00%**	**0.00%**			**0.00%**	**88.89%**	**97.82%**	**0.00%**		
% Heavy	**100.00%**	**2.03%**	**0.00%**	**0.00%**			**0.00%**	**0.00%**	**3.91%**	**8.40%**			**0.00%**	**0.00%**	**0.00%**	**0.00%**			**0.00%**	**11.11%**	**2.18%**	**0.00%**		

Location: Columbia, TN
Count Type: Turning Movement Counts

Count Sites: 2
Intersection #: 1
Intersection: Williamsport Pike and Hampshire Pike

Southbound: Williamsport Pike
Westbound: Hampshire Pike
Northbound: N/A
Eastbound: Hampshire Pike

Lat/Long: N/A

Count Date: 10/15/2024

Time Period: 1500 - 1800 (Weekday PM Peak)

Figure 1 - Turning Movement Designation

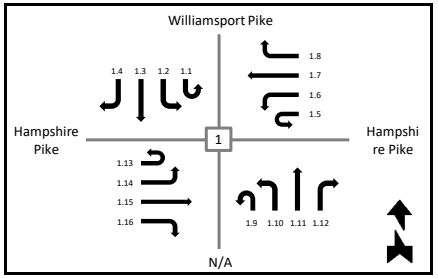
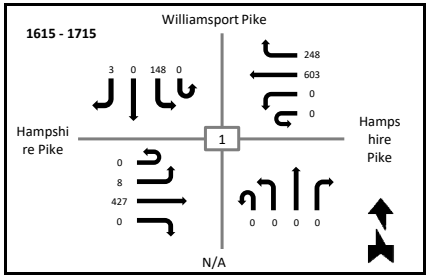


Figure 2 - PM Peak Hour TMC



T-SQUARE ENGINEERING

	Southbound						Westbound						Northbound						Eastbound					
	Williamsport Pike						Hampshire Pike						N/A						Hampshire Pike					
Time	U-Turn 1.1	Left 1.2	Thru 1.3	Right 1.4	Peds X-Walk	App Total	U-Turn 1.5	Left 1.6	Thru 1.7	Right 1.8	Peds X-Walk	App Total	U-Turn 1.9	Left 1.10	Thru 1.11	Right 1.12	Peds X-Walk	App Total	U-Turn 1.13	Left 1.14	Thru 1.15	Right 1.16	Peds X-Walk	App Total
1500 - 1515	0	26	0	3	0	29	0	0	156	50	0	206	0	0	0	0	0	0	0	1	105	0	0	106
1515 - 1530	0	32	0	0	0	32	0	0	158	54	0	212	0	0	0	0	0	0	0	3	104	0	0	107
1530 - 1545	0	29	0	1	0	30	0	0	161	56	0	217	0	0	0	0	0	0	0	1	103	0	0	104
1545 - 1600	0	26	0	1	0	27	0	0	125	50	0	175	0	0	0	0	0	0	0	3	96	0	0	99
1600 - 1615	0	31	0	1	0	32	0	0	145	41	0	186	0	0	0	0	0	0	0	2	96	0	0	98
1615 - 1630	0	38	0	0	0	38	0	0	149	60	0	209	0	0	0	0	0	0	0	1	98	0	0	99
1630 - 1645	0	41	0	1	0	42	0	0	149	67	0	216	0	0	0	0	0	0	0	3	108	0	0	111
1645 - 1700	0	36	0	1	0	37	0	0	148	59	0	207	0	0	0	0	0	0	0	1	115	0	0	116
1700 - 1715	0	33	0	1	0	34	0	0	157	62	0	219	0	0	0	0	0	0	0	3	106	0	0	109
1715 - 1730	0	25	0	1	0	26	0	0	157	62	0	219	0	0	0	0	0	0	0	2	89	0	0	91
1730 - 1745	0	30	0	0	0	30	0	0	109	55	0	164	0	0	0	0	0	0	0	1	98	0	0	99
1745 - 1800	0	39	0	1	0	40	0	0	121	50	0	171	0	0	0	0	0	0	0	1	104	0	0	105
Grand Total	**0**	**386**	**0**	**11**	**0**	**397**	**0**	**0**	**1735**	**666**	**0**	**2401**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**	**1222**	**0**	**0**	**1244**
Peak Hour Total																								
1615 - 1715	**0**	**148**	**0**	**3**	**0**	**151**	**0**	**0**	**603**	**248**	**0**	**851**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**427**	**0**	**0**	**435**
App %	0.00%	97.23%	0.00%	2.77%			0.00%	0.00%	72.26%	27.74%			0.00%	0.00%	0.00%	0.00%			0.00%	1.77%	98.23%	0.00%		
Int %	0.00%	9.55%	0.00%	0.27%		9.82%	0.00%	0.00%	42.92%	16.48%		59.40%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.54%	30.23%	0.00%		30.78%
Cars Total	0	379	0	11			0	0	1722	659			0	0	0	0			0	19	1202	0		
Heavy Total	0	7	0	0			0	0	13	7			0	0	0	0			0	3	20	0		
% Cars	**0.00%**	**98.19%**	**0.00%**	**100.00%**			**0.00%**	**0.00%**	**99.25%**	**98.95%**			**0.00%**	**0.00%**	**0.00%**	**0.00%**			**0.00%**	**86.36%**	**98.36%**	**0.00%**		
% Heavy	**0.00%**	**1.81%**	**0.00%**	**0.00%**			**0.00%**	**0.00%**	**0.75%**	**1.05%**			**0.00%**	**0.00%**	**0.00%**	**0.00%**			**0.00%**	**13.64%**	**1.64%**	**0.00%**		

Location: Columbia, TN
Count Type: Turning Movement Counts

Count Sites: 2
Intersection #: 2
Intersection: Hampshire Pike and Oak Springs Drive

Southbound: Oak Springs Drive
Westbound: Hampshire Pike
Northbound: Oak Springs Drive
Eastbound: Hampshire Pike

Lat/Long: N/A

Count Date: 10/15/2024

Time Period: 0600 - 0900 (Weekday AM Peak)

Figure 1 - Turning Movement Designation

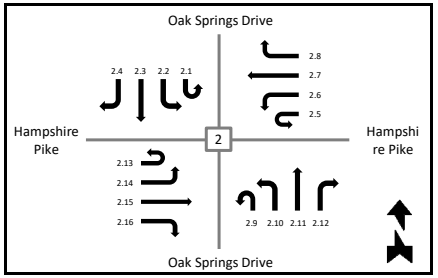
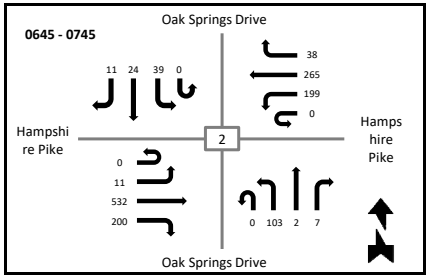


Figure 2 - AM Peak Hour TMC



T-SQUARE ENGINEERING

	Southbound						Westbound						Northbound						Eastbound					
	Oak Springs Drive						Hampshire Pike						Oak Springs Drive						Hampshire Pike					
Time	U-Turn 2.1	Left 2.2	Thru 2.3	Right 2.4	Peds X-Walk	App Total	U-Turn 2.5	Left 2.6	Thru 2.7	Right 2.8	Peds X-Walk	App Total	U-Turn 2.9	Left 2.10	Thru 2.11	Right 2.12	Peds X-Walk	App Total	U-Turn 2.13	Left 2.14	Thru 2.15	Right 2.16	Peds X-Walk	App Total
0600 - 0615	0	3	0	1	0	4	0	0	30	2	0	32	0	0	0	0	0	0	0	1	78	1	0	80
0615 - 0630	0	5	0	0	0	5	0	0	34	2	0	36	0	0	0	0	0	0	0	1	102	1	0	104
0630 - 0645	0	4	0	0	0	4	0	3	37	2	0	42	0	0	0	0	0	0	0	0	114	5	0	119
0645 - 0700	0	9	0	1	0	10	0	19	51	5	0	75	0	2	0	0	0	2	0	5	164	20	0	189
0700 - 0715	0	10	1	4	0	15	0	59	60	8	0	127	0	20	1	2	0	23	0	3	146	34	0	183
0715 - 0730	0	10	12	6	0	28	0	74	64	14	0	152	0	30	1	4	0	35	0	1	106	76	0	183
0730 - 0745	0	10	11	0	0	21	0	47	90	11	0	148	0	51	0	1	0	52	0	2	116	70	0	188
0745 - 0800	0	2	0	5	0	7	0	12	77	13	0	102	0	18	0	0	0	18	0	4	121	5	0	130
0800 - 0815	0	6	1	8	0	15	0	8	67	10	0	85	0	2	0	2	0	4	0	10	126	7	0	143
0815 - 0830	0	8	0	6	0	14	0	4	73	18	0	95	0	2	0	1	0	3	0	6	135	1	0	142
0830 - 0845	0	15	0	2	0	17	0	4	81	11	0	96	0	1	0	1	0	2	0	3	128	3	0	134
0845 - 0900	0	9	0	10	0	19	0	1	69	4	0	74	0	1	0	2	0	3	0	6	127	1	0	134
Grand Total	**0**	**91**	**25**	**43**	**0**	**159**	**0**	**231**	**733**	**100**	**0**	**1064**	**0**	**127**	**2**	**13**	**0**	**142**	**0**	**42**	**1463**	**224**	**0**	**1729**
Peak Hour Total																								
0645 - 0745	**0**	**39**	**24**	**11**	**0**	**74**	**0**	**199**	**265**	**38**	**0**	**502**	**0**	**103**	**2**	**7**	**0**	**112**	**0**	**11**	**532**	**200**	**0**	**743**
App %	0.00%	57.23%	15.72%	27.04%			0.00%	21.71%	68.89%	9.40%			0.00%	89.44%	1.41%	9.15%			0.00%	2.43%	84.62%	12.96%		
Int %	0.00%	2.94%	0.81%	1.39%		5.14%	0.00%	7.47%	23.69%	3.23%		34.39%	0.00%	4.10%	0.06%	0.42%		4.59%	0.00%	1.36%	47.29%	7.24%		55.88%
Cars Total	0	90	24	43			0	231	687	98			0	126	2	11			0	40	1430	222		
Heavy Total	0	1	1	0			0	0	46	2			0	1	0	2			0	2	33	2		
% Cars	**0.00%**	**98.90%**	**96.00%**	**100.00%**			**0.00%**	**100.00%**	**93.72%**	**98.00%**			**0.00%**	**99.21%**	**100.00%**	**84.62%**			**0.00%**	**95.24%**	**97.74%**	**99.11%**		
% Heavy	**0.00%**	**1.10%**	**4.00%**	**0.00%**			**0.00%**	**0.00%**	**6.28%**	**2.00%**			**0.00%**	**0.79%**	**0.00%**	**15.38%**			**0.00%**	**4.76%**	**2.26%**	**0.89%**		

Location: Columbia, TN
Count Type: Turning Movement Counts

Count Sites: 2
Intersection #: 2
Intersection: Hampshire Pike and Oak Springs Drive

Southbound: Oak Springs Drive
Westbound: Hampshire Pike
Northbound: Oak Springs Drive
Eastbound: Hampshire Pike

Lat/Long: N/A

Count Date: 10/15/2024

Time Period: 1500 - 1800 (Weekday PM Peak)

Figure 1 - Turning Movement Designation

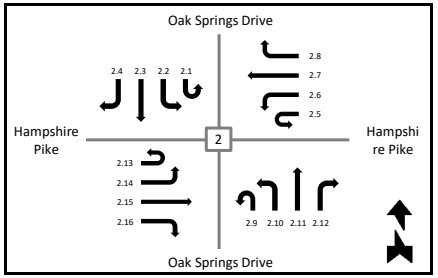
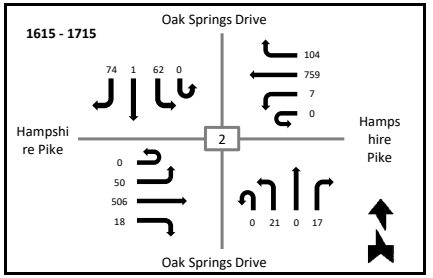


Figure 2 - PM Peak Hour TMC



T-SQUARE ENGINEERING

	Southbound						Westbound						Northbound						Eastbound					
	Oak Springs Drive						Hampshire Pike						Oak Springs Drive						Hampshire Pike					
Time	U-Turn 2.1	Left 2.2	Thru 2.3	Right 2.4	Peds X-Walk	App Total	U-Turn 2.5	Left 2.6	Thru 2.7	Right 2.8	Peds X-Walk	App Total	U-Turn 2.9	Left 2.10	Thru 2.11	Right 2.12	Peds X-Walk	App Total	U-Turn 2.13	Left 2.14	Thru 2.15	Right 2.16	Peds X-Walk	App Total
1500 - 1515	0	11	0	17	0	28	0	15	166	29	0	210	0	23	1	2	0	26	0	9	127	4	0	140
1515 - 1530	0	24	0	16	0	40	0	4	193	38	0	235	0	4	0	2	0	6	0	8	127	2	0	137
1530 - 1545	0	10	1	20	0	31	0	4	191	31	0	226	0	6	0	2	0	8	0	13	119	1	0	133
1545 - 1600	0	11	0	24	0	35	0	1	149	28	0	178	0	1	1	1	0	3	0	7	113	1	0	121
1600 - 1615	0	18	0	16	0	34	0	0	167	28	0	195	0	3	0	3	0	6	0	12	114	0	0	126
1615 - 1630	0	15	0	15	0	30	0	2	194	33	0	229	0	1	0	2	0	3	0	17	116	3	0	136
1630 - 1645	0	16	0	21	0	37	0	1	183	22	0	206	0	12	0	5	0	17	0	11	131	7	0	149
1645 - 1700	0	16	1	22	0	39	0	3	183	23	0	209	0	2	0	5	0	7	0	9	140	3	0	152
1700 - 1715	0	15	0	16	0	31	0	1	199	26	0	226	0	6	0	5	0	11	0	13	119	5	0	137
1715 - 1730	0	19	0	19	0	38	0	6	193	28	0	227	0	4	0	9	0	13	0	16	96	4	0	116
1730 - 1745	0	26	0	22	0	48	0	1	143	32	0	176	0	0	0	5	0	5	0	16	111	1	0	128
1745 - 1800	0	12	0	24	0	36	0	3	148	23	0	174	0	0	0	1	0	1	0	15	129	2	0	146
Grand Total	**0**	**193**	**2**	**232**	**0**	**427**	**0**	**41**	**2109**	**341**	**0**	**2491**	**0**	**62**	**2**	**42**	**0**	**106**	**0**	**146**	**1442**	**33**	**0**	**1621**
Peak Hour Total																								
1615 - 1715	**0**	**62**	**1**	**74**	**0**	**137**	**0**	**7**	**759**	**104**	**0**	**870**	**0**	**21**	**0**	**17**	**0**	**38**	**0**	**50**	**506**	**18**	**0**	**574**
App %	0.00%	45.20%	0.47%	54.33%			0.00%	1.65%	84.66%	13.69%			0.00%	58.49%	1.89%	39.62%			0.00%	9.01%	88.96%	2.04%		
Int %	0.00%	4.16%	0.04%	4.99%		9.19%	0.00%	0.88%	45.40%	7.34%		53.63%	0.00%	1.33%	0.04%	0.90%		2.28%	0.00%	3.14%	31.04%	0.71%		34.90%
Cars Total	0	188	2	231			0	41	2090	340			0	62	2	42			0	144	1415	33		
Heavy Total	0	5	0	1			0	0	19	1			0	0	0	0			0	2	27	0		
% Cars	**0.00%**	**97.41%**	**100.00%**	**99.57%**			**0.00%**	**100.00%**	**99.10%**	**99.71%**			**0.00%**	**100.00%**	**100.00%**	**100.00%**			**0.00%**	**98.63%**	**98.13%**	**100.00%**		
% Heavy	**0.00%**	**2.59%**	**0.00%**	**0.43%**			**0.00%**	**0.00%**	**0.90%**	**0.29%**			**0.00%**	**0.00%**	**0.00%**	**0.00%**			**0.00%**	**1.37%**	**1.87%**	**0.00%**		

SEPAC All Data Report

Intersection Name: Hampshire Pk & Oak Springs Dr	Intersection Alias: Hampshire Pk & Oak Springs Dr
IP Address: 10.112.4.233	Report Date/Time: 2024-10-14 12:07:34
Variant Name: Main	
Last Modified: 2024-03-22 05:04:14	

Access Data F-2-6

User Access Code	Admin Access Code	Connection Method	Revision	Address	IP Address	GPS Enabled	GPS Port
9999		Direct IP	5.4.1 (MAY 2022)	001	10.112.4.233/27	False	8

Phase Initialization Data F-3-4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	4	1	1	1	4	1	1	0	0	0	0	0	0	0	0

Phase Data : Bank 1		Phase #															
Vehicle		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-1-1	Min Green	5	25	5	5	5	25	5	5	-	-	-	-	-	-	-	-
	Passage	2.5	6.0	1.5	2.0	1.5	6.0	1.5	2.0	-	-	-	-	-	-	-	-
	Max 1	30	60	30	20	20	60	20	30	-	-	-	-	-	-	-	-
	Max 2	30	50	30	50	30	50	30	50	-	-	-	-	-	-	-	-
	Yellow	3.5	4.0	3.5	4.0	3.5	4.0	3.5	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Red	1.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0	-	-	-	-	-	-	-	-
F-3-1-2	Dyn Max	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dyn Step	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-1-3	Veh Recall	-	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-
	Recall Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-1-4	Green Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Yellow Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bike Green	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bike Passg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Density		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-2	Added Init	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Max Initial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Time B4 Rdctn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cars B4 Rdctn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Time to Rdce	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Min Gap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrian		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-3-1	Walk	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-
	Ped Clr	-	-	-	-	-	-	-	18	-	-	-	-	-	-	-	-
	Alt Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Alt Ped Clr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-2	Ped Recall	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ped Recall Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-3	Walk Offset Time	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Walk Offset Mode	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-4	Flash Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ext Ped Clr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Act Rest in Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Initial & NA		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-4	Initial	1	4	1	1	1	4	1	1	-	-	-	-	-	-	-	-
	NA Response	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Update Green	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Lock & Misc		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-5	Non-Lock	True	-	True	True	True	-	True	True	-	-	-	-	-	-	-	-

	Mem																
	Dual Entry	-	-	-	True	-	-	-	True	-	-	-	-	-	-	-	-
	Last Car Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cond Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No Simul Gap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Special Sequence		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-6	Omit	2	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
	- Yellow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Omit Call	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Phase Data : Bank 2		**Phase #**															
Vehicle		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-1-1	Min Green	10	15	10	15	10	15	10	15	-	-	-	-	-	-	-	-
	Passage	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0	-	-	-	-	-	-	-	-
	Max 1	25	35	25	35	25	35	25	35	-	-	-	-	-	-	-	-
	Max 2	30	50	30	50	30	50	30	50	-	-	-	-	-	-	-	-
	Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Red	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-	-	-	-
F-3-1-2	Dyn Max	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dyn Step	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-1-3	Veh Recall	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Recall Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-1-4	Green Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Yellow Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bike Green	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bike Passg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Density		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-2	Added Init	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Max Initial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Time B4 Rdctn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cars B4 Rdctn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Time to Rdce	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Min Gap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrian		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-3-1	Walk	-	7	-	7	-	7	-	7	-	-	-	-	-	-	-	-
	Ped Clr	-	8	-	8	-	8	-	8	-	-	-	-	-	-	-	-
	Alt Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Alt Ped Clr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-2	Ped Recall	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ped Recall Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-3	Walk Offset Time	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Walk Offset Mode	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-4	Flash Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ext Ped Clr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Act Rest in Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Initial & NA		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-4	Initial	1	3	1	1	1	3	1	1	-	-	-	-	-	-	-	-
	NA Response	-	1	-	2	-	1	-	2	-	-	-	-	-	-	-	-
	Update Green	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Lock & Misc		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-5	Non-Lock Mem	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dual Entry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Last Car Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cond Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No Simul Gap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Special Sequence		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-6	Omit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Yellow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Omit Call	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Phase Data : Bank 3		**Phase #**															
Vehicle		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-1-1	Min Green	10	15	10	15	10	15	10	15	-	-	-	-	-	-	-	-

	Passage	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0	-	-	-	-	-	-	-	-
	Max 1	25	35	25	35	25	35	25	35	-	-	-	-	-	-	-	-
	Max 2	30	50	30	50	30	50	30	50	-	-	-	-	-	-	-	-
	Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Red	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-	-	-	-
F-3-1-2	Dyn Max	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dyn Step	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-1-3	Veh Recall	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Recall Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-1-4	Green Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Yellow Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bike Green	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bike Passg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Density		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-2	Added Init	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Max Initial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Time B4 Rdctn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cars B4 Rdctn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Time to Rdce	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Min Gap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Pedestrian		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-3-1	Walk	-	7	-	7	-	7	-	7	-	-	-	-	-	-	-	-
	Ped Clr	-	8	-	8	-	8	-	8	-	-	-	-	-	-	-	-
	Alt Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Alt Ped Clr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-2	Ped Recall	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ped Recall Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-3	Walk Offset Time	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Walk Offset Mode	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-4	Flash Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ext Ped Clr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Act Rest in Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Initial & NA		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-4	Initial	1	3	1	1	1	3	1	1	-	-	-	-	-	-	-	-
	NA Response	-	1	-	2	-	1	-	2	-	-	-	-	-	-	-	-
	Update Green	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Lock & Misc		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-5	Non-Lock Mem	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dual Entry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Last Car Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cond Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No Simul Gap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Special Sequence		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-6	Omit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Yellow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Omit Call	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Phase Data : Bank 4		**Phase #**															
Vehicle		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-1-1	Min Green	10	15	10	15	10	15	10	15	-	-	-	-	-	-	-	-
	Passage	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0	-	-	-	-	-	-	-	-
	Max 1	25	35	25	35	25	35	25	35	-	-	-	-	-	-	-	-
	Max 2	30	50	30	50	30	50	30	50	-	-	-	-	-	-	-	-
	Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Red	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-	-	-	-
F-3-1-2	Dyn Max	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dyn Step	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-1-3	Veh Recall	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Recall Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-1-4	Green Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Yellow Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bike Green	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bike Passg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Density		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
F-3-2	Added Init	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Max Initial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Time B4 Rdctn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cars B4 Rdctn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Time to Rdce	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Min Gap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Pedestrian		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
F-3-3-1	Walk	-	7	-	7	-	7	-	7	-	-	-	-	-	-	-	-
	Ped Clr	-	8	-	8	-	8	-	8	-	-	-	-	-	-	-	-
	Alt Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Alt Ped Clr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-2	Ped Recall	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ped Recall Delay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-3	Walk Offset Time	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Walk Offset Mode	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-3-3-4	Flash Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ext Ped Clr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Act Rest in Walk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Initial & NA		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
F-3-4	Initial	1	3	1	1	1	3	1	1	-	-	-	-	-	-	-	-
	NA Response	-	1	-	2	-	1	-	2	-	-	-	-	-	-	-	-
	Update Green	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Lock & Misc		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-5	Non-Lock Mem	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dual Entry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Last Car Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cond Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No Simul Gap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Special Sequence		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
F-3-6	Omit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Yellow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Omit Call	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Detector Assignments F-3-7 : Bank 1

Vehicle Detector Data

#	Type	Assigned	Switch	Extend (sec)	Delay (sec)	Call	Passage	Added	Volume	Occup	Lock	Fail (sec)	Queue	Q-Limit (sec)
1	0	1	-	0.0	0.0	True	True	True	False	False	0	255	False	0
2	0	5	-	0.0	0.0	True	True	True	False	False	0	255	False	0
3	0	2	-	0.0	0.0	True	True	True	False	False	0	255	False	0
4	0	6	-	0.0	0.0	True	True	True	False	False	0	255	False	0
5	0	3	-	0.0	0.0	True	True	True	False	False	0	255	False	0
6	0	7	-	0.0	0.0	True	True	True	False	False	0	255	False	0
7	0	5	-	0.0	0.0	True	True	True	False	False	0	255	False	0
8	0	8	-	0.0	0.0	True	True	True	False	False	0	255	False	0
9	0	3	-	0.0	0.0	True	True	True	False	False	0	255	False	0
11	0	4	-	0.0	0.0	True	True	True	False	False	0	255	False	0
12	0	8	-	0.0	0.0	True	True	True	False	False	0	255	False	0
13	0	4	-	0.0	0.0	True	True	True	False	False	0	255	False	0
14	0	4	-	0.0	0.0	True	True	True	False	False	0	255	False	0
15	0	7	-	0.0	0.0	True	True	True	False	False	0	255	False	0
17	0	1	-	0.0	0.0	True	True	True	False	False	0	255	False	0
18	0	3	-	0.0	0.0	True	True	True	False	False	0	255	False	0
19	0	4	-	0.0	0.0	True	True	True	False	False	0	255	False	0
21	0	6	-	0.0	0.0	True	True	True	False	False	0	255	False	0
22	0	6	-	0.0	0.0	True	True	True	False	False	0	255	False	0
23	0	6	-	0.0	0.0	True	True	True	False	False	0	255	False	0
24	0	6	-	0.0	0.0	True	True	True	False	False	0	255	False	0
25	0	8	-	0.0	0.0	True	True	True	False	False	0	255	False	0
29	0	7	-	0.0	0.0	True	True	True	False	False	0	255	False	0
31	0	8	-	0.0	0.0	True	True	True	False	False	0	255	False	0

Stage F	1, 5
Stage G	1, 6
Stage H	2, 5
Stage I	
Stage J	
Stage K	
Stage L	

	Phases
PHSMODE	-
COORD PH	-

Mode:	0
Msg Type:	0
Outstation ID:	X000010

Port Configuration F-2-6-1

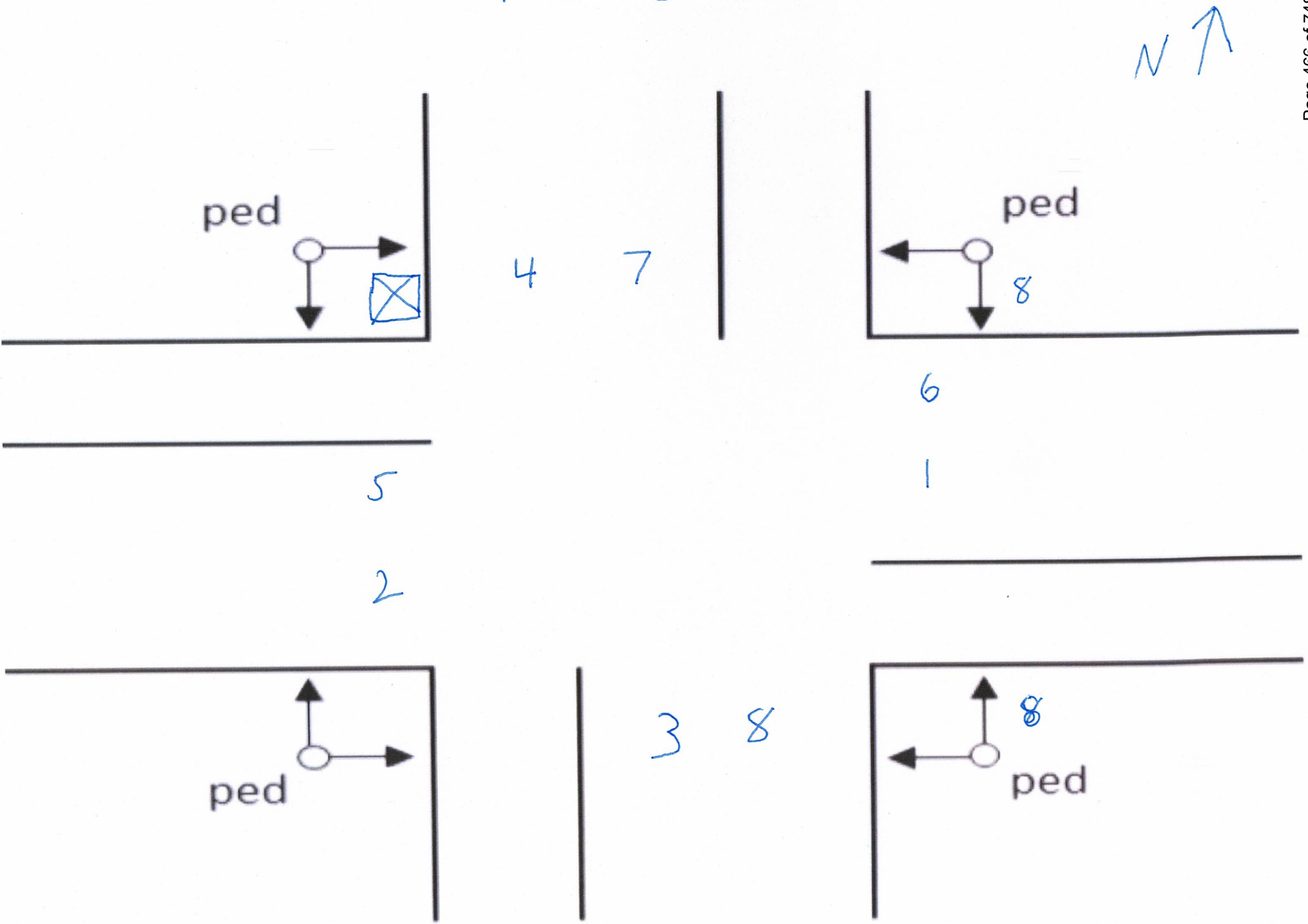
Port	Baud Rate	Protocol	CTS	DCD
1	153600	N/A	N/A	N/A
2	0	1	False	False
3	0	1	False	False

SPaT Data F-2-6-A

ID	Destination IP	DST Port	Enabled
1	10.112.4.226	1034	True
2	0.0.0.0	1034	False
3	0.0.0.0	1034	False
4	0.0.0.0	1034	False
5	0.0.0.0	1034	False
6	0.0.0.0	1034	False
7	0.0.0.0	1034	False
8	0.0.0.0	1034	False
9	0.0.0.0	1034	False
10	0.0.0.0	1034	False
11	0.0.0.0	1034	False
12	0.0.0.0	1034	False
13	0.0.0.0	1034	False
14	0.0.0.0	1034	False
15	0.0.0.0	1034	False
16	0.0.0.0	1034	False

System Data F-9-1-2	
Backup Time	900

Hampshire Pk @ Oak Springs



APPENDIX B – CAPACITY ANALYSES

EXISTING CAPACITY ANALYSES

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	617	278	102	127	5
Future Vol, veh/h	4	617	278	102	127	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	175	0	230
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	671	302	111	138	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	413	0	-	0	981	302
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	679	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1146	-	-	-	277	738
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	504	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1146	-	-	-	276	738
Mov Cap-2 Maneuver	-	-	-	-	392	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	504	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	18.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1146	-	-	-	392	738
HCM Lane V/C Ratio	0.004	-	-	-	0.352	0.007
HCM Control Delay (s)	8.2	-	-	-	19.1	9.9
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0	-	-	-	1.6	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	532	200	199	265	38	103	2	7	39	24	11
Future Volume (veh/h)	11	532	200	199	265	38	103	2	7	39	24	11
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	12	578	217	216	288	41	112	2	8	42	26	12
Adj No. of Lanes	1	2	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	795	1764	661	555	1371	1165	199	25	102	153	42	19
Arrive On Green	0.01	0.70	0.70	0.05	0.74	0.74	0.07	0.08	0.08	0.03	0.03	0.03
Sat Flow, veh/h	1774	2521	945	1774	1863	1583	1774	326	1306	1774	1207	557
Grp Volume(v), veh/h	12	405	390	216	288	41	112	0	10	42	0	38
Grp Sat Flow(s),veh/h/ln	1774	1770	1696	1774	1863	1583	1774	0	1632	1774	0	1764
Q Serve(g_s), s	0.3	12.5	12.5	4.6	6.8	1.0	8.3	0.0	0.8	3.2	0.0	3.0
Cycle Q Clear(g_c), s	0.3	12.5	12.5	4.6	6.8	1.0	8.3	0.0	0.8	3.2	0.0	3.0
Prop In Lane	1.00		0.56	1.00		1.00	1.00		0.80	1.00		0.32
Lane Grp Cap(c), veh/h	795	1238	1187	555	1371	1165	199	0	127	153	0	61
V/C Ratio(X)	0.02	0.33	0.33	0.39	0.21	0.04	0.56	0.00	0.08	0.27	0.00	0.62
Avail Cap(c_a), veh/h	968	1238	1187	789	1371	1165	393	0	291	296	0	189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	8.2	8.2	5.6	5.8	5.0	57.7	0.0	59.9	62.7	0.0	66.7
Incr Delay (d2), s/veh	0.0	0.7	0.7	0.3	0.3	0.1	0.9	0.0	0.1	0.4	0.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.3	6.1	2.2	3.6	0.4	4.1	0.0	0.4	1.6	0.0	1.5
LnGrp Delay(d),s/veh	5.8	8.9	8.9	5.9	6.1	5.1	58.6	0.0	60.0	63.1	0.0	70.4
LnGrp LOS	A	A	A	A	A	A	E		E	E		E
Approach Vol, veh/h		807			545			122			80	
Approach Delay, s/veh		8.9			5.9			58.7			66.6	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	103.9	14.7	9.9	6.4	109.0	8.7	15.9
Change Period (Y+Rc), s	4.5	6.0	4.5	5.0	4.5	6.0	4.5	5.0
Max Green Setting (Gmax), s	25.5	54.0	25.5	15.0	15.5	54.0	15.5	25.0
Max Q Clear Time (g_c+I1), s	6.6	14.5	10.3	5.0	2.3	8.8	5.2	2.8
Green Ext Time (p_c), s	0.4	14.8	0.1	0.0	0.0	5.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B



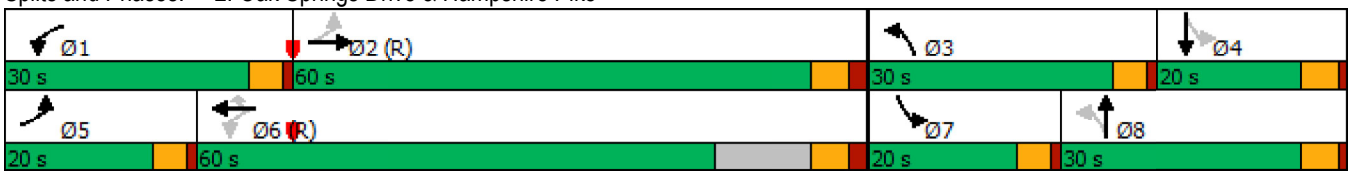
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	12	795	216	288	41	112	10	42	38
v/c Ratio	0.02	0.35	0.42	0.21	0.03	0.59	0.10	0.18	0.39
Control Delay	5.8	11.8	7.4	7.8	0.1	69.5	35.6	48.6	59.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.8	11.8	7.4	7.8	0.1	69.5	35.6	48.6	59.3
Queue Length 50th (ft)	2	152	47	68	0	101	2	33	23
Queue Length 95th (ft)	9	246	88	153	0	143	20	65	61
Internal Link Dist (ft)		385		512			201		183
Turn Bay Length (ft)	70		415		90	140		70	
Base Capacity (vph)	911	2258	652	1375	1200	335	299	275	200
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.35	0.33	0.21	0.03	0.33	0.03	0.15	0.19

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	11	532	199	265	38	103	2	39	24
Future Volume (vph)	11	532	199	265	38	103	2	39	24
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6		3	8	7	4
Permitted Phases	2		6		6	8		4	
Detector Phase	5	2	1	6	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	25.0	5.0	25.0	25.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0	9.5	31.0	31.0	9.5	30.0	9.5	10.0
Total Split (s)	20.0	60.0	30.0	60.0	60.0	30.0	30.0	20.0	20.0
Total Split (%)	14.3%	42.9%	21.4%	42.9%	42.9%	21.4%	21.4%	14.3%	14.3%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	3.5	4.0	3.5	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	4.5	6.0	6.0	4.5	5.0	4.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	99.0	92.5	108.7	103.4	103.4	15.4	7.8	19.5	6.8
Actuated g/C Ratio	0.71	0.66	0.78	0.74	0.74	0.11	0.06	0.14	0.05
v/c Ratio	0.02	0.35	0.42	0.21	0.03	0.59	0.10	0.18	0.39
Control Delay	5.8	11.8	7.4	7.8	0.1	69.5	35.6	48.6	59.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.8	11.8	7.4	7.8	0.1	69.5	35.6	48.6	59.3
LOS	A	B	A	A	A	E	D	D	E
Approach Delay		11.7		7.1			66.7		53.7
Approach LOS		B		A			E		D

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 54.5 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 16.6	Intersection LOS: B
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Oak Springs Drive & Hampshire Pike



Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	427	603	248	148	3
Future Vol, veh/h	8	427	603	248	148	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	175	0	230
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	464	655	270	161	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	925	0	-	0	1137	655
Stage 1	-	-	-	-	655	-
Stage 2	-	-	-	-	482	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	739	-	-	-	223	466
Stage 1	-	-	-	-	517	-
Stage 2	-	-	-	-	621	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	739	-	-	-	220	466
Mov Cap-2 Maneuver	-	-	-	-	355	-
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	621	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	23.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	739	-	-	-	355	466
HCM Lane V/C Ratio	0.012	-	-	-	0.453	0.007
HCM Control Delay (s)	9.9	-	-	-	23.3	12.8
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0	-	-	-	2.3	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	506	18	7	759	104	21	0	17	62	1	74
Future Volume (veh/h)	50	506	18	7	759	104	21	0	17	62	1	74
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	54	550	20	8	825	113	23	0	18	67	1	80
Adj No. of Lanes	1	2	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	424	2652	96	669	1377	1171	108	0	63	174	1	102
Arrive On Green	0.03	0.76	0.76	0.01	0.74	0.74	0.02	0.00	0.04	0.05	0.07	0.07
Sat Flow, veh/h	1774	3483	127	1774	1863	1583	1774	0	1583	1774	20	1567
Grp Volume(v), veh/h	54	279	291	8	825	113	23	0	18	67	0	81
Grp Sat Flow(s),veh/h/ln	1774	1770	1840	1774	1863	1583	1774	0	1583	1774	0	1586
Q Serve(g_s), s	1.0	6.3	6.3	0.2	29.0	2.8	1.7	0.0	1.5	5.0	0.0	7.0
Cycle Q Clear(g_c), s	1.0	6.3	6.3	0.2	29.0	2.8	1.7	0.0	1.5	5.0	0.0	7.0
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		0.99
Lane Grp Cap(c), veh/h	424	1347	1401	669	1377	1171	108	0	63	174	0	103
V/C Ratio(X)	0.13	0.21	0.21	0.01	0.60	0.10	0.21	0.00	0.28	0.39	0.00	0.78
Avail Cap(c_a), veh/h	564	1347	1401	975	1377	1171	394	0	283	288	0	170
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.1	4.7	4.7	4.5	8.5	5.1	62.6	0.0	65.3	59.8	0.0	64.5
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	1.9	0.2	0.4	0.0	0.9	0.5	0.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.2	3.3	0.1	15.4	1.3	0.9	0.0	0.7	2.5	0.0	3.2
LnGrp Delay(d),s/veh	7.1	5.1	5.1	4.5	10.5	5.3	62.9	0.0	66.2	60.3	0.0	69.3
LnGrp LOS	A	A	A	A	B	A	E		E	E		E
Approach Vol, veh/h		624			946			41			148	
Approach Delay, s/veh		5.3			9.8			64.3			65.2	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	112.6	7.5	14.1	8.9	109.5	11.0	10.6
Change Period (Y+Rc), s	4.5	6.0	4.5	5.0	4.5	6.0	4.5	5.0
Max Green Setting (Gmax), s	25.5	54.0	25.5	15.0	15.5	54.0	15.5	25.0
Max Q Clear Time (g_c+I1), s	2.2	8.3	3.7	9.0	3.0	31.0	7.0	3.5
Green Ext Time (p_c), s	0.0	10.0	0.0	0.1	0.0	14.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B



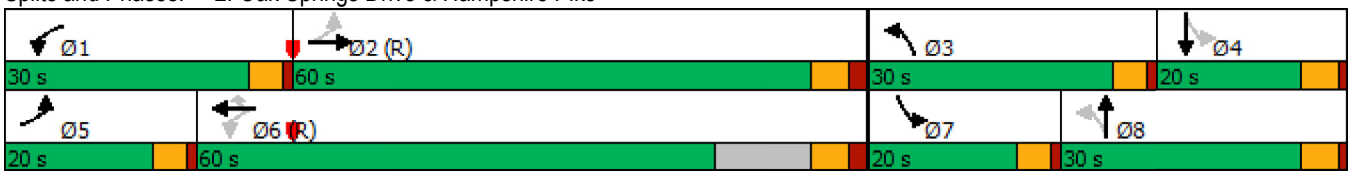
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	54	570	8	825	113	23	18	67	81
v/c Ratio	0.12	0.20	0.01	0.58	0.09	0.21	0.04	0.43	0.52
Control Delay	3.5	4.2	3.3	10.5	1.1	59.7	0.1	64.2	25.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.5	4.2	3.3	10.5	1.1	59.7	0.1	64.2	25.0
Queue Length 50th (ft)	7	50	1	307	0	21	0	57	1
Queue Length 95th (ft)	20	116	5	517	17	45	0	101	54
Internal Link Dist (ft)		385		512			201		183
Turn Bay Length (ft)	70		415		90	140		70	
Base Capacity (vph)	548	2846	853	1427	1241	324	666	213	241
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.20	0.01	0.58	0.09	0.07	0.03	0.31	0.34

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	50	506	7	759	104	21	0	62	1
Future Volume (vph)	50	506	7	759	104	21	0	62	1
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6		3	8	7	4
Permitted Phases	2		6		6	8		4	
Detector Phase	5	2	1	6	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	25.0	5.0	25.0	25.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0	9.5	31.0	31.0	9.5	30.0	9.5	10.0
Total Split (s)	20.0	60.0	30.0	60.0	60.0	30.0	30.0	20.0	20.0
Total Split (%)	14.3%	42.9%	21.4%	42.9%	42.9%	21.4%	21.4%	14.3%	14.3%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	3.5	4.0	3.5	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	4.5	6.0	6.0	4.5	5.0	4.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	115.8	113.1	112.9	107.3	107.3	8.3	5.0	14.3	7.2
Actuated g/C Ratio	0.83	0.81	0.81	0.77	0.77	0.06	0.04	0.10	0.05
v/c Ratio	0.12	0.20	0.01	0.58	0.09	0.21	0.04	0.43	0.52
Control Delay	3.5	4.2	3.3	10.5	1.1	59.7	0.1	64.2	25.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.5	4.2	3.3	10.5	1.1	59.7	0.1	64.2	25.0
LOS	A	A	A	B	A	E	A	E	C
Approach Delay		4.1		9.3			33.5		42.7
Approach LOS		A		A			C		D

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 54.5 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 10.9	Intersection LOS: B
Intersection Capacity Utilization 60.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Oak Springs Drive & Hampshire Pike



BACKGROUND CAPACITY ANALYSES

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	653	319	130	170	15
Future Vol, veh/h	9	653	319	130	170	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	175	0	230
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	710	347	141	185	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	488	0	-	0	1077	347
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	730	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1075	-	-	-	242	696
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	477	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1075	-	-	-	240	696
Mov Cap-2 Maneuver	-	-	-	-	363	-
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	477	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	23.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1075	-	-	-	363	696
HCM Lane V/C Ratio	0.009	-	-	-	0.509	0.023
HCM Control Delay (s)	8.4	-	-	-	24.8	10.3
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0	-	-	-	2.8	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	601	204	203	322	80	105	2	7	110	25	21
Future Volume (veh/h)	16	601	204	203	322	80	105	2	7	110	25	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	17	653	222	221	350	87	114	2	8	120	27	23
Adj No. of Lanes	1	2	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	705	1783	606	511	1345	1143	204	13	52	237	40	34
Arrive On Green	0.02	0.69	0.69	0.05	0.72	0.72	0.07	0.04	0.04	0.08	0.04	0.04
Sat Flow, veh/h	1774	2595	882	1774	1863	1583	1774	326	1306	1774	930	793
Grp Volume(v), veh/h	17	445	430	221	350	87	114	0	10	120	0	50
Grp Sat Flow(s),veh/h/ln	1774	1770	1707	1774	1863	1583	1774	0	1632	1774	0	1723
Q Serve(g_s), s	0.4	14.7	14.7	4.9	9.0	2.3	8.5	0.0	0.8	9.0	0.0	4.0
Cycle Q Clear(g_c), s	0.4	14.7	14.7	4.9	9.0	2.3	8.5	0.0	0.8	9.0	0.0	4.0
Prop In Lane	1.00		0.52	1.00		1.00	1.00		0.80	1.00		0.46
Lane Grp Cap(c), veh/h	705	1216	1173	511	1345	1143	204	0	66	237	0	75
V/C Ratio(X)	0.02	0.37	0.37	0.43	0.26	0.08	0.56	0.00	0.15	0.51	0.00	0.67
Avail Cap(c_a), veh/h	871	1216	1173	742	1345	1143	394	0	291	296	0	185
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.2	9.2	9.2	6.4	6.7	5.7	58.7	0.0	64.9	58.4	0.0	66.0
Incr Delay (d2), s/veh	0.0	0.9	0.9	0.4	0.5	0.1	0.9	0.0	0.4	0.6	0.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	7.5	7.2	2.4	4.7	1.0	4.2	0.0	0.4	4.4	0.0	2.0
LnGrp Delay(d),s/veh	6.2	10.0	10.1	6.8	7.1	5.9	59.6	0.0	65.3	59.0	0.0	69.8
LnGrp LOS	A	B	B	A	A	A	E		E	E		E
Approach Vol, veh/h		892			658			124			170	
Approach Delay, s/veh		10.0			6.9			60.0			62.2	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	102.2	15.0	11.1	6.9	107.1	15.4	10.6
Change Period (Y+Rc), s	4.5	6.0	4.5	5.0	4.5	6.0	4.5	5.0
Max Green Setting (Gmax), s	25.5	54.0	25.5	15.0	15.5	54.0	15.5	25.0
Max Q Clear Time (g_c+I1), s	6.9	16.7	10.5	6.0	2.4	11.0	11.0	2.8
Green Ext Time (p_c), s	0.4	16.3	0.1	0.1	0.0	7.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B



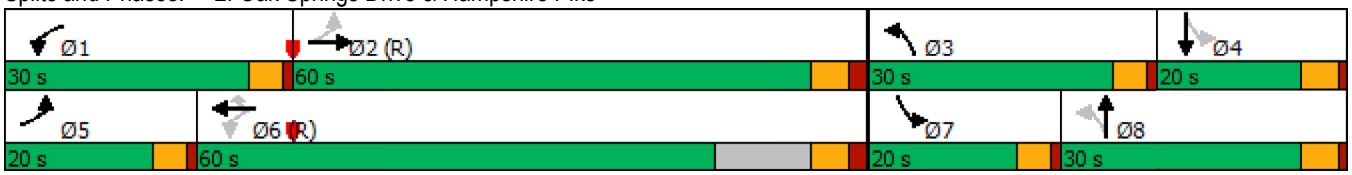
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	17	875	221	350	87	114	10	120	50
v/c Ratio	0.02	0.39	0.45	0.26	0.07	0.59	0.12	0.46	0.46
Control Delay	6.2	13.5	8.2	8.4	0.7	69.6	38.4	56.1	52.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.2	13.5	8.2	8.4	0.7	69.6	38.4	56.1	52.3
Queue Length 50th (ft)	3	180	48	87	0	102	2	98	24
Queue Length 95th (ft)	12	298	92	193	9	144	21	151	67
Internal Link Dist (ft)		385		512			201		183
Turn Bay Length (ft)	70		415		90	140		70	
Base Capacity (vph)	860	2220	614	1369	1195	340	299	282	206
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.39	0.36	0.26	0.07	0.34	0.03	0.43	0.24

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	16	601	203	322	80	105	2	110	25
Future Volume (vph)	16	601	203	322	80	105	2	110	25
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6		3	8	7	4
Permitted Phases	2		6		6	8		4	
Detector Phase	5	2	1	6	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	25.0	5.0	25.0	25.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0	9.5	31.0	31.0	9.5	30.0	9.5	10.0
Total Split (s)	20.0	60.0	30.0	60.0	60.0	30.0	30.0	20.0	20.0
Total Split (%)	14.3%	42.9%	21.4%	42.9%	42.9%	21.4%	21.4%	14.3%	14.3%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	3.5	4.0	3.5	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	4.5	6.0	6.0	4.5	5.0	4.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	97.2	90.7	108.2	102.9	102.9	15.1	6.4	21.6	7.1
Actuated g/C Ratio	0.69	0.65	0.77	0.74	0.74	0.11	0.05	0.15	0.05
v/c Ratio	0.02	0.39	0.45	0.26	0.07	0.59	0.12	0.46	0.46
Control Delay	6.2	13.5	8.2	8.4	0.7	69.6	38.4	56.1	52.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.2	13.5	8.2	8.4	0.7	69.6	38.4	56.1	52.3
LOS	A	B	A	A	A	E	D	E	D
Approach Delay		13.3		7.3			67.1		55.0
Approach LOS		B		A			E		D

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 54.5 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 18.6	Intersection LOS: B
Intersection Capacity Utilization 60.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Oak Springs Drive & Hampshire Pike



Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	473	645	321	191	13
Future Vol, veh/h	21	473	645	321	191	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	175	0	230
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	514	701	349	208	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1050	0	-	0	1261	701
Stage 1	-	-	-	-	701	-
Stage 2	-	-	-	-	560	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	663	-	-	-	~ 188	439
Stage 1	-	-	-	-	492	-
Stage 2	-	-	-	-	572	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	663	-	-	-	~ 181	439
Mov Cap-2 Maneuver	-	-	-	-	318	-
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	572	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	33.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	663	-	-	-	318	439
HCM Lane V/C Ratio	0.034	-	-	-	0.653	0.032
HCM Control Delay (s)	10.6	-	-	-	35.3	13.5
HCM Lane LOS	B	-	-	-	E	B
HCM 95th %tile Q(veh)	0.1	-	-	-	4.3	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	580	18	7	861	213	21	0	17	133	1	87
Future Volume (veh/h)	64	580	18	7	861	213	21	0	17	133	1	87
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	70	630	20	8	936	232	23	0	18	145	1	95
Adj No. of Lanes	1	2	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	2526	80	582	1299	1104	135	0	56	246	2	165
Arrive On Green	0.03	0.72	0.72	0.01	0.70	0.70	0.02	0.00	0.04	0.09	0.11	0.11
Sat Flow, veh/h	1774	3502	111	1774	1863	1583	1774	0	1583	1774	17	1569
Grp Volume(v), veh/h	70	318	332	8	936	232	23	0	18	145	0	96
Grp Sat Flow(s),veh/h/ln	1774	1770	1843	1774	1863	1583	1774	0	1583	1774	0	1586
Q Serve(g_s), s	1.5	8.6	8.6	0.2	42.8	7.3	1.7	0.0	1.6	10.7	0.0	8.1
Cycle Q Clear(g_c), s	1.5	8.6	8.6	0.2	42.8	7.3	1.7	0.0	1.6	10.7	0.0	8.1
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.99
Lane Grp Cap(c), veh/h	298	1277	1330	582	1299	1104	135	0	56	246	0	167
V/C Ratio(X)	0.23	0.25	0.25	0.01	0.72	0.21	0.17	0.00	0.32	0.59	0.00	0.58
Avail Cap(c_a), veh/h	435	1277	1330	888	1299	1104	421	0	283	282	0	170
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.0	6.6	6.6	6.1	12.9	7.5	63.1	0.0	65.9	56.4	0.0	59.7
Incr Delay (d2), s/veh	0.1	0.5	0.4	0.0	3.5	0.4	0.2	0.0	1.2	1.1	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.3	4.5	0.1	23.1	3.3	0.9	0.0	0.7	5.3	0.0	3.7
LnGrp Delay(d),s/veh	13.1	7.1	7.1	6.1	16.3	7.9	63.3	0.0	67.1	57.5	0.0	62.6
LnGrp LOS	B	A	A	A	B	A	E		E	E		E
Approach Vol, veh/h		720			1176			41			241	
Approach Delay, s/veh		7.7			14.6			65.0			59.5	
Approach LOS		A			B			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	107.0	7.5	19.7	9.2	103.7	17.2	10.0
Change Period (Y+Rc), s	4.5	6.0	4.5	5.0	4.5	6.0	4.5	5.0
Max Green Setting (Gmax), s	25.5	54.0	25.5	15.0	15.5	54.0	15.5	25.0
Max Q Clear Time (g_c+I1), s	2.2	10.6	3.7	10.1	3.5	44.8	12.7	3.6
Green Ext Time (p_c), s	0.0	11.6	0.0	0.1	0.0	7.7	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B



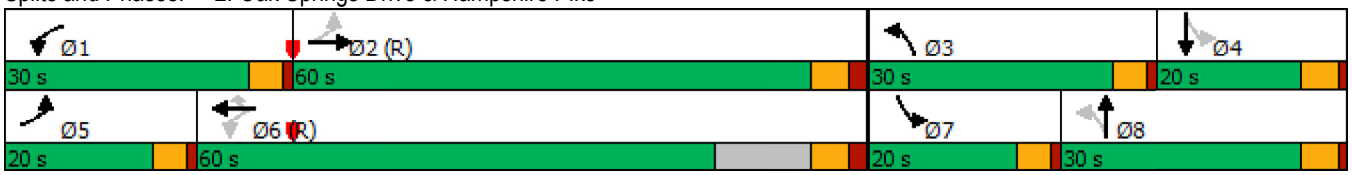
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	70	650	8	936	232	23	18	145	96
v/c Ratio	0.20	0.24	0.01	0.68	0.19	0.22	0.04	0.70	0.46
Control Delay	4.9	5.2	4.1	14.8	3.9	58.0	0.2	74.7	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.9	5.2	4.1	14.8	3.9	58.0	0.2	74.7	18.7
Queue Length 50th (ft)	10	58	1	390	25	21	0	130	1
Queue Length 95th (ft)	27	145	6	720	66	44	0	190	57
Internal Link Dist (ft)		385		512			201		183
Turn Bay Length (ft)	70		415		90	140		70	
Base Capacity (vph)	447	2760	794	1378	1203	324	607	229	254
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.24	0.01	0.68	0.19	0.07	0.03	0.63	0.38

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	64	580	7	861	213	21	0	133	1
Future Volume (vph)	64	580	7	861	213	21	0	133	1
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6		3	8	7	4
Permitted Phases	2		6		6	8		4	
Detector Phase	5	2	1	6	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	25.0	5.0	25.0	25.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0	9.5	31.0	31.0	9.5	30.0	9.5	10.0
Total Split (s)	20.0	60.0	30.0	60.0	60.0	30.0	30.0	20.0	20.0
Total Split (%)	14.3%	42.9%	21.4%	42.9%	42.9%	21.4%	21.4%	14.3%	14.3%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	3.5	4.0	3.5	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	4.5	6.0	6.0	4.5	5.0	4.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	112.5	109.7	109.3	103.6	103.6	8.1	5.0	17.8	10.7
Actuated g/C Ratio	0.80	0.78	0.78	0.74	0.74	0.06	0.04	0.13	0.08
v/c Ratio	0.20	0.24	0.01	0.68	0.19	0.22	0.04	0.70	0.46
Control Delay	4.9	5.2	4.1	14.8	3.9	58.0	0.2	74.7	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.9	5.2	4.1	14.8	3.9	58.0	0.2	74.7	18.7
LOS	A	A	A	B	A	E	A	E	B
Approach Delay		5.2		12.6			32.6		52.4
Approach LOS		A		B			C		D

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 54.5 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 14.9	Intersection LOS: B
Intersection Capacity Utilization 76.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Oak Springs Drive & Hampshire Pike



PROJECTED CAPACITY ANALYSES

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	33	653	319	170	209	38
Future Vol, veh/h	33	653	319	170	209	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	175	0	230
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	710	347	185	227	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	532	0	-	0	1129	347
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	782	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1036	-	-	-	~ 226	696
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	451	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1036	-	-	-	~ 218	696
Mov Cap-2 Maneuver	-	-	-	-	341	-
Stage 1	-	-	-	-	691	-
Stage 2	-	-	-	-	451	-

Approach	EB	WB	SE
HCM Control Delay, s	0.4	0	30.6
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1	SELn2
Capacity (veh/h)	1036	-	-	-	341	696
HCM Lane V/C Ratio	0.035	-	-	-	0.666	0.059
HCM Control Delay (s)	8.6	-	-	-	34.3	10.5
HCM Lane LOS	A	-	-	-	D	B
HCM 95th %tile Q(veh)	0.1	-	-	-	4.5	0.2

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	640	204	203	362	80	105	2	7	110	25	21
Future Volume (veh/h)	16	640	204	203	362	80	105	2	7	110	25	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	17	696	222	221	393	87	114	2	8	120	27	23
Adj No. of Lanes	1	2	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	672	1815	579	492	1345	1143	204	13	52	237	40	34
Arrive On Green	0.02	0.69	0.69	0.05	0.72	0.72	0.07	0.04	0.04	0.08	0.04	0.04
Sat Flow, veh/h	1774	2641	842	1774	1863	1583	1774	326	1306	1774	930	793
Grp Volume(v), veh/h	17	466	452	221	393	87	114	0	10	120	0	50
Grp Sat Flow(s),veh/h/ln	1774	1770	1714	1774	1863	1583	1774	0	1632	1774	0	1723
Q Serve(g_s), s	0.4	15.7	15.7	4.9	10.4	2.3	8.5	0.0	0.8	9.0	0.0	4.0
Cycle Q Clear(g_c), s	0.4	15.7	15.7	4.9	10.4	2.3	8.5	0.0	0.8	9.0	0.0	4.0
Prop In Lane	1.00		0.49	1.00		1.00	1.00		0.80	1.00		0.46
Lane Grp Cap(c), veh/h	672	1216	1178	492	1345	1143	204	0	66	237	0	75
V/C Ratio(X)	0.03	0.38	0.38	0.45	0.29	0.08	0.56	0.00	0.15	0.51	0.00	0.67
Avail Cap(c_a), veh/h	838	1216	1178	723	1345	1143	394	0	291	296	0	185
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.3	9.3	9.3	6.6	6.9	5.7	58.7	0.0	64.9	58.4	0.0	66.0
Incr Delay (d2), s/veh	0.0	0.9	0.9	0.5	0.6	0.1	0.9	0.0	0.4	0.6	0.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	8.0	7.7	2.4	5.6	1.0	4.2	0.0	0.4	4.4	0.0	2.0
LnGrp Delay(d),s/veh	6.3	10.2	10.3	7.1	7.4	5.9	59.6	0.0	65.3	59.0	0.0	69.8
LnGrp LOS	A	B	B	A	A	A	E		E	E		E
Approach Vol, veh/h		935			701			124			170	
Approach Delay, s/veh		10.2			7.1			60.0			62.2	
Approach LOS		B			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	102.2	15.0	11.1	6.9	107.1	15.4	10.6
Change Period (Y+Rc), s	4.5	6.0	4.5	5.0	4.5	6.0	4.5	5.0
Max Green Setting (Gmax), s	25.5	54.0	25.5	15.0	15.5	54.0	15.5	25.0
Max Q Clear Time (g_c+I1), s	6.9	17.7	10.5	6.0	2.4	12.4	11.0	2.8
Green Ext Time (p_c), s	0.4	17.1	0.1	0.1	0.0	7.8	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B



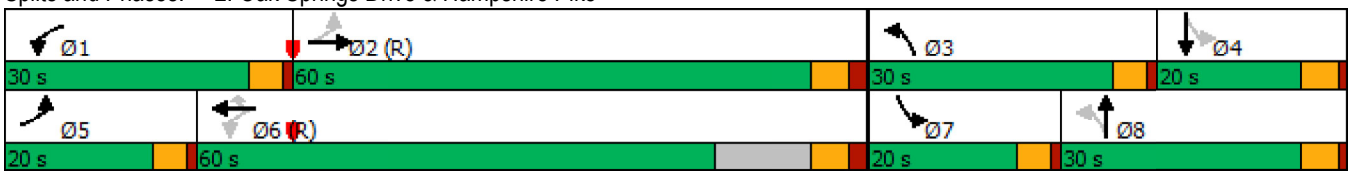
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	17	918	221	393	87	114	10	120	50
v/c Ratio	0.02	0.42	0.47	0.29	0.07	0.59	0.12	0.46	0.46
Control Delay	6.3	14.3	8.4	8.6	0.7	69.6	38.4	56.1	52.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.3	14.3	8.4	8.6	0.7	69.6	38.4	56.1	52.3
Queue Length 50th (ft)	3	200	48	101	0	102	2	98	24
Queue Length 95th (ft)	12	325	92	219	9	144	21	151	67
Internal Link Dist (ft)		385		512			201		183
Turn Bay Length (ft)	70		415		90	140		70	
Base Capacity (vph)	830	2203	595	1369	1195	340	299	282	206
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.42	0.37	0.29	0.07	0.34	0.03	0.43	0.24

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	16	640	203	362	80	105	2	110	25
Future Volume (vph)	16	640	203	362	80	105	2	110	25
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6		3	8	7	4
Permitted Phases	2		6		6	8		4	
Detector Phase	5	2	1	6	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	25.0	5.0	25.0	25.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0	9.5	31.0	31.0	9.5	30.0	9.5	10.0
Total Split (s)	20.0	60.0	30.0	60.0	60.0	30.0	30.0	20.0	20.0
Total Split (%)	14.3%	42.9%	21.4%	42.9%	42.9%	21.4%	21.4%	14.3%	14.3%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	3.5	4.0	3.5	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	4.5	6.0	6.0	4.5	5.0	4.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	96.4	89.9	108.2	102.9	102.9	15.1	6.4	21.6	7.1
Actuated g/C Ratio	0.69	0.64	0.77	0.74	0.74	0.11	0.05	0.15	0.05
v/c Ratio	0.02	0.42	0.47	0.29	0.07	0.59	0.12	0.46	0.46
Control Delay	6.3	14.3	8.4	8.6	0.7	69.6	38.4	56.1	52.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.3	14.3	8.4	8.6	0.7	69.6	38.4	56.1	52.3
LOS	A	B	A	A	A	E	D	E	D
Approach Delay		14.2		7.6			67.1		55.0
Approach LOS		B		A			E		D

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 54.5 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 18.8	Intersection LOS: B
Intersection Capacity Utilization 61.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Oak Springs Drive & Hampshire Pike



Intersection	
Int Delay, s/veh	5.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	169	32	128	75	80	78
Future Vol, veh/h	169	32	128	75	80	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	184	35	139	82	87	85

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	219	0	562	202
Stage 1	-	-	-	-	202	-
Stage 2	-	-	-	-	360	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1350	-	488	839
Stage 1	-	-	-	-	832	-
Stage 2	-	-	-	-	706	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1350	-	435	839
Mov Cap-2 Maneuver	-	-	-	-	435	-
Stage 1	-	-	-	-	832	-
Stage 2	-	-	-	-	630	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5	14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	571	-	-	1350	-
HCM Lane V/C Ratio	0.301	-	-	0.103	-
HCM Control Delay (s)	14	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.3	-	-	0.3	-

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	42	473	645	357	225	32
Future Vol, veh/h	42	473	645	357	225	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	175	0	230
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	514	701	388	245	35

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1089	0	-	0	1307	701
Stage 1	-	-	-	-	701	-
Stage 2	-	-	-	-	606	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	641	-	-	-	~ 176	439
Stage 1	-	-	-	-	492	-
Stage 2	-	-	-	-	545	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	641	-	-	-	~ 163	439
Mov Cap-2 Maneuver	-	-	-	-	300	-
Stage 1	-	-	-	-	457	-
Stage 2	-	-	-	-	545	-

Approach	EB	WB	SE
HCM Control Delay, s	0.9	0	48.7
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1	SELn2
Capacity (veh/h)	641	-	-	-	300	439
HCM Lane V/C Ratio	0.071	-	-	-	0.815	0.079
HCM Control Delay (s)	11	-	-	-	53.7	13.9
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0.2	-	-	-	6.7	0.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	614	18	7	897	213	21	0	17	133	1	87
Future Volume (veh/h)	64	614	18	7	897	213	21	0	17	133	1	87
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	70	667	20	8	975	232	23	0	18	145	1	95
Adj No. of Lanes	1	2	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	2531	76	562	1299	1104	135	0	56	246	2	165
Arrive On Green	0.03	0.72	0.72	0.01	0.70	0.70	0.02	0.00	0.04	0.09	0.11	0.11
Sat Flow, veh/h	1774	3509	105	1774	1863	1583	1774	0	1583	1774	17	1569
Grp Volume(v), veh/h	70	336	351	8	975	232	23	0	18	145	0	96
Grp Sat Flow(s),veh/h/ln	1774	1770	1844	1774	1863	1583	1774	0	1583	1774	0	1586
Q Serve(g_s), s	1.5	9.2	9.2	0.2	46.5	7.3	1.7	0.0	1.6	10.7	0.0	8.1
Cycle Q Clear(g_c), s	1.5	9.2	9.2	0.2	46.5	7.3	1.7	0.0	1.6	10.7	0.0	8.1
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.99
Lane Grp Cap(c), veh/h	279	1277	1330	562	1299	1104	135	0	56	246	0	167
V/C Ratio(X)	0.25	0.26	0.26	0.01	0.75	0.21	0.17	0.00	0.32	0.59	0.00	0.58
Avail Cap(c_a), veh/h	416	1277	1330	868	1299	1104	421	0	283	282	0	170
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.5	6.7	6.7	6.2	13.4	7.5	63.1	0.0	65.9	56.4	0.0	59.7
Incr Delay (d2), s/veh	0.2	0.5	0.5	0.0	4.0	0.4	0.2	0.0	1.2	1.1	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.7	4.9	0.1	25.0	3.3	0.9	0.0	0.7	5.3	0.0	3.7
LnGrp Delay(d),s/veh	14.7	7.2	7.2	6.2	17.5	7.9	63.3	0.0	67.1	57.5	0.0	62.6
LnGrp LOS	B	A	A	A	B	A	E		E	E		E
Approach Vol, veh/h		757			1215			41			241	
Approach Delay, s/veh		7.9			15.6			65.0			59.5	
Approach LOS		A			B			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	107.0	7.5	19.7	9.2	103.7	17.2	10.0
Change Period (Y+Rc), s	4.5	6.0	4.5	5.0	4.5	6.0	4.5	5.0
Max Green Setting (Gmax), s	25.5	54.0	25.5	15.0	15.5	54.0	15.5	25.0
Max Q Clear Time (g_c+I1), s	2.2	11.2	3.7	10.1	3.5	48.5	12.7	3.6
Green Ext Time (p_c), s	0.0	12.4	0.0	0.1	0.0	4.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B



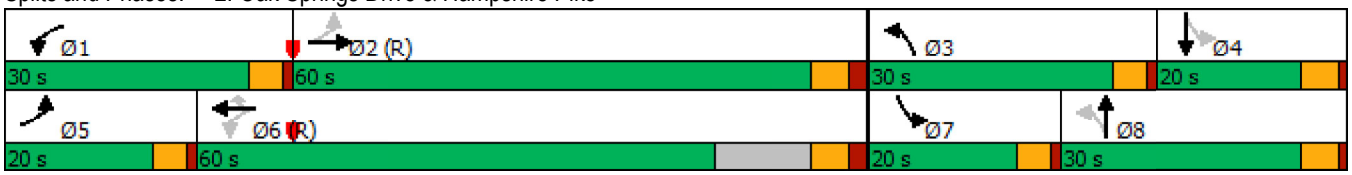
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	70	687	8	975	232	23	18	145	96
v/c Ratio	0.22	0.25	0.01	0.71	0.19	0.22	0.04	0.70	0.46
Control Delay	5.2	5.3	4.1	15.8	3.9	58.0	0.2	74.7	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.2	5.3	4.1	15.8	3.9	58.0	0.2	74.7	18.7
Queue Length 50th (ft)	10	63	1	424	25	21	0	130	1
Queue Length 95th (ft)	27	154	6	786	66	44	0	190	57
Internal Link Dist (ft)		385		512			201		183
Turn Bay Length (ft)	70		415		90	140		70	
Base Capacity (vph)	422	2762	777	1378	1203	324	599	229	254
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.25	0.01	0.71	0.19	0.07	0.03	0.63	0.38

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	64	614	7	897	213	21	0	133	1
Future Volume (vph)	64	614	7	897	213	21	0	133	1
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6		3	8	7	4
Permitted Phases	2		6		6	8		4	
Detector Phase	5	2	1	6	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	25.0	5.0	25.0	25.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0	9.5	31.0	31.0	9.5	30.0	9.5	10.0
Total Split (s)	20.0	60.0	30.0	60.0	60.0	30.0	30.0	20.0	20.0
Total Split (%)	14.3%	42.9%	21.4%	42.9%	42.9%	21.4%	21.4%	14.3%	14.3%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	3.5	4.0	3.5	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	4.5	6.0	6.0	4.5	5.0	4.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	112.5	109.7	109.3	103.6	103.6	8.1	5.0	17.8	10.7
Actuated g/C Ratio	0.80	0.78	0.78	0.74	0.74	0.06	0.04	0.13	0.08
v/c Ratio	0.22	0.25	0.01	0.71	0.19	0.22	0.04	0.70	0.46
Control Delay	5.2	5.3	4.1	15.8	3.9	58.0	0.2	74.7	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.2	5.3	4.1	15.8	3.9	58.0	0.2	74.7	18.7
LOS	A	A	A	B	A	E	A	E	B
Approach Delay		5.3		13.4			32.6		52.4
Approach LOS		A		B			C		D

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 54.5 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 15.2	Intersection LOS: B
Intersection Capacity Utilization 76.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Oak Springs Drive & Hampshire Pike



Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	190	28	114	285	67	67
Future Vol, veh/h	190	28	114	285	67	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	207	30	124	310	73	73

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	237	0	780	222
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	558	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1330	-	364	818
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	573	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1330	-	323	818
Mov Cap-2 Maneuver	-	-	-	-	323	-
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	508	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	16.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	463	-	-	1330	-
HCM Lane V/C Ratio	0.315	-	-	0.093	-
HCM Control Delay (s)	16.3	-	-	8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.3	-	-	0.3	-

APPENDIX C – DETAILED TRIP GENERATION CALCULATIONS

111 SE Parkway Ct
Franklin, TN 37064
615-678-8212
www.T2-Eng.com

TRIP GENERATION

Project:	1400 Hampshire Pike Development – Columbia, TN
ITE Land Use:	Convenience Store (851) and Fast Casual Restaurant (930)
ITE Code:	851 and 930
Trip Ends vs:	**ITE 851** – 5,040 SF and **ITE 930** – 2,250 SF
Daily Equation:	Weekday – Average Rate
AM Equation:	Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 AM – Average Rate
PM Equation:	Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 PM – Average Rate

Total Site Generated Traffic (Includes Pass-By Trips)

Land Use	Size	Generated Traffic Volumes				
		Daily	AM Peak		PM Peak	
			Enter	Exit	Enter	Exit
Convenience Store (851)	5,040 SF	3,842	158	157	126	122
Fast Casual Restaurant (930)	2,250 SF	219	2	1	16	12
TOTAL		**4,061**	**160**	**158**	**142**	**134**

New Site Generated Traffic (Excludes Pass-By Trips)

Land Use	Size	Generated Traffic Volumes				
		Daily	AM Peak		PM Peak	
			Enter	Exit	Enter	Exit
Convenience Store (851)	5,040 SF	1,921	79	78	63	61
Fast Casual Restaurant (930)	2,250 SF	109	1	0	8	6
TOTAL		**2,030**	**80**	**78**	**71**	**67**

Pass-By Trip Calculations

Studies have shown that new retail and restaurant developments generate relatively low "new" traffic. Traffic entering or exiting the new development are considered pass-by or captured trips. Pass-by or captured trips are vehicles that would have already been on the roadway regardless of the new development being constructed. The current edition of the *ITE Trip Generation Handbook* provides typical pass-by percentages for various land uses based on the size of each land use. Based on the *ITE Trip Generation Handbook* and assumptions made by T-Square Engineering for this study, **50% pass-by** reductions were assumed for both the convenience store and restaurant land uses. The Table below provides a summary of the pass-by and new trips generated for the proposed development.

111 SE Parkway Ct
Franklin, TN 37064
615-678-8212
www.T2-Eng.com

Generated Trip Summary Table

Land Use (ITE Code)	Size	Generated Traffic Volumes[1]				
		Daily	AM Peak		PM Peak	
			Enter	Exit	Enter	Exit
Convenience Store (851)	5,040 SF	3,842	158	157	126	122
Internal Trips		0	0	0	0	0
External Trips (Raw – Internal)		3,842	158	157	126	122
Pass-By Trips		1,921	79	79	63	61
New Trips (External – Pass-By)		**1,921**	**79**	**78**	**63**	**61**
Fast Casual Restaurant (930)	2,250 SF	219	2	1	16	12
Internal Trips		0	0	0	0	0
External Trips		219	2	1	16	12
Pass-By Trips		110	1	1	8	6
New Trips		**109**	**1**	**0**	**8**	**6**
TOTAL GENERATED TRIPS		**4,061**	**160**	**158**	**142**	**134**
TOTAL GENERATED INTERNAL TRIPS		**0**	**0**	**0**	**0**	**0**
TOTAL GENERATED EXTERNAL TRIPS		**4,061**	**160**	**158**	**142**	**134**
TOTAL GENERATED PASS-BY TRIPS		**2,031**	**80**	**80**	**71**	**67**
TOTAL GENERATED NEW TRIPS		**2,030**	**80**	**78**	**71**	**67**

TRIP GENERATION CALCULATIONS

Convenience Store (851) – 5,040 SF

Time Period	Formula[1]	Calculation[1]	Trips
Daily	$T = 762.28(X)$	$T = 762.28(5.04)$	3,842
AM Peak (Total)	$T = 62.54(X)$	$T = 62.54(5.04)$	315
AM Peak (Entering)	$T = 0.50(Total\ AM\ Trips)$	$T = 0.50(315)$	158
AM Peak (Exiting)	$T = 0.50(Total\ AM\ Trips)$	$T = 0.50(315)$	157
PM Peak (Total)	$T = 49.11(X)$	$T = 49.11(5.04)$	248
PM Peak (Entering)	$T = 0.51(Total\ PM\ Trips)$	$T = 0.51(248)$	126
PM Peak (Exiting)	$T = 0.49(Total\ PM\ Trips)$	$T = 0.49(248)$	122

[1] Institute of Transportation Engineers (ITE). Trip Generation Manual, 11th Edition. Washington, DC: ITE, 2024

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Franklin, TN 37064
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Fast Casual Restaurant (930) – 2,250 SF

Time Period	Formula	Calculation	Trips
Daily	$T = 97.14(X)$	$T = 97.14(2.25)$	219
AM Peak (Total)	$T = 1.43(X)$	$T = 1.43(2.25)$	3
AM Peak (Entering)	$T = 0.50(Total\ AM\ Trips)$	$T = 0.50(3)$	2
AM Peak (Exiting)	$T = 0.50(Total\ AM\ Trips)$	$T = 0.50(3)$	1
PM Peak (Total)	$T = 12.55(X)$	$T = 12.55(2.25)$	28
PM Peak (Entering)	$T = 0.55(Total\ PM\ Trips)$	$T = 0.55(28)$	16
PM Peak (Exiting)	$T = 0.45(Total\ PM\ Trips)$	$T = 0.45(28)$	12

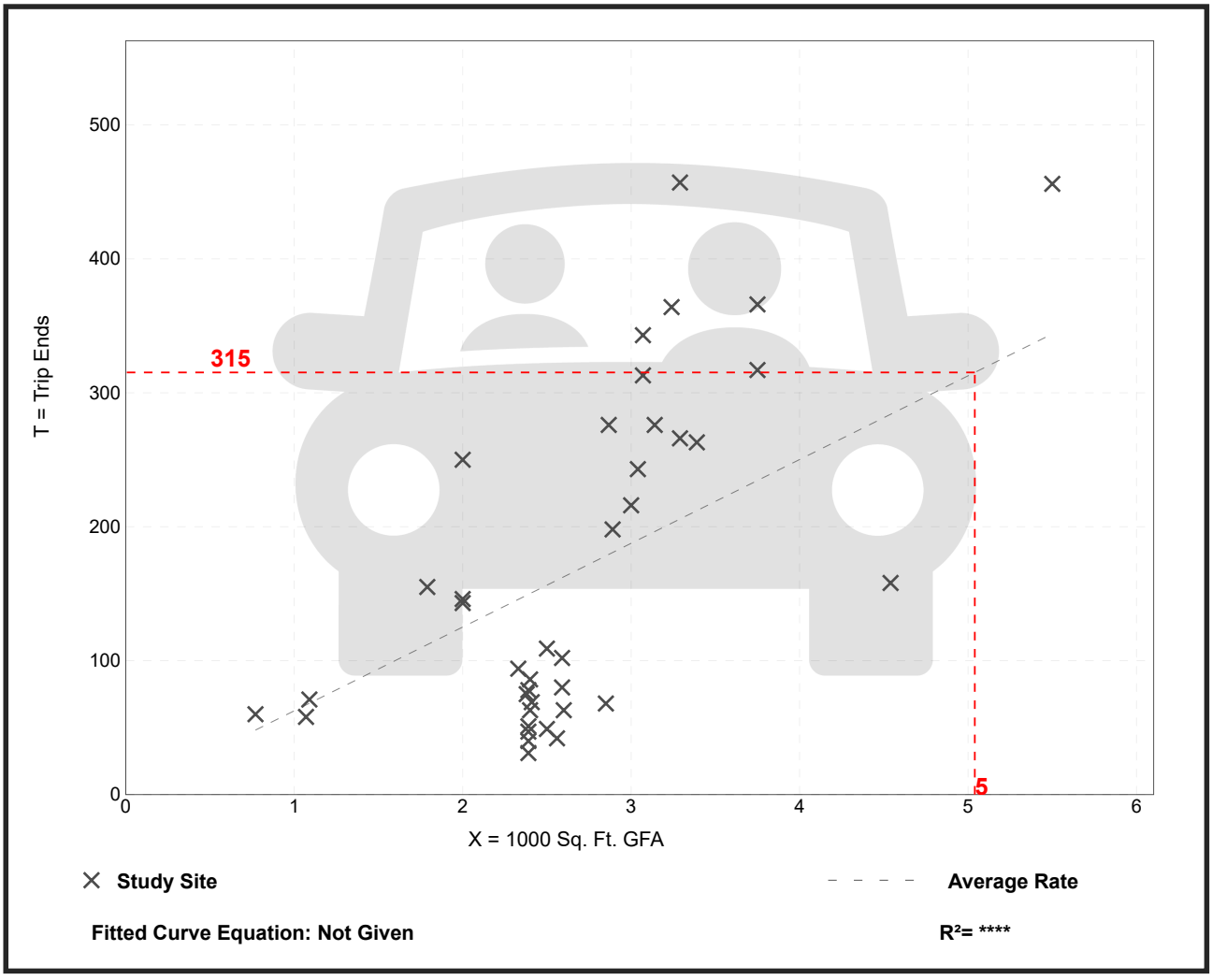
Convenience Store
(851)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 39
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
62.54	12.97 - 138.91	35.04

Data Plot and Equation



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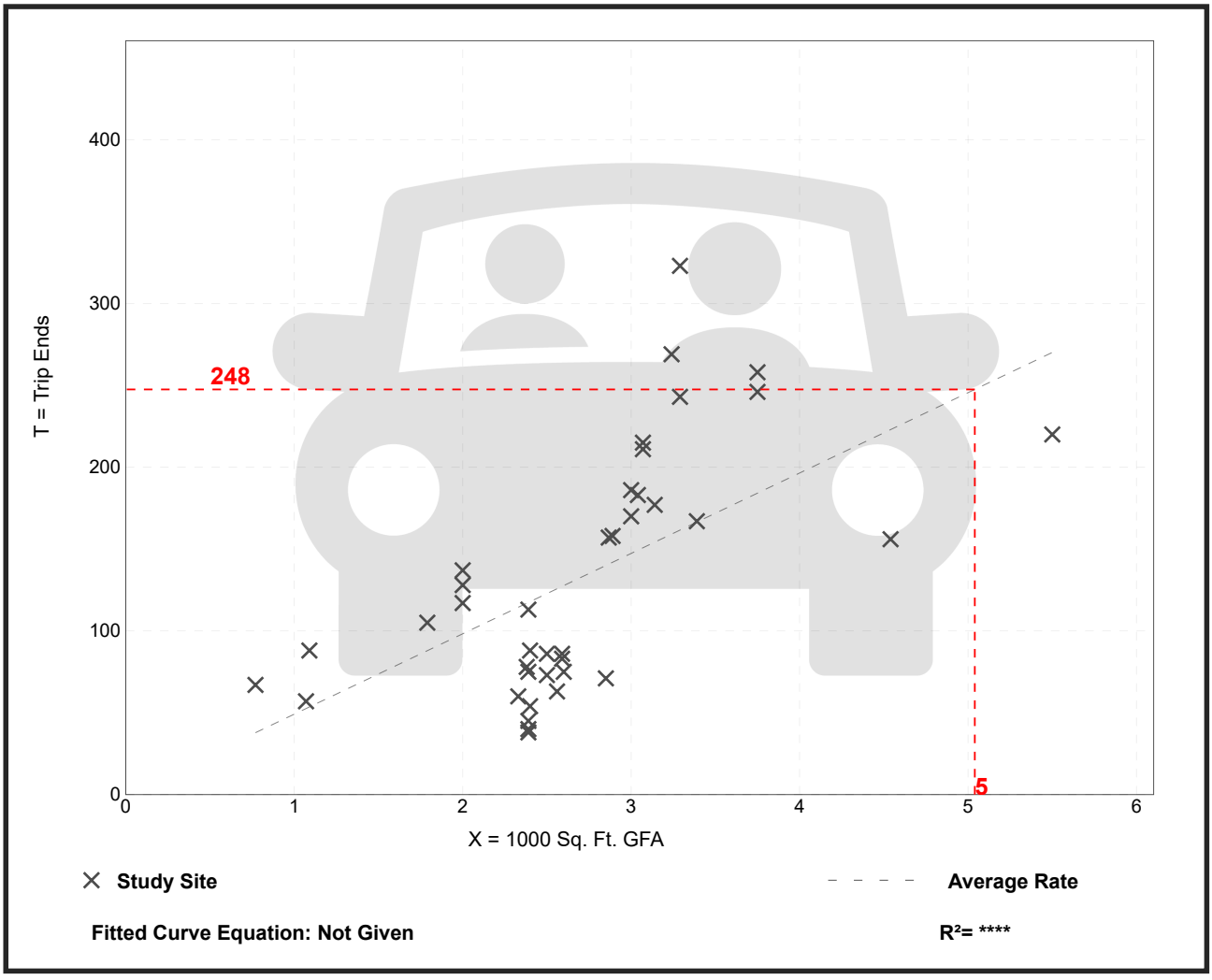
Convenience Store
(851)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 39
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
49.11	15.90 - 98.18	20.84

Data Plot and Equation



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Convenience Store
(851)

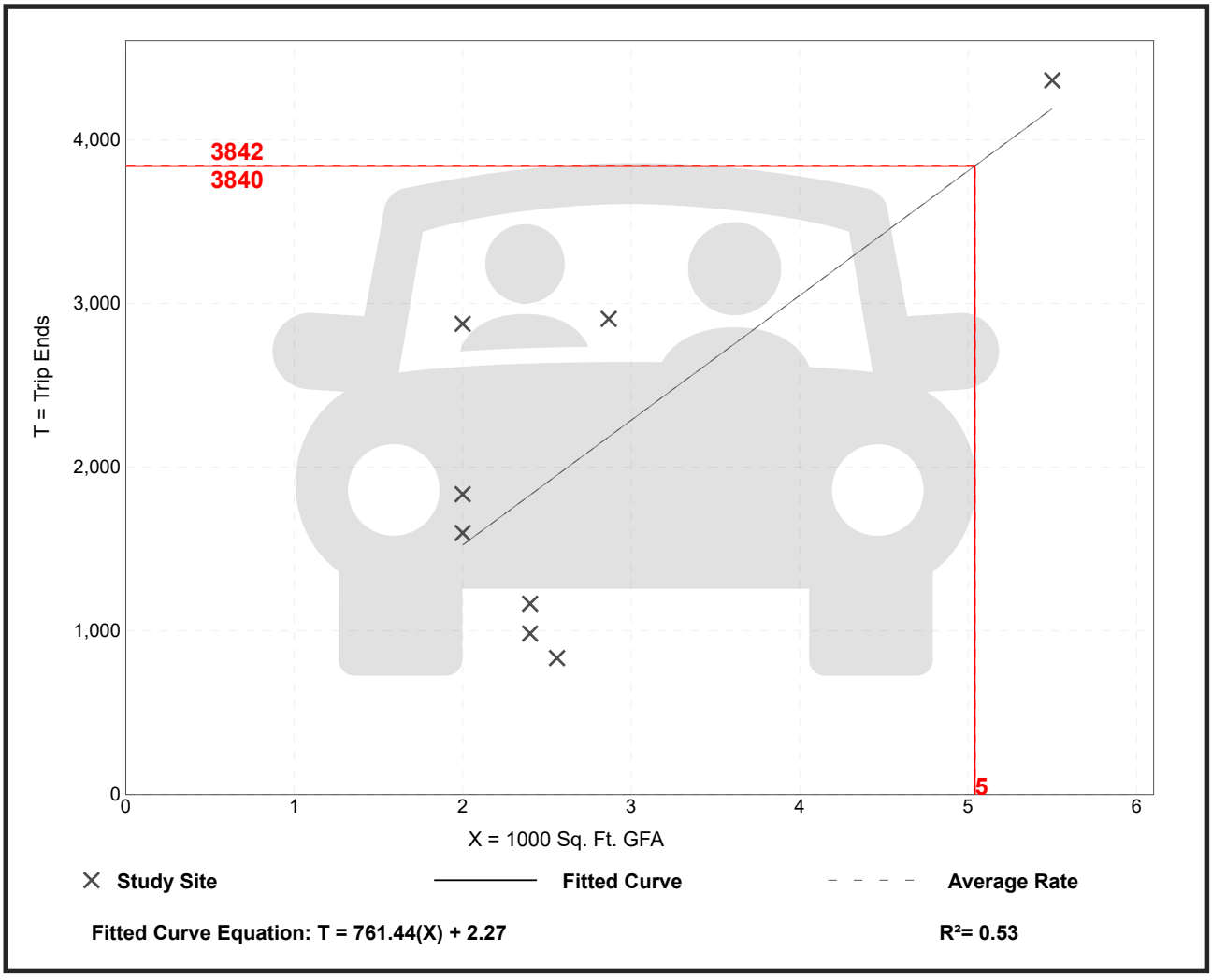
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 8
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
762.28	325.78 - 1438.00	333.89

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Fast Casual Restaurant
(930)

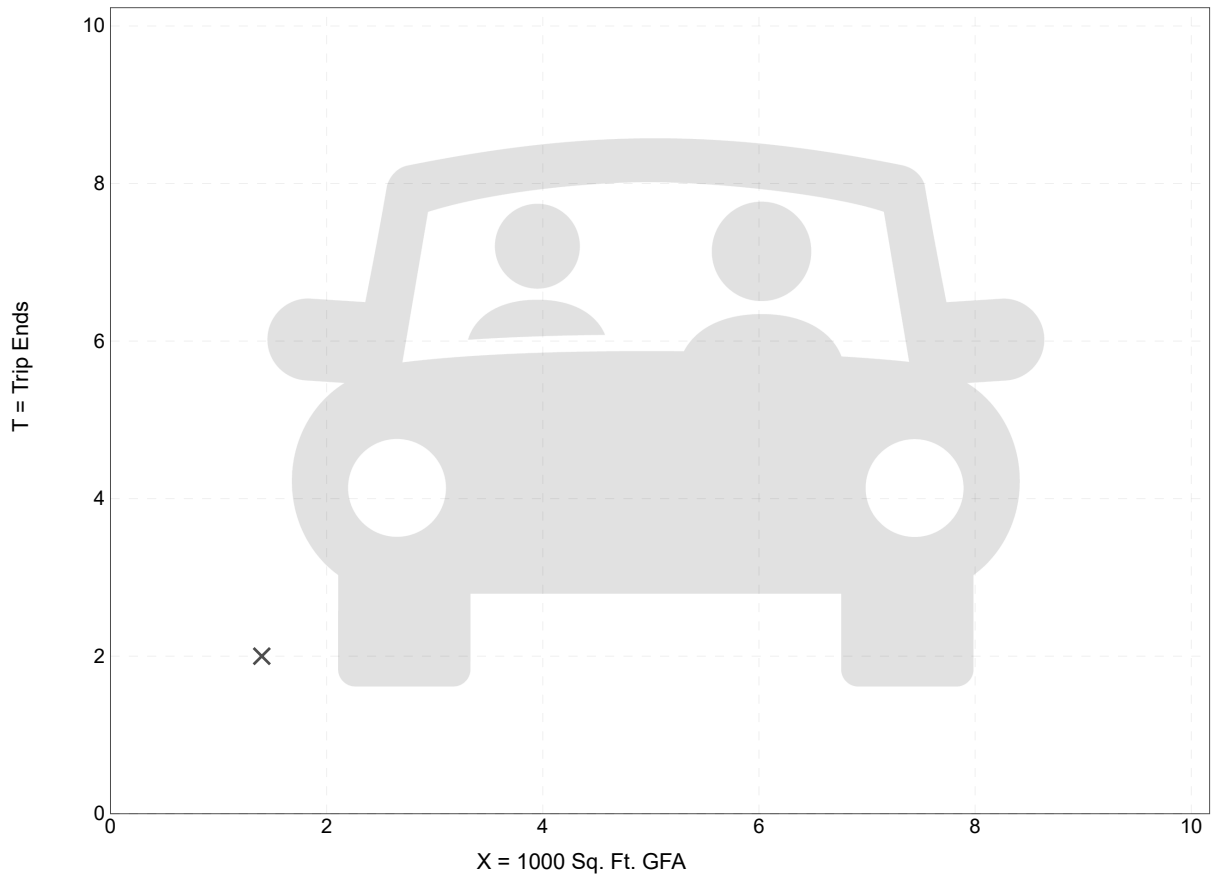
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 1
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.43	1.43 - 1.43	*

Data Plot and Equation

Caution – Small Sample Size



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

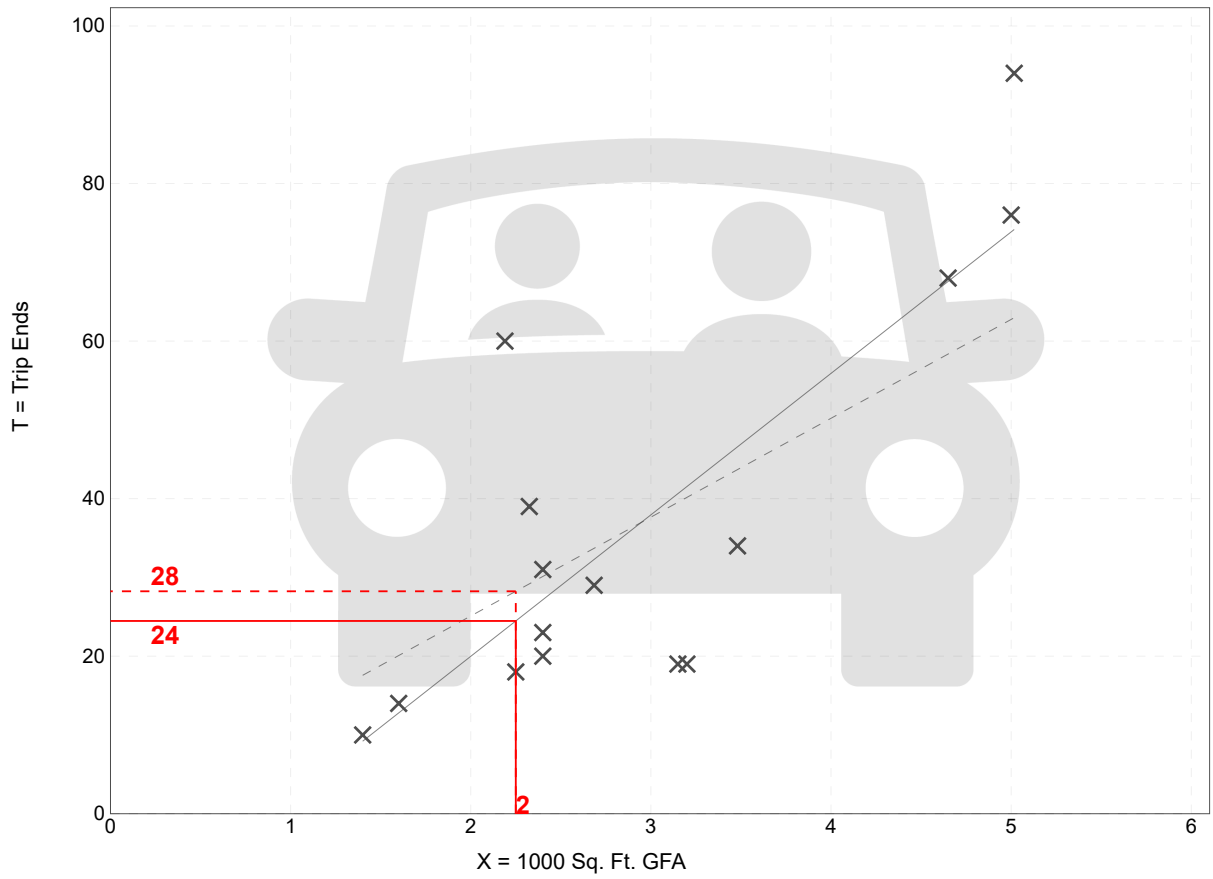
Fast Casual Restaurant
(930)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	15
Avg. 1000 Sq. Ft. GFA:	3
Directional Distribution:	55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
12.55	5.94 - 27.40	5.52

Data Plot and Equation



Fitted Curve Equation: T = 17.96(X) - 15.94

R^2= 0.65

Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Fast Casual Restaurant
(930)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

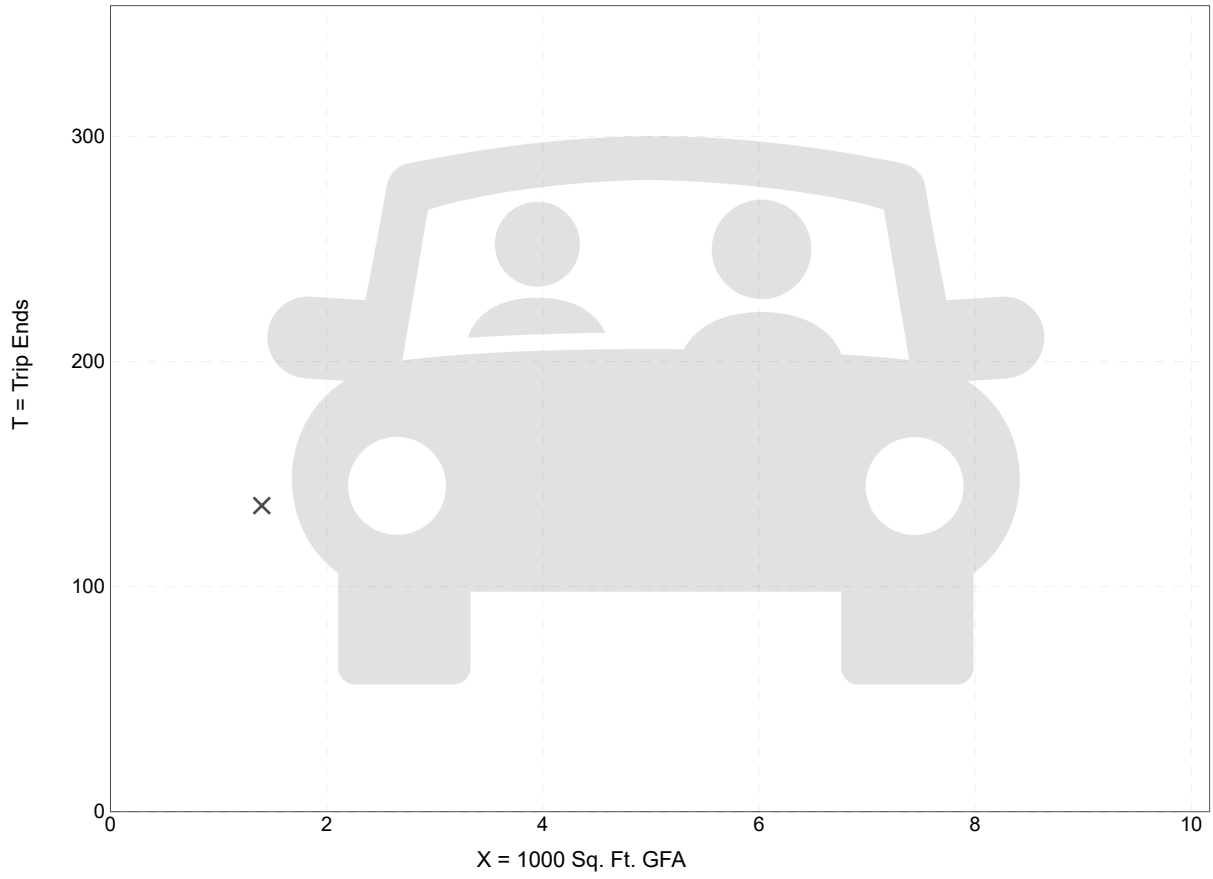
Setting/Location: **General Urban/Suburban**
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 1
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
97.14	97.14 - 97.14	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

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APPENDIX D – ADDITIONAL FIGURES

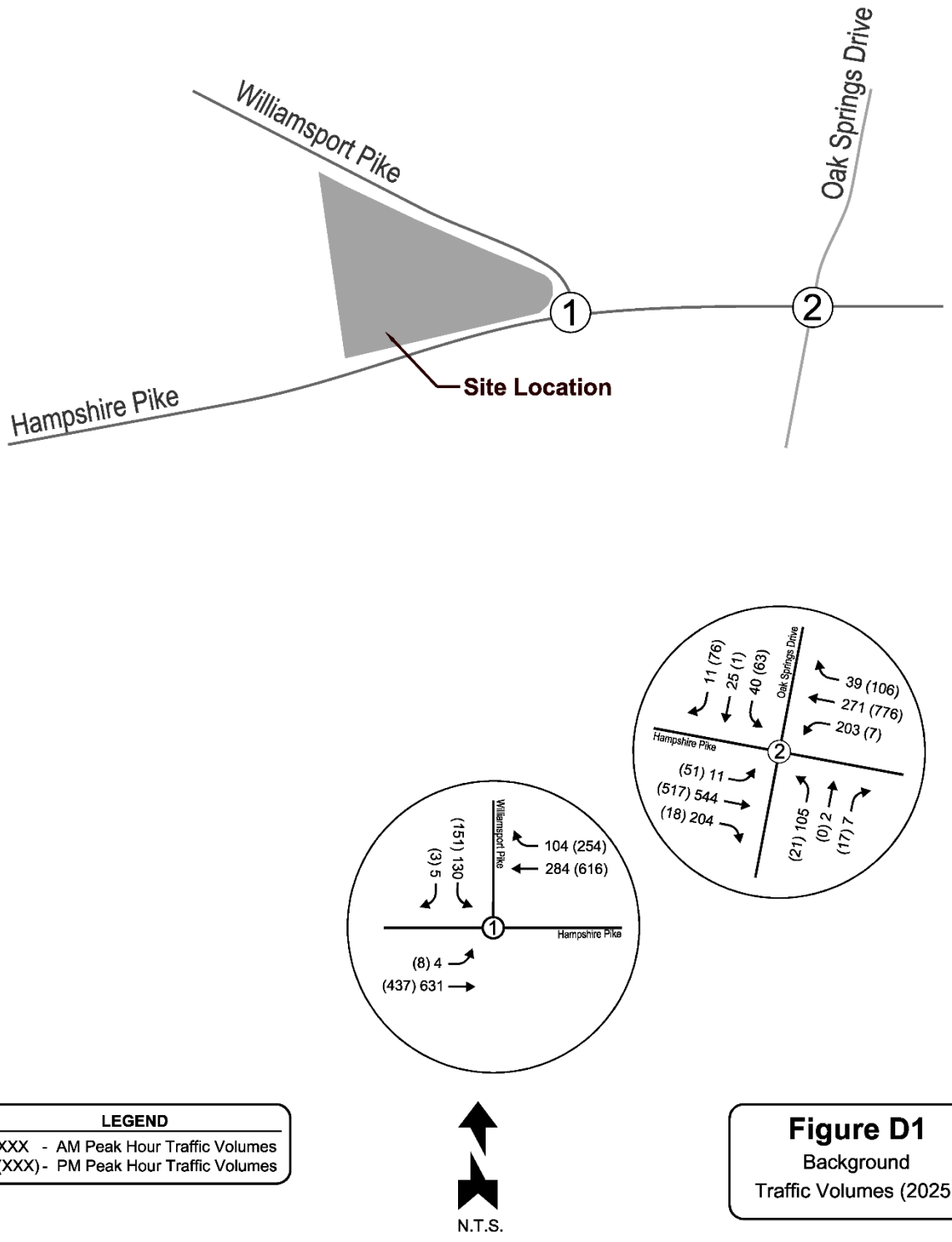
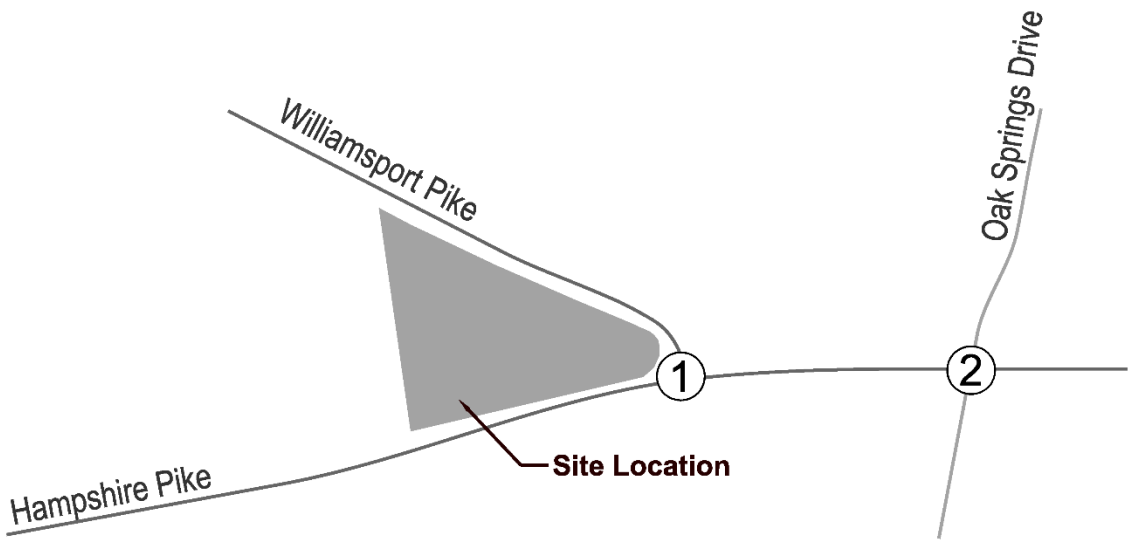
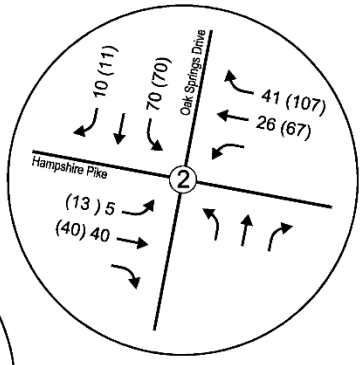
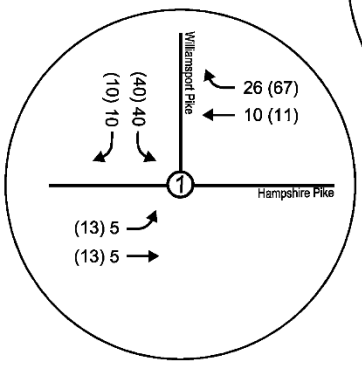


Figure D1
Background
Traffic Volumes (2025)







LEGEND

XXX - AM Peak Hour Traffic Volumes
(XXX) - PM Peak Hour Traffic Volumes

N.T.S.

Figure D2
Generated Background Developement Volumes (Williamsport Pike)

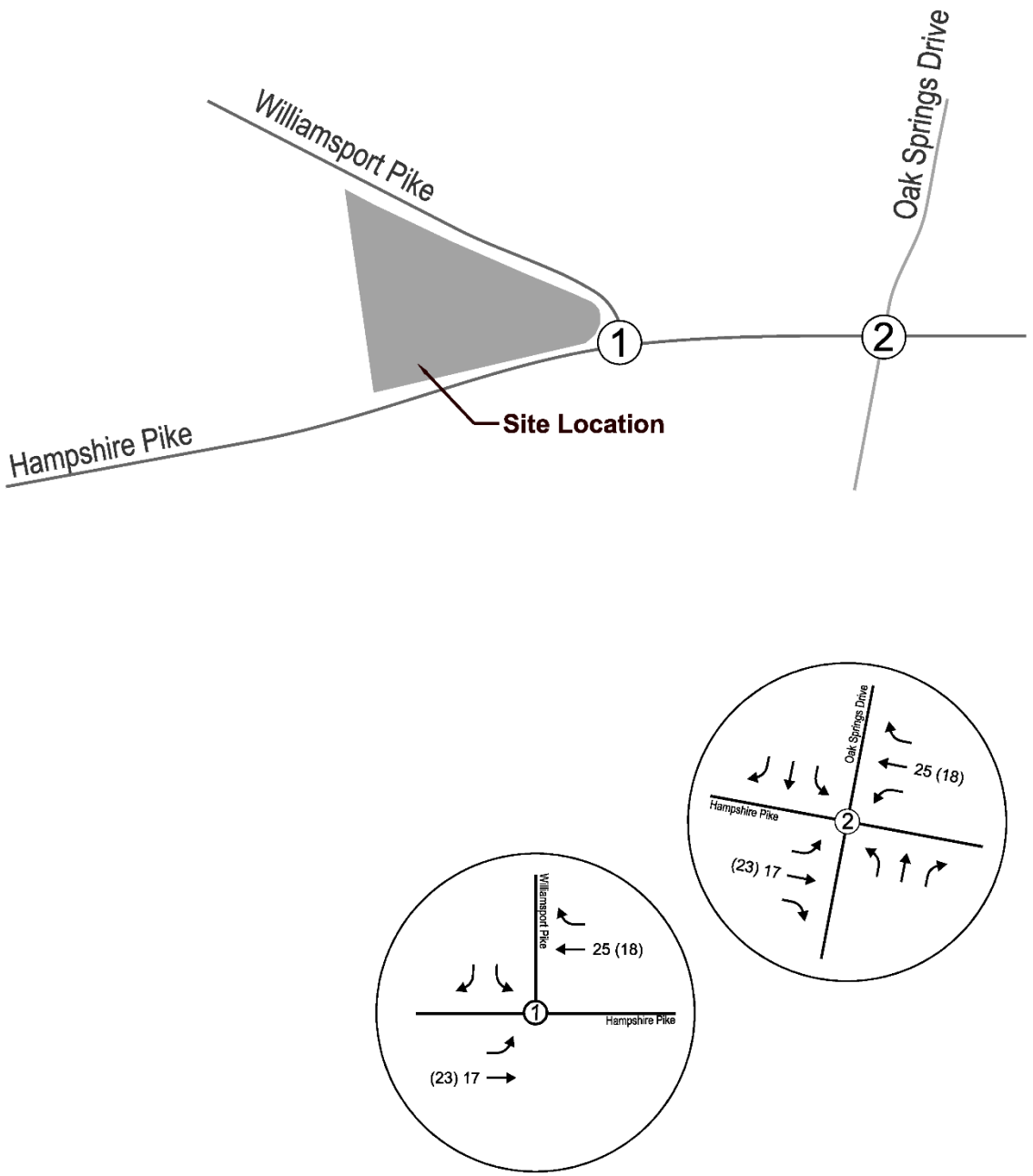


Figure D3
Generated Background Developement Volumes (Steadfast Hampshire)

APPENDIX E – MOU

CITY OF COLUMBIA – DEVELOPMENT SERVICES

TRAFFIC IMPACT STUDY (TIS) MEMORANDUM OF UNDERSTANDING (MOU) & AGREEMENT

CONTACT INFO (Identify primary point of contact)	
DEVELOPER/OWNER ☐ PRIMARY CONTACT	CIVIL CONSULTANT ☒ PRIMARY CONTACT
Contact Name: Malak Salama	Contact Name: Allison Corolla, PE
Company:	Company: T-Square Engineering
Address:	Address: 111 SE Parkway Ct, Franklin, TN 37064
Email: malaksalama34@gmail.com	Email: allison.corolla@t2-eng.com
Phone: 615-635-2787	Phone: 615-678-8212

DEVELOPERS TIS CONSULTANT CONTACT INFO: *complete if study was completed by Developer's consultant.*	
Contact Name: James Ensley III, PE, PTOE	Company: T-Square Engineering
Address: 111 SE Parkway Ct, Franklin, TN 37064	
Email: james.ensley@t2-eng.com	Phone: 615-678-8212

INDICATE THE LEVEL OF TIS REVIEW TO BE PERFORMED BY 3RD PARTY CONSULTANT AND CORRESPONDING FEE (SUBJECT TO STAFF CONFIRMATION):

* Level of TIS determined by the number of Daily & Peak Hour Trips per estimated trip generation calculation.

☐ Traffic Access Study ($2,900) ☒ Level I TIS ($3,900) ☐ Level II TIS ($4,800) ☐ Level III TIS (Fee TBD)

TRANSPORTATION IMPACT STUDY – MEMORANDUM OF UNDERSTANDING (MOU)

This MOU acknowledges that the transportation impact study for the following project will be prepared in accordance with the latest version of the City of Columbia Land Development Regulations.

PROJECT INFORMATION:	
Name:	1400 Hampshire Pike Development
Address:	1400 Hampshire Pike, Columbia, TN
Description:	Map 88M, Parcels 7.00 & 7.01
Existing Land Use (be specific):	Vacant
Proposed Land Use (be specific):	Convenience Store and Restaurant
Reason for Request: (Planned Unit Development, Site Plan, Rezoning)	
Potential Development Yield (number of residential units; building square footage, projected number of employees, hours of operations):	Convenience Store - 5,040 SF Restaurant - 2,250 SF

☒ Attach a site map and a trip generation table with a description of the proposed land uses, ITE rates, estimated daily, morning, midday and afternoon peak hour volumes (ins/outs/totals), proposed trip credits, etc.

☒ Attach a conceptual development plan showing all access points and adjacent streets.

Project Buildout Year: 2025	Ambient or CMP Growth Rate (% Per Year): 2.22%

STUDY INTERSECTIONS: *use additional pages as necessary	
1. Hampshire Pike and Williamsport Pike	9.
2. Hampshire Pike and Oak Springs Drive	10.
3. Williamsport Pike and Site Access	11.
4.	12.
5.	13.
6.	14.
7.	15.
8.	16.

TRIP CREDITS (EXACT AMOUNT OF CREDIT SUBJECT TO APPROVAL BY CITY OF COLUMBIA):

	YES	(indicate ___% of total trips)	NO
Transit Usage	☐	%	☒
Existing Active Land Use	☐	%	☒
Previous Land Use	☐	%	☒
Internal Trip	☐	%	☒
Pass-By Trip	☒	50 %	☐

3RD PARTY TRAFFIC CONSULTANT CONTACT INFO:		☐ NEEL SCHAFFER	☒ VOLKERT
NEEL SCHAFFER - GREG JUDY		VOLKERT – James E. Thomas, PE - AVP EG Traffic & Planning	
201 E. Main Street, Suite 325 Murfreesboro, TN 37130		750 Old Hickory Blvd., Suite 230-1 Brentwood, TN 37027	
greg.judy@neel-schaffer.com	615-217-0500	James.thomas@volkert.com	615-656-1845

MEMORANDUM OF UNDERSTANDING SIGN OFF:

	Name	Signature	Date
APPLICANT:	Malak Salama	MALAK SALAMA	10/29/24

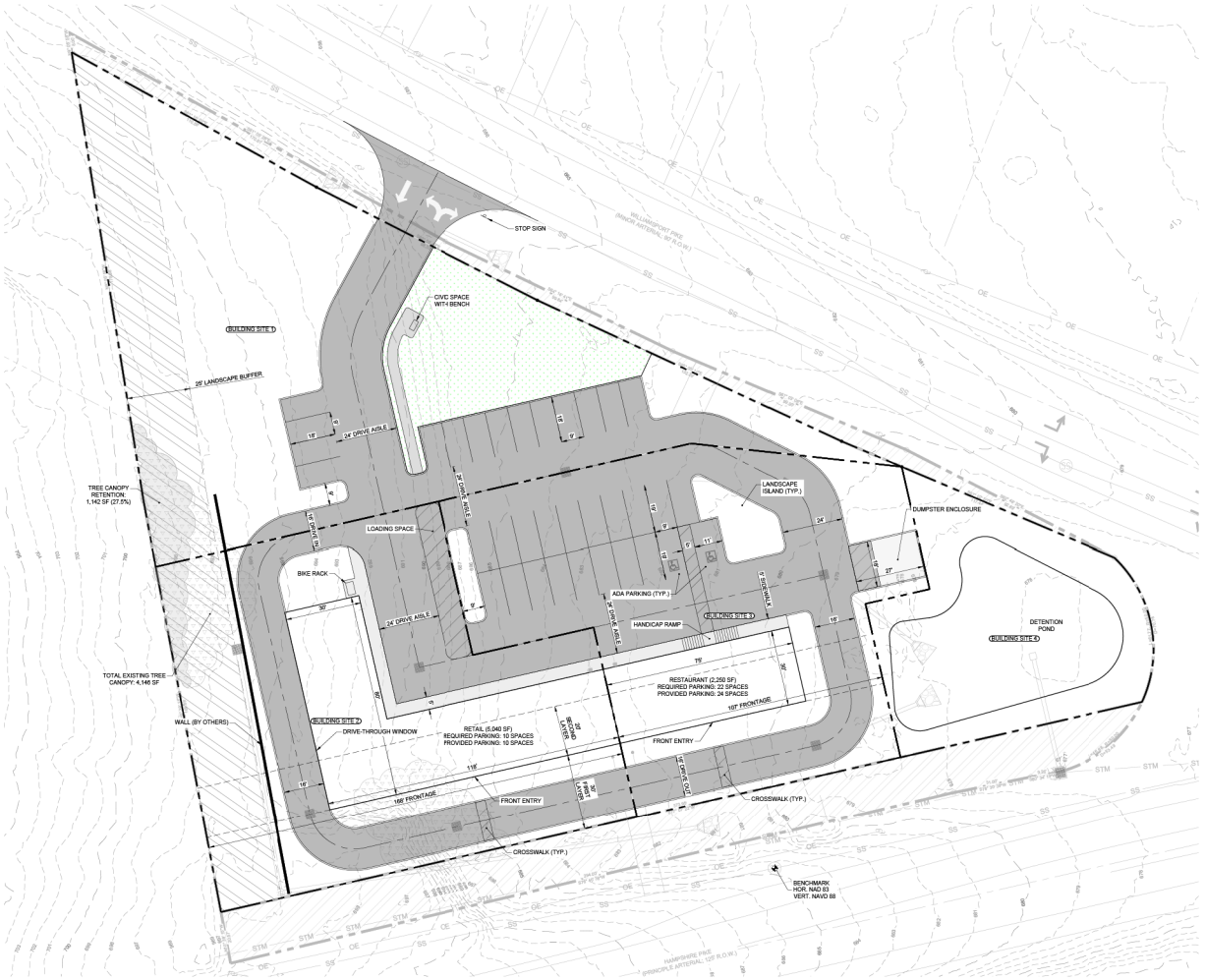
*As applicant, I agree to pay 100% of the review fee. *Paid to the City of Columbia.*
I understand that no work will commence until FULL payment is received and that it is NON-REFUNDABLE.

	Name	Signature	Date
3RD PARTY TRAFFIC CONSULTANT:			
CITY ENGINEER:			
DIRECTOR OF DEVELOPMENT SERVICES:			

Questions may be submitted and the completed form shall be emailed for review to: Glenn Harper, City Engineer gharper@columbiatn.gov

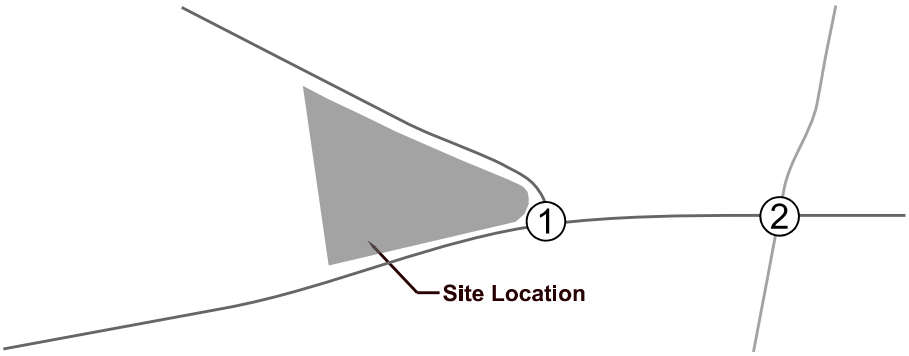


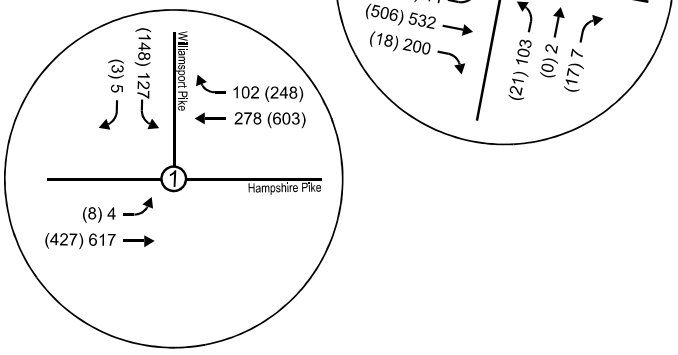
Figure 1
Location Map



N.T.S.

Figure 2
Preliminary Site Plan





LEGEND
XXX - AM Peak Hour Traffic Volumes
(XXX) - PM Peak Hour Traffic Volumes

N.T.S.

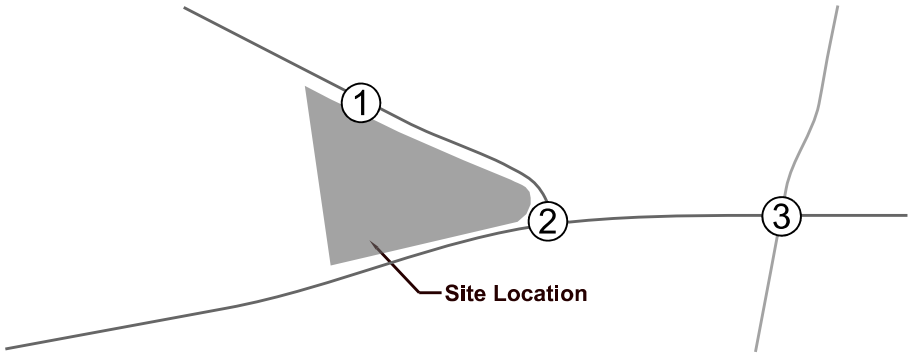
Figure 4
Existing Traffic Volumes
(2024)

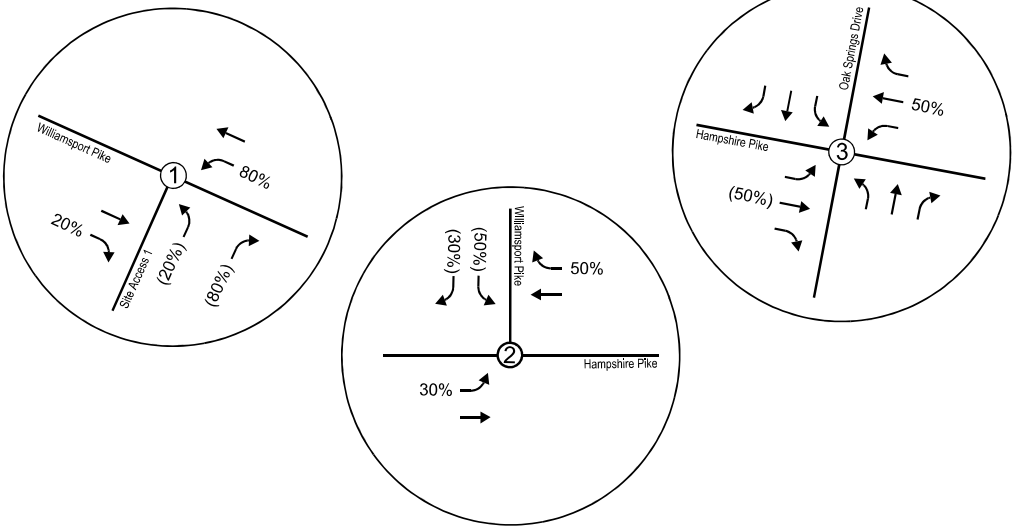


TDOT Count Station:	Maury 000158		Maury 000088		Maury 000147		Average % Growth
Year	AADT	% Change	AADT	% Change	AADT	% Change	
2023	2,717	–	20,287	--	11,705	--	–
2022	2,666	1.91%	19,501	6.80%	11,472	2.03%	3.58%
2021	2,438	5.72%	19,661	2.97%	11,402	1.33%	3.34%
2020	2,316	5.77%	18,906	3.39%	13,534	-4.50%	1.55%
2019	2,065	7.89%	21,205	-0.45%	12,187	-0.99%	2.15%
2018	2,773	-0.40%	19,254	1.63%	11,555	0.26%	0.49%
Average % Change	**4.18%**		**2.87%**		**-0.37%**		**2.22%**

N.T.S.

Figure 5
TDOT Count Locations & Background Traffic Growth Trends



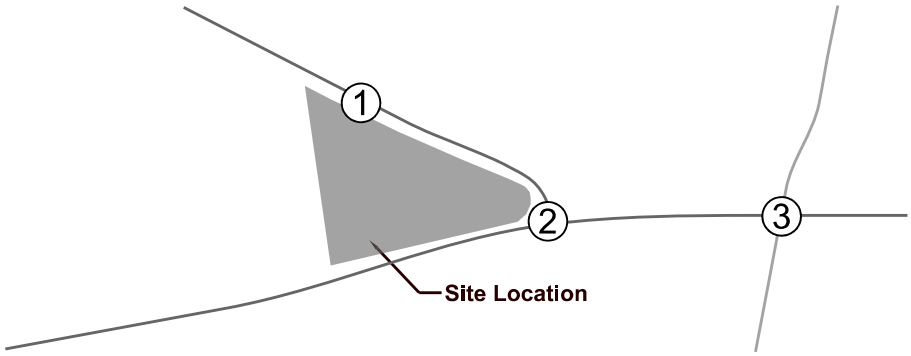


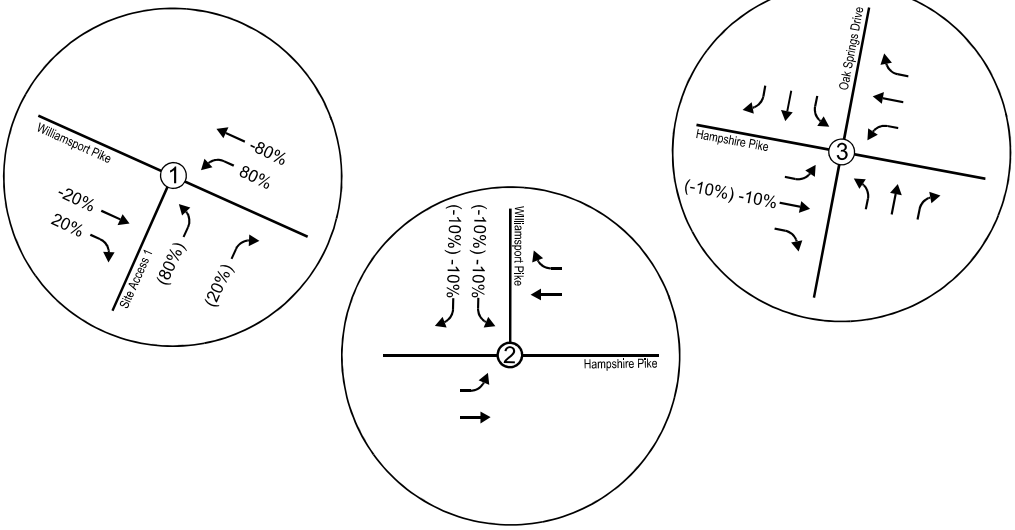
LEGEND

XX% - Entering Traffic Volumes
(XX%) - Exiting Traffic Volumes

N.T.S.

Figure 7A
Distribution of Generated
Peak Hour Traffic Volumes





LEGEND

XX% - Entering Traffic Volumes
(XX%) - Exiting Traffic Volumes

N.T.S.

Figure 7B
Distribution of Generated Peak Hour Traffic Volumes (Pass-By)

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TRIP GENERATION

Project:	1400 Hampshire Pike Development – Columbia, TN
ITE Land Use:	Convenience Store (851) and Fast Casual Restaurant (930)
ITE Code:	851 and 930
Trip Ends vs:	**ITE 851** – 5,040 SF and **ITE 930** – 2,250 SF
Daily Equation:	Weekday – Specific to Use
AM Equation:	Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 AM – Specific to Use
PM Equation:	Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 PM – Specific to Use

Total Site Generated Traffic (Includes Pass-By Trips)

Land Use	Size	Generated Traffic Volumes				
		Daily	AM Peak		PM Peak	
			Enter	Exit	Enter	Exit
Convenience Store (851)	5,040 SF	3,840	158	157	126	122
Fast Casual Restaurant (930)	2,250 SF	219	2	1	13	11
TOTAL		**4,059**	**160**	**158**	**139**	**133**

New Site Generated Traffic (Excludes Pass-By Trips)

Land Use	Size	Generated Traffic Volumes				
		Daily	AM Peak		PM Peak	
			Enter	Exit	Enter	Exit
Convenience Store (851)	5,040 SF	1,920	79	78	63	61
Fast Casual Restaurant (930)	2,250 SF	109	1	0	6	5
TOTAL		**2,029**	**80**	**78**	**69**	**66**

Pass-By Trip Calculations

Studies have shown that new retail and restaurant developments generate relatively low "new" traffic. Traffic entering or exiting the new development are considered pass-by or captured trips. Pass-by or captured trips are vehicles that would have already been on the roadway regardless of the new development being constructed. The current edition of the *ITE Trip Generation Handbook* provides typical pass-by percentages for various land uses based on the size of each land use. Based on the *ITE Trip Generation Handbook* and assumptions made by T-Square Engineering for this study, **50% pass-by** reductions were assumed for both the convenience store and restaurant land uses. The Table below provides a summary of the pass-by and new trips generated for the proposed development.

111 SE Parkway Ct
Franklin, TN 37064
615-678-8212
www.T2-Eng.com

Generated Trip Summary Table

Land Use (ITE Code)	Size	Generated Traffic Volumes[1]				
		Daily	AM Peak		PM Peak	
			Enter	Exit	Enter	Exit
Convenience Store (851)	5,040 SF	3,840	158	157	126	122
Internal Trips		0	0	0	0	0
External Trips (Raw – Internal)		3,840	158	157	126	122
Pass-By Trips		1,920	79	79	63	61
New Trips (External – Pass-By)		**1,920**	**79**	**78**	**63**	**61**
Fast Casual Restaurant (930)	2,250 SF	219	2	1	13	11
Internal Trips		0	0	0	0	0
External Trips		219	2	1	13	11
Pass-By Trips		110	1	1	7	6
New Trips		**109**	**1**	**0**	**6**	**5**
TOTAL GENERATED TRIPS		**4,059**	**160**	**158**	**139**	**133**
TOTAL GENERATED INTERNAL TRIPS		**0**	**0**	**0**	**0**	**0**
TOTAL GENERATED EXTERNAL TRIPS		**4,059**	**160**	**158**	**139**	**133**
TOTAL GENERATED PASS-BY TRIPS		**2,030**	**80**	**80**	**70**	**67**
TOTAL GENERATED NEW TRIPS		**2,029**	**80**	**78**	**69**	**66**

TRIP GENERATION CALCULATIONS

Convenience Store (851) – 5,040 SF

Time Period	Formula[1]	Calculation[1]	Trips
Daily	$T = 761.44(X) + 2.27$	$T = 761.44(5.04) + 2.27$	3,840
AM Peak (Total)	$T = 62.54(X)$	$T = 62.54(5.04)$	315
AM Peak (Entering)	$T = 0.50(Total\ AM\ Trips)$	$T = 0.50(315)$	158
AM Peak (Exiting)	$T = 0.50(Total\ AM\ Trips)$	$T = 0.50(315)$	157
PM Peak (Total)	$T = 49.11(X)$	$T = 49.11(5.04)$	248
PM Peak (Entering)	$T = 0.51(Total\ PM\ Trips)$	$T = 0.51(248)$	126
PM Peak (Exiting)	$T = 0.49(Total\ PM\ Trips)$	$T = 0.49(248)$	122

[1] Institute of Transportation Engineers (ITE). Trip Generation Manual, 11th Edition. Washington, DC: ITE, 2024

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Franklin, TN 37064
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www.T2-Eng.com

Fast Casual Restaurant (930) – 2,250 SF

Time Period	Formula	Calculation	Trips
Daily	$T = 97.14(X)$	$T = 97.14(2.25)$	219
AM Peak (Total)	$T = 1.43(X)$	$T = 1.43(2.25)$	3
AM Peak (Entering)	$T = 0.50(Total\ AM\ Trips)$	$T = 0.50(3)$	2
AM Peak (Exiting)	$T = 0.50(Total\ AM\ Trips)$	$T = 0.50(3)$	1
PM Peak (Total)	$T = 17.96(X) - 15.94$	$T = 17.96(2.25) - 15.94$	24
PM Peak (Entering)	$T = 0.55(Total\ PM\ Trips)$	$T = 0.55(24)$	13
PM Peak (Exiting)	$T = 0.45(Total\ PM\ Trips)$	$T = 0.45(24)$	11

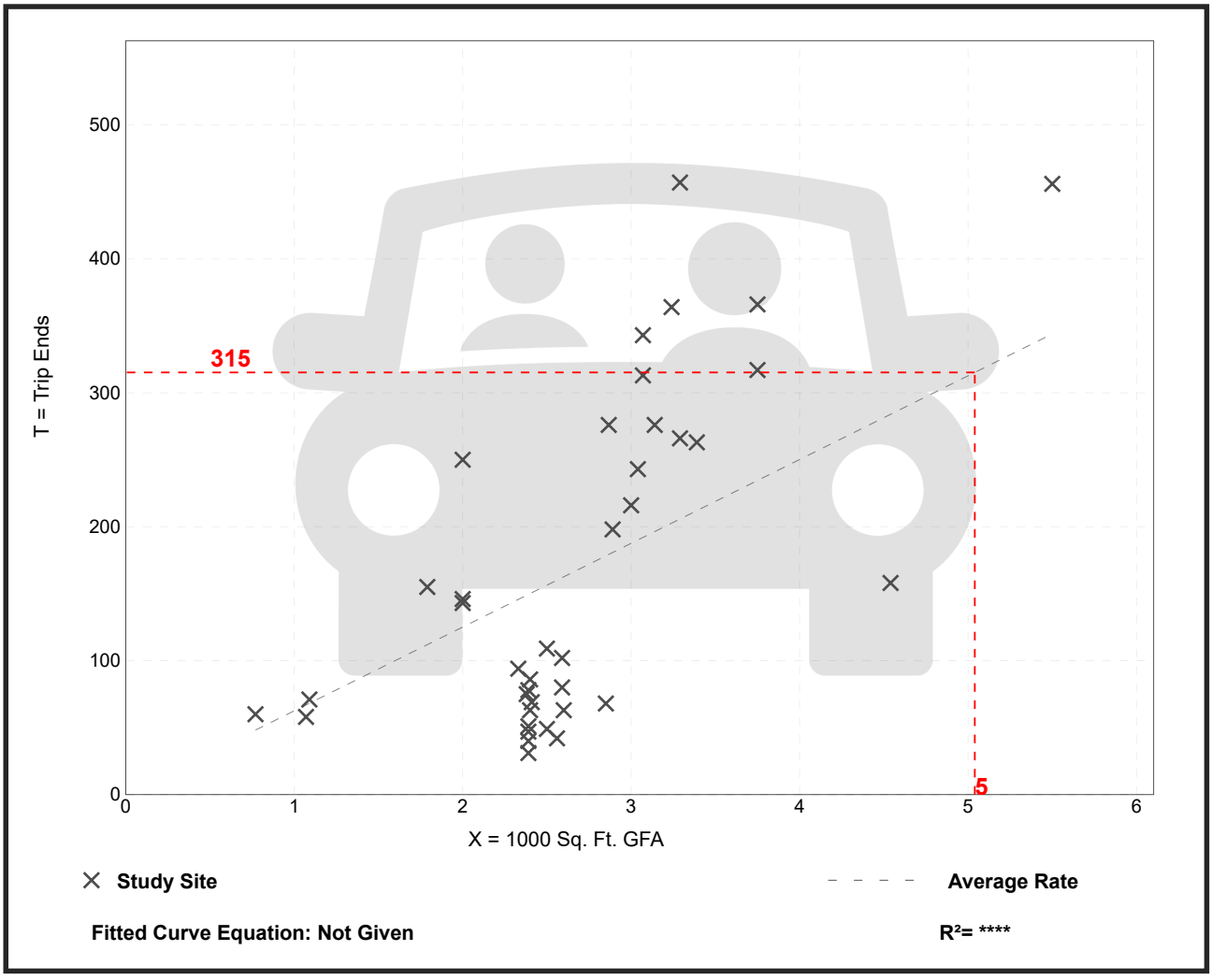
Convenience Store
(851)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 39
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
62.54	12.97 - 138.91	35.04

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

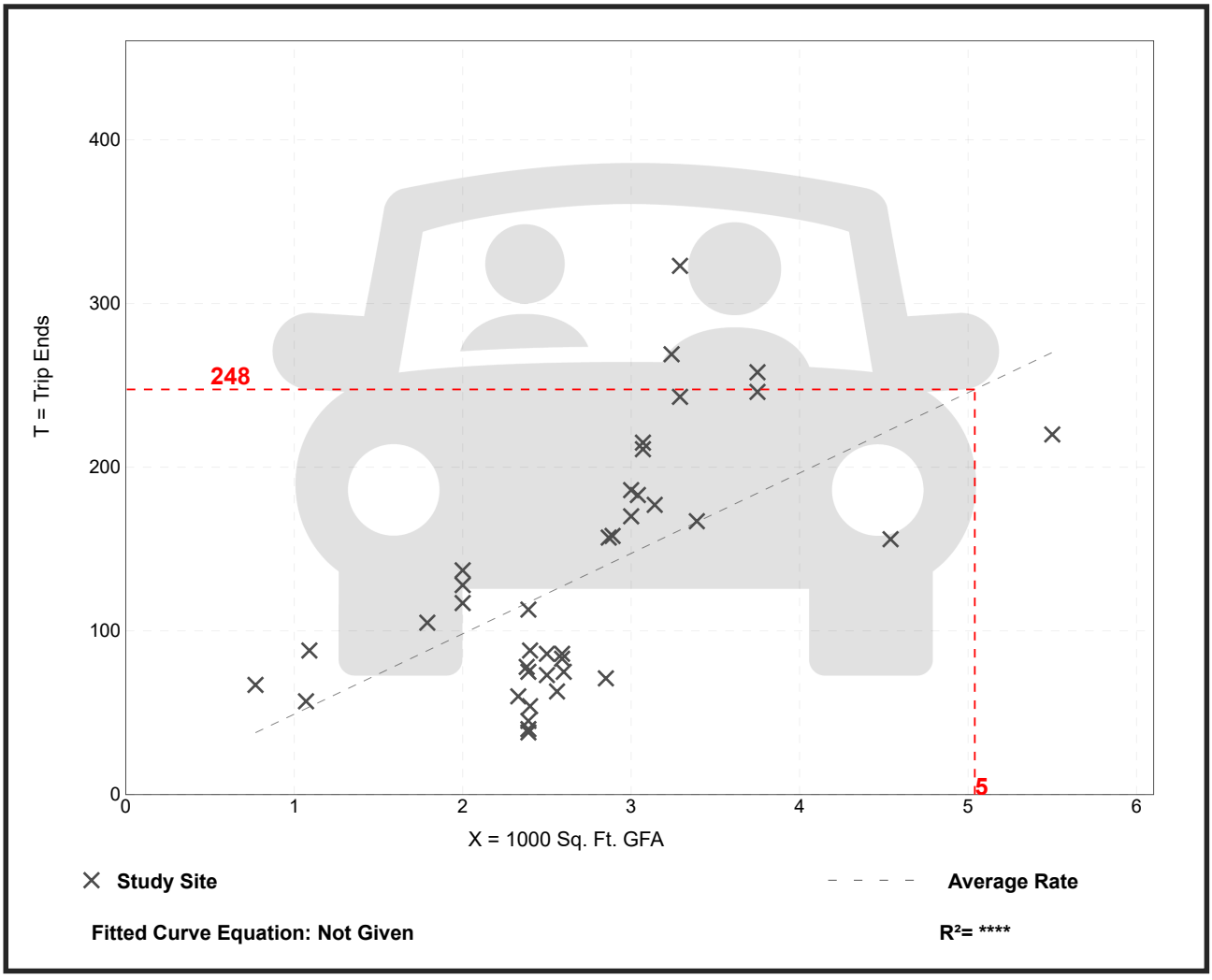
Convenience Store
(851)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 39
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
49.11	15.90 - 98.18	20.84

Data Plot and Equation



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Convenience Store
(851)

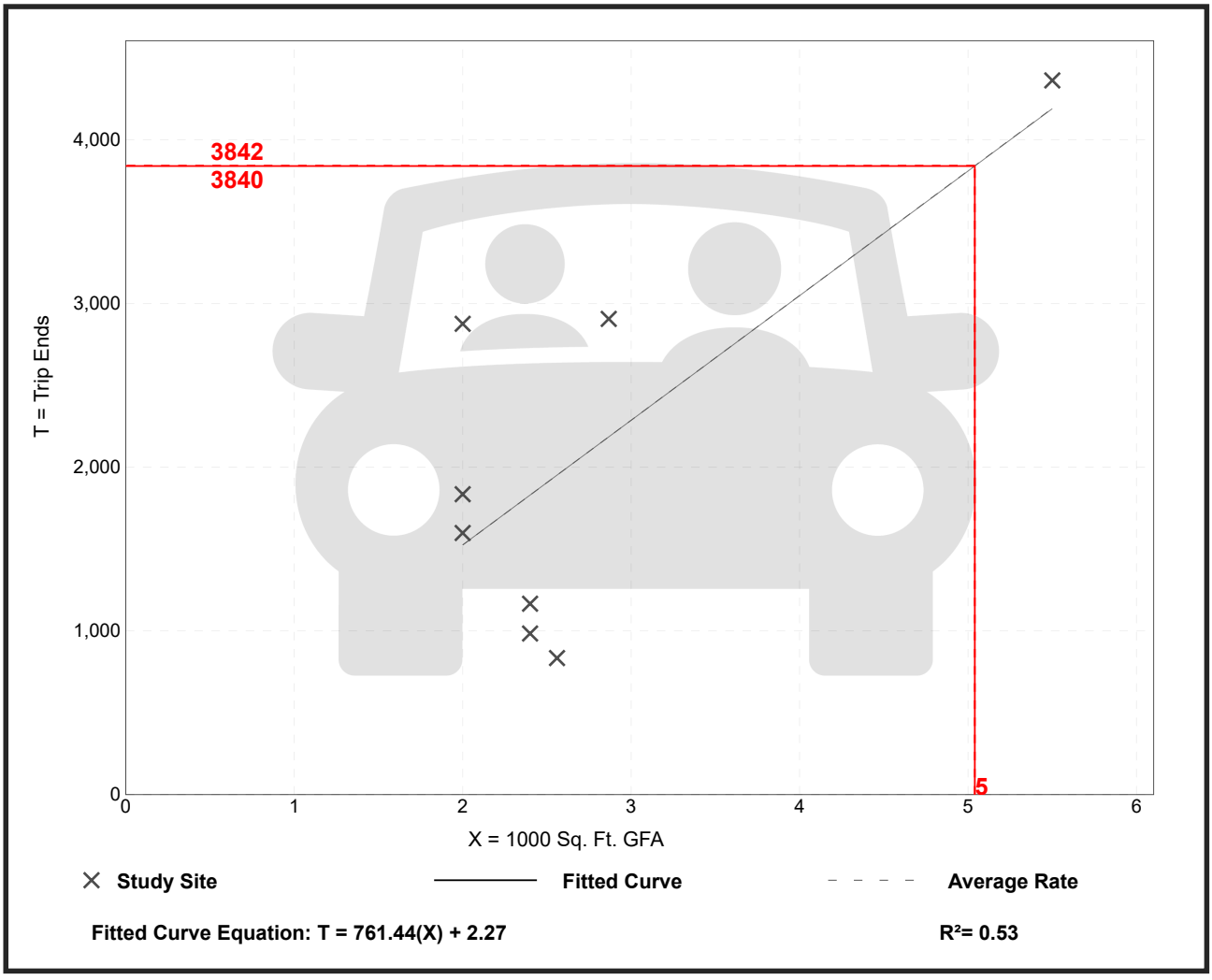
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 8
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
762.28	325.78 - 1438.00	333.89

Data Plot and Equation



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Fast Casual Restaurant
(930)

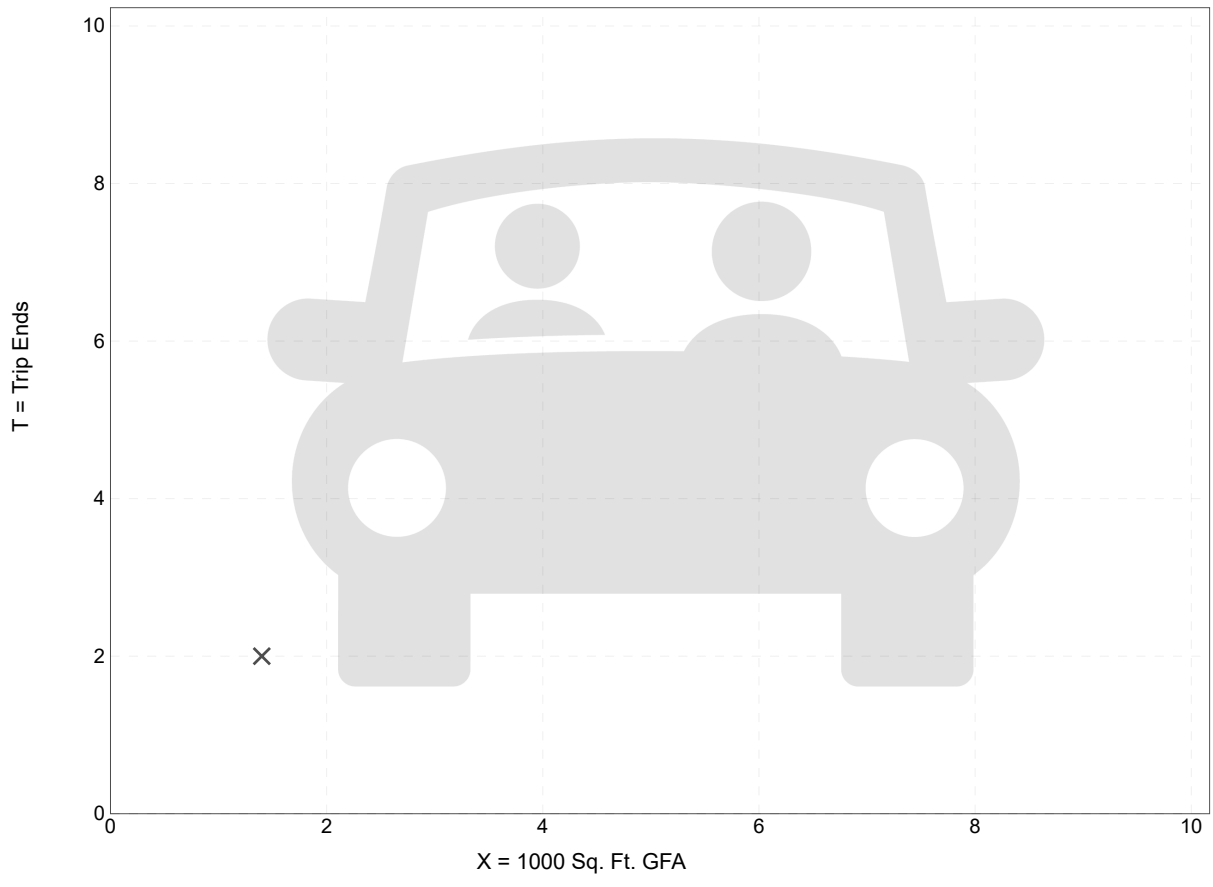
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 1
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.43	1.43 - 1.43	*

Data Plot and Equation

Caution – Small Sample Size



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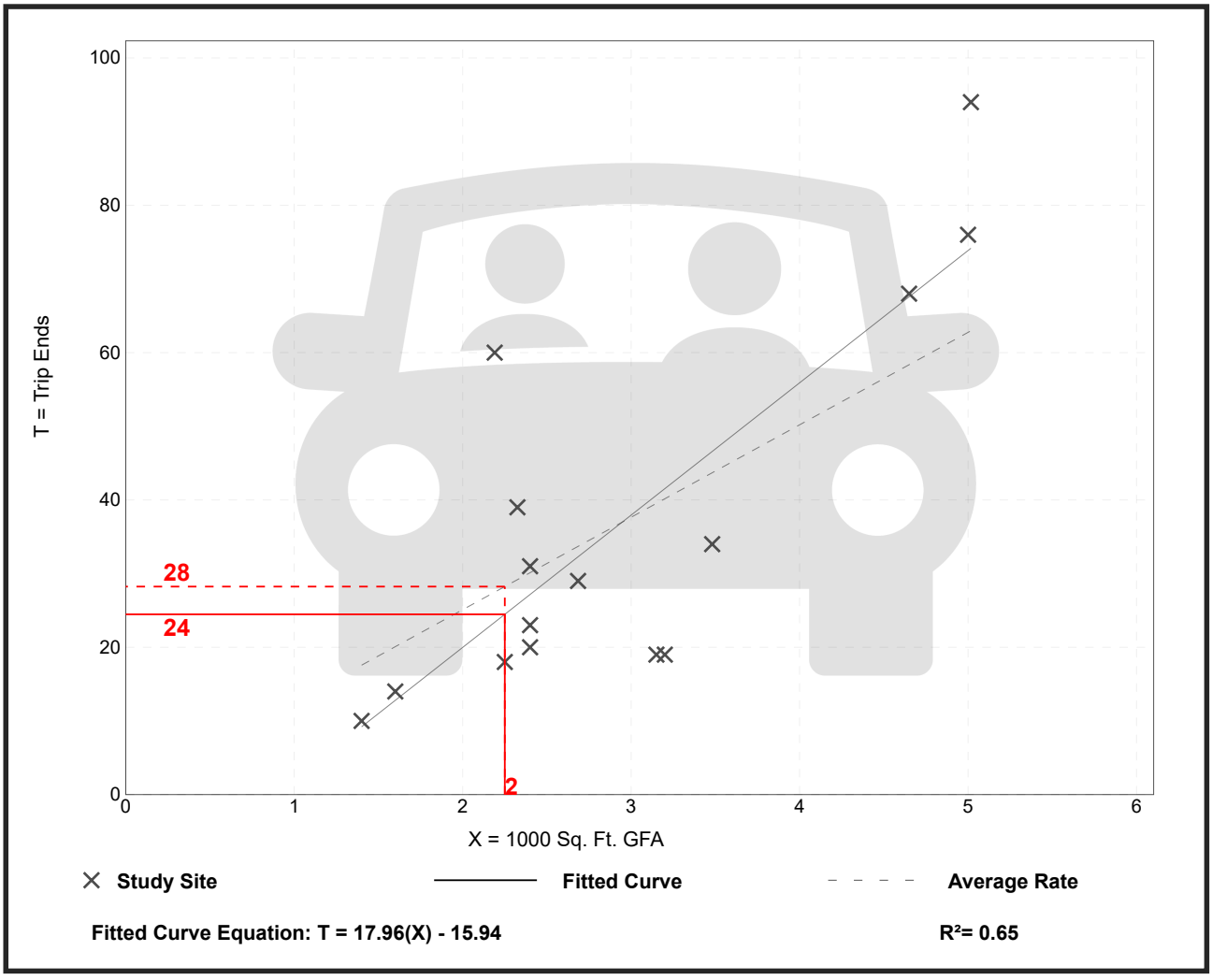
Fast Casual Restaurant
(930)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	15
Avg. 1000 Sq. Ft. GFA:	3
Directional Distribution:	55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
12.55	5.94 - 27.40	5.52

Data Plot and Equation



Fitted Curve Equation: T = 17.96(X) - 15.94

R^2= 0.65

Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Fast Casual Restaurant
(930)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

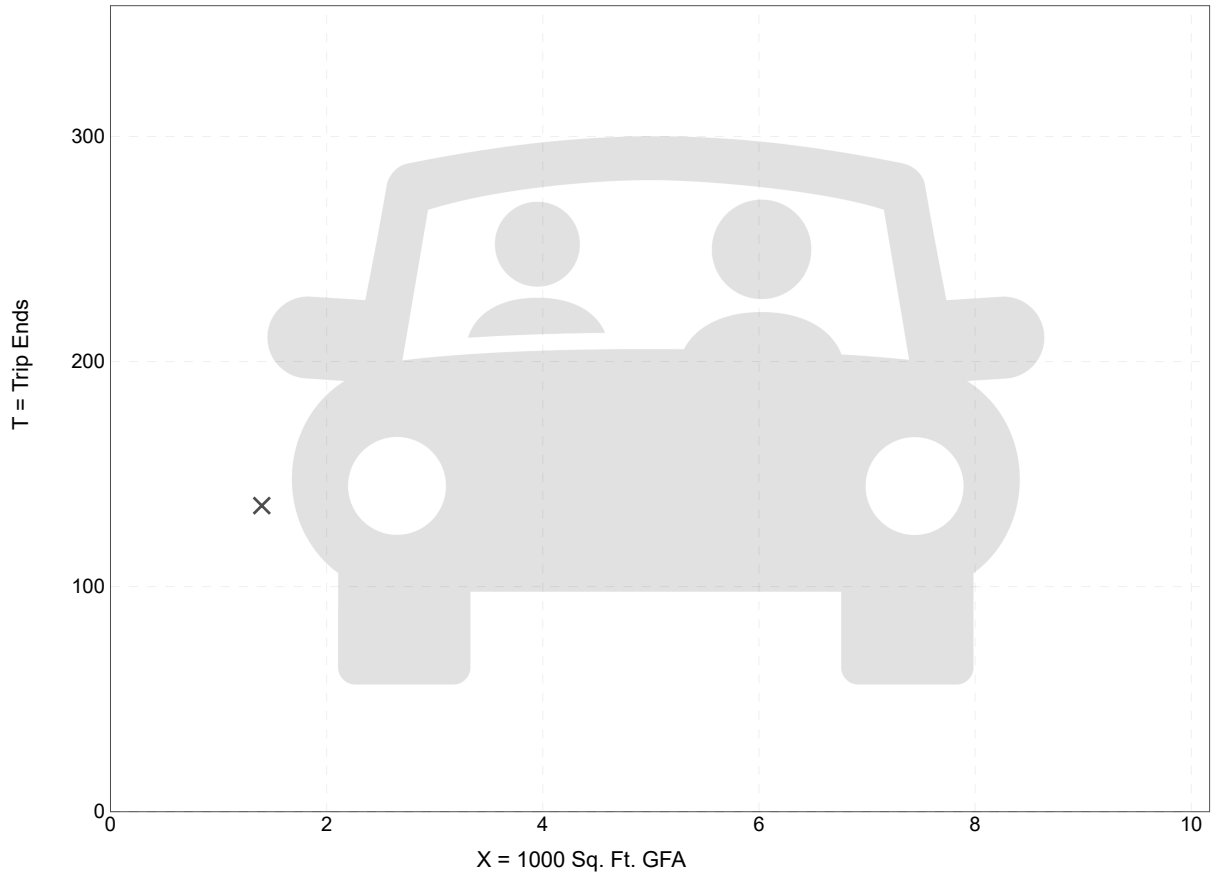
Setting/Location: **General Urban/Suburban**
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 1
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
97.14	97.14 - 97.14	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

T-SQUARE ENGINEERING
CIVIL-SITE | TRAFFIC | WASTEWATER

111 Southeast Parkway Court
Franklin, TN 37064
615.678.8212

www.T2-eng.com

November 14th, 2024

City of Columbia Staff

Comment Response Letter – Site Development Plan – 1400 Hampshire Pike

Planning

1. The lead staff person for this case is City Planner Kevin McCarthy, AICP; he will prepare the staff report for this item. Please contact kmccarthy@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
   Acknowledged.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
   Provided.
3. Provide a TIS at resubmittal. Consult with City Engineer regarding scope and requirements.
   TIS provided.
4. This item will likely need to be reevaluated by the DRC at its November meeting. Please consult with the assigned case planner on resubmittal day to determine whether plan revisions/TIS/amendments to applicable zoning provisions warrant new comments.
   This application requested deferral and was not subsequently placed on DRC review in November. Subsequently, we request to be placed on December's PC.
5. Please provide a photometric plan conforming to 4.3.17 of the zoning ordinance.
   Photometric plan required.
6. Advisory: EFIS is not a permitted façade material.
   Elevations updated.
7. Advisory: Secondary elevation façade glazing should meet minimum requirement at time of permit.
   Elevations updated.
8. Advisory: Soldier course and other façade detail will be required at time of permit.
   Acknowledged.
9. Advisory: Foundation plantings will be required to be shown at time of permit.
   Acknowledged.
10. Advisory: It's prudent to add a sign band location to the elevations at time of permit to ensure adequate conforming sign areas for businesses is incorporated into design.
    Acknowledged.

Engineering

11. Traffic impact study required prior to site development plan.
    TIS provided.

12. Subject to construction plan approval.
    Acknowledged.
13. Note: When building site 1 develops, cross access to adjacent property (1411 Williamsport Pk) may be required.
    Note provided on C-2.0.

Columbia Power

14. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
    Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.
    Acknowledged.
15. CPWS BB Plan to Serve
    Acknowledged.

ATT

16. ATT HAS AERIAL FACILTIES ON THE HAMPSHIRE PIKE PORTION OF THE PROPRTY THAT MAY OR MAY NOT BE IMPACTED.
    No facilities in Hampshire Pike ROW are impacted.

Columbia Water

17. "A water availability letter was issued on August 29, 2024, it remains valid for 120 days. The availability of capacity to serve is based on a determination by the Fire Marshal of fire flow requirements and the information submitted on the Water Service Availability Request application. Any off-site improvements detailed in the availability letter are the responsibility of the developer/owner. All public water system improvements are subject to the preparation and approval of detailed construction plans prepared in accordance with CPWS and Tennessee Department of Environment and Conservation requirements."
    Acknowledged.

Fire

18. No comments

Maury County Schools

19. No comment

Maury County Highway Dept.

20. No comments.

Public Works

21. No comments.

Atmos Energy

22. No comments provided.

Maury County E911

23. No comments provided.

Wastewater

24. No comments.

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, October 8, 2024

ITEM NO.
24-0415

DESCRIPTION: 1400 Hampshire Pike Parcel: 088M B 007.00

COMMENTS:

Planning

1. The lead staff person for this case is City Planner Kevin McCarthy, AICP; he will prepare the staff report for this item. Please contact kmccarthy@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
3. Provide a TIS at resubmittal. Consult with City Engineer regarding scope and requirements.
4. This item will likely need to be reevaluated by the DRC at its November meeting. Please consult with the assigned case planner on resubmittal day to determine whether plan revisions/TIS/amendments to applicable zoning provisions warrant new comments
5. Please provide a photometric plan conforming to 4.3.17 of the zoning ordinance.
6. Advisory: EFIS is not a permitted façade material.
7. Advisory: Secondary elevation façade glazing should meet minimum requirement at time of permit.
8. Advisory: Soldier course and other façade detail will be required at time of permit.
9. Advisory: Foundation plantings will be required to be shown at time of permit.
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Engineering

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13. Note: When building site 1 develops, cross access to adjacent property (1411 Williamsport Pk) may be required.

DEVELOPMENT SERVICES
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COLUMBIA, TN 38401
PHONE: (931) 560-1560
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ATT

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Fire

18. No comments

Maury County Schools

19. No comment

Maury County Highway Dept.

20. No comments.

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Public Works

21. No comments.

Atmos Energy

22. No comments provided.

Maury County E911

23. No comments provided.

Wastewater

24. No comments.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

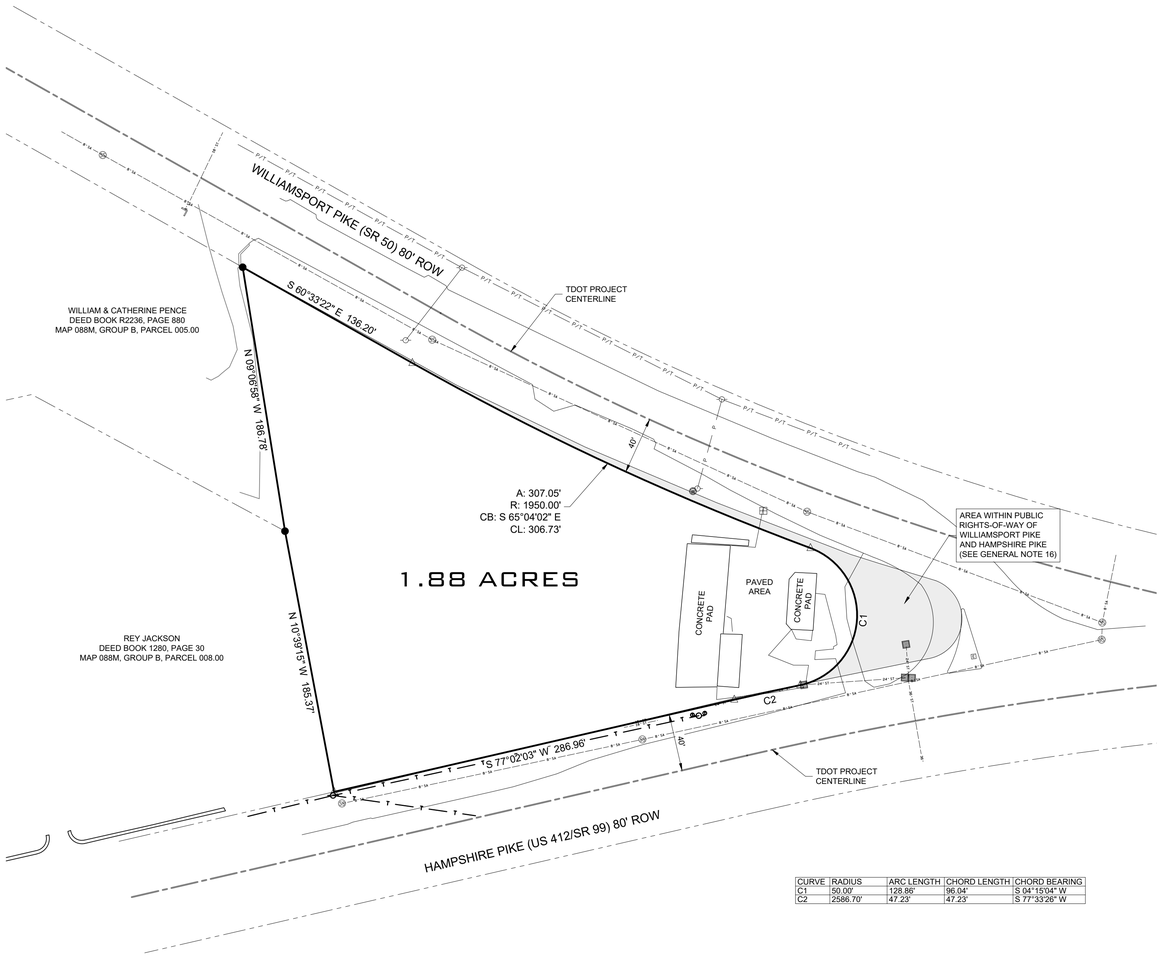
Please contact kmccarthy@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.

You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

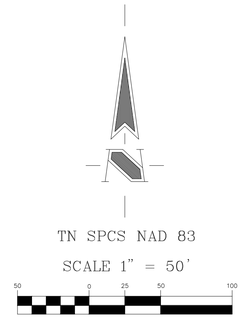
NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.



VICINITY MAP - NOT TO SCALE



CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	50.00'	128.86'	96.04'	S 04°15'04" W
C2	2586.70'	47.23'	47.23'	S 77°33'26" W



LEGEND

- CALCULATED POINT
- IRON PIN FOUND
- UTILITY POLE
- WATER METER
- MISCELLANEOUS UTILITY BOX
- ELECTRIC ACCESS BOX
- SEWER MANHOLE
- DROP INLET
- OVERHEAD COMMUNICATION LINE
- OVERHEAD ELEC./COMM. LINE
- OVERHEAD ELECTRIC LINE
- SANITARY SEWER LINE
- STORMWATER PIPE

GENERAL NOTES

1. THIS SURVEY WAS PREPARED USING THE CURRENT DEED OF RECORD FOR THE SUBJECT PROPERTY.
2. ALL DEED BOOK REFERENCES PERTAIN TO THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
3. UTILITIES AS SHOWN WERE TAKEN FROM VISIBLE FIELD LOCATIONS. ADDITIONAL UTILITY DETAILS AND PRECISE GROUND LOCATIONS SHOULD BE OBTAINED FROM THE PROPER AUTHORITIES BEFORE ANY GROUND DISTURBANCE OR CONSTRUCTION IS STARTED.
4. THE SUBJECT PROPERTY IS ZONED CD-4C.
5. THIS IS A GROUND RUN SURVEY; NO RECTIFIED ORTHOPHOTOGRAPHY, PHTOGRAMMETRIC MAPPING, OR LASER SCANNING DEVICES WERE USED IN THE COURSE OF THIS SURVEY.
6. THERE IS NO EVIDENCE OF THIS SITE AS A SOLID WASTE DUMP.
7. THE SUBJECT PROPERTY IS LOCATED WITHIN AREAS HAVING DESIGNATIONS OF ZONE "X" BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), FOR COMMUNITY PANEL NO. 47119C0280E, DATED 04-16-2007, IN CITY OF COLUMBIA, MAURY COUNTY, STATE OF TENNESSEE, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES ARE SITUATED.
8. TITLE COMMITMENT NO. B-22-4072 WAS FURNISHED TO THIS SURVEYOR. THIS SURVEYOR DID NOT PERFORM A TITLE SEARCH.
9. THE PROPERTY DESCRIBED HEREON IS THE SAME PROPERTY DESCRIBED IN COMMITMENT NO. B-22-4072, WITH AN EFFECTIVE DATE OF OCTOBER 20, 2022 AT 8:00 A.M., AND ALL EASEMENTS, COVENANTS, AND RESTRICTIONS REFERENCED IN SAID TITLE COMMITMENT OR APPARENT FROM A PHYSICAL INSPECTION OF THE SITE OR OTHERWISE KNOWN TO HAVE BEEN PLOTTED HEREON OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE SUBJECT PROPERTY.
10. THE ACCOMPANYING SURVEY WAS MADE ON THE GROUND AND THERE ARE NO VISIBLE ENCROACHMENTS ON THE SUBJECT PROPERTY OR UPON ADJACENT LAND ABUTTING SAID PROPERTY EXCEPT AS SHOWN HEREON, AND WAS MADE IN ACCORDANCE WITH LAWS AND/OR MINIMUM STANDARDS OF THE STATE OF TENNESSEE.
11. THE SURVEY AND THE INFORMATION, COURSES AND DISTANCES SHOWN HEREON ARE ACCURATE.
12. THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN CONDUCTING THE FIELDWORK.
13. SITE HAS DIRECT PHYSICAL ACCESS TO WILLIAMSPORT PIKE (SR 50), BEING AN 80 ft PUBLIC RIGHT-OF-WAY; AND HAMPSHIRE PIKE (US 412/SR 99), BEING AN 80 ft PUBLIC RIGHT-OF-WAY.
14. THERE IS NO EVIDENCE OF CEMETERIES AND BURIAL GROUNDS ON THE PROPERTY.
15. THE LANDS SHOWN HEREON AND THE ADJACENT PARCELS OF LAND, WHERE THEY SHARE A COMMON BOUNDARY LINE, ARE CONTIGUOUS WITH NO GAPS, GORES, HIATUS, OR OVERLAPS.
16. A PORTION OF THE SUBJECT PROPERTY AS DESCRIBED IN THE CURRENT DEED OF RECORD LIES WITHIN AN AREA RESERVED FOR THE PUBLIC RIGHTS-OF-WAY OF WILLIAMSPORT PIKE (SR 50) AND HAMPSHIRE PIKE (US 412/SR 99) AS THEY ARE SHOWN ON THEIR RESPECTIVE TENNESSEE DEPARTMENT OF TRANSPORTATION HIGHWAY PLANS. SAID AREA IS AS SHOWN HEREON.

TO W&M LLC, A TENNESSEE LIMITED LIABILITY COMPANY, TENNESSEE TITLE SERVICES LLC-BRENTWOOD, CHICAGO TITLE INSURANCE COMPANY, AND EACH OF THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1,2,4,8,13, AND 16 TABLE A THEREOF.

THE FIELD WORK WAS COMPLETED ON JUNE 10, 2024

J. MARK CANTRELL TN PLS#1859

SCHEDULE B, PART II - EXCEPTIONS

1. DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THE FORM. ***NOT A SURVEY MATTER***
2. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS. ***NOT A SURVEY MATTER***
3. ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS. ***NOT A SURVEY MATTER***
4. TAXES OR SPECIAL ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS BY THE PUBLIC RECORDS. ***NOT A SURVEY MATTER***
5. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCES AFFECTS THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND. ***DOES NOT AFFECT THE SUBJECT PROPERTY***
6. EASEMENTS OR CLAIMS OF EASEMENTS NOT SHOWN BY THE PUBLIC RECORDS. ***DOES NOT AFFECT THE SUBJECT PROPERTY***
7. IF IMPROVEMENTS ARE COMPLETED AFTER JANUARY 1 OF ANY YEAR, AND THE LAW, PURSUANT TO TCA 67-5-509 AND TCA 67-5-603, REQUIRES SUPPLEMENTAL ASSESSMENT FOR THE YEAR IN WHICH IMPROVEMENTS ARE COMPLETED, THE COMPANY ASSUMES NO LIABILITY FOR TAXES ASSESSED BY CORRECTION OR SUPPLEMENTAL ASSESSMENT. ***NOT A SURVEY MATTER***
8. TAXES FOR THE YEAR 2022, A LIEN NOT YET DUE AND PAYABLE. ***NOT A SURVEY MATTER***
9. SUBJECT TO ALL MATTERS SHOWN ON THE PLAN OF RECORD IN PLAT BOOK 2, PAGE 31, REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE. ***DOES NOT AFFECT THE SUBJECT PROPERTY.***
10. RIGHT OF WAY FOR HAMPSHIRE PIKE AND WILLIAMSPORT PIKE. ***AFFECTS THE SUBJECT PROPERTY AS IT PERTAINS TO THE RIGHTS-OF-WAY OF HAMPSHIRE PIKE AND WILLIAMSPORT PIKE SHOWN HEREON.***
11. SUMMARY OF TRUST OF RECORD IN BOOK 1281, PAGE 488 AND AMENDED IN BOOK R1797, PAGE 889. ALSO, SEE COURT ORDER ATTACHED TO DEED AT BOOK R1835, PAGE 711, IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE. ***NOT A SURVEY MATTER.***

LEGAL DESCRIPTION - 1.88 ACRES

Being a tract of land lying in Maury County, Tennessee, generally bounded on the north and east by Williamsport Pike (SR 50, 80 ft. right-of-way), on the south by Hampshire Pike (US 412/SR 99, 80 ft. right-of-way), and on the west by Rey Jackson (DB 1280, pg. 30) and William & Catherine Pence (DB R2236, pg. 880), and being more particularly described as follows:

Beginning at an iron pin found in the south margin of Williamsport Pike, being the northeast corner of Pence and the northwest corner of the property herein described; thence along the margin of Williamsport Pike, the following calls: S 60°33'22" E , 136.20'; thence with a curve turning to the left with a radius of 1950.00', an arc length of 307.05', with a chord bearing of S 65°04'02" E , and a chord length of 306.73'; thence with a curve turning to the right with a radius of 50.00', an arc length of 128.86', with a chord bearing of S 04°15'04" W , and a chord length of 96.04' to a point in the north margin of Hampshire Pike; thence along the margin of Hampshire Pike, the following calls: with a curve turning to the left with a radius of 2586.70', an arc length of 47.23', with a chord bearing of S 77°33'26" W , and a chord length of 47.23'; thence S 77°02'03" W , 286.96' to a point, being the southeast corner of Jackson; thence leaving the Hampshire Pike and with the east line of Jackson, N 10°39'15" W , 185.37' to an iron pin found, being the northeast corner of Jackson and the southeast corner of Pence; thence with the east line of Pence N 09°06'58" W , 186.78' to the Point of Beginning. Containing 1.88 Acres, as surveyed by T-Square Surveying, J. Mark Cantrell, RLS #1859, dated 7-29-2024.

T-SQUARE ENGINEERING
SURVEY DIVISION
111 SOUTHEAST PKWY CT, FRANKLIN, TN. 37064

MARK CANTRELL
PROFESSIONAL LAND SURVEYOR
XVI
ARCHITECTURE
COMMERCE
TENNESSEE NO. 1859

1-29-2024

ALTA/NSPS LAND TITLE SURVEY

1400 HAMPSHIRE PIKE
W & M LLC, OWNERS
DEED BOOK R2991, PG. 1036
MAP 088M, GROUP B, PARCEL 007.00
MAURY COUNTY, TENNESSEE

PROJECT:
23-0333

REVISIONS

NO.	DATE

DATE:
29 JULY 2024

SCALE:
1" = 50'

DRAWN BY:
DSW

REVIEWER:

SHEET:
1 OF 1

August 29, 2024
Ms. Allison Corolla El
T-Square Engineering
1329 West Main Street
Franklin, TN 37064
Sent via email: allison.corolla@t2-eng.com
RE: Water Availability Letter
Hampshire Pike Liquor / Tobacco Store
1400 Hampshire Pike
Tax Map 88, Parcel 7.00 & 7.01
Columbia, Maury County, TN

Dear Ms. Corolla:

Columbia Power and Water Systems ("the Utility"/CPWS) is a municipal corporation authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation, various Planning Commissions and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies, water service will be made available on a first-come, first-served basis, subject to availability of all CPWS furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development as submitted by the applicant includes a 2,250 square-foot restaurant and 5,040 square feet of retail space. CPWS has evaluated the projected water demands for the proposed development in the water system hydraulic model and is able to meet a fire-flow capacity of 1,000 gpm at 20 psi while maintaining the existing level of service and pressures in this portion of the distribution system. CPWS can provide water for the proposed development according to the following requirements:

- ***Sprinklers are mandatory, based on the available system flow and the requirements provided by the applicant.***
- Domestic waterline connection will be made to the existing 8-inch water main located on Williamsport Pike.
- CPWS may opt to provide a single domestic master meter to serve all units in the development. Separate fire and domestic meters will be required.

All of the above requirements are to be constructed and paid for by the Applicant and dedicated to CPWS once complete up to and including the meter. No construction of CPWS infrastructure shall be initiated until final construction plans have been approved by TDEC and all parties have fully executed a water service agreement.

Once you have received this Water Availability Letter, next steps in the process to obtain water service from CPWS are as follows:

- Prior to expiration of this letter in 120 days, remit to CPWS new water service fees:

New Water Service Fee: $1,500 + $370 per SFU (11.9 SFUs)	$5,903.00

- Provide for review and comment site utility drawings indicating the proposed location of all taps, meters, backflow devices, and hydrants.
- Upon resolution of all comments, applicant may then schedule a pre-construction meeting with CPWS. Pre-construction meeting will be canceled and re-scheduled unless all meter and impact fees are paid at least 48 hours prior, or surety is provided in lieu of full payment. Final meter and impact fees are subject to change based on final design and the prevailing Board approved rates at time of payment. If surety is provided in lieu of payment, meters are not ordered until fees are paid and may result in extended lead-times.

Meter Fee: TBD per 4" fire meter (1 meter)	TBD
Meter Fee: $710 per 1" meter (1 meter, restaurant)	$710.00
Meter Fee: $540 per ¾" meter (1 meter, retail)	$540.00
Impact Fee: $7,500 per 1" meter (1 meter)	$7,500.00
Impact Fee: $4,500 per 3/4" meter (11.9 meters)	$4,500.00
Total Meter and Impact Fees Due =	**$13,250.00**

- After the pre-construction meeting, CPWS will then issue a formal notice to proceed. No construction of CPWS infrastructure may take place prior to the pre-construction meeting.
- Applicant is then required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure.

If you have any questions, please feel free to contact me at 423-774-0349 or eric.king@inflodesign.com. This letter is valid for one-hundred twenty (120) days from the date of this letter.

Sincerely,



Eric King, P.E.
Inflo Design Group, LLC
on behalf of Columbia Power and Water Systems

cc: Jonathan Hardin, CPWS
File 24-050

CITY OF COLUMBIA
TENNESSEE

WASTEWATER DEPARTMENT

19 July 2024

Allison Corolla
111 Southeast Parkway Court
Franklin, TN 37064

RE: 1400 Hampshire Pike, Columbia, TN 38401

Allison,

This letter serves as confirmation that the City of Columbia Wastewater Department has the available capacity to service the subject development. Any extension to the existing sewer infrastructure will be initiated by the owner/developer, reviewed by our department and approved by the State of Tennessee. The project must be advanced in accordance with local, state and federal rules, regulations and policies. Funding and construction of those improvements will remain the responsibility of the owner/developer. New customers will be required to pay all fees applicable at the time of connection. No detailed design plan for an extension of the sewer has been proposed at this time.

Donnie Boshers, Director
City of Columbia, TN
Wastewater Department

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Preliminary Plat, Site Development Plan, and PUD Checklist

Development: 1400 Hampshire Pike

This checklist shall be completed, and included with the submittal documents. If the submittal does not contain a completed checklist, it shall be deemed incomplete. All below listed items shall be included in the submittal documents and plans, as well as any further information required by the City of Columbia to evaluate compliance and to perform a full and complete review. See Zoning Ordinance Article 8 and Subdivision Regulations.

General

- ☑ Name of development
- ☑ Contact info for the owner and licensed design professional(s) preparing plan: name, address, email, phone
- ☑ Plan sealed by a design professional licensed in the State of Tennessee.
- ☑ North Arrow, legend, and site vicinity map
- ☑ Graphic Scale: between 1 in. = 10 ft. and 1 in. =100 ft.
- ☑ Survey stamped by a State of Tennessee Licensed Professional Land Surveyor, with all project boundaries including bearings and angles to the nearest hundredth, utilities, and existing streets and rights-of-way.
- ☑ Note referencing Tennessee State Plane Coordinate System, NAD 83 Datum
- ☑ All property boundaries, existing easements, and encumbrances
- ☑ Parcel identification, owner, and deed and plat references of adjoining properties
- N/A ☐ Proposed phasing and timetable for all phases of development
- N/A ☐ Traffic Impact Study, as required.
- N/A ☐ The substance of all existing and proposed covenants, easements, or other restrictions.

Lots and Land-Use

- ☑ The size of total property to be developed in square feet and acres
- ☑ Lot numbers of all proposed lots, with dimensions, locations, and square footage
- ☑ A tabulation of the land area to be devoted to various uses and activities and overall densities.
- N/A ☐ Typical lot layout depicting proposed setbacks, yards, and easements, where applicable

Structures

- ☑ Location and approximate dimensions of all existing and proposed structures.
- ☑ Location of all earth retaining structures, with approximate top and bottom of wall elevations.
- ☑ Existing and intended use of all buildings and structures on site, including the number of dwelling units and density, where applicable
- ☑ Location, type, and size of proposed signs
- ☑ Approximate height, bulk, and the utilization of structures including activities and the number of living units.

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TENNESSEE

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Grading, Drainage, and Storm

- ☑ Existing conditions and contours at vertical intervals of not more than two (2) feet
- ☑ General proposed contours at vertical intervals of not more than two (2) feet
- ❑ FEMA Special Flood Hazard Area (SFHA), 100-year Floodplain (F-P), and Floodway (F-W) boundaries with elevations and the exact location of the nearest benchmark. Indicate the Flood Insurance Rate Map (FIRM) panel number, its effective date, and flood insurance zones — N/A
- ❑ Location and dimension of aquatic buffer zones — N/A
- ☑ General layout of the proposed storm drainage system including surface and subsurface drainage systems, areas for detention, and water quality devices.
- ❑ Identification of all critical lots — N/A

Streets, Parking, and Pedestrian Elements

- ☑ Proposed street and alley rights-of-way, typical sections, widths, classification, names, and proposed ownership and maintenance responsibility
- ☑ Proposed connections to existing and proposed streets (including classification) located outside the development
- ❑ Proposed improvements as identified in the Traffic Impact Study, as required — N/A
- ☑ Existing and proposed sidewalks, trails, and other pedestrian elements
- ☑ Existing and proposed on-street and off-street parking and loading areas
- ☑ Summary of all provided and required parking

Landscaping, Open Space, and Amenities

- ☑ Natural features on site including, but not limited to, wetlands, streams, ponds, springs, sinkholes, wells, rock outcroppings, excessive slopes, and forested areas
- ☑ Landscaped areas and buffers with details on proposed plantings, existing vegetation, and other features.
- ☑ The location and size of all common open space, parkland dedications, and dedications and reservations of land for public uses.
- ❑ Any amenity features and structures for private or public benefit. — N/A
- ☑ Location, dimension, and materials of fences and walls
- ☑ Tree Canopy retention

Utilities

- ☑ General layout and location of existing and proposed utilities and utility features including, but not limited to potable water, fire hydrants, sanitary sewer, storm sewer, and power and communication facilities.
- ☑ Acknowledgement from water, sewer, and power utility providers that the proposed development may be adequately served with existing infrastructure, or if improvements are required to adequately serve the development, a general statement of the improvements.

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PUD Specific Items

- ❑ List of all deviations from PUD Standards requested
- ❑ The nature of the landholder's interest in the land proposed to be developed and a written statement of concurrence from all parties having a beneficial interest in the affected property.
- ❑ Location and approximate dimensions of all existing and proposed structures including approximate height, bulk, and the utilization of structures including activities and the number of living units. Include architectural renderings of all proposed structures with materials listed.

N/A

- ❑ The substance of covenants, grants of easements or other restrictions to be imposed upon the use of the land, buildings and structures including proposed easements for public utilities on the property or documentation of off-site easements.
- ❑ Exterior lighting plan.

If the application is deemed incomplete by the Zoning Administrator, a written request shall be made within ten days after the original submittal, for further information. In such case the application shall be held in abeyance until deemed complete for final review. No plan shall be formally presented for Planning Commission action until such plan is found complete, compliant with City standards, and ready for review.

Checklist Completed By:

Allison Corolla	*Allison Corolla*	9/16/2024
Print Name	Signature	Date

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * *1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*
Fold hard copy submittals larger than 8½"x11"
All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	1400 HAMPSHIRE PIKE		
	TAX MAP: 88	GROUP:	PARCEL: 7.00 & 7.01
SUMMARY OF NATURE OF REQUEST AND WORK	THIS IS A SITE DEVELOPMENT PLAN APPLICATION FOR TWO CONNECTED COMMERCIAL BUILDINGS.		

DATE OF PRE-APPLICATION CONFERENCE	6/7/23	*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
❑ Comprehensive Plan Amendment ❑ Annexation ❑ Rezoning ❑ Preliminary Plat ❑ Final Plat ❑ PUD Preliminary Master Plan ❑ PUD Final Site Plan ☒ Site Development Plan ❑ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ❑ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ❑ Requested Zone Listed ❑ Statement of Compliance with Comprehensive Plan ❑ Concept Plan **Preliminary Plats/Site Development Plans:** ☒ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ☒ Receipt of Payment for Pre-Application Meeting ☒ Written Legal Description copy ☒ Columbia Water System Availability Letter ☒ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs: ❑ Project Name (include Sections & Phases) ❑ Total Number of Lots/Residential Units ❑ Square Footage of Non-Residential Floor Space ❑ Total acreage

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT
All communications go to the Applicant's email that is provided.

NAME	ALLISON COROLLA	PHONE	615.678.8212
ADDRESS	111 SE PWKY CT, FRANKLIN	EMAIL	ALLISON.COROLLA@T2-ENG.COM

PROPERTY OWNER NAME	W & M LLC	PHONE	
ADDRESS	2050 BELSHIRE WY, SPRING HILL	EMAIL	MALAKSALAMA34@GMAIL.COM

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

ALLISON COROLLA	Allison Corolla	9/11/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
Malak Salama	MALAK SALAMA	9/11/2024
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE

Columbia Commons Preliminary Plat

Project #:	24-0467	Location:	115 S. James M. Campbell
Applicant:	Julia Lannon	Case Type(s):	Preliminary Plat
Staff Planner:	Austin Brass, AICP	Proposed Use:	Commercial

PROJECT SUMMARY

The applicant seeks approval of a Preliminary Plat approval for a 3.88 +/-acre parcel within a CD-4C Character District. This preliminary plat subdivides one parcel into 3 building lots conforming to all standards of a CD-4C Character District for lot orientation and width. This parcel was the former site of the *Columbia Ford Automotive Dealership* that has been demolished. The purpose of this preliminary plat is for the construction of new single-site commercial uses on each lot.

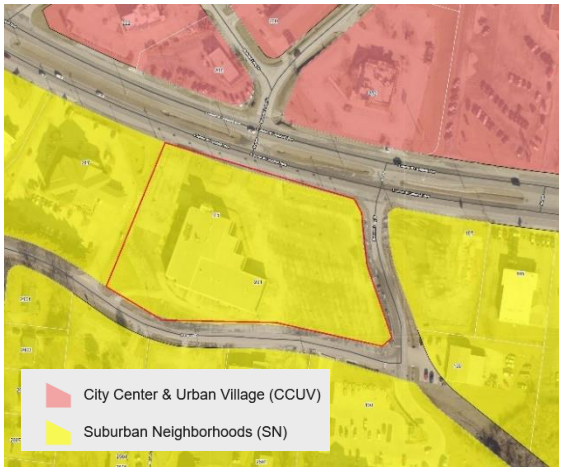
- This preliminary plat indicates two maximum setback lines of 40’ and 85’. The Zoning Ordinance was modified in October 2024 as approved by Planning Commission and City Council to allow for two rows of parking in the 1st layer of a lot or building site with a CD-4C district, if said lot or building site contains a use that enfronts an arterial roadway. When two rows of parking is being utilized in the 1st layer, the minimum setback within a CD-4C district is increased from 40 ft. to 85 ft.
- Any approval should be conditioned on the timely submittal of "as-approved" plans, which reflect the substance of the plans approved by the Planning Commission, as determined by the Zoning Administrator and the City Engineer.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.
- A subsequent Final Plat will be required to be submitted and approved by the Planning Commission due to the association of public sewer easements being re-routed on the site to accommodate this Preliminary Plat.
- Due to the site being less than 10 acres and no construction of a new throughfare section; the site development plan can be reviewed administratively as the site does not meet the definition of a Development Parcel.
- Staff recommends approval of this preliminary plat with the condition that 85’ setback line on secondary frontage be removed.
- The Planning Commission is the **decision-making authority** for this Preliminary Plat.

SITE INFORMATION

CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
CD-4C	Vacant Land	Commercial	+ /- 3.88 Acres



FUTURE LAND USE MAP (Suburban Neighborhoods)	ZONING MAP (CD-4C)





SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	Suburban Neighborhoods	CD-4C	Vacant
North	City Center & Urban Village	CD-4C/ SD-LI	Commercial (*First Watch*)
South	Suburban Neighborhoods	CD-4C/ CD-4	Commercial/ *Tractor Supply*
East	Suburban Neighborhoods	CD-4C	Vacant Commercial Lot
West	Suburban Neighborhoods	CD-4C	Commercial (*Bank*)

CONSISTENCY WITH CONNECT COLUMBIA

Suburban Neighborhoods: This requested Preliminary Plat & Site Development Plan is located within the Suburban Neighborhoods Future Land Use. The intent of the Suburban Neighborhoods (SN) future land use is to enhance existing suburban areas and create new neighborhoods that will improve the quality of life in Columbia. Where appropriate, the SN future land use area also establishes mixed-use and commercial centers which serve residents' retail needs and provide a wider range of housing options. Each development parcel should add to Columbia's existing sense of place and extend the established form and pattern to create a more interconnected community. Future development should emphasize connectivity and continuity of the city as whole. The density and intensity of residential development increases in proximity to areas under the CCUV future land use classification. In the same way, density and intensity decrease in proximity to areas under the Rural Transition (RT) future land use classification. New development enhances pedestrian infrastructure with sidewalks and other multimodal routes. Public frontages may include sidewalks and street trees. Over time, new and infill development connects neighborhoods and community anchors such as libraries, neighborhood centers, health facilities, retail uses, parks, and schools.

Suburban Neighborhoods

Character & Intent

The intent of the Suburban Neighborhoods (SN) future land use is to enhance existing suburban areas and create new neighborhoods that will improve the quality of life in Columbia. Where appropriate, the SN future land use area also establishes mixed-use and commercial centers which serve residents' retail needs and provide a wider range of housing options. Each development parcel should add to Columbia's existing sense of place and extend the established form and pattern to create a more interconnected community. Future development should emphasize connectivity and continuity of the city as whole. The density and intensity of residential development increases in proximity to areas under the CCUV future land use classification. In the same way, density and intensity decrease in proximity to areas under the Rural Transition (RT) future land use classification. New development enhances pedestrian infrastructure with sidewalks and other multimodal routes. Public frontages may include sidewalks and street trees. Over time, new and infill development connects neighborhoods and community anchors such as libraries, neighborhood centers, health facilities, retail uses, parks, and schools.

Land Use Considerations

The primary land use is low-density detached housing. Along arterial roadways, primary uses may include offices, retail, and all forms of medium-density housing. Secondary land uses include accessory dwellings, two-family homes, civic uses, institutional uses, schools, religious facilities, utility facilities, parks and open space. New industrial and warehouse uses are inappropriate.



Form & Pattern

The SN future land use area is characterized by the organization of the built environment to extend a succession of large-lot neighborhoods and compact walkable neighborhoods. Development parcels extend established neighborhood patterns. Leap-frogging development is inappropriate. The SN future land use is distinguished from RT in the organization of lots and thoroughfares to form blocks. Physically separated developments which do not extend established block formation and roadway networks are inappropriate. The density of streets and blocks increases with proximity to CCUV and community anchors. Implementing bulk and design standards loosely delimit the public and domestic realms though the application of layers and front-to-back discipline of lots. Along arterial roadways, commercial corridors of varying intensities emerge over time with a high-quality built environment typified by a mix of building types and a balance between automobile-oriented and pedestrian-oriented design. The physical intensity of development along arterial corridors varies based on the surrounding residential density and the roadway's place in the transportation network. New development should accompany concurrent extension of complete urban services. Parking is provided on-site by private land users, supplemented by on-street spaces.

Implementing Districts

Neighborhood-Large Lot CD-3L
Neighborhood CD-3
General Urban-Corridor CD-4C (only along Arterial roadways)
Manufactured Home Park SD-MHP
Residential PUD PUD-R
Mixed Use PUD PUD-MU
Civic CV

Implementing Standards

General Development Pattern: Mixed Uses & Isolated Uses
Density (density unites per ace): 4 - 24 du/ac
Building Height: 1 - 4 stories
Open Space Elements: Civic Spaces, Parks & Greenways





AREA OF CHANGE

Connect Columbia established the areas of change policy designation for the subject site as ***activate*.** The designation includes areas where significant and beneficial change is occurring or is desired. These areas are the focus of proactive City policies to bring the community's values to fruition. Public investment and increased coordination with the private sector will achieve transformational changes envisioned by the community (Connect Columbia p. 32).



CONFORMITY WITH ZONING ORDINANCE

Lots, Building Sites & Bulk Standards:

- **The proposed Preliminary plat conforms to the bulk standards of the Ordinance within an CD-4C Character District.**
    - This preliminary plat is for the creation of 3 lots that will be dedicated to single-site freestanding commercial uses within a CD-4C character district.
    - All proposed lots enfront an existing arterial throughfare type as required per the Zoning Ordinance.
    - Staff prepared the tables below to demonstrate how the preliminary plat conforms to the Zoning Ordinance. Table 1 describes applicable bulk standards per § 4.3.1-E (building, lot & building site standards) of the Zoning Ordinance for a CD-4C character district in which the subject property is zoned.

Table 1 (CD-4C) Urban Center Character Districts Bulk Standards		
Bulk Standards:	**Required**	**Proposed**
Minimum Lot/ Building Site Width Minimum and Maximum:	18 ft. min-200 ft. max	Lot 1: 120 ft. Lot 2: 178 ft. Lot 3: 158 ft.
Lot/Building Enfrontment:	Facades must have main entrance in principle of building frontage	*Will be determined at administrative site development plan.*
Building Height:	4 stories maximum	*Will be determined at administrative site development plan.*
Frontage Buildout:	60% min/ 40% min for Commercial	*Will be determined at administrative site development plan.*
Density:	24 Density Units Per Acre	*Will be determined at administrative site development plan.*
Setbacks:	**Principal Buildings** **Front:** 6 ft. minimum/ 40 ft. maximum (*85 ft. if parking is located in 1st layer enfronting arterial roadway*.) **Side:** – 0 ft. min **Rear:** 3ft min	**Principal Buildings** **Front:** – 6ft minimum. / 40 ft & 85ft. maximum **Side:** - 0 ft. **Rear:** - 3 ft.

REVIEW PROCESS

The Development Review Committee reviewed the proposed Preliminary Plat at its November 12th, 2024 meeting, as directed by Section **8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package and summarized above.

The Planning Commission is the Decision-Making Authority for Preliminary Plats that include the subdividing of more than two lots.

Section **2.2.6** of the Subdivision Regulations establishes the review criteria for approval of Preliminary Plats.

> *A. Recommendations and final action on a Preliminary Plat shall be based on consideration of the following criteria:*
>
> > *1. Whether the proposed Preliminary Plat complies with the applicable zoning district and overlay districts;*
> >
> > *2. Whether the proposed Preliminary Plat is consistent with all standards of these Subdivision Regulations and other related codes and ordinances enforced by the City; and*
> >
> > *3. Whether the CMPC determines that the particular site is suitable for the type of platting and development proposed.*

In the event of a denial, **§ 2.2.5** of the Subdivision Regulations requires the Planning Commission to identify the specific parts of applicable plans and regulations with which the plat does not comply.

SUMMARY OF DEVELOPMENT REVIEW COMMITTEE COMMENTS

The DRC reviewed this proposal at its November 12th, 2024 meeting. A full list of comments, and the applicant's responses, is provided in the agenda packet. Some key comments are noted below.

- **Engineering** noted concern of the alignment of the site entrance on South James M. Campbell Blvd that does not deter wrong-way movements exiting the site that could result in several conflict points. The applicant has responded that the site entrance as described has been proposed to be shifted to the east to eliminate the left turn conflict.

- **Planning** noted that the approximate location of all commercial buildings and associated parking will be achieved as an administrative site development plan in accordance to the CD 4-C district.
- **Wastewater** noted that the sanitary sewer in the current layout given the building placement might alter. The applicant has responded that the sanitary alignment has been shifted out of the road and into the drive aisle.
- **Columbia Water** indicated that a water availability letter will be required for each lot at time of development and may require off-site improvements to provide adequate water service.

COMMENTS FROM PLANNING STAFF

This preliminary plat and site development plan adheres to all standards of Zoning Ordinance 4400. As noted on the preliminary plat all structures are required to conform to the prescriptive design standards in Table 4.3.1-E of the Ordinance. This includes all form standards described.

SAMPLE MOTIONS

Approve:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in Sections **8.5.6.N** and **O** of the City of Columbia Zoning Ordinance, and Section **2.2.6** of the Subdivision Regulations, have been satisfied and approve the Site Development Plan and Preliminary Plat as presented *[, subject to technical comments and other conditions presented by planning staff*].

Approve Subject to Conditions:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in sections **8.5.6.N** and **O** of the City of Columbia Zoning Ordinance, and Section **2.2.6** of the Subdivision Regulations, have been satisfied and approve the Site Development Plan and Preliminary Plat subject to the following conditions: [*list conditions of approval crafted by Planning Commission*].

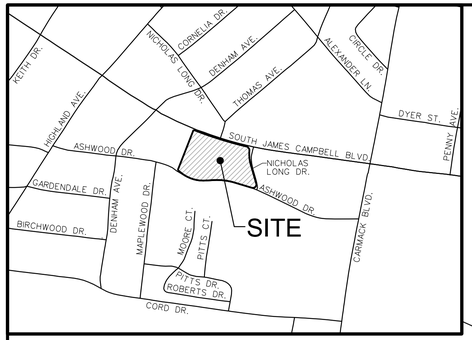
Deny:

Move to deny the Site Development Plan and Preliminary Plat having found, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in Sections **8.5.6.N** and **O** of the City of Columbia Zoning Ordinance and

Section **2.2.6** of the Subdivision Regulations are not satisfied [*list specific reasons for denial*].

Defer:

Move to find that there is insufficient information to make a decision, defer the matter to the next regularly scheduled meeting of the Planning Commission, and request that the [*applicant/staff*] provide: [*list additional information*] for review at that future meeting.



VICINITY MAP
(N.T.S.)

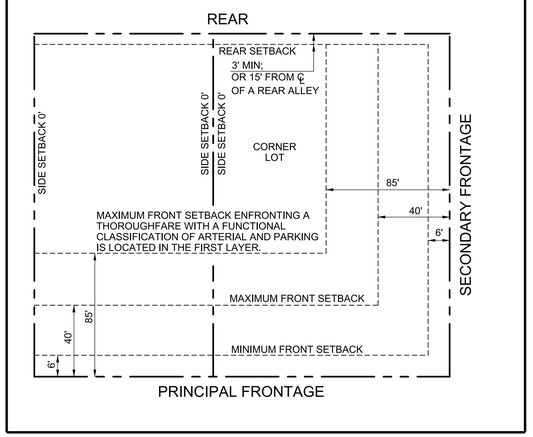
LINE TABLE

LINE	BEARING	DISTANCE
L-1	S 35° 53' 44" E	22.19'
L-2	S 04° 30' 57" E	7.20'
L-3	N 51° 43' 18" W	37.01'

CURVE TABLE

CURVE	DELTA	RADIUS	TANGENT	LENGTH	CHORD BEARING	DISTANCE
C1	03° 06' 34"	2924.93'	79.39'	158.73'	S 69° 59' 36" E	158.71'
C2	03° 29' 15"	2924.93'	89.04'	178.03'	S 73° 17' 30" E	178.00'
C3	21° 39' 56"	292.13'	55.90'	110.46'	S 04° 34' 07" E	109.81'
C4	124° 57' 00"	26.06'	50.01'	56.83'	S 44° 16' 42" W	46.22'
C5	19° 58' 00"	451.09'	79.40'	157.20'	N 83° 13' 48" W	156.40'
C6	41° 27' 16"	268.80'	101.72'	194.48'	N 72° 29' 40" W	190.27'
C8	08° 31' 30"	2924.93'	218.00'	435.20'	S 72° 42' 04" E	434.80'
C9	01° 55' 42"	2924.93'	49.22'	98.43'	S 75° 59' 58" E	98.43'
C10	10° 25' 36"	451.09'	41.16'	82.09'	N 78° 27' 35" W	81.98'
C11	09° 32' 24"	451.09'	37.64'	75.11'	N 88° 26' 35" W	75.02'
C12	32° 16' 10"	268.80'	77.76'	151.39'	N 67° 54' 16" W	149.40'
C13	09° 11' 05"	268.80'	21.59'	43.09'	N 88° 37' 15" W	43.04'

TYPICAL LOT SETBACKS
(NOT TO SCALE)



GENERAL SURVEY NOTES

1. THIS SURVEY MEETS THE REQUIREMENTS OF AN URBAN LAND SURVEY (CATEGORY 1), WITH A RATIO OF PRECISION OF THE UNADJUSTED SURVEY GREATER THAN 1:10,000 AS PER STANDARDS OF PRACTICE ADOPTED BY THE BOARD OF EXAMINERS FOR LAND SURVEYORS, STATE OF TENNESSEE.

2. BEARINGS SHOWN ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983 (NAD-1983). ELEVATIONS ARE BASED ON NAVD-1988, USING GEOID 2003 FOR ORTHOMETRIC HEIGHT DETERMINATION.

3. THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY NO. 470123, PANEL NO. 0285 E, DATED APRIL 16, 2007. ZONE "X".

4. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM FIELD LOCATED VISIBLE APPURTENANCES, ATLAS MAPS AS MAY BE AVAILABLE FROM MUNICIPALITIES OR UTILITY COMPANIES, AND OTHER DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES STATE THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION CONSULTED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. TO AVOID ANY POSSIBLE HAZARD OR CONFLICT, IT IS A REQUIREMENT OF THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT, FOR ANYONE WHO ENGAGES IN EXCAVATION TO NOTIFY ALL KNOWN UTILITY OWNERS NO LESS THAN THREE (3) OR MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE. CALL TENNESSEE ONE CALL AT 1-800-351-1111.

5. EXISTING SURVEY BASE INFORMATION IS FROM AN ALTA/NSPS LAND TITLE SURVEY PREPARED ON JUNE 17, 2024 BY BARGE DESIGN SOLUTIONS, INC.

6. CONTOUR INTERVAL ONE-FOOT, CONTOURS WERE INTERPOLATED FROM RANDOM SHOTS TAKEN ON A 50-FOOT INTERVAL.

DEED REFERENCE

BEING THE SAME PROPERTY CONVEYED TO COLUMBIA JAMES CAMPBELL BOULEVARD, LLC FROM THE J & R GROUP, LLC, SIGNED & NOTORIZED DEED COPY DATED 10-08-2024 PROVIDED TO THIS SURVEYOR, RECORDING PENDING.

PROPERTY MAP REFERENCE

BEING PARCEL 4.00 AS SHOWN ON MAURY COUNTY PROPERTY MAP NO. 113E, GROUP B.

PLAT REFERENCE

BEING TRACT NOS. 1-7 AS SHOWN ON THE SUBDIVISION PLAT OF THE CAMPBELL & DUE PROPERTY AS OF RECORD IN PLAT BOOK 6, PAGE 441A, R.O.M.C.

SURVEYOR'S CERTIFICATE

I (WE) HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, AND IN MY PROFESSIONAL OPINION BASED ON EXISTING FIELD EVIDENCE AND DOCUMENTARY EVIDENCE AVAILABLE, THAT THE SURVEY PERFORMED TO PREPARE THIS PRELIMINARY SUBDIVISION PLAT WAS DONE IN COMPLIANCE WITH CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE FOR A CATEGORY I SURVEY AND THE RATIO OF PRECISION OF THE UNADJUSTED SURVEY IS 1:22,524.

Digitally signed by Mark E Sawyer
Date: 2024.11.18 15:22:09-06'00'

BARGE DESIGN SOLUTIONS, INC.
BY: _____ DATE: 11-18-2024
MARK E. SAWYER

TN. LIC. NO. 1649

Digitally Signed by Mark E Sawyer
Date: 2024.11.18 15:23:00-06'00'

SITE DEVELOPMENT SPECIFIC NOTES

1. PROPERTY IS ZONED CD-4C (GENERAL URBAN CORRIDOR CHARACTER DISTRICT). ZONING INFORMATION SHOWN HEREON WAS TAKEN FROM CITY OF COLUMBIA PLANNING DEPARTMENT- ONLINE MAPPING: PARCEL REPORT, NO ZONING LETTER, OR ZONING REPORT WAS PROVIDED TO THIS SURVEYOR.

2. PROPOSED CONTOURS SHOWN HEREON ARE FOR THE MASS GRADING & INFRASTRUCTURE PACKAGE OF THIS SITE ONLY. INDIVIDUAL FINAL SITE DEVELOPMENT PLANS FOR EACH LOT WILL BE PROVIDED BY OTHERS AFTER PRELIMINARY PLAT APPROVAL ESTABLISHING FINAL FINISH GRADE OF PAVING, CURBS AND FINISH FLOOR ELEVATIONS OF BUILDINGS ETC.

3. SEE SHEET C1.00 SITE LAYOUT PLAN IN THIS SUBMITTAL FOR DETAILED INFORMATION ON INFRASTRUCTURE IMPROVEMENTS.

4. THE APPROXIMATE LOCATION OF ALL COMMERCIAL BUILDINGS AND ASSOCIATED PARKING WILL BE ACHIEVED AT SITE DEVELOPMENT PLAN IN ACCORDANCE TO THE DEVELOPMENT STANDARDS WITHIN A CD-4C ZONING DISTRICT. LOT WIDTH'S OF NEW PROPOSED LOTS SHALL CONFORM TO THE MINIMUM AND MAXIMUM OF A CD-4C ZONING DISTRICT.

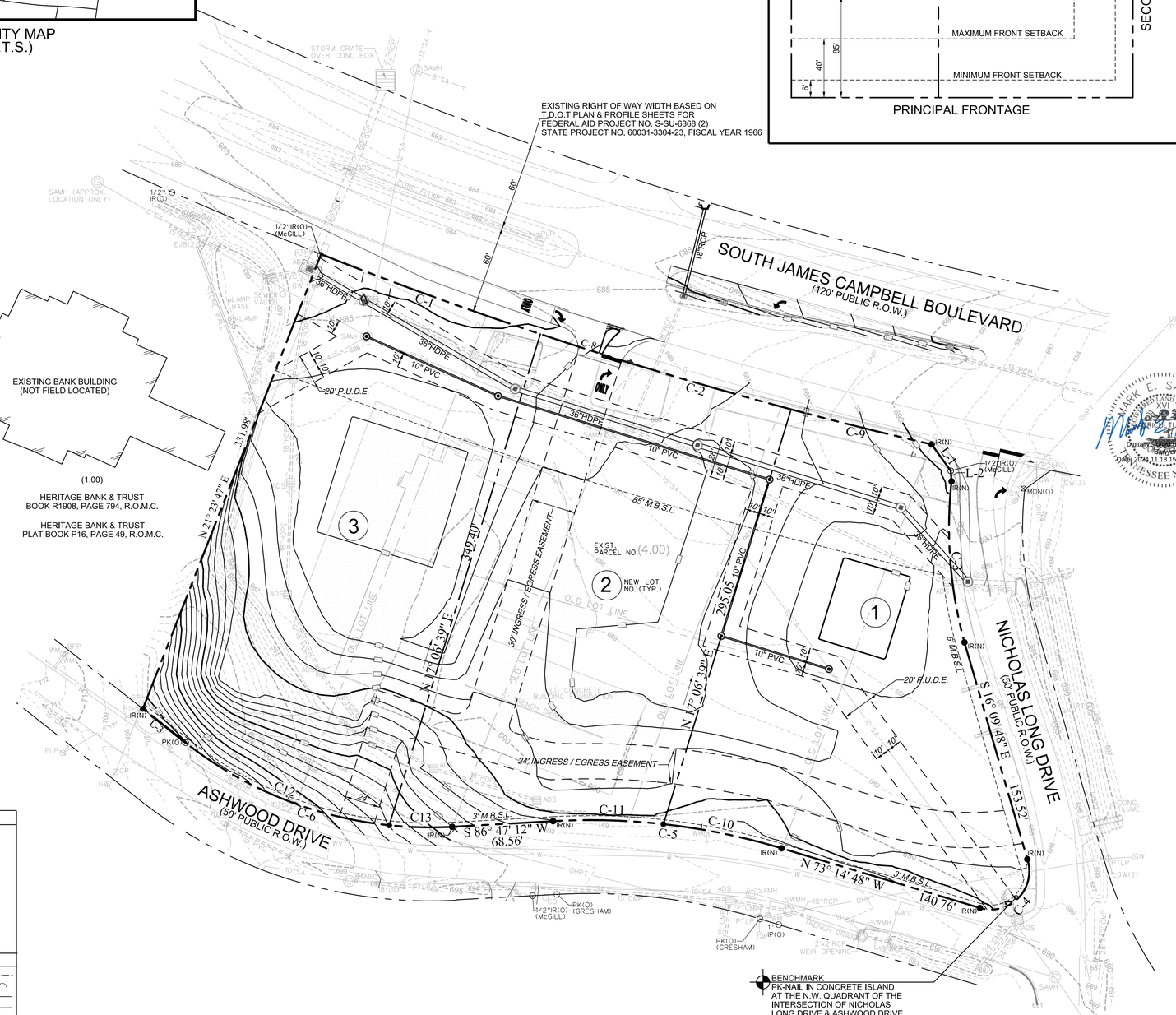
5. PUBLIC UTILITY AND DRAINAGE EASEMENTS (PUDE) SHALL BE REQUIRED AND BE TEN (10) FEET IN WIDTH ON ALL PROPERTY LINES PARALLEL AND ABUTTING PUBLIC ROADS OR RIGHTS-OF-WAY, AND FIVE (5) FEET IN WIDTH ON ALL INTERIOR LOT LINES; EXCEPT FOR INTERIOR LOT LINES WITH A ZERO-LOT LINE OR A COMMON WALL ALONG A LOT LINE, UNLESS MENTIONED IN SECTION 3.7(B)(C)(D) & (E) OF THE CITY OF COLUMBIA SUBDIVISION REGULATIONS, JUNE 5, 2024.

SITE DATA

LOT 1 - AREA 51,959 SQ.FT. OR 1.19 AC.
LOT 2 - AREA 57,040 SQ.FT. OR 1.31 AC.
LOT 3 - AREA 60,077 SQ.FT. OR 1.38 AC.
TOTAL SITE AREA - 169,076 SQ.FT. OR 3.88 AC.
P.U.D.E. AREA = 22,801 SQ. FT. OR 0.52 ACRE+/-
IMPERVIOUS AREA 1.98 AC.
PERVIOUS TURF AREA 1.37 AC.
PERVIOUS PAVER AREA 0.53 AC.

PREPARED BY:
BARGE DESIGN SOLUTIONS, INC.
615 3RD AVENUE NORTH, SUITE 700
NASHVILLE, TENNESSEE 37210
CONTACTS:
MARK E. SAWYER, RLS
E-MAIL: Mark.Sawyer@Bargedesign.com
ANDREW HARDISON, PE
EMAIL: Drew.Hardison@bargedesign.com

OWNER/DEVELOPER:
COLUMBIA JAMES CAMPBELL BOULEVARD, LLC
3841 GREEN HILLS VILLAGE, SUITE 400
NASHVILLE, TENNESSEE 37215
CONTACT: JULIA LANNON
TEL:
EMAIL: jlannon@oldacremcdonald.com



LEGEND

MAPPING SYMBOLS AND CODES

- POST
- IRON ROD NEW (IRN)
- IRON ROD OLD (IRO)
- IRON PIPE OLD (IPO)
- IRON SPIKE OLD (ISO)
- RIGHT-OF-WAY MONUMENT (RWM)
- P.K. NAIL OLD (PK(O))
- P.K. NAIL NEW (PK(N))
- POWER POLE (PP)
- TREE

LINE STYLES

- CENTERLINE
- EDGE OF WOODS LINE
- FENCE LINE
- OVERHEAD POWER LINE — OHP —
- OVERHEAD TELEPHONE LINE — OHT —
- OVERHEAD POWER AND TELEPHONE LINE — OHPT —
- PROPERTY LINE
- GUARDRAIL
- EDGE OF WATER

TN STATE PLANE COORDINATE SYSTEM 1983

SCALE: 1" = 40'

BARGE DESIGN SOLUTIONS
615 Third Avenue South, Suite 700, Nashville, Tennessee 37210
PHONE (615)254-1500 FAX (615) 255-8572

COLUMBIA COMMONS

PRELIMINARY SUBDIVISION PLAT

115 SOUTH JAMES CAMPBELL BOULEVARD
9TH CIVIL DISTRICT
COLUMBIA, MAURY COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
JMJ	MES	10-16-24	ORIGINAL ISSUE
MES	MES	10-18-24	REVISED OWNER/DEVELOPER NAME
JMJ	MES	11-18-24	PER DEV. COMMENTS, REVISIONS AND TECHNICAL CORRECTIONS PER REVIEWING AGENCIES

FILE NO. 3853101

11/18/2024
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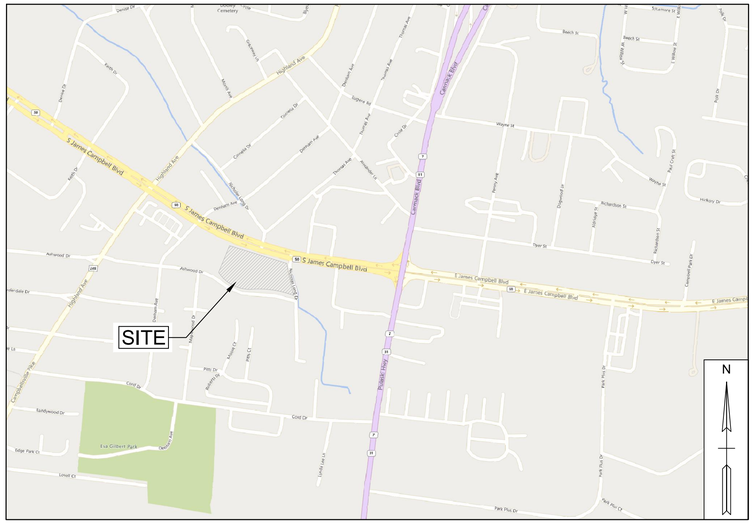
MASS GRADING & INFRASTRUCTURE PACKAGE

COLUMBIA COMMONS

115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

CONTACTS

DEVELOPER	OM3, LLC 3841 GREEN HILLS VILLAGE | SUITE 400 NASHVILLE, TN 37215 CONTACT: JULIA LANNON
DESIGN PROFESSIONAL	BARGE DESIGN SOLUTIONS 615 3RD AVENUE SOUTH | SUITE 700 NASHVILLE, TN 37210 615.252.4296 CONTACT: DREW HARDISON, PE
COLUMBIA ENGINEERING DIVISION	700 N GARDEN STREET COLUMBIA, TN 38401 931.560.1500
COLUMBIA PUBLIC WORKS	110 SANTE FE PIKE COLUMBIA, TN 38401 931.388.8650



VICINITY MAP

NOT TO SCALE

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
C0.00	COVER SHEET
C0.01	CIVIL CONSTRUCTION NOTES
C0.21	EXISTING CONDITIONS
C0.41	DEMOLITION PLAN
C1.01	SITE LAYOUT PLAN
C2.01	GRADING & DRAINAGE PLAN
C2.02	ROADWAY CROSS SECTIONS
C2.41	INITIAL EROSION AND SEDIMENT CONTROL PLAN
C2.42	INTERMEDIATE EROSION AND SEDIMENT CONTROL PLAN
C2.43	FINAL EROSION AND SEDIMENT CONTROL PLAN
C3.01	UTILITY PLAN
C4.01	SANITARY SEWER PROFILE
C4.21	STORM PROFILE
C4.22	STORM PROFILE
C7.01	SITE DETAILS
C7.02	SITE DETAILS
C7.03	SITE DETAILS

PERMIT NUMBERS

PROPERTY DATA	
PARCEL ID	113E B 004.00
TAX DISTRICT	
MAP	113E
ZONING	CD-4C

FEMA NOTE

THIS PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY NO. 47119C, PANEL NO. 0285E, DATED APRIL 16, 2007. ZONE "X."

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BARGE DESIGN SOLUTIONS

615 3rd Avenue South // Suite 700 // Nashville, Tennessee 37210
Phone (615) 254-1500 // Fax (615) 255-6572

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ANDREW BLAKE HARDISON — REGISTERED ENGINEER — No. 120505 — STATE OF TENNESSEE — 11/13/2024

COVER SHEET

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REVISION INFORMATION

REV.	DR.	CHK.	DATE	DESCRIPTION
1	JMB	JO	09.19.2024	PERMIT SET
2	REB	JO	11.12.2024	LAND DISTURBANCE PERMIT SET

C0.00

FILE NO. 38531-01

USER:RESBURYONO
FILE:F:\38\38531\38531010\4_CAD\CIVIL\PLOT\38531010_C0.00.dwg
SAVED:11/13/2024
PLOTTED:11/18/2024

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GENERAL NOTES

1. THE FOLLOWING NOTES ARE APPLICABLE TO ALL CIVIL DOCUMENTS.
2. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC. DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE OWNER AND ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN OWNER'S AND ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.
3. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND OBTAIN ALL PERMITS AND BOND, IF REQUIRED, PRIOR TO BEGINNING WORK.
4. THE SITE LAYOUT IS BASED ON THE CONTROL POINTS AS NOTED.
5. DO NOT SCALE DRAWING AS THEY ARE REPRODUCTION AND SUBJECT TO DISTORTION.
6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE STARTING ANY WORK. DAMAGES TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED ACCORDING TO LOCAL STANDARDS AND SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
7. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFICATIONS AND LIAISON WITH UTILITY COMPANIES IN THE PROCESS OF LOCATING, RELOCATION AND TIE-IN TO PUBLIC UTILITIES. ALSO, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL INSPECTORS A MINIMUM 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, VERIFY WITH GOVERNING AGENCY
8. ALL DAMAGE TO EXISTING ASPHALT PAVEMENT TO REMAIN, WHICH RESULTS FROM NEW CONSTRUCTION, SHALL BE REPLACED WITH LIKE MATERIALS AT CONTRACTOR'S EXPENSE.
9. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND OVERHEAD ELECTRICAL WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK, THE CONTRACTOR MUST WORK IN CLOSE PROXIMITY OF THE ABOVE NOTED WIRES, THE ELECTRICAL COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES TAKEN.
10. IN EASEMENTS AND RIGHTS-OF-WAY, CONTRACTOR SHALL PROTECT AND RESTORE SAID PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING AT THE COMMENCEMENT OF CONSTRUCTION EXCEPT AS NOTED.
11. THESE PLANS, PREPARED BY BARGE DESIGN SOLUTIONS, DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF BARGE DESIGN SOLUTIONS REGISTERED PROFESSIONAL ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND /OR LOCAL REGULATIONS.
12. THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.
13. UNLESS NOTED, SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS FOR REVIEW. DESIGN DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
14. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF TN PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED AND PAID FOR BY THE CONTRACTOR.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO EXISTING VEGETATION DURING CONSTRUCTION. THE COST TO REPLACE OR RESTORE VEGETATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
17. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ON COPY OF THE CURRENT CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED PERMITS.
18. ALL PAVING, CONSTRUCTION, MATERIALS AND WORKMANSHIP WITHIN THE STATE ROW SHALL BE IN ACCORDANCE WITH (TDOT) SPECIFICATIONS AND STANDARDS (2021 EDITION).
19. ALL PAVING, CONSTRUCTION, MATERIALS AND WORKMANSHIP WITHIN THE CITY OF COLUMBIA RIGHT-OF-WAY (ROW) SHALL BE IN ACCORDANCE WITH COLUMBIA SPECIFICATIONS AND STANDARDS (LATEST EDITION).
20. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
21. ANY WELLS DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.

DEMOLITION NOTES

1. THE A/E SHALL BE NOTIFIED OF ANY ITEMS REMAINING THAT ARE NOT SPECIFICALLY NOTED TO BE REMOVED AND THAT INTERFERE WITH CONSTRUCTION.
2. CONTRACTOR SHALL CHECK ALL EXISTING GRADES AND DIMENSIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE A/E PRIOR TO BEGINNING WORK.
3. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, NOTIFY OWNERS PRIOR TO BEGINNING WORK, AND REPAIR CONTRACTOR-CAUSED DAMAGE ACCORDING TO LOCAL STANDARDS AND CODES AT THE EXPENSE OF THE CONTRACTOR.
4. ALL DAMAGE TO EXISTING PAVEMENTS AND SIDEWALKS/CURBS TO REMAIN, WHICH RESULT FROM NEW CONSTRUCTION, SHALL BE REPLACED WITH LIKE MATERIALS AT THE EXPENSE OF THE CONTRACTOR.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND ELECTRICAL WIRES AND SERVICES. ANY TIME IN THE PURSUIT OF THIS WORK THE CONTRACTOR MUST WORK IN CLOSE PROXIMITY OF THE ABOVE-NOTED WIRES, THE ELECTRIC COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES TAKEN.
6. CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION AND CONSTRUCTION.
7. IN THE EVENT OF ANY DISCREPANCIES AND/OR ERRORS FOUND IN THE DRAWINGS, OR IF PROBLEMS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. IF THE ENGINEER IS NOT NOTIFIED, THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR THE COST OF ANY REVISION.
8. THE CONTRACTOR SHALL SAWCUT CONCRETE WALKS, CURBS AND ASPHALT PAVEMENTS AT THE NEAREST CONSTRUCTION/EXPANSION/CONTROL JOINT IN AREAS WHERE PROPOSED AND EXISTING CONSTRUCTION MEET.
9. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIAL PROPERLY OFF-SITE AT HIS OWN EXPENSE.

GRADING NOTES

1. ALL STORMWATER PIPES, STRUCTURES, AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF COLUMBIA STANDARD SPECIFICATIONS AND DETAILS.
2. NO TREES ARE TO BE REMOVED AND/OR VEGETATION DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES AND ONLY AS APPROVED BY OWNER'S REPRESENTATIVE AND CITY ENGINEER. SEE DEMO PLANS FOR TREES VEGETATION TO REMAIN.
3. STRIP ALL TOPSOIL AND OTHER DELETERIOUS MATERIALS AS PER SOIL CONSULTANT'S GEOTECH REPORT, TO ACCOMPLISH GRADING AS INDICATED ON THE PLANS. STOCKPILE TOPSOIL IN AREA(S) DESIGNATED BY THE OWNER FOR REUSE IN LANDSCAPE ISLANDS AND / OR GREEN SPACE AREAS.
4. ADJUST FINAL GRADES TO EXISTING PAVEMENTS TO ASSURE A SMOOTH TRANSITION.
5. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS. SUBGRADE SOFTENED BY PERCHED WATER IN FOUNDATIONS AND PAVEMENT AREAS MUST BE UNDERCUT AND RE-COMPACTED WITH SUITABLE FILL MATERIAL AS DIRECTED BY THE ON-SITE SOIL CONSULTANT.
6. IN NO CASE SHALL SLOPE HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH, INCLUDING TRENCH CONSTRUCTION, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL REGULATIONS, SPECIFICALLY THE CURRENT OSHA HEALTH AND SAFETY STANDARDS FOR EXCAVATIONS (29 CRF PART 1926) SHALL BE FOLLOWED
7. THE SITE GEOTECHNICAL REPORT SHALL BE FOLLOWED FOR THE PLACEMENT AND COMPACTION OF THE MASS GRADED AREA. IT IS INTENDED THAT THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT BE FOLLOWED. IN THE EVENT OF CONFLICT BETWEEN THE DRAWINGS AND THE GEOTECHNICAL REPORT, MAKE NO ASSUMPTIONS. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR CLARIFICATION.
8. ALL GRADED AREAS, INCLUDING SLOPES, ARE TO BE MULCHED AND SEEDED AS SOON AS POSSIBLE AFTER GRADING IS COMPLETED.
9. CONSTRUCT EROSION CONTROL AS SHOWN ON DRAWINGS PRIOR TO BEGINNING GRADING OPERATIONS.
10. CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS PRIOR TO BEGINNING WORK.
11. CONTOUR LINES AND SPOT ELEVATIONS ARE THE RESULT OF A DETAILED ENGINEERING GRADING DESIGN AND REFLECT A PLANNED INTENT WITH REGARD TO DRAINAGE AND MOVEMENT OF MATERIALS. CONTOUR LINES AND SPOT ELEVATIONS ARE BASED ON ESTABLISHED PROJECT BENCHMARK, WHICH THE CONTRACTOR SHALL VERIFY WITH TOPOGRAPHY SURVEY. SHOULD THE CONTRACTOR HAVE ANY QUESTION OF THE INTENT OR ANY PROBLEMS WITH CONTINUITY OF GRADES, THE ENGINEER SHOULD BE CONTACTED IMMEDIATELY PRIOR TO BEGINNING WORK.
12. ALL UN-SURFACED AREA DISTURBED BY GRADING OPERATIONS SHALL RECEIVE SEED AND STRAW. ALL SLOPES 3:1 OR STEEPER SHALL BE STABILIZED WITH EROSION CONTROL MATTING INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO MAINTAIN DISTURBED AREAS UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
13. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. ANY MUD/CONSTRUCTION DEBRIS THAT MAY BE TRANSPORTED ONTO SURROUNDING ROADS OR PARKING AREAS SHALL BE SWEPT AND CLEANED IMMEDIATELY.
14. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
15. CONSTRUCTION ENTRANCE SHALL BE IN PLACE PRIOR TO ANY COMBUSTIBLES, I.E. CONSTRUCTION TRAILER, LUMBER, ETC. BEING PRESENT ON JOB SITE. IN ADDITION TO THE CONSTRUCTION ENTRANCE, AN ALL WEATHER DRIVE MUST BE IN PLACE AND ACCESSIBLE TO ALL AREAS OF THE CONSTRUCTION SITE THAT WILL CONTAIN COMBUSTIBLES THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROCESS. THE ALL WEATHER DRIVE SHALL BE NO LESS THAN 20 FEET OF UNOBSTRUCTED WIDTH WITH ADEQUATE TURNING RADIUS CAPABLE OF SUPPORTING THE IMPOSED LOADS OF THE FIRE DEPARTMENT PROCESS.
16. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
17. EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1'.
18. THIS GRADING AND DRAINAGE PLAN IS NOT A DETERMINATION OR GUARANTEE OF THE SUITABILITY OF SURFACE CONDITIONS FOR THE WORK INDICATED. DETERMINATION OF THE SUBSURFACE CONDITIONS FOR THE WORK INDICATED IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
19. DO NOT DISTURB VEGETATION OR REMOVE ANY EXISTING TREES EXCEPT WHERE DESIGNATED ON THE PLAN.
20. TOP OF GRATE ELEVATIONS AND LOCATION OF COORDINATES FOR DRAINAGE STRUCTURES SHALL BE SHOWN ON THE PLAN UNLESS OTHERWISE NOTED. THE GRATES SHALL SLOPE LONGITUDINALLY WITH THE PAVEMENT GRADES.

EROSION CONTROL NOTES

1. NO VEGETATION IS TO BE DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES.
2. TOPSOIL IS TO BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED, AND REDISTRIBUTED OVER GRADED AREAS TO A MINIMUM DEPTH OF 6". THE SOIL IS TO BE STOCKPILED IN THE LOCATIONS AS DESIGNATED BY THE OWNER.
3. ALL GRADED AREAS INCLUDING 3:1 SLOPES ARE TO BE MULCHED AND SEEDED WITHIN 7 DAYS OF FINAL GRADING. ANY AREAS LEFT UNDISTURBED FOR 7 DAYS SHALL HAVE ADEQUATE STABILIZATION.
4. ALL DIMENSIONS AND LOCATIONS OF TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DESIGNATED BY THE OWNER'S REPRESENTATIVE OR ENGINEER.
5. WHEN THE TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES ARE NO LONGER REQUIRED FOR THE INTENDED PURPOSE, IN THE OPINION OF THE OWNER'S REPRESENTATIVE OR ENGINEER, THEY SHALL BE REMOVED.
6. ALL NEW STRUCTURES AND EXISTING STRUCTURES SHALL HAVE SEDIMENT REMOVED PRIOR TO ACCEPTANCE.
7. SILT BARRIERS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN APPROXIMATELY 50% FILLED WITH SUCH SEDIMENT.
8. REPLACE SILT BARRIERS WHEN CONDITIONS WARRANT AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND CITY ENGINEER.
9. INSTALL SILT FENCE AROUND THE BASE OF ANY STOCK PILES.
10. CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA, THE EQUIPMENT MAINTENANCE AND CLEANING AREA, CONTRACTOR'S EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, CONCRETE TRUCK WASHOUT AREA, OFFICE TRAILERS, AND TOILET FACILITIES. CONTRACTOR TO COORDINATE EXACT LOCATION WITH PROJECT ENGINEER AND CITY ENGINEER DURING PRECONSTRUCTION MEETING.
11. ALL UNDISTURBED AREAS INCLUDING WETLAND/STREAM BUFFERS, SHALL BE FIELD MARKED AND KEPT FREE OF CONSTRUCTION EQUIPMENT.
12. CURRENT VERSIONS OF THE STORM WATER POLLUTION PREVENTION PLAN, NOTICE OF INTENT, AND NOTICE OF COVERAGE SHALL BE KEPT ON SITE AND IS TO BE ACCESSIBLE FOR THE DURATION OF THE PROJECT.
13. APPLY PERMANENT SEEDING WHENEVER GRADING OPERATIONS ARE COMPLETED AND ALL CONSTRUCTION OPERATIONS WILL NOT IMPACT THE DISTURBED AREA. APPLY PERMANENT SEEDING TO ALL NON-CONSTRUCTION AREAS THAT SHOW SIGNS OF EXCESSIVE EROSION.
14. MULCH WITH STRAW AT A RATE OF 100 LBS/1000 S.F. OVER THE SEEDED AREAS.
15. EROSION CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDEC'S EROSION AND SEDIMENT CONTROL HANDBOOK AND TDEC'S CONSTRUCTION ACTIVITY PERMIT REQUIREMENTS. THE DEVICES SHOWN ON THE DRAWINGS ARE THE MINIMUM REQUIRED. THE CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION CONTROL DEVICES AS NEEDED.
16. CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH THE CITY OF COLUMBIA. CONTRACTOR TO COORDINATE EXACT LOCATION WITH THE CITY OF COLUMBIA. CONTROL OF OTHER SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICALS, LITTER, AND SANITARY WASTES THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITTEE. LOCATION OF AND/OR NOTES REFERRING TO THESE BMP'S SHALL BE SHOWN ON THE EPSC PLAN.
17. THE SITE SHALL BE STABILIZED WITHIN 14 DAYS AFTER CONSTRUCTION HAS TEMPORARILY/PERMANENTLY CEASED.
18. VEGETATION AND EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT ARE AFFECTED BY CONSTRUCTION SHALL BE REPAIRED OR REPLACED WITHIN 7 DAYS.
19. PERIMETER MEASURES SHALL BE IN PLACE AND INSTALLED BEFORE ANY EARTHWORK ACTIVITIES.

UTILITY NOTES

1. ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS OF THE CITY OF COLUMBIA.
2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND INVERTS OF ALL EXISTING UTILITY LINES AND STRUCTURES (INCLUDING STORM DRAINAGE PIPES OR STRUCTURES) PRIOR TO ORDERING OF MATERIALS AND THE COMMENCEMENT OF CONSTRUCTION.
3. THE ROADWAY SHALL BE CONSTRUCTED TO SUBGRADE. ALL PROPOSED FILLS SHALL BE INSTALLED AND COMPACTED PRIOR TO CONSTRUCTION OF SANITARY SEWERS.
4. SEWER SERVICE LINE CLEAN-OUT ASSEMBLY SHALL BE INSTALLED ACCORDING TO THE SPECIFICATIONS OF THE CITY OF COLUMBIA.
5. ALL PUBLIC AND PRIVATE WATER MAINS SHALL COMPLY WITH NFPA 13 AND 24 UNLESS LOCAL JURISDICTION STATES OTHERWISE.
6. CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS, AND PAY ANY APPLICABLE FEES.
7. IN THE EVENT OF ANY DISCREPANCIES AND/OR ERRORS FOUND IN THE DRAWINGS, OR IF PROBLEMS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. IF ENGINEER IS NOT NOTIFIED, THE CONTRACTOR SHALL TAKE RESPONSIBILITY FOR THE COST OF ANY REVISION.
8. THE CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN, REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE, AND COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
9. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND OVERHEAD AND UNDERGROUND ELECTRICAL WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK THE CONTRACTOR MUST WORK IN THE CLOSE PROXIMITY OF THE ABOVE NOTED WIRES, THE ELECTRIC COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES IN THE PROJECT AREA SHOULD BE MADE BY THE CONTRACTOR PRIOR TO THE INITIATION OF CONSTRUCTION.
10. THE OWNER AND ENGINEER DO NOT ASSUME RESPONSIBILITY FOR THE POSSIBILITY THAT, DURING CONSTRUCTION, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED OR THAT ACTUAL LOCATION OF THOSE SHOWN MAY BE DIFFERENT FROM LOCATIONS DESIGNATED ON THE CONTRACT DRAWINGS. IN AREAS WHERE IT IS NECESSARY THAT EXACT LOCATIONS BE KNOWN OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, FURNISH ALL LABOR AND TOOLS NECESSARY TO EITHER VERIFY AND SUBSTANTIATE OR DEFINITELY ESTABLISH THE POSITION OF UNDERGROUND UTILITY LINES.
11. MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE BETWEEN ALL SANITARY SEWER AND WATERLINE CROSSINGS, UNLESS LOCAL UTILITY JURISDICTION SPECS STATES OTHERWISE.

TDOT NOTES

1. THERE WILL BE NO INCREASE IN THE Q50 RUNOFF FROM THE DEVELOPMENT ONTO TDOT ROW.
2. ALL DRIVEWAYS MEET AASHTO INTERSECTION SIGHT DISTANCE.
3. ALL STORMWATER PIPES ON TDOT ROW TO BE 18 INCHES OR GREATER.
4. ALL PAVEMENT MARKINGS ON TDOT ROW SHALL BE THERMOPLASTIC.
5. ALL SIGNS TO MEET MUTCD STANDARDS.

BARGE DESIGN SOLUTIONS
615 3rd Avenue South // Suite 700 // Nashville, Tennessee 37210
PHONE (615) 254-1500 // FAX (615) 255-8372

ANDREW BLAKE HADDOCK — REGISTERED ENGINEER — 120595 — AGRICULTURE COMMERCE — STATE OF TENNESSEE — 11/8/2024

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CIVIL CONSTRUCTION NOTES

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REV.	DR.	CHK.	DATE	REVISION INFORMATION
1	JMB	JO	09.19.2024	PERMIT SET
2	RES	JO	11.12.2024	LAND DISTURBANCE PERMIT SET

PERMIT NUMBERS:

PARCEL ID: 113E B 004.00

FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.

DATUM: TNSPC (NAD83) NAVD 1988

BENCHMARK:

N

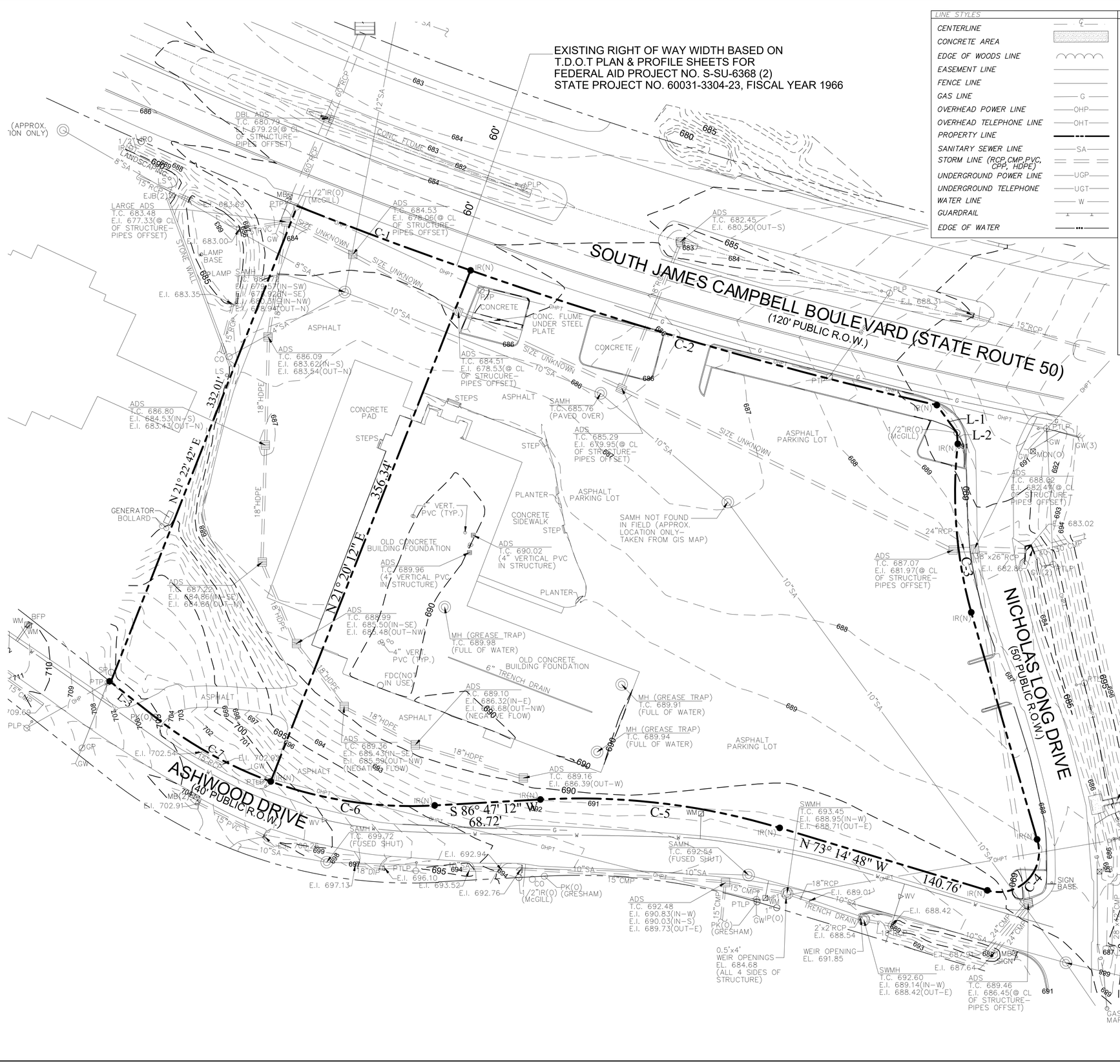
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SCALE: 1 INCH = 30 FEET

C0.01

FILE NO. 38531-01

USER:RESURYONO
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SAVED:1/16/2024
PLOTTED:1/16/2024

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NOTES

1. THIS SURVEY MEETS THE REQUIREMENTS OF AN URBAN LAND SURVEY (CATEGORY 1), WITH A RATIO OF PRECISION OF THE UNADJUSTED SURVEY GREATER THAN 1:10,000 AS PER STANDARDS OF PRACTICE ADOPTED BY THE BOARD OF EXAMINERS FOR LAND SURVEYORS, STATE OF TENNESSEE.

2. BEARINGS SHOWN ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983 (NAD-1983), ELEVATIONS ARE BASED ON NAVD-1988, USING GEOID 2003 FOR ORTHOMETRIC HEIGHT DETERMINATION.

3. PROPERTY IS ZONED CD-4C.
ZONING INFORMATION SHOWN HEREON WAS TAKEN FROM CITY OF COLUMBIA PLANNING DEPARTMENT-ONLINE MAPPING: PARCEL REPORT, NO ZONING LETTER, OR ZONING REPORT WAS PROVIDED TO THIS SURVEYOR.

4. THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY NO. 470123, PANEL NO. 0285 E, DATED APRIL 16, 2007. ZONE "X".

5. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM FIELD LOCATED VISIBLE APPURTENANCES, ATLAS MAPS AS MAY BE AVAILABLE FROM MUNICIPALITIES OR UTILITY COMPANIES, AND OTHER DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES STATE THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION CONSULTED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. TO AVOID ANY POSSIBLE HAZARD OR CONFLICT, IT IS A REQUIREMENT OF THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT, FOR ANYONE WHO ENGAGES IN EXCAVATION TO NOTIFY ALL KNOWN UTILITY OWNERS NO LESS THAN THREE (3) OR MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE. CALL TENNESSEE ONE CALL AT 1-800-351-1111.

6. FIDELITY NATIONAL TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE NO. TN252311055V, DATED NOVEMBER 10, 2023 AT 8:00 AM WAS FURNISHED TO THIS SURVEYOR.

7. CONTOUR INTERVAL ONE-FOOT, CONTOURS WERE INTERPOLATED FROM RANDOM SHOTS TAKEN ON A 50-FOOT INTERVAL.

8. THIS PARCEL CONTAINS NO MARKED PARKING SPACES, PARKING STRIPS ON THE PROPERTY WERE TOO FADED OR INTERMITTENT TO INCUDE IN A PARKING COUNT ON THE PROPERTY.

BARGE DESIGN SOLUTIONS
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PHONE (615) 254-1500 // FAX (615) 255-6372

ANDREW BLAKE HADDON
REGISTERED ENGINEER
No. 120595
STATE OF TENNESSEE
11/8/2024

EXISTING CONDITIONS

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REVISION INFORMATION			
REV.	DR.	CHK.	DESCRIPTION
1	JMB	JO	09.19.2024 PERMIT SET
2	RES	JO	11.12.2024 LAND DISTURBANCE PERMIT SET

Know what's below Call before you dig. 811
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PERMIT NUMBERS:

PARCEL ID: 113E B 004.00	FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.
DATUM: TNSPC (NAD83) NAVD 1988	BENCHMARK:

N

30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET

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PLOTTED:11/16/2024

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EXISTING RIGHT OF WAY WIDTH BASED ON
T.D.O.T PLAN & PROFILE SHEETS FOR
FEDERAL AID PROJECT NO. S-SU-6368 (2)
STATE PROJECT NO. 60031-3304-23, FISCAL YEAR 1966

SOUTH JAMES CAMPBELL BOULEVARD (STATE ROUTE 50)
(120' PUBLIC R.O.W.)

ASHWOOD DRIVE
(40' PUBLIC R.O.W.)

NICHOLAS LONG DRIVE
(50' PUBLIC R.O.W.)

LEGEND

- FOUNDATION REMOVAL
- ASPHALT PAVEMENT REMOVAL
- CONCRETE CURB REMOVAL
- SAWCUT
- PIPE REMOVAL
- ABANDON PIPE (CUT, CAP, AND FILL WITH FLOWABLE FILL)

DEMOLITION KEYNOTES

1	ADJUST EXISTING GUY WIRE
2	REMOVE EXISTING STRUCTURE
3	PROTECT EXISTING UTILITY IN PLACE
4	REMOVE WATER SERVICE AND METER
5	CUT, GROUT FILL, AND ABANDON EXISTING STORM PIPE
6	ADJUST EXISTING GUY WIRE

DEMOLITION NOTES

1. CONTRACTOR TO FIELD VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
2. CONTRACTOR TO PROVIDE SMOOTH, STRAIGHT SAW-CUT LINES ALONG ALL AREAS OF CURB AND PAVEMENT REMOVAL.

Know what's **below** **Call** before you dig. 811 www.call811.com

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ANDREW BLAKE HADDOX
REGISTERED ENGINEER
No. 120582
AGRICULTURE
STATE OF TENNESSEE
11/8/2024

DEMOLITION PLAN

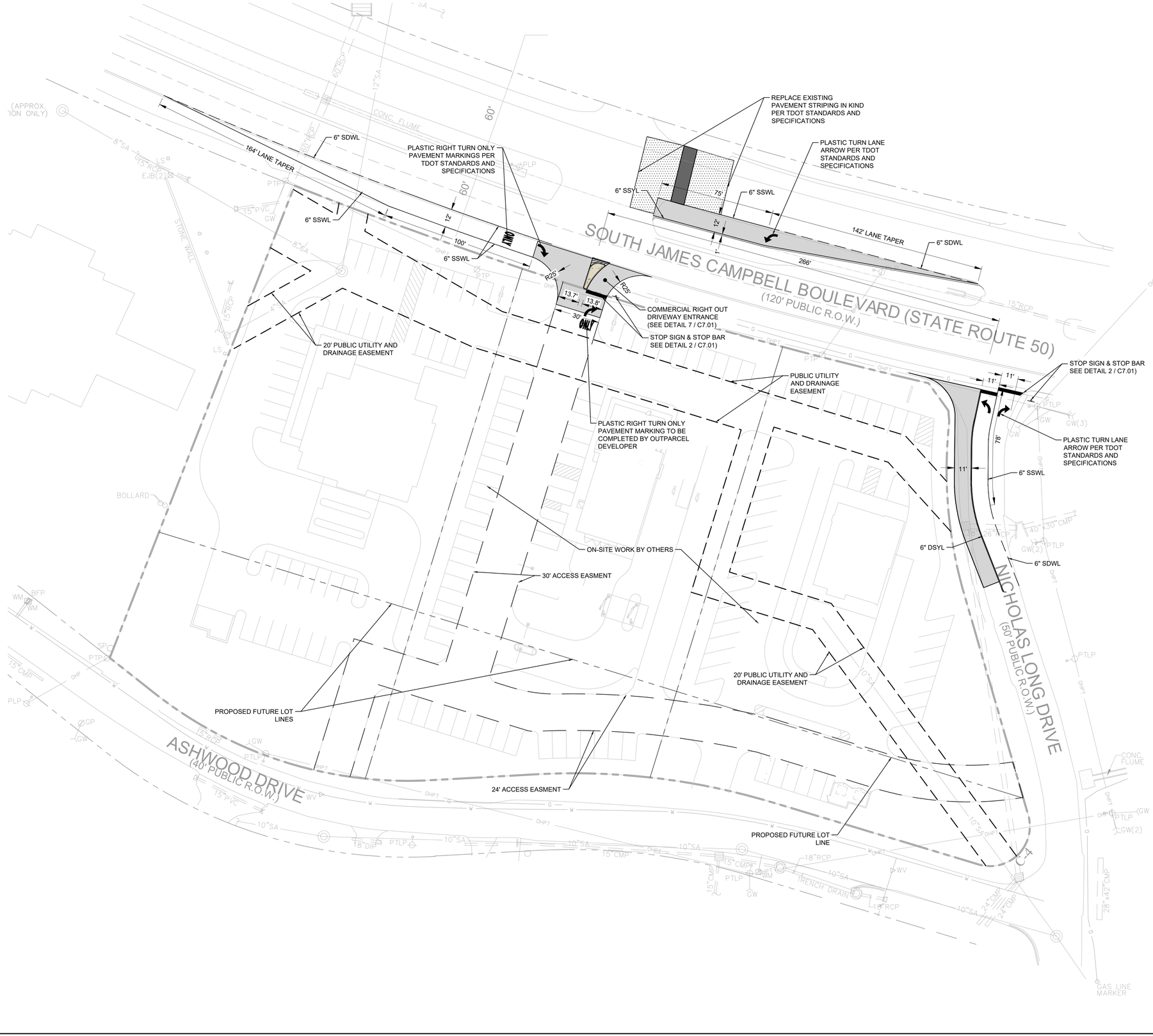
MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

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FILE NO. 38531-01

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SAVED:11/18/2024
PLOTTED:11/19/2024



LEGEND

- 6" CONCRETE (SEE DETAIL 6 ON SHEET C7.01)
- HEAVY DUTY ASPHALT PAVEMENT (SEE DETAIL 3 ON SHEET C7.01)
- MILL AND OVERLAY (ADD ADDITIONAL SURFACE COURSE AS NEEDED TO ACHIEVE FINISHED GRADE) (SEE DETAIL 4 ON SHEET C7.01)
- ASPHALT TRENCH REPAIR (SEE DETAIL 5 ON SHEET C7.01)

ABBREVIATIONS

SSWL: SINGLE SOLID WHITE LINE
SDWL: SINGLE DOTTED WHITE LINE
SSYL: SINGLE SOLID YELLOW LINE
DSYL: DOUBLE SOLID YELLOW LINE

SITE AREA DATA

TOTAL SITE AREA	169,065 SF (3.88 AC)

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ANDREW BLAKE HADDON — REGISTERED ENGINEER — 120595 — AGRICULTURE — COMMERCE — STATE OF TENNESSEE — 11/8/2024

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30' 15' 0' 30' 60'
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SITE LAYOUT PLAN

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS

115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

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SOUTH JAMES CAMPBELL BOULEVARD (STATE ROUTE 50)
(120' PUBLIC R.O.W.)

ASHWOOD DRIVE
(40' PUBLIC R.O.W.)

NICHOLAS LONG DRIVE
(50' PUBLIC R.O.W.)

HW-01
GRADING ENLARGEMENT (SEE THIS SHEET)
END S.R.50 ALIGNMENT STA 13+00.00
(E) FS 685.15
PROTECT EXISTING POWER POLE
END S.R.50 IMPROVEMENTS STA 12+69.87
FS: 684.93
(E) FS 684.97
FS: 686.40
(E) FS 691.23
BEGIN S.R.50 ALIGNMENT STA 10+00.00
BEGIN S.R.50 IMPROVEMENTS STA 10+50.00
CB-01
CB-02
CB-03
CB-04
CB-05
CB-06
CB-07
PIPE-01
PIPE-02
PIPE-03
PIPE-04
PIPE-05
PIPE-06
20' PUBLIC UTILITY AND DRAINAGE EASEMENT
PUBLIC UTILITY AND DRAINAGE EASEMENT
PROTECT EXISTING POWER POLE
(E) FS 690.38
(E) FS 690.14
FS: 691.36
(E) FS 691.58
CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING STORM PIPE AND ENSURE IT IS CONNECTED TO PROPOSED STRUCTURE
(E) FS 687.53
FS: 687.31
PAD = ±687
PAD = ±687.5
PAD = ±690
GENERATOR BOLLARD
LARGE ADS T.C. 683.48 E.I. 677.33(@ CL OF STRUCTURE- PIPES OFFSET)
ADS T.C. 692.48 E.I. 690.83(IN-W) E.I. 690.03(IN-S) E.I. 689.73(OUT-E)
SWMH T.C. 693.40 E.I. 688.95(IN-W) E.I. 688.71(OUT-E)
SAMH T.C. 699.72 (FUSED SHUT)
SAMH T.C. 692.54 (FUSED SHUT)
SWMH T.C. 692.60 E.I. 689.14(IN-W) E.I. 688.42(OUT-E)
ADS T.C. 689.46 E.I. 686.45(@ CL OF STRUCTURE- PIPES OFFSET)
SAMH T.C. 690.30 E.I. 684.84(IN-W E.I. 684.78(IN-S E.I. 684.68(OUT-
ADS T.C. 688.02 E.I. 682.45(@ CL OF STRUCTURE- PIPES OFFSET)
0.5'x4' WEIR OPENINGS EL. 684.68 (ALL 4 SIDES OF STRUCTURE)
WEIR OPENING EL. 691.85
2'x2' RCP E.I. 688.54
TRENCH DRAIN E.I. 689.01
E.I. 688.42
E.I. 687.64
E.I. 686.76
E.I. 692.94
E.I. 692.76
E.I. 702.54
E.I. 702.91
E.I. 683.35
E.I. 683.00
E.I. 683.02
GAS LINE MARKER
SIGN BASE
LAMP BASE

STRUCTURE SCHEDULE					
LABEL	STRUCTURE TYPE	DEPTH	GRATE ELEVATION	INVERT IN	INVERT OUT
CB-01	108" X 60" RECTANGULAR AREA DRAIN	6.65	683.48	677.33SE	677.33
CB-02	72" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	7.00	684.75	680.54SE	677.75
CB-03	72" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	4.24	685.25	681.01E	681.01
CB-04	72" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	5.17	686.70	681.53E	681.53
CB-05	72" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	6.14	688.25	682.11SE	682.11
CB-06	72" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	5.89	688.36	N/A	682.47
CB-07	48" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	2.97	683.47	N/A	680.97
HW-01	HEADWALL FOR 18" PIPE / SEE DETAIL 6 ON C7.02	N/A	683.69	680.66S	N/A

PIPE TABLE							
PIPE LABEL	PIPE SIZE	UPSTREAM STRUCTURE	UPSTREAM ELEVATION	DOWNSTREAM STRUCTURE	DOWNSTREAM ELEVATION	LENGTH (FT)	SLOPE (%)
PIPE-01	36" HDPE (N-12 DUAL WALL)	CB-02	677.75	CB-01	677.33	42.4	1.00%
PIPE-02	36" HDPE (N-12 DUAL WALL)	CB-03	681.01	CB-02	680.54	118.9	0.40%
PIPE-03	36" HDPE (N-12 DUAL WALL)	CB-04	681.53	CB-03	681.01	129.7	0.40%
PIPE-04	36" HDPE (N-12 DUAL WALL)	CB-05	682.11	CB-04	681.53	144.7	0.40%
PIPE-05	36" HDPE (N-12 DUAL WALL)	CB-06	682.47	CB-05	682.11	67.9	0.53%
PIPE-06	18" RCP (CLASS III)	CB-07	680.97	HW-01	680.66	61.3	0.50%

LEGEND

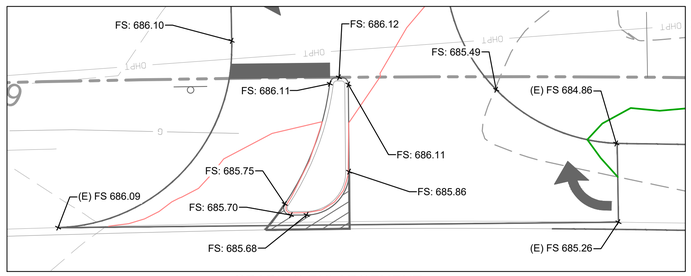
- EXISTING MAJOR CONTOUR (470)
- EXISTING MINOR CONTOUR (471)
- PROPOSED MAJOR CONTOUR (470)
- PROPOSED MINOR CONTOUR (471)

GRADING AND DRAINAGE NOTES

1. ON SITE CONTOURS REPRESENT APPROXIMATE SUBGRADE OF FINAL BUILD-OUT.
2. SEE SHEET C0.01 FOR ADDITIONAL GRADING AND DRAINAGE NOTES.
3. CONTRACTOR TO FIELD VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
4. HDPE PIPE CONNECTIONS TO CONCRETE STRUCTURES SHALL BE MADE WITH WATERTIGHT CONNECTIONS SUCH AS Z-LOK STM CONNECTORS OR KOR-N-SEAL BOOTS.
5. CATCH BASIN FRAME AND GRATE TO BE RAISED TO FINISHED GRADE UPON FINAL CONSTRUCTION.

ABBREVIATIONS

FFE	FINISHED FLOOR ELEVATION
FS	FINISHED SURFACE
(E)	EXISTING
CB	CATCH BASIN
HW	HEADWALL



GRADING ENLARGEMENT
SCALE: 1" = 10'

Know what's **below** Call **before you dig.** 811
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PERMIT NUMBERS:

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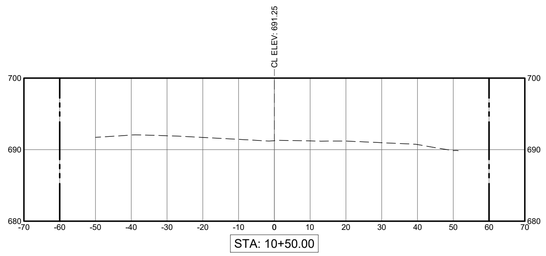
ANDREW BLAKE HADDON
REGISTERED ENGINEER
No. 120595
STATE OF TENNESSEE
11/12/2024

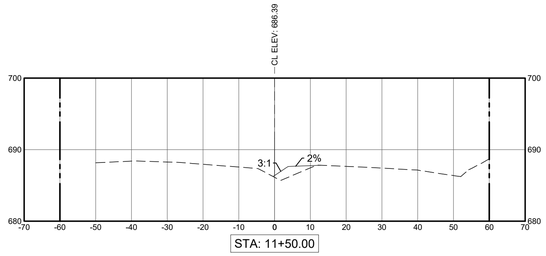
GRADING & DRAINAGE PLAN
MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

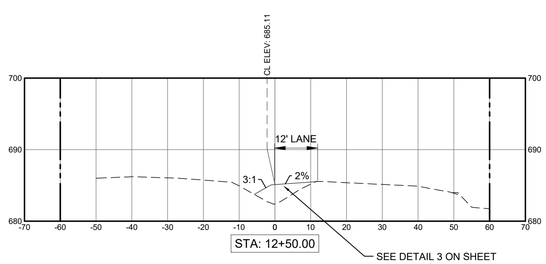
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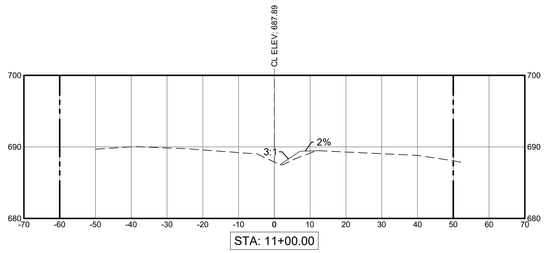


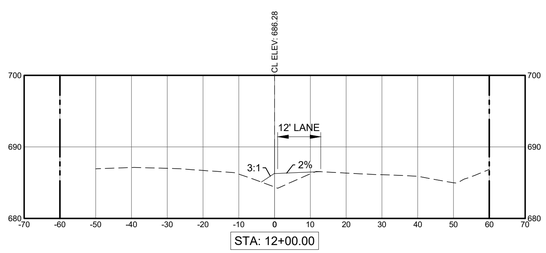


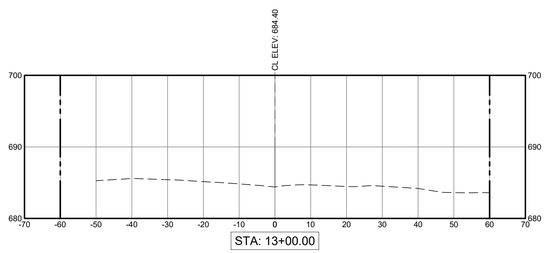


LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- R.O.W.







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ANDREW BLAKE HADDON
REGISTERED ENGINEER
120505
AGRICULTURE
COMMERCE
11/8/2024
No. 120505
STATE OF TENNESSEE

ROADWAY CROSS SECTIONS

MASS GRADING & INFRASTRUCTURE PACKAGE

COLUMBIA COMMONS

115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REV.	DR	CHK	DATE	REVISION INFORMATION DESCRIPTION
1	JMB	JO	09.19.2024	PERMIT SET
2	RES	JO	11.12.2024	LAND DISTURBANCE PERMIT SET

Know what's **below** **Call** before you dig. 811
www.call811.com

PERMIT NUMBERS:

PARCEL ID: 113E B 004.00

FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.

DATUM: TNSPC (NAD83) NAVD 1988

BENCHMARK:

SCALE: H: 1" = 20'
V: 1" = 10'

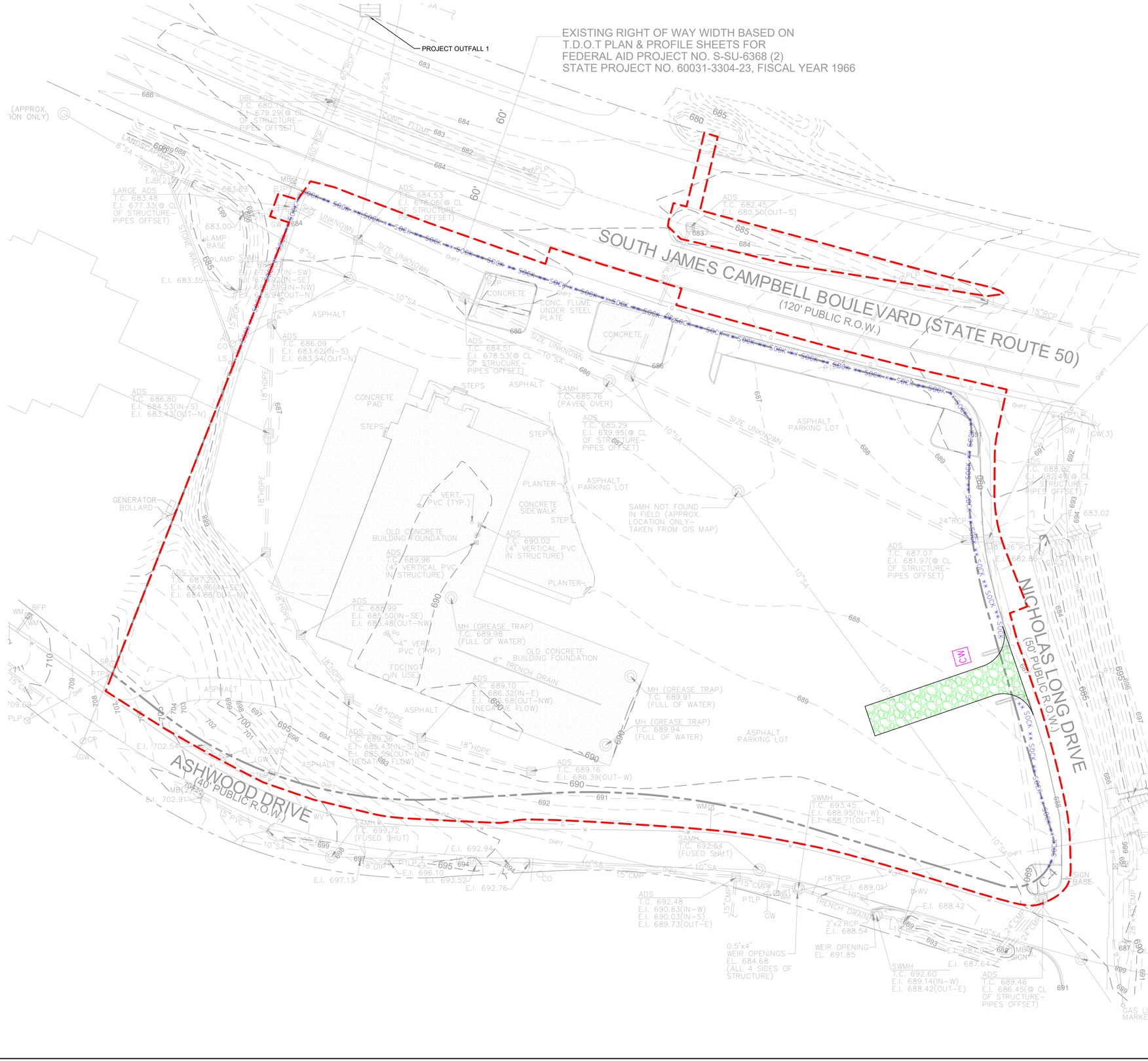
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C2.02

FILE NO. 38531-01

USER:RESBURYONO
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SAVED:11/18/2024
PLOTTED:11/19/2024

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PROJECT OUTFALL 1
EXISTING RIGHT OF WAY WIDTH BASED ON
T.D.O.T PLAN & PROFILE SHEETS FOR
FEDERAL AID PROJECT NO. S-SU-6368 (2)
STATE PROJECT NO. 60031-3304-23, FISCAL YEAR 1966
SOUTH JAMES CAMPBELL BOULEVARD (STATE ROUTE 50)
(120' PUBLIC R.O.W.)
NICHOLAS LONG DRIVE
(50' PUBLIC R.O.W.)
ASHWOOD DRIVE
(40' PUBLIC R.O.W.)
60'
SOCK ** SOCK ** SOCK **



GENERAL NOTES

1. SEE SHEET C0.01 FOR EROSION AND SEDIMENT CONTROL NOTES.

INTERMEDIATE & FINAL EPSC SEQUENCING

1. THE CONTRACTOR SHALL MAINTAIN ALL BMP'S INSTALLED IN THE INITIAL PHASE UNTIL NO LONGER NECESSARY.
2. THE CONTRACTOR SHALL ADJUST FILTER SOCK AS NEEDED.
3. THE CONTRACTOR TO CONSTRUCT THE SITE AS SHOWN.
4. THE CONTRACTOR TO INSTALL INLET PROTECTION ON NEW STORM INLETS AS SHOWN.

LEGEND

- LIMITS OF DISTURBANCE
- ** SOCK ** FILTER SOCK (SEE DETAIL 1 ON SHEET C7.03)
- CONSTRUCTION EXIT (SEE DETAIL 2 ON SHEET C7.03)
- CW CONCRETE WASHOUT (SEE DETAIL 3 ON SHEET C7.03)
- INLET PROTECTION (SEE DETAIL 4 ON SHEET C7.03)

LIMITS OF DISTURBANCE = 4.38 AC

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ANDREW BLAKE HADDON
REGISTERED ENGINEER
No. 120595
AGRICULTURE
COMMERCE
STATE OF TENNESSEE
11/8/2024

INTERMEDIATE EROSION AND SEDIMENT CONTROL PLAN

MASS GRADING & INFRASTRUCTURE PACKAGE

COLUMBIA COMMONS

115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

811 Know what's **below** **Call** before you dig. 811 www.call811.com

REVISION INFORMATION			
REV.	DR.	CHK.	DATE
1	JMB	JO	09.19.2024
2	RES	JO	11.12.2024

PERMIT SET
LAND DISTURBANCE PERMIT SET

PERMIT NUMBERS:

PARCEL ID: 113E B 004.00

FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.

DATUM: TNSPC (NAD83) NAVD 1988

BENCHMARK:

N

30' 15' 0' 30' 60'

SCALE: 1 INCH = 30 FEET

C2.42

FILE NO. 38531-01

USER:RESURYONO
FILE:F:\38\38531\38531010\4_CAD\CIV\LP\LOT\38531010_C2.42.dwg
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EXISTING RIGHT OF WAY WIDTH BASED ON
T.D.O.T PLAN & PROFILE SHEETS FOR
FEDERAL AID PROJECT NO. S-SU-6368 (2)
STATE PROJECT NO. 60031-3304-23, FISCAL YEAR 1966

PROJECT OUTFALL 1

SOUTH JAMES CAMPBELL BOULEVARD (STATE ROUTE 50)
(120' PUBLIC R.O.W.)

ASHWOOD DRIVE
(40' PUBLIC R.O.W.)

NICHOLAS LONG DRIVE
(50' PUBLIC R.O.W.)

GENERAL NOTES

1. SEE SHEET C0.01 FOR EROSION AND SEDIMENT CONTROL NOTES.

FINAL EPSC SEQUENCING

1. THE CONTRACTOR SHALL MAINTAIN ALL BMP'S INSTALLED IN THE INITIAL PHASE UNTIL NO LONGER NECESSARY.
2. THE CONTRACTOR SHALL APPLY NORTH AMERICAN GREEN SC150 TEMPORARY EROSION CONTROL BLANKET W/ SEEDING AS SHOWN.
3. AFTER SITE IS STABILIZED THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

LEGEND

- LIMITS OF DISTURBANCE
- NORTH AMERICAN GREEN SC150 TEMPORARY EROSION CONTROL BLANKET W/ SEEDING (SEE DETAIL 1 ON SHEET C7.05)
- SEED AND STRAW

LIMITS OF DISTURBANCE = 4.38 AC

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PERMIT NUMBERS:

PARCEL ID: 113E B 004.00	FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.
DATUM: TNSPC (NAD83) NAVD 1988	BENCHMARK:

30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET

N

REV	DR.	CHK.	REVISION INFORMATION DESCRIPTION	DATE
1	JMB	JO	PERMIT SET	09.19.2024
2	RES	JO	LAND DISTURBANCE PERMIT SET	11.12.2024

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STATE OF TENNESSEE
11/12/2024

FINAL EROSION AND SEDIMENT CONTROL PLAN

MASS GRADING & INFRASTRUCTURE PACKAGE

COLUMBIA COMMONS

115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

C2.43

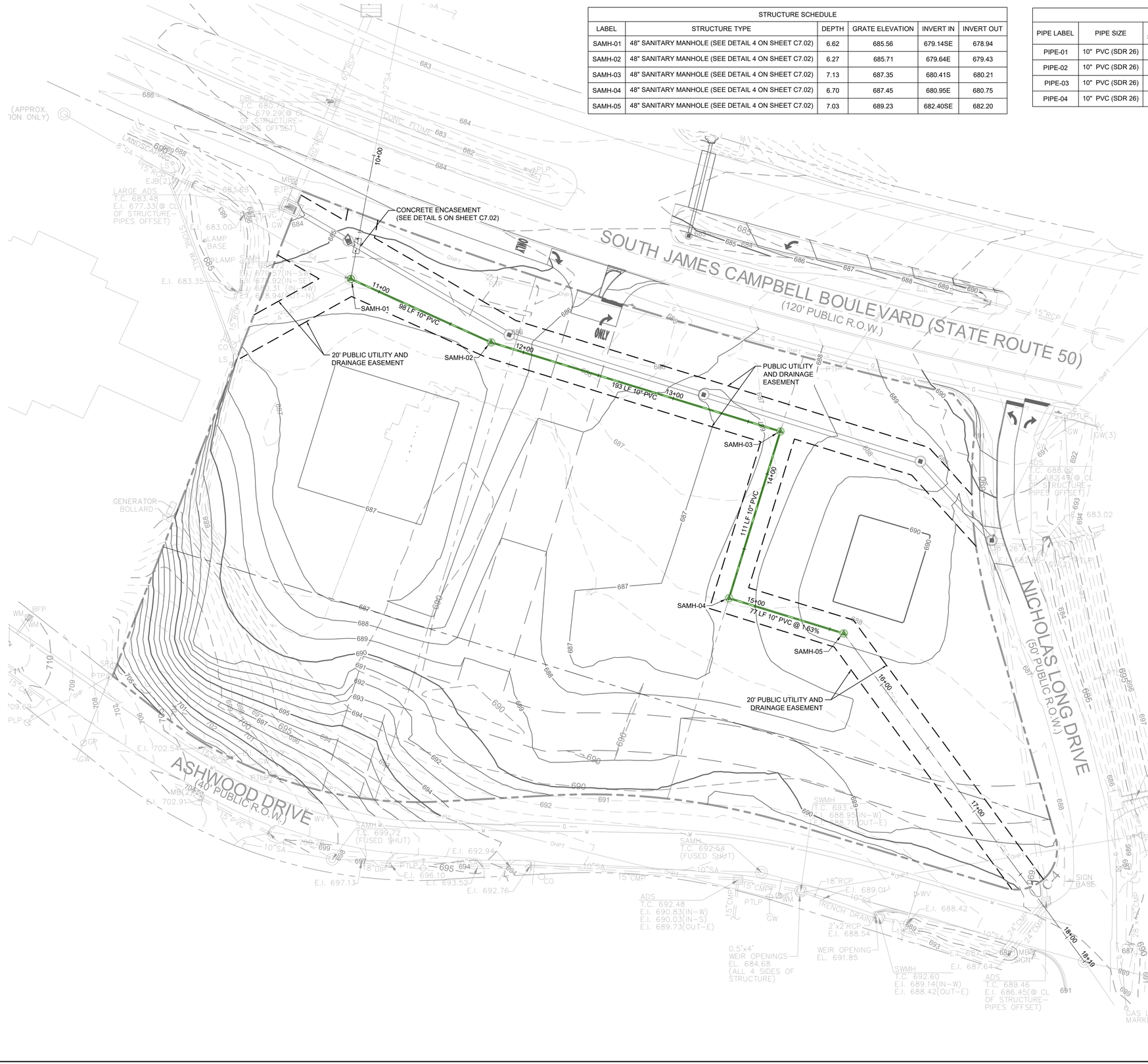
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SAVED:11/12/2024
PLOTTED:11/19/2024

STRUCTURE SCHEDULE					
LABEL	STRUCTURE TYPE	DEPTH	GRATE ELEVATION	INVERT IN	INVERT OUT
SAMH-01	48" SANITARY MANHOLE (SEE DETAIL 4 ON SHEET C7.02)	6.62	685.56	679.14SE	678.94
SAMH-02	48" SANITARY MANHOLE (SEE DETAIL 4 ON SHEET C7.02)	6.27	685.71	679.64E	679.43
SAMH-03	48" SANITARY MANHOLE (SEE DETAIL 4 ON SHEET C7.02)	7.13	687.35	680.41S	680.21
SAMH-04	48" SANITARY MANHOLE (SEE DETAIL 4 ON SHEET C7.02)	6.70	687.45	680.95E	680.75
SAMH-05	48" SANITARY MANHOLE (SEE DETAIL 4 ON SHEET C7.02)	7.03	689.23	682.40SE	682.20

PIPE TABLE							
PIPE LABEL	PIPE SIZE	UPSTREAM STRUCTURE	UPSTREAM ELEVATION	DOWNSTREAM STRUCTURE	DOWNSTREAM ELEVATION	LENGTH (FT)	SLOPE (%)
PIPE-01	10" PVC (SDR 26)	SAMH-02	679.43	SAMH-01	679.14	98.2	0.30%
PIPE-02	10" PVC (SDR 26)	SAMH-03	680.21	SAMH-02	679.64	193.1	0.30%
PIPE-03	10" PVC (SDR 26)	SAMH-04	680.75	SAMH-03	680.41	111.3	0.30%
PIPE-04	10" PVC (SDR 26)	SAMH-05	682.20	SAMH-04	680.95	76.5	1.63%



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STATE OF TENNESSEE
11/8/2024

SITE UTILITY PLAN

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REVISION INFORMATION			
REV.	DR.	CHK.	DESCRIPTION / DATE
1	JMB	JO	PERMIT SET 09.19.2024
2	RES	JO	LAND DISTURBANCE PERMIT SET 11.12.2024

811 Know what's **below** **Call** before you dig. 811 www.call811.com

PERMIT NUMBERS:

PARCEL ID: 113E B 004.00

FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.

DATUM: TNSPC (NAD83) NAVD 1988

BENCHMARK:

30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET

N

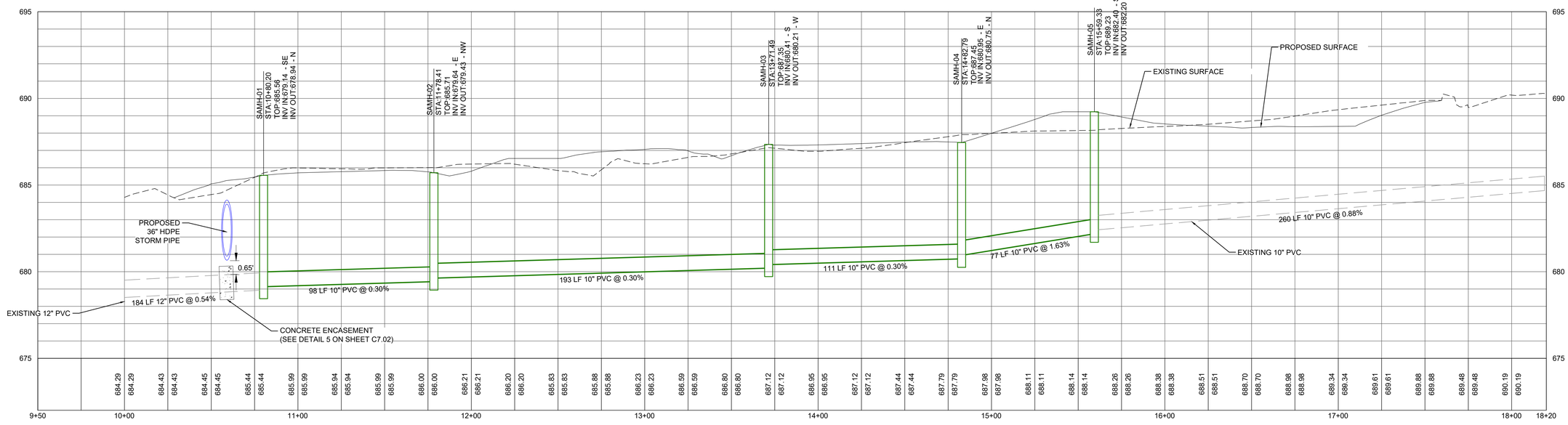
C3.01

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SANITARY SEWER PROFILE PROFILE STA. 9+50 TO 18+20
SCALE: 1"=30' H
1"=3' V

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REGISTERED ENGINEER
No. 120595
STATE OF TENNESSEE
11/8/2024

SANITARY SEWER PROFILE

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

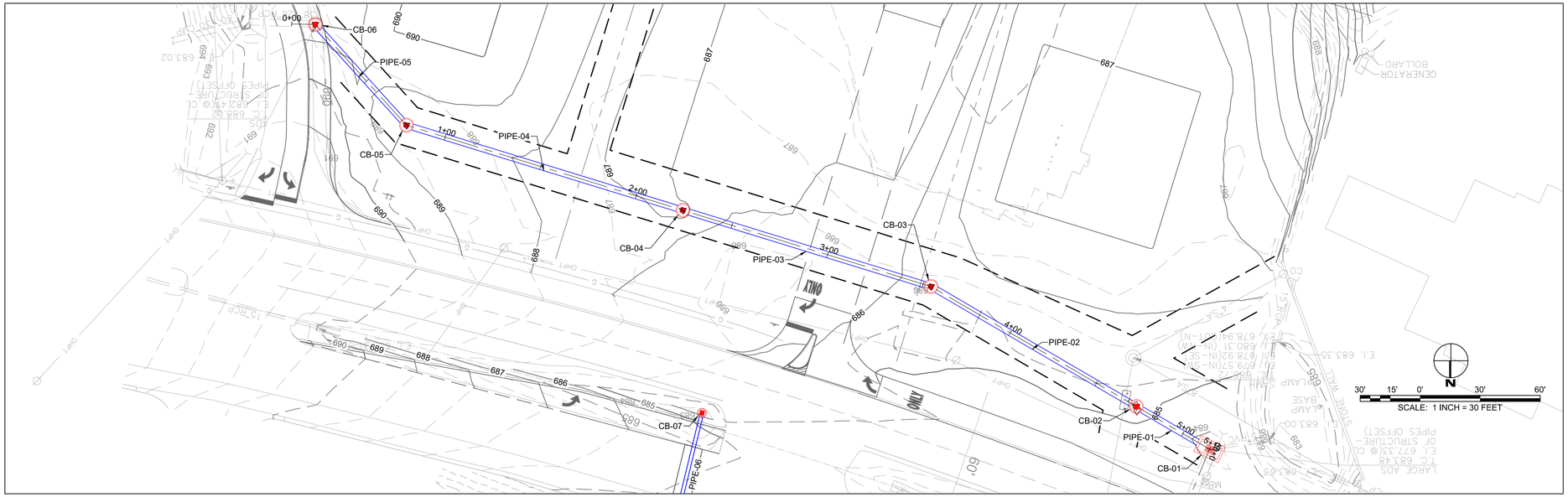
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2	RES	JO	11.12.2024 LAND DISTURBANCE PERMIT SET

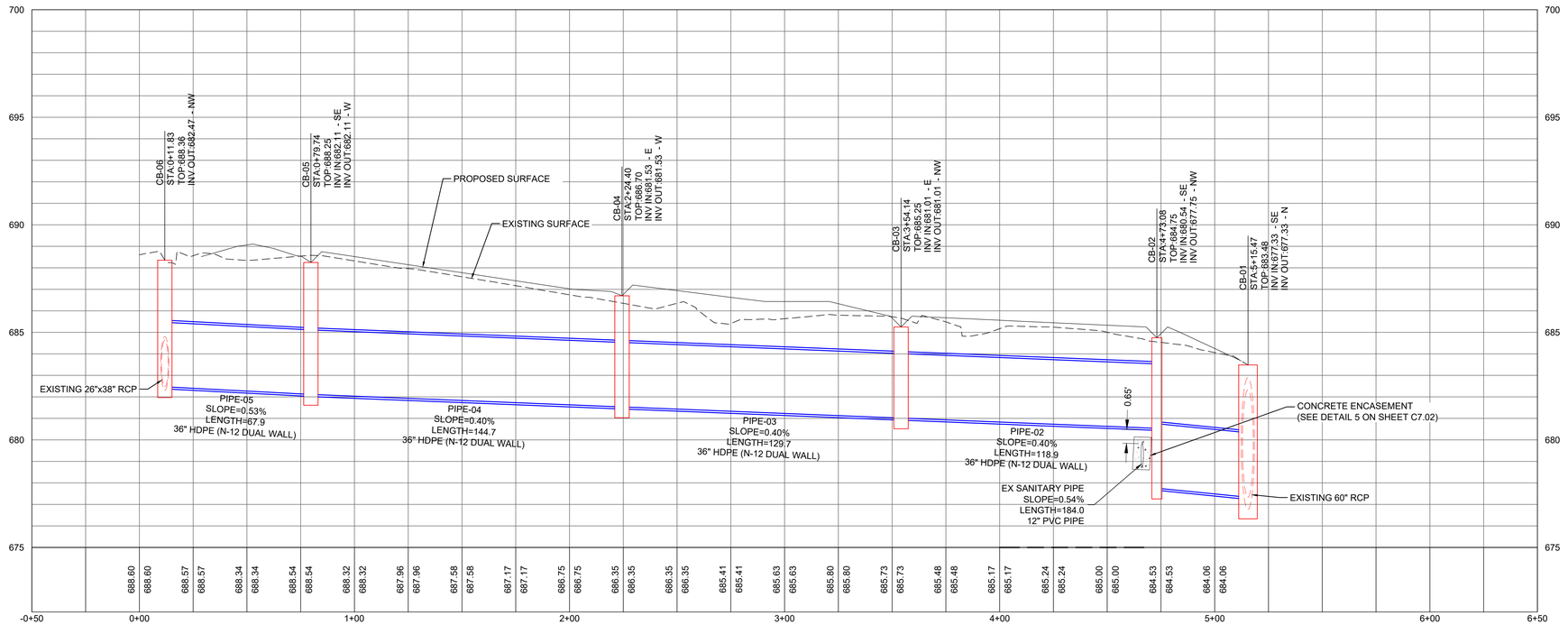
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SAVED:11/18/2024
PLOTTED:11/18/2024

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STORM SEWER PROFILE PROFILE STA. -0+50 TO 6+50
SCALE: 1"=30' H
1"=3' V

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ANDREW BLAKE HADDON
REGISTERED ENGINEER
No. 120595
STATE OF TENNESSEE
11/8/2024

STORM SEWER PROFILE

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

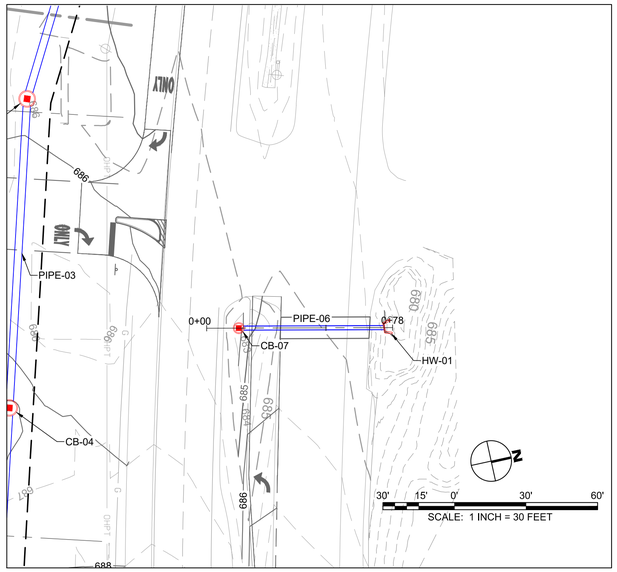
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2	RES	JO	LAND DISTURBANCE PERMIT SET	11.12.2024

C4.21

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PLOTTED:11/8/2024

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Alignment - (2) PROFILE STA. -0+50 TO 1+00
SCALE: 1"=30' H
1"=3' V

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PHONE (615) 254-1500 // FAX (615) 255-6372

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REGISTERED ENGINEER
No. 120595
STATE OF TENNESSEE
11/8/2024

STORM SEWER PROFILE

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

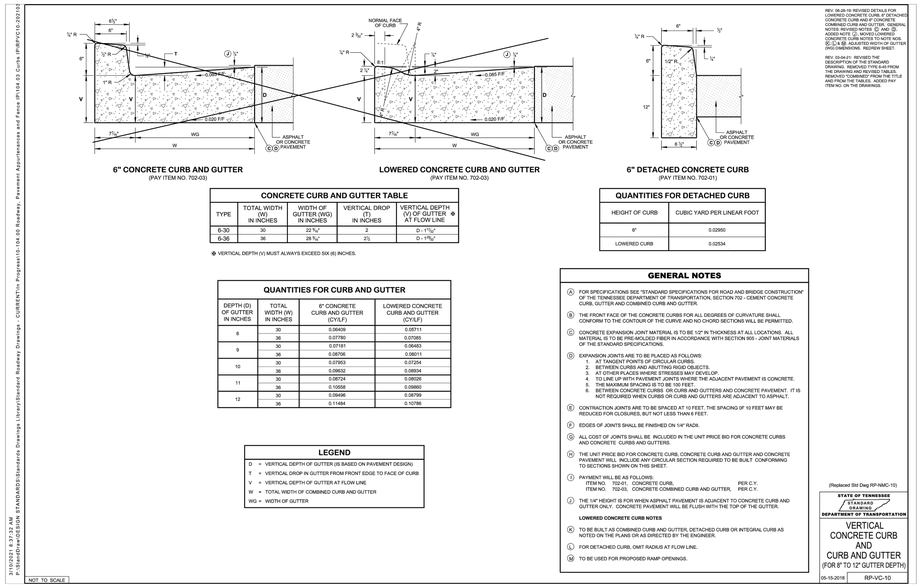
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2	RES	JO	11.12.2024	LAND DISTURBANCE PERMIT SET

C4.22

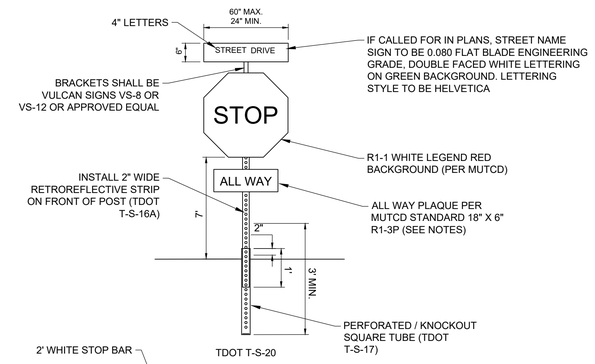
FILE NO. 38531-01

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PLOTTED:11/8/2024



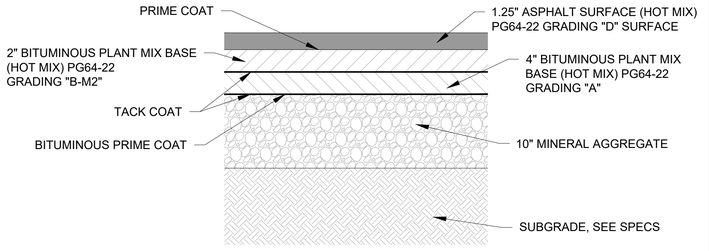
1 C7.01 CONCRETE POST CURB
SCALE: N.T.S.



NOTES:

1. STOP SIGN PER MUTCD STANDARD 30" X 30" R1-1. FOLLOW T.D.O.T. STANDARDS FOR SPECIFICATIONS AND SIGN INSTALLATION.
2. THE ALL WAY PLAQUE SHALL ONLY BE USED IF ALL INTERSECTION APPROACHES ARE CONTROLLED BY STOP SIGNS.
3. STOP BARS TO BE WHITE THERMOPLASTIC PER TDOT SPECIFICATIONS.

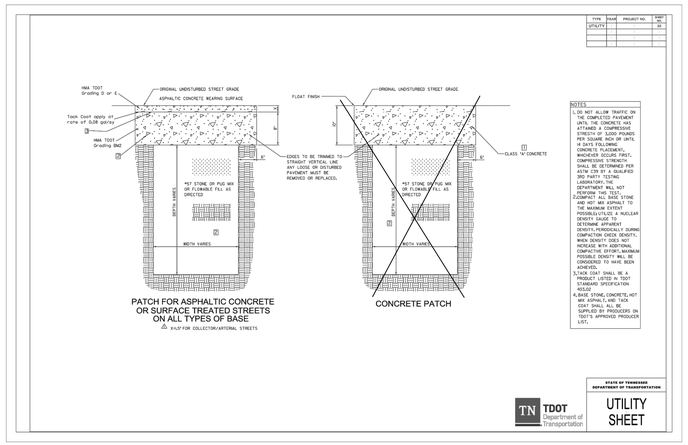
2 C7.01 R1-1 STOP SIGN WITH STOP BAR
SCALE: N.T.S.



NOTES:

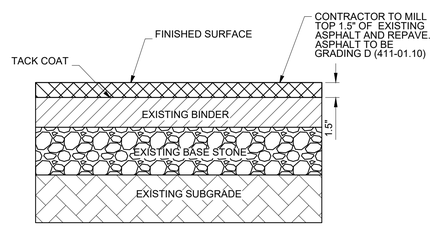
1. CONSTRUCTION SHALL MEET MOST RECENT EDITION OF THE STANDARD SPECIFICATIONS OF THE TN DEPT OF TRANSPORTATION.
2. SEE GEOTECHNICAL REPORT FOR SUBGRADE PREPARATION.
3. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

3 C7.01 HEAVY DUTY (TDOT) ASPHALT PAVEMENT
SCALE: N.T.S.

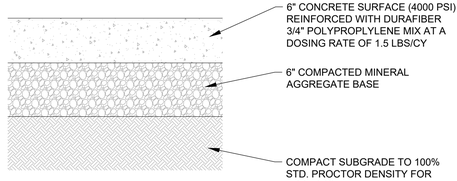


5 C7.01 ASPHALT TRENCH REPAIR
SCALE: N.T.S.

NOTES:
1.5" MILL AND RESURFACE PER STANDARDS.



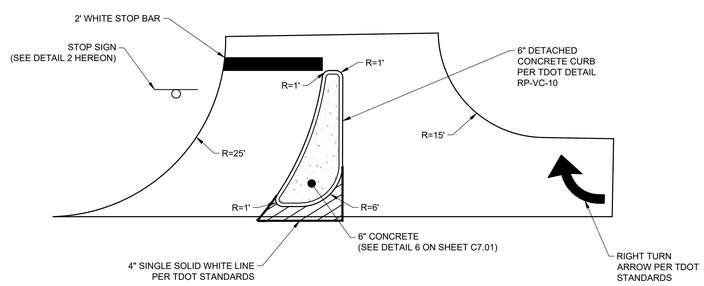
4 C7.01 ASPHALT MILL AND PAVING
SCALE: N.T.S.



NOTES:

1. ALL CONSTRUCTION SHALL MEET THE MOST RECENT EDITION OF THE STANDARD SPECIFICATIONS OF THE TN DEPT OF TRANSPORTATION.
2. SEE SPECIFICATIONS FOR JOINT INFORMATION.
3. SEE SPECIFICATIONS FOR SUBGRADE PREPARATION.

6 C7.01 6" CONCRETE PAVEMENT
SCALE: N.T.S.



7 C7.01 RIGHT OUT DRIVEWAY ENTRANCE
SCALE: N.T.S.

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ANDREW BLAKE HADSON
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No. 120595
STATE OF TENNESSEE
COMMERCE
11/8/2024

CIVIL STANDARD DETAILS

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REVISION INFORMATION

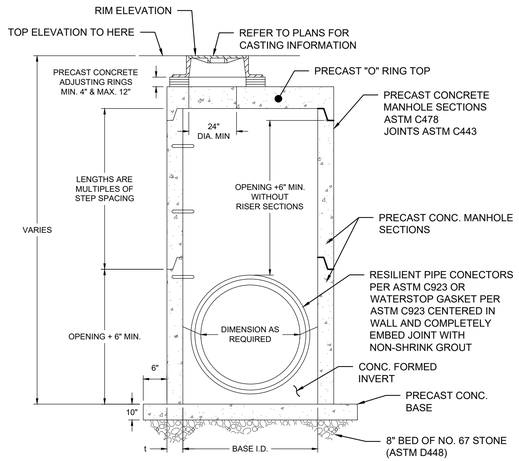
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2	RES	JO	LAND DISTURBANCE PERMIT SET	11.12.2024

C7.01
FILE NO. 38531-01

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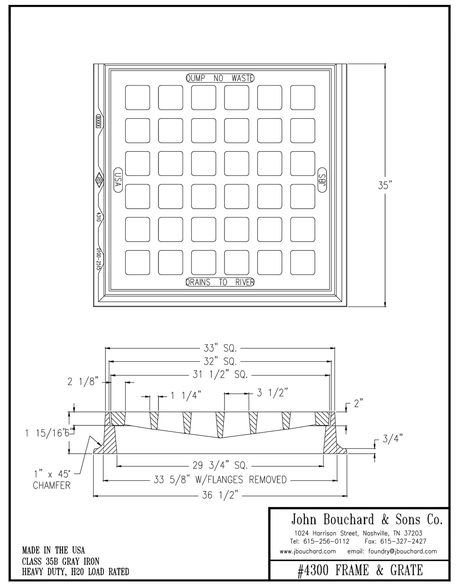
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MAXIMUM PIPE SIZES		
BASE I.D.	MIN. T	MAX. PIPE SIZE
48"	5"	24"
60"	5"	36"
72"	6"	42"



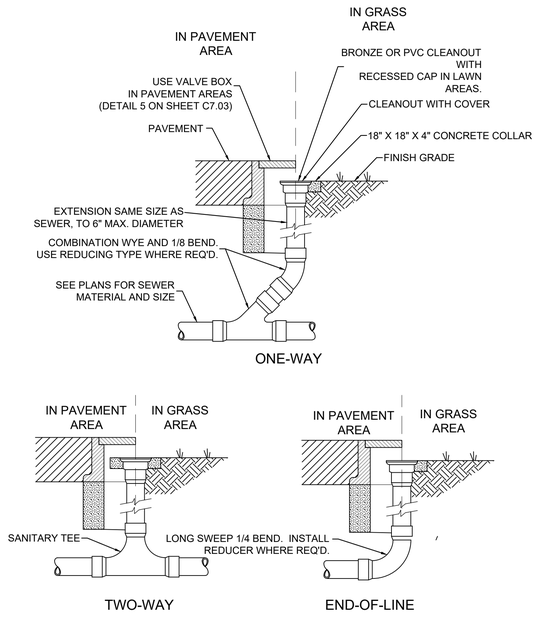
NOTES:
STEPS TO BE STEEL, ASTM A615 GRADE 60,
REINFORCED PROPYLENE PLASTIC, ASTM D4101

1 TYPICAL STORM MANHOLE / CATCH BASIN
C7.02 SCALE: N.T.S.

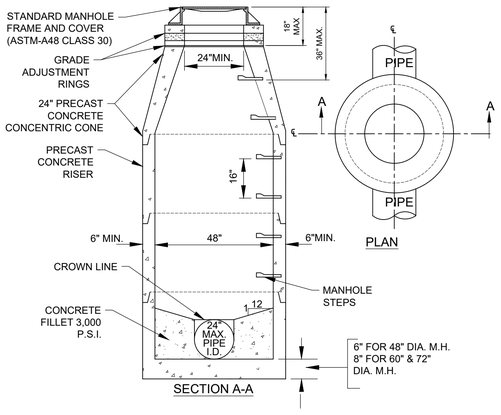


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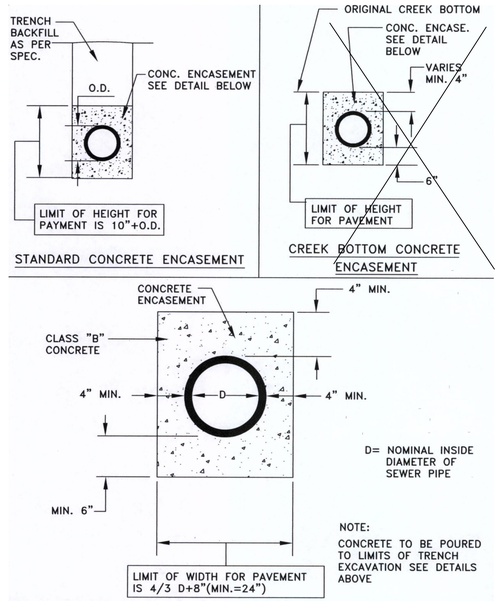
2 JBS 4300 FRAME AND GRATE
C7.02 SCALE: N.T.S.



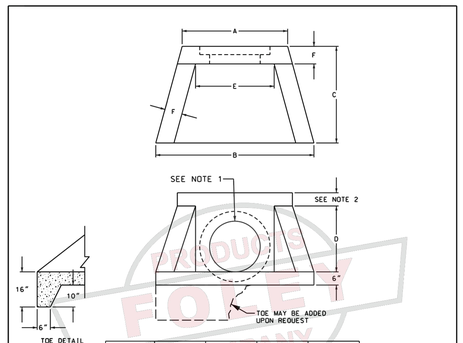
3 CLEANOUT WITH INSPECTION ASSEMBLY
C7.02 SCALE: N.T.S.



4 STANDARD PRECAST SANITARY MANHOLE
C7.02 SCALE: N.T.S.



5 CONCRETE ENCASEMENT
C7.02 SCALE: N.T.S.



PIPE SIZE	AW 12"-15"-18"	BW 24"	CW 30"-36"-42"	DW 48"-54"-60"
A	32"	48"	80"	97.25"
B	48"	72"	102"	120"
C	30"	44"	54"	56"
D	26"	36"	54"	60"
E	24"	36"	64"	83"
F	6"	8"	8"	8"
MAX.OPENING	26"	32"	55"	78"
WT/LB	1,380	3,100	8,100	11,400

GENERAL NOTES:

1. PIPE OPENING IN FACE OF WALL WILL EQUAL PIPE I.D. FOR 12"-36" DIA. PIPE.
2. 0° FOR AW HEADWALL
   6° FOR BW & CW HEADWALL
   6° TO 27° FOR DW HEADWALL
3. AW & BW REQUIRE NO REINFORCEMENT PER SDCI DESIGN

FOLEY HERMITAGE,TN LENOIR CITY,TN FRANKLIN,TN CHATTANOOGA,TN
PRECAST WINGED HEADWALL DETAIL | SCALE: NTS | PH: 1-800-737-0707 | DWG# ET-200 | REV DATE:02/20/14 | SHEET# 1 OF 1

6 WINGED HEADWALL
C7.02 SCALE: N.T.S.

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615 3rd Avenue South // Suite 700 // Nashville, Tennessee 37210
PHONE (615) 254-1500 // FAX (615) 255-6572

ANDREW BLAKE HADDON
REGISTERED ENGINEER
No. 120595
STATE OF TENNESSEE
AGRICULTURE
COMMERCE
11/8/2024

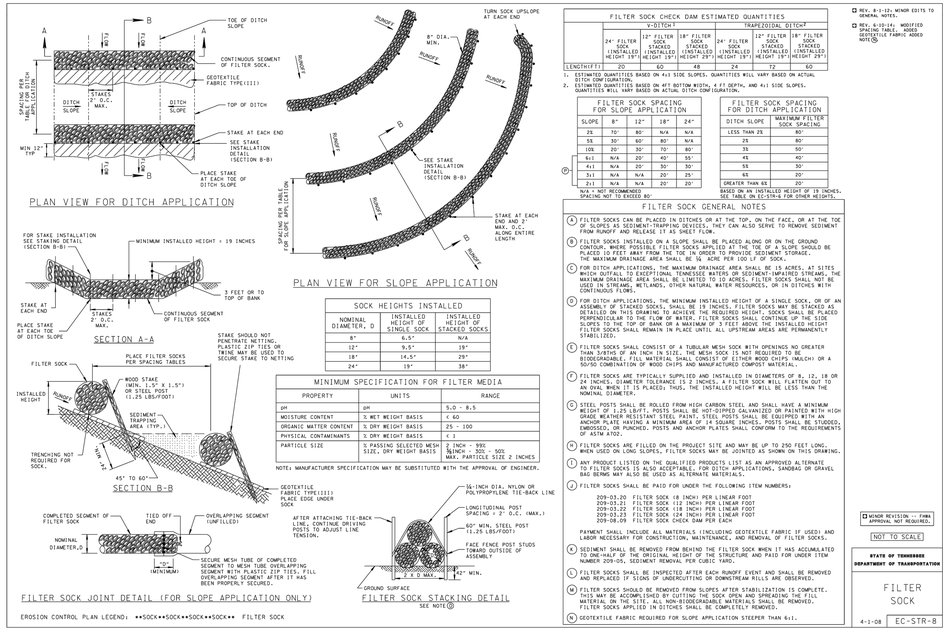
CIVIL STANDARD DETAILS

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

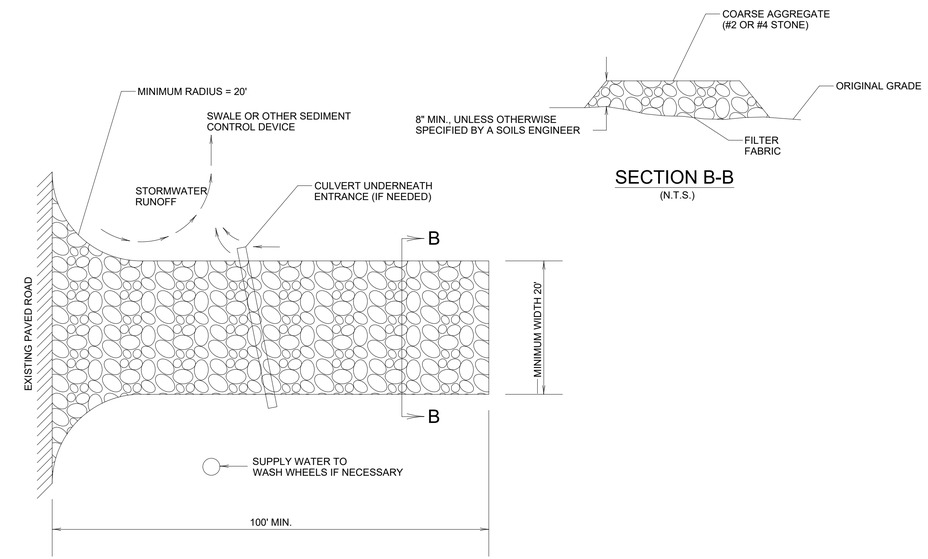
REVISION INFORMATION			
REV.	DR.	CHK.	DESCRIPTION
1	JMB	JD	09.19.2024 PERMIT SET
2	RES	JD	11.12.2024 LAND DISTURBANCE PERMIT SET

C7.02
FILE NO. 38531-01

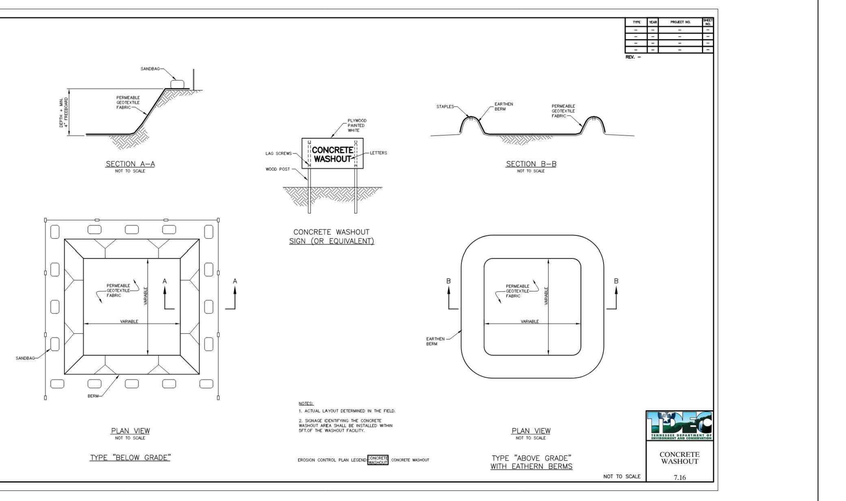
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SAVED:9/19/2024
PLOTTED:11/15/2024



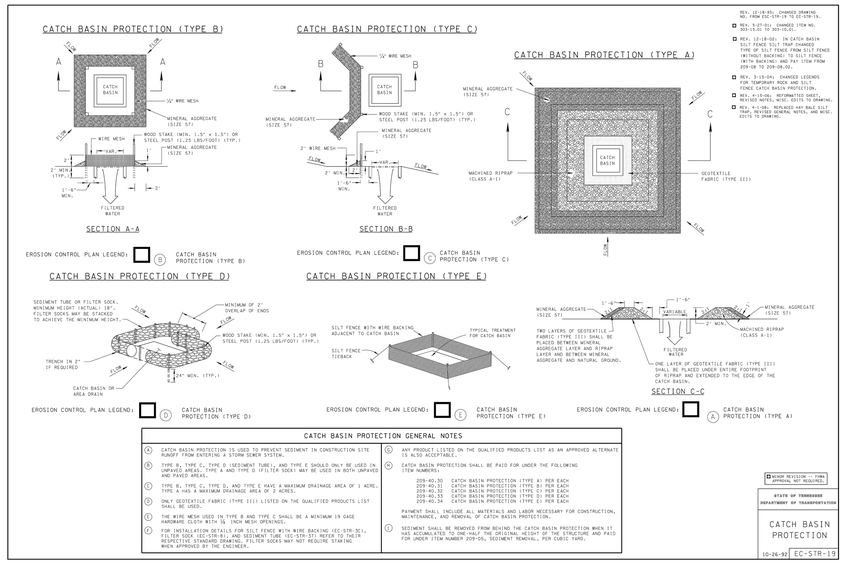
1 C7.03 FILTER SOCK
SCALE: N.T.S.



2 C7.03 CONSTRUCTION EXIT (TCP-03)
SCALE: N.T.S.



3 C7.03 CONCRETE WASHOUT
SCALE: N.T.S.



3 C7.03 INLET PROTECTION
SCALE: N.T.S.

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PHONE (615) 254-1500 // FAX (615) 255-6372

ANDREW BLAKE HADSON — REGISTERED ENGINEER — AGRICULTURE — No. 120595 — STATE OF TENNESSEE — COMMERCE — 11/8/2024

CIVIL STANDARD DETAILS

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REVISION INFORMATION

REV.	DR.	CHK.	DATE	DESCRIPTION
1	JMB	JD	08.19.2024	PERMIT SET
2	RES	JD	11.12.2024	LAND DISTURBANCE PERMIT SET

C7.03
FILE NO. 38531-01

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USER:JMBOYD
FILE:P:\38\38531\38531101\04_CAD\CIVIL\PLOT\38531101_C7.01.dwg
SAVED:8/19/2024
PLOTTED:11/15/2024



LEGEND

- PERVIOUS
- IMPERVIOUS
- PERVIOUS PAVERS
- DRAINAGE BOUNDARY

FUTURE CONDITION DRAINAGE DATA

IMPERVIOUS AREA:	1.98 AC (CN: 98)
PERVIOUS TURF AREA:	1.37 AC (CN: 79)
PERVIOUS PAVER AREA:	0.53 AC (CN: 70)
TOTAL AREA:	3.88 AC
WEIGHTED CURVE NUMBER:	87

NOTE

THE PAVER AND IMPERVIOUS AREA HATCHING SHOWN IS APPROXIMATE AND FOR ILLUSTRATIVE PURPOSES ONLY. FINAL LAYOUT AND DESIGN MUST BE APPROVED BY THE CITY AND IS DETERMINED BY THE OUTPARCEL DEVELOPER. EACH OUTPARCEL MUST ADHERE TO MAXIMUM IMPERVIOUS AND MINIMUM PAVER AREAS HERON.

BARGE DESIGN SOLUTIONS
615 3rd Avenue South // Suite 700 // Nashville, Tennessee 37210
PHONE (615) 254-1500 // FAX (615) 255-6372

FUTURE DEVELOPMENT DRAINAGE MAP

MASS GRADING & INFRASTRUCTURE PACKAGE

COLUMBIA COMMONS

115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

Know what's **below** **Call** before you dig.
811
www.call811.com

REVISION INFORMATION			
REV.	DR.	CHK.	DESCRIPTION
1	JMB	JO	PERMIT SET
2	RES	JO	11.12.2024 LAND DISTURBANCE PERMIT SET

PERMIT NUMBERS:

PARCEL ID: 113E B 004.00	FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.
DATUM: TNSPC (NAD83) NAVD 1988	BENCHMARK:

N

30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET

EX-02

FILE NO. 38531-01

USER:RESURYONO
FILE:F:\38\38531\38531101\04_CAD\CIVIL\CALC\38531101_EX-02.dwg
SAVED:11/18/2024
PLOTTED:11/18/2024

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November 18th, 2024
File No. 38531-01

City of Columbia
Development Services
700 North Garden Street
Columbia, Tennessee 38401

RE: COLUMBIA COMMONS
RESPONSES TO DEVELOPMENT REVIEW COMMITTEE (DRC) MEETING

Dear City Development Staff:

In response to the DRC comments on Columbia Commons noted in the comment letter dated November 12th, we are providing our responses below.

Responses:

Planning

1. The lead staff person for this case is Austin Brass, AICP; he will prepare the staff report for this item. Please contact abrass@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
Response: Noted.

2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
Response: Done.

3. Remove all outlines for building footprints and parking on preliminary plat.
Response: Buildings and parking removed.

4. Provide detail of the approximate location of all existing structures within the property, if any. (14)
Response: No existing structures on site except for outline of building foundation as shown.

5. Provide detail of the approximate location of all existing structures adjacent to property. (15)
Response: Adjacent building added.

615 3RD AVENUE SOUTH // SUITE 700 // NASHVILLE // TENNESSEE // 37210 // 615-254-1500 // BARGEDESIGN.COM

6. Provide a typical lot layout call out depicting proposed setbacks and easements. (18)
Response: Setback detail added. See note #5 for details.

7. Provide lot width callout of new proposed lots that conform to the min and max of a CD-4C Zoning District.
Response: See site development specific note #4.

8. As noted, the approximate location of all commercial buildings and associated parking will be achieved at site development plan in accordance to the development standards within a CD-4C district.
Response: See site development specific note #4.

9. Provide the location and dimension of any buffers. (25)
Response: no buffers required or shown.

10. Provide phasing and timetable of all phases of development. (32)
Response: No phasing, Final Plat will create 3 lots.

11. Provide building site lines if any proposed development will be located at rear of property.
Response: Shown on development plan.

Engineering

12. Subject to TIS and construction plans.
Response: Noted.

13. As shown engineering has concerns about the alignment of the site entrance on South James Campbell Blvd. Specifically, the alignment does not sufficiently deter wrong-way movements exiting the site, the left turn lane results in several conflict points with the existing median opening and Nicholas Long Drive (north).
Response: The proposed site entrance has been shifted east to eliminate the left turn conflict. See site plan (C1.01).

14. Storage for right-turn lane on Nicholas Long Drive (south) at SJCB is insufficient. Traffic study requires 75 ft. of storage. Additional ROW dedication/realignment may be required to construct.
Response: The alignment has been altered and additional pavement has been added to meet the TIS recommended storage length. See site plan (C1.01).

15. Subject to TDOT approval for all roadway and grading/drainage improvements. Note: typically TDOT has not permitted open cutting for drainage improvements. (18" RCP across SJCB)
Response: Due to elevation constraints the drainage in the median has no other option than to cut across SJCB. The roadway work will be performed at off-peak hours.

16. Indicate area and width for PUDE for all drainage infrastructure along the frontage.
Response: Area of PUDE added. Easement widths shown.

17. Design vehicle may necessitate large radius of curvature for right turn into site access at SJCB.
Response: The radius has been increased to 25'. See site plan (C1.01).

18. Provide engineer's stamp.
Response: Stamp added.

19. Provide impervious/pervious surface area summary.
Response: See the post construction stormwater exhibit included in resubmittal.

Wastewater

20. Columbia Wastewater does not want the sanitary sewer in the current layout given the building placement might change. If building placement does not change, then we would need to review this again.
Response: The sanitary alignment has been shifted out of the road and into the drive aisle. See utility plan (C3.01).

Building

21. No comment.
Response:

Maury County Schools

22. No comment.
Response:

Duck River Electric Membership Corp

23. No comment.
Response:

Public Works

24. One dumpster does not appear that it will be enough for three restaurants. We highly recommend dumpster enclosures at all three restaurants, or a trash compactor that can be utilized by all three restaurants. Private sanitation services may be utilized. Please retain the attached City of Columbia Dumpster Guidelines & Accessibility Requirements for your reference.
Response: Dumpsters will be included for all 3 buildings and will be shown on the respective site plan submittal for each individual parcel.

Columbia Power

25. Note: Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.
Response: Noted.

Maury County Highway Dept.

26. No comment.
Response:

Columbia Water

28. "A water availability letter will be required for each lot as the associated projects move forward with site plans. Based on preliminary assessment the project may require off-site improvements to provide adequate water service to these three lots without impacting existing water customers. The availability of capacity to serve is based on a determination by the Fire Marshal of fire flow requirements and the information submitted on the Water Service Availability Request application. Any off-site improvements detailed in the availability letter are the responsibility of the developer/owner. All public water system improvements are subject to the preparation and approval of detailed construction plans prepared in accordance with CPWS and Tennessee Department of Environment and Conservation requirements."

Response: Each individual site will submit for water availibity. A meeting has been requested with CPWS to discuss this further.

Atmos Energy

29. No comments provided.
Response:

Maury County E911

30. No comments provided.
Response:

ATT

31. Plan to serve.
Response:

Sincerely,

Jack Boyd E.I.
Project Engineer

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

DEVELOPMENT REVEW COMMITTEE MEETING
Tuesday, November 12, 2024

ITEM NO.
24-0467

DESCRIPTION: 115 South James Campbell Blvd., Oldacre Commercial (Former Sloan Ford)

COMMENTS:

Planning

1. The lead staff person for this case is Austin Brass, AICP; he will prepare the staff report for this item. Please contact abrass@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
3. Remove all outlines for building footprints and parking on preliminary plat.
4. Provide detail of the approximate location of all existing structures within the property, if any. (14)
5. Provide detail of the approximate location of all existing structures adjacent to property. (15)
6. Provide a typical lot layout call out depicting proposed setbacks and easements. (18)
7. Provide lot width callout of new proposed lots that conform to the min and max of a CD-4C Zoning District.
8. As noted, the approximate location of all commercial buildings and associated parking will be achieved at site development plan in accordance to the development standards within a CD-4C district.
9. Provide the location and dimension of any buffers (25)
10. Provide phasing and timetable of all phases of development (32)
11. Provide building site lines if any proposed development will be located at rear of property.

Engineering

12. Subject to TIS and construction plans
13. As shown engineering has concerns about the alignment of the site entrance on South James Campbell Blvd. Specifically, the alignment does not sufficiently deter wrong-way movements

DEVELOPMENT SERVICES
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COLUMBIA, TN 38401
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exiting the site, the left turn lane results in several conflict points with the existing median opening and Nicholas Long Drive (north).

14. Storage for right-turn lane on Nicholas Long Drive (south) at SJCB is insufficient. Traffic study requires 75 ft. of storage. Additional ROW dedication/realignment may be required to construct.
15. Subject to TDOT approval for all roadway and grading/drainage improvements. Note: typically TDOT has not permitted open cutting for drainage improvements (18" RCP across SJCB)
16. Indicate area and width for PUDE for all drainage infrastructure along the frontage.
17. Design vehicle may necessitate large radius of curvature for right turn into site access at SJCB
18. Provide engineer's stamp.
19. Provide impervious/pervious surface area summary.

Wastewater

20. Columbia Wastewater does not want the sanitary sewer in the current layout given the building placement might change. If building placement does not change, then we would need to review this again.

Building

21. No comments.

Maury County Schools

22. No comment.

Duck River Electric Membership Corp

23. No comment.

Public Works

24. One dumpster does not appear that it will be enough for three restaurants. We highly recommend dumpster enclosures at all three restaurants, or a trash compactor that can be utilized by all three restaurants. Private sanitation services may be utilized. Please retain the attached City of Columbia Dumpster Guidelines & Accessibility

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700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
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Requirements for your reference.

Columbia Power

25. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.
Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

Fire

26. Note: Each building will get its own water availability letter

Maury County Highway Dept.

27. No comment.

Columbia Water

28. "A water availability letter will be required for each lot as the associated projects move forward with site plans. Based on preliminary assessment the project may require off-site improvements to provide adequate water service to these three lots without impacting existing water customers. The availability of capacity to serve is based on a determination by the Fire Marshal of fire flow requirements and the information submitted on the Water Service Availability Request application. Any off-site improvements detailed in the availability letter are the responsibility of the developer/owner. All public water system improvements are subject to the preparation and approval of detailed construction plans prepared in accordance with CPWS and Tennessee Department of Environment and Conservation requirements."

Atmos Energy

29. No comments provided.

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Maury County E911

30. No comments provided.

ATT

31. Plan to serve.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.

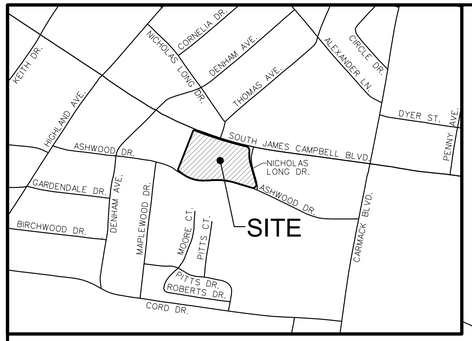
You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.

Current Enrollment / Capacity

	Facility Name	Constructed	Sq. Ft.	Acreage	Capacity
Elementary	Baker	1960	43,920	12	340
	Battle Creek	2019	90,000	30	700
	Brown	1968	56,720	20	405
	Highland	1986	47,800	4.5	380
	Howell	1999	81,600	17.5	700
	Mt. Pleasant	1978	80,021	22	630
	Riverside	1984	71,150	14	500
	Spring Hill	1984	69,000	10	540
	Woodard	1990	76,200	17	600
	Wright	2005	97,765	18	740
					5535
Middle	Battle Creek	2019	125,000	45	900
	Cox	1997	137,200	25	900
	Mt. Pleasant	2001	113,938	29.2	550
	Spring Hill	2010	158,106	39.49	950
	Whitthorne	1979	175,600	17	1050
					4350
High	Battle Creek	2024	305,675	51	2000
	Central	2016	296,740	55	1700
	Mt. Pleasant	1969	110,759	31	600
	Spring Hill	1993	181,800	57	1200
					5500
Unit	Culleoka	1969	205,800	34	1020
	Hampshire	1978	83,410	13.12	500
	Santa Fe	1964	94,225	24	650
					2170
Other	Central Office	1960	15,400	1.5	
	College Hill	1958	42,211	2.26	
	Maintenance	1987	9,400	4.7	
	McDowell		46,165	7	
			2,815,605	**601.27**	**17555**

Current Enrollment	Capacity Used
282	82.9%
682	97.4%
340	84.0%
311	81.8%
581	83.0%
543	86.2%
378	75.6%
465	86.1%
586	97.7%
617	83.4%
4785	***86.4%***
758	84.2%
630	70.0%
386	70.2%
556	58.5%
948	90.3%
3278	***75.4%***
394	19.7%
1393	81.9%
369	61.5%
905	75.4%
3061	***55.7%***
863	84.6%
414	82.8%
548	84.3%
1825	***84.1%***
148	
13097	



VICINITY MAP
(N.T.S.)

LINE TABLE

LINE	BEARING	DISTANCE
L-1	S 35° 53' 44" E	22.19'
L-2	S 04° 30' 57" E	7.20'
L-3	N 51° 43' 18" W	37.01'
L-4	S 86° 47' 12" W	64.75'
L-5	S 86° 47' 12" W	3.81'

CURVE TABLE

CURVE	DELTA	RADIUS	TANGENT	ARC	CHORD BRG.	CHORD
C-1	08° 31' 30"	2924.93'	218.00'	435.20'	S 72° 42' 04" E	434.80'
C-2	21° 39' 56"	292.13'	55.90'	110.46'	S 04° 34' 07" E	109.81'
C-3	124° 57' 00"	26.06'	50.01'	56.83'	S 44° 16' 42" W	46.22'
C-4	19° 58' 00"	451.09'	79.40'	157.20'	N 83° 13' 48" W	156.40'
C-5	41° 26' 55"	268.80'	101.70'	194.45'	N 72° 29' 20" W	190.24'
C-6	18° 20' 46"	268.80'	43.41'	86.07'	N 60° 53' 41" W	85.70'
C-7	03° 59' 28"	2924.93'	101.91'	203.74'	S 70° 26' 03" E	203.70'
C-8	02° 54' 00"	2924.93'	74.03'	148.04'	S 73° 52' 47" E	148.08'
C-9	01° 38' 02"	2924.93'	41.71'	83.42'	S 76° 08' 48" E	83.41'
C-10	08° 29' 31"	451.09'	33.49'	66.86'	N 77° 29' 33" W	66.80'
C-11	11° 28' 29"	451.09'	45.32'	90.34'	N 87° 28' 33" W	90.19'

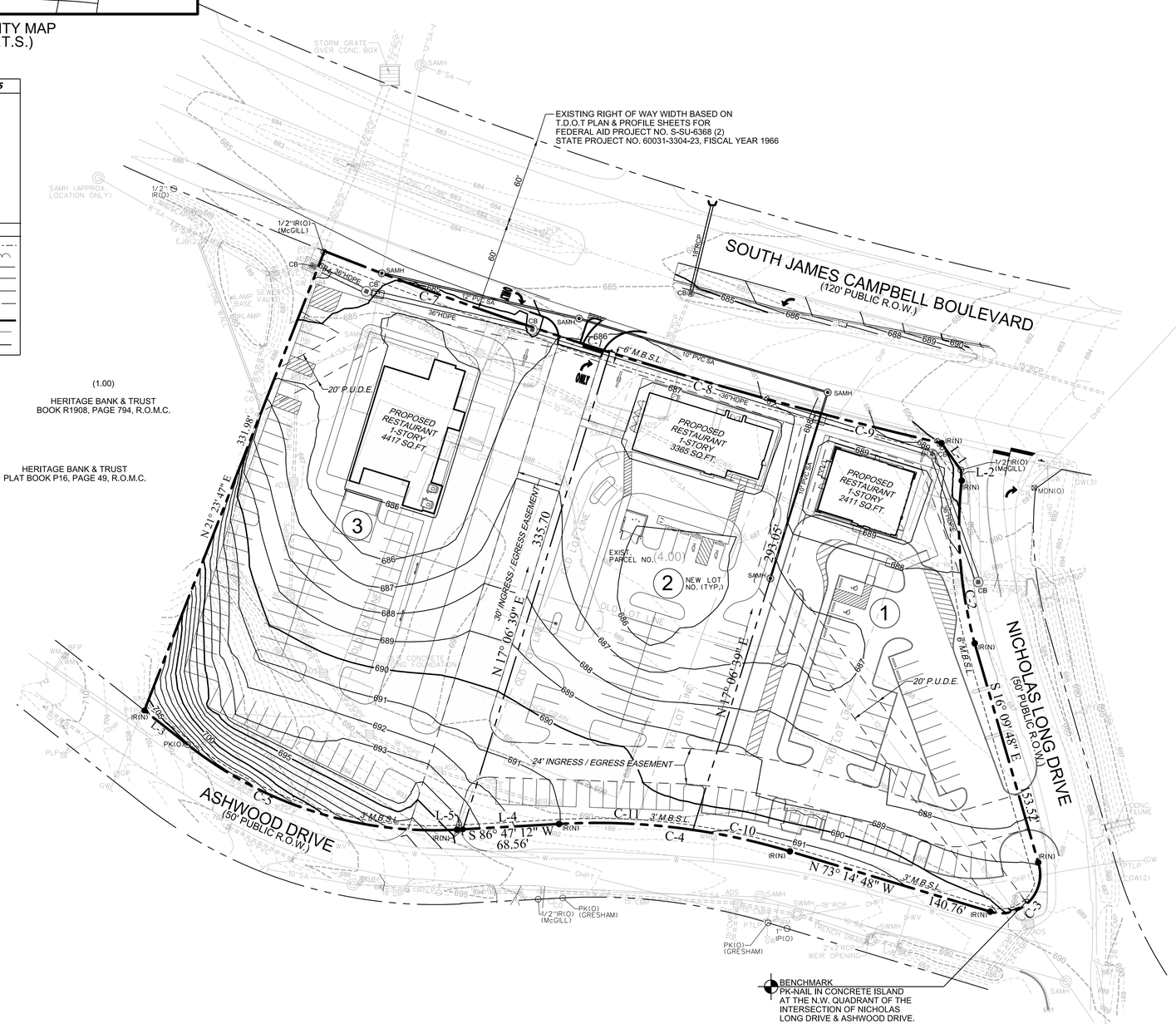
LEGEND

MAPPING SYMBOLS AND CODES

- POST
- IRON ROD NEW (IRN)
- IRON ROD OLD (IRO)
- IRON PIPE OLD (IPO)
- IRON SPIKE OLD (ISO)
- RIGHT-OF-WAY MONUMENT (RWM)
- P.K. NAIL OLD (PK(O))
- P.K. NAIL NEW (PK(N))
- POWER POLE (PP)
- TREE

LINE STYLES

- CENTERLINE
- EDGE OF WOODS LINE
- FENCE LINE
- OVERHEAD POWER LINE — OHP
- OVERHEAD TELEPHONE LINE — OHT
- OVERHEAD POWER AND TELEPHONE LINE — OHPT
- PROPERTY LINE
- GUARDRAIL
- EDGE OF WATER



GENERAL SURVEY NOTES

1. THIS SURVEY MEETS THE REQUIREMENTS OF AN URBAN LAND SURVEY (CATEGORY 1), WITH A RATIO OF PRECISION OF THE UNADJUSTED SURVEY GREATER THAN 1:10,000 AS PER STANDARDS OF PRACTICE ADOPTED BY THE BOARD OF EXAMINERS FOR LAND SURVEYORS, STATE OF TENNESSEE.

2. BEARINGS SHOWN ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983 (NAD-1983), ELEVATIONS ARE BASED ON NAVD-1988, USING GEOID 2003 FOR ORTHOMETRIC HEIGHT DETERMINATION.

3. THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY NO. 470123, PANEL NO. 0285 E, DATED APRIL 16, 2007. ZONE "X".

4. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM FIELD LOCATED VISIBLE APPURTENANCES, ATLAS MAPS AS MAY BE AVAILABLE FROM MUNICIPALITIES OR UTILITY COMPANIES, AND OTHER DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES STATE THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION CONSULTED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. TO AVOID ANY POSSIBLE HAZARD OR CONFLICT, IT IS A REQUIREMENT OF THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT, FOR ANYONE WHO ENGAGES IN EXCAVATION TO NOTIFY ALL KNOWN UTILITY OWNERS NO LESS THAN THREE (3) OR MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE. CALL TENNESSEE ONE CALL AT 1-800-351-1111.

5. EXISTING SURVEY BASE INFORMATION IS FROM AN ALTA/NSPS LAND TITLE SURVEY PREPARED ON JUNE 17, 2024 BY BARGE DESIGN SOLUTIONS, INC.

6. CONTOUR INTERVAL ONE-FOOT, CONTOURS WERE INTERPOLATED FROM RANDOM SHOTS TAKEN ON A 50-FOOT INTERVAL.

DEED REFERENCE

BEING THE SAME PROPERTY CONVEYED TO COLUMBIA JAMES CAMPBELL BOULEVARD, LLC FROM THE J & R GROUP, LLC, SIGNED & NOTORIZED DEED COPY DATED 10-08-2024 PROVIDED TO THIS SURVEYOR, RECORDING PENDING.

PROPERTY MAP REFERENCE

BEING PARCEL 4.00 AS SHOWN ON MAURY COUNTY PROPERTY MAP NO. 113E, GROUP B.

PLAT REFERENCE

BEING TRACT NOS. 1-7 AS SHOWN ON THE SUBDIVISION PLAT OF THE CAMPBELL & DUE PROPERTY AS OF RECORD IN PLAT BOOK 6, PAGE 441A, R.O.M.C.

SURVEYOR'S CERTIFICATE

I (WE) HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, AND IN MY PROFESSIONAL OPINION BASED ON EXISTING FIELD EVIDENCE AND DOCUMENTARY EVIDENCE AVAILABLE, THAT THE SURVEY PERFORMED TO PREPARE THIS PRELIMINARY SUBDIVISION PLAT WAS DONE IN COMPLIANCE WITH CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE FOR A CATEGORY I SURVEY AND THE RATIO OF PRECISION OF THE UNADJUSTED SURVEY IS 1:22,524.

BARGE DESIGN SOLUTIONS, INC.

BY: Mark E. Sawyer DATE: 10-18-2024
MARK E. SAWYER

TN. LIC. NO. 1649

Digitally signed by Mark E Sawyer
Date: 2024.10.18 15:19:16-05'00'

SITE DEVELOPMENT SPECIFIC NOTES

1. PROPERTY IS ZONED CD-4C (GENERAL URBAN CORRIDOR CHARACTER DISTRICT). ZONING INFORMATION SHOWN HEREON WAS TAKEN FROM CITY OF COLUMBIA PLANNING DEPARTMENT- ONLINE MAPPING: PARCEL REPORT, NO ZONING LETTER, OR ZONING REPORT WAS PROVIDED TO THIS SURVEYOR.

2. PROPOSED CONTOURS SHOWN HEREON ARE FOR THE MASS GRADING & INFRASTRUCTURE PACKAGE OF THIS SITE ONLY. INDIVIDUAL FINAL SITE DEVELOPMENT PLANS FOR EACH LOT WILL BE PROVIDED BY OTHERS AFTER PRELIMINARY PLAT APPROVAL ESTABLISHING FINAL FINISH GRADE OF PAVING, CURBS AND FINISH FLOOR ELEVATIONS OF BUILDINGS ETC.

3. SEE SHEET C1.00 SITE LAYOUT PLAN IN THIS SUBMITTAL FOR DETAILED INFORMATION ON INFRASTRUCTURE IMPROVEMENTS.

SITE DATA

LOT 1
AREA 47,547 SQ.FT. OR 1.09 AC.
PROPOSED USE - RESTAURANT
BUILDING AREA - 2411 SQ.FT.

LOT 2
AREA 46,007 SQ.FT. OR 1.06 AC.
PROPOSED USE - RESTAURANT
BUILDING AREA - 3365 SQ. FT.

LOT 3
AREA 75,522 SQ.FT. OR 1.73 AC.
PROPOSED USE - RESTAURANT
BUILDING AREA - 4417 SQ.FT.

TOTAL SITE AREA - 169,076 SQ.FT. OR 3.88 AC.

PREPARED BY:
BARGE DESIGN SOLUTIONS, INC.
615 3RD AVENUE NORTH, SUITE 700
NASHVILLE, TENNESSEE 37210
CONTACTS:
MARK E. SAWYER, RLS
E-MAIL: Mark.Sawyer@Bargedesign.com
ANDREW HARDISON, PE
EMAIL: Drew.Hardison@bargedesign.com

OWNER/DEVELOPER:
COLUMBIA JAMES CAMPBELL BOULEVARD, LLC
3841 GREEN HILLS VILLAGE, SUITE 400
NASHVILLE, TENNESSEE 37215
CONTACT: JULIA LANNON
TEL:
EMAIL: jlannon@oldacremcdonald.com

IN STATE PLANE COORDINATE SYSTEM 1983

40 20 0 20 40
SCALE: 1" = 40'

BARGE DESIGN SOLUTIONS
615 Third Avenue South, Suite 700, Nashville, Tennessee 37210
PHONE (615)254-1500 FAX (615) 255-8572

MARK E. SAWYER
TENNESSEE
REGISTERED
LAND SURVEYOR
2024

Digitally signed by Mark E Sawyer
Date: 2024.10.18 15:17:50-05'00'

COLUMBIA COMMONS

PRELIMINARY SUBDIVISION PLAT
115 SOUTH JAMES CAMPBELL BOULEVARD
9TH CIVIL DISTRICT
COLUMBIA, MAURY COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
JMJ	MES	10-18-24	ORIGINAL ISSUE
MES	MES	10-18-24	REVISED OWNER/DEVELOPER NAME

FILE NO. 3853101

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10/18/2024
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LandRes.pen Workspace: LandRes

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MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

CONTACTS

DEVELOPER	OM3, LLC 3841 GREEN HILLS VILLAGE | SUITE 400 NASHVILLE, TN 37215 CONTACT: JULIA LANNON
DESIGN PROFESSIONAL	BARGE DESIGN SOLUTIONS 615 3RD AVENUE SOUTH | SUITE 700 NASHVILLE, TN 37210 615.252.4296 CONTACT: DREW HARDISON, PE
COLUMBIA ENGINEERING DIVISION	700 N GARDEN STREET COLUMBIA, TN 38401 931.560.1500
COLUMBIA PUBLIC WORKS	110 SANTE FE PIKE COLUMBIA, TN 38401 931.388.8650



VICINITY MAP

NOT TO SCALE

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
C0.00	COVER SHEET
C0.01	CIVIL CONSTRUCTION NOTES
C0.21	EXISTING CONDITIONS
C0.41	DEMOLITION PLAN
C1.01	SITE LAYOUT PLAN
C2.01	GRADING & DRAINAGE PLAN
C2.02	ROADWAY CROSS SECTIONS
C2.41	INITIAL EROSION AND SEDIMENT CONTROL PLAN
C2.42	INTERMEDIATE EROSION AND SEDIMENT CONTROL PLAN
C2.43	FINAL EROSION AND SEDIMENT CONTROL PLAN
C3.01	UTILITY PLAN
C4.01	SANITARY SEWER PROFILE
C4.21	STORM PROFILE
C4.22	STORM PROFILE
C7.01	SITE DETAILS
C7.02	SITE DETAILS
C7.03	SITE DETAILS

PERMIT NUMBERS

PROPERTY DATA

PARCEL ID	113E B 004.00
TAX DISTRICT	
MAP	113E
ZONING	CD-4C

FEMA NOTE

THIS PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY NO. 47119C, PANEL NO. 0285E, DATED APRIL 16, 2007. ZONE "X."

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Digitally signed by Andrew B Hardison
Date: 2024.10.08 09:54:35 -05'00'

COVER SHEET

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REV	DR.	CHK.	DATE/DESCRIPTION
1	ABB	JS	09.19.2024 PERMIT SET

C0.00

FILE NO. 38531-01

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GENERAL NOTES

1. THE FOLLOWING NOTES ARE APPLICABLE TO ALL CIVIL DOCUMENTS.
2. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC. DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE OWNER AND ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN OWNER'S AND ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.
3. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND OBTAIN ALL PERMITS AND BOND, IF REQUIRED, PRIOR TO BEGINNING WORK.
4. THE SITE LAYOUT IS BASED ON THE CONTROL POINTS AS NOTED.
5. DO NOT SCALE DRAWING AS THEY ARE REPRODUCTION AND SUBJECT TO DISTORTION.
6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE STARTING ANY WORK. DAMAGES TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED ACCORDING TO LOCAL STANDARDS AND SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
7. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFICATIONS AND LIAISON WITH UTILITY COMPANIES IN THE PROCESS OF LOCATING, RELOCATION AND TIE-IN TO PUBLIC UTILITIES. ALSO, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL INSPECTORS A MINIMUM 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, VERIFY WITH GOVERNING AGENCY
8. ALL DAMAGE TO EXISTING ASPHALT PAVEMENT TO REMAIN, WHICH RESULTS FROM NEW CONSTRUCTION, SHALL BE REPLACED WITH LIKE MATERIALS AT CONTRACTOR'S EXPENSE.
9. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND OVERHEAD ELECTRICAL WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK, THE CONTRACTOR MUST WORK IN CLOSE PROXIMITY OF THE ABOVE NOTED WIRES, THE ELECTRICAL COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES TAKEN.
10. IN EASEMENTS AND RIGHTS-OF-WAY, CONTRACTOR SHALL PROTECT AND RESTORE SAID PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING AT THE COMMENCEMENT OF CONSTRUCTION EXCEPT AS NOTED.
11. THESE PLANS, PREPARED BY BARGE DESIGN SOLUTIONS, DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF BARGE DESIGN SOLUTIONS REGISTERED PROFESSIONAL ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND /OR LOCAL REGULATIONS.
12. THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.
13. UNLESS NOTED, SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS FOR REVIEW. DESIGN DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
14. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF TN PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED AND PAID FOR BY THE CONTRACTOR.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO EXISTING VEGETATION DURING CONSTRUCTION. THE COST TO REPLACE OR RESTORE VEGETATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
17. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ON COPY OF THE CURRENT CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED PERMITS.
18. ALL PAVING, CONSTRUCTION, MATERIALS AND WORKMANSHIP WITHIN THE STATE ROW SHALL BE IN ACCORDANCE WITH (TDOT) SPECIFICATIONS AND STANDARDS (2021 EDITION).
19. ALL PAVING, CONSTRUCTION, MATERIALS AND WORKMANSHIP WITHIN THE CITY OF COLUMBIA RIGHT-OF-WAY (ROW) SHALL BE IN ACCORDANCE WITH COLUMBIA SPECIFICATIONS AND STANDARDS (LATEST EDITION)
20. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
21. ANY WELLS DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.

DEMOLITION NOTES

1. THE A/E SHALL BE NOTIFIED OF ANY ITEMS REMAINING THAT ARE NOT SPECIFICALLY NOTED TO BE REMOVED AND THAT INTERFERE WITH CONSTRUCTION.
2. CONTRACTOR SHALL CHECK ALL EXISTING GRADES AND DIMENSIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE A/E PRIOR TO BEGINNING WORK.
3. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, NOTIFY OWNERS PRIOR TO BEGINNING WORK, AND REPAIR CONTRACTOR-CAUSED DAMAGE ACCORDING TO LOCAL STANDARDS AND CODES AT THE EXPENSE OF THE CONTRACTOR.
4. ALL DAMAGE TO EXISTING PAVEMENTS AND SIDEWALKS/CURBS TO REMAIN, WHICH RESULT FROM NEW CONSTRUCTION, SHALL BE REPLACED WITH LIKE MATERIALS AT THE EXPENSE OF THE CONTRACTOR.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND ELECTRICAL WIRES AND SERVICES. ANY TIME IN THE PURSUIT OF THIS WORK THE CONTRACTOR MUST WORK IN CLOSE PROXIMITY OF THE ABOVE-NOTED WIRES, THE ELECTRIC COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES TAKEN.
6. CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION AND CONSTRUCTION.
7. IN THE EVENT OF ANY DISCREPANCIES AND/OR ERRORS FOUND IN THE DRAWINGS, OR IF PROBLEMS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. IF THE ENGINEER IS NOT NOTIFIED, THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR THE COST OF ANY REVISION.
8. THE CONTRACTOR SHALL SAWCUT CONCRETE WALKS, CURBS AND ASPHALT PAVEMENTS AT THE NEAREST CONSTRUCTION/EXPANSION/CONTROL JOINT IN AREAS WHERE PROPOSED AND EXISTING CONSTRUCTION MEET.
9. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIAL PROPERLY OFF-SITE AT HIS OWN EXPENSE.

GRADING NOTES

1. ALL STORMWATER PIPES, STRUCTURES, AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF COLUMBIA STANDARD SPECIFICATIONS AND DETAILS.
2. NO TREES ARE TO BE REMOVED AND/OR VEGETATION DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES AND ONLY AS APPROVED BY OWNER'S REPRESENTATIVE AND CITY ENGINEER. SEE DEMO PLANS FOR TREES VEGETATION TO REMAIN.
3. STRIP ALL TOPSOIL AND OTHER DELETERIOUS MATERIALS AS PER SOIL CONSULTANT'S GEOTECH REPORT, TO ACCOMPLISH GRADING AS INDICATED ON THE PLANS. STOCKPILE TOPSOIL IN AREA(S) DESIGNATED BY THE OWNER FOR REUSE IN LANDSCAPE ISLANDS AND / OR GREEN SPACE AREAS.
4. ADJUST FINAL GRADES TO EXISTING PAVEMENTS TO ASSURE A SMOOTH TRANSITION.
5. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS. SUBGRADE SOFTENED BY PERCHED WATER IN FOUNDATIONS AND PAVEMENT AREAS MUST BE UNDERCUT AND RE-COMPACTED WITH SUITABLE FILL MATERIAL AS DIRECTED BY THE ON-SITE SOIL CONSULTANT.
6. IN NO CASE SHALL SLOPE HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH, INCLUDING TRENCH CONSTRUCTION, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL REGULATIONS, SPECIFICALLY THE CURRENT OSHA HEALTH AND SAFETY STANDARDS FOR EXCAVATIONS (29 CRF PART 1926) SHALL BE FOLLOWED
7. THE SITE GEOTECHNICAL REPORT SHALL BE FOLLOWED FOR THE PLACEMENT AND COMPACTION OF THE MASS GRADED AREA. IT IS INTENDED THAT THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT BE FOLLOWED. IN THE EVENT OF CONFLICT BETWEEN THE DRAWINGS AND THE GEOTECHNICAL REPORT, MAKE NO ASSUMPTIONS. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR CLARIFICATION.
8. ALL GRADED AREAS, INCLUDING SLOPES, ARE TO BE MULCHED AND SEEDED AS SOON AS POSSIBLE AFTER GRADING IS COMPLETED.
9. CONSTRUCT EROSION CONTROL AS SHOWN ON DRAWINGS PRIOR TO BEGINNING GRADING OPERATIONS.
10. CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS PRIOR TO BEGINNING WORK.
11. CONTOUR LINES AND SPOT ELEVATIONS ARE THE RESULT OF A DETAILED ENGINEERING GRADING DESIGN AND REFLECT A PLANNED INTENT WITH REGARD TO DRAINAGE AND MOVEMENT OF MATERIALS. CONTOUR LINES AND SPOT ELEVATIONS ARE BASED ON ESTABLISHED PROJECT BENCHMARK, WHICH THE CONTRACTOR SHALL VERIFY WITH TOPOGRAPHY SURVEY. SHOULD THE CONTRACTOR HAVE ANY QUESTION OF THE INTENT OR ANY PROBLEMS WITH CONTINUITY OF GRADES, THE ENGINEER SHOULD BE CONTACTED IMMEDIATELY PRIOR TO BEGINNING WORK.
12. ALL UN-SURFACED AREA DISTURBED BY GRADING OPERATIONS SHALL RECEIVE SEED AND STRAW. ALL SLOPES 3:1 OR STEEPER SHALL BE STABILIZED WITH EROSION CONTROL MATTING INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO MAINTAIN DISTURBED AREAS UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
13. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA, ANY MUD/CONSTRUCTION DEBRIS THAT MAY BE TRANSPORTED ONTO SURROUNDING ROADS OR PARKING AREAS SHALL BE SWEPT AND CLEANED IMMEDIATELY.
14. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
15. CONSTRUCTION ENTRANCE SHALL BE IN PLACE PRIOR TO ANY COMBUSTIBLES, I.E. CONSTRUCTION TRAILER, LUMBER, ETC. BEING PRESENT ON JOB SITE. IN ADDITION TO THE CONSTRUCTION ENTRANCE, AN ALL WEATHER DRIVE MUST BE IN PLACE AND ACCESSIBLE TO ALL AREAS OF THE CONSTRUCTION SITE THAT WILL CONTAIN COMBUSTIBLES THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROCESS. THE ALL WEATHER DRIVE SHALL BE NO LESS THAN 20 FEET OF UNOBSTRUCTED WIDTH WITH ADEQUATE TURNING RADIUS CAPABLE OF SUPPORTING THE IMPOSED LOADS OF THE FIRE DEPARTMENT PROCESS.
16. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
17. EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1'.
18. THIS GRADING AND DRAINAGE PLAN IS NOT A DETERMINATION OR GUARANTEE OF THE SUITABILITY OF SURFACE CONDITIONS FOR THE WORK INDICATED. DETERMINATION OF THE SUBSURFACE CONDITIONS FOR THE WORK INDICATED IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
19. DO NOT DISTURB VEGETATION OR REMOVE ANY EXISTING TREES EXCEPT WHERE DESIGNATED ON THE PLAN.
20. TOP OF GRATE ELEVATIONS AND LOCATION OF COORDINATES FOR DRAINAGE STRUCTURES SHALL BE SHOWN ON THE PLAN UNLESS OTHERWISE NOTED. THE GRATES SHALL SLOPE LONGITUDINALLY WITH THE PAVEMENT GRADES.

EROSION CONTROL NOTES

1. NO VEGETATION IS TO BE DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES.
2. TOPSOIL IS TO BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED, AND REDISTRIBUTED OVER GRADED AREAS TO A MINIMUM DEPTH OF 6". THE SOIL IS TO BE STOCKPILED IN THE LOCATIONS AS DESIGNATED BY THE OWNER.
3. ALL GRADED AREAS INCLUDING 3:1 SLOPES ARE TO BE MULCHED AND SEEDED WITHIN 7 DAYS OF FINAL GRADING. ANY AREAS LEFT UNDISTURBED FOR 7 DAYS SHALL HAVE ADEQUATE STABILIZATION.
4. ALL DIMENSIONS AND LOCATIONS OF TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DESIGNATED BY THE OWNER'S REPRESENTATIVE OR ENGINEER.
5. WHEN THE TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES ARE NO LONGER REQUIRED FOR THE INTENDED PURPOSE, IN THE OPINION OF THE OWNER'S REPRESENTATIVE OR ENGINEER, THEY SHALL BE REMOVED.
6. ALL NEW STRUCTURES AND EXISTING STRUCTURES SHALL HAVE SEDIMENT REMOVED PRIOR TO ACCEPTANCE.
7. SILT BARRIERS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN APPROXIMATELY 50% FILLED WITH SUCH SEDIMENT.
8. REPLACE SILT BARRIERS WHEN CONDITIONS WARRANT AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND CITY ENGINEER.
9. INSTALL SILT FENCE AROUND THE BASE OF ANY STOCK PILES.
10. CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA, THE EQUIPMENT MAINTENANCE AND CLEANING AREA, CONTRACTOR'S EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, CONCRETE TRUCK WASHOUT AREA, OFFICE TRAILERS, AND TOILET FACILITIES. CONTRACTOR TO COORDINATE EXACT LOCATION WITH PROJECT ENGINEER AND CITY ENGINEER DURING PRECONSTRUCTION MEETING.
11. ALL UNDISTURBED AREAS INCLUDING WETLAND/STREAM BUFFERS, SHALL BE FIELD MARKED AND KEPT FREE OF CONSTRUCTION EQUIPMENT.
12. CURRENT VERSIONS OF THE STORM WATER POLLUTION PREVENTION PLAN, NOTICE OF INTENT, AND NOTICE OF COVERAGE SHALL BE KEPT ON SITE AND IS TO BE ACCESSIBLE FOR THE DURATION OF THE PROJECT.
13. APPLY PERMANENT SEEDING WHENEVER GRADING OPERATIONS ARE COMPLETED AND ALL CONSTRUCTION OPERATIONS WILL NOT IMPACT THE DISTURBED AREA. APPLY PERMANENT SEEDING TO ALL NON-CONSTRUCTION AREAS THAT SHOW SIGNS OF EXCESSIVE EROSION.
14. MULCH WITH STRAW AT A RATE OF 100 LBS/1000 S.F. OVER THE SEEDED AREAS.
15. EROSION CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDEC'S EROSION AND SEDIMENT CONTROL HANDBOOK AND TDEC'S CONSTRUCTION ACTIVITY PERMIT REQUIREMENTS. THE DEVICES SHOWN ON THE DRAWINGS ARE THE MINIMUM REQUIRED. THE CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION CONTROL DEVICES AS NEEDED.
16. CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH THE CITY OF COLUMBIA. CONTRACTOR TO COORDINATE EXACT LOCATION WITH THE CITY OF COLUMBIA. CONTROL OF OTHER SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICALS, LITTER, AND SANITARY WASTES THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITTEE. LOCATION OF AND/OR NOTES REFERRING TO THESE BMP'S SHALL BE SHOWN ON THE EPSC PLAN.
17. THE SITE SHALL BE STABILIZED WITHIN 14 DAYS AFTER CONSTRUCTION HAS TEMPORARILY/PERMANENTLY CEASED.
18. VEGETATION AND EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT ARE AFFECTED BY CONSTRUCTION SHALL BE REPAIRED OR REPLACED WITHIN 7 DAYS.
19. PERIMETER MEASURES SHALL BE IN PLACE AND INSTALLED BEFORE ANY EARTHWORK ACTIVITIES.

UTILITY NOTES

1. ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS OF THE CITY OF COLUMBIA.
2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND INVERTS OF ALL EXISTING UTILITY LINES AND STRUCTURES (INCLUDING STORM DRAINAGE PIPES OR STRUCTURES) PRIOR TO ORDERING OF MATERIALS AND THE COMMENCEMENT OF CONSTRUCTION.
3. THE ROADWAY SHALL BE CONSTRUCTED TO SUBGRADE. ALL PROPOSED FILLS SHALL BE INSTALLED AND COMPACTED PRIOR TO CONSTRUCTION OF SANITARY SEWERS.
4. SEWER SERVICE LINE CLEAN-OUT ASSEMBLY SHALL BE INSTALLED ACCORDING TO THE SPECIFICATIONS OF THE CITY OF COLUMBIA.
5. ALL PUBLIC AND PRIVATE WATER MAINS SHALL COMPLY WITH NFPA 13 AND 24 UNLESS LOCAL JURISDICTION STATES OTHERWISE.
6. CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS, AND PAY ANY APPLICABLE FEES.
7. IN THE EVENT OF ANY DISCREPANCIES AND/OR ERRORS FOUND IN THE DRAWINGS, OR IF PROBLEMS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. IF ENGINEER IS NOT NOTIFIED, THE CONTRACTOR SHALL TAKE RESPONSIBILITY FOR THE COST OF ANY REVISION.
8. THE CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN, REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE, AND COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
9. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND OVERHEAD AND UNDERGROUND ELECTRICAL WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK THE CONTRACTOR MUST WORK IN THE CLOSE PROXIMITY OF THE ABOVE NOTED WIRES, THE ELECTRIC COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES IN THE PROJECT AREA SHOULD BE MADE BY THE CONTRACTOR PRIOR TO THE INITIATION OF CONSTRUCTION.
10. THE OWNER AND ENGINEER DO NOT ASSUME RESPONSIBILITY FOR THE POSSIBILITY THAT, DURING CONSTRUCTION, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED OR THAT ACTUAL LOCATION OF THOSE SHOWN MAY BE DIFFERENT FROM LOCATIONS DESIGNATED ON THE CONTRACT DRAWINGS. IN AREAS WHERE IT IS NECESSARY THAT EXACT LOCATIONS BE KNOWN OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, FURNISH ALL LABOR AND TOOLS NECESSARY TO EITHER VERIFY AND SUBSTANTIATE OR DEFINITELY ESTABLISH THE POSITION OF UNDERGROUND UTILITY LINES.
11. MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE BETWEEN ALL SANITARY SEWER AND WATERLINE CROSSINGS, UNLESS LOCAL UTILITY JURISDICTION SPECS STATES OTHERWISE.

TDOT NOTES

1. THERE WILL BE NO INCREASE IN THE Q50 RUNOFF FROM THE DEVELOPMENT ONTO TDOT ROW.
2. ALL DRIVEWAYS MEET AASHTO INTERSECTION SIGHT DISTANCE.
3. ALL STORMWATER PIPES ON TDOT ROW TO BE 18 INCHES OR GREATER.
4. ALL PAVEMENT MARKINGS ON TDOT ROW SHALL BE THERMOPLASTIC.
5. ALL SIGNS TO MEET MUTCD STANDARDS.

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N

PERMIT NUMBERS:

PARCEL ID: 113E B 004.00

FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.

DATUM: TNSPC (NAD83) NAVD 1988

BENCHMARK:

30' 15' 0' 30' 60'

SCALE: 1 INCH = 30 FEET

REV'D	BY	JOB	AS-CONSTRUCTION NOTES	DATE
	DPK	JOB	PERMIT SET	09.13.2024

BARGE DESIGN SOLUTIONS
193 3rd Avenue South | Suite 700 | Nashville, Tennessee 37210
PHONE: (615) 254-1999 | FAX: (615) 255-0412

Authenticated by Andrew B Hardison Date: 2024.10.08 09:55:03 -05'00'

CIVIL CONSTRUCTION NOTES

MASS GRADING & INFRASTRUCTURE PACKAGE

COLUMBIA COMMONS

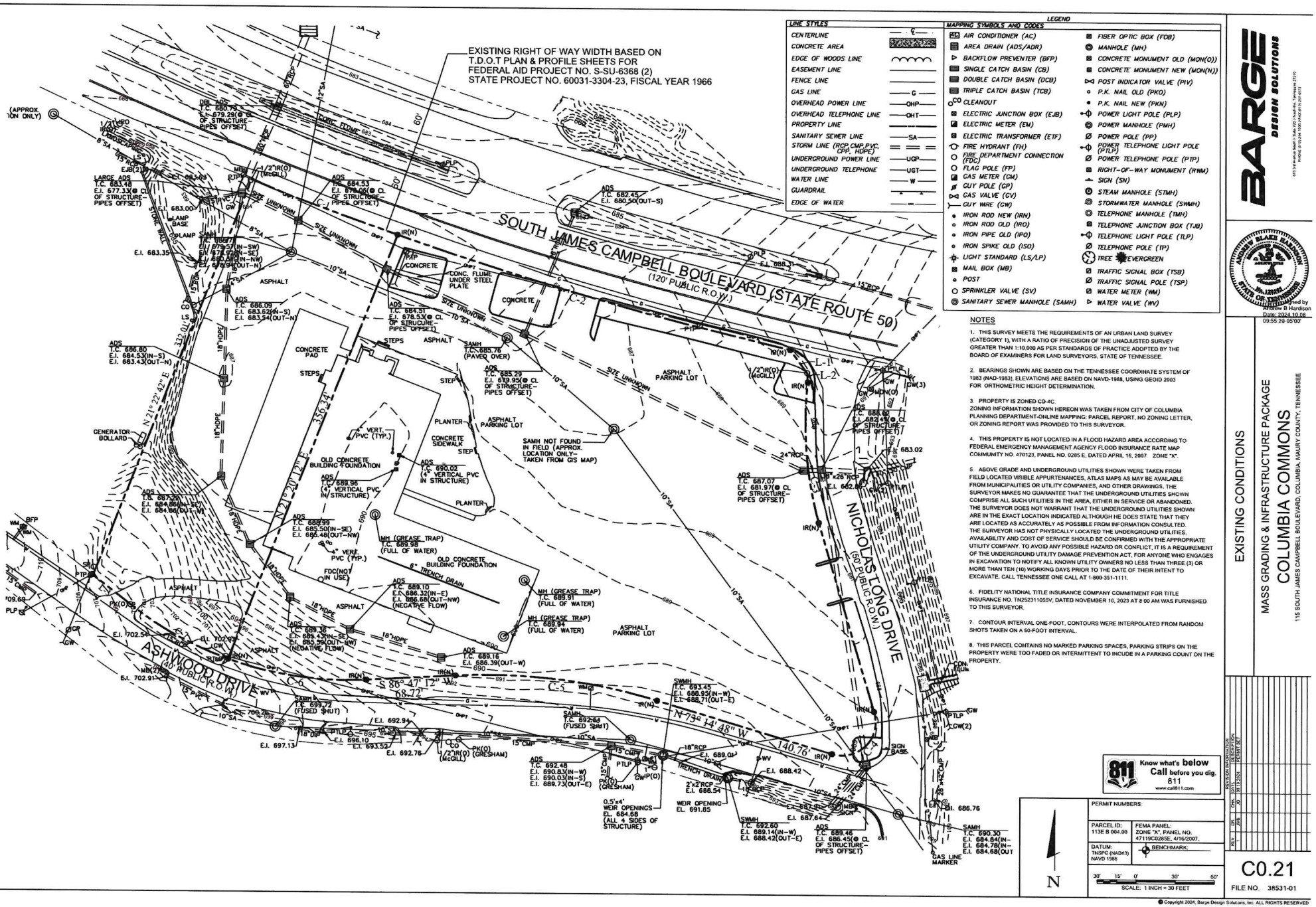
1115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

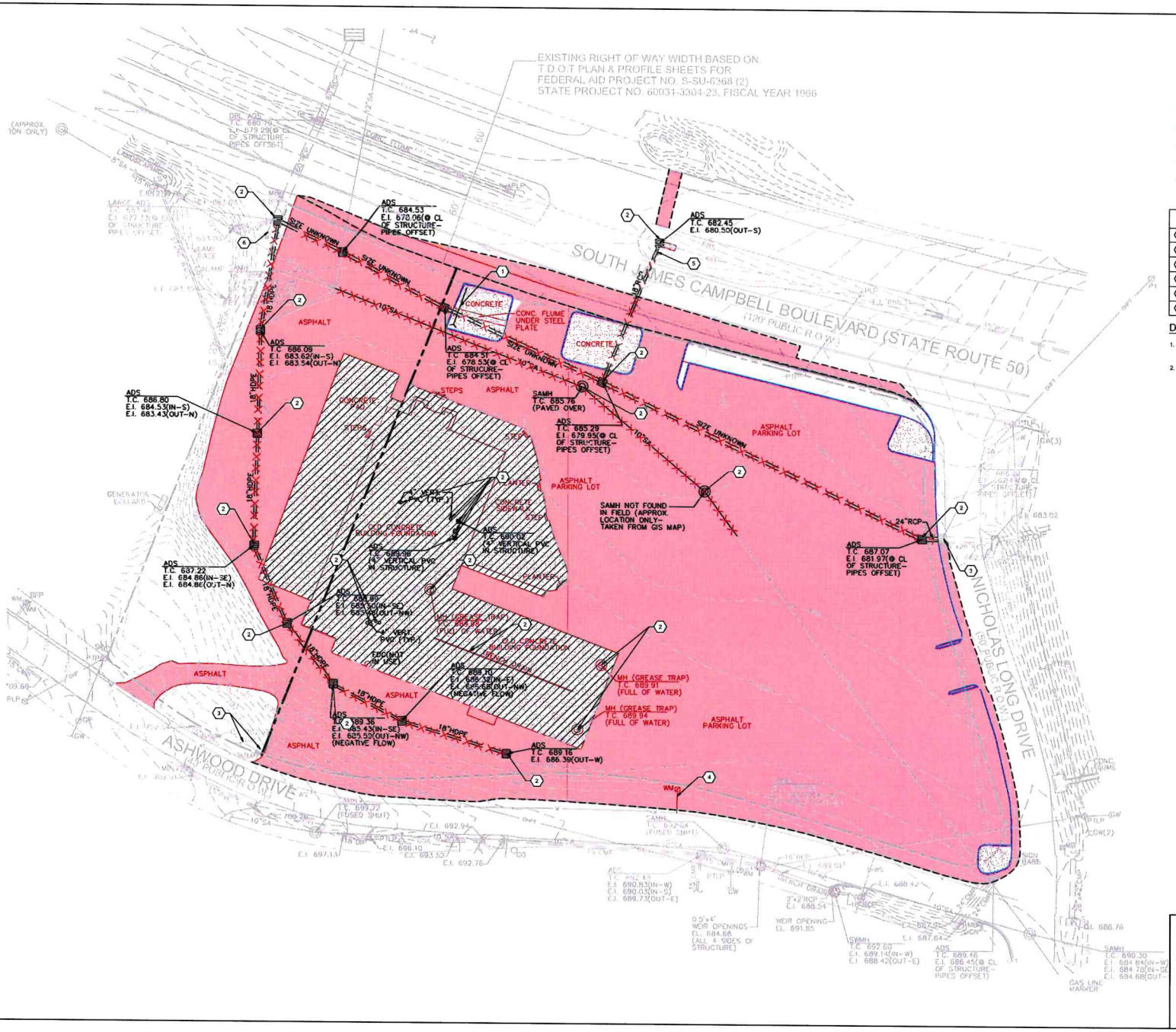
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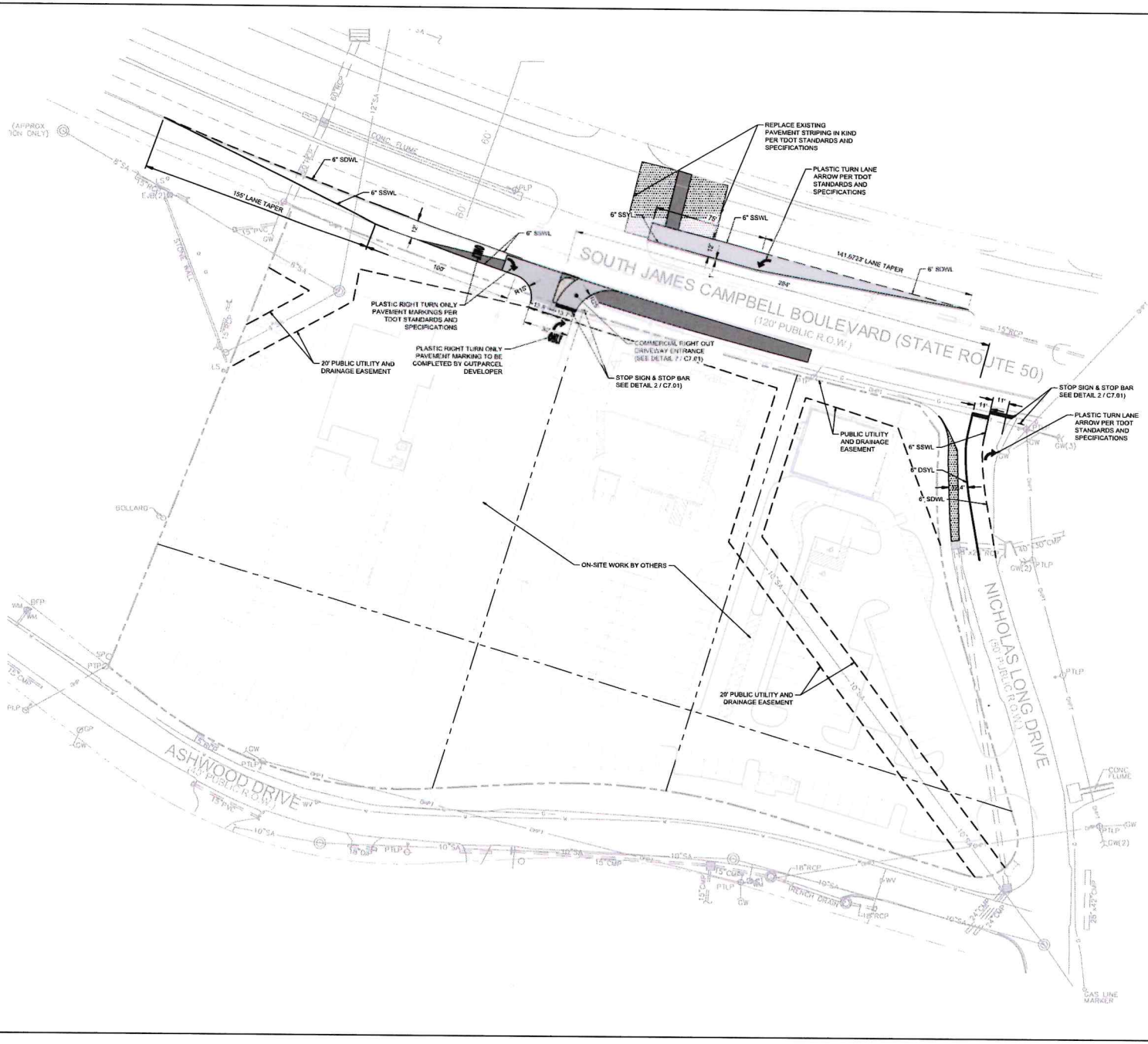
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PLOTTED: 10/8/2024


EXISTING RIGHT OF WAY WIDTH BASED ON
T.D.O.T PLAN & PROFILE SHEETS FOR
FEDERAL AID PROJECT NO. S-SU-6368 (2)
STATE PROJECT NO. 60031-3304-23, FISCAL YEAR 1966
SOUTH JAMES CAMPBELL BOULEVARD (STATE ROUTE 50)
(120' PUBLIC R.O.W.)
NICHOLAS LONG DRIVE
(50' PUBLIC R.O.W.)
ASHWOOD DRIVE
(40' PUBLIC R.O.W.)
LEGEND
LINE STYLES
CENTERLINE
CONCRETE AREA
EDGE OF WOODS LINE
EASEMENT LINE
FENCE LINE
GAS LINE
OVERHEAD POWER LINE
OVERHEAD TELEPHONE LINE
PROPERTY LINE
SANITARY SEWER LINE
STORM LINE (RCP,CMP,PVC, CPP, HDPE)
UNDERGROUND POWER LINE
UNDERGROUND TELEPHONE
WATER LINE
GUARDRAIL
EDGE OF WATER
MAPPING SYMBOLS AND CODES
AIR CONDITIONER (AC)
AREA DRAIN (ADS/ADR)
BACKFLOW PREVENTER (BFP)
SINGLE CATCH BASIN (CB)
DOUBLE CATCH BASIN (DCB)
TRIPLE CATCH BASIN (TCB)
CLEANOUT
ELECTRIC JUNCTION BOX (EJB)
ELECTRIC METER (EM)
ELECTRIC TRANSFORMER (ETF)
FIRE HYDRANT (FH)
FIRE DEPARTMENT CONNECTION (FDC)
FLAG POLE (FP)
GAS METER (GM)
GUY POLE (GP)
GAS VALVE (GV)
GUY WIRE (GW)
IRON ROD NEW (IRN)
IRON ROD OLD (IRO)
IRON PIPE OLD (IPO)
IRON SPIKE OLD (ISO)
LIGHT STANDARD (LS/LP)
MAIL BOX (MB)
POST
SPRINKLER VALVE (SV)
SANITARY SEWER MANHOLE (SAMH)
FIBER OPTIC BOX (FOB)
MANHOLE (MH)
CONCRETE MONUMENT OLD (MON(O))
CONCRETE MONUMENT NEW (MON(N))
POST INDICATOR VALVE (PIV)
P.K. NAIL OLD (PKO)
P.K. NAIL NEW (PKN)
POWER LIGHT POLE (PLP)
POWER MANHOLE (PMH)
POWER POLE (PP)
POWER TELEPHONE LIGHT POLE (PTLP)
POWER TELEPHONE POLE (PTP)
RIGHT-OF-WAY MONUMENT (RWM)
SIGN (SN)
STEAM MANHOLE (STMH)
STORMWATER MANHOLE (SWMH)
TELEPHONE MANHOLE (TMH)
TELEPHONE JUNCTION BOX (TJB)
TELEPHONE LIGHT POLE (TLP)
TELEPHONE POLE (TP)
TREE EVERGREEN
TRAFFIC SIGNAL BOX (TSB)
TRAFFIC SIGNAL POLE (TSP)
WATER METER (WM)
WATER VALVE (WV)
NOTES
1. THIS SURVEY MEETS THE REQUIREMENTS OF AN URBAN LAND SURVEY (CATEGORY 1), WITH A RATIO OF PRECISION OF THE UNADJUSTED SURVEY GREATER THAN 1:10,000 AS PER STANDARDS OF PRACTICE ADOPTED BY THE BOARD OF EXAMINERS FOR LAND SURVEYORS, STATE OF TENNESSEE.
2. BEARINGS SHOWN ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983 (NAD-1983), ELEVATIONS ARE BASED ON NAVD-1988, USING GEOID 2003 FOR ORTHOMETRIC HEIGHT DETERMINATION.
3. PROPERTY IS ZONED CG-4C.
ZONING INFORMATION SHOWN HEREON WAS TAKEN FROM CITY OF COLUMBIA PLANNING DEPARTMENT-ONLINE MAPPING: PARCEL REPORT, NO ZONING LETTER, OR ZONING REPORT WAS PROVIDED TO THIS SURVEYOR.
4. THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY NO. 470123, PANEL NO. 0285 E, DATED APRIL 16, 2007. ZONE "X".
5. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM FIELD LOCATED VISIBLE APPURTENANCES, ATLAS MAPS AS MAY BE AVAILABLE FROM MUNICIPALITIES OR UTILITY COMPANIES, AND OTHER DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES STATE THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION CONSULTED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. TO AVOID ANY POSSIBLE HAZARD OR CONFLICT, IT IS A REQUIREMENT OF THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT, FOR ANYONE WHO ENGAGES IN EXCAVATION TO NOTIFY ALL KNOWN UTILITY OWNERS NO LESS THAN THREE (3) OR MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE. CALL TENNESSEE ONE CALL AT 1-800-351-1111.
6. FIDELITY NATIONAL TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE NO. TN2523110SSV, DATED NOVEMBER 10, 2023 AT 8:00 AM WAS FURNISHED TO THIS SURVEYOR.
7. CONTOUR INTERVAL ONE-FOOT, CONTOURS WERE INTERPOLATED FROM RANDOM SHOTS TAKEN ON A 50-FOOT INTERVAL.
8. THIS PARCEL CONTAINS NO MARKED PARKING SPACES, PARKING STRIPS ON THE PROPERTY WERE TOO FADED OR INTERMITTENT TO INCUDE IN A PARKING COUNT ON THE PROPERTY.
Know what's below Call before you dig. 811 www.call811.com
PERMIT NUMBERS:
PARCEL ID: 113E B 004.00
FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.
DATUM: TNSPC (NAD83) NAVD 1988
BENCHMARK:
N
30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET
BARGE DESIGN SOLUTIONS
ANDREW BLAKE HARDISON
No. 121160
STATE OF TENNESSEE
REGISTERED LAND SURVEYOR
Digitally signed by Andrew B Hardison
Date: 2024.10.08 09:55:20 -05'00'
EXISTING CONDITIONS
MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE
REVISIONS/ISSUANCES
1 DR JAS 08.19.2024 PERMIT SET
C0.21
FILE NO. 38531-01
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USER: ANDREW HARDISON
PLOTTED: 10/8/2024
Page 586 of 748


EXISTING RIGHT OF WAY WIDTH BASED ON
T.D.O.T PLAN & PROFILE SHEETS FOR
FEDERAL AID PROJECT NO. S-SU-6368 (2)
STATE PROJECT NO. 60031-3304-23, FISCAL YEAR 1966
SOUTH JAMES CAMPBELL BOULEVARD (STATE ROUTE 50)
(120' PUBLIC R.O.W.)
NICHOLAS LONG DRIVE
(60' PUBLIC R.O.W.)
ASHWOOD DRIVE
(PUBLIC R.O.W.)
ASPHALT
ASPHALT PARKING LOT
CONCRETE
CONC. FLUME UNDER STEEL PLATE
CONCRETE SIDEWALK
STEPS
PLANTER
SAMH NOT FOUND IN FIELD (APPROX. LOCATION ONLY- TAKEN FROM GIS MAP)
SAMH T.C. 685.76 (PAVED OVER)
MH (GREASE TRAP) T.C. 689.91 (FULL OF WATER)
MH (GREASE TRAP) T.C. 689.94 (FULL OF WATER)
MID GREASE TRAP T.C. 688.38 (FULL OF WATER)
O.D. CONCRETE BUILDING FOUNDATION
TRENCH DRAIN
ADS T.C. 684.53 E.I. 678.06(@ CL OF STRUCTURE- PIPES OFFSET)
ADS T.C. 682.45 E.I. 680.50(OUT-S)
ADS T.C. 686.09 E.I. 683.62(IN-S) E.I. 683.54(OUT-N)
ADS T.C. 684.51 E.I. 678.53(@ CL OF STRUCTURE- PIPES OFFSET)
ADS T.C. 686.80 E.I. 684.53(IN-S) E.I. 683.43(OUT-N)
ADS T.C. 685.29 E.I. 679.95(@ CL OF STRUCTURE- PIPES OFFSET)
ADS T.C. 687.22 E.I. 684.86(IN-2E) E.I. 684.86(OUT-N)
ADS T.C. 690.03 (4" VERTICAL PVC IN STRUCTURE)
ADS T.C. 689.36 (4" VERTICAL PVC IN STRUCTURE)
ADS T.C. 687.07 E.I. 681.97(@ CL OF STRUCTURE- PIPES OFFSET)
ADS T.C. 688.85 E.I. 683.30(IN-SE) E.I. 683.20(OUT-NW)
ADS T.C. 688.70 E.I. 686.32(IN-E) E.I. 685.68(OUT-NW) (NEGATIVE FLOW)
ADS T.C. 689.36 E.I. 685.43(IN-SE) E.I. 685.50(OUT-NW) (NEGATIVE FLOW)
ADS T.C. 689.16 E.I. 686.39(OUT-W)
SIZE UNKNOWN
18"HDPE
10"SA
24"RCP
12"HDPE
6" VERT. (TYP.)
4" VENT PIPE (TYP.)
EDC(NOT IN USE)
WM(3)
WM(4)
SWMH T.C. 692.50 E.I. 689.14(IN-W) E.I. 688.42(OUT-E)
ADS T.C. 689.46 E.I. 686.45(@ CL OF STRUCTURE- PIPES OFFSET)
SAMH T.C. 690.30 E.I. 684.84(IN-W) E.I. 684.72(IN-SE) E.I. 684.68(OUT-
WEIR OPENINGS EL. 684.68 (ALL 4 SIDES OF STRUCTURE)
WEIR OPENING EL. 691.85
2'x2'RCP E.I. 688.54
GAS LINE MARKER
GAS LINE MARKER
GAS LINE MARKER



LEGEND

- 6" CONCRETE (SEE DETAIL 6 ON SHEET C7.01)
- HEAVY DUTY ASPHALT PAVEMENT (SEE DETAIL 3 ON SHEET C7.01)
- MILL AND OVERLAY (ADD ADDITIONAL SURFACE COURSE AS NEEDED TO ACHIEVE FINISHED GRADE) (SEE DETAIL 4 ON SHEET C7.01)
- ASPHALT TRENCH REPAIR (SEE DETAIL 5 ON SHEET C7.01)

ABBREVIATIONS

SSWL: SINGLE SOLID WHITE LINE
SDWL: SINGLE DOTTED WHITE LINE
SSYL: SINGLE SOLID YELLOW LINE
DSYL: DOUBLE SOLID YELLOW LINE

SITE AREA DATA

TOTAL SITE AREA	169,065 SF (3.88 AC)

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N

PERMIT NUMBERS:	
PARCEL ID: 113E B 004.00	FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007,
DATUM: TNSPC (NAD83) NAVD 1988	BENCHMARK:

30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET

BARGE DESIGN SOLUTIONS
615 3rd Avenue South | Suite 700 | Nashville, Tennessee 37210
PHONE (615) 254-1906 | FAX (615) 242-4272

ANDREW BLAKE HARDISON — TENNESSEE — 121 — REGISTERED LANDSCAPE ARCHITECT
Digitally signed by Andrew B Hardison
Date: 2024.10.08 09:55:50 -05'00'

SITE LAYOUT PLAN

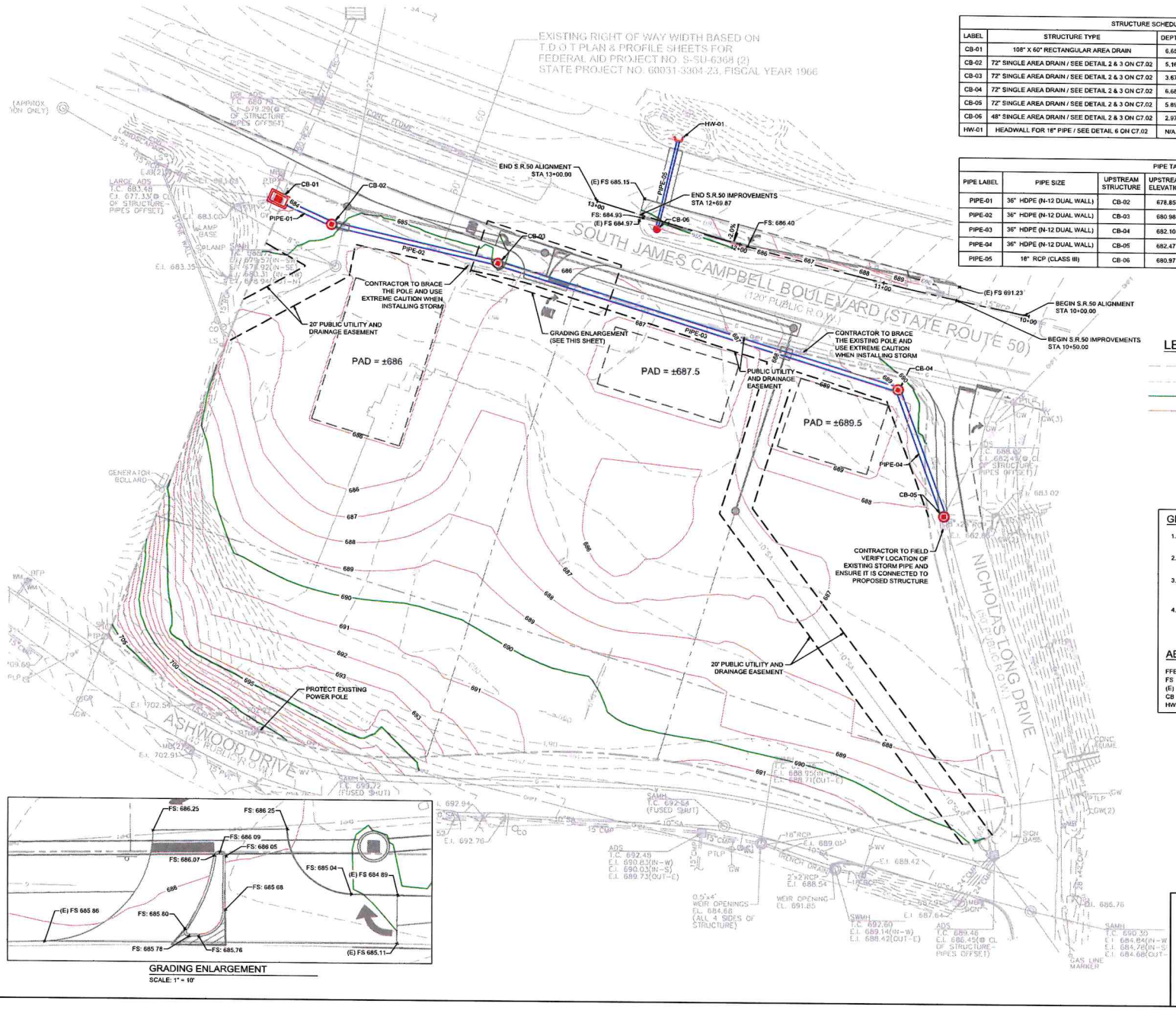
MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REV.	DES.	DRN.	CHK.	DESCRIPTION	DATE
1		JWS	JG	REVISIONS PER CITY COMMENTS FOR PERMIT SET	10.13.2024

C1.00
FILE NO. 38531-01

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PLOTTED: 10/7/2024



GRADING ENLARGEMENT
SCALE: 1" = 10'

STRUCTURE SCHEDULE					
LABEL	STRUCTURE TYPE	DEPTH	GRATE ELEVATION	INVERT IN	INVERT OUT
CB-01	108" X 60" RECTANGULAR AREA DRAIN	6.65	683.46	677.33SE	677.33
CB-02	72" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	5.16	684.01	680.52E	678.85
CB-03	72" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	3.67	684.65	680.98E	680.98
CB-04	72" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	6.68	688.78	682.10S	682.10
CB-05	72" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	5.89	688.36	N/A	682.47
CB-06	48" SINGLE AREA DRAIN / SEE DETAIL 2 & 3 ON C7.02	2.97	683.47	N/A	680.97
HW-01	HEADWALL FOR 18" PIPE / SEE DETAIL 6 ON C7.02	N/A	N/A	680.66S	N/A

PIPE TABLE							
PIPE LABEL	PIPE SIZE	UPSTREAM STRUCTURE	UPSTREAM ELEVATION	DOWNSTREAM STRUCTURE	DOWNSTREAM ELEVATION	LENGTH (FT)	SLOPE (%)
PIPE-01	36" HDPE (N-12 DUAL WALL)	CB-02	678.85	CB-01	677.33	39.4	3.86%
PIPE-02	36" HDPE (N-12 DUAL WALL)	CB-03	680.98	CB-02	680.52	114.5	0.40%
PIPE-03	36" HDPE (N-12 DUAL WALL)	CB-04	682.10	CB-03	680.98	281.7	0.40%
PIPE-04	36" HDPE (N-12 DUAL WALL)	CB-05	682.47	CB-04	682.10	91.6	0.40%
PIPE-05	18" RCP (CLASS III)	CB-06	680.97	HW-01	680.66	61.3	0.50%

LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 470 PROPOSED MAJOR CONTOUR
- 471 PROPOSED MINOR CONTOUR

GRADING AND DRAINAGE NOTES

1. ON SITE CONTOURS REPRESENT APPROXIMATE SUBGRADE OF FINAL BUILD-OUT.
2. SEE SHEET C0.01 FOR ADDITIONAL GRADING AND DRAINAGE NOTES.
3. CONTRACTOR TO FIELD VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
4. HDPE PIPE CONNECTIONS TO CONCRETE STRUCTURES SHALL BE MADEWITH WATERTIGHT CONNECTIONS SUCH AS Z-LOK STM CONNECTORS OR KOR-N-SEAL BOOTS.

ABBREVIATIONS

FFE	FINISHED FLOOR ELEVATION
FS	FINISHED SURFACE
(E)	EXISTING
CB	CATCH BASIN
HW	HEADWALL

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N

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REVISION INFORMATION			
REV.	DN	CHK	DESCRIPTION
1	JWB	JD	08.13.2024 PERMIT SET

BARGE DESIGN SOLUTIONS
315 3rd Avenue South | Suite 700 | Nashville, Tennessee 37210
PHONE (615) 244-1130 | FAX (615) 255-8972

Digitally signed by Andrew B Hardison
Date: 2024.10.08 09:56:07 -05'00'

GRADING & DRAINAGE PLAN

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

C2.01

FILE NO. 38531-01

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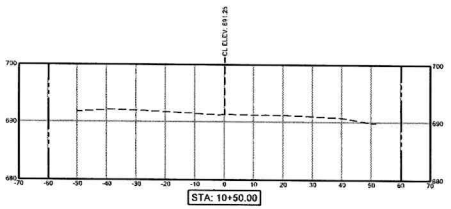
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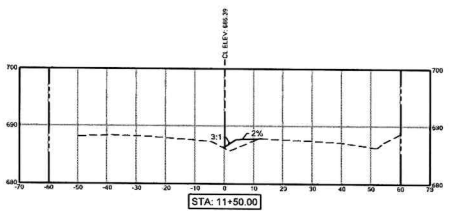
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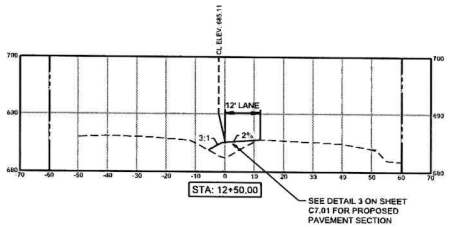
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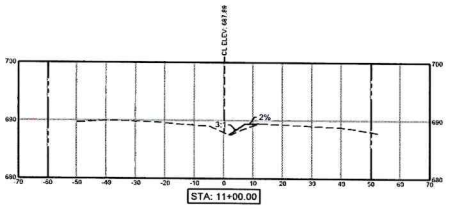
LEGEND

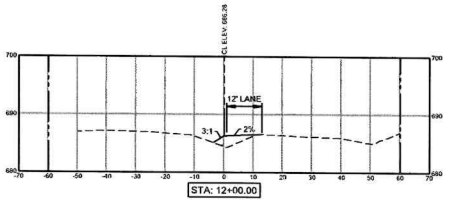
- EXISTING GRADE
- PROPOSED GRADE
- R.O.W.

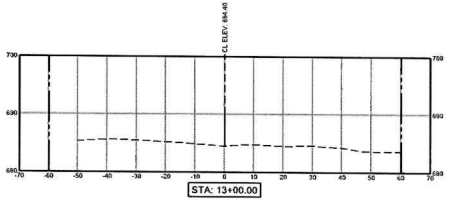












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N

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FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.

DATUM: TNSPC (NAD83) NAVD 1988

BENCHMARK:

SCALE: H: 1" = 20'
V: 1" = 10'

BARGE DESIGN SOLUTIONS
115 3rd Avenue South | Suite 700 | Nashville, Tennessee 37201
PHONE (615)254-7999 | FAX (615)254-5013

Digitally signed by Andrew B Hardison
Date: 2024.10.08 09:56:23-05'00'

ROADWAY CROSS SECTIONS

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

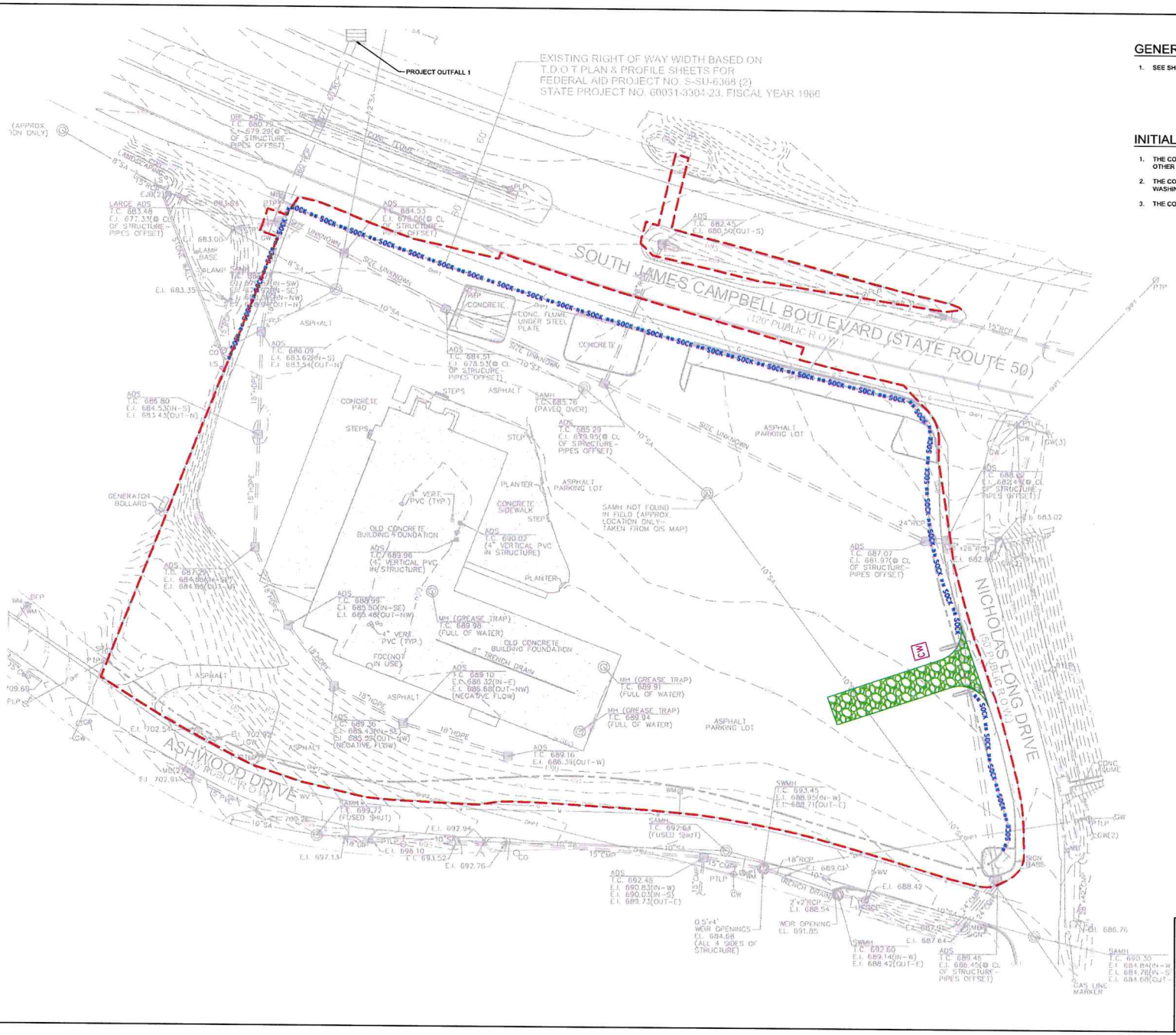
REV.	DR.	CHK.	REVISION INFORMATION	DATE
1	JRB	JD	PERMIT SET	09.19.2024

C2.02

FILE NO. 38531-01

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USER: jbrown
PW:\\Barge-pw.bargedesign.com:Documents\Projects\38531-01_CADCIVIL\PLOT\38531-01_C2.02.dwg
PLOTTED: 10/8/2024



GENERAL NOTES

1. SEE SHEET C0.01 FOR EROSION AND SEDIMENT CONTROL NOTES.

INITIAL EPSC SEQUENCING

1. THE CONTRACTOR SHALL INSTALL THE CONSTRUCTION EXIT BEFORE ANY OTHER WORK CAN BEGIN ON SITE.
2. THE CONTRACTOR SHALL DESIGNATE A CONCRETE WASHOUT AND TIRE WASHING FACILITY ONSITE.
3. THE CONTRACTOR SHALL INSTALL FILTER SOCK AS SHOWN.

LEGEND

- LIMITS OF DISTURBANCE
- SOCK FILTER SOCK (SEE DETAIL 1 ON SHEET C7.03)
- CONSTRUCTION EXIT (SEE DETAIL 2 ON SHEET C7.03)
- CW CONCRETE WASHOUT (SEE DETAIL 3 ON SHEET C7.03)

LIMITS OF DISTURBANCE = 4.38 AC

Know what's below Call before you dig. 811 www.call811.com

N

PERMIT NUMBERS:

PARCEL ID: 113E B 004.00

FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.

DATUM: TNSPC (NAD83) NAVD 1988

BENCHMARK:

30' 15' 0' 30' 60'

SCALE: 1 INCH = 30 FEET

BARGE DESIGN SOLUTIONS
115 3rd Avenue South | Suite 700 | Nashville, Tennessee 37201
Phone: 615.254.5436 | Fax: 615.254.5437

ANDREW BLAKE HARDISON — STATE OF TENNESSEE — REGISTERED ENGINEER

Digitally signed by Andrew B Hardison
Date: 2024.10.08 09:56:39 05'00'

INITIAL EROSION AND SEDIMENT CONTROL PLAN

MASS GRADING & INFRASTRUCTURE PACKAGE

COLUMBIA COMMONS

115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

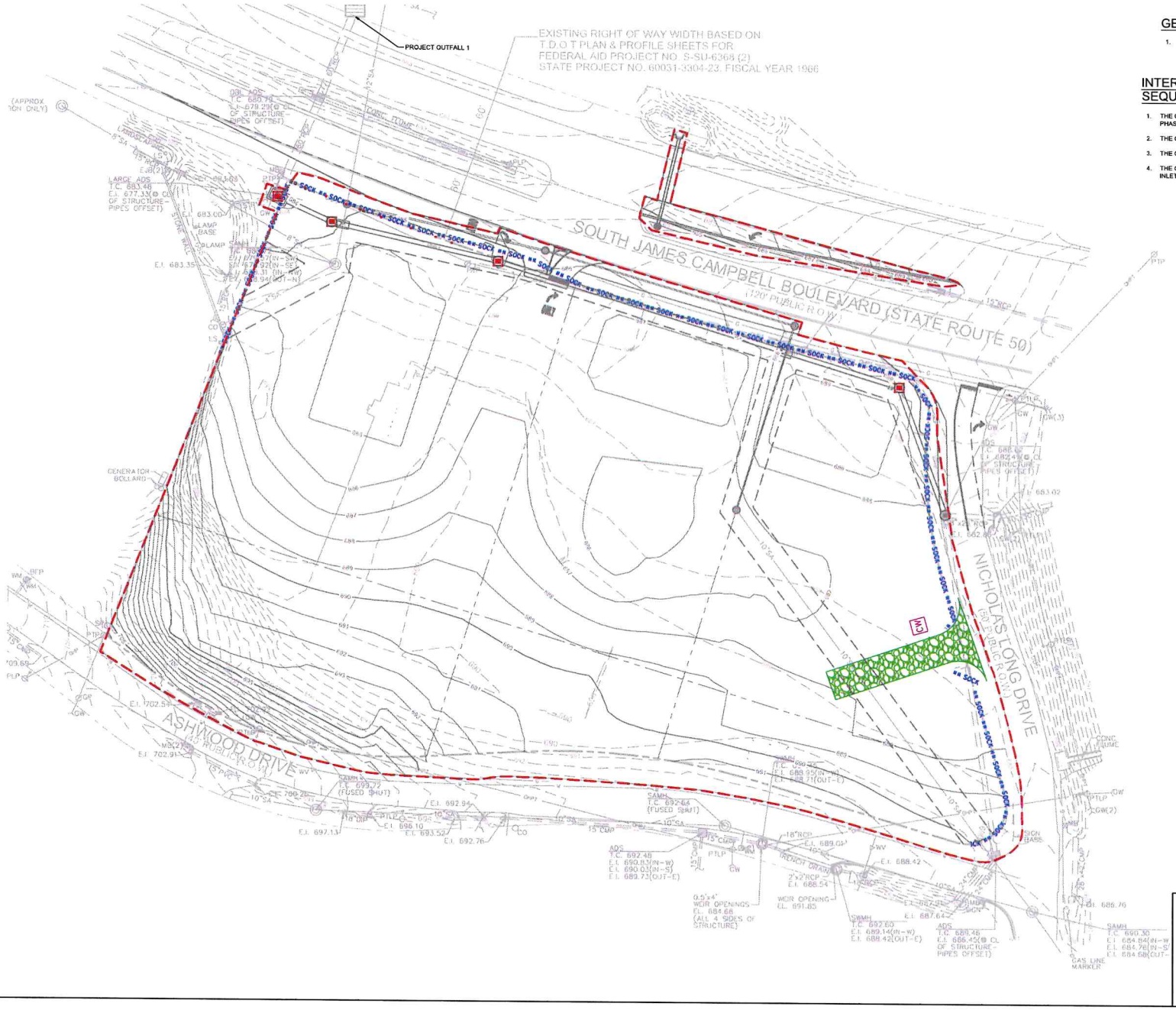
REV	BY	JOB	DATE	DESCRIPTION
1	DR	JOB	09.18.2024	PERMIT SET

C2.41

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PLOTTED: 10/8/2024



GENERAL NOTES

1. SEE SHEET C0.01 FOR EROSION AND SEDIMENT CONTROL NOTES.

INTERMEDIATE & FINAL EPSC SEQUENCING

1. THE CONTRACTOR SHALL MAINTAIN ALL BMP'S INSTALLED IN THE INITIAL PHASE UNTIL NO LONGER NECESSARY.
2. THE CONTRACTOR SHALL ADJUST FILTER SOCK AS NEEDED.
3. THE CONTRACTOR TO CONSTRUCT THE SITE AS SHOWN.
4. THE CONTRACTOR TO INSTALL INLET PROTECTION ON NEW STORM INLETS AS SHOWN.

LEGEND

- LIMITS OF DISTURBANCE
- ** SOCK ** FILTER SOCK (SEE DETAIL 1 ON SHEET C7.03)
- CONSTRUCTION EXIT (SEE DETAIL 2 ON SHEET C7.03)
- CW CONCRETE WASHOUT (SEE DETAIL 3 ON SHEET C7.03)
- INLET PROTECTION (SEE DETAIL 4 ON SHEET C7.03)

LIMITS OF DISTURBANCE = 4.38 AC

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PERMIT NUMBERS:

PARCEL ID: 113E B 004.00

FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.

DATUM: TNSPC (NAD83) NAVD 1988

BENCHMARK:

30' 15' 0' 30' 60'

SCALE: 1 INCH = 30 FEET

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1	JKB	JD	08.19.2024	PERMIT SET

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315 3rd Avenue South | Suite 700 | Nashville, Tennessee 37210
PHONE (615) 244-1166 | FAX (615) 256-6012

ANDREW B. HARDISON — REGISTERED PROFESSIONAL ENGINEER — STATE OF TENNESSEE

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Date: 2024.10.08 09:56:57-05'00'

INTERMEDIATE EROSION AND SEDIMENT CONTROL PLAN

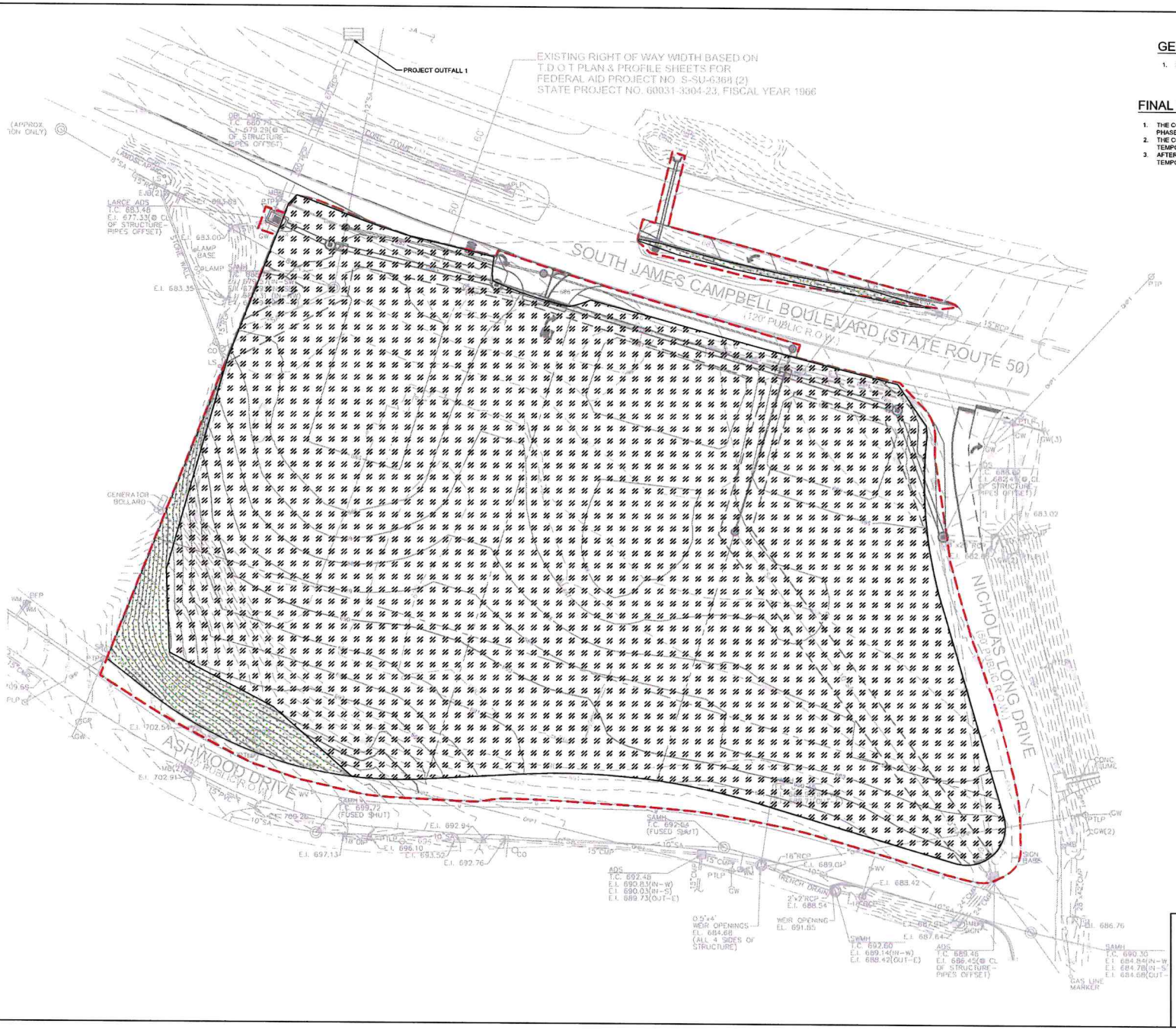
MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

C2.42

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PLOTTED: 10/8/2024



GENERAL NOTES

1. SEE SHEET C0.01 FOR EROSION AND SEDIMENT CONTROL NOTES.

FINAL EPSC SEQUENCING

1. THE CONTRACTOR SHALL MAINTAIN ALL BMP'S INSTALLED IN THE INITIAL PHASE UNTIL NO LONGER NECESSARY.
2. THE CONTRACTOR SHALL APPLY NORTH AMERICAN GREEN SC150 TEMPORARY EROSION CONTROL BLANKET W/ SEEDING AS SHOWN.
3. AFTER SITE IS STABILIZED THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

LEGEND

- LIMITS OF DISTURBANCE
- NORTH AMERICAN GREEN SC150 TEMPORARY EROSION CONTROL BLANKET W/ SEEDING (SEE DETAIL 1 ON SHEET C7.05)
- SEED AND STRAW

LIMITS OF DISTURBANCE = 4.38 AC

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N

PERMIT NUMBERS:

PARCEL ID: 113E B 004.00	FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.
DATUM: TNSPC (NAD83) NAVD 1988	BENCHMARK:

30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET

REV	DN	CHK	REVISION/ISSUANCE	DATE
1	JAB	JG	PERMIT SET	08.13.2024

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615 3rd Avenue South | Suite 700 | Nashville, Tennessee 37210
PHONE (615) 254-1580 | FAX (615) 254-5015

Andrew Blake Hardison
No. 129481
State of Tennessee
Licensed Professional Engineer
Digitally signed by Andrew B Hardison
Date: 2024.10.08 09:57:16 05'00'

FINAL EROSION AND SEDIMENT CONTROL PLAN

MASS GRADING & INFRASTRUCTURE PACKAGE

COLUMBIA COMMONS

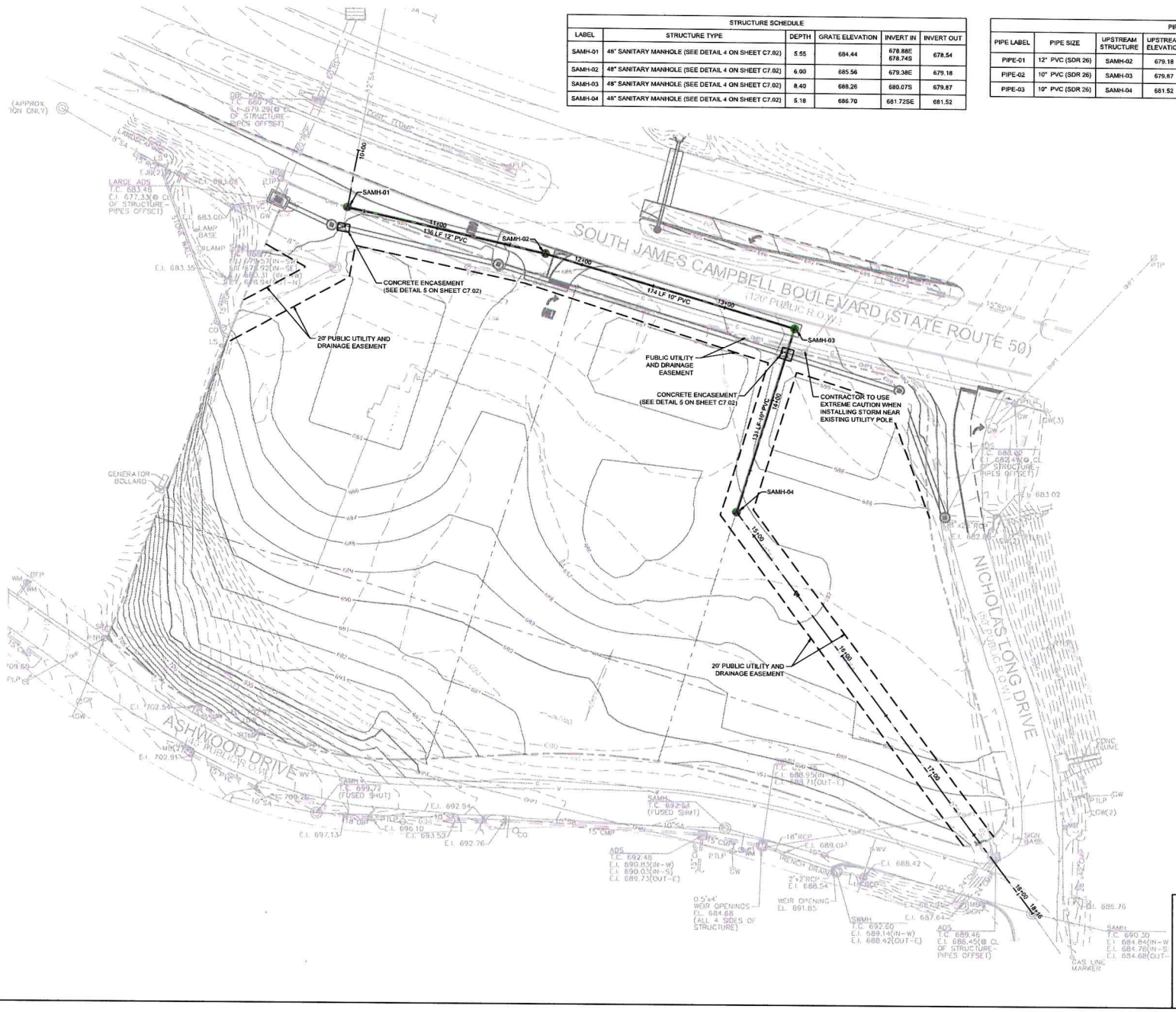
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C2.43

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PLOTTED: 10/8/2024
C:\Users\james.bolton\ACCDocs\Columbia_CADNCIVIL\CIVIL\DGT\38531m_C2.43.dwg



STRUCTURE SCHEDULE

LABEL	STRUCTURE TYPE	DEPTH	GRATE ELEVATION	INVERT IN	INVERT OUT
SAMH-01	48" SANITARY MANHOLE (SEE DETAIL 4 ON SHEET C7.02)	5.55	684.44	678.88E 678.74S	678.54
SAMH-02	48" SANITARY MANHOLE (SEE DETAIL 4 ON SHEET C7.02)	6.00	685.56	679.38E	679.18
SAMH-03	48" SANITARY MANHOLE (SEE DETAIL 4 ON SHEET C7.02)	8.40	688.26	680.07S	679.87
SAMH-04	48" SANITARY MANHOLE (SEE DETAIL 4 ON SHEET C7.02)	5.18	686.70	681.72SE	681.52

PIPE TABLE

PIPE LABEL	PIPE SIZE	UPSTREAM STRUCTURE	UPSTREAM ELEVATION	DOWNSTREAM STRUCTURE	DOWNSTREAM ELEVATION	LENGTH (FT)	SLOPE (%)
PIPE-01	12" PVC (SDR 26)	SAMH-02	679.18	SAMH-01	678.88	136.1	0.22%
PIPE-02	10" PVC (SDR 26)	SAMH-03	679.87	SAMH-02	679.38	174.4	0.28%
PIPE-03	10" PVC (SDR 26)	SAMH-04	681.52	SAMH-03	680.07	131.0	1.11%

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315 3rd Avenue South | Suite 770 | Nashville, Tennessee 37210
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ANDREW B. HARDISON — 120.001 — STATE OF TENNESSEE — REGISTERED ENGINEER
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Date: 2024.10.08 09:57:33-05'00'

SITE UTILITY PLAN

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

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1	JAB	09.18.2024	PERMIT SET

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FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.

DATUM: TNSPC (NAD83) NAVD 1988

BENCHMARK:

N

30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET

C3.01

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SANITARY SEWER PROFILE

COLUMBIA COMMONS

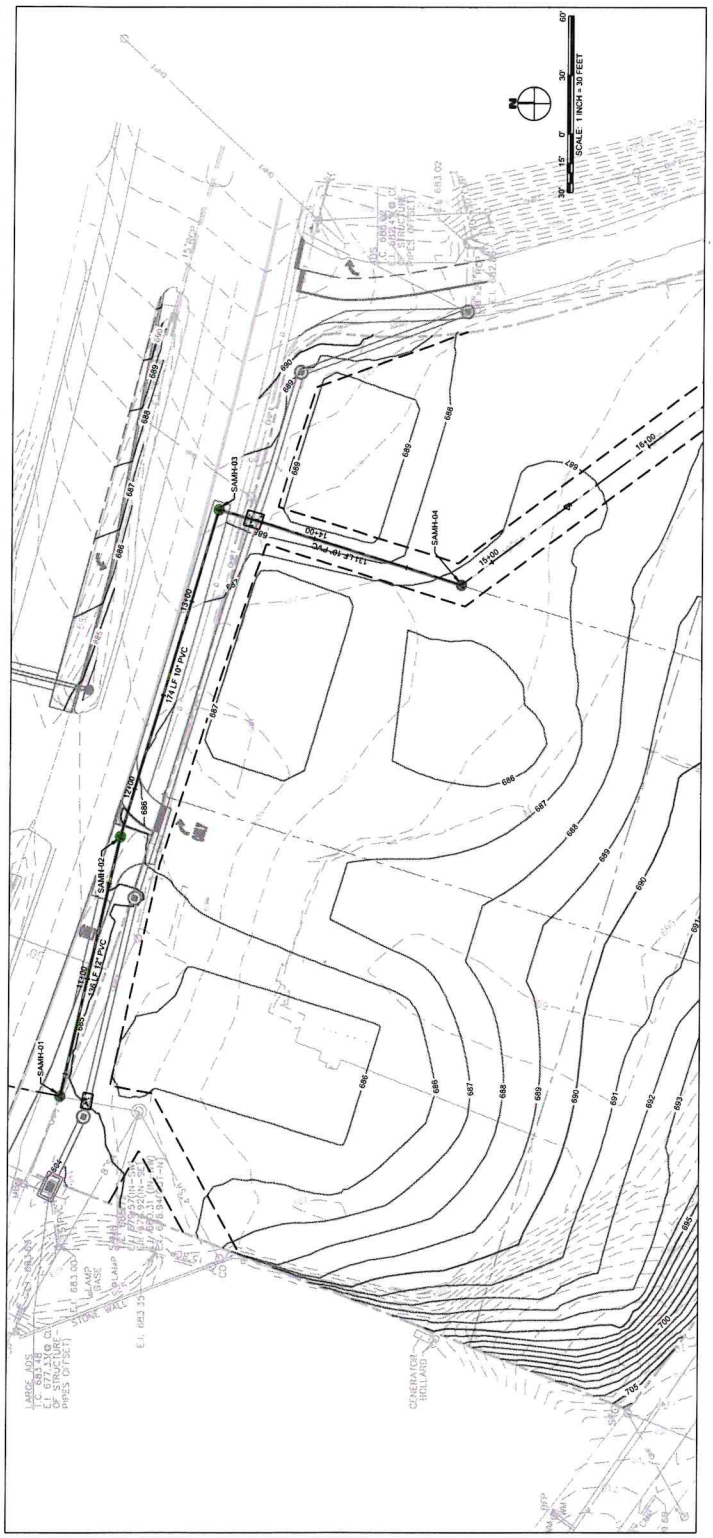
MASS GRADING & INFRASTRUCTURE PACKAGE

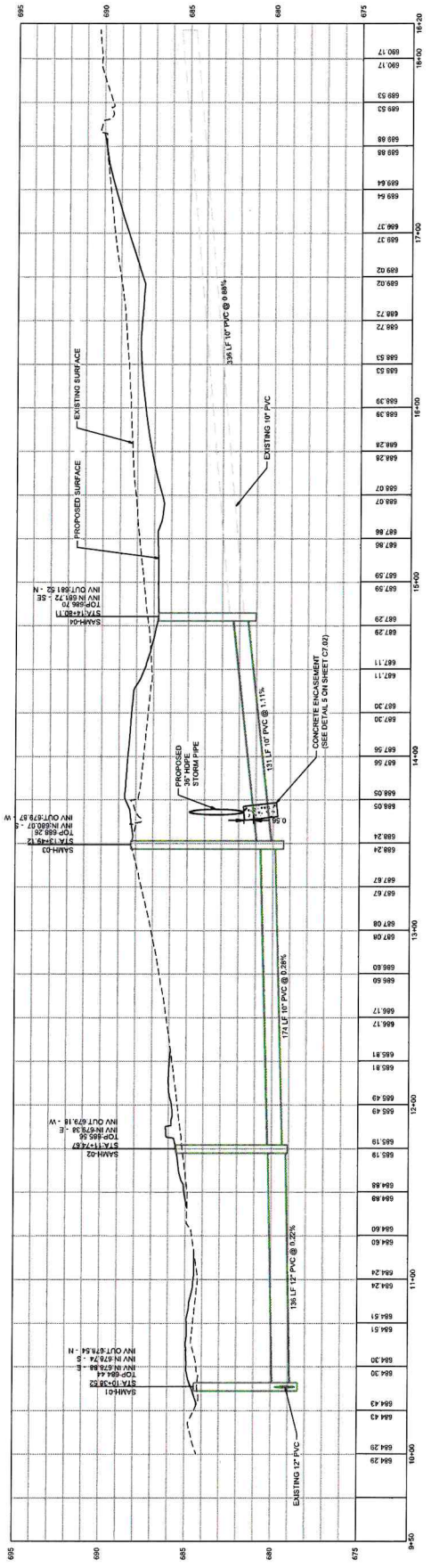
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615 3rd Avenue South / Suite 700 / Nashville, Tennessee 37210
PHONE (615) 254-5333 / FAX (615) 255-0372

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NASHVILLE METROPOLITAN GOVERNMENT
REGISTERED ENGINEER
STATE OF TENNESSEE

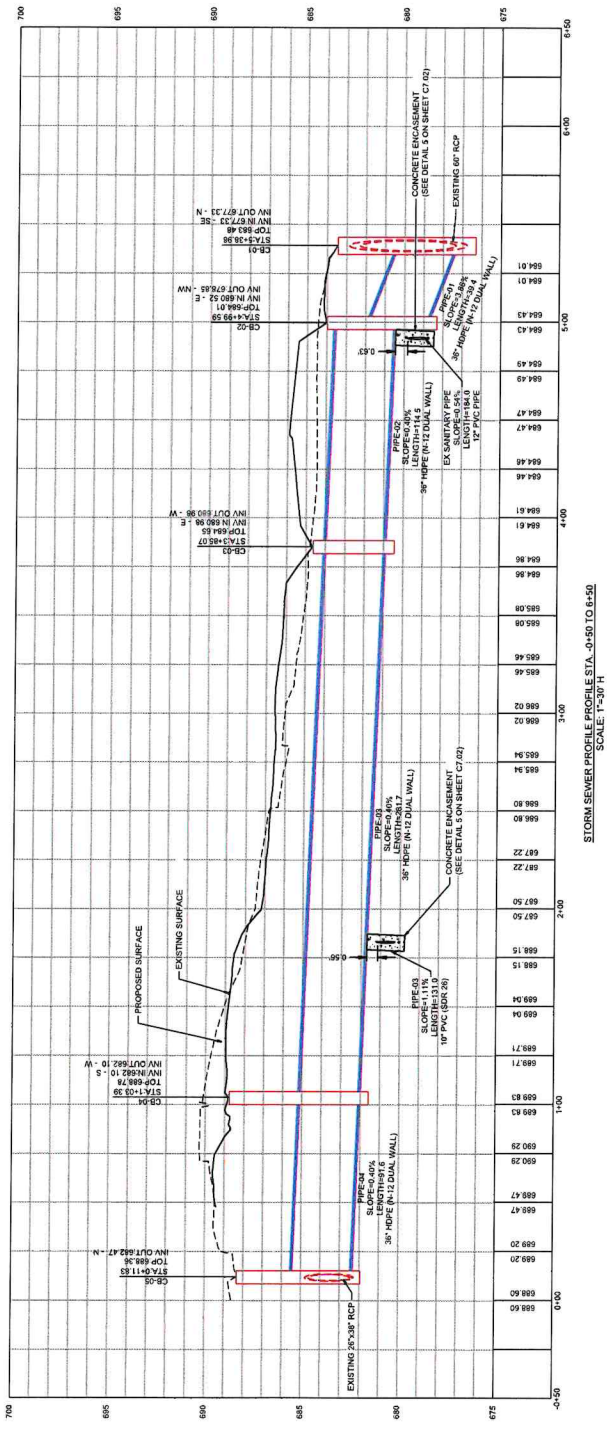
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REV.	DR.	CHK.	DATE	DESCRIPTION
1	JAB	JD	09.13.2024	PERMIT SET





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STORM SEWER PROFILE

MASS GRADING & INFRASTRUCTURE PACKAGE

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REVISION INFORMATION				
REV	DR	CHK	DATE	DESCRIPTION
1	JMB	JD	09.19.2024	PERMIT SET

C4.21

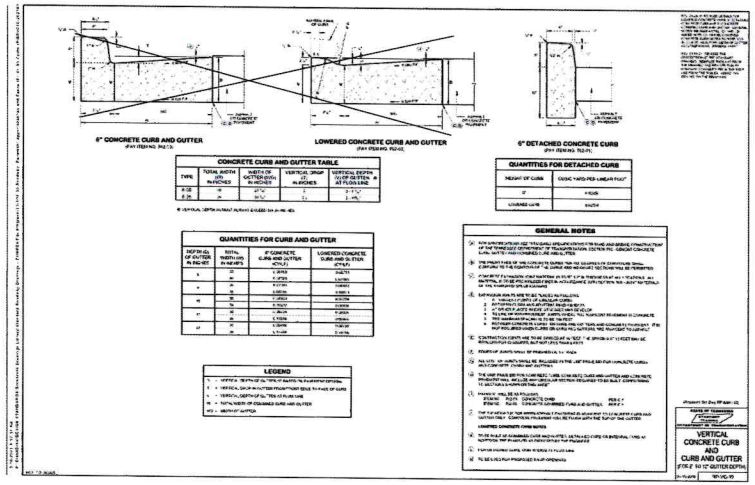
FILE NO. 38531-01

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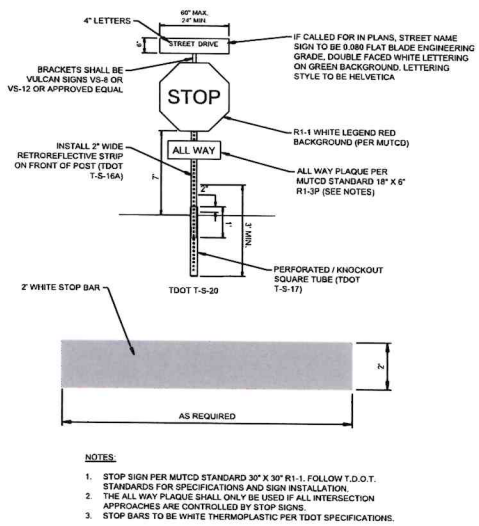
BARGE DESIGN SOLUTIONS
915 3rd Avenue, Suite 700 | Nashville, Tennessee 37210
PHONE (615) 254-1449 | FAX (615) 256-6227

Prepared by
Andrew Richard Jackson
Date: 2024.10.09
09:58:10 -05'00'

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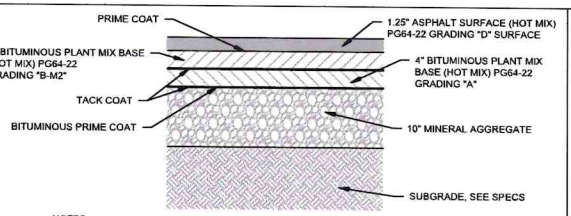


1 CONCRETE POST CURB
C7.01 SCALE: N.T.S.



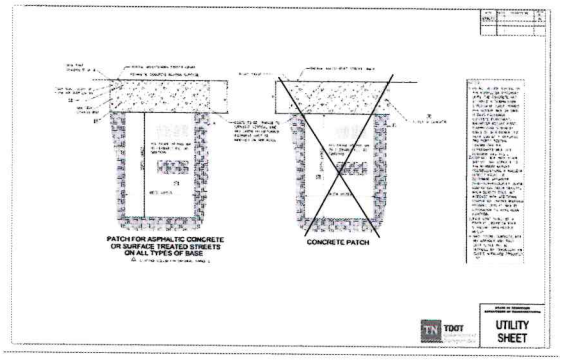
NOTES:
1. STOP SIGN PER MUTCD STANDARD 30" X 30" R1-1, FOLLOW T.D.O.T. STANDARDS FOR SPECIFICATIONS AND SIGN INSTALLATION.
2. THE ALL WAY PLAQUE SHALL ONLY BE USED IF ALL INTERSECTION APPROACHES ARE CONTROLLED BY STOP SIGNS.
3. STOP BARS TO BE WHITE THERMOPLASTIC PER TDOT SPECIFICATIONS.

2 R1-1 STOP SIGN WITH STOP BAR
C7.01 SCALE: N.T.S.

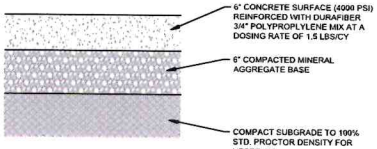


NOTES:
1. CONSTRUCTION SHALL MEET MOST RECENT EDITION OF THE STANDARD SPECIFICATIONS OF THE TN DEPT OF TRANSPORTATION.
2. SEE GEOTECHNICAL REPORT FOR SUBGRADE PREPARATION.
3. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

3 HEAVY DUTY (TDOT) ASPHALT PAVEMENT
C7.01 SCALE: N.T.S.



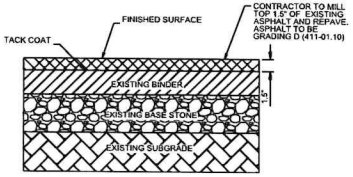
5 ASPHALT TRENCH REPAIR
C7.01 SCALE: N.T.S.



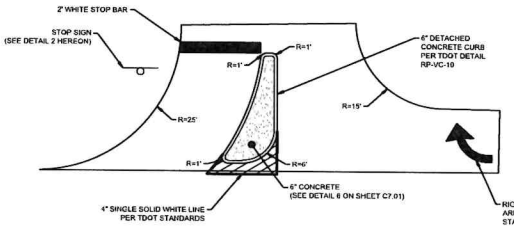
NOTES:
1. ALL CONSTRUCTION SHALL MEET THE MOST RECENT EDITION OF THE STANDARD SPECIFICATIONS OF THE TN DEPT OF TRANSPORTATION.
2. SEE SPECIFICATIONS FOR JOINT INFORMATION.
3. SEE SPECIFICATIONS FOR SUBGRADE PREPARATION.

6 6" CONCRETE PAVEMENT
C7.01 SCALE: N.T.S.

NOTES:
1.5" MILL AND RESURFACE PER STANDARDS.



4 ASPHALT MILL AND PAVING
C7.01 SCALE: N.T.S.



7 RIGHT OUT DRIVEWAY ENTRANCE
C7.01 SCALE: N.T.S.

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PHONE 615.254.1500 | FAX 615.254.4012

ANDREW BLAKE HARDISON — 2011 — STATE OF TENNESSEE — REGISTERED LANDSCAPE ARCHITECT
Digitally signed by Andrew B Hardison
Date: 2024.10.08 09:58:53 05'00'

CIVIL STANDARD DETAILS

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REV.	BY	DATE	NOTES ON REVISIONS
1	DR	08.19.2024	PERMIT SET
	JAB		
	JO		

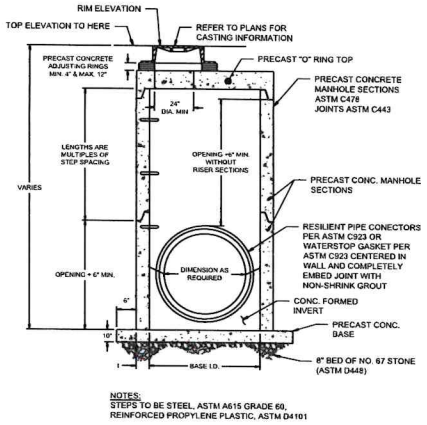
C7.01

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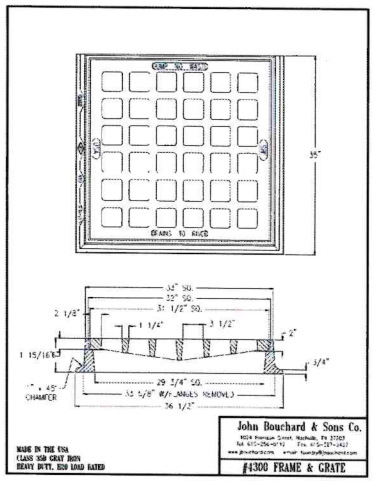
USER: JMINOR
FILE: E:\Projects\38531\04_CAD\CIVIL\PLOTS\38531-01_C7.01.dwg
PLOTTED: 10/8/2024

MAXIMUM PIPE SIZES		
BASE I.D.	MIN. T	MAX. PIPE SIZE
48"	5"	24"
60"	5"	36"
72"	6"	42"



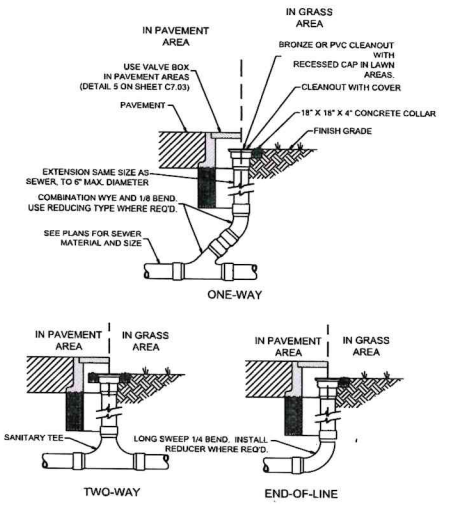
NOTES:
STEPS TO BE STEEL, ASTM A615 GRADE 60,
REINFORCED PROPYLENE PLASTIC, ASTM D4101

1 C7.02 **TYPICAL STORM MANHOLE / CATCH BASIN**
SCALE: N.T.S.

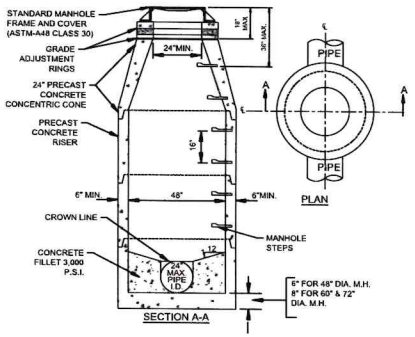


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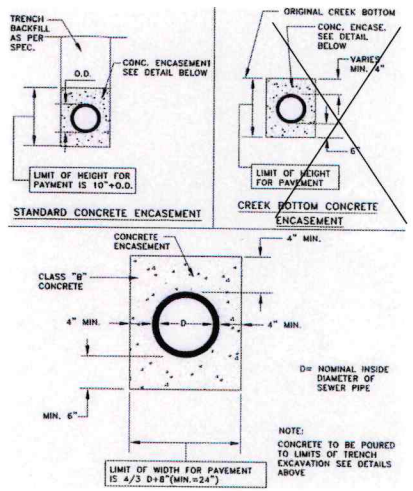
2 C7.02 **JBS 4300 FRAME AND GRATE**
SCALE: N.T.S.



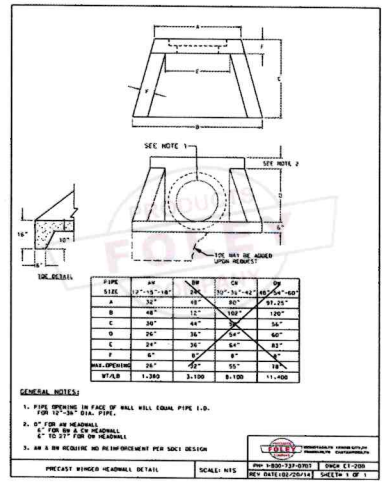
3 C7.02 **CLEANOUT WITH INSPECTION ASSEMBLY**
SCALE: N.T.S.



4 C7.02 **STANDARD PRECAST SANITARY MANHOLE**
SCALE: N.T.S.



5 C7.02 **CONCRETE ENCASEMENT**
SCALE: N.T.S.



PIPE SIZE	12"-15"-18"	24"	30"-36"-42"	48"-54"-60"
A	32"	48"	80"	97.25"
B	48"	72"	102"	126"
C	30"	44"	72"	96"
D	26"	36"	54"	60"
E	24"	36"	54"	82"
F	6"	8"	8"	8"
MAX. OPENING	26"	42"	66"	78"
WT./LB	1,350	3,100	8,100	11,400

GENERAL NOTES:
1. PIPE OPENING IN FACE OF WALL WILL EQUAL PIPE I.D. FOR 12"-36" DIA. PIPE.
2. 6" FOR 48 HEADWALL
   6" FOR 54 & 60 HEADWALL
   8" TO 27" FOR ON HEADWALL
3. 48 & 54 REQUIRE NO REINFORCEMENT PER SDC: DESIGN

FOLEY
PRECAST WINGED HEADWALL DETAIL | SCALE: NTS | PHP: 1-800-727-0703 | DWG# C7.20B | REV DATE:(02/20/14) | SHEET 1 OF 1

6 C7.02 **WINGED HEADWALL**
SCALE: N.T.S.

FOR CONSTRUCTION

BARGE DESIGN SOLUTIONS
615 3rd Avenue South | Suite 700 | Nashville, Tennessee 37210
PHONE: (615) 254-1900 | FAX: (615) 242-6021

ANDREW B. HARDISON — No. 120178 — STATE OF TENNESSEE — REGISTERED ENGINEER
Digitally signed by Andrew B Hardison
Date: 2024.10.08 09:59:14 -05'00'

CIVIL STANDARD DETAILS

MASS GRADING & INFRASTRUCTURE PACKAGE
COLUMBIA COMMONS
115 SOUTH JAMES CAMPBELL BOULEVARD, COLUMBIA, MAURY COUNTY, TENNESSEE

REV.	BY	DATE	DESCRIPTION
1	JAB	10.8.2024	PERMIT SET

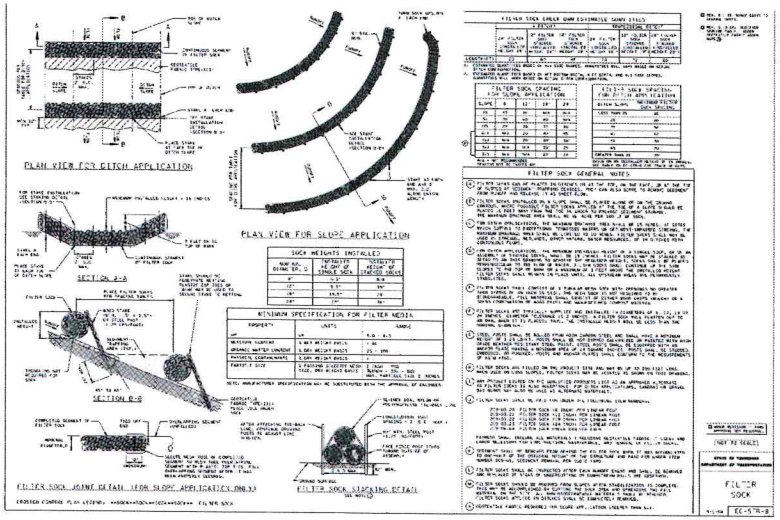
DESIGNED BY: DRAWN BY: CHK'D BY: JD

C7.02

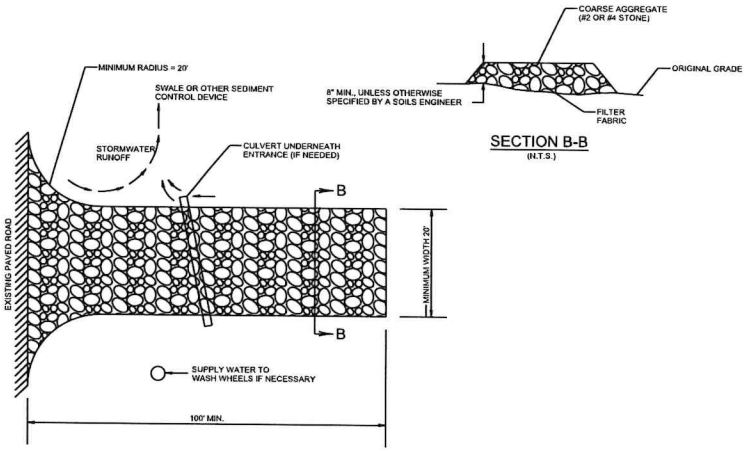
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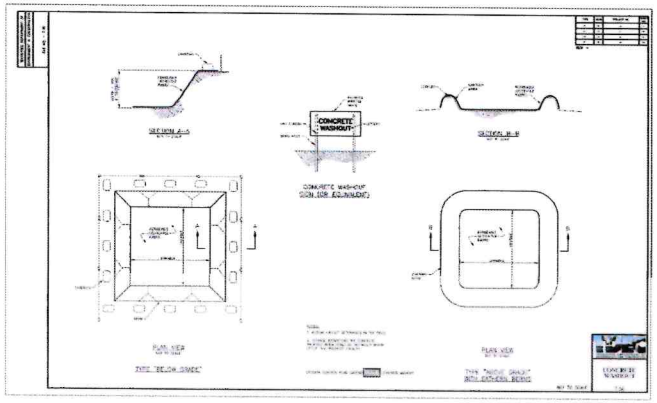
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PLOTTED: 10/8/2024



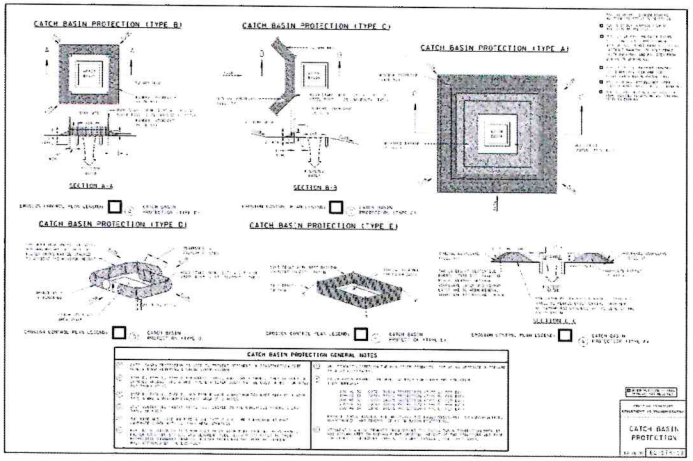
1 C7.03 **FILTER SOCK**
SCALE: N.T.S.



2 C7.03 **CONSTRUCTION EXIT (TCP-03)**
SCALE: N.T.S.



3 C7.03 **CONCRETE WASHOUT**
SCALE: N.T.S.



3 C7.03 **INLET PROTECTION**
SCALE: N.T.S.

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Traffic Impact Study

115 SOUTH JAMES M CAMPBELL BLVD

S. JAMES M CAMPBELL BLVD
COLUMBIA, TENNESSEE

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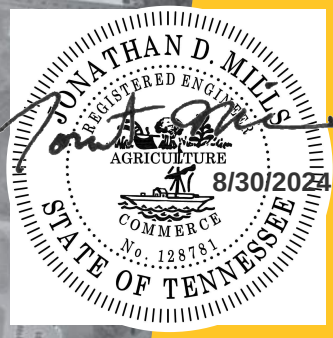
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July 1, 2024 rev. August 30, 2024

NOTICE

This document and its contents have been prepared and are intended solely as information for Oldacre McDonald and their use in relation to the proposed 115 S. James M Campbell Blvd Development.

Document History

Revision	Purpose	Originated	Reviewed	Authorized	Date
1.0	Draft Report	WM/MM	TMN	JM	7/1/2024
2.0	Revised Report	VJ	TMN	JM	8/30/2024

Client Signoff

Client	**Oldacre McDonald**
Project	115 S. James M Campbell Blvd
Job Number	3853101

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EXECUTIVE SUMMARY

A traffic impact study has been prepared for the proposed 115 S. James M Campbell Blvd development in Columbia, Tennessee. It is located south of downtown Columbia and includes an empty lot that is not currently in use. It is served by one access located along S. James M Campbell Boulevard, one access along Nicholas Long Drive, and one access along Ashwood Drive.

The purpose of this study is to assess the potential traffic impacts of the proposed development on the transportation network in the study area. Analysis of the existing traffic conditions was conducted, growth expected to occur on the roadway network prior to the development opening was determined and analyzed, trips expected to be generated by the proposed development were calculated and assigned to the roadway network. Analysis of the roadway network after opening of the proposed development was then conducted. Improvements to the study area network needed to mitigate the impacts of the new development were then evaluated.

Traffic Counts

Traffic counts are collected to determine the existing conditions of the roadway network. 12-hour and peak hour turning movement counts were conducted at four existing intersections on S. James M Campbell Boulevard. The count locations included:

1. S. James M Campbell Boulevard at Campbellsville Pike / Highland Avenue (SR 245)
2. S. James M Campbell Boulevard at Lot Access (Site Access 1) / Nicholas Long Drive
3. S. James M Campbell Boulevard at Nicholas Long Drive / Restaurant Access
4. S. James M Campbell Boulevard at Pulaski Highway / Carmack Boulevard (SR 7 / US 31)

Background Growth

Based on historical TDOT traffic counts and coordination with the City of Columbia, it was determined a growth factor of 2.0% per year should be applied to the existing traffic volumes.

Proposed Development

Applying the industry standard methodology, using the *ITE Trip Generation Manual*, the new trips expected to be generated by the development were calculated. With a pass-by trip reduction of 30% applied to all three restaurants, the net new site trips for the development are expected to increase by 207 trips in the AM peak hour and 158 trips in the PM peak hour. These trips were then distributed and assigned to the study area.

Analysis

Intersection analysis was conducted for the study area using the methodology outlined in the *HCM Manual, 7th Edition*. The results are shown for the Existing 2024, No Build 2026, and Build 2026 scenarios. The proposed improvements near the development are expected to mitigate effects to traffic operations through the study area.

Safety Analysis

A safety analysis using five-year crash data for the study area obtained from AASHTOWare Safety was conducted to determine patterns within the crash data that may result from existing roadway conditions. The results from the data show what, if any, safety improvements should be made.

Recommendations

Based on this study's analysis and evaluation of the transportation network, the following improvements are recommended to better enhance traffic operations within the study area upon completion of the proposed development.

Build 2026

S. James M Campbell Boulevard at Nicholas Long Drive / Restaurant Access

- Restripe the northbound approach on Nicholas Long Drive to provide a left/through lane and separate right turn lane with 75 feet of storage and taper length per TDOT and MUTCD standards.
- Both northbound lanes should be 11 feet wide.

S. James M Campbell Boulevard at Lot Access (Site Access 1) / Nicholas Long Drive

- Install a westbound left turn lane with a minimum of 100 feet of storage and taper per TDOT and MUTCD standards.
- Install an eastbound right turn lane with approximately 100 feet of storage and taper per TDOT and MUTCD standards.
- Install one entering lane and one exiting lane to the development that is stop controlled. Install concrete channelization for northbound right turning movements and restrict northbound left turning movements.

Nicholas Long Drive at Site Access 2

- Install one entering lane and one exiting lane to the development that is stop controlled.

Ashwood Drive at Site Access 3

- Install one entering lane and one exiting lane to the development that is stop controlled.

Design the internal accesses according to federal, state, and local standards, including *Roadway Design Guidelines* (Tennessee Department of Transportation), and *A Policy on Geometric Design of Highways and Streets* (AASHTO, 2018). Placement of all signing should be in accordance with the *Manual on Uniform Traffic Control Devices* (FHWA, 2023).

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1. INTRODUCTION

A traffic impact study has been prepared for the proposed 115 S. James M Campbell Blvd development in Columbia, Tennessee. It is located south of downtown Columbia and includes an empty lot that is not currently in use. It is served by one access located along S. James M Campbell Boulevard, one access along Nicholas Long Drive, and one access along Ashwood Drive.

The purpose of this study is to assess the potential traffic impacts of the proposed development on the transportation network in the study area. Analysis of the existing traffic conditions was conducted, growth expected to occur on the roadway network prior to the development opening was determined and analyzed, trips expected to be generated by the proposed development were calculated and assigned to the roadway network. Analysis of the roadway network after opening of the proposed development was then conducted. Improvements to the study area network needed to mitigate the impacts of the new development were then evaluated.

References

- Manual on Uniform Traffic Control Devices (MUTCD); *US Department of Transportation Federal Highway Administration (FHWA); 2023 Edition*
- A Policy on Geometric Design of Highways and Streets (Green Book); *American Association of State Highway and Transportation Officials (AASHTO), 2018*
- Trip Generation Manual 11th Edition; *Institute of Transportation Engineers (ITE); 2021*
- Trip Generation Handbook 3rd Edition; *Institute of Transportation Engineers (ITE); 2017*
- Study Area Peak Hour Traffic Counts; *Marr Traffic, April 2024*
- Study Area Signal Timings; *Neel-Schaffer*
- The Highway Capacity Manual; *Transportation Research Board; 7th Edition*
- Synchro 12; *CUBIC/Trafficware, 2023*

2. STUDY AREA CONDITIONS

2.1. Project Description

The proposed development is located in Maury County, Tennessee. The study area is south of downtown Columbia and is bound to the east by US Highway 31 and to the west by State Route 245 (SR 245). Existing uses in the area include fast food restaurants, grocery stores, car dealerships and commercial developments. Access to the site will be provided on S. James M Campbell Boulevard, Nicholas Long Drive, and Ashwood Drive as shown on the site plan in Appendix A. The study area for the proposed development includes four intersections:

1. S. James M Campbell Boulevard at Campbellsville Pike / Highland Avenue (SR 245)
2. S. James M Campbell Boulevard at Lot Access (Site Access 1) / Nicholas Long Drive
3. S. James M Campbell Boulevard at Nicholas Long Drive / Restaurant Access
4. S. James M Campbell Boulevard at Pulaski Highway / Carmack Boulevard (SR 7 / US 31)

Figure 2.1 shows the count and access locations on S. James M Campbell Boulevard.

Figure 2.1 – Study Area



2.2. Project Inventory

The analysis of the existing intersections was conducted using the roadway characteristics and traffic control obtained from field inventory. The descriptions provided below include the existing conditions of the transportation network in the study area.

Roadway Inventory

S. James M Campbell Boulevard (SR 50) is classified as a minor arterial according to the Tennessee Department of Transportation (TDOT) function classification map. S. James M Campbell Boulevard runs east-west within the study area and includes two travel lanes in each direction with a grass median. The roadway has a posted speed limit of 40 mph throughout the study area. Sidewalks and bicycle facilities are not provided along S. James M Campbell Boulevard within the study area. Street lighting is present.

Campbellsville Pike / Highland Avenue is classified as a minor arterial according to the TDOT function classification map. Campbellsville Pike / Highland Avenue runs north-south within the study area and includes one travel lane in each direction. The roadway has a posted speed limit of 35 mph throughout the study area. Sidewalks and bicycle facilities are not provided along the roadway within the study area. Street lighting is present.

Nicholas Long Drive is a local road that is not included in the TDOT function classification map. Nicholas Long Drive runs north-south within the study area and includes one travel lane in each direction. The roadway does not have a posted speed limit. Sidewalks and bicycle facilities are not provided along Nicholas Long Drive within the study area. Street lighting is present.

Pulaski Highway / Carmack Boulevard (SR 7 / US 31) is classified as a principal arterial according to the TDOT function classification map. Pulaski Highway / Carmack Boulevard runs north-south within the study area and includes two travel lanes in each direction with a two-way left-turn center lane. The roadway has a posted speed limit of 40 mph to the north of S. James M Campbell Boulevard and a posted speed limit of 45 mph south of S. James M Campbell Boulevard. Sidewalks are provided along both sides of the roadway within the study area, but bicycle facilities are not. Street lighting is present.

Intersection Inventory

S. James M Campbell Boulevard at Campbellsville Pike / Highland Avenue is a signalized four-legged intersection. The eastbound approach of S. James M Campbell Boulevard includes a left-turn lane with 75 feet of storage and protected only phasing, two through lanes, and a right-turn lane with 175 feet of storage. The westbound approach of S. James M Campbell Boulevard includes a left-turn lane with 75 feet of storage and protected only phasing, two through lanes, and a right-turn lane with 110 feet of storage. The northbound approach of Campbellsville Pike includes a left-turn lane with 225 feet of storage and protected-permissive phasing and a shared through/right-turn lane. The southbound approach of Highland Avenue includes a left-turn lane with 225 feet of storage and protected-permissive phasing and a shared through/right-turn lane. No pedestrian or bicycle infrastructure is present at the intersection. Street lighting is included in the northeast, northwest and southwest corners of the intersection and in the eastern median.

S. James M Campbell Boulevard at Lot Access (Site Access 1) / Nicholas Long Drive is an unsignalized four-legged intersection with two-way stop control. The eastbound and westbound approaches of S. James M Campbell Boulevard operate in free-flow and include a shared left-turn/through lane and shared through/right-turn lane. The northbound approach of the lot access is stop controlled and includes a shared left/through/right turn lane. The southbound approach of Nicholas Long Drive is stop controlled includes a shared left-turn/through/right-turn lane. No pedestrian or bicycle infrastructure is present at the intersection. Street lighting is included on the western side of the grassed median.

S. James M Campbell Boulevard at Nicholas Long Drive / Restaurant Access an unsignalized four-legged intersection with two-way stop control. The eastbound and westbound approaches of S. James M Campbell Boulevard operate in free-flow and include a left-turn lane with 75 feet of storage, a through lane, and a shared through/right-turn lane. The northbound approach of Nicholas Long Drive is stop controlled and includes a shared left-turn/through/right-turn lane. The southbound approach of the Access is stop controlled and includes a shared left-turn/through lane and right-turn lane. No pedestrian or bicycle infrastructure is present at the intersection. Street lighting is included on the western side of the grassed median and in the southeast corner of the intersection.

S. James M Campbell Boulevard at Pulaski Highway / Carmack Boulevard is a signalized four-legged intersection. The eastbound approach of S. James M Campbell Boulevard includes two left-turn lanes with 325 feet of storage and protected only phasing, two through lanes, and a yield controlled channelized right-turn lane with 300 feet of storage. The westbound approach of S. James M Campbell Boulevard includes an offset left-turn lane with 250 feet of storage and protected only phasing, two through lanes, and a yield controlled channelized right-turn lane with 190 feet of storage. The northbound approach of Pulaski Highway includes a left-turn lane with 130 feet of storage and protected-permissive phasing, two through lanes, and a yield controlled channelized right-turn lane. The southbound approach of Carmack Boulevard includes a left-turn lane with 130 feet of storage and protected-permissive phasing, two through lanes, and a yield controlled channelized right-turn lane with 300 feet of storage. Pedestrian curb ramps and transverse crosswalk markings are present for all crossings at the intersection, but no pedestrian signal heads or pushbuttons are included. Bicycle infrastructure is not present at the intersection. Street lighting is present in the northeast, northwest, and southwest corners of the intersection.

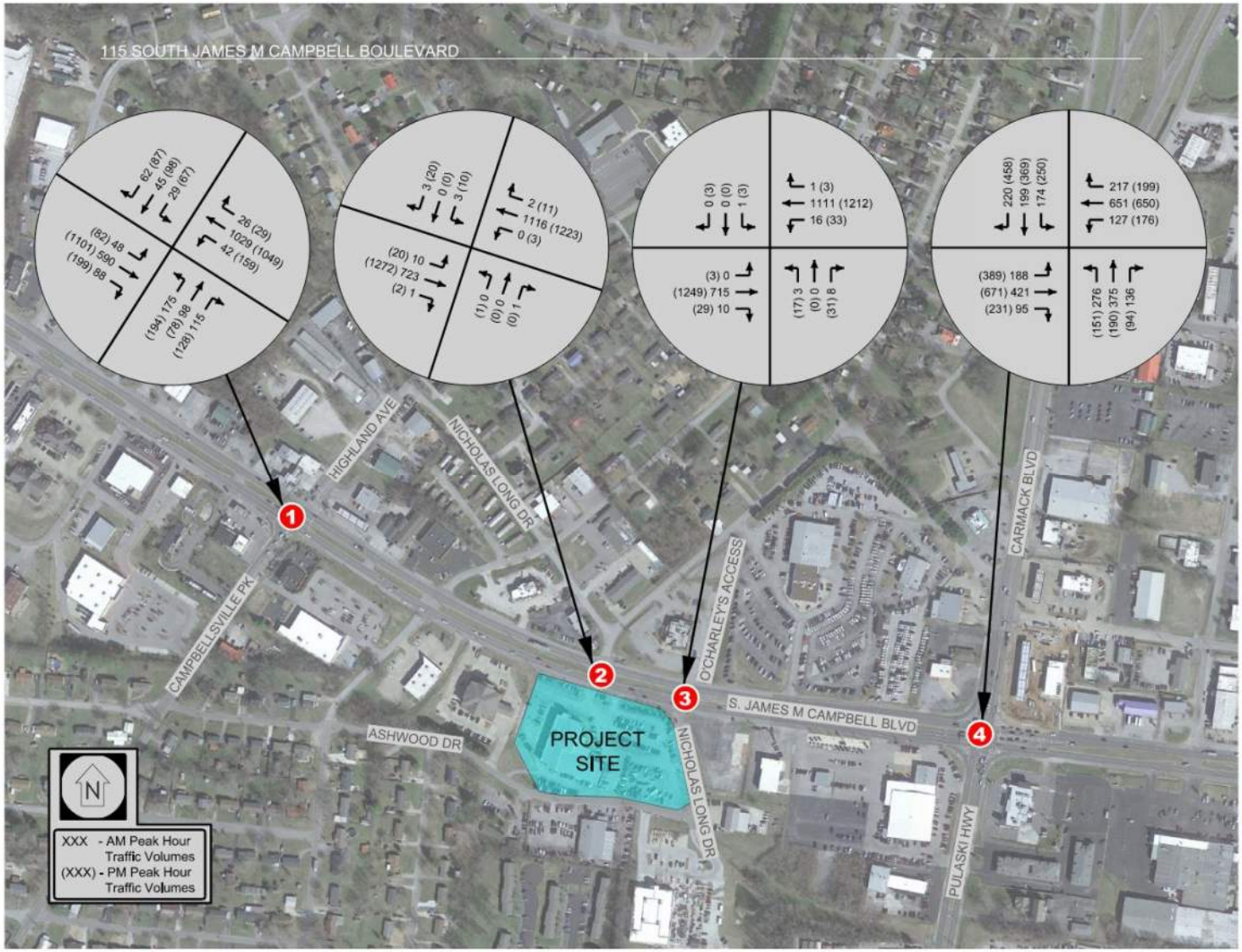
3.1. Existing Traffic Volumes

To analyze the existing traffic operations, peak hour and 12-hour turning movement counts were collected at the existing study area intersections on Tuesday, March 19, 2024. The resulting peak hours for the AM and PM traffic volumes in the study area are shown in Figure 3.1, and listed in Table 3.1. The raw traffic count data is included in Appendix A.

Table 3.1 – 2023 Turning Movement Collection Summary

Peak	Count Collection Period	Peak Hour
AM	6:00 AM – 9:00 AM	**7:15 – 8:15 AM**
PM	3:00 PM – 6:00 PM	**4:15 – 5:15 PM**

Figure 3.1 – Existing 2024 AM and PM Peak Hour Traffic Volumes



3.2. Background Growth

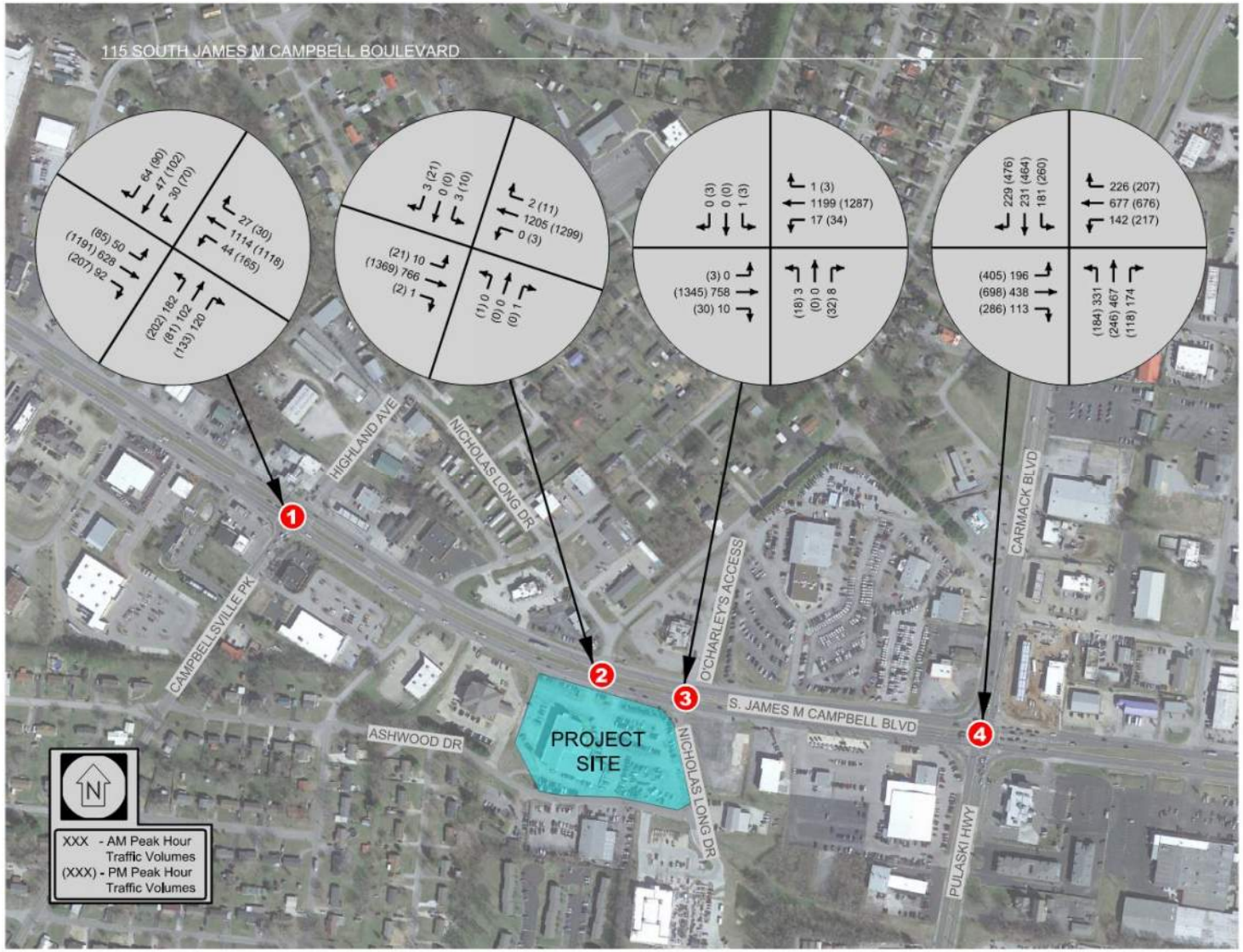
Background growth is the general increase in traffic passing through the study area due to regional development and general population growth. It is typically calculated from historic traffic counts collected on a yearly basis by TDOT. Four TDOT count stations are located near the study area. Count station 60000081 is located along S. James M Campbell Blvd west of the study area and carried an average of 27,920 vehicles per day in 2023. Count station 60000082 is located along S. James M Campbell Blvd east of the study area and carried an average of 20,204 vehicles per day in 2023. Count station 60000099 is located on Carmack Boulevard to the northeast of the study area and carried an average of 16,866 vehicles per day in 2023. Count station 60000041 is located on Pulaski Highway to the southeast of the study area and carried an average of 10,268 vehicles per day in 2023. The count stations showed an annual growth rate of 0.81% over the past ten years.

Based on historical growth rates, an annual background growth rate of 2.0% per year was applied throughout the study area. Historic count data is included in Appendix A.

No Build Traffic Volumes

Background trips were added to the existing traffic volumes to calculate the No Build 2026 traffic volumes. A multifamily housing development south of the study area was included in the background along Pulaski Highway was included in the analysis. These are the volumes expected to be on the roadway before the development opens in 2026. The No Build 2026 peak hour traffic volumes are shown in Figure 3.2. Background development trip generation is included in Appendix A.

Figure 3.2 – No Build 2026 AM and PM Peak Hour Traffic Volumes



4.1. Proposed Development Program

The existing vacant lot is expected to be converted into the following:

- A high turnover restaurant of approximately 3,100 square feet.
- A fast food restaurant with a drive thru of approximately 3,300 square feet.
- A fast food restaurant with a drive thru of approximately 2,700 square feet.

Parking at each establishment will be provided in accordance with Article 4.3.12 of the City of Columbia Zoning Ordinances. An annotated site plan is shown in Figure 4.1.

Figure 4.1 – Annotated Site Plan



4.2. Trip Generation

The trips generated by the proposed development were calculated using ITE methodology, as outlined in the *Trip Generation Handbook* (ITE, 3rd Edition) and using factors from the *Trip Generation Manual* (ITE, 11th Edition). Certain commercial and retail land uses generate pass-by vehicle trips, meaning that vehicles make an intermediate stop on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are not new to the overall roadway network and do not involve route diversion to enter the site driveway(s). The expected new trips are summarized in Table 4.1. Detailed trip generation figures from the *ITE Trip Generation Manual* and pass-by rates are included in Appendix B.

Table 4.1 – Trip Generation Summary

				AM			PM			
ITE Land Use Code	Land Use	Quantity	Units	Enter	Exit	Total	Enter	Exit	Total	Weekday
New Trips										
932	High Turnover Restaurant	3.1	k.s.f.	17	13	**30**	17	11	**28**	336
934	Fast Food w/ Drive Thru	3.3	k.s.f.	75	72	**147**	57	52	**109**	1,543
934	Fast Food w/ Drive Thru	2.7	k.s.f.	61	59	**120**	46	43	**89**	1,262
Subtotal				153	144	**297**	120	106	**226**	3,141
Pass-By Trips		*AM*	*PM*							
932	High Turnover Restaurant	30%	30%	-5	-4	**-9**	-5	-3	**-8**	-101
934	Fast Food w/ Drive Thru	30%	30%	-23	-22	**-45**	-17	-16	**-33**	-463
934	Fast Food w/ Drive Thru	30%	30%	-18	-18	**-36**	-14	-13	**-27**	-379
Subtotal				-46	-44	**-90**	-36	-32	**-68**	-943
Total				**107**	**100**	**207**	**84**	**74**	**158**	**2,198**

4.3. Trip Distribution and Assignment

A distribution of the trips generated by the project site was prepared using the existing traffic counts, historical traffic data, and knowledge of existing travel patterns. The distributions are summarized in Table 4.2.

Table 4.2 – Trip Distribution Summary

Direction of Approach	External Distribution
to/from **West** via **S. James M Campbell Boulevard**	**35%**
to/from **East** via **S. James M Campbell Boulevard**	**30%**
to/from **South** via **Pulaski Highway**	**10%**
to/from **North** via **Carmack Boulevard**	**15%**
to/from **South** via **Campbellsville Parkway**	**7%**
to/from **North** via **Highland Avenue**	**3%**

The generated trips were assigned to the roadway network using the distributions. The expected new trip distributions and assignments are shown in Figure 4.2 and Figure 4.3, respectively. Pass-by Reductions were taken, and the pass-by trip distributions and assignments are shown in Figure 4.4 and Figure 4.5, respectively. Net new site trips to the proposed development are shown in Figure 4.6.

Figure 4.2 – New Trip Distribution

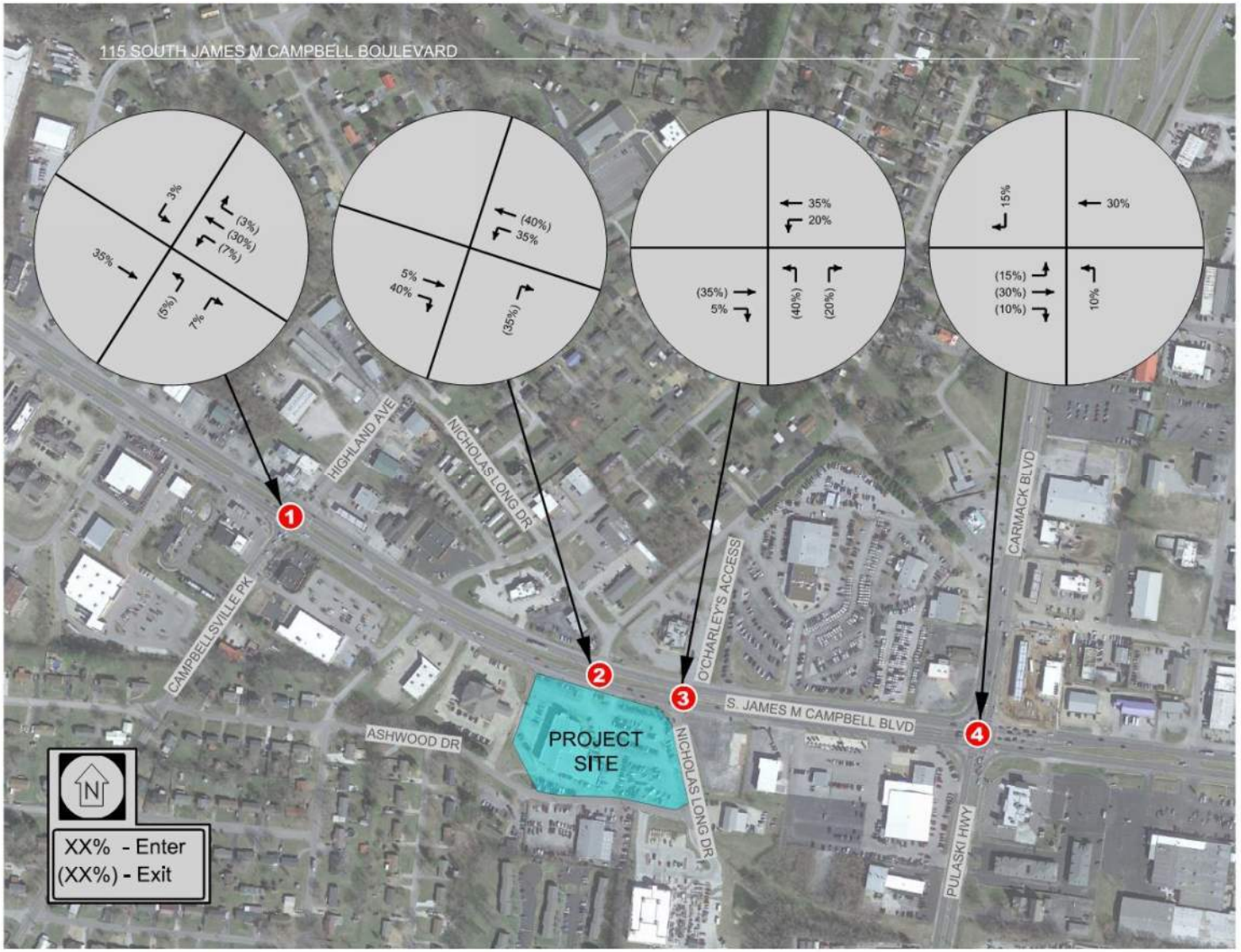


Figure 4.3 – New Trip Assignment

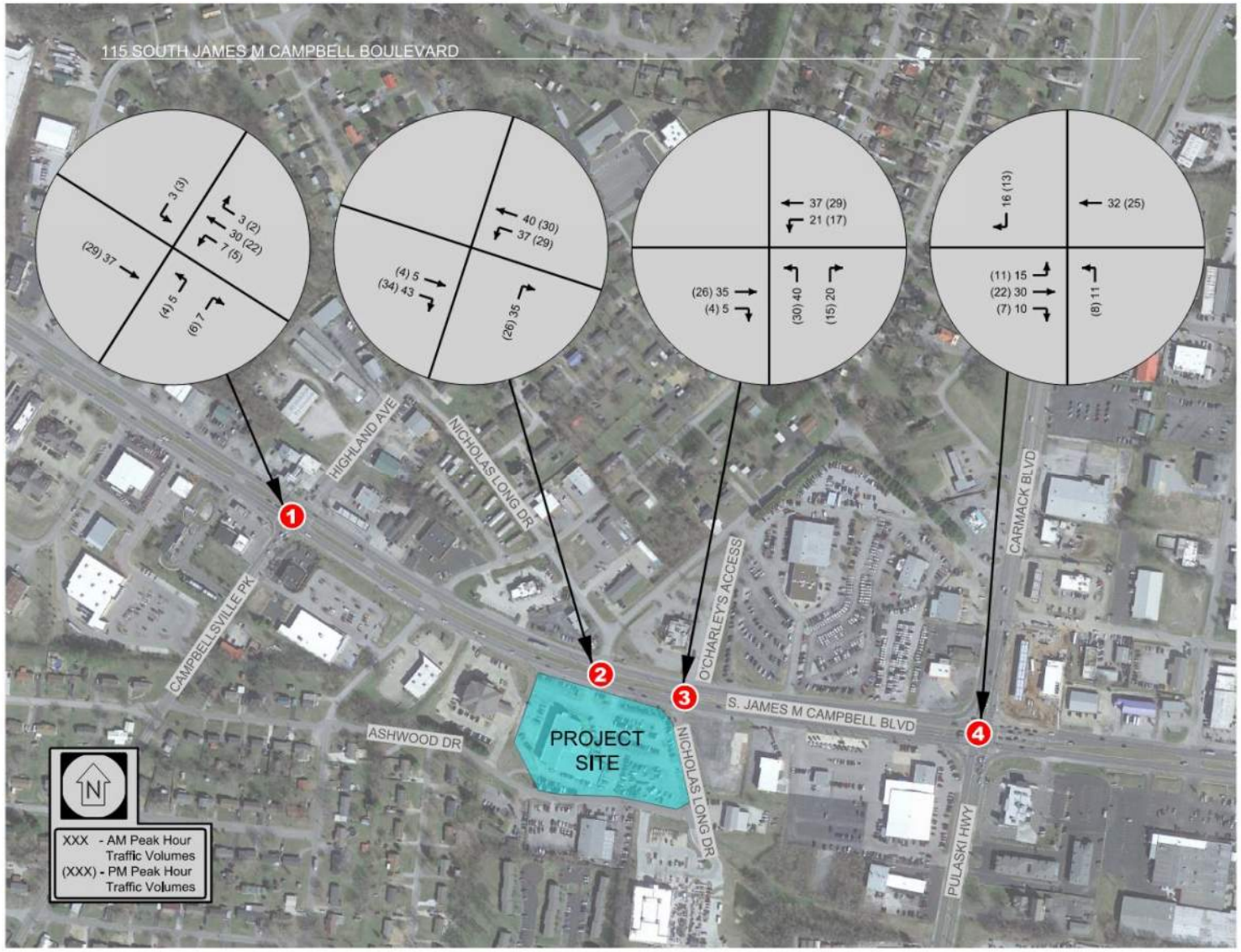


Figure 4.4 – Pass-by Trip Distribution

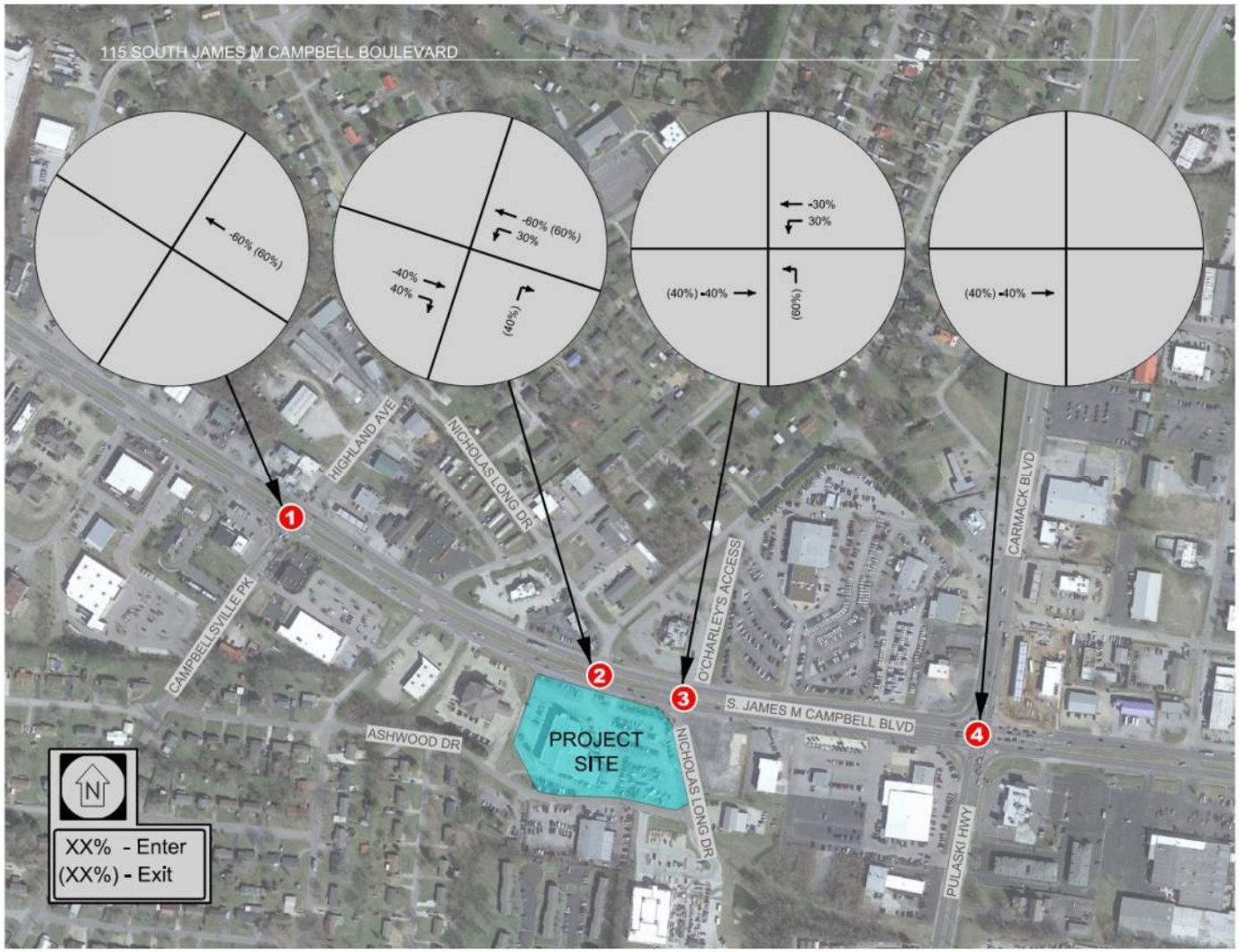


Figure 4.5 – Pass-by Trip Assignment

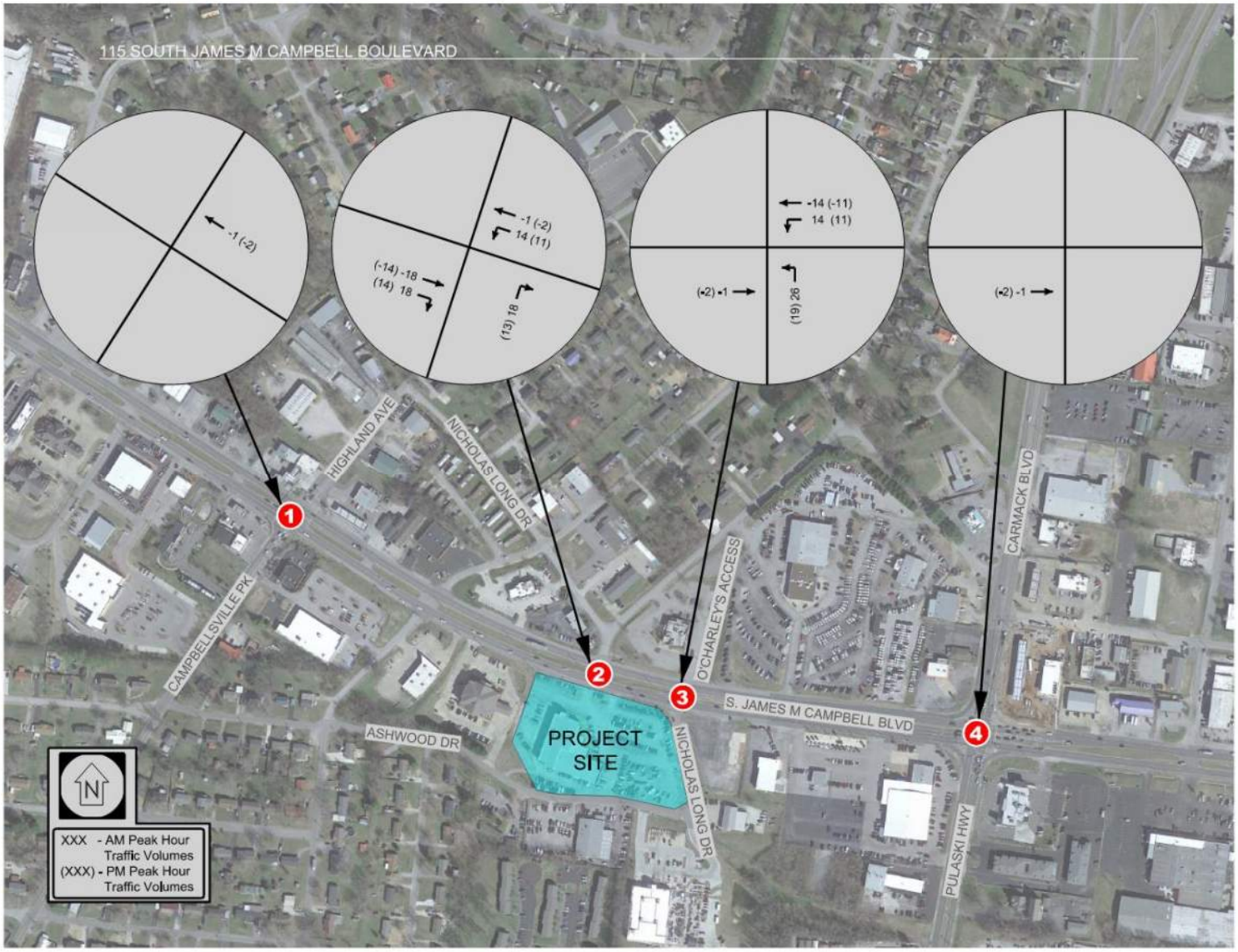
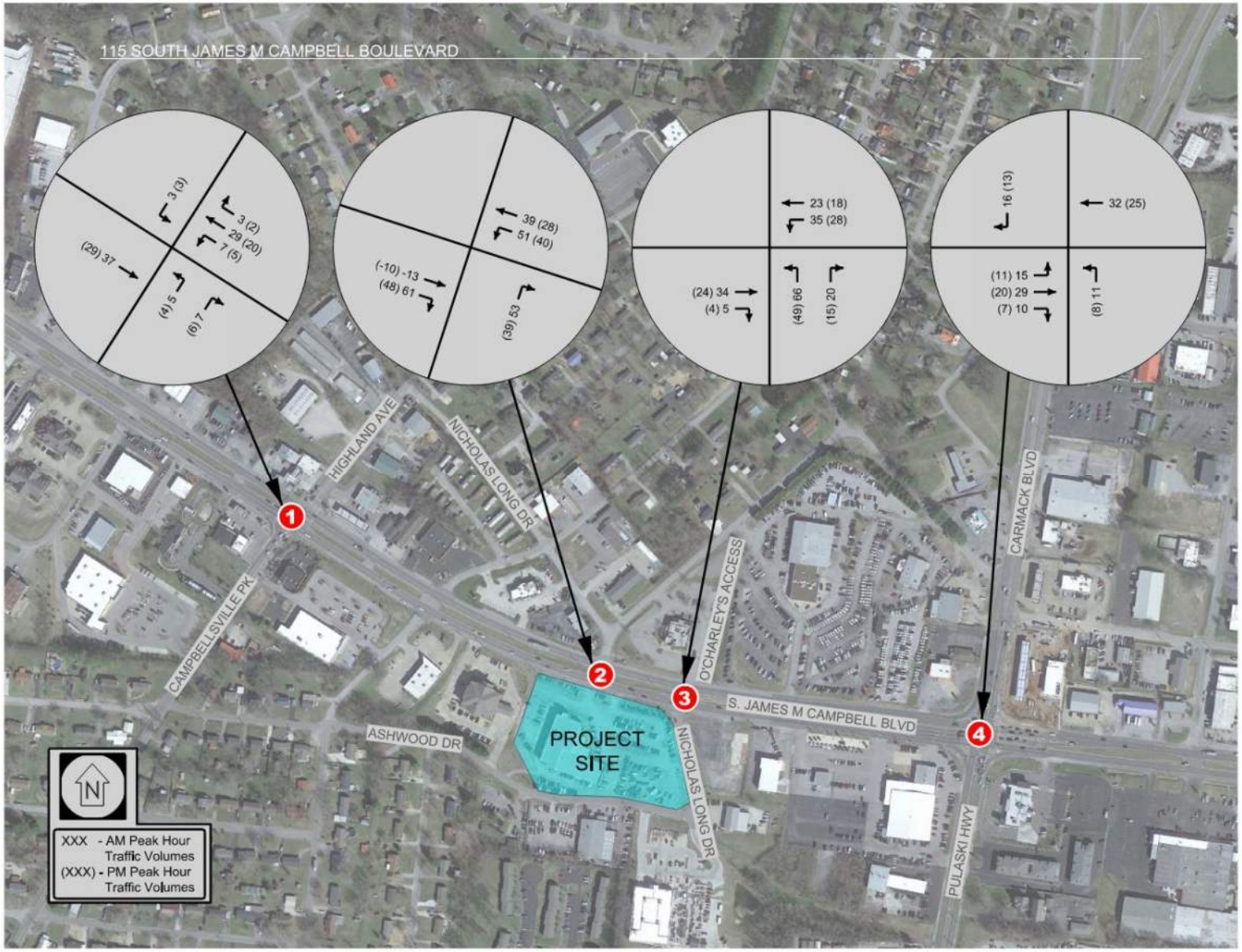


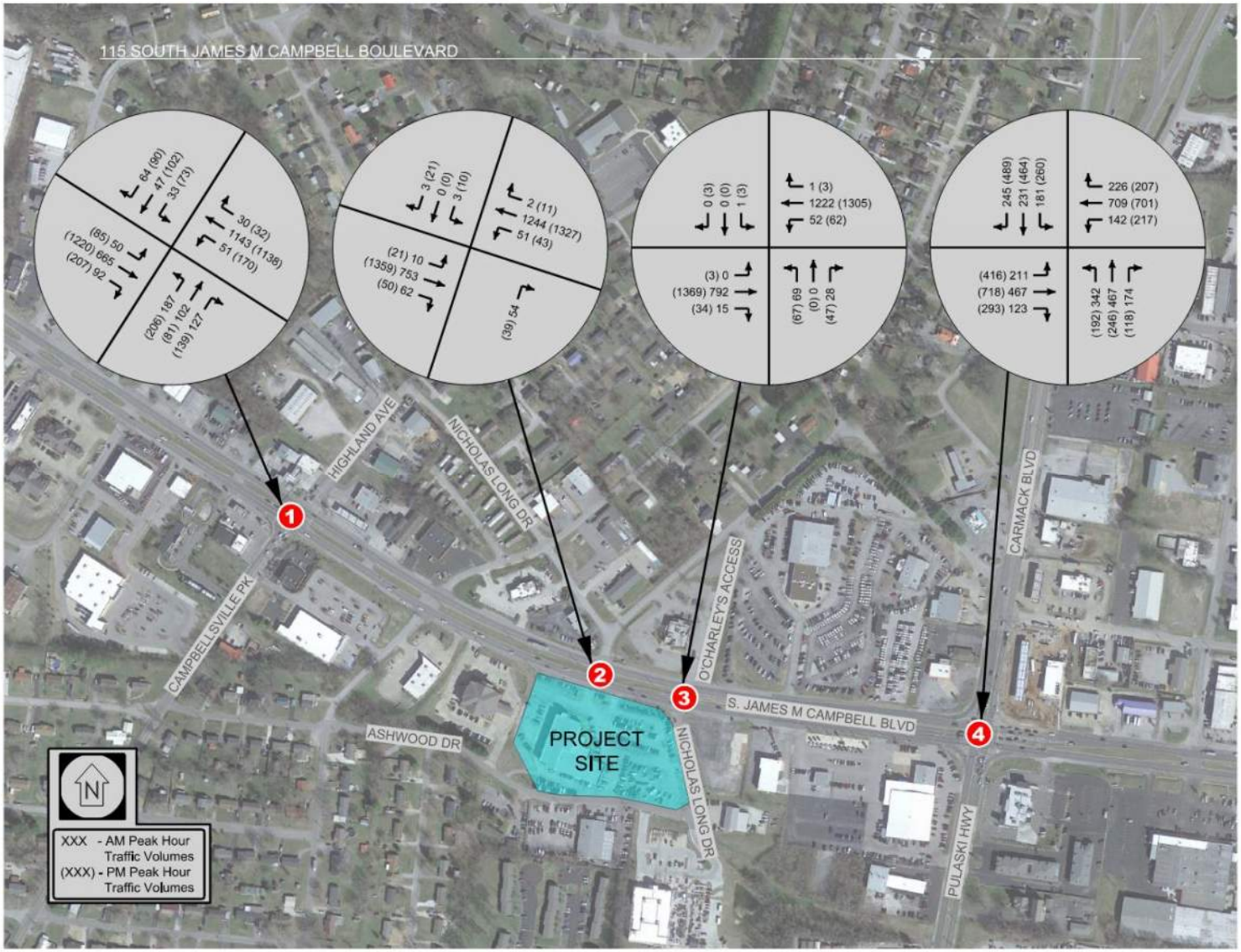
Figure 4.6 – Net New Site Trips



4.4. Build 2026 Traffic Volumes

The Build 2026 volumes represent the traffic volumes expected to be travelling through the study area network after opening of the development. The net site generated peak hour traffic volumes shown in Figure 4.6 were added to the No Build 2026 traffic volumes to determine the Build 2026 traffic volumes, shown in Figure 4.7.

Figure 4.7 – Build 2026 AM and PM Peak Hour Volumes



5.1. Analysis

5.1.1. Methodology

The *Highway Capacity Manual, 7th Edition* (HCM) outlines the methodology used for conducting operational analysis of the study intersections. The performance measure used in this methodology is based on the average delay, in seconds, experienced per vehicle at the intersection. Delay is further summarized in terms of Level of Service (LOS), a letter grade based on the calculated delay that ranges from A, the best, to F, the worst. The relationship between control delay and LOS for signalized and unsignalized intersections is summarized in Table 5.1.

Table 5.1 – Level of Service Criteria

Level of Service	Description	Average Control Delay (seconds per vehicle)	
		Signalized	Unsignalized
A	*Free flow*	≤ 10	≤ 10
B	*Stable flow, slight delay*	> 10 - 20	> 10 - 15
C	*Stable flow, acceptable delay*	> 20 - 35	> 15 - 25
D	*Near-unstable flow, tolerable delay*	> 35 - 55	> 25 - 35
E	*Unstable flow, intolerable delay*	> 55 - 80	> 35 - 50
F	*Forced flow, failure*	> 80	> 50

Source: Highway Capacity Manual (HCM 7th Edition)

5.1.2. Analysis Conditions

The results of the Existing 2024, No Build 2026, Build 2026 and Build 2026 with Improvements scenarios are summarized in Table 5.2 and Table 5.3. The roadway geometry and traffic control used for the analysis of each scenario is summarized below.

Existing 2024

The existing roadway geometry and traffic control along with the existing traffic counts were used in the analysis. The results for the AM and PM peak hours are summarized in Table 5.2 and Table 5.3, respectively. As shown, all approaches operate at LOS D or better, with a few exceptions. For the intersections of (1) S. James M Campbell Blvd at SR245, (2) S. James M Campbell Blvd at Lot Access / Nicholas Long Drive, and (3) S. James M Campbell Blvd at Nicholas Long Drive / Restaurant Access, the northbound approach experiences excessive delay in the PM peak hour and the southbound approaches experience excessive LOS E or worse both peak hours. The northbound and southbound approach for the intersection of S. James M Campbell Blvd at US 31 operates at LOS E in the PM peak hour.

No Build 2026

The No Build 2026 analysis was conducted with the same roadway geometry as the Existing 2024 analysis. Based on this roadway geometry and traffic control, the study intersections will continue to operate at a similar LOS to existing conditions with minor changes. The westbound approach at S. James M Campbell Blvd at US 31 is expected to perform at LOS E during the PM peak hour.

Build 2026

For the Build 2026 analysis, the existing lot access will be converted to Site Access 1 for the proposed development. This access will be controlled to only permit right turns exiting the development, which decreases the delay in the PM peak hour for the approach and provides safer merging for cars onto the roadway. Additional access to the development will be present on Ashwood Drive to the south and Nicholas Long Drive to the east. The analysis showed the study area is expected to operate at an acceptable level when the redevelopment is complete and open.

Build 2026 with Improvements

Analysis was performed to evaluate improvements to the transportation network that includes a northbound right turn lane on Nicholas Long Drive /Restaurant Access at S. James M Campbell Boulevard, a signal at the Intersection of S. James M Campbell Boulevard at Nicholas Long Drive / Restaurant Access, a westbound left turn lane and eastbound right turn lane at S. James M Campbell Blvd at Site Access 1. The need for a signal will be based on MUTCD warrants that are included in the following section.

The results show that installation of a northbound right turn lane will shorten the 95th percentile queue length expected northbound on Nicholas Long Drive /Restaurant Access at S James Campbell Boulevard. The northbound left turn movement is expected to experience a long delay which is common for a minor approach to a major arterial. The HCM analysis does not consider the signalized intersections to the east and west of this intersection, which are anticipated to create vehicle platoons that would provide gaps for left-turn movements.

The westbound left turn lane and eastbound right turn lane on James Campbell Boulevard at Site Access 1 will help provide storage outside of the through lanes for vehicles slowing to make the turning movement.

Table 5.2 – Capacity Analysis Results – AM Peak Hour

Intersection	Approach	2024 Existing Delay	2024 Existing LOS	2024 Existing Queues	2026 No Build Delay	2026 No Build LOS	2026 No Build Queues	2026 Build Delay	2026 Build LOS	2026 Build Queues	2026 Build w Imp Delay	2026 Build w Imp LOS	2026 Build w Imp Queues
AM Peak Hour													
1. S. James M	**Overall**	**29.7**	**C**	--	**30.7**	**C**	--	**33.9**	**C**	--	**33.9**	**C**	--
Campbell Blvd	Eastbound	24.7	C	300+	25.5	C	300+	34.3	C	300+	34.3	C	300+
At SR245	Westbound	20.4	C	300+	22.0	C	300+	22.7	C	300+	22.7	C	300+
	Northbound	52.9	D	238.0	53.3	D	248.0	54.6	D	256.0	54.6	D	256.0
	Southbound	**66.4**	**E**	121.0	**67.6**	**E**	126.0	**67.1**	**E**	126.0	**67.1**	**E**	126.0
2. S. James M	EB Left	11.9	B	< 25.0	12.6	B	< 25.0	12.9	B	< 25.0	12.9	B	< 25.0
Campbell Blvd	EB Through	0.3	A	< 25.0	0.4	A	< 25.0	0.4	B	< 25.0	0.4	A	< 25.0
at Lot Access	WB Left	--	--	--	--	--	--	10.4	B	< 25.0	10.4	B	< 25.0
(Site Access 1)	WB Through	--	--	--	--	--	--	1.2	A	< 25.0	--	--	--
/ Nicholas	Northbound	11.0	B	< 25.0	11.3	B	< 25.0	12.3	B	< 25.0	11.9	B	< 25.0
Long Dr	Southbound	**40.6**	**E**	< 25.0	**49.1**	**E**	< 25.0	**79.0**	**F**	< 25.0	**74.4**	**F**	< 25.0
3. S. James M	WB Left	9.7	A	< 25.0	9.9	A	< 25.0	10.4	B	< 25.0	10.4	B	<25
Campbell Blvd	Northbound	22.6	C	< 25.0	25.5	D	< 25.0	**300+**	**F**	235.0	12.2	B	<25
at Nicholas	*NB Left*										**300+**	**F**	200
Long Dr /	Southbound	**67.5**	**F**	< 25.0	**83.3**	**F**	< 25.0	**113.7**	**F**	< 25.0	**113.7**	**F**	< 25.0
Access	*Signalized*												
	Overall	--	--	--	--	--	--	--	--	--	**12.3**	**B**	--
	Eastbound	--	--	--	--	--	--	--	--	--	10.1	B	55.0
	Westbound	--	--	--	--	--	--	--	--	--	13.5	B	300+
	Northbound	--	--	--	--	--	--	--	--	--	15.9	B	55.0
	Southbound	--	--	--	--	--	--	--	--	--	14.1	B	< 25.0
4. S. James M	**Overall**	**41.2**	**D**	--	**43.9**	**D**	--	**44.4**	**D**	--	**44.3**	**D**	--
Campbell Blvd	Eastbound	36.6	D	248.0	38.8	D	257.0	39.0	D	268.0	38.7	D	244.0
at US 31	Westbound	34.6	C	300+	38.1	D	300+	38.7	D	300+	38.7	D	300+
	Northbound	47.5	D	272.0	49.4	D	300+	50.5	D	300+	50.5	D	300+
	Southbound	51.4	D	176.0	53.0	D	244.0	53.0	D	243.0	53.0	D	243.0

Table 5.3 – Capacity Analysis Results – PM Peak Hour

Intersection	Approach	2024 Existing Delay	2024 Existing LOS	2024 Existing Queues	2026 No Build Delay	2026 No Build LOS	2026 No Build Queues	2026 Build Delay	2026 Build LOS	2026 Build Queues	2026 Build w Imp Delay	2026 Build w Imp LOS	2026 Build w Imp Queues
PM Peak Hour													
1. S. James M	**Overall**	**29.9**	**C**	--	**31.3**	**C**	--	**31.8**	**C**	--	**31.8**	**C**	--
Campbell Blvd	Eastbound	5.2	A	272.0	6.2	A	300+	6.7	A	300+	6.7	A	300+
at SR 245	Westbound	29.5	C	300+	30.7	C	300+	31.3	C	300+	31.3	C	300+
	Northbound	**58.7**	**E**	233.0	**59.9**	**E**	257.0	**61.1**	**E**	268.0	**61.1**	**E**	268.0
	Southbound	**122.1**	**F**	300+	**131.0**	**F**	300+	**130.2**	**F**	300+	**130.2**	**F**	300+
2. S. James M	EB Left	12.2	B	< 25.0	12.8	B	< 25.0	13.0	B	< 25.0	13.0	B	< 25.0
Campbell Blvd	EB Through	0.8	A	< 25.0	1.0	A	< 25.0	1.0	A	< 25.0	1.0	A	< 25.0
at Lot Access	WB Left	12.2	B	< 25.0	12.9	B	< 25.0	14.1	B	< 25.0	14.1	B	< 25.0
(Site Access 1)	WB Through	0.1	A	< 25.0	0.1	A	< 25.0	2.3	A	< 25.0	--	--	--
/ Nicholas	Northbound	**137.6**	**F**	< 25.0	**182.2**	**F**	< 25.0	16.5	C	< 25.0	16.0	C	< 25.0
Long Dr	Southbound	**76.5**	**F**	40.0	**105.4**	**F**	50.0	**224.9**	**F**	75.0	**197.0**	**F**	70.0
3. S. James M	EB Left	11.9	B	85.0	12.4	B	< 25.0	12.5	B	< 25.0	12.5	B	<25
Campbell Blvd	WB Left	12.8	B	< 25.0	13.7	B	< 25.0	14.7	B	< 25.0	14.7	B	<25
at Nicholas	Northbound	**143.6**	**F**	< 25.0	**250.1**	**F**	112.5	**300+**	**F**	375.0	17.0	C	<25
Long Dr /	*NB Left*										**300+**	**F**	250
Access	Southbound	**85.6**	**F**	< 25.0	**112.5**	**F**	< 25.0	**156.2**	**F**	< 25.0	**156.2**	**F**	< 25.0
	Signalized												
	Overall	--	--	--	--	--	--	--	--	--	**15.1**	**B**	--
	Northbound	--	--	--	--	--	--	--	--	--	16.5	B	300+
	Southbound	--	--	--	--	--	--	--	--	--	13.5	B	271.0
	Eastbound	--	--	--	--	--	--	--	--	--	16.3	B	62.0
	Westbound	--	--	--	--	--	--	--	--	--	14.4	B	< 25.0
4. S. James M	**Overall**	**47.7**	**D**	--	**51.8**	**D**	--	**52.0**	**D**	--	**51.4**	**D**	--
Campbell Blvd	Eastbound	42.1	D	255.0	43.8	D	264.0	44.3	D	269.0	42.4	D	300+
at US 31	Westbound	44.5	D	300+	**56.1**	**E**	300+	**56.5**	**E**	300+	**56.5**	**E**	300+
	Northbound	**56.7**	**E**	160.0	54.4	D	211.0	54.1	D	211.0	54.1	D	211.0
	Southbound	**56.7**	**E**	257.0	**57.3**	**E**	300+	**57.1**	**E**	300+	**57.1**	**E**	300+

5.2. Warrants

5.2.1. Turn Lane Warrants

A left turn lane warrant was conducted for the proposed unsignalized intersection of S. James M Campbell Boulevard at Site Access 1. This warrant was only analyzed with Build 2026 traffic volumes since the driveway will only be operational once the proposed development is built. The warrants were evaluated according to the *National Cooperative Highway Research Program (NCHRP) Report 457* methodology. The results of the left turn lane warrant are shown in Table 5.4.

Table 5.4 – Left Turn Lane Warrant Analysis Results

Approach	Peak Hour	Advancing Volume	Opposing Volume	Left Turn Volume	Warrant Met?
Build 2026					
WB – S. James M Campbell Blvd at Site Access 1	AM	1,297	815	51	**YES**
	PM	1,381	1,409	43	**YES**

Based on the warrant analyses in Table 5.4, a left turn lane is warranted based on both the AM and PM peak hours. Full warrant analysis results are included in Appendix C.

A right lane warrant was conducted for the proposed unsignalized intersection of S. James M Campbell Boulevard at Site Access 1. This warrant was only analyzed with Build 2026 traffic volumes. The warrants were evaluated according to the *National Cooperative Highway Research Program (NCHRP) Report 457* methodology. The results of the right turn lane warrant are shown in Table 5.5.

Table 5.5 – Left Turn Lane Warrant Analysis Results

Approach	Peak Hour	Major Road Volume (One-direction)	Right Turn Volume	Warrant Met?
Build 2026				
EB – S. James M Campbell Blvd at Site Access 1	AM	825	62	**NO**
	PM	1,430	50	**YES**

5.2.2. Signal Warrant Analysis

A signal warrant analysis was conducted to evaluate the potential need for a traffic signal at S. James M Campbell Boulevard at Nicholas Long Drive / Restaurant Access.

The *Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways (2023 Edition)* published by *Federal Highway Administration (FHWA)*, sets forth nine different warrants that have been developed to aid in the determination of when a signal is warranted. These warrants present minimum conditions that normally indicate

when a traffic signal is justified at a particular location. The MUTCD states that "traffic control signals should not be installed unless one or more of the factors…are met."

The nine warrants are based on specific transportation characteristics such as traffic volumes, pedestrian related warrants, roadway operations and safety. The nine warrants criteria are listed below:

- #1 – Eight-Hour Vehicular Volumes
  - Condition A - Minimum Vehicular Volume
  - Condition B - Interruption of Continuous Traffic
- #2 – Four-Hour Vehicular Volume
- #3 – Peak Hour
- #4 – Pedestrian Volume
- #5 – School Crossing
- #6 – Coordinated Signal System
- #7 – Crash Experience
- #8 – Roadway Network
- #9 – Intersection Near a Grade Crossing

Volume warrants 1 and 2 were evaluated at the intersection of at S. James M Campbell Boulevard at Nicholas Long Drive / Restaurant Access to determine if a traffic signal is warranted for vehicular operations. The signal warrant analysis hourly data was analyzed directly from 12-hour TMC that was collected on Tuesday, March 19, 2024. The annual growth rate was applied to the existing traffic count to determine the 2026 volumes for the 12-hour analysis. Background development trips were also added to the hourly distributions. Hourly Trip Generation Rates provided by *ITE's Trip Generation Handbook, 11th Edition* were applied to the annual projected growth of the study network to determine the hourly projections for Build 2026 volumes.

Based on TDOT guidelines and engineering judgement, signal warrant analysis can be done with a reduction in right turn volumes from the minor street approach. As presented in the analysis, Nicholas Long Drive is proposed to provide a separate right turn lane. Therefore, the right turn volume was removed from the signal warrant analysis, and the minor approach was analyzed as one lane. As shown in the analysis the signal is not warranted. The results of this analysis are shown in Table 5.6 and full warrant analysis results are included in Appendix C.

Table 5.6 – Signal Warrant Analysis

TIME	TRAFFIC VOLUMES		WARRANTS MET?			
	S. JAMES M CAMPBELL BLVD (BOTH DIRECTIONS)	MINOR ST. HIGHEST APPROACH	#1A	#1B	Combine	#2
6:00 – 7:00 AM	1,018	18	--	--	--	--
7:00 – 8:00 AM	1,983	33	--	--	--	--
8:00 – 9:00 AM	1,816	41	--	--	--	--
9:00 – 10:00 AM	1,725	45	--	--	--	--
10:00 – 11:00 AM	1,911	52	--	--	--	--
11:00 AM – 12:00 PM	2,217	80	--	1	--	--
12:00 – 1:00 PM	2,613	125	--	1	--	1
1:00 – 2:00 PM	2,376	101	--	1	--	--
2:00 – 3:00 PM	2,331	83	--	1	--	--
3:00 – 4:00 PM	2,546	73	--	--	--	--
4:00 – 5:00 PM	2,759	70	--	--	--	--
5:00 – 6:00 PM	2,532	75	--	1	--	--
		TOTAL HOURS SATISFIED	**0**	**5**	**N/A**	**1**

6.1. Historic Crash Analysis

Crash data was analyzed from AASHTOWare Safety to determine how many, if any, crashes occurred throughout the study area. Crashes from the most recent five-year period (April 1, 2019 – March 31, 2024) were analyzed with this study. Crash data included motor vehicle, pedestrian, and bicycle related crashes. Results showed that there has been a total of 328 reported crashes - one of which involved a non-motorist. Figure 6.1 shows a map of the crash locations through the study area.

Figure 6.1 – Study Area Crash Locations – (March 2019 – March 2024)



Table 6.1 details the total number of crashes by severity at an annual breakdown. The total number of crashes by location and crash type are detailed Table 6.2.

Table 6.1 – Crash Severity Annual Breakdown – (April 1, 2019 – March 31, 2024)

Year	Total Crashes	Crash Severity				
		Fatal	Serious Injury	Minor Injury	Possible Injury	Property Damage Only
2024	9	0	0	0	0	9
2023	70	0	1	7	5	57
2022	75	0	3	9	5	58
2021	60	0	0	2	4	54
2020	64	1	0	1	1	61
2019	50	0	0	7	1	42
Total	**328**	**1**	**4**	**26**	**16**	**281**

Table 6.2 – Crash Location and Type Annual Breakdown – (April 1, 2019 – March 31, 2024)

Year	Crash Location		Crash Type					
	Intersection	Along Roadway	Head-On	Rear-End	Angle	Sideswipe	*Non-Motorist Involved	Other / Unknown
2024	5	4	1	4	2	2	0	0
2023	24	46	1	30	9	8	0	22
2022	27	48	2	20	16	9	0	28
2021	15	45	1	13	12	4	0	30
2020	34	30	1	27	16	5	0	15
2019	39	11	1	12	12	5	1	19
Total	**144**	**184**	**7**	**106**	**67**	**33**	**1**	**114**

*Includes pedestrians, bicyclists, and other non-motorists

Out of the 328 crashes that have occurred within the study area during the five-year analysis period, one involved a cyclist, one resulted in a fatality, and four resulted in one or more suspected serious injuries. The cyclist, fatal and suspected serious injury crashes occurred during clear conditions. The pedalcycle crash occurred when a cyclist traveling westbound along the eastbound shoulder of S. James M Campbell Blvd crossed Nicholas Long Drive and was struck by a vehicle making a northbound right-turn at a stop sign. Of the suspected serious injury and fatal crashes, four out of five were the result of improperly following traffic control and the other was the result of a driver who was under the influence of alcohol. A summary of the pedalcycle, fatal, and suspected serious injury crashes is shown in Table 6.3 and the mapped locations are shown in Figure 6.2.

Table 6.3 – Pedalcycle, Fatal, and Suspected Serious Injury Crashes – (April 1, 2019 – March 31, 2024)

Date	Type	Location	Severity	Driver Action	Conditions
06/08/2019	Pedalcycle	S. James M Campbell Blvd at Nicholas Long Dr	Suspected Minor Injury	Right-Turn at Stop Sign While Cyclist was Crossing	Clear; Daylight
12/09/2020	Angle	S. James M Campbell Blvd at US 31	Fatal	Running Red Light	Clear; Daylight
04/16/2022	Angle	S. James M Campbell Blvd at Derham Ave	Suspected Serious Injury	Failure to Yield Right-of-Way	Clear; Daylight
05/12/2022	Angle	S. James M Campbell Blvd at Highland Ave	Suspected Serious Injury	Running Red Light	Clear; Daylight
09/16/2022	Angle	S. James M Campbell Blvd at US 31	Suspected Serious Injury	Running Red Light	Clear; Daylight
07/07/2023	Rear-End	SB on S. James M Campbell Blvd approaching US 31	Suspected Serious Injury	DUI	Clear; Dark-Lighted

Figure 6.2 – Pedalcycle, Fatal, and Suspected Serious Injury Crashes – (April 1, 2019 – March 31, 2024)



Safety concerns at the intersection of S. James M Campbell Boulevard at Pulaski Highway / Carmack Boulevard (US 31) were identified during the preparation of study. Updates to the existing infrastructure could alleviate the severity of the crashes. The addition of concrete channelized islands or channelization bollards at all four approaches could improve safety for right turning vehicles and provide refuge for pedestrians crossing the intersection. Additionally, updates to the existing pedestrian crosswalks and infrastructure could improve safety for pedestrians crossing the intersection.

6.2. Crash Modification Factors (CMFs) Clearinghouse

CMF Clearinghouse was utilized to determine what, if any, proven safety benefit exists with the installation of a concrete channelized island, channelization bollards, pedestrian signals, or high visibility crosswalks. The CMF Clearinghouse is composed of a comprehensive listing of available CMFs and includes all the CMFs included in the Highway Safety Manual (HSM). A CMF is a multiplicative factor used to compute the expected number of crashes after implementing a given countermeasure at a specific site. A CMF reflects the safety effect of a countermeasure, whether it will result in a decrease in crashes (CMF below 1.0), increase in crashes (CMF over 1.0), or no change in crashes (CMF of 1.0). A countermeasure is a strategy intended to reduce crash frequency or severity on the road, and in the case of this study, the installation of concrete channelized islands, channelization bollards, pedestrian signals, or high visibility crosswalks.

A CMF is graded on its star quality rating, which indicates the quality or confidence in the results of the study producing the CMF. The star rating is based on a scale (1 to 5), where a 5 indicates the highest or best rating. The review process to determine the star rating judges the accuracy and precision as well as the general applicability of the study results. Reviewers considered various factors for each study (depending on the study type used to develop the CMFs) — study design, sample size, statistical methodology, statistical significance, etc. — and judged each CMF according to its performance in the various factors (including multiple subcategories within each factor).

This study assessed CMFs from the Clearinghouse database to determine the safety impacts of the installation of improved pedestrian facilities at the intersection of S. James M Campbell Boulevard at Pulaski Highway / Carmack Boulevard (US 31). The results of the Clearinghouse data are summarized below in Table 5.

Table 5 – Crash Modification Factors

CMF ID	Countermeasure	CMF Factor	Star Quality Rating
175	**Install raised median with marked crosswalk (uncontrolled)**	0.54	3/5
4123	**Install high-visibility crosswalk**	0.6	2/5
	Install Pedestrian Signals	Not provided	4/5

Installation of the channelized concrete islands was evaluated using the CMF values for installation of a raised median with marked crosswalk (uncontrolled). As shown in Table 5, the installation of raised median with a marked crosswalk has shown to provide almost a 46% reduction in crashes at the areas studied with this improvement. The installation of a high-visibility crosswalk along an urban arterial roadway has shown a 40% reduction of crashes at locations that were studied with this improvement. The CMF factor for the installation of Pedestrian Signals is not provided but those are expected to improve safety at the intersection.

7. RECOMMENDATIONS

Recommendations

Based on this study's analysis and evaluation of the transportation network, the following improvements are recommended to better enhance traffic operations within the study area upon completion of the proposed development.

Build 2026

S. James M Campbell Boulevard at Nicholas Long Drive / Restaurant Access

- Restripe the northbound approach on Nicholas Long Drive to provide a left/through lane and separate right turn lane with 75 feet of storage and taper length per TDOT and MUTCD standards.
- Both northbound lanes should be 11 feet wide.

S. James M Campbell Boulevard at Lot Access (Site Access 1) / Nicholas Long Drive

- Install a westbound left turn lane with a minimum of 100 feet of storage and taper per TDOT and MUTCD standards.
- Install an eastbound right turn lane with approximately 100 feet of storage and taper per TDOT and MUTCD standards.
- Install one entering lane and one exiting lane to the development that is stop controlled. Install concrete channelization for northbound right turning movements and restrict northbound left turning movements.

Nicholas Long Drive at Site Access 2

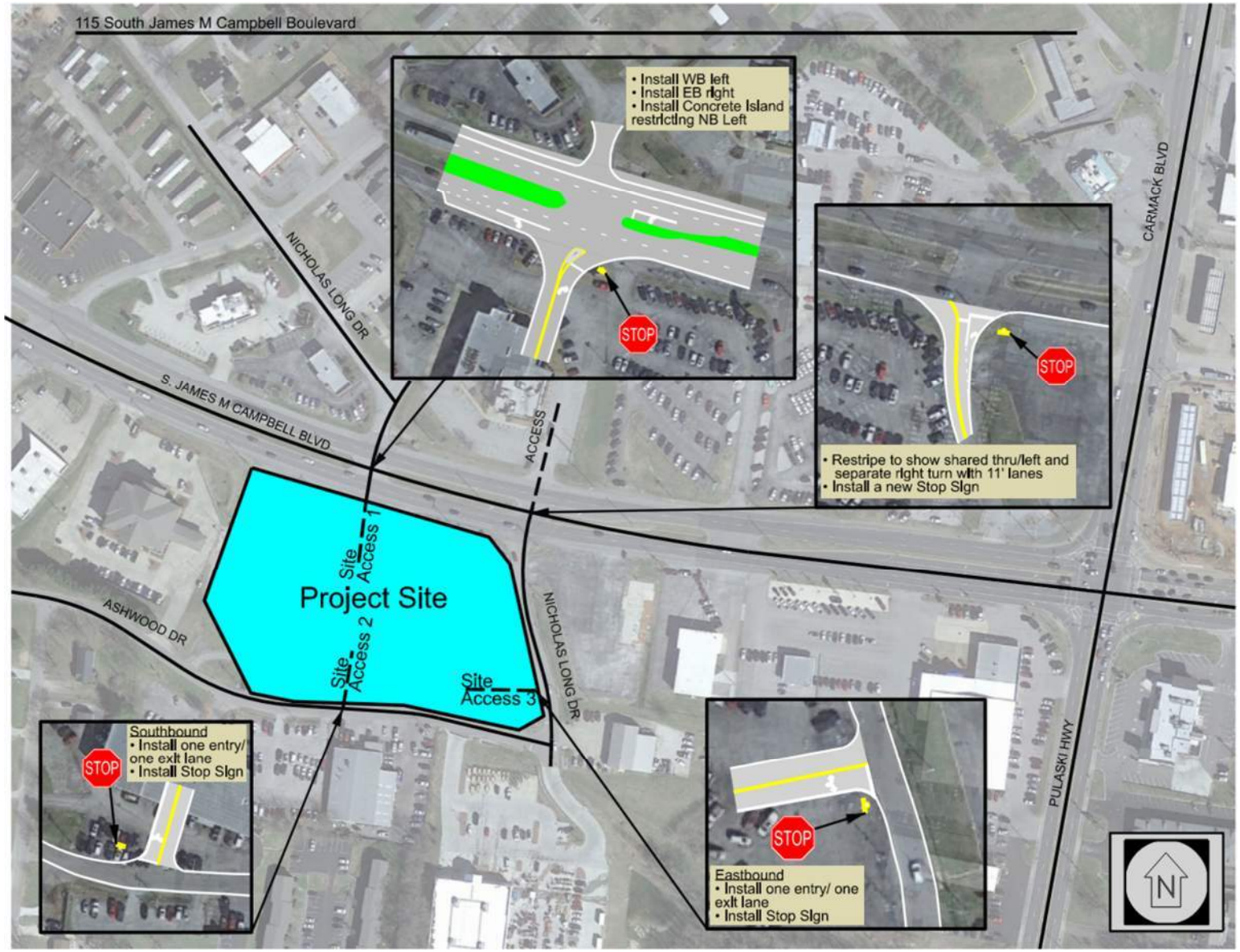
- Install one entering lane and one exiting lane to the development that is stop controlled.

Ashwood Drive at Site Access 3

- Install one entering lane and one exiting lane to the development that is stop controlled.

Design the internal accesses according to federal, state, and local standards, including *Roadway Design Guidelines* (Tennessee Department of Transportation), and *A Policy on Geometric Design of Highways and Streets* (AASHTO, 2018). Placement of all signing should be in accordance with the *Manual on Uniform Traffic Control Devices* (FHWA, 2023).

Figure 7.1 – Recommendations



APPENDIX A – DATA COLLECTION

Site Plan

Existing Data Counts

Historic Traffic Data

Background Development Trip Generation

EXISTING RIGHT OF WAY WIDTH BASED ON
T.D.O.T PLAN & PROFILE SHEETS FOR
FEDERAL AID PROJECT NO. S-SU-6368 (2)
STATE PROJECT NO. 60031-3304-23, FISCAL YEAR 1966

SOUTH JAMES CAMPBELL BOULEVARD
(120' PUBLIC R.O.W.)

ASHWOOD DRIVE
(40' PUBLIC R.O.W.)

NICHOLAS LONG DRIVE
(50' PUBLIC R.O.W.)

BARGE DESIGN SOLUTIONS
615 3rd Avenue South // Suite 700 // Nashville, Tennessee 37210
PHONE (615) 254-1500 // FAX (615) 255-6572

PRELIMINARY
NOT FOR
CONSTRUCTION

DATE

SITE LAYOUT PLAN

115 SOUTH JAMES CAMPBELL BOULEVARD

COLUMBIA, MAURY COUNTY, TENNESSEE

811 Know what's **below** **Call** before you dig.
811
www.call811.com

REV.:	DR.	CHK.	DATE	REVISION INFORMATION DESCRIPTION

PERMIT NUMBERS:

PARCEL ID: 113E B 004.00	FEMA PANEL: ZONE "X", PANEL NO. 47119C0285E, 4/16/2007.
DATUM: TNSPC (NAD83) NAVD 1988	BENCHMARK:

N

30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET

C1.00

FILE NO. 38531-01

USER:RESURYONO
FILE:F:\38\38531\38531010\4_CAD\CIV\LPLOT\38531010_C1.01.dwg
SAVED:8/22/2024
PLOTTED:8/26/2024

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Prepared by National Data & Surveying Services

Campbellsville Pike/Highlands Ave/SR 245 & S James Campbell Blvd/SR 50/Columbia Bypass

Peak Hour Turning Movement Count

ID: 24-200002-001
City: Columbia

Day: Tuesday
Date: 3/19/2024

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	6:00 AM - 09:00 AM
12:00 PM - 01:00 PM	11:00 AM - 01:00 PM
04:15 PM - 05:15 PM	3:30 PM - 06:30 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	2347	2910	3271
PHF	0.90	0.97	0.96

SOUTHBOUND — Campbellsville Pike/Highlands Ave/SR 245

	Left	Thru	Right	U-Turn	Total	
AM	62	45	29	0	172	AM
NOON	96	65	36	0	174	NOON
PM	87	98	67	0	185	PM

EASTBOUND — S James Campbell Blvd/SR 50/Columbia Bypass

	AM	NOON	PM
Thru	1266	1325	1334
Left	0	2	4
Thru	48	73	78
Right	590	967	1101
U-Turn	88	148	199

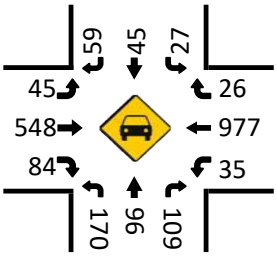
WESTBOUND — S James Campbell Blvd/SR 50/Columbia Bypass

	PM	NOON	AM
Left	29	29	26
Thru	1049	1054	1029
Right	156	91	41
U-Turn	3	0	1
Thru	1299	1107	735

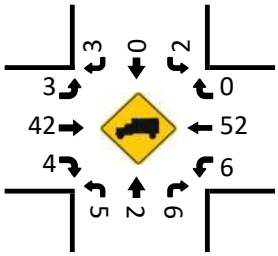
NORTHBOUND — Campbellsville Pike/Highlands Ave/SR 245

	Thru	Left	Thru	Right	U-Turn	
PM	453	0	194	78	128	PM
NOON	304	0	173	72	104	NOON
AM	174	0	175	98	115	AM

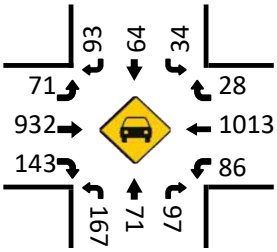
Cars (AM)



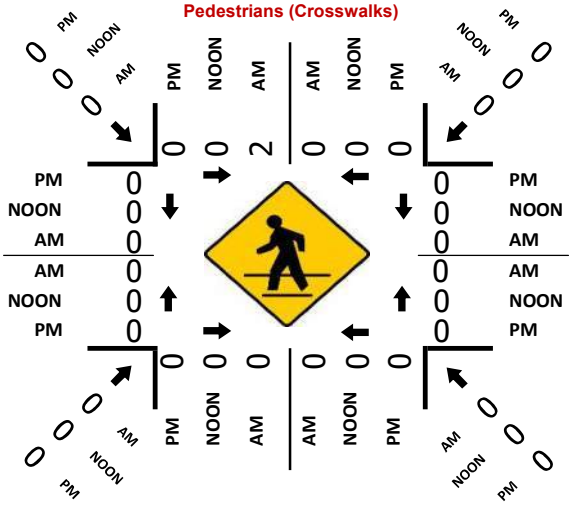
HT (AM)



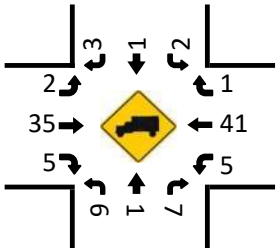
Cars (NOON)



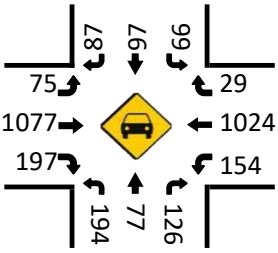
Pedestrians (Crosswalks)



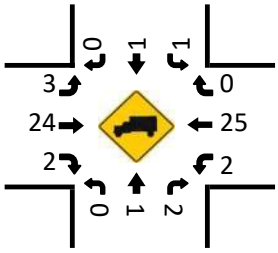
HT (NOON)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Nicholas Long Dr/Thomas Ave & S James Campbell Blvd/SR 50/Columbia Bypass

Peak Hour Turning Movement Count

ID: 24-200002-002
City: Columbia

Day: Tuesday
Date: 3/19/2024

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	6:00 AM - 10:00 AM
12:00 PM - 01:00 PM	10:00 AM - 02:00 PM
04:15 PM - 05:15 PM	2:00 PM - 06:00 PM

CONTROL: 1-Way Stop(SB)

	AM	NOON	PM
TEV	1859	2343	2562
PHF	0.90	0.96	0.94

SOUTHBOUND (Nicholas Long Dr/Thomas Ave)

	L	T	R	U	Approach
AM	3	0	3	0	11
NOON	30	0	22	0	21
PM	20	0	10	0	20

EASTBOUND (S James Campbell Blvd/SR 50/Columbia Bypass)

	L	T	R	U	Approach
AM	1	20	11	0	32
NOON	9	16	9	0	34
PM	723	1072	1272	2	1120
AM	1	1	2	0	4
NOON	1226				
PM	1255				

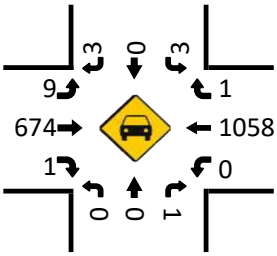
WESTBOUND (S James Campbell Blvd/SR 50/Columbia Bypass)

	L	T	R	U	Approach
PM	0	11	5	2	18
NOON	2	1223	1176	1116	2515
AM	0	1	0	0	1
PM	0	2	1	0	3
NOON	1284				
AM	1095				
PM	727				

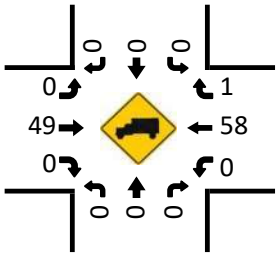
NORTHBOUND (Nicholas Long Dr/Thomas Ave)

	L	T	R	U	Approach
PM	3	0	1	0	0	4
NOON	1	0	0	0	0	1
AM	1	0	0	0	1	2

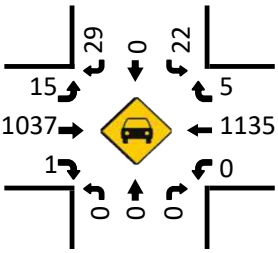
Cars (AM)



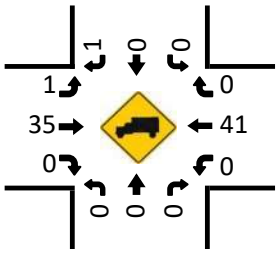
HT (AM)



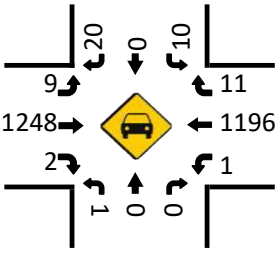
Cars (NOON)



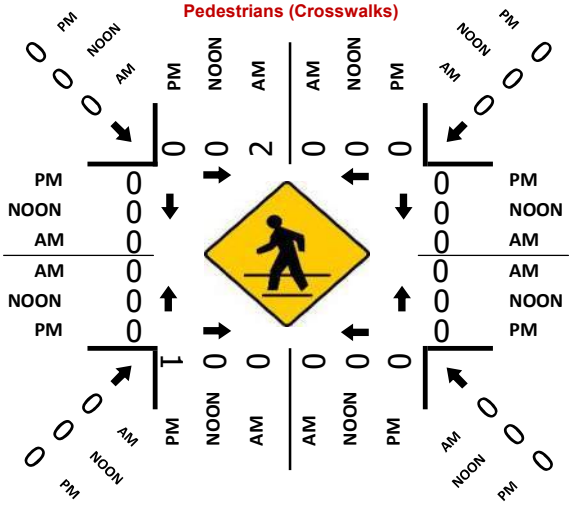
HT (NOON)



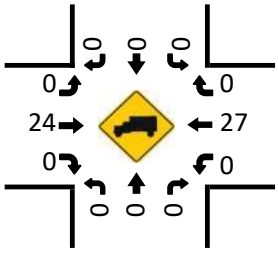
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



Prepared by National Data & Surveying Services

Ashwood Dr/O'Charley's Access & S James Campbell Blvd/SR 50/Columbia Bypass

Peak Hour Turning Movement Count

ID: 24-200002-003
City: Columbia

Day: Tuesday
Date: 3/19/2024

PEAK HOURS

AM	07:15 AM - 08:15 AM
NOON	12:15 PM - 01:15 PM
PM	04:15 PM - 05:15 PM

COUNT PERIODS

AM	6:00 AM - 10:00 AM
NOON	10:00 AM - 02:00 PM
PM	2:00 PM - 06:00 PM

CONTROL: 1-Way Stop(NB)

	AM	NOON	PM
TEV	1865	2371	2583
PHF	0.89	0.94	0.93

SOUTHBOUND — Ashwood Dr/O'Charley's Access

	L	T	R	U	Thru	
AM	0	0	1	0	1	AM
NOON	7	0	7	0	18	NOON
PM	3	0	3	0	4	PM

EASTBOUND — S James Campbell Blvd/SR 50/Columbia Bypass

	AM	NOON	PM	
Thru	1114	1175	1234	
L	0	5	2	0
T	0	12	1	1
R	715	1041	1249	2
U	10	33	29	0

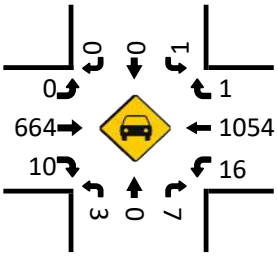
WESTBOUND — S James Campbell Blvd/SR 50/Columbia Bypass

	PM	NOON	AM	
U	3	6	1	0
L	1212	1148	1111	2
T	31	42	16	1
R	2	2	0	0
Thru	1285	1103	724	

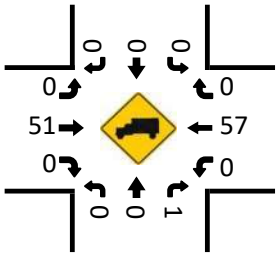
NORTHBOUND — Ashwood Dr/O'Charley's Access

	L	T	R	U	Thru	
PM	60	0	17	0	31	PM
NOON	75	0	15	0	53	NOON
AM	26	0	3	0	8	AM

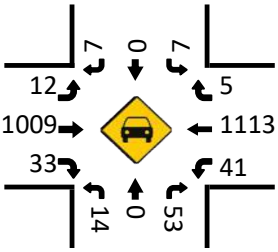
Cars (AM)



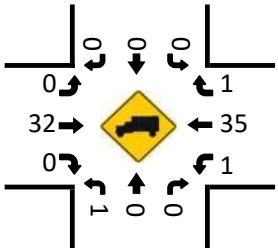
HT (AM)



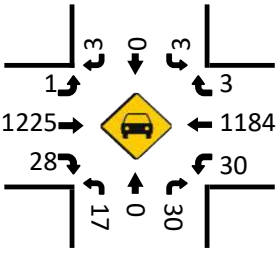
Cars (NOON)



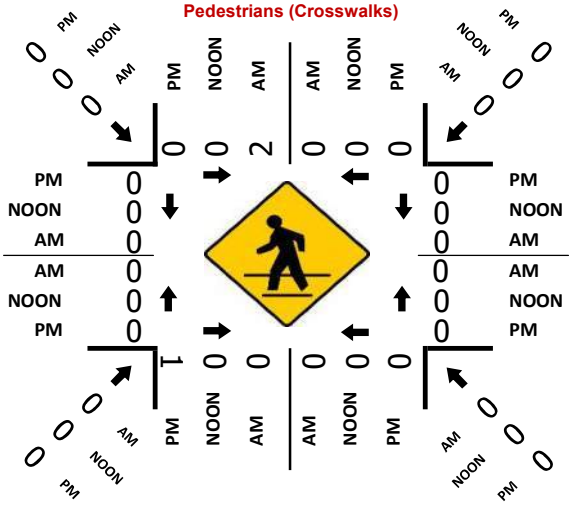
HT (NOON)



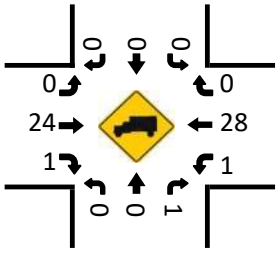
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



Prepared by National Data & Surveying Services

Carmack Blvd/SR 7/US 31 & S James Campbell Blvd/SR 50/Columbia Bypass

Peak Hour Turning Movement Count

ID: 24-200002-004
City: Columbia

Day: Tuesday
Date: 3/19/2024

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	6:00 AM - 09:00 AM
12:00 PM - 01:00 PM	11:00 AM - 01:00 PM
04:15 PM - 05:15 PM	3:30 PM - 06:30 PM

SOUTHBOUND (Carmack Blvd/SR 7/US 31)

AM	220	199	173	1	781	AM
NOON	473	200	191	0	772	NOON
PM	458	369	250	0	776	PM

EASTBOUND (S James Campbell Blvd/SR 50/Columbia Bypass)

AM	NOON	PM	
1147	1195	1261	
0	1	2	0
188	394	387	2
421	497	671	2
95	179	231	1
AM	NOON	PM	

WESTBOUND (S James Campbell Blvd/SR 50/Columbia Bypass)

PM	NOON	AM	
199	165	217	1
650	533	651	2
173	82	127	1
3	2	0	0
1018	756	730	
PM	NOON	AM	

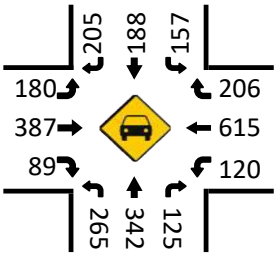
NORTHBOUND (Carmack Blvd/SR 7/US 31)

PM	773	0	151	190	94	PM
NOON	461	0	188	213	66	NOON
AM	421	0	276	375	136	AM

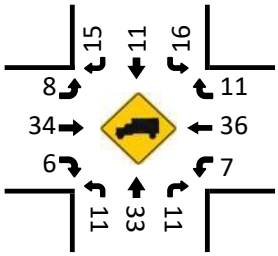
	1	2	1	0
	0	1	1.5	0.5

CONTROL			
Signalized			
TEV	3079 AM	3184 NOON	3828 PM
PHF	0.91	0.94	0.93

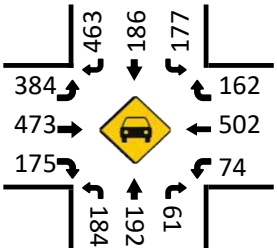
Cars (AM)



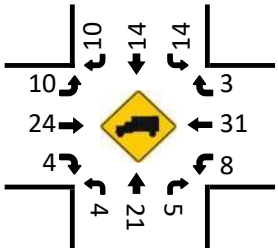
HT (AM)



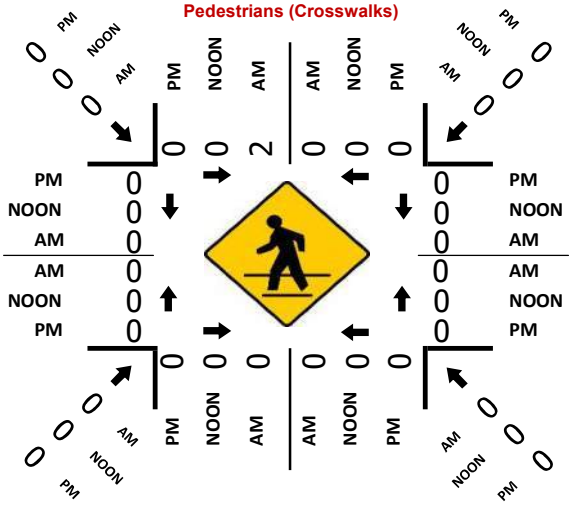
Cars (NOON)



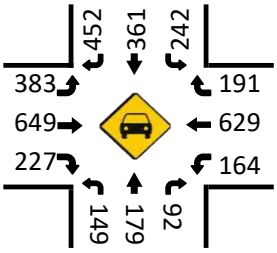
HT (NOON)



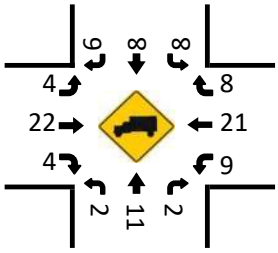
Pedestrians (Crosswalks)



Cars (PM)



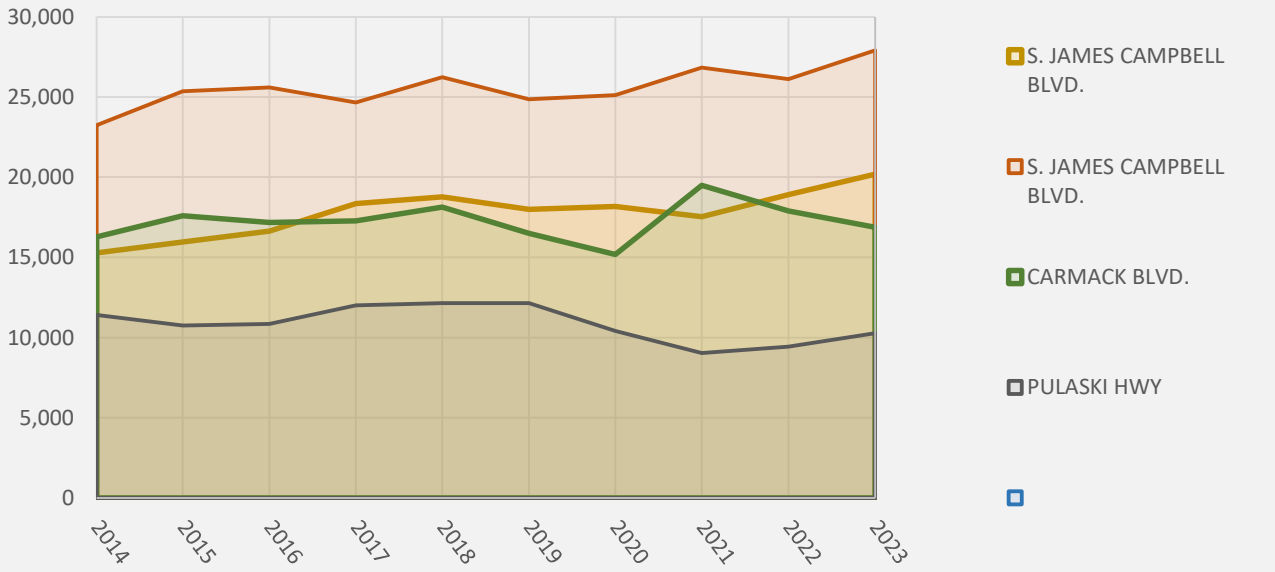
HT (PM)

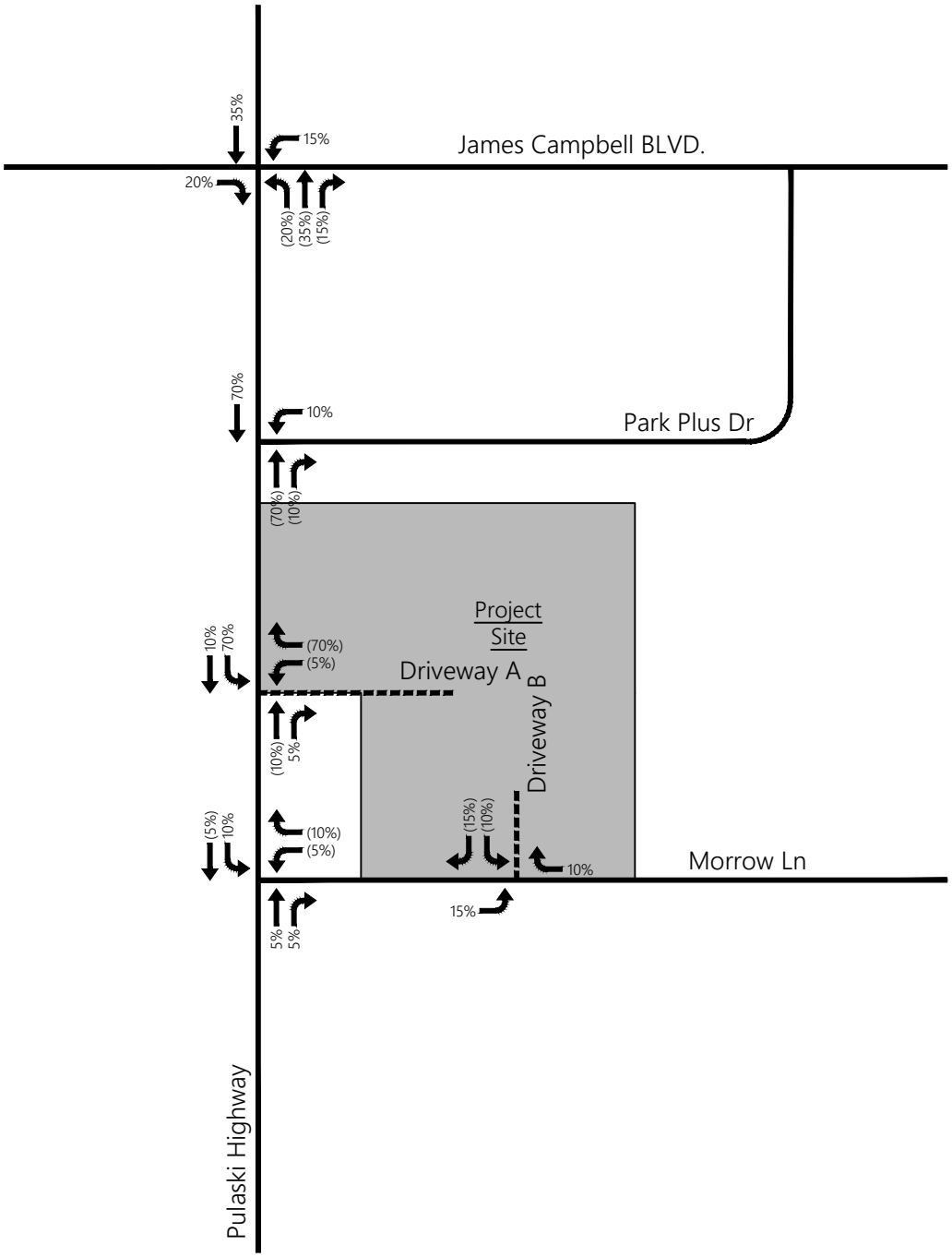


Historic Traffic Data

Year	60000081 S. JAMES CAMPBELL BLVD.	60000082 S. JAMES CAMPBELL BLVD.	60000099 CARMACK BLVD.	60000041 PULASKI HWY		Total
2023	27,920	20,204	16,866	10,268		75,258
2022	26,107	18,902	17,885	9,442		72,336
2021	26,838	17,537	19,495	9,031		72,901
2020	25,106	18,169	15,187	10,417		68,879
2019	24,857	17,989	16,490	12,145		71,481
2018	26,225	18,763	18,138	12,159		75,285
2017	24,664	18,341	17,272	12,003		72,280
2016	25,601	16,629	17,169	10,857		70,256
2015	25,348	15,961	17,586	10,745		69,640
2014	23,244	15,278	16,274	11,408		66,204

Current Year	2023
Horizon Year	2038
Linear Growth Per Year	0.81%
Since	2014

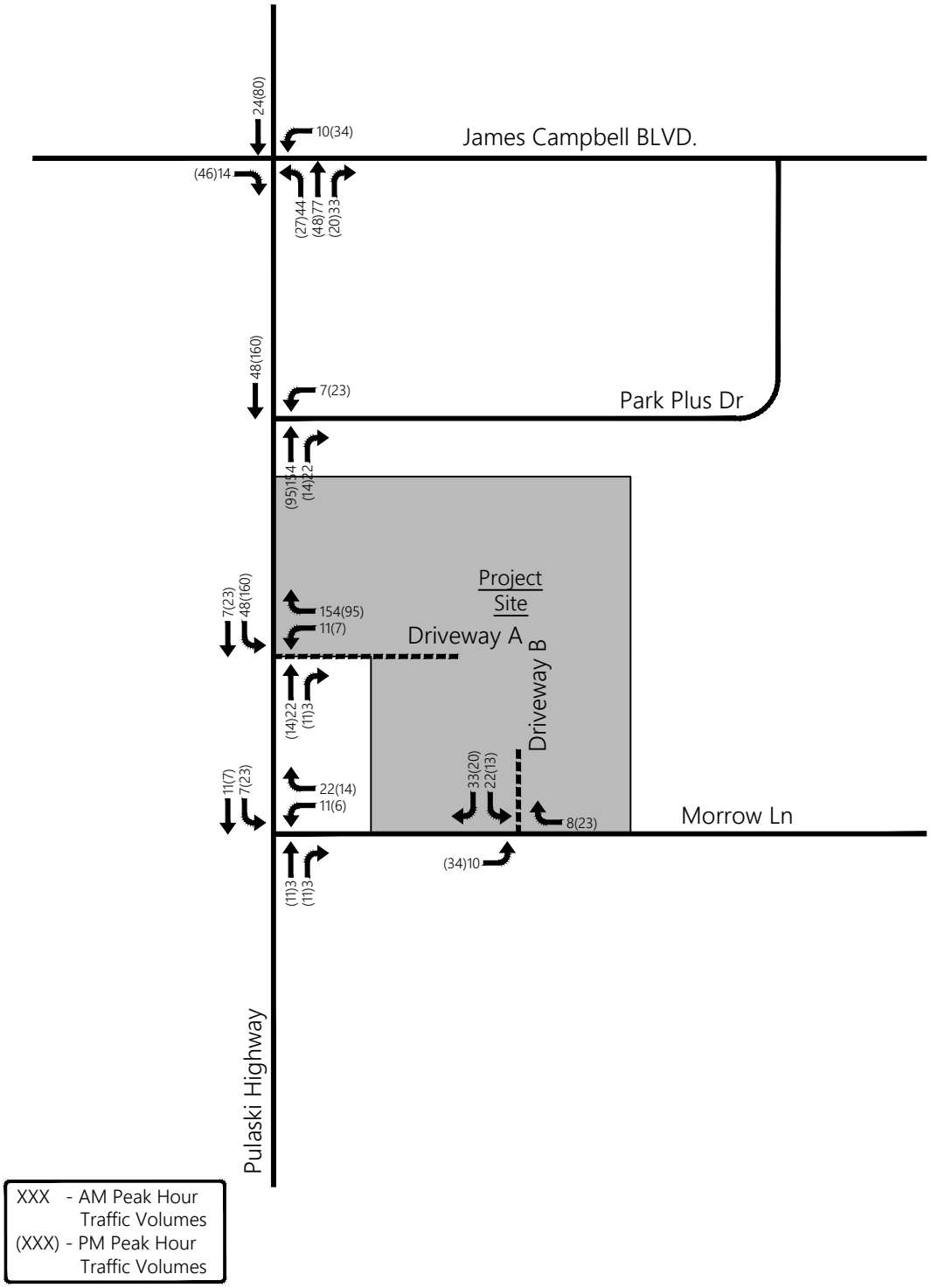




XX% - Enter
(XX%) - Exit

Distribution of Peak Hour Traffic Volumes
Generated by the Project Site
(Not to Scale)

Figure 5.



Assignment of Peak Hour Traffic Volumes
Generated by the Project Site
(Not to Scale)

Figure 6.

APPENDIX B – PROPOSED DEVELOPMENT DATA

Trip Generation Figures

ITE Pass-By Reductions

ITE Hourly Distributions

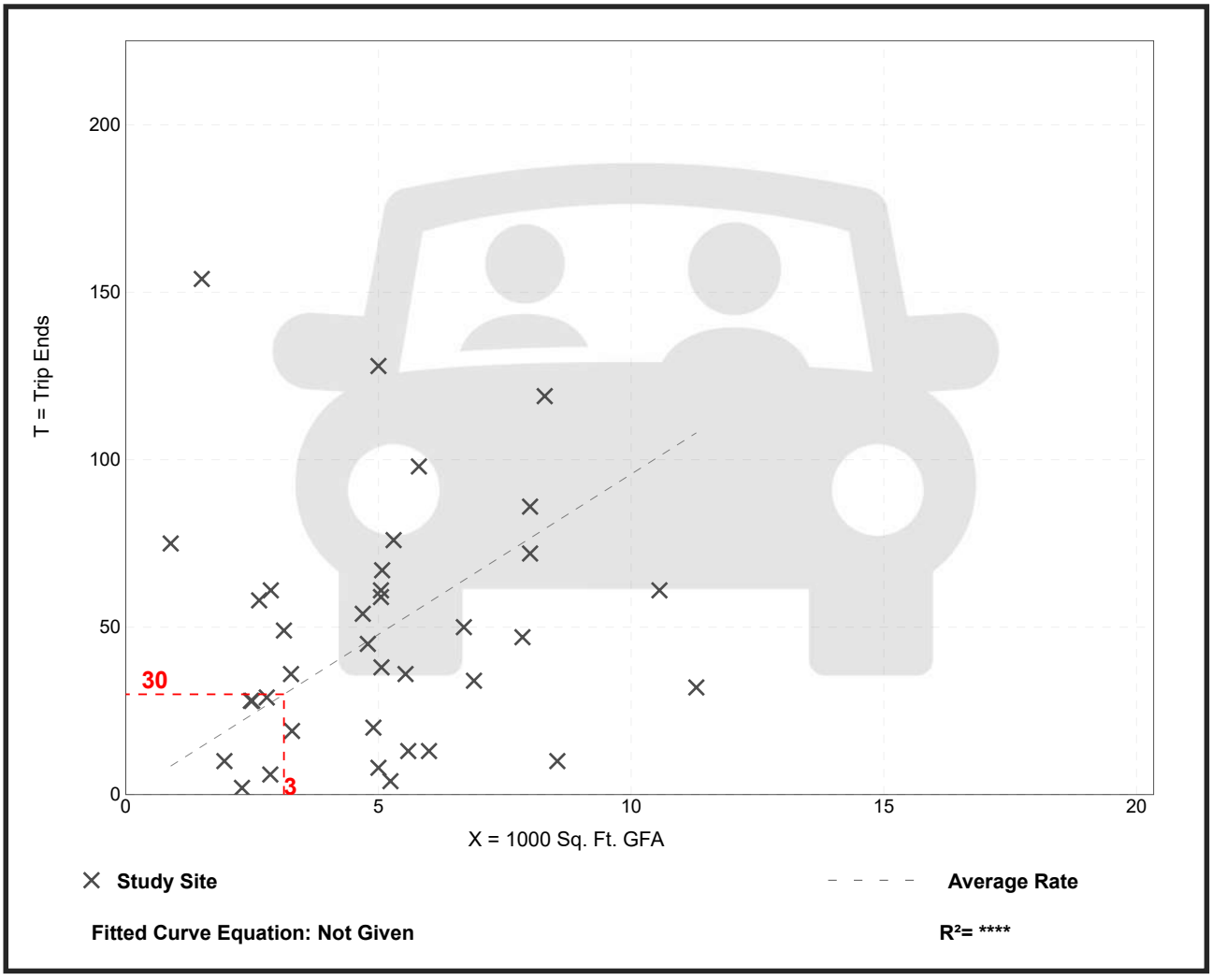
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 37
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.57	0.76 - 102.39	11.61

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

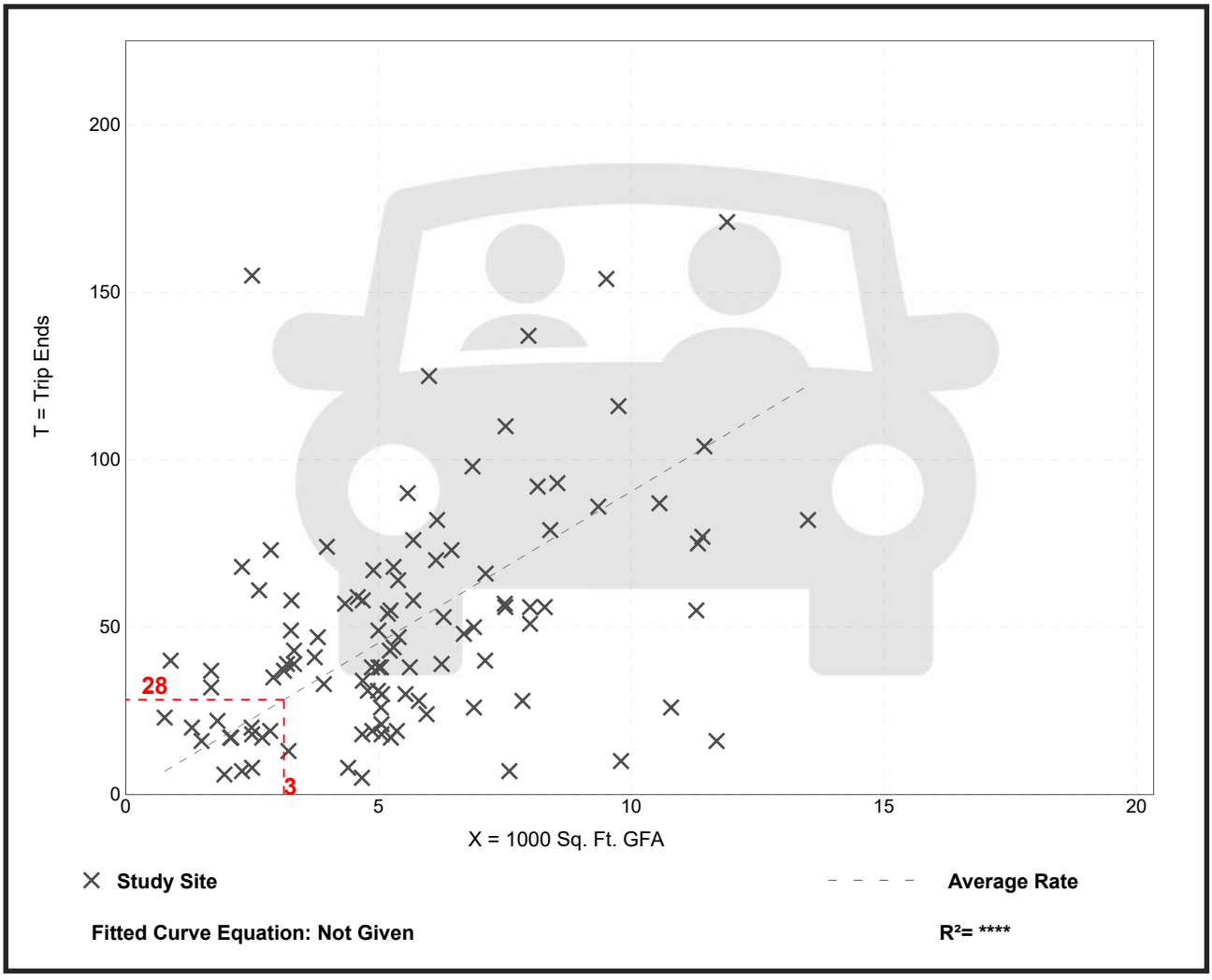
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 104
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.05	0.92 - 62.00	6.18

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

High-Turnover (Sit-Down) Restaurant
(932)

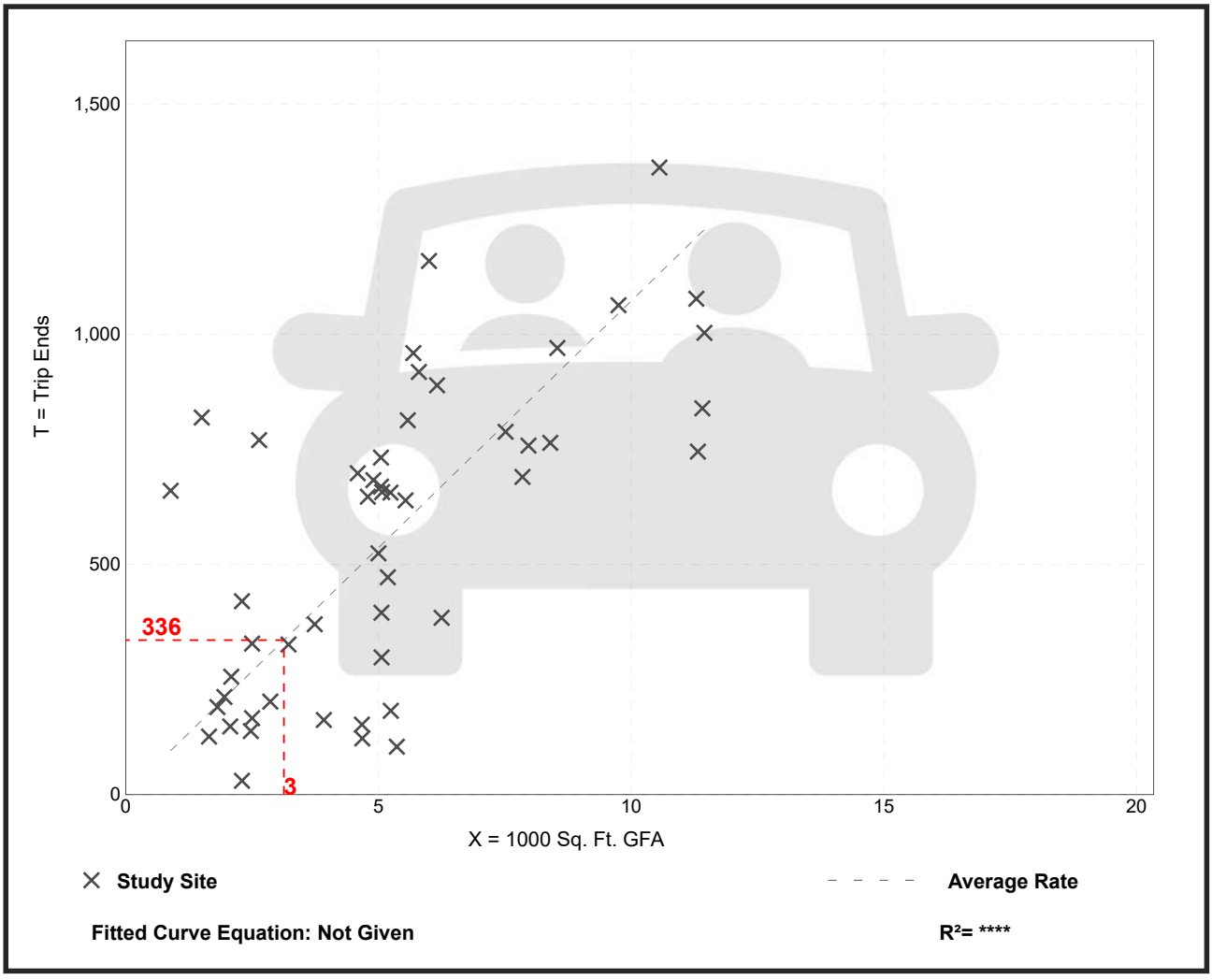
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 50
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
107.20	13.04 - 742.41	66.72

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

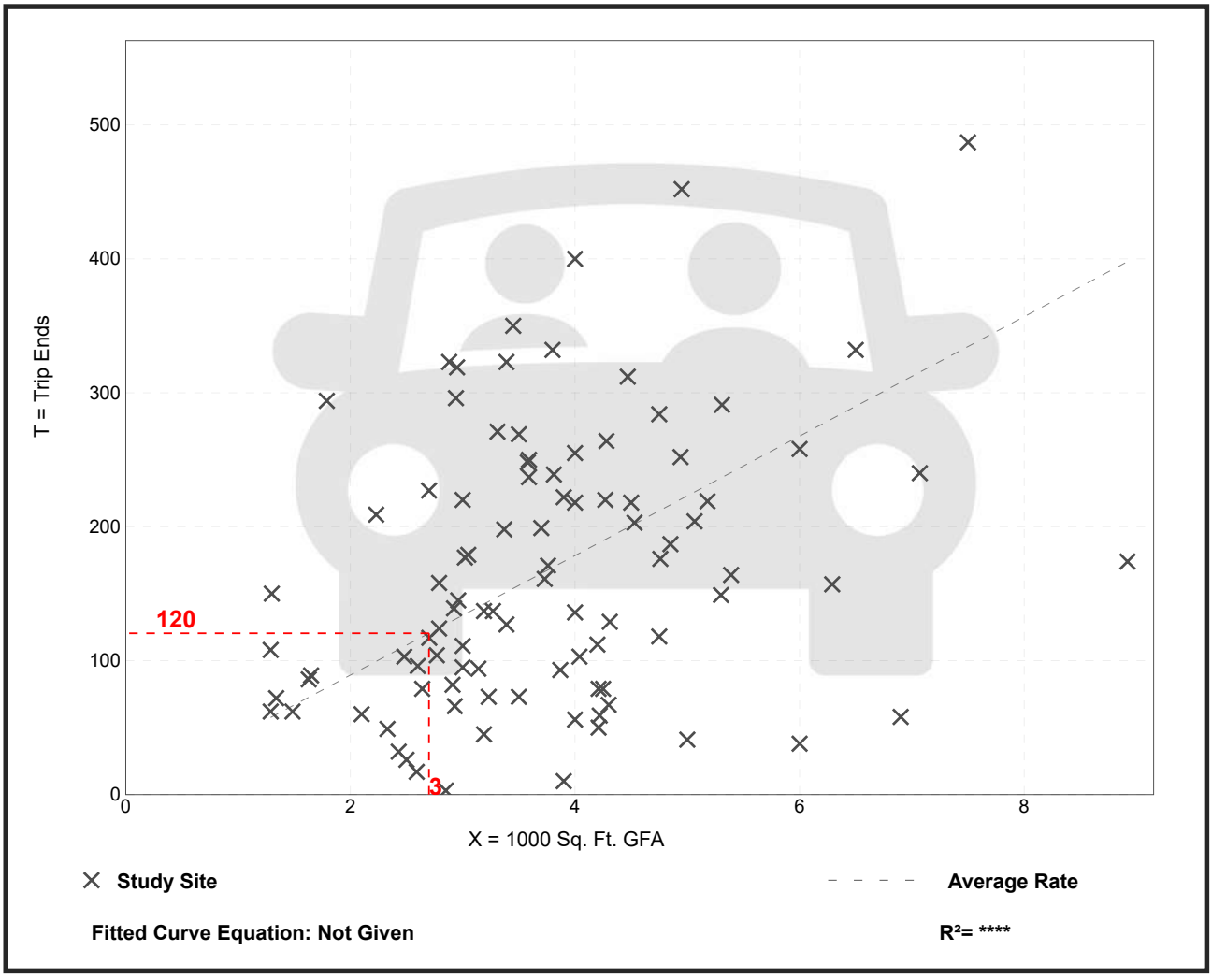
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 96
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

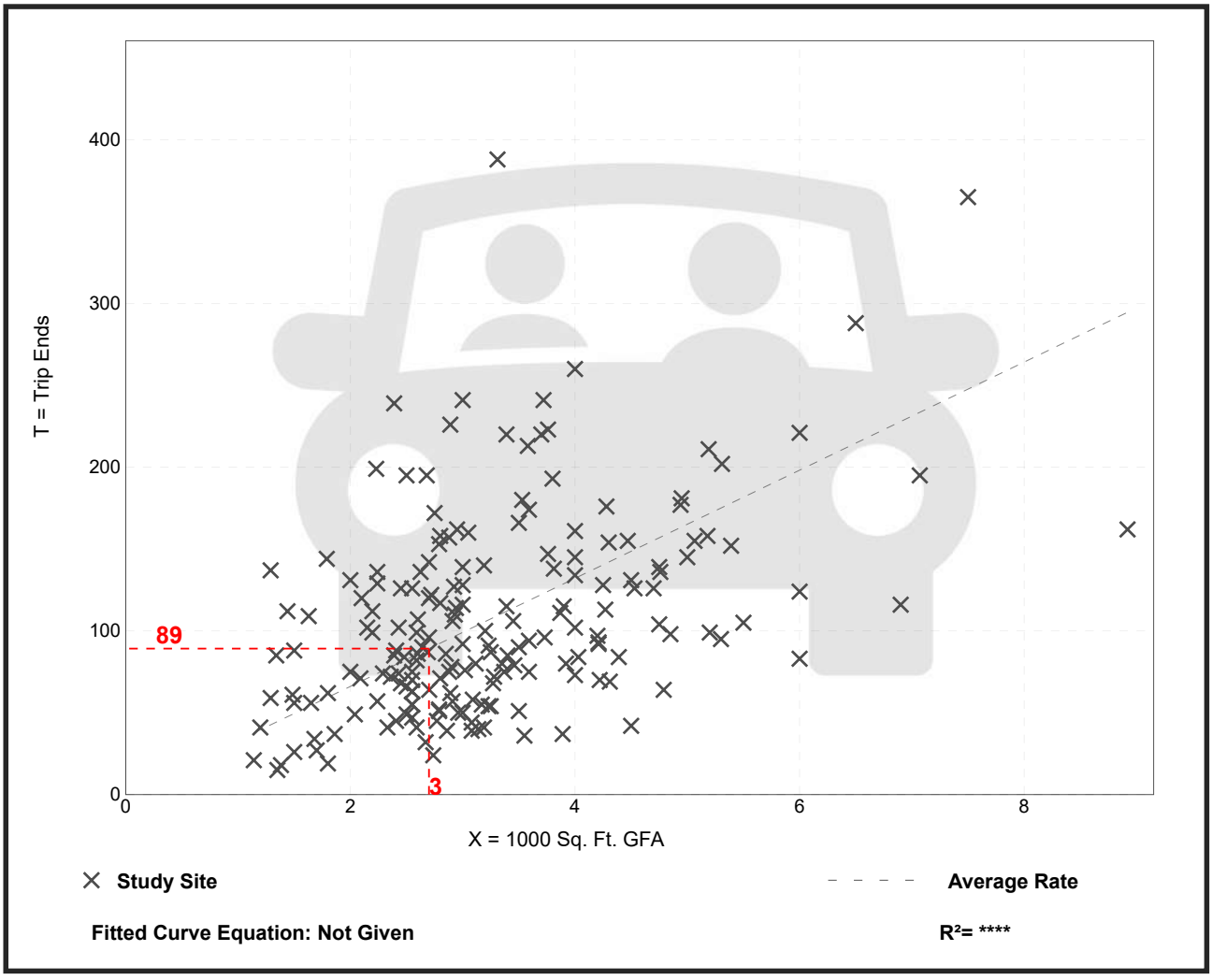
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 190
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Fast-Food Restaurant with Drive-Through Window
(934)

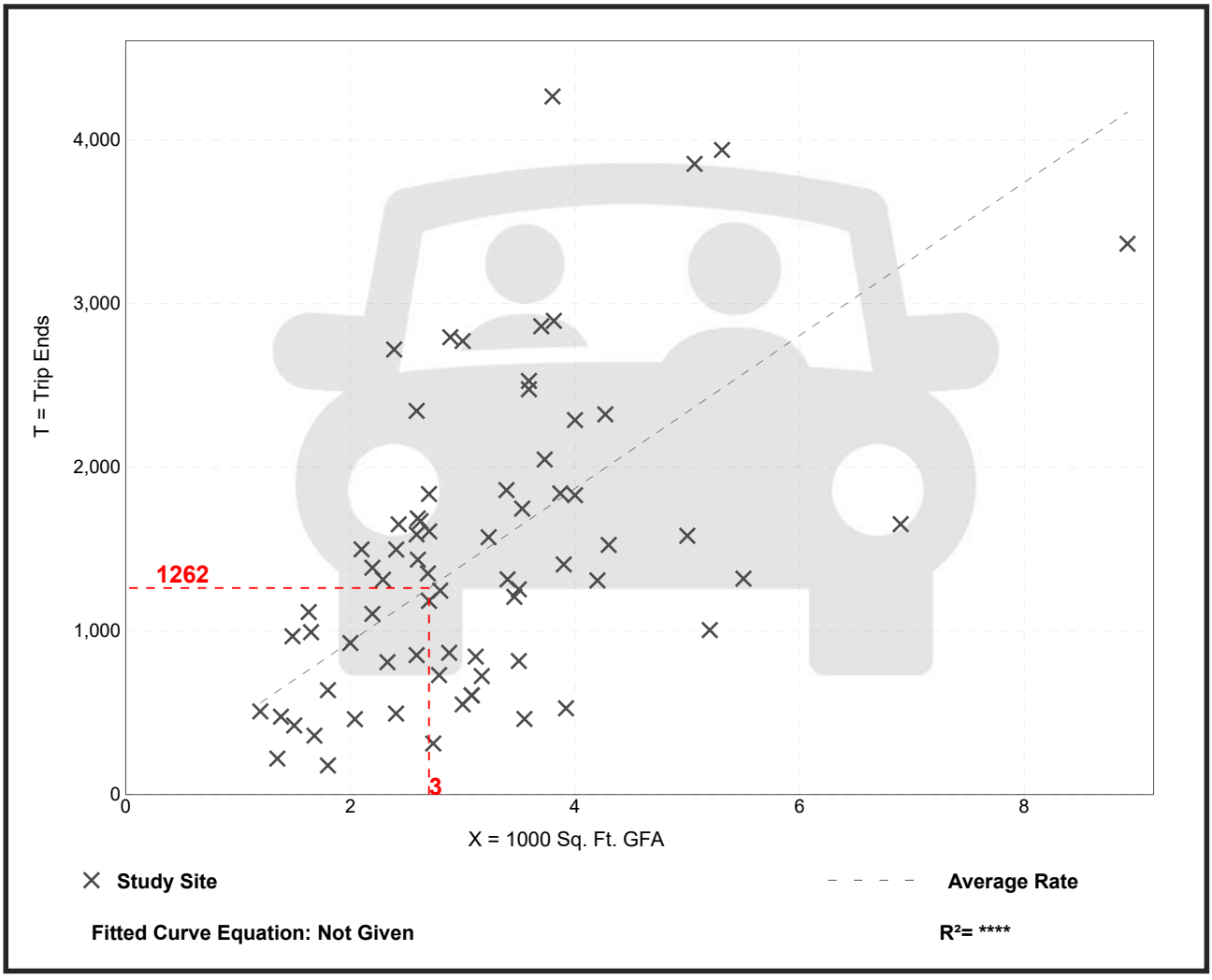
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 71
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
467.48	98.89 - 1137.66	238.62

Data Plot and Equation



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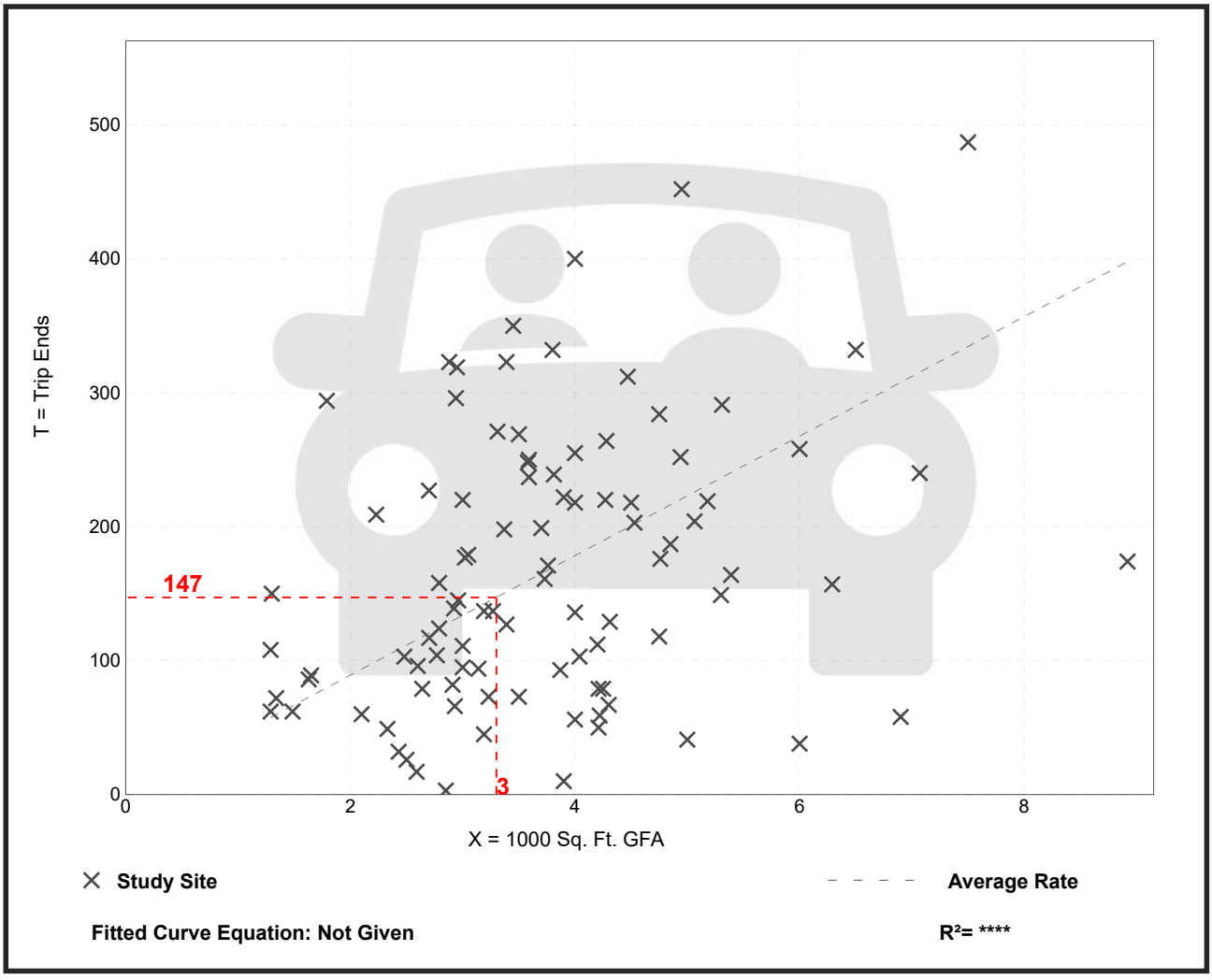
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 96
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

Data Plot and Equation



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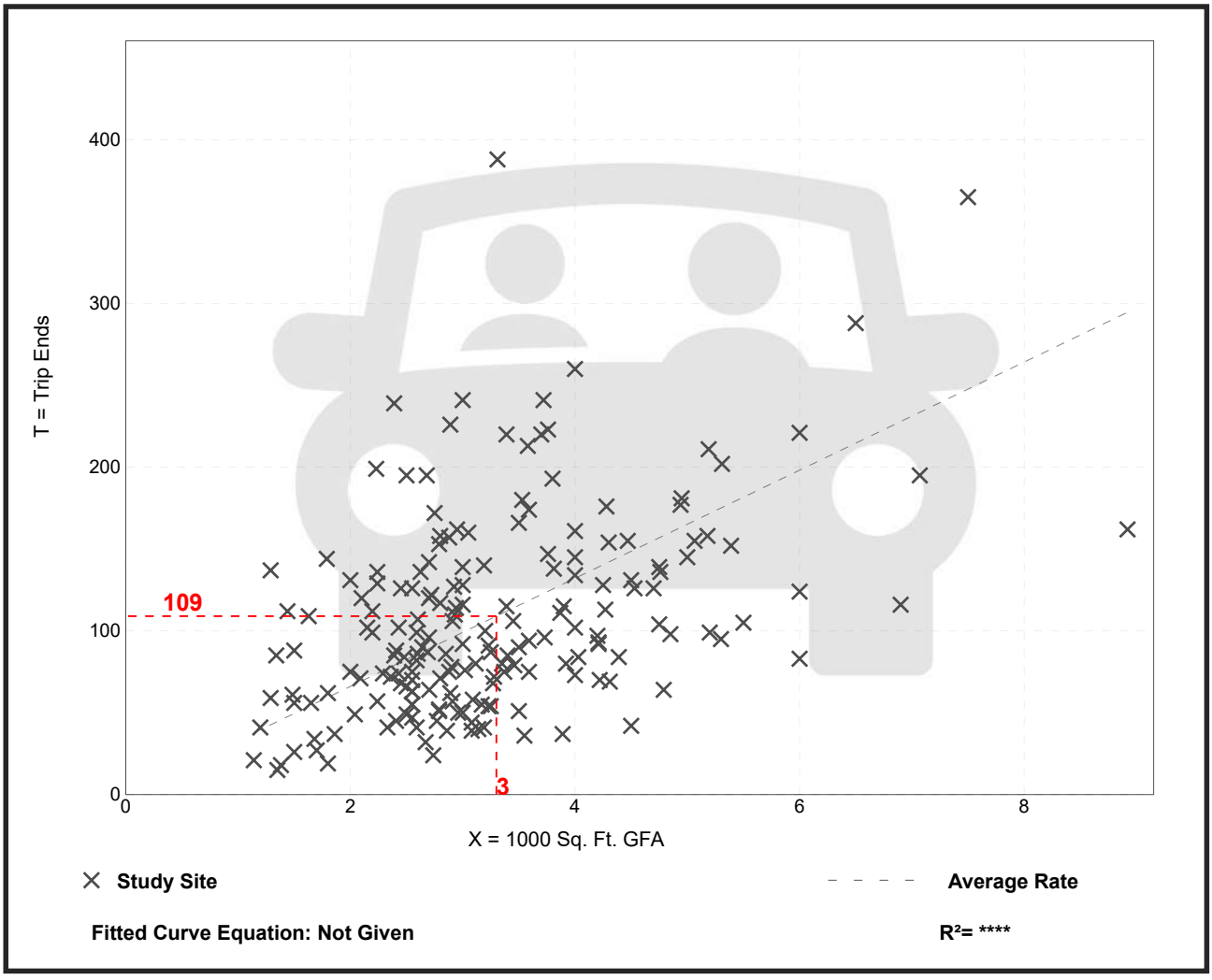
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 190
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Fast-Food Restaurant with Drive-Through Window
(934)

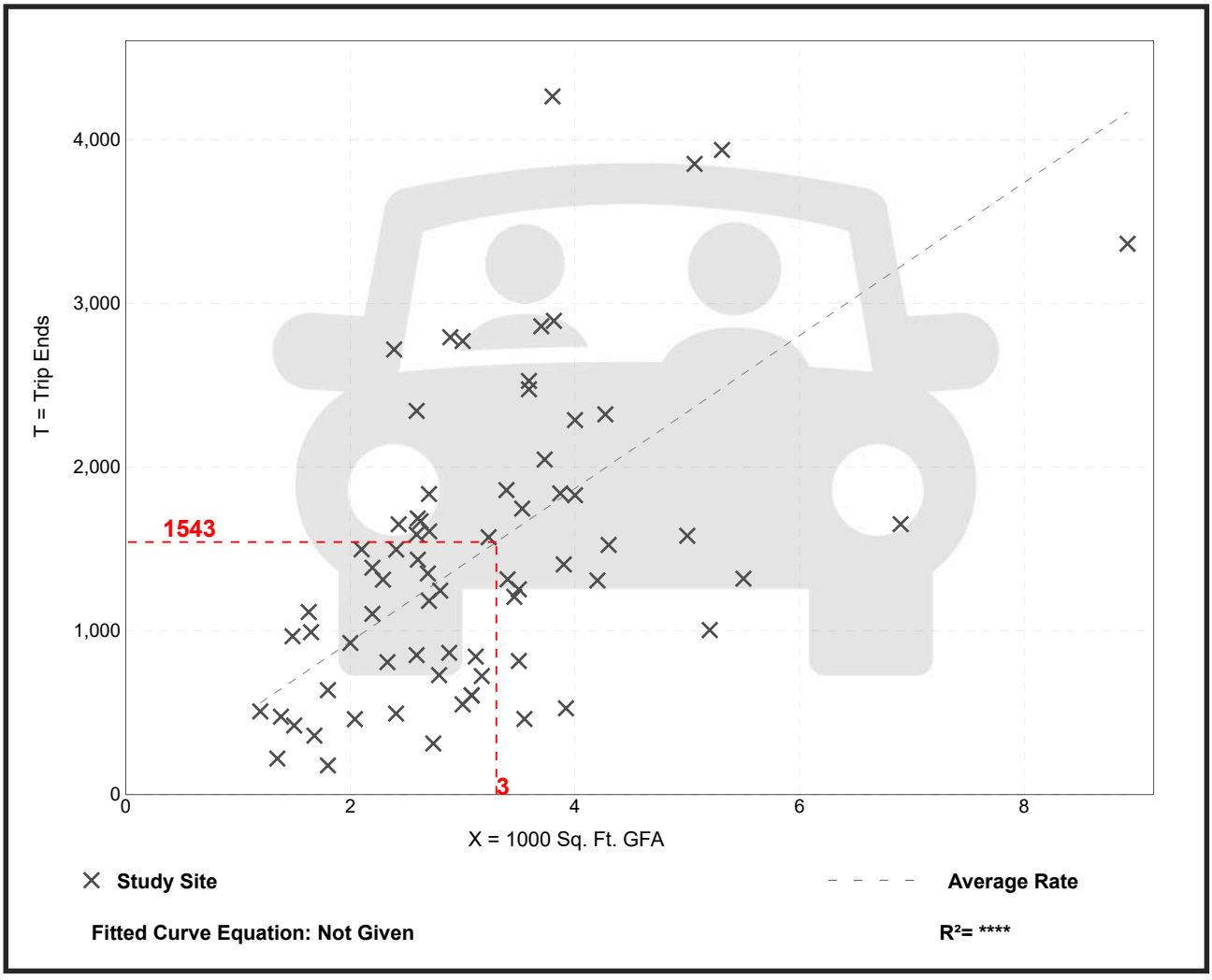
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 71
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
467.48	98.89 - 1137.66	238.62

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	932
Land Use	High-Turnover (Sit-Down) Restaurant
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	12
Average Pass-By Rate	43%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
2.9	Kentucky	1993	41	37	27	36	63	3935	2
3.1	Kentucky	1993	21	38	29	33	62	2580	2
4.6	Florida	1992	276	63	—	—	37	—	30
5	Florida	1992	65	58	—	—	42	—	30
5.3	Kentucky	1993	24	50	37	13	50	1615	2
5.7	Florida	1994	308	57	—	—	43	—	30
5.8	Florida	1992	150	32	—	—	68	—	30
6.2	Florida	1995	521	46	43	11	54	—	30
7.1	Indiana	1993	—	23	23	54	77	1565	2
8	Florida	1995	664	40	39	21	60	—	30
11	Florida	1996	267	38	43	19	62	—	30
12	Florida	1996	317	29	51	20	71	—	30

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday AM Peak Period
# Data Sites	5
Average Pass-By Rate	50%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
1.4	Kentucky	1993	—	62	22	16	38	1407	2
3	Kentucky	1993	—	43	14	43	57	2903	2
3.3	--	1996	—	68	—	—	32	—	21
3.6	Kentucky	1993	—	32	47	21	68	437	2
4.2	Indiana	1993	—	46	23	31	54	1049	2

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	11
Average Pass-By Rate	55%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
1.3	Kentucky	1993	—	68	22	10	32	2055	2
1.9	Kentucky	1993	33	67	24	9	33	2447	2
2.8	Florida	1995	47	66	—	—	34	—	30
2.9	Florida	1996	271	41	41	18	59	—	30
3	Kentucky	1993	—	31	31	38	69	4250	2
3.1	Florida	1995	28	71	—	—	29	—	30
3.1	Florida	1996	29	38	—	—	62	—	30
3.2	Florida	1996	202	40	39	21	60	—	30
3.3	—	1996	—	62	—	—	38	—	21
4.2	Indiana	1993	—	56	25	19	44	1632	2
4.3	Florida	1994	304	62	—	—	38	—	30

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	210		
Land Use	Single-Family Detached Housing		
Setting	General Urban/Suburban		
Time Period	Weekday		
# Data Sites	7		
	% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting
12:00 - 1:00 AM	0.3%	0.5%	0.2%
1:00 - 2:00 AM	0.2%	0.2%	0.1%
2:00 - 3:00 AM	0.2%	0.3%	0.1%
3:00 - 4:00 AM	0.2%	0.2%	0.2%
4:00 - 5:00 AM	0.6%	0.3%	0.8%
5:00 - 6:00 AM	1.2%	0.5%	2.0%
6:00 - 7:00 AM	3.7%	1.6%	5.8%
7:00 - 8:00 AM	6.5%	3.1%	10.0%
8:00 - 9:00 AM	6.2%	3.8%	8.5%
9:00 - 10:00 AM	4.6%	3.3%	5.8%
10:00 - 11:00 AM	4.9%	4.2%	5.6%
11:00 - 12:00 PM	5.3%	5.4%	5.1%
12:00 - 1:00 PM	5.7%	5.7%	5.7%
1:00 - 2:00 PM	6.1%	6.1%	6.0%
2:00 - 3:00 PM	6.6%	7.1%	6.1%
3:00 - 4:00 PM	7.5%	8.7%	6.2%
4:00 - 5:00 PM	8.9%	10.5%	7.4%
5:00 - 6:00 PM	8.7%	10.0%	7.3%
6:00 - 7:00 PM	7.2%	8.5%	5.9%
7:00 - 8:00 PM	5.1%	6.1%	4.2%
8:00 - 9:00 PM	4.6%	6.1%	3.1%
9:00 - 10:00 PM	3.3%	4.4%	2.3%
10:00 - 11:00 PM	1.6%	2.1%	1.0%
11:00 - 12:00 AM	1.0%	1.3%	0.6%

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	220		
Land Use	Multifamily Housing (Low-Rise)		
Subcategory	Not Close to Rail Transit		
Setting	General Urban/Suburban		
Time Period	Weekday		
# Data Sites	6		
	% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting
12:00 - 1:00 AM	0.7%	0.9%	0.4%
1:00 - 2:00 AM	0.4%	0.5%	0.3%
2:00 - 3:00 AM	0.4%	0.4%	0.4%
3:00 - 4:00 AM	0.4%	0.4%	0.3%
4:00 - 5:00 AM	0.9%	0.3%	1.4%
5:00 - 6:00 AM	1.6%	0.5%	2.6%
6:00 - 7:00 AM	4.2%	1.4%	6.9%
7:00 - 8:00 AM	6.5%	2.0%	10.8%
8:00 - 9:00 AM	5.8%	3.1%	8.5%
9:00 - 10:00 AM	3.9%	2.9%	4.9%
10:00 - 11:00 AM	3.6%	2.4%	4.8%
11:00 - 12:00 PM	4.3%	3.8%	4.7%
12:00 - 1:00 PM	4.3%	4.5%	4.1%
1:00 - 2:00 PM	4.2%	4.0%	4.4%
2:00 - 3:00 PM	5.2%	5.6%	4.9%
3:00 - 4:00 PM	6.1%	6.9%	5.3%
4:00 - 5:00 PM	7.9%	10.1%	5.6%
5:00 - 6:00 PM	9.5%	11.4%	7.6%
6:00 - 7:00 PM	8.2%	9.7%	6.7%
7:00 - 8:00 PM	6.4%	8.1%	4.7%
8:00 - 9:00 PM	5.9%	7.7%	4.2%
9:00 - 10:00 PM	4.4%	6.0%	2.7%
10:00 - 11:00 PM	3.5%	4.7%	2.4%
11:00 - 12:00 AM	1.9%	2.5%	1.4%

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	932		
Land Use	High-Turnover (Sit-Down) Restaurant		
Setting	General Urban/Suburban		
Time Period	Weekday		
# Data Sites	37		
	% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting
12:00 - 1:00 AM	0.5%	0.3%	0.8%
1:00 - 2:00 AM	0.2%	0.1%	0.3%
2:00 - 3:00 AM	0.3%	0.3%	0.2%
3:00 - 4:00 AM	0.3%	0.2%	0.4%
4:00 - 5:00 AM	0.3%	0.2%	0.3%
5:00 - 6:00 AM	0.5%	0.7%	0.2%
6:00 - 7:00 AM	1.3%	1.7%	0.9%
7:00 - 8:00 AM	2.3%	2.7%	1.8%
8:00 - 9:00 AM	3.2%	3.4%	3.1%
9:00 - 10:00 AM	3.7%	4.0%	3.4%
10:00 - 11:00 AM	4.9%	5.5%	4.4%
11:00 - 12:00 PM	9.5%	12.1%	6.9%
12:00 - 1:00 PM	12.3%	12.4%	12.3%
1:00 - 2:00 PM	8.8%	6.5%	11.2%
2:00 - 3:00 PM	4.5%	4.0%	5.1%
3:00 - 4:00 PM	3.6%	3.3%	4.0%
4:00 - 5:00 PM	5.1%	6.2%	3.9%
5:00 - 6:00 PM	8.5%	10.2%	6.8%
6:00 - 7:00 PM	9.4%	10.1%	8.7%
7:00 - 8:00 PM	8.2%	7.2%	9.2%
8:00 - 9:00 PM	5.7%	4.3%	7.1%
9:00 - 10:00 PM	3.7%	2.6%	4.8%
10:00 - 11:00 PM	2.2%	1.4%	2.9%
11:00 - 12:00 AM	0.9%	0.5%	1.4%

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934		
Land Use	Fast-Food Restaurant with Drive-Through Window		
Setting	General Urban/Suburban		
Time Period	Weekday		
# Data Sites	53		
	% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting
12:00 - 1:00 AM	0.8%	0.8%	0.8%
1:00 - 2:00 AM	0.4%	0.4%	0.5%
2:00 - 3:00 AM	0.3%	0.3%	0.3%
3:00 - 4:00 AM	0.3%	0.2%	0.3%
4:00 - 5:00 AM	0.3%	0.3%	0.3%
5:00 - 6:00 AM	0.7%	0.8%	0.7%
6:00 - 7:00 AM	2.1%	2.3%	1.9%
7:00 - 8:00 AM	3.3%	3.4%	3.1%
8:00 - 9:00 AM	3.5%	3.5%	3.4%
9:00 - 10:00 AM	3.3%	3.4%	3.3%
10:00 - 11:00 AM	3.8%	4.0%	3.7%
11:00 - 12:00 PM	8.4%	9.1%	7.7%
12:00 - 1:00 PM	11.9%	11.9%	12.0%
1:00 - 2:00 PM	8.3%	7.9%	8.7%
2:00 - 3:00 PM	6.2%	5.9%	6.5%
3:00 - 4:00 PM	5.7%	5.7%	5.7%
4:00 - 5:00 PM	5.7%	5.9%	5.6%
5:00 - 6:00 PM	6.7%	6.9%	6.5%
6:00 - 7:00 PM	7.4%	7.4%	7.4%
7:00 - 8:00 PM	6.5%	6.3%	6.6%
8:00 - 9:00 PM	5.7%	5.6%	5.8%
9:00 - 10:00 PM	4.4%	4.1%	4.6%
10:00 - 11:00 PM	2.7%	2.5%	2.9%
11:00 - 12:00 AM	1.6%	1.4%	1.8%

APPENDIX C – ANALYSIS RESULTS

Capacity Analysis Results

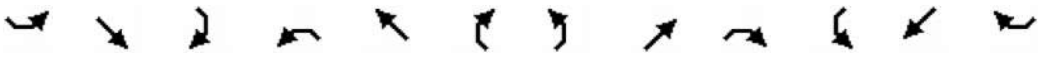
Warrant Analysis Results



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	SWL	SWT
Lane Group Flow (vph)	53	656	98	47	1143	29	194	237	32	119
v/c Ratio	0.48	0.34	0.10	0.43	0.59	0.03	0.65	0.62	0.19	0.69
Control Delay (s/veh)	56.0	23.6	4.9	89.1	12.2	0.0	49.8	47.2	37.6	54.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.0	23.6	4.9	89.1	12.2	0.0	49.8	47.2	37.6	54.3
Queue Length 50th (ft)	43	170	4	40	342	0	132	153	20	59
Queue Length 95th (ft)	84	309	28	m69	480	m0	194	238	44	121
Internal Link Dist (ft)		1626			1042			369		418
Turn Bay Length (ft)	200		175	90		110	230		230	
Base Capacity (vph)	146	1882	955	151	1929	949	316	389	195	230
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.35	0.10	0.31	0.59	0.03	0.61	0.61	0.16	0.52

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	48	590	88	42	1029	26	175	98	115	29	45	62
Future Volume (veh/h)	48	590	88	42	1029	26	175	98	115	29	45	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1773	1773	1844	1826	1826	1826	2011	2011	1934	1788	1788	1788
Adj Flow Rate, veh/h	53	656	98	47	1143	29	194	109	128	32	50	69
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	5	5	5	3	3	3	4	4	4
Cap, veh/h	67	1932	896	60	1971	879	285	143	167	153	61	85
Arrive On Green	0.03	0.38	0.38	0.03	0.57	0.57	0.11	0.17	0.17	0.03	0.09	0.09
Sat Flow, veh/h	1688	3368	1562	1739	3469	1547	1915	843	990	1703	680	939
Grp Volume(v), veh/h	53	656	98	47	1143	29	194	0	237	32	0	119
Grp Sat Flow(s),veh/h/ln	1688	1684	1562	1739	1735	1547	1915	0	1833	1703	0	1619
Q Serve(g_s), s	3.9	17.2	5.0	3.4	26.5	1.0	11.1	0.0	15.4	2.1	0.0	9.0
Cycle Q Clear(g_c), s	3.9	17.2	5.0	3.4	26.5	1.0	11.1	0.0	15.4	2.1	0.0	9.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.54	1.00		0.58
Lane Grp Cap(c), veh/h	67	1932	896	60	1971	879	285	0	310	153	0	146
V/C Ratio(X)	0.79	0.34	0.11	0.78	0.58	0.03	0.68	0.00	0.76	0.21	0.00	0.82
Avail Cap(c_a), veh/h	149	1932	896	153	1971	879	335	0	330	223	0	188
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.3	21.7	18.0	59.9	17.4	11.9	43.8	0.0	49.6	49.8	0.0	55.8
Incr Delay (d2), s/veh	7.1	0.5	0.2	8.0	1.3	0.1	3.0	0.0	8.4	0.2	0.0	15.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.4	1.9	1.6	10.3	0.4	5.5	0.0	7.7	0.9	0.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.4	22.2	18.2	67.8	18.6	11.9	46.7	0.0	58.0	50.0	0.0	70.9
LnGrp LOS	E	C	B	E	B	B	D		E	D		E
Approach Vol, veh/h		807			1219			431			151	
Approach Delay, s/veh		24.7			20.4			52.9			66.4	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	77.2	19.7	16.8	12.0	76.5	9.9	26.6
Change Period (Y+Rc), s	7.0	5.5	6.5	5.5	7.0	5.5	6.5	5.5
Max Green Setting (Gmax), s	11.0	58.5	16.5	14.5	11.0	58.5	8.5	22.5
Max Q Clear Time (g_c+I1), s	5.4	19.2	13.1	11.0	5.9	28.5	4.1	17.4
Green Ext Time (p_c), s	0.0	18.9	0.1	0.2	0.0	24.6	0.0	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	29.7
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	723	1	0	1116	2	0	0	1	3	0	3
Future Vol, veh/h	10	723	1	0	1116	2	0	0	1	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	7	7	5	5	5	2	2	2	2	2	2
Mvmt Flow	11	803	1	0	1240	2	0	0	1	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1242	0	0	804	0	0	1446	2068	402	1665	2068	621
Stage 1	-	-	-	-	-	-	826	826	-	1241	1241	-
Stage 2	-	-	-	-	-	-	620	1242	-	424	827	-
Critical Hdwy	4.24	-	-	4.2	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.27	-	-	2.25	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	530	-	-	796	-	-	92	54	598	63	54	430
Stage 1	-	-	-	-	-	-	332	385	-	185	245	-
Stage 2	-	-	-	-	-	-	442	245	-	578	384	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	530	-	-	796	-	-	89	52	598	62	52	430
Mov Cap-2 Maneuver	-	-	-	-	-	-	89	52	-	62	52	-
Stage 1	-	-	-	-	-	-	323	374	-	185	245	-
Stage 2	-	-	-	-	-	-	439	245	-	562	374	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.47	0	11.03	40.63
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	598	49	-	-	796	-	-	108
HCM Lane V/C Ratio	0.002	0.021	-	-	-	-	-	0.062
HCM Control Delay (s/veh)	11	11.9	0.3	-	0	-	-	40.6
HCM Lane LOS	B	B	A	-	A	-	-	E
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	715	10	16	1111	1	3	0	8	1	0	0
Future Vol, veh/h	0	715	10	16	1111	1	3	0	8	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	7	7	7	5	5	5	9	9	9	2	2	2
Mvmt Flow	0	803	11	18	1248	1	3	0	9	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1249	0	0	815	0	0	1469	2094	407	1687	2099	625
Stage 1	-	-	-	-	-	-	809	809	-	1285	1285	-
Stage 2	-	-	-	-	-	-	660	1285	-	402	815	-
Critical Hdwy	4.24	-	-	4.2	-	-	7.68	6.68	7.08	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.54	5.54	-
Follow-up Hdwy	2.27	-	-	2.25	-	-	3.59	4.09	3.39	3.52	4.02	3.32
Pot Cap-1 Maneuver	526	-	-	789	-	-	83	47	574	61	51	428
Stage 1	-	-	-	-	-	-	326	376	-	174	234	-
Stage 2	-	-	-	-	-	-	402	220	-	596	389	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	526	-	-	789	-	-	81	46	574	59	50	428
Mov Cap-2 Maneuver	-	-	-	-	-	-	81	46	-	59	50	-
Stage 1	-	-	-	-	-	-	326	376	-	170	228	-
Stage 2	-	-	-	-	-	-	393	215	-	587	389	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.14	22.65	67.5
HCM LOS			C	F

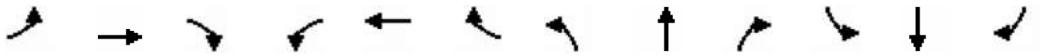
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	216	526	-	-	789	-	-	59
HCM Lane V/C Ratio	0.057	-	-	-	0.023	-	-	0.019
HCM Control Delay (s/veh)	22.6	0	-	-	9.7	-	-	67.5
HCM Lane LOS	C	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	207	463	104	140	715	238	303	561	191	219	242
v/c Ratio	0.54	0.40	0.15	0.64	0.58	0.34	0.66	0.74	0.70	0.41	0.55
Control Delay (s/veh)	49.2	34.1	6.4	66.6	36.3	5.2	36.7	48.4	44.4	50.4	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.2	34.1	6.4	66.6	36.3	5.2	36.7	48.4	44.4	50.4	10.9
Queue Length 50th (ft)	91	148	14	109	251	0	179	206	105	85	0
Queue Length 95th (ft)	100	248	m60	177	332	59	263	272	#176	126	76
Internal Link Dist (ft)		890			679			468		458	
Turn Bay Length (ft)	300		315	255		250	135		135		380
Base Capacity (vph)	580	1152	681	249	1213	696	477	788	272	526	439
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.40	0.15	0.56	0.59	0.34	0.64	0.71	0.70	0.42	0.55

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	421	95	127	651	217	276	375	136	174	199	220
Future Volume (veh/h)	188	421	95	127	651	217	276	375	136	174	199	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1844	1773	1844	1899	1826	1826	1949	1874	1874	1862	1790	1790
Adj Flow Rate, veh/h	207	463	0	140	715	0	303	412	0	191	219	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	7	7	7	5	5	5	7	7	7	7	7	7
Cap, veh/h	281	1395		169	1475		421	628		301	401	
Arrive On Green	0.08	0.41	0.00	0.09	0.43	0.00	0.16	0.18	0.00	0.10	0.12	0.00
Sat Flow, veh/h	3406	3368	1562	1809	3469	1547	1856	3654	0	1773	3402	1517
Grp Volume(v), veh/h	207	463	0	140	715	0	303	412	0	191	219	0
Grp Sat Flow(s),veh/h/ln	1703	1684	1562	1809	1735	1547	1856	1780	0	1773	1701	1517
Q Serve(g_s), s	7.4	11.7	0.0	9.5	18.7	0.0	17.3	13.5	0.0	11.8	7.6	0.0
Cycle Q Clear(g_c), s	7.4	11.7	0.0	9.5	18.7	0.0	17.3	13.5	0.0	11.8	7.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1395		169	1475		421	628		301	401	
V/C Ratio(X)	0.74	0.33		0.83	0.48		0.72	0.66		0.63	0.55	
Avail Cap(c_a), veh/h	572	1395		246	1475		461	826		301	517	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.0	24.9	0.0	55.7	26.0	0.0	38.0	48.0	0.0	43.0	52.0	0.0
Incr Delay (d2), s/veh	5.3	0.6	0.0	16.9	1.1	0.0	5.5	2.5	0.0	4.9	2.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	4.7	0.0	5.1	7.7	0.0	8.3	6.0	0.0	5.5	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.3	25.5	0.0	72.6	27.2	0.0	43.6	50.4	0.0	48.0	54.4	0.0
LnGrp LOS	E	C		E	C		D	D		D	D	
Approach Vol, veh/h		670			855			715			410	
Approach Delay, s/veh		36.6			34.6			47.5			51.4	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	58.6	20.0	29.0	18.7	57.3	27.3	21.7
Change Period (Y+Rc), s	7.0	5.5	7.5	7.0	7.0	5.5	7.5	7.0
Max Green Setting (Gmax), s	21.0	35.5	12.5	29.0	17.0	39.5	22.5	19.0
Max Q Clear Time (g_c+I1), s	9.4	20.7	13.8	15.5	11.5	13.7	19.3	9.6
Green Ext Time (p_c), s	0.9	10.4	0.0	6.6	0.3	10.7	0.5	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	41.2
HCM 7th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	SWL	SWT
Lane Group Flow (vph)	85	1147	207	166	1093	30	202	214	70	193
v/c Ratio	0.63	0.66	0.23	0.85	0.58	0.03	0.79	0.57	0.34	0.94
Control Delay (s/veh)	82.9	18.6	3.3	76.0	27.9	0.0	64.5	46.0	44.3	99.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	82.9	18.6	3.3	76.0	27.9	0.0	64.5	46.0	44.3	99.9
Queue Length 50th (ft)	79	160	0	146	433	0	147	134	47	148
Queue Length 95th (ft)	136	272	46	m#226	473	m0	#233	222	89	#300
Internal Link Dist (ft)		1626			1042			369		418
Turn Bay Length (ft)	200		175	90		110	230		230	
Base Capacity (vph)	168	1729	892	209	1865	920	265	372	212	207
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.66	0.23	0.79	0.59	0.03	0.76	0.58	0.33	0.93

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	82	1101	199	159	1049	29	194	78	128	67	98	87
Future Volume (veh/h)	82	1101	199	159	1049	29	194	78	128	67	98	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1847	1847	1921	1870	1870	1870	2027	2027	1949	1817	1817	1817
Adj Flow Rate, veh/h	85	1147	207	166	1093	30	202	81	133	70	102	91
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	1751	812	190	1940	865	257	115	188	197	95	85
Arrive On Green	0.12	1.00	1.00	0.11	0.55	0.55	0.11	0.17	0.17	0.05	0.11	0.11
Sat Flow, veh/h	1759	3509	1628	1781	3554	1585	1930	690	1133	1731	885	790
Grp Volume(v), veh/h	85	1147	207	166	1093	30	202	0	214	70	0	193
Grp Sat Flow(s),veh/h/ln	1759	1754	1628	1781	1777	1585	1930	0	1823	1731	0	1675
Q Serve(g_s), s	6.4	0.3	0.1	12.4	27.2	1.2	12.2	0.0	15.0	4.8	0.0	14.5
Cycle Q Clear(g_c), s	6.4	0.3	0.1	12.4	27.2	1.2	12.2	0.0	15.0	4.8	0.0	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		0.47
Lane Grp Cap(c), veh/h	105	1751	812	190	1940	865	257	0	303	197	0	180
V/C Ratio(X)	0.81	0.66	0.25	0.87	0.56	0.03	0.79	0.00	0.71	0.36	0.00	1.07
Avail Cap(c_a), veh/h	169	1751	812	211	1940	865	275	0	303	225	0	180
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.7	0.1	0.1	59.4	20.1	14.2	46.0	0.0	53.2	50.5	0.0	60.3
Incr Delay (d2), s/veh	4.9	1.6	0.6	26.8	1.2	0.1	11.8	0.0	6.3	0.4	0.0	87.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.4	0.2	6.9	11.1	0.4	6.7	0.0	7.4	2.1	0.0	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.5	1.7	0.7	86.2	21.3	14.3	57.7	0.0	59.5	50.9	0.0	148.0
LnGrp LOS	E	A	A	F	C	B	E		E	D		F
Approach Vol, veh/h		1439			1289			416			263	
Approach Delay, s/veh		5.2			29.5			58.7			122.1	
Approach LOS		A			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.4	72.8	20.7	20.0	15.1	79.2	12.8	27.9
Change Period (Y+Rc), s	7.0	5.5	6.5	5.5	7.0	5.5	6.5	5.5
Max Green Setting (Gmax), s	16.0	64.5	15.5	14.5	13.0	67.5	8.5	21.5
Max Q Clear Time (g_c+I1), s	14.4	2.3	14.2	16.5	8.4	29.2	6.8	17.0
Green Ext Time (p_c), s	0.0	46.2	0.1	0.0	0.0	29.2	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	29.9
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	1272	2	3	1223	11	1	0	0	10	0	20
Future Vol, veh/h	20	1272	2	3	1223	11	1	0	0	10	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	1353	2	3	1301	12	1	0	0	11	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1313	0	0	1355	0	0	2054	2716	678	2032	2711	656
Stage 1	-	-	-	-	-	-	1397	1397	-	1313	1313	-
Stage 2	-	-	-	-	-	-	657	1319	-	719	1398	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	523	-	-	503	-	-	32	21	395	33	21	408
Stage 1	-	-	-	-	-	-	148	206	-	167	226	-
Stage 2	-	-	-	-	-	-	420	225	-	386	206	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	523	-	-	503	-	-	28	19	395	31	19	408
Mov Cap-2 Maneuver	-	-	-	-	-	-	28	19	-	31	19	-
Stage 1	-	-	-	-	-	-	139	193	-	165	224	-
Stage 2	-	-	-	-	-	-	394	223	-	360	192	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.95	0.15	137.65	76.53
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	28	56	-	-	9	-	-	80
HCM Lane V/C Ratio	0.038	0.041	-	-	0.006	-	-	0.397
HCM Control Delay (s/veh)	137.6	12.2	0.8	-	12.2	0.1	-	76.5
HCM Lane LOS	F	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	1.6

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1249	29	33	1212	3	17	0	31	3	0	3
Future Vol, veh/h	3	1249	29	33	1212	3	17	0	31	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1343	31	35	1303	3	18	0	33	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1306	0	0	1374	0	0	2088	2742	687	2054	2756	653
Stage 1	-	-	-	-	-	-	1365	1365	-	1376	1376	-
Stage 2	-	-	-	-	-	-	723	1377	-	678	1381	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	526	-	-	495	-	-	30	20	389	32	19	410
Stage 1	-	-	-	-	-	-	155	214	-	153	211	-
Stage 2	-	-	-	-	-	-	384	211	-	408	210	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	526	-	-	495	-	-	28	18	389	27	18	410
Mov Cap-2 Maneuver	-	-	-	-	-	-	28	18	-	27	18	-
Stage 1	-	-	-	-	-	-	154	212	-	142	196	-
Stage 2	-	-	-	-	-	-	353	196	-	371	209	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.34	143.56	85.81
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	69	526	-	-	495	-	-	51
HCM Lane V/C Ratio	0.745	0.006	-	-	0.072	-	-	0.127
HCM Control Delay (s/veh)	143.6	11.9	-	-	12.8	-	-	85.8
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	3.4	0	-	-	0.2	-	-	0.4

4: Pulaski Highway (US 31)/Carmack Blvd (US 31) & S. James M Campbell Blvd

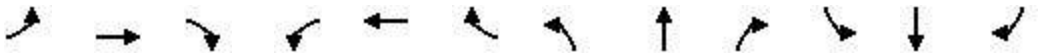
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	418	722	248	189	699	214	162	305	269	397	492
v/c Ratio	0.71	0.53	0.31	0.83	0.57	0.31	0.50	0.57	0.69	0.61	0.81
Control Delay (s/veh)	75.4	29.1	5.8	87.2	39.3	5.7	38.2	49.1	44.3	55.3	23.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	75.4	29.1	5.8	87.2	39.3	5.7	38.2	49.1	44.3	55.3	23.2
Queue Length 50th (ft)	200	152	15	164	264	0	101	110	180	170	85
Queue Length 95th (ft)	255	206	56	#288	357	59	157	160	257	226	#242
Internal Link Dist (ft)		888			679			468		458	
Turn Bay Length (ft)	300		315	255		250	135		135		380
Base Capacity (vph)	725	1357	779	233	1209	680	347	543	405	652	608
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.53	0.32	0.81	0.58	0.31	0.47	0.56	0.66	0.61	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	389	671	231	176	650	199	151	190	94	250	369	458
Future Volume (veh/h)	389	671	231	176	650	199	151	190	94	250	369	458
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1921	1847	1921	1914	1841	1841	2011	1934	1934	1939	1864	1864
Adj Flow Rate, veh/h	418	722	0	189	699	0	162	204	0	269	397	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	4	4	4	3	3	3	2	2	2
Cap, veh/h	508	1539		214	1445		277	366		377	540	
Arrive On Green	0.14	0.44	0.00	0.12	0.41	0.00	0.09	0.10	0.00	0.14	0.15	0.00
Sat Flow, veh/h	3549	3509	1628	1823	3497	1560	1915	3771	0	1847	3542	1580
Grp Volume(v), veh/h	418	722	0	189	699	0	162	204	0	269	397	0
Grp Sat Flow(s),veh/h/ln	1774	1754	1628	1823	1749	1560	1915	1837	0	1847	1771	1580
Q Serve(g_s), s	15.4	19.6	0.0	13.8	19.8	0.0	10.1	7.1	0.0	17.1	14.4	0.0
Cycle Q Clear(g_c), s	15.4	19.6	0.0	13.8	19.8	0.0	10.1	7.1	0.0	17.1	14.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	508	1539		214	1445		277	366		377	540	
V/C Ratio(X)	0.82	0.47		0.88	0.48		0.59	0.56		0.71	0.74	
Avail Cap(c_a), veh/h	710	1539		230	1445		336	544		404	656	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.2	26.8	0.0	58.6	29.0	0.0	48.5	57.9	0.0	44.1	54.6	0.0
Incr Delay (d2), s/veh	6.6	1.0	0.0	30.1	1.2	0.0	2.8	2.8	0.0	6.1	5.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	8.3	0.0	8.1	8.4	0.0	4.9	3.4	0.0	8.4	6.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.8	27.8	0.0	88.8	30.2	0.0	51.3	60.8	0.0	50.2	59.7	0.0
LnGrp LOS	E	C		F	C		D	E		D	E	
Approach Vol, veh/h		1140			888			366			666	
Approach Delay, s/veh		40.6			42.7			56.6			55.9	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.3	61.3	27.0	20.4	22.9	64.7	19.8	27.6
Change Period (Y+Rc), s	7.0	5.5	7.5	7.0	7.0	5.5	7.5	7.0
Max Green Setting (Gmax), s	27.0	39.5	21.5	20.0	17.0	49.5	16.5	25.0
Max Q Clear Time (g_c+I1), s	17.4	21.8	19.1	9.1	15.8	21.6	12.1	16.4
Green Ext Time (p_c), s	1.9	11.8	0.3	2.7	0.1	17.1	0.3	4.1

Intersection Summary	
HCM 7th Control Delay, s/veh	46.5
HCM 7th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

1: Campbellsville Pike/Highland Ave & S. James M Campbell Blvd

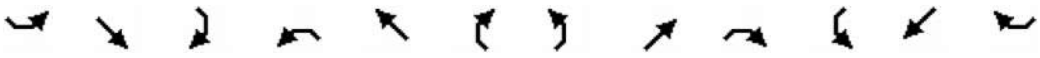
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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	SWL	SWT
Lane Group Flow (vph)	56	698	102	49	1238	30	202	246	33	123
v/c Ratio	0.50	0.37	0.10	0.44	0.64	0.03	0.67	0.64	0.19	0.70
Control Delay (s/veh)	57.9	23.9	4.8	87.6	14.3	0.0	50.5	47.8	37.5	56.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.9	23.9	4.8	87.6	14.3	0.0	50.5	47.8	37.5	56.3
Queue Length 50th (ft)	45	184	4	42	377	0	137	160	20	63
Queue Length 95th (ft)	89	323	27	m66	524	m0	201	248	46	126
Internal Link Dist (ft)		1626			1042			369		418
Turn Bay Length (ft)	200		175	90		110	230		230	
Base Capacity (vph)	146	1868	949	151	1913	942	317	391	195	229
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.37	0.11	0.32	0.65	0.03	0.64	0.63	0.17	0.54

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	50	628	92	44	1114	27	182	102	120	30	47	64
Future Volume (veh/h)	50	628	92	44	1114	27	182	102	120	30	47	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1773	1773	1844	1826	1826	1826	2011	2011	1934	1788	1788	1788
Adj Flow Rate, veh/h	56	698	102	49	1238	30	202	113	133	33	52	71
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	5	5	5	3	3	3	4	4	4
Cap, veh/h	71	1907	885	63	1944	867	291	147	173	154	63	86
Arrive On Green	0.03	0.38	0.38	0.04	0.56	0.56	0.11	0.17	0.17	0.03	0.09	0.09
Sat Flow, veh/h	1688	3368	1562	1739	3469	1547	1915	842	991	1703	685	935
Grp Volume(v), veh/h	56	698	102	49	1238	30	202	0	246	33	0	123
Grp Sat Flow(s),veh/h/ln	1688	1684	1562	1739	1735	1547	1915	0	1833	1703	0	1619
Q Serve(g_s), s	4.1	18.7	5.3	3.5	30.5	1.1	11.5	0.0	16.0	2.2	0.0	9.3
Cycle Q Clear(g_c), s	4.1	18.7	5.3	3.5	30.5	1.1	11.5	0.0	16.0	2.2	0.0	9.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.54	1.00		0.58
Lane Grp Cap(c), veh/h	71	1907	885	63	1944	867	291	0	320	154	0	150
V/C Ratio(X)	0.79	0.37	0.12	0.78	0.64	0.03	0.69	0.00	0.77	0.21	0.00	0.82
Avail Cap(c_a), veh/h	149	1907	885	153	1944	867	335	0	330	224	0	188
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.2	22.6	18.5	59.8	18.8	12.3	43.4	0.0	49.2	49.5	0.0	55.7
Incr Delay (d2), s/veh	6.7	0.5	0.3	7.6	1.6	0.1	3.7	0.0	9.2	0.3	0.0	16.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	8.0	2.0	1.7	11.9	0.4	5.7	0.0	8.1	0.9	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.9	23.1	18.7	67.4	20.4	12.4	47.1	0.0	58.4	49.8	0.0	72.4
LnGrp LOS	E	C	B	E	C	B	D		E	D		E
Approach Vol, veh/h		856			1317			448			156	
Approach Delay, s/veh		25.5			22.0			53.3			67.6	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	76.3	20.1	17.1	12.3	75.5	9.9	27.3
Change Period (Y+Rc), s	7.0	5.5	6.5	5.5	7.0	5.5	6.5	5.5
Max Green Setting (Gmax), s	11.0	58.5	16.5	14.5	11.0	58.5	8.5	22.5
Max Q Clear Time (g_c+I1), s	5.5	20.7	13.5	11.3	6.1	32.5	4.2	18.0
Green Ext Time (p_c), s	0.0	19.8	0.1	0.2	0.0	22.7	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	30.7
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	766	1	0	1205	2	0	0	1	3	0	3
Future Vol, veh/h	10	766	1	0	1205	2	0	0	1	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	7	7	5	5	5	2	2	2	2	2	2
Mvmt Flow	11	851	1	0	1339	2	0	0	1	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1341	0	0	852	0	0	1543	2215	426	1788	2214	671
Stage 1	-	-	-	-	-	-	874	874	-	1340	1340	-
Stage 2	-	-	-	-	-	-	669	1341	-	448	874	-
Critical Hdwy	4.24	-	-	4.2	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.27	-	-	2.25	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	484	-	-	764	-	-	78	43	577	51	43	399
Stage 1	-	-	-	-	-	-	311	365	-	161	220	-
Stage 2	-	-	-	-	-	-	413	219	-	560	365	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	484	-	-	764	-	-	75	42	577	50	42	399
Mov Cap-2 Maneuver	-	-	-	-	-	-	75	42	-	50	42	-
Stage 1	-	-	-	-	-	-	302	354	-	161	220	-
Stage 2	-	-	-	-	-	-	410	219	-	542	354	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.53	0	11.25	49.14
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	577	46	-	-	764	-	-	88
HCM Lane V/C Ratio	0.002	0.023	-	-	-	-	-	0.076
HCM Control Delay (s/veh)	11.3	12.6	0.4	-	0	-	-	49.1
HCM Lane LOS	B	B	A	-	A	-	-	E
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	758	10	17	1199	1	3	0	8	1	0	0
Future Vol, veh/h	0	758	10	17	1199	1	3	0	8	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	7	7	7	5	5	5	9	9	9	2	2	2
Mvmt Flow	0	852	11	19	1347	1	3	0	9	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1348	0	0	863	0	0	1569	2244	431	1812	2249	674
Stage 1	-	-	-	-	-	-	857	857	-	1386	1386	-
Stage 2	-	-	-	-	-	-	712	1387	-	426	863	-
Critical Hdwy	4.24	-	-	4.2	-	-	7.68	6.68	7.08	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.54	5.54	-
Follow-up Hdwy	2.27	-	-	2.25	-	-	3.59	4.09	3.39	3.52	4.02	3.32
Pot Cap-1 Maneuver	481	-	-	756	-	-	70	38	553	49	41	397
Stage 1	-	-	-	-	-	-	304	356	-	151	209	-
Stage 2	-	-	-	-	-	-	374	196	-	577	370	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	481	-	-	756	-	-	68	37	553	47	40	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	68	37	-	47	40	-
Stage 1	-	-	-	-	-	-	304	356	-	147	203	-
Stage 2	-	-	-	-	-	-	364	191	-	567	370	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.14	25.51	83.33
HCM LOS			D	F

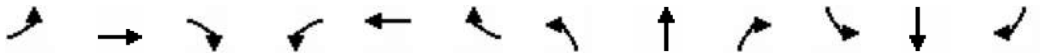
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	188	481	-	-	756	-	-	47
HCM Lane V/C Ratio	0.066	-	-	-	0.025	-	-	0.024
HCM Control Delay (s/veh)	25.5	0	-	-	9.9	-	-	83.3
HCM Lane LOS	D	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	215	481	124	156	744	248	364	704	199	254	252
v/c Ratio	0.55	0.43	0.18	0.69	0.63	0.36	0.78	0.89	0.85	0.47	0.56
Control Delay (s/veh)	47.5	35.1	7.5	69.2	38.2	5.3	43.2	58.7	63.1	51.6	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.5	35.1	7.5	69.2	38.2	5.3	43.2	58.7	63.1	51.6	10.9
Queue Length 50th (ft)	94	157	20	121	265	0	225	277	110	100	0
Queue Length 95th (ft)	100	257	m74	195	350	59	#331	#384	#244	145	78
Internal Link Dist (ft)		890			679			468		458	
Turn Bay Length (ft)	300		315	255		250	135		135		380
Base Capacity (vph)	580	1101	661	249	1167	686	471	788	233	530	450
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.44	0.19	0.63	0.64	0.36	0.77	0.89	0.85	0.48	0.56

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	438	113	142	677	226	331	467	174	181	231	229
Future Volume (veh/h)	196	438	113	142	677	226	331	467	174	181	231	229
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1844	1773	1844	1899	1826	1826	1949	1874	1874	1862	1790	1790
Adj Flow Rate, veh/h	215	481	0	156	744	0	364	513	0	199	254	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	7	7	7	5	5	5	7	7	7	7	7	7
Cap, veh/h	290	1283		185	1382		450	714		293	410	
Arrive On Green	0.09	0.38	0.00	0.10	0.40	0.00	0.18	0.20	0.00	0.10	0.12	0.00
Sat Flow, veh/h	3406	3368	1562	1809	3469	1547	1856	3654	0	1773	3402	1517
Grp Volume(v), veh/h	215	481	0	156	744	0	364	513	0	199	254	0
Grp Sat Flow(s),veh/h/ln	1703	1684	1562	1809	1735	1547	1856	1780	0	1773	1701	1517
Q Serve(g_s), s	7.7	12.9	0.0	10.6	20.5	0.0	20.8	16.8	0.0	12.3	8.9	0.0
Cycle Q Clear(g_c), s	7.7	12.9	0.0	10.6	20.5	0.0	20.8	16.8	0.0	12.3	8.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	1283		185	1382		450	714		293	410	
V/C Ratio(X)	0.74	0.37		0.84	0.54		0.81	0.72		0.68	0.62	
Avail Cap(c_a), veh/h	572	1283		246	1382		450	826		293	517	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.9	27.9	0.0	55.1	28.8	0.0	37.0	46.7	0.0	43.0	52.2	0.0
Incr Delay (d2), s/veh	5.3	0.8	0.0	20.0	1.5	0.0	11.0	3.7	0.0	6.9	3.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	5.2	0.0	5.8	8.6	0.0	10.5	7.6	0.0	5.9	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.1	28.8	0.0	75.1	30.3	0.0	48.0	50.4	0.0	49.9	55.5	0.0
LnGrp LOS	E	C		E	C		D	D		D	E	
Approach Vol, veh/h		696			900			877			453	
Approach Delay, s/veh		38.8			38.1			49.4			53.0	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	55.3	20.0	32.1	19.8	53.1	30.0	22.1
Change Period (Y+Rc), s	7.0	5.5	7.5	7.0	7.0	5.5	7.5	7.0
Max Green Setting (Gmax), s	21.0	35.5	12.5	29.0	17.0	39.5	22.5	19.0
Max Q Clear Time (g_c+I1), s	9.7	22.5	14.3	18.8	12.6	14.9	22.8	10.9
Green Ext Time (p_c), s	0.9	9.5	0.0	6.3	0.3	10.8	0.0	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	43.9
HCM 7th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	SWL	SWT
Lane Group Flow (vph)	89	1241	216	172	1165	31	210	223	73	200
v/c Ratio	0.64	0.72	0.24	0.86	0.62	0.03	0.82	0.59	0.36	0.97
Control Delay (s/veh)	84.0	20.4	3.5	76.7	27.0	0.0	68.2	47.0	44.8	107.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	84.0	20.4	3.5	76.7	27.0	0.0	68.2	47.0	44.8	107.3
Queue Length 50th (ft)	81	187	0	152	451	0	154	142	49	156
Queue Length 95th (ft)	140	304	48	m#230	500	m0	#257	233	92	#317
Internal Link Dist (ft)		1626			1042			369		418
Turn Bay Length (ft)	200		175	90		110	230		230	
Base Capacity (vph)	168	1713	885	209	1851	915	262	376	209	206
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.72	0.24	0.82	0.63	0.03	0.80	0.59	0.35	0.97

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	85	1191	207	165	1118	30	202	81	133	70	102	90
Future Volume (veh/h)	85	1191	207	165	1118	30	202	81	133	70	102	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1847	1847	1921	1870	1870	1870	2027	2027	1949	1817	1817	1817
Adj Flow Rate, veh/h	89	1241	216	172	1165	31	210	84	139	73	106	94
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	1727	801	196	1919	856	264	115	190	196	95	85
Arrive On Green	0.12	0.98	0.98	0.11	0.54	0.54	0.11	0.17	0.17	0.05	0.11	0.11
Sat Flow, veh/h	1759	3509	1628	1781	3554	1585	1930	686	1136	1731	888	788
Grp Volume(v), veh/h	89	1241	216	172	1165	31	210	0	223	73	0	200
Grp Sat Flow(s),veh/h/ln	1759	1754	1628	1781	1777	1585	1930	0	1822	1731	0	1676
Q Serve(g_s), s	6.7	2.6	0.4	12.8	30.3	1.2	12.7	0.0	15.7	5.0	0.0	14.5
Cycle Q Clear(g_c), s	6.7	2.6	0.4	12.8	30.3	1.2	12.7	0.0	15.7	5.0	0.0	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		0.47
Lane Grp Cap(c), veh/h	109	1727	801	196	1919	856	264	0	305	196	0	180
V/C Ratio(X)	0.81	0.72	0.27	0.88	0.61	0.04	0.80	0.00	0.73	0.37	0.00	1.11
Avail Cap(c_a), veh/h	169	1727	801	211	1919	856	275	0	305	220	0	180
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.3	0.6	0.5	59.2	21.2	14.6	45.8	0.0	53.3	50.4	0.0	60.3
Incr Delay (d2), s/veh	7.1	2.2	0.7	28.6	1.4	0.1	13.2	0.0	7.6	0.4	0.0	100.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.8	0.3	7.3	12.4	0.5	7.0	0.0	7.8	2.2	0.0	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.4	2.8	1.2	87.7	22.7	14.6	59.0	0.0	60.8	50.9	0.0	160.3
LnGrp LOS	E	A	A	F	C	B	E		E	D		F
Approach Vol, veh/h		1546			1368			433			273	
Approach Delay, s/veh		6.2			30.7			59.9			131.0	
Approach LOS		A			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	71.9	21.2	20.0	15.4	78.4	13.1	28.1
Change Period (Y+Rc), s	7.0	5.5	6.5	5.5	7.0	5.5	6.5	5.5
Max Green Setting (Gmax), s	16.0	64.5	15.5	14.5	13.0	67.5	8.5	21.5
Max Q Clear Time (g_c+I1), s	14.8	4.6	14.7	16.5	8.7	32.3	7.0	17.7
Green Ext Time (p_c), s	0.0	48.0	0.0	0.0	0.0	28.5	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	31.3
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	1369	2	3	1299	11	1	0	0	10	0	21
Future Vol, veh/h	21	1369	2	3	1299	11	1	0	0	10	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	1456	2	3	1382	12	1	0	0	11	0	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1394	0	0	1459	0	0	2199	2902	729	2167	2897	697
Stage 1	-	-	-	-	-	-	1502	1502	-	1394	1394	-
Stage 2	-	-	-	-	-	-	697	1400	-	773	1503	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	487	-	-	459	-	-	25	16	365	26	16	384
Stage 1	-	-	-	-	-	-	127	183	-	149	207	-
Stage 2	-	-	-	-	-	-	397	205	-	358	183	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	487	-	-	459	-	-	21	14	365	24	14	384
Mov Cap-2 Maneuver	-	-	-	-	-	-	21	14	-	24	14	-
Stage 1	-	-	-	-	-	-	118	169	-	147	204	-
Stage 2	-	-	-	-	-	-	370	203	-	330	169	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.13	0.17	182.23	105.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	21	54	-	-	8	-	-	66
HCM Lane V/C Ratio	0.05	0.046	-	-	0.007	-	-	0.501
HCM Control Delay (s/veh)	182.2	12.8	1	-	12.9	0.1	-	105.4
HCM Lane LOS	F	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	2

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1345	30	34	1287	3	18	0	32	3	0	3
Future Vol, veh/h	3	1345	30	34	1287	3	18	0	32	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1446	32	37	1384	3	19	0	34	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1387	0	0	1478	0	0	2234	2929	739	2188	2944	694
Stage 1	-	-	-	-	-	-	1469	1469	-	1459	1459	-
Stage 2	-	-	-	-	-	-	765	1460	-	730	1485	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	490	-	-	451	-	-	23	15	360	25	15	385
Stage 1	-	-	-	-	-	-	134	190	-	136	192	-
Stage 2	-	-	-	-	-	-	362	192	-	380	187	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	490	-	-	451	-	-	21	14	360	21	13	385
Mov Cap-2 Maneuver	-	-	-	-	-	-	21	14	-	21	13	-
Stage 1	-	-	-	-	-	-	133	189	-	125	177	-
Stage 2	-	-	-	-	-	-	330	176	-	341	185	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.35	250.12	112.48
HCM LOS			F	F

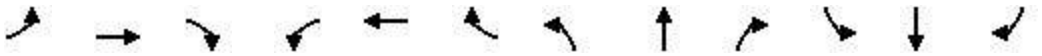
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	53	490	-	-	451	-	-	40
HCM Lane V/C Ratio	1.01	0.007	-	-	0.081	-	-	0.162
HCM Control Delay (s/veh)	250.1	12.4	-	-	13.7	-	-	112.5
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	4.5	0	-	-	0.3	-	-	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	435	751	308	233	727	223	198	392	280	499	512
v/c Ratio	0.72	0.57	0.38	1.00	0.62	0.33	0.67	0.71	0.77	0.76	0.87
Control Delay (s/veh)	76.3	29.1	5.2	117.4	41.3	5.7	44.5	55.7	49.4	60.9	33.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	76.3	29.1	5.2	117.4	41.3	5.7	44.5	55.7	49.4	60.9	33.1
Queue Length 50th (ft)	208	155	18	207	285	0	124	153	185	221	143
Queue Length 95th (ft)	264	207	63	#383	373	61	190	211	#269	286	#351
Internal Link Dist (ft)		888			679			468		458	
Turn Bay Length (ft)	300		315	255		250	135		135		380
Base Capacity (vph)	725	1314	800	233	1168	670	310	547	378	652	583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.57	0.39	1.00	0.62	0.33	0.64	0.72	0.74	0.77	0.88

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	405	698	286	217	676	207	184	246	118	260	464	476
Future Volume (veh/h)	405	698	286	217	676	207	184	246	118	260	464	476
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1921	1847	1921	1914	1841	1841	2011	1934	1934	1939	1864	1864
Adj Flow Rate, veh/h	435	751	0	233	727	0	198	265	0	280	499	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	4	4	4	3	3	3	2	2	2
Cap, veh/h	524	1394		230	1313		289	480		396	610	
Arrive On Green	0.15	0.40	0.00	0.13	0.38	0.00	0.10	0.13	0.00	0.15	0.17	0.00
Sat Flow, veh/h	3549	3509	1628	1823	3497	1560	1915	3771	0	1847	3542	1580
Grp Volume(v), veh/h	435	751	0	233	727	0	198	265	0	280	499	0
Grp Sat Flow(s),veh/h/ln	1774	1754	1628	1823	1749	1560	1915	1837	0	1847	1771	1580
Q Serve(g_s), s	16.1	22.2	0.0	17.0	22.1	0.0	11.9	9.1	0.0	17.4	18.3	0.0
Cycle Q Clear(g_c), s	16.1	22.2	0.0	17.0	22.1	0.0	11.9	9.1	0.0	17.4	18.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	524	1394		230	1313		289	480		396	610	
V/C Ratio(X)	0.83	0.54		1.01	0.55		0.68	0.55		0.71	0.82	
Avail Cap(c_a), veh/h	710	1394		230	1313		323	544		420	656	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.9	31.2	0.0	59.0	33.2	0.0	44.8	55.0	0.0	41.9	53.8	0.0
Incr Delay (d2), s/veh	7.1	1.5	0.0	63.3	1.7	0.0	6.0	2.1	0.0	5.6	8.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	9.5	0.0	11.8	9.5	0.0	6.0	4.3	0.0	8.4	8.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.0	32.7	0.0	122.3	34.9	0.0	50.8	57.1	0.0	47.6	62.7	0.0
LnGrp LOS	E	C		F	C		D	E		D	E	
Approach Vol, veh/h		1186			960			463			779	
Approach Delay, s/veh		43.8			56.1			54.4			57.3	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.9	56.2	27.2	24.6	24.0	59.1	21.6	30.3
Change Period (Y+Rc), s	7.0	5.5	7.5	7.0	7.0	5.5	7.5	7.0
Max Green Setting (Gmax), s	27.0	39.5	21.5	20.0	17.0	49.5	16.5	25.0
Max Q Clear Time (g_c+I1), s	18.1	24.1	19.4	11.1	19.0	24.2	13.9	20.3
Green Ext Time (p_c), s	1.9	10.8	0.3	3.1	0.0	16.5	0.2	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	51.8
HCM 7th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

1: Campbellsville Pike/Highland Ave & S. James M Campbell Blvd

04/29/2024



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	SWL	SWT
Lane Group Flow (vph)	56	739	102	57	1270	33	208	254	37	123
v/c Ratio	0.50	0.39	0.10	0.50	0.66	0.03	0.68	0.65	0.22	0.70
Control Delay (s/veh)	58.6	24.2	4.5	87.6	15.0	0.0	51.1	48.1	38.0	56.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.6	24.2	4.5	87.6	15.0	0.0	51.1	48.1	38.0	56.3
Queue Length 50th (ft)	45	195	3	48	398	0	141	164	23	63
Queue Length 95th (ft)	89	338	26	m73	538	m0	207	256	49	126
Internal Link Dist (ft)		1626			1042			369		418
Turn Bay Length (ft)	200		175	90		110	230		230	
Base Capacity (vph)	146	1855	944	151	1907	940	318	393	191	229
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.40	0.11	0.38	0.67	0.04	0.65	0.65	0.19	0.54

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	50	665	92	51	1143	30	187	102	127	33	47	64
Future Volume (veh/h)	50	665	92	51	1143	30	187	102	127	33	47	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1773	1773	1844	1826	1826	1826	2011	2011	1934	1788	1788	1788
Adj Flow Rate, veh/h	56	739	102	57	1270	33	208	113	141	37	52	71
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	5	5	5	3	3	3	4	4	4
Cap, veh/h	71	1878	871	73	1934	863	296	143	178	152	63	86
Arrive On Green	0.01	0.18	0.18	0.04	0.56	0.56	0.11	0.18	0.18	0.03	0.09	0.09
Sat Flow, veh/h	1688	3368	1562	1739	3469	1547	1915	813	1015	1703	685	935
Grp Volume(v), veh/h	56	739	102	57	1270	33	208	0	254	37	0	123
Grp Sat Flow(s),veh/h/ln	1688	1684	1562	1739	1735	1547	1915	0	1828	1703	0	1619
Q Serve(g_s), s	4.1	24.1	6.8	4.1	31.9	1.2	11.9	0.0	16.6	2.4	0.0	9.3
Cycle Q Clear(g_c), s	4.1	24.1	6.8	4.1	31.9	1.2	11.9	0.0	16.6	2.4	0.0	9.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.56	1.00		0.58
Lane Grp Cap(c), veh/h	71	1878	871	73	1934	863	296	0	321	152	0	150
V/C Ratio(X)	0.79	0.39	0.12	0.78	0.66	0.04	0.70	0.00	0.79	0.24	0.00	0.82
Avail Cap(c_a), veh/h	149	1878	871	153	1934	863	335	0	329	219	0	188
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.1	32.4	25.3	59.3	19.3	12.5	43.2	0.0	49.4	49.5	0.0	55.7
Incr Delay (d2), s/veh	6.7	0.6	0.3	6.6	1.8	0.1	4.2	0.0	11.1	0.3	0.0	16.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	11.0	2.7	1.9	12.5	0.4	5.9	0.0	8.5	1.0	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.7	33.0	25.6	65.9	21.1	12.6	47.4	0.0	60.4	49.8	0.0	72.4
LnGrp LOS	E	C	C	E	C	B	D		E	D		E
Approach Vol, veh/h		897			1360			462			160	
Approach Delay, s/veh		34.3			22.7			54.6			67.1	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	75.2	20.5	17.1	12.3	75.2	10.1	27.4
Change Period (Y+Rc), s	7.0	5.5	6.5	5.5	7.0	5.5	6.5	5.5
Max Green Setting (Gmax), s	11.0	58.5	16.5	14.5	11.0	58.5	8.5	22.5
Max Q Clear Time (g_c+I1), s	6.1	26.1	13.9	11.3	6.1	33.9	4.4	18.6
Green Ext Time (p_c), s	0.0	19.0	0.1	0.2	0.0	21.8	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	33.9
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	753	62	51	1244	2	0	0	54	3	0	3
Future Vol, veh/h	10	753	62	51	1244	2	0	0	54	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	7	7	5	5	5	2	2	2	2	2	2
Mvmt Flow	11	837	69	57	1382	2	0	0	60	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1384	0	0	906	0	0	1698	2391	453	1937	2424	692
Stage 1	-	-	-	-	-	-	893	893	-	1497	1497	-
Stage 2	-	-	-	-	-	-	804	1498	-	441	928	-
Critical Hdwy	4.24	-	-	4.2	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.27	-	-	2.25	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	466	-	-	728	-	-	60	33	554	39	32	386
Stage 1	-	-	-	-	-	-	303	358	-	128	184	-
Stage 2	-	-	-	-	-	-	343	184	-	565	345	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	466	-	-	728	-	-	50	28	554	30	27	386
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	28	-	30	27	-
Stage 1	-	-	-	-	-	-	293	346	-	112	161	-
Stage 2	-	-	-	-	-	-	297	161	-	488	334	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.52	1.57	12.28	78.95
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	554	39	-	-	141	-	-	55
HCM Lane V/C Ratio	0.108	0.024	-	-	0.078	-	-	0.121
HCM Control Delay (s/veh)	12.3	12.9	0.4	-	10.4	1.2	-	79
HCM Lane LOS	B	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.3	-	-	0.4

Intersection	
Int Delay, s/veh	19.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	792	15	52	1222	1	69	0	28	1	0	0
Future Vol, veh/h	0	792	15	52	1222	1	69	0	28	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	7	7	7	5	5	5	9	9	9	2	2	2
Mvmt Flow	0	890	17	58	1373	1	78	0	31	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1374	0	0	907	0	0	1702	2389	453	1935	2397	687
Stage 1	-	-	-	-	-	-	898	898	-	1490	1490	-
Stage 2	-	-	-	-	-	-	803	1491	-	445	907	-
Critical Hdwy	4.24	-	-	4.2	-	-	7.68	6.68	7.08	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.54	5.54	-
Follow-up Hdwy	2.27	-	-	2.25	-	-	3.59	4.09	3.39	3.52	4.02	3.32
Pot Cap-1 Maneuver	470	-	-	728	-	-	~ 55	30	535	40	33	389
Stage 1	-	-	-	-	-	-	287	340	-	130	186	-
Stage 2	-	-	-	-	-	-	328	174	-	562	353	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	470	-	-	728	-	-	~ 51	28	535	34	30	389
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 51	28	-	34	30	-
Stage 1	-	-	-	-	-	-	287	340	-	119	171	-
Stage 2	-	-	-	-	-	-	302	160	-	529	353	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.42	$ 422.82	113.66
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	69	470	-	-	728	-	-	34
HCM Lane V/C Ratio	1.585	-	-	-	0.08	-	-	0.033
HCM Control Delay (s/veh)	$ 422.8	0	-	-	10.4	-	-	113.7
HCM Lane LOS	F	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	9.4	0	-	-	0.3	-	-	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	232	513	135	156	779	248	376	704	199	254	269
v/c Ratio	0.57	0.46	0.20	0.69	0.67	0.36	0.81	0.89	0.85	0.48	0.58
Control Delay (s/veh)	48.3	35.3	7.0	69.2	39.7	5.4	45.1	58.7	62.7	51.8	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.3	35.3	7.0	69.2	39.7	5.4	45.1	58.7	62.7	51.8	11.0
Queue Length 50th (ft)	101	170	21	121	284	0	234	277	110	100	0
Queue Length 95th (ft)	107	268	m73	195	372	60	#358	#384	#243	145	81
Internal Link Dist (ft)		890			679			468		458	
Turn Bay Length (ft)	300		315	255		250	135		135		380
Base Capacity (vph)	580	1101	661	249	1152	680	470	788	234	526	462
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.47	0.20	0.63	0.68	0.36	0.80	0.89	0.85	0.48	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	467	123	142	709	226	342	467	174	181	231	245
Future Volume (veh/h)	211	467	123	142	709	226	342	467	174	181	231	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1844	1773	1844	1899	1826	1826	1949	1874	1874	1862	1790	1790
Adj Flow Rate, veh/h	232	513	0	156	779	0	376	513	0	199	254	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	7	7	7	5	5	5	7	7	7	7	7	7
Cap, veh/h	308	1283		185	1363		450	714		293	410	
Arrive On Green	0.09	0.38	0.00	0.10	0.39	0.00	0.18	0.20	0.00	0.10	0.12	0.00
Sat Flow, veh/h	3406	3368	1562	1809	3469	1547	1856	3654	0	1773	3402	1517
Grp Volume(v), veh/h	232	513	0	156	779	0	376	513	0	199	254	0
Grp Sat Flow(s),veh/h/ln	1703	1684	1562	1809	1735	1547	1856	1780	0	1773	1701	1517
Q Serve(g_s), s	8.3	13.9	0.0	10.6	22.0	0.0	21.7	16.8	0.0	12.3	8.9	0.0
Cycle Q Clear(g_c), s	8.3	13.9	0.0	10.6	22.0	0.0	21.7	16.8	0.0	12.3	8.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	1283		185	1363		450	714		293	410	
V/C Ratio(X)	0.75	0.40		0.84	0.57		0.84	0.72		0.68	0.62	
Avail Cap(c_a), veh/h	572	1283		246	1363		450	826		293	517	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.5	28.3	0.0	55.1	29.7	0.0	37.3	46.7	0.0	43.0	52.2	0.0
Incr Delay (d2), s/veh	5.3	0.9	0.0	20.0	1.7	0.0	13.3	3.7	0.0	6.9	3.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	5.7	0.0	5.8	9.2	0.0	11.2	7.6	0.0	5.9	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.8	29.2	0.0	75.1	31.4	0.0	50.6	50.4	0.0	49.9	55.5	0.0
LnGrp LOS	E	C		E	C		D	D		D	E	
Approach Vol, veh/h		745			935			889			453	
Approach Delay, s/veh		39.0			38.7			50.5			53.0	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	54.6	20.0	32.1	19.8	53.1	30.0	22.1
Change Period (Y+Rc), s	7.0	5.5	7.5	7.0	7.0	5.5	7.5	7.0
Max Green Setting (Gmax), s	21.0	35.5	12.5	29.0	17.0	39.5	22.5	19.0
Max Q Clear Time (g_c+I1), s	10.3	24.0	14.3	18.8	12.6	15.9	23.7	10.9
Green Ext Time (p_c), s	1.0	8.8	0.0	6.3	0.3	11.2	0.0	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	44.4
HCM 7th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	SWL	SWT
Lane Group Flow (vph)	89	1271	216	177	1185	33	215	229	76	200
v/c Ratio	0.64	0.74	0.24	0.88	0.64	0.03	0.84	0.60	0.38	0.97
Control Delay (s/veh)	84.0	21.1	3.5	79.3	26.7	0.0	70.0	47.0	45.4	107.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	84.0	21.1	3.5	79.3	26.7	0.0	70.0	47.0	45.4	107.3
Queue Length 50th (ft)	82	195	0	158	453	0	158	146	52	156
Queue Length 95th (ft)	140	315	47	m#239	m501	m0	#268	238	95	#317
Internal Link Dist (ft)		1626			1042			369		418
Turn Bay Length (ft)	200		175	90		110	230		230	
Base Capacity (vph)	168	1707	883	209	1849	914	262	379	205	206
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.74	0.24	0.85	0.64	0.04	0.82	0.60	0.37	0.97

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	85	1220	207	170	1138	32	206	81	139	73	102	90
Future Volume (veh/h)	85	1220	207	170	1138	32	206	81	139	73	102	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1847	1847	1921	1870	1870	1870	2027	2027	1949	1817	1817	1817
Adj Flow Rate, veh/h	89	1271	216	177	1185	33	215	84	145	76	106	94
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	1710	793	201	1911	853	268	112	194	195	95	85
Arrive On Green	0.12	0.97	0.97	0.11	0.54	0.54	0.11	0.17	0.17	0.05	0.11	0.11
Sat Flow, veh/h	1759	3509	1628	1781	3554	1585	1930	667	1152	1731	888	788
Grp Volume(v), veh/h	89	1271	216	177	1185	33	215	0	229	76	0	200
Grp Sat Flow(s),veh/h/ln	1759	1754	1628	1781	1777	1585	1930	0	1819	1731	0	1676
Q Serve(g_s), s	6.7	4.5	0.6	13.2	31.2	1.3	13.0	0.0	16.2	5.2	0.0	14.5
Cycle Q Clear(g_c), s	6.7	4.5	0.6	13.2	31.2	1.3	13.0	0.0	16.2	5.2	0.0	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.63	1.00		0.47
Lane Grp Cap(c), veh/h	109	1710	793	201	1911	853	268	0	306	195	0	180
V/C Ratio(X)	0.81	0.74	0.27	0.88	0.62	0.04	0.80	0.00	0.75	0.39	0.00	1.11
Avail Cap(c_a), veh/h	169	1710	793	211	1911	853	275	0	306	216	0	180
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.3	0.9	0.9	59.0	21.6	14.7	45.7	0.0	53.5	50.3	0.0	60.3
Incr Delay (d2), s/veh	7.1	2.5	0.7	29.9	1.5	0.1	14.2	0.0	8.8	0.5	0.0	100.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	1.1	0.3	7.6	12.8	0.5	7.3	0.0	8.1	2.3	0.0	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.4	3.4	1.6	88.9	23.2	14.8	59.8	0.0	62.2	50.8	0.0	160.3
LnGrp LOS	E	A	A	F	C	B	E		E	D		F
Approach Vol, veh/h		1576			1395			444			276	
Approach Delay, s/veh		6.7			31.3			61.1			130.2	
Approach LOS		A			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	71.3	21.5	20.0	15.4	78.1	13.3	28.2
Change Period (Y+Rc), s	7.0	5.5	6.5	5.5	7.0	5.5	6.5	5.5
Max Green Setting (Gmax), s	16.0	64.5	15.5	14.5	13.0	67.5	8.5	21.5
Max Q Clear Time (g_c+I1), s	15.2	6.5	15.0	16.5	8.7	33.2	7.2	18.2
Green Ext Time (p_c), s	0.0	47.5	0.0	0.0	0.0	28.2	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	31.8
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	1359	50	43	1327	11	0	0	39	10	0	21
Future Vol, veh/h	21	1359	50	43	1327	11	0	0	39	10	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	1446	53	46	1412	12	0	0	41	11	0	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1423	0	0	1499	0	0	2314	3032	749	2277	3053	712
Stage 1	-	-	-	-	-	-	1517	1517	-	1509	1509	-
Stage 2	-	-	-	-	-	-	797	1515	-	768	1544	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	474	-	-	443	-	-	20	13	354	22	12	375
Stage 1	-	-	-	-	-	-	125	180	-	126	182	-
Stage 2	-	-	-	-	-	-	346	180	-	361	175	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	474	-	-	443	-	-	15	10	354	15	9	375
Mov Cap-2 Maneuver	-	-	-	-	-	-	15	10	-	15	9	-
Stage 1	-	-	-	-	-	-	115	165	-	105	151	-
Stage 2	-	-	-	-	-	-	270	150	-	293	160	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.16	2.6	16.51	224.89
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	354	50	-	-	111	-	-	42
HCM Lane V/C Ratio	0.117	0.047	-	-	0.103	-	-	0.789
HCM Control Delay (s/veh)	16.5	13	1	-	14.1	2.3	-	224.9
HCM Lane LOS	C	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.3	-	-	3

Intersection	
Int Delay, s/veh	74.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1369	34	62	1305	3	67	0	47	3	0	3
Future Vol, veh/h	3	1369	34	62	1305	3	67	0	47	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1472	37	67	1403	3	72	0	51	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1406	0	0	1509	0	0	2332	3037	754	2281	3053	703
Stage 1	-	-	-	-	-	-	1497	1497	-	1538	1538	-
Stage 2	-	-	-	-	-	-	835	1540	-	742	1515	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	481	-	-	439	-	-	~ 20	13	352	22	12	380
Stage 1	-	-	-	-	-	-	128	184	-	121	176	-
Stage 2	-	-	-	-	-	-	328	175	-	373	180	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	481	-	-	439	-	-	~ 16	11	352	16	10	380
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 16	11	-	16	10	-
Stage 1	-	-	-	-	-	-	128	183	-	103	149	-
Stage 2	-	-	-	-	-	-	276	149	-	318	179	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.66	$ 1881.9	156.25
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	27	481	-	-	439	-	-	30
HCM Lane V/C Ratio	4.53	0.007	-	-	0.152	-	-	0.216
HCM Control Delay (s/veh)	$ 1881.9	12.5	-	-	14.7	-	-	156.2
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	15	0	-	-	0.5	-	-	0.7

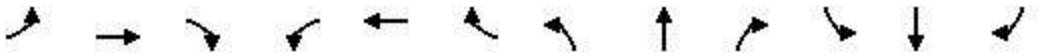
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	447	772	315	233	754	223	206	392	280	499	526
v/c Ratio	0.74	0.58	0.39	1.00	0.65	0.33	0.69	0.71	0.77	0.76	0.91
Control Delay (s/veh)	76.0	29.4	5.1	117.4	42.4	5.7	45.9	55.4	49.1	60.9	38.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	76.0	29.4	5.1	117.4	42.4	5.7	45.9	55.4	49.1	60.9	38.6
Queue Length 50th (ft)	213	163	17	207	300	0	130	153	185	221	167
Queue Length 95th (ft)	269	216	60	#383	390	61	197	211	269	286	#388
Internal Link Dist (ft)		888			679			468		458	
Turn Bay Length (ft)	300		315	255		250	135		135		380
Base Capacity (vph)	725	1311	803	233	1156	666	310	551	379	652	578
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.59	0.39	1.00	0.65	0.33	0.66	0.71	0.74	0.77	0.91

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	416	718	293	217	701	207	192	246	118	260	464	489
Future Volume (veh/h)	416	718	293	217	701	207	192	246	118	260	464	489
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1921	1847	1921	1914	1841	1841	2011	1934	1934	1939	1864	1864
Adj Flow Rate, veh/h	447	772	0	233	754	0	206	265	0	280	499	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	4	4	4	3	3	3	2	2	2
Cap, veh/h	536	1383		230	1291		295	492		400	610	
Arrive On Green	0.15	0.39	0.00	0.13	0.37	0.00	0.11	0.13	0.00	0.15	0.17	0.00
Sat Flow, veh/h	3549	3509	1628	1823	3497	1560	1915	3771	0	1847	3542	1580
Grp Volume(v), veh/h	447	772	0	233	754	0	206	265	0	280	499	0
Grp Sat Flow(s),veh/h/ln	1774	1754	1628	1823	1749	1560	1915	1837	0	1847	1771	1580
Q Serve(g_s), s	16.5	23.1	0.0	17.0	23.4	0.0	12.3	9.1	0.0	17.4	18.3	0.0
Cycle Q Clear(g_c), s	16.5	23.1	0.0	17.0	23.4	0.0	12.3	9.1	0.0	17.4	18.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	536	1383		230	1291		295	492		400	610	
V/C Ratio(X)	0.83	0.56		1.01	0.58		0.70	0.54		0.70	0.82	
Avail Cap(c_a), veh/h	710	1383		230	1291		323	544		425	656	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.7	31.8	0.0	59.0	34.3	0.0	44.3	54.6	0.0	41.7	53.8	0.0
Incr Delay (d2), s/veh	7.5	1.6	0.0	63.3	1.9	0.0	6.7	2.0	0.0	5.3	8.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	9.9	0.0	11.8	10.1	0.0	6.3	4.3	0.0	8.4	8.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.2	33.4	0.0	122.3	36.2	0.0	51.0	56.5	0.0	47.0	62.7	0.0
LnGrp LOS	E	C		F	D		D	E		D	E	
Approach Vol, veh/h		1219			987			471			779	
Approach Delay, s/veh		44.3			56.5			54.1			57.1	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.4	55.3	27.2	25.1	24.0	58.7	22.0	30.3
Change Period (Y+Rc), s	7.0	5.5	7.5	7.0	7.0	5.5	7.5	7.0
Max Green Setting (Gmax), s	27.0	39.5	21.5	20.0	17.0	49.5	16.5	25.0
Max Q Clear Time (g_c+I1), s	18.5	25.4	19.4	11.1	19.0	25.1	14.3	20.3
Green Ext Time (p_c), s	1.9	10.3	0.3	3.1	0.0	16.4	0.2	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	52.0
HCM 7th LOS	D

Notes

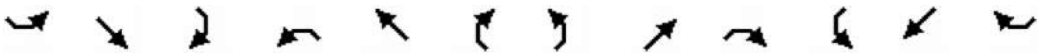
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	SWL	SWT
Lane Group Flow (vph)	56	739	102	57	1270	33	208	254	37	123
v/c Ratio	0.50	0.39	0.10	0.50	0.66	0.03	0.68	0.65	0.22	0.70
Control Delay (s/veh)	58.6	24.2	4.5	78.1	20.1	0.0	51.1	48.1	38.0	56.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.6	24.2	4.5	78.1	20.1	0.0	51.1	48.1	38.0	56.3
Queue Length 50th (ft)	45	195	3	46	411	0	141	164	23	63
Queue Length 95th (ft)	89	338	26	m61	511	m0	207	256	49	126
Internal Link Dist (ft)		1626			1042			369		418
Turn Bay Length (ft)	200		175	90		110	230		230	
Base Capacity (vph)	146	1855	944	151	1907	940	318	393	191	229
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.40	0.11	0.38	0.67	0.04	0.65	0.65	0.19	0.54

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	50	665	92	51	1143	30	187	102	127	33	47	64
Future Volume (veh/h)	50	665	92	51	1143	30	187	102	127	33	47	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1773	1773	1844	1826	1826	1826	2011	2011	1934	1788	1788	1788
Adj Flow Rate, veh/h	56	739	102	57	1270	33	208	113	141	37	52	71
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	5	5	5	3	3	3	4	4	4
Cap, veh/h	71	1878	871	73	1934	863	296	143	178	152	63	86
Arrive On Green	0.01	0.18	0.18	0.04	0.56	0.56	0.11	0.18	0.18	0.03	0.09	0.09
Sat Flow, veh/h	1688	3368	1562	1739	3469	1547	1915	813	1015	1703	685	935
Grp Volume(v), veh/h	56	739	102	57	1270	33	208	0	254	37	0	123
Grp Sat Flow(s),veh/h/ln	1688	1684	1562	1739	1735	1547	1915	0	1828	1703	0	1619
Q Serve(g_s), s	4.1	24.1	6.8	4.1	31.9	1.2	11.9	0.0	16.6	2.4	0.0	9.3
Cycle Q Clear(g_c), s	4.1	24.1	6.8	4.1	31.9	1.2	11.9	0.0	16.6	2.4	0.0	9.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.56	1.00		0.58
Lane Grp Cap(c), veh/h	71	1878	871	73	1934	863	296	0	321	152	0	150
V/C Ratio(X)	0.79	0.39	0.12	0.78	0.66	0.04	0.70	0.00	0.79	0.24	0.00	0.82
Avail Cap(c_a), veh/h	149	1878	871	153	1934	863	335	0	329	219	0	188
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.1	32.4	25.3	59.3	19.3	12.5	43.2	0.0	49.4	49.5	0.0	55.7
Incr Delay (d2), s/veh	6.7	0.6	0.3	6.6	1.8	0.1	4.2	0.0	11.1	0.3	0.0	16.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	11.0	2.7	1.9	12.5	0.4	5.9	0.0	8.5	1.0	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.7	33.0	25.6	65.9	21.1	12.6	47.4	0.0	60.4	49.8	0.0	72.4
LnGrp LOS	E	C	C	E	C	B	D		E	D		E
Approach Vol, veh/h		897			1360			462			160	
Approach Delay, s/veh		34.3			22.7			54.6			67.1	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	75.2	20.5	17.1	12.3	75.2	10.1	27.4
Change Period (Y+Rc), s	7.0	5.5	6.5	5.5	7.0	5.5	6.5	5.5
Max Green Setting (Gmax), s	11.0	58.5	16.5	14.5	11.0	58.5	8.5	22.5
Max Q Clear Time (g_c+I1), s	6.1	26.1	13.9	11.3	6.1	33.9	4.4	18.6
Green Ext Time (p_c), s	0.0	19.0	0.1	0.2	0.0	21.8	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	33.9
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	753	62	51	1244	2	0	0	54	3	0	3
Future Vol, veh/h	10	753	62	51	1244	2	0	0	54	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	7	7	5	5	5	2	2	2	2	2	2
Mvmt Flow	11	837	69	57	1382	2	0	0	60	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1384	0	0	906	0	0	-	-	418	1937	2424	692
Stage 1	-	-	-	-	-	-	-	-	-	1497	1497	-
Stage 2	-	-	-	-	-	-	-	-	-	441	928	-
Critical Hdwy	4.24	-	-	4.2	-	-	-	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.54	5.54	-
Follow-up Hdwy	2.27	-	-	2.25	-	-	-	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	466	-	-	728	-	-	0	0	583	39	32	386
Stage 1	-	-	-	-	-	-	0	0	-	128	184	-
Stage 2	-	-	-	-	-	-	0	0	-	565	345	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	466	-	-	728	-	-	-	-	583	32	28	386
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	32	28	-
Stage 1	-	-	-	-	-	-	-	-	-	118	170	-
Stage 2	-	-	-	-	-	-	-	-	-	491	334	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.52	0.41	11.88	74.45
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	583	47	-	-	728	-	-	58
HCM Lane V/C Ratio	0.103	0.024	-	-	0.078	-	-	0.114
HCM Control Delay (s/veh)	11.9	12.9	0.4	-	10.4	-	-	74.4
HCM Lane LOS	B	B	A	-	B	-	-	F
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.3	-	-	0.4

Intersection	
Int Delay, s/veh	14.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	792	15	52	1222	1	69	0	28	1	0	0
Future Vol, veh/h	0	792	15	52	1222	1	69	0	28	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	7	7	7	5	5	5	9	9	9	2	2	2
Mvmt Flow	0	890	17	58	1373	1	78	0	31	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1374	0	0	907	0	0	1702	2389	453	1935	2397	687
Stage 1	-	-	-	-	-	-	898	898	-	1490	1490	-
Stage 2	-	-	-	-	-	-	803	1491	-	445	907	-
Critical Hdwy	4.24	-	-	4.2	-	-	7.68	6.68	7.08	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.54	5.54	-
Follow-up Hdwy	2.27	-	-	2.25	-	-	3.59	4.09	3.39	3.52	4.02	3.32
Pot Cap-1 Maneuver	470	-	-	728	-	-	~ 55	30	535	40	33	389
Stage 1	-	-	-	-	-	-	287	340	-	130	186	-
Stage 2	-	-	-	-	-	-	328	174	-	562	353	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	470	-	-	728	-	-	~ 51	28	535	34	30	389
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 51	28	-	34	30	-
Stage 1	-	-	-	-	-	-	287	340	-	119	171	-
Stage 2	-	-	-	-	-	-	302	160	-	529	353	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.42	$ 319.82	113.66
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	51	535	470	-	-	728	-	-	34
HCM Lane V/C Ratio	1.526	0.059	-	-	-	0.08	-	-	0.033
HCM Control Delay (s/veh)	$ 444.7	12.2	0	-	-	10.4	-	-	113.7
HCM Lane LOS	F	B	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	7.3	0.2	0	-	-	0.3	-	-	0.1

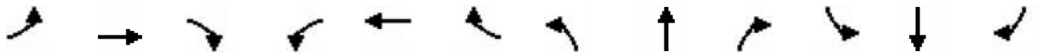
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	907	58	1374	109	1
v/c Ratio	0.49	0.22	0.72	0.24	0.00
Control Delay (s/veh)	7.8	7.3	9.4	14.1	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.8	7.3	9.4	14.1	15.0
Queue Length 50th (ft)	121	6	172	22	0
Queue Length 95th (ft)	55	m22	318	55	3
Internal Link Dist (ft)	202		890	306	288
Turn Bay Length (ft)		75			
Base Capacity (vph)	1840	261	1897	438	418
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.49	0.22	0.72	0.25	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



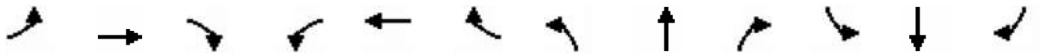
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	792	15	52	1222	1	69	0	28	1	0	0
Future Volume (veh/h)	0	792	15	52	1222	1	69	0	28	1	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1773	1773	1773	1826	1826	1826	1767	1767	1767	1870	1870	1870
Adj Flow Rate, veh/h	0	890	17	58	1373	1	78	0	31	1	0	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	7	7	5	5	5	9	9	9	2	2	2
Cap, veh/h	114	1775	34	328	1868	1	414	15	131	594	0	0
Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.53	0.33	0.00	0.33	0.33	0.00	0.00
Sat Flow, veh/h	374	3381	65	600	3557	3	950	46	396	1444	0	0
Grp Volume(v), veh/h	0	443	464	58	669	705	109	0	0	1	0	0
Grp Sat Flow(s),veh/h/ln	374	1684	1761	600	1735	1825	1392	0	0	1444	0	0
Q Serve(g_s), s	0.0	10.7	10.7	4.3	18.8	18.8	2.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.7	10.7	15.0	18.8	18.8	3.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.00	0.72		0.28	1.00		0.00
Lane Grp Cap(c), veh/h	114	884	925	328	911	959	560	0	0	594	0	0
V/C Ratio(X)	0.00	0.50	0.50	0.18	0.73	0.73	0.19	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	123	922	964	341	950	1000	560	0	0	594	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.66	0.66	0.66	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.6	9.6	14.5	11.6	11.6	15.2	0.0	0.0	14.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.2	1.9	1.8	0.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.1	3.2	0.5	5.9	6.2	1.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	10.1	10.1	14.7	13.5	13.4	15.9	0.0	0.0	14.1	0.0	0.0
LnGrp LOS		B	B	B	B	B	B			B		
Approach Vol, veh/h		907			1432			109			1	
Approach Delay, s/veh		10.1			13.5			15.9			14.1	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.4		37.6		25.4		37.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		19.0		34.5		19.0		34.5				
Max Q Clear Time (g_c+I1), s		5.4		12.7		2.0		20.8				
Green Ext Time (p_c), s		0.3		9.8		0.0		12.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			12.3									
HCM 7th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	232	513	135	156	779	248	376	704	199	254	269
v/c Ratio	0.57	0.46	0.20	0.69	0.67	0.36	0.81	0.89	0.85	0.48	0.58
Control Delay (s/veh)	42.8	30.9	7.6	69.2	39.7	5.4	45.1	58.7	62.7	51.8	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.8	30.9	7.6	69.2	39.7	5.4	45.1	58.7	62.7	51.8	11.0
Queue Length 50th (ft)	101	152	22	121	284	0	234	277	110	100	0
Queue Length 95th (ft)	108	244	78	195	372	60	#358	#384	#243	145	81
Internal Link Dist (ft)		890			679			468		719	
Turn Bay Length (ft)	300		315	255		250	135		135		380
Base Capacity (vph)	580	1101	661	249	1152	680	470	788	234	526	462
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.47	0.20	0.63	0.68	0.36	0.80	0.89	0.85	0.48	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	467	123	142	709	226	342	467	174	181	231	245
Future Volume (veh/h)	211	467	123	142	709	226	342	467	174	181	231	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1844	1773	1844	1899	1826	1826	1949	1874	1874	1862	1790	1790
Adj Flow Rate, veh/h	232	513	0	156	779	0	376	513	0	199	254	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	7	7	7	5	5	5	7	7	7	7	7	7
Cap, veh/h	308	1283		185	1363		450	714		293	410	
Arrive On Green	0.09	0.38	0.00	0.10	0.39	0.00	0.18	0.20	0.00	0.10	0.12	0.00
Sat Flow, veh/h	3406	3368	1562	1809	3469	1547	1856	3654	0	1773	3402	1517
Grp Volume(v), veh/h	232	513	0	156	779	0	376	513	0	199	254	0
Grp Sat Flow(s),veh/h/ln	1703	1684	1562	1809	1735	1547	1856	1780	0	1773	1701	1517
Q Serve(g_s), s	8.3	13.9	0.0	10.6	22.0	0.0	21.7	16.8	0.0	12.3	8.9	0.0
Cycle Q Clear(g_c), s	8.3	13.9	0.0	10.6	22.0	0.0	21.7	16.8	0.0	12.3	8.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	1283		185	1363		450	714		293	410	
V/C Ratio(X)	0.75	0.40		0.84	0.57		0.84	0.72		0.68	0.62	
Avail Cap(c_a), veh/h	572	1283		246	1363		450	826		293	517	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.5	28.3	0.0	55.1	29.7	0.0	37.3	46.7	0.0	43.0	52.2	0.0
Incr Delay (d2), s/veh	4.6	0.8	0.0	20.0	1.7	0.0	13.3	3.7	0.0	6.9	3.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	5.6	0.0	5.8	9.2	0.0	11.2	7.6	0.0	5.9	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.1	29.1	0.0	75.1	31.4	0.0	50.6	50.4	0.0	49.9	55.5	0.0
LnGrp LOS	E	C		E	C		D	D		D	E	
Approach Vol, veh/h		745			935			889			453	
Approach Delay, s/veh		38.7			38.7			50.5			53.0	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	54.6	20.0	32.1	19.8	53.1	30.0	22.1
Change Period (Y+Rc), s	7.0	5.5	7.5	7.0	7.0	5.5	7.5	7.0
Max Green Setting (Gmax), s	21.0	35.5	12.5	29.0	17.0	39.5	22.5	19.0
Max Q Clear Time (g_c+I1), s	10.3	24.0	14.3	18.8	12.6	15.9	23.7	10.9
Green Ext Time (p_c), s	1.0	8.8	0.0	6.3	0.3	11.2	0.0	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	44.3
HCM 7th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

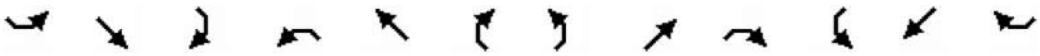
1: Campbellsville Pike/Highland Ave & S. James M Campbell Blvd



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	SWL	SWT
Lane Group Flow (vph)	89	1271	216	177	1185	33	215	229	76	200
v/c Ratio	0.64	0.74	0.24	0.88	0.64	0.03	0.84	0.60	0.38	0.97
Control Delay (s/veh)	84.0	21.1	3.5	97.7	25.6	0.0	70.0	47.0	45.4	107.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	84.0	21.1	3.5	97.7	25.6	0.0	70.0	47.0	45.4	107.3
Queue Length 50th (ft)	82	195	0	154	388	0	158	146	52	156
Queue Length 95th (ft)	140	315	47	#284	478	0	#268	238	95	#317
Internal Link Dist (ft)		1626			1042			369		418
Turn Bay Length (ft)	200		175	90		110	230		230	
Base Capacity (vph)	168	1707	883	209	1849	914	262	379	205	206
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.74	0.24	0.85	0.64	0.04	0.82	0.60	0.37	0.97

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	85	1220	207	170	1138	32	206	81	139	73	102	90
Future Volume (veh/h)	85	1220	207	170	1138	32	206	81	139	73	102	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1847	1847	1921	1870	1870	1870	2027	2027	1949	1817	1817	1817
Adj Flow Rate, veh/h	89	1271	216	177	1185	33	215	84	145	76	106	94
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	1710	793	201	1911	853	268	112	194	195	95	85
Arrive On Green	0.12	0.97	0.97	0.11	0.54	0.54	0.11	0.17	0.17	0.05	0.11	0.11
Sat Flow, veh/h	1759	3509	1628	1781	3554	1585	1930	667	1152	1731	888	788
Grp Volume(v), veh/h	89	1271	216	177	1185	33	215	0	229	76	0	200
Grp Sat Flow(s),veh/h/ln	1759	1754	1628	1781	1777	1585	1930	0	1819	1731	0	1676
Q Serve(g_s), s	6.7	4.5	0.6	13.2	31.2	1.3	13.0	0.0	16.2	5.2	0.0	14.5
Cycle Q Clear(g_c), s	6.7	4.5	0.6	13.2	31.2	1.3	13.0	0.0	16.2	5.2	0.0	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.63	1.00		0.47
Lane Grp Cap(c), veh/h	109	1710	793	201	1911	853	268	0	306	195	0	180
V/C Ratio(X)	0.81	0.74	0.27	0.88	0.62	0.04	0.80	0.00	0.75	0.39	0.00	1.11
Avail Cap(c_a), veh/h	169	1710	793	211	1911	853	275	0	306	216	0	180
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.3	0.9	0.9	59.0	21.6	14.7	45.7	0.0	53.5	50.3	0.0	60.3
Incr Delay (d2), s/veh	7.1	2.5	0.7	29.9	1.5	0.1	14.2	0.0	8.8	0.5	0.0	100.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	1.1	0.3	7.6	12.8	0.5	7.3	0.0	8.1	2.3	0.0	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.4	3.4	1.6	88.9	23.2	14.8	59.8	0.0	62.2	50.8	0.0	160.3
LnGrp LOS	E	A	A	F	C	B	E		E	D		F
Approach Vol, veh/h		1576			1395			444			276	
Approach Delay, s/veh		6.7			31.3			61.1			130.2	
Approach LOS		A			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	71.3	21.5	20.0	15.4	78.1	13.3	28.2
Change Period (Y+Rc), s	7.0	5.5	6.5	5.5	7.0	5.5	6.5	5.5
Max Green Setting (Gmax), s	16.0	64.5	15.5	14.5	13.0	67.5	8.5	21.5
Max Q Clear Time (g_c+I1), s	15.2	6.5	15.0	16.5	8.7	33.2	7.2	18.2
Green Ext Time (p_c), s	0.0	47.5	0.0	0.0	0.0	28.2	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	31.8
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	1359	50	43	1327	11	0	0	39	10	0	21
Future Vol, veh/h	21	1359	50	43	1327	11	0	0	39	10	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	1446	53	46	1412	12	0	0	41	11	0	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1423	0	0	1499	0	0	2288	3005	723	2277	3053	712
Stage 1	-	-	-	-	-	-	1490	1490	-	1509	1509	-
Stage 2	-	-	-	-	-	-	797	1515	-	768	1544	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	474	-	-	443	-	-	21	13	369	22	12	375
Stage 1	-	-	-	-	-	-	130	186	-	126	182	-
Stage 2	-	-	-	-	-	-	346	180	-	361	175	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	474	-	-	443	-	-	16	11	369	16	10	375
Mov Cap-2 Maneuver	-	-	-	-	-	-	16	11	-	16	10	-
Stage 1	-	-	-	-	-	-	119	170	-	113	163	-
Stage 2	-	-	-	-	-	-	292	162	-	294	160	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.16	0.44	16	196.99
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	369	55	-	-	443	-	-	45
HCM Lane V/C Ratio	0.113	0.047	-	-	0.103	-	-	0.731
HCM Control Delay (s/veh)	16	13	1	-	14.1	-	-	197
HCM Lane LOS	C	B	A	-	B	-	-	F
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.3	-	-	2.8

Intersection	
Int Delay, s/veh	47

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1369	34	62	1305	3	67	0	47	3	0	3
Future Vol, veh/h	3	1369	34	62	1305	3	67	0	47	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1472	37	67	1403	3	72	0	51	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1406	0	0	1509	0	0	2332	3037	754	2281	3053	703
Stage 1	-	-	-	-	-	-	1497	1497	-	1538	1538	-
Stage 2	-	-	-	-	-	-	835	1540	-	742	1515	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	481	-	-	439	-	-	~ 20	13	352	22	12	380
Stage 1	-	-	-	-	-	-	128	184	-	121	176	-
Stage 2	-	-	-	-	-	-	328	175	-	373	180	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	481	-	-	439	-	-	~ 16	11	352	16	10	380
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 16	11	-	16	10	-
Stage 1	-	-	-	-	-	-	128	183	-	103	149	-
Stage 2	-	-	-	-	-	-	276	149	-	318	179	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.66	$ 1178	156.25
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	16	352	481	-	-	439	-	-	30
HCM Lane V/C Ratio	4.386	0.144	0.007	-	-	0.152	-	-	0.216
HCM Control Delay (s/veh)	$ 1992.5	17	12.5	-	-	14.7	-	-	156.2
HCM Lane LOS	F	C	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	9.7	0.5	0	-	-	0.5	-	-	0.7

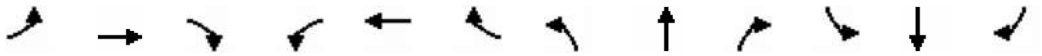
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	3	1509	67	1406	123	6
v/c Ratio	0.02	0.80	0.56	0.74	0.25	0.01
Control Delay (s/veh)	7.6	16.1	34.3	14.1	14.2	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.6	16.1	34.3	14.1	14.2	1.1
Queue Length 50th (ft)	1	223	15	196	26	0
Queue Length 95th (ft)	4	310	#75	271	62	2
Internal Link Dist (ft)		206		888	225	239
Turn Bay Length (ft)	75		75			
Base Capacity (vph)	117	1873	118	1897	491	530
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.81	0.57	0.74	0.25	0.01

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	1369	34	62	1305	3	67	0	47	3	0	3
Future Volume (veh/h)	3	1369	34	62	1305	3	67	0	47	3	0	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1847	1847	1847	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	1472	37	67	1403	3	72	0	51	3	0	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	204	1860	47	180	1935	4	353	23	202	305	27	246
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.33	0.00	0.33	0.33	0.00	0.33
Sat Flow, veh/h	378	3498	88	347	3638	8	807	70	621	673	84	757
Grp Volume(v), veh/h	3	737	772	67	685	721	123	0	0	6	0	0
Grp Sat Flow(s),veh/h/ln	378	1754	1831	347	1777	1869	1498	0	0	1513	0	0
Q Serve(g_s), s	0.4	21.4	21.5	12.0	18.5	18.5	2.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	18.9	21.4	21.5	33.5	18.5	18.5	3.6	0.0	0.0	0.1	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.00	0.59		0.41	0.50		0.50
Lane Grp Cap(c), veh/h	204	933	974	180	945	994	578	0	0	578	0	0
V/C Ratio(X)	0.01	0.79	0.79	0.37	0.73	0.73	0.21	0.00	0.00	0.01	0.00	0.00
Avail Cap(c_a), veh/h	204	933	974	180	945	994	578	0	0	578	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.58	0.58	0.58	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.4	11.9	11.9	25.6	11.2	11.2	15.5	0.0	0.0	14.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.7	4.5	0.7	1.6	1.6	0.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.4	7.7	0.9	5.8	6.1	1.3	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.5	16.6	16.5	26.3	12.9	12.8	16.3	0.0	0.0	14.4	0.0	0.0
LnGrp LOS	B	B	B	C	B	B	B			B		
Approach Vol, veh/h		1512			1473			123			6	
Approach Delay, s/veh		16.5			13.5			16.3			14.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.0		38.0		25.0		38.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		20.0		33.5		20.0		33.5				
Max Q Clear Time (g_c+I1), s		5.6		23.5		2.1		35.5				
Green Ext Time (p_c), s		0.3		8.5		0.0		0.0				

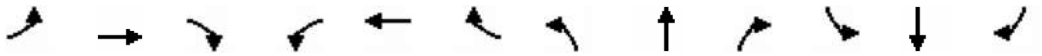
Intersection Summary												
HCM 7th Control Delay, s/veh			15.1									
HCM 7th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	447	772	315	233	754	223	206	392	280	499	526
v/c Ratio	0.74	0.58	0.39	1.00	0.65	0.33	0.69	0.71	0.77	0.76	0.91
Control Delay (s/veh)	61.0	36.3	4.5	117.4	42.4	5.7	45.9	55.4	49.1	60.9	38.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.0	36.3	4.5	117.4	42.4	5.7	45.9	55.4	49.1	60.9	38.6
Queue Length 50th (ft)	193	287	0	207	300	0	130	153	185	221	167
Queue Length 95th (ft)	243	355	61	#383	390	61	197	211	269	286	#388
Internal Link Dist (ft)		888			679			468		458	
Turn Bay Length (ft)	300		315	255		250	135		135		380
Base Capacity (vph)	725	1311	803	233	1156	666	310	551	379	652	578
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.59	0.39	1.00	0.65	0.33	0.66	0.71	0.74	0.77	0.91

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	416	718	293	217	701	207	192	246	118	260	464	489
Future Volume (veh/h)	416	718	293	217	701	207	192	246	118	260	464	489
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1921	1847	1921	1914	1841	1841	2011	1934	1934	1939	1864	1864
Adj Flow Rate, veh/h	447	772	0	233	754	0	206	265	0	280	499	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	4	4	4	3	3	3	2	2	2
Cap, veh/h	536	1383		230	1291		295	492		400	610	
Arrive On Green	0.15	0.39	0.00	0.13	0.37	0.00	0.11	0.13	0.00	0.15	0.17	0.00
Sat Flow, veh/h	3549	3509	1628	1823	3497	1560	1915	3771	0	1847	3542	1580
Grp Volume(v), veh/h	447	772	0	233	754	0	206	265	0	280	499	0
Grp Sat Flow(s),veh/h/ln	1774	1754	1628	1823	1749	1560	1915	1837	0	1847	1771	1580
Q Serve(g_s), s	16.5	23.1	0.0	17.0	23.4	0.0	12.3	9.1	0.0	17.4	18.3	0.0
Cycle Q Clear(g_c), s	16.5	23.1	0.0	17.0	23.4	0.0	12.3	9.1	0.0	17.4	18.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	536	1383		230	1291		295	492		400	610	
V/C Ratio(X)	0.83	0.56		1.01	0.58		0.70	0.54		0.70	0.82	
Avail Cap(c_a), veh/h	710	1383		230	1291		323	544		425	656	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.49	0.49	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.7	31.8	0.0	59.0	34.3	0.0	44.3	54.6	0.0	41.7	53.8	0.0
Incr Delay (d2), s/veh	3.8	0.8	0.0	63.3	1.9	0.0	6.7	2.0	0.0	5.3	8.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	9.7	0.0	11.8	10.1	0.0	6.3	4.3	0.0	8.4	8.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.5	32.6	0.0	122.3	36.2	0.0	51.0	56.5	0.0	47.0	62.7	0.0
LnGrp LOS	E	C		F	D		D	E		D	E	
Approach Vol, veh/h		1219			987			471			779	
Approach Delay, s/veh		42.4			56.5			54.1			57.1	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.4	55.3	27.2	25.1	24.0	58.7	22.0	30.3
Change Period (Y+Rc), s	7.0	5.5	7.5	7.0	7.0	5.5	7.5	7.0
Max Green Setting (Gmax), s	27.0	39.5	21.5	20.0	17.0	49.5	16.5	25.0
Max Q Clear Time (g_c+I1), s	18.5	25.4	19.4	11.1	19.0	25.1	14.3	20.3
Green Ext Time (p_c), s	1.9	10.3	0.3	3.1	0.0	16.4	0.2	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	51.4
HCM 7th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

4-lane roadway

INPUT

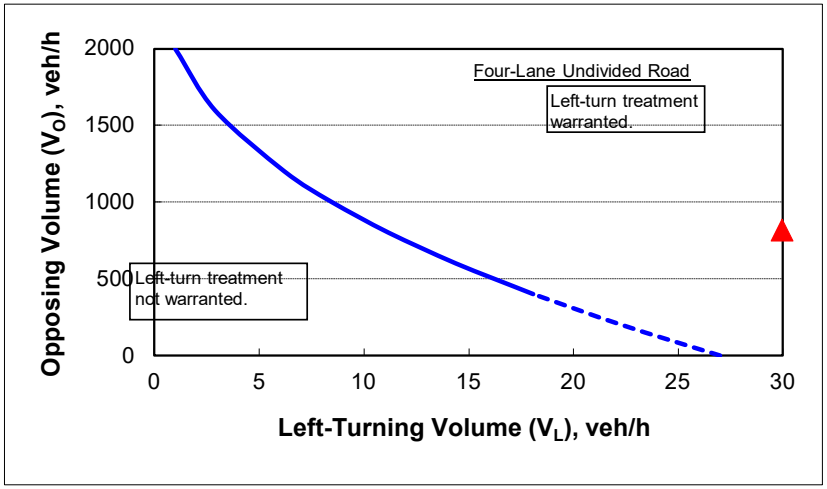
Variable	Value
Left-turning volume (V_L), veh/h:	30
Advancing volume (V_A), veh/h:	1297
Opposing volume (V_O), veh/h:	815

OUTPUT

Variable	Message
Opposing volume (Vo) check:	O.K.
Combined volume (V_A and V_O) check:	O.K.
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	4.0
Critical headway, s:	6.0



Note: When V_O < 400 veh/h (dashed line), a left-turn lane is not normally warranted unless the advancing volume (V_A) in the same direction as the left-turning traffic exceeds 400 veh/h (V_A > 400 veh/h).

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

4-lane roadway

INPUT

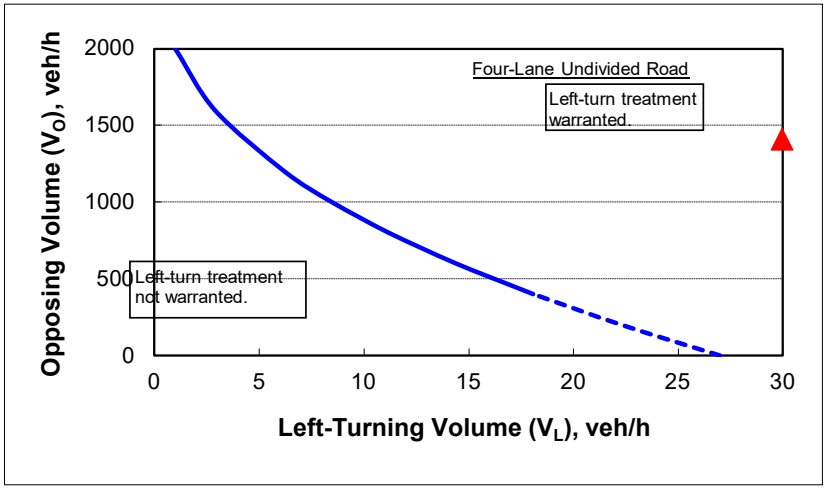
Variable	Value
Left-turning volume (V_L), veh/h:	30
Advancing volume (V_A), veh/h:	1381
Opposing volume (V_O), veh/h:	1409

OUTPUT

Variable	Message
Opposing volume (Vo) check:	O.K.
Combined volume (V_A and V_O) check:	O.K.
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	4.0
Critical headway, s:	6.0



Note: When V_O < 400 veh/h (dashed line), a left-turn lane is not normally warranted unless the advancing volume (V_A) in the same direction as the left-turning traffic exceeds 400 veh/h (V_A > 400 veh/h).

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadw ay

Variable	Value
Major-road speed, mph:	40
Major-road volume (one direction), veh/h:	825
Right-turn volume, veh/h:	62

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	67
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	

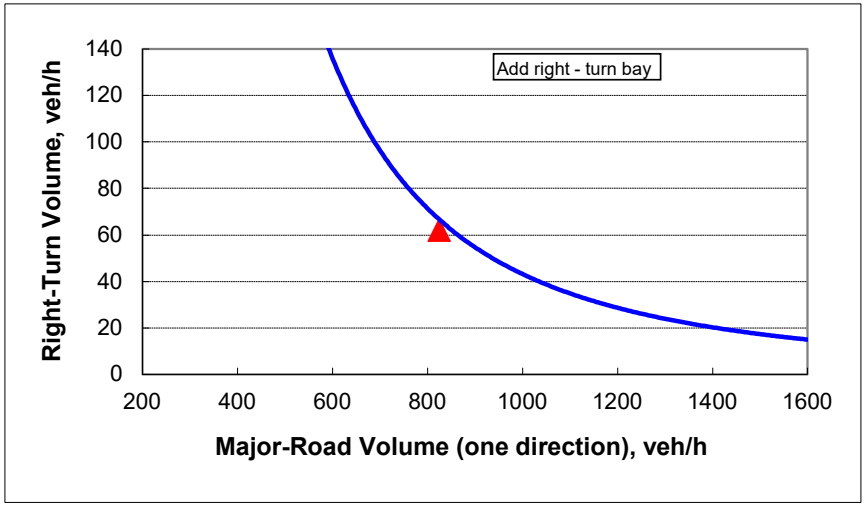


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

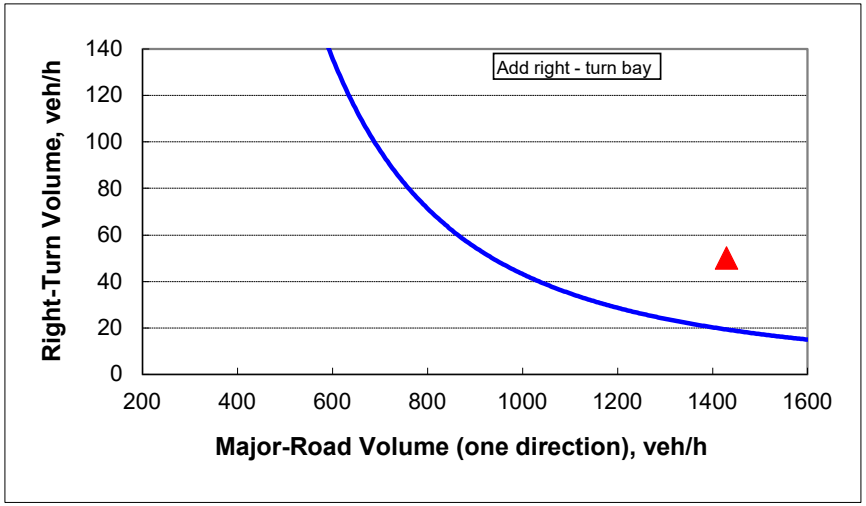
INPUT

Roadway geometry:	4-lane roadw ay

Variable	Value
Major-road speed, mph:	40
Major-road volume (one direction), veh/h:	1430
Right-turn volume, veh/h:	50

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	19
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Add right-turn bay.	



Traffic Signal Warrant Analysis Report

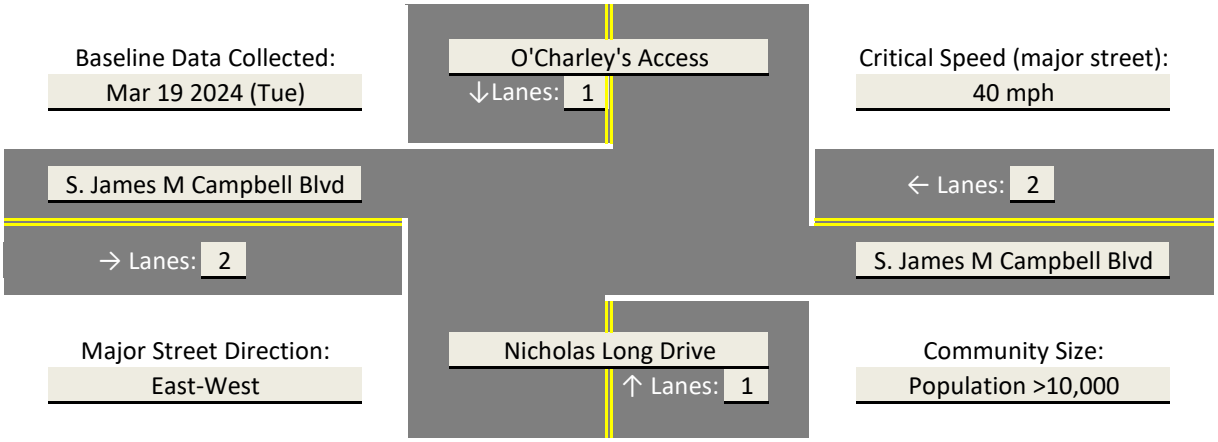
Build 2026

Project Information

Project Name:	115 South James M Campbell Boulevard				
Location:	Columbia, TN				
Project Number:	3853101	Analyst:	TMN	Prepared:	Aug 15 2024
Intersection:	S. James M Campbell Blvd at O'Charley's / Nicholas Long Drive				
Analysis Type:	Build 2026				
Analysis Duration:	6:00 AM to 6:00 PM				
Notes:	100% RT reduction - northbound approach				

Study Intersection

Baseline Data Collected: Mar 19 2024 (Tue)



Critical Speed (major street): 40 mph

Major Street Direction: East-West

Community Size: Population >10,000

Summary of Results

	Warrant Type	Satisfied?	Worksheet
Warrant #1:	Eight-Hour Vehicle Volume	**NO**	Sheet 1
Warrant #2:	Four-Hour Vehicle Volume	**NO**	Sheet 2
Warrant #3:	Peak Hour	**NO**	Sheet 3
Warrant #4:	Pedestrian Volume	*n/a*	~~Sheet 4~~
Warrant #5:	School Crossing	*n/a - no crossing facilities*	~~Sheet 5~~
Warrant #6:	Coordinated Signal System	*n/a - isolated intersection*	~~Sheet 5~~
Warrant #7:	Crash Experience	*n/a*	~~Sheet 6~~
Warrant #8:	Roadway Network	*n/a*	~~Sheet 7~~
Warrant #9:	Intersection Near a Grade Crossing	*n/a - no railroad crossing*	~~Sheet 8~~

Conclusions: 5/8 hours - Warrant 1 - Condition B; 1/4 hours Warrant 2

See following sheets for calculation details and justifications.

Workbook Notes: - Uses MUTCD 2009 methodology; warrant curves developed by R Blankenship (ALDOT)
- Document template last revised *5/27/2020* by *pdk* *(includes IA-19 safety changes*

Urban (70%) Volume Level Criteria

1. Is the critical speed of major street traffic >40 mph? NO
2. Is the intersection in the built-up area of an isolated community of <10,000 population? NO

If Criteria 1 or 2 applies, use 70% volume level for Warrants 1-4. ***Volume Level?*** [ ] 70% [X] 100%

Warrant #1 - Eight-Hour Vehicular Volume

Have other remedial measures failed to address the issue? ***Applicable?*** [X] Yes [ ] No

Description of remedial measures tried (required for 80% combination of A & B)

Warrant is met if Condition A or Condition B is satisfied at 100%; ***Met?*** [ ] Yes [X] No

warrant is also met if both Condition A and Condition B are satisfied at 80%, given that adequate trials of other remedial measures have been tried

Either condition satisfied at 100%? [ ] Yes [X] No

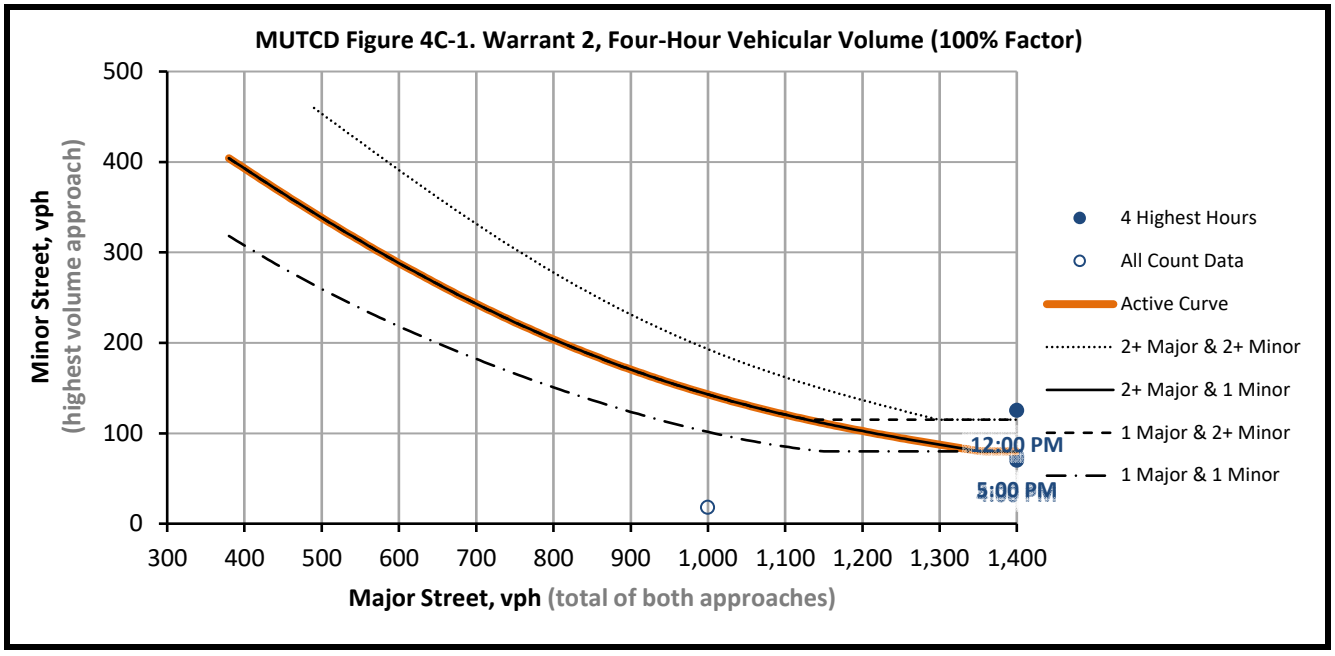
Both conditions satisfied at 80%? [ ] Yes [X] No

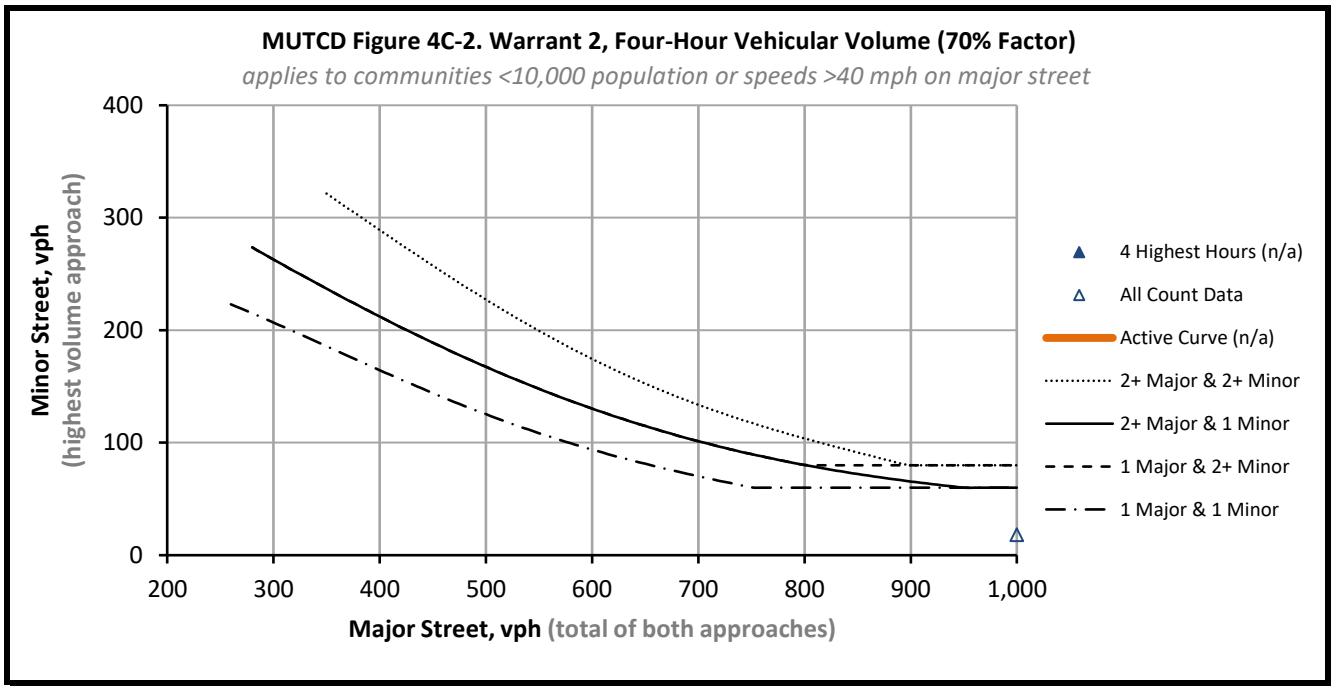
		Minimum Requirements				Eight Highest Hours (veh/hr)							
Approach Lanes		1		2 or more		10:00 AM	11:00 AM	12:00 PM	01:00 PM	02:00 PM	03:00 PM	04:00 PM	05:00 PM
Volume Level		100%	70%	100%	70%								
Condition A: Minimum Vehicular Volume													
100% Satisfied	Both Approaches on Major Street	500	350	***600***	420	***1,911***	***2,217***	***2,613***	***2,376***	***2,331***	***2,546***	***2,759***	***2,532***
	Highest Approach on Minor Street	***150***	105	200	140	52	80	125	101	83	73	70	75
80% Satisfied	Both Approaches on Major Street	400	280	***480***	336	***1,911***	***2,217***	***2,613***	***2,376***	***2,331***	***2,546***	***2,759***	***2,532***
	Highest Approach on Minor Street	***120***	84	160	112	52	80	***125***	101	83	73	70	75
Condition B: Interruption of Continuous Traffic													
100% Satisfied	Both Approaches on Major Street	750	525	***900***	630	***1,911***	***2,217***	***2,613***	***2,376***	***2,331***	***2,546***	***2,759***	***2,532***
	Highest Approach on Minor Street	***75***	53	100	70	52	***80***	***125***	***101***	***83***	73	70	***75***
80% Satisfied	Both Approaches on Major Street	600	420	***720***	504	***1,911***	***2,217***	***2,613***	***2,376***	***2,331***	***2,546***	***2,759***	***2,532***
	Highest Approach on Minor Street	***60***	42	80	56	52	***80***	***125***	***101***	***83***	***73***	***70***	***75***

Warrant #2 - Four-Hour Vehicular Volume

Warrant is met if all four points lie above the appropriate line *Met?* [ ] Yes [X] No

	Four Highest Hours (veh/hr)			
	12:00 PM	03:00 PM	04:00 PM	05:00 PM
Both Approaches on Major Street	**2,613**	**2,546**	**2,759**	**2,532**
Highest Approach on Minor Street	**125**	**73**	**70**	**75**





ALL VEHICLES	Direction:	Northbound					Southbound					Eastbound					Westbound				
	Roadway:	Nicholas Long Drive					O'Charley's Access					S. James M Campbell Blvd					S. James M Campbell Blvd				
	Movement:	NBL	NBT	NBR	NBU	RTOR	SBL	SBT	SBR	SBU	RTOR	EBL	EBT	EBR	EBU	RTOR	WBL	WBT	WBR	WBU	RTOR
06:00 AM	to 06:15 AM	18	0				0	0	0			0	372	6			12	610	0		
06:15 AM	to 06:30 AM																				
06:30 AM	to 06:45 AM																				
06:45 AM	to 07:00 AM																				
07:00 AM	to 07:15 AM	33	0				2	0	0			0	770	13			30	1133	2		
07:15 AM	to 07:30 AM																				
07:30 AM	to 07:45 AM																				
07:45 AM	to 08:00 AM																				
08:00 AM	to 08:15 AM	41	0				0	0	0			0	705	20			32	1059	0		
08:15 AM	to 08:30 AM																				
08:30 AM	to 08:45 AM																				
08:45 AM	to 09:00 AM																				
09:00 AM	to 09:15 AM	45	0				0	0	0			2	711	24			41	947	0		
09:15 AM	to 09:30 AM																				
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM	52	0				0	0	3			4	827	28			42	1006	4		
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM	80	0				4	0	3			15	963	35			63	1132	9		
11:15 AM	to 11:30 AM																				
11:30 AM	to 11:45 AM																				
11:45 AM	to 12:00 PM																				
12:00 PM	to 12:15 PM	125	0				10	0	9			10	1183	43			101	1269	7		
12:15 PM	to 12:30 PM																				
12:30 PM	to 12:45 PM																				
12:45 PM	to 01:00 PM																				
01:00 PM	to 01:15 PM	101	0				2	0	9			7	1101	48			61	1153	6		
01:15 PM	to 01:30 PM																				
01:30 PM	to 01:45 PM																				
01:45 PM	to 02:00 PM																				
02:00 PM	to 02:15 PM	81	2				2	0	8			4	1172	41			52	1060	2		
02:15 PM	to 02:30 PM																				
02:30 PM	to 02:45 PM																				
02:45 PM	to 03:00 PM																				
03:00 PM	to 03:15 PM	71	2				0	0	8			4	1282	38			55	1164	3		
03:15 PM	to 03:30 PM																				
03:30 PM	to 03:45 PM																				
03:45 PM	to 04:00 PM																				
04:00 PM	to 04:15 PM	70	0				4	0	3			4	1372	41			58	1277	7		
04:15 PM	to 04:30 PM																				
04:30 PM	to 04:45 PM																				
04:45 PM	to 05:00 PM																				
05:00 PM	to 05:15 PM	75	0				2	0	5			11	1194	26			52	1243	6		
05:15 PM	to 05:30 PM																				
05:30 PM	to 05:45 PM																				
05:45 PM	to 06:00 PM																				

October 14, 2024

RE: 115 S James Campbell Blvd, Columbia, TN 38401 Map and Parcel 113E B 00400 000

To Whom It May Concern:

Please accept this letter as Atmos Energy's willingness to serve 115 S James Campbell Blvd, Map and Parcel 113E B 00400 000 in Columbia, TN.

We can serve this parcel from James M Campbell Blvd S (4" Steel) or Ashwood Dr (2" PE).

Any costs associated with main line extensions required to serve multiple buildings, parcels, or tenants will be the responsibility of the developer.

If you have any questions or need additional information, please do not hesitate to contact me at (629) 248-2445.

Sincerely,

Blake Davis

Blake Davis
Senior Account Representative

Atmos Energy Corporation Blake Davis
200 Noah Drive, Franklin, TN
P 629-248-2445 blake.davis@atmosenergy.com



OLDACRE MCDONALD, LLC

Jack Boyd

115 S James M Campbell Blvd

Columbia TN

Dear Jack Boyd,

This letter is in response to your request for information on the availability of service at 115 S James M Campbell Blvd Columbia TN or development by AT&T.

This letter acknowledges that the above referenced 115 S James M Campbell Blvd Columbia, TN is located in an area served by AT&T. Any service arrangements for the list development, location, or development will be subject to later discussions and agreements between the developer and AT&T. Please be advised that this letter is not a commitment by AT&T to provide service to the project, location or development.

Please contact me at the phone number included in this letter with any questions.

Thank you for contacting AT&T.

Brian Gomez

bg3893@exo.att.com

(661) 210-8526

CPWS
Columbia Power & Water Systems

201 Pickens Lane
P.O. Box 379
Columbia, TN 38402

P 931.388.4833
F 931.388.5287
www.cpws.com

October 14, 2024

Oldacre McDonald, LLC
3841 Green Hills Village, Ste. 400
Nashville, TN 37215

Re: 115 S. James Campbell Blvd., being Tax Map and Parcel 113E B 00400 000

Dear Sir:

Columbia Power System has an existing power line near your proposed development.

We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.

- **Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.**

Yours truly,

COLUMBIA POWER SYSTEM

Kathy Walker

Ryan Massey
Vice President of Power Engineering

kw
Senior Power Engineering Office Coordinator

CITY OF COLUMBIA
TENNESSEE

WASTEWATER DEPARTMENT

14 March 2024

Jack M Boyd
615 3rd Avenue South, Suite 700
Nashville, TN 37210

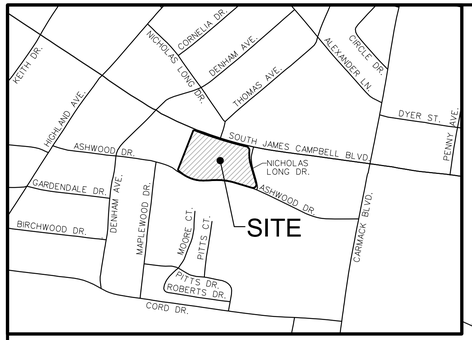
RE: 115 S James Campbell Blvd, Columbia, TN 38401

Jack,

This letter serves as confirmation that the City of Columbia Wastewater Department has the available capacity to service the above-referenced development. Any extension to the existing sewer infrastructure will be initiated by the owner/developer, reviewed by our department and approved by the State of Tennessee. The project must be advanced in accordance with local, state and federal rules, regulations and policies. Funding and construction of those improvements will remain the responsibility of the owner/developer. New customers will be required to pay all fees applicable at the time of connection. No detailed design plan for an extension of the sewer has been proposed at this time.

The proposed reroute and existing service situation on-site is subject to the plan review process and may include rehabilitation, replacement or removal of existing infrastructure depending upon condition.

Donnie Boshers, Director
City of Columbia, TN
Wastewater Department

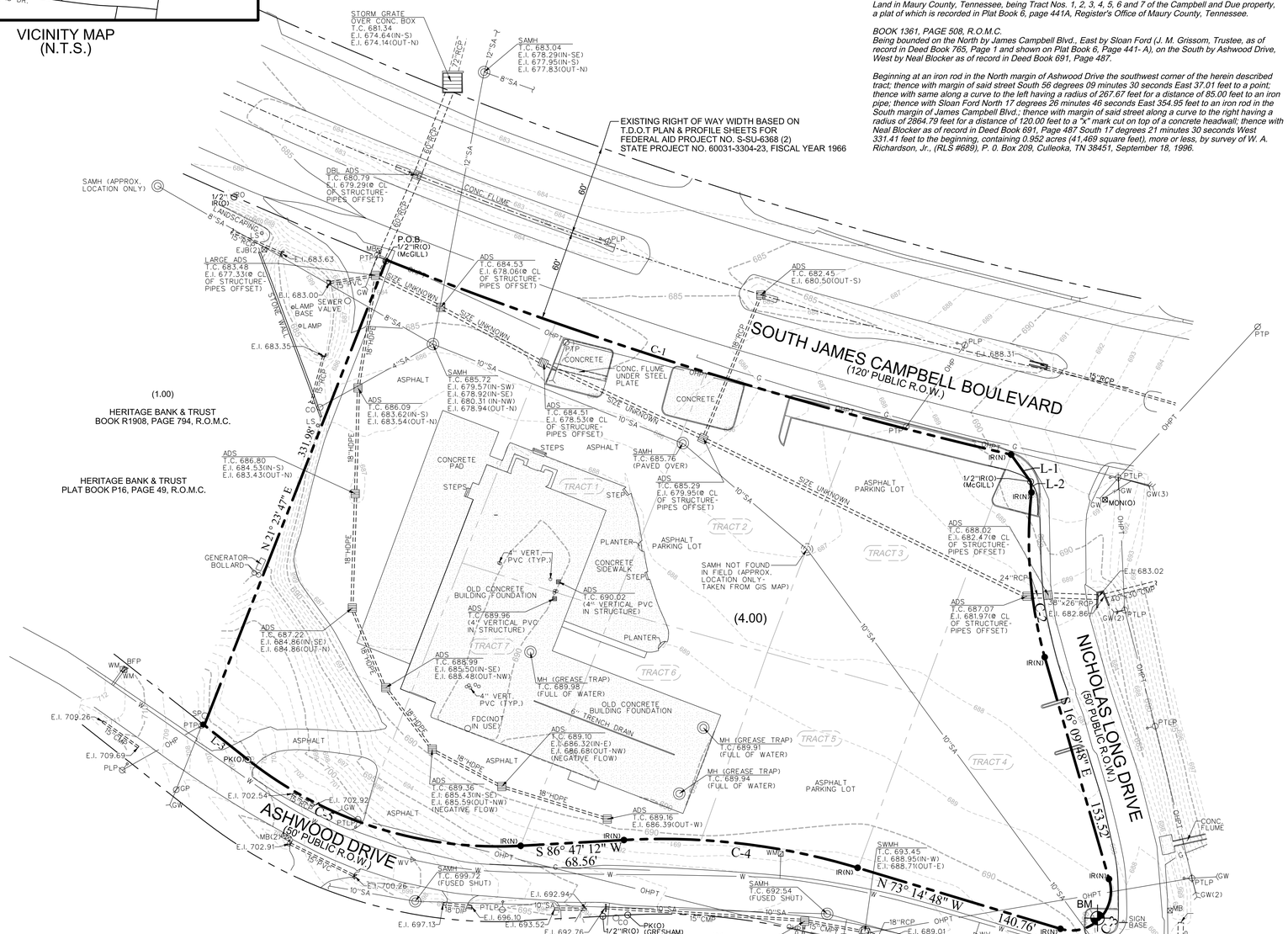


VICINITY MAP
(N.T.S.)

MAPPING SYMBOLS AND CODES		MAPPING SYMBOLS AND CODES	
AIR CONDITIONER (AC)	FIBER OPTIC BOX (FOB)	GAS METER (GM)	SIGN (SN)
AREA DRAIN (ADS/ADR)	MANHOLE (MH)	GUY POLE (GP)	STEAM MANHOLE (STMH)
BACKFLOW PREVENTER (BFP)	CONCRETE MONUMENT OLD (MONO))	GAS VALVE (GV)	STORMWATER MANHOLE (SWMH)
SINGLE CATCH BASIN (CB)	CONCRETE MONUMENT NEW (MONN))	GUY WIRE (GW)	TELEPHONE MANHOLE (TMH)
DOUBLE CATCH BASIN (DCB)	POST INDICATOR VALVE (PIV)	IRON ROD NEW (IRN)	TELEPHONE JUNCTION BOX (TJB)
TRIPLE CATCH BASIN (TCB)	P.K. NAIL OLD (PKO)	IRON ROD OLD (IRO)	TELEPHONE LIGHT POLE (TLP)
CLEANOUT	P.K. NAIL NEW (PKN)	IRON PIPE OLD (IPO)	TELEPHONE POLE (TP)
ELECTRIC JUNCTION BOX (EJB)	POWER LIGHT POLE (PLP)	IRON SPIKE OLD (ISO)	TREE EVERGREEN
ELECTRIC METER (EM)	POWER MANHOLE (PMH)	LIGHT STANDARD (LS/LP)	TRAFFIC SIGNAL BOX (TSB)
ELECTRIC TRANSFORMER (ETF)	POWER POLE (PP)	MAIL BOX (MB)	TRAFFIC SIGNAL POLE (TSP)
FIRE HYDRANT (FH)	POWER TELEPHONE LIGHT POLE (PTLP)	POST	WATER METER (WM)
FIRE DEPARTMENT CONNECTION (FDC)	POWER TELEPHONE POLE (PTP)	SPRINKLER VALVE (SV)	WATER VALVE (WV)
FLAG POLE (FP)	RIGHT-OF-WAY MONUMENT (RWM)	SANITARY SEWER MANHOLE (SAMH)	

LINE STYLES	
CENTERLINE	
CONCRETE AREA	
EDGE OF WOODS LINE	
EASEMENT LINE	
FENCE LINE	
GAS LINE	G
OVERHEAD POWER LINE	OHP
OVERHEAD TELEPHONE LINE	OHT

LINE STYLES	
OVERHEAD POWER AND	OHPT
PROPERTY LINE	
SANITARY SEWER LINE	SA
STORM LINE (RCP,CMP,PVC, CPP, HDPE)	
UNDERGROUND POWER LINE	UGP
UNDERGROUND TELEPHONE	UGT
WATER LINE	W
GUARDRAIL	
EDGE OF WATER	
CENTERLINE	



RECORD DESCRIPTION

RECORD BOOK R1399, PAGE 878, R.O.M.C.
Land in Maury County, Tennessee, being Tract Nos. 1, 2, 3, 4, 5, 6 and 7 of the Campbell and Due property, a plat of which is recorded in Plat Book 6, page 441A, Register's Office of Maury County, Tennessee.

BOOK 1361, PAGE 508, R.O.M.C.
Being bounded on the North by James Campbell Blvd., East by Sloan Ford (J. M. Grissom, Trustee, as of record in Deed Book 765, Page 1 and shown on Plat Book 6, Page 441- A), on the South by Ashwood Drive, West by Neal Blocker as of record in Deed Book 691, Page 487.

Beginning at an iron rod in the North margin of Ashwood Drive the southwest corner of the herein described tract; thence with margin of said street South 56 degrees 09 minutes 30 seconds East 37.01 feet to a point; thence with same along a curve to the left having a radius of 267.67 feet for a distance of 85.00 feet to an iron pipe; thence with Sloan Ford North 17 degrees 26 minutes 46 seconds East 354.95 feet to an iron rod in the South margin of James Campbell Blvd.; thence with margin of said street along a curve to the right having a radius of 2864.79 feet for a distance of 120.00 feet to a "x" mark cut on top of a concrete headwall; thence with Neal Blocker as of record in Deed Book 691, Page 487 South 17 degrees 21 minutes 30 seconds West 331.41 feet to the beginning, containing 0.952 acres (41,469 square feet), more or less, by survey of W. A. Richardson, Jr., (RLS #689), P. O. Box 209, Culleoka, TN 38451, September 18, 1996.

NOTES

1. *THIS SURVEY MEETS THE REQUIREMENTS OF AN URBAN LAND SURVEY (CATEGORY 1), WITH A RATIO OF PRECISION OF THE UNADJUSTED SURVEY GREATER THAN 1:10,000 AS PER STANDARDS OF PRACTICE ADOPTED BY THE BOARD OF EXAMINERS FOR LAND SURVEYORS, STATE OF TENNESSEE.*

2. *BEARINGS SHOWN ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983 (NAD-1983), ELEVATIONS ARE BASED ON NAVD-1988, USING GEOID 2003 FOR ORTHOMETRIC HEIGHT DETERMINATION.*

3. *PROPERTY IS ZONED CD-4C. ZONING INFORMATION SHOWN HEREON WAS TAKEN FROM CITY OF COLUMBIA PLANNING DEPARTMENT-ONLINE MAPPING: PARCEL REPORT, NO ZONING LETTER, OR ZONING REPORT WAS PROVIDED TO THIS SURVEYOR.*

4. *THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY NO. 470123, PANEL NO. 0285 E, DATED APRIL 16, 2007. ZONE "X".*

5. *ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM FIELD LOCATED VISIBLE APPURTENANCES, ATLAS MAPS AS MAY BE AVAILABLE FROM MUNICIPALITIES OR UTILITY COMPANIES, AND OTHER DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES STATE THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION CONSULTED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. TO AVOID ANY POSSIBLE HAZARD OR CONFLICT, IT IS A REQUIREMENT OF THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT, FOR ANYONE WHO ENGAGES IN EXCAVATION TO NOTIFY ALL KNOWN UTILITY OWNERS NO LESS THAN THREE (3) OR MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE. CALL TENNESSEE ONE CALL AT 1-800-351-1111.*

6. *TITLE COMMITMENT ORDER NO. TN252311055V, DATED NOVEMBER 10, 2023 AT 8:00 AM BY FIDELITY NATIONAL TITLE INSURANCE COMPANY WAS FURNISHED TO THIS SURVEYOR.*

7. *CONTOUR INTERVAL ONE-FOOT, CONTOURS WERE INTERPOLATED FROM RANDOM SHOTS TAKEN ON A 50-FOOT INTERVAL.*

8. *THIS PARCEL CONTAINS NO MARKED PARKING SPACES, PARKING STRIPS ON THE PROPERTY WERE TOO FADED OR INTERMITTENT TO INCUDE IN A PARKING COUNT ON THE PROPERTY.*

SURVEYOR'S DESCRIPTION

Beginning in the southerly right of way line of James Campbell Boulevard (S.R.50, 120 foot public right of way, 60 foot from centerline) at the northeast corner of Heritage Bank & Trust as of record in Plat Book P16, Page 49, R.O.M.C., said point of beginning being located N 14° 13' 57" E, 0.75 feet from a ½"capped rebar "McGill" found;

THENCE, with the southerly right of way line of James Campbell Boulevard along a curve to the left having a central angle of 08° 31' 30", a tangent of 218.00 feet, and a chord of S 02° 42' 04" E, 434.80 feet for an arc length of 435.20 feet to the westerly right of way Of Nicholas Long Drive;

THENCE, with said westerly right of way line, S 35°53'44" E, 22.19 feet to a capped rebar found "McGill);

THENCE, continuing with said right of way line, S 04° 30'57" E, 7.20 feet;

THENCE, continuing with said right of way line along a curve to the left, having a central angle of 21° 39' 56 sec., a radius of 292.13 feet, a tangent of 55.90 feet, and a chord of S 04° 34' 07" E, 109.81 feet for an arc length of 110.46 feet;

THENCE, continuing with said right of way line, S 16° 09' 48" E, 153.52 feet;

THENCE, with a curve to the right, having a central angle of 124° 57' 00 sec., a radius of 26.06 feet, a tangent of 50.01 feet, and a chord of S 44° 16' 42" W, 46.22 feet for an arc length of 56.83 feet to the northerly right of way line Ashwood Drive (50 foot public right of way)

THENCE, with the northerly right of way line of Ashwood N 73° 14' 48" W, 140.76 feet;

THENCE, with a curve to the left, having a central angle of 19° 58' 00 sec., a radius of 451.09 feet, a tangent of 79.40 feet, and a chord of N 83° 13' 48"W, 156.40 feet for an arc length of 157.20 feet;

THENCE, continuing with said northerly right of way line, S 86° 47' 12" W, 68.56 feet;

THENCE, with a curve to the right, having a central angle of 41° 26' 55", a tangent of 101.70 feet, and a chord of N 72° 29' 20" W, 190.24 feet for an arc length of 194.45 feet to an a PK-Nail found;

THENCE, N 51° 43' 18" W, 37.01 feet to the southeast corner of Heritage Bank & Trust as of record in Plat Book P16, Page 49, R.O.M.C

THENCE, with the easterly line of said Heritage Bank & Trust, N 21° 23' 47" E, 331.98 feet to the Point of Beginning.

Containing 169,076 square feet or 3.88 acres, more or less.

DEED REFERENCE

BEING THE PROPERTY CONVEYED TO THE J & R GROUP LLC BY DEED OF RECORD IN BOOK R1399 , PAGE 878, R.O.M.C. AS AFFECTED BY AFFIDAVIT RECORDED NOVEMBER 16, 2023 IN RECORD BOOK R2958, PAGE 1397, R.O.M.C. AND BEING THE PROPERTY CONVEYED TO J & R GROUP LLC IN BOOK 1361, PAGE 508, R.O.M.C.

PROPERTY MAP REFERENCE

BEING PARCEL 4.00 AS SHOWN ON MAURY COUNTY PROPERTY MAP NO. 113E, GROUP B.

PLAT REFERENCE

BEING TRACT NOS. 1-7 AS SHOWN ON THE SUBDIVISION PLAT OF THE CAMPBELL & DUE PROPERTY AS OF RECORD IN PLAT BOOK 6, PAGE 441A, R.O.M.C.

SURVEYOR'S CERTIFICATE

TO: COLUMBIA JAMES CAMPBELL BOULEVARD, LLC, A DELAWARE LIMITED LIABILITY COMPANY, CCRE CT20, LLC, A DELAWARE LIMITED LIABILITY COMPANY, PINNACLE BANK, A STATE-CHARTERED TENNESSEE BANK AND FIDELITY NATIONAL TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(A), 6(B), 8, 10, 11(A), 12, 13, 16, 17 AND 18 OF TABLE A THEREOF.
THE FIELDWORK WAS COMPLETED ON FEBRUARY 14, 2024.

BARGE DESIGN SOLUTIONS, INC.

DATE OF PLAT OR MAP: OCTOBER 18, 2024

TN.LIC.NO. 1649

NAME: Mark E. Sawyer

PRINTED NAME: MARK E. SAWYER

SCALE: 1" = 40'

TN STATE PLANE COORDINATE SYSTEM 1983

SCHEDULE B - SECTION II EXCEPTIONS TO TITLE

10. All matters shown on plat of survey recorded in Plat Book 6, Page 441A, Register's Office of Maury County, Tennessee. (APPLIES AS SHOWN)

11. For informational purposes only:

a. Notice of Completion recorded in Book NC12 Page 942, in the Register's Office of Maury County, Tennessee. (NOT A SURVEY MATTER

b. Articles of Organization for J & R Group, LLC recorded in Book P Page 531, aforesaid records. (NOT A SURVEY MATTER)

CURVE TABLE

CURVE	DELTA	RADIUS	TANGENT	ARC	CHORD BRG.	CHORD
C-1	08° 31' 30"	2924.93'	218.00'	435.20'	S 72° 42' 04" E	434.80'
C-2	21° 39' 56"	292.13'	55.90'	110.46'	S 04° 34' 07" E	109.81'
C-3	124° 57' 00"	26.06'	50.01'	56.83'	S 44° 16' 42" W	46.22'
C-4	19° 58' 00"	451.09'	79.40'	157.20'	N 83° 13' 48" W	156.40'
C-5	41° 26' 55"	268.80'	101.70'	194.45'	N 72° 29' 20" W	190.24'
C-6	18° 20' 46"	268.80'	43.41'	86.07'	N 60° 53' 41" W	85.70'

LINE TABLE

LINE	BEARING	DISTANCE
L-1	S 35° 53' 44" E	22.19'
L-2	S 04° 30' 57" E	7.20'
L-3	N 51° 43' 18" W	37.01'

PREPARED FOR:
JULIA LANNON
DEVELOPMENT SERVICES MANAGER
OLDACRE McDONALD, LLC
3841 GREEN HILLS VILLAGE DRIVE
SUITE 400
NASHVILLE, TN 37215

BARGE DESIGN SOLUTIONS
615 Third Avenue South, Suite 700, Nashville, Tennessee 37210
PHONE (615)254-1500 FAX (615) 255-8572

MARK E. SAWYER — LICENSED PROFESSIONAL LAND SURVEYOR — TENNESSEE
Digitally signed by Mark E. Sawyer
Date: 2024.10.18 13:22:25 -05'00'

COLUMBIA JAMES CAMPBELL BOULEVARD, LLC

ALTA/NSPS LAND TITLE SURVEY

115 SOUTH JAMES CAMPBELL BOULEVARD

9TH CIVIL DISTRICT
COLUMBIA, MAURY COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
JMJ	MES	10-21-24	ORIGINAL ISSUE
JMJ	MES	03-22-24	GENERAL REVISIONS TO SURVEY
MES	MES	06-17-24	ADDED EXISTING MANHOLE
MES	MES	10-17-24	REVISED TITLE COMMITMENT
MES	MES	10-18-24	REVISED NAME IN CERTIFICATE

FILE NO. 3853100

© Copyright 2024, Barge Design Solutions, Inc. ALL RIGHTS RESERVED

10/18/2024
1:20:05 PM
ME:Sawyer
LandRes.pen Workspace: LandRes

F:\38\38531\3853100\04_CAD\SURV\3853100VSP.dgn

This Instrument prepared by:
Tessa N. Lawson, Attorney
148 Shipley Street
Cookeville, TN 38501

Map and Parcel Number
Map: 113E
Group: B
Parcel: 004.00

PROPERTY OWNERS:
COLUMBIA JAMES CAMPBELL BOULEVARD, LLC
Property Address:
115 South James Campbell Boulevard
Columbia, Tennessee 38401

SEND TAX BILLS:

WARRANTY DEED

FOR AND IN CONSIDERATION of the sum of Ten ($10.00) Dollars cash in hand paid and other good and valuable consideration, the receipt and sufficiency of all of which is hereby acknowledged, **J & R Group, LLC, a Tennessee limited liability company,** hereafter referred to as "Grantor", has this day bargained and sold, all of its rights, title, and interest and does hereby transfer and convey unto, **COLUMBIA JAMES CAMPBELL BOULEVARD, LLC, a Delaware limited liability Company,** its successors and assigns, hereafter referred to as "Grantee" whether one or more, certain tracts of real estate located in Maury County, Tennessee, and more particularly described as follows:

See attached Exhibit A for property description.
Title Exam for property conducted by Fidelity National Title Insurance Company,
See attached Exhibit B for Permitted Exceptions

SOURCE OF DESCRIPTION: Survey performed by Barge Design Solutions, Mark E. Sawyer, TN No. 1649, dated March 22, 2024.

THE PREVIOUS AND LAST CONVEYANCE being a Warranty Deed from J.M. Grissim, Trustee to J & R Group, LLC, a Tennessee limited liability company, of record in Book 1399, Page 878, Register's Office of Maury County, Tennessee., as affected by Affidavit recorded November 16, 2023 in Record book R2958, Page 1397, aforesaid records; and J & R Group, LLC, a Tennessee limited liability company, by virtue of Quitclaim deed from James R. Sloan, Riley D. Sloan, et al dated January 16, 1998 and recorded in record Book 1361, page 508, in the register's Office for Maury County, Tennessee.

TO HAVE AND TO HOLD said real estate with the appurtenances, hereditaments, estate, title and interest thereto belonging to said Grantees its successors and assigns, forever. Grantor covenants that it is lawfully seized and possessed of said land in fee simple, has good right to covey it, and that same is unencumbered, except as set forth on Exhibit B attached hereto.

The Grantor further covenants and binds itself and its successors and representatives to warrant and forever defend the title to said land to said Grantee, its successors and assigns, against the lawful claims of all persons.

IN WITNESS WHEREOF, the Grantor has executed this instrument on this 8 day of October, 2024.

J & R Group, LLC, a Tennessee limited liability company

Riley Sloan

Riley Sloan
Its: Manger/President

STATE OF TENNESSEE)
COUNTY OF MAURY)

Personally appeared before me, the undersigned, a Notary Public in and for the State and County Before me, the undersigned authority, a Notary Public of the State and county mentioned, personally appeared Riley Sloan, with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence), and who, upon oath, acknowledged himself to be manager/president (or other officer authorized to execute the instrument) of J & R Group, LLC, a Tennessee limited liability company the within named bargainor, a limited liability company, and that such manager/president, executed the foregoing instrument for the purpose therein contained, by personally signing the name of the a limited liability company as manager/president(or other authorized officer).

Witness my hand, at office, this 8 day of October, 2024.

My Commission expires: 09/22/2026

Kassie Sisk
Notary Public

KASSIE SISK
TENNESSEE NOTARY PUBLIC
COUNTY OF MAURY

STATE OF Tennessee)

COUNTY OF Davidson)

The actual consideration for this transfer is $4,250,000.00.

Affiant

Subscribed and sworn to before me this 17th day of October, 2024.

Notary Public

My Commission Expires: 8/6/2028

HANNAH WEAVER
STATE OF TENNESSEE NOTARY PUBLIC
WILLIAMSON COUNTY
My Commission Expires 08-06-2028

Exhibit A
Property Description

Land in Maury County, Tennessee, being Lots Nos. 1, 2, 3, 4, 5, 6 and 7 of the Campbell and Due property, a plat of which is recorded in Plat Book 6, Page 441A, Register's Office of Maury County, Tennessee.

Being a portion of that certain property conveyed to J & R Group, LLC, a Tennessee limited liability company, by virture of Warranty Deed from J. M. Grissim, Trustee, dated October 15, 1998 and recorded in Record Book R1399 Page 878, in the Register's Office for Maury County, Tennessee, as affected by Affidavit recorded November 16, 2023 in Record Book R2958 Page 1397, aforesaid records.

AND

Real property situated in the Ninth (9th) Civil District of Maury County, Tennessee, and more particularly described as follows:

Being bounded on the North by James Campbell Blvd., East by Sloan Ford (J. M. Grissom, Trustee, as of record in Deed Book 765, Page 1 and shown on Plat Book 6, Page 441-A), on the South by Ashwood Drive, West by Neal Blocker as of record in Deed Book 691, Page 487.

Beginning at an iron rod in the North margin of Ashwood Drive the Southwest corner of the herein described tract; thence with margin of said street South 56 degrees 09 minutes 30 seconds East 37.01 feet to a point; thence with same along a curve to the left having a radius of 267.67 feet for a distance of 85.00 feet to an iron pipe; thence with Sloan Ford North 17 degrees 26 minutes 46 seconds East 354.95 feet to an iron rod in the South margin of James Campbell Blvd.; thence with margin of said street along a curve to the right having a radius of 2864.79 feet for a distance of 120.00 feet to a "x" mark cut on top of a concrete headwall; thence with Neal Blocker as of record in Deed Book 691, Page 487 South 17 degrees 21 minutes 30 seconds West 331.41 feet to the beginning, containing 0.952 acres (41,469 square feet), more or less, by survey of W. A. Richardson, Jr., (RLS #689), P. O. Box 209, Culleoka, TN 38451, September 18, 1996.

Being the same property conveyed to J & R Group LLC, a Tennessee limited liability company, by virtue of Quitclaim Deed from James R. Sloan, Riley D. Sloan, et al. dated January 16, 1998 and recorded in Record Book 1361 Page 508, in the Register's Office for Maury County, Tennessee.

Exhibit B
Permitted Exceptions

1. Taxes for the year 2024, a lien not yet due and payable.

2. Subject to all matters shown on the Plat of record in Plat Book 6, Page 441A, Register's Office of Maury County, Tennessee.

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Preliminary Plat, Site Development Plan, and PUD Checklist

Development: Columbia Commons

This checklist shall be completed, and included with the submittal documents. If the submittal does not contain a completed checklist, it shall be deemed incomplete. All below listed items shall be included in the submittal documents and plans, as well as any further information required by the City of Columbia to evaluate compliance and to perform a full and complete review. See Zoning Ordinance Article 8 and Subdivision Regulations.

General

- ☑ Name of development
- ☑ Contact info for the owner and licensed design professional(s) preparing plan: name, address, email, phone
- ☑ Plan sealed by a design professional licensed in the State of Tennessee.
- ☑ North Arrow, legend, and site vicinity map
- ☑ Graphic Scale: between 1 in. = 10 ft. and 1 in. =100 ft.
- ☑ Survey stamped by a State of Tennessee Licensed Professional Land Surveyor, with all project boundaries including bearings and angles to the nearest hundredth, utilities, and existing streets and rights-of-way.
- ☑ Note referencing Tennessee State Plane Coordinate System, NAD 83 Datum
- ☑ All property boundaries, existing easements, and encumbrances
- ☑ Parcel identification, owner, and deed and plat references of adjoining properties
- ☑ Proposed phasing and timetable for all phases of development
- ☑ Traffic Impact Study, as required.
- ☑ The substance of all existing and proposed covenants, easements, or other restrictions.

Lots and Land-Use

- ☑ The size of total property to be developed in square feet and acres
- ☑ Lot numbers of all proposed lots, with dimensions, locations, and square footage
- ☑ A tabulation of the land area to be devoted to various uses and activities and overall densities.
- ☑ Typical lot layout depicting proposed setbacks, yards, and easements, where applicable
  Building setbacks shown on each lot

Structures

- ☑ Location and approximate dimensions of all existing and proposed structures.
- N/A ☐ Location of all earth retaining structures, with approximate top and bottom of wall elevations.
- ☑ Existing and intended use of all buildings and structures on site, including the number of dwelling units and density, where applicable
- N/A ☐ Location, type, and size of proposed signs
- N/A ☐ Approximate height, bulk, and the utilization of structures including activities and the number of living units.

CITY OF COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Grading, Drainage, and Storm

- ☑ Existing conditions and contours at vertical intervals of not more than two (2) feet
- ☑ General proposed contours at vertical intervals of not more than two (2) feet
- ☑ FEMA Special Flood Hazard Area (SFHA), 100-year Floodplain (F-P), and Floodway (F-W) boundaries with elevations and the exact location of the nearest benchmark. Indicate the Flood Insurance Rate Map (FIRM) panel number, its effective date, and flood insurance zones
- N/A ☐ Location and dimension of aquatic buffer zones
- ☑ General layout of the proposed storm drainage system including surface and subsurface drainage systems, areas for detention, and water quality devices.
- N/A ☐ Identification of all critical lots

Streets, Parking, and Pedestrian Elements

- N/A ☐ Proposed street and alley rights-of-way, typical sections, widths, classification, names, and proposed ownership and maintenance responsibility
- ☑ Proposed connections to existing and proposed streets (including classification) located outside the development
- ☑ Proposed improvements as identified in the Traffic Impact Study, as required
- ☑ Existing and proposed sidewalks, trails, and other pedestrian elements
- N/A ☐ Existing and proposed on-street and off-street parking and loading areas
- N/A ☐ Summary of all provided and required parking

Landscaping, Open Space, and Amenities

- N/A ☐ Natural features on site including, but not limited to, wetlands, streams, ponds, springs, sinkholes, wells, rock outcroppings, excessive slopes, and forested areas
- N/A ☐ Landscaped areas and buffers with details on proposed plantings, existing vegetation, and other features.
- N/A ☐ The location and size of all common open space, parkland dedications, and dedications and reservations of land for public uses.
- N/A ☐ Any amenity features and structures for private or public benefit.
- N/A ☐ Location, dimension, and materials of fences and walls
- N/A ☐ Tree Canopy retention

Detailed landscape plans to be provided on final development plans for each lot

Utilities

- ☑ General layout and location of existing and proposed utilities and utility features including, but not limited to potable water, fire hydrants, sanitary sewer, storm sewer, and power and communication facilities.
- ☑ Acknowledgement from water, sewer, and power utility providers that the proposed development may be adequately served with existing infrastructure, or if improvements are required to adequately serve the development, a general statement of the improvements.

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PUD Specific Items

- ❑ List of all deviations from PUD Standards requested
- ❑ The nature of the landholder's interest in the land proposed to be developed and a written statement of concurrence from all parties having a beneficial interest in the affected property.
- ❑ Location and approximate dimensions of all existing and proposed structures including approximate height, bulk, and the utilization of structures including activities and the number of living units. Include architectural renderings of all proposed structures with materials listed.
- ❑ The substance of covenants, grants of easements or other restrictions to be imposed upon the use of the land, buildings and structures including proposed easements for public utilities on the property or documentation of off-site easements.
- ❑ Exterior lighting plan.

If the application is deemed incomplete by the Zoning Administrator, a written request shall be made within ten days after the original submittal, for further information. In such case the application shall be held in abeyance until deemed complete for final review. No plan shall be formally presented for Planning Commission action until such plan is found complete, compliant with City standards, and ready for review.

Checklist Completed By:

Jack Boyd	Jack Boyd Digitally signed by Jack Boyd Date: 2024.10.07 16:37:45-05'00'	10/17/2024
Print Name	Signature	Date

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PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * *1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)*
Fold hard copy submittals larger than 8½"x11"
All Others: * Please submit the Application online at City of Columbia | Permitting (onlama.com)

ADDRESS/LOCATION	115 South James Campbell Blvd., Columbia, TN		
	TAX MAP: 113E	GROUP: B	PARCEL: 4.00
SUMMARY OF NATURE OF REQUEST AND WORK	Preliminary Subdivision Plat to create 3 Lots with associated infrastructure and mass grading on 3.88 acres.		

DATE OF PRE-APPLICATION CONFERENCE		*Pre-application meetings are scheduled for Wednesdays.*

SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
☐ Comprehensive Plan Amendment ☐ Annexation ☐ Rezoning ☒ Preliminary Plat ☐ Final Plat ☐ PUD Preliminary Master Plan ☐ PUD Final Site Plan ☐ Site Development Plan ☐ Other: **File naming nomenclature examples:* *Freedom Point Site Plan* *Freedom Point Master Plan* *Freedom Point Final Plat*	**Annexations:** ☐ Annexation Permission Form **Annexations/Rezoning/Plan Amendments:** ☐ Requested Zone Listed ☐ Statement of Compliance with Comprehensive Plan ☐ Concept Plan **Preliminary Plats/Site Development Plans:** ☒ Plans and/or Plats conforming to City standards with signed and completed check list **All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:** ☒ Receipt of Payment for Pre-Application Meeting ☒ Written Legal Description copy ☒ Columbia Water System Availability Letter ☒ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs: ☒ Project Name (include Sections & Phases) Columbia Commons ☒ Total Number of Lots/Residential Units 3-lots ☒ Square Footage of Non-Residential Floor Space Lot 1: 2,411 sf Lot 2: 3,365 sf Lot 3: 4,417 SF ☒ Total acreage 3.88 acres

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME	Julia Lannon	PHONE	615-269-5444 x307
ADDRESS	3841 Green Hills Village Dr Ste 400, Nashville, TN 37215	EMAIL	jlannon@oldacremcdonald.com

PROPERTY OWNER NAME	Oliver Oldacre	PHONE	615-269-5444 x294
ADDRESS	3841 Green Hills Village Dr Ste 400, Nashville, TN 37215	EMAIL	ooldacre@oldacremcdonald.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Julia Lannon	Julia Lannon	10/15/2024
APPLICANT NAME	APPLICANT SIGNATURE	DATE
Oliver Oldacre		10/15/2024
PROPERTY OWNER NAME	PROPERTY OWNER SIGNATURE	DATE