



The Columbia Board of Zoning Appeals will meet on Thursday, September 14, 2023 at 9:00 AM in Council Chambers on the basement level of City Hall, 700 N. Garden Street, to consider the following:

I. Roll Call

II. Approval of Minutes

1. June, 2023 Minutes

III. Old Business

IV. New Business

1. Case #23-0315 Request from Lewis and Christy Armstrong for variance approval to the building, lot & building site standards concerning placement of a pool, shed, and fence at [1160 Pretender Way](#).
2. Case #23-0332 Request from David Pike for conditional use approval concerning a wireless telecommunications facility at [1616 Harley Davidson Blvd](#).

V. Other Business

1. Updates from Planning staff.

VI. Adjourn

Anyone requesting accommodations due to disabilities should contact the City's ADA Coordinator at 931-560-1570 prior to the meeting.

The 2023 meeting schedule can be found on the City of Columbia Board of Zoning Appeals webpage.

For other questions, please contact the Department of Development Services at 931-560-1560.

City of Columbia
BOARD OF ZONING APPEALS
June 26, 2023
Special Called Meeting

CALL TO ORDER:

Chairman Jimmy Dugger called the June meeting of the Board of Zoning Appeals for the City of Columbia to order at 9:05 a.m. The meeting was held in the Council Chambers at City Hall.

ROLL CALL:

Quorum present and included the following:

Present were: Mr. Eddie Ables
Mr. Jimmy Campbell
Mr. Jimmy Dugger
Mr. George Vrailas

Absent was: Ms. Kristi Martin

Other attendees: Mr. Robert Archibald, Planner II
Mr. Kevin McCarthy, City Planner
Mrs. Sandra J. Richardson, Secretary
Mrs. Melissa Sanders, Planner I

APPROVAL OF MINUTES:

The May minutes were presented for approval. Mr. Campbell moved to approve the minutes, with Mr. Ables seconding. Motion to approve the minutes passed four to zero.

OLD BUSINESS:

NEW BUSINESS:

AGENDA ITEM #3:1

Case #23-0161

Request from Eddie Campbell for variance to CD-4C building standards regarding ceiling height at Tax Map 100K Group F Parcel 21 off Hatcher Lane.

Staff Review:

Kevin McCarthy presented the details of the staff report. Mr. McCarthy stated that he could not identify a site specific hardship. Because he wasn't sure of the intent of Council to apply this rule to every commercial property in the city, he declined to make a recommendation.

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BOARD OF ZONING APPEALS
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Discussion and Motion:

Mr. Eddie Campbell, 1704 Aspire drive, Columbia, was present to answer questions. Discussion included they are asking for a variance on ceiling height for a building that they are building. He had a handout for the Board members. The property in question was at 815 Hatcher Lane. The property is zoned CD-4C. He stated that the Columbia Code that was adopted a few months ago and he referenced page 89 of the handout. He said one sentence of the hand out stated that for office use the minimum ceiling height is eleven feet, and a maximum of twenty- five feet. They have several reasons to ask for this variance the eleven feet does not work with current building material. He said secondly, he doesn't think the esthetics would be good at all when you consider that the largest office in this building is twelve by twelve feet. He also stated that the intent of the code is maybe written for high rise offices. In this particular instance he doesn't feel that it is appropriate. The current building code has several requirements that you need to make your buildings energy efficient. They have increased insulation in the wall, they require ceiling above window and doors caulking, and tape to prevent energy loss. They even have tests that you have to pass, to make sure there is no air. The eleven-foot requirement causes an increase of almost twenty-five percent cubic feet in an office building. He stated that it is just wasted energy in his opinion. He stated that he thinks that the energy use of the building should be considered. He doesn't think the eleven-foot ceiling height is best for this situation. They are requesting to go with nine-foot ceilings. Mr. Dugger asked what was the intent in regards of the one sentence causing this issue. Mr. McCarthy explained the new zoning ordinance and the fit for Columbia. Mr. Dugger asked if corridor meant anything here, and is Hatcher Lane a corridor. Mr. McCarthy stated as far as the CD-4C zoning yes. Mr. Campbell stated that he has talked with several Planning Commissioners, City Council members, the Mayor, and the City Manager, and he feels that this will be one of the first modifications that we will see. Further discussion included long range plan, three lots left of Hatcher Lane, the smart plan, energy smart consideration, environmental specifics, the governing code, energy saving, contractors, the process, cost factor, current requirements, counter-productive, other factors, and new codes are strict. Mr. Vrillas stated that as long as he has served on this board he doesn't think that the Board has ever had to make a decision of what the appearance looks like on the inside. It has always been esthetics on the outside. He also stated that the Board would have to start going into people buildings or houses and have to start factoring all of that. Personally, he thinks as long as it meets the fire code, he thinks that is what is needed to be as far as inside the building. Outside of the building he thinks that is their job. He is not so sure about the inside of the building. Mr. McCarthy stated that ceiling height relates to total height structure. The total height structure is under the new ordinance it is measured in stories, and that relates to the ceiling height. It defines that standard. It is a bulk standard for the size, location matching the building, the Board will not be regulating any interior paint color or things like that. Mr. Vrillas asked is there anything else in the past that the Board has ever had to look inside some of these properties. Mr. McCarthy stated that you are not looking inside you are looking at the ceiling height. Mr. Vrillas stated, but the exterior doesn't dictate that. It usually defines the height of the whole structure. Mr. McCarthy stated that this code reflects a

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Special Called Meeting

lot of principals that are very design focused much more detailed than what you have seen in previous zoning ordinances. Mr. Dugger read alternative motions to the Board. Mr. Vrailas moved to approve, with Mr. Ables seconding. The motion to approve passed three to zero with Mr. Campbell abstaining.

OTHER BUSINESS:

Mr. McCarthy stated that Mr. Archibald is our new Planner II.

Mr. Dugger asked Mr. Archibald to share the difference between his job, and Mr. McCarthy's job.

Mr. Archibald stated that his job is more along the zoning administration enforcement. He will be training for the flood plain manager.

Mr. McCarthy discussed the zoning ordinance, the Comprehensive plans, future education inclusive of the function of a Board, facilitating changes to the ordinance issues, and updates to the zoning text.

ADJOURNMENT:

Mr. Ables moved to adjourn with Mr. Campbell seconding. The meeting adjourned at 9:36 a.m.

Board of Zoning Appeals, Chairman
Jimmy Dugger

Date

CONTACT INFORMATION

Robert Archibald, Planner II, rarchibald@columbiatn.com 931-560-1531

DOCKET/CASE/APPLICATION NUMBER

23-0315

APPLICANT/ PROPERTY OWNER

Lewis & Christy Armstrong

PUBLIC HEARING DATE

September 14th, 2023

PROPERTY ADDRESS/LOCATION

**1160 Pretender Way/ Elan Phase II
Subdivision Lot 36**

**REQUEST: Variance from Building, Lot & Building
Site Standards**

The applicant requests a variance from the strict application of the City of Columbia Zoning Ordinance. Specifically, the applicant requests to add a pool, shed, & fence in the back yard of a through lot.

The Zoning Ordinance limits the placement of accessory structures & non-building components to the 3rd layer of a building site [see layer illustration, attachment A].

The applicant asks that the Board of Zoning Appeals determine from the evidence presented in the application that a hardship exists due to unusual lot conditions. The applicant further asks the Board to find that the requested variance is the minimum relief from the hardship and that all other criteria for granting a variance under Section 8.5.16.L of the Ordinance have been met.

It is physically impossible to add accessory structures or non-building components to this site without granting a variance. The hardship exists because subject lot is a through lot with frontages at both front & rear of lot with no defined 3rd layer as defined in zoning text. The applicant purchased the platted lot and did not create the hardship. The lot conformed to the ordinance at that time. Staff recommends approval because of the hardship created by formation of a non-conforming lot.



EXISTING ZONING	EXISTING LAND USE	SURROUNDING ZONING & LAND USE	SITE IMPROVEMENTS	Historic District
CD-3 Neighborhood Character District	Single Family Residence	CD-3/ Single-Family Residential	Pool, storage building, & fence	N/A

DEVELOPMENT STATUS & HISTORY:

- On January 13, 2021 the Planning Commission approved a Final Plat for Phase 2 of the Elan Subdivision. The subject property was created as lot 36 with its current dimensions. The Final Plat depicts lots which conform to the applicable Ordinance (Section 6.3.8), including subject lot and lots 34, 35, & 37, which were approved as **through lots**.¹
- Throughout 2021 and 2022 the homebuilders applied for building permits. The plot plans provided with the applications depicted homes situated on platted lots detailing **Front, Rear, & Side Yards as depicted on the Final Plat**.²
- On July 1st, 2021, the applicant applied for a building permit to construct a home on lot 36 [1160 Pretender Way].
 - On July 13th, 2021, the site plan was reviewed under the regulations of Ordinance 3638 and approved as submitted meeting review criteria for building site placement within the regulatory setbacks.
 - On July 14th, 2023, the applicant applied for a building permit to install a 20'x40' inground swimming pool with concrete deck, subsequently reviewed under the regulations of Ordinance 4400, as approved July 2022.
 - Planning staff notified the applicant that the proposed improvements do not conform to the Ordinance. Staff advised the applicant to apply for a variance.

REVIEW & ASSESSMENT:

Article 4, Table 4.3.1-C District Standards

1. Non-Building Components

- Swimming Pools, Hot Tubs, & Spas are only permitted in the 2nd & 3rd layers.

Article 4, 4.3.3-D Lots & Building Sites

2. Through Lots

- Through Lots and Building Sites are prohibited. In any case in which a Nonconforming Lot is a Through Lot or Building Site, the Frontage and Front Setback regulations shall apply to both frontages.

8.5.16. L REQUIREMENTS FOR VARIANCE

1. Standards:

The Board shall not grant a variance unless it makes findings based upon evidence presented to it as follows:

- a. That by reason of exceptional narrowness, shallowness, or shape of a particular piece of property at the time of enactment of this ordinance, or by reason of

¹ Through lots or Building Sites: A Lot or Building Site type that extends through from Thoroughfare or Internal Drive to Thoroughfare or Internal Drive.

² Front Yard Setback (30'), Rear Yard Setback (30'), and Side Yard Setback (10') per Ordinance 3638 regulations for RS-10, governing ordinance during time of review for Elan Subdivision Phase II.



CITY OF COLUMBIA TENNESSEE
BOARD OF ZONING APPEALS
STAFF REPORT

exceptional topographic conditions or other exceptional and extraordinary situation or condition of such piece of property, the strict application of any regulation contained within this ordinance would result in peculiar and exceptional practical difficulties to or exceptional or undue hardship upon the owner of such property.

- b. That the variance is the minimum variance that will relieve such difficulties or hardship and thereby make possible the reasonable use of the land, building, or structure.
- c. That the variance will not authorize activities in a zone district other than those permitted by this ordinance.
- d. That financial returns alone shall not be considered as a basis for granting a variance.
- e. That the granting of the variance will not be detrimental to the public welfare, injurious to other property or improvements in the area in which the subject property is located, or a substantial impairment to the intent and purpose of the general provisions of this Zoning Ordinance.
- f. That the purposed variance will not impair an adequate supply of light and air to the adjacent property, or substantially increase the congestion in the public streets, or increase the danger of fire, or endanger the public safety.
- g. That the alleged difficulty or hardship has not been knowingly and intentionally created by any person having an interest in the property after the effective date of this ordinance.

STAFF ANALYSIS

Staff has reviewed this variance request in relation to Section 8.5.16.L and finds the following:

- a. The applicant states that due to the shape and narrowness of this lot combined with the required rear setback of 30-ft., the strict application of the requirements of the applicable zoning standard would deprive the existing property owner of rights and privileges currently enjoyed on this site and by other property owners in the same zoning district.

Applicant's lot is situated on a through-lot created by developer and legally platted as part of approval of Elan Subdivision. Strict application of Article 4, Table 4.3.1-C would only allow a space of approx. 20-30 ft. on either side of lot 36 as buildable space for accessory uses. The creation of this through-lot restricts the applicant to minimal building areas that under normal lot circumstances would be available to other home owners.

- b. Staff concurs with the applicant that the requested variance – variance to use a street yard for accessory uses – is the minimum variance that will relieve the hardship and make possible the reasonable use of the land. Without authoritative action from the Board of Zoning Appeals in the granting of this requested variance, the applicant would not have reasonable use of the land.
- c. Approval of this variance request may establish a precedent for any future similar variance requests particular to adjacent lots – existing through-lots - #34, #35, & #37. The lots are subject to the same hardship. The BZA will make this determination based on any evidence

- d. Financial returns are not the basis of the applicant's request.
- e. The applicant states that the granting of this variance would not have an effect on adjoining properties.

The requested variance, use of a street yard, is unlikely to have an injurious impact on other properties or any obvious harm to the public welfare. However, as stated above, staff notes that the granting of this variance request may establish precedent for existing adjoining lots if future similar variance requests were made by those property owners.

- f. The proposed variance will not impair an adequate supply of light and air to the adjacent property, substantially increase congestion in public streets, increase the danger of fire, or endanger the public safety.
- g. The claimed hardship is the result of the developer's creation of a through-lot without the owners having knowledge of implications resulting from regulations in zoning standards that existed during development [#3638, Section 8.4.9-A, "*private swimming pools (as well as the decking and equipment associated with pool) on a single-family, duplex, and triplex lots shall not be located in the street yards and not be closer than 10 feet to any property line*"] and also current standards which allow accessory uses to be built in only the 2nd & 3rd layers.

RECOMMENDATION:

Approve

Recommended Motion:

Move to approve the requested variance having found that the seven variance criteria listed at Section 8.5.16.L of the City of Columbia Zoning Ordinance have been sufficiently and fully satisfied.

Alternative Motions:

Alternative Motion [Deny]:

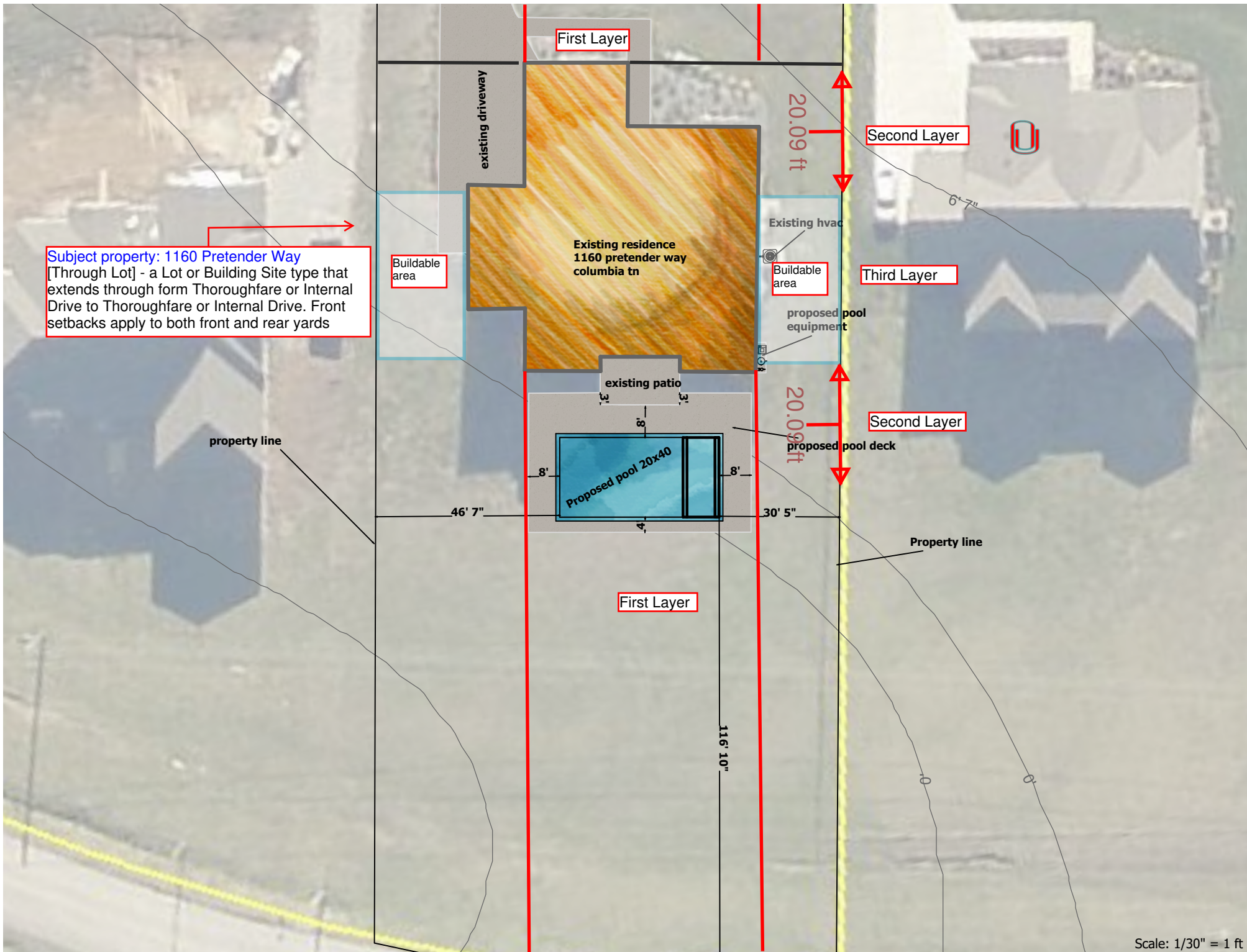
Move to find that all seven variance criteria listed at Section 8.5.16.L of the City of Columbia Zoning Ordinance have not been sufficiently and fully satisfied and deny the requested variance.

Alternative Motion [Approve Subject to Conditions]:

Move to find that all seven variance criteria listed at Section 8.5.16.L of the City of Columbia Zoning Ordinance have been sufficiently and fully satisfied and grant the requested variance subject to the following conditions: [*list conditions of approval*].

Alternative Motion [Defer]:

Move to find that there is insufficient information to make a decision, continue the hearing, and request that the [applicant/staff] provide: [list additional information] for review at a future meeting.



Minimum Building Setbacks

Front Yard - 30 feet

Rear Yard - 30 feet

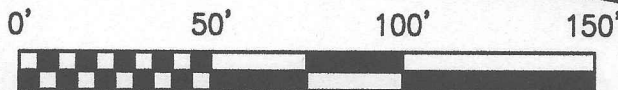
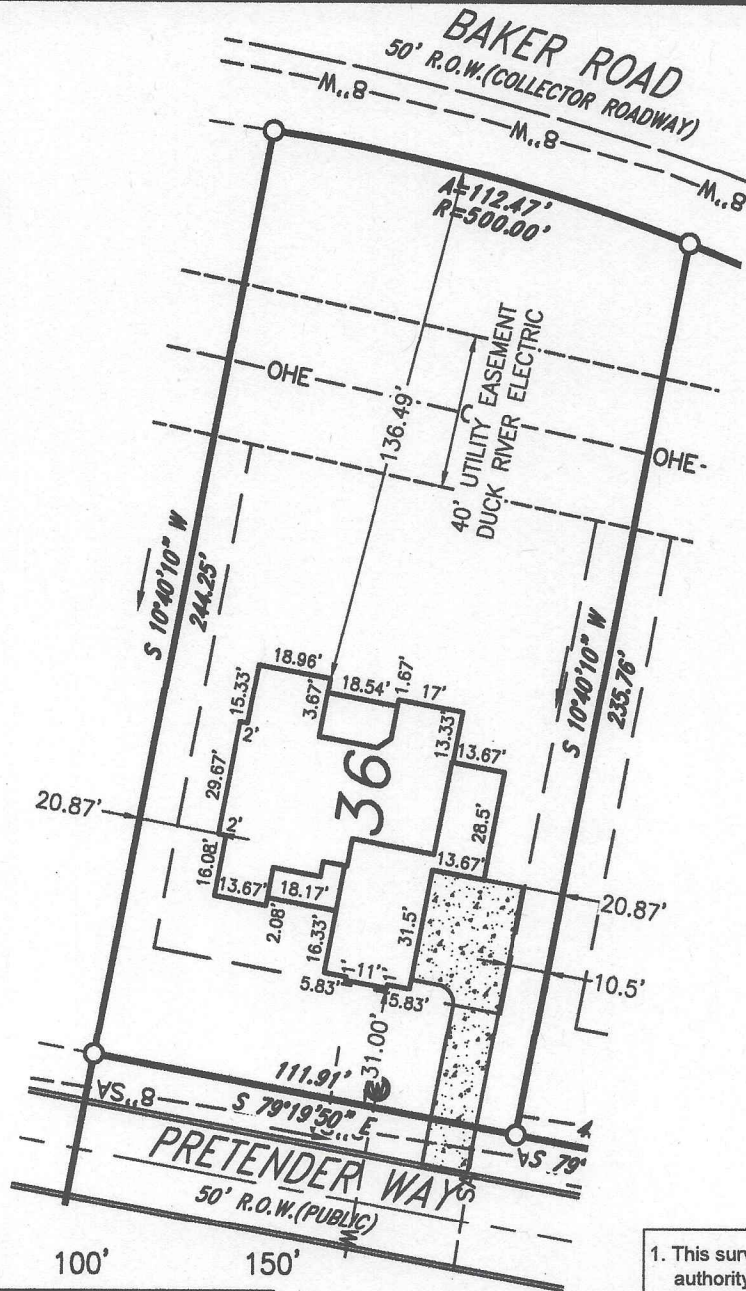
Side Yard - 10 feet

***Per plat of record

Owner - Shaw Enterprises, LLC

Deed Book R1800, Page 1387

Plat Book P22, Page 310

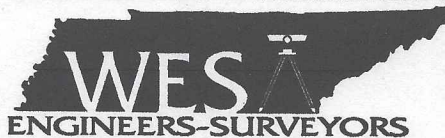


1"=50'

Plan Scale

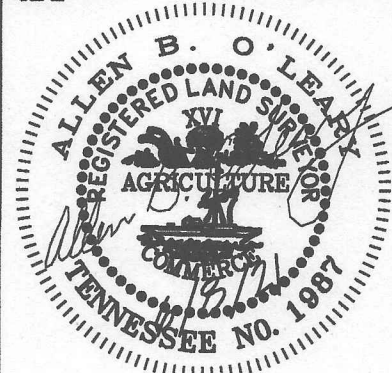
TAX MAP 75L, GRP "D", Parcel 31.00

1. This survey was done under the authority of TCA 62-18-126 and is not a survey as defined under 0820-3-.07
2. No property corners were set or reset as part of this survey.
3. Bearing are based on plat of record .
4. Contractor to verify all dimensions prior to construction of house.



CIVIL ENGINEERING SURVEYING PLANNING
2488 Nashville Hwy
COLUMBIA, TN 38401
PHONE (931) 388-2329

SEAL



CLIENT:

Shaw Enterprises
113 Nashville Highway
Columbia, TN 38401

PROJECT:

Plot Plan - Lot 36
Elan Subdivision, Phase 2
1160 Pretender Way
Columbia, TN 38401

REVISION:

DATE

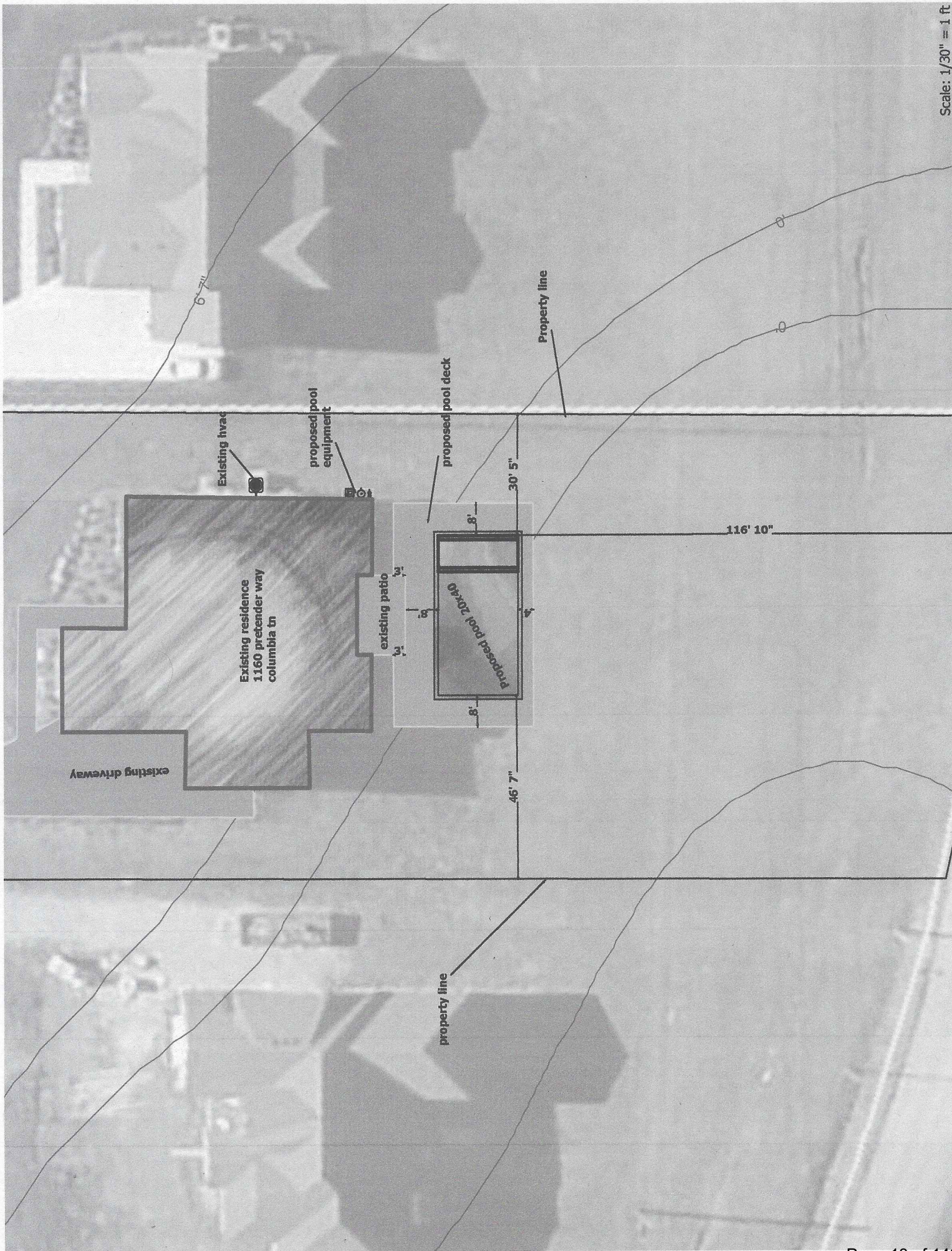
DRAWN BY: EB

SCALE: 1" = 50'

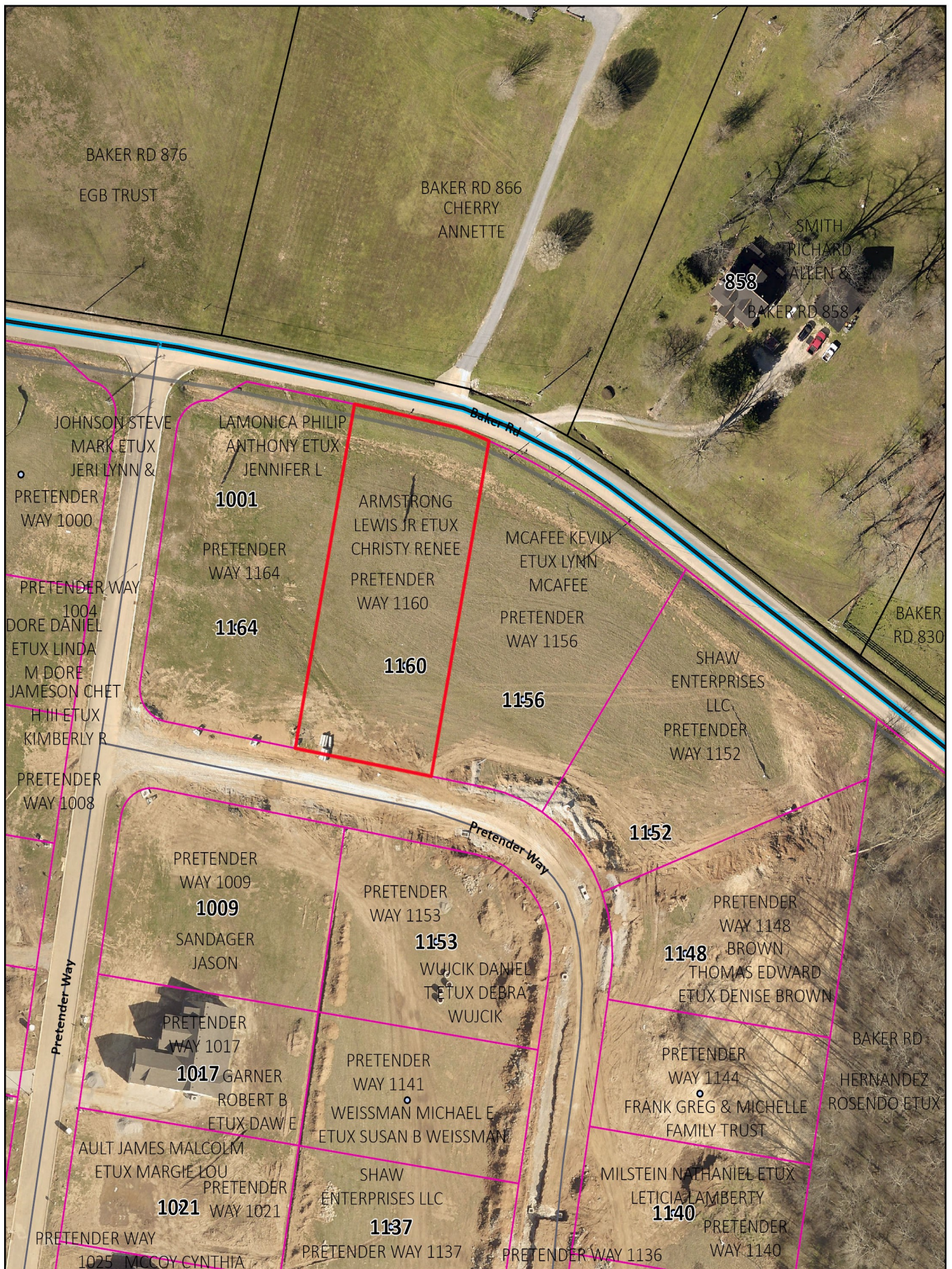
SHEET: 1 OF 1

PROJECT NO: 10571-1

DATE: 06-08-2021



Scale: 1/30" = 1 ft



Case #23-0315
1160 Pretender Way



CITY OF
COLUMBIA
TENNESSEE

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

August 3, 2023

Lewis & Christy Armstrong Jr

1160 Pretender Way

Columbia TN 38401

SUBJECT: Letter of Intent for Zoning Variances/Special Exception – 1160 PRETENDER WAY

Dear Planning & Zoning Members:

I am writing to seek a variance for my single-family home at 1160 Pretender Way, Columbia TN for an inground swimming pool, storage shed, and aluminum fence. Current zoning rules indicate the property is considered a 'through lot' and placement of these items would be noncompliant with standards. I respectfully request an exception to the current zoning regulations to install these items.

Due to the shape and narrowness of this lot combined with the required rear setback of 30 FT. The strict application of the requirements of this applicable zoning chapter would deprive the existing property owner of rights and privileges currently enjoyed on this site and by other property owners in the same zoning district. The location of the swimming pool will be in rear yard, directly behind the footprint of the house. The storage shed will also be in the rear of the yard, situated near the pool. There is no other location on the site to build the swimming pool, shed, nor amenities. Noise and/or light would be non-obtrusive to Pretender Way and/or Baker Road.

The approval will provide us with the ability to create a space solely intended to be used by our family privately. The granting of the variance would have no effect on any adjoining properties. The request for variance is not associated or motivated by financial returns. There will be no financial advantage if the variance is approved.

With the facts above, we request your approval for the variance to the zoning ordinance.

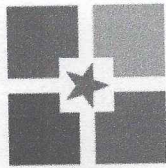
The variance will also not impair an adequate supply of light and air to the adjacent property, or substantially increase the congestion in the public streets, or increase the danger of fire, or endanger the public safety. It will also not be detrimental to the public welfare or a substantial impairment to the intent and purpose of the general provisions of this zoning ordinance.

The difficulty and hardship has not been knowingly and intentionally created by any person having an interest in the property after the effective date of this ordinance.

Thank you,

Lewis & Christy Armstrong Jr

615-275-6574



BOARD OF ZONING
VARIANCE APPLICATION AND CHECKLIST
SUBMITTAL REQUIREMENTS

*Please submit the Application online at [City of Columbia | Permitting \(onlana.com\)](http://City of Columbia | Permitting (onlana.com))
If there is no access to a computer, please submit all pertinent information on a flash drive as well as
provide one hard copy*

1. Applicants must complete this application, include required supporting materials, & pay the required fee (**\$200.00 for owner-occupied residential, \$400 for all others**) by the published submittal deadline. Please contact the Columbia Development Services Department with any questions or to discuss any concerns during the BZA submittal & review process: Kevin McCarthy, City Planner, kmccarthy@columbiatn.com or (931) 560-1560.
2. Please provide the following information:
 - a. Completed application.
 - b. **For a setback variance only:** The length of the boundaries of the lot measured to the nearest foot. Locations, square footages, and exterior dimensions, measured from outside wall to outside wall, of all existing and proposed buildings and structures. *A plot plan may satisfy this requirement.*
 - c. **For all variances requests:** Completion of the Requirements of Variance Sheet on this Application or a Justification Letter addressing the seven (7) criteria.
 - d. Applicable drawings, illustrations, and so forth, to accompany the request.
 - e. Any additional information requested by the Department of Development Services that will be necessary to fully complete a review by City Staff and/or by the Board of Zoning Appeals.
3. Please submit the final request to the Department of Development Services according to the established Board Deadline and Meeting schedule. A representative must attend the BZA Meeting.

BOARD OF ZONING APPEALS APPLICATION COLUMBIA, TENNESSEE					
LOT ADDRESS: 1100 PRETENDER WAY, COLUMBIA 38401					
ZONING:			LOT ACREAGE:		
LAND USE: Residential			BUILDING SQUARE FOOTAGE: 3384		
ESTABLISHED/EXISTING SETBACKS (DISTANCE BETWEEN BUILDINGS AND PROPERTY LINES): FRONT: 30 ft. SIDE: 10 ft. REAR: 30 ft.					
OTHER INFORMATION: Requesting variance for pool, shed, & fence					

VARIANCE PERMIT REQUEST

EXCEPTIONAL HARDSHIP VARIANCE REQUEST		
1. If requesting a Setback Variance, indicate below which yard the setback variance is located within and provide an exact measure of the distance of the new setback in feet. 2. If requesting a Variance of any other provision of the <i>Zoning Ordinance</i>, provide a detailed explanation below in "Other Variance Request." Please note that the Zoning Ordinance does not allow variances from certain standards listed at § 8.5.16.D.3.		
SETBACK VARIANCE <i>Check applicable yard</i>	☐ FRONT YARD ☐ SIDE YARD ☒ REAR YARD	REQUESTED SETBACK (ft):
OTHER VARIANCE REQUEST	ZONING ORDINANCE SECTION: 4400, TABLE 4.3.1-C	
	REASON FOR REQUEST:	

APPLICANT

NAME	LEWIS & Christy ARMSTRONG	PHONE	615 275 6574
ADDRESS	1100 PRETENDER WAY	EMAIL	CRC822001@aol.com

PROPERTY OWNER

NAME	LEWIS & CHRISY ARMSTRONG	PHONE	615 275 0574
ADDRESS	1160 PRETENDER WAY	EMAIL	CR0822007@aol.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.

LEWIS ARMSTRONG
CHRISY ARMSTRONG

APPLICANT NAME

CAE /

APPLICANT SIGNATURE

8/3/23

DATE

LEWIS ARMSTRONG
CHRISY ARMSTRONG

PROPERTY OWNER NAME

CAE /

PROPERTY OWNER SIGNATURE

8/3/23

DATE

CONTACT INFORMATION

Kevin C. McCarthy, AICP, City Planner, kmccarthy@columbiatn.com 931-560-1531

**DOCKET/CASE/APPLICATION
NUMBER
23-0332**

**APPLICANT/ PROPERTY
OWNER
AT&T (through David A. Pike) /
Marketing Group 1 LLC**

**PUBLIC HEARING DATE
September 14, 2023**

**PROPERTY
ADDRESS/LOCATION
1616 Harley Davidson Blvd/
Tax Map 93 Parcels 1.01**

REQUEST: Conditional Use (Wireless Communications Facility)

The applicant requests the Board's approval of a Conditional Use permit to allow a temporary Wireless Communication Facility. Specifically, the applicant proposes to place a Cell on Wheels (COW) on property located on Harley Davidson Boulevard near I-65. The applicant's lease of an adjacent property at 16234 Bear Creek Pike recently expired. The owner of that property unexpectedly declined to renew the lease. Placing the COW on the subject site will provide temporary continuation of service until a new permanent site is established nearby in unincorporated Maury County. The long-term location should be operational sometime between May 2024 and September 2025. The subject property is zoned CD-4C (General Urban Corridor). Table 4.3.9.1-A of the Zoning Ordinance authorizes the Board to approve the use in a CD-4C. Section 4.3.9.E.6 of the Zoning Ordinance prescribes specific standards for wireless communications facilities. In addition to these standards, the Board may impose restrictions and conditions which ensure compatibility with surrounding properties. Staff recommends **approval** of the proposed conditional use, **subject to conditions** listed in the sample motion at the end of the report.



EXISTING ZONING	EXISTING LAND USE	SURROUNDING ZONING & LAND USE	SITE IMPROVEMENTS	SIZE OF PROPERTY
CD-4C	Motor Vehicle Sales	CD-4/CD4-C Vacant/Townhomes	N/A	± 5.28 acres

DEVELOPMENT STATUS & HISTORY:

Previous Requests/Approval: N/A

Conditions of Previous Approval: N/A

REVIEW & ASSESSMENT:

Subject Site:

The subject site is comprised of a commercial building on a ± 5.28 acre lot. The structure, a 30,800 square foot building, was constructed in 2008. Adjacent parcels are mostly vacant with a mix of zoning. There is a residential development underway on the property to the east.

Zoning Ordinance:

Staff reviewed the request for a Conditional Use permit for conformity with the City of Columbia Zoning Ordinance. The relevant provisions of the Ordinance are listed below; the most applicable standards are **bolded** and underlined. Staff comments follow in the next section. Some of the listed standards are not applicable to this request for temporary approval.

8.5.16.J BOARD OF ZONING APPEALS ACTION.

1. The Board of Zoning Board of Appeals shall conduct a public hearing pursuant to Section 8.5.16.G.
2. After conducting the public hearing, and considering the recommendations of the Zoning Administrator and the requirements listed in, Sections 8.5.16K, the Board of Zoning Appeals shall:
 - a) Approve the request;
 - b) Approve the request with conditions.
 - c) Deny the request; or
 - d) Continue the hearing.

8.5.16.K CONDITIONAL USE PERMIT SPECIFIC REQUIREMENTS.

1. A Conditional Use Permit may be granted provided the Board of Zoning Appeals finds that the request conforms to the following requirements:
 - a) The proposed Use is listed as a Conditional Use for the applicable District.
 - b) The proposed Use conforms to all applicable standards listed in Section [4.3.9.E], for the proposed Use;
 - c) The proposed Use is so designed, located, and proposed to be operated **that the public health, safety, and welfare will be protected;**
 - d) The proposed Use will not adversely affect other property in the area in which it is located;
 - e) The proposed Use conforms to all applicable provisions of this Ordinance for the District in which it is to be located.
2. The Board of Zoning Appeals may impose such **other conditions and restrictions upon the premises benefited by a Conditional Use Permit** as **may be necessary to reduce or minimize the injurious effect** of such Conditional Use upon and ensure compatibility with surrounding

properties. **The Board of Zoning Appeals may establish dates for the expiration of any Conditional Use Permit as a condition of approval.**

4.3.9.E.6.AM WIRELESS COMMUNICATIONS FACILITIES

Wireless Communication Facilities shall be permitted in accordance with the applicable Use Table, subject to the following:

- (1) The requirements set forth in this Section 4.3.9.D.6.n. shall govern the location of Towers that exceed, and antennas that are installed at a height in excess of 70 feet. The height limitations applicable to Buildings and Structures shall not apply to Towers and Antennas.
- (2) Antennas or Towers located on property owned, leased, or otherwise controlled by the CITY shall be exempt from the requirements of this subsection, provided a license or lease authorizing such Antenna or Tower has been approved by City Council.
- (3) This Section shall not govern any Tower, or the installation of any Antenna, that is under 70 feet in height and is owned and operated by a federally – licensed amateur radio station operator or is used exclusively for receive – only Antennas.
- (4) The following requirements must be met:
 - a. Site and landscape plans drawn to scale and landscape plans drawn to scale;
 - b. A report including a description of the Tower with technical reasons for its design;
 - c. Documentation establishing the structural integrity for the Tower’s proposed uses, certified by a professional engineer licensed in the State of Tennessee competent in such design, the general capacity of the Tower and information necessary to assure that ANSI (American National Standard Institute) standards are met;
 - d. A statement of intent whether excess space on the Tower will be leased;
 - e. Proof of ownership of the site or a copy of the owner’s authorization to use the site;
 - f. Copies of any Easements necessary to gain access or limited Development areas;
 - g. An analysis of the site containing existing topographical contours;
 - h. A written opinion from an appropriate authority that the soils and underlying materials will support the intended Structure;
 - i. Evidence that the Tower facility meets technical emissions standards set by the FCC (Federal Communication Commission);
 - j. Evidence of “Determination of No Hazard” from the FAA (Federal Aviation Administration), as well as all required FCC permit information;
 - k. Alternatives to the Tower location and why this site was selected; and**
 - l. Evidence that the site complies with requirements of the NEPA (National Environmental Policy Act) in regard to impact on wildlife, endangered species, historical sites, Native American religious sites, floodplains, wetlands, high intensity white lights in Residential neighborhoods, and frequency emissions in excess of FCC guidelines.
- (5) **Towers may be built on the same Lot or Building Site with another Principal Use.** A separation a minimum of the Tower height between the Tower and any other Principal Use is required in order to provide for the health, safety and welfare of individuals and Structures occupying the same site. Joint use is prohibited on a Lot or Building Site where a proposed or existing Principal Use includes the storage, distribution or sale of volatile, flammable, explosive or hazardous wastes such as LP gas, propane, gasoline, natural gas and corrosive or dangerous chemicals.

- (6) Towers 80 feet or more in height shall be located on the Lot so that the distance from the base of the Tower to any adjoining property line or supporting Structure of another Tower is a minimum of 100% of the proposed Tower height. No Variance shall be granted from this minimum setback requirement.
- (7) Except as specifically required by the FAA (Federal Aviation Administration) or the FCC (Federal Communication Commission), transmission Structures shall:
 - a. use colors such as gray, blue or green which reduce their visual impacts; provided, wooden poles do not have to be painted; and
 - b. not be illuminated, except equipment shelters may use lighting for security reasons which is compatible with the surrounding neighborhood;
 - c. not use strobe lights unless specifically required by FAA.
- (8) Any proposed Tower shall be structurally designed so as to accommodate the minimum number of foreseeable shared users.
- (9) No advertising or display is permitted on any Communication Tower.
- (10) Any Accessory Buildings or Structures shall be located a minimum of 50 feet from any adjoining property line. Except for emergency purposes, the accessory facilities may not include offices, long-term vehicular storage, other outdoor storage, or broadcast studios, unless the Use is permitted in the district.
- (11) The **Tower base and equipment area shall be enclosed with a fence no less than six feet in height. Access shall be locked at all times when the site is not occupied.**
- (12) Where the Tower site abuts or is contiguous to any Residential District, there shall be provided a continuous, solid Screening and it shall be of such plant material as will provide an evergreen Screen. Screening as required herein shall be not less than four feet in height at the time of planting and shall be permanently maintained.
- (13) Location on any other Structure other than a Tower (i.e. water tank, utility poles, roof tops, etc.) is permitted subject to the provisions listed above relating to a Tower location.
- (14) Co – location on Towers is encouraged.

Staff Comment:

Planning staff consulted with the City Engineer about the suitability of the temporary communications facility on the site. At the request of planning staff, the applicant provided supplemental information which addressed staff concerns about potential impacts to the public welfare. Section **8.5.16** of the Zoning Ordinance tasks the Board with confirming that the limited use standards are met; ensuring that the proposed use is designed, located and operated in a manner that protects the public health, safety and welfare; and, to impose any other conditions necessary to ensure compatibility with surrounding properties and minimize

any injurious effect to neighbors. Staff analysis and recommendation is provided below to assist the Board in its review of the proposed temporary wireless communications facility.

General Requirements

The Use Table at Section 4.3.9.1-A of the Zoning Ordinance lists “Wireless Facilities” as a Conditional Use in a CD-4C character district.

Section 4.3.9.E.6 of the Zoning Ordinance prescribes specific standards for wireless communications facilities. Those standards are discussed below.

The proposed temporary use poses no known harm to the public health, safety, and welfare.

The use is not expected to adversely affect other properties in the area, provided the applicant maintains the site and operates according to the performance standards imposed by the Board.

Additional Requirements (4.3.9.E.6.AM)

Not all of the performance standards listed in the Ordinance are applicable to the temporary use.

The applicant will provide fencing around the facility in conformity with the Ordinance.

If the Board grants the Conditional Use approval the Zoning Administrator will ensure ongoing conformity to any conditions of approval.

RECOMMENDATION:

Approval Subject to Conditions.

Recommended Motion:

Move to find that the proposed Conditional Use conforms to the requirements listed at Section 8.5.16 of the City of Columbia Zoning Ordinance and approve Conditional Use 23-0332 subject to the following conditions:

- 1) That the approval shall expire on June 15, 2024, provided that the Zoning Administrator may approve up to two 60-day extensions;
- 2) Any additional extension of the temporary use must be approved by the Board;
- 3) That the area around the temporary use shall be fenced and secured for public safety;
- 4) That the COW shall not be raised to a height greater than 64’;
- 5) That the temporary use shall not cause the site and its principal use to become noncompliant with requirements of City of Columbia ordinances (e.g. parking, stormwater, etc.);

- 6) The applicant will provide detailed site plans and fencing specification for review and approval by the Zoning Administrator, the City Engineer, the Chief Building Official, and the City of Columbia Fire Marshal prior to establishing the use; and
- 7) The applicant shall inform the Zoning Administrator of any cessation or change to the status of the temporary use.

Alternative Motions:

Alternative Motion [Approve]:

Move to find that the proposed Conditional Use conforms to the requirements listed at Section 8.5.16 of the City of Columbia Zoning Ordinance and approve Conditional Use 23-0332.

Alternative Motion [Deny]:

Move to deny the proposed Conditional Use having found *[list reasons for denial]*.

Alternative Motion [Defer]:

Move to find that there is insufficient information to make a decision, continue the hearing, and request that the [applicant/staff] provide: *[list additional information]* for review at a future meeting.

I-65

Temporary Tower

New Cingular Wireless, PCS, LLC,
a Delaware Limited Liability Company
d/b/a AT&T Mobility

Columbia, TN Zoning Board of Appeals

September 14, 2023, 9:00 AM (CT)

City Hall - Council Chambers (basement), 700 N Garden St.,
Columbia, TN 38401.

AT&T Mobility – I-65 Temporary Tower

- Robert Grant attorney for AT&T
- Thanks to Kevin McCarthy for his hard work and assistance with this application.
- Gratified that his staff report recommends approval.
- All exhibits required by the Ordinance have been submitted.
- All procedural guidelines of the Ordinance have been followed.
- A copy of this presentation has been filed today.

Emergency

- Until recently, AT&T provided service from a tower at 1624 Bear Creek Pike, Columbia, TN.
- Tower was owned by American Towers (“ATC”), and the ATC lease with the underlying landowner expired.
- Tower was dismantled and removed on (or about) Aug. 1, 2023.
- Currently, AT&T does not have a site to provide service to this area.

Emergency Cont.

- There is a significant gap in AT&T's wireless coverage in this area.
- This is a matter of public safety.
- 70% of all emergency calls are made with mobile phones.
- As of June 2022, 70.7% of adults and 81.7% of children live in wireless only households.
- First Responder Network Authority ("FirstNet"), an advanced broadband network dedicated specifically to public safety communications.

Location of Permanent Site

- AT&T first looked at an existing tower at 1449 Rock Springs Road, Columbia, TN but the owner intends to remove it in the near future.
- AT&T is working with ATC to develop a permanent site for a new tower.
- ATC is in the final stages of negotiations with a property owner in unincorporated Maury County.
- If all goes as planned, then AT&T can move to ATC new tower site as early as May 2024.
- Backup plan for a permanent site is a parcel owned by Charles Stoffer/Columbia Neon Co Inc just south of the Harley Davidson temp site in unincorporated Maury County.

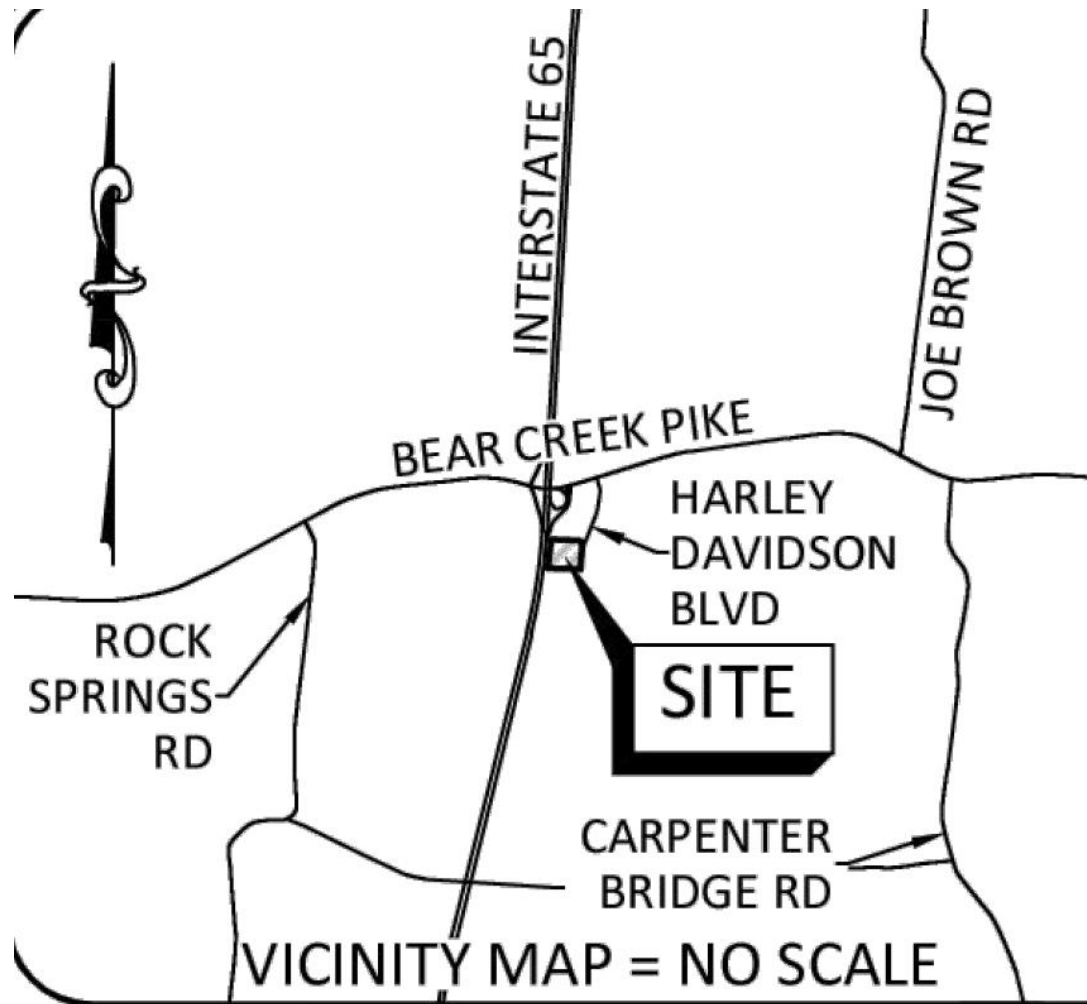
Temporary Site Selection

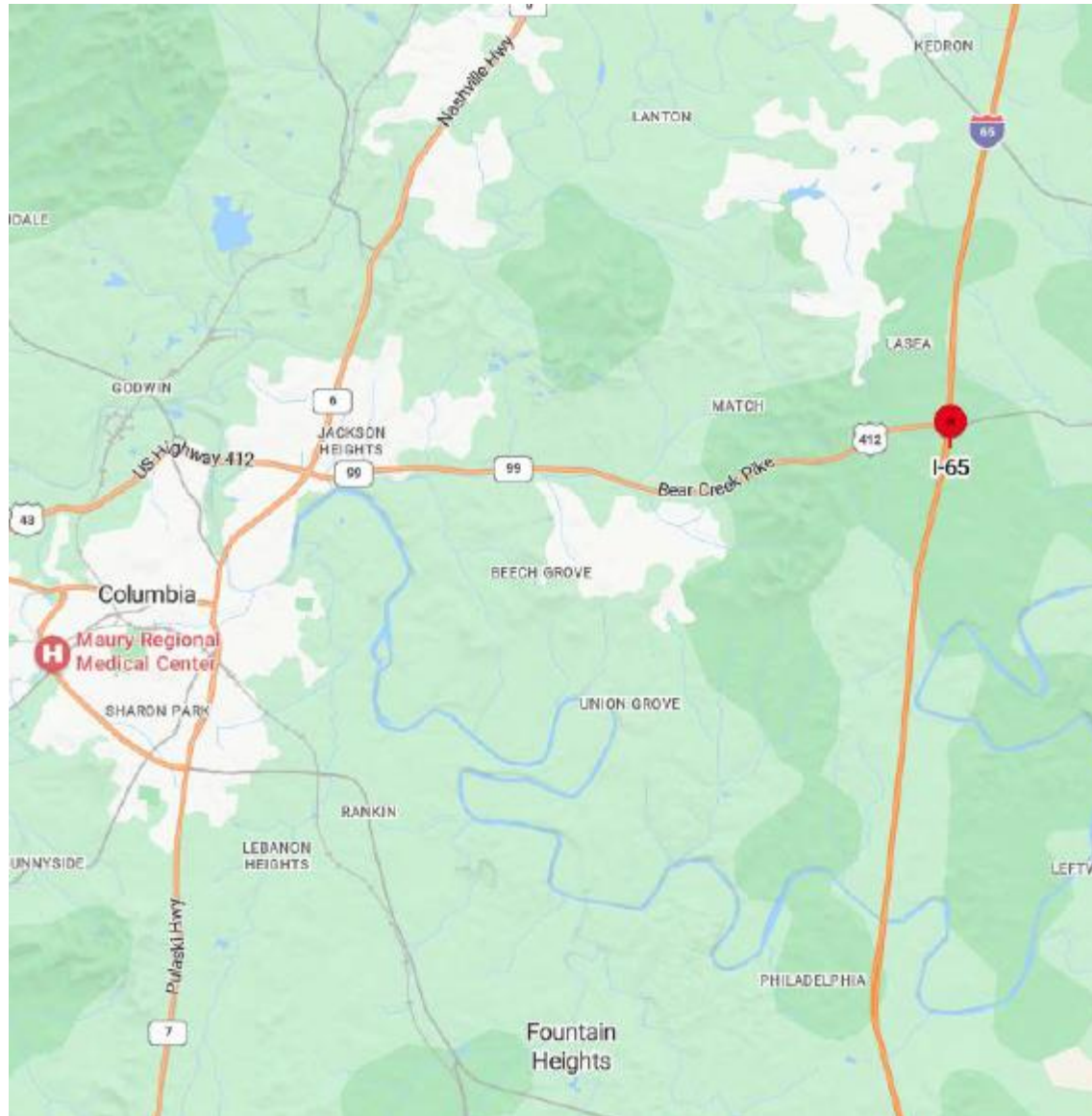
- Since this is essential public utility infrastructure and the loss of the existing ATC tower created a state of emergency it was necessary to locate a temporary site with existing electricity and fiber.
 - Any ground disturbance requires a NEPA review that can take 6-12 months and delay the restoration of service to this area.
- The Harley Davidson dealership meets the necessary criteria for existing utilities so we can get the temporary facility on the air as fast as possible to meet the emergency.
- We also attempted to contact a nearby hotel property, but they did not respond to our inquiries.
- Mr. Stofel's property wasn't considered for a temp location because it would require a ground disturbance.

Temporary Solution

- 64' tall temporary “cell tower on wheels” (COW) structure
- 1616 Harley Davidson Boulevard, Columbia, TN 38401
- Landowner: Marketing Group 1 LLC
- Current use: Harley Davidson dealership
- Located at the rear of the building.

VICINITY

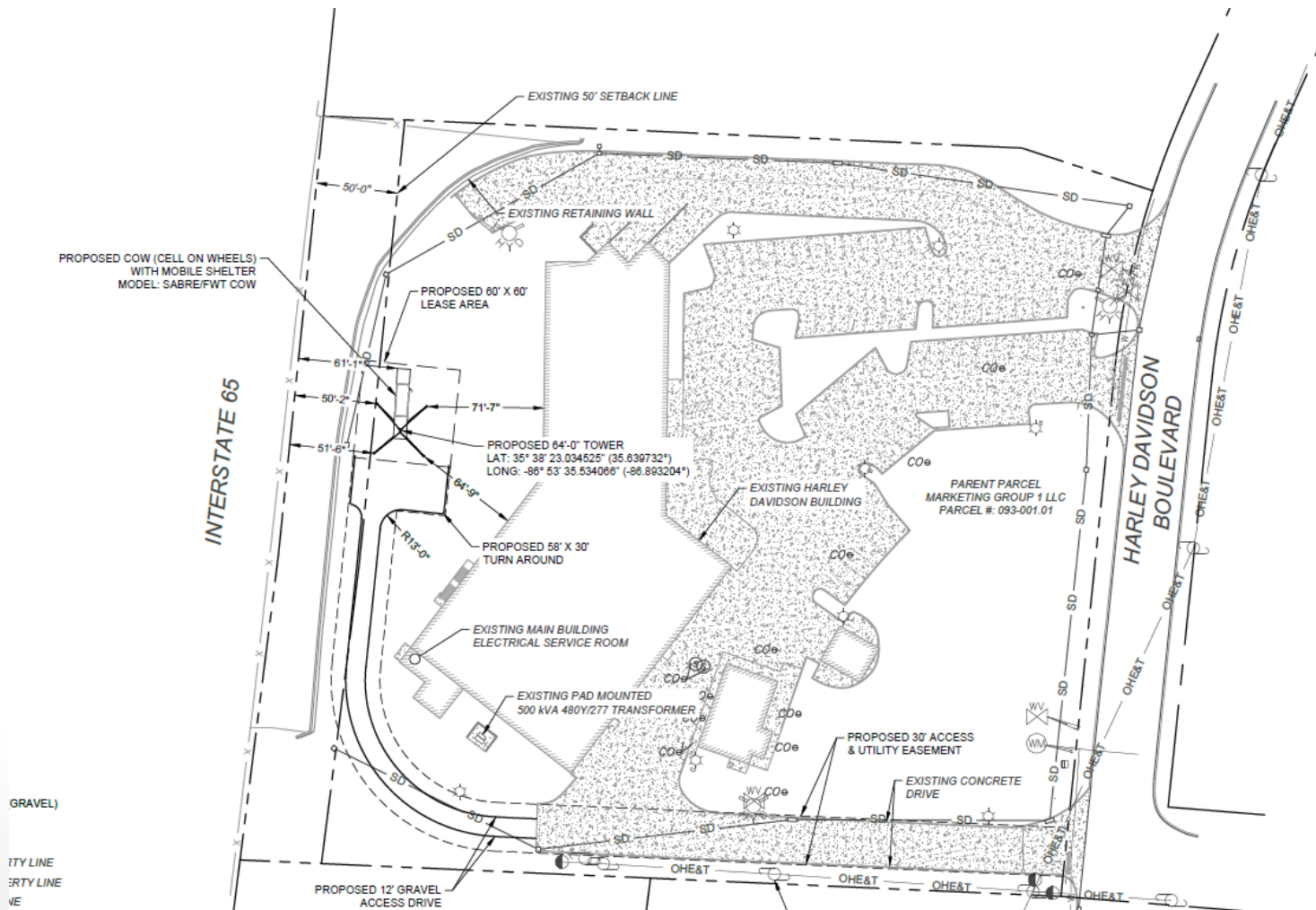




Network Integration

- The location was selected because it is near the former American Towers, LLC tower site.
- This will allow the Temporary Facility to integrate and function within AT&T's existing network to provide service for the area.
- The location is near the Bear Creek Pike / I-65 interchange, where there is a concentrated service need.
- The 64' COW is well situated behind the Harley Davidson dealership building in zone 3 as required in the CD-4C zone and will not adversely affect other properties in the area.

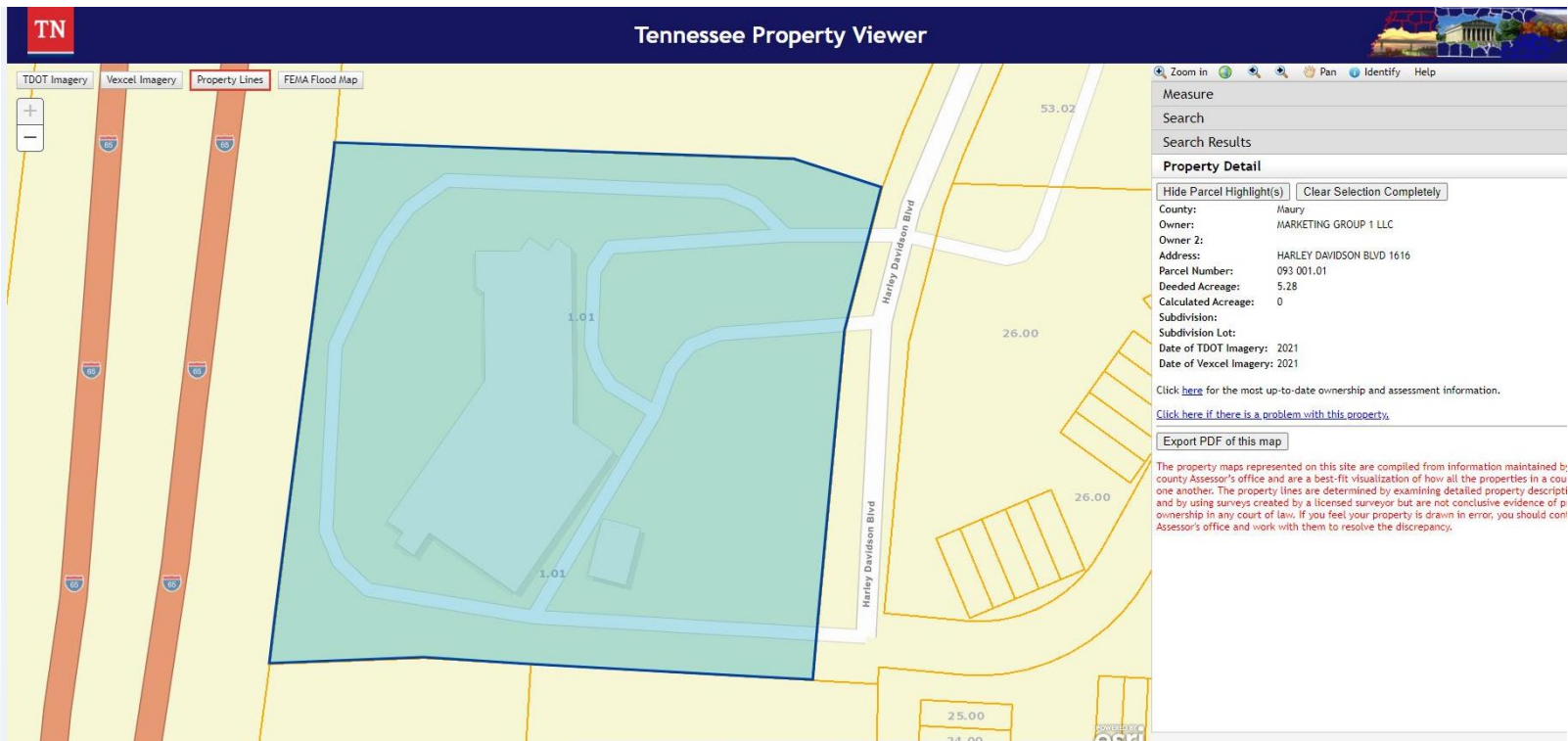
LOCATED BEHIND BUILDING



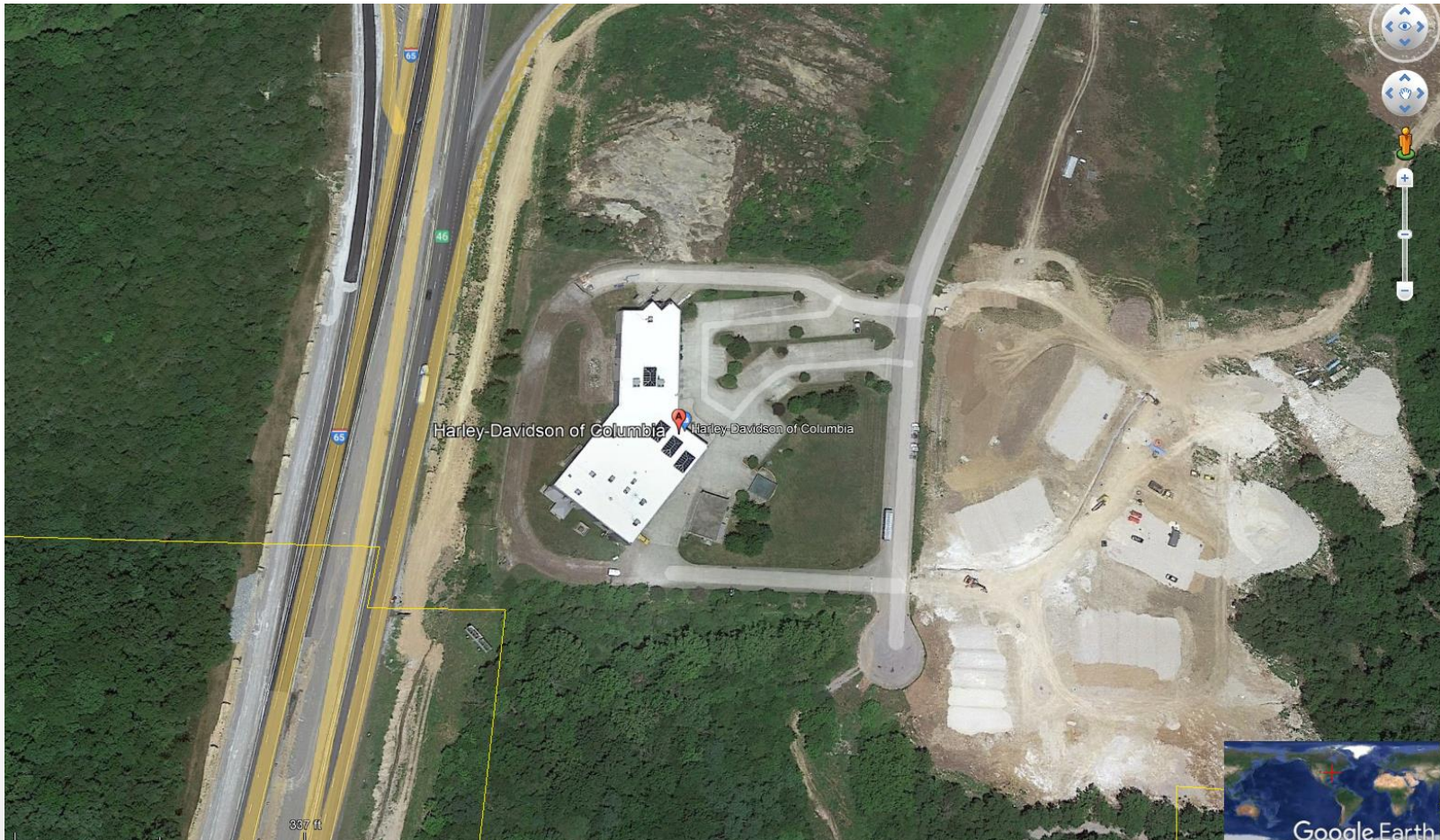
Photograph of Site Location



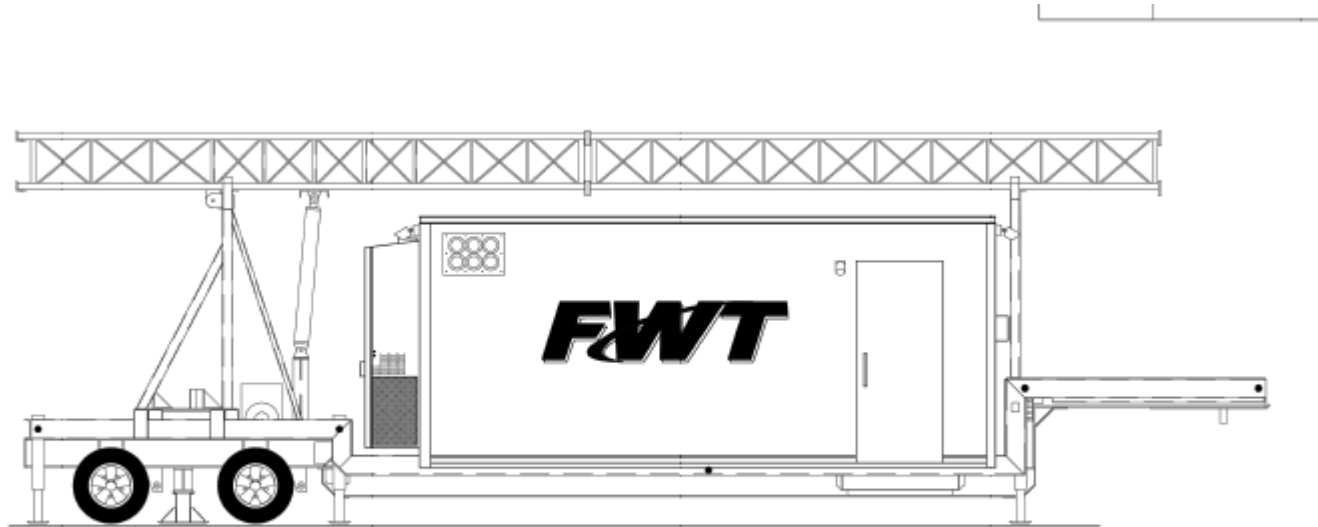
Parcel Map – 5.28 Acres



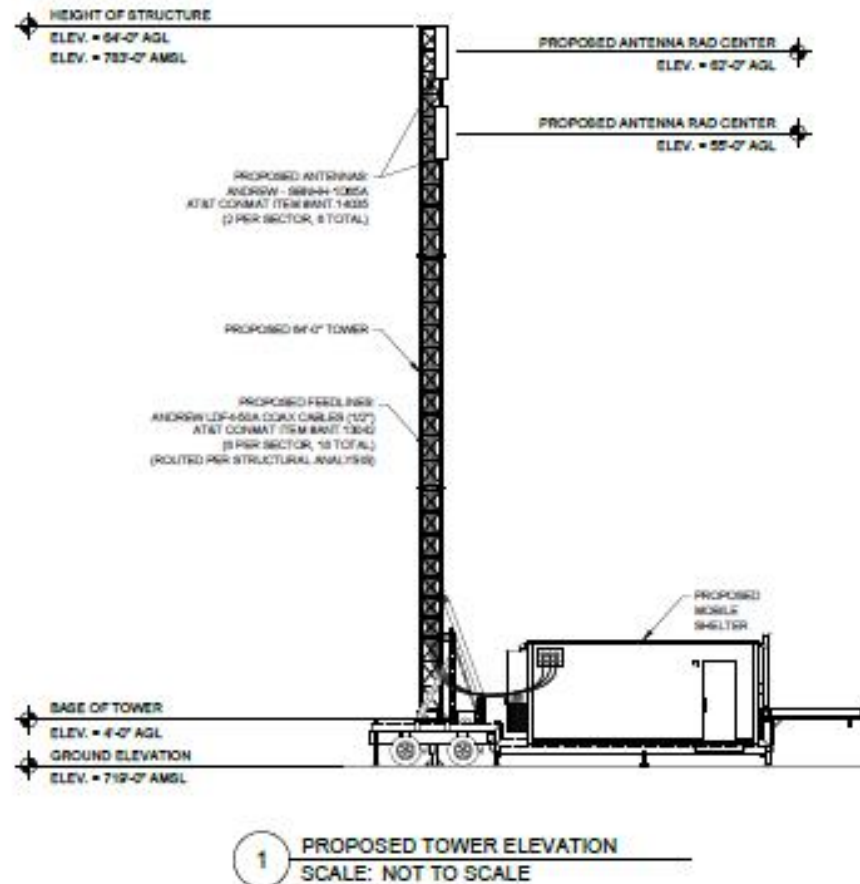
Aerial View



Cell on Wheels (Trailer)



64' CELL ON WHEELS (COW)



Example of a COW



STRUCTURAL ANALYSIS



August 1, 2023

Project Structural Analysis Report

Carrier Information AT&T
Site Name: I-65 (Columbia 61)-COW
FA #: 16171923

Commissioned By Tania Rogers
tania.rogers@smartlinkgroup.com

POD Information Project Number: 23-159585

Site Data 64' Proposed FWT Self Support Tower
1616 Harley Davidson Blvd., Columbia, Maury County, TN 38401
Latitude: 35° 38' 23.04"N; Longitude: 86° 53' 35.53"W

Dear Tania Rogers,

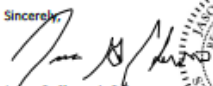
The purpose of this analysis is to determine whether the proposed tower design is capable of supporting the proposed appurtenance configuration. The tower has been analyzed for conformance to applicable local, state, and federal codes unless otherwise stated in the report. The tower and its foundation were found to be adequate to support the proposed appurtenance loading and will not require modification.

Results	Tower Capacity:	29.1%	Pass
	Foundation Capacity:	56.3%	Pass

Thank you for allowing us to provide these engineering services. If there are any comments or concerns please do not hesitate to call.

Structural Analysis prepared by: Alec Peoples

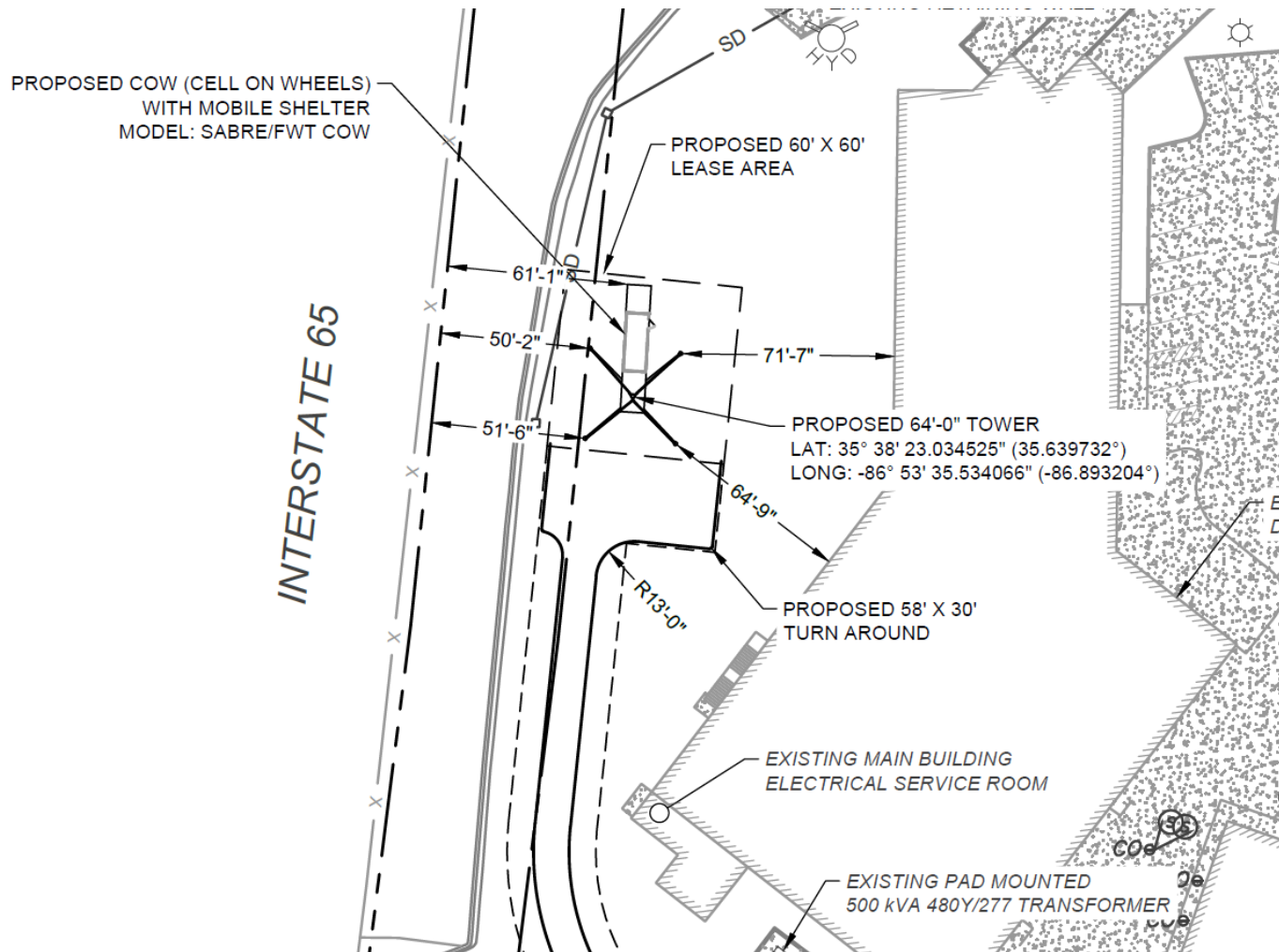
Sincerely,


Jason G. Cheronis P.E.
Tennessee PE# 118703



1033 E Turkeyfoot Lake Rd., Suite 206 | Akron, OH 44312 | 330-961-7432
POD Group

Setbacks



Conditional Use Review

- The 5.28-acre commercial property is zoned CD-4C where towers are permitted as a conditional use.
- Since the proposed 64' temporary tower is less than 70', the standards for taller towers in §4.3.9.E.6.am do not apply.
- Meets all requirements for zone CD-4C.
- Meets all applicable requirements of §8.5.16C
- Public utility infrastructure necessary for public safety.

Public Welfare

- Essential Public Utility Infrastructure
 - Location will not materially increase traffic on surrounding streets.
 - Tower will not be staffed daily.
 - Personnel will visit occasionally (approximately monthly) for maintenance and repair.
 - No adverse effect on surrounding properties.
 - Tower will improve access to essential wireless services (including E-911).
 - Tower is well removed from surrounding properties.
- Appropriate fencing.
 - Proposed fencing meets all applicable local requirements.

Federal Telecommunications Law

- As discussed in the following slides, several provisions of federal law govern applications for cellular tower construction.
- This hearing is different than other zoning hearings because it is governed by federal law and separate state statutes dealing only with wireless communications facilities.
- The Telecommunications Act of 1996 - 47 USC § 332 (“TCA”) preserves the authority of local government to regulate the placement, construction and modification of wireless communications facilities.
 - This piece of legislation was widely supported by both parties.
 - Passed House of Representatives by a vote of 414-16.
 - Passed Senate by a vote of 91-5.
 - The goal of this law was to accelerate the deployment of wireless communications facilities throughout the United States.

Federal Telecommunications Law

- While the TCA preserves the authority of local planning authorities, the authority is subject to the following limitations:
 - Local authorities shall not unreasonably discriminate among providers of functionally equivalent services.
 - Local authorities shall not prohibit or have the effect of prohibiting the provision of personal wireless services.
 - A prohibition of service occurs when an application to construct a telecommunications facility is denied even though the Applicant proves that a significant gap in service coverage exists and an inquiry into the feasibility of alternative facilities or site locations has occurred. *T-Mobile Central*, 691 F.3d at 805
 - A service gap exists when the Applicant presents evidence of a significant gap in its own coverage. *T-Mobile Central*, 691 F.3d at 806
 - Local authorities must act on applications to construct a wireless communications facility within a reasonable period of time following the filing of a request.

Federal Telecommunications Law

- Applications for construction of a telecommunications facility can be denied only when the denial is based on substantial evidence. 47 U.S.C Sec. 332(c)(7)(B)(iii)
- The locality's own zoning requirements are an example of substantial evidence. *Domincovitch v. Wilson County Bd. of Zoning Appeals*, 2000 Tenn. App. LEXIS 735, 12 (Tenn. App. 2000); *Branch Towers, LLC v. City of Knoxville, Tenn.*, 2016 U.S. Dist. LEXIS 89338 (E.D. Tenn. 2016); and *Cellular South Real Estate, Inc. v. City of Germantown*, 2015 U.S. Dist. LEXIS 80416 (W.D. of Tenn. 2015)

SUBSTANTIAL EVIDENCE

- The following items are NOT substantial evidence according to the U.S. Court of Appeals and the federal courts of Tennessee:
 - Lay opinion. *T-Mobile Central, LLC v. Charter Township of West Bloomfield*, 691 F.3d 794, 804.
 - Unsupported opinion. *American Towers v. Wilson County*, 2014 U.S. Dist. LEXIS 131, 28 (M.D. Tenn. 2014) and *Domincovitch* at 19.
 - Generalized expressions of concerns with ‘aesthetics.’ *Cellular South* at 21.
 - Claims the tower is unsightly are generalized expressions of aesthetical concerns and the same objection could be made by any resident in any area in which a tower is placed. *Cellular South* at 19.
 - General concerns that the tower is ugly or unwanted near an individual’s residence are not sufficient. *T-Mobile Central* at 800.
 - Anyone who opposes a tower in their backyard can claim it would be bad for the community, not aesthetically pleasing, or is otherwise objectionable. *T-Mobile Central* at 801.

Federal Telecommunications Law

- Federal Law prohibits local zoning authorities from prohibiting an Applicant from providing wireless service. 47 USC Sec. 332(c)(7)(b)(i)(II)
- A prohibition of service occurs when an application to construct a telecommunications facility is denied even though the Applicant proves that a significant gap in service coverage exists and an inquiry into the feasibility of alternative facilities or site locations has occurred. *T-Mobile Central* at 805 and *American Towers* at 36.
- An applicant need not investigate every single piece of property within the applicable search ring. Rather, an applicant must show that a good faith effort has been made to identify and evaluate less intrusive alternatives. *American Towers* at 36.
 - Speculative and unsupported assertions that other, feasible alternatives exist is insufficient to refute a proposed site location. *Branch Towers* at 28.
 - A service gap exists when the Applicant presents evidence of a significant gap in its own coverage. *T-Mobile Central* at 806 and *Cellular South* at 19.
- If an applicant meets all of the requirements of the zoning regulations and there is no valid ground for denial of the application, the permit should be issued. *Dominovitch* at 12.

Environmental and Health Concerns

- This hearing is different than other zoning hearings because it is governed by federal law. Specifically, Federal Law prevents this Board from considering health effects of radio frequency emissions. 47 USC Section 332(7)(B)(iv) and *American Towers* at 27.
- The tower will be constructed to meet all federal guidelines for radio frequency emissions.

Establish Record

- Introduce all filings by Applicant to date including prior to hearing, supplemental filings and information introduced today is hereby introduced into the record.

Conclusion

- You deserve the best possible wireless service in your community.
- The existing state of emergency was not created by AT&T's actions.
- The proposed facility is in compliance with all federal, state and local requirements with appropriate waivers.
- Thank you for your patience.



1578 Highway 44 East, Suite 6
P.O. Box 369
Shepherdsville, KY 40165-0369
Phone (502) 955-4400 or (800) 516-4293
Fax (502) 543-4410 or (800) 541-4410

August 31, 2023

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

RE: Supplemental Information
Conditional Use Application for a Temporary Wireless Communication Facility
Applicant: New Cingular Wireless PCS, LLC, d/b/a AT&T Mobility
Site Location: 1616 Harley Davidson Blvd., Columbia, TN 38401
Type: Cell on Wheels ("COW") with a 64' Tower
Site Name: I-65

Dear Mr. McCarthy:

Thank you for your request for additional information regarding the application of New Cingular Wireless PCS, LLC, d/b/a AT&T Mobility ("AT&T" or "Applicant"), to locate and operate a temporary wireless communication facility at 1616 Harley Davidson Blvd., Columbia, TN 38401 to serve the customers of AT&T with wireless communications services within the City of Columbia, Tennessee. We have provided responses to each of your requests below:

1. **Will the tower be guyed? If yes, please revise plans to show the location of all guy wires.** The tower will not be guyed. While the plans do show outriggers for the trailer, there are no guy wires proposed for the tower. The manufacturer of the COW includes an option for a non-guyed self-support system, which is what is proposed by AT&T. Outriggers and guy wires are two different components of a COW. The trailer outriggers are for the stabilization of the trailer while the tower is deployed. In those instances where guy wires are utilized for a COW, then steel cables are attached to the tower and extend down to concrete block anchors. These wires would physically brace the tower and pull force from the tower legs into the wires and down into the anchors. However, AT&T's configuration is for a 64-foot self-supporting structure that only utilizes the outriggers on the trailer for stabilization. This can be seen in the design documents presented with the application.

2. **What is the term of the lease agreement with the property owner?** The license agreement provides for a two-year term beginning on 9-28-23 and ending 9-28-25.
3. **What are the provider's plans for securing a location for a permanent tower?** AT&T is working with American Towers LLC ("ATC") to secure a permanent tower location. Following the removal of ATC's tower at 1624 Bear Creek Pike, Columbia, TN and the loss of AT&T's facility, ATC has been negotiating a new tower lease with a property owner in unincorporated Maury County. If all goes as planned with ATC's new site, then as early as May 2024, AT&T may be able to move from the temporary location to a permanent location on ATC's new tower.
4. **Will there be fencing or any other permanent fixtures associated with the tower site?** Only temporary fencing will be located at the site. The only permanent change will be 200A 1 Phase 120/240 lateral feeder with 3 strands of #3/0 AWG THWN-2 and #2 ECG in 2.5" PVC conduit that is approximately 192 feet long to be installed from the main building electrical room to the COW. If necessary, then AT&T can remove the conductor and conduit when the COW is taken offline and AT&T moves to a permanent location.
5. **Will the tower function at a height of 64-feet? The plans provided with the application indicate a variable height which could be much greater.** While the manufacturer designed the COW for variable heights, the proposal is for an overall height of 64-feet where AT&T's equipment will be located. AT&T will not extend the tower beyond the requested 64-feet without prior approval from the City of Columbia.
6. **Has the project team communicated with the Office of the Fire Marshal about the tower?** Yes, AT&T's project engineer has spoken with the Fire Marshal, Brad Massey who stated that since the temporary tower is not an occupied space, he would not require AT&T to do a water availability study, water flow test, or provide a water availability letter. He further advised the project engineer that it is sufficient for AT&T to show the existing hydrant locations on the face of the survey which AT&T has done. Finally, he also wanted to ensure that the COW does not block existing fire department access to the main building. AT&T's project engineer has confirmed that the design meets all of the requirements for an unoccupied space per Columbia Municipal Code Title 7, Chapters 1-6, ICF 2018, IBC 2018, IRC, NFPA 1 2021, NFPA 13 2022, NFPA 24 2022, NFPA 70 2023, NFPA 72 2019 where applicable.

Currently, the City of Columbia is an exempt jurisdiction with the State Fire Marshal's Office. Only Educational (Kindergarten through 12, public or private), day-care centers (including adult day-care), all state-owned and state-leased facilities, and all facilities requiring a State Fire Marshal inspection for initial licensure by another state department are required to be submitted to the State

Fire Marshal's Office for review. The SFMO formally delegates codes enforcement to local jurisdictions that are adequately performing their building codes enforcement programs.

Pursuant to Tennessee Code Annotated § 68-120-101(b)(2), these jurisdictions employ staff to perform plan reviews and inspections for buildings and structures to ensure fire and building code compliance that they have adopted by ordinance. In accordance with Tenn. Comp. R. & Regs. 0780-02-19-.04, a SFMO audit team performs quality audits of each Exempt Jurisdiction once every three (3) years.

7. **Please provide examples of other locations where a temporary tower was used as an interim measure and replaced with a permanent tower. See attached.**

Please do not hesitate to contact us if you have any questions or require any additional information concerning this matter.

Sincerely,



David A. Pike
F. Keith Brown
Robert W. Grant
Attorney for Applicant

enclosures





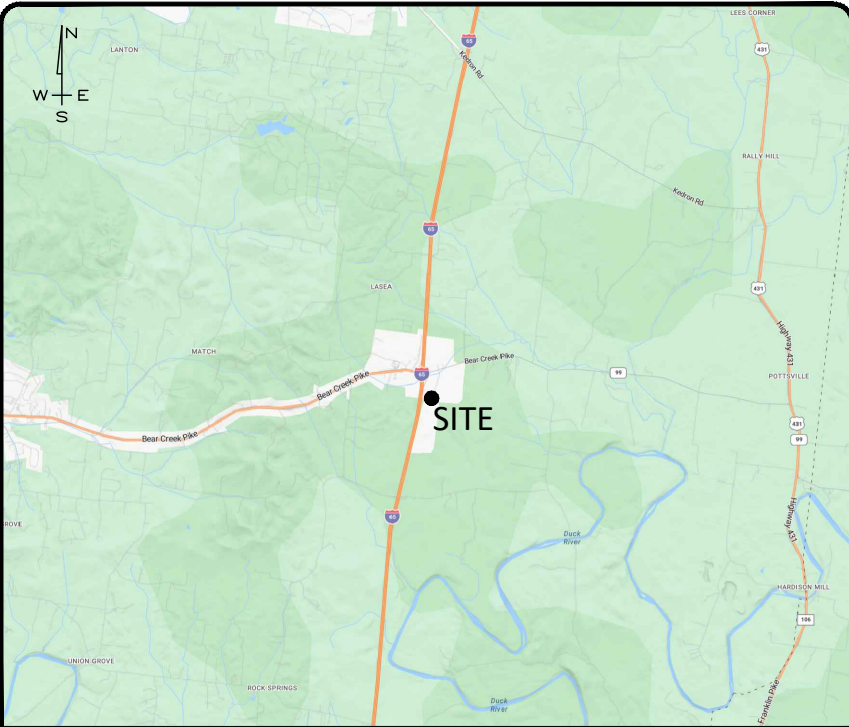
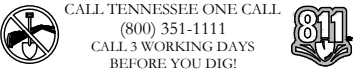
AT&T

SITE NAME:

I-65

FA# 10068977
PACE# MRTNK069905
USID# 328878

PROPOSED TEMPORARY COW WITH A 64'-0" TOWER AND
INSTALLATION OF UTILITIES AND EQUIPMENT INSIDE MOBILE SHELTER



VICINITY MAP

NOT TO SCALE

DRIVE DIRECTIONS

STARTING AT THE MAURY COUNTY, TN COUNTY COURT HOUSE, 41 PUBLIC SQ,
COLUMBIA, TN 38401:

DEPART AND HEAD (NORTH) 354 FT
EXIT THE ROUNDABOUT AT THE 2ND EXIT, ONTO W 7TH ST 404 FT
TURN RIGHT ONTO US-412 E / US-31 N / TN-99 / TN-7 / N GARDEN ST 1.8 MI
BEAR RIGHT, THEN BEAR RIGHT ONTO US-412 E / TN-99 / BEAR CREEK PIKE 6.6 MI
TURN LEFT ONTO LASEA RD 0.3 MI
TURN RIGHT ONTO OLD HIGHWAY 99 0.4 MI
TURN LEFT ONTO US-412 E / TN-99 / BEAR CREEK PIKE 0.3 MI
TURN RIGHT ONTO HARLEY DAVIDSON BLVD 0.2 MI
TURN RIGHT 256 FT

ARRIVE AT DESTINATION

SCOPE OF WORK

CONSTRUCTION DRAWINGS FOR:
INSTALLATION OF A NEW TEMPORARY COW (CELL ON WHEELS) TELECOMMUNICATIONS
FACILITY.

SITE WORK: NEW TOWER, UNMANNED EQUIPMENT TRAILER, & UTILITY INSTALLATIONS.

PROJECT INFORMATION

COUNTY: MAURY

SITE ADDRESS: 1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401

APPLICANT: NEW CINGULAR WIRELESS PCS,
LLC A DELAWARE LIMITED
LIABILITY COMPANY, D/B/A AT&T
MOBILITY
1025 LENOX PARK BLVD NE, 3RD
FLOOR
ATLANTA, GA 30319

LATITUDE: 35° 38' 23.034525"
(35.639732°)

LONGITUDE: -86° 53' 35.534066"
(-86.893204°)

CONTACT INFORMATION

EMERGENCY
CALL 911

LANDLORD APPROVAL

SIGNATURE DATE

SHEET INDEX

T-1	TITLE SHEET & PROJECT INFORMATION
SURVEY: B-1 THRU B-1.3 B-2	SITE SURVEY ABUTTER'S MAP
GENERAL: GN-1 GN-2	GENERAL NOTES & SPECIFICATIONS ANTENNA INSTALLATION NOTES
CIVIL: C-1 C-2 C-3 C-4 C-5	OVERALL SITE PLAN ENLARGED SITE PLAN TOWER ELEVATION ANTENNA MOUNT & ORIENTATION EQUIPMENT SPECS
ATTACHED	COW SPEC SHEETS

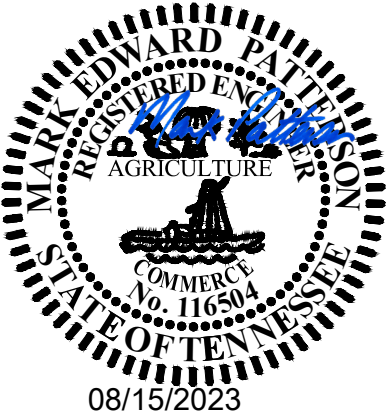
PREPARED BY:



POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:





REVISIONS

REV.	DATE	DESCRIPTION
A	08/14/23	PRELIM ISSUE
0	08/15/23	FINAL ISSUE

SITE NAME:
I-65

SITE INFORMATION:
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401
MAURY COUNTY

FA NUMBER:
10068977

PACE:
MRTNK069905

POD PROJECT NUMBER: 23-160141
DRAWN BY: CPM
CHECKED BY: MEP
DATE: 08/15/23

SHEET TITLE:
TITLE SHEET
& PROJECT
INFORMATION

SHEET NUMBER:
T-1

DATE _____

Page 59 of 142

GENERAL NOTES

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

THIS SURVEY IS FOR THE PROPOSED LEASE AREA AND THE PROPOSED ACCESS & UTILITY EASEMENT ONLY, AND NO BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.03', FOR A PRECISION OF 1:42,871 AND HAS NOT BEEN ADJUSTED.

THIS PROPERTY IS SUBJECT TO ANY RECORDED EASEMENTS AND/OR RIGHTS OF WAY SHOWN HEREON OR NOT.

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE PARENT PARCEL, THE PROPOSED LEASE AREA AND THE PROPOSED ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100 YEAR FLOOD PLAIN (ZONE "X") PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 47119C0195E, DATED APRIL 16, 2007.

GLOBAL POSITIONING SYSTEMS NOTE

1. RANDOM TRAVERSE CONTROL MONUMENTS WERE SET USING GPS METHODS. A PORTION OF THE TOPOGRAPHY AND FOUND BOUNDARY MONUMENTS WERE ALSO LOCATED USING GPS METHODS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (INERTIAL GPS NETWORK), NAD 83 TENNESSEE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID 20B. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.02' TO 0.05' HORIZONTALLY.
3. SPECTRA PRECISION SP85 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

FAA COORDINATE POINT
NAD 83
LATITUDE: 35°38'23.034525"
LONGITUDE: -86°53'35.534066"
NAVD 88
ELEVATION: 719'± AMSL
NORTHING: 476,747.051
EASTING: 1,703,098.878

TEMPORARY BENCHMARK
NORTHING: 476,894.226
EASTING: 1,703,560.692
ELEVATION: 704.8' ± AMSL
LOCATION: BEING A FOUND 1/2" REBAR WITH A YELLOW PLASTIC CAP STAMPED "CHAP-DELAINE-1444", N76°57'E 393.6' ± FROM THE NORTHEAST CORNER OF THE PROPOSED LEASE AREA.

BASED ON TENNESSEE STATE PLANE ZONE. THE SOURCE OF BEARINGS WERE DETERMINED BY A GPS OBSERVATIONS COMPLETED ON JULY 17, 2023

PARCEL NO. 093-001.01
MARKETING GROUP 1 LLC
BOOK R2008, PAGE 875

PROPOSED 30' ACCESS & UTILITY EASEMENT (20,135.824 S.F.)

PARCEL NO. 093-002.01
CHR LAND LLC
BOOK R2704, PAGE 868

LEGEND

- UTILITY POLE
- LIGHT POLE
- GUY ANCHOR
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- ROAD SIGN
- EX. EXISTING
- S.F. SQUARE FEET
- OHE&T OVERHEAD ELECTRIC & TELCO
- SD STORM SEWER
- W WATER LINE
- X CHAINLINK FENCE
- METAL FENCE
- PROPOSED EASEMENT
- SET 1/2" REBAR, 18" LONG, WITH A YELLOW PLASTIC CAP STAMPED "PATTERSON TN RLS3010"
- FOUND MONUMENT AS NOTED
- SUBJECT PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT OF WAY LINE
- ③ SANITARY SEWER MANHOLE
- COe SANITARY SEWER CLEANOUT
- CB CATCH BASIN
- EOP EDGE OF PAVEMENT
- ROW RIGHT OF WAY
- P.O.C. POINT OF COMMENCEMENT
- P.O.R. POINT OF REFERENCE
- P.O.B. POINT OF BEGINNING

CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)

I, MARK E. PATTERSON, A TENNESSEE REGISTERED LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREON WERE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARDS OF PRACTICE AS CONTAINED IN THE RULES OF THE TENNESSEE STATE BOARD OF EXAMINERS FOR LAND SURVEYORS.

Mark E. Patterson
MARK E. PATTERSON, RLS #3010

08/15/2023

DATE



0' 40' 80'
1 INCH = 40' FEET

PREPARED BY:



PREPARED FOR:



PREPARED FOR:



REVISIONS

REV.	DATE	DESCRIPTION
A	7.26.23	PRELIMINARY ISSUE
B	8.14.23	FA NUMBER
0	8.15.23	ISSUED AS FINAL

SITE INFORMATION:

I-65
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401
MAURY COUNTY

TAX PARCEL NUMBER:
093-001.01

PROPERTY OWNER:
MARKETING GROUP 1 LLC
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401

SOURCE OF TITLE:
BOOK R2008, PAGE 785

FA NUMBER:
10068977

POD NUMBER: 23-159495
CHECKED BY: MEP
DRAWN BY: CPM
SURVEY DATE: 7.17.23
PLAT DATE: 7.26.23

SHEET TITLE:
SITE SURVEY
THIS DOES NOT REPRESENT A
BOUNDARY SURVEY OF THE
PARENT PARCEL

SHEET NUMBER: (4 pages)

B-1.1

GLOBAL POSITIONING SYSTEMS NOTE

1. RANDOM TRAVERSE CONTROL MONUMENTS WERE SET USING GPS METHODS. A PORTION OF THE TOPOGRAPHY AND FOUND BOUNDARY MONUMENTS WERE ALSO LOCATED USING GPS METHODS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (INET GPS NETWORK), NAD 83 TENNESSEE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID 20B. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.02' TO 0.05' HORIZONTALLY. SPECTRA PRECISION SP85 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.
3.

GENERAL NOTES

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

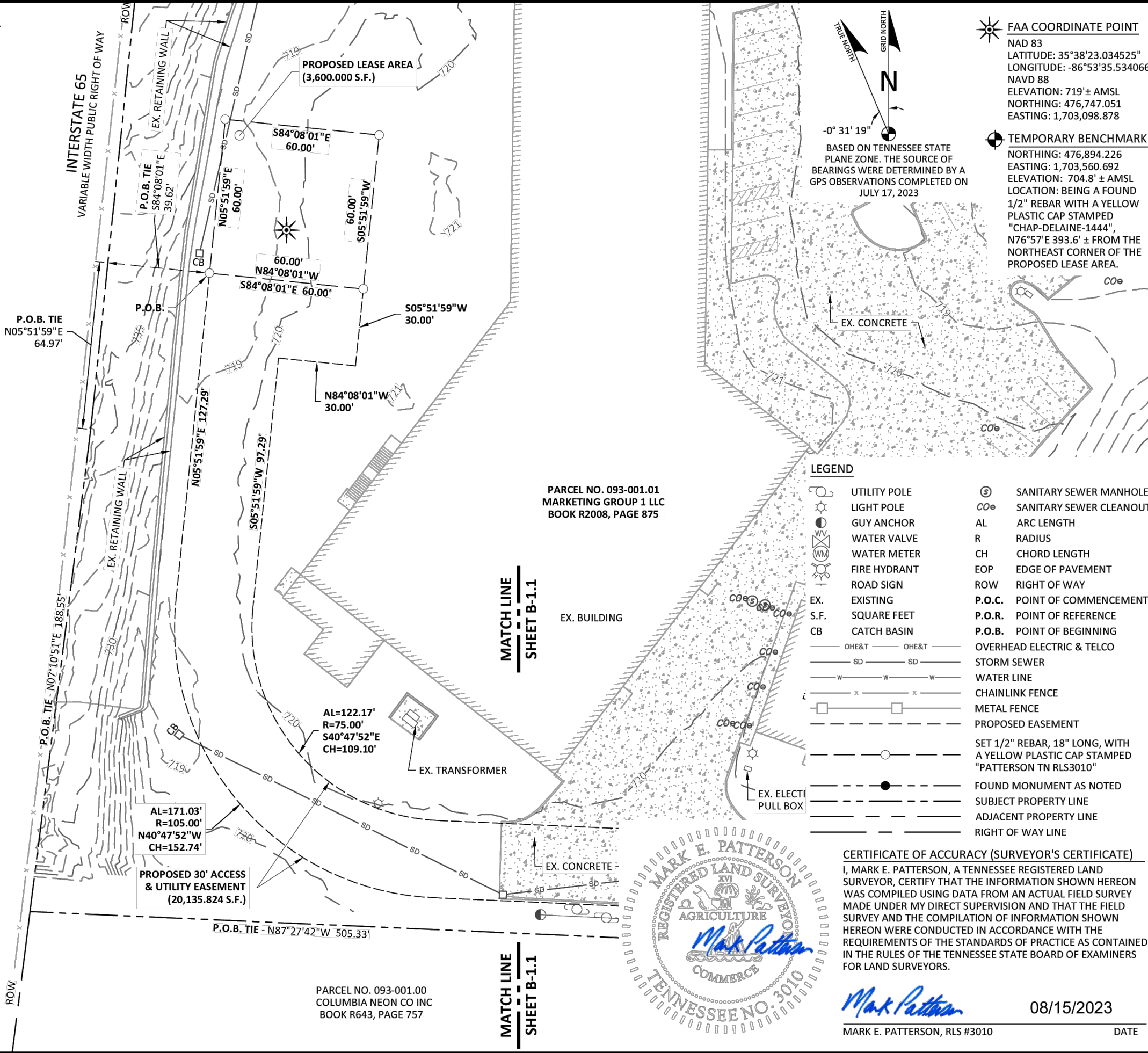
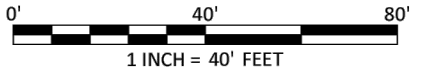
THIS SURVEY IS FOR THE PROPOSED LEASE AREA AND THE PROPOSED ACCESS & UTILITY EASEMENT ONLY, AND NO BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.03', FOR A PRECISION OF 1:42,871 AND HAS NOT BEEN ADJUSTED.

THIS PROPERTY IS SUBJECT TO ANY RECORDED EASEMENTS AND/OR RIGHTS OF WAY SHOWN HEREON OR NOT.

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE PARENT PARCEL, THE PROPOSED LEASE AREA AND THE PROPOSED ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100 YEAR FLOOD PLAIN (ZONE "X") PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 47119C0195E, DATED APRIL 16, 2007.



0° 31' 19"

BASED ON TENNESSEE STATE PLANE ZONE. THE SOURCE OF BEARINGS WERE DETERMINED BY A GPS OBSERVATIONS COMPLETED ON JULY 17, 2023

FAA COORDINATE POINT

NAD 83
LATITUDE: 35°38'23.034525"
LONGITUDE: -86°53'35.534066"
NAVD 88
ELEVATION: 719'± AMSL
NORTHING: 476,747.051
EASTING: 1,703,098.878

TEMPORARY BENCHMARK

NORTHING: 476,894.226
EASTING: 1,703,560.692
ELEVATION: 704.8' ± AMSL
LOCATION: BEING A FOUND 1/2" REBAR WITH A YELLOW PLASTIC CAP STAMPED "CHAP-DELAINE-1444", N76°57'E 393.6' ± FROM THE NORTHEAST CORNER OF THE PROPOSED LEASE AREA.

LEGEND	
	UTILITY POLE
	LIGHT POLE
	GUY ANCHOR
	WATER VALVE
	WATER METER
	FIRE HYDRANT
	ROAD SIGN
EX.	EXISTING
S.F.	SQUARE FEET
CB	CATCH BASIN
	O&E&T
	SD
	W
	CHAINLINK FENCE
	METAL FENCE
	PROPOSED EASEMENT
	SET 1/2" REBAR, 18" LONG, WITH A YELLOW PLASTIC CAP STAMPED "PATTERSON TN RLS3010"
	FOUND MONUMENT AS NOTED
	SUBJECT PROPERTY LINE
	ADJACENT PROPERTY LINE
	RIGHT OF WAY LINE
	SANITARY SEWER MANHOLE
	SANITARY SEWER CLEANOUT
AL	ARC LENGTH
R	RADIUS
CH	CHORD LENGTH
EOP	EDGE OF PAVEMENT
ROW	RIGHT OF WAY
P.O.C.	POINT OF COMMENCEMENT
P.O.R.	POINT OF REFERENCE
P.O.B.	POINT OF BEGINNING
	OVERHEAD ELECTRIC & TELCO
	STORM SEWER
	WATER LINE
	PROPOSED EASEMENT
	SET 1/2" REBAR, 18" LONG, WITH A YELLOW PLASTIC CAP STAMPED "PATTERSON TN RLS3010"
	FOUND MONUMENT AS NOTED
	SUBJECT PROPERTY LINE
	ADJACENT PROPERTY LINE
	RIGHT OF WAY LINE

CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)

I, MARK E. PATTERSON, A TENNESSEE REGISTERED LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREON WERE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARDS OF PRACTICE AS CONTAINED IN THE RULES OF THE TENNESSEE STATE BOARD OF EXAMINERS FOR LAND SURVEYORS.



08/15/2023

MARK E. PATTERSON, RLS #3010

DATE

PREPARED BY:

11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:

PREPARED FOR:

REVISIONS

REV.	DATE	DESCRIPTION
A	7.26.23	PRELIMINARY ISSUE
B	8.14.23	FA NUMBER
0	8.15.23	ISSUED AS FINAL

SITE INFORMATION:

I-65

1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401
MAURY COUNTY

TAX PARCEL NUMBER:
093-001.01

PROPERTY OWNER:
MARKETING GROUP 1 LLC
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401

SOURCE OF TITLE:
BOOK R2008, PAGE 785

FA NUMBER:
10068977

POD NUMBER: 23-159495

CHECKED BY: MEP

DRAWN BY: CPM

SURVEY DATE: 7.17.23

PLAT DATE: 7.26.23

SHEET TITLE:

SITE SURVEY

THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (4 pages)

B-1.2

LEGAL DESCRIPTIONS

PROPOSED LEASE AREA

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED LEASE AREA, LAYING AND BEING IN THE FOURTH CIVIL DISTRICT OF MAURY COUNTY, TENNESSEE, BEING A PART OF THE PARCEL CONVEYED TO MARKETING GROUP 1 LLC AS RECORDED IN BOOK R2008, PAGE 875, PARCEL NO. 093-001.01, IN THE OFFICE OF THE REGISTER OF DEEDS OF MAURY COUNTY, TENNESSEE, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON TENNESSEE STATE PLANE COORDINATE SYSTEM, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE INET REAL TIME GPS NETWORK COMPLETED ON JULY 17, 2023.

COMMENCING AT A FOUND 1/2" REBAR WITH A YELLOW PLASTIC CAP STAMPED "WEAKLEY-BROTHERS" IN THE SOUTHEAST CORNER OF PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AS RECORDED IN BOOK R2008, PAGE 875, PARCEL ID: 093-001.01, SAID REBAR BEING IN THE WEST RIGHT OF WAY LINE OF HARLEY DAVIDSON BOULEVARD, SAID REBAR FOR REFERENCE BEING ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 530.00', ARC LENGTH OF 113.38', THE CHORD OF WHICH BEARS S11°57'39"W 113.16' AND S05°49'56"W 324.92' ALONG THE EAST LINE OF AFOREMENTIONED PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND THE WEST RIGHT OF WAY LINE OF HARLEY DAVIDSON BOULEVARD FROM A FOUND 1/2" REBAR WITH A YELLOW PLASTIC CAP STAMPED "CHAP-DELAINE-1444" IN THE NORTHEAST CORNER OF SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC; THENCE WITH THE SOUTH LINE OF SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC, N87°27'42"W 505.33' TO THE SOUTHWEST CORNER OF SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC, ALSO BEING IN THE EAST RIGHT OF WAY LINE OF INTERSTATE 65; THENCE WITH THE WEST LINE OF SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND SAID WEST RIGHT OF WAY LINE OF INTERSTATE 65, N07°10'51"E 188.55' TO A POINT; THENCE CONTINUING ALONG SAID WEST LINE OF PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND EAST RIGHT OF WAY LINE OF INTERSTATE 65, N05°51'59"E 64.97' TO A POINT; THENCE LEAVING THE WEST LINE OF SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND SAID EAST RIGHT OF WAY LINE OF INTERSTATE 65 AND TRAVERSING SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC, S84°08'01"E 39.62' TO A SET 1/2" REBAR, 18" LONG, WITH A YELLOW PLASTIC CAP STAMPED "PATTERSON TN RLS3010", HEREAFTER REFERRED TO AS A "SET IPC", IN THE SOUTHWEST CORNER OF THE PROPOSED LEASE AREA AND BEING **THE TRUE POINT OF BEGINNING**; THENCE N05°51'59"E 60.00' TO A "SET IPC"; THENCE S84°08'01"E 60.00' TO A "SET IPC"; THENCE S05°51'59"W 60.00' TO A "SET IPC"; THENCE N84°08'01"W 60.00' **TO THE POINT OF BEGINNING** CONTAINING 3,600.000 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, RLS #3010 DATED JULY 17, 2023.

PROPOSED 30' ACCESS & UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 30' ACCESS & UTILITY EASEMENT, LAYING AND BEING IN THE FOURTH CIVIL DISTRICT OF MAURY COUNTY, TENNESSEE, BEING A PART OF THE PARCEL CONVEYED TO MARKETING GROUP 1 LLC AS RECORDED IN BOOK R2008, PAGE 875, PARCEL NO. 093-001.01, IN THE OFFICE OF THE REGISTER OF DEEDS OF MAURY COUNTY, TENNESSEE, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON TENNESSEE STATE PLANE COORDINATE SYSTEM, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE INET REAL TIME GPS NETWORK COMPLETED ON JULY 17, 2023.

COMMENCING AT A FOUND 1/2" REBAR WITH A YELLOW PLASTIC CAP STAMPED "WEAKLEY-BROTHERS" IN THE SOUTHEAST CORNER OF PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AS RECORDED IN BOOK R2008, PAGE 875, PARCEL ID: 093-001.01, SAID REBAR BEING IN THE WEST RIGHT OF WAY LINE OF HARLEY DAVIDSON BOULEVARD, SAID REBAR FOR REFERENCE BEING ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 530.00', ARC LENGTH OF 113.38', THE CHORD OF WHICH BEARS S11°57'39"W 113.16' AND S05°49'56"W 324.92' ALONG THE EAST LINE OF AFOREMENTIONED PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND THE WEST RIGHT OF WAY LINE OF HARLEY DAVIDSON BOULEVARD FROM A FOUND 1/2" REBAR WITH A YELLOW PLASTIC CAP STAMPED "CHAP-DELAINE-1444" IN THE NORTHEAST CORNER OF SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC; THENCE WITH THE SOUTH LINE OF SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC, N87°27'42"W 505.33' TO THE SOUTHWEST CORNER OF SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC, ALSO BEING IN THE EAST RIGHT OF WAY LINE OF INTERSTATE 65; THENCE WITH THE WEST LINE OF SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND SAID WEST RIGHT OF WAY LINE OF INTERSTATE 65, N07°10'51"E 188.55' TO A POINT; THENCE CONTINUING ALONG SAID WEST LINE OF PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND EAST RIGHT OF WAY LINE OF INTERSTATE 65, N05°51'59"E 64.97' TO A POINT; THENCE LEAVING THE WEST LINE OF SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND SAID EAST RIGHT OF WAY LINE OF INTERSTATE 65 AND TRAVERSING SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC, S84°08'01"E 39.62' TO A SET 1/2" REBAR, 18" LONG, WITH A YELLOW PLASTIC CAP STAMPED "PATTERSON TN RLS3010", HEREAFTER REFERRED TO AS A "SET IPC", IN THE SOUTHWEST CORNER OF THE PROPOSED LEASE AREA AND BEING **THE TRUE POINT OF BEGINNING**; THENCE S84°08'01"E 60.00' TO A "SET IPC" IN THE SOUTHEAST CORNER OF SAID PROPOSED LEASE AREA; THENCE S05°51'59"W 30.00'; THENCE N84°08'01"W 30.00'; THENCE S05°51'59"W 97.29'; THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 75.00', ARC LENGTH OF 122.17', THE CHORD OF WHICH BEARS S40°47'52"E 109.10'; THENCE S87°27'42"E 351.74' TO A POINT IN THE EAST LINE OF THE AFOREMENTIONED PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND THE WEST RIGHT OF WAY LINE OF HARLEY DAVIDSON BOULEVARD; THENCE WITH SAID EAST LINE OF THE PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND THE WEST RIGHT OF WAY LINE OF HARLEY DAVIDSON BOULEVARD, S05°49'56"W 30.05' TO A POINT; THENCE LEAVING SAID EAST LINE OF THE PROPERTY CONVEYED TO MARKETING GROUP 1 LLC AND THE WEST RIGHT OF WAY LINE OF HARLEY DAVIDSON BOULEVARD AND TRAVERSING SAID PROPERTY CONVEYED TO MARKETING GROUP 1 LLC, N87°27'42"W 350.02'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 105.00', ARC LENGTH OF 171.03', THE CHORD OF WHICH BEARS N40°47'52"W 152.74'; THENCE N05°51'59"E 127.29' **TO THE POINT OF BEGINNING** CONTAINING 20,135.824 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, RLS #3010 DATED JULY 17, 2023.

CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)

I, MARK E. PATTERSON, A TENNESSEE REGISTERED LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREON WERE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARDS OF PRACTICE AS CONTAINED IN THE RULES OF THE TENNESSEE STATE BOARD OF EXAMINERS FOR LAND SURVEYORS.

Mark E. Patterson

08/15/2023

MARK E. PATTERSON, RLS #3010

DATE



PREPARED BY:



PREPARED FOR:



PREPARED FOR:



REVISIONS

REV.	DATE	DESCRIPTION
A	7.26.23	PRELIMINARY ISSUE
B	8.14.23	FA NUMBER
0	8.15.23	ISSUED AS FINAL

SITE INFORMATION:

I-65
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401
MAURY COUNTY

TAX PARCEL NUMBER:
093-001.01

PROPERTY OWNER:
MARKETING GROUP 1 LLC
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401

SOURCE OF TITLE:
BOOK R2008, PAGE 785

FA NUMBER:
10068977

POD NUMBER:	23-159495
CHECKED BY:	MEP
DRAWN BY:	CPM
SURVEY DATE:	7.17.23
PLAT DATE:	7.26.23

SHEET TITLE:

SITE SURVEY
THIS DOES NOT REPRESENT A
BOUNDARY SURVEY OF THE
PARENT PARCEL

SHEET NUMBER: (4 pages)

B-1.3

- A1

PARCEL NO.: 093-001.01
MARKETING GROUP 1 LLC
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401
- B1

PARCEL NO.: 072-053.01
BEAR CREEK PIKE LLC
P.O. BOX 681194
FRANKLIN, TN 37068
- C1

PARCEL NO.: 072-053.02
COLUMBIA HDB LLC
P.O. BOX 681194
FRANKLIN, TN 37068
- D1

PARCEL NO.: 093A-026.00
CHR LAND LLC
1081 CRANFORD HOLLOW RD
COLUMBIA, TN 38401
- E1

PARCEL NO.: 093A-027.00
CHR LAND LLC
1081 CRANFORD HOLLOW RD
COLUMBIA, TN 38401
- F1

PARCEL NO.: 093-002.01
CHR LAND LLC
1081 CRANFORD HOLLOW RD
COLUMBIA, TN 38401
- G1

PARCEL NO.: 093-001.00
COLUMBIA NEON CO INC
102 NASHVILLE HWY
COLUMBIA, TN 38401
- H1

PARCEL NO.: 092-014.00
HOLT MATTIE LORENE
1543 ROCK SPRINGS RD
COLUMBIA, TN 38401
- I1

PARCEL NO.: 092-013.00
KING LAND INVESTMENTS LLC
P O BOX 705
SHELBYVILLE, TN 37162

GENERAL NOTE:

1. ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE RECORDS OF THE MAURY COUNTY TENNESSEE ASSESSOR'S OFFICE ON AUGUST 3, 2023. THE ASSESSOR'S RECORDS MAY NOT REFLECT THE CURRENT OWNERS AND ADDRESSES DUE TO THE INACCURACIES AND TIME LAPSE IN UPDATING FILES. POD AND THE COUNTY ASSESSOR EXPRESSLY DISCLAIMS ANY WARRANTY FOR THE CONTENT AND ANY ERRORS CONTAINED IN THEIR FILES
2. THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY
3. NOT FOR RECORDING OR PROPERTY TRANSFER.

CERTIFICATE

I HEREBY CERTIFY THAT THIS EXHIBIT PERTAINING TO THE ADJOINING PROPERTY OWNERS PER ASSESSOR'S RECORDS WAS PREPARED UNDER MY DIRECT SUPERVISION. NO BOUNDARY SURVEYING OF ANY KIND HAS BEEN PERFORMED FOR THIS EXHIBIT.

Mark E. Patterson

08/14/2023

MARK E. PATTERSON, RLS #3010

DATE



PROPOSED LEASE AREA

PROPOSED TEMPORARY "TOWER ON WHEELS"

BUSINESS

INTERSTATE 65

PROPOSED ACCESS & UTILITY EASEMENT

HARLEY DAVIDSON BOULEVARD

NOTE:
PARCEL NUMBERS ARE OF RECORD IN
THE MAURY COUNTY ASSESSOR'S OFFICE.

PREPARED BY:

**POD**
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:



PREPARED FOR:



REVISIONS		
REV.	DATE	DESCRIPTION
1	8.9.23	OLC COMMENTS
2	8.14.23	FA NUMBER

SITE INFORMATION:

I-65
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401
MAURY COUNTY

TAX PARCEL NUMBER:
093-001.01

PROPERTY OWNER:
MARKETING GROUP 1 LLC
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401

SOURCE OF TITLE:
BOOK R2008, PAGE 785

FA NUMBER:

10068977

POD NUMBER: 23-159686

CHECKED BY: MEP

DRAWN BY: ADM

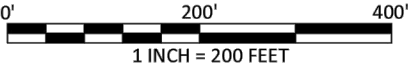
PLAT DATE: 8.3.23

SHEET TITLE:

ABUTTERS MAP

SHEET NUMBER: (1 pages)

B-2



NOTES:

THE CONTRACTOR MUST PROVIDE CLOSE-OUT DOCUMENTS AT THE FINAL INSPECTION WALK BEFORE PAYMENTS WILL BE MADE.

GENERAL REQUIREMENTS:

1.

THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY. SPECIFICATIONS AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES.
2.

THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS, THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3.

THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT&T'S REPRESENTATIVE OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK.
4.

THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5.

THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK AND FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT.
6.

THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT.
7.

THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS OTHERWISE NOTED OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8.

THE CONTRACTOR SHALL MAINTAIN A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE, UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9.

THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
10.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
11.

THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC., DURING SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
12.

THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS/RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY.
13.

THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT SECTIONS OF THE APPLICABLE BUILDING CODES AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
14.

THE CONTRACTOR SHALL NOTIFY AT&T'S REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL THAT CONFLICT IS RESOLVED BY AT&T'S REPRESENTATIVE.
15.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS.
16.

THE CONTRACTOR SHALL NOTIFY THE RF ENGINEER FOR ANTENNA AZIMUTH VERIFICATION (DURING ANTENNA INSTALLATION) PRIOR TO COORDINATING SITE SWEEPING.
17.

THE CONTRACTOR SHALL SUBMIT, AT THE END OF THE PROJECT, A COMPLETE SET OF AS-BUILT DRAWINGS TO AT&T'S PROJECT MANAGER.

SITE WORK AND DRAINAGE

EARTHWORK, EXCAVATION AND GRADING

PART 1 GENERAL

- 1.01

WORK INCLUDED: REFER TO SURVEY AND SITE PLAN FOR WORK INCLUDED.
- 1.02

RELATED WORK

A.

CONSTRUCTION OF EQUIPMENT FOUNDATIONS

B.

INSTALLATION OF ANTENNA SYSTEM

C.

SITE PREPARATION
- 1.03

DESCRIPTIONS

A.

ACCESS ROAD, TURNAROUND AREAS AND SITES ARE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR MATERIAL AND EQUIPMENT DELIVERIES AND MAINTENANCE PERSONNEL ACCESS.
- 1.04

QUALITY ASSURANCE

A.

APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION (USE AS NEEDED)

B.

VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT WILL BE PLACED AND MAINTAINED AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.
- 1.05

SEQUENCING

A.

CONTRACTOR IS RESPONSIBLE FOR LAYOUT AND CONSTRUCTION STAKING.

B.

GRUB THE COMPLETE ROAD AND SITE AREA PRIOR TO FOUNDATION CONSTRUCTION OR PLACEMENT OF BACK FILL OR SUB-BASE MATERIAL.

C.

CONSTRUCT TEMPORARY CONSTRUCTION ZONE ALONG ACCESS DRIVE.

D.

THE SITE AREA WILL BE BROUGHT TO SUB-BASE COURSE ELEVATION AND THE ACCESS ROAD TO BASE COURSE ELEVATION PRIOR TO FORMING FOUNDATIONS.

E.

APPLY SILT STERILIZER PRIOR TO PLACING BASE MATERIALS.

F.

IF REQUIRED, GRADE, SEED, FERTILIZE AND MULCH DISTURBED AREAS IMMEDIATELY AFTER BRINGING THE SITE AND ACCESS ROAD TO BASE ELEVATION. WATER TO ENSURE GROWTH.

G.

REMOVE EXCESS GRAVEL FROM TEMPORARY CONSTRUCTION ZONE.

H.

AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL STERILIZER TO THE STONE SURFACES.
- 1.06

SUBMITTALS

A.

BEFORE CONSTRUCTION

1.

IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO COPIES OF THE LANDSCAPING PLAN UNDER NURSERY LETTERHEAD. IF A LANDSCAPE ALLOWANCE IS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS UNDER NURSERY LETTERHEAD (REFER TO SITE PLAN FOR LANDSCAPING REQUIREMENT).

2.

SUBMIT FOR APPROVAL, 1/2 CUBIC FOOT OF THE PROPOSED SURFACE COURSE MATERIAL.

3.

LANDSCAPING WARRANTY STATEMENT, IF REQUIRED.

PART 2 PRODUCTS

- 2.01

MATERIALS

A.

ROAD AND SITE MATERIALS: FILL MATERIAL SHALL BE ACCEPTABLE, SELECT FILL AND SHALL BE IN ACCORDANCE WITH LOCAL DEPARTMENT OF HIGHWAY AND PUBLIC TRANSPORTATION STANDARD SPECIFICATIONS.

B.

SOIL STERILIZER SHALL BE EPA REGISTERED OF LIQUID COMPOSITION AND OF PRE-EMERGENCE DESIGN.

C.

SOIL STABILIZER FABRIC SHALL BE MIRAFI OR EQUAL - 500% AT ACCESS ROAD AND SOAK AT COMPOUND.

D.

GRAVEL FILL: WELL GRADED, HARD, DURABLE, NATURAL SAND AND GRAVEL, FREE FROM ICE AND SNOW, ROOTS, SOD RUBBISH, AND OTHER DELETERIOUS OR ORGANIC MATTER. MATERIAL SHALL CONFORM TO THE FOLLOWING GRADATION REQUIREMENTS:

U.S. SIEVE NO.	PASSING BY WEIGHT
----------------	-------------------

4"	100
1/2"	50-85
#4	40-75
#10	30-60
#40	10-30
#100	5-20
#200	0-5

GRAVEL FILL TO BE PLACED IN LIFTS OF 9" MAXIMUM THICKNESS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.

- 2.02

EQUIPMENT

A.

COMPACTION SHALL BE ACCOMPLISHED BY MECHANICAL MEANS. LARGER AREAS SHALL BE COMPACTED BY SHEEP'S FOOT, VIBRATORY OR RUBBER TIED ROLLERS WEIGHING AT LEAST 5 TONS. SMALLER AREAS SHALL BE COMPACTED BY POWER-DRIVER, HAND-HELD TAMPER.

B.

PRIOR TO OTHER EXCAVATION AND CONSTRUCTION EFFORTS, GRUB ORGANIC MATERIAL TO A MINIMUM OF 6" BELOW ORIGINAL GROUND LEVEL.

C.

UNLESS OTHERWISE INSTRUCTED BY AT&T, REMOVE TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED DISPOSAL LOCATION.

D.

PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.

E.

WHERE UNSTABLE CONDITIONS ARE ENCOUNTERED, LINE THE RUBBED AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.

PART 3 EXECUTION

- 3.30

INSTALLATION

A.

THE SITE AND TURNAROUND SHALL BE AT THE SUB-BASE COURSE ELEVATION PRIOR TO FORMING FOUNDATIONS. GRADE OR FILL THE SITE AND ACCESS ROAD AS REQUIRED TO PRODUCE EVEN DISTRIBUTION OF SPOILS RESULTING FROM FOUNDATION EXCAVATIONS. THE RESULTING GRADE SHALL CORRESPOND WITH SAID SUB-BASE COURSE. ELEVATIONS ARE TO BE CALCULATED FROM FINISHED GRADES OR SLOPES INDICATED.

B.

CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF CUMULUS LEASE PROPERTY UNLESS AUTHORIZED BY PROJECT MANAGER.

C.

DO NOT CREATE DEPRESSIONS WHERE WATER MAY POND.

D.

SEED, FERTILIZER AND STRAW COVER SHALL BE APPLIED TO ALL OTHER DISTURBED AREAS AND DITCHES, DRAINAGE SWALES, NOT OTHERWISE RIPRAPPED.

E.

IF A DITCH LIES WITH SLOPES GREATER THAN TEN PERCENT, MOUNT DIVERSIONARY HEADWALLS IN THE DITCH FOR 6'-0" ABOVE THE CULVERT ENTRANCE.

F.

SEED AND FERTILIZER SHALL BE APPLIED TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND TO LOOSEN THE SOIL.

G.

SOW SEEDS IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.

H.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE GROWTH OF SEEDED AND LANDSCAPED AREAS BY WATERING TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.

3.04 FIELD QUALITY CONTROL

- A.

COMPACTION SHALL BE 90% STANDARD PROCTOR DENSITY IN ACCORDANCE WITH ASTM D-1557 FOR SITE WORK AND 95% STANDARD PROCTOR DENSITY UNDER SLAB AREAS. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE.

3.05 PROTECTION

- A.

PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1"-2". STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET SHALL BE AN ACCEPTABLE ALTERNATIVE.
- B.

ALL EXPOSED AREAS SHALL BE PROTECTED AGAINST WASHOUTS AND SOIL EROSION. STRAW BALES SHALL BE PLACED AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS.

EROSION AND SEDIMENT CONTROL NOTES:

1.

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE EPA "STORMWATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES" MANUAL, (LATEST EDITION).
2.

ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP OF CLEARING. ADD MEASURES AS NECESSARY AS DISTURBANCES INCREASE AS PART OF THE PHASED CONSTRUCTION.
3.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, ALONG WITH THE APPROVED NOTICE OF INTENT AND STORMWATER POLLUTION PREVENTION PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
4.

PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
5.

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
6.

ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES FINAL STABILIZATION IS ACHIEVED.
7.

DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
8.

CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE EXPOSURE TIME OF CLEARED SURFACE AREA. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO EARTH MOVING OPERATIONS. ALL CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY, AND AT MAXIMUM 14 CALENDAR DAYS IN DRY PERIODS AND WITHIN 24 HOURS AFTER ANY RAINFALL EXCEEDING 0.5 INCH WITHIN A 24 HOUR PERIOD.
9.

THE CONTRACTOR SHALL DESIGNATE IN WRITING THE NAME AND PHONE NUMBER OF THE INDIVIDUAL RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS.
10.

PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE REMOVED MORE THAN 20 CALENDAR DAYS PRIOR TO GRADING. ALL GRADED AREAS EXPECTED TO REMAIN UNFINISHED FOR MORE THAN 30 CALENDAR DAYS SHALL BE COVERED WITH TEMPORARY GRASS, SOD, STRAW, MULCH OR FABRIC MATS. PERMANENT SOIL STABILIZATION SHALL BE INSTALLED WITHIN 15 CALENDAR DAYS OF FINAL GRADING.
11.

THE CONTRACTOR SHALL MAINTAIN RECORDS OF EROSION CONTROL INSPECTIONS AND REPAIRS FOR A MINIMUM OF 3 YEARS AFTER CONSTRUCTION COMPLETION.
12.

MULCHING SHALL CONSIST OF LOOSE HAY OR STRAW APPLIED AT THE RATE OF 2 TONS/ACRE.
13.

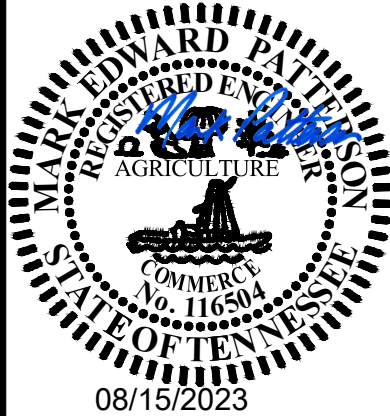
THE CONTRACTOR SHALL REMOVE SEDIMENT FROM TRAPS, SILT FENCES, SEDIMENT PONDS, ETC. AS NECESSARY AND WHEN CAPACITY HAS BEEN REDUCED BY 50%.
14.

STOCKPILES SHALL BE STABILIZED AND PROTECTED FROM EROSION.

PREPARED BY:



PREPARED FOR:



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SHEET TITLE:

GENERAL NOTES
& SPECIFICATIONS

SHEET NUMBER:

GN-1

SPECIAL CONSTRUCTION — ANTENNA
INSTALLATION

PART 1 GENERAL

1.01 CODES REQUIREMENTS

- A. INSTALL ANTENNA, COAXIAL CABLES, TMA'S, GROUNDING SYSTEM, AND ALL OTHER EQUIPMENT SHOWN ON THESE DRAWINGS OR THE AT&T RF DESIGN IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS IN EFFECT AT THE PROJECT LOCATION AND RECOMMENDATIONS OF STATE AND LOCAL BUILDING CODES HAVING JURISDICTION OVER SPECIFIC PORTIONS OF WORK. THESE CODES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
- EIA — ELECTRONIC INDUSTRIES ASSOCIATION RS-22. STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
 - FAA — FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR AC 70/7480—IH, CONSTRUCTION MARKING AND LIGHTING.
 - FCC — FEDERAL COMMUNICATION COMMISSION RULES AND REGULATIONS FORM 715, OBSTRUCTION MARKING AND LIGHTING SPECIFICATION FOR ANTENNA STRUCTURES.
 - AISC — AMERICAN INSTITUTE OF STEEL CONSTRUCTION FOR STRUCTURAL JOINTS USING ASTM 1325 OR A490 BOLTS.
 - NEC — NATIONAL ELECTRIC CODE — ON TOWER LIGHTING KITS.
 - UL — UNDERWRITER'S LABORATORIES APPROVED ELECTRICAL PRODUCTS.
 - IN ALL CASES, PART 77 OF THE FAA RULES AND PARTS 17 AND 22 OR THE FCC RULES ARE APPLICABLE AND IN THE EVENT OF CONFLICT, SUPERSEDE ANY OTHER STANDARDS OR SPECIFICATIONS.
 - LIFE SAFETY CODE NFPA, LATEST EDITION.

1.02 WORK INCLUDED

- A. INSTALLATION OF GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
- B. INSTALLATION OF GALVANIZED STEEL CABLE LADDER AS INDICATED ON DRAWINGS.
- C. INSTALLATION OF ALL ANTENNAS, TMA'S, COAXIAL CABLES, AND OTHER EQUIPMENT AS SPECIFIED ON THE AT&T RF DESIGN.
- D. INSTALLATION OF PROPER GROUNDING FOR LINES, ANTENNAS AND OTHER NEW EQUIPMENT.
- E. TESTING OF ALL LINES, ANTENNAS, AND OTHER EQUIPMENT PER AT&T SPECIFICATIONS.
- F. DAILY CLEAN UP AND REMOVAL OF ALL DEBRIS, EXCESS MATERIALS, AND TRASH FROM THE SITE.
- G. RELATED WORK
- FURNISH THE FOLLOWING WORK AS SPECIFIED IN CONSTRUCTION DOCUMENTS, BUT COORDINATE WITH OTHER TRADES PRIOR TO BID:
 - FLASHING OF OPENINGS INTO OUTSIDE WALLS.
 - SEALING AND CAULKING ALL OPENINGS.
 - PAINTING.
 - CUTTING AND PATCHING.

1.03 GENERAL

- A. NO WORK SHALL BE PERFORMED ON THE SITE BY THE CONTRACTOR WITHOUT A FINAL RE CONFIGURATION SHEET.
- B. CONTRACTOR IS RESPONSIBLE TO REVIEW AND ADHERE TO RF EXPOSURE OCCUPATIONAL M.O.P. PROVIDED BY OWNER.

PART 2 PRODUCTS

2.01 EQUIPMENT

- A. UNLESS SPECIFIED OTHERWISE BY OWNER, ANTENNAS, COAXIAL CABLES, TMA'S, JUMPERS, CONNECTORS, GROUND KITS, AND ATTACHMENT HARDWARE ARE FURNISHED BY OTHERS UNDER SEPARATE CONTRACT.
- B. ALL WEATHERPROOFING TO BE SUPPLIED BY CONTRACTOR.

PART 3 EXECUTION

3.01 INSTALLATION

- A. ANY EXISTING CONDITIONS THAT WOULD PREVENT THE INSTALLATION OF THE MOUNTS, COAXIAL CABLES, ANTENNAS, OR ANY OTHER EQUIPMENT TO BE INSTALLED ACCORDING TO THE SPECIFIED RE CONFIGURATION OR THAT WOULD CAUSE SHADOWING, SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER IMMEDIATELY.
- B. THE CONTRACTOR SHOULD CHECK TO VERIFY THAT NO PART OF THE TOWER STRUCTURE OR OTHER OBSTRUCTIONS EXISTS WITHIN A 180 DEGREE VIEW OF THE ANTENNAS AND MOUNT.
- C. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND AT&T SPECIFICATIONS.
- D. INSTALL GALVANIZED STEEL ANTENNA MOUNTS.
- E. INSTALL COAXIAL CABLES AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
- F. BENDS IN COAXIAL CABLES ARE TO BE KEPT TO A MINIMUM. UNDER NO CIRCUMSTANCES SHOULD COAXIAL CABLE BE BENT TO A RADIUS LESS THAN FOLLOWS:

CABLE SIZE	MINIMUM BENDING RADIUS
1/2" SUPERFLEX	1.25"
1/2"	5"
3/8"	3.75"
5/8"	8"
7/8"	10"
1-1/4"	15"
1-5/8"	20"

- G. JUMPERS SHALL BE INSTALLED WITH MINIMUM BENDS. MINIMUM BENDING RADIUS FOR 1/2" JUMPER IS 5". JUMPERS SHALL NOT BE COILED.
- H. ANTENNA JUMPERS SHALL BE SUPPORTED AT MAXIMUM 3' SPACING WITH SUPPORT SUPPLIED WITHIN 18" OF EACH END OF THE JUMPER.
- I. CABLES THAT EXCEED THE MINIMUM BENDING RADIUS, ARE CRUSHED, OR ARE OTHERWISE DAMAGED SHALL BE DISCARDED AND REPLACED AT CONTRACTOR'S EXPENSE.
- J. DO NOT REMOVE DUST CAPS FROM CONNECTORS OF JUMPERS UNTIL CONNECTION IS READY TO BE MADE. USE CARE IN MAKING CONNECTIONS. VISUALLY INSPECT THE CENTER PIN.
- K. ANTENNAS SHALL BE INSTALLED WITH DOWNTILT BRACKETS AND HEAVY DUTY CLAMPS SUPPLIED BY THE MANUFACTURER.

3.02 GROUNDING

- A. ANTENNA AND COAXIAL CABLE GROUNDING:
- GROUPS SHALL BE INSTALLED ON THE COAXIAL CABLE APPROXIMATELY TWO FEET ABOVE THE VERTICAL TO HORIZONTAL TRANSITION.
 - ALL EXTERIOR #6 GREEN GROUND WIRE DAISY CHAIN CONNECTIONS TO BE WEATHER SEALED WITH APPROVED WEATHERPROOFING KIT.
 - ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS).
 - ALL COAX GROUNDS SHALL BE BONDED TO THE GROUND BAR UTILIZING TWO HOLE LUGS.
 - ALL COAX GROUND LEADS ARE TO BE INSTALLED WITH 2" OF SLACK TO ACCOMMODATE MOVEMENT IN THE LINES.
 - ALL COAX GROUNDS SHALL BE INSTALLED SUCH THAT THE LEADS FALL DOWNWARD TO THE CONNECTION TO THE GROUND BAR.
- B. ALL ANTENNA MOUNTING PIPES TO BE BONDED TO TOWER GROUND BAR.

3.03 COLOR CODING

- A. ALL JUMPERS, COAX RUNS, AND BIAS—T POWER CABLES TO HAVE COLOR CODE BANDS INSTALLED ON BOTH ENDS.
- B. COLOR CODE BANDS TO BE INSTALLED UTILIZING MINIMUM THREE WRAPS OF 3M-35 TAPE. COLOR CODE BANDS ON MAIN COAX CABLES AT TOP OF TOWER TO BE INSTALLED UTILIZING MINIMUM 3" WIDE BANDS WITH MINIMUM 3/4" SPACING BETWEEN BANDS. COLOR CODE BANDS NEAR GROUND LEVEL TO BE INSTALLED UTILIZING 3/4" WIDE BANDS.
- C. ON 'COMMON' ELEMENTS, THOSE CARRYING BOTH 850MHz AND 1900MHz SIGNALS, THE COLOR CODE IS TO MATCH THE 850MHz COLOR CODE (NO WHITE).

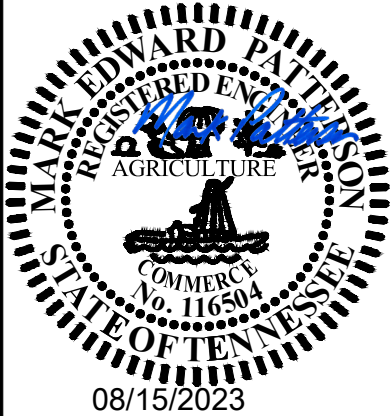
3.04 INSPECTION, TESTING, AND CLOSE OUT

- A. MOUNT ORIENTATION MUST BE LESS THAN 10 DEGREES FROM THE DESIRED AZIMUTH. MOUNTS MUST NOT OVERSHADOW OR IMPEDE ANTENNAS ON OTHER SECTORS.
- B. ALL ANTENNAS MUST BE WITHIN ±3 DEGREES FROM THE SPECIFIED RF CONFIGURATION. ALL ANTENNAS IN A SECTOR MUST BE WITHIN ±1 DEGREE FROM OTHER ANTENNAS IN THE SAME SECTOR.
- C. EACH ANTENNA MUST HAVE THE DOWNTILT VERIFIED UTILIZING A DIGITAL LEVEL. A PHOTOGRAPH OF THE ANTENNA WITH THE LEVEL IN PLACE MUST BE TAKEN FOR EACH ANTENNA. ALL PHOTOGRAPHS MUST CLEARLY IDENTIFY THE SECTOR AND ANTENNA BEING DISPLAYED.
- D. THE MODEL NUMBER OF ALL NEW AND EXISTING ANTENNAS SHALL BE PHOTOGRAPHED. THIS INFORMATION SHOULD BE RECORDED ON THE JOB CHECKLIST. ALL PHOTOGRAPHS MUST CLEARLY IDENTIFY THE SECTOR AND ANTENNA BEING DISPLAYED.
- E. THE CONTRACTOR SHALL CONDUCT SWEEP TEST FOR THE COMPLETED ANTENNA SYSTEM PER AT&T REQUIREMENTS.

PREPARED BY:



PREPARED FOR:



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MAURY COUNTY

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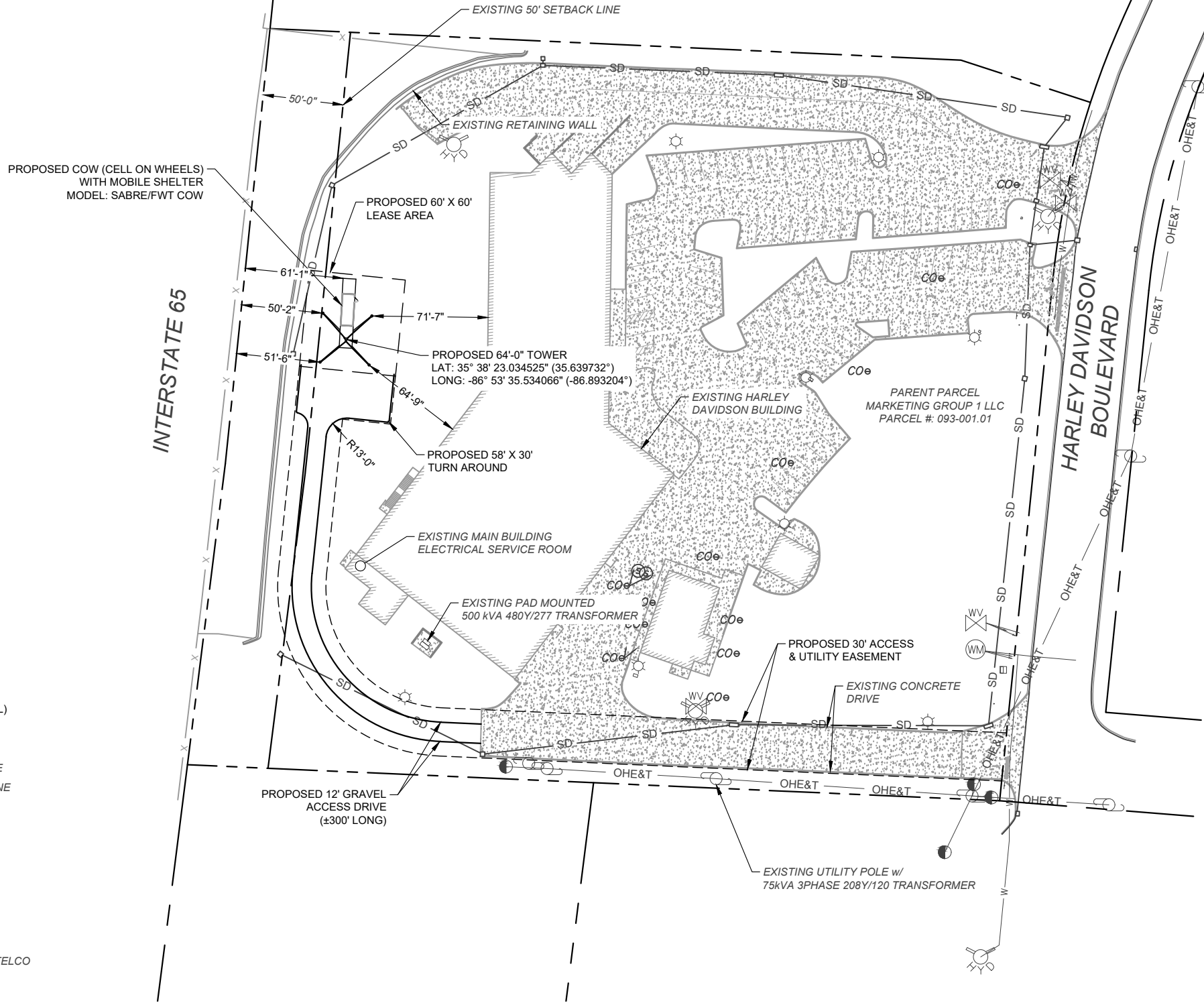
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ANTENNA
INSTALLATION
NOTES

SHEET NUMBER:

GN-2

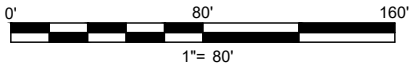


- PROPOSED ACCESS ROAD (GRAVEL)
- PROPOSED LEASE AREA
- PROPOSED EASEMENT
- EXISTING SUBJECT PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING RIGHT OF WAY LINE
- EXISTING SETBACK LINE
- EXISTING CONCRETE
- EXISTING ROAD (ASPHALT)
- EXISTING BUILDING
- EXISTING CHAINLINK FENCE
- EXISTING STORM SEWER LINE
- EXISTING WATER LINE
- EXISTING OVERHEAD ELECTRIC & TELCO
- EXISTING UTILITY POLE
- EXISTING GUY ANCHOR
- EXISTING LIGHT POLE
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING FIRE HYDRANT
- EXISTING SANITARY CLEANOUT
- EXISTING SANITARY SEWER MANHOLE

1

OVERALL SITE PLAN

SCALE:

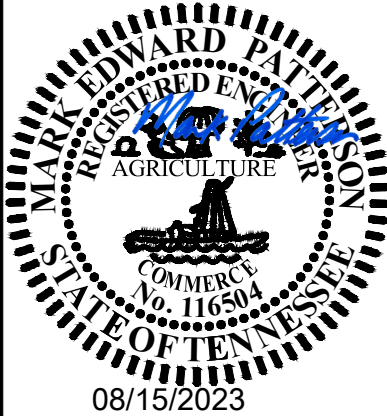


PREPARED BY:

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:

smartlink



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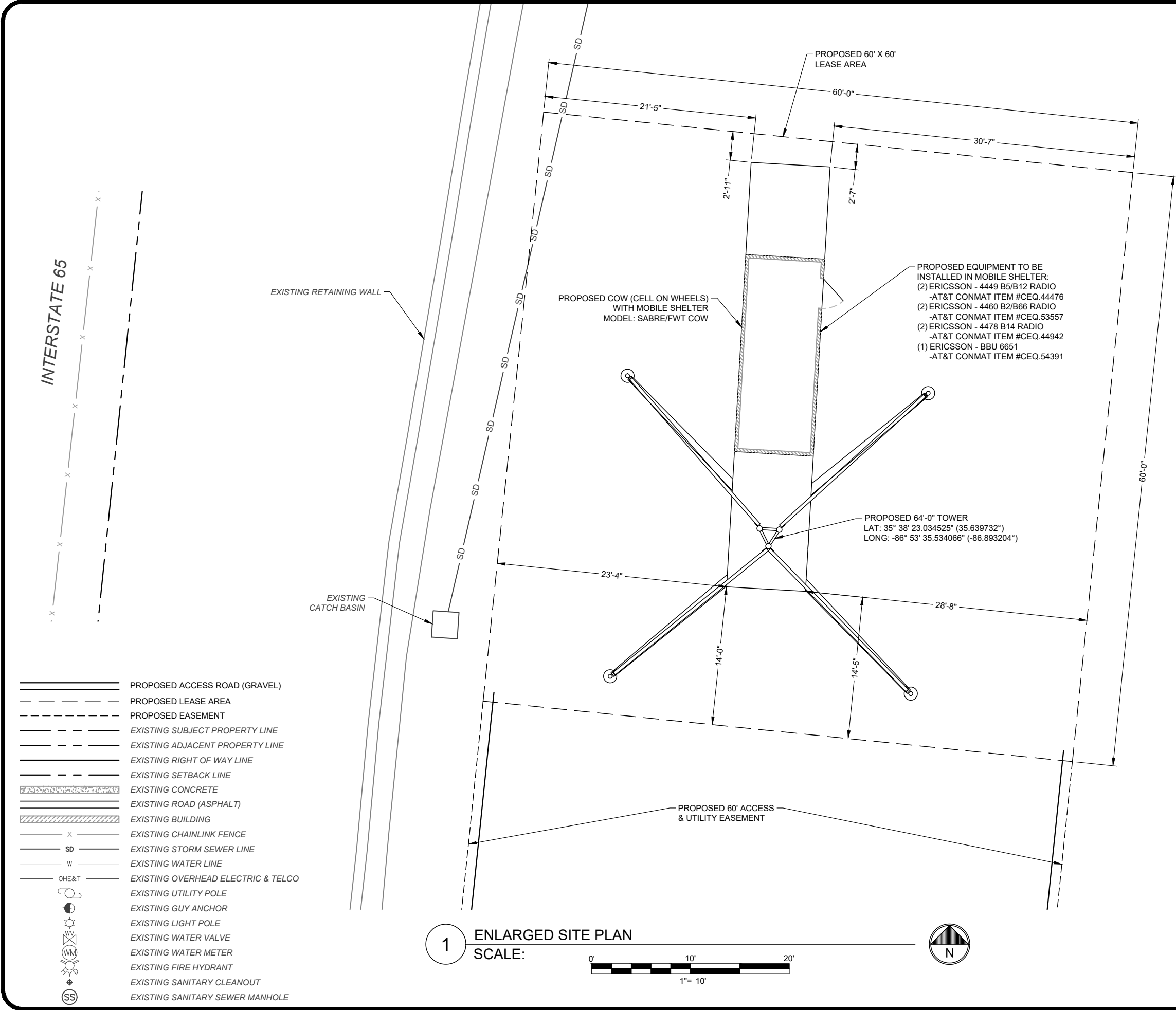
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SHEET NUMBER:

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LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:

smartlink

MARK EDWARD PATTERSON
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 116504
STATE OF TENNESSEE
08/15/2023

REVISIONS		
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OVERALL SITE PLAN

SHEET NUMBER:
C-2

TOWER NOTES:

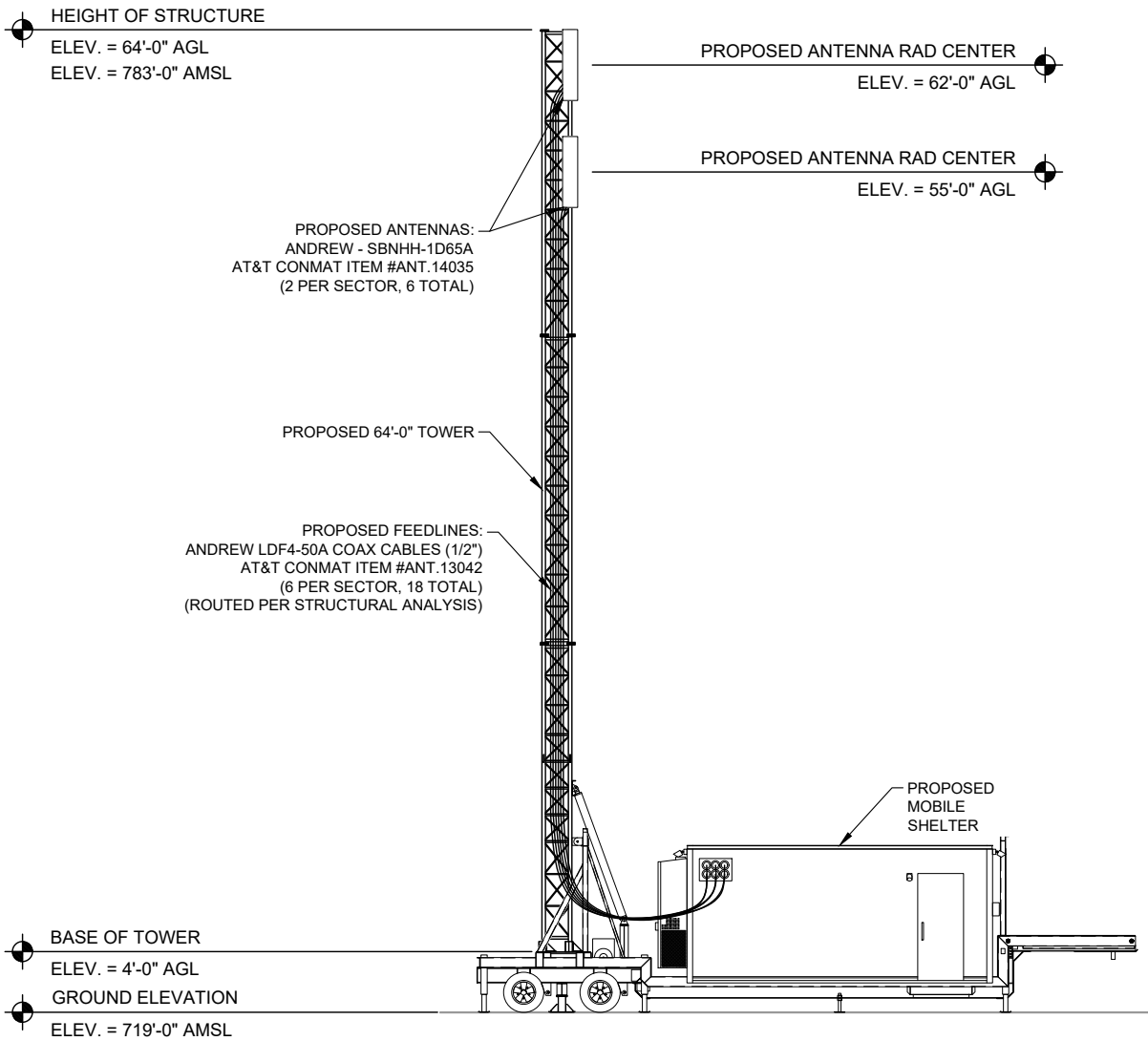
1. THE NEW TOWER, FOUNDATION, ANTENNA MOUNTS, AND ANTENNAS WERE DESIGNED BY OTHERS.
2. THE TOWER ELEVATION SHOWN IS FOR REFERENCE ONLY.
3. TOWER AND FOUNDATION DESIGN WAS NOT PROVIDED TO POWER OF DESIGN GROUP, LLC.
4. CONTRACTOR TO FIELD VERIFY ANTENNA MOUNT CONFIGURATION WITH AT&T. ALL ANTENNAS AND MOUNTING HARDWARE SHALL CONFORM TO DESIGN REQUIREMENTS PER INTERNATIONAL BUILDING CODE (LATEST EDITION) AND EIA/TIA-222-G STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES, BASIC WIND SPEED AS LISTED IN TOWER DRAWINGS.
5. SEE TOWER MANUFACTURER'S DRAWINGS FOR TOWER AND FOUNDATION DETAILS & SPECIFICATIONS.
6. MANUFACTURER'S DRAWINGS SUPERCEDE A&E DRAWINGS.

GENERAL NOTES:

1. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT: THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE AND/OR COUNTY IN WHICH IT IS TO BE PERFORMED.
2. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
4. ALL DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REVISION) PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE OWNER IMMEDIATELY IF DISCREPANCIES ARE DISCOVERED.
5. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE (1) YEAR FROM THE DATE OF ACCEPTANCE.

TOWER NOTE:

1. CARRIER LOADING SHOWN IS FOR ILLUSTRATIVE PURPOSES ONLY AND MAY NOT REPRESENT ACTUAL FINAL LOADING. PLEASE REFER TO THE LATEST RFDS OR APPLICATION FOR CONFIRMATION.
2. ONLY ONE SECTOR SHOWN FOR CLARITY



1 PROPOSED TOWER ELEVATION
SCALE: NOT TO SCALE

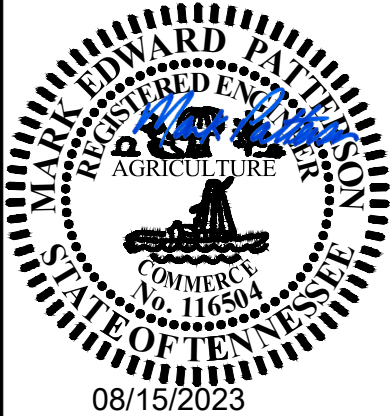
PREPARED BY:



POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:





REVISIONS		
REV.	DATE	DESCRIPTION
A	08/14/23	PRELIM ISSUE
0	08/15/23	FINAL ISSUE

SITE NAME:
I-65

SITE INFORMATION:
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401
MAURY COUNTY

FA NUMBER:
10068977

PACE:
MRTNK069905

POD PROJECT NUMBER: 23-160141

DRAWN BY: CPM

CHECKED BY: MEP

DATE: 08/15/23

SHEET TITLE:

TOWER ELEVATION

SHEET NUMBER:

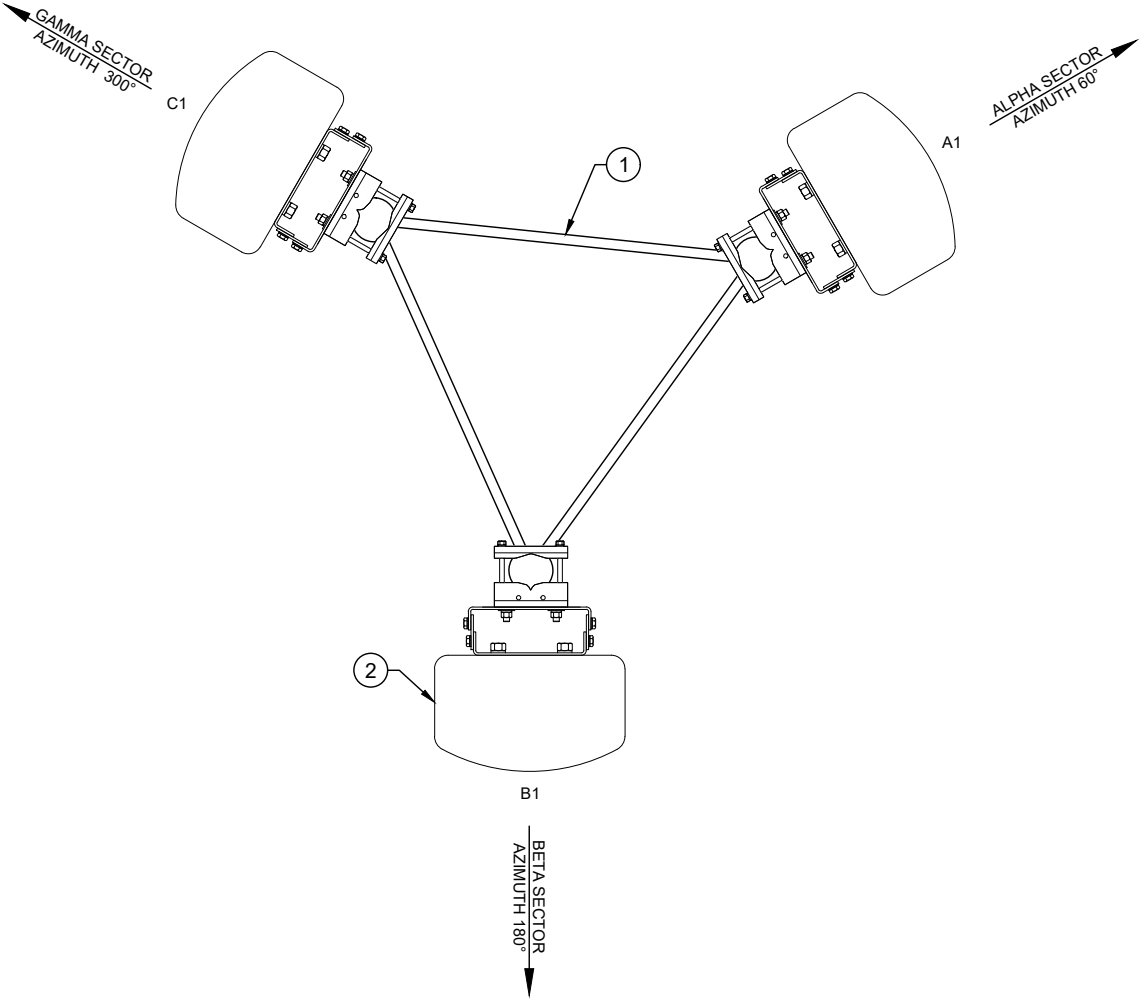
C-3

EQUIPMENT LEGEND:

- 1

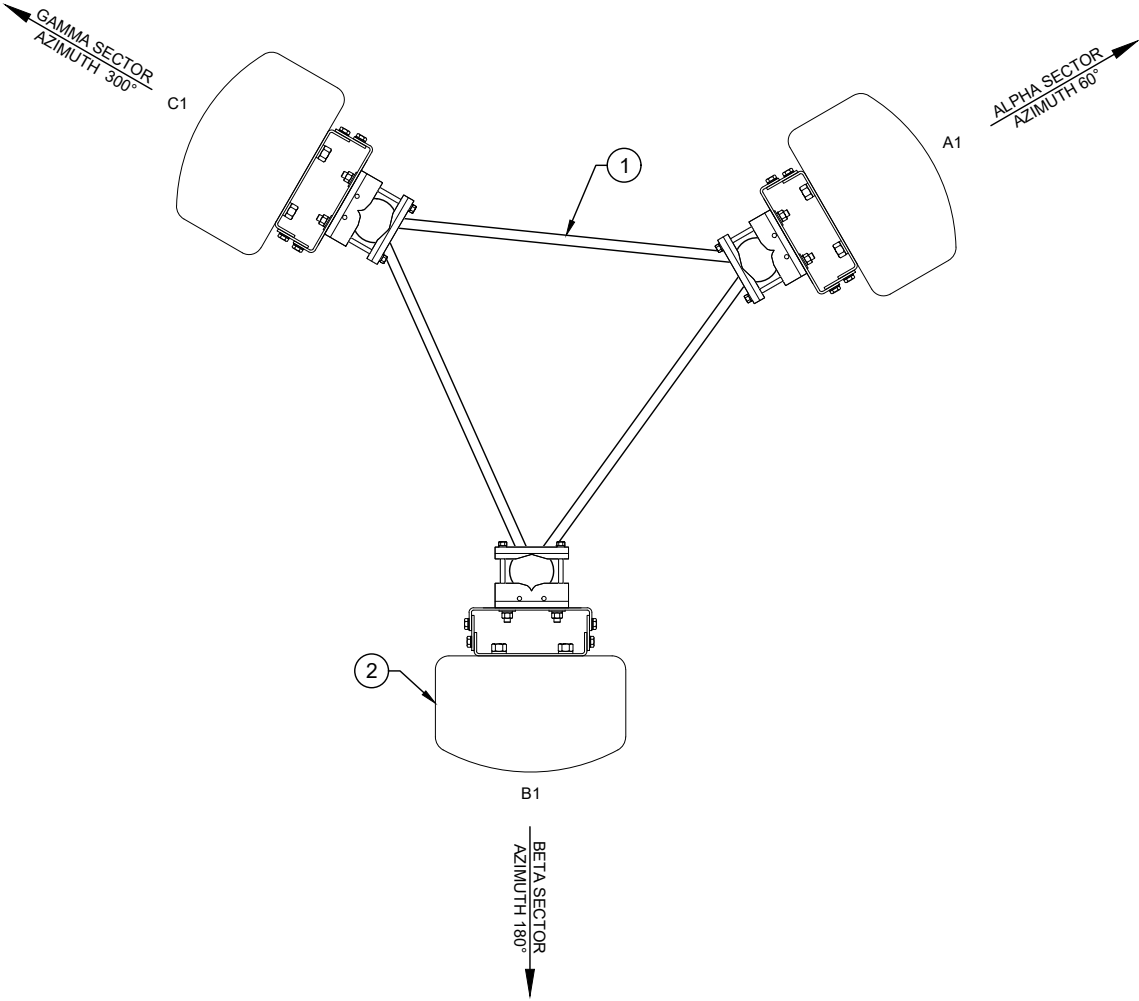
PROPOSED 64'-0" TOWER
ANDREW COW
- 2

PROPOSED ANDREW - SBNHH-1D65A ANTENNA
AT&T CONMAT ITEM #ANT.14035
(2 PER SECTOR, 6 TOTAL)



2

ANTENNA LAYOUT - RAD CENTER: 64'-0" AGL
SCALE: 0" 12" 24"
1"= 12"



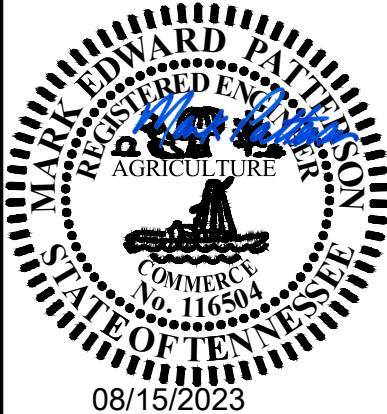
1

ANTENNA LAYOUT - RAD CENTER: 55'-0" AGL
SCALE: 0" 12" 24"
1"= 12"

PREPARED BY:



PREPARED FOR:



REVISIONS

REV.	DATE	DESCRIPTION
A	08/14/23	PRELIM ISSUE
0	08/15/23	FINAL ISSUE

SITE NAME:
I-65

SITE INFORMATION:
1616 HARLEY DAVIDSON BLVD
COLUMBIA, TN 38401
MAURY COUNTY

FA NUMBER:
10068977

PACE:
MRTNK069905

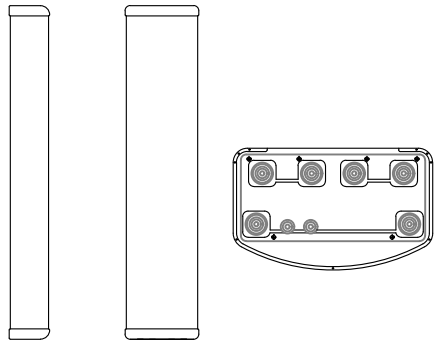
POD PROJECT NUMBER: 23-160141
DRAWN BY: CPM
CHECKED BY: MEP
DATE: 08/15/23

SHEET TITLE:

ANTENNA MOUNT
& ORIENTATION

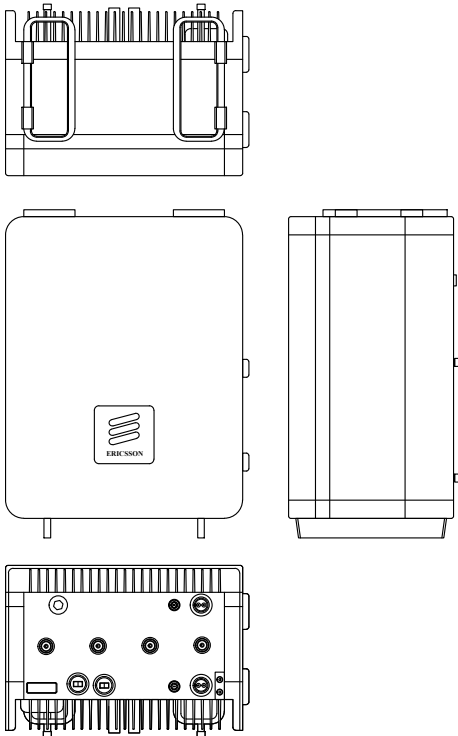
SHEET NUMBER:

C-4



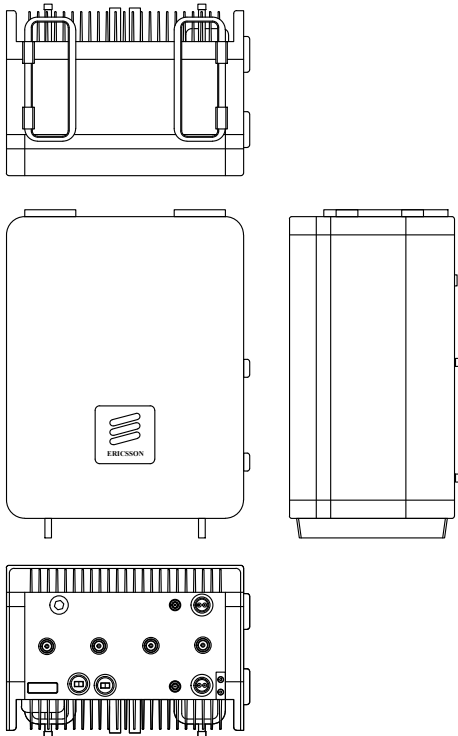
COMMSCOPE - SBNHH-1D65A
WEIGHT (WITHOUT MOUNTING HARDWARE): 33.5 LBS
SIZE (HxWxD): 55.6x11.90x7.10 IN.
MOUNTING HARDWARE P/N: BSAMNT-1
RATED WIND VELOCITY: 150.0 MPH

1 COMMSCOPE - SBNHH-1D65A
SCALE: NOT TO SCALE



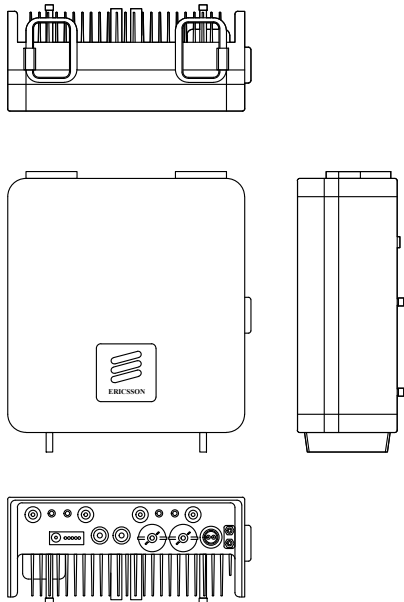
ERICSSON - RADIO 4449 B5/B12
WEIGHT: 70.0 LBS
SIZE (HxWxD): 18.0x13.2x9.4 IN.

2 ERICSSON - RADIO 4449 B5/B12
SCALE: NOT TO SCALE



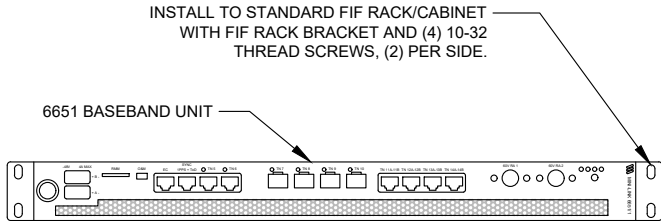
ERICSSON - RADIO 4460 B2/B66
WEIGHT: 109 LBS
SIZE (HxWxD): 17.0x15.1x11.9 IN.

3 ERICSSON - RADIO 4460 B2/B66
SCALE: NOT TO SCALE



ERICSSON - RADIO 4478 B14
WEIGHT: 60.0 LBS
SIZE (HxWxD): 15.0x13.0x8.0 IN.

4 ERICSSON - RADIO 4478 B14
SCALE: NOT TO SCALE



ERICSSON - 6651 STAND-ALONE BASEBAND
WEIGHT: 10.0 LBS
SIZE (HxWxD): 1.7x17.6x9.4 IN.

5 ERICSSON - BB 6651
SCALE: NOT TO SCALE

PREPARED BY:



POWER OF DESIGN

11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:

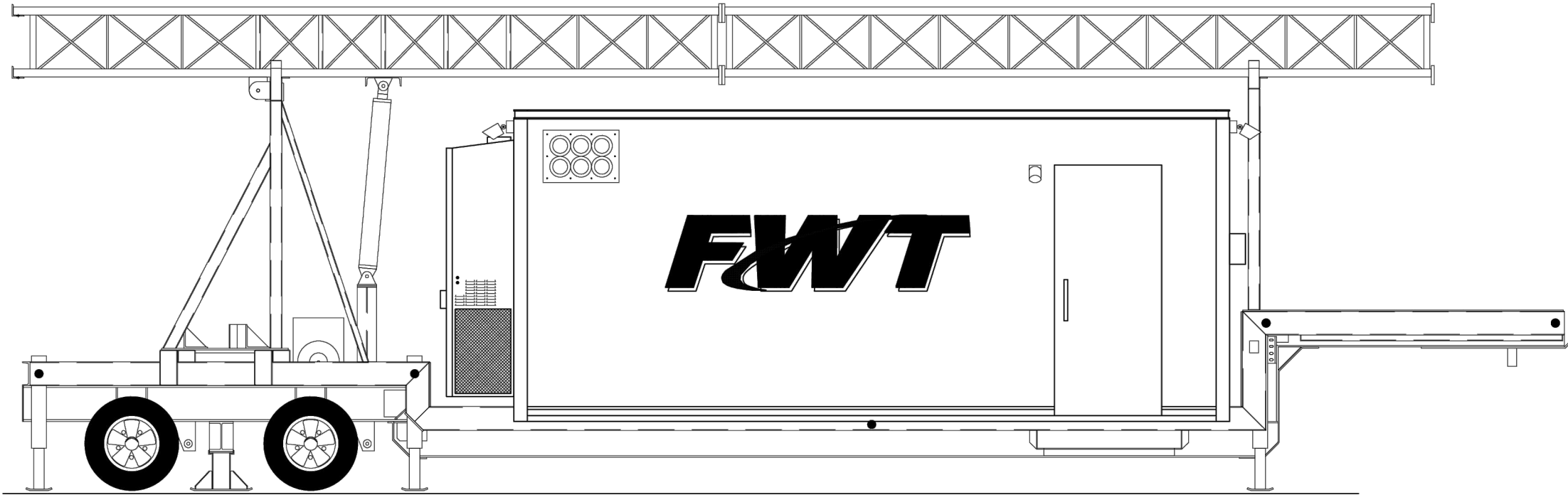


REVISIONS		
REV.	DATE	DESCRIPTION
SITE NAME: I-65		
SITE INFORMATION: 1616 HARLEY DAVIDSON BLVD COLUMBIA, TN 38401 MAURY COUNTY		
FA NUMBER: 10068977		
PACE: MRTNK069905		
POD PROJECT NUMBER: 23-160141 DRAWN BY: CPM CHECKED BY: MEP DATE: 08/15/23		
SHEET TITLE: EQUIPMENT SPECS		
SHEET NUMBER: C-5		

SPECIAL NOTES:

- 1.) TRAILER MUST BE LEVELED AND SUPPORTED PROPERLY. (SEE INSTALLATION MANUAL)
- 2.) TOWER SUPPORT STANDS MUST BE BOLTED IN PLACE PRIOR TO STACKING TOWER.
TOWER SUPPORT STANDS ARE LOCATED UNDER TRAILER FRAME AND BETWEEN THE TRAILER AXLES. (SEE INSTALLATION MANUAL)
- 3.) BOTTOM 40'-0" OF TOWER HAS A FIXED PIVOT POINT.
BOTTOM 40'-0" OF TOWER RAISED AND LOWERED WITH A HYDRAULIC SYSTEM.
- 4.) TOP 80'-0" OF TOWER MUST BE STACKED WITH A CRANE.

BILL OF MATERIAL		
DRAWING NO.	DESCRIPTION	SHEET NO.
FSC150-E01	TABLE OF CONTENTS	SHEET 1 OF 1
FSC150-E02	BILL OF MATERIALS	SHEET 1 OF 1
FSC150-E03	EXTERIOR ELEVATIONS	SHEET 1 OF 1
FSC150-E04	INTERIOR ELEVATIONS	SHEET 1 OF 2
FSC150-E04	INTERIOR ELEVATIONS	SHEET 2 OF 2
FSC150-E05	ELECTRICAL WIRING SCHEMATIC	SHEET 1 OF 1
FSC150-E06	ALARM WIRING SCHEMATIC	SHEET 1 OF 1
FSC150-E07	TRAILER WIRING SCHEMATIC	SHEET 1 OF 1
FSC-SWC001	STANDARD WALL CONSTRUCTION	SHEET 1 OF 2
FSC-SWC001	STANDARD WALL CONSTRUCTION	SHEET 2 OF 2



Full Size COW by FWT, LLC
Job Number: J101207001
Customer: AT&T
State: KY

Design Number: N/A
Design Tower Height: 124'-0" GUYED TOWER
Design Wind Speed: 150 MPH
Allowable Stresses: NO 1/3 ALLOWED

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FWT
5750 EAST I-20
FORT WORTH, TEXAS 76119 USA
(817) 255-3060

REV.	DATE	BY	INIT.	DESCRIPTION		
DRAWN BY: PY	CHECKED BY:	ENG	CAD FILE:	0:\JOB\10\12\07\001\DR\EB\COW-FSC\FSC_E01.DWG PYORK 08DEC10 8:55AM		
SPECIFIC INFORMATION				SCALE: NONE	SHEET NO.	
BUILDING 8'-0"(w) x 20'-0"(l) x 8'-6"(h); TOWER 120'-0"				DATE: 07-DEC-10	SHEET 1 OF 1	
DRAWING TITLE				JOB NO.	DRAWING NO.	
Full Size COW Trailer (TABLE of CONTENTS)				J101207001	FSC150-E01	

BILL OF MATERIAL		
ITEM	QTY.	DESCRIPTION
1	2	4 TON BARD AIR CONDITIONER W/4KW HEAT STRIP
2	1	INTERSECT 42 POSITION LOAD CENTER (AP122030-3R)
3	1	CAM-LOK ICL-1P CONNECTOR PANEL 200A
4		
5		
6		
7		
8	1	THERMOSTAT W/LEAD LAG CONTROL (LL 357)
9	1	HOFFMAN ALARM BOX (12" x 12")
10	1	HIGH TEMP ALARM
11	1	LOW TEMP ALARM
12	1	MAGNETIC DOOR ALARM
13		
14	8	FLORESCENT LIGHT x 4'-0" (2 BULB) W/WIRE GUARD
15	1	EMERGENCY LIGHT
16		
17	4	LIGHT SWITCH (1) INTERIOR (3) EXTERIOR
18	2	DUPLEX OUTLET (INTERIOR)
19	1	DUPLEX OUTLET (EXTERIOR) GFI
20		
21	1	3'-0" x 7'-0" DOOR (RH SWING) W/INTEGRAL FRAME, STAINLESS
22		STEEL HINGES, COMPRESSION SEAL and 3 POINT LATCH
23		
24	1	COAX CABLE LADDER TRAY (12" WIDE) x 60'-0"
25		
26	2	COAX ENTRY PANELS (VALMONT/MICROFLECT #B553)
27		
28	1	4'-0" LEVEL
29		
30		

BILL OF MATERIAL		
ITEM	QTY.	DESCRIPTION
31	1	#2 GREEN STRANDED HALO GROUND W/#2 SOLID TINNED DOWNLEAD
32		
33	N/A	5/8"Ø GROUND ROD x 10'-0" W/HARDWARE (SEE DRAWING GR0035)
34	N/A	GROUND BUS BAR (SEE DRAWING GR0042)
35		
36	2	TOWER SUPPORT STANDS
37		
38	1	HYDRAULIC UNIT
39		
40		
41		
42		
43	1	SMOKE ALARM
44		
45		
46	3	EXTERIOR MIGHTY LIGHT
47		
48		
49		
50	N/A	2'-0" STAND-OFF MOUNTS WITH HARDWARE (SEE DRAWING AM30001)
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		

BILL OF MATERIAL		
ITEM	QTY.	DESCRIPTION
61		
62		
63		
64		
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66		
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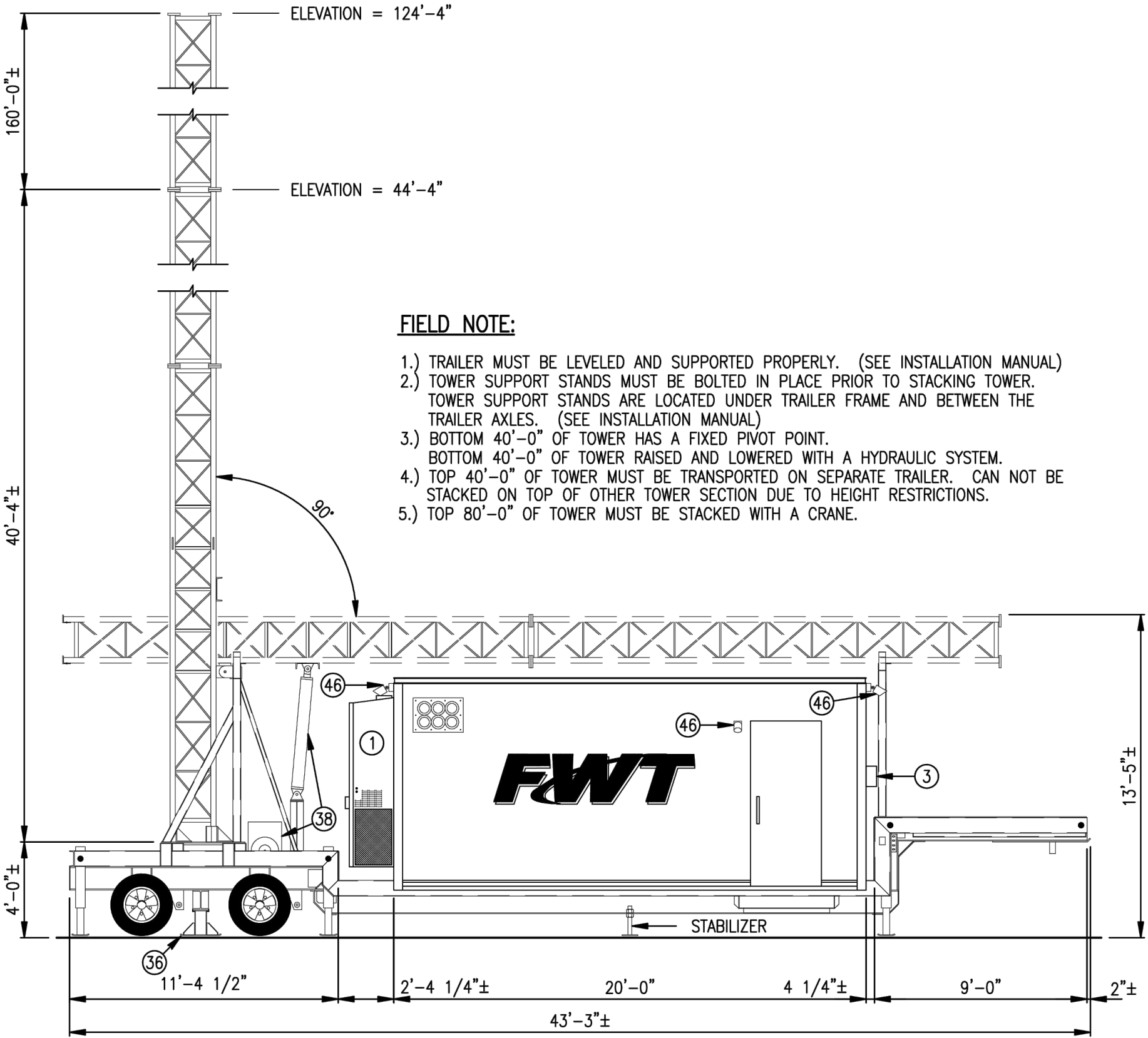
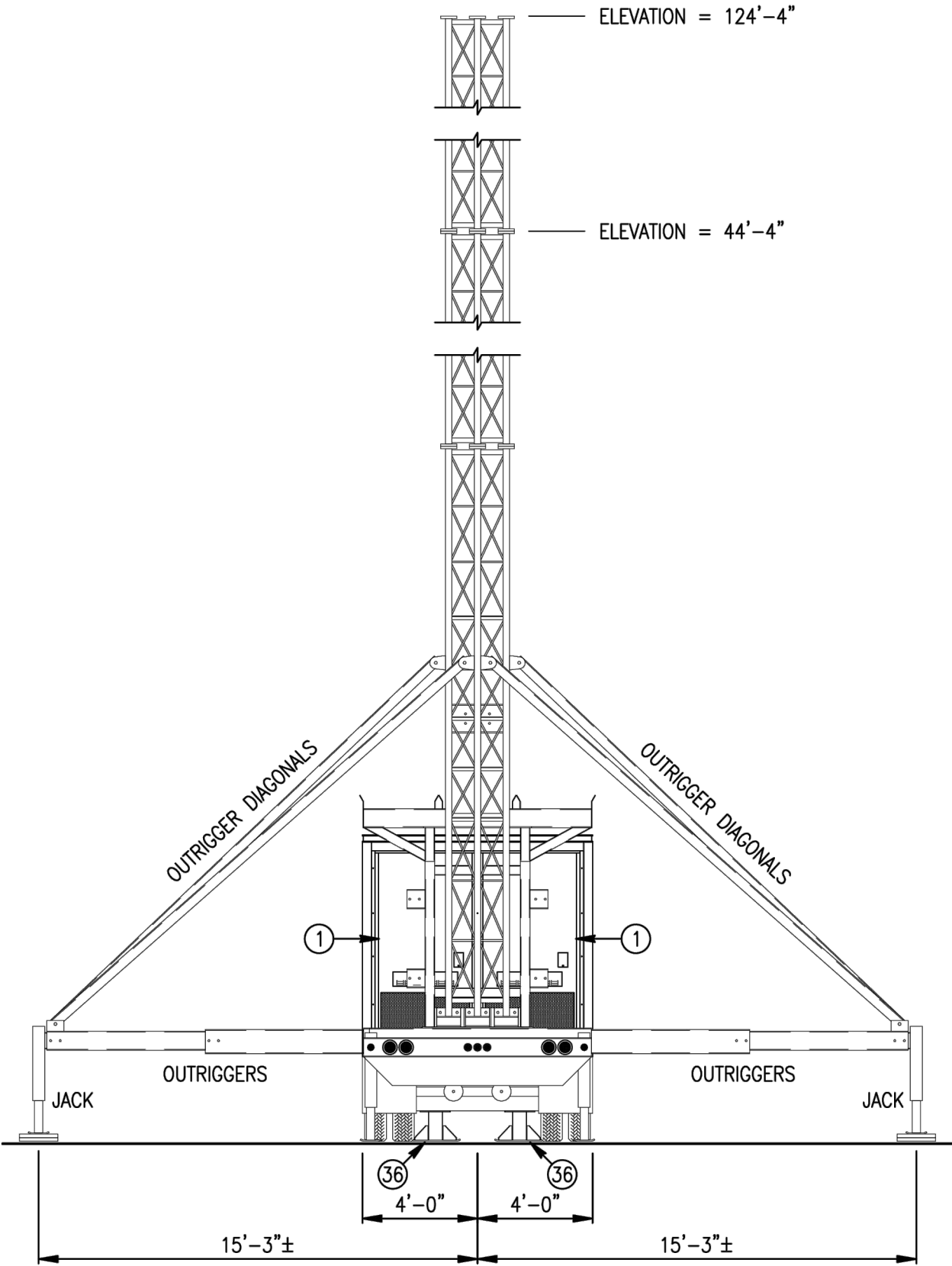
Full Size COW by FWT, LLC
Job Number: J101207001
Customer: AT&T
State: KY

Design Number: N/A
Design Tower Height: 124'-0" GUYED TOWER
Design Wind Speed: 150 MPH
Allowable Stresses: NO 1/3 ALLOWED

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REV.	DATE	BY	INIT.	DESCRIPTION		
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SPECIFIC INFORMATION				SCALE: NONE	SHEET NO.	
BUILDING 8'-0"(w) x 20'-0"(l) x 8'-6"(h); TOWER 120'-0"				DATE: 07-DEC-10	SHEET 1 OF 1	
DRAWING TITLE				JOB NO.	DRAWING NO.	
Full Size COW Trailer (BILL OF MATERIAL)				J101207001	FSC150-E02	



FIELD NOTE:

- 1.) TRAILER MUST BE LEVELED AND SUPPORTED PROPERLY. (SEE INSTALLATION MANUAL)
- 2.) TOWER SUPPORT STANDS MUST BE BOLTED IN PLACE PRIOR TO STACKING TOWER. TOWER SUPPORT STANDS ARE LOCATED UNDER TRAILER FRAME AND BETWEEN THE TRAILER AXLES. (SEE INSTALLATION MANUAL)
- 3.) BOTTOM 40'-0" OF TOWER HAS A FIXED PIVOT POINT. BOTTOM 40'-0" OF TOWER RAISED AND LOWERED WITH A HYDRAULIC SYSTEM.
- 4.) TOP 40'-0" OF TOWER MUST BE TRANSPORTED ON SEPARATE TRAILER. CAN NOT BE STACKED ON TOP OF OTHER TOWER SECTION DUE TO HEIGHT RESTRICTIONS.
- 5.) TOP 80'-0" OF TOWER MUST BE STACKED WITH A CRANE.

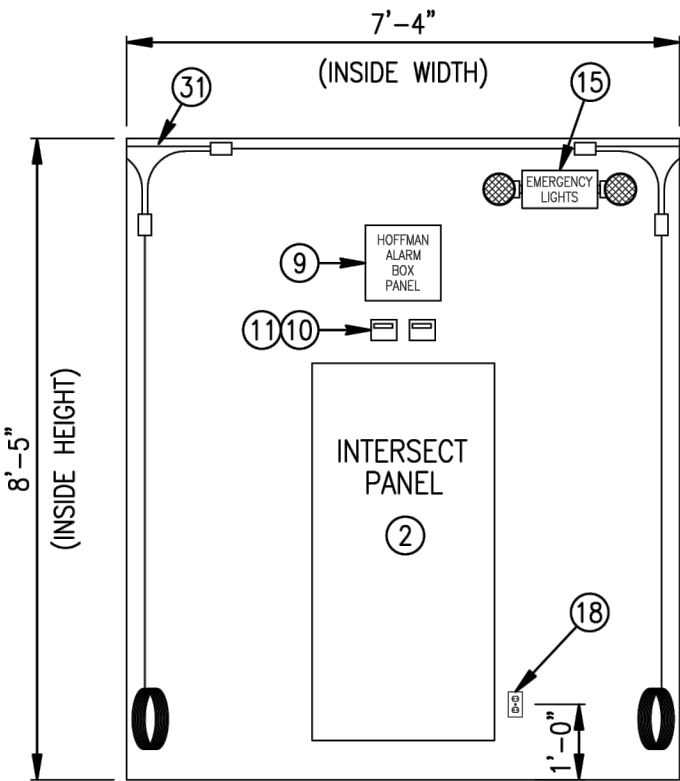
Full Size COW by FWT, LLC
Job Number: J101207001
Customer: AT&T
State: KY

Design Number: N/A
Design Tower Height: 124'-0" GUYED TOWER
Design Wind Speed: 150 MPH
Allowable Stresses: NO 1/3 ALLOWED

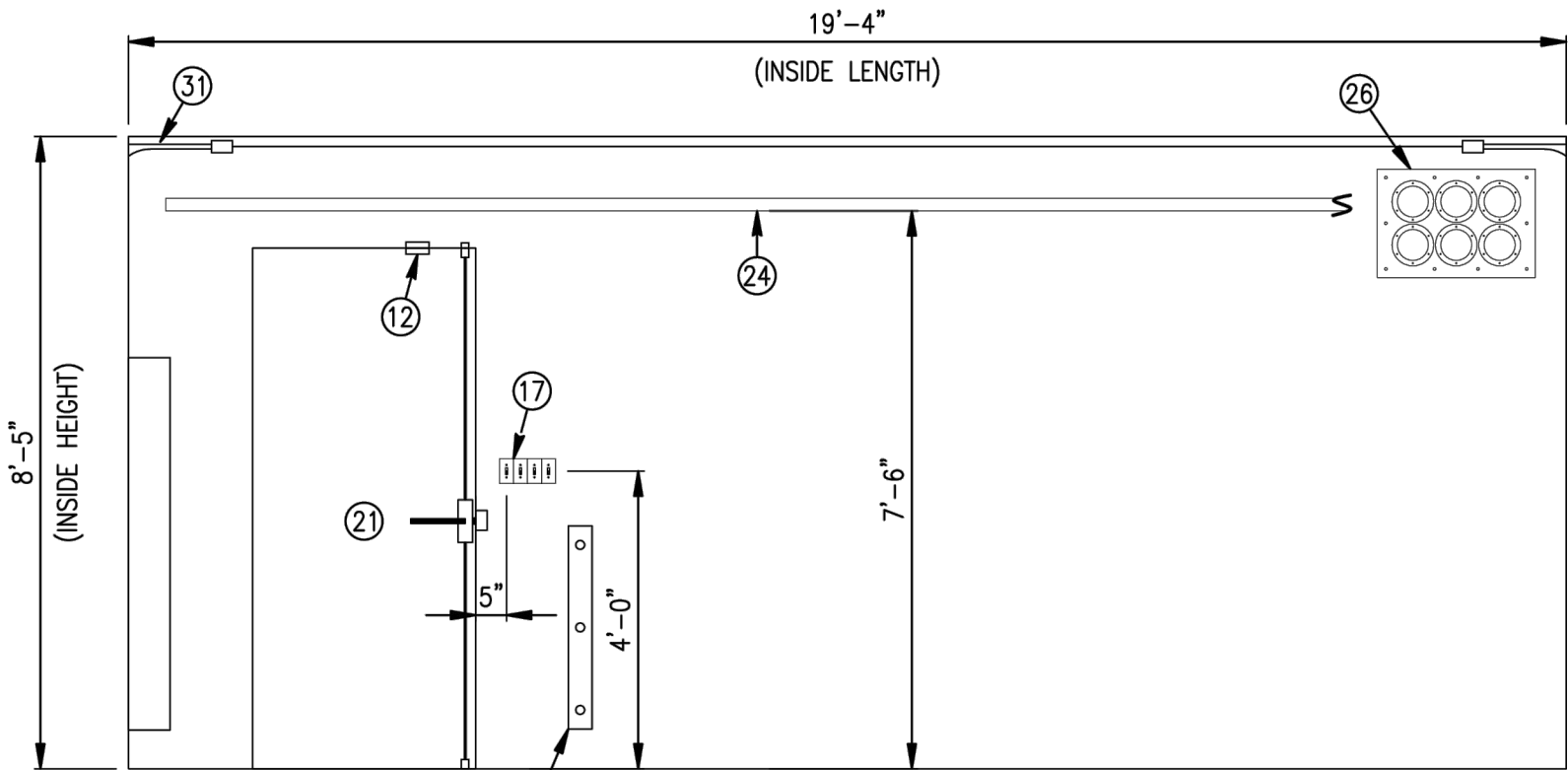
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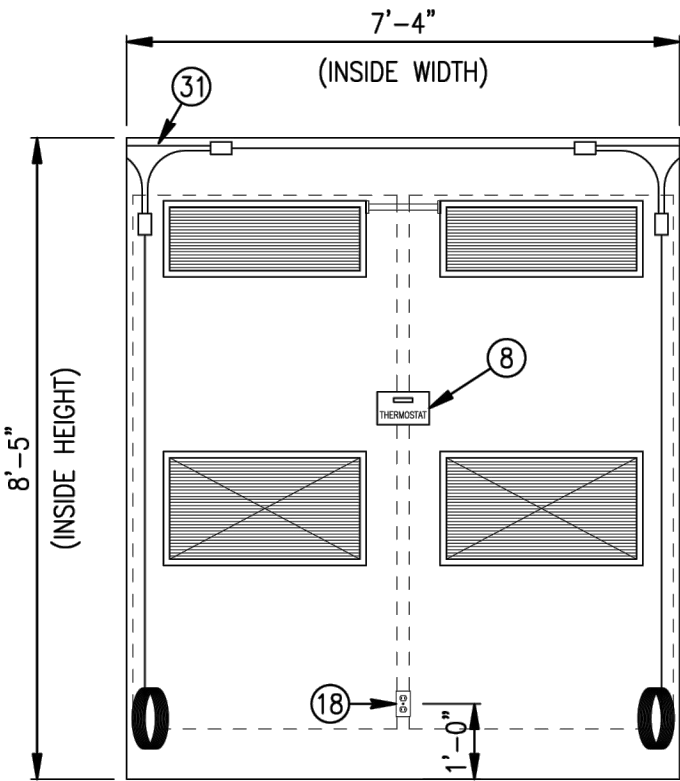
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SPECIFIC INFORMATION				SCALE: NONE
BUILDING 8'-0"(w) x 20'-0"(l) x 8'-6"(h); TOWER 120'-0"				DATE: 07-DEC-10
DRAWING TITLE				SHEET NO. SHEET 1 OF 1
Full Size COW Trailer (EXTERIOR ELEVATION)				JOB NO. J101207001
				DRAWING NO. FSC150-E03



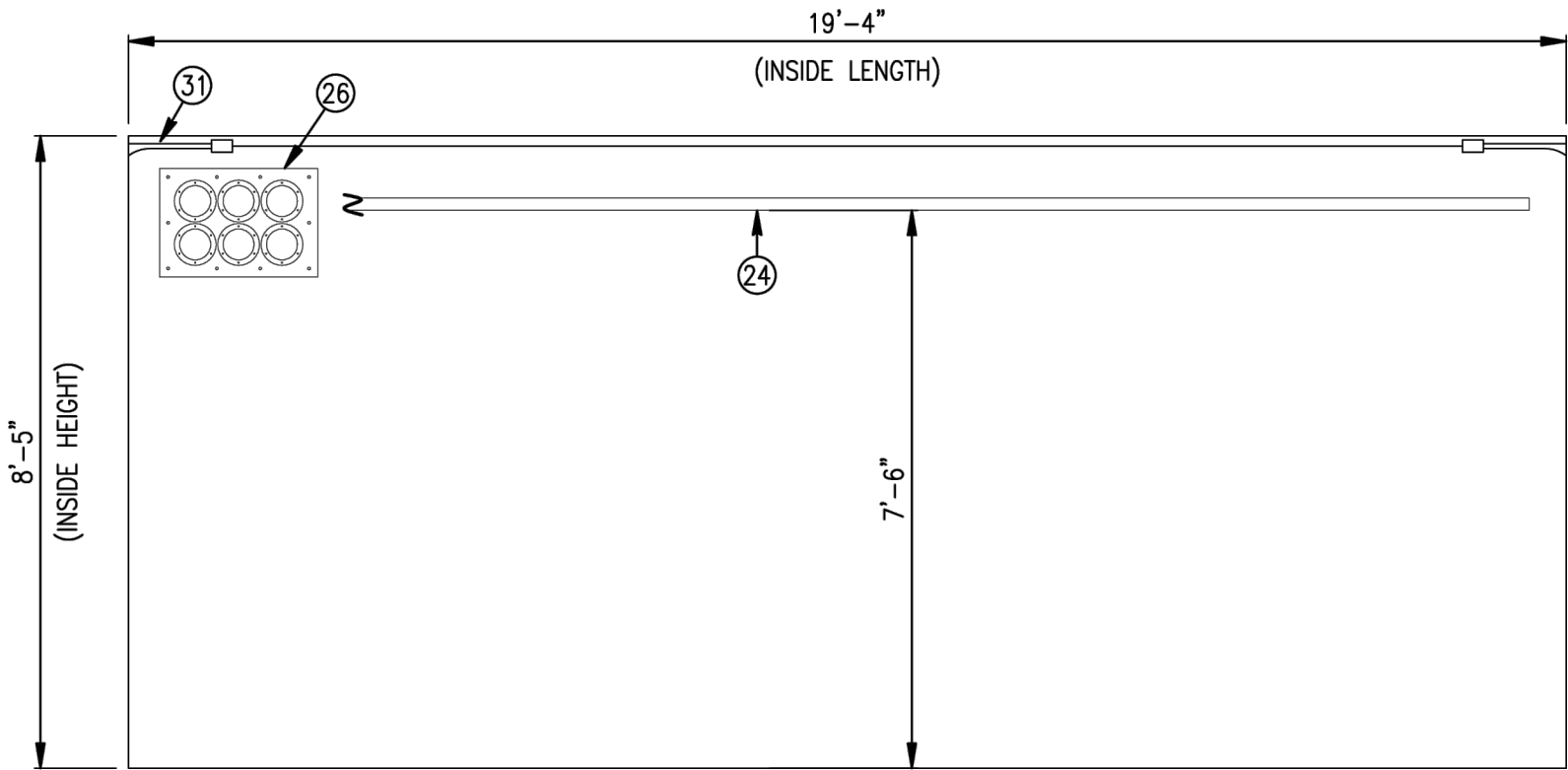
ELEVATION VIEW
(WALL "A")



ELEVATION VIEW
(WALL "B")



ELEVATION VIEW
(WALL "C")



ELEVATION VIEW
(WALL "D")

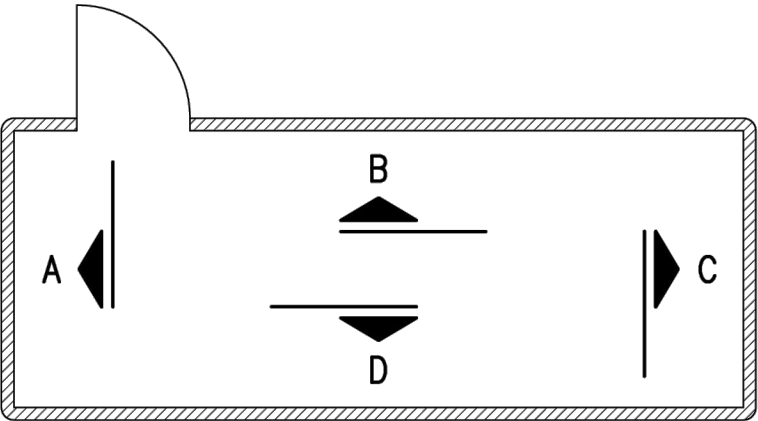
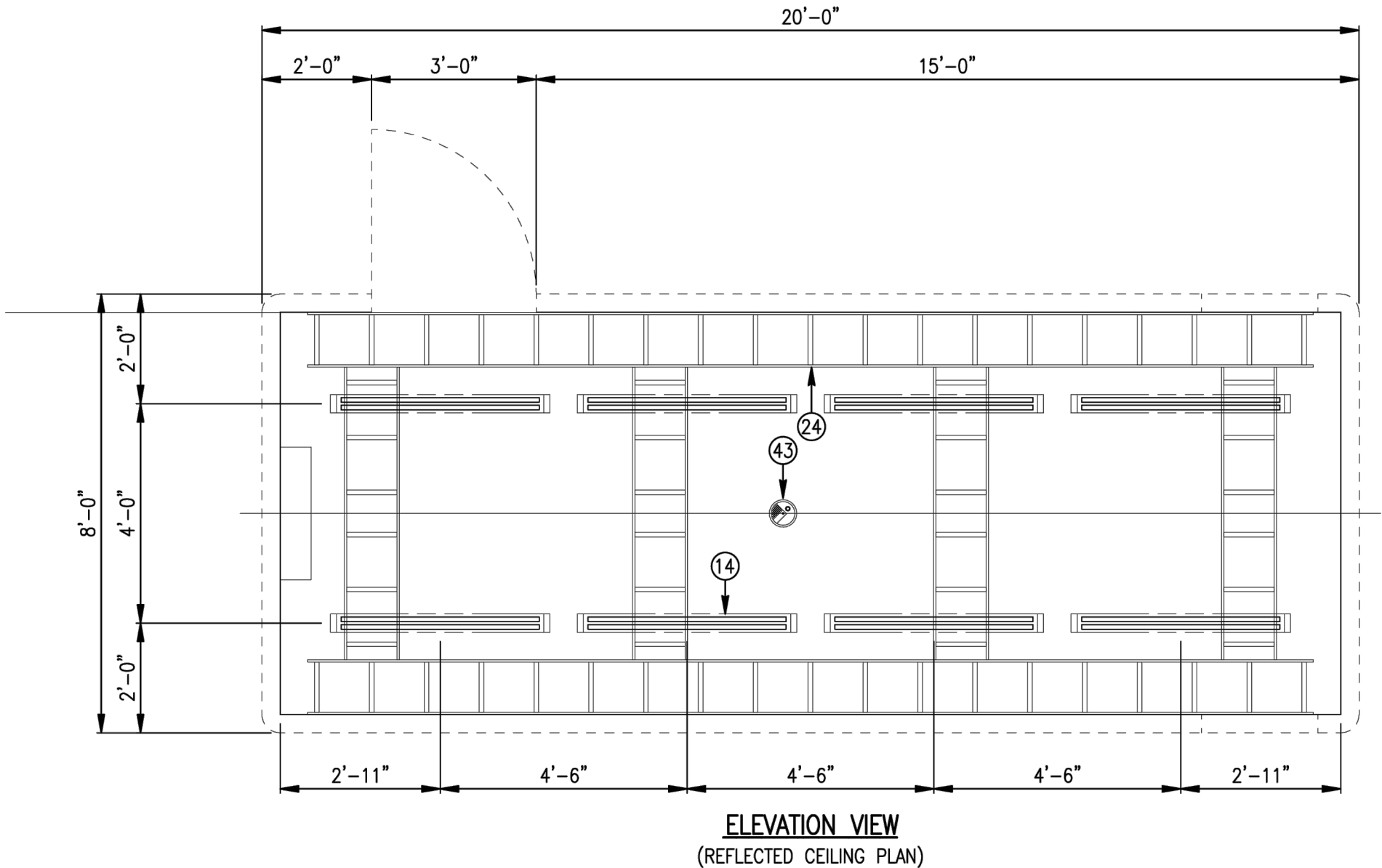
Full Size COW by FWT, LLC
Job Number: J101207001
Customer: AT&T
State: KY

Design Number: N/A
Design Tower Height: 124'-0" GUYED TOWER
Design Wind Speed: 150 MPH
Allowable Stresses: NO 1/3 ALLOWED

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REV.		DATE	BY	INIT.	DESCRIPTION	
DRAWN BY:	PY	CHECKED BY:	ENG	CAD FILE:	0:\JOB\09\10\09\001\DR\EB\COW-FSC\FSC_E04.DWG\KSCHEFFER\19OCT09\3:31 PM	REV. -
SPECIFIC INFORMATION					SCALE: NONE	SHEET NO.
BUILDING 8'-0"(w) x 20'-0"(l) x 8'-6"(h); TOWER 120'-0"					DATE: 07-DEC-10	SHEET 1 OF 2
DRAWING TITLE					JOB NO.	DRAWING NO.
Full Size COW Trailer (INTERIOR ELEVATIONS)					J101207001	FSC150-E04



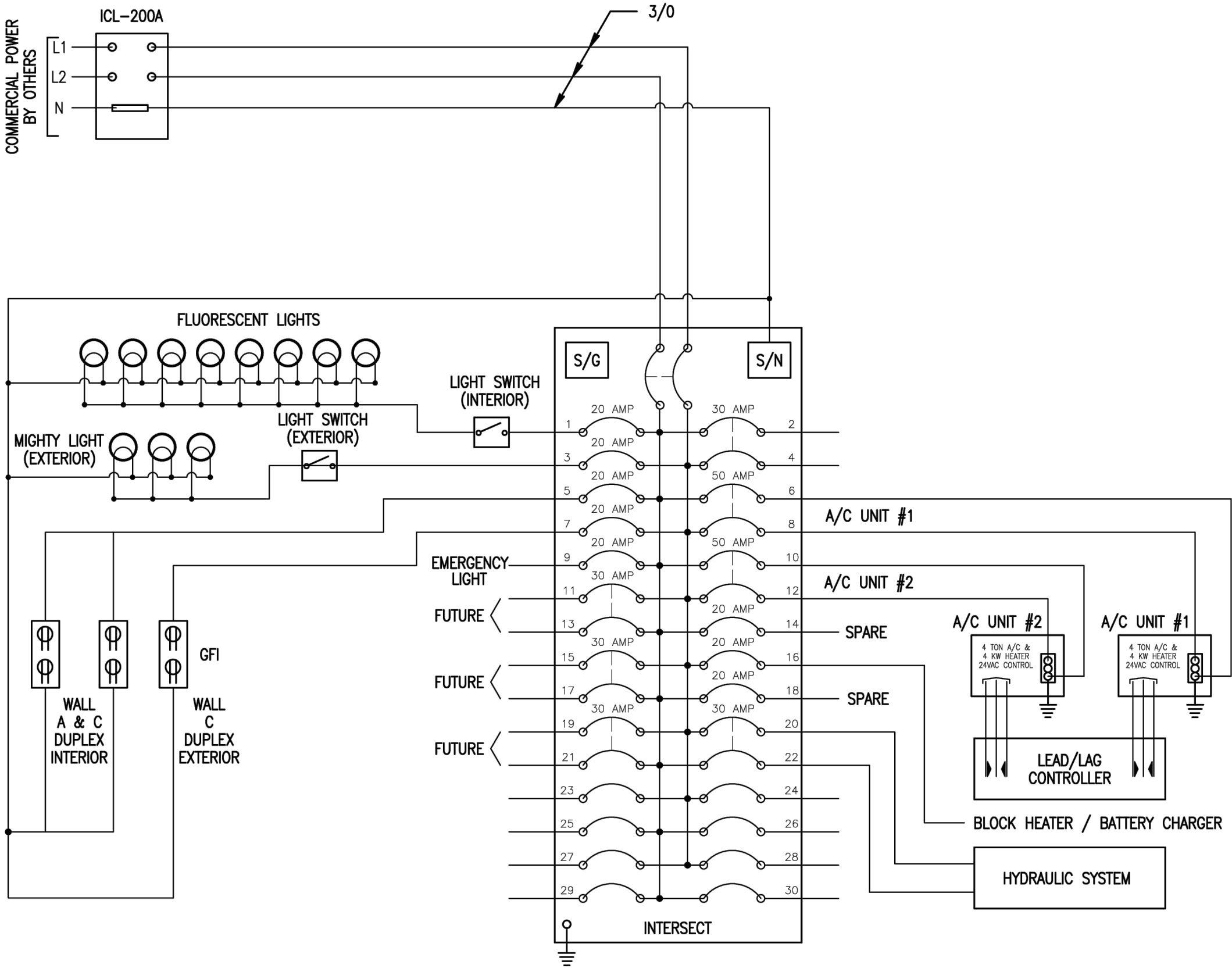
Full Size COW by FWT, LLC
Job Number: J101207001
Customer: AT&T
State: KY

Design Number: N/A
Design Tower Height: 124'-0" GUYED TOWER
Design Wind Speed: 150 MPH
Allowable Stresses: NO 1/3 ALLOWED

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REV.	DATE	BY	INIT.	DESCRIPTION			
DRAWN BY: PY	CHECKED BY: ENG	CAD FILE: 0:\JOB\09\10\09\001\DR\EB\COW-FSC\FSC_E04.DWG			KSCHIEFFER 19OCT09 3:31PM	REV. —	
SPECIFIC INFORMATION				SCALE: NONE	SHEET NO.		
BUILDING 8'-0"(w) x 20'-0"(l) x 8'-6"(h); TOWER 120'-0"				DATE: 07-DEC-10	SHEET 2 OF 2		
DRAWING TITLE				JOB NO.	DRAWING NO.		
Full Size COW Trailer (INTERIOR ELEVATIONS)				J101207001	FSC150-E04		



BREAKER ASSIGNMENT SCHEDULE

SERVICE	POLE POS.	# OF WIRES/SIZE	BRK. SIZE
LIGHT (INTERIOR)	1	3 - #12 THHN	20
HVAC - UNIT #1	6 & 8	3 - #8 THHN	50
LIGHT (EXTERIOR)	3	3 - #12 THHN	20
OUTLETS WALL A & C	5	3 - #12 THHN	20
OUTLETS WALL C	7	3 - #12 THHN	20
EMERGENCY LIGHT	9	3 - #12 THHN	20
HVAC - UNIT #2	10 & 12	3 - #8 THHN	50
FUTURE	11 & 13		30
SPARE	14		20
FUTURE	15 & 17		30
BLOCK HEATER/CHARGER	16	3 - #12 THHN	20
FUTURE	19 & 21		30
SPARE	18		20
HYDRAULIC SYSTEM	20 & 22	3 - #10 THHN	30

NOTE:

- 1.) PANEL ASSIGNMENTS MAY VARY.
- 2.) ADDITIONAL OUTLETS MAY BE ADDED PER CUSTOMER REQUIREMENTS, WITH A MAXIMUM OF 3 DUPLEX OUTLETS PER 20 AMP CIRCUIT.
- 3.) ADDITIONAL CIRCUITS MAY BE ADDED FOR CUSTOMER EQUIPMENT.
- 4.) ALL ELECTRICAL COMPONENTS ARE U/L APPROVED.

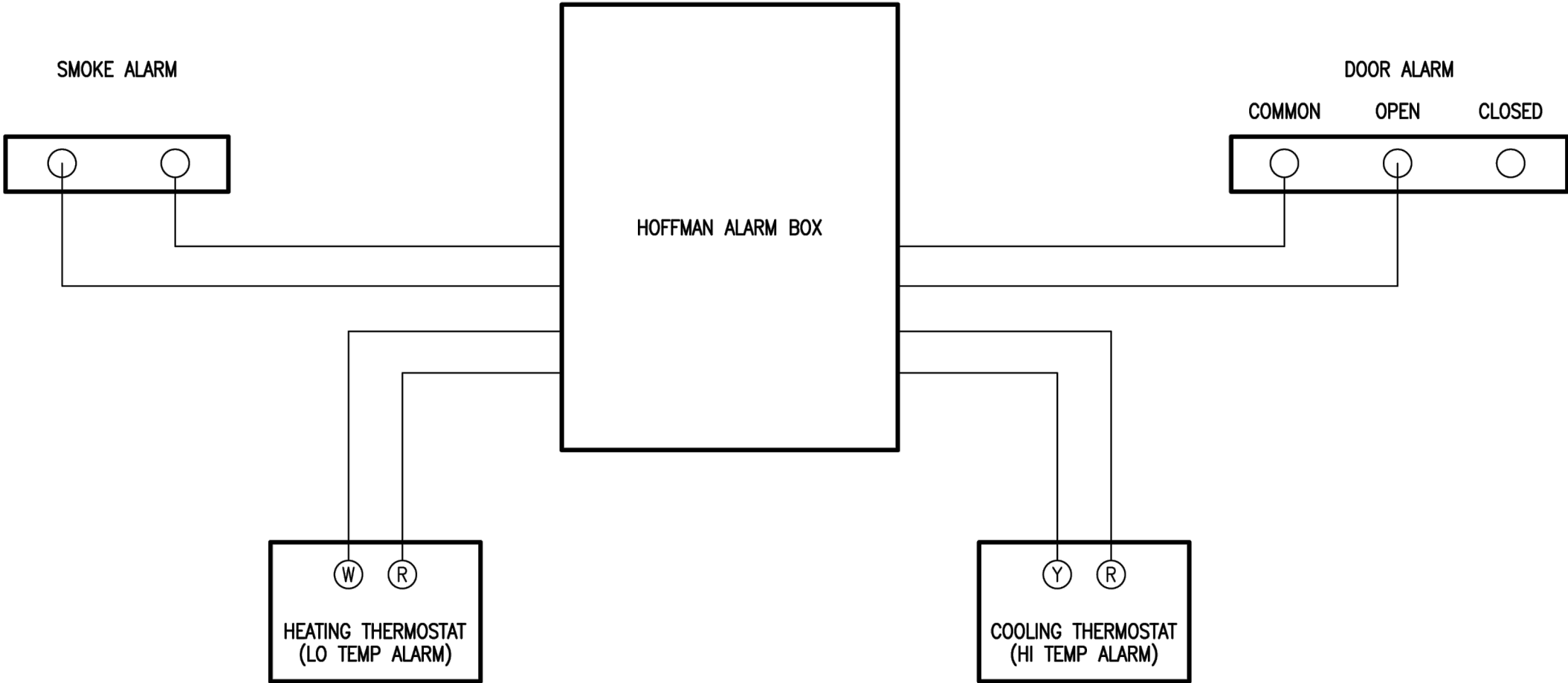
Full Size COW by FWT, LLC
Job Number: J101207001
Customer: AT&T
State: KY

Design Number: N/A
Design Tower Height: 124'-0" GUYED TOWER
Design Wind Speed: 150 MPH
Allowable Stresses: NO 1/3 ALLOWED

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REV.	DATE	BY	INIT.	DESCRIPTION
DRAWN BY: PY	CHECKED BY: ENG	CAD FILE: O:\JOB\09\10\09\001\DR\EB\COW-FSC\FSC_E05.DWG	19OCT09\3:31 PM	REV. -
SPECIFIC INFORMATION				SCALE: NONE
BUILDING 8'-0"(w) x 20'-0"(l) x 8'-6"(h); TOWER 120'-0"				SHEET NO. SHEET 1 OF 1
DRAWING TITLE				DRAWING NO. FSC150-E05
Full Size COW Trailer (WIRING SCHEMATIC)				J101207001



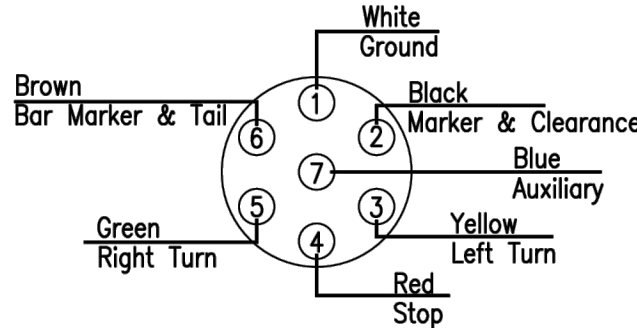
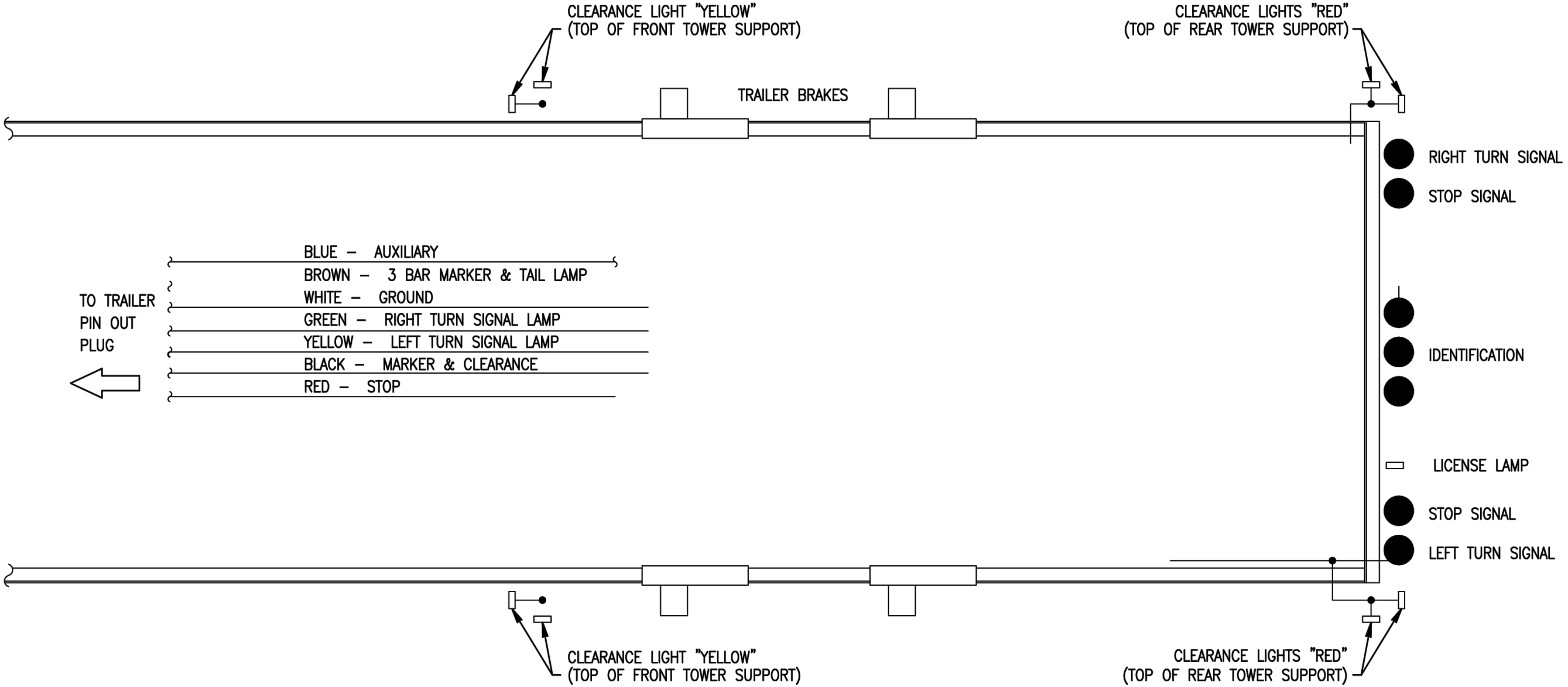
Full Size COW by FWT, LLC
Job Number: J101207001
Customer: AT&T
State: KY

Design Number: N/A
Design Tower Height: 124'-0" GUYED TOWER
Design Wind Speed: 150 MPH
Allowable Stresses: NO 1/3 ALLOWED

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REV.	DATE	BY	INIT.	DESCRIPTION		
DRAWN BY: PY	CHECKED BY:	ENG	CAD FILE: O:\JOB\09\10\09\001\DR\EB\COW-FSC\FSC_E06.DWG	KSCHEFFER\19OCT09\3:31 PM		REV. -
SPECIFIC INFORMATION				SCALE: NONE	SHEET NO.	
BUILDING 8'-0"(w) x 20'-0"(l) x 8'-6"(h); TOWER 120'-0"				DATE: 07-DEC-10	SHEET 1 OF 1	
DRAWING TITLE				JOB NO.	DRAWING NO.	
Full Size COW Trailer (WIRING SCHEMATIC)				J101207001	FSC150-E06	



PINOUT SCHEMATIC

Full Size COW by FWT, LLC
Job Number: J101207001
Customer: AT&T
State: KY

Design Number: N/A
Design Tower Height: 124'-0" GUYED TOWER
Design Wind Speed: 150 MPH
Allowable Stresses: NO 1/3 ALLOWED

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REV.		DATE	BY	INIT.	DESCRIPTION	
DRAWN	PY	CHECKED	BY:	ENG	CAD FILE:	0:\JOB\09\10\09\001\DR\EB\COW-FSC\FSC_E07.DWG\KSCHAEFFER\19OCT09\3:32PM
SPECIFIC INFORMATION					SCALE:	NONE
BUILDING 8'-0"(w) x 20'-0"(l) x 8'-6"(h); TOWER 120'-0"					DATE:	07-DEC-10
DRAWING TITLE					JOB NO.	J101207001
Full Size COW Trailer (WIRING SCHEMATIC)					DRAWING NO.	FSC80-E07

August 1, 2023

Project

Structural Analysis Report

Carrier Information

AT&T

Site Name: I-65 (Columbia 61)-COW

FA #: 16171923

Commissioned By

Tania Rogers

tania.rogers@smartlinkgroup.com

POD Information

Project Number: 23-159585

Site Data

64' Proposed FWT Self Support Tower

1616 Harley Davidson Blvd., Columbia, Maury County, TN 38401

Latitude: 35° 38' 23.04"N; Longitude: 86° 53' 35.53"W

Dear Tania Rogers,

The purpose of this analysis is to determine whether the proposed tower design is capable of supporting the proposed appurtenance configuration. The tower has been analyzed for conformance to applicable local, state, and federal codes unless otherwise stated in the report. The tower and its foundation were found to be adequate to support the proposed appurtenance loading and will not require modification.

Results

Tower Capacity:

29.1%

Pass

Foundation Capacity:

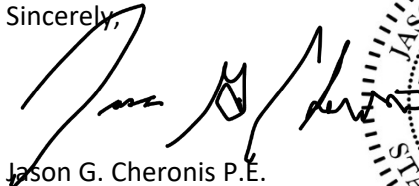
56.3%

Pass

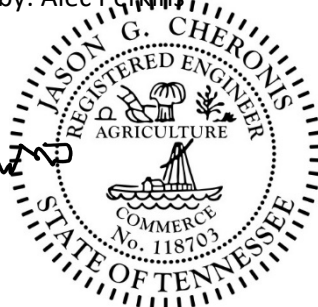
Thank you for allowing us to provide these engineering services. If there are any comments or concerns please do not hesitate to call.

Structural Analysis prepared by: Alec Perkins

Sincerely,



Jason G. Cheronis P.E.
Tennessee PE#: 118703



Design Criteria

The proposed tower has been analyzed per the following requirements.

Governing	TIA-222-H, ASCE 7-16 & 2018 IBC
Ultimate Wind Speed	105 MPH 3 Second Gust
Wind Speed with Ice	30 MPH 3 Second Gust
Radial Ice Thickness	1.5"
Structure Class	II
Exposure Category	C
Topographic Category	1
S_s	0.284
S₁	0.138

Tower Description

The following material grades were used based on original manufacture information:

Tower Materials

Structural Component	Material Strength
Legs, Diagonals	ASTM A572-50 (50 KSI Yield Strength)
Horizontals	ASTM A36 (36 KSI Yield Strength)
Bolts	ASTM A325N (92 KSI Yield Strength)

Referenced Documents

Document Type	Designation	Source
Radio Frequency Data Sheet	AT&T Mobility Name: COW Andrew - TNL06528C Dated: 06/28/2023	Smartlink
Tower Manufacturer Drawings	FWT Job #: J091009001 Dated: 11/03/2009	Smartlink

Tower Loading

The following table indicates the proposed loading provided by Smartlink LLC for this analysis.

Final Proposed Loading

Carrier	Mounting Level (ft)	Center Line (ft)	# of Units	Unit Manufacturer	Unit Model	# of Coax	Coax Size (in)	Note
AT&T	62	62	3	CommScope	SBNHH-1D65A	12	1/2	1
	55	55	3	CommScope	SBNHH-1D65A	6	1/2	

Notes:

- 1) See "Coax Layout" for proposed cable configuration

Results

Capacity Summary of Structural Components

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P lbs	φPallow lbs	% Capacity	Pass/Fail
T1	64 - 44	Leg	1.75 SR	1	-8.8119	87.0191	10.1	Pass
T2	44 - 24	Leg	2.25 SR	97	-25.7308	156.9710	16.4	Pass
T3	24 - 4	Leg	2.75 SR	193	-47.0531	244.6760	19.2 19.3 (b)	Pass
T1	64 - 44	Diagonal	0.625 SR	12	-0.5804	6.5985	8.8	Pass
T2	44 - 24	Diagonal	0.625 SR	106	-0.8948	6.8386	13.1	Pass
T3	24 - 4	Diagonal	0.625 SR	203	-1.2322	7.0407	17.5	Pass
T1	64 - 44	Horizontal	0.625 SR	17	-0.1743	3.4180	5.1	Pass
T2	44 - 24	Horizontal	0.625 SR	112	-0.4457	3.5769	12.5	Pass
T3	24 - 4	Horizontal	0.625 SR	208	-0.8150	3.7472	21.7	Pass
T1	64 - 44	Top Girt	L1 1/2x1 1/2x1/4	5	-0.0041	20.2316	0.1	Pass
T2	44 - 24	Top Girt	L1 1/2x1 1/2x1/4	101	-0.4457	20.4324	2.2	Pass
T3	24 - 4	Top Girt	L1 1/2x1 1/2x1/4	196	-0.8150	20.6286	4.0	Pass
T1	64 - 44	Bottom Girt	L1 1/2x1 1/2x1/4	8	0.1749	22.2750	0.8	Pass
T2	44 - 24	Bottom Girt	L1 1/2x1 1/2x1/4	104	-0.4457	20.4324	2.2	Pass
T3	24 - 4	Bottom Girt	L1 1/2x1 1/2x1/4	200	6.4797	22.2750	29.1	Pass
							Summary	
						Leg (T3)	19.3	Pass
						Diagonal (T3)	17.5	Pass
						Horizontal (T3)	21.7	Pass
						Top Girt (T3)	4.0	Pass
						Bottom Girt (T3)	29.1	Pass
						Bolt Checks	19.3	Pass
						RATING =	29.1	Pass

Foundation Original Design Reaction Comparison Summary

Reactions	Current Reactions	Original Reactions	% Capacity	Pass/Fail
Axial (Kip)	4.0	21.8	18.4	Pass
Shear (Kip)	2.0	6.6	30.3	Pass
Moment (Kip-ft)	88.0	156.2	56.3	Pass

Conclusions and Recommendations

The tower and its foundation were found to be adequate to support the proposed appurtenance loading and will not require modification.

The proposed loading reactions were found to be less than the original design reactions. Therefore, it is our opinion the foundation is adequate for the proposed loading scenario as long as they were designed per a site specific geotechnical investigation. In order to verify the foundation capacity, the in place geometry of the existing foundation and the in situ soil properties must be determined.

Assumptions

This structural analysis is based on the theoretical capacity of the members and is not a condition assessment of the tower or its foundation. It has been compiled from information supplied, and therefore, its results are based on and are as accurate as that supplied data. POD has made no independent determination of its accuracy. The following assumptions were made for this structural analysis.

1. Tower and foundation was built in accordance with the manufacturer's specifications.
2. The tower and foundation have been maintained in accordance with the manufacturer's specifications.
3. The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in the Existing/Leased Loading and Proposed Loading tables, and specified documents.
4. All mounts, if applicable, are considered adequate to support the loading. No actual analysis of the mounts was performed. This analysis is limited to analyzing the tower and foundation only.
5. Material grades and mount sizes, weights, and manufacturers are best estimates determined by information provided and previous experience without the benefit of a site visit by POD.
6. A rigorous foundation analysis was not performed. Capacity shown is a comparison of the current reaction to the original design reactions.

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and POD should be allowed to review any new information to determine its effect on the structural integrity of the tower and its foundation.

Disclaimer of Warranties

POD Group has not performed a site visit to the structure to verify the member sizes or antenna/coax loading unless noted otherwise. If the existing conditions are not as represented in this report, we should be contacted immediately to evaluate the significance of the discrepancy. This is not a condition assessment of the structure or foundation. This report does not replace a full structure inspection. The structure, foundations, and mounting systems are assumed to have been properly fabricated, erected, maintained, in good condition, twist free, and plumb.

The engineering services rendered by POD Group in connection with this Structural Analysis are limited to a computer analysis of the structure and theoretical capacity of its main structural members. No allowance was made for any damaged, bent, missing, loose, or rusted members (above and below ground). No allowance was made for loose bolts or cracked welds.

POD Group does not analyze the fabrication of the structure (including welding). It is not possible to have all the very detailed information needed to perform a thorough analysis of every structural sub-component and connection of an existing structure. POD Group provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc. The purpose of this report is to assess the feasibility of adding appurtenances usually accompanied by transmission lines to the structure.

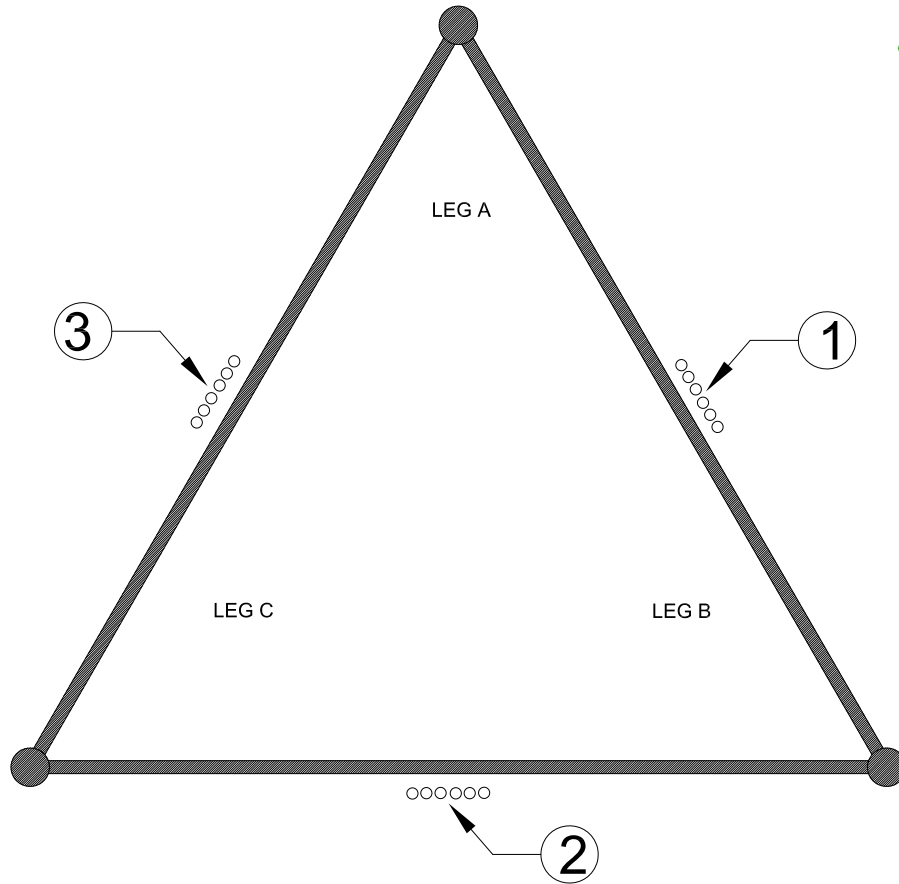
It is the owner's responsibility to determine the amount of ice accumulation in excess of the code specified amount, if any, that should be considered in the structural analysis.

The attached sketches are a schematic representation of the analyzed structure. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions, proper fit, and clearance in the field. Any mention of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from POD Group, but are beyond the scope of this report.

Miscellaneous items such as antenna mounts, etc., have not been designed or detailed as a part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

POD Group makes no warranties, expressed and/or implied, in connection with this report and disclaims any liability arising from material, fabrication, and erection of this structure. POD Group will not be responsible whatsoever, for or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of POD Group pursuant to this report will be limited to the total fee received for preparation of this report.

Coax Layout



COAX LAYOUT

CALLOUT	CARRIER	ELEVATION	SIZE (IN)	QUANTITY	NOTES
1	AT&T	8' - Varies	1/2"	6	4 to 62', 2 to 55'
2	AT&T	8' - Varies	1/2"	6	4 to 62', 2 to 55'
3	AT&T	8' - Varies	1/2"	6	4 to 62', 2 to 55'

tnxTower Output

<i>tnxTower</i> Power of Design Group, LLC 1033 E. Turkeyfoot Lake Rd., Suite 206 Akron, OH 44312 Phone: (330) 961-7432 FAX:	Job 23-159585	Page 1 of 11
	Project I-65 (Columbia 61)	Date 08:47:00 08/01/23
	Client Smartlink	Designed by Alec Perkins

Tower Input Data

The main tower is a 3x free standing tower with an overall height of 64.00 ft above the ground line.

The base of the tower is set at an elevation of 4.00 ft above the ground line.

The face width of the tower is 2.00 ft at the top and 2.00 ft at the base.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

Tower base elevation above sea level: 723.66 ft.

Basic wind speed of 105 mph.

Risk Category II.

Exposure Category C.

Simplified Topographic Factor Procedure for wind speed-up calculations is used.

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 1.5000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 30 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

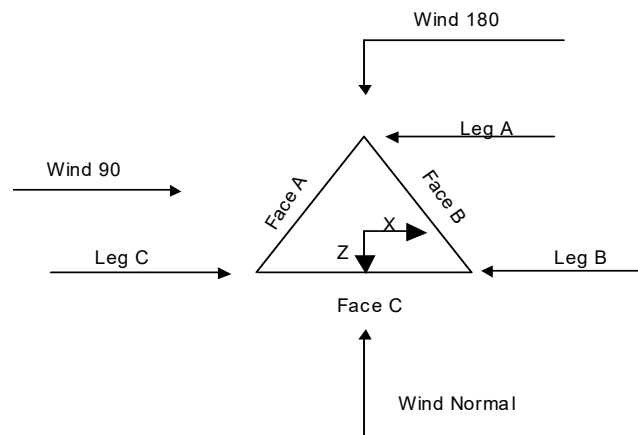
Stress ratio used in tower member design is 1.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Horizontals	Assume Legs Pinned	√ Calculate Redundant Bracing Forces
Consider Moments - Diagonals	√ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Use Moment Magnification	√ Use Clear Spans For Wind Area	SR Leg Bolts Resist Compression
√ Use Code Stress Ratios	√ Use Clear Spans For KL/r	√ All Leg Panels Have Same Allowable
√ Use Code Safety Factors - Guys	Retension Guys To Initial Tension	Offset Girt At Foundation
Escalate Ice	√ Bypass Mast Stability Checks	√ Consider Feed Line Torque
Always Use Max Kz	√ Use Azimuth Dish Coefficients	Include Angle Block Shear Check
Use Special Wind Profile	√ Project Wind Area of Appurt.	Use TIA-222-H Bracing Resist. Exemption
√ Include Bolts In Member Capacity	√ Autocalc Torque Arm Areas	Use TIA-222-H Tension Splice Exemption
√ Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Poles
√ Secondary Horizontal Braces Leg	√ Sort Capacity Reports By Component	Include Shear-Torsion Interaction
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Always Use Sub-Critical Flow
SR Members Have Cut Ends	Treat Feed Line Bundles As Cylinder	Use Top Mounted Sockets
√ SR Members Are Concentric	Ignore KL/ry For 60 Deg. Angle Legs	Pole Without Linear Attachments
		Pole With Shroud Or No Appurtenances
		Outside and Inside Corner Radii Are
		Known

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Triangular Tower

Tower Section Geometry

<i>Tower Section</i>	<i>Tower Elevation</i>	<i>Assembly Database</i>	<i>Description</i>	<i>Section Width</i>	<i>Number of Sections</i>	<i>Section Length</i>
	<i>ft</i>			<i>ft</i>		<i>ft</i>
T1	64.00-44.00			2.00	1	20.00
T2	44.00-24.00			2.00	1	20.00
T3	24.00-4.00			2.00	1	20.00

Tower Section Geometry (cont'd)

<i>Tower Section</i>	<i>Tower Elevation</i>	<i>Diagonal Spacing</i>	<i>Bracing Type</i>	<i>Has K Brace End Panels</i>	<i>Has Horizontals</i>	<i>Top Girt Offset</i>	<i>Bottom Girt Offset</i>
	<i>ft</i>	<i>ft</i>				<i>in</i>	<i>in</i>
T1	64.00-44.00	1.99	X Brace	No	Yes	0.0000	1.0000
T2	44.00-24.00	1.98	X Brace	No	Yes	1.0000	1.0000
T3	24.00-4.00	1.99	X Brace	No	Yes	1.0000	0.0000

Tower Section Geometry (cont'd)

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<i>Tower Elevation ft</i>	<i>Leg Type</i>	<i>Leg Size</i>	<i>Leg Grade</i>	<i>Diagonal Type</i>	<i>Diagonal Size</i>	<i>Diagonal Grade</i>
T1 64.00-44.00	Solid Round	1.75 SR	A572-50 (50 ksi)	Solid Round	0.625 SR	A572-50 (50 ksi)
T2 44.00-24.00	Solid Round	2.25 SR	A572-50 (50 ksi)	Solid Round	0.625 SR	A572-50 (50 ksi)
T3 24.00-4.00	Solid Round	2.75 SR	A572-50 (50 ksi)	Solid Round	0.625 SR	A572-50 (50 ksi)

Tower Section Geometry (cont'd)

<i>Tower Elevation ft</i>	<i>Top Girt Type</i>	<i>Top Girt Size</i>	<i>Top Girt Grade</i>	<i>Bottom Girt Type</i>	<i>Bottom Girt Size</i>	<i>Bottom Girt Grade</i>
T1 64.00-44.00	Equal Angle	L1 1/2x1 1/2x1/4	A36 (36 ksi)	Equal Angle	L1 1/2x1 1/2x1/4	A36 (36 ksi)
T2 44.00-24.00	Equal Angle	L1 1/2x1 1/2x1/4	A36 (36 ksi)	Equal Angle	L1 1/2x1 1/2x1/4	A36 (36 ksi)
T3 24.00-4.00	Equal Angle	L1 1/2x1 1/2x1/4	A36 (36 ksi)	Equal Angle	L1 1/2x1 1/2x1/4	A36 (36 ksi)

Tower Section Geometry (cont'd)

<i>Tower Elevation ft</i>	<i>No. of Mid Girts</i>	<i>Mid Girt Type</i>	<i>Mid Girt Size</i>	<i>Mid Girt Grade</i>	<i>Horizontal Type</i>	<i>Horizontal Size</i>	<i>Horizontal Grade</i>
T1 64.00-44.00	None	Flat Bar		A36 (36 ksi)	Solid Round	0.625 SR	A572-50 (50 ksi)
T2 44.00-24.00	None	Flat Bar		A36 (36 ksi)	Solid Round	0.625 SR	A572-50 (50 ksi)
T3 24.00-4.00	None	Flat Bar		A36 (36 ksi)	Solid Round	0.625 SR	A572-50 (50 ksi)

Tower Section Geometry (cont'd)

<i>Tower Elevation ft</i>	<i>Gusset Area (per face) ft²</i>	<i>Gusset Thickness in</i>	<i>Gusset Grade</i>	<i>Adjust. Factor A_f</i>	<i>Adjust. Factor A_r</i>	<i>Weight Mult.</i>	<i>Double Angle Stitch Bolt Spacing Diagonals in</i>	<i>Double Angle Stitch Bolt Spacing Horizontals in</i>	<i>Double Angle Stitch Bolt Spacing Redundants in</i>
T1 64.00-44.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T2 44.00-24.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T3 24.00-4.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000

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Tower Section Geometry (cont'd)

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Legs	K Factors ¹						
				X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1 64.00-44.00	No	No	1	1	1	1	1	1	1	1
T2 44.00-24.00	No	No	1	1	1	1	1	1	1	1
T3 24.00-4.00	No	No	1	1	1	1	1	1	1	1

¹Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 64.00-44.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T2 44.00-24.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 24.00-4.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 64.00-44.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T2 44.00-24.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 24.00-4.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 64.00-44.00	Flange	0.7500 A325N	3	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0

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Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T2 44.00-24.00	Flange	0.7500	3	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T3 24.00-4.00	Flange	0.8750	3	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
LDF4-50A (1/2 FOAM)	A	No	No	Ar (CaAa)	55.00 - 8.00	2	2	0.2500	0.6300		0.15
LDF4-50A (1/2 FOAM)	B	No	No	Ar (CaAa)	55.00 - 8.00	2	2	0.2500	0.6300		0.15
LDF4-50A (1/2 FOAM)	C	No	No	Ar (CaAa)	55.00 - 8.00	2	2	0.2500	0.6300		0.15
LDF4-50A (1/2 FOAM)	A	No	No	Ar (CaAa)	62.00 - 8.00	4	4	0.2500	0.6300		0.15
LDF4-50A (1/2 FOAM)	B	No	No	Ar (CaAa)	62.00 - 8.00	4	4	0.2500	0.6300		0.15
LDF4-50A (1/2 FOAM)	C	No	No	Ar (CaAa)	62.00 - 8.00	4	4	0.2500	0.6300		0.15

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R	A_F	$C_A A_A$ In Face	$C_A A_A$ Out Face	Weight K
			ft ²	ft ²	ft ²	ft ²	
T1	64.00-44.00	A	0.000	0.000	5.922	0.000	0.0141
		B	0.000	0.000	5.922	0.000	0.0141
		C	0.000	0.000	5.922	0.000	0.0141
T2	44.00-24.00	A	0.000	0.000	7.560	0.000	0.0180
		B	0.000	0.000	7.560	0.000	0.0180
		C	0.000	0.000	7.560	0.000	0.0180
T3	24.00-4.00	A	0.000	0.000	6.048	0.000	0.0144
		B	0.000	0.000	6.048	0.000	0.0144
		C	0.000	0.000	6.048	0.000	0.0144

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R	A_F	$C_A A_A$ In Face	$C_A A_A$ Out Face	Weight K
				ft ²	ft ²	ft ²	ft ²	
T1	64.00-44.00	A	1.576	0.000	0.000	25.021	0.000	0.2135
		B		0.000	0.000	25.021	0.000	0.2135
		C		0.000	0.000	25.021	0.000	0.2135
T2	44.00-24.00	A	1.504	0.000	0.000	32.648	0.000	0.2649
		B		0.000	0.000	32.648	0.000	0.2649

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	Client	Smartlink	Designed by	Alec Perkins

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight K
T3	24.00-4.00	C	1.377	0.000	0.000	32.648	0.000	0.2649
		A		0.000	0.000	24.703	0.000	0.1888
		B		0.000	0.000	24.703	0.000	0.1888
		C		0.000	0.000	24.703	0.000	0.1888

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	64.00-44.00	0.0000	-0.6836	0.0000	-0.0939
T2	44.00-24.00	0.0000	-0.6985	0.0000	-0.1209
T3	24.00-4.00	0.0000	-0.5668	0.0000	-0.1206

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	1	LDF4-50A (1/2 FOAM)	44.00 - 55.00	0.6000	0.1800
T1	2	LDF4-50A (1/2 FOAM)	44.00 - 55.00	0.6000	0.1800
T1	3	LDF4-50A (1/2 FOAM)	44.00 - 55.00	0.6000	0.1800
T1	4	LDF4-50A (1/2 FOAM)	44.00 - 62.00	0.6000	0.1800
T1	5	LDF4-50A (1/2 FOAM)	44.00 - 62.00	0.6000	0.1800
T1	6	LDF4-50A (1/2 FOAM)	44.00 - 62.00	0.6000	0.1800
T2	1	LDF4-50A (1/2 FOAM)	24.00 - 44.00	0.6000	0.1943
T2	2	LDF4-50A (1/2 FOAM)	24.00 - 44.00	0.6000	0.1943
T2	3	LDF4-50A (1/2 FOAM)	24.00 - 44.00	0.6000	0.1943
T2	4	LDF4-50A (1/2 FOAM)	24.00 - 44.00	0.6000	0.1943
T2	5	LDF4-50A (1/2 FOAM)	24.00 - 44.00	0.6000	0.1943
T2	6	LDF4-50A (1/2 FOAM)	24.00 - 44.00	0.6000	0.1943
T3	1	LDF4-50A (1/2 FOAM)	8.00 - 24.00	0.6000	0.2240
T3	2	LDF4-50A (1/2 FOAM)	8.00 - 24.00	0.6000	0.2240
T3	3	LDF4-50A (1/2 FOAM)	8.00 - 24.00	0.6000	0.2240
T3	4	LDF4-50A (1/2 FOAM)	8.00 - 24.00	0.6000	0.2240
T3	5	LDF4-50A (1/2 FOAM)	8.00 - 24.00	0.6000	0.2240
T3	6	LDF4-50A (1/2 FOAM)	8.00 - 24.00	0.6000	0.2240

Discrete Tower Loads

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C _{AA} Front ft ²	C _{AA} Side ft ²	Weight K
SBNHH-1D65A w/ Mount Pipe	A	From Leg	0.50	0.0000	62.00	No Ice	5.98	5.05	0.0518
			0.00			1/2" Ice	6.37	5.72	0.1041
			0.00			1" Ice	6.77	6.38	0.1628
			0.00			2" Ice	7.58	7.74	0.3027
SBNHH-1D65A w/ Mount Pipe	B	From Leg	0.50	0.0000	62.00	No Ice	5.98	5.05	0.0518
			0.00			1/2" Ice	6.37	5.72	0.1041
			0.00			1" Ice	6.77	6.38	0.1628
			0.00			2" Ice	7.58	7.74	0.3027
SBNHH-1D65A w/ Mount Pipe	C	From Leg	0.50	0.0000	62.00	No Ice	5.98	5.05	0.0518
			0.00			1/2" Ice	6.37	5.72	0.1041
			0.00			1" Ice	6.77	6.38	0.1628
			0.00			2" Ice	7.58	7.74	0.3027
SBNHH-1D65A w/ Mount Pipe	A	From Leg	0.50	0.0000	55.00	No Ice	5.98	5.05	0.0518
			0.00			1/2" Ice	6.37	5.72	0.1041
			0.00			1" Ice	6.77	6.38	0.1628
			0.00			2" Ice	7.58	7.74	0.3027
SBNHH-1D65A w/ Mount Pipe	B	From Leg	0.50	0.0000	55.00	No Ice	5.98	5.05	0.0518
			0.00			1/2" Ice	6.37	5.72	0.1041
			0.00			1" Ice	6.77	6.38	0.1628
			0.00			2" Ice	7.58	7.74	0.3027
SBNHH-1D65A w/ Mount Pipe	C	From Leg	0.50	0.0000	55.00	No Ice	5.98	5.05	0.0518
			0.00			1/2" Ice	6.37	5.72	0.1041
			0.00			1" Ice	6.77	6.38	0.1628
			0.00			2" Ice	7.58	7.74	0.3027

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
T1	64	Leg	A325N	0.7500	3	0.0088	30.1014	0.000	1	Bolt Tension
T2	44	Leg	A325N	0.7500	3	2.6665	30.1014	0.089	1	Bolt Tension
T3	24	Leg	A325N	0.8750	3	8.0056	41.5560	0.193	1	Bolt Tension

Compression Checks

Leg Design Data (Compression)

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Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	64 - 44	1.75 SR	20.00	1.99	54.6 K=1.00	2.4053	-8.8119	87.0191	0.101 ¹ ✓
T2	44 - 24	2.25 SR	20.00	1.98	42.3 K=1.00	3.9761	-25.7308	156.9710	0.164 ¹ ✓
T3	24 - 4	2.75 SR	20.00	1.99	34.8 K=1.00	5.9396	-47.0531	244.6760	0.192 ¹ ✓

¹ P_u / φP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	64 - 44	0.625 SR	2.82	1.31	100.5 K=1.00	0.3068	-0.5804	6.5985	0.088 ¹ ✓
T2	44 - 24	0.625 SR	2.82	1.28	98.0 K=1.00	0.3068	-0.8948	6.8386	0.131 ¹ ✓
T3	24 - 4	0.625 SR	2.82	1.25	96.0 K=1.00	0.3068	-1.2322	7.0407	0.175 ¹ ✓

¹ P_u / φP_n controls

Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	64 - 44	0.625 SR	2.00	1.85	142.4 K=1.00	0.3068	-0.1743	3.4180	0.051 ¹ ✓
T2	44 - 24	0.625 SR	2.00	1.81	139.2 K=1.00	0.3068	-0.4457	3.5769	0.125 ¹ ✓
T3	24 - 4	0.625 SR	2.00	1.77	136.0 K=1.00	0.3068	-0.8150	3.7472	0.217 ¹ ✓

¹ P_u / φP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	64 - 44	L1 1/2x1 1/2x1/4	2.00	1.85	76.2 K=1.00	0.6875	-0.0041	20.2316	0.000 ¹

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Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T2	44 - 24	L1 1/2x1 1/2x1/4	2.00	1.81	74.5 K=1.00	0.6875	-0.4457	20.4324	0.022 ¹ ✓
T3	24 - 4	L1 1/2x1 1/2x1/4	2.00	1.77	72.8 K=1.00	0.6875	-0.8150	20.6286	0.040 ¹ ✓

¹ P_u / φP_n controls

Bottom Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	64 - 44	L1 1/2x1 1/2x1/4	2.00	1.85	76.2 K=1.00	0.6875	-0.1540	20.2316	0.008 ¹ ✓
T2	44 - 24	L1 1/2x1 1/2x1/4	2.00	1.81	74.5 K=1.00	0.6875	-0.4457	20.4324	0.022 ¹ ✓

¹ P_u / φP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	64 - 44	1.75 SR	20.00	1.99	54.6	2.4053	8.0001	108.2380	0.074 ¹ ✓
T2	44 - 24	2.25 SR	20.00	1.98	42.3	3.9761	24.0180	178.9240	0.134 ¹ ✓
T3	24 - 4	2.75 SR	20.00	1.99	34.8	5.9396	44.2622	267.2810	0.166 ¹ ✓

¹ P_u / φP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	64 - 44	0.625 SR	2.82	1.31	100.5	0.3068	0.5442	13.8058	0.039 ¹

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Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T2	44 - 24	0.625 SR	2.82	1.28	98.0	0.3068	0.8455	13.8058	0.061 ¹ ✓
T3	24 - 4	0.625 SR	2.82	1.25	96.0	0.3068	1.1690	13.8058	0.085 ¹ ✓

¹ P_u / φP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	64 - 44	0.625 SR	2.00	1.85	142.4	0.3068	0.2132	13.8058	0.015 ¹ ✓
T2	44 - 24	0.625 SR	2.00	1.81	139.2	0.3068	0.4457	13.8058	0.032 ¹ ✓
T3	24 - 4	0.625 SR	2.00	1.77	136.0	0.3068	0.8150	13.8058	0.059 ¹ ✓

¹ P_u / φP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	64 - 44	L1 1/2x1 1/2x1/4	2.00	1.85	49.6	0.6875	0.0026	22.2750	0.000 ¹ ✓
T2	44 - 24	L1 1/2x1 1/2x1/4	2.00	1.81	48.5	0.6875	0.4457	22.2750	0.020 ¹ ✓
T3	24 - 4	L1 1/2x1 1/2x1/4	2.00	1.77	47.3	0.6875	0.8150	22.2750	0.037 ¹ ✓

¹ P_u / φP_n controls

Bottom Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	64 - 44	L1 1/2x1 1/2x1/4	2.00	1.85	49.6	0.6875	0.1749	22.2750	0.008 ¹ ✓

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	Client	Smartlink	Designed by	Alec Perkins

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T2	44 - 24	L1 1/2x1 1/2x1/4	2.00	1.81	48.5	0.6875	0.4457	22.2750	0.020 ¹
T3	24 - 4	L1 1/2x1 1/2x1/4	2.00	1.77	47.3	0.6875	6.4797	22.2750	0.291 ^{*1}

* DL controls

¹ P_u / φP_n controls

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	φP _{allow} K	% Capacity	Pass Fail
T1	64 - 44	Leg	1.75 SR	1	-8.8119	87.0191	10.1	Pass
T2	44 - 24	Leg	2.25 SR	97	-25.7308	156.9710	16.4	Pass
T3	24 - 4	Leg	2.75 SR	193	-47.0531	244.6760	19.2	Pass
							19.3 (b)	
T1	64 - 44	Diagonal	0.625 SR	12	-0.5804	6.5985	8.8	Pass
T2	44 - 24	Diagonal	0.625 SR	106	-0.8948	6.8386	13.1	Pass
T3	24 - 4	Diagonal	0.625 SR	203	-1.2322	7.0407	17.5	Pass
T1	64 - 44	Horizontal	0.625 SR	17	-0.1743	3.4180	5.1	Pass
T2	44 - 24	Horizontal	0.625 SR	112	-0.4457	3.5769	12.5	Pass
T3	24 - 4	Horizontal	0.625 SR	208	-0.8150	3.7472	21.7	Pass
T1	64 - 44	Top Girt	L1 1/2x1 1/2x1/4	5	-0.0041	20.2316	0.1	Pass
T2	44 - 24	Top Girt	L1 1/2x1 1/2x1/4	101	-0.4457	20.4324	2.2	Pass
T3	24 - 4	Top Girt	L1 1/2x1 1/2x1/4	196	-0.8150	20.6286	4.0	Pass
T1	64 - 44	Bottom Girt	L1 1/2x1 1/2x1/4	8	0.1749	22.2750	0.8	Pass
T2	44 - 24	Bottom Girt	L1 1/2x1 1/2x1/4	104	-0.4457	20.4324	2.2	Pass
T3	24 - 4	Bottom Girt	L1 1/2x1 1/2x1/4	200	6.4797	22.2750	29.1	Pass
							Summary	
							Leg (T3)	19.3
							Diagonal (T3)	17.5
							Horizontal (T3)	21.7
							Top Girt (T3)	4.0
							Bottom Girt (T3)	29.1
							Bolt Checks	19.3
							RATING =	29.1
								Pass

SOIL RESISTIVITY REPORT

I-65

35° 38' 23.034525" N

86° 53' 35.534066" W

1616 Harley Davidson Blvd,
Columbia, TN 38401

Prepared For:



Prepared By:



August 3, 2023

Ms. Tania Rogers
409 Sion Kelly Rd
Broadway, NC 27705

RE: I-65 – Soil Resistivity Report

Dear Ms. Rogers,

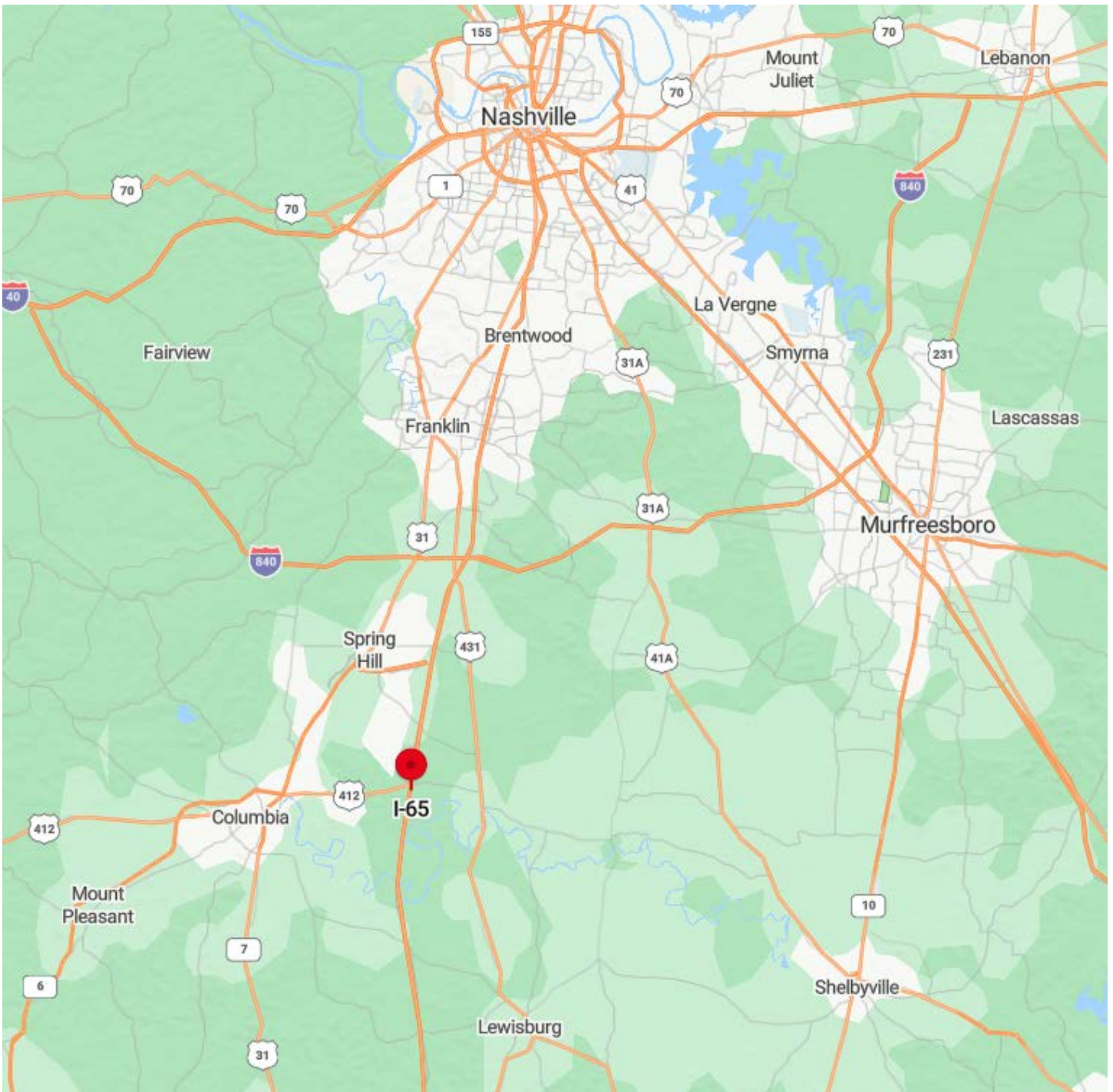
To aid in the design of the grounding equipment for the above-mentioned site, soil resistivity tests were performed. The Wenner Vertical Profiling Method was used by centering the potential electrodes on a traverse line between the current electrodes and maintaining an equal “A” spacing between electrodes. The depth of interests or “A” spacing of 2.5 feet, 5 feet, 10 feet, 12.5 feet, 15 feet, 20 feet and 50 feet were determined as requested by Smartlink. The resistivity measurements were taken in perpendicular lines centered over the same location near the proposed tower site.

If you have any questions regarding this report, please contact our office.

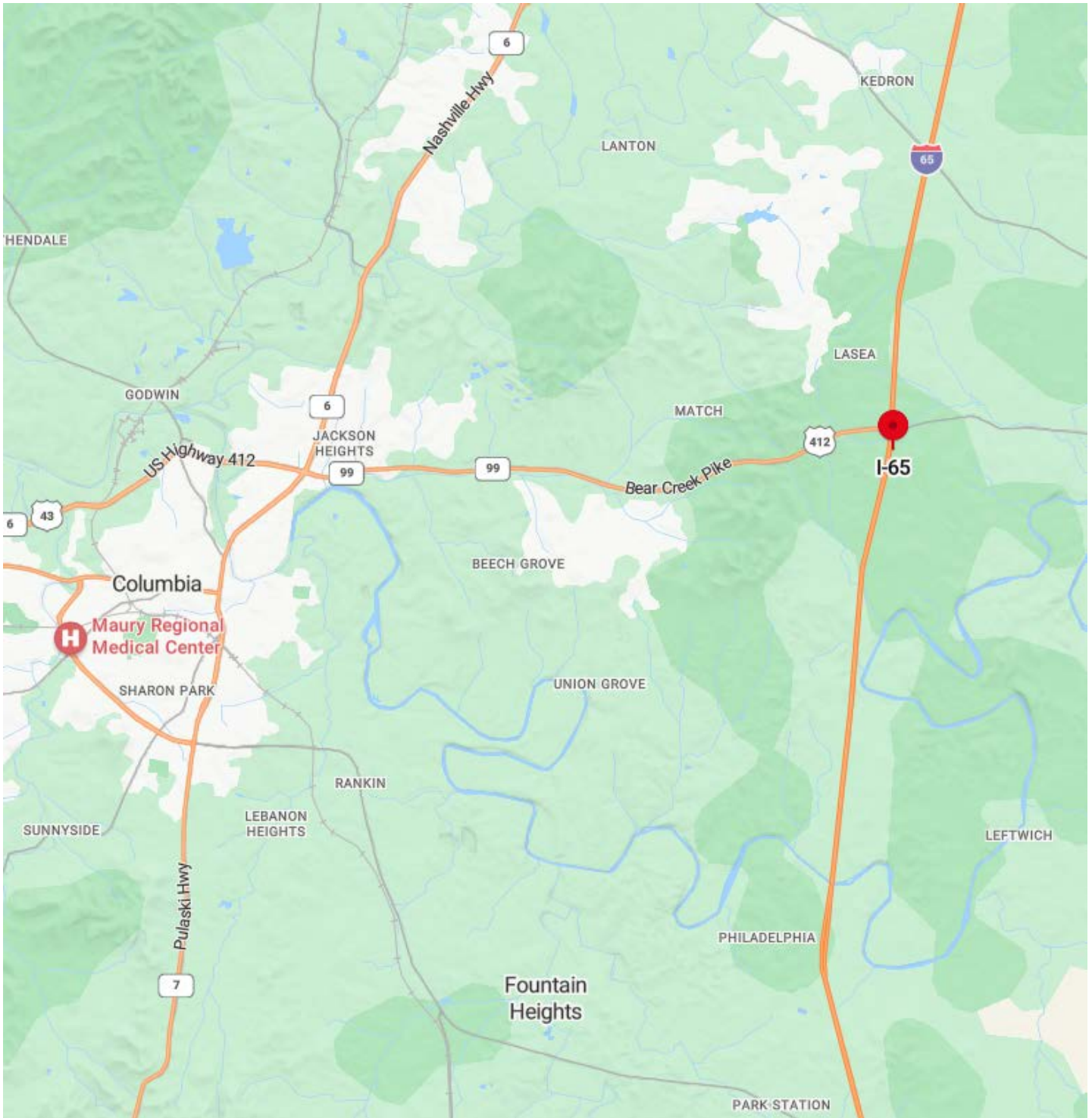
Sincerely,



Katybeth Coode
Project Manager
Power of Design Group, LLC



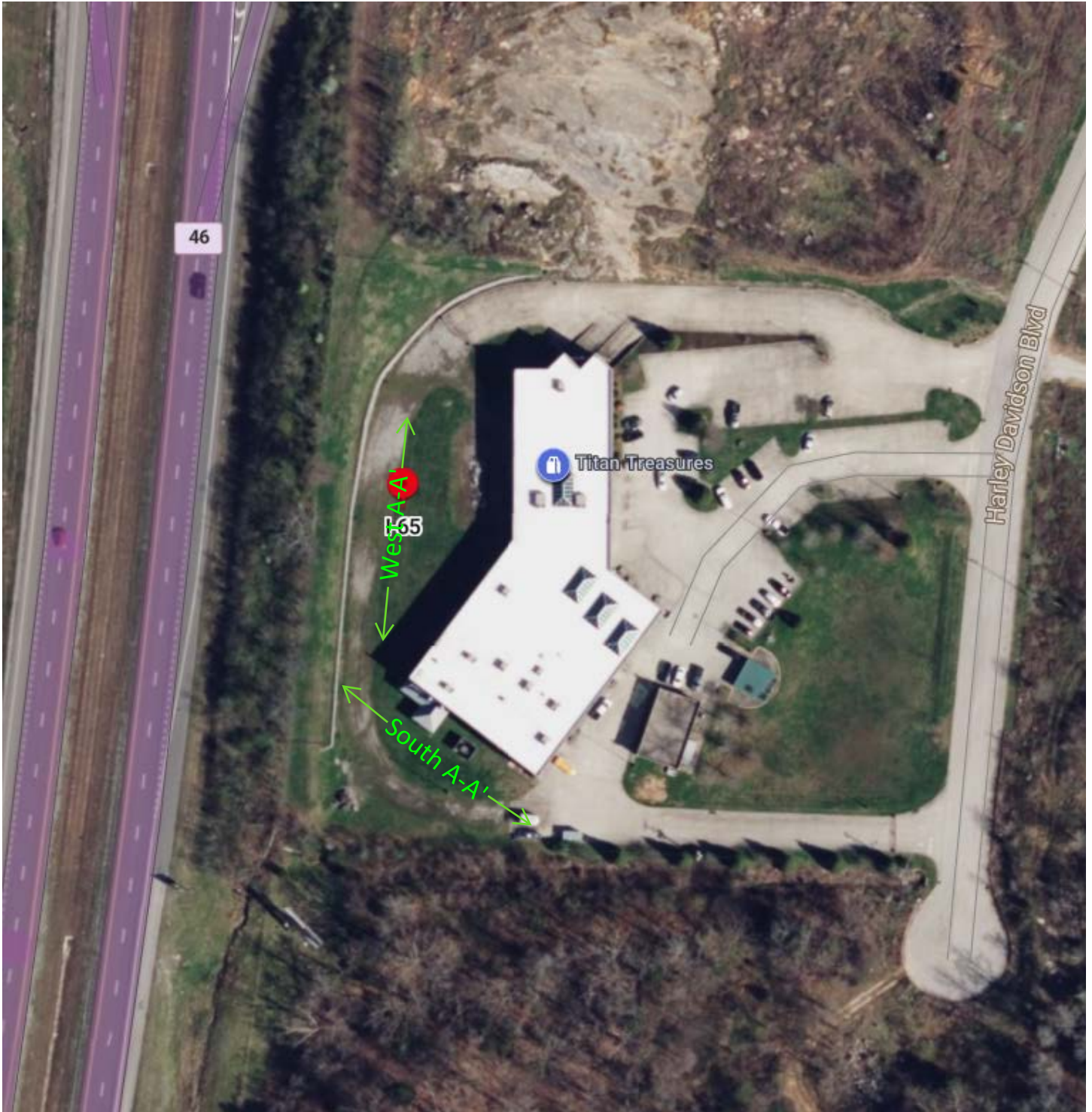
SHEET TITLE: SOIL RESISTIVITY PLAN	SITE INFORMATION: I-65		 POWER OF DESIGN 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 502-437-5252 PREPARED FOR
	LATITUDE: 35° 38' 23.034525" N LONGITUDE: 86° 53' 35.534066" W	1616 HARLEY DAVIDSON BLVD COLUMBIA, TN 38401 MAURY COUNTY	
SHEET NUMBER: 1	POD NUMBER: 23-XXXXX DRAWN BY: KEC DATE: 8.3.2022		



SHEET TITLE: SOIL RESISTIVITY PLAN	SITE INFORMATION: I-65		 POD POWER OF DESIGN 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 502-437-5252 PREPARED FOR  AT&T
	LATITUDE: 35° 38' 23.034525" N LONGITUDE: 86° 53' 35.534066" W	1616 HARLEY DAVIDSON BLVD COLUMBIA, TN 38401 MAURY COUNTY	
	POD NUMBER: 23-XXXXX DRAWN BY: KEC DATE: 8.3.2022		
SHEET NUMBER: 2			



SHEET TITLE: SOIL RESISTIVITY PLAN	SITE INFORMATION:		 POD POWER OF DESIGN 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 502-437-5252
	LATITUDE:	35° 38' 23.034525" N	
	LONGITUDE:	86° 53' 35.534066" W	
SHEET NUMBER: 3	1616 HARLEY DAVIDSON BLVD COLUMBIA, TN 38401 MAURY COUNTY		PREPARED FOR  AT&T
	POD NUMBER:	23-XXXX	
	DRAWN BY:	KEC	
	DATE:	8.3.2022	



SHEET TITLE: SOIL RESISTIVITY PLAN			SITE INFORMATION: I-65 1616 HARLEY DAVIDSON BLVD COLUMBIA, TN 38401 MAURY COUNTY	 POD POWER OF DESIGN 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 502-437-5252
	LATITUDE: 35° 38' 23.034525" N			
	LONGITUDE: 86° 53' 35.534066" W			
SHEET NUMBER: 4	POD NUMBER: 23-XXXX			PREPARED FOR  AT&T
	DRAWN BY: KEC			
	DATE: 8.3.2022			



SHEET TITLE: SOIL RESISTIVITY PLAN	SITE INFORMATION:		 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 502-437-5252 PREPARED FOR
	LATITUDE: 35° 38' 23.034525" N	I-65	
	LONGITUDE: 86° 53' 35.534066" W	1616 HARLEY DAVIDSON BLVD COLUMBIA, TN 38401 MAURY COUNTY	
SHEET NUMBER: 5	POD NUMBER: 23-XXXX		
	DRAWN BY: KEC		
	DATE: 8.3.2022		

At-Grade Measurements (equal rod spacing)

		North A -A'						
Field Measured	Depth of Interest (feet)	2.5	5	10	12.5	15	20	50
	Dial Reading (Ohm)							
	Range Switch	1	1	1	1	1	1	1
	Calculated Resistivity (ohms-cm)	0	0	0	0	0	0	0
		East A -A'						
Field Measured	Depth of Interest (feet)	2.5	5	10	12.5	15	20	50
	Dial Reading (Ohm)							
	Range Switch	1	1	1	1	1	1	1
	Calculated Resistivity (ohms-cm)	0	0	0	0	0	0	0
		South A -A'						
Field Measured	Depth of Interest (feet)	2.5	5	10	12.5	15	20	50
	Dial Reading (Ohm)	6.52	3.12	2.08	1.784	1.576	1.220	0.904
	Range Switch	1	1	1	1	1	1	1
	Calculated Resistivity (ohms-cm)	3120.055	2986.065	3981.42	4268.541	4525.036	4670.511	8651.931
		West A -A'						
Field Measured	Depth of Interest (feet)	2.5	5	10	12.5	15	20	50
	Dial Reading (Ohm)	11.13	9.04	7.55	6.81	6.36	5.38	3.69
	Range Switch	1	1	1	1	1	1	1
	Calculated Resistivity (ohms-cm)	5326.106	8651.931	14451.79	16294.15	18260.93	20596.19	35315.96
		Average						
Field Measured	Depth of Interest (feet)	2.5	5	10	12.5	15	20	50
	Dial Reading (Ohm)	8.825	6.080	4.815	4.297	3.968	3.300	2.297
	Range Switch	1	1	1	1	1	1	1
	Calculated Resistivity (ohms-cm)	2111.54	2909.499	4608.302	5140.673	5696.493	6316.675	10991.97

Resistivity (ohm-cm) = $2 * p * a * R * 30.48$

R = resistivity (dial reading * range switch)

a = electrode spacing

Equipment Usage: Biddle Megger DET2/2

Additional Notes: _____



Radio Frequency Engineering Statement

in support of Application for

Proposed AT&T Mobility Wireless Communications Facility

1616 Harley Davidson Blvd., Columbia, TN 38401

Site Name: I-65 Temp

BACKGROUND

AT&T Mobility (“AT&T”) is an FCC-licensed wireless communications service provider that provides essential wireless voice and data services to residential and commercial customers. AT&T delivers these services over a network of sites (i.e., antennas mounted on a support structure, with associated radio transmitting equipment) which are linked to one another and which transmit and receive signals to and from mobile phones and other wireless communication devices.

Each site provides coverage for users located in a particular area. The geographic area covered by a given site is determined by factors such as site elevation, local topography, relative location and elevation of adjacent sites and customer usage patterns for the area. The volume of usage that can be handled by an individual site is limited, and sites must be carefully located to provide sufficient coverage for users in a given area. Sites must also be located with reference to other sites in the network to provide seamless mobile connectivity while also avoiding interference with one another in order to be integrated into AT&T’s existing network.

Until very recently, AT&T provided service to the area in and around the Bear Creek Pike / I-65 interchange area from a tower located at 1624 Bear Creek Pike, Columbia, TN owned American Towers, LLC. However, American Towers, LLC’s lease expired, and the tower was dismantled and removed on or about August 1, 2023, leaving AT&T without a site to provide service to the subject area. AT&T is diligently working to develop a new, permanent site to serve the area. The process to develop a new site, however, will require time to obtain all necessary federal, state and local approvals, and to design and construct the facility.

In the interim, while a permanent site is in development, there is presently a significant gap in AT&T’s wireless coverage in the vicinity of the former American Towers, LLC tower site. In order to reduce service disruptions for area customers while the permanent site is in development, AT&T proposes to locate a temporary facility on property located at 1616 Harley Davidson Blvd., Columbia, TN 38401 (the “Temporary Facility”). The Temporary Facility will include an approximately 64-foot tall temporary wireless communications tower and associated ground equipment and will be constructed and operated in compliance with applicable Federal Communications Commission (“FCC”) regulations.

The Temporary Facility location was selected because it is an available site located near the former American Towers, LLC tower site. This will allow the Temporary Facility to integrate and function properly within AT&T’s existing network to provide service for the area. Additionally, the location is near the Bear Creek Pike / I-65 interchange, where there is a concentrated service need.

CRITICAL SERVICE NEED – I-65 INTERCHANGE AREA

Residents and businesses in the subject area are accustomed to the availability of reliable, high-quality wireless communications service. Additionally, wireless service is especially critical to law enforcement, fire and emergency medical services that rely on service availability to respond to emergencies. However, in the aftermath of the recent loss of the former American Towers, LLC

tower site, AT&T is currently unable to provide the former level of coverage and capacity to the area.

Since AT&T customers in the affected area are in immediate need of voice and data service availability for their personal and business use, and since restoring service is critically important for police, fire and emergency services response, AT&T is using its best efforts to mitigate the recent service loss by providing as much coverage and capacity as possible for the area using means such as the proposed Temporary Facility until a new permanent facility is constructed and operational to restore service to the area.

FIRSTNET

AT&T is pleased to have been selected as the nationwide public safety broadband network provider for the First Responder Network Authority (“FirstNet”), an advanced broadband network dedicated specifically to public safety communications. Congress created FirstNet to address emergency response communications shortcomings that were initially identified in the aftermath of the September 11, 2001 terrorist attacks.

All 50 U.S. states and 2 territories have opted in to FirstNet, which means that this will truly be a national network that is completely interconnected and will not stop at any state lines.

The proposed Temporary Facility will provide coverage and capacity for the FirstNet platform. Availability of FirstNet in the subject area improves public safety by providing advanced communications capabilities to assist public safety agencies and first responders.

The following documents with additional information regarding the benefits of FirstNet are attached as addenda to this Report:

1. AT&T Press Release: *AT&T Selected by FirstNet to Build and Manage America’s First Nationwide Public Safety Broadband Network Dedicated to First Responders*
2. FirstNet Authority Top 10 Frequently Asked Questions
3. FirstNet Authority - FirstNet for 911 Telecommunicators

SERVICE COVERAGE GAP

The extent of service coverage available from existing AT&T sites is shown on the map included as Exhibit A (page 5) with this Report. The green shading indicates areas with a signal strength level that provides acceptable in-building service coverage (i.e., where users are able to place or receive a call on the ground floor of a building). The blue shading indicates areas with a signal strength level that provides acceptable in-transit service coverage (i.e., where users should be able to place or receive a call from within a vehicle). The red shading indicates areas with a signal strength level where a customer might have difficulty receiving consistently acceptable service, and white indicates areas where there is little or no measurable signal strength.

The quality of service experienced by any individual customer can differ greatly depending on whether the user is indoors, outdoors, stationary, or in transit. AT&T strives to provide consistent service to all users within a coverage area. Accordingly, the blue, red and white areas on Exhibit A are areas where there will be inadequate service coverage.

AT&T proposes to construct the Temporary Facility to mitigate the present service issues discussed above, and to minimize the coverage gap illustrated by Exhibit A until a new, permanent site is constructed and operational. The map attached as Exhibit B (page 6) depicts coverage in the subject area once the Temporary Facility is deployed and integrated into AT&T's existing network. A comparison of Exhibit A (i.e., existing coverage) with Exhibit B (i.e., proposed coverage) shows the significant improvement to area coverage once the Temporary Facility is operational, which will provide needed coverage and improved service quality for the subject area.

Existing AT&T Service Coverage Without Temporary Site

at&t

Sites

- Decomm
- On-Air
- Planned

Zonina BL LTE: RSRP (dBm) - Indoor

- RSRP Level (DL) (dBm) ≥ -95
- RSRP Level (DL) (dBm) ≥ -105
- RSRP Level (DL) (dBm) ≥ -115

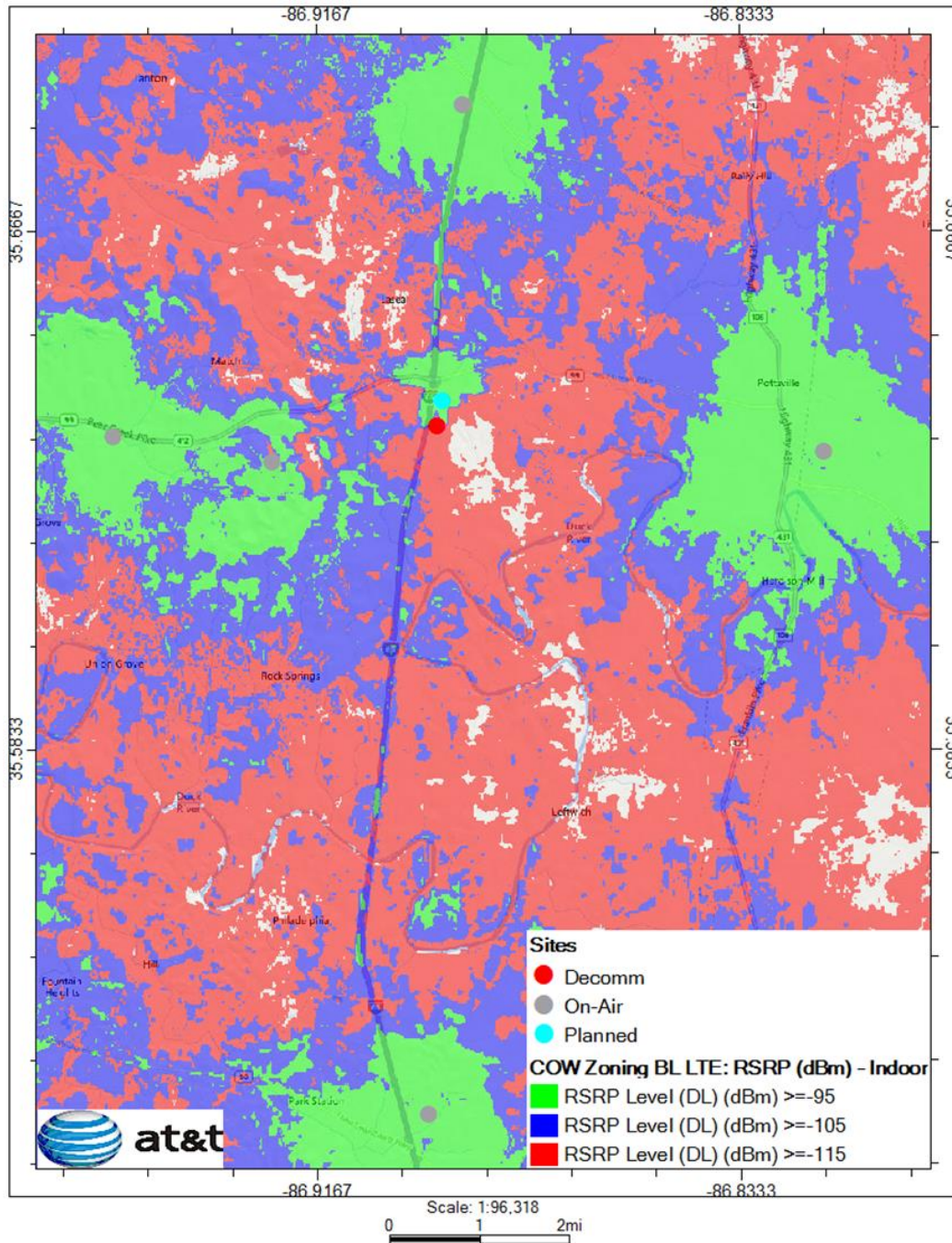
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EXHIBIT B

AT&T Service Coverage With Proposed Temporary Site

This map illustrates improved coverage that will be realized with the addition of the Temporary Facility.



AT&T SITE SELECTION

AT&T has determined that there is no more suitable location reasonably available for the Temporary Facility. Whenever possible, AT&T seeks to co-locate its equipment on existing structures. To this end, AT&T investigated the possibility for locating antennas on the existing tower located at 1449 Rock Springs Road, Columbia, TN, as a possible solution (temporary and permanent) to address the subject service need. Unfortunately, the landowner for the site informed AT&T that they intend to remove this tower in the near future to accommodate alternative use or development of the property. Further, there are no other suitable existing tall structures in the vicinity that are suitable for co-location.

Accordingly, there are no reasonably available opportunities to co-locate AT&T's antennas on an existing structure that will satisfy the service objectives that the proposed Temporary Facility will address.

CONCLUSION

The Temporary Facility will provide a necessary link in AT&T's wireless network infrastructure to mitigate service disruptions caused by the loss of the former American Towers, LLC tower site while a new permanent site to serve the area is being developed. The location for the Temporary Facility was chosen to address the service issues described in this report. The Temporary Facility will be constructed and operated in compliance with applicable Federal Communications Commission regulations and, once operational, will provide critically needed wireless communications services for the area.



Michael O'Connell
Sr. Specialist-RAN Design Engineer+
AT&T Mobility

ADDENDUM 1

AT&T Press Release: AT&T Selected by FirstNet to Build and Manage America's First Nationwide Public Safety Broadband Network Dedicated to First Responders

AT&T Selected by FirstNet to Build and Manage America's First Nationwide Public Safety Broadband Network Dedicated to First Responders

[Our Company](#) / Dallas, Texas, Mar 30, 2017

Public-Private Infrastructure Investment Helps Police, Firefighters & Other First Responders Keep America Safe

FirstNet Investments Expected to Create 10,000 Jobs

[AT&T*](#) has been selected by the First Responder Network Authority (FirstNet) to build and manage the first [broadband network](#) dedicated to America's police, firefighters and emergency medical services (EMS). The FirstNet network will cover all 50 states, 5 U.S. territories and the District of Columbia, including rural communities and tribal lands in those states and territories.

This is a much needed investment in America's communications infrastructure to support millions of first responders and public safety personnel nationwide who protect and serve more than 320 million people across the U.S. This significant public-private infrastructure investment is expected to create 10,000 U.S. jobs over the next two years from AT&T's work for FirstNet. The network buildout will begin later this year.

Randall Stephenson, AT&T chairman and CEO, said, “We are honored to work with FirstNet to build a network for America’s police, firefighters and EMS that is second to none. This is an unprecedented public-private investment in infrastructure that makes America a leader and public safety a national priority.”

“Today is a landmark day for public safety across the Nation and shows the incredible progress we can make through public-private partnerships,” said U.S. Department of Commerce Secretary Wilbur Ross. “FirstNet is a critical infrastructure project that will give our first responders the communications tools they need to keep America safe and secure. This public-private partnership will also spur innovation and create over ten thousand new jobs in this cutting-edge sector.”

Today, first responders use commercial networks – the same ones used by consumers and businesses – for mobile data and applications. That can be an issue when a significant public safety crisis happens and commercial networks quickly become congested. It makes it difficult for first responders to communicate, coordinate and do their jobs.

Plus, first responders use more than 10,000 networks for voice communications. These networks often do not interoperate, which severely limits their ability to communicate with each other when responding to a situation.

FirstNet’s mission is to fix this. Through this new public-private partnership with FirstNet, AT&T will deliver a dedicated, interoperable network and ecosystem that will give first responders the *technology they need to better communicate and collaborate across agencies and jurisdictions – local, state and national.*

“There’s no connection more important than one that can save a life,” said Kay Kapoor, president, AT&T Global Public Sector. “FirstNet is

unprecedented in its vision, scope and importance to our nation and the future of public safety communications. We're honored to be selected for this historic and critical initiative.”

“This partnership brings together FirstNet as the voice of public safety and a global technology team with a proven track record and commitment to public safety,” said FirstNet CEO Mike Poth. “Together, FirstNet and AT&T will move with precision and urgency to deliver this much-needed infrastructure to those who need it the most: the first responders we rely on in disasters and emergencies.”

In addition to creating a nationwide seamless, IP-based, high-speed mobile communications network that will give first responders priority access, the network will help:

- Improve rescue and recovery operations to help keep first responders out of harm's way
- Better connect first responders to the critical information they need in an emergency
- Further the development of public safety focused [IoT](#) and Smart City solutions such as providing near real-time information on traffic conditions to determine the fastest route to an emergency
- Enable advanced capabilities, like wearable sensors and cameras for police and firefighters, and camera-equipped drones and robots that can deliver near real-time images of events, such as fires, floods or crimes

FirstNet and AT&T will innovate and evolve the network to keep the public safety community at the forefront of technology advances. For example, as 5G network capabilities develop in the coming years, FirstNet and AT&T will work together to provide the exponential increases in the speed with which video and data travel across the FirstNet network.

To help FirstNet achieve its public safety mission, AT&T has assembled a team that includes Motorola Solutions, General Dynamics, Sapient Consulting and Inmarsat Government.

The broad terms of this 25-year agreement between FirstNet and AT&T are:

- FirstNet will provide 20 MHz of high-value, telecommunications spectrum and success-based payments of \$6.5 billion over the next five years to support the network buildout; FirstNet's funding was raised from previous FCC spectrum auctions.
- AT&T will spend about \$40 billion over the life of the contract to build, deploy, operate and maintain the network, with a focus on ensuring robust coverage for public safety users.
- Additionally, AT&T will connect FirstNet users to the company's telecommunications network assets, valued at more than \$180 billion.

The strong participation of states in the FirstNet network will help make this significant investment in America's communications infrastructure a reality. As states join FirstNet, investment in infrastructure and job creation will follow.

For more information on AT&T's selection, please visit att.com/FirstResponderNews. For more information about FirstNet, please visit FirstNet.gov/mediakit.

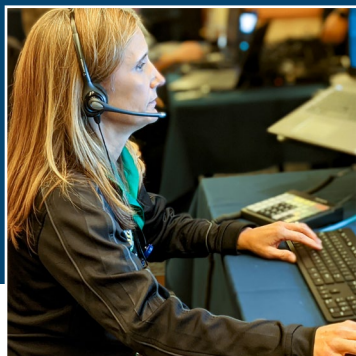
*AT&T products and services are provided or offered by subsidiaries and affiliates of AT&T Inc. under the AT&T brand and not by AT&T Inc.

ADDENDUM 2

FirstNet Authority Top 10 Frequently Asked Questions

Top 10

Frequently Asked Questions



1. What is the First Responder Network Authority?

The First Responder Network Authority is the independent authority established by Congress to deliver a nationwide broadband network dedicated to public safety. The network is strengthening public safety users' communications capabilities, enabling them to respond more quickly and effectively to accidents, disasters, and emergencies.

The First Responder Network Authority is led by a Board of leaders and executives from the public safety community; federal, state, and local governments; and the technology, finance, and wireless sectors. It has a staff of about 200 employees with expertise in public safety, telecommunications, customer service, technology, procurement, and other areas needed to develop the network.

It is headquartered in Reston, Virginia, and has a technology center and lab in Boulder, Colorado.

2. What led to the creation of the First Responder Network Authority?

The 9/11 terrorist attacks brought to the forefront the many communications challenges that first responders face during emergencies and disasters. These issues were captured in the *9/11 Commission Report*, which identified gaps in emergency communications and recommended a nationwide network for law enforcement, fire, and emergency medical personnel communications.

The public safety community united to fulfill the 9/11 Commission's recommendation. Public safety organizations and associations advocated before Congress for a dedicated, reliable wireless network for first responders. Their advocacy efforts led to the passage of legislation in 2012 to create the agency to deploy the Network in all U.S. states and territories, including rural communities and tribal nations.

3. How has public safety been involved in the vision for the FirstNet network?

Public safety officials have worked closely with the First Responder Network Authority since its inception in 2012 to ensure the network meets first responders' needs – today and in the future. The agency's outreach and consultation efforts have connected the organization to more than 3 million first responders and state public safety and technology executives across the country.

Specifically, the First Responder Network Authority has consulted extensively with **state single points of contact (SPOCs)** in each of the 50 U.S. states, 5 territories, and the District of Columbia, as well as local/municipal, tribal and federal public safety leaders. It also coordinates with public safety through the **Public Safety Advisory Committee (PSAC)**, which provides guidance and subject matter expertise from a first responder perspective. Public safety leaders at the national, state and local levels continue to advocate for and support deployment of the network.

4. How was AT&T selected to build, operate, and maintain the FirstNet network?

The First Responder Network Authority and the Department of Interior made the 25-year award based on the determination of the overall best value solution for FirstNet and public safety. The buildup to the award included a fair, competitive procurement process that began in January 2016 with **release of the Network RFP**.

The procurement process followed the Federal Acquisition Regulation (FAR) and encouraged offerors to provide innovative solutions that could meet or exceed the needs of public safety.

The procurement was open to all entities, whether traditional wireless companies or new entrants, provided their proposal could meet the RFP's statement of objectives. AT&T was selected on a best-value award that considered financial sustainability and was based on more than just a technically acceptable solution at the lowest cost. The evaluation of proposals assessed the offerors' ability to submit a cost-effective and innovative model, and to meet or exceed the 16 objectives and evaluation factors outlined in the FirstNet RFP.

5. Why is the Network being built and operated through a public-private partnership?

The First Responder Network Authority and AT&T are modernizing and improving public safety communications by leveraging private sector resources, infrastructure, and cost-saving synergies to deploy and operate the network. This public-private model also helps keep costs down for American taxpayers. To do this, Congress used the sale of communications airwaves (or spectrum) to fund FirstNet's initial operations and help start network deployment; the \$7 billion FirstNet received in initial funding came from FCC spectrum auction revenue, not taxpayer funds.

If the federal government were to build, maintain and operate this network, the estimated cost would be tens of billions of dollars over 25 years. **The Government Accountability Office has estimated** it could cost up to \$47 billion over 10 years to construct and operate the Network.

With this partnership approach, the First Responder Network Authority and AT&T do not need any additional federal funding to build and operate the network – it is a fully funded and self-sustaining. In return, America's first responders get services far above and beyond what they have today over a first-class broadband network dedicated to their communications needs.

6. What are the key terms this public-private partnership?

Congress intended for the network to be built and operated as a public-private partnership that brings together the best of the private sector, including commercial best practices, infrastructure, and resources – with the First Responder Network Authority's public safety expertise. This approach will lead to a fully-funded, self-sustaining Network that will serve public safety for years to come. This business model is built upon the efficient use of resources, infrastructure, cost-saving synergies, and incentives, including:

- 20 MHz of federally owned spectrum and \$6.5 billion in initial funding to the partnership; in return AT&T will deploy and operate a nationwide high-speed broadband network for public safety over 25 years.
- AT&T will invest about \$40 billion over the life of the contract to build, operate, deploy, and maintain the Network, and together with the First Responder Network Authority will help ensure the Network evolves with the needs of public safety.
- AT&T can use FirstNet's spectrum when it is not being used by public safety for other, commercial purposes. The company will prioritize first responders over any other commercial users.
- First Responder Network Authority will oversee the contract to ensure it delivers innovation, technology and customer care to public safety through various mechanisms, including subscriber adoption targets, milestone build-outs, disincentive fees and other mechanisms outlined in the contract.

7. What will the FirstNet Network provide first responders that they don't have today?

Today, in emergencies and at large events, heavy public use can lead to wireless communications networks becoming overloaded and inaccessible. In those instances, public safety users are treated the same as any other commercial or enterprise user, and communications can be limited due to congestion and capacity issues.

With the FirstNet network, public safety get a dedicated "fast lane" that provides highly secure communications every day and for every emergency. It delivers specialized features to public safety that are not available on wireless networks today – such as priority access; preemption; more network capacity; and a resilient, hardened connection. The network also delivers more than just a public-safety-dedicated wireless connection – it creates devices and apps ecosystems that connect first responders to innovative, life-saving technologies.

8. How will the Network benefit first responders and help them do their jobs better?

FirstNet improves communications, response times and outcomes for first responders from coast-to-coast, in rural and urban areas, inland and on boarders – leading to safer, and more secure communities. The network provides first responders with innovation and robust capacity so they can take advantage of advanced technologies, tools and services during emergencies, such as:

- Applications that allow first responders to reliably share videos, text messages, photos and other information during incidents in near real-time;
- Advanced capabilities, like camera-equipped connected drones and robots, to deliver images of wildfires, floods or other events;
- Improved location services to help with mapping capabilities during rescue and recovery operations; and
- Wearables that could relay biometric data of a patient to the hospital or alert when a fire fighter is in distress.

Network technology will also be tested and validated through the **FirstNet Innovation and Test Lab**, located in Boulder, Colorado, so first responders will have the proven tools they need in disasters and emergencies.

9. What's happening with FirstNet now?

All 50 states, five U.S. territories and Washington, D.C., have “opted in,” to FirstNet, meaning each has accepted its individual State Plan detailing how the network will be deployed in their state/territory.

The First Responder Network Authority's public-private partnership with AT&T provides first responders with immediate access to mission-critical capabilities over the FirstNet network. This includes priority and preemption features that give first responders their own “fast lane” on the public safety network to communicate and share information during emergencies, large events, or other situations when commercial networks could become congested. FirstNet is the only broadband network with dedicated spectrum for public safety (Band 14) and ‘always on’ priority and preemption for access to the network even during times of network congestion.

Key FirstNet activities include:

Expanding the network and building out Band 14: The First Responder Network Authority has issued work orders to deploy the RANs. This gave AT&T the green light to expand FirstNet's footprint and deploy Band 14 capacity and coverage throughout the nation, providing first responders with the bandwidth, capacity, and public safety features they need to communicate, share information, and use innovative technologies every day and in every emergency.

Driving public safety innovation: FirstNet is also unlocking a new technology marketplace for public safety, enabling first responders to benefit from advancements in innovation. The FirstNet App Catalog is filling up with FirstNet-approved mobile apps that are optimized for public safety use over the Network.

Securing emergency communications: FirstNet's first-of-its-kind core infrastructure gives first responders the dedicated, highly secure, non-commercial network they deserve. The FirstNet Core, delivered in March 2018, provides encryption of public safety data over FirstNet and end-to-end cyber security. FirstNet subscribers also have access to a dedicated Security Operations Center, offering 24/7/365 support.

Creating a differentiated broadband communications experience for public safety: The First Responder Network Authority developed a new Roadmap to advance and evolve FirstNet beyond the current contractual commitments and to create opportunities for public safety to shape the future of their network. Based on input from the public safety community, the **First Responder Network Authority Roadmap** provides a view of emergency responders' critical communications needs and technology trends for mobile broadband communications over the next five years. The First Responder Network Authority will use the Roadmap to prioritize its programs, activities, and investments to ensure first responders have the communications tools they need to save lives and protect communities.

Engaging with public safety: The First Responder Network Authority will continue to engage with public safety in the states, territories, federal agencies, and tribal nations to understand their trends, drivers and priorities and collaborate with them to realize the operational benefits of FirstNet's differentiated broadband communications experience. Input gathered from public safety on their critical communications needs will continuously be incorporated into the First Responder Network Authority's Roadmap to help guide the growth, evolution, and advancement of FirstNet.

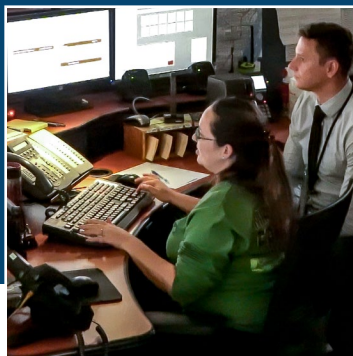
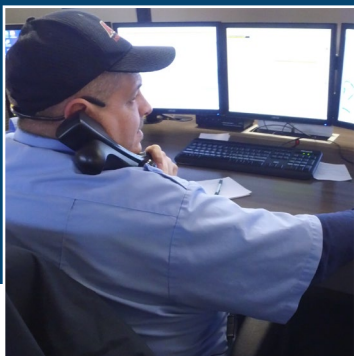
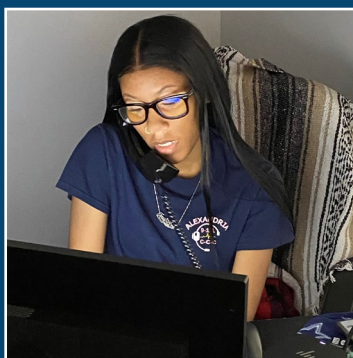
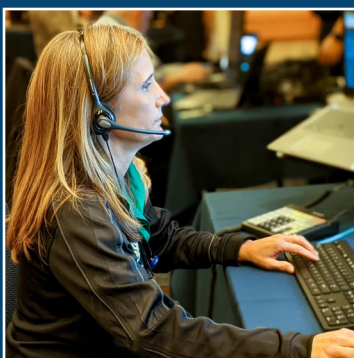
10. How can I learn more?

Stay up-to-date on the First Responder Network Authority activities and the building and deployment of FirstNet at **FirstNet.gov**. Follow us on Twitter, Facebook and YouTube.

ADDENDUM 3

FirstNet Authority - FirstNet for 911 Telecommunicators

FirstNet for 911 Telecommunicators



As a 9-1-1 Telecommunicator, you know that speed is of the essence. The faster you can deliver accurate, robust information to on-scene responders, the safer our communities are. FirstNet provides our nation's emergency communicators with a secure, reliable broadband connection to communicate with both the public and first responders.

Always-on connection, innovative tools

As the first touchpoint during an emergency, you need a network you can count on to relay information to first responders in the field. FirstNet provides a reliable network that includes priority, preemption, and quality of service—key features that ensure your communications are heard, even when networks are congested.

The FirstNet network also enables you to:

- Quickly and reliably connect to first responders in the field and other agencies and jurisdictions, as an emergency unfolds.
- Track assets and personnel.
- Have the ability to “uplift” all users, including extended primary users, to a higher priority status when needed.
- Stream high-volume data—including videos, photos, and texts—to and from your Public Safety Answering Point (PSAP) or Emergency Communications Center (ECC) to the field.
- Access 150+ FirstNet-dedicated network deployable assets, available at no cost to FirstNet subscribers, which can be used to reestablish a network connection to your ECC during a disaster that destroys existing infrastructure.

Quality of service, priority, and preemption

FirstNet's high-quality Band 14 spectrum is reserved for public safety. Because of FirstNet's built-in priority and preemption capabilities, first responders stay connected even when commercial networks are overloaded.

FirstNet supports:

Mission critical applications

- CAD
- Criminal queries/databases
- Incident Management
- Record Management Systems
- GIS/mapping
- Weather/traffic
- Video sharing
- Emergency guides
- Push-to-talk

Administrative applications

- Email/text/calendar
- Office tools (PDF, Word)
- Records management
- Reporting
- Database access
- Medical references

Secure connectivity

- Strong user authentication
- Application VPN
- Secure mobile gateway
- Mobile Device Management (MDM) policy controls
- End-to-end encryption



“FirstNet gives our tactical dispatch teams the ability to function in the field supporting the first responders on long-term, high-profile incidents with the same technical capabilities they would have if they were sitting in their dispatch center.”

Andrew Knapp
Executive Director
Hamilton County, Ohio
911 Emergency Communications Center

Remote call-taking

You can combine existing E9-1-1/NG9-1-1 call handling remote laptop solutions with FirstNet Ready™ smartphones and Wi-Fi devices for highly secure connectivity to set up remote call taking. This allows staff to handle dispatch and calls from home or other remote locations when physical access to the ECC is not possible.

Transport diversity for CAD and Call Handling

You can use the FirstNet LTE network to route calls if the terrestrial network fails. Systems can be designed to use FirstNet as a secondary or tertiary network for transport diversity.

Lowered barrier-to-entry to cloud-based intelligent dispatching

You can tie into third-party, cloud-based solutions and applications that route video and IoT feeds back into the 9-1-1 Call Center for more intelligent dispatching and routing. Applications like cloud-based CAD solutions can have a direct connection back to the ECC and can also utilize FirstNet to deliver critical information out to the field.

Mobile communication directly with first responders in the field

FirstNet can connect your ECC to the people, units and resources in the field wirelessly. So, you can use FirstNet to relay critical information to first responders and complement existing radio network communications.

Additional information:

- For use cases and testimonials, visit [FirstNet.gov/FirstNetinAction](https://firstnet.gov/FirstNetinAction).
- For more info about how FirstNet serves the 911 Telecommunicator community, visit [FirstNet.gov/911](https://firstnet.gov/911).
- Learn more about the First Responder Network Authority at [FirstNet.gov](https://firstnet.gov).
- Learn about FirstNet products and services on [FirstNet.com](https://firstnet.com).

Site Name: I-65 Interchange
Site No: 16171923

TEMPORARY SITE LICENSE

LICENSOR:

Ricky Kelley and Marketing Group 1, LLC
1616 Harley Davidson Blvd
Columbia, TN 38401

LICENSEE:

New Cingular Wireless PCS, LLC and its affiliates

TERM:

9/28/2023 through 9/28/2025.

LICENSE FEE:

██████████ per month (prorated for any partial month)

COMMENCEMENT DATE:

September 1st, 2023

LICENSED SITE:

Harley-Davidson of Columbia
1616 Harley-Davidson Blvd
Columbia, TN 38401

1. License of Site. During the Term hereof, Licensor hereby licenses a certain portion of Licensor's property (the "Property") at the Licensed Site and grants to Licensee the right to install, operate and maintain at Licensee's expense and risk, temporary communications transmitting and receiving equipment, including (without limitation) antennas, poles, masts, transmission line(s), vehicles and accessories (collectively, the "Equipment") at the Licensed Site. Licensee shall at all times have the unrestricted right to enter or leave the Licensed Site with full and complete access to its Equipment on a 24-hour, seven (7) day per week basis. At its discretion, Licensee may take at its expense measures and precautions necessary to protect the Equipment.

2. License Fee. Within thirty (30) days after the date of this License, Licensee shall pay Licensor the License Fee for the first full month of the Term plus, if the Term shall commence on a date other than the first day of a month, the prorated License Fee due for such initial partial month. The License Fee for each subsequent month shall be due and payable in full by not later than the first day of that month.

3. Holdover. If Licensee remains in possession of the Licensed Site after the expiration of this License, then Licensee will be deemed to be occupying the Licensed Premises on a month-to-month basis.

4. Termination. This Agreement may be terminated by Licensee, without penalty or further liability, at Licensee's sole discretion, upon sixty (60) days' prior written notice to Licensor.

5. Removal of Equipment and Site Condition. Except as set forth herein, Licensee takes the Licensed Site as it finds it and Licensor shall have no responsibility for its condition or any damage suffered by Licensee or any other person due to such condition. Unless otherwise mutually agreed by the parties, Licensee shall remove all of the Equipment prior to the end of the Term, and any extensions thereof, and shall leave the Licensed Site in substantially the same condition that existed as of the date of this License, ordinary wear and tear and occurrences for which Licensee is not responsible hereunder, excepted.

6. Indemnification; No Consequential or Indirect Damages. Licensee shall indemnify and hold Licensor harmless against any liability or loss from personal injury or property damage resulting from or arising out of the use or occupancy of the Property by Licensee or its employees or agents, provided, however, Licensee shall have no obligation to indemnify or hold harmless against any such liabilities and losses as may be due to or caused by

Site Name: I-65 Interchange
Site No: 16171923

the acts or omissions of Licensor or its employees or agents. Licensor shall indemnify and hold Licensee harmless against any liability or loss from personal injury or property damage resulting from or arising out of (1) the use or occupancy of the Property by Licensor or its employees or agents or (2) contamination of the Property subsurface or structures with hazardous substances; provided, however, Licensor shall have no obligation to indemnify or hold harmless against any such liabilities and losses as may be due to or caused by the acts or omissions of Licensee or its employees or agents. Except for the indemnity obligations set forth in this Agreement, and otherwise notwithstanding anything to the contrary in this Agreement, Licensor and Licensee each waives any claims that each may have against the other with respect to consequential, incidental, punitive or special damages, however caused, based on any theory of liability.

7. Operation of Equipment. Licensee will install, operate and maintain its Equipment in accordance with applicable laws and regulations so as not to cause interference (as that term is defined in the rules and regulations of the Federal Communications Commission), with any radio or television transmitting or receiving equipment whether or not such equipment is located on the Licensed Site. In the event that Licensee's Equipment causes interference with other radio or television transmissions, Licensee will promptly take all reasonable steps necessary to correct and eliminate the same. If Licensee is unable to eliminate the interference within a reasonable period of time, Licensee agrees to remove the Equipment from the Licensed Site and this License shall be terminated.

8. Assignment. Licensee shall have the right to assign this License to any present or future affiliate, subsidiary, or parent corporation of Licensee, without securing the consent of Licensor and may grant to any such assignee the same rights and privileges Licensee enjoys under this License.

9. Electrical Service. Licensor agrees to permit Licensee to use existing electrical service facilities located on the Property to supply electrical service for the operation of Licensee's equipment. The cost and expense of such electrical service shall be borne by Licensor, and Licensor and Licensee acknowledge and agree that the License Fee as provided herein is accepted by Licensor as full compensation and reimbursement for all such cost and expense.

10. Damage to Licensed Site. If the Licensed Site or any portion thereof is damaged for any reason so as to render the Licensed Site unusable for Licensee's intended purpose, the License Fee shall abate for such period as the Licensed Site is unusable. In addition, Licensee may, at its option, elect to terminate this Agreement.

11. Notices. Any notice or demand required or permitted to be given or made hereunder shall be deemed given when received. Notices may be sent by messenger delivery, overnight delivery, or by certified mail in a sealed envelope, postage prepaid, addressed in the case of Licensor to:

Ricky Kelley
1616 Harley Davidson Blvd
Columbia, TN 38401

Site Name: I-65 Interchange
Site No: 16171923

and addressed in the case of Licensee, to:

New Cingular Wireless PCS, LLC
Attn: AT&T Mobility
1025 Lenox Park Blvd NE 3rd Floor
Atlanta, GA 30324

With a copy to Licensee's Regional Counsel:

AT&T Mobility
Network Legal Counsel
208 S. Akard Street
Dallas TX, 75202-4206

12. Waiver. Failure or delay on the part of Licensor or Licensee to exercise any right, power or privilege hereunder shall not operate as a waiver thereof.

13. Prior Negotiations. This License constitutes the entire agreement of the parties hereto with respect to the subject matter hereof and shall supersede all prior offers, negotiations and agreements.

14. Amendment. No revision of this contract shall be valid unless made in writing and signed by duly authorized officers or representatives of Licensee and Licensor.

15. Licensor's Representations. Licensor represents and warrants that it owns or otherwise controls the Licensed Site during the Term of this License and that Licensor has full authority to execute and deliver this License.

16. Governing Law. This Agreement shall be construed and governed in accordance with the laws of the State in which the Licensed Site is located.

IN WITNESS WHEREOF, the parties have executed this License as of the 1st day of August, 2003.

LICENSOR:

AT&T Mobility

By: [Signature]
Name: Andy Baker
Title: General Manager

LICENSEE:

New Cingular Wireless PCS, LLC
By: AT&T Mobility Corporation Its
Manager

By: [Signature]
Name: Chris Tharp
Title: Area Manager

QUITCLAIM DEED

Address of New Owner:	Map-Parcel Numbers:	Send Tax Bills To:
Marketing Group 1, LLC 7128 South Springs Drive Franklin, Tennessee 37067	A portion of Map/Parcel 72-53	Same
<i>MAIL</i> This instrument prepared by: Bone McAllester Norton PLLC (CJR) 511 Union Street, Suite 1600, Nashville, Tennessee 37219		

FOR AND IN CONSIDERATION OF ONE DOLLAR (\$1.00) cash in hand paid by the hereinafter named Grantee, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged **W. G. & K., LLC**, a Tennessee limited liability company also known as WG & K, LLC, (the "Grantor") has bargained and sold, and by these presents does transfer, release, relinquish, quitclaim and convey unto **Marketing Group 1, LLC**, a Tennessee limited liability company, (the "Grantee"), its successors and assigns, all of Grantor's right, title and interest in and to certain land situated within Maury County, Tennessee, and being more particularly described as follows:

See Exhibit A.

This is unimproved property known as 5.28 acres, Bear Creek Pike (Tract 3), Columbia, Maury County, Tennessee 38401.

Said property is conveyed subject to such limitations, restrictions, and encumbrances as may affect the premises. Wherever used, the singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.

[Remainder of page intentionally left blank. Signature page follows.]

{00230044.2}

BK/PG:R2008/875-877

07016276

3 PGS : AL - QUITCLAIM DEED	
TRISH BATCH: 72169	
10/04/2007 - 09:15 AM	
VALUE	0.00
MORTGAGE TAX	0.00
TRANSFER TAX	0.00
RECORDING FEE	15.00
DF FEE	2.00
REGISTER'S FEE	0.00
TOTAL AMOUNT	17.00

STATE of TENNESSEE, MAURY COUNTY

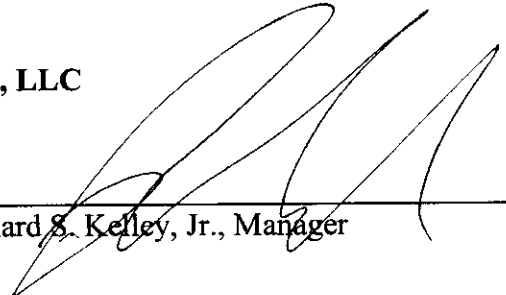
JOHN FLEMING

REGISTER OF DEEDS

IN WITNESS WHEREOF, Grantor has caused this instrument to be executed this 25th day of September 2007.

W. G. & K., LLC

By:


Richard S. Kelley, Jr., Manager

STATE OF TENNESSEE)
COUNTY OF DAVIDSON)

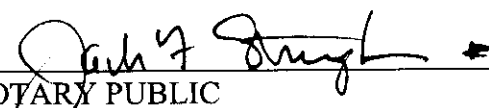
Before me, the undersigned, a Notary Public of the State and County aforesaid, personally appeared Richard S. Kelley, Jr., with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence), and who, upon oath, acknowledged himself to be a manager of W. G. & K., LLC, a Tennessee limited liability company, the within named bargainor, and that he as such manager being authorized so to do, executed the foregoing instrument for the purpose therein contained, by signing the name of the bargainor by himself as such manager.

Witness my hand and seal, at office, this 25th day of September 2007.

My Commission Expires: May 22, 2010

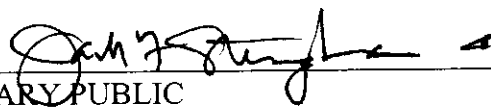


STATE OF TENNESSEE)
COUNTY OF DAVIDSON)


NOTARY PUBLIC

The actual consideration of this transfer is \$-0-.

Subscribed and sworn to before me,
this 25th day of September 2007.


NOTARY PUBLIC

My Commission Expires: May 22, 2010

{00230044.2}

2



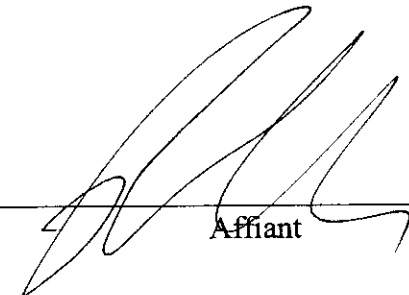

Affiant

EXHIBIT A

LEGAL DESCRIPTION

A parcel of land lying in the 4 Civil District of Maury County, Tennessee, a portion of Parcel 53 on Tax Map 72 in the Tax Assessor's Office of Maury County, Tennessee; the CMI Properties, LLC property recorded in Deed Book R1835 Page 642, Tract I on Plat Book 13, page 248 as recorded in the Register's Office of Maury County, Tennessee; being more particularly described as follows:

Commencing at an iron pin set at the northeast corner of the property herein described, said point lying on the south margin of Bear Creek Pike, Tennessee Highway 99, said point also lying South 77°41'16" East a distance of 1,409.66' from the northeast corner of the CMI Properties, LLC recorded in Deed Book R1835 Page 642, the parent property from which this tract is carved;

Thence with the west margin of the proposed road, South 16°38'53" East a distance of 123.74' to a concrete monument set;

Thence continuing and with a curve turning to the right with an arc length of 79.79', with a radius of 160.00', with a chord bearing of South 02°21'43" East, with a chord length of 78.96' to a concrete monument set;

Thence continuing South 11°55'27" West a distance of 379.13' to a concrete monument set; Thence continuing and with a curve turning to the right with an arc length of 57.81', with a radius of 270.00', with a chord bearing of South 18°03'29" West, with a chord length of 57.70' to a concrete monument set;

Thence continuing, South 24°11'31" West a distance of 409.17' to a concrete monument set; Thence with a curve turning to the left with an arc length of 56.51', with a radius of 530.00', with a chord bearing of South 21°08'15" West, with a chord length of 56.48' to an iron pin set, the TRUE POINT OF BEGINNING;

Thence continuing with the west margin of the proposed road and with a curve turning to the left with an arc length of 113.37', with a radius of 530.00', with a chord bearing of South 11°57'18" West, with a chord length of 113.15' to a concrete monument set; Thence continuing South 05°49'37" West a distance of 324.93' to an iron pin set; Thence leaving the west margin of the proposed road and with the north line of Tract 2 of CMI Properties LLC, as recorded in Plat Book 13, page 247 and Deed Book R1835, page 642, North 87°28'01" West a distance of 505.33' to an iron pin found, said point also lying on the north line of Columbia Neon Co. Inc. property as recorded in Deed Book 643 Page 757 and said point lying on the east margin of Interstate 65;

Thence with the east margin on Interstate 65, North 07°10'32" East a distance of 188.56' to a concrete monument found; Thence continuing, North 05°51'40" East a distance of 271.81' to an iron pin set; Thence South 87°23'24" East a distance of 429.83' to an iron pin set; Thence South 71°56'15" East a distance of 85.62' to the TRUE POINT OF BEGINNING, having an area of 230.062 square feet, 5.28 acres.

Being the same property conveyed to W. G. & K., LLC, by deed from CMI PROPERTIES, LLC, of record as Book R1929, page 906, dated July 10, 2006, said Register's Office.

{00230044.2}

Maury (060)	Jan 1 Owner	Current Owner	HARLEY DAVIDSON BLVD 1616		
Tax Year 2023 Reappraisal 2022	MARKETING GROUP 1 LLC	1616 HARLEY DAVIDSON BLVD	Ctrl Map:	Group:	SI:
	1616 HARLEY DAVIDSON BLVD	COLUMBIA TN 38401	093	001.01	000
	COLUMBIA TN 38401				

Value Information

Land Market Value:	\$837,400
Improvement Value:	\$3,170,700
Total Market Appraisal:	\$4,008,100
Assessment Percentage:	40%
Assessment:	\$1,603,240

Additional Information

HARLEY DAVIDSON

General Information**Class:** 08 - Commercial**City:** COLUMBIA**City #:** 156**Special Service District 2:** 000**Special Service District 1:** 000**Neighborhood:** Z41**District:** 03**Number of Mobile Homes:** 0**Number of Buildings:** 1**Utilities - Electricity:** 01 - PUBLIC**Utilities - Water/Sewer:** 11 - INDIVIDUAL /**Zoning:**

INDIVIDUAL

Utilities - Gas/Gas Type: 00 - NONE**Outbuildings & Yard Items**

Long OutBuilding & Yard Items list on subsequent pages

Sale Information

Sale Date	Price	Book	Page	Vacant/Improved	Type Instrument	Qualification
9/25/2007	\$0	R2008	875		-	-
7/10/2006	\$560,988	R1929	906	V - VACANT	WD - WARRANTY DEED	L - LIMITED

Land Information**Deed Acres:** 5.28**Calculated Acres:** 0**Total Land Units:** 5.28

Land Code	Soil Class	Units
10 - COM		5.28

Commercial Building #: 1**Improvement Type:**

20 - STORE

Quality:

1+ - AVERAGE +

Foundation:

02 - CONTINUOUS FOOTING

Roof Framing:

05 - BAR JOIST/RIGID FRAME

Cabinet/Millwork:

03 - AVERAGE

Interior Finish:

07 - DRYWALL

Bath Tiles:

00 - NONE

Shape:

01 - RECTANGLE

Heat and AC:

07 - HVAC SPLIT

Building Sketch**Actual Year Built:**

2008

Business Living Area:

30804

Floor System:

01 - SLAB ON GRADE

Roof Cover/Deck:

11 - BUILT-UP/METAL GYPSUM

Floor Finish:

01 - CONCRETE FINISH

Paint/Decor:

03 - AVERAGE

Electrical:

03 - AVERAGE

Structural Frame:

05 - RIGID FRAME

Plumbing Fixtures:

37

Interior/Exterior Areas

Type	Square Feet	Exterior Wall
20 - STORE	18,180	18 - STONE/WOOD
SPN - Service Production Area	6,696	18 - STONE/WOOD
SPN - Service Production Area	5,928	18 - STONE/WOOD

Commercial Features

Type	Units
OPU - OPEN PORCH UNFINISHED	168 X 1
MEZ - MEZZANINE	7776 X 1
SPR - SPRINKLER SYSTEM	30804 X 1

Outbuildings & Yard Items

Building #	Type	Description	Units
1	CNC - CONCRETE PAVING		63,800
1	MSN - MASONRY WALL	440X10	4,400
1	BTH - BATH HOUSE	33X54	1,782



Case #23-0332
1616 Harley Davidson Blvd.



CITY OF
COLUMBIA
TENNESSEE

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



1578 Highway 44 East, Suite 6
P.O. Box 369
Shepherdsville, KY 40165-0369
Phone (502) 955-4400 or (800) 516-4293
Fax (502) 543-4410 or (800) 541-4410

August 16, 2023

City of Columbia
c/o Kevin McCarthy, City Planner
Development Services
700 North Garden Street
Columbia, TN 38401

RE: Conditional Use Application for a Temporary Wireless Communication Facility
Applicant: New Cingular Wireless PCS, LLC, d/b/a AT&T Mobility
Site Location: 1616 Harley Davidson Blvd., Columbia, TN 38401
Type: COW with a 64' Tower, Utilities, Equipment, Mobile Shelter
Site Name: I-65

Dear Board Members:

New Cingular Wireless PCS, LLC, d/b/a AT&T Mobility ("AT&T" or "Applicant"), by counsel, respectfully submits the attached application to locate and operate a temporary wireless communication facility at 1616 Harley Davidson Blvd., Columbia, TN 38401 to serve the customers of AT&T with wireless communications services within the City of Columbia, Tennessee. The application to approve a conditional use for temporary wireless communication facility (the "Temporary Facility") is made pursuant to 47 USC § 332 ("Telecommunications Act of 1996"), Tennessee Code, and the Columbia, Tennessee Zoning Ordinance ("Ordinance"). Since the proposed 64' temporary tower is less than 70', the standards of §4.3.9.E.6.am do not apply.

As outlined below, this request conforms with the requirements for a conditional use outlined in §8.5.16.K. Applicant submits the following information in support the application:

- 1) Application and fee
- 2) Site Plan
- 3) Structural Report
- 4) Soils Report
- 5) Radio Frequency Engineering Statement
- 6) Tax Card
- 7) Redacted License Agreement

I. State of Emergency

Until very recently, AT&T provided service to the area in and around the Bear Creek Pike / I-65 interchange area from a tower located at 1624 Bear Creek Pike, Columbia, TN

Until very recently, AT&T provided service to the area in and around the Bear Creek Pike / I-65 interchange area from a tower located at 1624 Bear Creek Pike, Columbia, TN owned American Towers, LLC. See Rado Frequency Engineering Statement attached hereto. However, American Towers, LLC's lease expired, and the tower was dismantled and removed on or about August 1, 2023, leaving AT&T without a site to provide service to the subject area. AT&T is diligently working to develop a new, permanent site to serve the area. The process to develop a new site, however, will require time to obtain all necessary federal, state and local approvals, and to design and construct the facility.

In the interim, while a permanent site is in development, there is presently a significant gap in AT&T's wireless coverage in the vicinity of the former American Towers, LLC tower site. In order to reduce service disruptions for area customers while the permanent site is in development, AT&T proposes to locate a temporary cell on wheels or COW with a 64' tower and installation of utilities and equipment inside a mobile shelter on property located at 1616 Harley Davidson Blvd., Columbia, TN 38401. The site coordinates are (35° 38' 23.034525" (35.639732°), -86° 53' 35.534066" (-86.893204°). The tax parcel number is 093-001.01. The 5.28-acre commercial property is zoned CD-4C where towers are permitted as a conditional use. The property on which the Temporary Facility will be located is owned by Marketing Group 1, LLC by means of a Deed recorded at Book R2008, Page 875 and is the location of a Harley Davidson dealership. It will be operated in compliance with applicable Federal Communications Commission ("FCC") regulations. AT&T has determined that there is no more suitable location reasonably available for the Temporary Facility.

The Temporary Facility location was selected because it is an available site located near the former American Towers, LLC tower site. This will allow the Temporary Facility to integrate and function properly within AT&T's existing network to provide service for the area. Additionally, the location is near the Bear Creek Pike / I-65 interchange, where there is a concentrated service need. The 64' COW is well situated behind the Harley Davidson dealership building in zone 3 as required in the CD-4C zone and will not adversely affect other properties in the area.

II. Critical Need

Residents and businesses in the area are accustomed to the availability of reliable, high-quality wireless communications service. Additionally, wireless service is especially critical to law enforcement, fire and emergency medical services that rely on service availability to respond to emergencies. However, in the aftermath of the recent loss of the former American Towers, LLC tower site, AT&T is currently unable to provide the former level of coverage and capacity to the area.

Since AT&T customers in the affected area are in immediate need of voice and data service availability for their personal and business use, and since restoring service is critically important for police, fire and emergency services response, AT&T is using its best efforts to mitigate the recent service loss by providing as much coverage and

capacity as possible for the area using means such as the proposed Temporary Facility until a new permanent facility is constructed and operational to restore service to the area.

III. A Matter of Public Safety

National statistics compiled by the FCC indicate that approximately 70% of E-911 calls to police and fire departments are now made using wireless phones. That percentage grows each year. For many Americans, the ability to call E-911 for help in an emergency is one of the main reasons they own a wireless phone. Other wireless E-911 calls come from “Good Samaritans” reporting traffic accidents, crimes or other emergencies. Presently, the lack of a dedicated permanent site to serve the area reduces access to these essential services. The proposed Temporary Facility will increase access until a permanent site can be constructed.

IV. Essential Public Utility Infrastructure

The Temporary Facility is necessary public utility communication infrastructure. There is a huge growth in data demand that is driving the need for additional antenna sites. A U.S. Government Semi-Annual Report showing that as of June 2022, 70.7% of adults and 81.7% of children live in wireless only households. Applicant provides essential services to individuals and businesses within the City of Columbia. The public requires reliable and state-of-the-art communications infrastructure to deliver expected service. Large numbers of people have “cut the cord” from traditional wireline service, and now rely exclusively on wireless services to connect to the national telephone system. The federal Report reveals that wireless communication is an essential means of emergency communications and other communications for nearly half of the general population. This dependence upon the availability of wireless service by a significant proportion of the population clearly demonstrates a public need for ensuring the availability of reliable wireless communications services, including residential areas of the City.

V. FirstNet

AT&T was selected as the nationwide public safety broadband network provider for the First Responder Network Authority (“FirstNet”), an advanced broadband network dedicated specifically to public safety communications. Congress created FirstNet to address emergency response communications shortcomings that were initially identified in the aftermath of the September 11, 2001, terrorist attacks.

All 50 U.S. states and 2 territories have opted into FirstNet, which means that this will truly be a national network that is completely interconnected and will not stop at any state lines.

The proposed Temporary Facility will provide coverage and capacity for the FirstNet platform. Availability of FirstNet in the subject area improves public safety by providing advanced communications capabilities to assist public safety agencies and first

responders. For these reasons, the proposed 64' COW is essential to public health, safety, and welfare.

VI. Co-location

AT&T is committed to co-location and frequently locates equipment on existing towers and buildings. This practice saves time and capital compared to building a new tower. AT&T has reciprocal agreements with other wireless carriers regarding co-location and allows co-location on its towers. To this end, AT&T investigated the possibility of locating antennas on the existing tower located at 1449 Rock Springs Road, Columbia, TN, as a possible solution (temporary and permanent) to address the subject service need. Unfortunately, the landowner for the site informed AT&T that they intend to remove this tower in the near future to accommodate alternative use or development of the property. Further, there are no other suitable existing tall structures in the vicinity that are suitable for co-location. Accordingly, there are no reasonably available opportunities to co-locate AT&T's antennas on an existing structure that will satisfy the service objectives that the proposed Temporary Facility will address.

VII. Federal Law

AT&T has worked to comply with lawful local ordinances for thousands of towers to meet community goals and to provide needed wireless service. However, federal law limits local regulation. The Telecommunications Act of 1996 (TCA) provides that local cell tower regulation "shall not prohibit or have the effect of prohibiting the provision of personal wireless services." The United States Supreme Court has stated that the TCA was enacted "to promote competition and higher quality in American telecommunications services and to encourage the rapid deployment of new telecommunications technologies" by, inter alia, reducing "the impediments imposed by local governments upon the installation of facilities for wireless communications, such as antenna towers." *City of Rancho Palos Verdes v. Abrams*, 544 U.S. 113 (2005).

VIII. Tennessee Law

T.C. 13-24-304 authorizes planning commissions and certain legislative bodies that have adopted planning and zoning regulations to regulate the siting of wireless communication facilities. However, T.C. 13-24-305 prohibits local regulatory bodies from acting "to prohibit or have the effect of prohibiting the provision of wireless service." This section also prohibits local regulatory bodies from requiring radio frequency justification. The overarching intent of these laws is to mirror the intent of the TCA in encouraging competition and provision of service to the citizens of the state of Tennessee.

IX. Conclusion

AT&T is licensed by the Federal Communications Commission (FCC) to build and operate a wireless communications network in Columbia, Tennessee, and the proposed

Temporary Facility will be constructed and operated in accordance with applicable FCC regulations.

All exhibits required by the Zoning Ordinances have been submitted. All exhibits attached to this Application are hereby incorporated by reference as if fully set out as part of the Application. Applicant reserves the right to supplement the Application with additional exhibits and expert testimony as necessary. This submittal letter, application form and attachments constitute the "Application" for a temporary 64' COW communication facility. This information is submitted in compliance with §8.5.16.K and includes a clear and complete analysis of how the proposed use conforms to all applicable standards and will promote the health, safety and welfare of the community.

Applicant respectfully requests that this matter be reviewed at the earliest possible date, and having met the requirements of Telecommunications Act of 1996, Tennessee Code and the Zoning Ordinance, the Applicant further requests that the application to construct and operate the proposed temporary 64' COW communications facility at the proposed location be approved. Please do not hesitate to contact us if you have any questions or require any additional information concerning this matter.

Sincerely,



David A. Pike
F. Keith Brown
Robert W. Grant
Attorney for Applicant

enclosures



BOARD OF ZONING
CONDITIONAL USE PERMIT: APPLICATION AND CHECKLIST
SUBMITTAL REQUIREMENTS

*Please submit the Application online at [City of Columbia | Permitting \(onlana.com\)](http://CityofColumbia.com/Permitting)
If there is no access to a computer, please submit all pertinent information on a flash drive as well as
provide one hard copy*

1. Applicants must complete this application, include required supporting materials, & pay the required fee (\$300.00-plus processing and advertising fees) by the published submittal deadline. Please contact the Columbia Development Services Department with any questions or to discuss any concerns during the BZA submittal & review process: Kevin McCarthy, City Planner, kmccarthy@columbiatn.com or (931) 560-1560.
2. Please provide the following information:
 - a. Completed application.
 - b. **For a Conditional Use Permit only:** Complete Description of Requested Use or submit a separate Request Letter to the Board of Zoning Appeals. In either case, address each of the following:
 - i. Explain in detail the proposed use for the property, including long-term plans; and
 - ii. Explain how your proposal will be designed, located, and operated so that the public health, safety, and welfare will be protected; and
 - iii. Explain how your proposal will not adversely impact other properties in the area in which it is located (this includes addressing access and parking for the site, if applicable).
 - c. Submit applicable drawings, illustrations, and so forth, to accompany the request.
 - d. Any additional information requested by the Department of Development Services that will be necessary to fully complete a review by City Staff and/or by the Board of Zoning Appeals.
3. Please submit the final request to the Department of Development Services according to the established Board Deadline and Meeting schedule. A representative must attend the BZA Meeting.

BOARD OF ZONING APPEALS APPLICATION COLUMBIA, TENNESSEE					
ADDRESS: 1616 Harley Davidson Blvd., Columbia, TN 38401					
ZONING: CD-4C			LOT ACREAGE: 5.28-acre		
EXISTING LAND USE: Harley Davidson dealership			BUILDING SQUARE FOOTAGE:		
ESTABLISHED/EXISTING SETBACKS (DISTANCE BETWEEN BUILDINGS AND PROPERTY LINES): FRONT: _____ ft. SIDE: _____ ft. REAR: _____ ft.					
OTHER INFORMATION: 64' Temporary Tower Facility located behind the dealership					

CONDITIONAL USE PERMIT REQUEST:

CONDITIONAL USE PERMIT 8.5.16C
REQUESTED USE (<i>be detailed</i>): 64' temporary communication tower facility
DOES THE REQUESTED USE HAVE REQUIRED PARKING (SEE TABLE 4.3.12.B-1 IN THE ZONING ORDINANCE)? Yes. Unmanned facility.
HOURS OF OPERATION: 24/7

APPLICANT

NAME	AT&T by David A. Pike, Attorney	PHONE	502-9554400
ADDRESS	PO Box 369, Shepherdsville, KY40165	EMAIL	dpike@pikelegal.com

PROPERTY OWNER

NAME	Marketing Group 1, LLC	PHONE	AT&T as per attached license agreement
ADDRESS	1616 Harley Davidson Blvd, Columbia TN	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.

David A. Pike, Attorney for AT&T

APPLICANT NAME

David A Pike

APPLICANT SIGNATURE

8-1-23

DATE

AT&T as per attached license agreement

PROPERTY OWNER NAME

PROPERTY OWNER SIGNATURE

DATE