



**ZONING BOARD OF ADJUSTMENTS  
AGENDA**

**Tuesday, June 15, 2021 - 4:00 PM  
Council Chambers, 2nd Floor, City Hall  
209 Pearl Street**

**1. CALL TO ORDER**

- A. \*\*\*ALL ATTENDEES THAT ARE NOT FULLY VACCINATED  
AGAINST COVID-19 ARE REQUIRED TO WEAR A FACEMASK  
AND/OR FACESHIELD AT ALL TIMES\*\*\*

**2. ROLL CALL**

**3. PLEDGE OF ALLEGIANCE**

**4. ADOPTION OF AGENDA**

**5. APPROVAL OF MINUTES**

**6. PROOF OF PUBLICATION/POSTING**

**7. REVIEW OF MEETING PROCEDURES**

**8. PUBLIC HEARINGS**

A. CASE #BA-21-002

Public hearing on the request of Quenton and Genevieve Pfitzer for a variance from Section 15.26.040, Nonconforming Structure, of the Council Bluffs Municipal Code (Zoning Ordinance) to allow an enlargement of a nonconforming front porch at property legally described as Lot 14, Block 18, Evans Second Bridge Addition, City of Council Bluffs, Pottawattamie County, Iowa. Location: 2912 Avenue D.

B. CASE #CU-00-008(M2)

Public hearing on the request of AT&T Mobility, represented by Dave Trost of Qualtek Wireless, to modify an existing conditional use permit (CU-00-008), approved on August 15, 2000, and then later modified (CU-00-008(M)) on May 20, 2014, to increase the lease area of an existing 150 foot-tall telecommunication tower in an A-P/Administrative-Professional District on property legally described as being part of Lot 1, Auditor's Subdivision of the NW1/4 NE1/4 of Section 30-75-43, City of Council Bluffs, Pottawattamie County, Iowa, on Kirn Junior High School property approximately 250 feet west of North Avenue. Location: 100 North Avenue.

**9. OTHER BUSINESS**

**10. ADJOURNMENT**

Any questions or concerns regarding this agenda and/or requests for special accommodations at this meeting should be directed to the Community Development Department at (712) 890-5350 or email at [cgibbons@councilbluffs-ia.gov](mailto:cgibbons@councilbluffs-ia.gov).

## Zoning Board of Adjustment Communication

Department: Community  
Development

Case/Project No.: BA-21-002

CASE #BA-21-002

Council Action: 6/15/2021

Submitted by: Haley Weber,  
Planner

### Description

Public hearing on the request of Quenton and Genevieve Pfitzer for a variance from Section 15.26.040, Nonconforming Structure, of the Council Bluffs Municipal Code (Zoning Ordinance) to allow an enlargement of a nonconforming front porch at property legally described as Lot 14, Block 18, Evans Second Bridge Addition, City of Council Bluffs, Pottawattamie County, Iowa. Location: 2912 Avenue D.

### Background/Discussion

See attachments.

### Recommendation

### ATTACHMENTS:

Description

Type

Upload Date

Staff Report & Attachments

Other

6/9/2021

**TO:** Zoning Board of Adjustment  
**FROM:** Community Development Department

**DATE:** June 15, 2021

**RE:** **CASE #BA-21-001**  
**REQUEST:** Public hearing on the request of Quenton and Genevieve Pfitzer for a variance from Section 15.26.040, *Nonconforming structure*, of the Council Bluffs Municipal Code (Zoning Ordinance) to allow the enlargement of a nonconforming front porch on property legally described as Lot 14, Block 18, Evans Second Bridge Addition, Council Bluffs, Pottawattamie County, Iowa.

**APPLICABLE  
CODE SECTION:**

**Section 15.26.040 Nonconforming structure.**

1. Enlargement of Nonconforming Structure. No nonconforming structure may be enlarged or altered in any way, which increases its nonconformity; however, a nonconforming structure may be altered to decrease its nonconformity.

**RELIEF SOUGHT:** A variance from Section 15.26.040 of the Municipal Code (Zoning Ordinance) to allow an enlargement of a legally nonconforming front landing

**LEGAL**

**DESCRIPTION:** Lot 14, Block 18, Evans Second Bridge Addition, City of Council Bluffs, Pottawattamie County, Iowa.

**LOCATION:** 2912 Avenue D

**APPLICANT/OWNER:** Quenton and Genevieve Pfitzer, 2912 Avenue D, Council Bluffs, IA 51501

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**BACKGROUND INFORMATION** – The applicants, Quenton and Genevieve Pfitzer, have applied for a variance from Section 15.26.040, *Nonconforming structure*, of the Municipal Code (Zoning Ordinance) to allow an enlargement of a legally nonconforming front porch.

The existing 3' x 5' (15 square feet) front landing is located 16 feet (more/less) from the front property line, which does not meet the minimum required 25-foot front yard setback for principal structures in the R-2/Two-Family Residential District. Therefore, the existing front landing is considered nonconforming. At this time, the applicant is requesting a variance to enlarge the nonconforming 3' x 5' porch to 16'6" x 12'5" (204.88 square feet), as shown in Attachments 'A' and 'B', to accommodate their family size and allow for a larger entrance into their home, as stated in their signed petition, included as Attachment 'C'. The applicant has also included photographs of open and enclosed porches on the 2900 Block of Avenue D for reference, included as Attachment 'D'.

The following attachments are included with the case staff report:

Attachment A: Deck Rendering

Attachment B: Site Plan

Attachment C: Signed Petition

Attachment D: Photos of Porches in Vicinity

Attachment E: Location/Zoning Map



**CURRENT ZONING AND LAND USE** –The subject property and all properties in the general vicinity are zoned R-2/Two-Family Residential District.

**CITY DEPARTMENTS AND UTILITIES** – All City departments and local utility providers were notified of the requested variance. The following comments were received:

Council Bluffs Community Development Department:

1. The subject property is zoned R-2/Two-Family Residential District and is considered a non-conforming lot of record as the lot is 44 feet in width as opposed to the minimum 50 feet required for interior lots in the R-2 District. As per Section 15.26.020(A) of the Council Bluffs Municipal Code (Zoning Ordinance), *“Nonconforming lots of record existing at the date of this chapter shall be exempt, unless otherwise provided, from the minimum lot area and lot width requirements of each zoning district. Such lots may be developed with any principal use allowed by the regulations for the district and must comply with all other density regulations set forth by this title.”* The subject property exceeds the minimum R-2 District lot depth and area requirements, as per Section 15.09.050, *Site Development Regulations*, of the Council Bluffs Municipal Code (Zoning Ordinance).
2. Section 15.24.060, *Yard Exceptions and Permitted Intrusions Into Required Yards*, of the Council Bluffs Municipal Code (Zoning Ordinance) states:
  - A. *“The following building features may project into the required front yard no more than six feet and into the required side yards no more than three feet, provided that such projections are no closer than three feet to any side yard line:*
    2. *Porches, as defined in Council Bluffs Municipal Code Section 15.03, platforms and landings which do not extend above the level of the first floor of the building.”*

As the minimum required front yard setback is twenty-five (25) feet, there must be a minimum of nineteen (19) feet between the landing and front property line to administratively allow a front yard intrusion. However, as the front landing is located only sixteen (16) feet from the property line, this provision is not applicable to the subject landing.
3. Section 15.26.040(A), *Enlargement of nonconforming structure*, of the Council Bluffs Municipal Code (Zoning Ordinance) states *“no nonconforming structure may be enlarged or altered in any way which increases its nonconformity; however, a nonconforming structure may be altered to decrease its nonconformity.”* The proposed enlargement of the nonconforming landing would be considered an enlargement of a nonconforming structure.
4. The applicant’s petition, included with this report as Attachment ‘C’, states they would like to build a new front landing as their existing landing is in poor condition. Section 15.26.040(B), *Repair of nonconforming structure*, states, *“should a nonconforming structure or portion of a nonconforming structure be destroyed by any means to an extent of fifty (50) percent of its replacement cost at the time of destruction, it shall not be reconstructed except in conformity with the provisions of this title.”* Repairs could be made to the existing 3’ x 5’ landing or the applicant could replace the landing size-for-size to provide access to the front door to the dwelling. A 3’ x 5’ landing meets the minimum size required by building code for access into a dwelling. The request to expand the 3’ x 5’ landing to 16’6” x 12’5” is a design preference and is not necessary for providing conforming access to the dwelling.
5. The applicant has provided photos of open and enclosed porches in the general vicinity of the subject property. The examples provided are not equivalents to the subject landing as the provided examples are open and enclosed porches rather than landings. Additionally, the majority of these homes were constructed with porches prior to the adoption of the City’s current zoning standards and would therefore be considered legally nonconforming structures. The applicant has included a photo of the neighboring property to the east (2910 Avenue D), which has a single-family

dwelling built in 2014; the single-family dwelling at 2910 Avenue D meets the minimum twenty-five (25) setback for the R-2/Two-Family Residential District.

Council Bluffs Public Works Department stated that they have no comments regarding the request.

**NEIGHBORHOOD RESPONSE** – All property owners within 200 feet of the subject property were notified of the requested variance. As of the date of this report, no comments have been received.

**COMMENTS** - Evidence must be presented to demonstrate that a literal enforcement of the Ordinance will create a hardship for which relief is necessary. The Board of Adjustment shall approve a variance to grant relief when ‘unforeseen applications of this Ordinance...create particular hardships.’ No variance shall be granted unless the Board of Adjustment makes findings of fact based on the standards and conditions that follow. A variance less than requested may be granted by the Board when the record supports the applicant’s right to some relief, but not to the entire relief requested. (§15.02.080 – *Variances*)

1. *The particular property, because of size, shape, topography or other physical conditions suffers singular disadvantage through the application of this ordinance, which does not apply to other properties in the vicinity. The subject property is a nonconforming lot of record as it does not meet the minimum lot width for the R-2/Two-Family Residential District. However, the size of the property is typical of those in the general vicinity and surrounding area. The lot exceeds the depth and area requirements for a lot in the R-2/Two-Family Residential District.*
2. *Because of such disadvantage, the owner is unable to make reasonable use of the affected property. The applicant could continue to utilize the subject property as a single-family dwelling if the requested variance is not granted. Additionally, the applicant could repair or replace the existing porch size-for-size without a variance. The request to expand the 3’ x 5’ landing to 16’6” x 12’5” is a design preference and is not necessary for providing conforming access to the dwelling.*
3. *The disadvantage does not exist because of conditions created by the owner or previous owners of the property. The dwelling was constructed closer to the front property line than is allowed by current zoning regulations by previous owners of the property. There is no space to allow for any additional intrusions into the front yard setback.*
4. *Granting the variance will not confer on the applicant any special privileges that are denied by this ordinance to other properties or structures in the same district. Granting the variance will allow the applicant to enlarge a nonconforming structure, which is a special privilege denied by this ordinance to all other nonconforming structures in the City. The applicant could repair or replace the porch size-for-size without obtaining a variance.*
5. *Granting the variance will not be contrary to the public interest, will not adversely affect other property in the vicinity, and will be in harmony with the purpose and intent of this ordinance. The variance process is to provide a narrowly circumscribed means by which relief may be granted from unforeseen applications of this ordinance that create particular hardships. Granting the requested variance to allow an enlargement of a nonconforming porch at the subject property will not adversely affect other properties in the vicinity. The request to expand the 3’ x 5’ landing to 16’6” x 12’5” is a design preference and is not necessary for providing conforming access to the dwelling.*

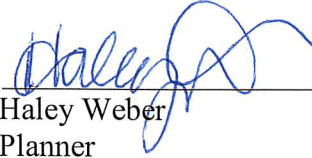
**RECOMMENDATION**—The Community Development Department recommends **denial** of the requested variance from Section 15.26.040, *Nonconforming structure*, of the Council Bluffs Municipal

Code (Zoning Ordinance) for property legally described as Lot 14, Block 18, Evans' Second Bridge Addition, City of Council Bluffs, Pottawattamie County, Iowa, based on the reasons stated above.



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Christopher Gibbons, AICP  
Planning Manager



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Haley Weber  
Planner

Design ID: 308258088247  
 Estimate ID: 73120

**MENARDS**  
**Design & Buy™ DECK**

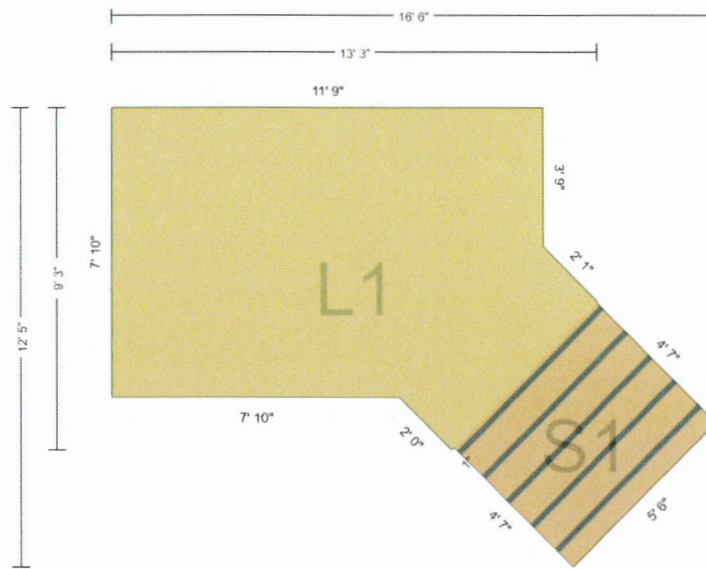


Illustration intended to show general deck size and shape. Some options may not be shown for picture clarity.

**Estimated Price: \$2,807.29**

*\*Today's estimated price. Future pricing may go up or down. Tax, labor, and delivery not included.*



Design ID: 308258088247  
Estimate ID: 73120

**MENARDS**  
**Design & Buy™ DECK**

### How to purchase at the store

1. Take this packet to any Menards store.
2. Have a building materials team member enter the design number into the Deck Estimator Search Saved Designs page.
3. Apply the design to System V to create the material list.
4. Take the purchase documents to the register and pay.

### How to recall and purchase a saved design at home

1. Go to Menards.com.
2. Select the Deck Estimator from the Project Center.
3. Select Search Saved Designs.
4. Log into your account.
5. Select the saved design to load back into the estimator.
6. Add your deck to the cart and purchase.

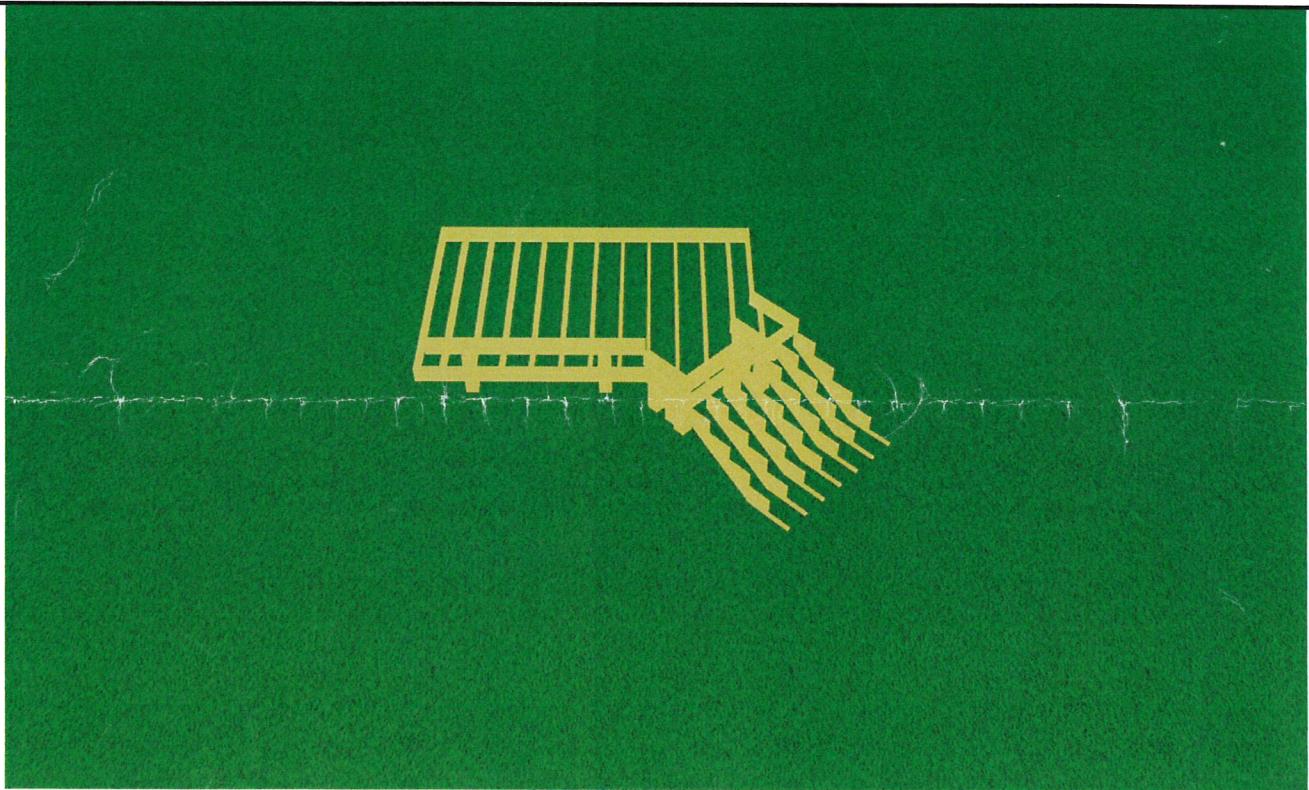


Illustration intended to show general deck size and shape. Some options may not be shown for picture clarity.

**Estimated Price: \$2,807.29**

*\*Today's estimated price. Future pricing may go up or down. Tax, labor, and delivery not included.*

**Layout dimension sheets are intended as a construction aid. Not all options selected are shown.**

Final design should be performed by a registered professional engineer to ensure all applicable building codes and regulations are met. This is an estimate. It is only for general price information. This is not an offer and there can be no legally binding contract between the parties based on this estimate. The prices stated herein are subject to change depending upon the market conditions. The prices stated on this estimate are not firm for any time period unless specifically written otherwise on this form. The availability of materials is subject to inventory conditions. MENARDS IS NOT RESPONSIBLE FOR ANY LOSS INCURRED BY THE GUEST WHO RELIES ON PRICES SET FORTH HEREIN OR ON THE AVAILABILITY OF ANY MATERIALS STATED HEREIN. All information on this form, other than price, has been provided by the guest. Menards is not responsible for any errors in the information on this estimate, including but not limited to quantity, dimension and quality. Please examine this estimate carefully. MENARDS MAKES NO REPRESENTATIONS, ORAL, WRITTEN OR OTHERWISE THAT THE MATERIALS LISTED ARE SUITABLE FOR ANY PURPOSE BEING CONSIDERED BY THE GUEST. BECAUSE OF THE WIDE VARIATIONS IN CODES, THERE ARE NO REPRESENTATIONS THAT THE MATERIALS LISTED HEREIN MEET YOUR CODE REQUIREMENTS.

Design ID: 308258088247  
 Estimate ID: 73120



## L1

Height off the ground: 3' 0"  
 Width: 13' 3"  
 Length: 9' 3"

## S1

Height off the ground: 3' 0"  
 Width: 5' 6"  
 Length: 4' 7"

## Decking

Deck Board Material Type: AC2 Green Treated  
 Deck Board: 5/4x6 Thick Deck  
 Deck Board Fastener: 6-Lobe Drive Tan Premium Exterior Deck Screw

## Framing

Framing Material Type: AC2 Green Treated  
 Joist: 2x8  
 Joist Spacing: 12" On Center  
 Beam: 2x8  
 Framing Post: 6x6 Framing Post  
 Framing Fastener Type: Galvanized Framing Fastener  
 Footing: 12" Poured Footing  
 Footing Depth: 42" Footing Depth  
 Joist Hanger Type: Galvanized Joist Hanger  
 Joist Hanger Fastener Type: Joist Hanger Fastener Nail

## Railing

Railing Material Type: AC2 Railing  
 Railing Style: Traditional Railing  
 Spindle: 2x2x36 Square  
 Handrail: 2 x 4 Handrail  
 Graspable Handrail: No Graspable Handrail  
 Railing Post: 4 x 4 x 54 AC2 Treated Chamfered Deck Post  
 Base Ring: No Ring  
 Mounting Style: Joist Mount

## Additional Options

Deck Flashing: No Rolled Joist Flashing  
 Lattice/Skirting: None







# PETITION

## To the city zoning board of adjustment

The Petition of .....  
*Quenton and Genevieve Pfitzer at 2912 Avenue D Council Bluffs, IA: to build a front porch*

Brings to the attention of the house:

We would like to build a new front porch in place of the small, old existing front porch. It is crumbling and it is too small for our family of 7. It is difficult to take things in and out of this small area Ex: furniture

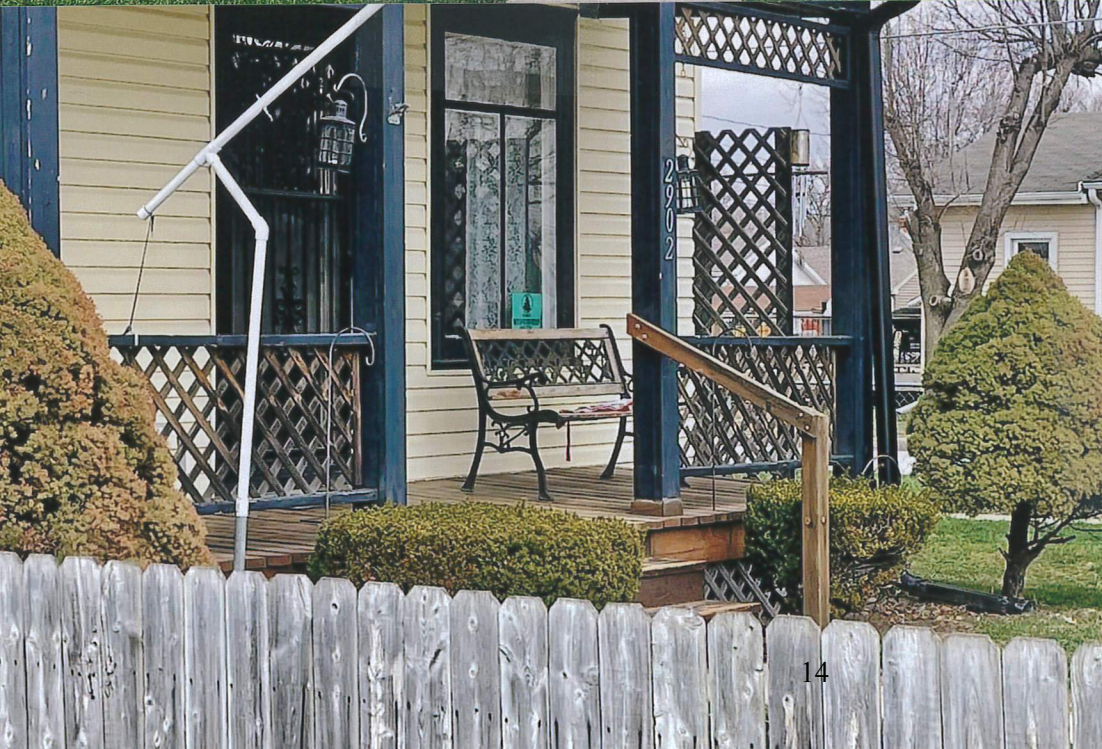
The undersigned petitioners therefore ask the Legislative Assembly to .....  
 Allow us to make our front porch bigger and allow us to extend it to the east corner of our home. The majority of the homes on Avenue D have the same size porch that we would like to build and their names, address, and signature are below as they support our edition. We would not infringe on the 18ft property line to the street. We want to just take the porch to the east corner of the house and out towards the street to the 18ft. Enclosed is a picture of each house on the block with a large front porch and the signature of each neighbour in support of our front porch petition. The size of the new porch would not adversely affect any surrounding property and the existing porch size is just too small.

Name	Address	Signature
KURTIS KIBBE	2933 AVE D	Kurtis
Michael Snyder	2914 Ave D	Michael
Megan Gill	2907 Ave D	Megan
Tim W...	2920 Ave D	Tim
Ritchie Orndorff	2900 AVE D	Ritchie
Martha Alcala	2910 Ave D	Martha
Sharon Evans	2930 Ave D	Sharon Evans

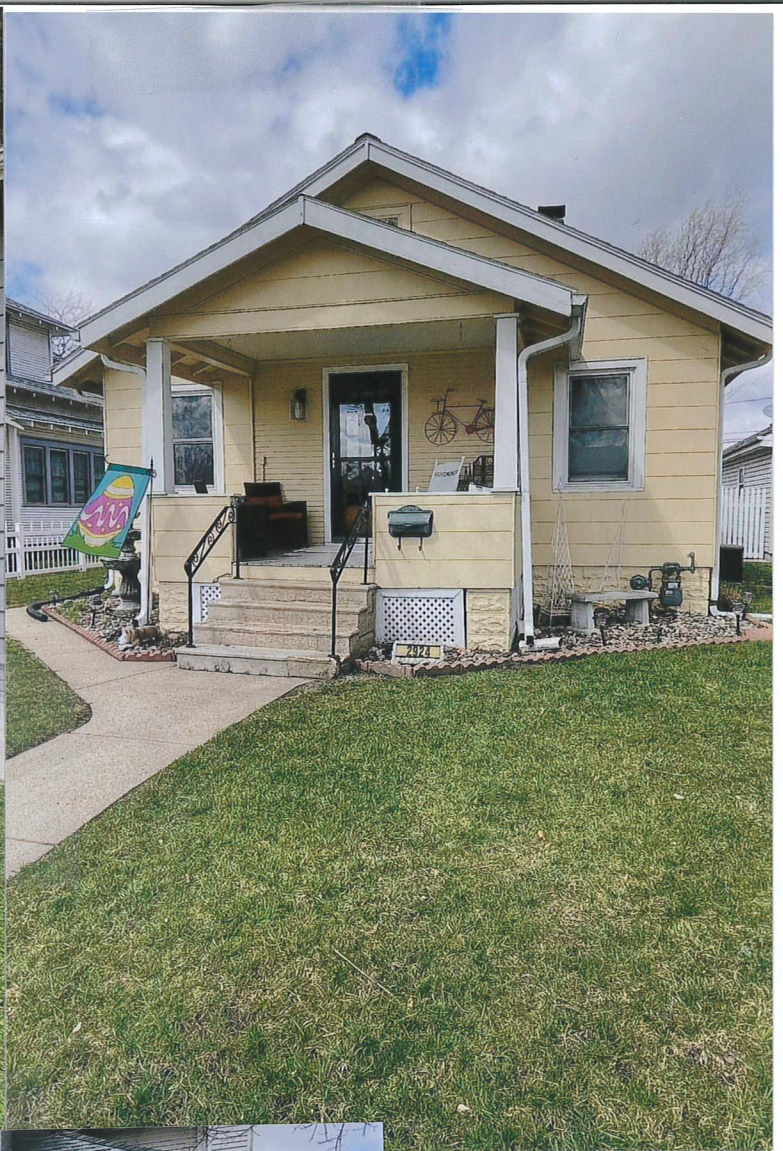


















# CITY OF COUNCIL BLUFFS - ZONING BOARD OF ADJUSTMENT LOCATION/ZONING MAP CASE #BA-21-002

Attachment E

## Map Legend

-  Subject Property Case #BA-21-002
-  Parcels

0 15 30



1 inch = 250 feet



Note: Subject property is highlighted in red.

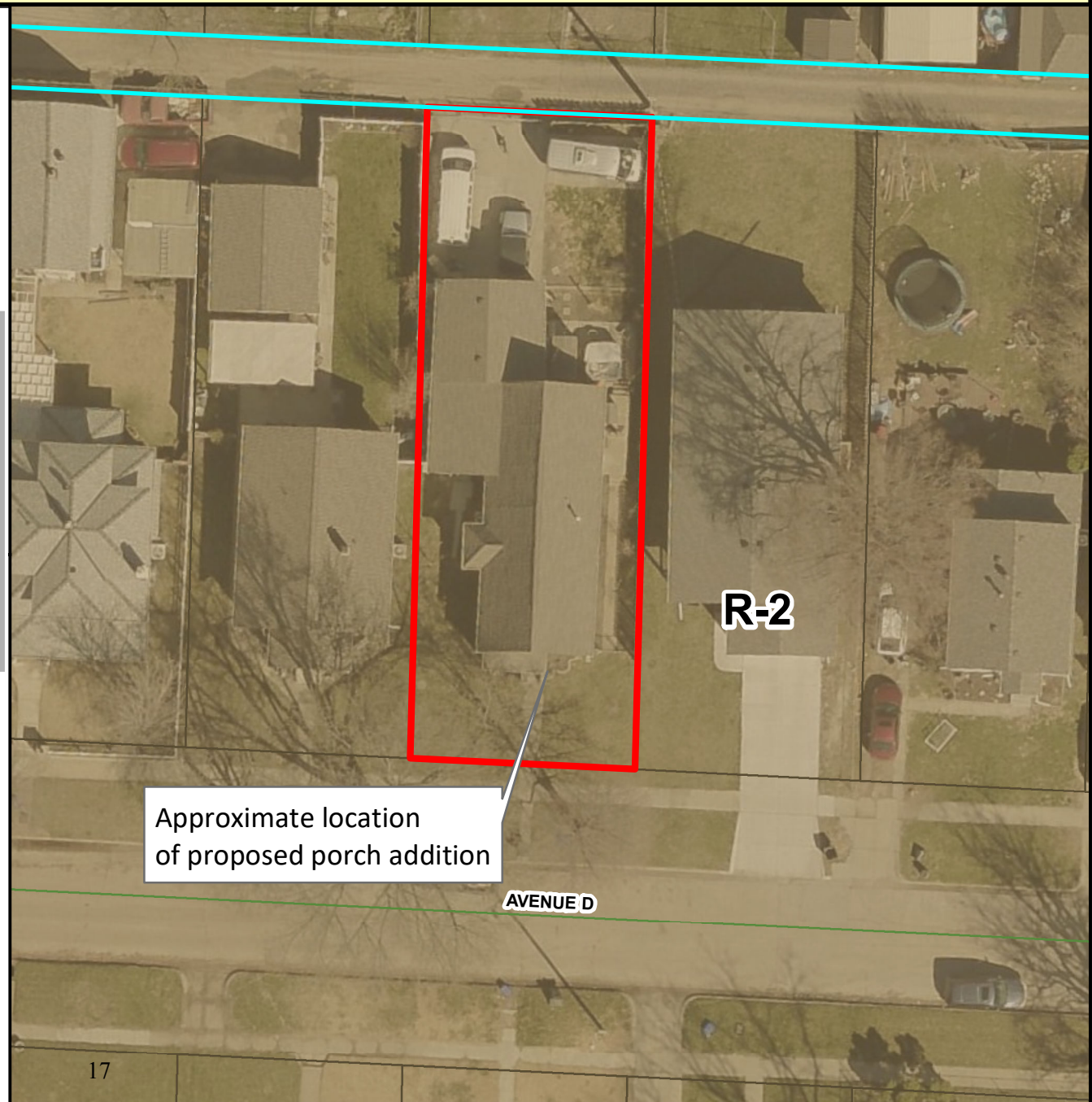


Last Amended: 5/14/2021

Council Bluffs Community  
Development Department  
209 Pearl Street  
Council Bluffs, IA 51503  
Telephone: (712) 328.4629

## DISCLAIMER

This map is prepared and compiled from City documents, plans and other public records data. Users of this map are hereby notified that the City expressly denies any and all responsibilities for errors, if any, in the information contained on this map of the misuse of the same by the user or anyone else. The user should verify the accuracy of information/data contained on this map before using it. The City assumes no legal responsibility for the information contained on this map.



## Zoning Board of Adjustment Communication

Department: Community

Development

Case/Project No.: CU-00-008(M2)

CASE #CU-00-008(M2)

Council Action: 6/15/2021

Submitted by: Moises Monrroy,

Planner

### **Description**

Public hearing on the request of AT&T Mobility, represented by Dave Trost of Qualtek Wireless, to modify an existing conditional use permit (CU-00-008), approved on August 15, 2000, and then later modified (CU-00-008(M)) on May 20, 2014, to increase the lease area of an existing 150 foot-tall telecommunication tower in an A-P/Administrative-Professional District on property legally described as being part of Lot 1, Auditor's Subdivision of the NW1/4 NE1/4 of Section 30-75-43, City of Council Bluffs, Pottawattamie County, Iowa, on Kirm Junior High School property approximately 250 feet west of North Avenue. Location: 100 North Avenue.

### **Background/Discussion**

See attachments.

### **Recommendation**

### **ATTACHMENTS:**

Description

Staff Report & Attachments

Type

Other

Upload Date

6/9/2021



**TO:** Zoning Board of Adjustment  
**FROM:** Community Development Department  
**DATE:** June 15, 2021  
**RE:** **CASE #CU-00-008(M2)**  
**REQUEST:** Public hearing on the request of AT&T Mobility, represented by Dave Trost of Qualtek Wireless, to modify an existing conditional use permit (CU-00-008), approved on August 15, 2000, and then later modified (CU-00-008(M)) on May 20, 2014, to increase the lease area of an existing 150 foot-tall telecommunication tower in an A-P/Administrative-Professional District on property legally described as being part of Lot 1, Auditor's Subdivision of the NW ¼ NE ¼ of Section 30-75-43, City of Council Bluffs, Pottawattamie County, Iowa, on Gerald W. Kirn Middle School property approximately 250 feet west of North Avenue.

**APPLICABLE  
CODE SECTIONS:**

**Section 15.02.020 Zoning Board of Adjustment**

The Zoning Board of Adjustment shall have the following powers, pursuant to this ordinance:

B. To make final decisions on applications for conditional uses.

**Chapter 15.31 Communication Towers**

**LEGAL**

**DESCRIPTION:** Part of Lot 1, Auditor's Subdivision of the NW ¼ NE ¼ of Section 30-75-43, City of Council Bluffs, Pottawattamie County, Iowa

**LOCATION:** 100 North Avenue, Council Bluffs, IA 51503

**APPLICANT:** New Cingular Wireless PCS, LLC d/b/a AT&T Mobility, 7900 Xerxes Avenue South, 3<sup>rd</sup> Floor, Bloomington, MN 55431

**OWNERS:** Council Bluffs Community School District, 300 West Broadway, Suite 1600, Council Bluffs, IA 51503  
Alltel Corporate Services, c/o Verizon Wireless, PO Box 2549, Addison, TX 75001

**REPRESENTED BY:** Dave Trost, Qualtek Wireless, 6100 110<sup>th</sup> Street, Bloomington, MN 55425

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**BACKGROUND INFORMATION** – The Community Development Department has received a request from AT&T Mobility, represented by Dave Trost of Qualtek Wireless, to modify an existing conditional use permit (CU-00-008), approved on August 15, 2000, and then later modified (CU-00-008(M)) on May 20, 2014, to increase the lease area of an existing 150 foot-tall telecommunication tower in an A-P/Administrative-Professional District on property legally described as being part of Lot 1, Auditor's Subdivision of the NW ¼ NE ¼ of Section 30-75-43, City of Council Bluffs, Pottawattamie County, Iowa, on Gerald W. Kirn Middle School property approximately 250 feet west of North Avenue.

On August 15, 2000, the Zoning Board of Adjustment approved a conditional use permit (see Case #CU-00-008) to allow the installation of the existing communication tower on a lease area measuring 25' x 50'-6". On May 20, 2014, the Board approved a request to modify said conditional use permit (see Case #CU-00-008(M)) in order to allow a 20' x 30' expansion of the lease area. The applicant is now requesting a

15' x 20' expansion of the lease area, and must receive approval from the Zoning Board of Adjustment to modify the approved conditional use permit before expanding the tower site.

The existing communication tower is located on the Gerald W. Kirn Middle School site, which is owned by the Council Bluffs Community School District. The Community Development Department has received a letter of authorization (see Attachment 'C') from the school district to allow the applicant to proceed with their conditional use permit modification request. The applicant proposes a 15' x 20' expansion to the northwest of the existing lease area. The purpose of this request is to accommodate a 6'-10" x 6'-10" equipment shelter, a 12'-6" ice bridge and a 20-kW diesel generator. The applicant also proposes to enclose the expanded lease area with 10-foot tall chain link fence. As per the applicant's letter of intent, space is reserved on the existing tower for antennas, radios, surge arrestors, DC trunk lines and fiber lines at the 138-foot elevation. The existing paved driveway will continue to provide access to the tower from North Avenue. The proposed modification request will not increase the height of the existing tower.

The following attachments have been included for your reference:

Attachment A: Location/Zoning Map

Attachment B: Letter of Intent

Attachment C: Letter of Authorization from Council Bluffs Community School District

Attachment D: Building Plans

Attachment E: Site Survey

**CURRENT ZONING AND LAND USE** – The subject property is zoned A-P/Administrative-Professional District. Properties to the north of the existing communication tower are zoned R-1/Single-Family Residential District and R-3/Low Density Multifamily Residential District; to the south, properties are zoned R-1 District, R-3 District and C-2/Commercial District; to the east, properties are zoned C-2 District, R-3 District and R-4/High Density Multifamily Residential District; and to the west, properties are zoned A-P District, R-1 District, R-3 District and C-3/Commercial District.

Surrounding land uses include single-family residential to the north, south, east and west; multi-family residential to the north and east; Gerald W. Kirn Middle School and Jennie Edmundson Hospital to the south; and Super Saver, Hoover Elementary School and an emergency shelter to the west. The future land use map of the Bluffs Tomorrow: 2030 Comprehensive Plan designates the subject property as 'Public/Semi-Public.'

The following site photographs show the existing condition of the subject property and surrounding area:



**Exhibit 'A':** Looking west at the existing tower/lease area



**Exhibit 'B':** Looking east at the access drive





**Exhibit 'C':** Looking southwest to the expanded lease area



**Exhibit 'D':** Looking north at the expanded lease area

**CITY DEPARTMENTS AND UTILITIES** – All City departments and local utility providers were notified of the proposed conditional use permit request. The following comments were received:

- The Community Development Department had the following comment:
  1. As per Section 15.31.020(E) of the Council Bluffs Municipal Code (Zoning Ordinance), “Communication facilities to be co-located onto an existing legally established tower with no increase in height are exempt from the review procedures of this chapter.” However, since the request involves the physical expansion of the approved lease area in order to accommodate additional equipment, the conditional use permit for the existing communication tower must be modified.
  2. The applicant proposes to install a 10-foot tall chain link to secure the perimeter of the expanded lease area. The approved conditional use permit only allows a maximum fence height of eight feet. Although the proposed fence exceeds the maximum height allowed, such a fence would be appropriate for this type of use as it would provide sufficient security to the equipment servicing the existing tower. Additionally, the proposed fence would not be visible from the public right-of-way due to the tower’s location on the Gerald W. Kirn Middle School site.
  3. All provisions outlined in this conditional use permit shall only be applicable to the geographical boundary lease area and the proposed expansion area, as legally described in Sheet V-101, Attachment ‘E.’
- The Public Works Department stated they have no changes needed for the modified conditional use permit.
- The Parks and Recreation Department stated that they have no comments on the request.

**NEIGHBORHOOD RESPONSE** – All property owners within 200 feet were notified of the conditional use permit request. No comments have been received as of the date of this report.

**COMMENTS** - The development and execution of the Ordinance (Title 15) is based upon the division of the City into districts. Within each district the use of land and buildings, and the bulk and location of buildings and structures in relation to the land, are substantially uniform. It is recognized, however, that there are specific uses which, because of their unique characteristics, cannot be properly classified in any particular district or districts without consideration, in each case, of the impact of those uses upon neighboring land and of the public need for the particular use at the particular location. Such uses may be either public or private, and are

of such an unusual nature that their operation may give rise to unique problems with respect to their impact upon neighboring property or public facilities. (§15.02.090(A) – Conditional Uses)

The Zoning Board of Adjustment shall make findings of fact, based upon the evidence presented at the public hearing, with respect to each of the applicable standards in Section 15.02.090(E), Findings of Fact.

The Zoning Board of Adjustment may impose such conditions and restrictions upon the location, construction, design and use of the property benefitted by a conditional use as may be necessary or appropriate to protect the public interest, adjacent property and property values. Failure to maintain such conditions or restrictions as may be imposed shall constitute grounds for revocation of the conditional use. The terms of relief granted, including any conditions or restrictions, shall be specifically set forth in the concluding statement separate from the findings of fact. No conditional use shall be approved unless the Zoning Board of Adjustment makes findings of fact based directly on the standards and conditions imposed by this section. The findings of fact are presented below in *italics*:

1. *The proposed conditional use will comply with all applicable regulations of this Ordinance, including lot requirements, bulk regulations, use limitations, and all other standards or conditions contained in the provisions authorizing such use. A conditional use permit was issued in 2000 and modified in 2014 by the Zoning Board of Adjustment for the existing 150-foot tall telecommunication tower after it was determined all applicable City development standards would be met. The proposed modification request complies with all standards in Chapter 15.31, Communication Towers, of the Council Bluffs Municipal Code (Zoning Ordinance). No increase to the height of the tower is proposed with this request.*
2. *Adequate utility, drainage, and other necessary facilities or improvements have been or will be provided. The existing tower is an unmanned facility with limited utility needs. No utility service extensions and/or infrastructure improvements are necessary for the proposed lease area expansion.*
3. *Adequate access roads or entrance and exit drives will be designed and built to prevent traffic hazards and to minimize traffic conflicts and congestion in public streets and alleys. Since the existing tower is an unmanned facility, there is minimal traffic to the site. The tower is accessed by a paved driveway within a 25-foot access/utility easement area. No additional ingress/egress drives are required to access the expanded lease area.*
4. *All necessary permits and licenses required for the operation of the conditional use have been obtained, or it clearly states that such permits are obtainable for the proposed conditional use on the subject property. In addition to receiving a conditional use permit from the Board, the applicant must also receive a building permit from the Permits and Inspections Division to install the proposed equipment shelter, ice bridge, outdoor generator and additional antennae on the tower. As part of the building permit review, the applicant must demonstrate the upgrades comply with all local, state and federal building regulations for telecommunication towers.*
5. *All exterior lighting shall be shaded as necessary to direct the light away from neighboring residential properties. No additional exterior lighting is proposed with this request. All outdoor lighting shall comply with Section 15.24.050, Lighting Controls, of the Council Bluffs Municipal Code (Zoning Ordinance).*
6. *The location and size of the conditional use, the nature and intensity of the activities, to be conducted in connection with it, the size of the site, and the relationship of the site to adjacent roadways shall be considered to assure the use is in harmony with the appropriate and orderly development of the*

district and the neighborhood in which it is located. The proposed request is to enlarge the lease area of an existing 150 foot-tall telecommunication tower which was granted a conditional use permit by the Zoning Board of Adjustment on August 15, 2000 (see Case #CU-00-008). The approved conditional use permit was previously modified on May 20, 2014 (see Case #CU-00-008(M)) to expand the lease area. No increase to the height of the tower is proposed with this request. This is an unmanned facility with limited traffic to the site except for routine maintenance. The tower has access to North Avenue via an existing concrete paved driveway and is located in an area of the Gerald W. Kirn Middle School site that is isolated from the public.

7. The location, nature and height of buildings, structures, walls, and fences on the site, and the nature and extent of landscaping and screening on the site shall be designed so that the use will not reasonably hinder or discourage the appropriate development, use, and enjoyment of the adjacent land, buildings and structures. No increase to the height of the tower is proposed with this request. The height and size of the equipment shelter and outdoor generator comply with minimum R-3 District standards for accessory structures. A 10-foot tall chain link fence is proposed to secure the 15' x 20' lease expansion area. The proposed fence height exceeds the maximum height allowed by the approved conditional use permit for the 150-foot tall tower. However, such a fence is appropriate for this type of use as it would provide sufficient security to the equipment servicing the existing tower. As such, the proposed fence is not expected to have an adverse impact on the development of adjacent properties. The existing tower is located in an area of the Gerald W. Kirn Middle School site that is isolated from the public. The base of the tower and associated equipment will be screened from public view by existing vegetation that surrounds the tower site.
8. The proposed conditional use will not cause substantial injury to the value of other property in the neighborhood in which it is located and will contribute to and promote the convenience and welfare of the public. The proposed expansion of the lease area is not anticipated to have a negative impact on property values for existing or future land uses in the surrounding area. The existing tower will not increase in height. Due to existing vegetation and its location on the Gerald W. Kirn Middle School site, the tower structure and its associated equipment are not visible from the public right-of-way.

**RECOMMENDATION** – The Community Development Department recommends approval of the request to modify an approved conditional use permit (CU-00-008) by expanding the lease area of an existing 150 foot-tall telecommunication tower in an A-P/Administrative-Professional District on property legally in Attachment 'E,' subject to the comments stated above and the following conditions:

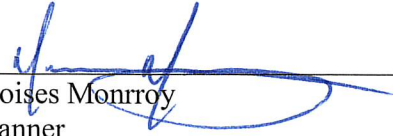
1. All proposed antenna and equipment upgrades shall comply with all applicable federal, state and local regulations.
2. All provisions outlined in this conditional use permit shall only be applicable to the geographical boundary of the lease area and the proposed expansion area, as legally described in Sheet V-101, Attachment 'E.'
3. All vehicular access/turn around areas shall be paved in accordance with current City standards.
4. A 'Knox Box' shall be installed on the fenced enclosure to provide emergency access.
5. A copy of the updated lease agreement between the applicant and the property owner shall be provided to the City prior to issuance of any building permits.
6. All security fencing installed at this site shall not exceed ten feet in height, as measured from finished grade.
7. Barb wire fencing shall not be permitted at this site.
8. Outdoor storage shall not be permitted at this site.

9. Any modifications to the approved conditional use permit which substantially alters the design, layout, configuration, and/or appearance of the project shall be reviewed and approved by the Zoning Board of Adjustment prior to such changes being made. Minor modifications to the approved conditional use permit that result in a design that is considered compatible with the overall development may be administratively approved by the Community Development Director or their designee.



---

Christopher N. Gibbons, AICP  
Planning Manager  
Community Development Department



---

Moises Monroy  
Planner  
Community Development Department

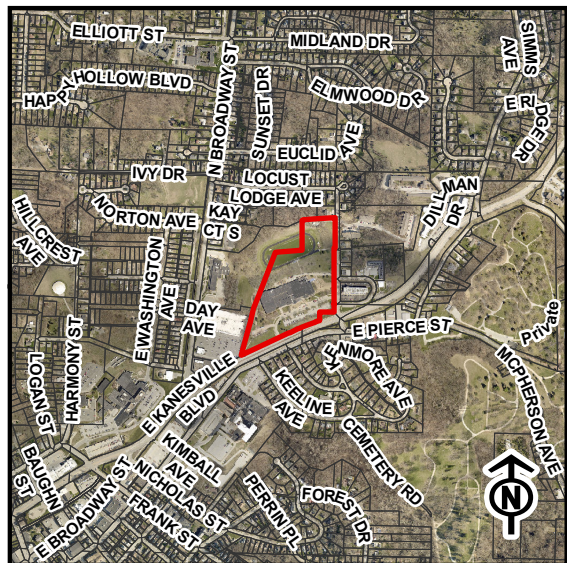


# CITY OF COUNCIL BLUFFS - ZONING BOARD OF ADJUSTMENT CASE #CU-00-008(M2) LOCATION/ZONING MAP

## Legend

Subject Property

0 115 230  
1 Inch = 236 Feet



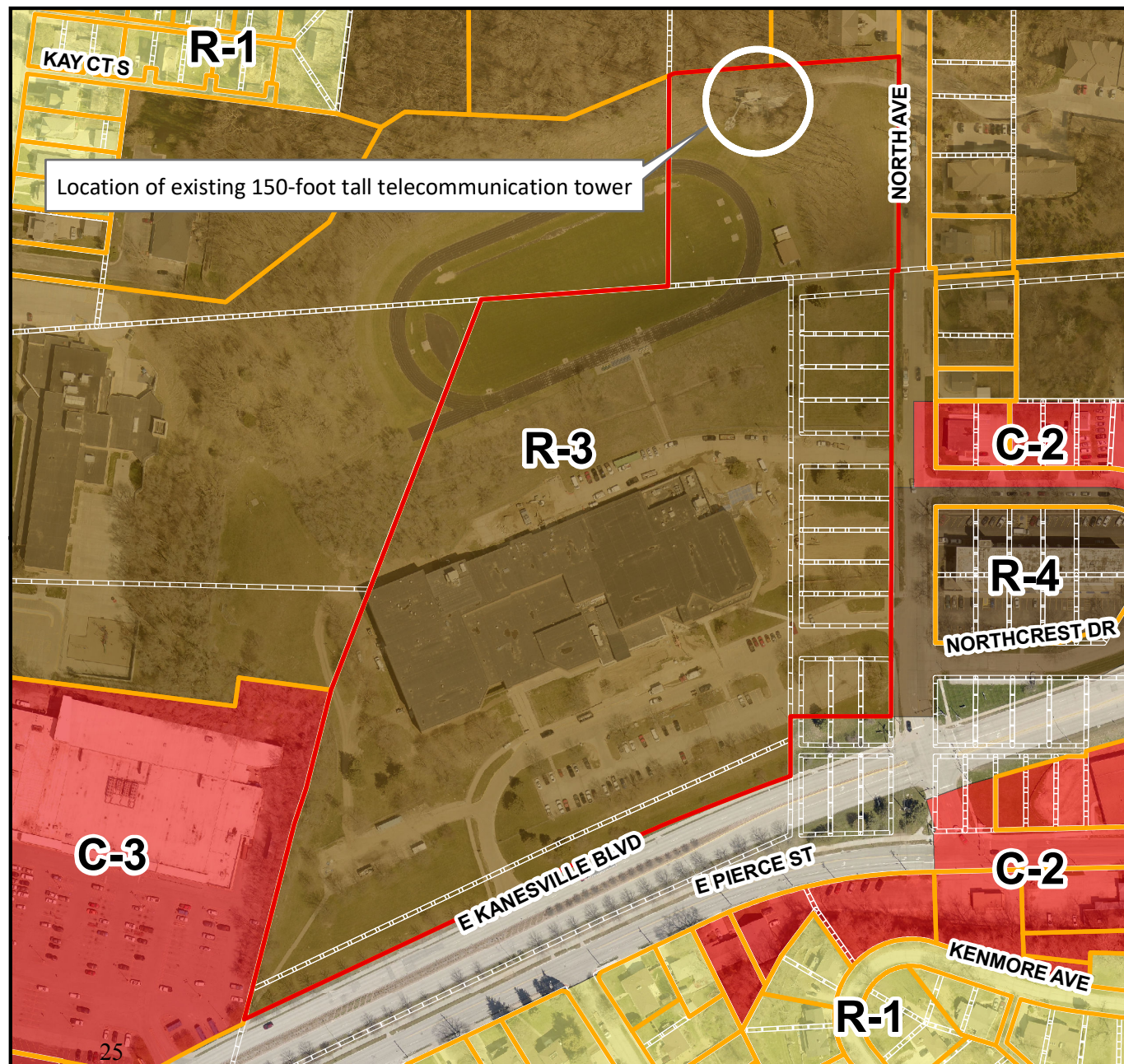
Last Amended: 5/25/2021



Council Bluffs Community  
Development Department  
209 Pearl Street  
Council Bluffs, IA 51503  
Telephone: (712) 890-5350

### DISCLAIMER

This map is prepared and compiled from City documents, plans and other public records data. Users of this map are hereby notified that the City expressly denies any and all responsibilities for errors, if any, in the information contained on this map, the misuse of the same by the user or anyone else. The user should verify the accuracy of information/data contained on this map before using it. The City assumes no legal responsibility for the information contained on this map.





[www.qualtekservices.com](http://www.qualtekservices.com)

May 14, 2021

Christopher N. Gibbons, AICP  
Planning Manager  
Community Development Department  
City of Council Bluffs  
209 Pearl Street  
Council Bluffs, IA 51503  
Office: 712-890-5358

RE: **Plan of Operations** -ATT Conditional Use Permit 352 North Avenue, Council Bluffs, IA 51503  
ATT FA# 15339632 – Council\_Bluffs\_N\_Kanesville\_Bldv

Dear Mr. Gibbons:

The ATT collocation at the above-named site consists of a 15'x20' ground lease expansion, occupied by a 6'10"x 6'10" telecommunications equipment shelter, outdoor generator surrounded by a 10' high chain link fence to match existing. Space is reserved on the 150' monopole for antennas, radios, surge arrestors, DC trunk lines and fiber lines at the 138' elevation.

The structure will be unoccupied and after construction will be intermittently visited by service technicians to monitor the facility. There is adequate space for technician parking on the existing concrete access drive.

There will be no sewer or water and no regular hours of operation.

*Dave Trost*

Dave Trost  
6100 110th St. W. Bloomington MN 55425  
779-777-3149  
DTrost@Qualtekwireless.co

*6100 110th Street W  
Bloomington, MN 55438*





### LETTER OF AUTHORIZATION

Licensee Name: New Cingular Wireless PCS, LLC d/b/a AT&T Mobility  
 ATC Site No/ Name / Project: 418387 / Council Bluffs-Kirn Jr High IA / OAA760947  
 Site Address: 352 North Avenue, Council Bluffs, IA 51503  
 APN: 7543-30-129-038

I, Dave Coziahr, Council Bluffs Community School District, owner of the property identified above or duly authorized agent thereof, do hereby authorize New Cingular Wireless PCS, LLC dba AT&T Mobility, American Tower\*, their parents, subsidiaries, affiliates, successors, assigns, contractors, and agents, to act as my non-exclusive agent for the sole purpose of filing and consummating any current or future land-use or construction permit application(s) as may be required by the applicable permitting authorities for New Cingular Wireless PCS, LLC dba AT&T Mobility's proposed equipment modification.

### SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST, CONTRACTORS SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED MATERIALS TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING, INSTALLATION OF:

- (-) COMPOUND EXPANSION WITH 10'-0" HIGH CHAINLINK FENCE
- (1) NEW 6'-10" X 6'-10" SHELTER WITH OUTDOOR GENERATOR
- (6) ANTENNAS (NNH4-65C-R6-V3) AT 138'-0" ON EXISTING 150'-0" TOWER
- (9) RRH'S ((3) 4T4R B12/14/29, (3) 4T4R B30, (3) 4T4R B25/66 )
- (1) RAYCAP
- (3) DC TRUNKS
- (1) FIBER TRUNK

Signature: *David Coziahr*  
 Print Name: DAVID COZIHR  
 Council Bluffs Community School District

### NOTARY BLOCK

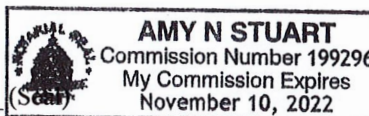
State of Iowa  
 County of Pottawattamie

On April 27, 2021, before me, *Amy Stuart* personally appeared Dave Coziahr, who provide to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Iowa that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Signature *Amy Stuart*  
 My Commission Expires: 11/10/2022



\*American Tower as used herein includes any affiliates or subsidiaries of American Tower Corporation



AT&T

SITE NAME:

PROJECT TYPE:

SITE NUMBER:

ATC NUMBER:

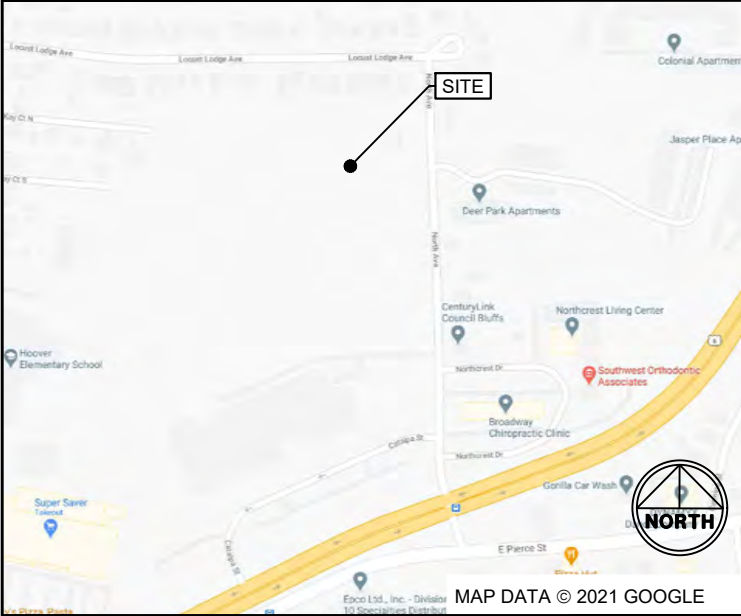
FA CODE:

PAGE ID:

ADDRESS:

COUNCIL BLUFFS  
NEW SITE BUILD (COLLOCATION) LTE 1C - 6C  
IAL01207  
418387  
15339632  
MRUMW043202, MRUMW045042, MRUMW045049  
MRUMW045047, MRUMW045084, MRUMW045111  
352 NORTH AVENUE  
COUNCIL BLUFFS, IA 51503

VICINITY MAP



DRIVING DIRECTIONS

DIRECTIONS FROM 7900 XERXES AVE S, MINNEAPOLIS, MN:  
TURN RIGHT ONTO XERXES AVE S, USE THE LEFT 2 LANES TO TURN LEFT ONTO AMERICAN BLVD W, TURN RIGHT ONTO PENN AVE S, TURN LEFT ONTO W 82ND ST, TURN RIGHT ONTO HUMBOLDT AVE S, TAKE THE RAMP ON THE LEFT ONTO I-35W S, MERGE ONTO I-35W S, CONTINUE ONTO I-35 S ENTERING IOWA, USE THE RIGHT 2 LANES TO MERGE ONTO I-35 S/I-80 W TOWARD KANSAS CITY/COUNCIL BLUFFS, KEEP RIGHT AT THE FORK TO CONTINUE ON I-80 W, FOLLOW SIGNS FOR COUNCIL BLUFFS/OMAHA, TAKE EXIT 8 TOWARD COUNCIL BLUFFS, MERGE ONTO E KANESVILLE BLVD, TURN RIGHT ONTO, NORTH AVE DESTINATION WILL BE ON THE LEFT.



NOTE:  
48 HOURS PRIOR TO DIGGING,  
CONTRACTOR TO NOTIFY ALL UTILITY  
COMPANIES TO LOCATE  
ALL UNDERGROUND UTILITIES.

ALWAYS CALL  
BEFORE YOU DIG

APPLICANT / LESSEE

NAME:

ADDRESS:

AT&T SAC PM:

AT&T C&E PM:

AT&T MOBILITY

7900 XERXES AVE S., 3RD FLOOR  
MINNEAPOLIS, MN 55431

PETER MCENERY  
PM753T@ATT.COM  
(952) 258-9629

SARAH LANGE  
(952) 229-9725  
SL7988@ATT.COM

SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST, CONTRACTORS SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED MATERIALS TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING, INSTALLATION OF:

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(1) NEW 6'-10" X 6'-10" SHELTER WITH OUTDOOR GENERATOR  
(6) ANTENNAS (NNH4-65C-R6-V3) AT 138'-0" ON EXISTING 150'-0" TOWER  
(9) RRH'S ((3) 4T4R B12/14/29, (3) 4T4R B30, (3) 4T4R B25/66 )  
(1) RAYCAP  
(3) DC TRUNKS  
(1) FIBER TRUNK

PROJECT SUMMARY

USID:

ADDRESS:

E-911 ADDRESS:

PROPERTY COORDINATES:

GROUND ELEVATION:

PARCEL NUMBER:

PARCEL OWNER:

TOWER OWNER :

ATC TOWER NUMBER :

ACCESS CONTACT:

POWER COMPANY:

TELEPHONE/ FIBER COMPANY:

BUILDING CODES:

COUNTY:

JURISDICTION:

294037

352 NORTH AVENUE  
COUNCIL BLUFFS, IA 51503

100 NORTH AVENUE  
COUNCIL BLUFFS, IA 51503

LATITUDE: 41°16' 26.20" (41.2739440°)  
LONGITUDE: -95°49' 55.69" (-95.832111°)

1147.96' (NAVD88) - SOURCE: FCC REGISTRATION DATED 01/04/16

754330129038

COUNCIL BLUFFS COMM SCHOOLS

ALLTEL CORPORATION

418387

DANIEL FLATLEY  
(617) 922-0004  
DANIEL.FLATLEY@AMERICANTOWER.COM

TBD

TBD

2015 IBC  
2017 NEC

POTTAWATTAMIE COUNTY

CITY OF COUNCIL BLUFFS

SITE ACQUISITION

NAME:

ADDRESS:

SITE ACQUISITION PM:

CONSTRUCTION PM:

SITE ACQUISITION REPRESENTATIVE:

QUALTEK WIRELESS

6100 110TH ST W  
BLOOMINGTON, MN 55425  
PH: (952)-944-1858, FAX: (925) 944-1506

JACQUELINE CASTRICHINI  
JCASTRICHINI@QUALTEKWIRELESS.COM  
(612) 358-3193

DARVONTE GREEN  
DARVONTE.GREEN@VELEX.COM  
(618) 447-0775

JESSE DIMOND  
JDIMOND@QUALTEKWIRELESS.COM

APPROVALS

AT&T CONSTRUCTION MGR.	DATE	ENGINEER	DATE
CONSTRUCTION MGR.	DATE	CONTRACTOR	DATE
PROPERTY OWNER	DATE	CONTRACTOR	DATE
REAL ESTATE	DATE	OPERATION	DATE
RF	DATE		

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G-2	GROUNDING DETAILS	1
G-3	GROUNDING DETAILS	1
G-4	GROUNDING DETAILS & NOTES	1

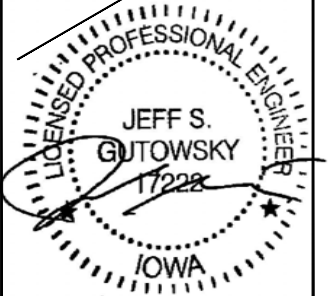
DESIGN TEAM

ARCHITECT/ENGINEER:

PROJECT MANAGER:

THE W-T GROUP, LLC  
2675 PRATUM AVE  
HOFFMAN ESTATES, IL 60192  
TEL: (224) 293-6333  
FAX: (224) 293-6444

DAVID VAN LIESHOUT  
(847) 287-2165  
David.VanLieshout@wtengineering.com

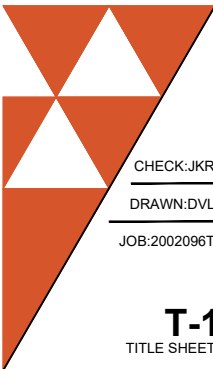


EXPIRES: 12/31/21

REVISIONS

REV.	ISSUED FOR	DATE	BY
A	REVIEW CD'S	10/09/20	APK
0	FINAL	11/19/20	DVL
1	REVISION	02/04/21	GT

AQUATIC \ DESIGN & PROGRAM MANAGEMENT  
CIVIL \ TELECOMMUNICATION \ MECHANICAL  
PLUMBING \ ELECTRICAL \ LAND SURVEYING  
ACCESSIBILITY CONSULTING \ STRUCTURAL



CHECK:JKR  
DRAWN:DVL  
JOB:2002096T

WT GROUP  
Engineering with Precision, Pace and Passion  
2675 Pratum Avenue | Hoffman Estates, IL 60192  
T: 224.293.6333 | F: 224.293.6444  
wtengineering.com

WT Group  
Engineering • Design • Consulting

IAL01207 / ATC # 418387  
COUNCIL BLUFFS  
352 NORTH AVENUE  
COUNCIL BLUFFS, IA 51503

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GENERAL REQUIREMENTS

A. PURPOSE AND INTENT

- 1. THE DRAWING AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED ON BOTH. SHOULD THERE BE ANY DISCREPANCIES BETWEEN REQUIREMENTS SHOWN IN BOTH, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
- 2. THE INTENTION OF THIS DOCUMENT IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.

B. CONFLICTS

- 1. VERIFY ALL MEASUREMENTS AT THE SITE BEFORE ORDERING MATERIAL OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED DUE TO DIFFERENCES BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS SHOWN ON PLANS. SUBMIT NOTICE OF ANY DISCREPANCY OR OTHERWISE TO AT&T FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
- 2. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS GOVERNING THE WORK.

C. CLEANING

- 1. KEEP THE SITE CLEAN OF ACCUMULATION OF WASTE AND RUBBISH CAUSED BY EMPLOYEES. AT THE COMPLETION OF THE WORK, REMOVE ALL WASTE AND NON-CONSTRUCTION MATERIAL, INCLUDING ALL CONTRACTOR TOOLS, SCAFFOLDING, AND SURPLUS MATERIAL AND LEAVE SITE CLEAN AND READY FOR USE.

D. CODES

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL LAWS, REGULATIONS, AND RULES PROMULGATED BY FEDERAL, STATE, AND LOCAL AUTHORITIES WITH JURISDICTION OVER THE SITES. THIS RESPONSIBILITY IS IN EFFECT REGARDLESS OF WHETHER THE LAW, ORDINANCE, REGULATION, OR RULE IS MENTIONED IN THESE SPECIFICATIONS.

E. LICENSING

- 1. CONTRACTOR SHALL HAVE AND MAINTAIN A VALID CONTRACTOR'S LICENSE FOR THE LOCATION IN WHICH THE WORK IS TO BE PERFORMED. FOR JURISDICTIONS THAT LICENSE INDIVIDUAL TRADES, THE TRADESMAN OR SUBCONTRACTOR PERFORMING THOSE TRADES SHALL BE LICENSED . RESEARCH AND COMPLY WITH THE LICENSING LAWS, PAY LICENSING FEES, AND SELECT AND INFORM SUBCONTRACTORS REGARDING THESE LAWS.

F. OSHA

- 1. FOLLOW ALL APPLICABLE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS AND STATE LAWS BASED IN THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT. THESE REGULATIONS INCLUDE, BUT ARE NOT LIMITED TO, REGULATIONS DEALING WITH TOWER CONSTRUCTION AND SAFETY, EXCAVATIONS AND TRENCHING, AND WORK IN CONFINED SPACES. ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES DURING CONSTRUCTION.

G. PHOTOS

- 1. PROVIDE PHOTOGRAPHIC EVIDENCE OF ALL FOUNDATION INSTALLATION, GROUNDING, AND TRENCHING AFTER PLACEMENT OF UTILITIES PRIOR TO BACKFILL.

H. BUILDING PERMITS

- 1. CONTRACTOR WILL SUBMIT CONSTRUCTION DOCUMENTS TO THE JURISDICTIONAL AUTHORITY FOR PLAN CHECK AND REVIEW. CONTRACTOR WILL SUBMIT LICENSING AND WORKMAN'S COMPENSATION INFORMATION TO THE JURISDICTION AS REQUIRED TO OBTAIN THE BUILDING PERMIT. CONTRACTOR SHALL COORDINATE AND SCHEDULE REQUIRED INSPECTIONS AND POST REQUIRED PERMITS AT THE JOB SITE. COMPLY WITH SPECIFIC PROJECT RELATED REQUESTS AND SUGGESTIONS MADE BY BUILDING INSPECTOR AND INFORM CONSTRUCTION MANAGER OF ANY SUCH WORK THAT MAY BE BEYOND THE SCOPE OF THE CONTRACT OR DEVIATE FROM THE CONSTRUCTION DOCUMENTS. AT&T WILL REIMBURSE THE CONTRACTOR FOR FEES, FOR PLAN REVIEW, BUILDING PERMIT, CONNECTIONS, AND INSPECTION. (INCLUDED IN THE BASE PROPOSAL.)

I. ZONING REGULATIONS AND CONDITIONAL USE PERMITS

- 1. CONTRACTOR WILL SUBMIT FOR AND OBTAIN ALL ZONING AND CONDITIONAL USE PERMITS. SOME USE PERMITS MAY HAVE SPECIFIC REQUIREMENTS FOR THE SITE RELATED TO CONSTRUCTION, SUCH AS NOISE REGULATIONS, HOURS OF WORK, ACCESS LIMITATIONS, ETC. THE CONSTRUCTION MANAGER WILL INFORM THE CONTRACTOR OF THESE REQUIREMENTS IN THE PRE-BID MEETING OR AS SHOWN IN THE CONSTRUCTION DOCUMENTS.

J. FAA PERMIT AND TOWER LIGHTING

- 1. REFER TO CONSTRUCTION DOCUMENTS AND CONSTRUCTION MANAGER FOR FAA AND STATE LIGHTING REQUIREMENTS. CONTRACTOR SHALL PROVIDE TEMPORARY FM APPROVED LIGHTING UNTIL PERMANENT LIGHTING IS OPERATIONAL.

K. TOWER SECURITY

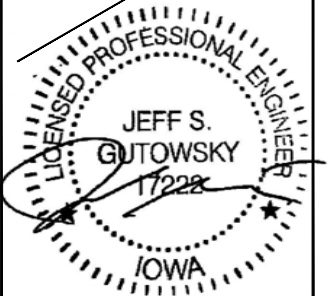
- 1. IF REQUIRED, TOWER MUST BE FENCED, TEMPORARILY OR PERMANENTLY WITHIN 24 HOURS OF ERECTION. DO NOT ALLOW THE GATE ACCESSING THE TOWER AREA TO REMAIN OPEN OR UNATTENDED ANY TIME FOR ANY REASON. KEEP THE GATE CLOSED AND LOCKED WHEN NOT IN USE.

L. SITE CONTROL

- 1. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR CONTAINMENT OF SEDIMENT AND CONTROL OF EROSION AT THE SITE. ANY DAMAGE TO ADJACENT OR DOWNSTREAM PROPERTIES WILL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO AT&T.
- 2. THE CONTRACTOR IS TO MAINTAIN ADEQUATE DRAINAGE AT ALL TIMES. DO NOT ALLOW WATER TO STAND OR POND. ANY DAMAGE TO SITE OR WORK ON THE SITE CAUSED BE INADEQUATE MAINTENANCE OF DRAINAGE PROVISIONS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ANY COST ASSOCIATED WITH ANY REPAIRS FOR SUCH DAMAGE WILL BE AT THE CONTRACTORS EXPENSE.
- 3. ALL WASTE MATERIAL SHALL BE PROPERLY DISPOSED OF OFF-SITE OR AS DIRECTED BY THE CONSTRUCTION MANAGER AND IN ACCORDANCE WITH JURISDICTIONAL AUTHORITIES.

GENERAL NOTES

- 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS TO ENSURE THAT WORK PROGRESSION IS NOT INTERRUPTED.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD, AND GROUNDS. CONTRACTOR SHALL REMOVE AND DISPOSE OF OFF-SITE ALL RUBBISH, WASTE MATERIALS, LITTER AND ALL FOREIGN SUBSTANCES. REMOVE PETROCHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS TO A SMOOTH EVEN-TEXTURED SURFACE.
- 3. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA. EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATION INDICATED, IN PARTICULAR. THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES, AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXCAVATION WORK. 48 HOURS BEFORE YOU DIG, DRILL OR BLAST, CALL LOCAL UTILITY LOCATOR COMPANY.
- 4. THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE OWNER OR THE OWNER'S REPRESENTATIVE.
- 5. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
- 6. THE CONTRACTOR SHALL RESTORE ALL DAMAGED, PUBLIC OR PRIVATE, PROPERTY TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- 7. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
- 8. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- 9. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH OSHA REGULATIONS FOR CONSTRUCTION.
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF THE WORK.
- 11. ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER OR OWNER'S REPRESENTATIVE AND THE UTILITY OWNER BEFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE.
- 12. MAINTAIN FLOW FOR ALL EXISTING UTILITIES.
- 13. ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS AS DEFINED BY THE OWNER OR OWNER'S REPRESENTATIVE ON THE DRAWINGS OR THE GEOTECHNICAL REPORT RECOMMENDATIONS.
- 14. CONTRACTOR TO GRADE ALL AREAS OF THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING OR EQUIPMENT PAD AND THE TOWER.
- 15. IF NECESSARY THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING AND REGRADING ROADWAY AND ANY DISTURBED AREAS FOLLOWING INSTALLATION OF NEW UTILITIES.
- 16. NO COMMERCIAL MESSAGES TO BE DISPLAYED ON TOWER.
- 17. WATER AND SEWER SERVICES ARE NOT REQUIRED FOR THIS DEVELOPMENT.
- 18. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS UNLESS NOTED.

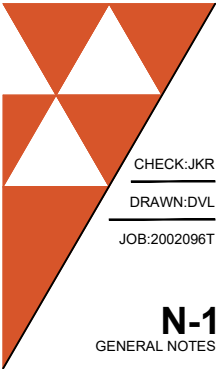


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N-1  
GENERAL NOTES

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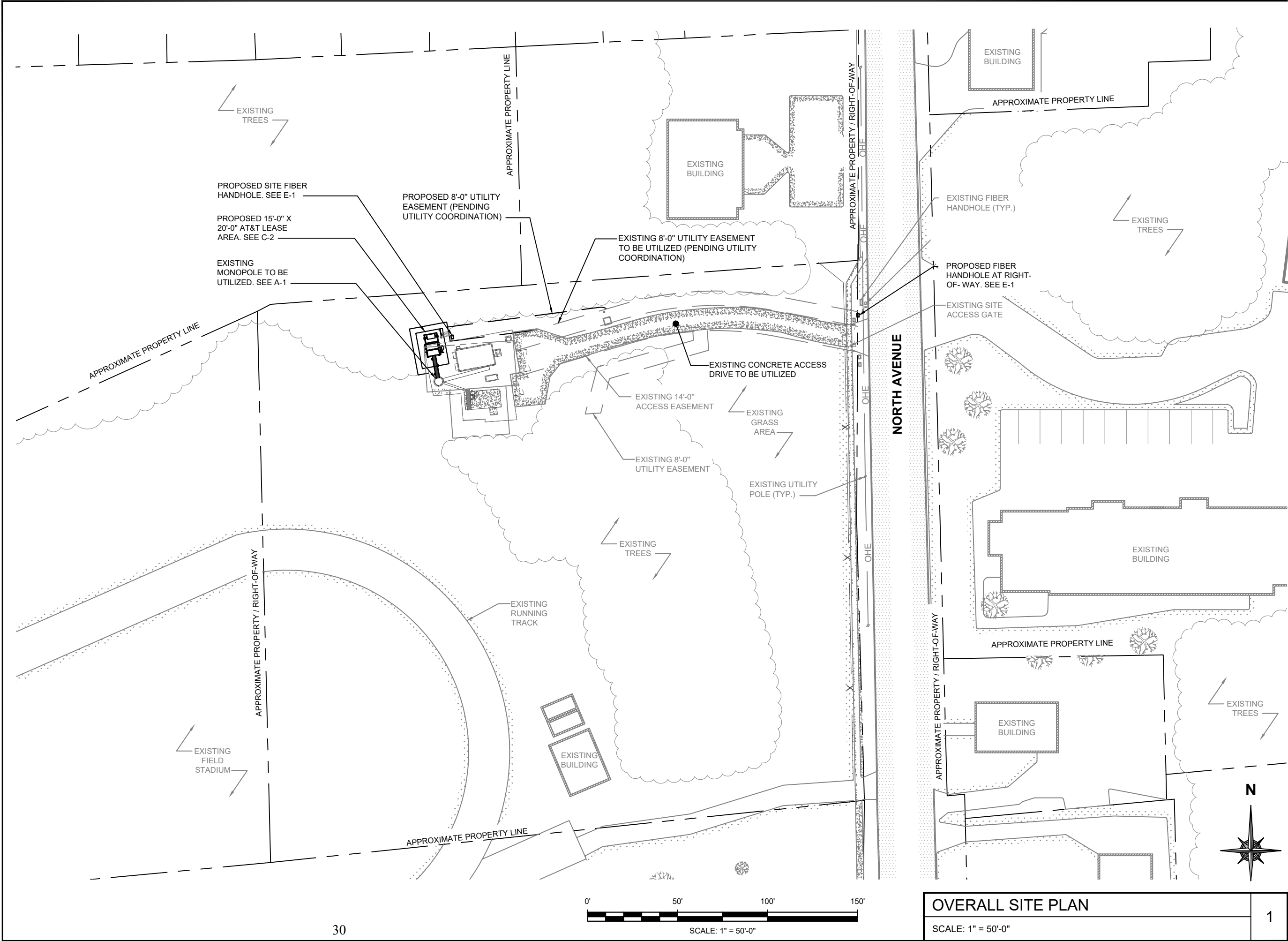
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**OVERALL SITE PLAN**

SCALE: 1" = 50'-0"

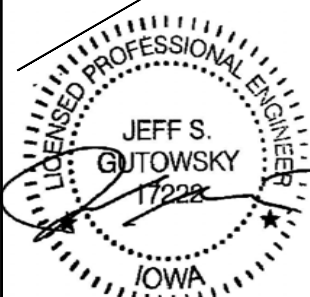
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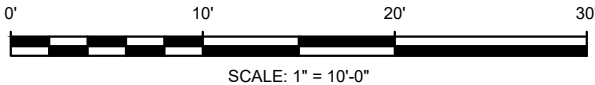
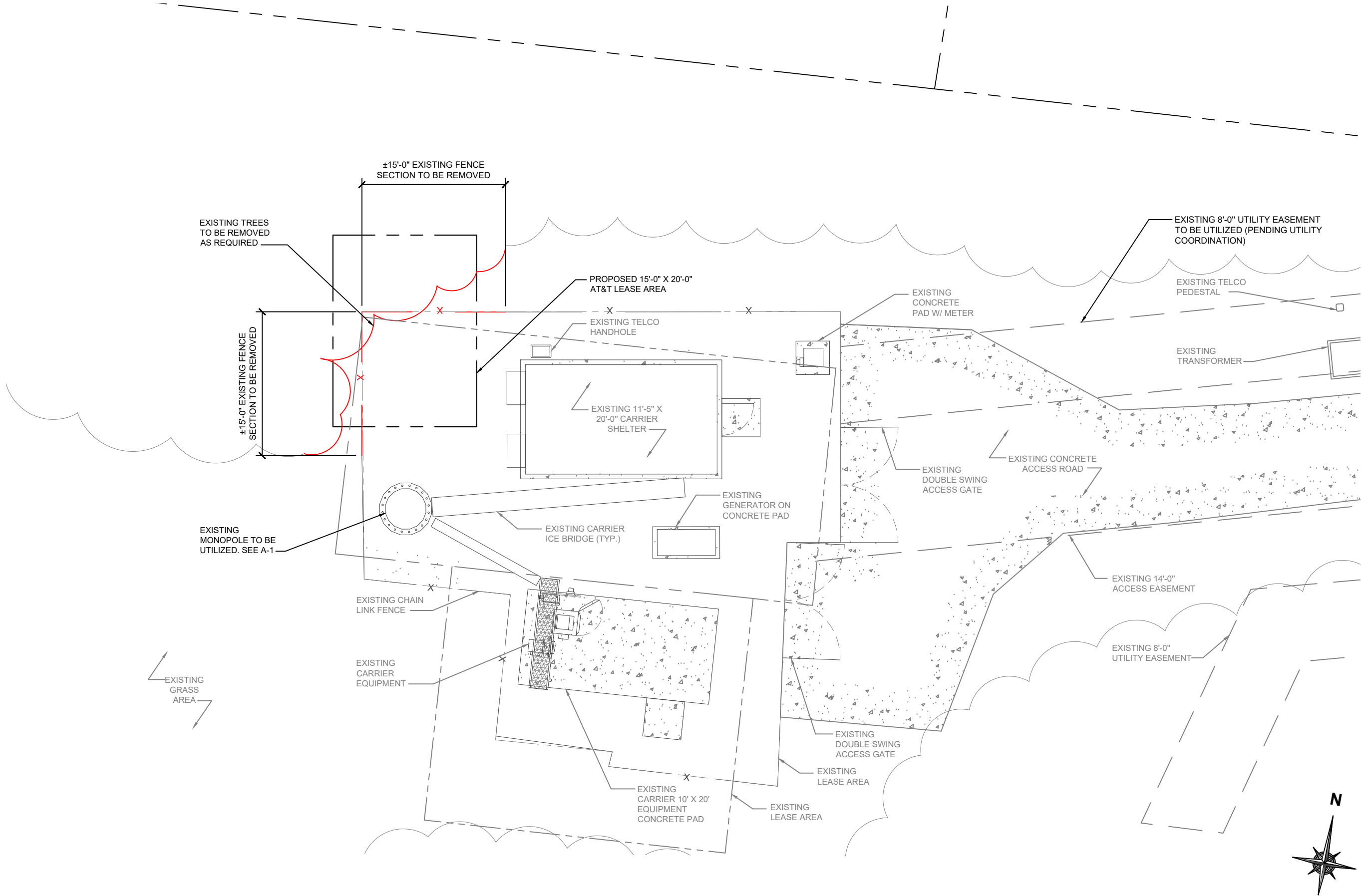
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**C-1**  
OVERALL SITE PLAN



EXISTING SITE PLAN

SCALE: 1" = 10'-0"

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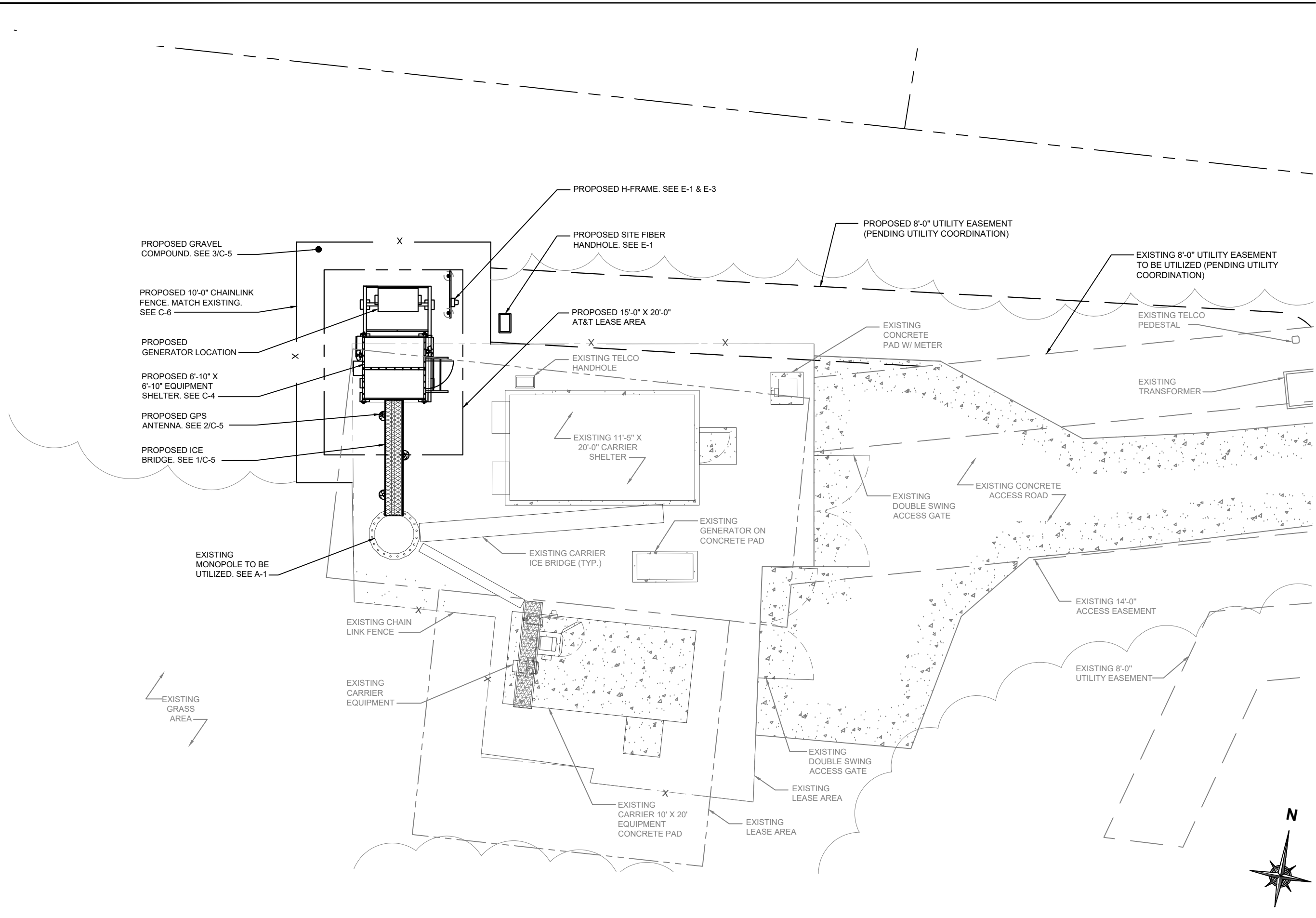
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**C-2.1**  
EXISTING SITE PLAN





PROPOSED GRAVEL  
COMPOUND. SEE 3/C-5

PROPOSED 10'-0" CHAINLINK  
FENCE. MATCH EXISTING.  
SEE C-6

PROPOSED  
GENERATOR LOCATION

PROPOSED 6'-10" X  
6'-10" EQUIPMENT  
SHELTER. SEE C-4

PROPOSED GPS  
ANTENNA. SEE 2/C-5

PROPOSED ICE  
BRIDGE. SEE 1/C-5

EXISTING  
MONOPOLE TO BE  
UTILIZED. SEE A-1

EXISTING CHAIN  
LINK FENCE

EXISTING  
CARRIER  
EQUIPMENT

EXISTING  
GRASS  
AREA

PROPOSED H-FRAME. SEE E-1 & E-3

PROPOSED SITE FIBER  
HANDHOLE. SEE E-1

PROPOSED 8'-0" UTILITY EASEMENT  
(PENDING UTILITY COORDINATION)

EXISTING 8'-0" UTILITY EASEMENT  
TO BE UTILIZED (PENDING UTILITY  
COORDINATION)

EXISTING TELCO  
PEDESTAL

EXISTING  
TRANSFORMER

EXISTING CONCRETE  
PAD W/ METER

PROPOSED 15'-0" X 20'-0"  
AT&T LEASE AREA

EXISTING TELCO  
HANDHOLE

EXISTING 11'-5" X  
20'-0" CARRIER  
SHELTER

EXISTING  
GENERATOR ON  
CONCRETE PAD

EXISTING CARRIER  
ICE BRIDGE (TYP.)

EXISTING CONCRETE  
ACCESS ROAD

EXISTING DOUBLE SWING  
ACCESS GATE

EXISTING 14'-0"  
ACCESS EASEMENT

EXISTING 8'-0"  
UTILITY EASEMENT

EXISTING DOUBLE SWING  
ACCESS GATE

EXISTING  
LEASE AREA

EXISTING CARRIER 10' X 20'  
EQUIPMENT  
CONCRETE PAD

EXISTING  
LEASE AREA

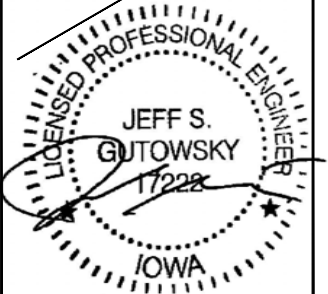


SCALE: 1" = 10'-0"

## PROPOSED SITE PLAN

SCALE: 1" = 10'-0"

1

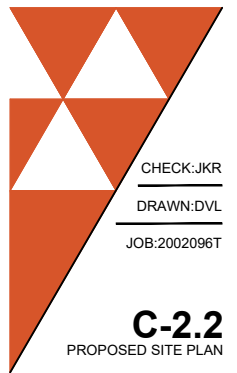


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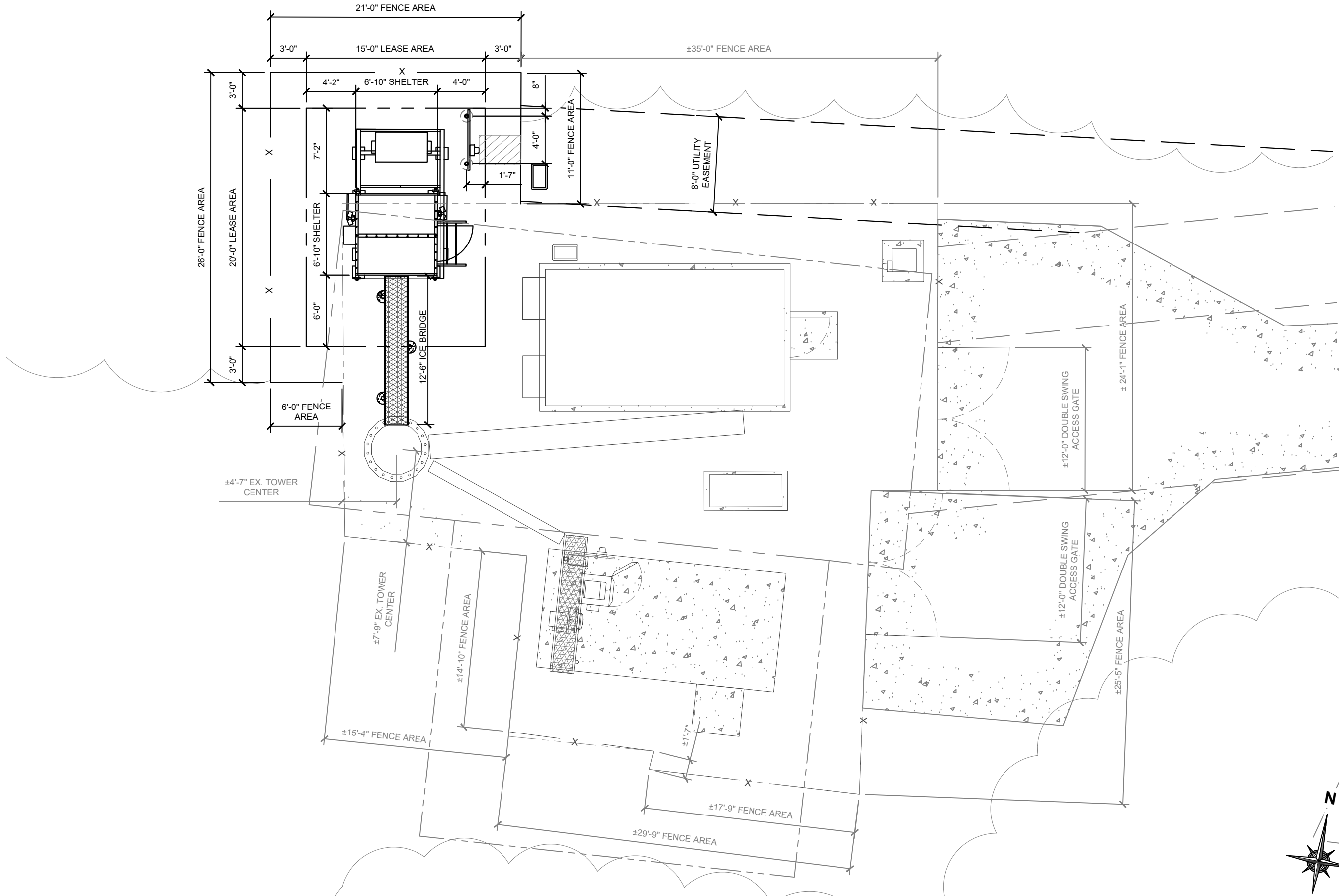
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SCALE: 1/8" = 1'-0"

# GEOMETRIC PLAN


SCALE: 1/8" = 1'-0"

1



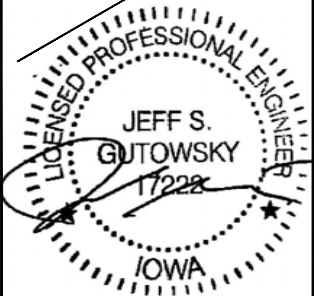
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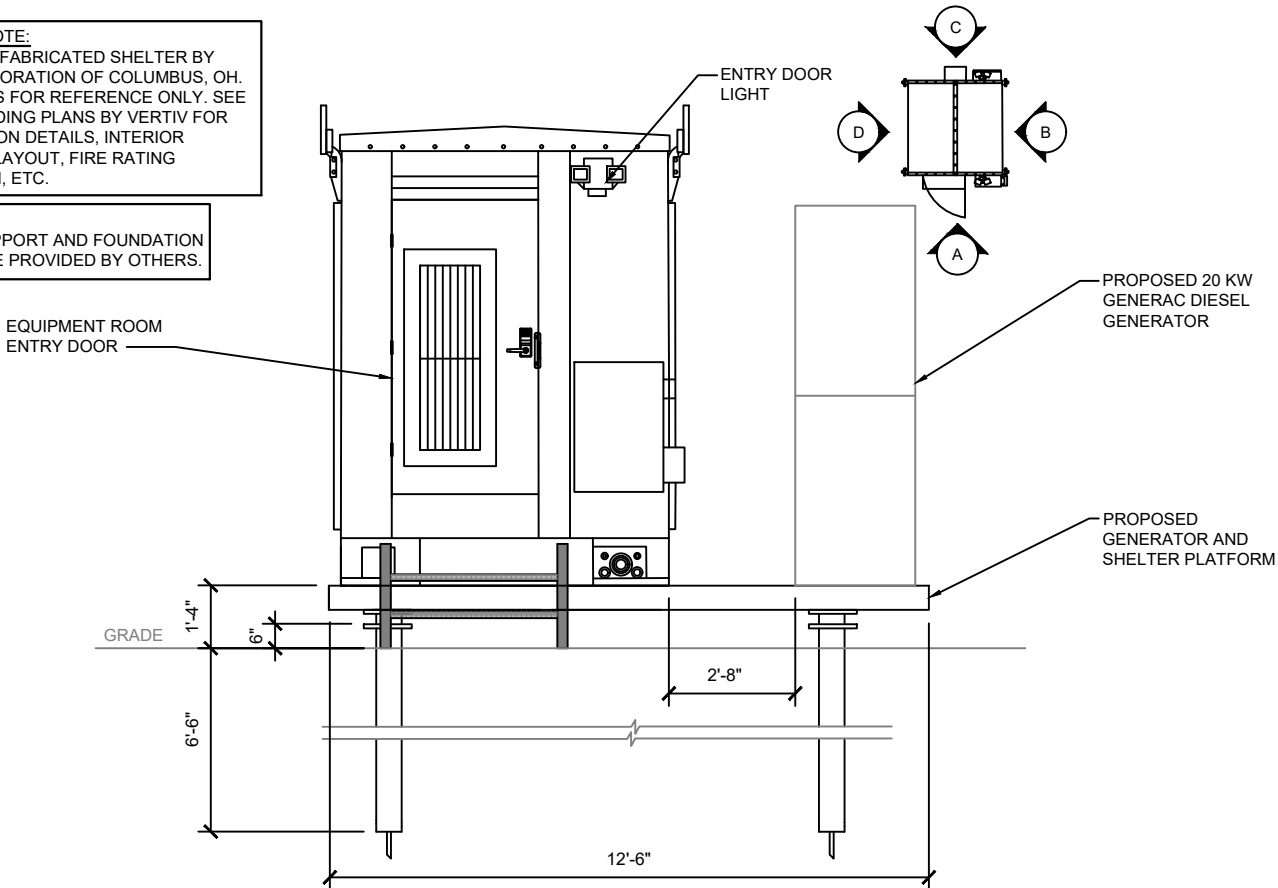
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**C-3**  
GEOMETRIC PLAN

REVIEWER NOTE:  
THIS IS A PREFABRICATED SHELTER BY  
VERTIV CORPORATION OF COLUMBUS, OH.  
THIS SHEET IS FOR REFERENCE ONLY. SEE  
ACTUAL BUILDING PLANS BY VERTIV FOR  
CONSTRUCTION DETAILS, INTERIOR  
ELECTRICAL LAYOUT, FIRE RATING  
INFORMATION, ETC.

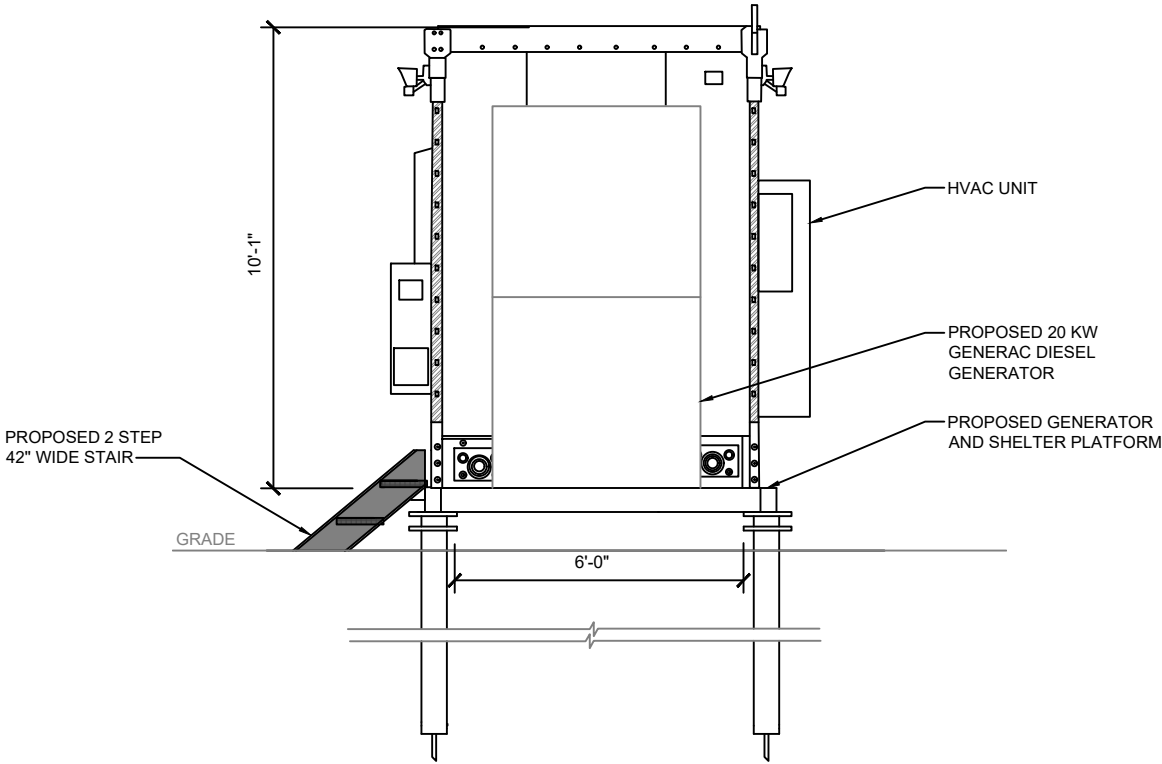
NOTE:  
SHELTER SUPPORT AND FOUNDATION  
DESIGN TO BE PROVIDED BY OTHERS.



"A" SHELTER ELEVATION

SCALE: 1/4" = 1'-0"

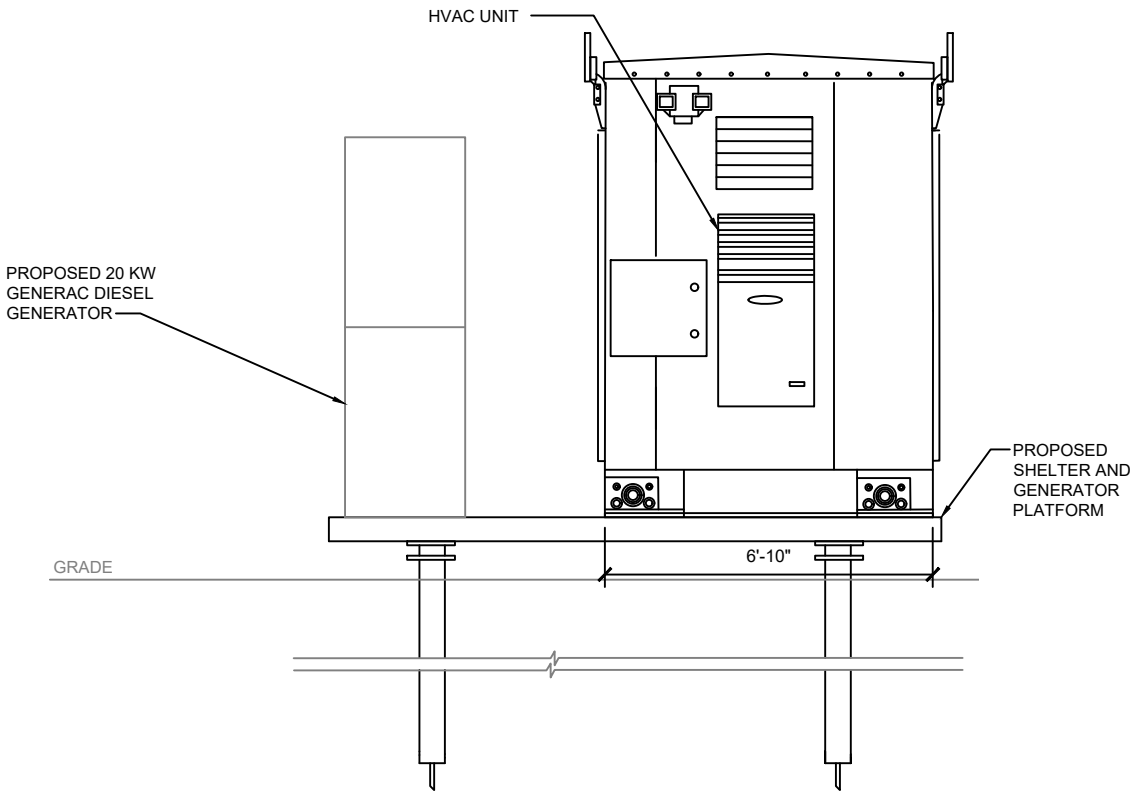
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"B" SHELTER ELEVATION

SCALE: 1/4" = 1'-0"

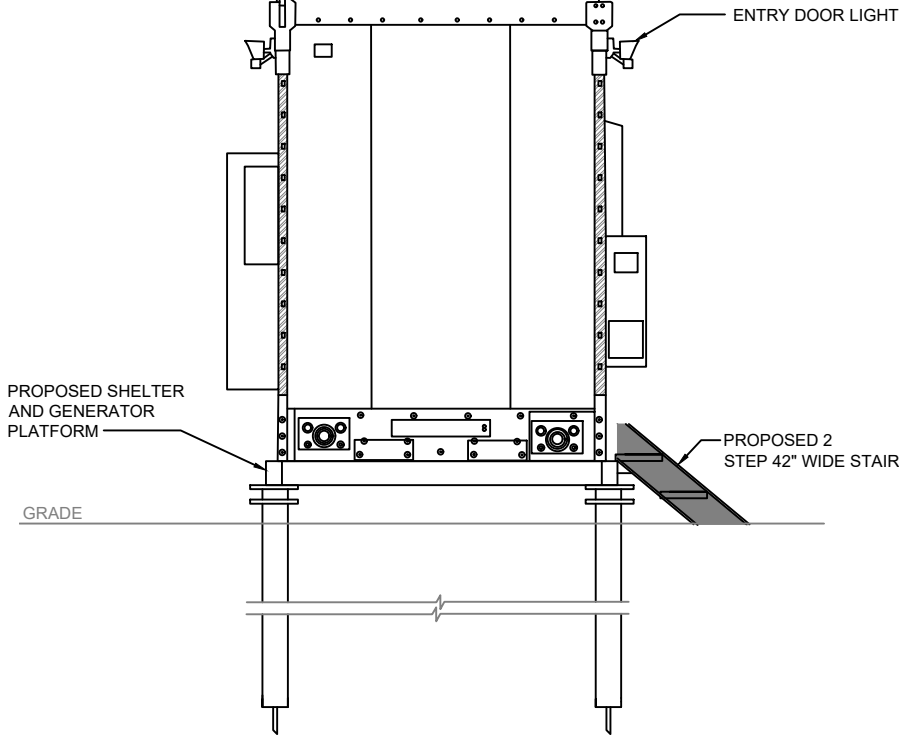
2



"C" SHELTER ELEVATION

SCALE: 1/4" = 1'-0"

3



"D" SHELTER ELEVATION

SCALE: 1/4" = 1'-0"

4

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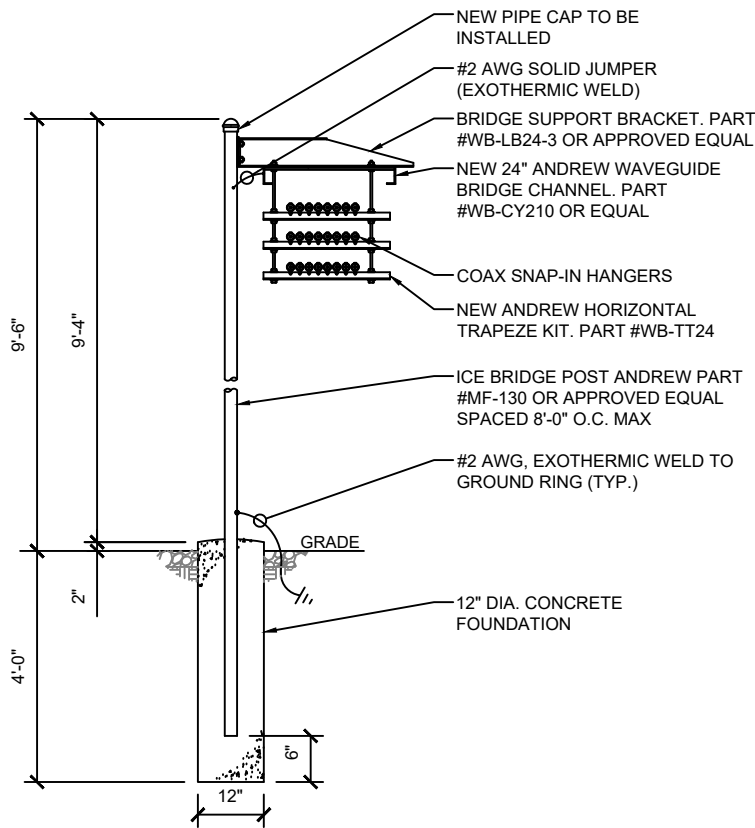
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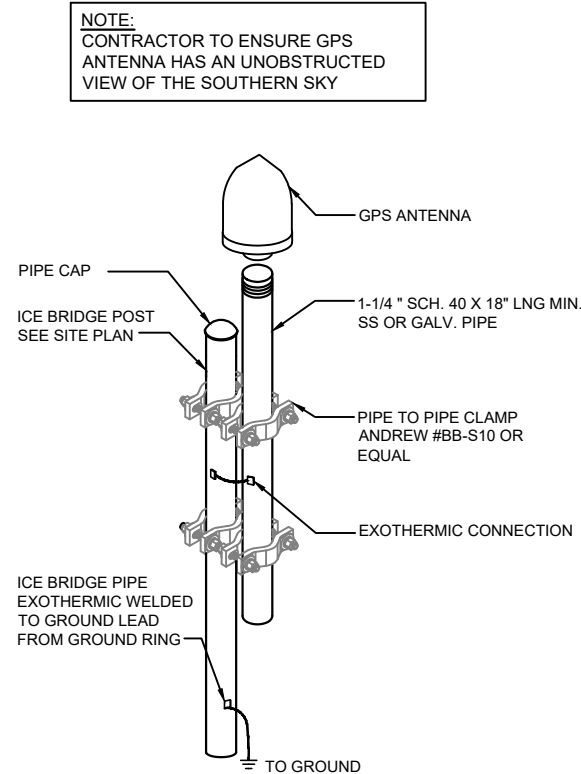
C-5  
SHELTER ELEVATIONS



ICE BRIDGE DETAIL

SCALE: NONE

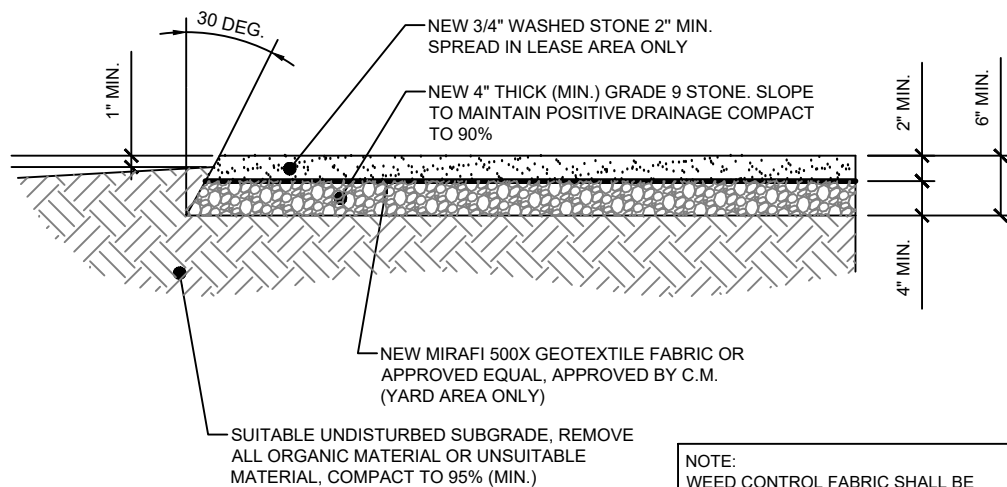
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GPS ANTENNA DETAIL

SCALE: NONE

2



NOTE:  
WEED CONTROL FABRIC SHALL BE USED UNDER ALL AREAS OF THE YARD.

YARD PAVEMENT DETAIL

SCALE: NONE

35

3

NOT USED

SCALE: NONE

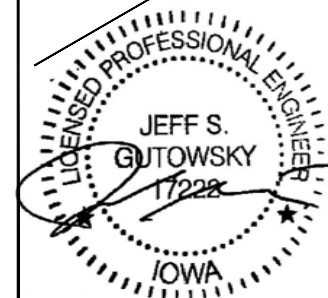
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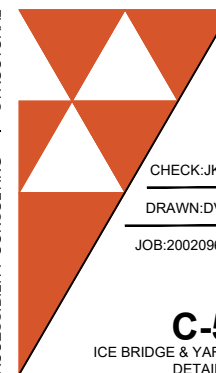


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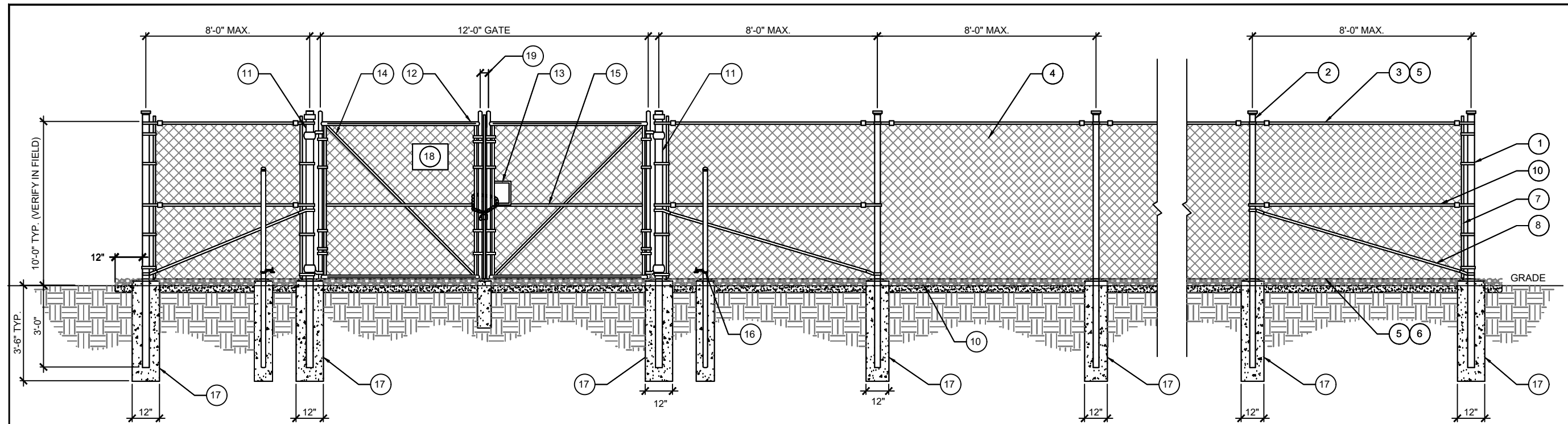
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**C-5**  
ICE BRIDGE & YARD  
DETAILS

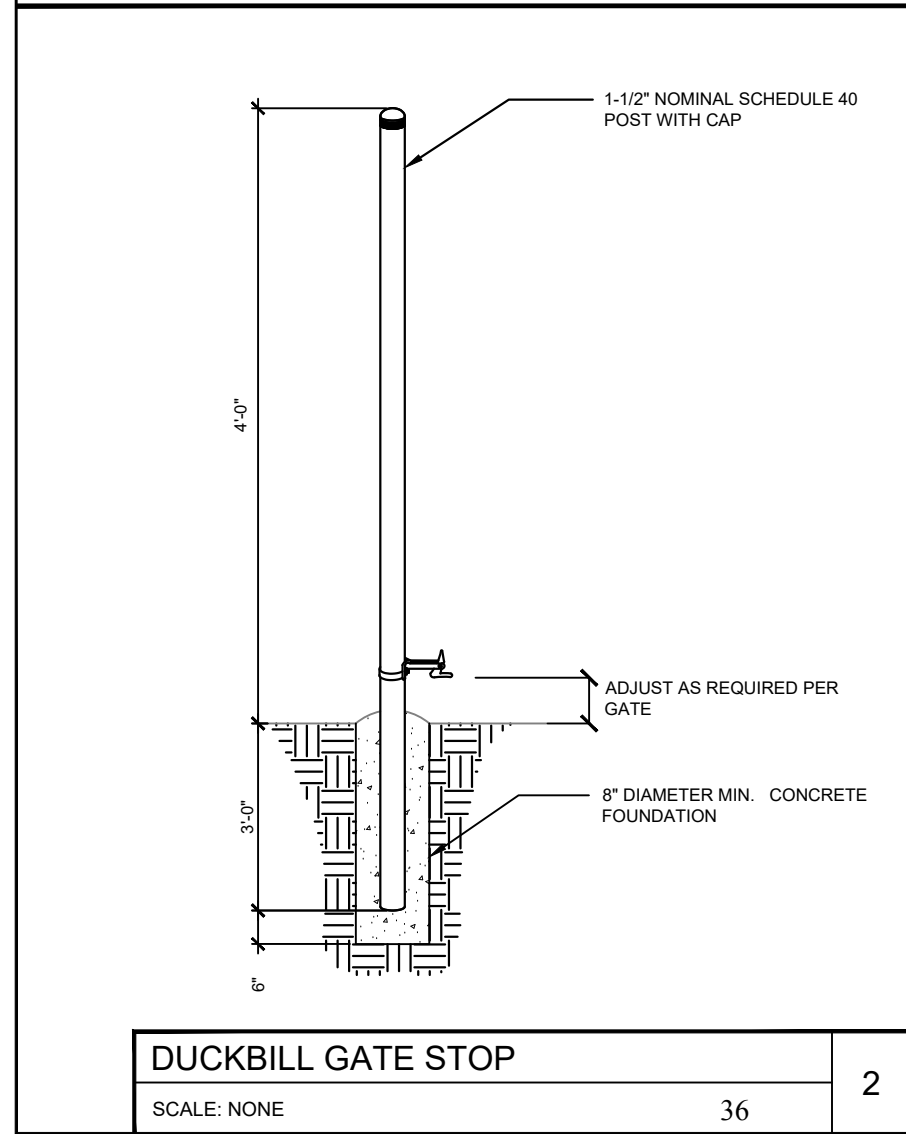




**FENCE DETAIL**

SCALE: NONE

1



**DUCKBILL GATE STOP**

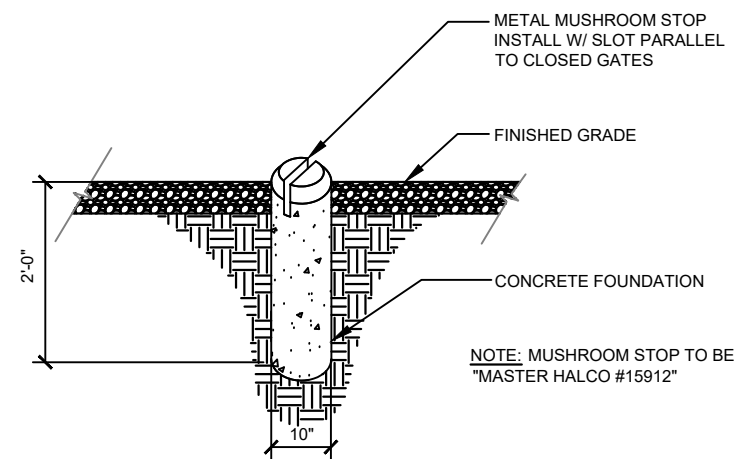
SCALE: NONE

36

2

- REFERENCE NOTES:**
- CORNER, END OR PULL POST: 3" NOMINAL SCHEDULE 40 PIPE.
  - LINE POST: 2-1/2" NOMINAL SCHEDULE 40 PIPE, PER ASTM F1083. LINE POSTS SHALL BE EQUALLY SPACED AT MAXIMUM 8'-0" O.C. (2-7/8" O.D.)
  - TOP RAIL & BRACE RAIL: 1-1/2" NOMINAL PIPE, PER ASTM F1083.
  - FABRIC: 9 GAUGE CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM A392. GROUND CLEARANCE TO BE 2" MAX.
  - TIE WIRE: MINIMUM 11 GAUGE GALVANIZED STEEL. A SINGLE WRAP OF FABRIC TIE AT POSTS AND RAILS. BY HOG RINGS SPACED MAXIMUM 24" INTERVALS AT TENSION WIRE .
  - TENSION WIRE: 9 GAUGE GALVANIZED STEEL.
  - STRETCHER BAR: 3/16" X 3/4" X HEIGHT OF FENCE.
  - 3/8" DIAGONAL ROD WITH GALVANIZED STEEL TURNBUCKLE OR DIAGONAL THREADED ROD.
  - CORNER POST BRACE: 1-1/4" NOMINAL PIPE EACH CORNER EACH WAY.
  - FINISH GRADE SHALL BE UNIFORM, LEVEL AND EXTEND 12" BEYOND FENCE BOUNDARY.
  - GATE POST: 3-1/2" NOMINAL SCHEDULE 40 PIPE, FOR GATE WIDTHS UP THRU 10 FEET OR 20 FEET FOR DOUBLE SWING GATE, PER ASTM F1083.
  - GATE FRAME: 1-1/2" NOMINAL PIPE, PER ASTM F1083.
  - 4" X 6" HANDHOLD WITH 3/4" CHAIN AND LOCKS. WELD CHAIN TO THE GATE LEAF WITHOUT THE HANDHOLD.
  - GATE DIAGONAL: GALVANIZED STEEL 1-1/2" NOMINAL PIPE.
  - GATE FRAME BRACE: 1-5/8" NOMINAL PIPE.
  - DUCK BILL OPEN GATE HOLDER. VERIFY LOCATION IN FIELD PRIOR TO INSTALLATION.
  - POST CONCRETE FOUNDATION (2000 PSI).
  - SIGNAGE PROVIDED BY OWNER.
  - GAP BETWEEN GATES: 1" MIN. / 3" MAX.

- GENERAL NOTES:**
- INSTALL FENCING PER ASTM F567.
  - INSTALL SWING GATES PER ASTM F900.
  - COMPLY WITH LOCAL ORDINANCE OF BARBED WIRE PERMIT REQUIREMENT, IF REQUIRED.
  - POST & GATE PIPE SIZES ARE INDUSTRY STANDARDS. ALL PIPE TO BE 1-1/4" NOMINAL SCHEDULE 40 GALVANIZED MINIMUM (HOT DIP, ASTM F1083 GRADE "A" STEEL). ALL GATE FRAMES SHALL BE WELDED. ALL WELDING SHALL BE COATED WITH (3) COATS OF COLD GALVANIZING (OR EQUAL).
  - ALL OPEN POSTS SHALL HAVE END-CAPS.
  - USE GALVANIZED HOG-RING WIRE TO MOUNT ALL SIGNS.
  - ALL SIGNS MUST BE MOUNTED ON INSIDE OF FENCE FABRIC.



**MUSHROOM GATE STOP**

SCALE: NONE

3

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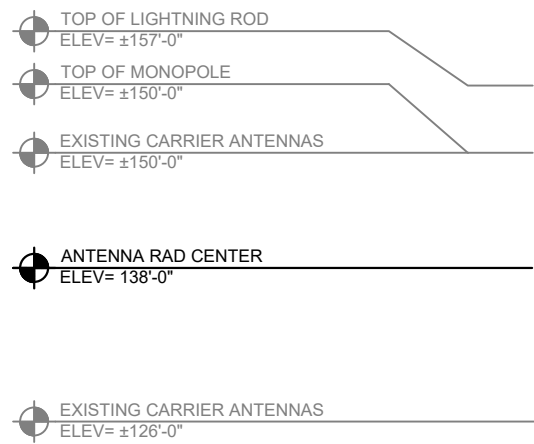
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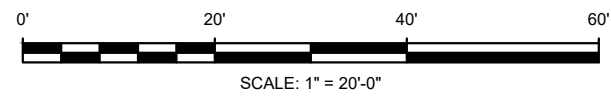
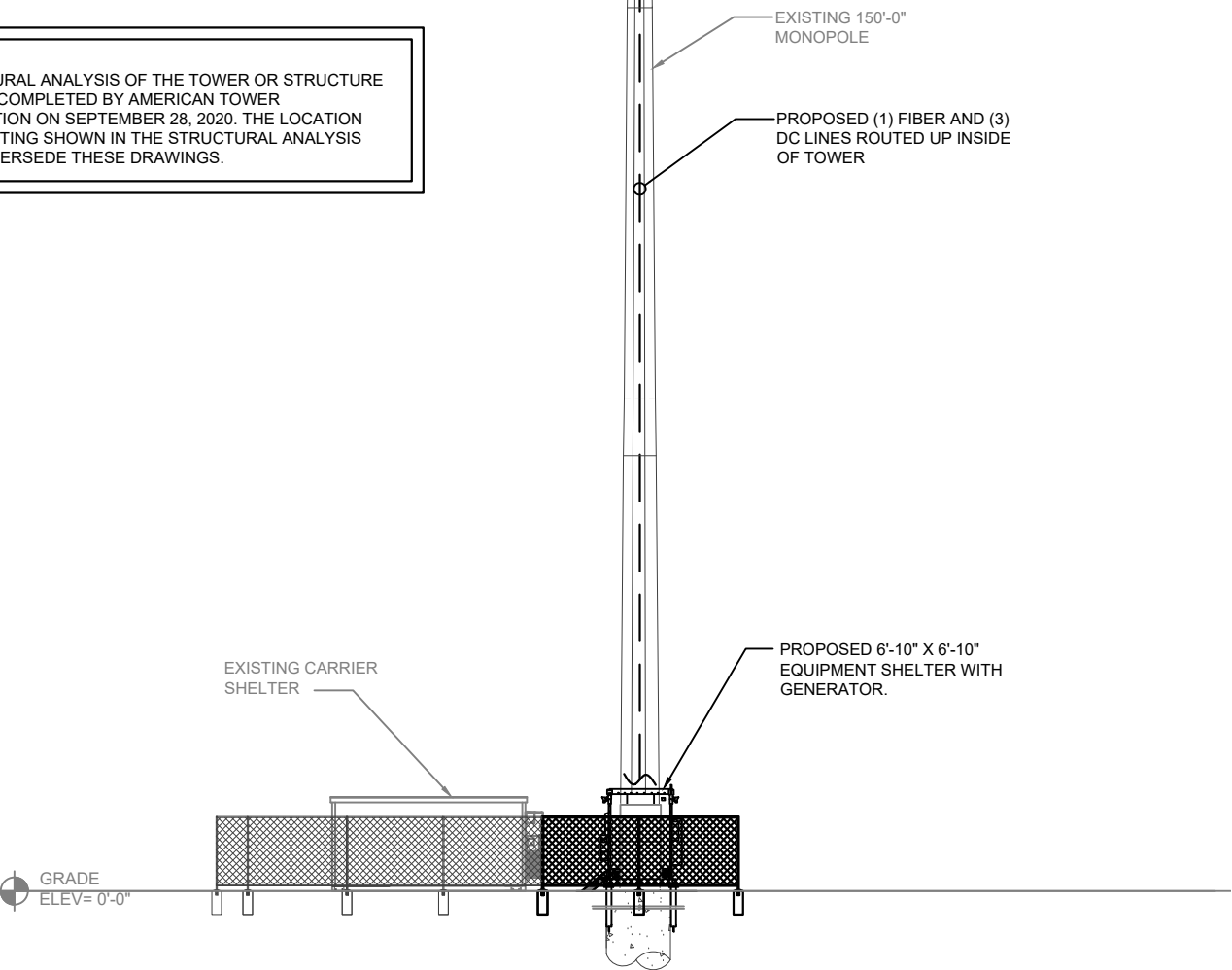
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**C-6**  
FENCE DETAILS



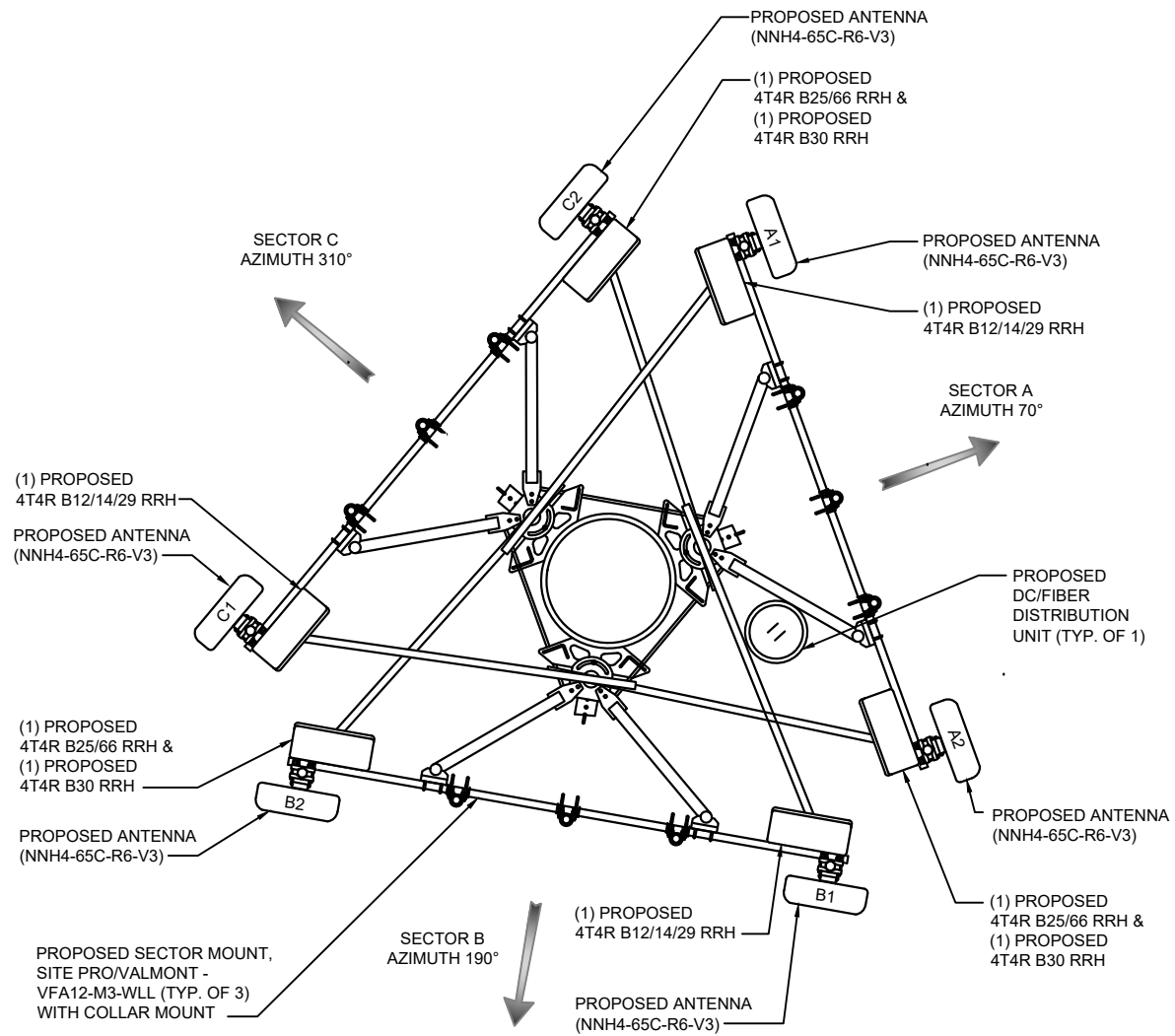


NOTE:  
A STRUCTURAL ANALYSIS OF THE TOWER OR STRUCTURE HAS BEEN COMPLETED BY AMERICAN TOWER CORPORATION ON SEPTEMBER 28, 2020. THE LOCATION AND MOUNTING SHOWN IN THE STRUCTURAL ANALYSIS SHALL SUPERSEDE THESE DRAWINGS.



NORTH ELEVATION

1



- NOTES:
1. ALL RF CABLE JUMPERS SHALL USE PRE-MADE JUMPERS WITH PRE-INSTALLED CONNECTORS ON BOTH ENDS.
  2. ALL RF JUMPERS SHALL BE LDF4 OR JUMPERS FROM APPROVED RF JUMPER CABLE MANUFACTURERS.
  3. RF JUMPER CONNECTORS SHALL BE INSTALLED WITH PROPER TORQUE AND WEATHERPROOFING.
  4. JUMPERS SHALL HAVE RF SWEEP PERFORMED.
  5. ALL FIBER CABLES SHALL BE OF THE SAME LENGTH FROM THE FIBER/DC SURGE PROTECTION BOX TO EACH RRH. ANY EXCESS FIBER SHOULD BE SPOOLED IN THE FIBER/DC SURGE PROTECTIONS BOX.
  6. JUMPERS SHALL BE SUPPORTED AT INTERVALS NOT EXCEEDING 3 FEET.
  7. DRAWING IS FOR REFERENCE ONLY. ROUTING IS DIAGRAMMATIC.

ANTENNA PLAN

SCALE: NONE

2

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17228  
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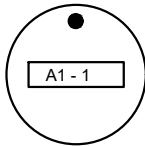
A-1  
TOWER ELEVATION & ANTENNA PLAN

COLOR CODE NOTES:

1. ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) WRAPS OF TAPE
2. ALL COLOR BANDS INSTALLED AT THE TOWER TOP SHALL BE A MINIMUM OF 3" WIDE AND SHALL HAVE A MINIMUM OF 3/4" OF SPACING BETWEEN EACH COLOR
3. ALL COLOR BANDS INSTALLED AT OR NEAR THE GROUND MAY BE ONLY 3/4" WIDE. EACH TOP-JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS
4. EACH MAIN COAX SHALL COLOR CODED WITH (1) SET OF 3" BANDS EAR THE TOP-JUMPER CONNECTION AND WITH 3/4" COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING
5. ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" BANDS ON EACH AND OF THE BOTTOM JUMPER
6. ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE TO SIDE
7. EACH COLOR BAND SHALL HAVE A MINIMUM OF (3) WRAPS AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING
8. X-POLE ANTENNAS SHOULD USE "XX-1" FOR THE "+45" PORT, "XX-2: FOR THE "-45" PORT
9. COLORBAND #4 REFERS TO THE FREQUENCY BAND: ORANGE=850, VIOLET=1900. USED ON JUMPERS ONLY
10. RF FEEDLINE SHALL BE IDENTIFIED WITH A METAL TAG (STAINLESS OR BRASS) AND STAMPED WITH THE SECTOR, ANTENNA POSITION AND CABLE NUMBER.
11. ANTENNAS MUST BE IDENTIFIED USING THE SECTOR LETTER AND ANTENNA NUMBER, WITH A BLACK MARKER PRIOR TO INSTALLATION

TAPE	TAG	CABLE MARKING LOCATIONS TABLE
X		LOCATION
X		EACH TOP JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS
X		EACH MAIN COAX SHALL BE COLOR CODED (1) SET OF 3" WIDE BANDS NEAR THE TOP JUMPER CONNECTION AND WITH THE (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING ENTERING THE BTS OR TRANSMITTER BUILDING
	X	MARKING TAGS SHALL BE ATTACHED AT CABLE ENTRY PORT ON THE INTERIOR OF THE SHELTER
X		ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.

FIGURE 1: CABLE MARKING TAGS



TO PROVIDE ADDITIONAL IDENTIFICATION RF CABLES SHALL BE IDENTIFIED WITH A METAL TAG MADE OF STAINLESS STEEL OR BRASS AND STAMPED WITH THE SECTOR, ANTENNA POSITION, AND CABLE NUMBER. THE ID MARKING LOCATIONS SHOULD BE AS PER "CABLE MARKING LOCATIONS TABLE". THE TAG SHOULD BE ATTACHED WITH CORROSION PROOF WIRE

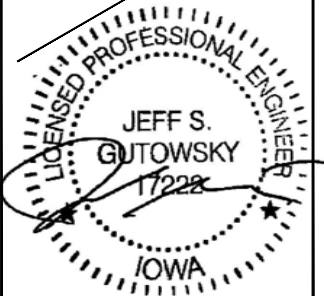
THESE DRAWINGS ARE PREPARED BASED ON RFDS DATED: 09/14/20  
REVISION: 1.00  
GENERAL CONTRACTOR TO VERIFY AND INCORPORATE MOST RECENT VERSION OF RFDS WITH AT&T PRIOR TO CONSTRUCTION.

SECTOR	ANTENNA NUMBER	TECHNOLOGY	TOP & BOTTOM JUMPER COLOR	COAX ID	RRH MODEL	ANTENNA VENDOR	ANTENNA MODEL	AZIMUTH	ELECTRICAL DOWNTILT	MECHANICAL DOWNTILT	ANTENNA RAD	ANTENNA TIP HEIGHT	FEEDER TYPE	FEEDER LENGTH
A	A1	LTE 700	RED-WHITE-SLATE	A1-1	4T4R B12/14/29 370W AHLBBA	COMMSCOPE	NNH4-65C-R6-V3	70°	0°, 0°	0	138'-0"	142'-0"	FIBER & DC	±175'-0"
			RED-WHITE-BROWN	A1-2					0°, 0°					
	A2	-	-	-	-	-	-	-	-					
		-	-	-				-	-					
	A3	-	-	-	-	-	-	-	-					
		-	-	-				-	-					
	A4	LTE 1900/AWS 5G AWS	RED-VIOLET-SLATE	A4-1	4T4R B25/66 320W AHFIB 4T4R B30 100W AHNA	COMMSCOPE	NNH4-65C-R6-V3	70°	0°, 0°	0				
		LTE WCS	RED-VIOLET-BROWN	A4-2					0°, 0°					
B	B1	LTE 700	BLUE-WHITE-SLATE	B1-1	4T4R B12/14/29 370W AHLBBA	COMMSCOPE	NNH4-65C-R6-V3	190°	0°, 0°	0				
			BLUE-WHITE-BROWN	B1-2					0°, 0°					
	B2	-	-	-	-	-	-	-	-					
		-	-	-				-	-					
	B3	-	-	-	-	-	-	-	-					
		-	-	-				-	-					
	B4	LTE 1900/AWS 5G AWS	BLUE-VIOLET-SLATE	B4-1	4T4R B25/66 320W AHFIB 4T4R B30 100W AHNA	COMMSCOPE	NNH4-65C-R6-V3	190°	0°, 0°	0				
		LTE WCS	BLUE-VIOLET-BROWN	B4-2					0°, 0°					
C	C1	LTE 700	GREEN-WHITE-SLATE	C1-1	4T4R B12/14/29 370W AHLBBA	COMMSCOPE	NNH4-65C-R6-V3	310°	0°, 0°	0				
			GREEN-WHITE-BROWN	C1-2					0°, 0°					
	C2	-	-	-	-	-	-	-	-					
		-	-	-				-	-					
	C3	-	-	-	-	-	-	-	-					
		-	-	-				-	-					
	C4	LTE 1900/AWS 5G AWS	GREEN-VIOLET-SLATE	C4-1	4T4R B25/66 320W AHFIB 4T4R B30 100W AHNA	COMMSCOPE	NNH4-65C-R6-V3	310°	0°, 0°	0				
		LTE WCS	GREEN-VIOLET-BROWN	C4-2					0°, 0°					

ANTENNA INFORMATION CHART

SCALE: NONE

1

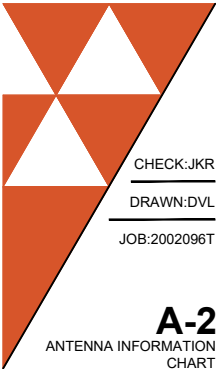


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A-2  
ANTENNA INFORMATION  
CHART

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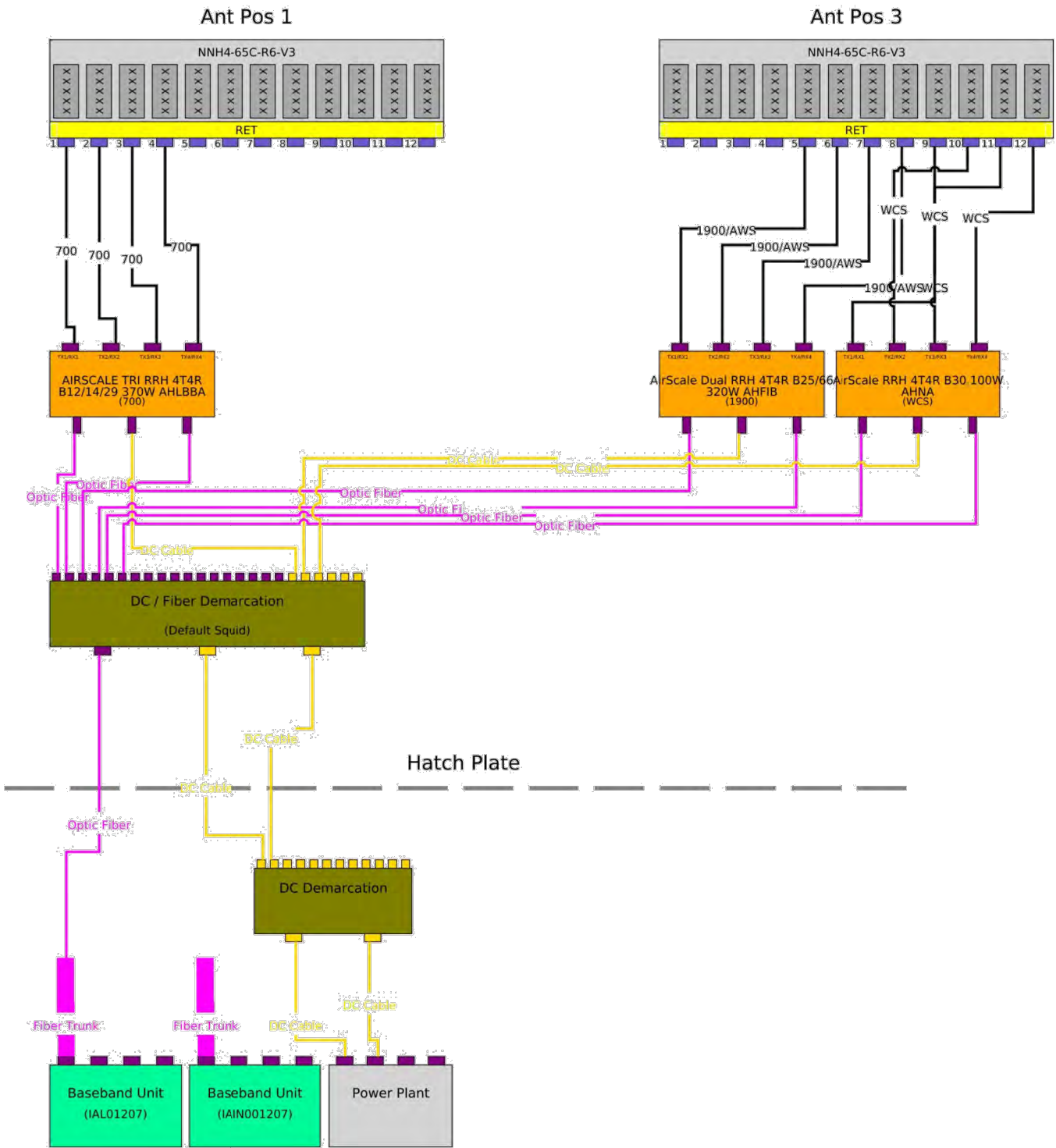
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PLUMBING DIAGRAM

SCALE: NONE

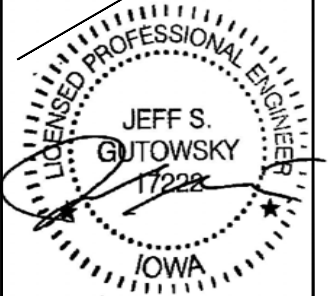
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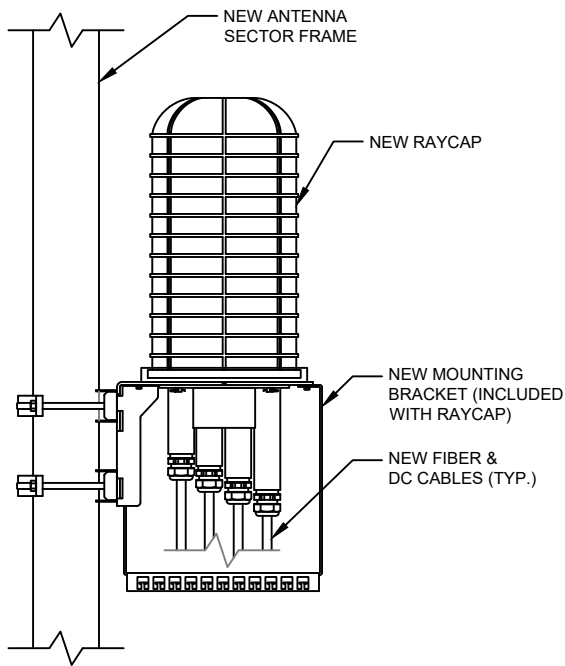
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**A-3**  
ANTENNA PLUMBING  
DIAGRAM

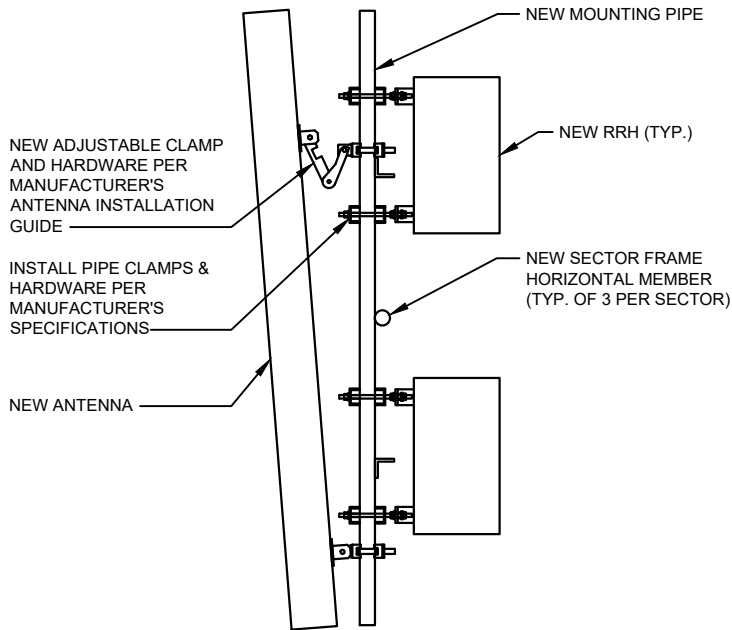




RAYCAP MOUNTING DETAIL

SCALE: NONE

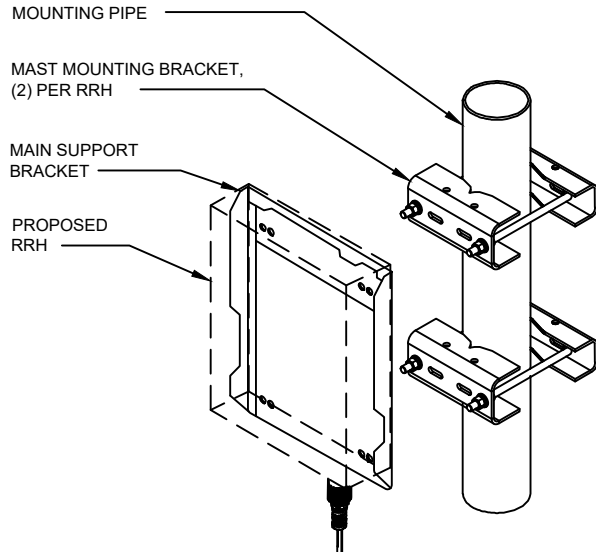
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ANTENNA MOUNT

SCALE: NONE

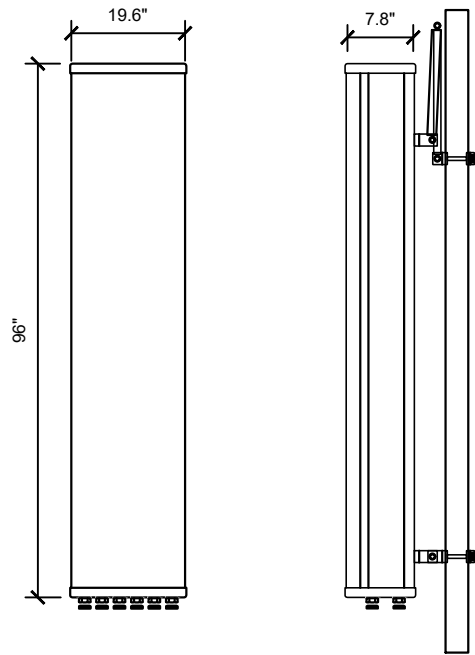
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RRH MOUNTING DETAIL

SCALE: NONE

3



FRONT VIEW

SIDE VIEW

MAKE:

COMMSCOPE

MODEL:

NNH4-65C-R6-V3

DIMENSIONS, HxWxD:

96"x19.6"x7.8"

ANTENNA WEIGHT:

102.1 lbs

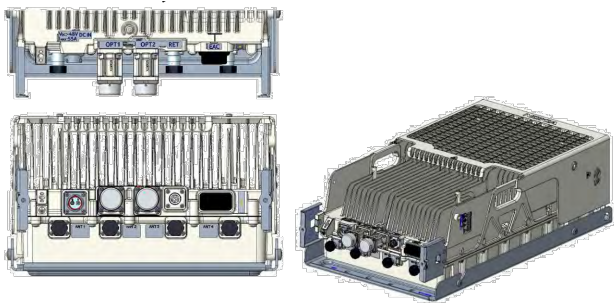
ANTENNA DETAIL

SCALE: NONE

4

AHLBBA External Interfaces

Name	Qty	Connector Type	Purpose (and Description)
DC In	1	Quick Disconnect	2-pole Power Circular Connector
GND	1	Screw lug (2xM5/1xM8)	Ground
ANT	4	4.3-10	RF signal for Transmitter/Receiver (50 Ohm)
Unit	1	LED	Unit Status LED
EAC	1	MDR26	External Alarm Interface (4 alarms)
OPT	2	SFP+ cage	Optical CPRI Interface up to 10 Gps.
RET	1	8-pin circular connector conforming to IEC 60130-9 - Ed.3.0	AISG 2.0 to external devices



Band 12 (Ant 1, 2, 3, 4)	Downlink EARFCN	Downlink Frequency (MHz)	LTE Channel Bandwidth	
			5 MHz	10 MHz
	5010	729.0	Band Edge	Band Edge
	.....			
	5035	731.5	Bottom Ch	
	.....			
	5060	734.0		Bottom Ch
	.....			
	5085	736.5	Middle Ch	Middle Ch
	.....			
	5110	739.0		Top Channel
	.....			
	5135	741.5	Top Channel	
	.....			
	5160	744.0	Band Edge	Band Edge

Band 14 (Ant 1, 2, 3, 4)	Downlink EARFCN	Downlink Frequency (MHz)	LTE Channel Bandwidth	
			5 MHz	10 MHz
	5280	758.0	Band Edge	Band Edge
	.....			
	5305	760.5	Bottom Ch	
	.....			
	5330	763.0	Middle Ch	Bottom Ch Middle Ch Top Channel
	.....			
	5355	765.5	Top Channel	
	.....			
	5380	768.0	Band Edge	Band Edge

AHLBBA Band 29 (Ant 1, 4)	Downlink EARFCN	Downlink Frequency (MHz)	LTE Channel Bandwidth	
			5 MHz	10 MHz
	9670	718.0	Band Edge	Band Edge
	.....			
	9695	720.5	Bottom Channel	
	.....			
	9720	723.0	Middle Channel	Bottom Ch Middle Ch Top Channel
	.....			
	9745	725.5	Top Channel	
	.....			
	9770	728.0	Band Edge	Band Edge

TRIPLE BAND B14/12/29 RRH

SCALE: NONE 40

5



AHFIB Airscale Dual RRH 4T4R B25/B66 320W

Product name	AirScale Dual RRH 4T4R B25/B66 320W AHFIB - 474216A
Supported frequency bands	3GPP Band 25 and Band 66
Frequencies	Band 25: DL 1930~1995MHz, UL 1850~1915MHz Band 66: DL 2110~2200MHz, UL 1710~1780MHz
Number of TX/RX ports	4
Instantaneous Bandwidth IBW	Band 25: 65MHz, Band 66: 70MHz UL/90MHz DL
Occupied Bandwidth OBW	Band 25: 65MHz, Band 66: 80MHz
Output power	Band 25: 4x40W, Band 66: 4x40W
Dimensions (mm) height x width x depth	560x308x149 (current view - core only) 730x308x149 (overall not-to-exceed with cover and bracket)
Volume (liters)	<26 (core only)
Weight (kg)	<30 (core only) <40 (overall not-to-exceed with cover and bracket)
Supply Voltage / Voltage Range	DC+48V / -36V to -60V
Typical Power Consumption	5.25W (BT5) 2.4W Avg = 4x20W per band, 40W per TX port
Antenna ports	4TX/RX, 4.3-10"
Optical ports	2 x CPRI 9.8 Gbps
ALD control interfaces	AISG3.0 from ANT1, 2, 3, 4 and RET (Power supply ANT1 and ANT3)
Other interfaces	External alarm MDR-26 serial connector (4 inputs) DC circular power connector
Operational temperature range	-40°C to 55°C (with no solar load)
Ingress protection class	IP65
Installation options	Pole or wall, vertical or horizontal book mount
Surge protection	Class II S/A

DUAL BAND B25/B66 RRH

SCALE: NONE

6

474861A AHNA AirScale RRH 4T4R B30 100W

AHNA AirScale RRH 4T4R B30 100W - Preliminary	
Supported Frequency bands	3GPP band 30
Frequencies	DL 2350-2360 MHz, UL 2305-2315 MHz
Number of TX/RX ports	4/4
Instantaneous Bandwidth IBW	10 MHz
Occupied Bandwidth OBW	10 MHz
Output Power	4T4R 25W /TX
Dimensions (mm) Height x width x depth	336.5 x 306 x 140, Core only (see more dimensions on next slide)
Volume	14.4 Liters, Core only
Weight	Approx. 15.5 kg / 34.17 lbs, Core only Approx. 17.7kg / 39.02 lbs including AirScale Mounting Bracket and Solar Cover
Supply Voltage / Voltage Range	DC-48V / -36V to -60V
Typical Power Consumption	Estimated 515 W @ 100% RF load
Antenna Ports	4TX/4RX, 4.3-10"
Optical Ports	2x CPRI 9.8 Gbps/ PR3_01 chaining
ALD Control Interfaces	AISG3.0 from ANT1, 2, 3, 4 and RET (Power supply ANT1 and ANT3)
Other Interfaces	External Alarm Connector (up to 4 inputs)
Operational Temperature Range	-40°C to 55°C

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Ingress protection class	IP65
Installation options	Wall, Book mount, Vertical wall/pole, Horizontal wall
Surge protection	Class II S/A

NOKIA

DUAL BAND B30 RRH

SCALE: NONE

7



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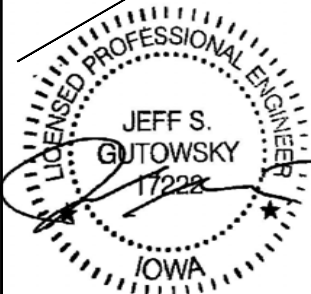
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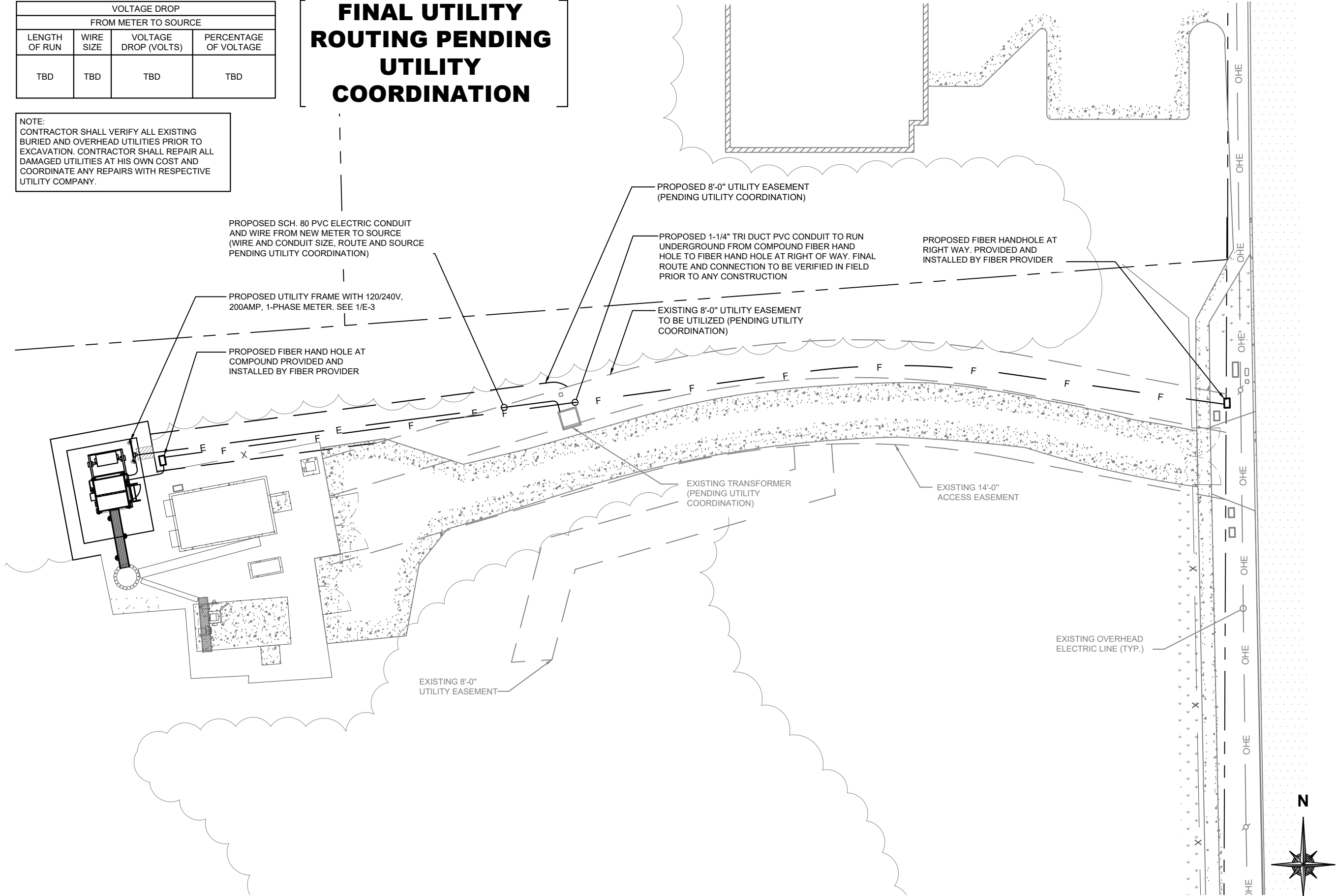
**A-4**  
EQUIPMENT  
INFORMATION



VOLTAGE DROP FROM METER TO SOURCE			
LENGTH OF RUN	WIRE SIZE	VOLTAGE DROP (VOLTS)	PERCENTAGE OF VOLTAGE
TBD	TBD	TBD	TBD

NOTE:  
CONTRACTOR SHALL VERIFY ALL EXISTING BURIED AND OVERHEAD UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL REPAIR ALL DAMAGED UTILITIES AT HIS OWN COST AND COORDINATE ANY REPAIRS WITH RESPECTIVE UTILITY COMPANY.

# FINAL UTILITY ROUTING PENDING UTILITY COORDINATION



SCALE: 1" = 20'-0"

## OVERALL UTILITY PLAN

SCALE: 1" = 20'-0"

1

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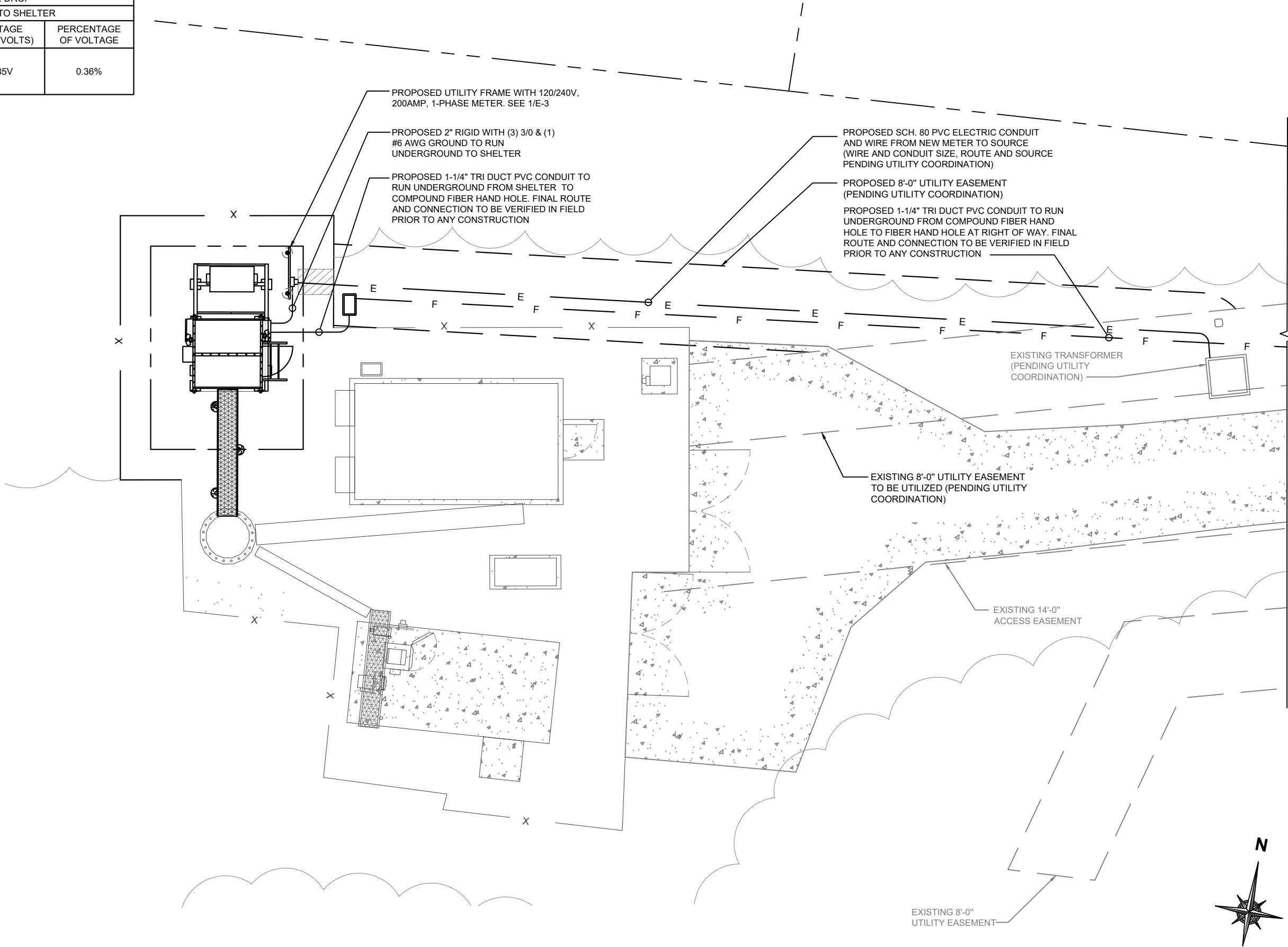
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**E-1**  
OVERALL UTILITY PLAN

VOLTAGE DROP			
FROM METER TO SHELTER			
LENGTH OF RUN	WIRE SIZE	VOLTAGE DROP (VOLTS)	PERCENTAGE OF VOLTAGE
25'-0"	(1) RUN OF (3) 3/0 AWG	0.85V	0.36%






SCALE: 1" = 10'-0"

ENLARGED UTILITY PLAN

SCALE: 1" = 10'-0"

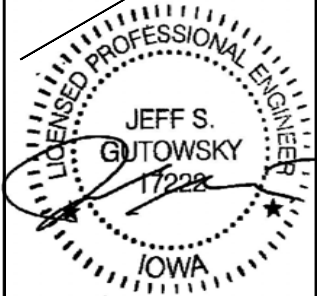
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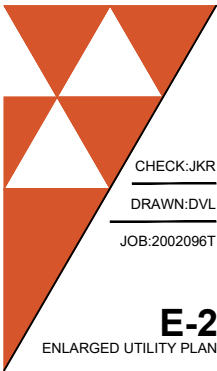
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**E-2**  
ENLARGED UTILITY PLAN





ELECTRICAL INSTALLATION NOTES

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE.
2. CONDUIT ROUTING ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT EQUIPMENT IS NOT BLOCKED.
3. WIRING, RACEWAY, SUPPORT METHODS, AND MATERIAL SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
5. CABLE SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
6. EACH END OF EVERY POWER, CURRENT CARRYING CONDUCTORS, GROUNDING, T1 CONDUCTORS, AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA REQUIREMENTS.
7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH PLASTIC TAPE PER COLOR SCHEDULE. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATIONS, AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E. PANELBOARD AND CIRCUIT IDs).
8. PANELBOARDS (ID NUMBER) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TO REMOVE SHARP EDGES.
10. POWER, CONTROL, AND EQUIPMENT GROUND CONDUCTOR IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600V, OIL RESISTANT, THHN OR THWN-2, CLASS B STRANDED COPPER CONDUCTOR RATED FOR 90°C (WET AND DRY) OPERATION: LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED
11. SUPPLEMENTAL EQUIPMENT GROUND WIRE LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600V, OIL RESISTANT, THHN OR THWN-2, CLASS B STRANDED COPPER CONDUCTOR RATED FOR 90°C (WET AND DRY) OPERATION: LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER) 600V, OIL RESISTANT, THHN OR THWN-2, CLASS B STRANDED COPPER CONDUCTOR RATED FOR 90°C (WET AND DRY) OPERATION: WITH OUTER JACKET: LISTED OR LABELED FOR THE LOCATION USED, U UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION MIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC REQUIREMENTS.
15. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (I.E. RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC CONDUIT (RIGID PVC SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GROUND.
18. RIGID NON METALLIC CONDUIT (I.E. RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND: DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY TRAFFIC.
19. LIQUID TIGHT FLEXIBLE METALLIC CONDUIT (SEAL TITE) SHALL BE USED IN INDOORS AND OUTDOORS, AND WHEN VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
20. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED, SETSCREW FITTINGS ARE NOT ACCEPTABLE.
21. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC REQUIREMENTS.
22. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD. WIREWAYS SHALL BE PANDUIT TYPE E (OR EQUAL) AND BE NEMA 1 RATED (OR BETTER).
23. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET METAL, AND SHALL MEET OR EXCEED UL 50, AND BE NEMA 1 RATED (OR BETTER) INDOORS OR NEMA 3R (OR BETTER) OUTDOORS.
24. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING: SHALL MEET OR EXCEED UL514A AND NEMA OS1: AND BE NEMA 1 RATED (OR BETTER) INDOORS, AND WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
25. NONMETALLIC RECEPTACLES, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS2: AND BE NEMA 1 RATED (OR BETTER) INDOORS, AND WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
26. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANEL.
27. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES, AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFE GUARD LIFE AND PROPERTY.

- NOTE:
1. THE CONTRACTOR HAS MADE THIS INSERT. ANY QUESTIONS, CONTACT A CONTRACTOR REPRESENTATIVE.
2. POSITION 33 TO 50 ON THE 66 BLOCK IS FOR FUTURE USE.
3. CONTRACTOR SHALL RUN CAT5 CABLE FROM EQUIPMENT TO ASTERISK(\*) TERMINAL ON 66 BLOCK FOR AT&T TO TERMINATE.

LEGEND:



\* DENOTES CONTRACTOR PUNCHDOWN RESPONSIBILITY

POS.	CABLE FROM BTS	ALARM DEFINITION	LEVEL/ID	STATE	ALARM SIDE	DEVICE
1	WHITE/BLUE	SITE DOOR OPEN	1/0	BREAKING	FACTORY INSTALLED	FACTORY INSTALLED
2	BLUE/WHITE					
3	WHITE/ORANGE	HIGH TEMP RADIO ROOM	1/1	BREAKING	FACTORY INSTALLED	FACTORY INSTALLED
4	ORANGE/WHITE					
5	WHITE/GREEN	AC SURGE ARRESTOR FAIL	1/2	BREAKING	FACTORY INSTALLED	FACTORY INSTALLED
6	GREEN/WHITE					
7	WHITE/BROWN	SMOKE DETECTOR	1/3	BREAKING	FACTORY INSTALLED	FACTORY INSTALLED
8	BROWN/WHITE					
9	RED/BLUE	AC DISTRIBUTION FAIL	1/4	BREAKING	FACTORY INSTALLED	FACTORY INSTALLED
10	BLUE/RED					
11	RED/ORANGE	LO TEMP RADIO ROOM	1/5	BREAKING	FACTORY INSTALLED	FACTORY INSTALLED
12	ORANGE/RED					
13	RED/GREEN	24V BAT. DISCONNECT FUSE FAIL	1/6	BREAKING	WHITE/BLUE	NC COMMON
14	GREEN/RED				BLUE/WHITE	
15	RED/BROWN	RECT. SYSTEM A1 ALARM PECO	1/7	BREAKING	VIOLET/GREEN	MODULAR PLUG
16	BROWN/RED				VIOLET/ORANGE	
17	BLACK/BLUE	RECT. SYSTEM A2 ALARM PECO	1/8	BREAKING	YELLOW/BROWN	MODULAR PLUG
18	BLUE/BLACK				YELLOW/SLATE	
19	BLACK/ORANGE	OVER VOLTAGE PECO	1/9	BREAKING	WHITE/BROWN	MODULAR PLUG
20	ORANGE/BLACK				WHITE/SLATE	
21	BLACK/GREEN	BATTERY ON DISCHARGE PECO	1/A	BREAKING	RED/ORANGE	MODULAR PLUG
22	GREEN/BLACK				RED/GREEN	
23	BLACK/BROWN	SITE DOOR OPEN	1/B	BREAKING	WHITE/BLUE	MODULAR PLUG
24	BROWN/BLACK				BLUE/WHITE	
25	YELLOW/BLUE	TMA TROUBLE	1/C	BREAKING	WHITE	MODULAR PLUG
26	BLUE/YELLOW				BLUE	
27	YELLOW/ORANGE	WHITE STROBE FAIL	1/D	BREAKING	WHITE/BLUE	NC COMMON
28	ORANGE/YELLOW				BLUE/WHITE	
29	YELLOW/GREEN	RED STROBE FAIL	1/E	BREAKING	WHITE/ORANGE	NC COMMON
30	GREEN/YELLOW				ORANGE/WHITE	
31	YELLOW/BROWN	SIDE LIGHT FAILURE	1/F	BREAKING	WHITE/GREEN	NC COMMON
32	BROWN/YELLOW				GREEN/WHITE	

ALARM TERMINATION DIAGRAM

SCALE: NONE

1



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LICENSED PROFESSIONAL ENGINEER

JEFF S. GUTOWSKY

17228

IOWA

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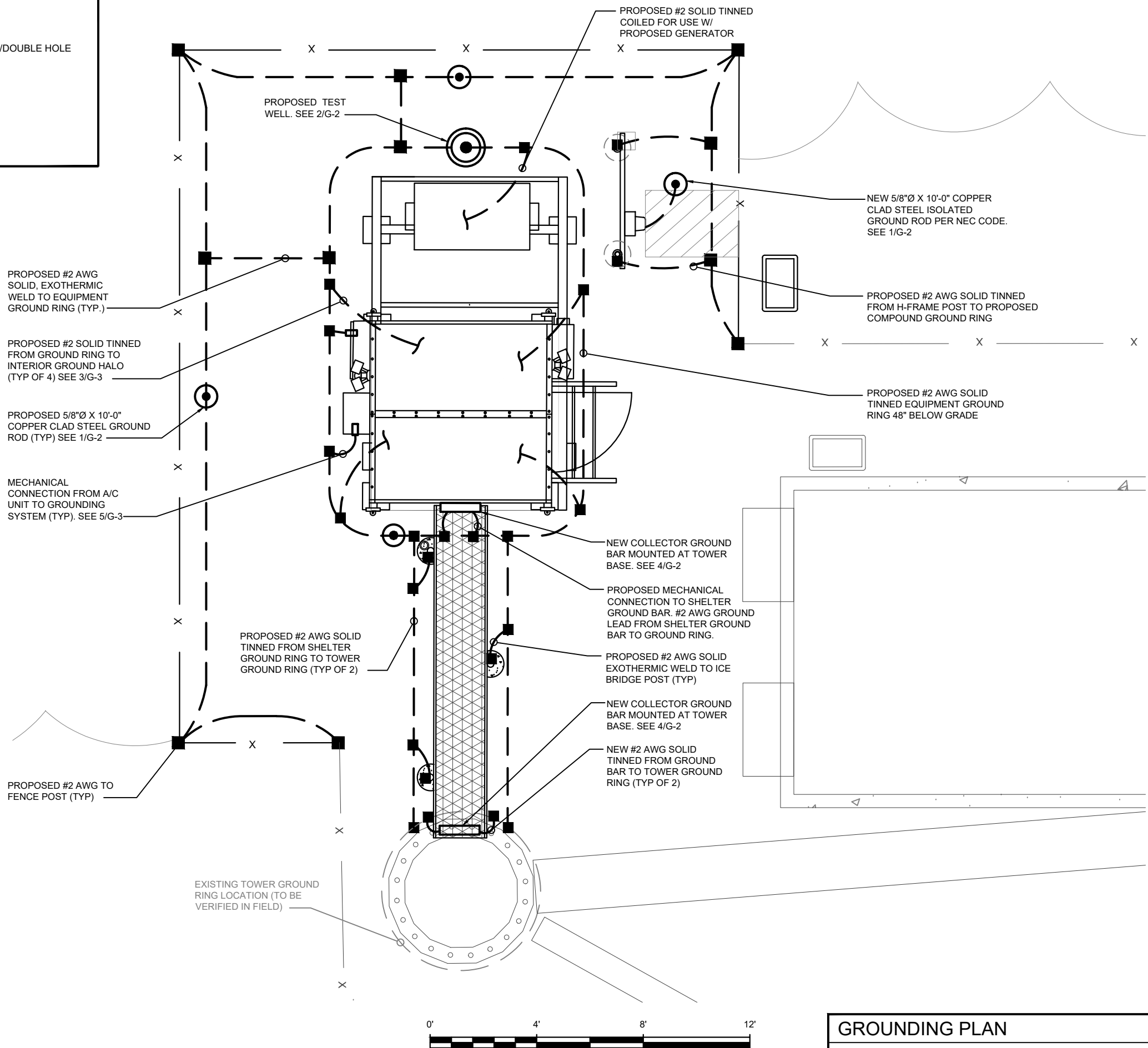
JOB:2002096T

E-4

ALARM TERMINATION DIAGRAM & NOTES

LEGEND

- GROUNDING WIRE
- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION/DOUBLE HOLE LUG TYPE CONNECTION
- ⊙ GROUND ROD
- ⊙ TEST WELL



<b>GROUNDING PLAN</b>		<b>1</b>
SCALE: 1/4" = 1'-0"		



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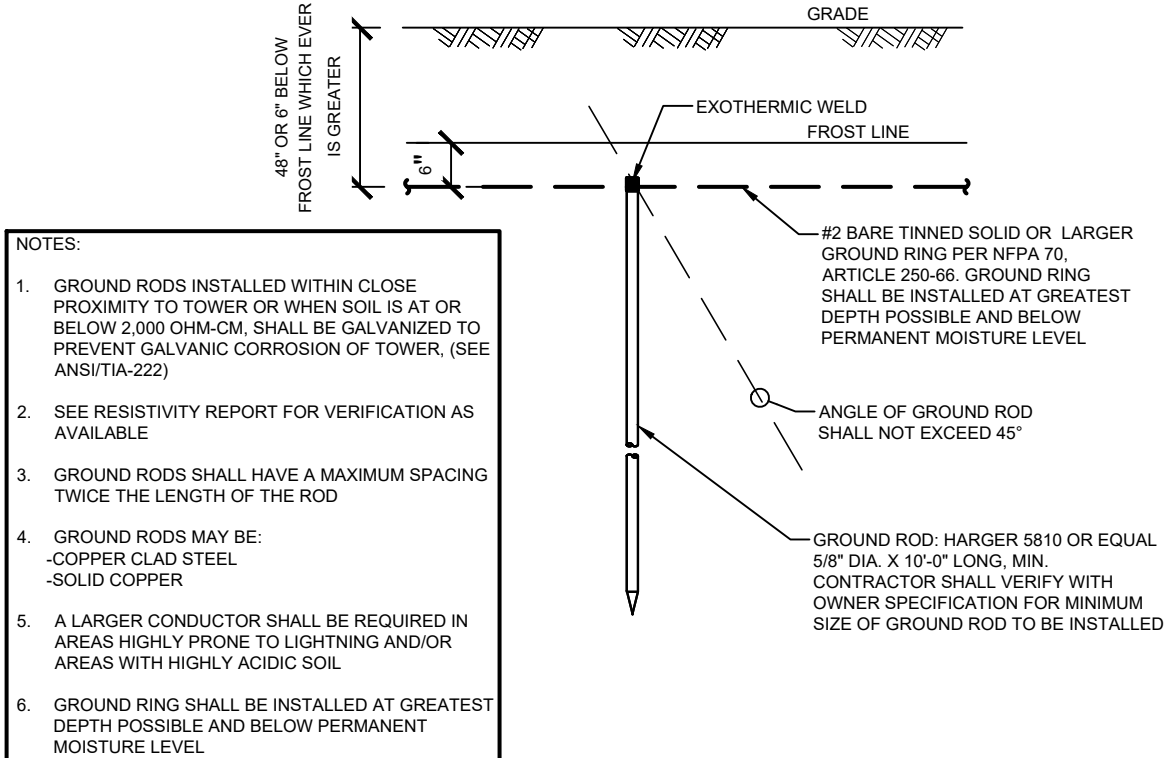
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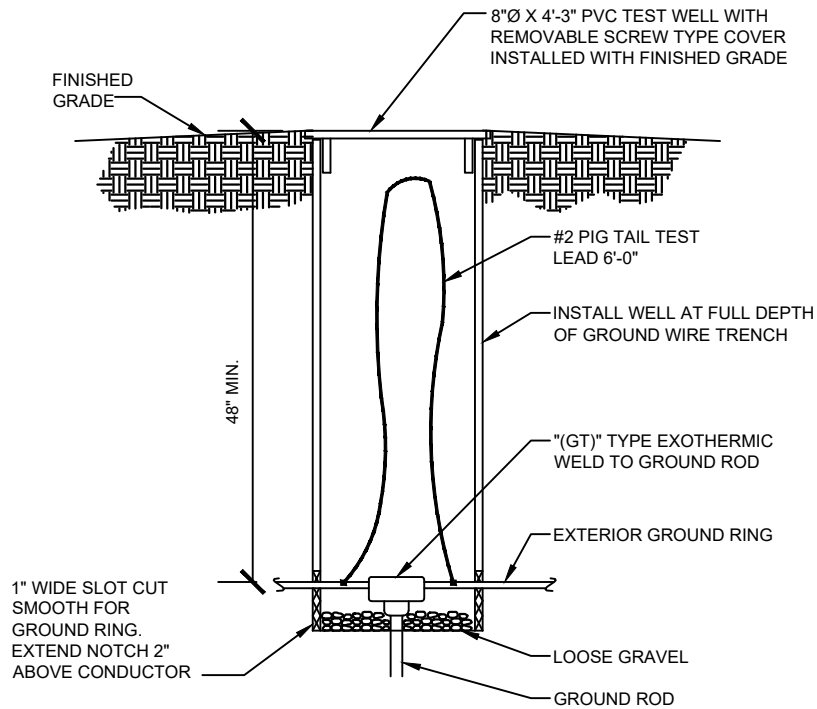
**G-1**  
GROUNDING PLAN



GROUND ROD DETAIL

SCALE: NONE

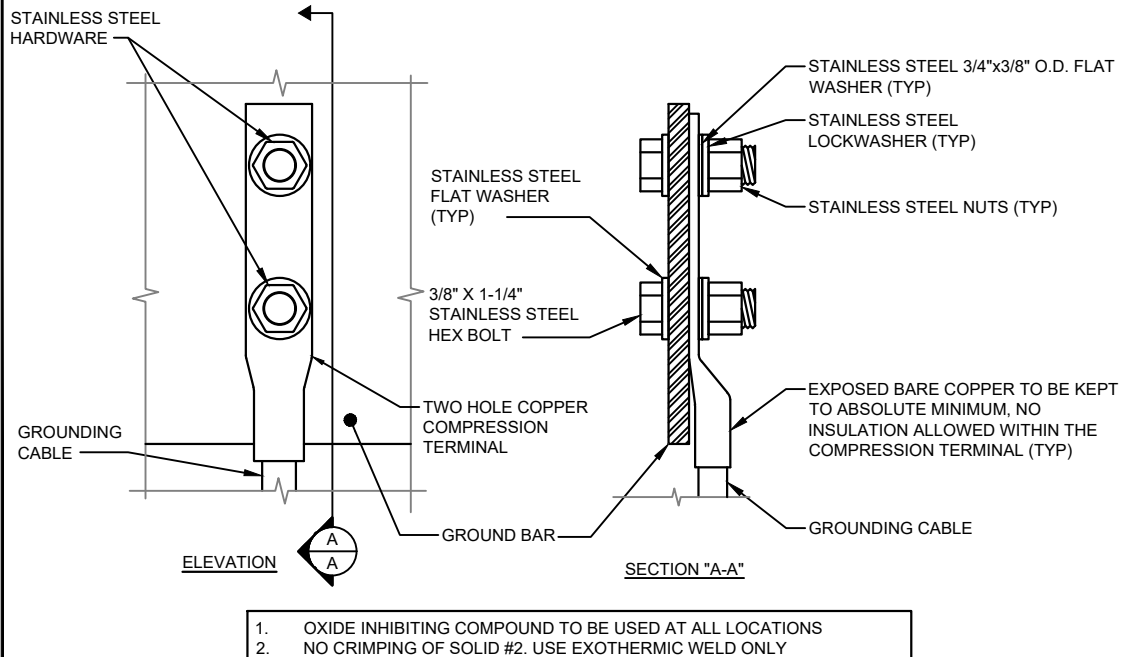
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TEST WELL DETAIL

SCALE: NONE

2



GROUND BAR CONNECTION DETAIL

SCALE: NONE

46

3

KEY NOTES:

1.	1/4" THK ELECTRICAL TINNED GROUND BAR HARGER OR APPROVED EQUAL. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION
2.	INSULATORS (UNLESS NOTED OTHERWISE)
3.	3/8" STAINLESS STEEL LOCKWASHERS
4.	WALL MOUNTING BRACKET
5.	3/8" STAINLESS STEEL BNLF BOLTS
6.	EXOTHERMICALLY WELD #2 AWG BARE TINNED SOLID COPPER CONDUCTOR TO GROUND BAR. ROUTE CONDUCTOR TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD
7.	CONTRACTOR SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "I") WITH 1" HIGH LETTERS

EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION

SECTION "P" - SURGE PRODUCERS

- COLLECTOR GROUND BAR
- GENERATOR FRAMEWORK (IF AVAILABLE)
- TELCO GROUND BAR
- COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND
- FIBER GROUND BAR
- EQUIPMENT ROOM COLLECTOR GROUND BAR
- HVAC
- RECTIFIER FRAMES

SECTION "A" - SURGE ABSORBERS

- INTERIOR GROUND RING
- EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING)
- METALLIC COLD WATER PIPE (IF AVAILABLE)
- BUILDING STEEL (IF AVAILABLE)
- AC POWER

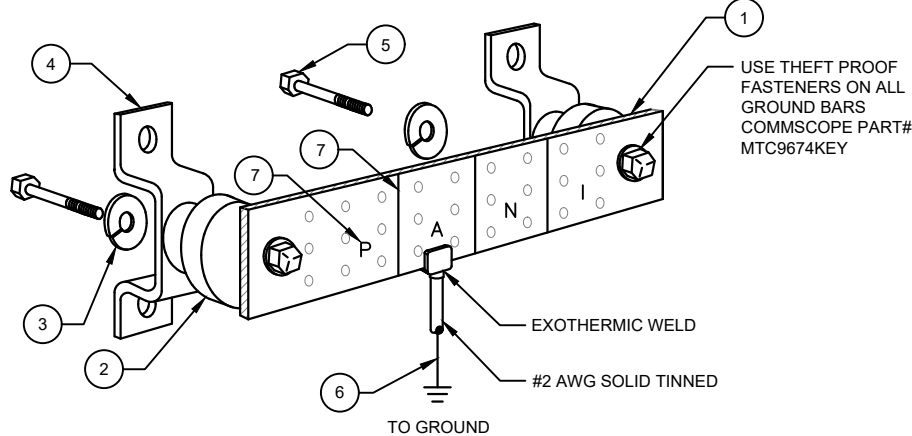
SECTION "N" - NON-ISOLATED GROUND ZONE

EQUIPMENT

- MISCELLANEOUS NON-ISOLATED GROUND ZONE EQUIPMENT
- CABLE TRAY SYSTEM
- EQUIPMENT FRAMES
- BATTERY RACKS
- DC POWER

SECTION "I" - ISOLATED GROUND ZONE

- ISOLATED EQUIPMENT FRAMES
- ISOLATED GROUND BAR - IGB



NOTES:  
-EXTERIOR GROUND BARS TO BE TIN PLATED  
-HARDWARE SHALL BE STAINLESS STEEL  
-CONTRACTOR SHALL GROUP INCOMING WIRES  
-CONTRACTOR TO APPLY 'KOPR-SHIELD' TO ALL CONNECTIONS

GROUND BAR DETAIL

SCALE: NONE

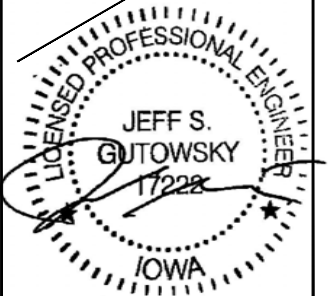
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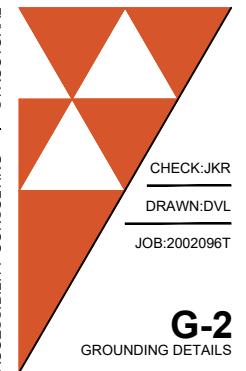


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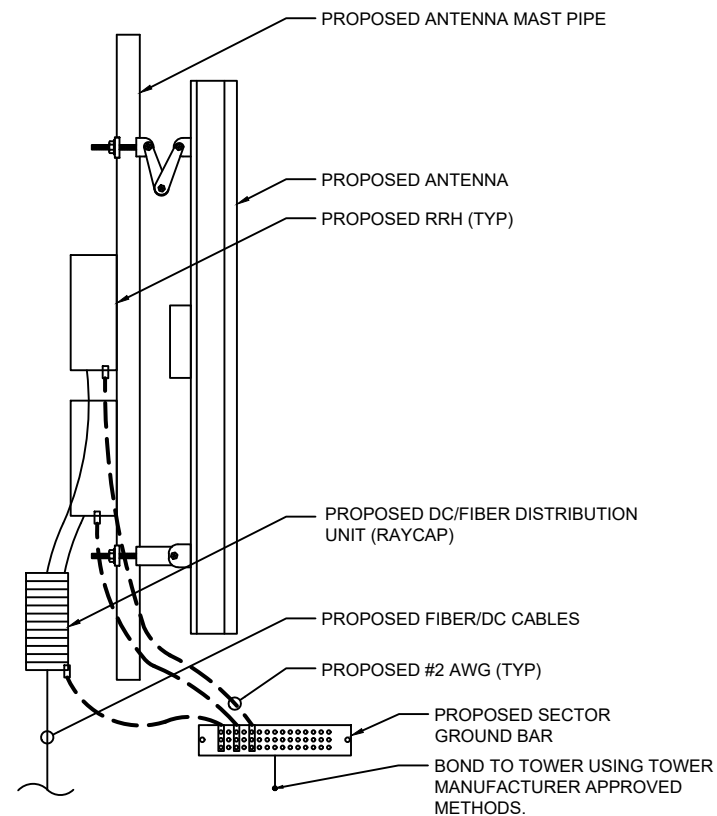
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**G-2**

GROUNDING DETAILS

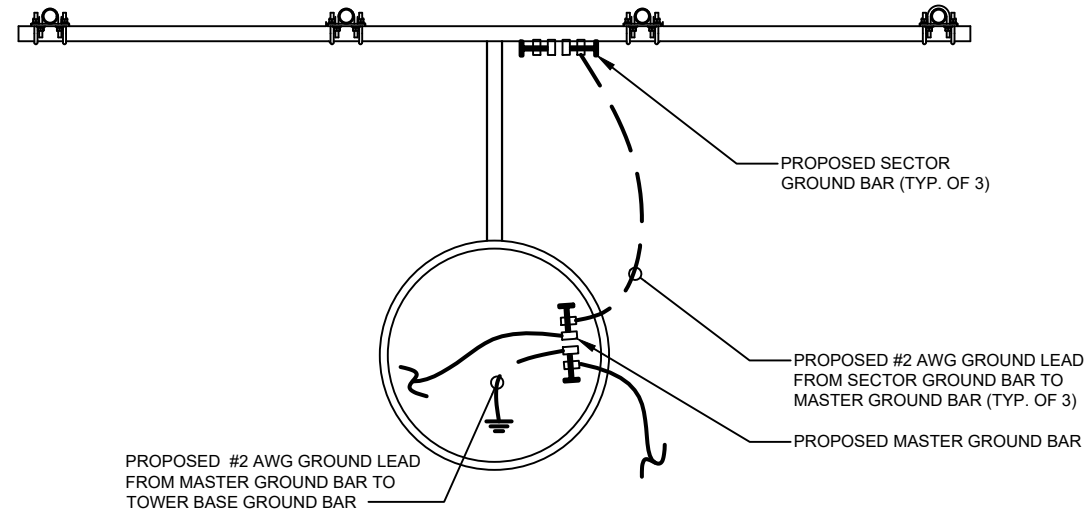
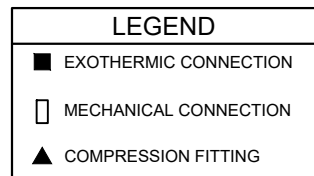




ANTENNA GROUNDING SCHEMATIC

SCALE: NONE

1



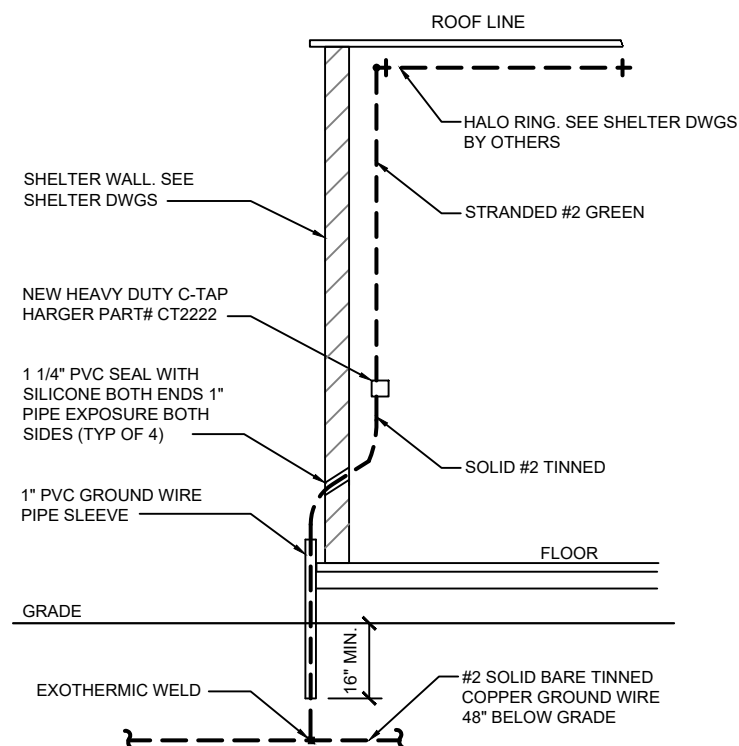
ANTENNA FRAME GROUNDING (TYP)

SCALE: NONE

2

NOTE:  
NEW STRANDED GREEN GROUND LEAD WITHIN  
SHELTER MUST TRANSITION TO #2 SOLID PRIOR  
TO LEAVING SHELTER.

NOTE:  
NEW GROUND TO BE RUN IN 1" FLEX  
WITH SILICONE ON TOP SIDE.



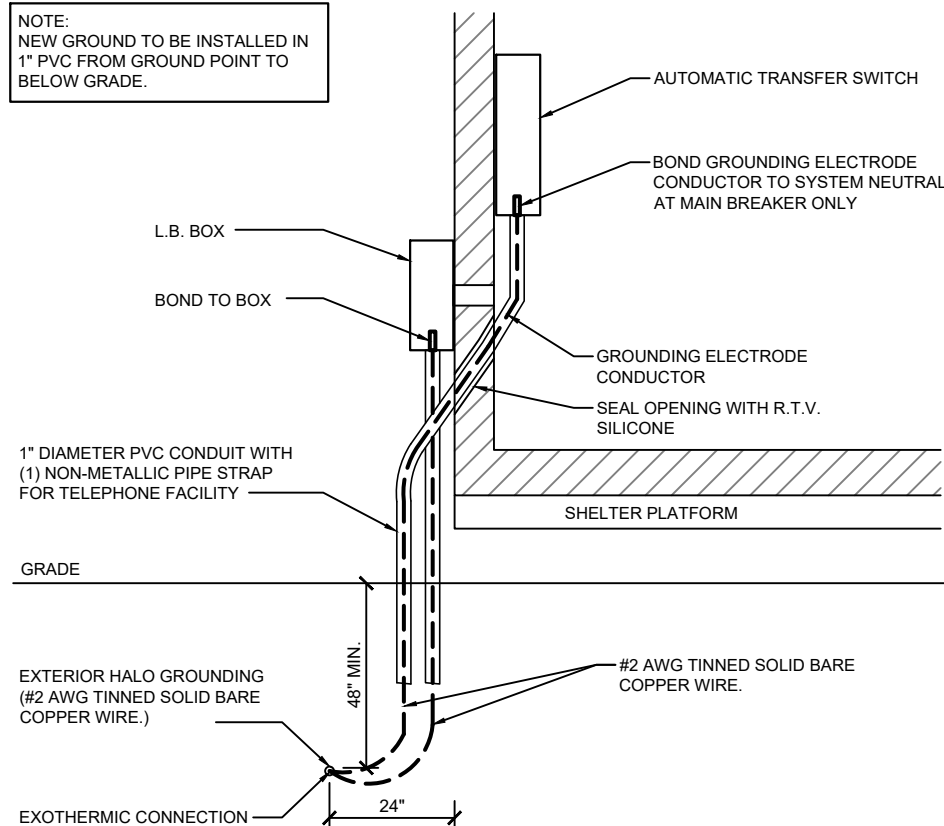
SHELTER TIE-IN

SCALE: NONE

47

3

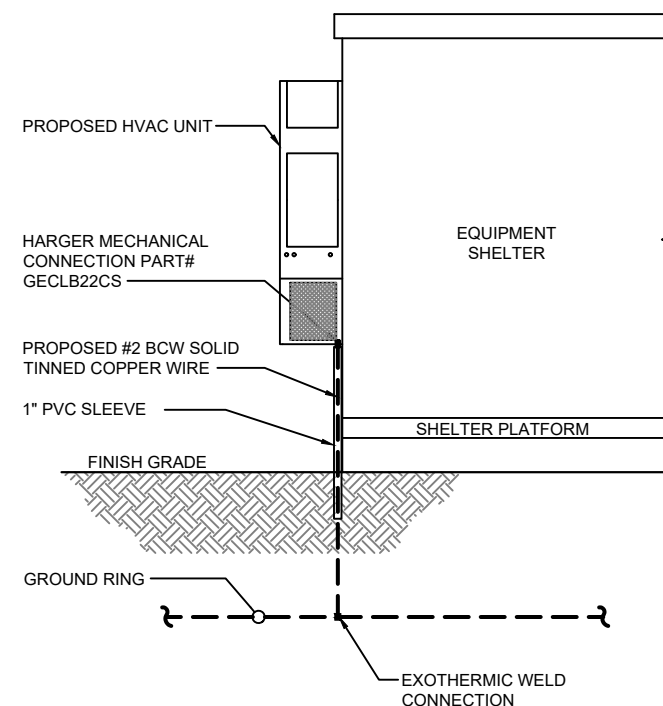
NOTE:  
NEW GROUND TO BE INSTALLED IN  
1" PVC FROM GROUND POINT TO  
BELOW GRADE.



ELECTRIC GROUND DETAIL

SCALE: NONE

4



HVAC GROUNDING

SCALE: NONE

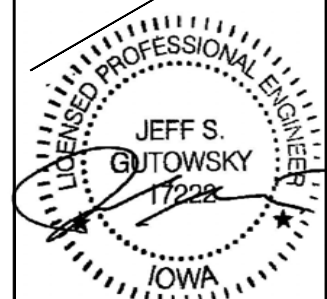
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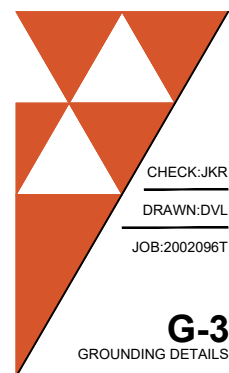
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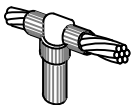
**G-3**

GROUNDING DETAILS

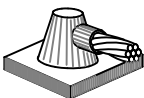
NOTE:  
THE FOLLOWING SYMBOLS SHOWN ARE HARGER  
ULTRAWELD EXOTHERMIC CONNECTIONS WITH PART  
NUMBERS BELOW. THESE CONNECTIONS MAY BE  
CROSS-REFERENCED WITH EXOTHERMIC CONNECTIONS  
WHICH ARE SHOWN IN PARENTHESIS.



GT  
(GR)



GO  
(GT)



HB  
(HS)



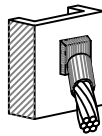
HD  
(HA)



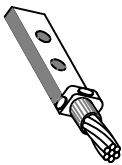
BS  
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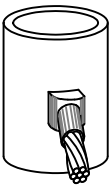
XX  
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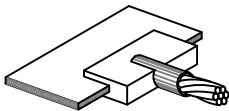
VA  
(VH)



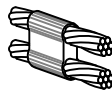
LE  
(GL)



VA  
(VS)



BD, BE, BU  
(LJ)



PT  
(PT)



RT  
(TA)

## EXOTHERMIC WELD TYPES

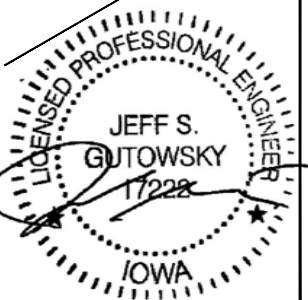
SCALE: NONE

48

1

## GROUNDING NOTES

1. ALL GROUNDING ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER) SHALL BE BONDED TOGETHER BELOW GRADE BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH PART III OF NEC SECTION 250.
2. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUNDING ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 Ohms OR LESS.
3. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TEST RESULTS.
4. ALL METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED CODING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH A #6 AWG COPPER WIRE UL LISTED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUNDING CONDUCTOR. STRANDED COPPER CONDUCTOR WITH GREEN INSULATION, SIZED PER SECTION 250.122 OF THE NEC, EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED WITH THE BRANCH CIRCUIT TO THE EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND CONDUCTORS, #6 AWG COPPER OR LARGER FOR INDOOR EQUIPMENT, AND #2 AWG STRANDED COPPER FOR OUTDOOR EQUIPMENT.
7. CONNECTIONS TO THE GROUND BAR SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS TO THE GROUND BAR ON OPPOSITE SIDES OF THE GROUND BAR ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL SHALL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTOR SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND SYSTEM.
15. APPROVED ANTIOXIDANT COATING (I.E CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES, AND SUPPORTS, SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH PART III OF SECTION 250 OF THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 FT. OF ANY MAIN GROUND CONDUCTOR WITH (1) #2 AWG COPPER TINNED GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS, OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (I.E. NON-METALLIC CONDUIT IS PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

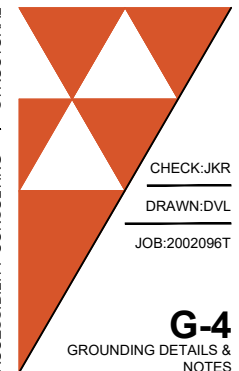


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**PROJECT SUMMARY**

FIELD SURVEY DATE: 1-6-2021  
SITE ADDRESS: 352 NORTH AVE., COUNCIL BLUFFS, IA  
PARCEL INFORMATION  
OWNER: COUNCIL BLUFFS COMMUNITY SCHOOL DISTRICT  
OWNER ADDRESS: 12 SCOTT ST., COUNCIL BLUFFS, IA 51503  
APN: 7543-30-129-038  
BOOK 78, PAGE 5523

TOTAL AREAS:  
PARENT PARCEL: 5.991± ACRES  
ATC EASEMENT AREA AS PROVIDED AS SURVEYED: 2.028± S.F., 0.047± AC.  
14" W. ACCESS/UTILITY EASEMENT AS PROVIDED AS SURVEYED: 2.756± S.F., 0.063± AC.  
8" W. UTILITY EASEMENT AS PROVIDED AS SURVEYED: 1.591± S.F., 0.037± AC.  
ATC EXPANSION AREA: 313± S.F., 0.007± AC.

GEOGRAPHIC COORDINATES OF TOWER:  
LATITUDE: 41°16'26.191" N LONGITUDE: 95°49'55.712" W  
VERTICAL DATUM: NAVD 1988 HORIZONTAL DATUM: NAD83  
GROUND ELEVATION: 1148.22

COORDINATES ARE BASED ON IOWA STATE PLANE COORDINATES, SOUTH ZONE.

BEARINGS ARE BASED ON THE WESTERLY RIGHT OF WAY LINE OF NORTH AVENUE  
PER SURVEY PREPARED BY E&A CONSULTING GROUP, INC., DATED 6-14-2000,  
PROJECT NO. 971282; SAID BEARING BEING SOUTH 00 DEGREES 04 MINUTES 11  
SECONDS WEST.

FLOODPLAIN:  
PER THE FEMA FLOODPLAIN MAPS, THE SITE IS LOCATED IN AN AREA DESIGNATED  
AS ZONE X  
COMMUNITY PANEL NO. : 19155C0414E DATED: 02-04-2005  
SITE BENCHMARK: SET AT END OF DRIVE.  
ELEVATION = 1148.47

BOUNDARY NOTE  
THIS SURVEY DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PARENT TRACT.  
ANY PARENT TRACT PROPERTY LINES SHOWN HEREON ARE FROM SUPPLIED  
INFORMATION AND MAY NOT BE FIELD VERIFIED.

ENCROACHMENT STATEMENT  
AT THE TIME OF THE SURVEY, NO VISIBLE ENCROACHMENTS WERE EVIDENT ONTO OR BEYOND THE  
EASEMENT AREAS, PARENT PARCEL OR THE ACCESS AND UTILITY EASEMENT.

**SURVEYOR'S NOTES**

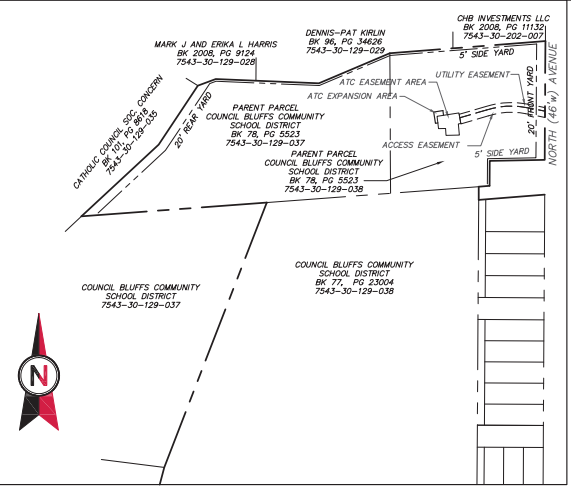
1. THERE IS ACCESS TO THE SUBJECT PROPERTY FROM NORTH AVENUE, VIA AN ACCESS EASEMENT AS SHOWN HEREON.
2. THE LOCATIONS OF ALL UTILITIES SHOWN ON THE SURVEY ARE FROM VISIBLE SURFACE EVIDENCE, GROUND MARKINGS, AND PLANS FROM THE MUNICIPALITY.
3. AT THE TIME OF THIS SURVEY THERE WAS NO OBSERVABLE SURFACE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS.
4. AT THE TIME OF THIS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF THE SUBJECT PROPERTY BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
5. AT THE TIME OF THIS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF ANY RECENT CHANGES IN STREET RIGHT-OF-WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION.
6. AT THE TIME OF THIS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF ANY RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
7. THIS SURVEY WAS PREPARED TO SHOW THE INTERESTS OF AMERICAN TOWER CORPORATION AND IMPROVEMENTS PROXIMAL TO SAID INTERESTS. IT DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE ENTIRE PARENT PARCEL.
8. ALL CALLS ARE MEASURED UNLESS OTHERWISE NOTED.
9. UNLESS OTHERWISE SPECIFIED, UTILITY POLES DO NOT IDENTIFY OWNERSHIP.
10. ATC EASEMENT AREA, ATC EXPANSION AREA, ACCESS EASEMENT AND UTILITY EASEMENTS LIE WHOLLY WITHIN THE PARENT PARCEL.

**ZONING INFORMATION**

ZONING INFORMATION HAS NOT BEEN PROVIDED TO THE SURVEYOR

**SURVEY LEGEND**

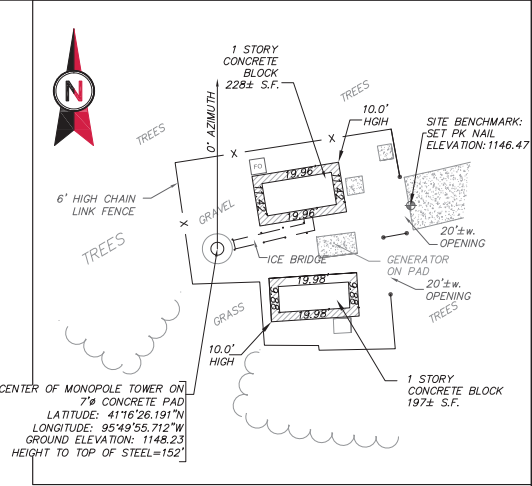
- EXISTING PROPERTY
- EXISTING ADJ. PROPERTY
- EXISTING EASEMENT
- EXISTING CHAINLINK FENCE
- EXISTING BUILDING
- SD EXISTING STORM DRAIN
- EXISTING ROAD (STONE)
- EXISTING CONCRETE
- SURVEY IRON PIN FOUND
- SURVEY BENCHMARK
- EXISTING SETBACK
- EXISTING RIGHT OF WAY
- EXISTING WIRE FENCE
- EXISTING WOOD FENCE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD WIRE
- EXISTING TELEPHONE SPICE BOX
- EXISTING FIBER OPTIC BOX
- EXISTING ELECTRIC SPICE BOX



**2 PARENT DETAIL**

0 400' 800' 1600'

SCALE: 1"=400' (11X17)  
1"=200' (22X34)



**3 COMPOUND DETAIL**

0 20' 40' 80'

SCALE: 1"=40' (11X17)  
1"=20' (22X34)

**AMERICAN TOWER®**  
**ATC TOWER SERVICES, INC.**  
3500 REGENCY PARKWAY  
SUITE 100  
CARY, NC 27518  
PHONE: (919) 468-0112  
FAX: (919) 466-5415

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REV.	DESCRIPTION	BY	DATE
0	PRELIMINARY	JAC	1-8-21

ATC SITE NUMBER:  
**418387**

ATC SITE NAME:  
**COUNCIL BLUFFS-KIRN JR. HIGH IA**

SITE ADDRESS:  
352 NORTH AVENUE  
COUNCIL BLUFFS, IA 51503

SURVEY CERTIFICATE:  
TO AMERICAN TOWER CORPORATION AND RELTCO  
THIS IS TO CERTIFY THAT SHERILL ASSOCIATES, INC., AT THE REQUEST AND FOR THE EXCLUSIVE USE OF AMERICAN TOWER CORP., HAS PERFORMED THIS AS-BUILT SURVEY OF THE ATC EASEMENT AREA, FROM THE RECORD SOURCES AND ACTUAL FIELD SURVEY ON 1-6-2021, IN ACCORDANCE WITH THE MINIMUM STANDARDS FOR PROPERTY BOUNDARY SURVEYS. ALL LINEAR AND ANGULAR VALUES SHOWN ARE BASED UPON DEED OR RECORD INFORMATION UNLESS OTHERWISE NOTED.

DATE OF PLAT OR MAP: 1-8-2021

DAVID J. SHERILL P.L.S. 12315  
STATE OF IOWA  
EXPIRATION: 12-31-2021

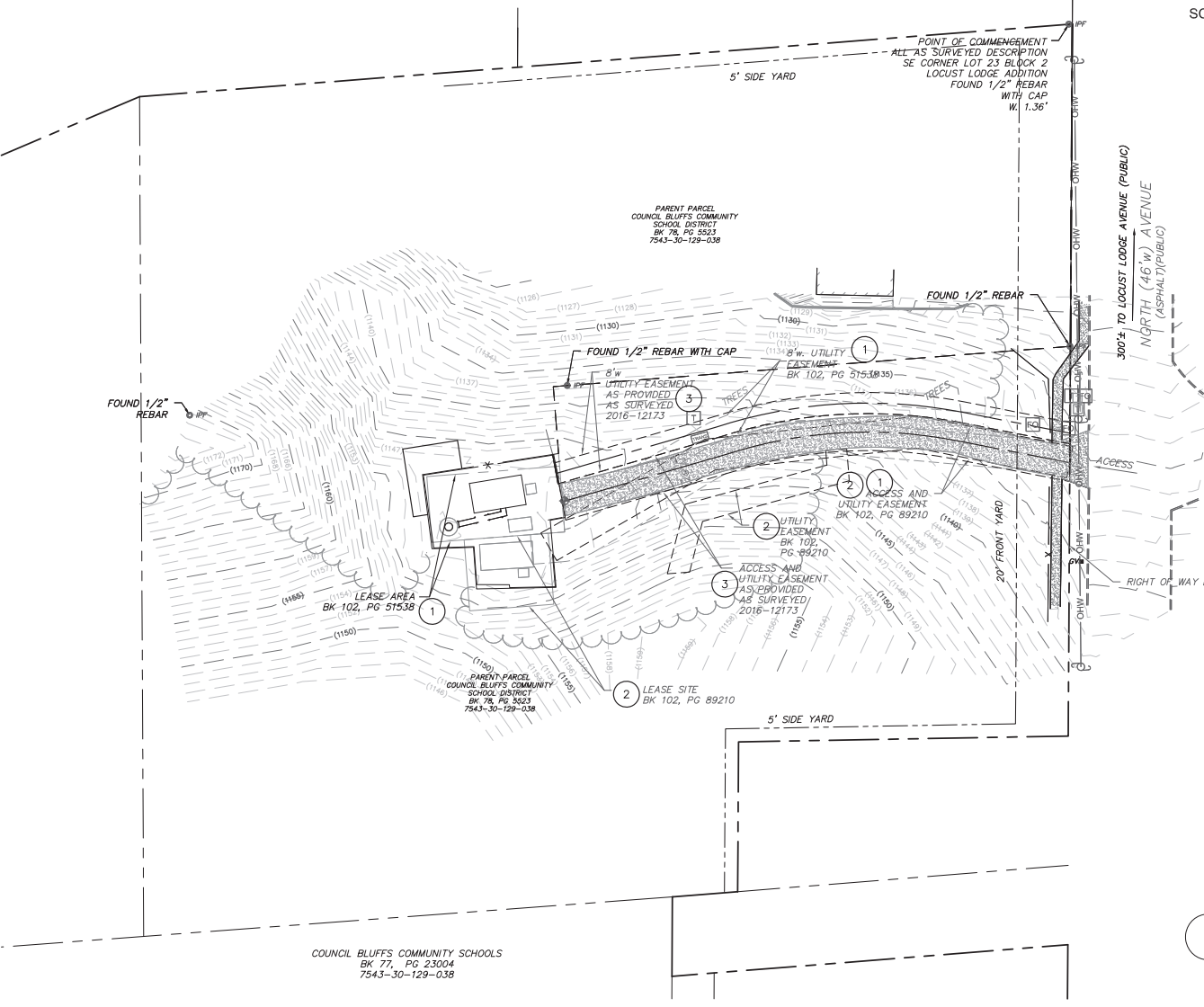
SURVEY LOGO:  
**SHERILL ASSOCIATES, INC.**  
Surveyors - Engineers - Planners

316 N. Main Street  
Edwardsville, IL 62025  
618-656-9251 Phone  
618-656-9496 Fax

DRAWN BY:	JAC
APPROVED BY:	DJS
DATE DRAWN:	1-8-2021
ATC JOB NO:	20772-01

**EXISTING CONDITIONS & TOPOGRAPHIC PLAN**

SHEET NUMBER:	REVISION:
<b>V-102</b>	<b>2</b>



**1 EXISTING CONDITION PLAN**

0 30' 60' 120'

SCALE: 1"=600' (11X17)  
1"=30' (22X34)

WORK COORDINATED BY:  
**COX LEVIN**  
National Land Survey Consultants  
survey@coxlevin.com  
781-640-3300 • www.coxlevin.com

