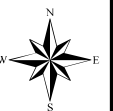


Case File No. 22-0054
Vertical Bridge 500, LLC Tower



BlaineMN.gov

Blaine Planning Department / 10801 Town Square Dr NE / Blaine, MN 55449 / (763) 785-6180



Letter of Application

July 8, 2022

Ms. Elizabeth Showalter
Community Development Specialist
Planning & Community Development
10801 City Square Drive NE, Blaine MN 55449

RE: Proposed Vertical Bridge Communications Antenna Structure – US-MN-5101
2201 108th L.N. N.E. Blaine, MN 55449
Parcel No. 21-31-23-12-0007

Dear Ms. Showalter:

LCC Telecom Services, on behalf of the applicant VERTICAL BRIDGE 500, LLC (dba “Vertical Bridge”), has finalized an agreement with the property owners of the site referenced above to develop and construct a communications antenna structure and facility that will be available to be used by wireless carriers. The proposed shared use facility is designed to house the equipment necessary to provide clear and uninterrupted wireless telecommunications services to the residents and visitors of the City of Blaine and surrounding area.

This communications antenna structure is being constructed pursuant to Sections 33.17 (Telecommunications antennas and towers) and Section 27.04 (Conditional Use Permits) of the City of Blaine Zoning Ordinance. A Conditional Use Permit is required for the siting and construction of any new communications antenna structure and facility. The proposed communications antenna structure will consist of a 105’-0” tall monopole tower with a 5’-0” lightning rod for a total height of 110’-0”, to be located within a 100’-0” x 100’-0” ground area. The proposed tower will be erected, owned, and operated by Vertical Bridge. Vertical Bridge has a lease with AT&T Mobility, a wireless services provider, for this site. Additionally, the facility will be open for collocation to other wireless providers.

On behalf of the applicant VERTICAL BRIDGE 500, LLC (dba “Vertical Bridge”), LCC Telecom Services has submitted all required documentation for the proposed tower in accordance with , and Sections 27.04 (Telecommunications antennas and towers) and 33.17 (Conditional Uses) of the City of Blaine Zoning Ordinance for this application to be deemed complete. Should you have any questions please feel free to contact me. I look forward to working with you during the review and approval process. Vertical Bridge looks forward to helping provide the City of Blaine with improved wireless coverage.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Bieniek". The signature is fluid and cursive, with the first name "Mike" and last name "Bieniek" clearly distinguishable.

Michael Bieniek, AICP

Zoning Director

LCC Telecom Services

10700 Higgins Road, Suite 240

Rosemont, IL 60018

mbieniek@lcctelecom.com

Cell - (847) 287-1156

Fax - (847) 608-1299

Narrative Overview

VERTICAL BRIDGE 500, LLC (“Vertical Bridge”) seeks approval of a Conditional Use Permit and any other permits or approvals necessary in order to install a new communications antenna structure and facility on property located at 2201 108TH L.N. N.E. Blaine, MN 55449 . Vertical Bridge proposes to erect this tower and will be offering it as a shared facility with AT&T Wireless as the anchor tenant and any other communication carriers as potential tenants if they have a need for a facility in this area.

The proposed site is located in an I-2 Heavy Industrial District. Pursuant to Sections 27.04 (Telecommunications antennas and towers) and 33.17 (Conditional Uses), mobile service facilities are allowed in this district with Conditional Use Permit approval.

The wireless telecommunications facility that Vertical Bridge is proposing to install on the property for AT&T is necessary to provide uninterrupted wireless services to the residents and visitors of the City of Blaine and surrounding area, including wireless telephone service, voice paging, messaging and wireless internet and broadband data transmission. All registered wireless provider’s technology operates at various radio frequency bands allocated by the FCC as part of their license.

Wireless systems operate on a grid system where overlapping cells mesh together, forming a seamless network. No single site can function as a stand-alone entity as each site is interconnected, forming the network. The technical criteria for establishing cell sites are very exacting as to the location and height. The proposed site at 2201 108TH L.N. N.E. Blaine, MN 55449 is within the geographic area deemed necessary by AT&T engineers to provide uninterrupted services.

In accordance with the City of Blaine’s Zoning Ordinance Sections 27.04 (Telecommunications antennas and towers) and 33.17 (Conditional Uses), Vertical Bridge has made application to install a new communications antenna facility. The proposed new communications antenna facility will consist of a 105’-0” tall monopole tower with a 5’-0” lightning rod for a total height of 110’-0” to be located within a 100’-0” x 100’-0” ground area.

After the initial construction, the proposed facility will be unstaffed and will only require service technicians, in a pick-up/van sized vehicle, to visit the site approximately once per month. Access will be provided via an easement with the proposed access entry point from 108th Ln. NE. Utilities required to service the facility are power and fiber. The site is entirely self-monitored through a sophisticated alarm system which is connected to a main switch station. The system alerts personnel to any equipment malfunction or breach of security. Additionally, there is no impact on the City of Blaine’s utilities such as water and sanitation, as they are not used at the site.

In accordance with FCC regulations, the mobile service facility will not interfere with any form of communications, including but not limited to, land-line phones, cable and satellite television and radio broadcasts. Wireless technology has become a vital part of emergency services, aiding local residents and motorists in a variety of situations, thus helping to protect the general public's health, safety and welfare. The proposed wireless telecommunications facility at this site will further enhance goals of providing the most reliable wireless coverage possible in this area.

The proposed telecommunications facility will be designed and constructed to meet all applicable governmental and industry safety standards. Specifically, Vertical Bridge will comply with all FCC and FAA rules and regulations regarding construction requirements and technical standards. RF emissions are subject to the exclusive jurisdiction of the FCC. Any height, lighting or marking issues are subject to the exclusive jurisdiction of the FAA.

LCC Telecom Services, on behalf of Vertical Bridge and AT&T, looks forward to working with the City of Blaine to bring the benefits of the proposed improved wireless services to the area. The addition of the facility will ensure the best uninterrupted wireless services for the City of Blaine. This application addresses all standards of the City of Blaine Zoning Ordinance and satisfies the requirements of both 27.04 (Telecommunications antennas and towers) and 33.17 (Conditional Uses).

Conditional Use Permit Standards

(a)

Criteria for granting conditional use permits. In granting a conditional use permit, the Blaine City Council shall consider the advice and recommendations of the Planning Commission and the effect of the proposed use on the comprehensive plan and upon the health, safety, and general welfare of occupants of surrounding lands. Among other things, the Council shall consider the following findings where applicable. (Ord. No. [20-2447](#), 7-20-2020)

(1) The use shall not create an excessive burden on existing parks, schools, streets and other public facilities and utilities which serve or are proposed to serve the area.

No drainage, sanitation, refuse removal, parks, library, or school services will be necessary for this facility. Existing police and fire protection are more than adequate to provide security for the facility. The only utilities necessary are power and telco, which are available at or near the site. Therefore, there will be no additional requirements at public cost for public facilities and services.

(2) The use will be located, designed, maintained, and operated to be compatible with adjoining properties and the existing or intended character of the zoning district. (Ord. No. [20-2447](#), 7-20-2020)

The proposed wireless telecommunications facility will be designed, constructed, operated and maintain so as not to diminish the opportunity for surrounding properties to be used to be used and developed as zoned. The property is in a heavy industrial district and the area is substantially developed at this point. The property is far removed from residential uses and other aesthetically sensitive areas. The site does not generate noise or traffic which would be detrimental to surrounding properties. The applicant's use is appropriate in this district and will not change the intended character of the district.

(3) The use shall have an appearance that will not have an adverse effect upon adjacent properties.

The proposed wireless telecommunications facility will be designed, constructed, operated and maintain so as not to diminish the opportunity for surrounding properties to be used to be used and developed as zoned. The use will support other uses in the area by improving communication services to adjacent businesses. The support structure will be a monopole which is the least intrusive structure type and is favored under the ordinance.

(4) The use, in the opinion of the City Council, shall be reasonably related to the overall needs of the City and to the existing land use.

Enhanced wireless communications will have a positive influence on the development of this area. As many people remove landlines from their residences and businesses increase reliance on technology, wireless telecommunications are critical. The use is also vital for emergency services. Therefore, having robust wireless services is essential for the normal and orderly development of the area and supports the overall needs of the City.

(5) The use shall be consistent with the purposes of the zoning code and purposes of the zoning district in which the applicant intends to locate the proposed use.

The proposed wireless telecommunications facility at this location is consistent with the purposes of Chapter 23 of the City of Blaine Zoning Ordinance. Improved communications will promote the health, safety and general welfare of Blaine residents and visitors. In addition, the installation will assist the city in meeting the goal of facilitating the establishment of public requirements, including communications services. The purpose of the I-2 (Heavy Industrial) District is outlined at Chapter 31.21. This district is the least restrictive zoning district in the City of Blaine and is intended for the development of heavy industrial uses. The proposed facility is compatible with this section of the ordinance.

(6) The use shall not be in conflict with the comprehensive plan of the City.

The 2040 Comprehensive Land continues to classify this area as appropriate for heavy industrial uses. The Conditional Use will be in harmony with the spirit and intent of the City of Blaine Zoning Ordinance in providing public safety communication with the minimal footprint of an unstaffed utility structure requiring no services from the city itself. Wireless telephones provide an alternate communication system which has repeatedly proven its effectiveness in emergency situations and is commonly being utilized by police and fire departments to protect the general public's health, safety and welfare. Therefore, the granting of the Conditional Use will be in conformance with the general and specific purposes imposed by the City of Blaine Ordinance and the Official Comprehensive Plan and will enhance wireless telecommunications coverage which will have a positive influence on the area.

(7) The use will not cause traffic hazard or congestion.

A wireless telecommunications facility is unstaffed, there will be no impact on the existing traffic nor will there be any traffic hazards generated. After construction is complete, maintenance personnel will only visit the facility once or twice a month in a van-sized vehicle. Existing parking at the subject property is more than adequate for the expected infrequent maintenance visits to this site.

(8) The use shall have adequate utilities, access roads, drainage and necessary facilities.

No drainage, sanitation, refuse removal, parks, library, or school services will be necessary for this facility. Existing police and fire protection are more than adequate to provide security for the facility. As indicated above, the only necessary utilities at the site will be power and telco,

both of which are readily available. Therefore, there will be to additional requirements at public cost for public facilities and services.

Section 33.17 Telecommunications antennas and tower Standards

Height Limitations, as set forth in this ordinance, shall not apply to church spires, flag poles, and municipal water towers and attachments, including antennae. Any structure over fifty (50) feet in height from ground level shall require a conditional use permit. Communication antenna, no greater than fifty (50) feet in height, are permitted in any zoning district and must be located in the rear yard or on the principal structure and meet a twenty (20) foot setback from the side and rear property lines. Freestanding communication antennae over fifty (50) in height shall also be regulated by the standards outlined in [Section 33.17\(b\)](#). Any structure over one hundred fifty (150) feet in height from ground level shall not be permitted, unless specifically permitted in another section of the zoning ordinance. (Ord. No. 97-1673, amended 9-4-1997; Ord. No. 98-1761, amended 12-17-1998)

(b) Free standing communication antennae that are greater than fifty (50) feet in height are only permitted through conditional use permit and are subject to the following standards: (Ord. No. 97-1673, amended 9-4-1997; Ord. No. 98-1761, amended 12-17-1998)

The proposed tower is 105'-0" monopole tower with a 5'-0" lightning rod for a total height of 110'-0". Vertical Bridge will be in compliance with all of the above provisions.

(1) The applicant must hold an FCC license to operate the proposed communication system.

Vertical Bridge will comply with all state, federal and local codes. The site will be in compliance with all regulations of the FCC.

(2) The applicant shall submit a study which demonstrates that existing municipal water tower sites and colocation with existing facilities are not technically feasible.

The applicant has submitted radio frequency engineering propagation maps that detail the need for the site in this particular location.

(3) That all structures must be mono-pole.

The proposed structure is a monopole.

(4) That all structures must be constructed for co-location at market rate.

The proposed wireless telecommunications facility will be provided for those wishing to co-locate. Vertical Bridge is in the business of erecting towers for various carriers and leasing the towers to additional carriers and they will encourage the shared use of the proposed

tower. In fact, if and when the tower is erected, Vertical Bridge actively markets the use of the tower to all interested parties, including local emergency entities.

(5) That the applicant must provide proof that the construction and operation of the facilities will not interfere with reception and transmission of radio or television services enjoyed by neighboring residential and non-residential properties.

Vertical Bridge and all carriers co-locating on the proposed wireless telecommunications facility will meet all federal and state regulations. The carriers operate on distinct frequencies regulated by the FCC and do not interfere with radio frequency users.

(6) That the structures have no lighting other than what is required by the FAA, FCC, or other governmental bodies.

The FAA approval for the proposed tower has been obtained and no lighting is required.

(7) That the structures have no signage except as required by state and federal regulations.

The structure will have no signage except as required by state and federal regulations.

(8) That the structures not be multi-colored and the color be of minimal visibility unless the architectural design or materials that are used, as determined by the City, suggest otherwise. (Ord. No. 08-2166, amended 10-16-2008)

All materials used in the construction and co-location will be in accordance with all local building requirements.

(9) That the structures not be located in the designated front yard of a property.

The structure will not be located in the designated front yard of a property.

(10) That the structure not be within the following distance of any residential structures: (Ord. No. 98-1761, amended 12-17-1998; Ord. No. 08-2166, amended 10-16-2008; Ord. No. 11-2221, amended 3-17-2011)

a. Three hundred and fifty (350) feet for towers one hundred (100) feet in height or greater.

b. Three hundred (300) feet for towers greater than eighty (80) feet and less than one hundred (100) feet

c. Two hundred and fifty (250) feet for towers eight (80) feet in height or less.

(11) That the height of any structure does not exceed one hundred fifty (150) feet.

The proposed monopole measures 110' in total height and is not within 350 feet of any residential structures.

(12) That the structures be placed with a minimum setback from all lot lines equal to the height of the proposed structure, unless a qualified structural engineer specifies in writing that the collapse of any antenna or tower will occur within a lesser distance under all foreseeable circumstances. Towers may not be located within the building setback areas of the underlying zoning district.

The proposed monopole will be placed with a minimum setback from all lot lines equal to the height of the proposed structure. If necessary Vertical Bridge can provide a fall zone letter by a qualified structural engineer specifying in writing that the collapse of the monopole will occur within a lesser distance under all foreseeable circumstances.

(13) That the owner agrees to remove the structure within twelve (12) months after terminating transmission from the facility.

Vertical Bridge will comply with all removal requirements in the event the tower is removed in the future.

(c) Communication antennae attached to or on top of existing buildings may exceed the height limitations of the district when the following standards are met:

(1) The applicant must hold an FCC license to operate the proposed communication system;

Vertical Bridge will comply with all state, federal and local codes, including FCC requirements.

(2) Building mounted antennas shall not extend more than ten (10) feet above the roof and must be setback at least five (5) feet from the roof edge; and

This site is a proposed monopole structure; therefore this provision does not apply.

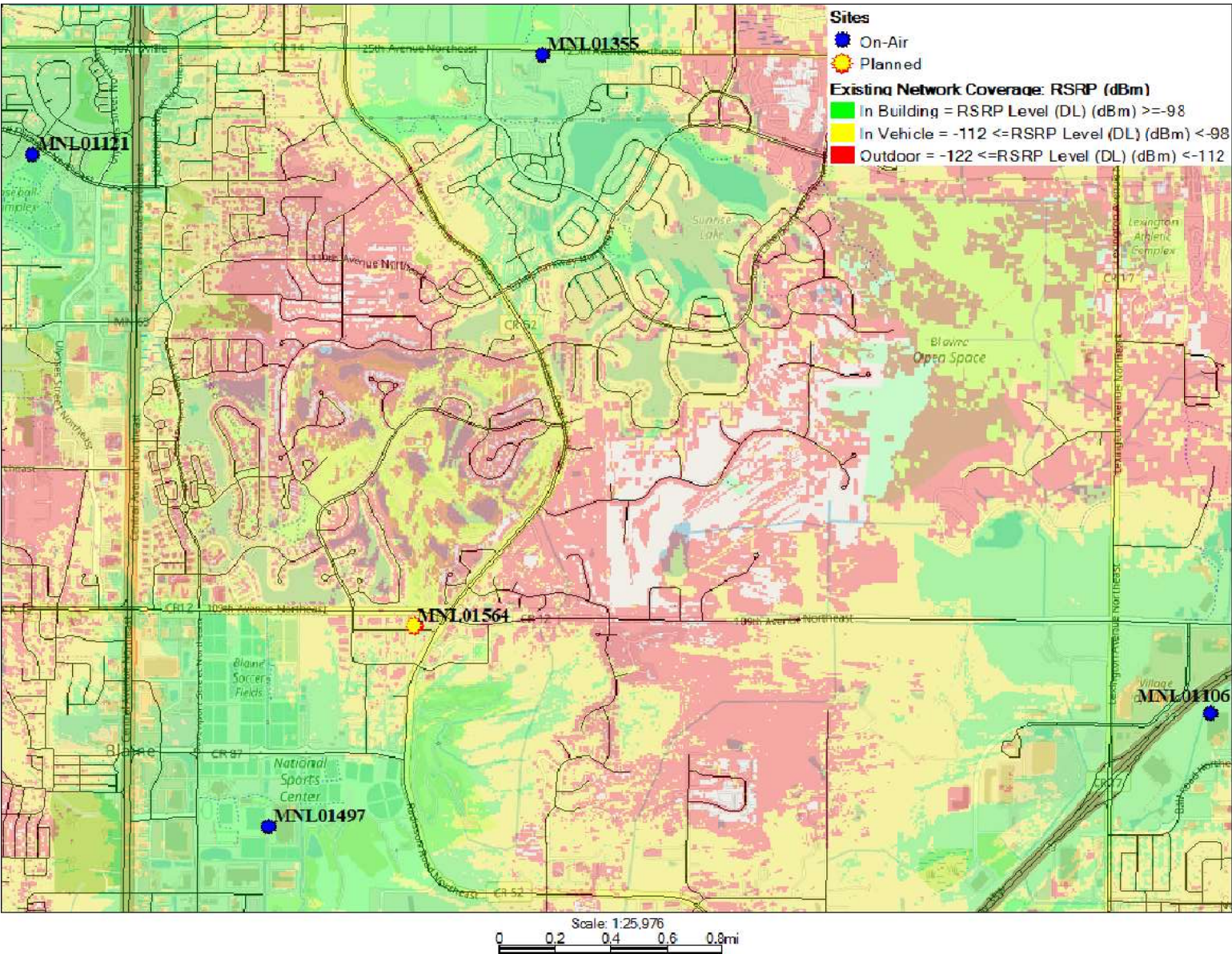
(3) Wall or facade mounted antennae shall not extend more than five (5) feet above the roof.

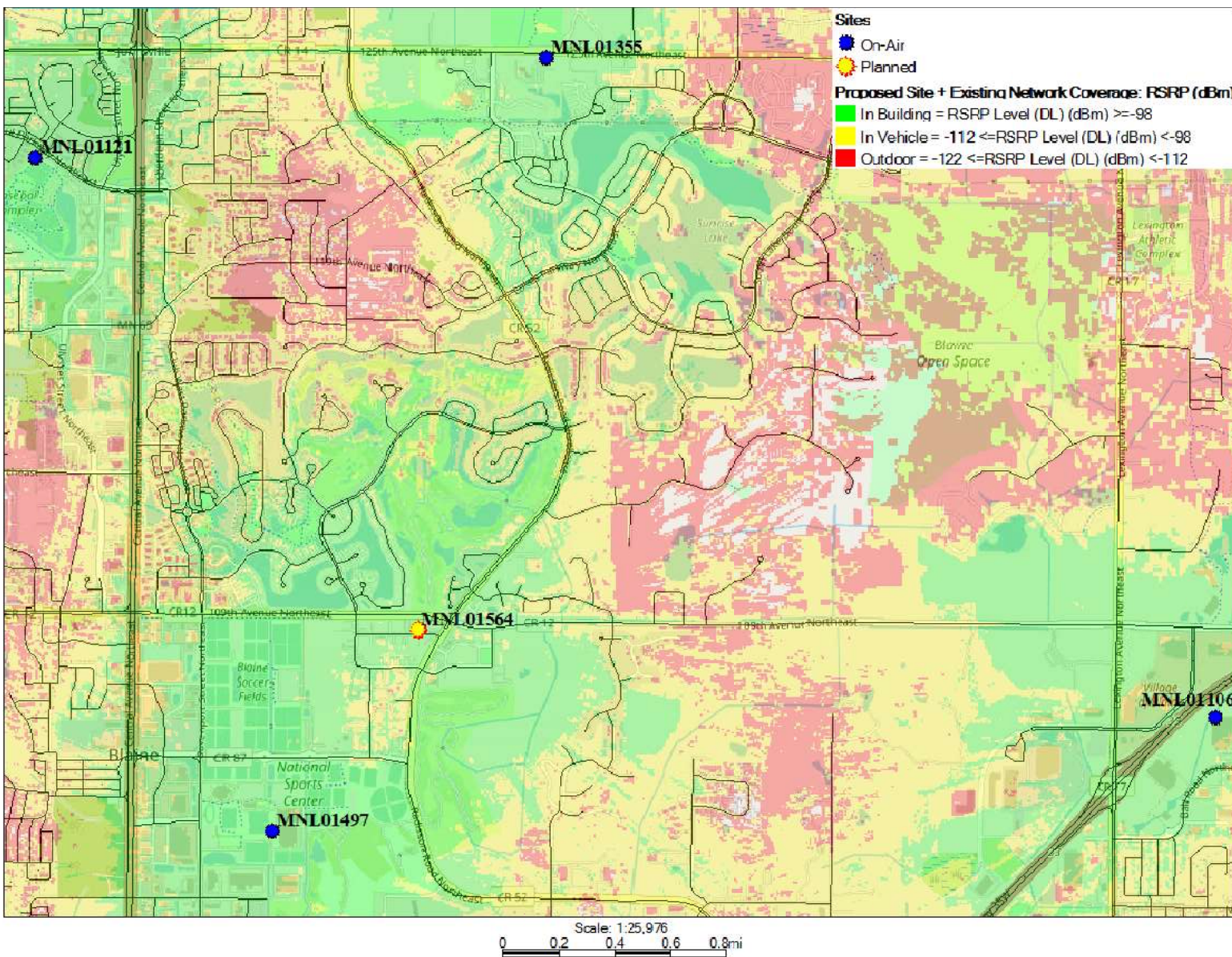
This site is a proposed monopole structure; therefore this provision does not apply.

TPC TWIN CITIES – Zoning Maps

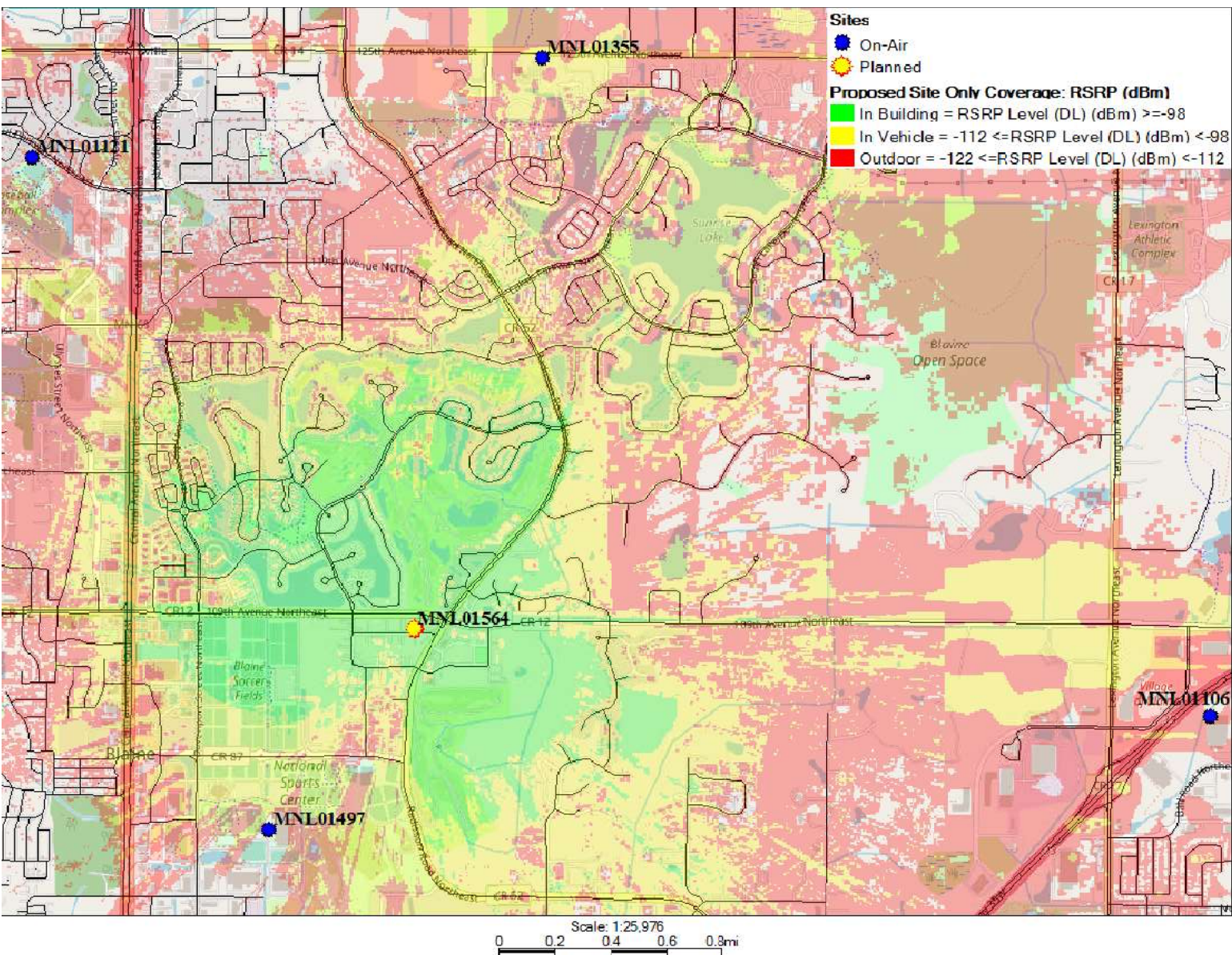
- Propagation maps calculated using our most used band, PCS
- Proposed Site MNL01564 is run with a 100' rad center
- Purpose of site:
 - #1 is to solve year-round in-building coverage problems around the golf course area
 - #2 provide solid mid-band coverage on the golf course to eliminate the need to deploy a COW for tournaments

Existing Coverage





Existing + Proposed Site
100' Rad Center Coverage



100' Rad Center
Proposed Site Coverage

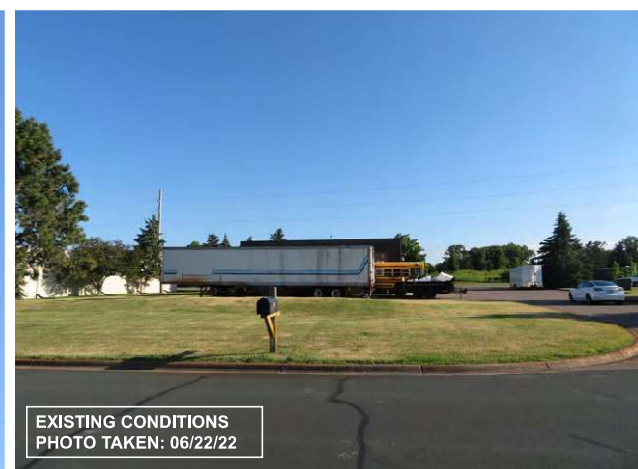
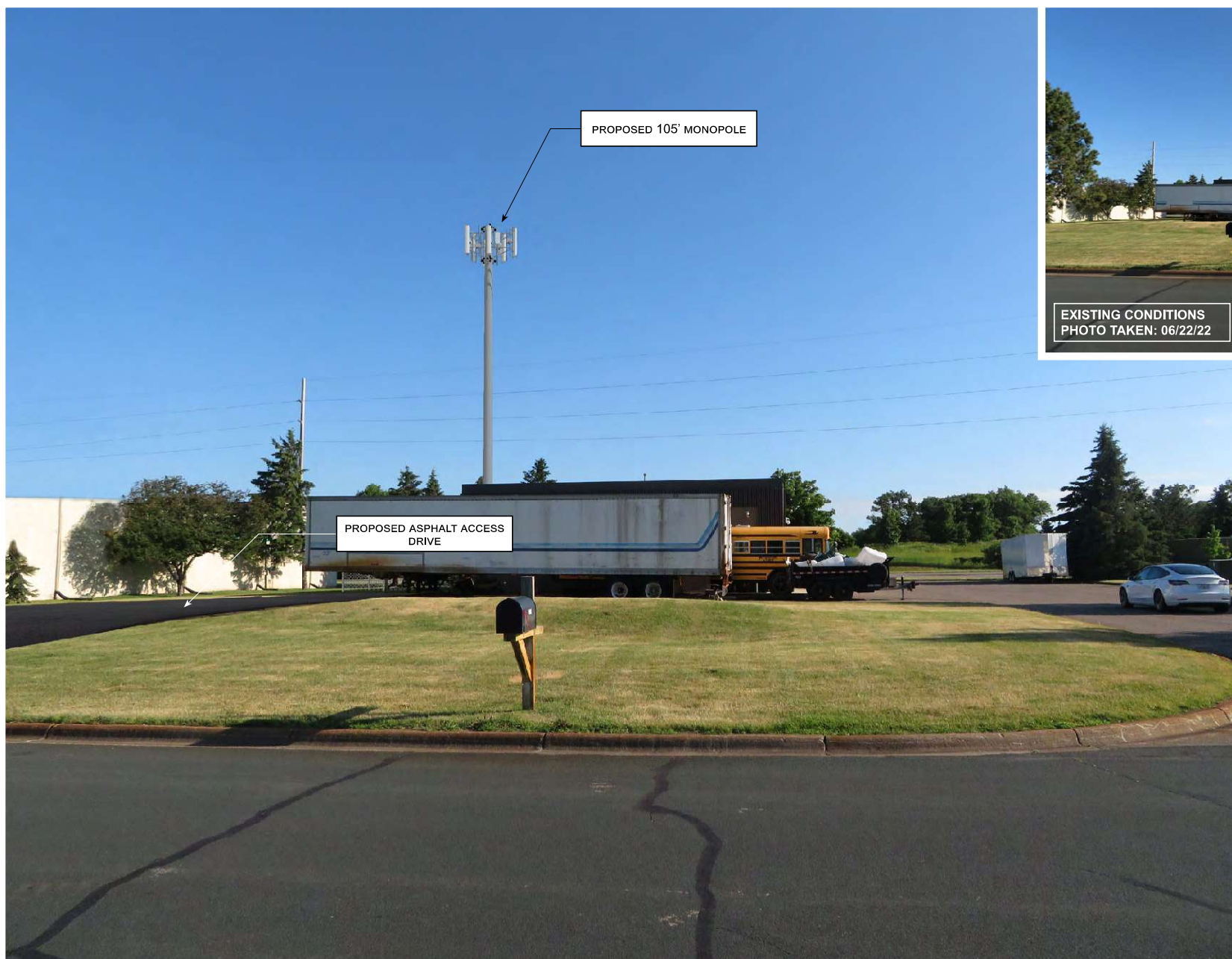


PHOTO SIMULATION 1

PHOTO LOCATION: PHOTO IS TAKEN FROM THE SOUTH SIDE OF 108 LANE NE FACING NORTHWEST

SITE INFORMATION:

SITE NAME: BLAIN
SITE NUMBER: US-MN-5101
LOCATION: BLAIN, MN
EDGE PROJECT #: 34048

INT.	DATE	DESCRIPTION
ALP	06/27/22	REV. 0

Edge
 Consulting Engineers, Inc.
 624 WATER STREET
 PRAIRIE DU SAC, WI 53578
 608.664.1449 VOICE
 608.664.1549 FAX
 www.edgeconsult.com

verticalbridge

PROPOSED 105' MONOPOLE

EXISTING CONDITIONS
PHOTO TAKEN: 06/22/22

PHOTO SIMULATION 2

PHOTO LOCATION: PHOTO IS TAKEN FROM THE SOUTH SIDE OF NASSAU CIRCLE FACING SOUTHEAST

SITE INFORMATION:

SITE NAME: BLAIN

SITE NUMBER: US-MN-5101

LOCATION: BLAIN, MN

EDGE PROJECT #: 34048

INT.	DATE	DESCRIPTION
ALP	06/27/22	REV. 0



Edge

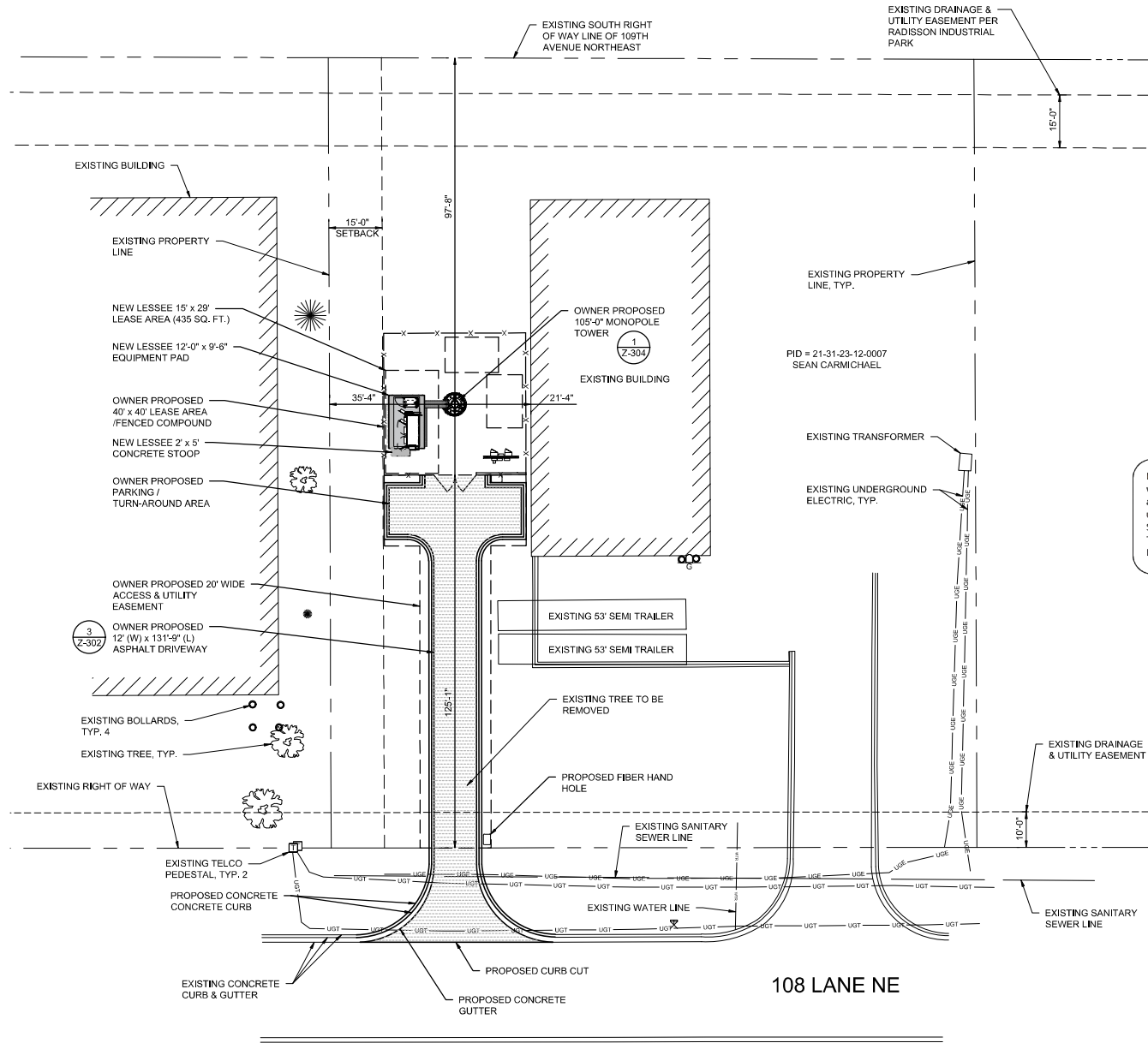
Consulting Engineers, Inc.

624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.664.1449 VOICE
608.664.1549 FAX
www.edgeconsult.com

verticalbridge

NOTES:

1. THIS DRAWING IS BASED ON A SITE SURVEY BY WIDSETH, DATED 05/04/2022. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. THE PROPOSED USE DOES NOT REQUIRE FULL OR PART TIME EMPLOYEES AT THE SITE.
3. FOR GENERAL SITE WORK NOTES, SEE SHEET C-003.
4. ALL NORTH ARROWS ON SITE PLANS ARE TRUE NORTH, UNLESS OTHERWISE SPECIFIED.



1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH : 423-843-9500 / FAX : 423-843-9509

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE CLIENT IS STRICTLY PROHIBITED.

DRAWN BY CAE
CHECKED BY FDW

REVISIONS				
0	06/16/22	CAE	CAE	ZONING ISSUE
A	06/06/22	CAE	CAE	PRELIMINARY ZDs
#	DATE	BY	DESCRIPTION	

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.
Signature: John Liu
Typed or Printed Name: John Liu
Date: 6/16/2022 License Number: 53472

CARRIER:

(HEREINAFTER REFERRED TO AS "LESSEE")

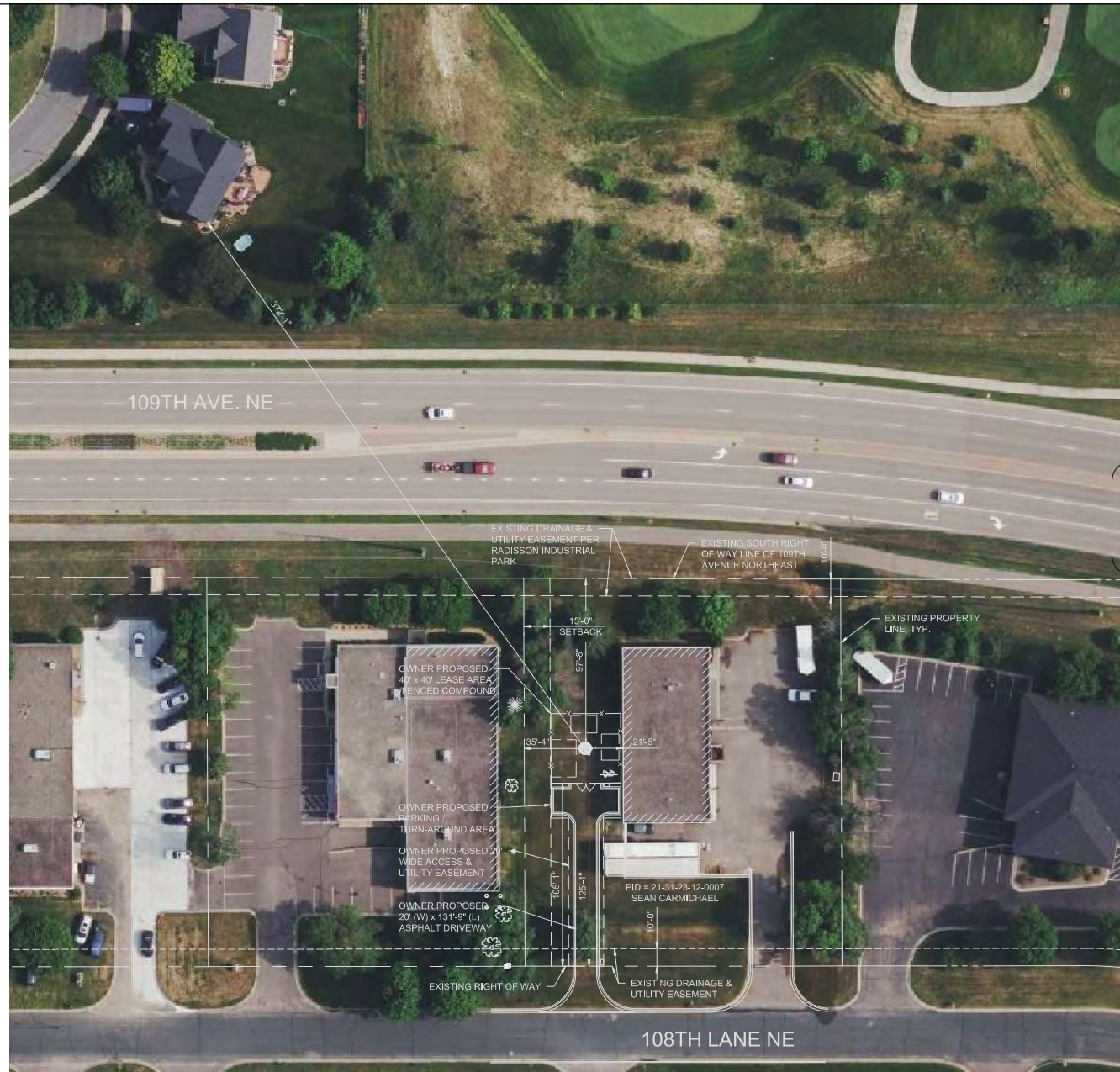
SITE NAME : BLAIN
SITE # / LOCATION CODE : 15448464 (ABM)

SITE NAME : BLAIN
SITE NUMBER : US-MN-5101

SITE ADDRESS : 108TH LANE NE
BLAINE, MN 55449
SITE TYPE : RAWLAND

SHEET TITLE :
OVERALL SITE LAYOUT PLAN

DRAWING # : Z-101
REVISION : 0



TeleCAD
Wireless

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
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CHECKED BY	FDW

REVISIONS				
0	06/16/22	CAE	ZONING ISSUE	
A	06/06/22	CAE	PRELIMINARY ZDs	
#	DATE	BY	DESCRIPTION	

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature: [Signature]
Typed or Printed Name: John Liu
Date: 6/16/2022 License Number: 53472

CARRIER:

AT&T
(HEREINAFTER REFERRED TO AS "LESSEE")

SITE NAME : BLAIN
SITE # / LOCATION CODE : 15448464 (ABM)

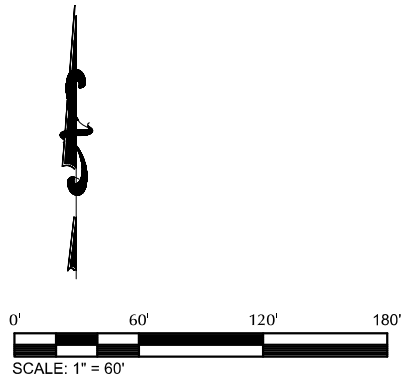
verticalbridge

SITE NAME : BLAIN
SITE NUMBER : US-MN-5101

SITE ADDRESS : 108TH LANE NE
BLAINE, MN 55449
SITE TYPE: RAWLAND

SHEET TITLE : ZONING SITE LAYOUT PLAN

DRAWING # :	REVISION :
Z-101.1	0



OWNER PROPOSED 40' x 40'
LEASE AREA & 6' CHAIN LINK
FENCE W/ 3 STRANDS
OF BARBED WIRE

NEW LESSEE 15' x 29'
LEASE AREA (435 SQ. FT.)

NEW LESSEE POLAR POWER
20 KW DIESEL DC
GENERATOR
MODEL #: 8220-603-D-20-03-V
CONMST ID: NEQ.44444

NEW LESSEE (3) DC12-48-60-25E
RAYCAP UNIT (STACKED)

NEW LESSEE
DELTA W.U.C. 3 BAY
MODEL #: ESOP030 HCU01
CONMAT ID: NEQ.20111

NEW LESSEE 10'-0" x 15'-0"
EQUIPMENT PAD

NEW LESSEE EMI 87" x 168"
BOLT TOGETHER PLATFORM
& CANOPY

1'-4"
SLAB

EXISTING 15' PROPERTY
SETBACK LINE

NEW LESSEE 2' x 5'
CONCRETE STOOP

OWNER PROPOSED
PARKING /
TURN-AROUND AREA

NEW LESSEE
(3) DC12-48-60-25E
RAYCAP UNIT
(STACKED)

NEW LESSEE
ICE BRIDGE,
LENGTH = 18'-5"±

OWNER PROPOSED
105'-0" MONOPOLE
TOWER

OWNER PROPOSED
12' WIDE GATE

OWNER PROPOSED
8' WIDE UTILITY
H-FRAME

PROPOSED FIBER HAND
HOLE. FIBER ROUTING
TBD.

0' 4' 8' 12'
SCALE: 1" = 4'



1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH : 423-843-9500 / FAX : 423-843-9509

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DRAWN BY CAE
CHECKED BY FDW

REVISIONS				
0	06/16/22	CAE	ZONING ISSUE	
A	06/06/22	CAE	PRELIMINARY ZDs	
#	DATE	BY	DESCRIPTION	

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CARRIER:
AT&T
(HEREINAFTER REFERRED
TO AS "LESSEE")

SITE NAME : BLAIN
SITE # / LOCATION CODE :
15448464 (ABM)

verticalbridge
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SITE NUMBER :
US-MN-5101

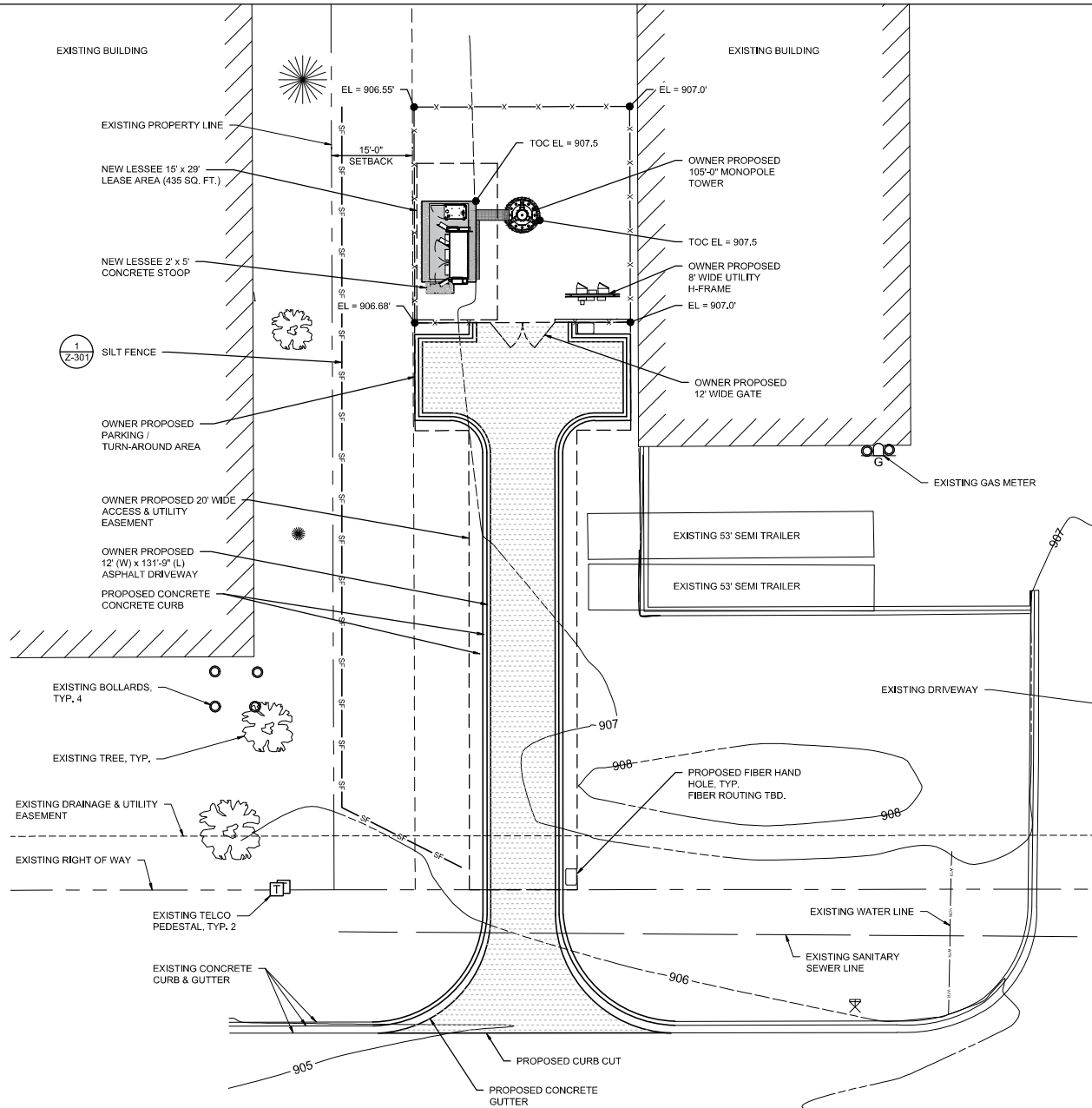
SITE ADDRESS :
108TH LANE NE
BLAINE, MN 55449
SITE TYPE : RAWLAND

SHEET TITLE :
EQUIPMENT LAYOUT PLAN

DRAWING # : Z-103
REVISION : 0

NOTES:

1. NO GRADING REQUIRED.



1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH : 423-843-9500 / FAX : 423-843-9509

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CHECKED BY	FDW

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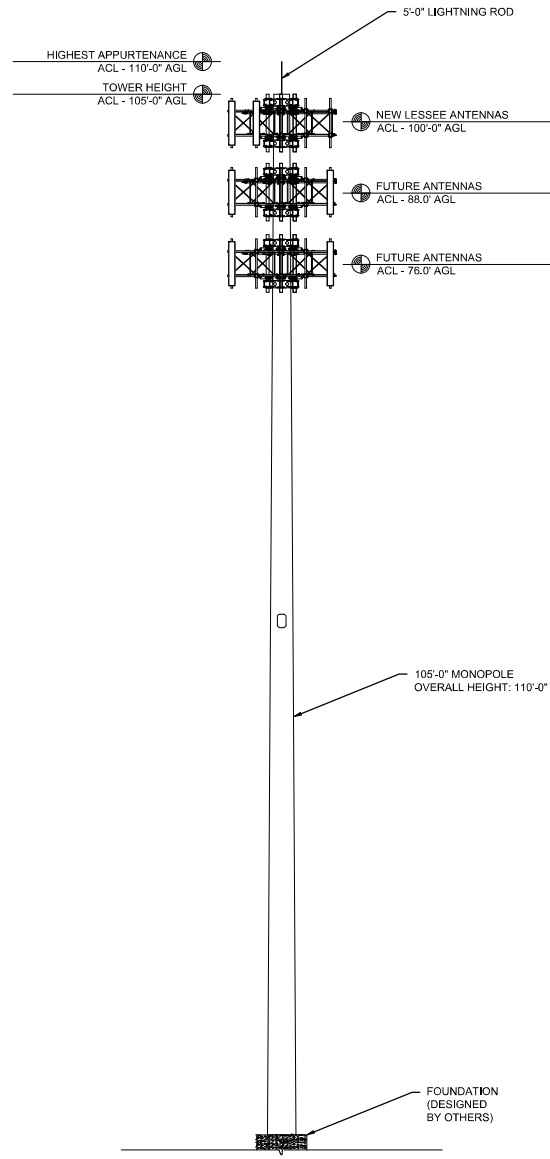
SITE NAME : BLAIN
SITE # / LOCATION CODE : 15448464 (ABM)

SITE NAME : BLAIN
SITE NUMBER : US-MN-5101

SITE ADDRESS : 108TH LANE NE
BLAINE, MN 55449
SITE TYPE: RAWLAND

SHEET TITLE : SITE GRADING PLAN

DRAWING # :	REVISION :
Z-201	0



TOWER ELEVATION ①
NTS

TeleCAD Wireless
1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH : 423-843-9500 / FAX : 423-843-9509

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DRAWN BY	CAE
CHECKED BY	FDW

REVISIONS				
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A	06/06/22	CAE	PRELIMINARY ZDs	
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CARRIER:
AT&T
(HEREINAFTER REFERRED TO AS "LESSEE")
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SITE # / LOCATION CODE : 15448464 (ABM)

verticalbridge
SITE NAME : BLAIN
SITE NUMBER : US-MN-5101

SITE ADDRESS : 108TH LANE NE
BLAINE, MN 55449
SITE TYPE: RAWLAND

SHEET TITLE :
SITE DETAILS

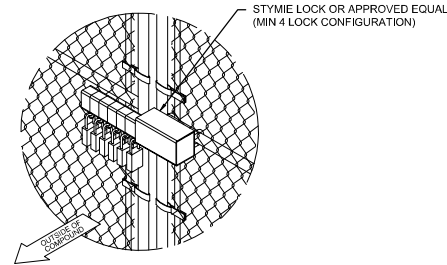
DRAWING # : Z-304	REVISION : 0
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TYPICAL WOVEN WIRE FENCING NOTES:

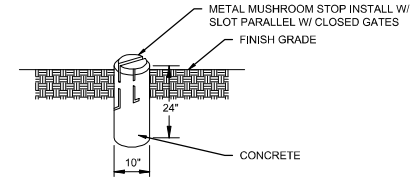
(INSTALL FENCING PER ASTM F-567, SWING GATES PER ASTM F-900)

- GATE POST, CORNER, TERMINAL OR PULL POST SHALL BE 3"Ø SCHEDULE 40 FOR GATE WIDTHS UP THRU 7 FEET OR 14 FEET FOR DOUBLE SWING GATE PER ASTM-F1083.
- LINE POST: 2"Ø SCHEDULE 40 PIPE PER ASTM-F1083. INSTALL EVERY 8'-0" ALONG FENCE LINE.
- GATE FRAME: 1-1/2"Ø SCHEDULE 40 PIPE, STELL, HOT-DIPPED ZINC COATED (GALVANIZED) WELDED STEEL PIPE PER ASTM-F1083.
- TOP RAIL & BRACE RAIL: 1-5/8"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
- CHAIN LINK FABRIC: 9 GA. MIN. CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392.
- TIE WIRE: MINIMUM 11 GA. GALVANIZED STEEL INSTALL A SINGLE WRAP TIE WIRE AT POSTS AND RAILS AT MAX. 24" INTERVALS. INSTALL HOG RINGS ON TENSION WIRE AT 24" INTERVALS.
- TENSION WIRE: 7 GA. GALVANIZED STEEL
- BARBED WIRE: DOUBLE STRAND 12-1/2" GA. TWISTED WIRE, 4 PT. BARBS SPACED ON APPROXIMATELY 5" CENTERS. (IF USED)
- GATE LATCH: 1-3/8" OD PLUNGER ROD W/ MUSHROOM TYPE CATCH AND LOCK (KEYED ALIKE FOR ALL SITES OR COMBINATION AS SPECIFIED BY OWNER)
- LOCAL ORDINANCE FOR BARBED WIRE PERMIT SHALL GOVERN INSTALLATION.
- HEIGHT: 6" VERTICAL + 1" BARBED WIRE VERTICAL DIMENSION. WORK WITH SPECIFICATION 2831.

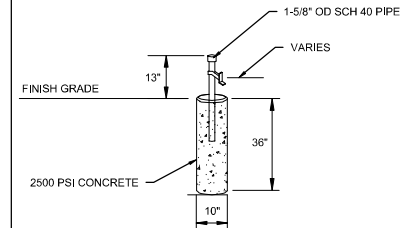
CHECK LOCAL CODES FOR BARBED WIRE REQUIREMENTS.



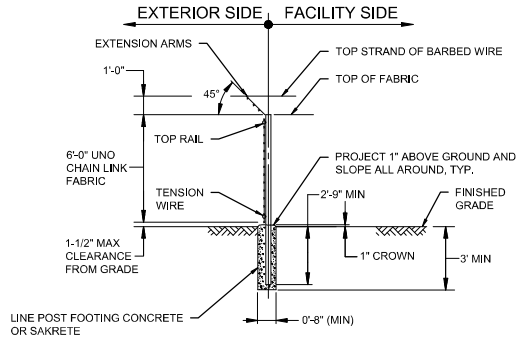
FENCE LOCK DETAIL
NTS



MUSHROOM STOP
NTS

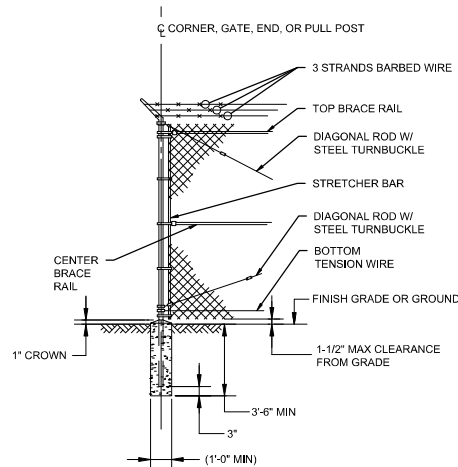


GATE STOP DETAIL
NTS

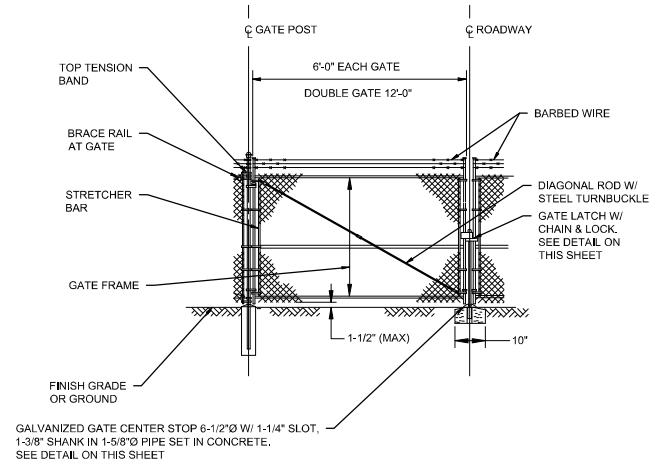


TYPICAL SECTION

WOVEN WIRE FENCE ①
NTS



WOVEN WIRE CORNER, GATE, END OR PULL POST ②
NTS



WOVEN WIRE DOUBLE GATE ③
NTS



1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH : 423-843-9500 / FAX : 423-843-9509

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DRAWN BY CAE
CHECKED BY FDW

REVISIONS				
0	06/16/22	CAE	ZONING ISSUE	
A	06/06/22	CAE	PRELIMINARY ZDs	
#	DATE	BY	DESCRIPTION	

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.
Signature: *John Liu*
Typed or Printed Name: John Liu
Date: 6/16/2022 License Number: 53472

CARRIER:
AT&T
(HEREINAFTER REFERRED TO AS "LESSEE")

SITE NAME : BLAIN
SITE # / LOCATION CODE : 15448464 (ABM)

verticalbridge
SITE NAME : BLAIN
SITE NUMBER : US-MN-5101

SITE ADDRESS : 108TH LANE NE
BLAIN, MN 55449

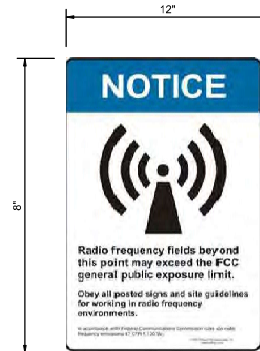
SITE TYPE: RAWLAND

SHEET TITLE : SITE DETAILS

DRAWING # : Z-306
REVISION : 0



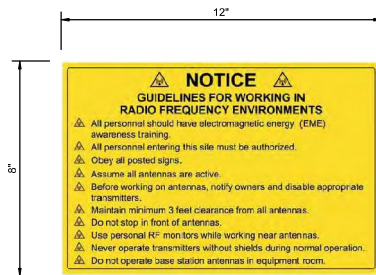
① NO TRESPASSING - 10" x 14"
NTS



② RF GUIDELINES - 8" x 12"
NTS



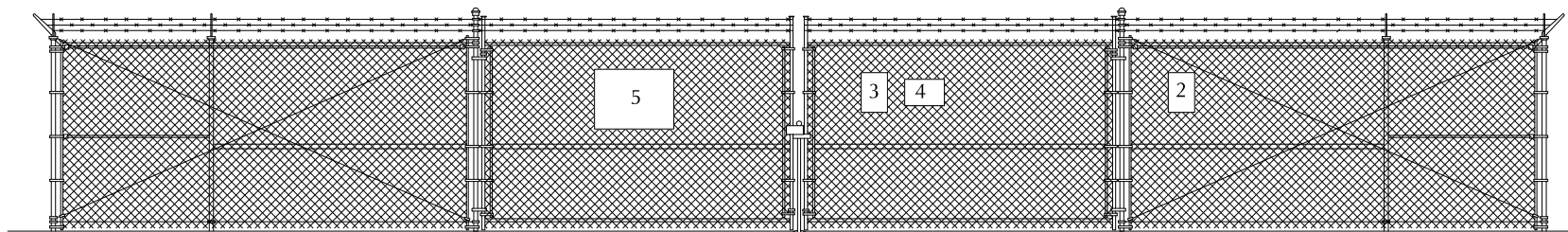
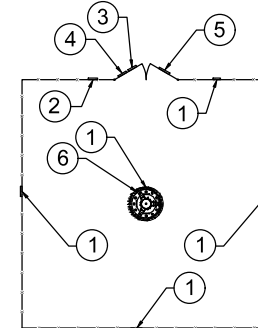
③ RF GUIDELINES - 8" x 12"
NTS



④ RF GUIDELINES - 8" x 12"
NTS



⑤ SITE ID SIGN - 18" x 24"
NTS



TeleCAD
Wireless

1961 NORTHPOINT BLVD, SUITE 130
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0	06/16/22	CAE	ZONING ISSUE	
A	06/06/22	CAE	PRELIMINARY ZDs	

FOR REFERENCE
ONLY

CARRIER:
AT&T
(HEREINAFTER REFERRED TO AS "LESSEE")

SITE NAME : BLAIN
SITE # / LOCATION CODE : 15448464 (ABM)

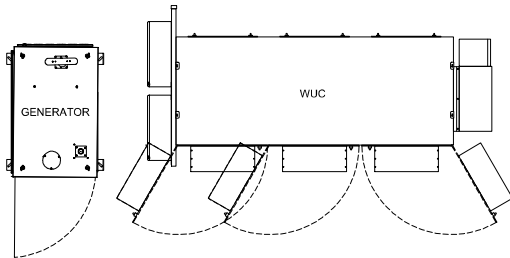
verticalbridge

SITE NAME : BLAIN
SITE NUMBER : US-MN-5101

SITE ADDRESS : 108TH LANE NE
BLAINE, MN 55449
SITE TYPE : RAWLAND

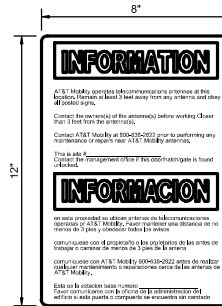
SHEET TITLE : SITE DETAILS

DRAWING # : Z-307
REVISION : 0



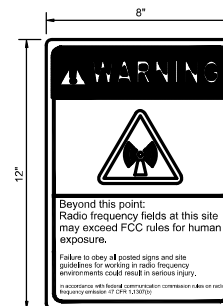
SIGN LOCATIONS ON WUC & GENERATOR

NTS



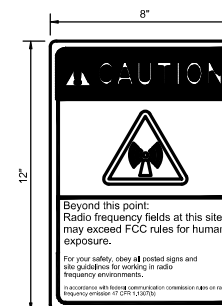
RFE NOTICE (GREEN) SIGN - 12" x 8"

NTS



RFE NOTICE (BLUE) SIGN - 12" x 8"

NTS

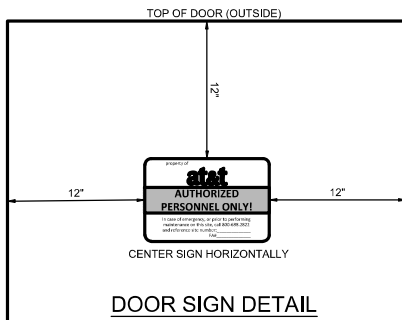


RFE NOTICE (YELLOW) SIGN - 12" x 8"

NTS

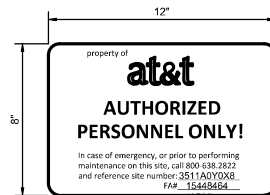
RF CAUTION SIGNS:

RF CAUTION SIGNS TO BE INSTALLED AS DETERMINED BY SITE RF EXPOSURE SURVEY



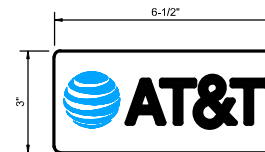
DOOR SIGN DETAIL

NTS



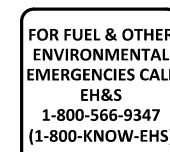
AT&T IDENTIFICATION SIGN - 8" x 12"

NTS



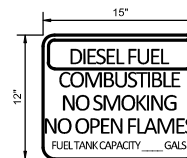
AT&T IDENTIFICATION SIGN - 3" x 6-1/2"

NTS



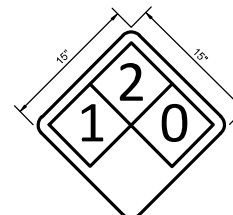
YELLOW EH&S SIGN

NTS



FUEL TANK SIGN - 12" x 15"

NTS

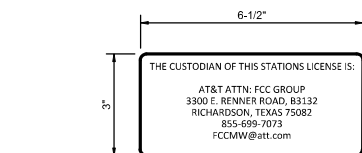


HAZARD DIAMOND SIGN - 15" x 15" W/ 6" LETTERS

NTS

② GENERATOR SIGNS:

EACH SIDE OF GENERATOR



FCC CUSTODIAL LICENSE SIGN - 3" x 6-1/2"

NTS



DANGER SIGN - 10" x 14"

NTS



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SITE ADDRESS :	108TH LANE NE BLAIN, MN 55449
SITE TYPE:	RAWLAND

SHEET TITLE :	SITE DETAILS
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DRAWING # :	REVISION :
Z-308	0