



Planning and Zoning Commission Agenda

Grimes Planning and Zoning Commission
June 3, 2025 @ 5:30 PM
Grimes Community Complex, 410 SE Main Street

Public Comment: If you would like to address the Planning and Zoning Commission during the Public Comment portion of the meeting, please sign up upon entrance to the meeting. Participants must be recognized by the presiding officer and must state their full name and address before addressing the Planning and Zoning Commission. The presiding officer will recognize you for 3 minutes of comment, and your microphone will be turned on. Pursuant to §21.4(2) of the Code of Iowa (2019), the City has the right to amend this agenda up until 24 hours before the posted meeting time. For any additional assistance or questions in attending the meeting, please call 515-986-3036. Meetings will be recorded.

GENERAL AGENDA ITEMS

1. Call to Order
2. Roll Call
3. Approval of the Agenda
4. Approval of the Previous Minutes

PUBLIC AGENDA ITEMS

1. Hope Meadows Plat 3 Final Plat
2. American Mechanical 3.0 Site Plan Amendment
3. Verizon Des Beaver Creek Site Plan Amendment
4. Adjournment



101 NE Harvey Street, Grimes, Iowa 50111 | P: 515.986.3036

This meeting of the Grimes Planning and Zoning Commission was called to order Tuesday, May 6th, 2025 at 5:29 P.M.

Roll Call: Present: Scott Almeida, Russ Lickteig, Craig Patterson, Courtney Strutt-Todd, Adam Bunge, Council Liaison: Andrew Borcharding

Staff: Alex Pfaltzgraff, Evann Martin, Alivia Hoodjer, Rachel Greving, Stephanie Moss

Absent: Craig Patterson

A. GENERAL AGENDA ITEMS

1. Call to Order

2. Roll Call

3. APPROVAL OF THE AGENDA

Motion by Bunge, Second by Lickteig, to approve the agenda

Roll Call: Ayes-All; Nays-0 Motion passes: 4-0

4. APPROVAL OF THE MINUTES

Motion by Lickteig, Second by Reiland, to approve the minutes from the April 07, 2025 meeting

Roll call: Ayes-All: Nays-0 Motion passes: 4-0

B. PUBLIC AGENDA ITEMS

Learning Care Group Site Plan

Staff member Martin presents the details of the proposed site plan, located at 100 NE 18th Street. A 10,273 sf daycare facility with an outdoor play area is proposed. The property will be divided into two lots: one for the daycare and one for future development to the south. A city improvement easement will be established along the north side of the lot to realign NE Street with NW 18th Street across N James Street as a future improvement.

The Commission discussed the proposal and asked questions of staff.

Motion by Reiland, Second by Bunge to approve Learning Care Group Site Plan.

Roll Call: Aye-All Nay-0 **Motion Passes 4-0**

C. PUBLIC AGENDA ITEMS

Ziggi's Coffee Site Plan

Staff member Hoodjer presents the details of the proposed site plan located at 1201 NE Gateway Drive. 865 sf building, dumpster enclosure, outdoor seating area, and parking lot on the 1.52-acre property. Currently, the applicant is revising the elevations to include a roofline with more varying heights, as intended in the Heritage at Grimes PUD code. The Heritage Review Committee has given their recommendation of approval for the site and architectural plans.

The Commission discussed the proposal and asked questions of staff.

Motion by Lickteig, Second by Reiland to approve Ziggi's Coffee Site Plan

Roll Call: Aye-All Nay-0 **Motion Passes 4-0**

D. PUBLIC FORUM – None

E. REPORTS

1. **Department Update – N/A**
2. **Council Liaison Update – N/A**
3. **Old Business – N/A**
4. **New Business – N/A**
5. **Next meeting June 3rd, 2025**

Meeting is adjourned at 5:57 p.m.

Chairperson Signature

Clerk Signature

DATE

June 3, 2025

PROJECT NAME

Hope Meadows Plat 3
Final Plat

APPLICANT

Hope K Farms

REQUESTED ACTION

Approval of the final plat to
subdivide two lots on 14.06
acres

LOCATION

Generally located south of W 1st
Street, north of SW 4th Street
and west of SW Meadowbrooke
Drive

ZONING

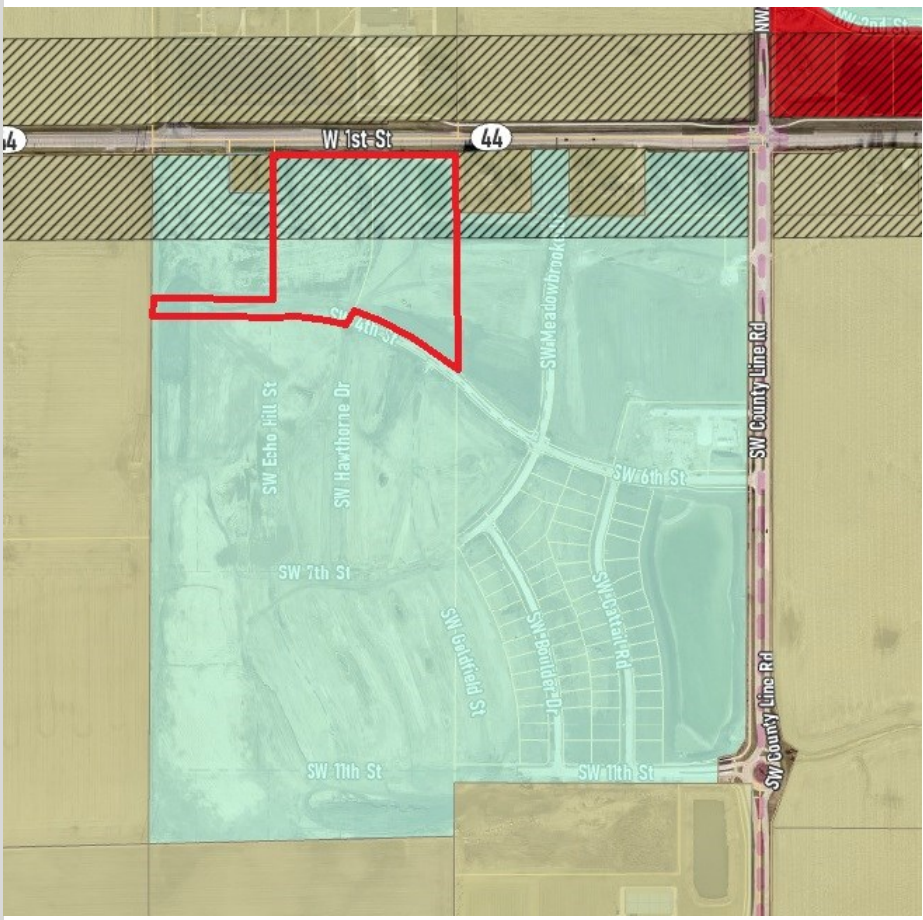
R-4
Meadows PUD

PLANNER

Evann Martin
emartin@grimesiowa.gov
(515) 986-4050



Location Map



Zoning Map

Relation to Comprehensive & Neighborhood Plans

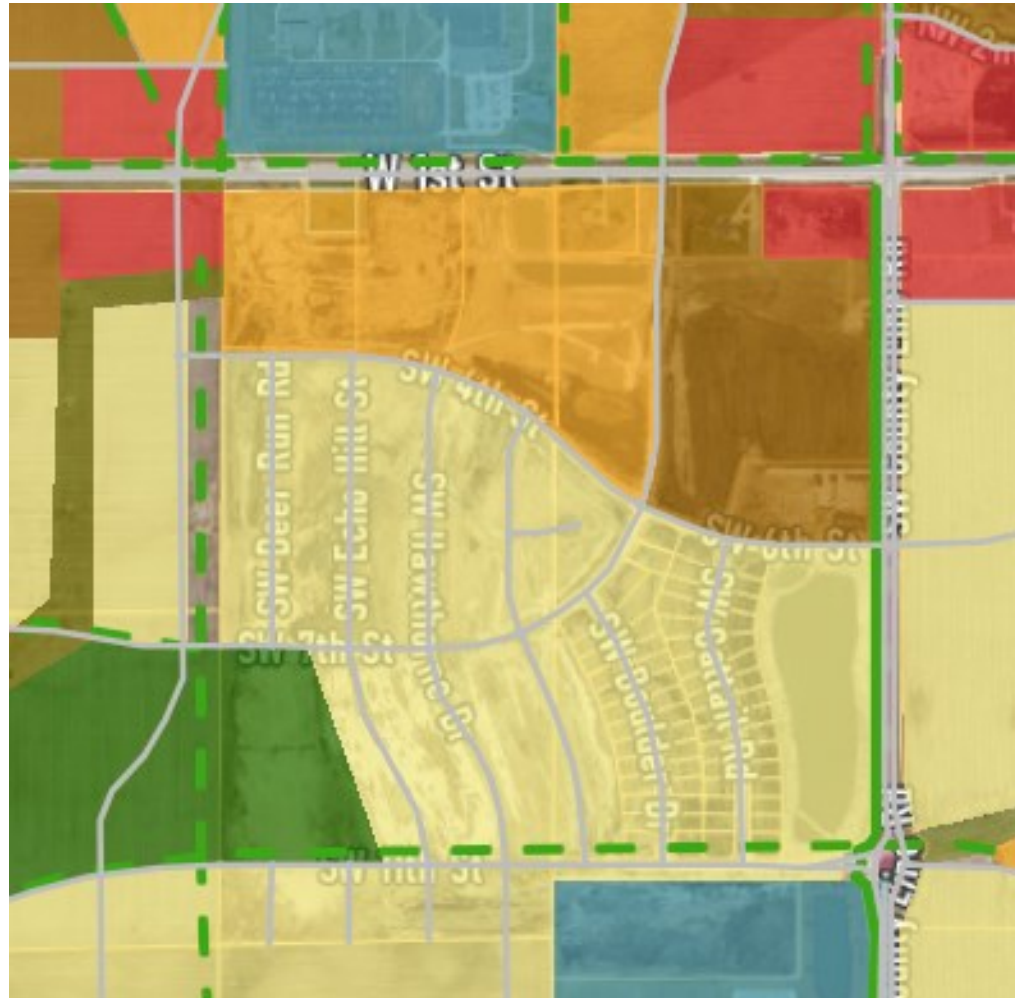
LAND USES & ZONING

Location	Existing Land Use	Land Use Plan Designation	Current Zoning
Subject Site	Vacant	MDR	R-4
North	School	Civic	A-1
South	Single-Family (Under construction)	LDR	R-4
East	Vacant	MDR	R-4
West	Vacant	Commercial/LDR	A-1

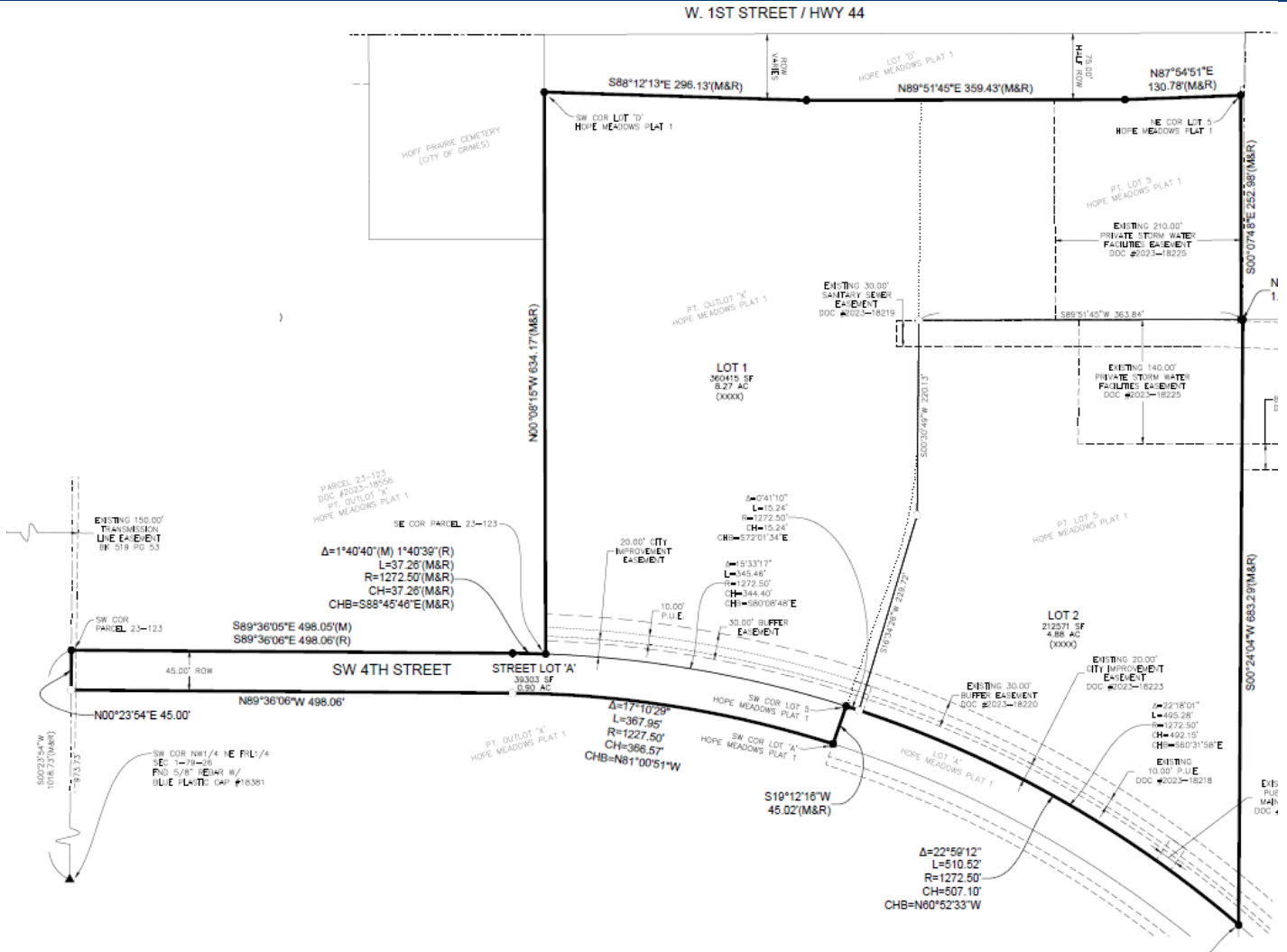
PARKS

The property to be platted is part of the Meadows PUD. All required parkland within the development will be dedicated with a future plat, consistent with the Master Plan for the PUD.

Future Land Use Map



Plat Layout



PLAT LAYOUT

The plat will consist of two lots for development and one street lot for SW 4th Street.

ACCESS

Access to the lots within the plat will be provided from SW 4th Street. Access to Highway 44 is not permitted.

PEDESTRIAN CONNECTIVITY

The trail along the north side of SW 4th Street will be constructed with the site plan for each lot.

EASEMENTS

Easements for public utilities, landscape buffer, and city improvement easement will be provided. The landscape buffer and the street trees within the city improvement easement will be established with the site plan for each lot. Easements for private detention are already established and basins constructed to serve the plat.

UTILITIES

Sanitary sewer is available toward the north side of the lots. Water will be constructed along SW 4th Street with the public improvements for the plat.

Legal, Studies & Conclusion

LEGAL

The plat is subject to the Amended and Restated Meadows PUD Zoning Change and Development Agreement.

All legal documents related to the final plat will be required to be submitted for review and will be recorded with the plat.

RELATION TO STUDIES

Right-of-way has already been dedicated along Highway 44 to accommodate future road improvements consistent with the Highway 44 Corridor Study.

Conclusion

The plat will consist of two development lots and one street lot.

No additional right-of-way is required along Highway 44.

The trail, landscape buffers, and street trees will be established with the site plans for each lot.

All legal documents will be required to be submitted for review and will be recorded with the plat.

Staff Recommendation

Staff recommend approval subject to any remaining staff comments and legal document review.



Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

May 23, 2025

Civil Design Advantage

Attn: Jared Murray
4121 NW Urbandale Drive
Urbandale, IA 50323

RE: Hope Meadows Plat 3 Final Plat

Dear Jared:

The Development Services Department is in receipt of a proposed Final Plat for Hope Meadows Plat 3. Based on the review of the provided submittal materials, staff have the following comments:

General Comments:

1. Provide vicinity sketch.
2. Update zoning section to the following:
 - a. R-4 – Hope Meadows PUD – townhome residential
 - b. Add reference to the Amended and Restated Meadows Zoning Change and Development Agreement BK PG (staff will provide the BK & PG)
3. City to provide addresses for each lot.
4. Provide road extension fee for SW 4th St.

Legal Comments:

All legal documents are required to be submitted for review no later than 2 weeks prior to the desired Council date.

1. A title opinion by an attorney-at-law who has examined the abstract of title of the land being platted. The opinion shall state the names of the proprietors and holders of mortgages, liens or other encumbrances on the land being platted and shall note the encumbrances, along with any bonds securing the encumbrances.

2. A certificate by the owner(s) that the subdivision is with their free consent and is in accordance with the desire of the owner(s). This certificate must be signed and acknowledged by the owner(s) before a notary.
3. A statement from the mortgage holders or lienholders, if any, that the plat is prepared with their free consent and in accordance with their desire, signed and acknowledged before a notary.
4. A certificate of the County Treasurer that the land is free from certified taxes and certified special assessments or that the land is free from certified taxes and that the certified special assessments are secured by bond in compliance with Iowa Code Chapter 354.
5. Approval of the subdivision name from the County, if required.
6. A resolution and certificate for approval by the Council and signatures of the Mayor and Clerk. To be provided by the City.
7. Any easement documents and their legal descriptions, and mortgage holder consent, if applicable.
 - a. PUE
 - b. City improvement easement
 - c. Landscape buffer easement
8. Declaration and Covenants, Restrictions, and Easements, if applicable.
9. Any deeds for property intended to be dedicated for public use, and mortgage release, if applicable.
10. A list of the minimum protection elevations (MPEs) for each lot within the plat. This document shall be certified by a licensed engineer. MPE's shall not be referenced on the final plat.
11. Agreement to Complete Public Improvements with performance bond or letter of credit for incomplete public improvements. Staff will draft the agreement based on the bond amount.
12. Four (4) year maintenance bonds for public improvements. This can be provided upon completion of construction.
13. Executed electric and gas distribution agreements.

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: May 30, 2025
(1 PDF of Final Plat and Legals)

PLANNING & ZONING: June 3, 2025 at 5:30

COUNCIL MEETING: June 24, 2025 at 5:30 (dependent on legal docs)

Please feel free to contact me at emartin@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,

Evann Martin
Senior Planner

HOPE MEADOWS PLAT 3

FINAL PLAT

W. 1ST STREET / HWY 44

INDEX LEGEND

LOCATION: LOT 5 & PT. OUTLOT 'X'
HOPE MEADOWS PLAT 1
GRIMES, DALLAS COUNTY, IOWA

REQUESTOR: HOPE K FARMS LLC

PROPRIETOR: HOPE K FARMS LLC
4500 WESTOWN PARKWAY, SUITE #277
WEST DES MOINES, IA 50266

SURVEYOR: JONATHAN A. ERDAHL

SURVEYOR COMPANY: CIVIL DESIGN ADVANTAGE

PREPARED BY & RETURN TO: CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE
URBANDALE, IOWA 50322
PH: 515-369-4400

OWNER / DEVELOPER

HOPE K FARMS LLC
4500 WESTOWN PARKWAY, SUITE #277
WEST DES MOINES, IA 50266
CONTACT: ARASH RAZIZADEH
EMAIL: ARASH.RAZIZADEH@EPCMFG.COM
PH: (515) 381-3925

ENGINEER / SURVEYOR

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE
URBANDALE, IA 50322

ZONING

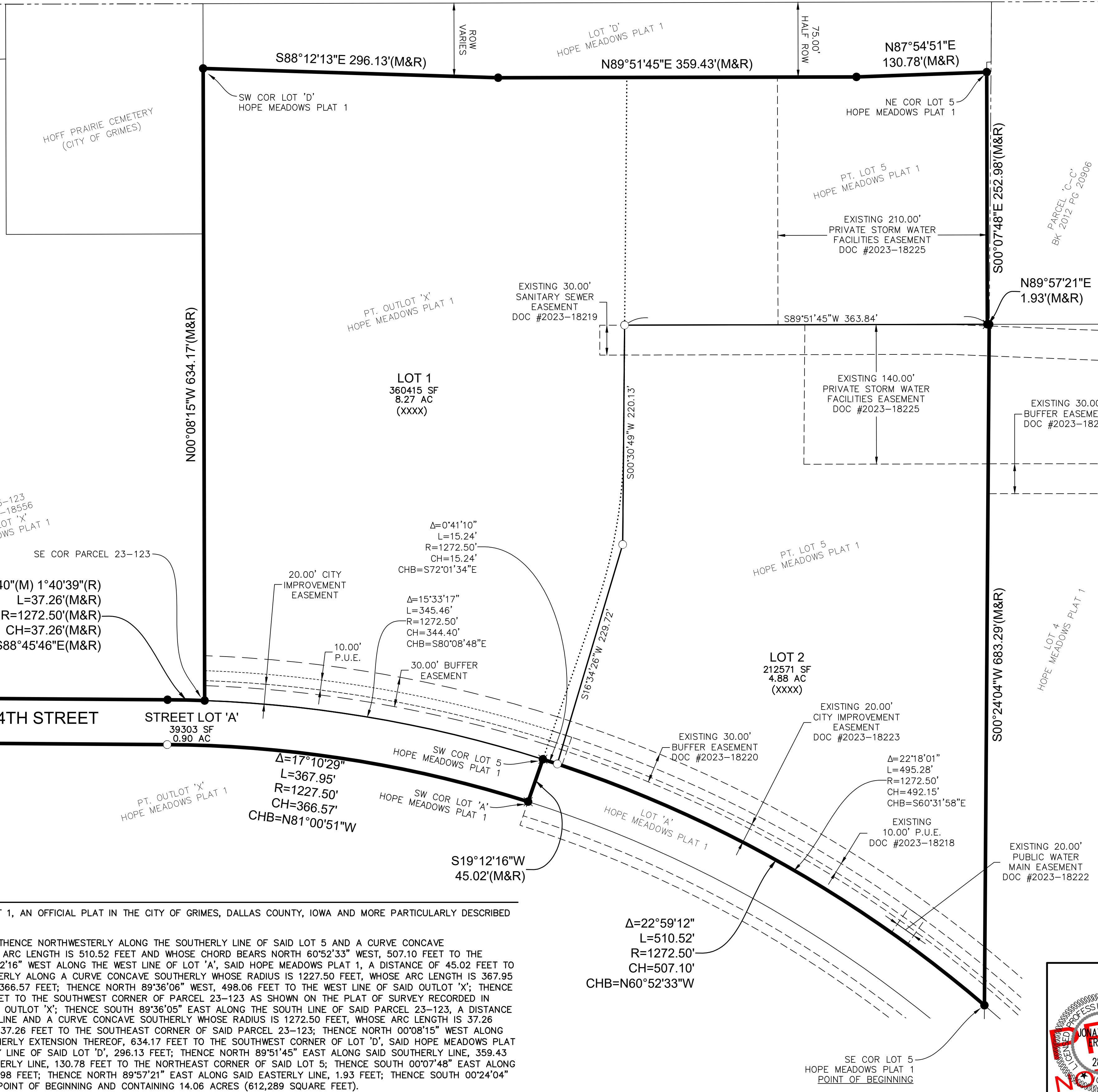
R-4: MEADOWS PUD - SINGLE FAMILY RESIDENTIAL (LOTS 1-195, OUTLOT 'Y', & OUTLOT 'W')
ORDINANCE 751 - SINGLE FAMILY RESIDENTIAL
ORDINANCE 787 - SINGLE FAMILY RESIDENTIAL
R-4: MEADOWS PUD - TOWNHOME RESIDENTIAL (OUTLOT 'X')

BULK REGULATIONS

SETBACKS
FRONT YARD = 30 FT
REAR YARD = 25 FT
SIDE YARD = 5 FT (10 FT TOTAL)

DATE OF SURVEY

FEBRUARY 25, 2025



NOTES

- ANY SET MONUMENTATION SHOWN ON THIS PLAT WILL BE COMPLETED WITHIN ONE YEAR FROM THE DATE THIS PLAT WAS RECORDED.
- LOTS MAY BE SUBJECT TO MINIMUM PROTECTION ELEVATIONS AND OTHER ELEVATION RESTRICTIONS NOT SHOWN ON THIS PLAT. REFER TO THE APPROVED PROJECT ENGINEERING DOCUMENTS FOR ANY ELEVATION RESTRICTIONS.
- STREET LOT 'A' SHALL BE DEDICATED TO THE CITY OF GRIMES FOR PUBLIC RIGHT-OF-WAY.

LEGEND

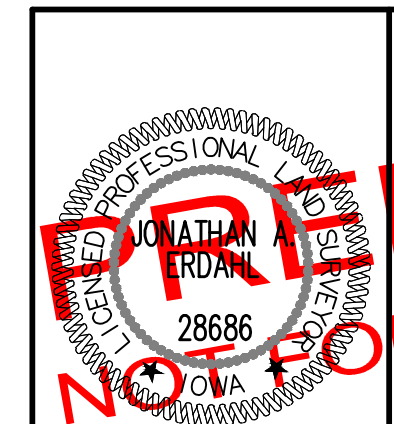
	FOUND	SET
SECTION CORNER AS NOTED	▲	△
1/2" REBAR, BLUE PLASTIC CAP #18381 (UNLESS OTHERWISE NOTED)	●	○
1/2" REBAR, YELLOW PLASTIC CAP #28686 (UNLESS OTHERWISE NOTED)		○
MEASURED BEARING & DISTANCE	M	
RECORDED BEARING & DISTANCE	R	
DEEDED BEARING & DISTANCE	D	
PUBLIC UTILITY EASEMENT	P.U.E.	
CURVE ARC LENGTH	AL	
LOT ADDRESS CENTERLINE	(1234)	
SECTION LINE	---	
EASEMENT LINE	---	
BUILDING SETBACK LINE	---	
PLAT BOUNDARY	---	

PLAT DESCRIPTION

LOT 5 AND A PART OF OUTLOT 'X', HOPE MEADOWS PLAT 1, AN OFFICIAL PLAT IN THE CITY OF GRIMES, DALLAS COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 5; THENCE NORTHWESTERLY ALONG THE SOUTHERLY LINE OF SAID LOT 5 AND A CURVE CONCAVE SOUTHWESTERLY WHOSE RADIUS IS 1272.50 FEET, WHOSE ARC LENGTH IS 510.52 FEET AND WHOSE CHORD BEARS NORTH 60°52'33" WEST, 507.10 FEET TO THE SOUTHWEST CORNER OF SAID LOT 5; THENCE SOUTH 19°12'16" WEST ALONG THE WEST LINE OF LOT 'A', SAID HOPE MEADOWS PLAT 1, A DISTANCE OF 45.02 FEET TO THE SOUTHWEST CORNER OF SAID LOT 'A'; THENCE WESTERLY ALONG A CURVE CONCAVE SOUTHERLY WHOSE RADIUS IS 1227.50 FEET, WHOSE ARC LENGTH IS 367.95 FEET AND WHOSE CHORD BEARS NORTH 81°00'51" WEST, 366.57 FEET; THENCE NORTH 89°36'06" WEST, 498.06 FEET TO THE WEST LINE OF SAID OUTLOT 'X'; THENCE NORTH 00°23'54" EAST ALONG SAID WEST LINE, 45.00 FEET TO THE SOUTHWEST CORNER OF PARCEL 23-123 AS SHOWN ON THE PLAT OF SURVEY RECORDED IN DOCUMENT NUMBER 2023-18556, BEING A PART OF SAID OUTLOT 'X'; THENCE SOUTH 89°36'05" EAST ALONG THE SOUTH LINE OF SAID PARCEL 23-123, A DISTANCE OF 498.05 FEET; THENCE EASTERLY ALONG SAID SOUTH LINE AND A CURVE CONCAVE SOUTHERLY WHOSE RADIUS IS 1272.50 FEET, WHOSE ARC LENGTH IS 37.26 FEET AND WHOSE CHORD BEARS SOUTH 88°45'46" EAST, 37.26 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL 23-123; THENCE NORTH 00°08'15" WEST ALONG THE EAST LINE OF SAID PARCEL 23-123 AND THE NORTHERLY EXTENSION THEREOF, 634.17 FEET TO THE SOUTHWEST CORNER OF LOT 'D', SAID HOPE MEADOWS PLAT 1; THENCE SOUTH 88°12'13" EAST ALONG THE SOUTHERLY LINE OF SAID LOT 'D', 296.13 FEET; THENCE NORTH 89°51'45" EAST ALONG SAID SOUTHERLY LINE, 359.43 FEET; THENCE NORTH 87°54'51" EAST ALONG SAID SOUTHERLY LINE, 130.78 FEET TO THE NORTHEAST CORNER OF SAID LOT 5; THENCE SOUTH 00°07'48" EAST ALONG THE EASTERLY LINE OF SAID LOT 5, A DISTANCE OF 252.98 FEET; THENCE NORTH 89°57'21" EAST ALONG SAID EASTERLY LINE, 1.93 FEET; THENCE SOUTH 00°24'04" WEST ALONG SAID EASTERLY LINE, 683.29 FEET TO THE POINT OF BEGINNING AND CONTAINING 14.06 ACRES (612,289 SQUARE FEET).

THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.



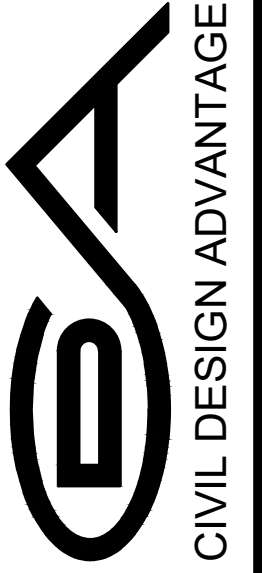
I HEREBY CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED AND THE RELATED SURVEY WORK WAS CONDUCTED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA.

JONATHAN A. ERDAHL, P.L.S. DATE: _____
LICENSE NUMBER 28686
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2025
PAGES OR SHEETS COVERED BY THIS SEAL:
THIS SHEET

DATE	REVISIONS	1ST SUBMITTAL
04/24/25		

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400

TECH: _____ REVIEW: _____
ENGINEER: _____



GRIMES, IOWA

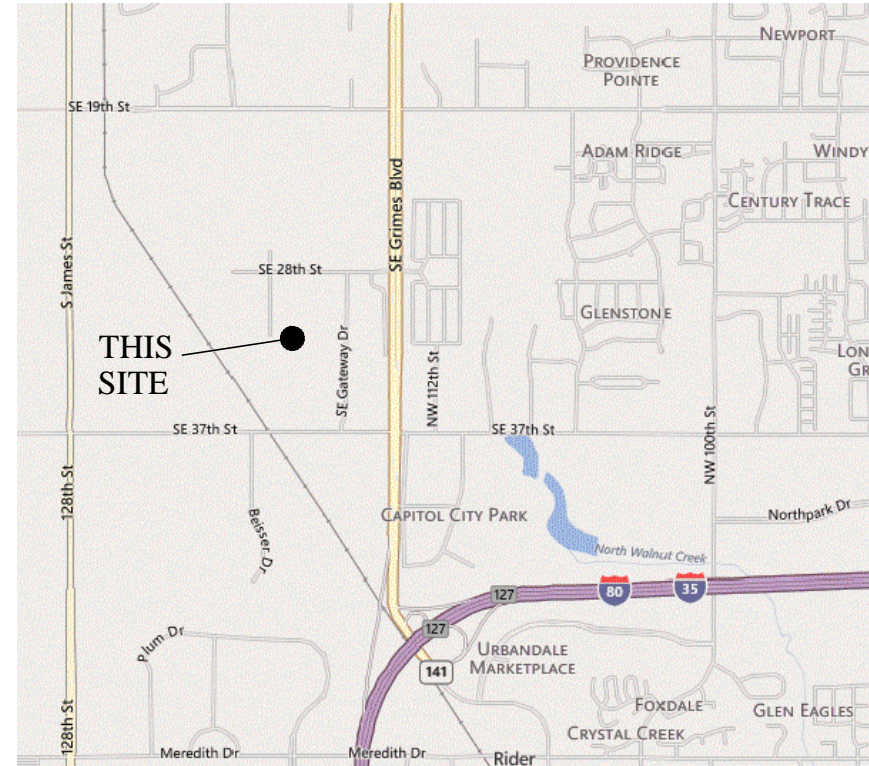
HOPE MEADOWS PLAT 3

FINAL PLAT

SITE PLAN

AMERICAN MECHANICAL GRIMES, IOWA

3105 SE ENTERPRISE DRIVE, GRIMES, IOWA 50111



LOCATION MAP
NO SCALE

SHEET INDEX

SHEET #	TITLE
1	COVER
2	DIMENSION PLAN
3	UTILITY PLAN
4	GRADING PLAN
5	LANDSCAPE PLAN
A2.0	EXTERIOR ELEVATION

FLOOD ZONE
 ZONE 'X'
 FEMA FLOOD INSURANCE RATE MAP (FIRM)
 PANEL NO. 14153C0166F & 14153C0167F
 EFFECTIVE DATE: 2/1/2014

OPEN SPACE
 REQUIRED - 10% OF 212,746 SQ. FT.
 PROVIDED - 64.06% = 136,281 SQ. FT.

SITE AREAS	EXISTING		PROPOSED	
	AREA	PERCENT	AREA	PERCENT
BUILDING	10,670 SQ. FT.	5.02%	26,040 SQ. FT.	12.24%
IMPERVIOUS	8,991 SQ. FT.	4.23%	49,111 SQ. FT.	22.95%
OPEN SPACE	155,074 SQ. FT.	72.84%	137,424 SQ. FT.	64.63%
TOTAL	212,746 SQ. FT.	100.0%	212,746 SQ. FT.	100.0%

SETBACKS
 FRONT YARD - 25'
 SIDE YARD - 0' EXCEPT WHEN ADJOINING 'R' DISTRICT OR STREET, THEN 25'
 REAR YARD - 25', HOWEVER FOR EVERY FOOT THE FRONT YARD IS INCREASED OVER 25 FEET, THE REAR YARD MAY BE DECREASED IN DIRECT PROPORTION THERETO, BUT IN NO CASE SHALL THE REAR YARD BE LESS THAN 10 FEET.
 MAXIMUM HEIGHT - 50 FEET

PARKING STALLS
 REQUIRED: 1630 SF OFFICE (3 SPACES/1000 SF) = 5 STALLS
 28,130 SF WAREHOUSE (1 SPACE/2000 SF) = 15 SPACES
 + 16 VEHICLE STALLS
 TOTAL 36 SPACES REQUIRED
 REQUIRED ADA: 2 SPACE
 PROVIDED: 48 SPACES - INCL. 2 ADA SPACES

OWNER
 M4K INVESTMENTS
 11803 NW 102ND AVENUE
 GRANGER IA 50111

LEGAL DESCRIPTION
 LOT 22, GATEWAY BUSINESS PARK, AN OFFICIAL PLAT RECORDED IN BOOK 7135, PAGE 30-43, POLK COUNTY RECORDER'S OFFICE. SAID AREA CONTAINS 4.88 ACRES.

ZONING
 M-1A COMMERCIAL AND LIMITED LIGHT INDUSTRIAL DISTRICT

PLANNED LAND USE
 OFFICE AND WAREHOUSE
 (1630 SF OFFICE & 27682 WAREHOUSE)

EMPLOYEES
 5 FULL TIME EMPLOYEES
 16 FIELD PERSONNEL - VEHICLE PARKING

UTILITIES
 WATER SUPPLY - CITY OF GRIMES WATER WORKS
 SEWAGE DISPOSAL PROVISION - CITY OF GRIMES
 ALL UTILITIES SHALL BE UNDERGROUND

SCHEDULE
 JUNE 1, 2025 BEGIN CONSTRUCTION
 NOVEMBER 31, 2025 COMPLETE CONSTRUCTION

APPLICANT / DEVELOPER
 M4K INVESTMENTS
 11803 NW 102ND AVENUE
 GRANGER IA 50111

GENERAL LEGEND

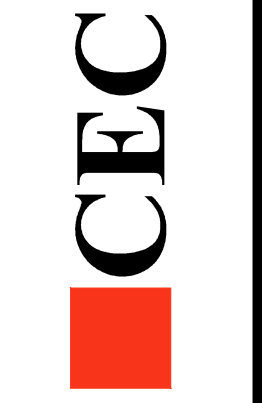
PROPOSED	EXISTING
--- PLAT BOUNDARY	--- LOT LINE
--- SECTION LINE	--- SANITARY/STORM MANHOLE
--- LOT LINE	--- WATER VALVE
--- CENTERLINE	--- FIRE HYDRANT
--- EASEMENT LINE	--- STORM SEWER SINGLE INTAKE
--- FLARED END SECTION	--- STORM SEWER DOUBLE INTAKE
TYPE SW-501 STORM INTAKE	--- STORM SEWER ROUND INTAKE
TYPE SW-502 STORM INTAKE	--- FLARED END SECTION
TYPE SW-503 STORM INTAKE	--- DECIDUOUS TREE
TYPE SW-504 STORM INTAKE	--- CONIFEROUS TREE
TYPE SW-505 STORM INTAKE	--- SHRUB
TYPE SW-506 STORM INTAKE	--- POWER POLE
TYPE SW-511 STORM INTAKE	--- STREET LIGHT
TYPE SW-512 STORM INTAKE	--- GUY ANCHOR
TYPE SW-513 STORM INTAKE	--- ELECTRIC TRANSFORMER
TYPE SW-401 STORM MANHOLE	--- GAS METER
TYPE SW-402 STORM MANHOLE	--- TELEPHONE RISER
TYPE SW-403 STORM MANHOLE	--- SIGN
TYPE SW-403 STORM MANHOLE	--- CATV UNDERGROUND TELEVISION
TYPE SW-301 SANITARY MANHOLE	--- UGE UNDERGROUND ELECTRIC
TYPE SW-302 SANITARY MANHOLE	--- UGFO UNDERGROUND FIBER OPTIC
TYPE SW-304 SANITARY MANHOLE	--- UGT UNDERGROUND TELEPHONE
TYPE SW-304 SANITARY MANHOLE	--- OHW OVERHEAD ELECTRIC
TYPE SW-304 SANITARY MANHOLE	--- SAN 8" SANITARY SEWER WITH SIZE
TYPE SW-304 SANITARY MANHOLE	--- ST 12" STORM SEWER WITH SIZE
TYPE SW-304 SANITARY MANHOLE	--- W 8" WATER MAIN WITH SIZE
TYPE SW-304 SANITARY MANHOLE	--- 426 EXISTING CONTOUR
TYPE SW-304 SANITARY MANHOLE	--- TREELINE
TYPE SW-304 SANITARY MANHOLE	--- B.S.L. BUILDING SETBACK LINE
TYPE SW-304 SANITARY MANHOLE	--- P.U.E. PUBLIC UTILITY EASEMENT
TYPE SW-304 SANITARY MANHOLE	--- M.O.E. MINIMUM OPENING ELEVATION
TYPE SW-304 SANITARY MANHOLE	--- U.N.O. UNLESS NOTED OTHERWISE
TYPE SW-304 SANITARY MANHOLE	--- DIVERSION DITCH
TYPE SW-304 SANITARY MANHOLE	--- FEMA FLOOD ZONE
TYPE SW-304 SANITARY MANHOLE	--- ZONE A
TYPE SW-304 SANITARY MANHOLE	--- SAN 12" SANITARY SEWER WITH SIZE
TYPE SW-304 SANITARY MANHOLE	--- SAN 8" SANITARY SERVICE
TYPE SW-304 SANITARY MANHOLE	--- ST 12" STORM SEWER WITH SIZE
TYPE SW-304 SANITARY MANHOLE	--- ST 8" STORM SERVICE
TYPE SW-304 SANITARY MANHOLE	--- W 12" WATER SEWER WITH SIZE
TYPE SW-304 SANITARY MANHOLE	--- W 8" WATER SERVICE
TYPE SW-304 SANITARY MANHOLE	--- 426 PROPOSED CONTOUR
TYPE SW-304 SANITARY MANHOLE	--- X-X SILT FENCE
TYPE SW-304 SANITARY MANHOLE	--- 1234 RIP RAP
TYPE SW-304 SANITARY MANHOLE	--- 1234 ADDRESS

CERTIFICATION

<p>I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.</p> <p>PRELIMINARY</p> <p>MELISSA M. HILLS, IOWA LIC. NO. 160233 DATE MY LICENSE RENEWAL DATE IS: JUNE 30, 2025 PAGES OR SHEETS COVERED BY THIS SEAL: SHEETS 1-4</p>	<p>I HEREBY CERTIFY THAT THE PORTION OF THIS TECHNICAL SUBMISSION DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF IOWA.</p> <p>PRELIMINARY</p> <p>KENT R. ZARLEY, IOWA REG. NO. 2571 MY LICENSE RENEWAL DATE IS: JUNE 30, 2025 PAGES OR SHEETS COVERED BY THIS SEAL: SHEET 5</p>
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FILED BY: CAROL MCCANN AND ERIN PAND D (3400 X 22.00 INCHES) 2025-05-28 11:40:04 AM PDF (GENERAL DOCUMENTATION) P33 G:\E-FILES\1400\ERIN_TL_GSD_Drawing\Construction Documents\01-COVER.dwg

Civil Engineering Consultants, Inc.
 2400 86th Street Unit 12 Des Moines, Iowa 50322
 515.276.4884 Fax: 515.276.7084 mail@cecinc.com



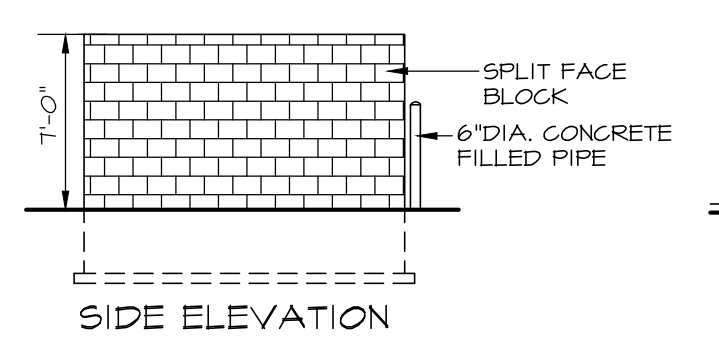
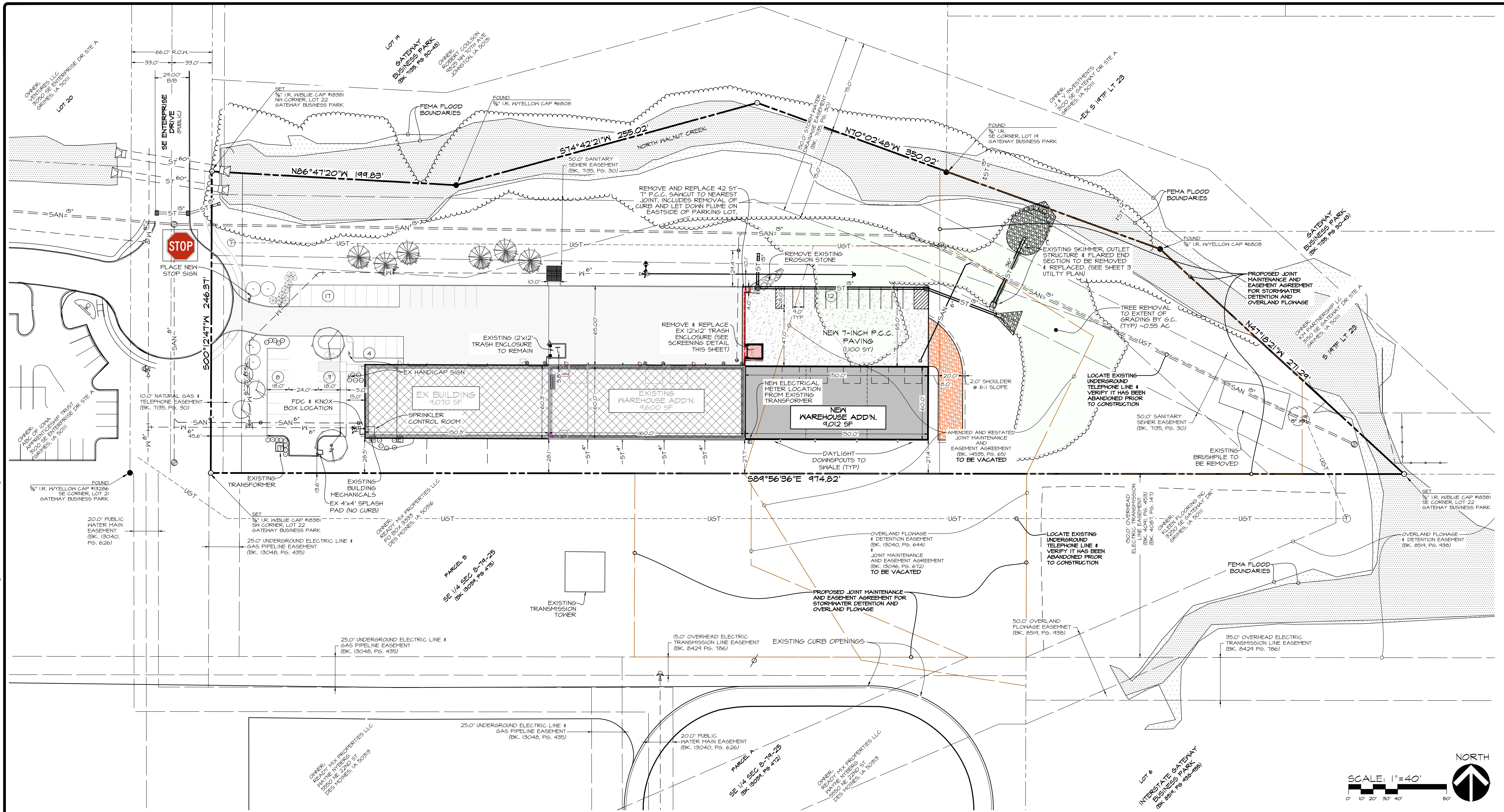
DATE: 1ST SUBMIT 02/05/2025
 2ND SUBMIT 03/28/2025
 DATE OF SURVEY: JAN. 18, 2024
 DESIGNED BY: MPH
 DRAWN BY: CMI

AMERICAN MECHANICAL
 GRIMES, IOWA
 COVER

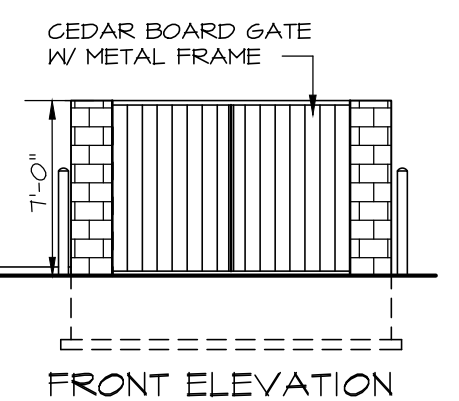
SHEET 1 OF 5
 E-9177



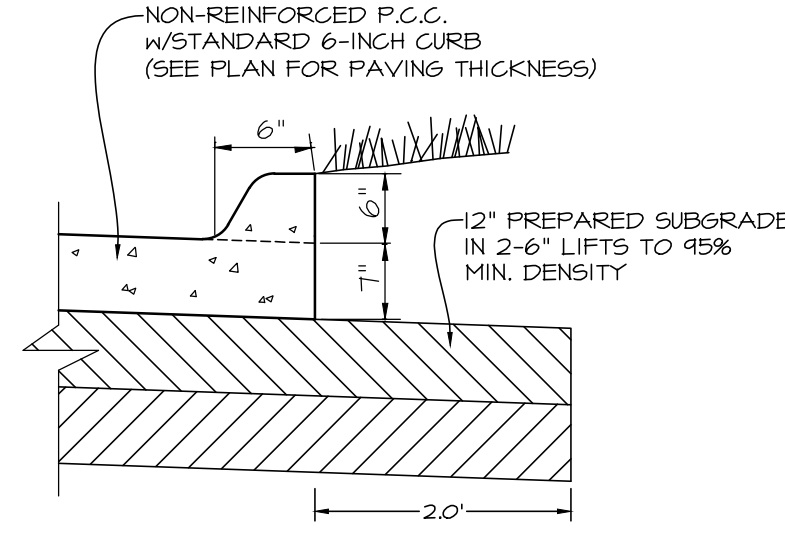
Plot by: CARL MCCANN AND/ EXPAND D (34.00 X 22.00 INCHES) 2025-05-23 11:11 AUTOCAD PDF (GENERAL DOCUMENTATION) P33 G:\E-FILES\14000\ERITL\CDP Drawings\Construction Documents\22-Dim.dwg



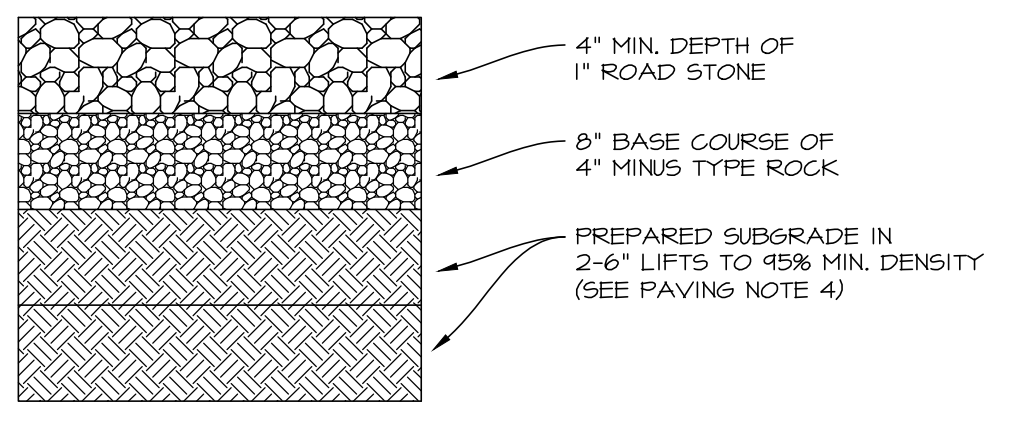
SPLIT FACE BLOCK SCREENING DETAIL
NO SCALE



FRONT ELEVATION
NO SCALE

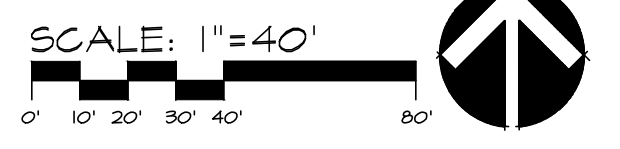


STANDARD CURB DETAIL
NO SCALE

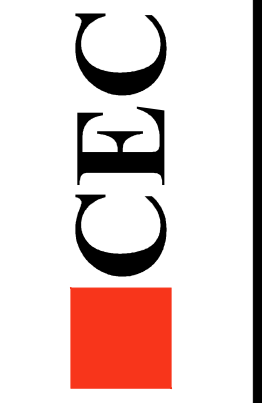


NOTES
1. CONTRACTOR SHALL PROOF ROLL TURNAROUND PRIOR TO PLACEMENT OF FILTER FABRIC.

FIRE ACCESS CROSS SECTION
NO SCALE



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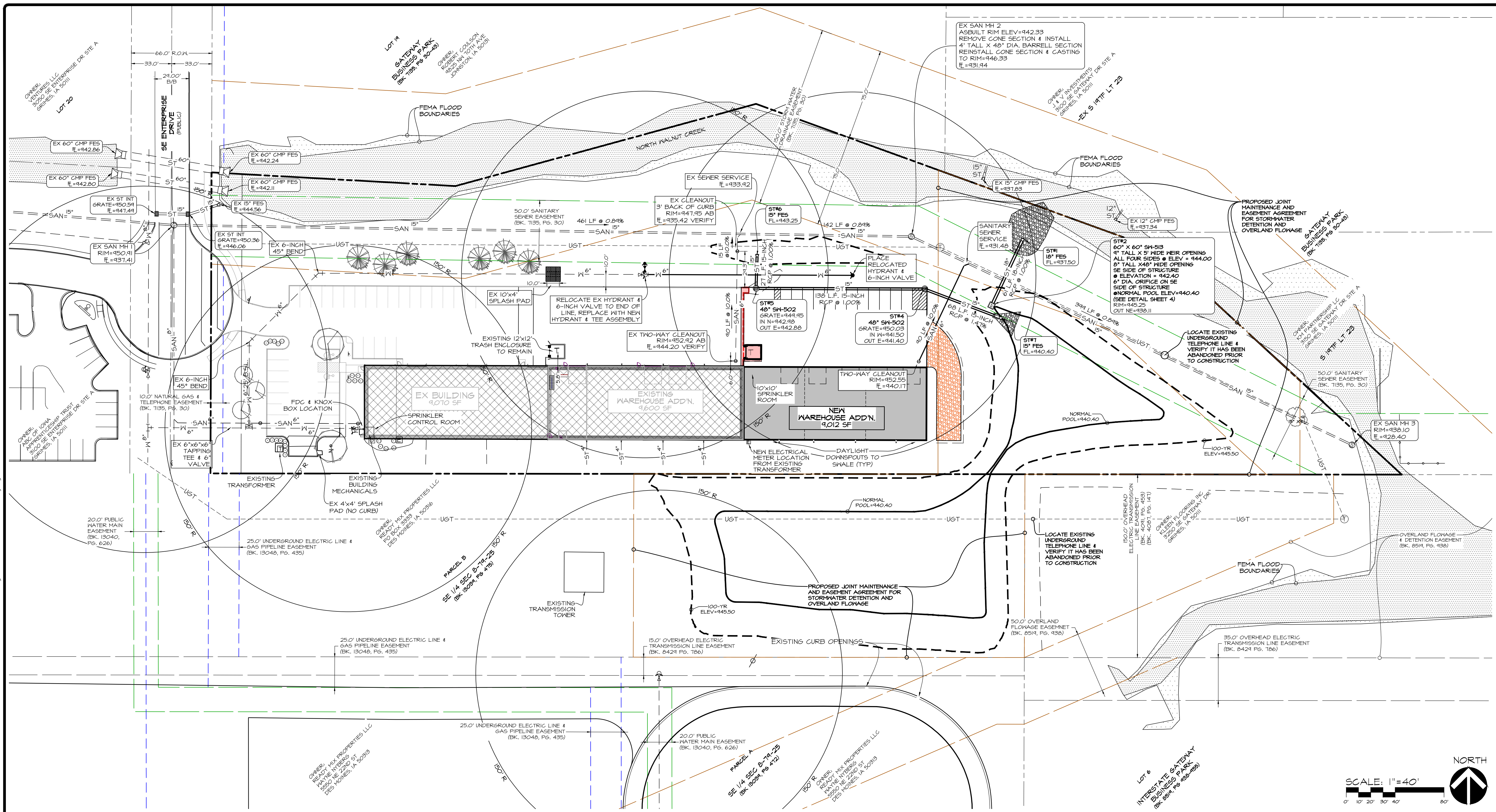


DATE: 02/05/2025
1ST SUBMIT 02/05/2025
2ND SUBMIT 03/28/2025
DATE OF SURVEY: JAN 18, 2024
DESIGNED BY: MPM
DRAWN BY: CM

AMERICAN MECHANICAL
GRIMES, IOWA
DIMENSION PLAN

SHEET
2
OF
5
E-917T

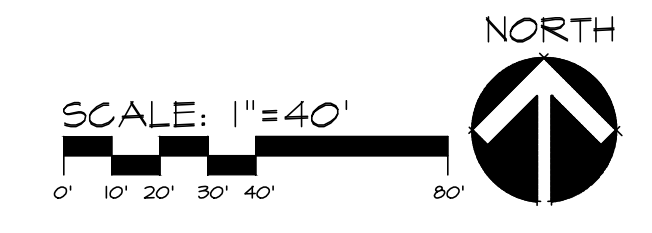
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QUANTITIES

SANITARY SEWER	
40 LF	6-INCH PVC
1 EA.	SANITARY SEWER CLEANOUT
1 EA.	4'X48" DIA. MANHOLE BARREL SECTION
STORM SEWER	
233 LF.	15-INCH RCP CL III
61 LF.	18-INCH RCP CL III
2 EA.	15-INCH RCP F.E.S.
1 EA.	18-INCH RCP F.E.S.
2 EA.	48" DIA. TYPE SN-502 INTAKE
	WSN-603 TYPE 18" GRATE
1 EA.	60"X60" TYPE SN-513 MODIFIED INTAKE
	WSN-602 TYPE 18" CASTING
	(SEE DETAIL SHEET 4)

WATER MAIN	
170 LF.	6-INCH WATER MAIN
1 EA.	HYDRANT, TEE AND 6-INCH VALVE ASSEMBLY
PAVING	
42 SY.	DEMO T" P.C.C.
1,100 SY.	7-INCH NON-REINFORCED P.C.C.
1,151 SY.	12-INCH SUBGRADE PREPARATION
216 SY.	FIRE ACCESS



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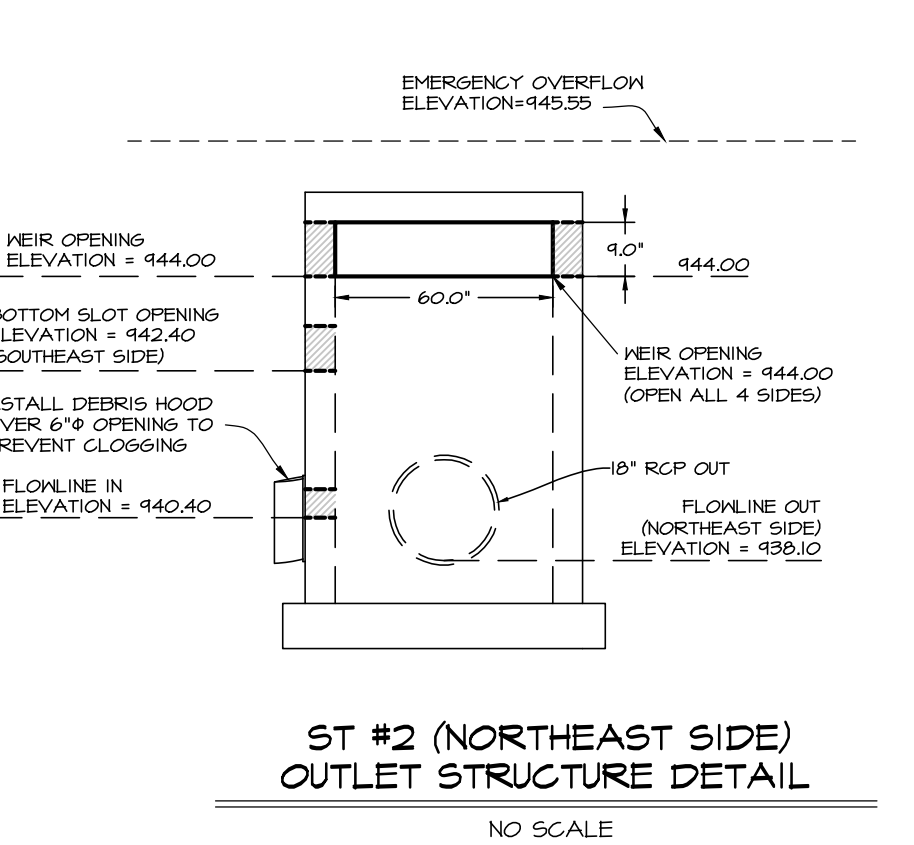
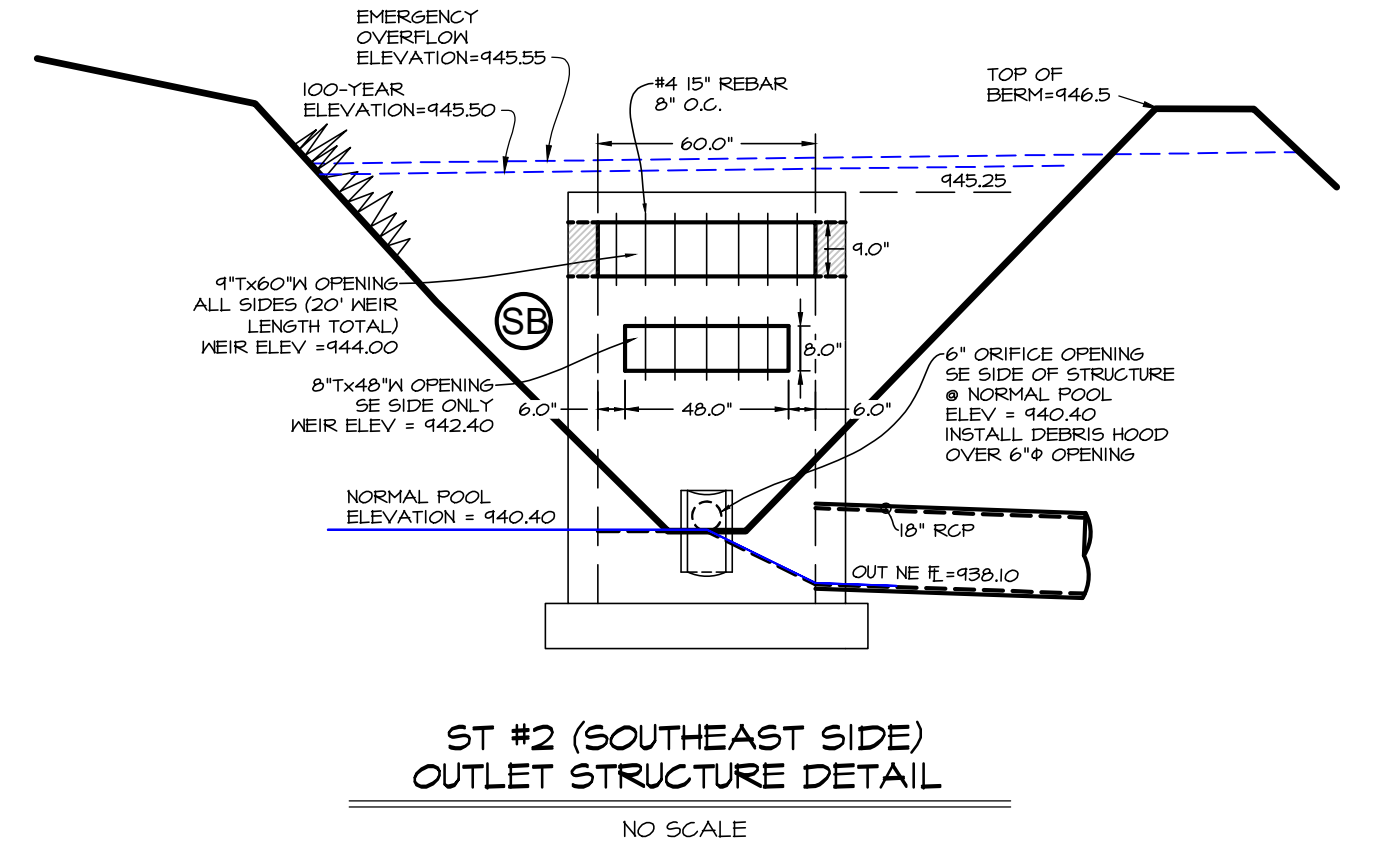
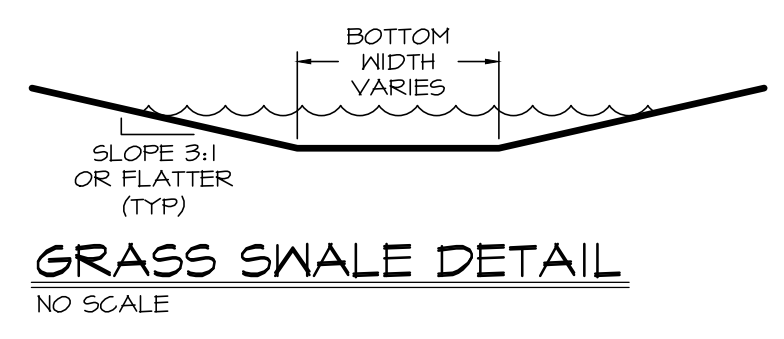
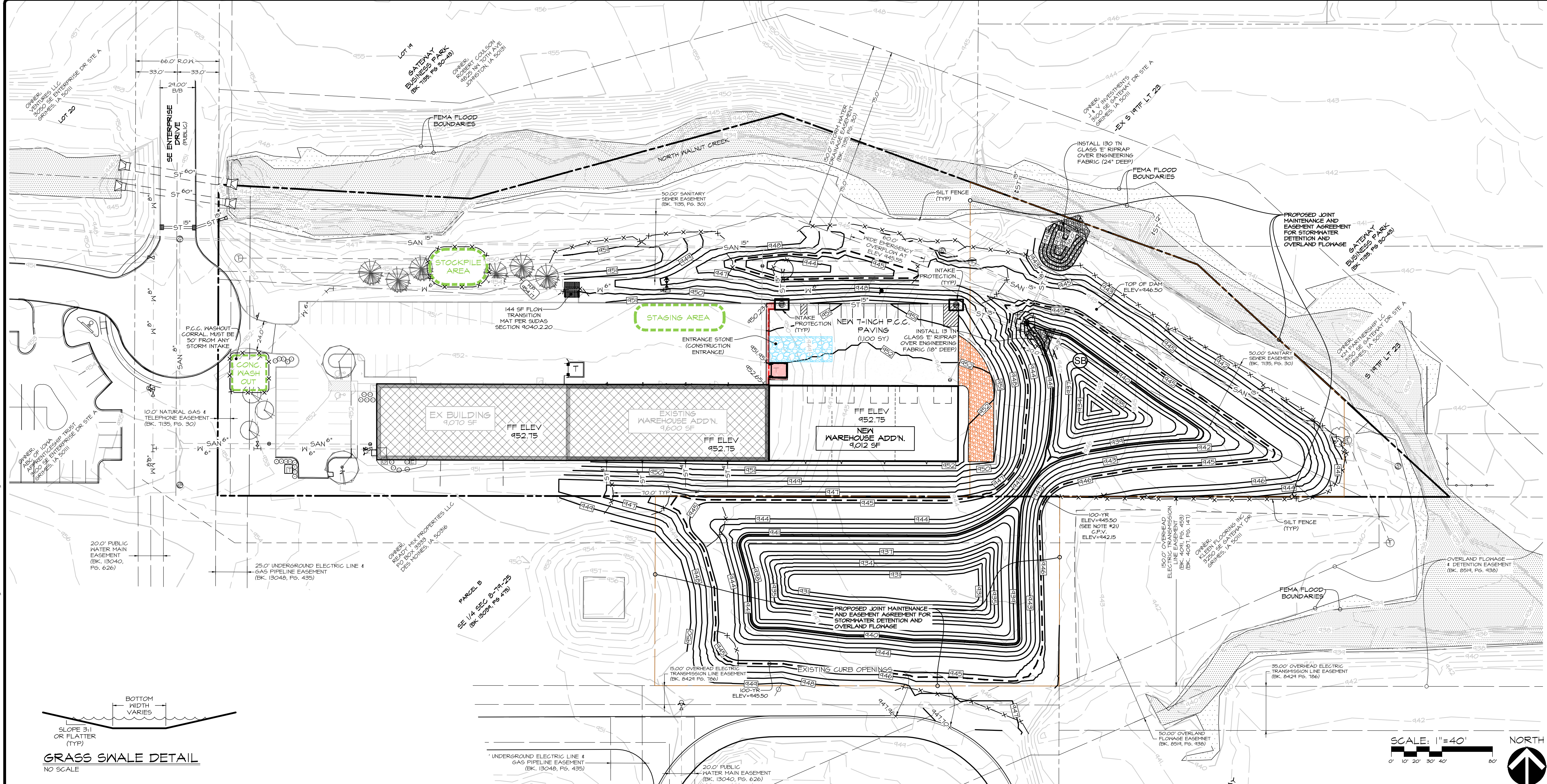
DATE:	1ST SUBMIT 02/05/2025
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DESIGNED BY:	MPH
DRAWN BY:	CM

AMERICAN MECHANICAL
GRIMES, IOWA

UTILITY PLAN

SHEET
3
OF
5

E-9177



FLOOD ZONE DESIGNATION
 FEMA FLOOD INSURANCE RATE MAP:
 PANELS: 18153C0166F & 18153C0167F
 ZONE G - AREAS OF MINIMAL FLOODING
 EFFECTIVE DATE: FEBRUARY 01, 2019

MULCHING TABLE

1. DRY STRAW OR HAY, 2 TONS PER ACRE. ANCHOR STRAW WITH MULCH TILLER OR ASPHALT TACT @ 1200 PER ACRE.
2. WOOD CHIPS OR BARK, 10-12 TONS PER ACRE.

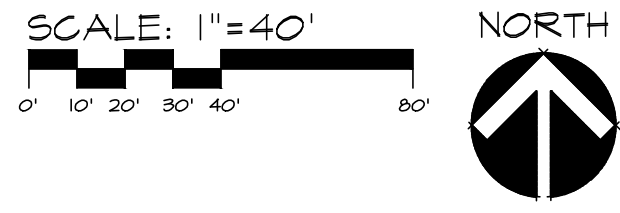
GRADING QUANTITIES
 44,084 SF SEEDING (SUDAS TYPE 4 TEMPORARY EROSION CONTROL MIX)
 1820 LF SILT FENCE
 143 TN CLASS 5' RIPRAP
 144 SF SCOUR STOP FLOW TRANSMISSION MAT OR EQUIV. (ANCHORED PER MANUFACTURER'S SPEC)
 5.2 TN DRY STRAW OR HAY MULCH (2 TN / ACRE)
 2 EA INLET PROTECTION (FILTER SOCK)
 1 EA ENTRANCE STONE (IOWA DOT SECTION 4122, GRADATION 13, MACADAM CRUSED STONE)
 1 LS. MOBILIZATION

GRADING NOTES

- STRIP A MINIMUM OF 6" OF TOPSOIL FROM ALL AREAS WHICH ARE TO BE FILLED OR CUT FOR BORROW.
- ALL AREAS TO RECEIVE STRUCTURAL FILL SHALL BE BENCHED.
- PREPARE BOTTOM OF BENCH FOR FILL BY DISCING TO A DEPTH OF 4 INCHES AND COMPACT. ANY LOCALIZED AREAS WHICH CANNOT BE SATISFACTORILY COMPACTED OR WHICH SHOW EVIDENCE OF PUMPING ACTION SHALL BE UNDERCUT AND RECOMPACTED WITH ONSITE FILL MATERIALS.
- ALL FILL SHALL BE COMPACTED TO A DENSITY THAT IS NOT LESS THAN 95% STANDARD PROCTOR.
- ALL AREAS WHICH ARE TO RECEIVE PAVING SHALL HAVE THE TOP 12-INCHES DISCED AND COMPACTED TO 95% STANDARD PROCTOR DENSITY. COMPACT SUBGRADE IN TWO 6" LIFTS.
- MAINTAIN ALL CUT AND FILL AREAS TO ACCOMMODATE SURFACE DRAINAGE.
- GRADING CONTRACTOR SHALL STOCKPILE TOP SOIL FOR SHOULDERING.
- FINISHED GRADE ON ALL NON-PAVED AREAS SHALL BE WITHIN 0.20 FOOT OF PLAN GRADE. PARKING LOTS AND STREETS SHALL BE WITHIN 0.10 FOOT.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND PROTECT ALL EXISTING UTILITIES AND STRUCTURES. DAMAGE TO UTILITIES AND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE UTILITY OWNER.
- MAXIMUM ALLOWABLE GRADE ON ALL PROPOSED SLOPES IS 3:1.
- TOPSOIL SHALL BE SPREAD TO A MINIMUM THICKNESS OF 6 INCHES ON ALL DISTURBED AREAS.
- BACKFILL TO TOP OF ALL CURBS.
- MOISTURE CONTENT SHALL NOT DEVIATE FROM OPTIMUM BY MORE THAN 2% IN STRUCTURAL FILL.
- ALL ELEVATIONS ARE TO TOP OF SLAB UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF IMPLEMENTING THE MEASURES CONTAINED IN THIS PLAN. ALL CONTRACTORS AND SUBCONTRACTORS SHALL SIGN A CERTIFICATION STATEMENT BEFORE CONDUCTING ANY PROFESSIONAL SERVICE AT THE SITE RELATING TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT.
- PROVIDE IN-PLACE FIELD DENSITY TESTS. RECOMPACT & RETEST AREAS THAT FAIL DENSITY SPECS AT NO COST TO OWNER.
- COVER AND/OR FILTER SOCK AROUND ALL INTAKES PRIOR TO PAVING TO PREVENT SEDIMENTATION FROM ENTERING THE STORM SEWER AND DRAINAGEWAYS.
- ALL EXISTING TILE LINES ENCOUNTERED SHALL BE RESTORED OR ROUTED TO A STORM SEWER WHETHER ACTIVE OR NOT.
- ALL DEBRIS SPILLED ON CITY R.O.W. AND ADJOINING PROPERTY SHALL BE REMOVED BY OWNER/CONTRACTOR IMMEDIATELY.
- GRADING OF THIS SITE DISTURBS 3.17 ACRES. AN NPDES PERMIT IS REQUIRED.

LEGEND

EXISTING/PROPOSED	PLAT BOUNDARY
-SAN 15"	SANITARY SEWER & SIZE
-W 8"	WATER MAIN & SIZE
-ST 12"	STORM SEWER & SIZE
○	MANHOLE
⊕	STORM INTAKE
⊕	FIRE HYDRANT
⊕	VALVE
100X0	SPOT ELEVATION
100	EXISTING CONTOURS
100	PROPOSED CONTOURS
□	INLET PROTECTION (FILTER SOCK)
---	SILT FENCE
○	100-YR ELEVATION
SB	SEDIMENT BASIN



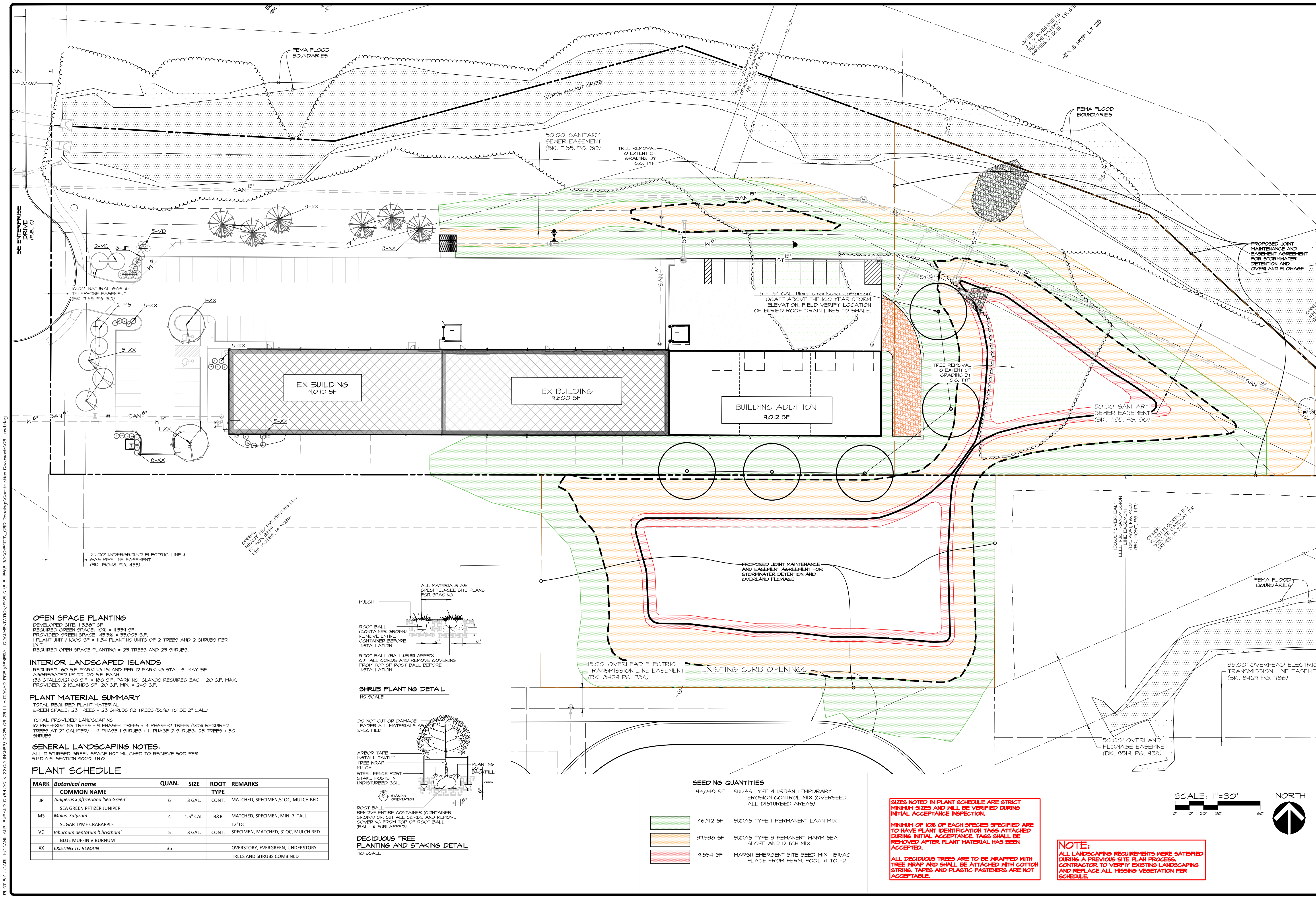
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AMERICAN MECHANICAL
 GRIMES, IOWA
GRADING PLAN

SHEET 4 OF 5
 E-917T



OPEN SPACE PLANTING

DEVELOPED SITE: 113,301 SF
 REQUIRED GREEN SPACE: 10% = 11,330 SF
 PROVIDED GREEN SPACE: 45,398 = 35,203 SF.
 1 PLANT UNIT / 1000 SF = 11.34 PLANTING UNITS OF 2 TREES AND 2 SHRUBS PER UNIT.
 REQUIRED OPEN SPACE PLANTING = 23 TREES AND 23 SHRUBS.

INTERIOR LANDSCAPED ISLANDS

REQUIRED: 60 S.F. PARKING ISLAND PER 12 PARKING STALLS. MAY BE AGGREGATED UP TO 120 S.F. EACH.
 (36 STALLS/12) 60 S.F. = 100 S.F. PARKING ISLANDS REQUIRED EACH 120 S.F. MAX.
 PROVIDED: 2 ISLANDS OF 120 S.F. MIN. = 240 S.F.

PLANT MATERIAL SUMMARY

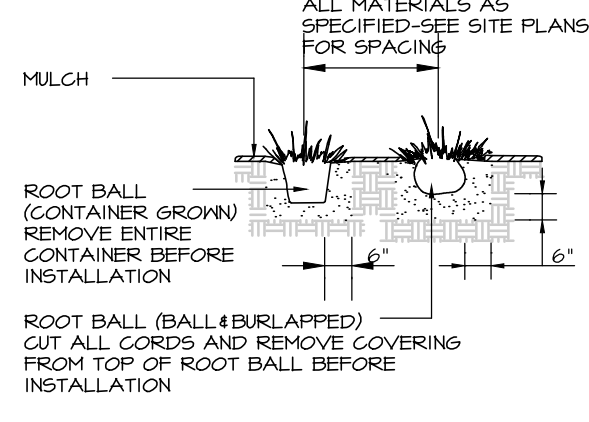
TOTAL REQUIRED PLANT MATERIAL:
 GREEN SPACE: 23 TREES + 23 SHRUBS (12 TREES (50%) TO BE 2" CAL.)
 TOTAL PROVIDED LANDSCAPING:
 10 PRE-EXISTING TREES + 4 PHASE-1 TREES + 4 PHASE-2 TREES (50% REQUIRED TREES AT 2" CALIPER) + 14 PHASE-1 SHRUBS + 11 PHASE-2 SHRUBS, 23 TREES + 30 SHRUBS.

GENERAL LANDSCAPING NOTES:

ALL DISTURBED GREEN SPACE NOT MULCHED TO RECEIVE SOD PER S.U.D.A.S. SECTION 4020 U.N.O.

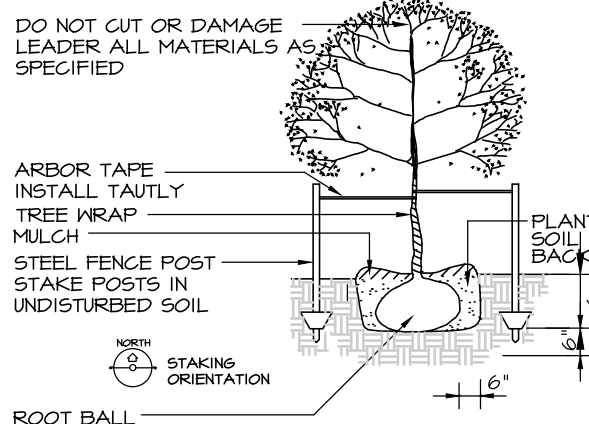
PLANT SCHEDULE

MARK	Botanical name	QUAN.	SIZE	ROOT TYPE	REMARKS
JP	<i>Juniperus x pfitzeriana</i> 'Sea Green'	6	3 GAL.	CONT.	MATCHED, SPECIMEN, 5' OC, MULCH BED
MS	<i>Malus 'Sutzyam'</i>	4	1.5" CAL.	B&B	MATCHED, SPECIMEN, MIN. 7' TALL
VD	<i>Viburnum dentatum</i> 'Christom'	5	3 GAL.	CONT.	SUGAR TYME CRABAPPLE SPECIMEN, MATCHED, 3' OC, MULCH BED
XX	EXISTING TO REMAIN	35			OVERSTORY, EVERGREEN, UNDERSTORY TREES AND SHRUBS COMBINED



SHRUB PLANTING DETAIL

NO SCALE



DECIDUOUS TREE PLANTING AND STAKING DETAIL

NO SCALE

SEEDING QUANTITIES

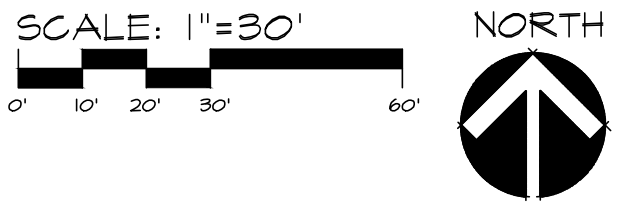
44,048 SF	SUDAS TYPE 4 URBAN TEMPORARY EROSION CONTROL MIX (OVERSEED ALL DISTURBED AREAS)
46,912 SF	SUDAS TYPE 1 PERMANENT LAWN MIX
31,338 SF	SUDAS TYPE 3 PERMANENT WARM SEA SLOPE AND DITCH MIX
4,234 SF	MARSH EMERGENT SITE SEED MIX -15%/AC PLACE FROM PERM. POOL +1 TO -2'

SIZES NOTED IN PLANT SCHEDULE ARE STRICT MINIMUM SIZES AND WILL BE VERIFIED DURING INITIAL ACCEPTANCE INSPECTION.

MINIMUM OF 10% OF EACH SPECIES SPECIFIED ARE TO HAVE PLANT IDENTIFICATION TAGS ATTACHED DURING INITIAL ACCEPTANCE. TAGS SHALL BE REMOVED AFTER PLANT MATERIAL HAS BEEN ACCEPTED.

ALL DECIDUOUS TREES ARE TO BE WRAPPED WITH TREE WRAP AND SHALL BE ATTACHED WITH COTTON STRINGS, TAPES AND PLASTIC FASTENERS ARE NOT ACCEPTABLE.

NOTE:
 ALL LANDSCAPING REQUIREMENTS WERE SATISFIED DURING A PREVIOUS SITE PLAN PROCESS. CONTRACTOR TO VERIFY EXISTING LANDSCAPING AND REPLACE ALL MISSING VEGETATION PER SCHEDULE.



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DATE: 1ST SUBMIT 02/05/2025
 2ND SUBMIT 03/28/2025

DATE OF SURVEY: JAN. 18, 2024
 DESIGNED BY: MPH
 DRAWN BY: CM

AMERICAN MECHANICAL
 GRIMES, IOWA
LANDSCAPE PLAN

SHEET 5 OF 5
 E-917T

PLOT BY: CARL MCCANN AND EXPANDED (24x00 X 22.00 INCHES) 2025-05-23 11:11 AUTOCAD PDF (GENERAL DOCUMENTATION) P23.GVA-FILEVE-100001711_L2D DrawingConstruction Documents\25-Landscap

DATE

June 3, 2025

PROJECT NAME

American Mechanical 3.0
Site Plan Amendment

APPLICANT

Matt Cooper

REQUESTED ACTION

Approval of a site plan amendment for a 9,102 sf building addition and parking expansion.

LOCATION

3105 SE Enterprise Drive

ZONING

M-1A

PLANNER

Evann Martin
emartin@grimesiowa.gov
515-986-4050



Location Map



Zoning Map

Relation to Comprehensive & Neighborhood Plans

LAND USES & ZONING

Location	Existing Land Use	Land Use Plan Designation	Current Zoning
Subject Site	Light Industrial	General Industrial	M-1A
North	Light Industrial	General Industrial	M-1A
South	Heavy Industrial	General Industrial	M-3
East	Light Industrial	Business Park	M-1A
West	Light Industrial	General Industrial	M-1A

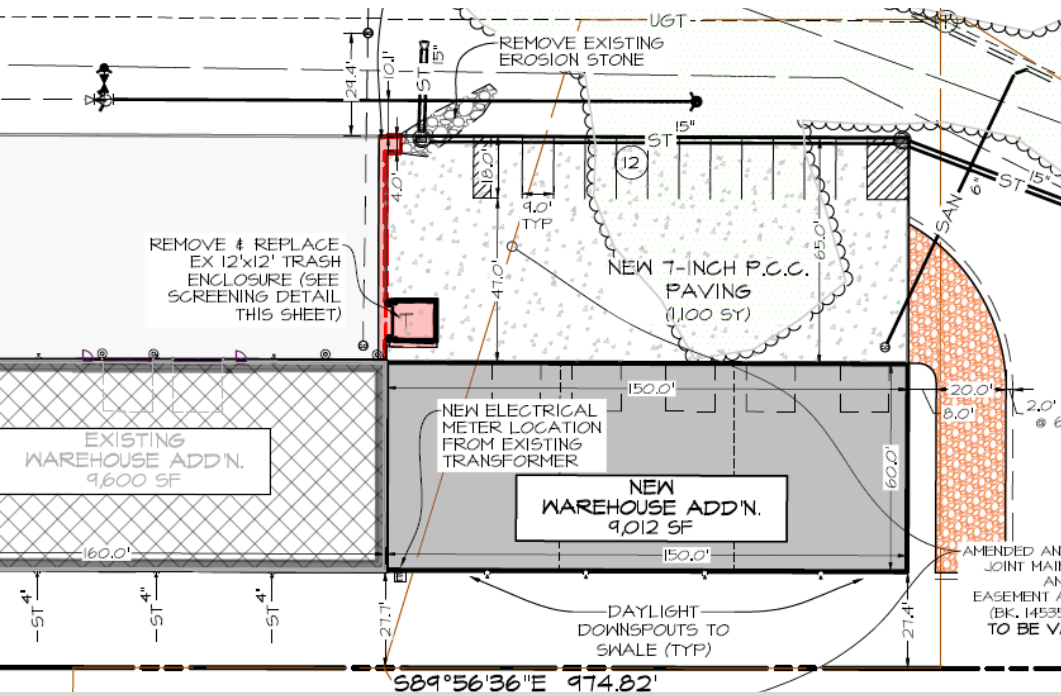
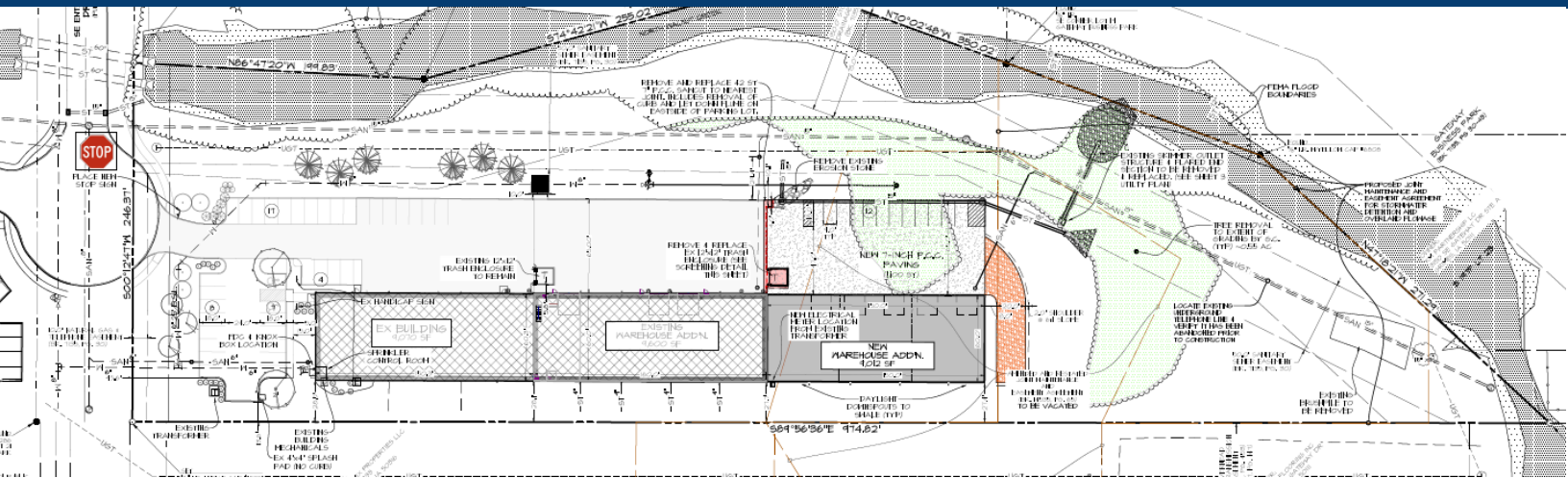
Future Land Use Map



PARKS

The site is commercial, therefore no parkland dedication is required.

Site Layout



Close Up New Site Improvements

ACCESS

Access will be provided via the existing driveway from SE Enterprise Drive.

SIDEWALK

There is no existing sidewalk network along SE Enterprise Drive. A sidewalk agreement will be required for the installation of the future 5' sidewalk along SE Enterprise Drive at such time the network is established in the area.

LIGHTING

Wall pack lighting will be provided on the building addition. No parking lot lighting is proposed.

PARKING

Twelve additional parking spaces are proposed for the new building addition. Across the site, 36 spaces are required. A total of 48 spaces will be provided.

Utilities & Landscaping

UTILITIES

A new sanitary service will be provided to the building addition. The hydrant loop will be extended to provide an additional hydrant to provide coverage for the building addition.

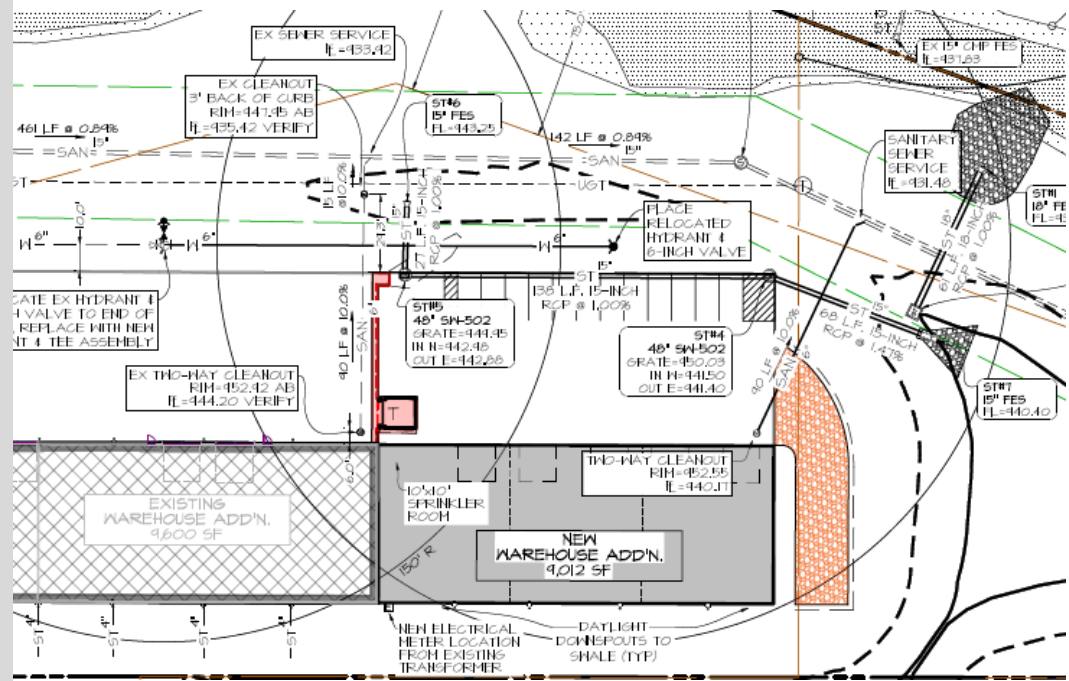
STORM WATER

The existing stormwater basin will be reconstructed and expand into the property to the south to become a shared basin with CTI. A private detention easement will be established to determine maintenance responsibilities of the basin.

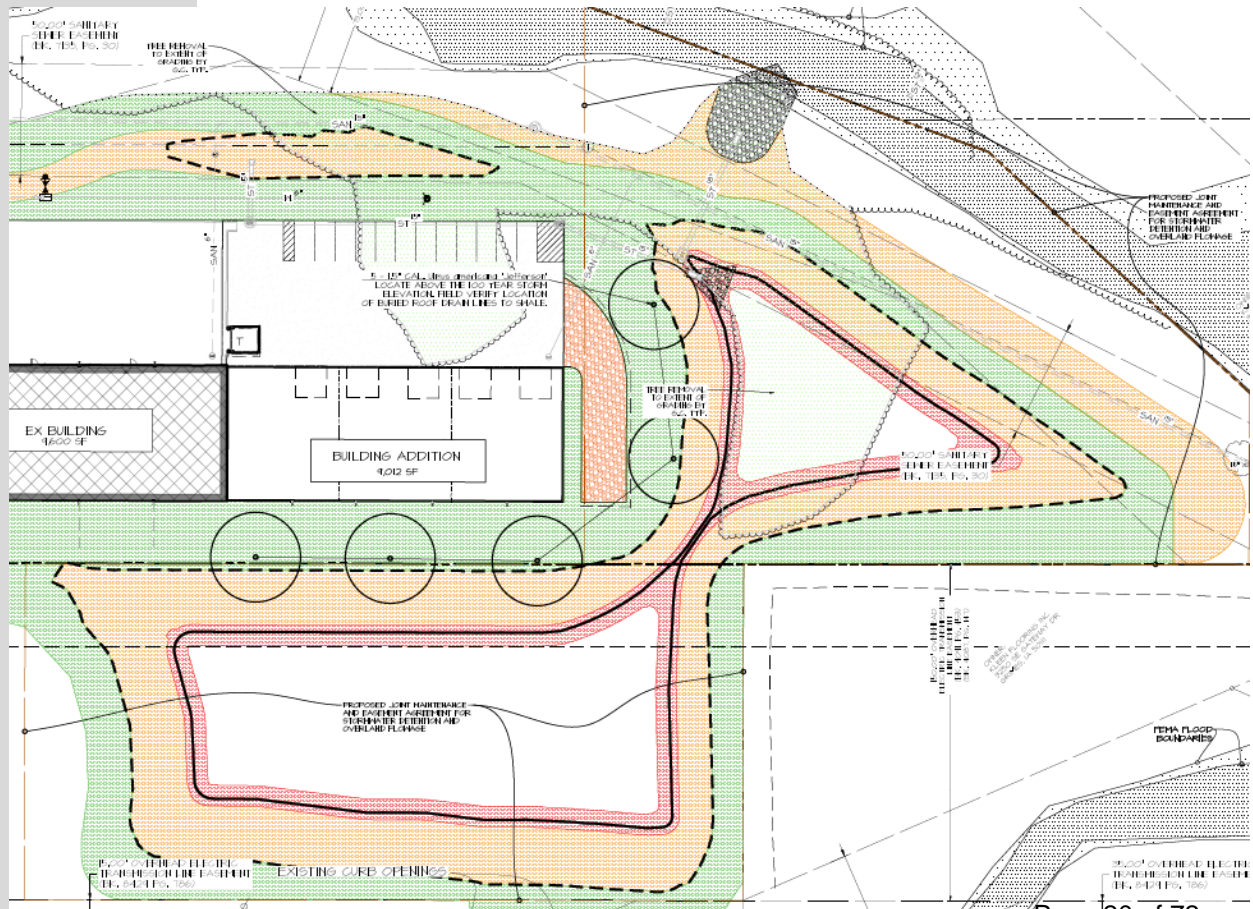
LANDSCAPING

There are no landscaping requirements for this property. However, some trees are proposed along the south and east side of the building to help replace some of the trees that will be removed to construct the project.

Utilities Map

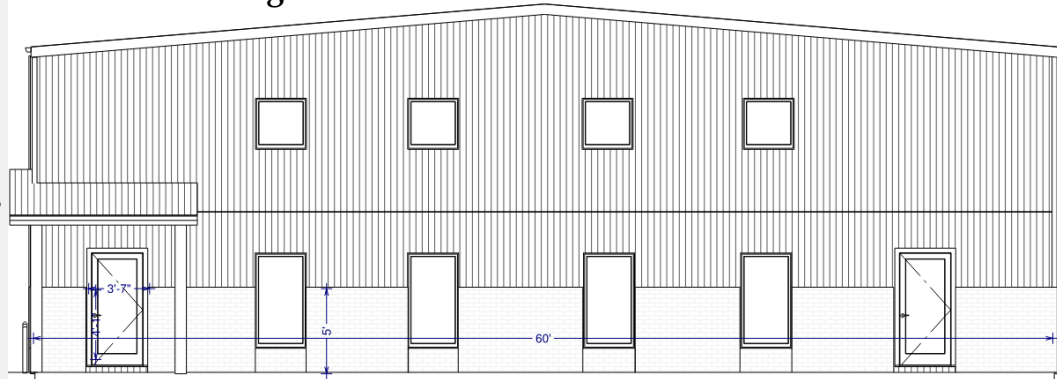


Landscaping Plan

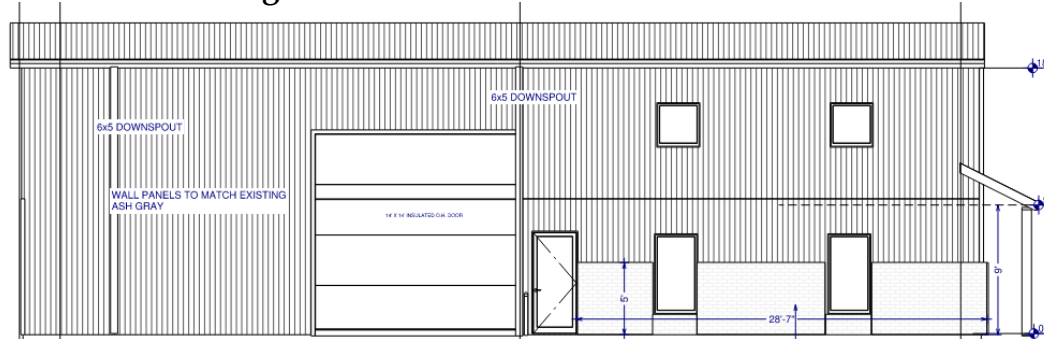


Architecture

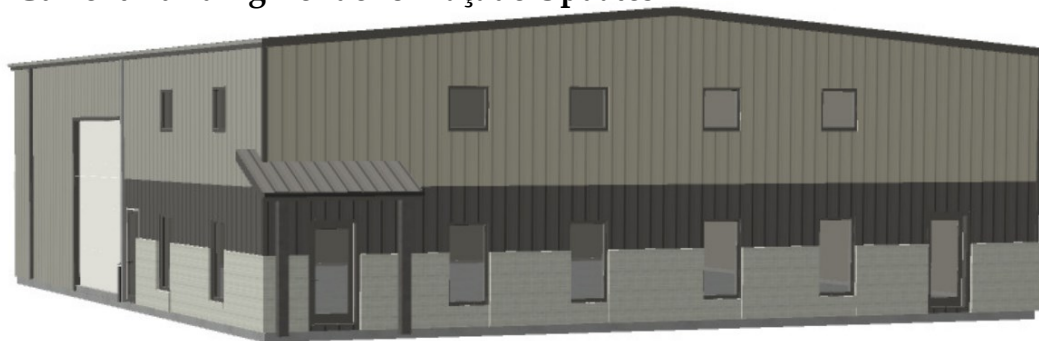
Current Building West Elevation



Current Building North Elevation



Current Building Render of Façade Updates



BUILDING & ELEVATIONS

The building addition is proposed to be composed of metal wall paneling to match the existing ash gray exterior. There will be a total of three man doors and three overhead doors on the proposed addition.

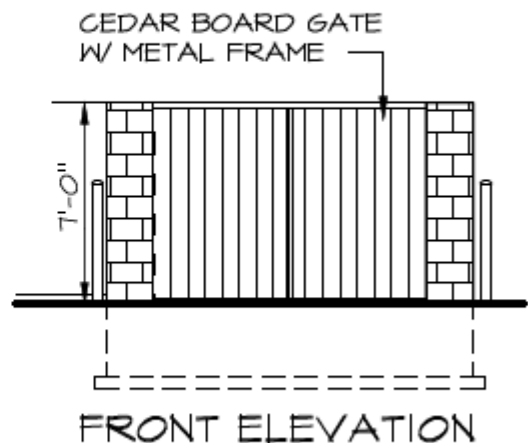
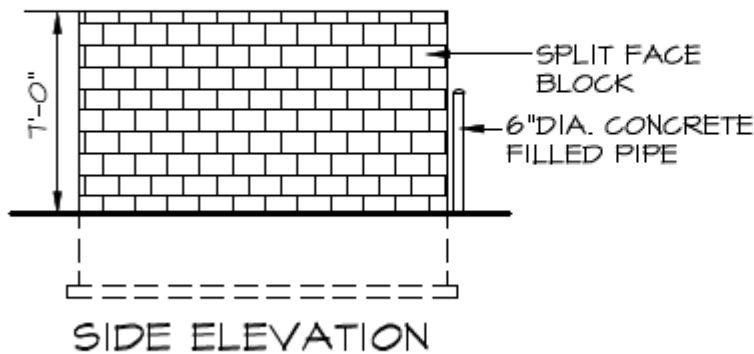
The building will also be updated on the street-facing facades to meet the architecture code requirements for M1-A. Earthtone brick and an additional darker brown metal paneling will be added to the current west and north elevations. All windows and doors shown on the current west and north elevations are apart of the original structure.

The materials and architecture of the addition and current elevation updates satisfy the architecture code requirements for M1-A zoned properties.

DUMPSTER ENCLOSURE

An additional dumpster enclosure will be provided on site and will be constructed of split face block with a metal-framed cedar gate.

Dumpster Enclosure Elevations



Conclusion

STAFF RECOMMENDATION

Staff recommends approval subject to any remaining staff comments.

Conclusion

A 9,102 sf building addition for warehouse and office use is proposed along with parking and circulation expansion.

Landscaping will be provided along the south and east sides of the building.

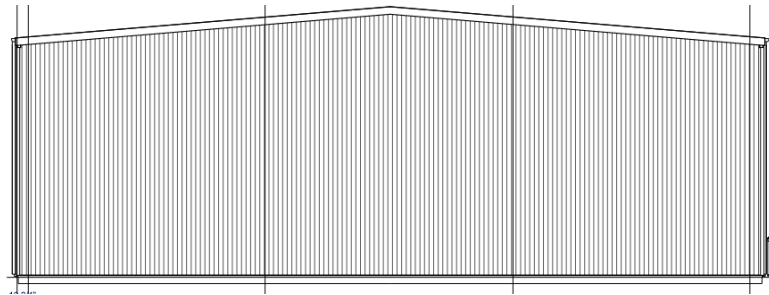
Utilities will be extended to serve the building addition.

The detention basin will be reconstructed and expanded into the property to the south to be a shared private detention basin between the two sites.

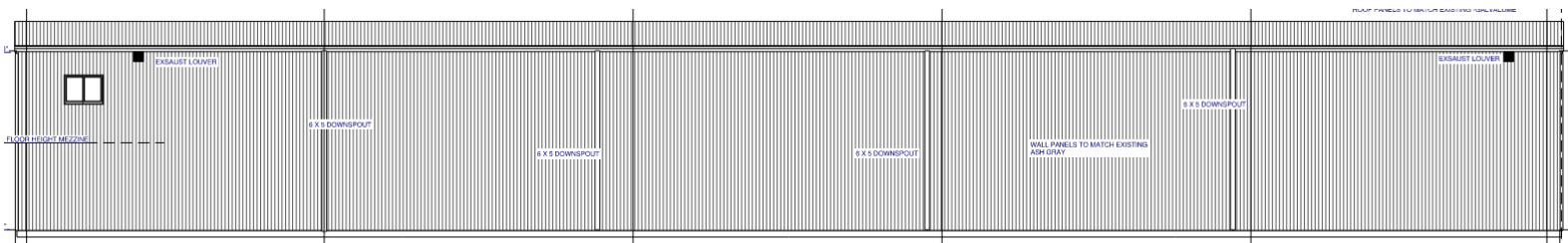
All existing easements will be vacated or amended to accommodate the new detention basin and establish maintenance responsibilities.

The proposed gravel fire department access on the east side of the building will be required to be paved. It is currently shown in the plans to be a rock access.

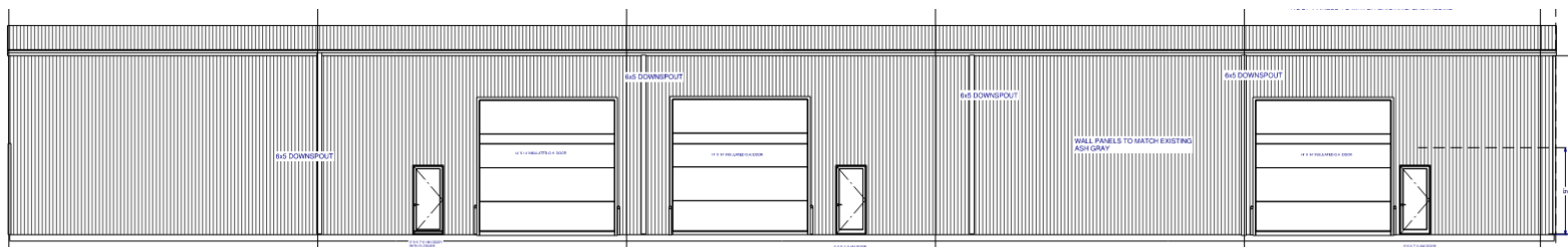
East Elevation

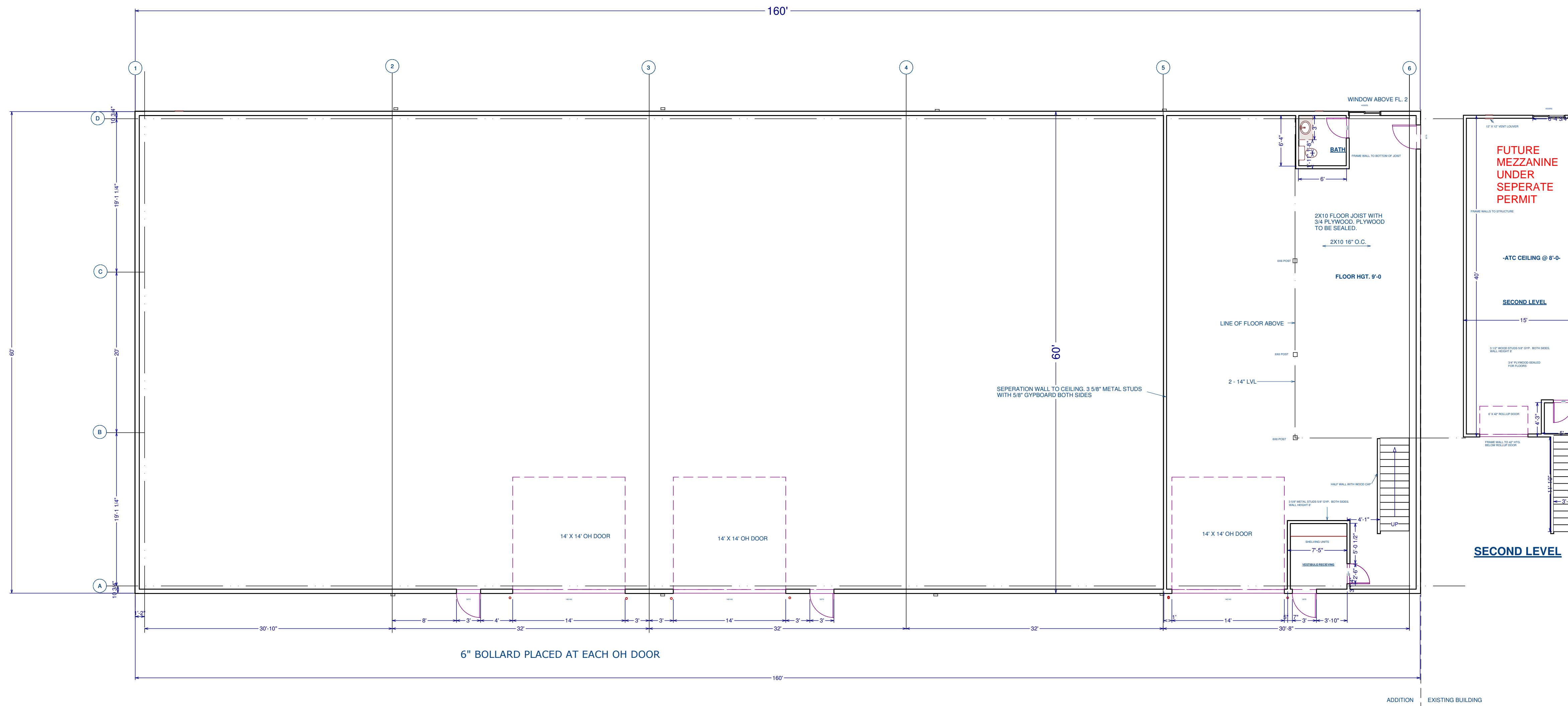


South Elevation



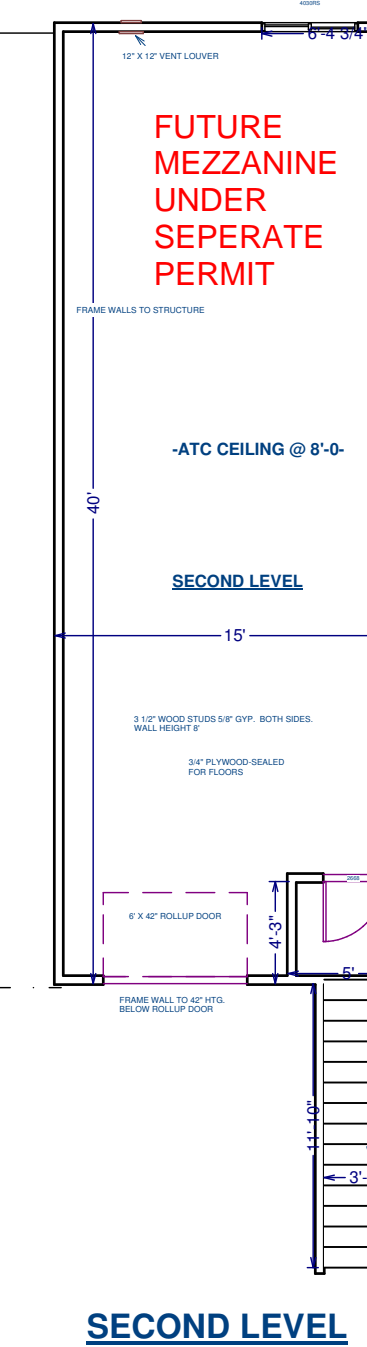
North Elevation





MAIN LEVEL FLOOR PLAN

STRUCTURE DESING BY STAR BUILDING



SECOND LEVEL

HC

NO.	DESCRIPTION	BY	DATE

SHEET TITLE:
FLOOR PLAN

PROJECT DESCRIPTION:
AMERICAN MECHANICAL BUILDING ADDITION

AMERICAN MECHANICAL
3105 SE ENTERPRISE DR.
GRIMES IOWA 50111

DATE:

8/20/2020

SCALE:

1/8" = 1FT

SHEET:

A-1

NO.	DESCRIPTION	BY	DATE

SHEET TITLE:
ELEVATIONS

PROJECT DESCRIPTION:
**AMERICAN MECHANICAL
 BUILDING ADDITION**

AMERICAN MECHANICAL
 3105 SE ENTERPRISE DR.
 GRIMES IOWA 50111

DATE:

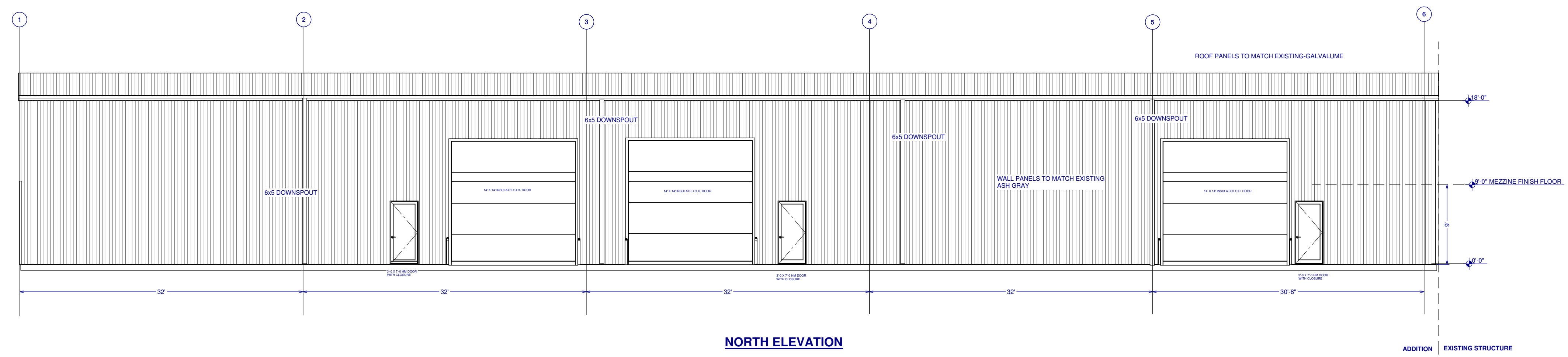
8/20/2020

SCALE:

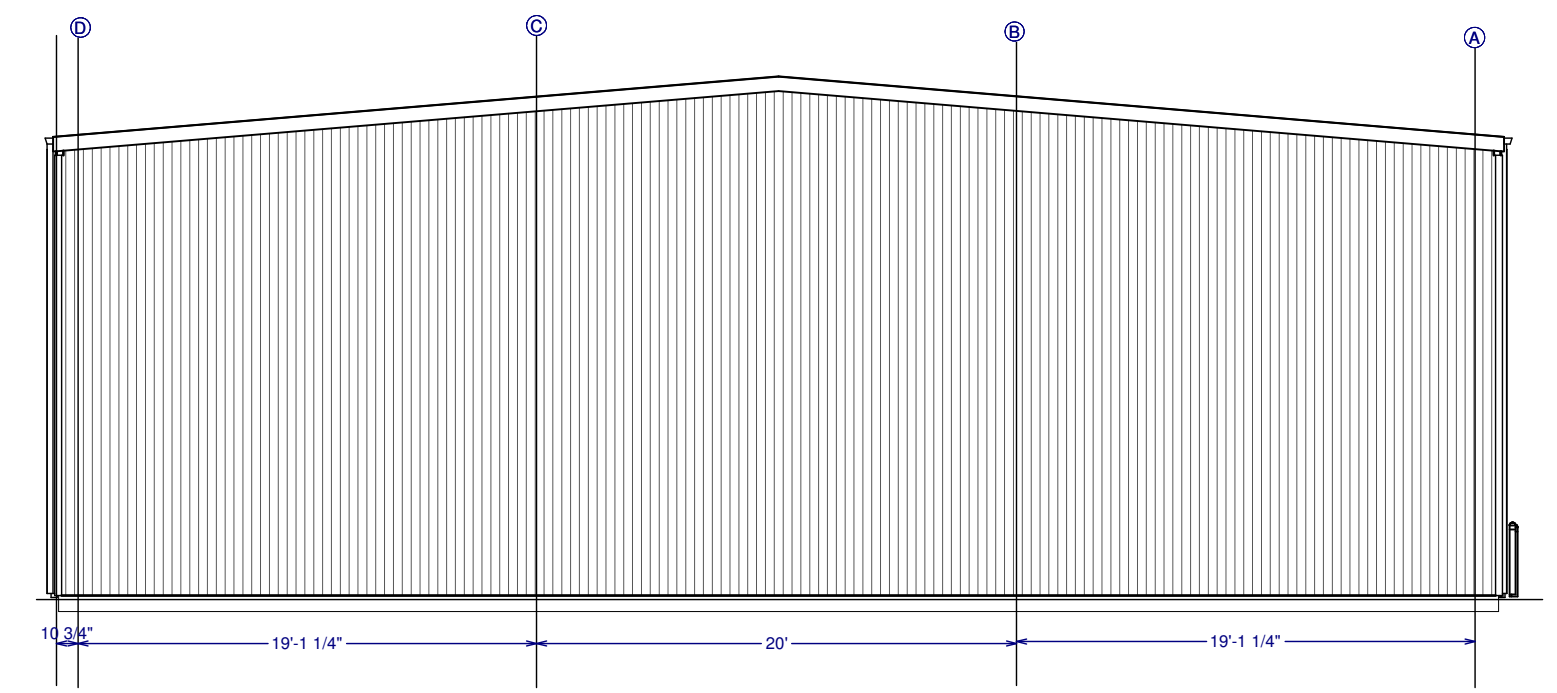
1/8" = 1 FT

SHEET:

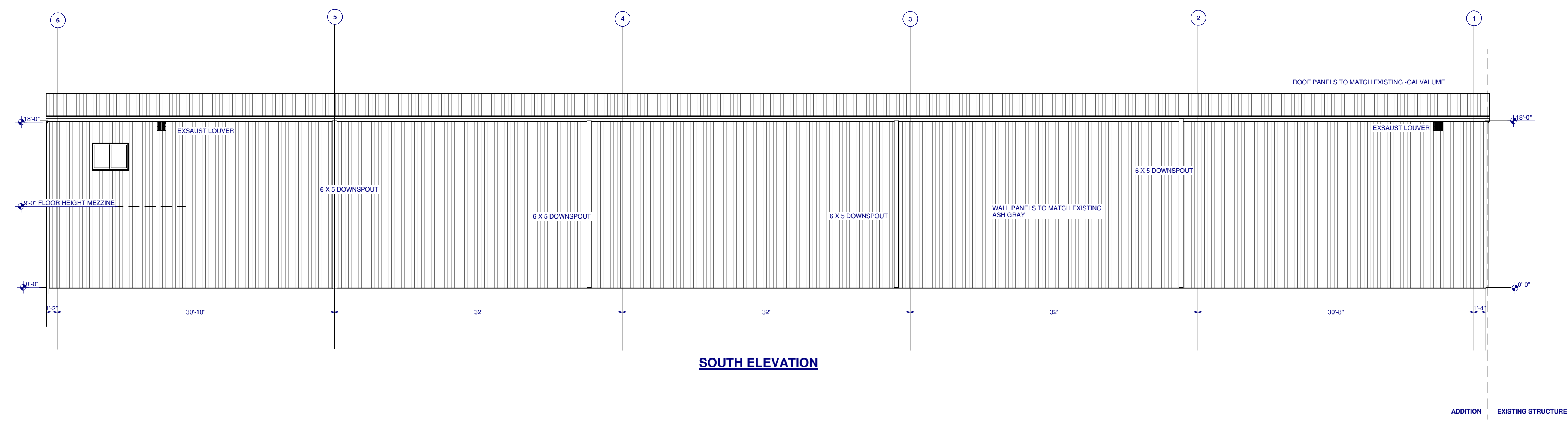
A-2



NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION

NO.	DESCRIPTION	BY	DATE

SHEET TITLE:
ALTERNATE ELEVATIONS EXISTING STRUCTURE

PROJECT DESCRIPTION:
**AMERICAN MECHANICAL
BUILDING ADDITION**

AMERICAN MECHANICAL
3105 SE ENTERPRISE DR.
GRIMES IOWA 50111

DATE:

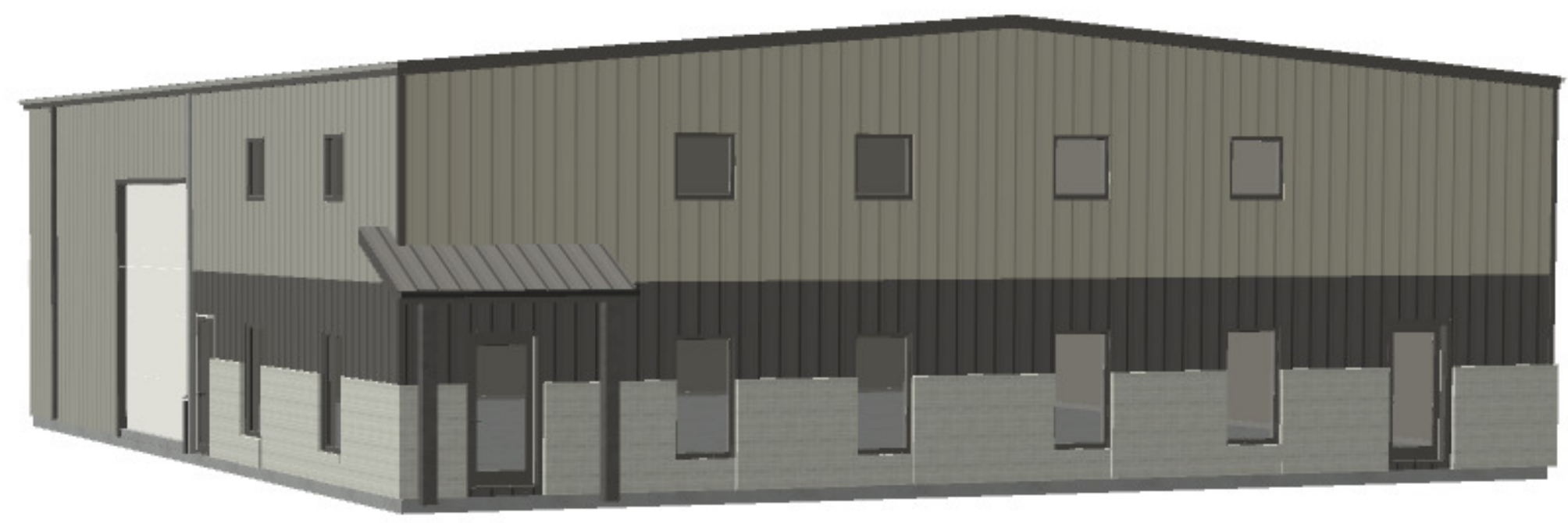
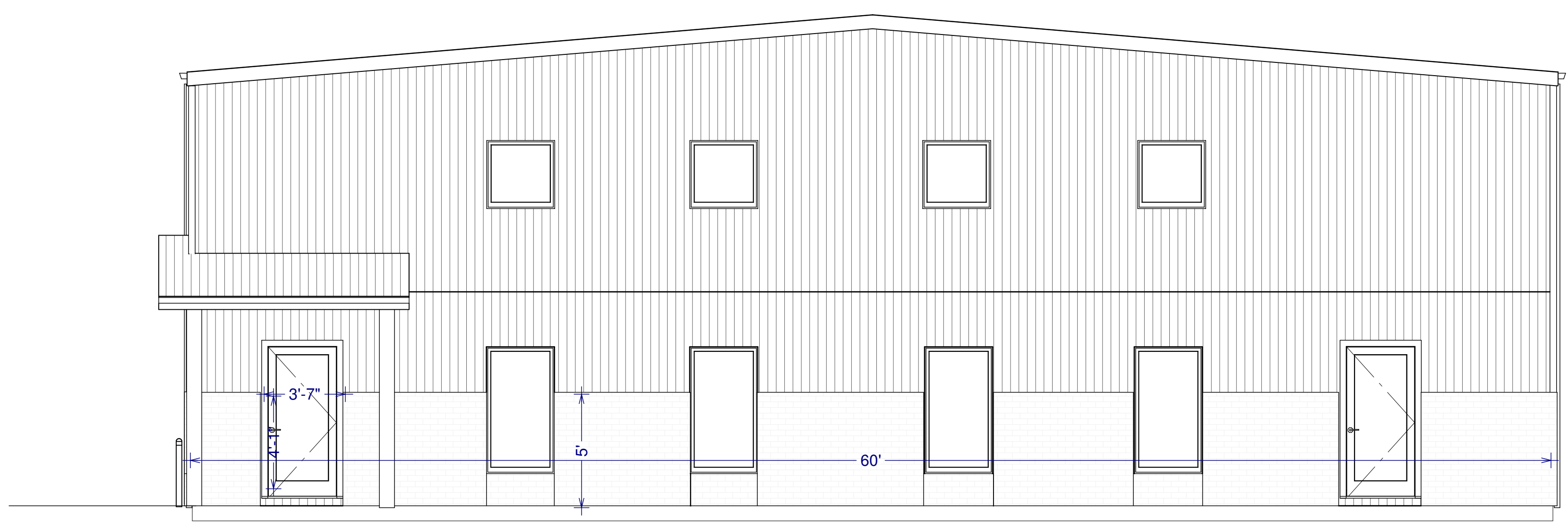
8/20/2020

SCALE:

1/8" = 1FT

SHEET:

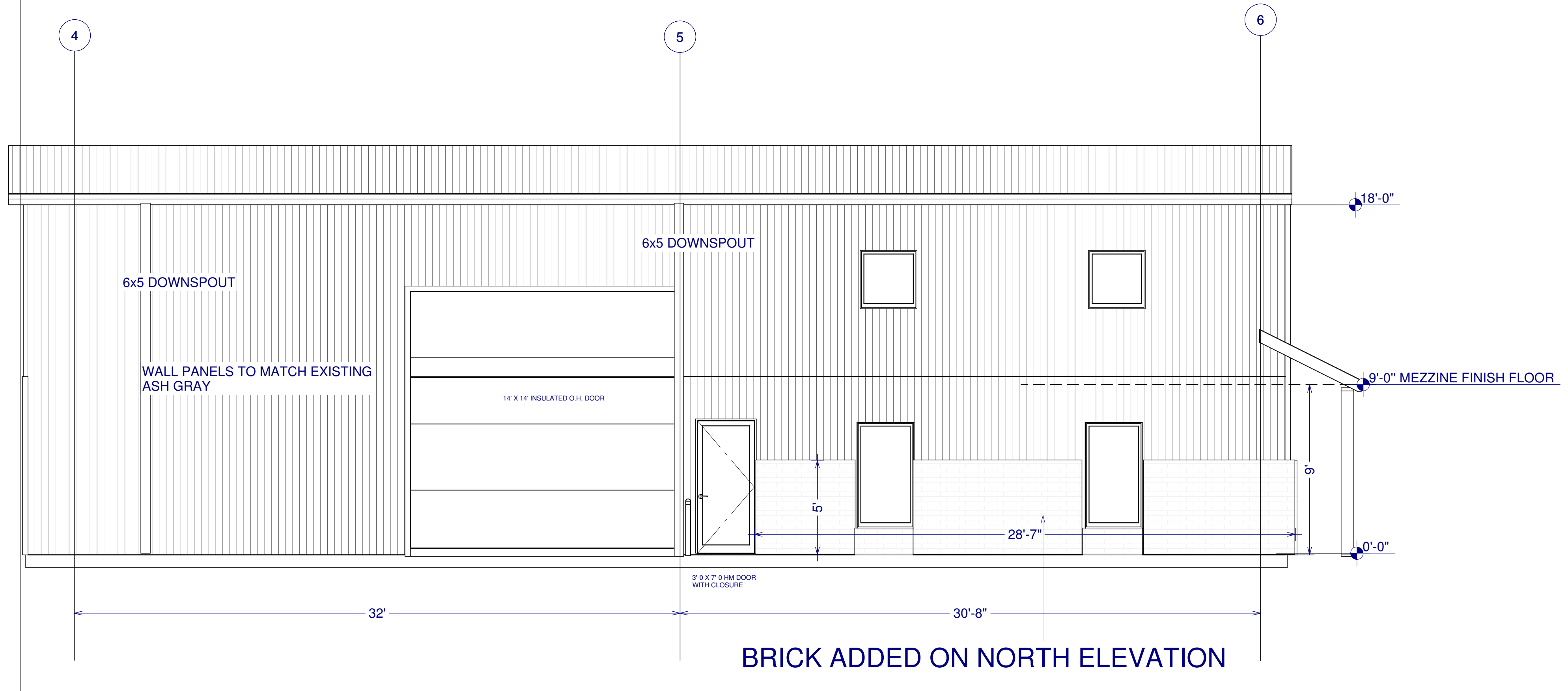
A-3



25% ADDED BRICK ON CURRENT WEST ELEVATION

245 S.F.

EARTH TONE BRICK COLOR - UNITED BRICK KNOB HILL - MODULAR



BRICK ADDED ON NORTH ELEVATION

137.8 S.F.



Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

April 23, 2025

Civil Engineering Consultants

Attn: Melissa Hills

Street

City, State ZIP

RE: American Mechanical 3.0 Site Plan Amendment

Dear Melissa:

The Development Services Department is in receipt of a proposed Site Plan Amendment for American Mechanical 3.0. Based on the review of the submitted materials, staff have the following comments:

General Comments:

1. Staff will provide the observation fee template with the final comments.
2. Staff will provide the preconstruction packet upon receipt of the final plans.
3. CAD files are required with the final plan set with the following information included:
 - a. All new utilities to be installed and any removed.
 - b. Pavement within the project site
 - c. Finished grade surface of grading area.
 - d. All trees that are to be added or removed.
 - e. Survey file of existing conditions with any private utilities located.
 - f. Sign locations and pavement markings
 - g. Any recorded easements
4. As-builts are required to be provided upon completion of the project in compliance with the attached as-built policy.
5. Provide permission from MidAmerican for grading and detention located in the transmission easement.
6. Amended and restated joint maintenance and easement agreement is to be vacated by the property owners.

7. The joint maintenance and easement agreement is to be vacated by the property owners.
8. The overland flowage and detention easement will be vacated by the City at the same time the site plan is approved. Provide an easement vacation plat so the City can carry out this process.
9. Provide the easement document for new joint maintenance and easement agreement for stormwater detention and overland flowage.
10. Easement establish
11. Sidewalk agreement
12. Provide floodplain permit. Application provided.
13. Update city standard notes. Notes are provided.
14. Provide photometric plan and lighting specs.
15. Provide SWPPP checklist. Checklist is provided.

Architecture:

1. Provide colored architectural elevations of the building addition with material percentages.
2. Is roof-mounted equipment proposed?
3. Label lighting locations on the building.
4. Label down spout locations.

Stormwater Management Plan (SWMP)

1. WQv calculations: Dry detention basins do not provide WQ treatment. Please use another method.
2. Match Pond 1 outlet condition with plans. Plans list 18" pipe at 1.00% and hydrograph states 0.83%.

3. What is hydrograph #7?
4. Provide rip-rap outlet protection size calculations (SUDAS 7E-10).

Site Plan (SP)

1. Sheet 3: Label critical crossing between storm sewer and water main.

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: April 30, 2025
(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: June 3, 2025 at 5:30

COUNCIL MEETING: June 24, 2025 at 5:30

Please feel free to contact me at emartin@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,

Evann Martin
Senior Planner

DATE

June 3, 2025

PROJECT NAME

Verizon Des Beaver Creek
Site Plan Amendment

APPLICANT

Verizon Wireless

REQUESTED ACTION

Approve a site plan amendment to construct a 150' tall communication tower with screening for ground equipment

LOCATION

1000 NE Heritage Drive

ZONING

R-4 (Hope Commercial PUD)

PLANNER

Evann Martin
emartin@grimesiowa.gov
515-986-4050



Location Map



Zoning Map

Relation to Comprehensive & Neighborhood Plans

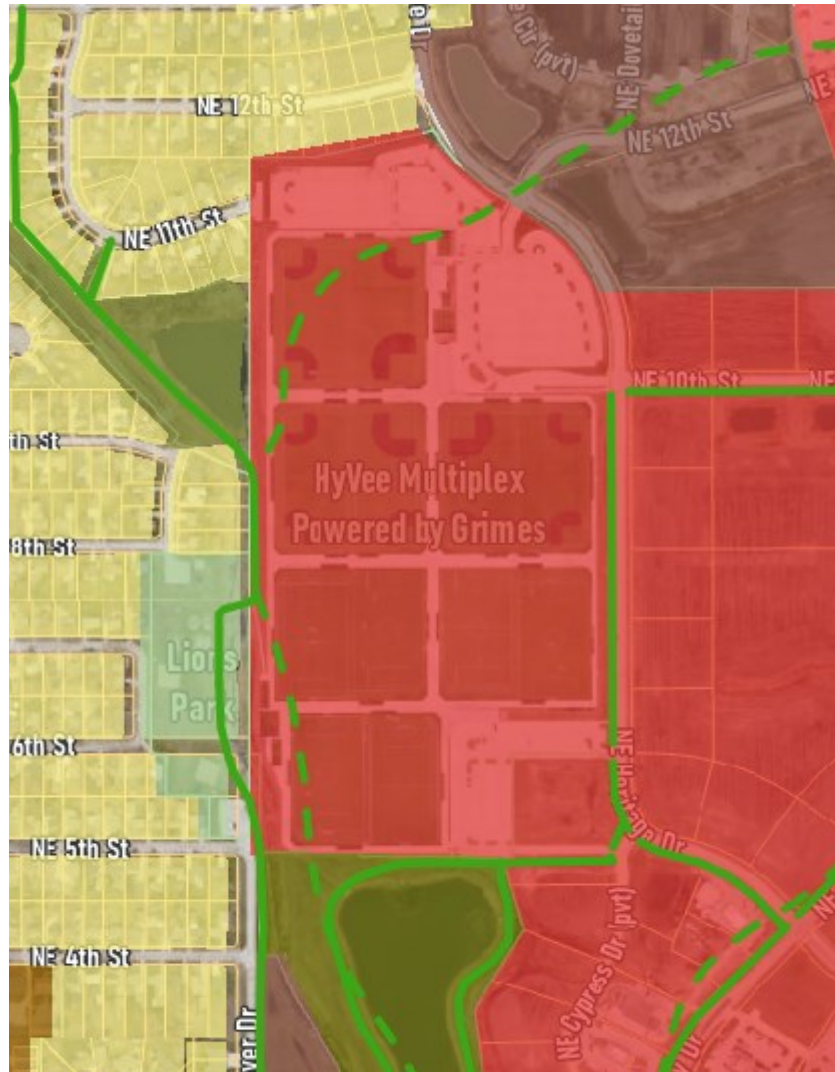
LAND USES & ZONING

Location	Existing Land Use	Land Use Plan Designation	Current Zoning
Subject Site	Sports Complex	Commercial	R-4
North	Single-Family	Low-Density Residential	R-4
South	Commercial	Commercial/Greenway	R-4/C-2
East	Commercial	Commercial	R-4
West	Park/Single-Family	Park/Low-Density Residential	Park/R-2

PARKS

All parkland dedication for the Hope Commercial PUD has been satisfied through the development of the Hy-Vee Multiplex. In addition, the tower project is commercial, therefore no parkland dedication is required.

The Parks and Recreation Advisory Board has recommended approval of the site plan amendment.

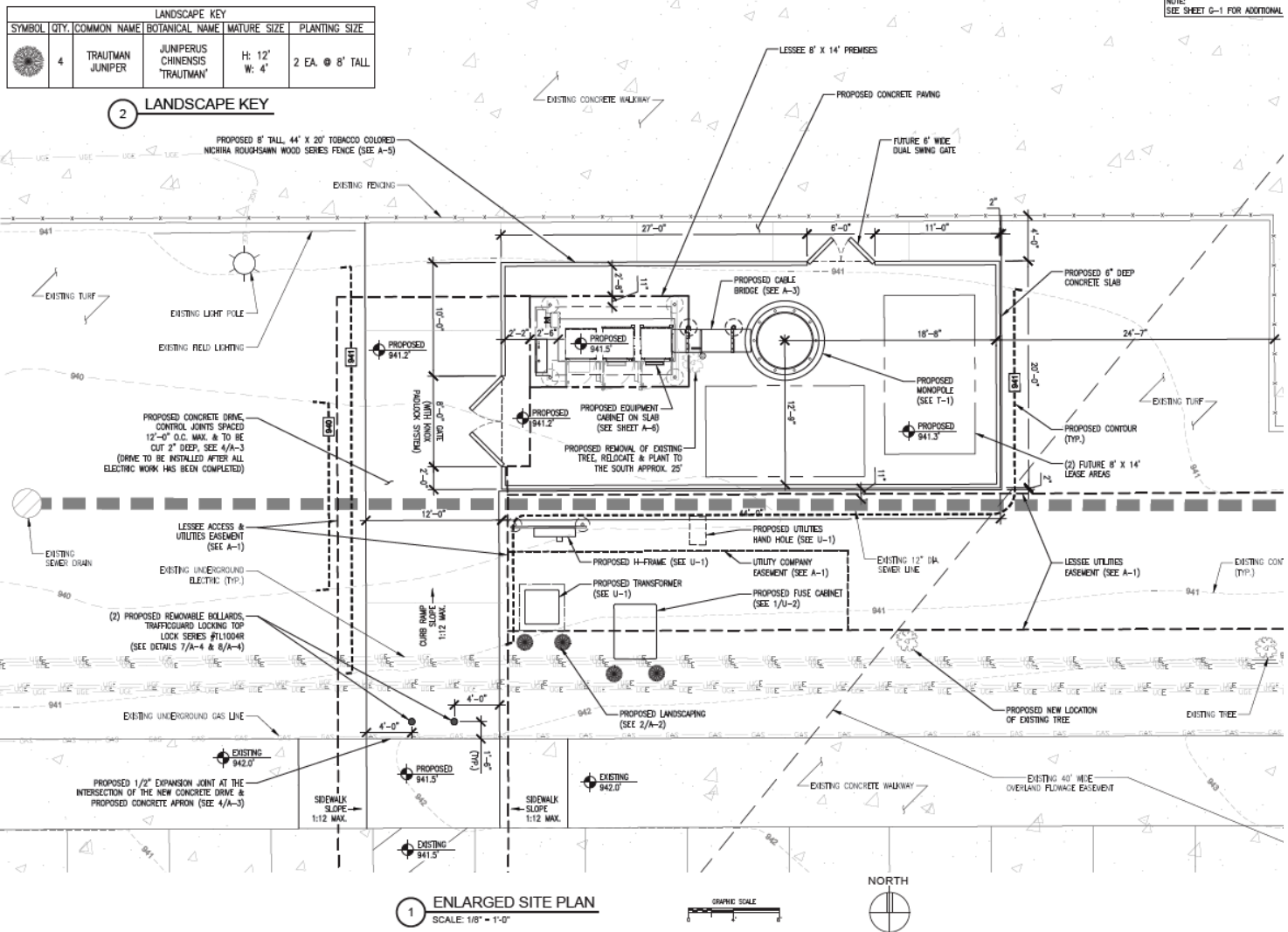


Future Land Use Map

Communication towers are not typically permitted on commercial property, however the zoning ordinance does allow towers on city-owned property. Because this site is City-owned, the tower is a permitted use on the property.

Site Layout

Site Layout



TOWER SITE

A 20' by 44' concrete pad will be constructed to house the tower and ground equipment for up to three carriers.

SCREENING

An 8' tall fence will be provided around the pad site to screen all carrier ground equipment from view. The fence will consist of tobacco-colored Nichiha that will match the Nichiha on the concession building.

ACCESS

The tower will be accessed via a new driveway from the parking lot to the tower pad. A new curb ramp will be installed to ensure vehicle and ADA access. Removable bollards will be placed at the end of the driveway to ensure only authorized tower users can park in the driveway. The parking stall in front of the driveway will be striped for no parking to ensure carriers have access to the driveway.

LANDSCAPING

Columnar evergreen plantings will be planted in front of electrical ground equipment on the exterior of the fenced area to screen the equipment from view.

Tower Design

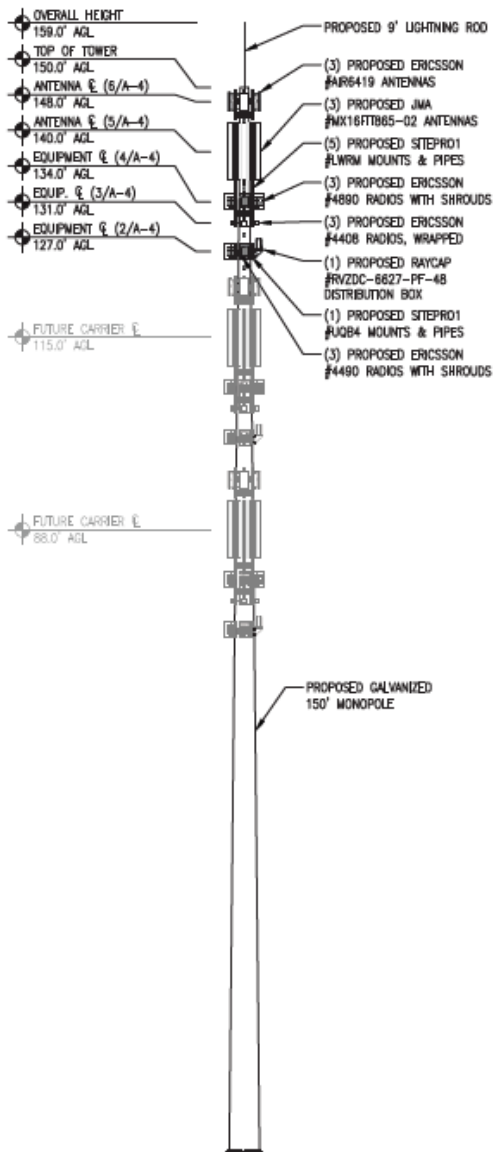
TOWER DESIGN

The communication tower will be a 150' tall galvanized monopole with space for three carriers to locate on the tower. The galvanized finish will help the tower to blend in with the existing galvanized field lighting poles.

A rendering is provided to demonstrate how the tower would look onsite. The viewpoint provided is from the trail on the north side of the regional detention basin.



Existing View



Proposed View

Legal & Conclusion

LEGAL

The communication tower has been granted two variances by the Board of Adjustment. The proposed site plan complies with the variances granted.

- A variance was granted to increase the tower height from 100' to 150'. To reduce the number of towers in the City, the City can require towers to allow collocation of other carriers on the tower. The City required that there be collocation capability for the City or other carriers. To accommodate other carriers, an increase in height was necessary for other carriers to provide adequate service.
- A variance was granted to reduce the setback of the tower from the south property line. Towers are required to be setback from all property lines equal to the height of the tower. There were no alternative locations available on site for the tower. No structures will be proposed within 150' south of the tower. Only parking will be provided within 150' to the south of the tower.

The site is subject to the Hope Commercial PUD Zoning Change and Development Agreement.

Verizon has entered into a lease agreement with the City to locate on the tower, and operate and maintain their equipment.

Conclusion

A 150' tall galvanized monopole communication tower is proposed between the south concession building and batting cages.

Carrier ground equipment will be screened by an 8' tall Nichiha fence.

Landscaping will be provided to help screen the electrical equipment on the exterior of the fence line.

A new driveway will connect from the parking lot to the pad site for carriers to access the tower facility.

Two variances were granted by the Board of Adjustment to increase the tower height and reduce the setback of the tower from the south property line.

Staff Recommendation

Staff recommend approval subject to any remaining staff comments.



Site Location & Surrounding Properties



Site Location

Easement

Aerial Photographs (2023)

Verizon Wireless – DES BEAVER CREEK - B
 1000 NE Heritage Drive
 Grimes, IA 50111





1 AERIAL KEY



DESIGN 1
 9973 VALLEY VIEW RD.
 EDEN PRAIRIE, MN 55344
 (952) 903-9299
 WWW.DESIGN1EP.COM

verizon
 10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 (952) 946-4700

PROJECT

 LOC. CODE: 573148

DES
 BEAVER CREEK

NE HERITAGE DR
 GRIMES, IA 50111

SHEET CONTENTS:
 PHOTO SIMULATION

DRAWN BY: MJS
 CHECKED BY: JP/TJR
 v.1 05-05-25

PS-0



① EXISTING PHOTO

DESIGN

9973 VALLEY VIEW RD.
EDEN PRAIRIE, MN 55344
(952) 903-9299
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verizon

10801 BUSH LAKE ROAD
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DRAWN BY: MJS
CHECKED BY: JP/TJR
v.1 05-05-25

PS-1A



1 PROPOSED IMAGE

DESIGN

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SHEET CONTENTS:
PHOTO SIMULATION

DRAWN BY:	MJS
CHECKED BY:	JP/TJR
v.1	05-05-25

PS-1B

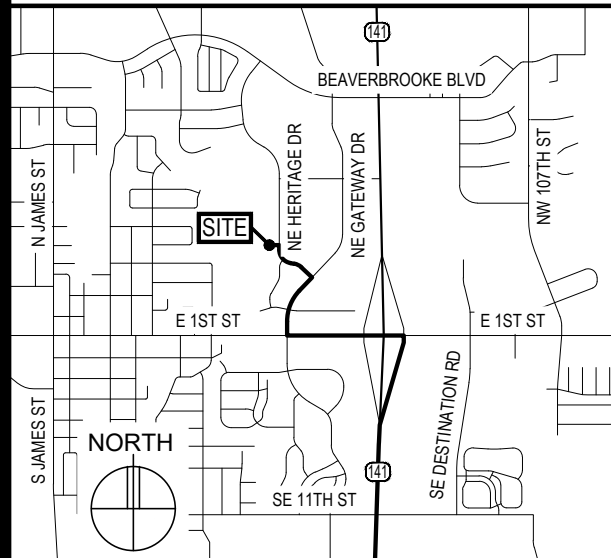


DES BEAVER CREEK NEW BUILD

PROJECT INFORMATION

SITE NAME: DES BEAVER CREEK
 SITE ADDRESS: NE HERITAGE DR
 GRIMES, IA 50111
 COUNTY: POLK
 LATITUDE: N 41° 41' 34.46"
 LONGITUDE: W 93° 46' 54.20"
 DRAWING BASED ON
 RFDS DATED: 04-12-24
 CONSTRUCTION TYPE: IIB
 SITE AREA: 8' X 14' - 112 S.F.

VICINITY MAP



MAP DATA ©2023 GOOGLE

LOCATION SCAN



ISSUE SUMMARY

REV	DESCRIPTION	SHEET/DETAIL
A	ISSUED FOR REVIEW 11-08-24	ALL
B	ISSUED FOR OWNER SIGNOFF 12-13-24	ALL
C	ISSUED FOR REVISED ANTENNA KEYS 12-20-24	A-3
D	ISSUED FOR CITY REQUIREMENTS 04-10-25	ALL
E	ISSUED FOR CITY COMMENTS 05-06-25	ALL

DEPARTMENTAL APPROVALS

JOB TITLE	NAME	DATE
RF ENGINEER	NICHOLAS CLAUSEN	04-15-25
OPERATIONS MANAGER		
CONSTRUCTION ENGINEER	JUSTIN RUCH	04-15-25

LESSOR / LICENSOR APPROVAL

SIGNATURE	PRINTED NAME	DATE

LESSOR / LICENSOR: PLEASE CHECK THE APPROPRIATE BOX BELOW
 NO CHANGES. CHANGES NEEDED. SEE COMMENTS.

CONTACTS

LESSOR / LICENSOR: CITY OF GRIMES
 410 SE MAIN ST, SUITE 102
 GRIMES, IA 50111
 ALEX PFALTZGRAFF (515) 986-4050

LESSEE: VERIZON WIRELESS
 10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 CONSTRUCTION DEPT (952) 946-4700

POWER UTILITY COMPANY CONTACT: MIDAMERICA ENERGY
 500 EAST COURT AVE
 DES MOINES, IA 50309
 LAYNE OGLE (515) 252-6797

TELCO UTILITY COMPANY CONTACT: ONEFIBER
 250 SE DESTINATION DRIVE
 GRIMES, IA 50111
 RYAN HESELTINE (515) 986-7325

DESIGNER: DESIGN 1 OF EDEN PRAIRIE
 9973 VALLEY VIEW ROAD
 EDEN PRAIRIE, MN 55344
 (952) 903-9299

SURVEYOR: WIDSETH
 610 FILLMORE STREET - PO BOX 1028
 ALEXANDRIA, MN 56308-1028
 320-762-8149

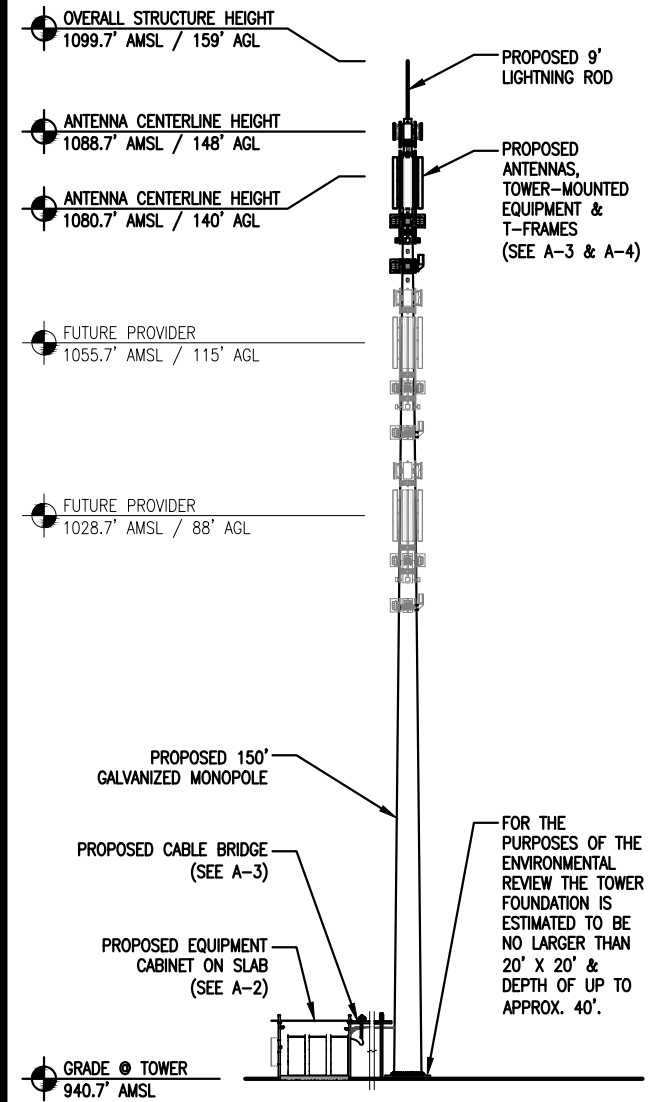
STRUCTURAL ENGINEER: T.B.D

GEOTECHNICAL ENGINEER: CERTIFIED TESTING SERVICES, INC
 419 WEST 6TH ST, PO BOX 1193
 SIOUX CITY, IA 51102
 JAMES BERTSCH, PE (712) 252-5132

NOTES:
 1. THESE DRAWINGS DO NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, OF THE ACCURACY OF THE STRUCTURAL ANALYSES AND THE PERFORMANCE OF THE COMPLETED CONSTRUCTION AS SHOWN ON THESE DOCUMENTS AND THE STRUCTURAL ANALYSES.
 2. NO STRUCTURAL ANALYSIS FOR THE TOWER, MOUNTS OR FOUNDATION HAVE BEEN PERFORMED AS PART OF THESE DRAWINGS. THE STRUCTURAL ANALYSIS FOR THE TOWER AND FOUNDATION ARE BY THE TOWER SUPPLIER AND SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT.
 3. PLEASE COORDINATE ANY STRUCTURAL CONCERNS/MATTERS OR ANY LOADING MODIFICATIONS TO THE CONSULTANT WHO AUTHORED THE ANALYSIS AND NOTIFY DESIGN 1 IMMEDIATELY OF THE ISSUE.
 4. TOWER FOUNDATION, EQUIPMENT SLAB, GENERATOR FOUNDATION, AND THE ACCESS DRIVE TO BE EXCAVATED AND CONSTRUCTED IN ACCORDANCE WITH RECOMMENDATIONS AND SPECIFICATIONS OF THE GEOTECHNICAL REPORT WHICH IS NOT INCLUDED IN THIS PACKAGE. DISCREPANCIES BETWEEN THE REPORT AND THE OTHER DOCUMENTS TO BE IMMEDIATELY REPORTED TO VERIZON WIRELESS AND THE DESIGNER.

TOWER ELEVATION

NOTES:
 1. TOWER TO BE ERECTED AND INSTALLED IN ACCORDANCE WITH TOWER MANUFACTURER'S DRAWINGS NOT INCLUDED WITH THIS PACKAGE. DISCREPANCIES BETWEEN TOWER DRAWINGS AND DESIGNER DRAWINGS TO BE REPORTED TO VERIZON WIRELESS AND THE DESIGNER IMMEDIATELY.
 2. CONTRACTOR TO ENSURE TIP OF ANTENNAS DO NOT EXCEED TOWER HEIGHT.
 3. ELEVATION IS SHOWN FOR GENERAL DIAGRAMMATIC PURPOSES ONLY. DO NOT SCALE.
 4. THE STRUCTURAL DESIGN FOR THE MOUNTS (BY OTHERS) SHALL BE PER THE VERIZON NETWORK STANDARD NSTD-445. ALL LOADING AND DESIGN SHALL BE PER THE TIA-222-H STANDARD.



1 NORTH ELEVATION
 SCALE: 1" = 30'-0"
 GRAPHIC SCALE: 0 15' 30'

SHEET INDEX

SHEET	SHEET DESCRIPTION
T-1	PROJECT INFORMATION, TOWER ELEVATION & SHEET INDEX
A-1	OVERALL SITE PLAN
A-1.1	SITE PLAN, DETAIL INDEX & PHOTO
A-2	ENLARGED SITE PLAN
A-3	ANTENNA AND COAX KEY, CABLE BRIDGE PLAN & DETAILS
A-4	TOWER ELEVATION, MOUNTING DETAILS & BOLLARD DETAILS
A-5	FENCE & GATE DETAILS
A-6	CABINET DETAILS
A-7	OUTLINE SPECIFICATIONS
G-1	GROUNDING & UTILITY NOTES
G-2	GROUNDING PLAN & GROUNDING DETAIL INDEX
U-1	SITE UTILITY PLAN
U-2	ENLARGED SITE UTILITY & PULLBOX LOCATION PLANS
-	SURVEY (2 SHEETS)

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

(signature) Joshua Herzog (date) 05/06/2025

Printed or typed name: Joshua Herzog
 License number: P20456
 My license renewal date is December 31, 2026

Pages or sheets covered by this seal:
 T-1, A-1, A-1.1, A-2, A-3, A-4, A-5, A-6, A-7, G-1, G-2, U-1, AND U-2

HERZOG ENGINEERING
 1334 81st AVE NE
 SPRING LAKE PARK, MN 55432
 (612) 844-1234
 WWW.HERZOGENGINEERING.COM

JOSHUA HERZOG
 20456
 IOWA

HE #: 241495 05/06/2025

DESIGN 1

9973 VALLEY VIEW RD.
 EDEN PRAIRIE, MN 55344
 (952) 903-9299
 WWW.DESIGN1EP.COM

10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 (952) 946-4700

PROJECT

 LOC. CODE: 573148

DES
 BEAVER CREEK

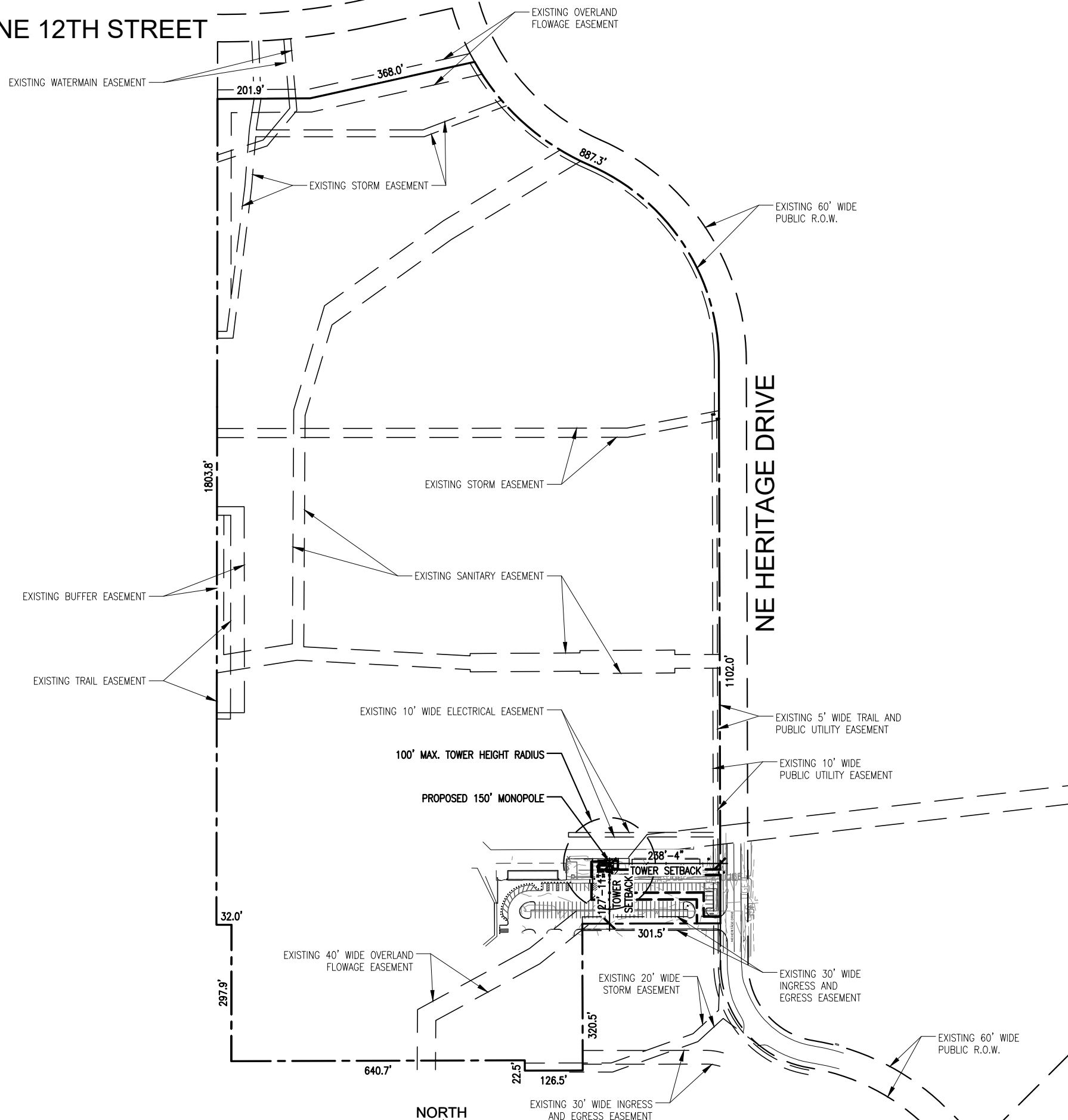
NE HERITAGE DR
 GRIMES, IA 50111

SHEET CONTENTS:
 CONTACTS
 ISSUE SUMMARY
 SHEET INDEX
 DEPARTMENTAL APPROVALS
 LESSOR APPROVAL
 PROJECT INFORMATION
 AREA & VICINITY MAPS
 GENERAL NOTES

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

T-1

NE 12TH STREET



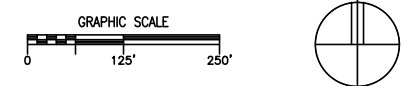
- NOTES:**
1. PROPOSED STRUCTURES TO PROVIDE CELLULAR SERVICE TO THE SURROUNDING AREA.
 2. PROJECT PROPERTY ZONING REFERENCE: R-4 (HOPE COMMERCIAL PUD)
 3. AREA OF LOT: 2,139,136.8 SF/49.1 ACRES
 4. CONTRACTOR TO COORDINATE APPROVAL TO START CONSTRUCTION BETWEEN THE SCHOOL, CITY (BUILDING PERMIT) AND VERIZON. THEN ABOUT 4 WEEKS FOR ACTUAL CONSTRUCTION.
 5. CONTRACTOR TO PROVIDE TEMPORARY LOCKING SECURITY FENCING AROUND THE CONSTRUCTION SITE FOR SAFETY OF PUBLIC AND PROTECTION OF CONSTRUCTION IMPROVEMENTS.

- City of Grimes Standard Notes for Site Plans:**
1. **General Notes:**
 - a. All work shall be done in accordance with the current version of the Iowa Statewide Urban Design and Specifications (SUDAS) for Public Improvements on the date of approval and the City of Grimes Supplemental Specifications.
 - b. The contractor shall be responsible for reviewing, signing, and returning the preconstruction packet to the Development Services Department prior to the start of construction.
 - c. All permits (IDNR, NPDES, IDOT, Army Corp., etc.) shall be obtained prior to the start of construction.
 - d. Provide the City of Grimes with record drawings (as-builts) of all improvements and easements as per City commercial as-built policy.
 - e. The record drawings should include a certified grading sheet and as-built plans of all stormwater management facilities on site with a certification statement signed by the design engineer indicating that the facilities were constructed as designed.
 - f. Record drawings to include one electronic file in .dwg and .pdf file extensions.
 - g. Typical building service layout to reflect the City's service order from left to right facing the lot sanitary, water, sump. Mark the ends of services with a steel fence post and paint green for sanitary, blue for water, and white for storm. Mark the ends of sanitary and sump with a 2 x 4 from end of pipe to 2' above grade.
 - h. A Knox box is required by the fire department.
 - i. All site lighting shall not spill onto adjacent properties or rights-of-way.
 - j. Provide a 4-year maintenance bond for all public improvements (utility, paving, subgrade) with an itemized cost breakdown.
 - k. The contractor shall be responsible for locating all newly constructed public and private utilities associated with the project at their expense until the City accepts the project through the Grimes City Council.
 2. **Sanitary Sewer Notes:**
 - a. The contractor is required to place a temporary plug in the existing downstream sanitary sewer manhole prior to the start of construction. The contractor shall remove the plug following approval of construction by the City of Grimes.
 - b. Sanitary gravity pipe material shall be PVC SDR 26 or Truss (8" to 15").
 - c. Sanitary gravity service pipe material shall be PVC SDR 23.5 (4" to 6").
 - d. All sanitary sewer manholes shall have steps.
 - e. All sanitary sewer manholes castings shall be sealed with heat shrink sleeves.
 - f. All sanitary sewer manhole castings located within pavement shall be Type B:PCC W/adjusting mechanism.
 - g. Sanitary sewer cleaning & televising shall be completed prior to paving. Run sufficient dyed water through pipe prior to televising. Provide the video and inspection report to the City Engineering Division.
 3. **Water Main Notes:**
 - a. All fire hydrants shall be American Flow Control-Waterous Pacer WB-67-250, Mueller Super Centurion 250 (3-way A-423), or Clow Medallion F-2545. All hydrants shall have the following: 6" MI Shoe, 2-1/2" Hose Nozzle, 4-1/2" Steamer Nozzle, NST Threads, Pentagon Operating Nut, Chain on cap, open left, 5-1/2" bury, and factory painted red. The minimum spool pipe length from auxiliary valve to hydrant shoe shall be 2.0'.
 - b. All hydrants will immediately be covered with a black plastic bag (or equivalent) once the hydrant is installed. The City of Grimes will notify the contractor when the bags can be removed.
 - c. A tracer wire receptacle shall be installed at each hydrant, AA Manufacturing Tracer Wire Receptacle Model TW-18-2.
 - d. All valves shall be resilient wedge gate valves.
 - e. Water service shall be 1-inch minimum type K copper.

- FLOODPLAIN DESIGNATIONS:**
1. ZONE A SPECIAL FLOOD HAZARD AREA WITHOUT BASE FLOOD ELEVATION (NORTH OF THE SITE)
 2. ZONE AE SPECIAL FLOOD HAZARD AREA WITH BASE FLOOD ELEVATION (IN SOUTHWEST CORNER OF THE PARENT PARCEL)
 3. REGULATORY FLOODWAY (IN SOUTHWEST CORNER OF THE PARENT PARCEL)

- VARIANCES GRANTED (PER 3-19-25 MEETING):**
1. REQUEST TO INCREASE TOWER HEIGHT.
 2. REDUCE SETBACK REQUIREMENTS FOR THE TOWER.

1 OVERALL SITE PLAN
SCALE: 1" = 250'-0"



HERZOG ENGINEERING
1334 81ST AVE NE
SPRING LAKE PARK, MN 55432
(612) 844-1234
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HE #: 241495 05/06/2025

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verizon

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(952) 946-4700

PROJECT
LOC. CODE: 573148

DES
BEAVER CREEK

NE HERITAGE DR
GRIMES, IA 50111

SHEET CONTENTS:
OVERALL SITE PLAN
NOTES

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

A-1



2 SITE PHOTO
VIEW: LOOKING EAST

PROPOSED
FENCED COMPOUND

LESSEE ACCESS &
UTILITIES EASEMENT

FROST DEPTH DESIGN =
3'-6" MIN. OR EXTENDING
BELOW THE FROST LINE
OF THE LOCALITY,
WHICHEVER IS GREATER

DETAIL INDEX

DETAIL	DETAIL DESCRIPTION
SLAB	SEE SHEET A-6
3.1	CABLE BRIDGE SECTION
4.3	CABLE BRIDGE ELEVATION
7.1	GPS MOUNTING DETAIL (DETAIL 1)
8.1	TELCO ENTRY DETAIL
9.1	CMPH DETAIL
10.8	ONE-LINE ELECTRICAL DIAGRAM
12.1	METER ON H-FRAME (DETAIL 1)

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LICENSED PROFESSIONAL ENGINEER
JOSHUA HERZOG
20456
IOWA

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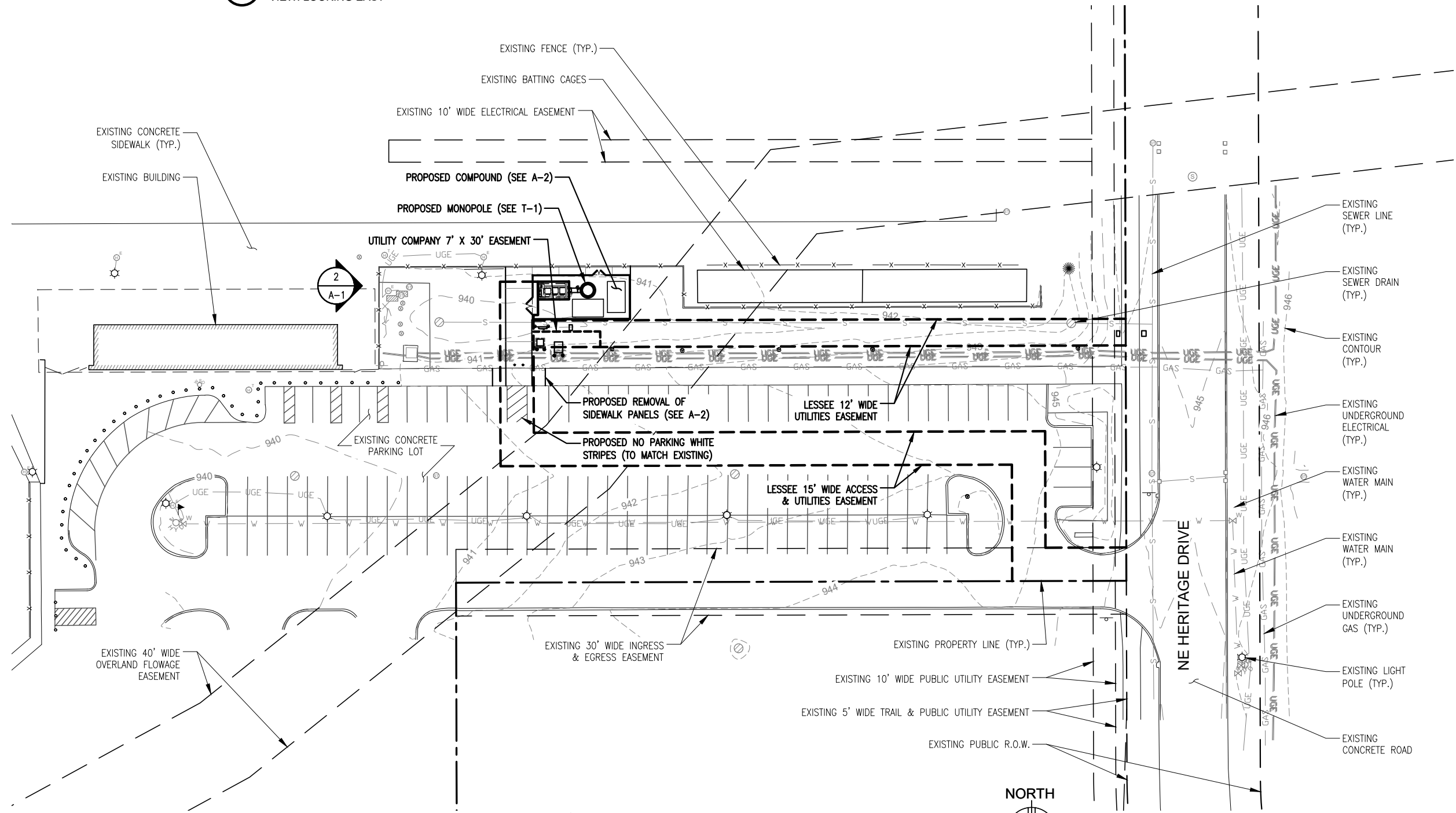
DES BEAVER CREEK

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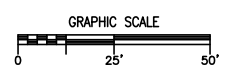
SHEET CONTENTS:
SITE PLAN
DETAIL INDEX
PHOTO


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REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

A-1.1



1 SITE PLAN
SCALE: 1" = 50'-0"



LANDSCAPE KEY					
SYMBOL	QTY.	COMMON NAME	BOTANICAL NAME	MATURE SIZE	PLANTING SIZE
	4	TRAUTMAN JUNIPER	JUNIPERUS CHINENSIS 'TRAUTMAN'	H: 12' W: 4'	2 EA. @ 8' TALL

2 LANDSCAPE KEY

NOTE:
SEE SHEET G-1 FOR ADDITIONAL NOTES

HERZOG ENGINEERING
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 SPRING LAKE PARK, MN 55432
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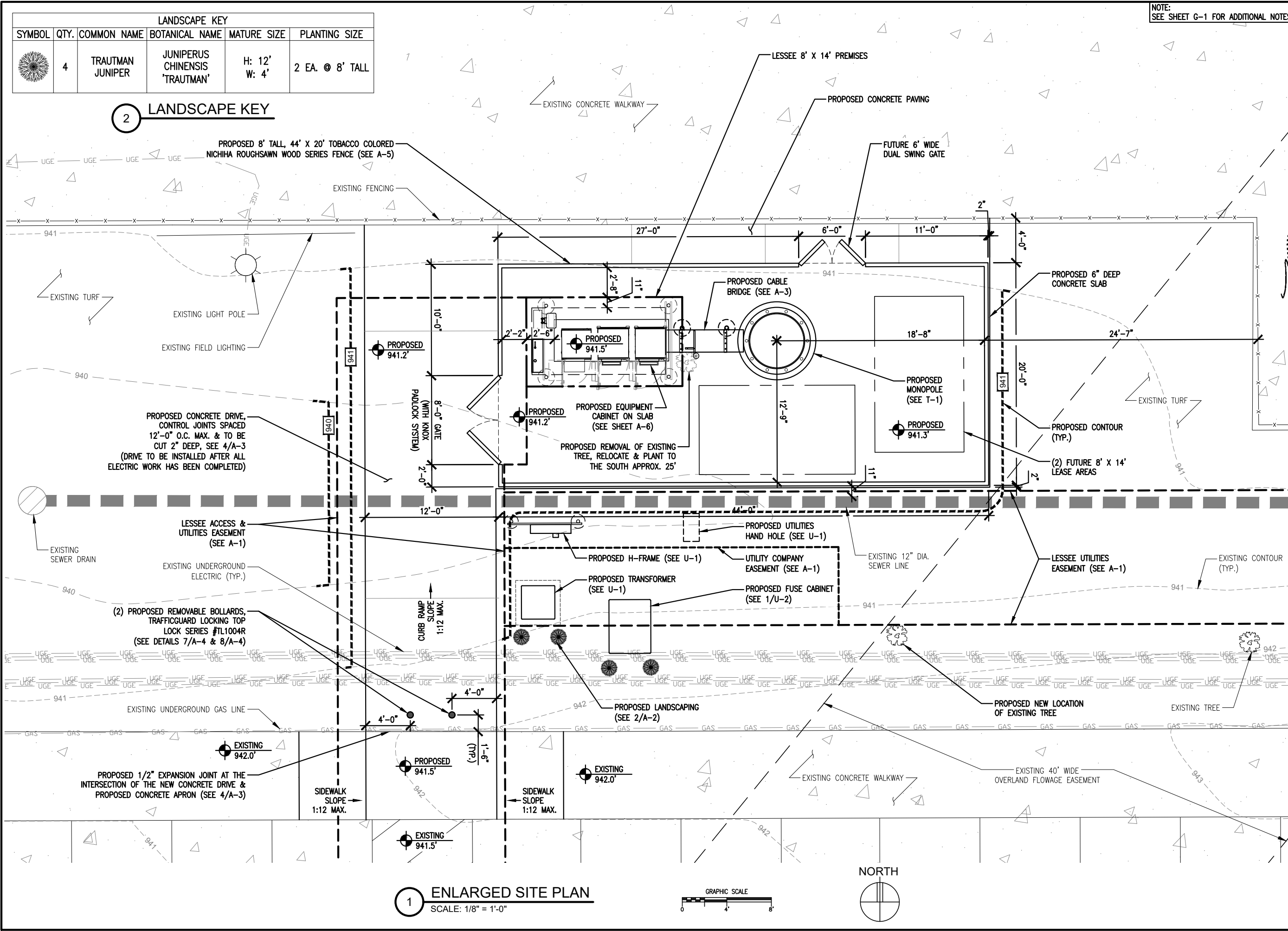
DES
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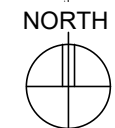
SHEET CONTENTS:
 ENLARGED SITE PLAN

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

A-2



1 ENLARGED SITE PLAN
 SCALE: 1/8" = 1'-0"



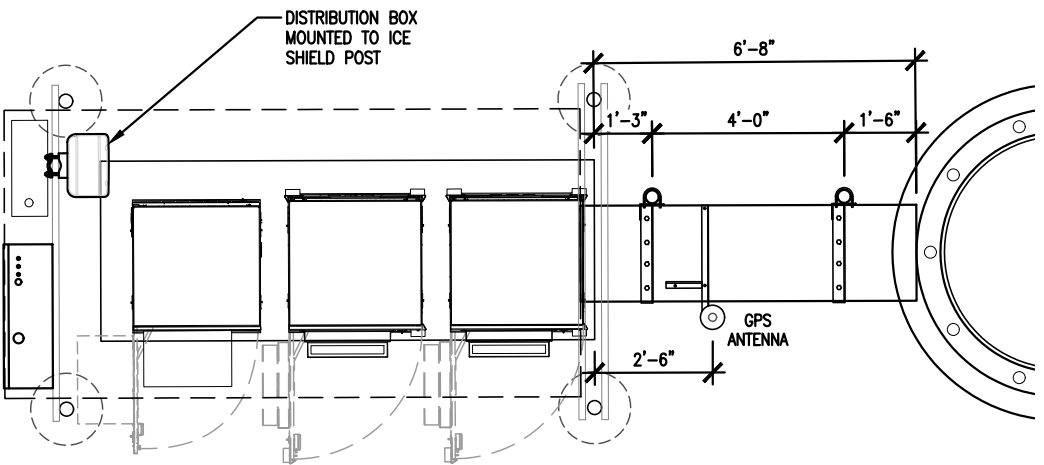
ANTENNA KEY													EQUIPMENT KEY				
	AZIMUTH	POSITION	FUNCTION	QTY	MANUFACTURER	MODEL	MOD TYPE	ANTENNA LENGTH	ANTENNA TIP	ANTENNA CENTER	ELEC DOWNTILT	MECH DOWNTILT	QTY	MANUFACTURER	MODEL	RRU PORT	
"X" SECTOR	30°	1.1	-	1	ERICSSON	AIR 6419	L-SUB6	28"	149.2'	148.0'	3'	0'	-	-	-	-	
	30°	2.1	TX/RX1	1	JMA	MX16FIT865-02	700/850	96"	144.0'	140.0'	2'	0'	1	ERICSSON	4490	1	
	-	2.2	TX/RX2	-	-	2ND PORT	700/850	-	-	-	-	-	-	-	-	2	
	-	2.3	TX/RX3	-	-	3RD PORT	700/850	-	-	-	-	-	0'	-	-	3	
	-	2.4	TX/RX4	-	-	4TH PORT	700/850	-	-	-	-	-	0'	-	-	4	
	-	2.5	TX/RX1	-	-	5TH PORT	AWS	-	-	-	-	2'	0'	1	ERICSSON	4890	1
	-	2.6	TX/RX2	-	-	6TH PORT	AWS	-	-	-	-	-	-	-	-	3	
	-	2.7	TX/RX3	-	-	7TH PORT	AWS	-	-	-	-	-	-	-	-	5	
	-	2.8	TX/RX4	-	-	8TH PORT	AWS	-	-	-	-	-	-	-	-	7	
	-	2.9	TX/RX1	-	-	9TH PORT	PCS	-	-	-	-	2'	0'	-	-	2	
	-	2.10	TX/RX2	-	-	10TH PORT	PCS	-	-	-	-	-	-	-	-	4	
	-	2.11	TX/RX3	-	-	11TH PORT	PCS	-	-	-	-	-	-	-	-	6	
	-	2.12	TX/RX4	-	-	12TH PORT	PCS	-	-	-	-	-	-	-	-	8	
	-	2.13	TX/RX1	-	-	13TH PORT	CBRS	-	-	-	-	2'	0'	1	ERICSSON	4408	1
	-	2.14	TX/RX2	-	-	14TH PORT	CBRS	-	-	-	-	-	-	-	-	2	
	-	2.15	TX/RX3	-	-	15TH PORT	CBRS	-	-	-	-	-	-	-	-	3	
-	2.16	TX/RX4	-	-	16TH PORT	CBRS	-	-	-	-	-	-	-	-	4		
"Y" SECTOR	150°	1.1	-	1	ERICSSON	AIR 6419	L-SUB6	28"	149.2'	148.0'	3'	0'	-	-	-	-	
	150°	2.1	TX/RX1	1	JMA	MX16FIT865-02	700/850	96"	144.0'	140.0'	2'	0'	1	ERICSSON	4490	1	
	-	2.2	TX/RX2	-	-	2ND PORT	700/850	-	-	-	-	-	-	-	-	2	
	-	2.3	TX/RX3	-	-	3RD PORT	700/850	-	-	-	-	-	0'	-	-	3	
	-	2.4	TX/RX4	-	-	4TH PORT	700/850	-	-	-	-	-	0'	-	-	4	
	-	2.5	TX/RX1	-	-	5TH PORT	AWS	-	-	-	-	2'	0'	1	ERICSSON	4890	1
	-	2.6	TX/RX2	-	-	6TH PORT	AWS	-	-	-	-	-	-	-	-	3	
	-	2.7	TX/RX3	-	-	7TH PORT	AWS	-	-	-	-	-	-	-	-	5	
	-	2.8	TX/RX4	-	-	8TH PORT	AWS	-	-	-	-	-	-	-	-	7	
	-	2.9	TX/RX1	-	-	9TH PORT	PCS	-	-	-	-	2'	0'	-	-	2	
	-	2.10	TX/RX2	-	-	10TH PORT	PCS	-	-	-	-	-	-	-	-	4	
	-	2.11	TX/RX3	-	-	11TH PORT	PCS	-	-	-	-	-	-	-	-	6	
	-	2.12	TX/RX4	-	-	12TH PORT	PCS	-	-	-	-	-	-	-	-	8	
	-	2.13	TX/RX1	-	-	13TH PORT	CBRS	-	-	-	-	2'	0'	1	ERICSSON	4408	1
	-	2.14	TX/RX2	-	-	14TH PORT	CBRS	-	-	-	-	-	-	-	-	2	
	-	2.15	TX/RX3	-	-	15TH PORT	CBRS	-	-	-	-	-	-	-	-	3	
-	2.16	TX/RX4	-	-	16TH PORT	CBRS	-	-	-	-	-	-	-	-	4		
"Z" SECTOR	270°	1.1	-	1	ERICSSON	AIR 6419	L-SUB6	28"	149.2'	148.0'	3'	0'	-	-	-	-	
	270°	2.1	TX/RX1	1	JMA	MX16FIT865-02	700/850	96"	144.0'	140.0'	2'	0'	1	ERICSSON	4490	1	
	-	2.2	TX/RX2	-	-	2ND PORT	700/850	-	-	-	-	-	-	-	-	2	
	-	2.3	TX/RX3	-	-	3RD PORT	700/850	-	-	-	-	-	0'	-	-	3	
	-	2.4	TX/RX4	-	-	4TH PORT	700/850	-	-	-	-	-	0'	-	-	4	
	-	2.5	TX/RX1	-	-	5TH PORT	AWS	-	-	-	-	2'	0'	1	ERICSSON	4890	1
	-	2.6	TX/RX2	-	-	6TH PORT	AWS	-	-	-	-	-	-	-	-	3	
	-	2.7	TX/RX3	-	-	7TH PORT	AWS	-	-	-	-	-	-	-	-	5	
	-	2.8	TX/RX4	-	-	8TH PORT	AWS	-	-	-	-	-	-	-	-	7	
	-	2.9	TX/RX1	-	-	9TH PORT	PCS	-	-	-	-	2'	0'	-	-	2	
	-	2.10	TX/RX2	-	-	10TH PORT	PCS	-	-	-	-	-	-	-	-	4	
	-	2.11	TX/RX3	-	-	11TH PORT	PCS	-	-	-	-	-	-	-	-	6	
	-	2.12	TX/RX4	-	-	12TH PORT	PCS	-	-	-	-	-	-	-	-	8	
	-	2.13	TX/RX1	-	-	13TH PORT	CBRS	-	-	-	-	2'	0'	1	ERICSSON	4408	1
	-	2.14	TX/RX2	-	-	14TH PORT	CBRS	-	-	-	-	-	-	-	-	2	
	-	2.15	TX/RX3	-	-	15TH PORT	CBRS	-	-	-	-	-	-	-	-	3	
-	2.16	TX/RX4	-	-	16TH PORT	CBRS	-	-	-	-	-	-	-	-	4		

ADDITIONAL:

(1) DISTRIBUTION BOX, MODEL RVZDC-6627-PF-48 (ON TOWER)
(1) DISTRIBUTION BOX, MODEL RVZDC-4520-RM-48 (IN CABINET)
(2) HUBER+SUHNER HYBRID CABLE, MODEL #85205110 (DIST BOX AT SLAB TO DIST BOX ON TOWER)
(12) HUBNER+SUHNER HYBRID JUMPER, MODEL #85243898 (DIST. BOX TO RRU)
(48) ANDREW COAX JUMPER, MODEL LDF4-50A, 1/2"Ø FOAM DIELECTRIC, 10' EACH (RRU TO ANTENNA)
(1) POWERSHIFT EQUIPMENT, DC-DC UP-CONVERTER UNITS (IN CABINET)
(5) POWERSHIFT EQUIPMENT, DC-DC UP-CONVERTER MODULE (IN CABINET)

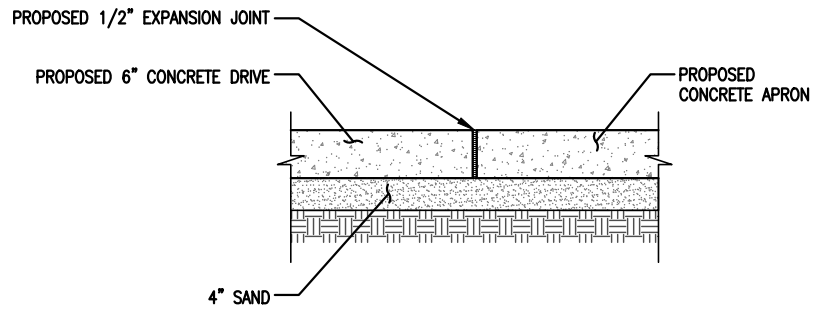
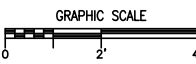
CABLE BRIDGE	=	7'
RAD CENTER	=	127'
CANOPY	=	12'
TOTAL	=	146'

2 PROPOSED KEYS

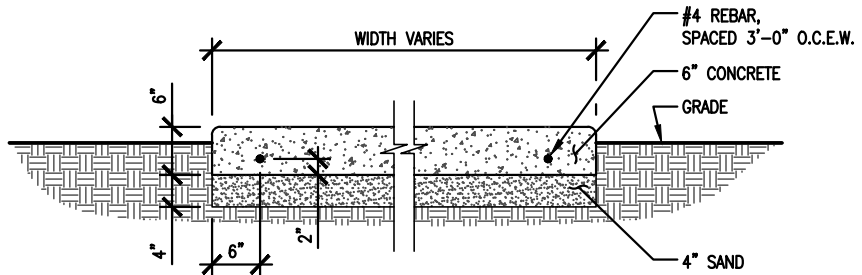
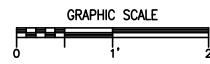


NOTE:
CABLE BRIDGE SUPPORTS ARE REQUIRED
AT INTERVALS NOT TO EXCEED 6'-0" WITH
OVERHANG EXTENSIONS NOT TO EXCEED 1'-6"

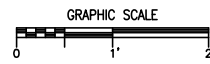
1 CABLE BRIDGE PLAN
SCALE: 1/4" = 1'-0"



4 EXPANSION JOINT DETAIL
SCALE: 1/2" = 1'-0"



3 DRIVEWAY DETAIL
SCALE: 1/2" = 1'-0"



HERZOG ENGINEERING
1334 81ST AVE NE
SPRING LAKE PARK, MN 55432
(612) 844-1234
WWW.HERZOGENGINEERING.COM

LICENSED PROFESSIONAL ENGINEER
JOSHUA HERZOG
20456
IOWA

HE #: 241495 05/06/2025

DESIGN 1
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(952) 903-9299
WWW.DESIGN1EP.COM

verizon
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

PROJECT
LOC. CODE: 573148

DES
BEAVER CREEK

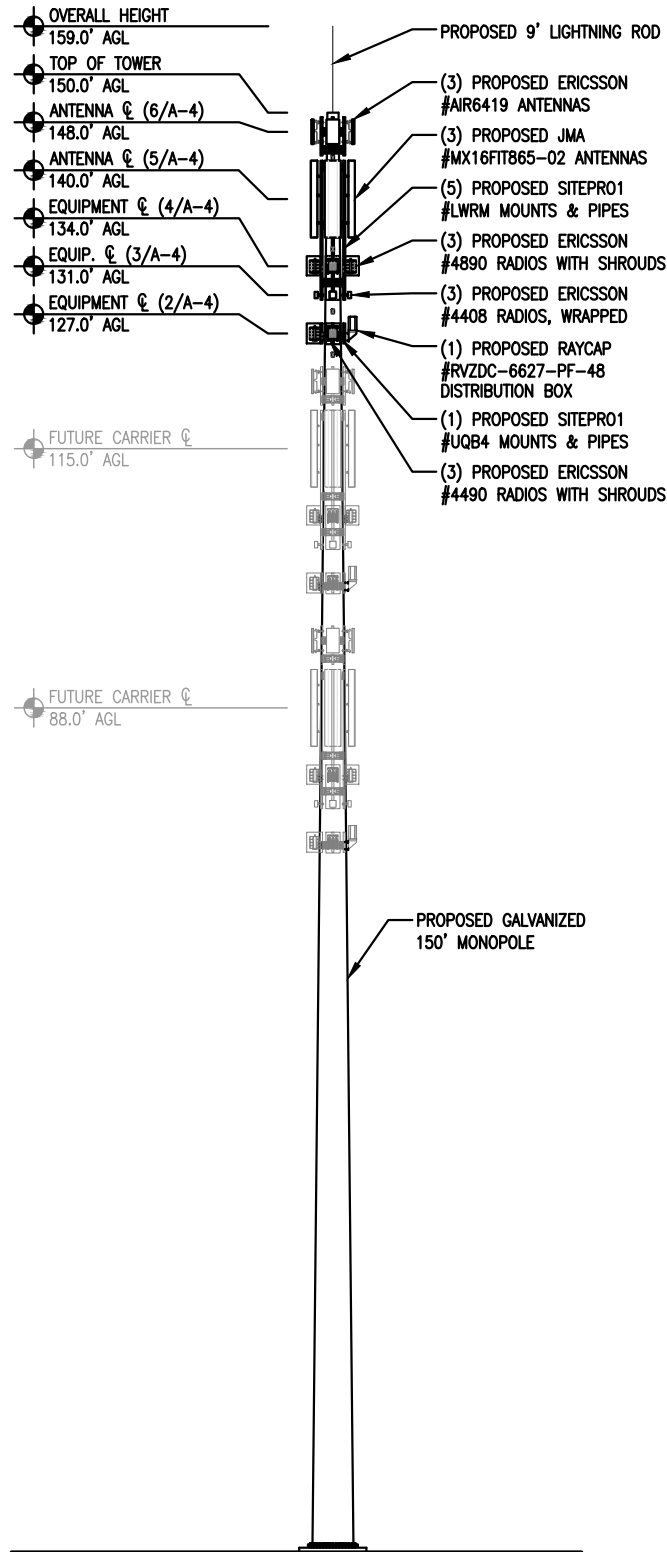
NE HERITAGE DR
GRIMES, IA 50111

SHEET CONTENTS:
PROPOSED KEYS
CABLE BRIDGE PLAN
DETAILS

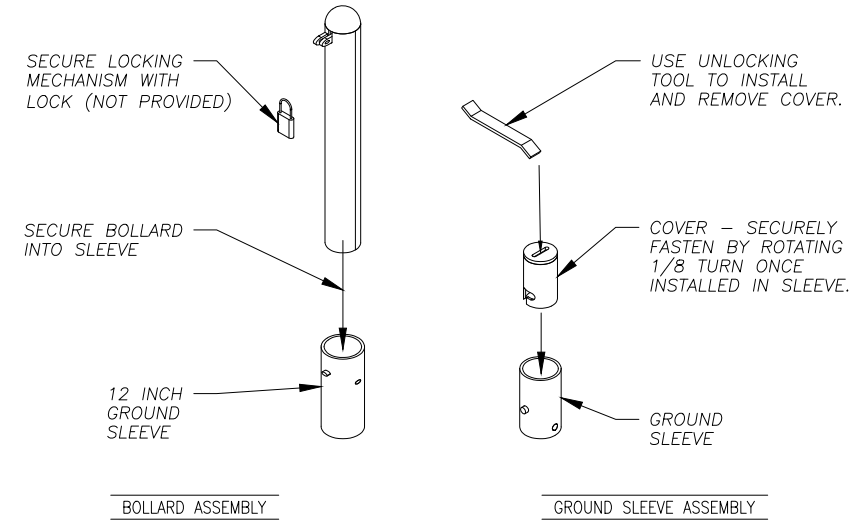
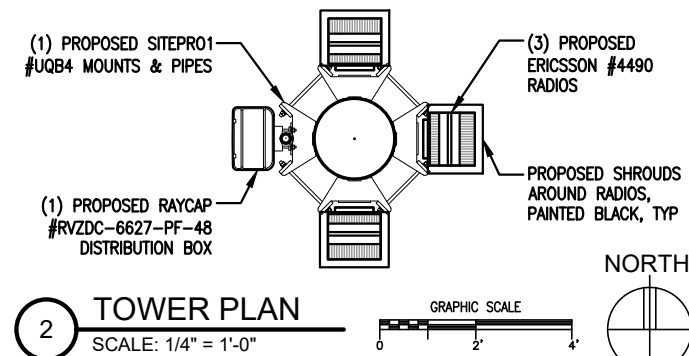
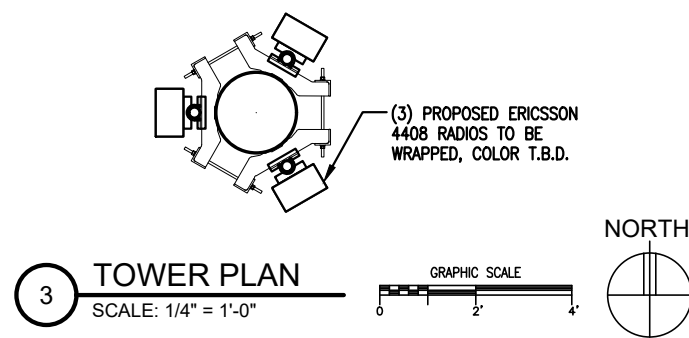
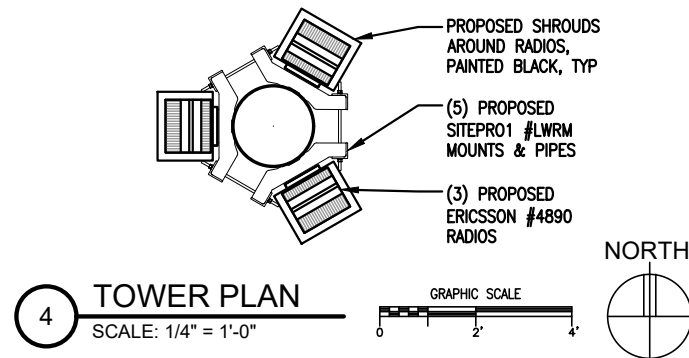
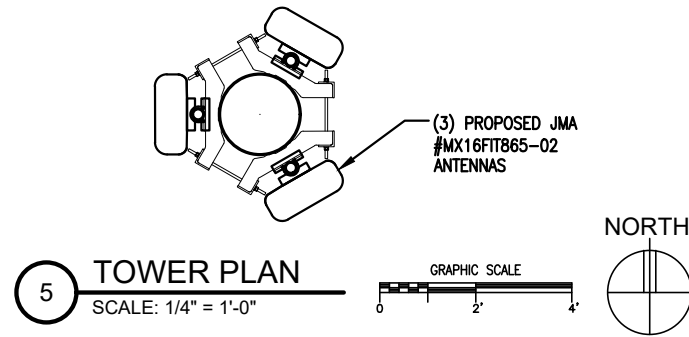
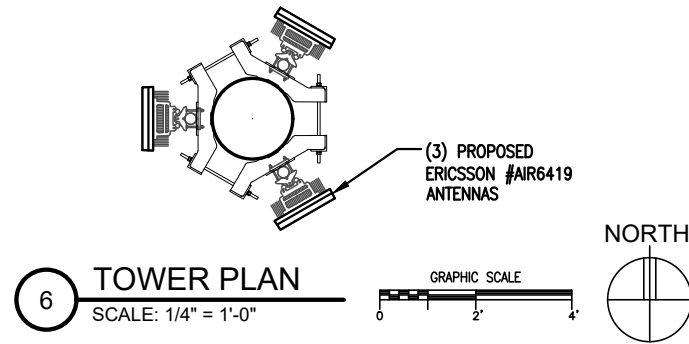
DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

A-3

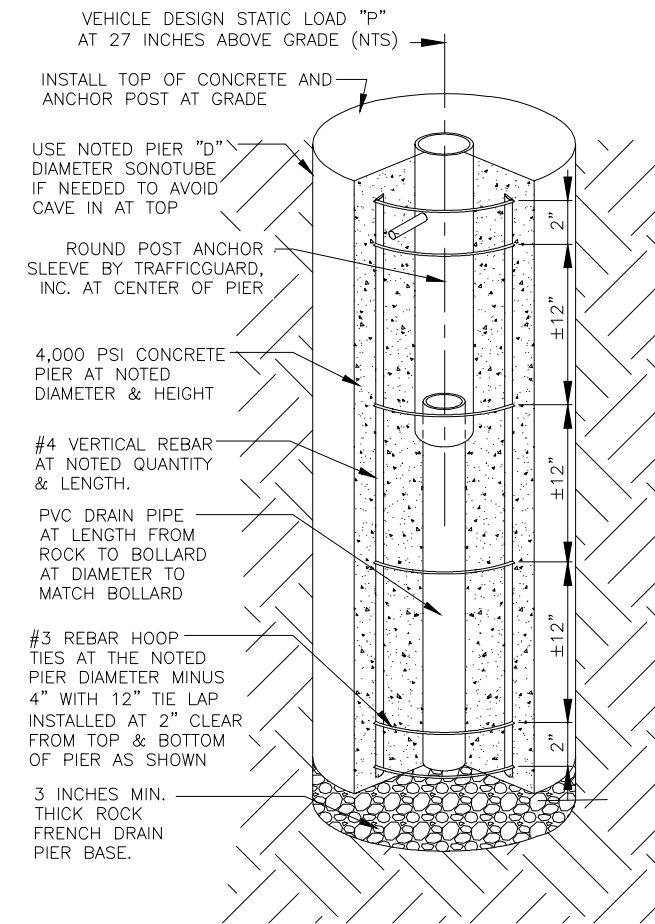
- NOTE:**
- 1.) VERIZON WIRELESS GC TO SUPPLY & INSTALL THE MOUNTS. THE MOUNTS MEET THE VERIZON WIRELESS MOUNT STANDARD NSTD-445. THE GC SHOULD OBTAIN A MOUNT CLASSIFICATION BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF THE PROJECT & SUBMIT THE PE-STAMPED REPORT TO VERIZON PRIOR TO CONSTRUCTION. THE GC SHALL BRING ANY CONCERNS OR DISCREPANCIES TO THE ATTENTION OF THE CONSTRUCTION ENGINEER & ENGINEER OF RECORD.
 - 2.) ALL QUAD MOUNT AZIMUTHS TO BE 0°, 90°, 180° & 270°.
 - 3.) CONTRACTOR TO ENSURE MOUNT & ANTENNA ARRAY DOES NOT IMPEDE SAFETY CLIMB/CABLES.
 - 4.) CABLE TO BE BUNDLED & STRAPPED TO PIPE OR USE CLICK BLOCKS IN A NEAT, ORDERLY MANNER.



1 TOWER ELEVATION
SCALE: 1" = 20'-0"
GRAPHIC SCALE



7 BOLLARD ASSEMBLY



8 PIER ELEVATION SECTION



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verizon
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(952) 946-4700

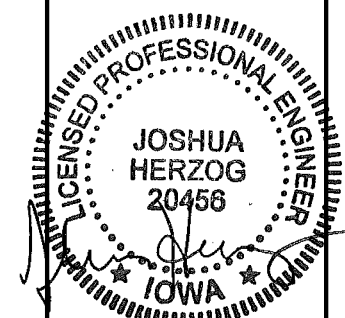
PROJECT
LOC. CODE: 573148

DES BEAVER CREEK

NE HERITAGE DR
GRIMES, IA 50111

SHEET CONTENTS:
TOWER ELEVATION
MOUNTING DETAILS
BOLLARD DETAILS

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25



HE #: 241495 05/06/2025



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PROJECT

 LOC. CODE: 573148

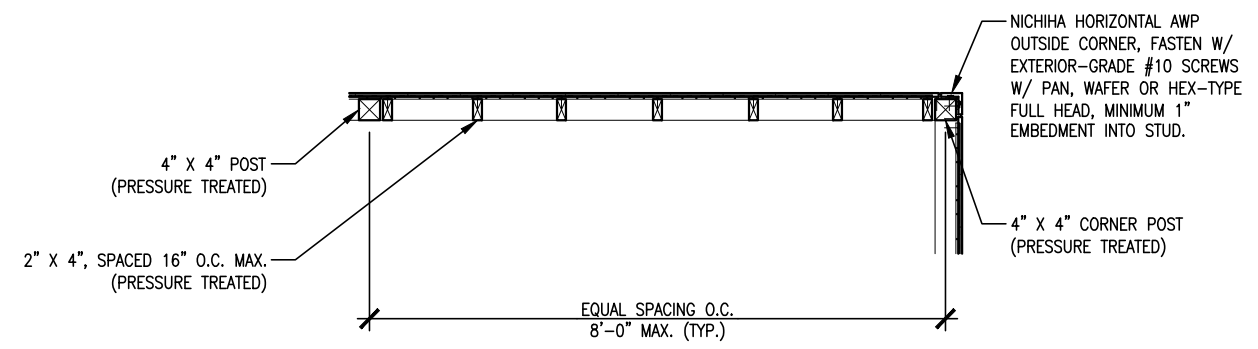
DES
BEAVER CREEK

NE HERITAGE DR
 GRIMES, IA 50111

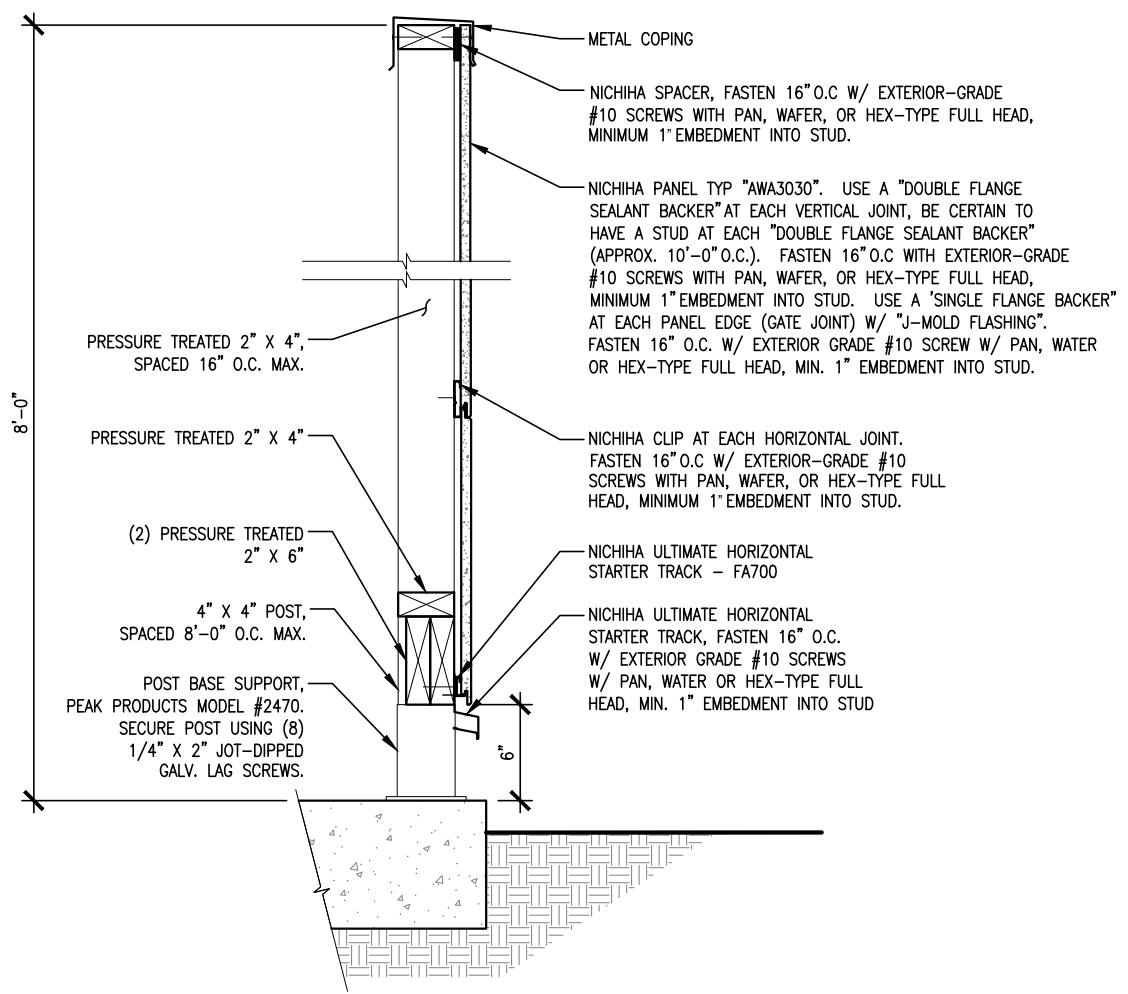
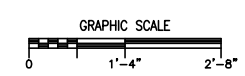
SHEET CONTENTS:
 FENCE & GATE DETAILS

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

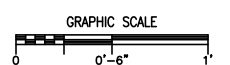
A-5



1 FENCE PLAN
 SCALE: 3/8" = 1'-0"

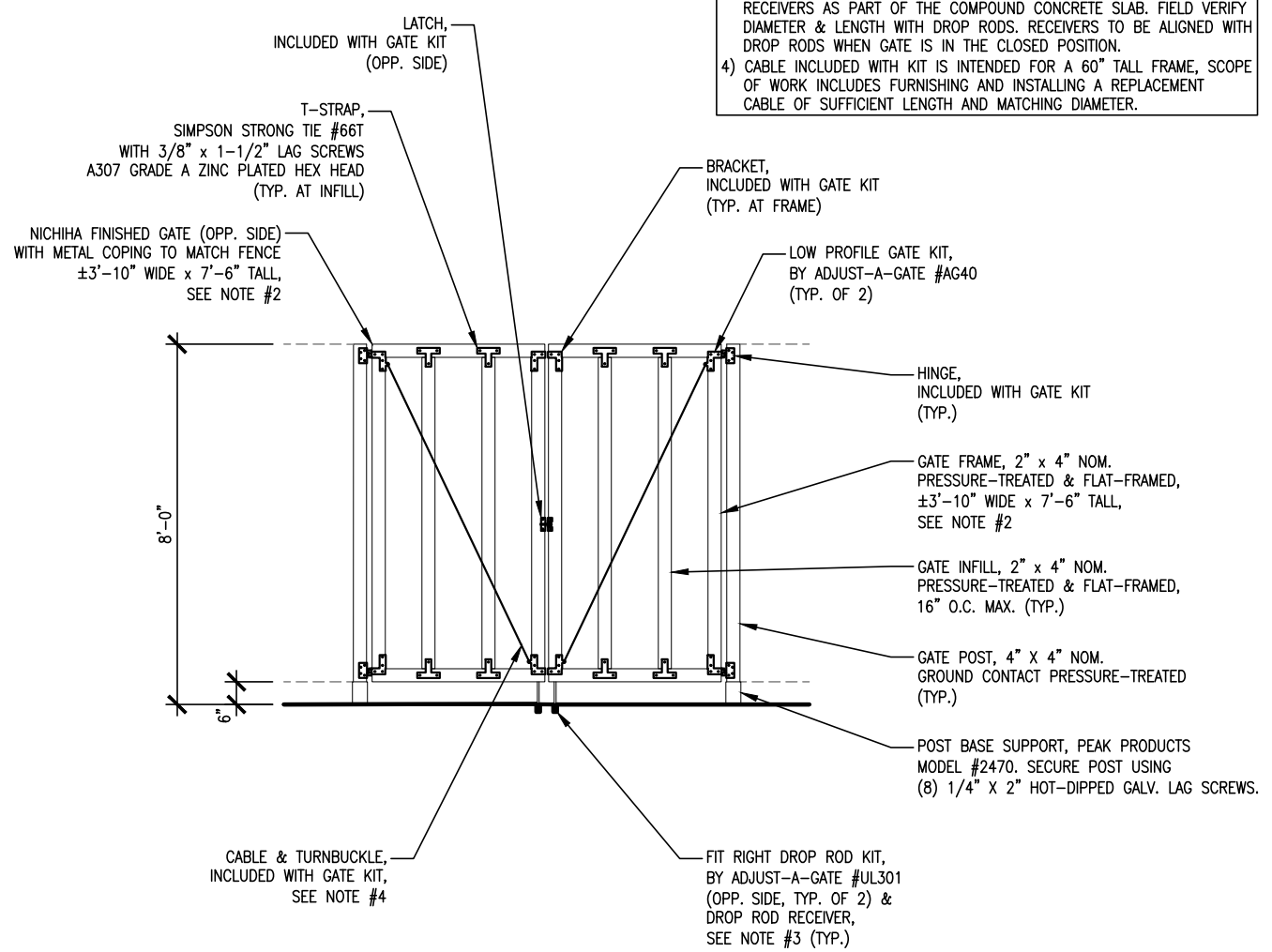


2 FENCE SECTION
 SCALE: 1" = 1'-0"

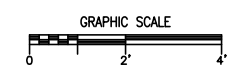


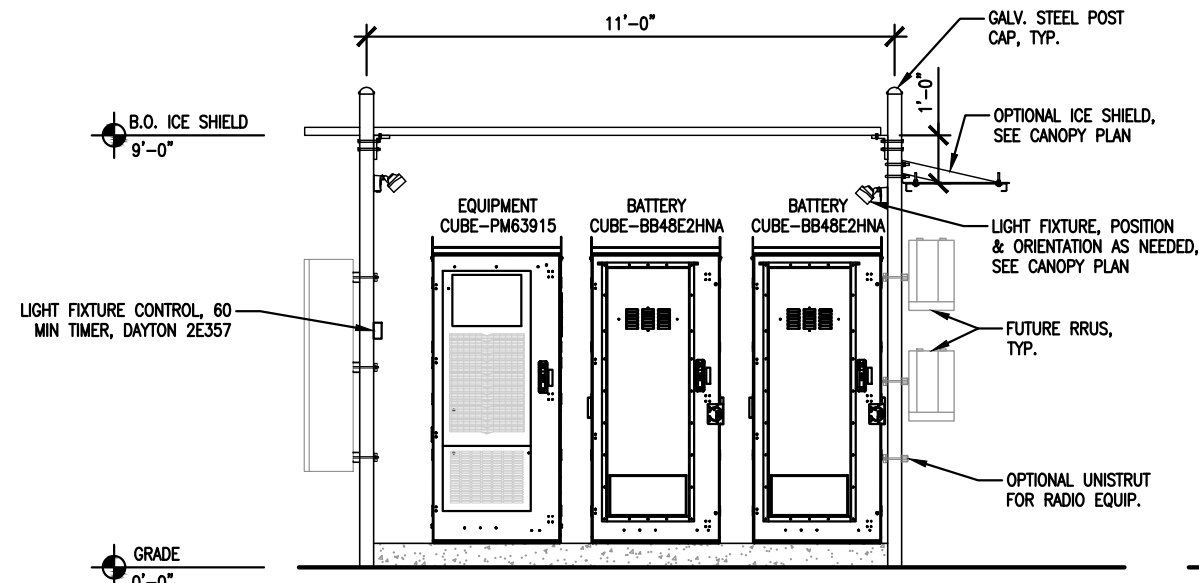
GATE NOTES:

- 1) LOW-PROFILE GATE KIT INCLUDES RECOMMENDED FASTENERS, SEE ASSEMBLY INSTRUCTIONS.
- 2) FIELD VERIFY GATE WIDTH, USE HINGE OFFSET DIMENSIONS & RECOMMENDED LATCH SPACING IN THE ASSEMBLY INSTRUCTIONS.
- 3) SCOPE OF WORK INCLUDES FURNISHING & INSTALLING DROP ROD RECEIVERS AS PART OF THE COMPOUND CONCRETE SLAB. FIELD VERIFY DIAMETER & LENGTH WITH DROP RODS. RECEIVERS TO BE ALIGNED WITH DROP RODS WHEN GATE IS IN THE CLOSED POSITION.
- 4) CABLE INCLUDED WITH KIT IS INTENDED FOR A 60" TALL FRAME, SCOPE OF WORK INCLUDES FURNISHING AND INSTALLING A REPLACEMENT CABLE OF SUFFICIENT LENGTH AND MATCHING DIAMETER.

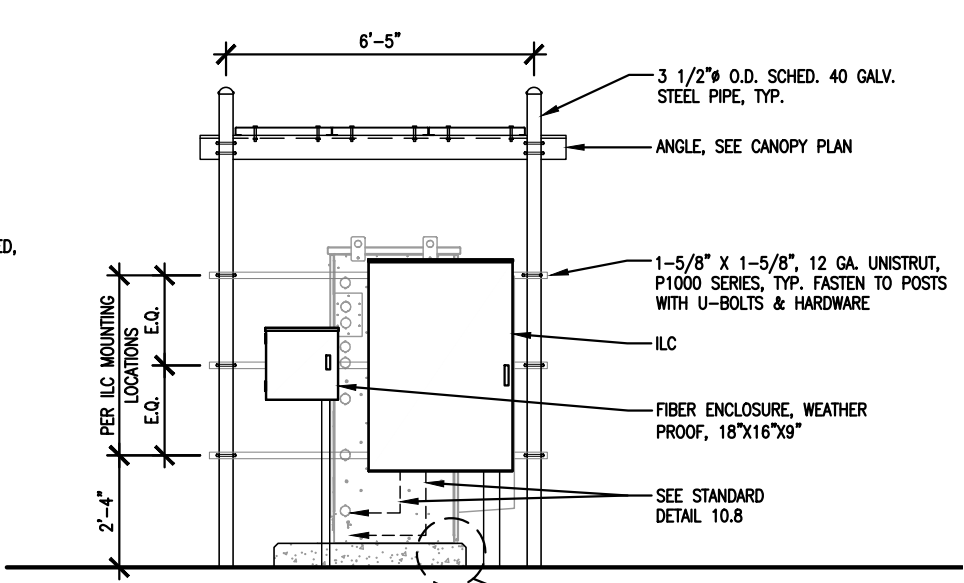


3 GATE INTERIOR ELEVATION
 SCALE: 1/4" = 1'-0"

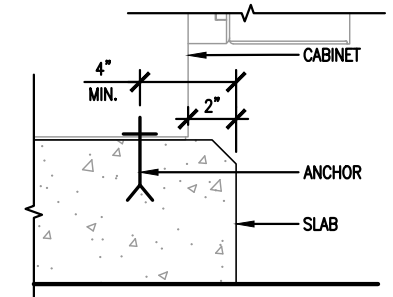




5 FRONT ELEVATION
SCALE: 1/4" = 1'-0"

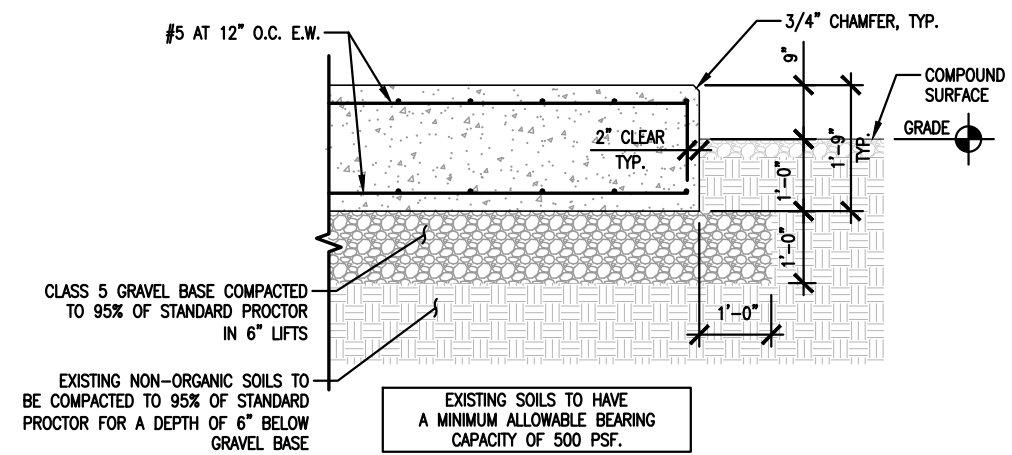


6 SIDE ELEVATION
SCALE: 1/4" = 1'-0"

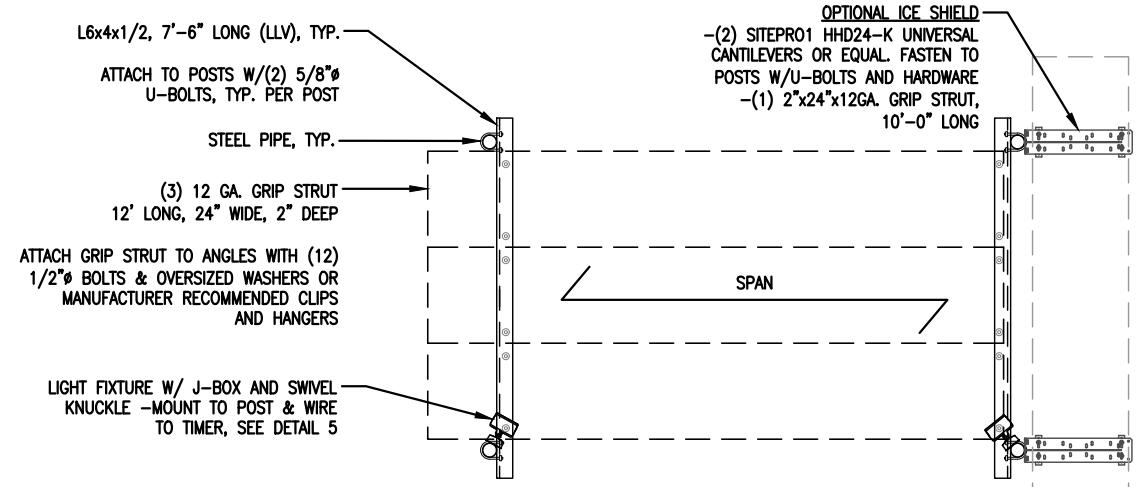


TYPICAL CAB. FRAME ANCHOR BOLT:
HILTI KWIK BOLT TZ (GALV.) EXP.
ANCHOR-5/8" X 3-9/16" NOM.
EMBED, MIN.
ANCHOR PER CABINET MANUFACTURER
SPECIFIED LOCATIONS

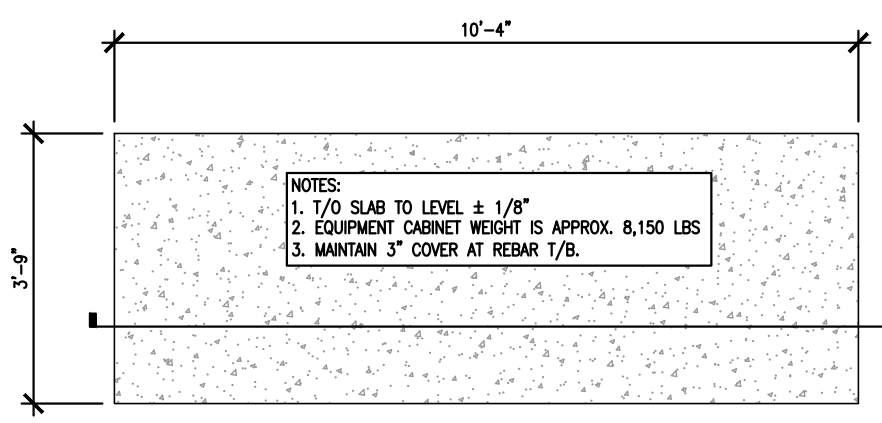
7 DETAIL
SCALE: 1-1/2" = 1'-0"



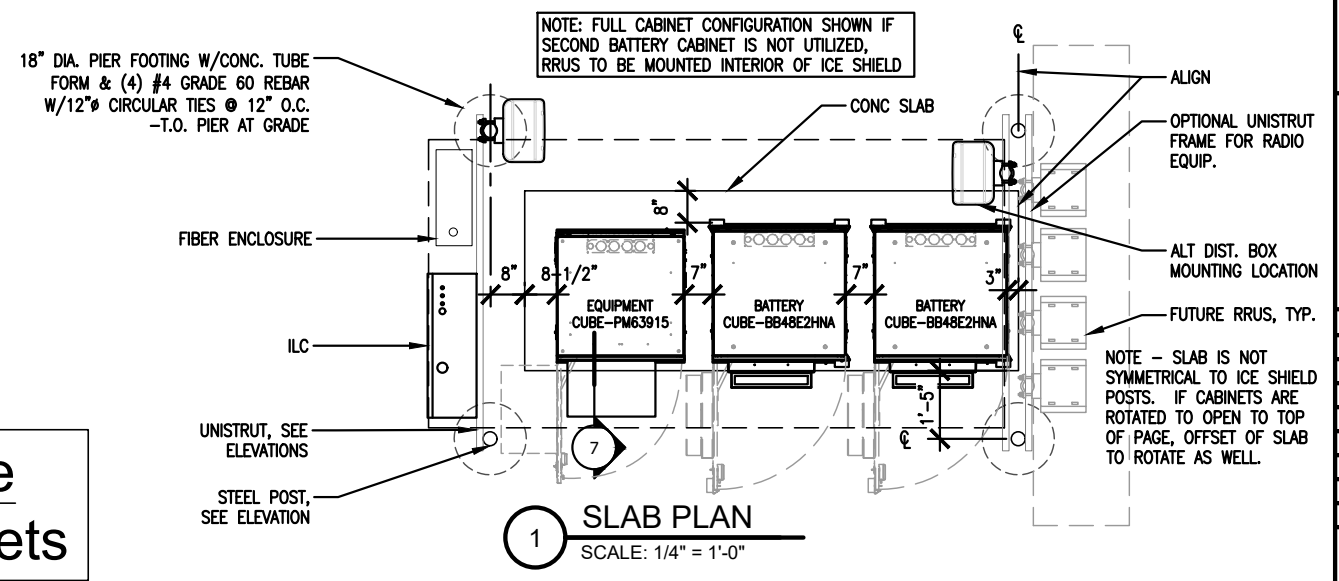
4 FOUNDATION SECTION
SCALE: 3/8" = 1'-0"



2 CANOPY PLAN
SCALE: 1/4" = 1'-0"



3 FOUNDATION PLAN
SCALE: 3/8" = 1'-0"



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

**Slab On Grade
Slab W/ 3 Cabinets**



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verizon
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PROJECT
LOC. CODE: 573148

**DES
BEAVER CREEK**

NE HERITAGE DR
GRIMES, IA 50111

SHEET CONTENTS:
FOUNDATION PLAN & DETAILS
FLOOR PLAN
ELEVATIONS

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

GENERAL CONDITIONS

00 0001 PERMITS

Construction Permit shall be acquired by, or in the name of, Verizon Wireless, to be hereinafter referred to as the OWNER. Other permits shall be acquired by the Contractor.

00 0002 SURVEY FEES

Survey shall be furnished by the Designer. Layout Staking shall be coordinated with the Surveyor per "Request For Quote", (RFQ).

01 0010 INSURANCE & BONDS

Contractor is to furnish Insurance certificates for themselves and subcontractors. Contractor will provide any required Bonding. Contractor agrees to warranty the project for (1) one year after completion.

01 0400 SUPERVISION & COORDINATION

Contractor shall provide supervision throughout the Project, coordinating the work of the Subcontractors, and delivery & installation of Owner-furnished items. Contractor's responsibilities include arranging & conducting of Underground Utilities Locates. Contractor shall comply with municipal, county, state and/or federal codes, including OSHA.

01 0600 TESTING

Contractor is responsible for providing Agencies with sufficient notice to arrange for Test Samples (i.e.: Concrete Cylinders), and for Special Inspections.

01 2000 MEETINGS

Contractor shall make themselves aware of, and attend, meetings with the Owner and/or Designer. Contractor is to attend a Pre-Construction Meeting of all parties involved, prior to the start of construction.

01 5100 TEMPORARY UTILITIES

Contractor shall maintain the job site in a clean and orderly fashion, providing temporary sanitary facilities, waste disposal, and security (fence area or trailer module).

01 5300 EQUIPMENT RENTAL

Contractor shall furnish equipment necessary to expedite work.

01 5900 FIELD OFFICES & SHEDS

Contractor shall provide security (fence area or trailer module) for tools and materials that remain overnight on site.

01 7000 CLEAN UP & CLOSE OUT

Contractor shall clean up the Site to the satisfaction of Owner. Contractor shall complete the items listed on the Owner's Punch List, and shall sign and return the List to the Owner. Contractor shall maintain a set of drawings during the job, on which changes shall be noted in red ink. A full set of redlined drawings (As-Builts) are to be given to the Designer at Job completion and submit "construction work complete memo" to Construction Engineer.

01 8000 TRUCKS & MILEAGE

Contractor shall provide transportation for their own personnel.

01 8300 TRAVEL TIME & PER DIEM

Contractor shall provide room and board for their own personnel, and reasonable time for traveling to & from job site.

01 9200 TAXES

Contractor shall pay sales and/or use tax on materials and taxable services.

SITWORK

02 1000 SITE PREPARATION & DEMOLITION

Contractor is to mobilize within 7 calendar days of the Owner issuing a 'START' document. Contractor will immediately report to Designer if any environmental considerations arise. Site shall be scraped to a depth of 3" minimum to remove vegetative matter, and scrapings shall be stockpiled on site. Excess material to be disposed of in accordance with RFQ.

02 1100 ROAD IMPROVEMENT & CONSTRUCTION

Contractor shall furnish & install culverts as necessary to prevent ponding or washing-out from normal surface runoff. Contractor shall obtain city, county, state and/or federal approvals for road approach and culvert work within or adjacent to right-of ways. Road shall be graded smooth, and edges dressed, at job completion.

02 2000 EARTHWORK & EXCAVATION

Excavation material shall be used for surface grading as necessary; excess to be stockpiled on site. Excess material to be disposed of in accordance with RFQ. For dewatering excavated areas, contractor shall utilize sock or sediment filter for filtering of water discharge.

02 5000 PAVING & SURFACING

New paving shall be according to plans, or match existing adjacent paving. Concrete paving shall be 5" thick, reinforced with 6"x6" welded wire mesh or #3 steel bars 18" o.c.e.w., over a 3" sand cushion.

02 7800 POWER TO SITE

Contractor shall coordinate the electrical service to the building with the Utility Provider. Conduits shall include pull strings. Underground conduits shall be 2-1/2" Schedule 40 PVC. (schedule 80 PVC under roads and drives) Cable to be 3/0 THWN CU. Trenches shall be backfilled in a timely fashion, using a compactor, and including two (2) detectable ribbons; one each at 3" and 15" above conduit. Service shall be 200 amp, single phase, 120/240 volt. Service type shall be "General Time-Of-Day" if available, and meter base shall be approved by utility provider. Contractor to provide and install expansion joint sleeve connections to prevent differential movement at utility connections.

02 7900 TELCO TO SITE

Contractor shall provide 2" SDR-11 HDPE conduit for fiber conduit as noted on Drawings when directional boring is utilized. Contractor shall provide 2" schedule 40 PVC conduit and 2" schedule 80 PVC conduit under roadways with large-sweep elbows for fiber conduit as noted on Drawings when hand trenched. Trenches shall be as in 02 7800.

Contractor to provide and install handholes as noted in the Drawings. Additional handholes shall be provided and installed a maximum of 500 feet on center; at 90° bends if directional boring; and every third bend if hand trenched. Handholes size per Drawings and traffic-rated in roadways.

Contractor to provide and install Carlon expansion joint connections at cabinets/shelter location per manufacturer's specifications and recommendations.

02 8000 SITE IMPROVEMENTS

Areas bounded by fence and adjacent to Cabinet Slab shall receive polyethylene geotextile, 200 mesh woven, topped with 3" deep 3/4" to 1 1/2" clean rock (no fines), raked smooth.

02 8001 FENCING

Fence enclosures shall be completed within 7 days of tower erecting and Contractor shall provide for temporary security fence at base of Tower. Existing fences shall be protected against damage during this work, and any damage that may occur shall be repaired or replaced to equal existing pre-construction condition.

02 8500 IRRIGATION SYSTEMS

Contractor shall provide temporary irrigation of relocated tree and new/relocated sod, to be maintained so it survives 1 year after planting.

02 9000 LANDSCAPING

Contractor to restore turf areas damaged by construction by preparing soil, seeding & watering to maintain grass survival for 1 year.

Contractor shall protect existing landscape elements that are not in the Scope of Work. Reasonable precautions shall be taken to assure the health of existing trees and shrubbery. If conflicts arise regarding the location of root systems, branch lines, etc., the Architect must be contacted prior to performing Work that may cause damage. Damage resulting from disregard of this Article shall be compensated by the Responsible Party and at a cost to be determined by the Property Owner, Designer, and Owner. Contractor shall furnish and install new trees, shrubs, and sod. Watering shall be as described in 02 8500.

CONCRETE

03 1000 CONCRETE FORMWORK

Concrete forms shall be dimensional lumber, modular, or steel.

03 8000 TOWER FOUNDATION

Contractor shall arrange for delivery of anchors, and shall furnish and install materials per Tower Manufacturer Plans. Tower foundation concrete and reinforcing to be per tower manufacturer's specification. Contractor shall comply with the Owner's Standard CONSTRUCTION SPECIFICATIONS MINIMUM CONCRETE STANDARDS.

03 8001 CATHODIC PROTECTION

N/A

03 9000 EQUIPMENT CABINETS FOUNDATION

Contractor shall furnish & install materials for Equipment Cabinets foundation. Concrete shall be 6% ±1% air entrained, and 4,000 psi at 28 days.

All reinforcing steel is to be Grade 60 (ASTM 615). Anchor bolts are furnished by Contractor. Contractor shall comply with the Owner's Standard CONSTRUCTION SPECIFICATIONS MINIMUM CONCRETE STANDARDS.

MASONRY

N/A

METALS

05 0000 METALS

Contractor will furnish and install steel shapes and fabricated steel items not specifically furnished by Owner, and install Owner-furnished materials. Fabrication and erection of steel items per AISC standards. Welding shall conform to AWS standards. Fabrications shall be shop welded and galvanized before delivery to site unless noted otherwise.

Steel shapes shall meet ASTM A36 and steel pipe ASTM A53 Grade B. Steel shapes and fabrications shall be hot-dip galvanized per ASTM A123 with minimum coating thickness Grade 55 (2.2 mil). Bolts shall meet ASTM F3125 and U-bolts SAE J429 Grade 5 minimum. Bolts and hardware to be hot-dip galvanized per ASTM A153. Field repair of galvanized coatings shall be per ASTM A780.

WOOD & PLASTICS

N/A

THERMAL & MOISTURE

N/A

DOORS AND HARDWARE

N/A

FINISHES

09 9000 PAINTING

Contractor shall provide materials and labor for all painting indicated in the architectural documents and shall touch-up construction related scrapes & scratches with appropriate paint.

Contractor to field verify finish coat colors/sheens and select appropriate swatches corresponding to the colors described below. Contractor to obtain Lessor and Designer approvals of all swatches prior to application of paint:

- Tobacco colored Nichiha Roughsawn Wood Series Fence Panels.

SPECIAL CONSTRUCTION

13 1260 CABLE BRIDGE, CANOPY, & ICE SHIELDS

Contractor shall furnish & install materials for the Cable Bridge as indicated on the drawings and Verizon Wireless Standard Details.

Contractor shall furnish & install materials for the Ice Shields as indicated on the Drawings & Verizon Wireless Standard Details.

13 1400 ANTENNA INSTALL

Contractor shall install Owner's antennas and feed lines during erecting. Contractor shall test and certify feed lines per current VZW standards.

13 3423 TRANSPORT AND SET EQUIPMENT CABINETS

Contractor shall provide crane(s) and/or truck for transporting, setting and erecting Equipment Cabinets per RFQ. Contractor shall install items shipped loose with the Equipment Cabinets.

13 3613 TRANSPORT AND ERECT TOWER/ANTENNA MOUNTS

Contractor shall schedule delivery of Owner-furnished Tower, and provide cranes for unloading and erecting. Contractor to Install antenna mounts. Contractor shall ensure the existence of a 3/8" cable safety climb (DBI/Sala or equal) on the Tower.

MECHANICAL

15 4000 PLUMBING

N/A

15 5000 HVAC

N/A

ELECTRIC

16 5000 LIGHTING AND ELECTRICAL

Contractor shall provide labor and materials as necessary to complete the work shown on Drawings including items shipped loose with the Equipment Cabinets assembly.

LITHONIA OLFL – MINI LED FLOOD LIGHT FIXTURE:

Brand: Lithonia Lighting	Lumens: 1,351
Part #: OLFL 14 PE BZ M4	Voltage: 120
UPC: 75373853497	Beam Angle: Flood
DLC Listed: No	Metal Halide Equal: 50 Watt
Safety Rating: UL indoor/outdoor	Housing: Aluminum
CRI: 72	Height: 7.4 in.
Color: Cool White	Width: 6.4 in.
Color Temp: 4000 Kelvin	Depth: 4.4 in.
Life Hours: 5000	Weight: 1.5 lbs.
Wattage: 18 Watt	Warranty: 5 Years
LPW: 75	

16 6000 GROUNDING

Contractor shall make themselves familiar with and follow the current GROUNDING STANDARDS of VERIZON WIRELESS. Contractor shall perform work as shown on Grounding Plans. Any site-specific grounding issues not covered by the GROUNDING STANDARD are to be addressed by the Contractor to the Owner.

OWNER-FURNISHED EQUIPMENT & FEES

MONOPOLE

CABINETS

COAX AND/OR CABLES

ANTENNAS & DOWNTILT BRACKETS

GPS & GPS MOUNTING

BUILDING PERMIT FEES

MATERIALS TESTING FEES

SPECIAL INSPECTIONS FEES

CONTRACTOR-FURNISHED EQUIPMENT

ANTENNA MOUNTS

POWER TO SITE

TELCO TO SITE

CABLE BRIDGE & ICE SHIELDS

GROUNDING MATERIALS

FENCING

CONNECTORS, BOOTS, & RELATED HARDWARE

BOLLARDS

SCOPE OF WORK:

CONTRACTOR SHALL PROVIDE MATERIALS, LABOR, TOOLS, TRANSPORTATION, SUPERVISION, ETC. TO FULLY EXECUTE WORK. WORK REQUIREMENTS ARE DETAILED ON THE DRAWINGS AND SPECIFICATIONS AND SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING ITEMS:

SITE PREPARATION

SITE WORK & ROAD CONSTRUCTION

CABINET SLAB & TOWER FOUNDATIONS

SET EQUIPMENT CABINETS & ERECT TOWER

ROUTING OF GROUND, POWER, FIBER & ALARM

SITE GROUNDING

ELECTRICAL & TELEPHONE SERVICES

INSTALL ANTENNAS & CABLES

CABLE BRIDGE & ICE SHIELDS

GRAVEL SURFACING & FENCING

Contractor to compare drawings against Owner's "Request for Quote", (RFQ). If discrepancies arise, Contractor shall verify with Owner that the RFQ supersedes the drawings.

EQUIPMENT

The Designer/E.O.R. makes no warranty, expressed or implied, on the structural adequacy for proprietary brackets, clips & parts from a manufacturer.



1334 81ST AVE NE
SPRING LAKE PARK, MN 55432
(612) 844-1234
WWW.HERZOGENGINEERING.COM



HE #: 241495 05/06/2025



9973 VALLEY VIEW RD.
EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGN1EP.COM



10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

PROJECT

LOC. CODE: 573148

**DES
BEAVER CREEK**

NE HERITAGE DR
GRIMES, IA 50111

**SHEET CONTENTS:
OUTLINE SPECIFICATIONS**

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
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REV. D	04-10-25
REV. E	05-06-25

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GENERAL GROUNDING NOTES:

An external buried ground ring (Lead 1) shall be established around the equipment cabinets and tower foundations. Lead 1 shall be kept 24" from foundations; if foundations are less than 48" apart, keep Lead 1 centered between them. If the tower base is over 20'-0" from the equipment cabinets, a separate Lead 1 shall be established around each foundation, and the two Lead 1s shall be bonded with two parallel leads at least 6 feet apart horizontally. Connections between the two Lead 1s shall be bi-directional.

All subgrade connections shall be by exothermic weld, brazed weld, or gas-tight UL467-listed compression fittings pre-filled with anti-oxidant compound. Subgrade connections shall not be 'cold galvanize' coated.

Lead 1 shall be #2 solid bare tin-clad (SBTC) copper wire buried at local frost depth. Lead 1 bends shall be minimum 24" radius. 'Whip' lead bends may be of 12" radius.

Ground rods shall be galvanized steel, 5/8"Ø, spaced twenty feet apart, or as shown. Rods shall be kept min. 24 inches from foundations. Ground rods are required to be installed at their full specified length. Depth shall be as shown in Detail 11.1 in the Verizon Wireless Standard Detail Booklet.

SPECIAL CONSIDERATIONS FOR GROUND RODS:

When ground rods are not specified to be backfilled w/ Bentonite Slurry: If boulders, bedrock, or other obstructions prevent driving of ground rods, the Contractor will need to have drilling equipment bore a hole for ground rod placement. Hole to be backfilled w/ Bentonite Slurry.

When specified with slurried Bentonite encasement, drilling equipment will be used to be bore a hole for ground rod placement. Slurry shall be made from pelletized material ("Grounding Gravel"); powdered Bentonite is not allowed. If boulders, bedrock, or other obstructions are found, Contractor shall drill to the specified depth and provide Bentonite encasements.

Above-grade connections shall be by lugs w/ two-hole tongues unless noted otherwise, joined to solid leads by welding (T&B 54856BE "BROWN"), self-threading (RECOGNIZED, EM 2522DH.75.312), or 10,000psi crimping (BURNDY YA3C 2TC 14E2). Surfaces that are galvanized or coated shall have coating(s) removed prior to bolting. Bolts shall be stainless steel with flat washers on each side of the connection and a lock washer beneath the fastening nut. Star-tooth washers shall be used between lug & dissimilar metal (copper-to-steel, etc) but are not required between tin-clad CU lugs & tin-clad CU bus bars. Lug tongues shall be coated with anti-oxidant compound, and excess compound wiped clean after bolting. The connection shall then be coated with cold-galvanizing compound, or with color-matching paint.

Ground bars exposed to weather shall be tin-clad copper, and shall be clean of any oxidation prior to lug bolting.

Galvanized items shall have zinc removed within 1" of weld area, and below lug surface contact area. After welding or bolting, the joint shall be coated with cold galvanizing compound.

Ground Bar leads

Ground bars are isolated electrically from tower bottoms and equipment cabinets by their standoff mounts. Leads from each ground bar to the ground ring shall be a pair of #2 SBTC, each connected to Lead 1 bi-directionally with #2 SBTC 'jumpers'. Pairs of #2 SBTC may be required between ground bars. Leads shall be routed to ground bars as follows:

- * The Main Ground Bar (MGB), typically mounted adjacent to the ILC (location varies).
- * The Port Ground Bars (PGB), mounted inside and outside on the equipment shelter walls beneath the transmission line port. Note: Transmission line grounds also attach to the PGBs.
- * The Tower Ground Bar (TGB) mounted at the base of the tower. Note: Transmission line grounds also attach to the TGBs.

NOTE: Contractor shall confirm that TGBs exist at 75-foot vertical intervals on any guyed or self-support tower, and that transmission lines are grounded to each TGB. Only the bottom-most TGB is isolated from the tower steel frame; upper TGBs may use the tower steel frame as common ground, requiring no copper leads between TGBs.

#2 SBTC Whip leads

'Whip' leads shall connect the buried external ground ring to the following items:

Monopole Towers:

- * Three whips to flanges on the monopole base, at least 90° apart. If none are provided, attach to the baseplate or consult tower manufacturer.

Self-Support Towers:

- * Two whips to flange(s) on each tower leg base. If none are provided, attach to the baseplate or consult tower manufacturer.

Guyed Towers:

- * Two whips to flange(s) on the tower base. If none are provided, attach to the baseplate or consult tower manufacturer.
- * Establish a Lead 1 within the fence enclosure of each guy anchor, at least 40 foot perimeter and having 4 ground rods.
- * #2 SBTC leads shall extend up, and be clamped (bronze clamshell or equal), to any two guy wires. NEVER weld leads to the guy wires. The lead to the guy anchor 'hand' plate may be welded.

Fences:

- Metallic fence within 25 feet of tower Lead 1, or within 6 feet of shelter lead 1, shall have whip leads as follows:
 - * Each corner post.
 - * Each pair of gate posts.
 - * Any line post over 20'-0" from a grounded post.
 - * Each gate leaf to its respective gatepost using braided strap (3/4", tin-clad copper w/ lug ends).
 - * Fences around guy anchors shall be grounded in similar fashion.

Fuel tanks:

NEVER WELD to any fuel enclosure. NEVER penetrate the fuel containment. Metal tanks shall have one whip lead attached. Use an approved clamp or two-hole lug on an available flange.

Equipment Shelter/Platform and Other General Requirements (including but not limited to):

- Extend new Lead 21B up to shelter halo, remaking two-way connections as needed. Generator-equipped shelters have 6 such connections. Connections within the shelter shall be by compression; NEVER weld inside the shelter.
- Each vertical support pipe of the exterior cable bridge. Bridge end shall be kept at least 6" from the tower structure. The cable bridge shall be jumpered to the vertical support pipes with #2 SBTC at each vertical support pipe.
- Opposite corners of the steel equipment platform.
- Opposite corners of the roof shield over the equipment shelter.
- Each HVAC unit shield, if separate (may be 'jumpered' to main roof shield).
- Each HVAC package unit.
- Commercial electric meter box.
- Generator receptacle, if present.
- Steel building skid, if shelter is metal frame.
- Each air intake or exhaust fan vent louver.
- Each generator vent hood or louver.
- Generator exhaust stack, external.
- Opposite corners of generator support frame, if separate from shelter.
- Generator fuel tank, if separate from generator unit.
- Host building rain gutter, downspouts, and roof flashings within 25 feet.
- Telco MPOP (Main Point of Presence), if external to equipment shelter.
- Within cable vaults, one each to the ladder and to the manhole rim.

Note: The door frame is connected to the interior ground halo, and need no separate connection to the external ground ring.

Inspection & Testing

Test lead #1 and ground rods after installation but before backfilling or connecting to any other grounding, using the 3-point fall of potential method. Contractor to notify Verizon Wireless senior construction engineer at least 48 hours prior to testing. Document installation and test results with photographs.

General Contractor Notes:

- Contractor to coordinate public & private utility locates prior to construction start. Notify the Designer & VZW Construction Engineer immediately of any utility line issues.
- General contractor is responsible for confirming that the installation of all grounding meets the Verizon Network Standard Number "NSTD46" document titled "Cell Site and Microwave Radio Station Protection - Engineering Considerations".
- Contractor shall ensure that each whip is routed to lead 1 by the shortest path, and bends shall not be less than 12" radius.
- Primary Electrical - Depth and specification by Power Utility Company.
- Secondary Electrical - Install conduit 32" below grade with two (2) detectable ribbons.
- Fiber Optic - Install conduit 36" below grade with pull string, traceable wire and two (2) detectable ribbons.

SYMBOL AND NOTE LEGEND

①	#2 SBTC AROUND CABINET SLAB, TOWER, OR GUY ANCHOR
●	5/8" X 10'-0" GALVANIZED STEEL GROUND ROD
⊙	TEST WELL PREFERRED LOCATION
---	#2 SBTC 'WHIP' LEAD
⑤	(2) #2 SBTC FROM MGB, PGB, OR TGB TO LEAD 1
⑥	AC HVAC UNIT
②①B	BC BUILDING CORNER
⑥	BO BOLLARD
⑥	CBS CABLE BRIDGE SUPPORT POST
④	EL ELECTRICAL SERVICE GROUND
⑥	EM COMMERCIAL ELECTRICAL METER
⑥	FAN GUY ANCHOR PLATE
⑥	FP FENCE POST
⑨0	GEN GENERATOR
⊖	GP GATE POST, 3/4" BRAID STRAP TO LEAF
⑥	GPS GPS UNIT
⑥	GUY GUY WIRE, MECH. CLAMP ONLY - NO WELDS
⑥	HL HOOD OR LOUVER
⑥	HB OUTSIDE OF HOFFMAN BOX
⑥	ILC INTEGRATED LOAD CENTER
⑤	MGB MAIN GROUND BAR
⑥	MU GENERATOR MUFFLER
⑤	PGB PORT GROUND BAR
⑥	RBR FOUNDATION REINFORCING
⑥	RS ROOF SHIELD
⑥	SB STEEL BEAM
⑥	SP STEEL POST
⑥	STP STEEL PLATFORM
⑥	TEL HOFFMAN BOX
⑤	TGB TOWER GROUND BAR
⑥	TWR TOWER BASE
⑥	VP DIESEL FUEL VENT PIPE

Note:

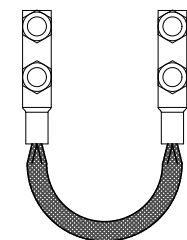
Contractor to provide #2 solid bare tin-clad (SBTC) copper wire lead from #1 ground ring to air conditioner & ice shield if provided by VZW.



TOP VIEW SIDE VIEW

TWO-HOLE 10,000 PSI COMPRESSION FITTING UL 9498 LISTED

NOTE: REMOVE GALVANIZING FROM FENCE POSTS IN AREAS LUGS WILL BE INSTALLED. LIGHTLY COAT THE UNDERSIDE OF THE LUGS W/ ANTI-OX COMPOUND BEFORE ATTACHING TO POSTS.

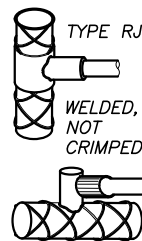


GATE BONDED TO FENCE POST (2) TWO-HOLE 10,000 PSI COMPRESSION FITTING W/ 3/4" BRAIDED TINNED COPPER JUMPER STRAP

HYTAP CONNECTOR 10,000 PSI COMPRESSION FITTING MUST BE UL467 LISTED ACCEPTABLE FOR DIRECT BURIAL

2 COMPRESSION CONNECTOR DETAILS

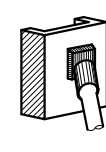
SCALE: NTS



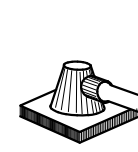
TYPE RJ WELDED, NOT CRIMPED



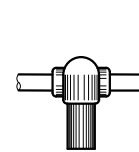
TYPE VS ROUND SURFACE



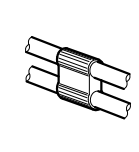
TYPE VS FLAT SURFACE



TYPE HS



TYPE GT



TYPE PT



TYPE GL LUG

WELD: THOMAS & BETTS, 54856BE "BROWN33" CRIMP: BURNDY, YA3C 2TC 14E2, 10,000 PSI SCREW: RECOGNIZED, EM 2522DH.75.312

1 EXOTHERMIC WELD DETAILS

SCALE: NTS

LEAD IDENTIFICATION & DESCRIPTION:

1	RING, EXTERNAL BURIED w/ RODS	#2 SBTC
1A	RING, CONCRETE ENCASED	#2 SBTC
2	DEEP ANODE (TO IMPROVE OHMS)	ROD OR PIPE
3	RING TO BLDG STL FRAME	#2 SBTC
4	MAIN AC PANEL NEUTRAL BUS TO (2) GROUND RODS, ISOLATED FROM LEAD #1	NEC 250.66
5	RING TO GROUND BAR	(2) #2 SBTC
6	RING TO EXT MTL OBJECT	#2 SBTC
7	DEEP ANODE TO MGB	NSTD33-9
8	AC PANEL TO WATER METER	NEC 250.66
9	EXT WATER TO INT WATER PIPES	NSTD33-9
10	INT WATER PIPE TO MGB	NSTD33-9
11-12	NOT USED	
13	AC PANEL TO MGB	NSTD33-9
14	MGB/FGB TO BLDG STL FRAME	#2/0 I-STR
14C	MGB/FGB TO ROOF/WALL MTL PNL	#1/0 I-STR
15	MGB/FGB TO FGB-HE SAME FLOOR	#2/0 I-STR
16	NOT USED	
16A	ECPG TO CABLE ENTRY RACK	#1/0 I-STR
17	MGB TO CABLE SHIELDING	#6 I-STR
17A	ECPG TO CABLE SHIELDING	#6 I-STR
17B	MGB/FGB TO F-0 SPLICE SHELF	#1 I-STR
18	LOWEST MGB/FGB TO HIGHEST FGB	#2/0 I-STR
19	LEAD 18 TO OTHER FGBs, <6'	#2/0 I-STR
20	MGB/FGB TO BRANCH AC PNL	#6 I-STR
20A	NEAREST GRND TO DISCONNECT PNL	NEC 250.66
20B	GWB TO AC DISTR PNL	#6 I-STR
21	MGB/FGB TO INT HALO	#2 I-STR
21A	INTERIOR 'GREEN' HALO	#2 I-STR
21B	INT HALO TO EXT RING	#2 SBTC
21C	INT HALO TO EQUIPMENT MTL	#6 I-STR
22	ROOF TOWER RING TO ROOF GRND	NFPA 780
23	MGB/FGB TO ECPGB, SAME FLOOR	#1 I-STR
23A	MGB/FGB TO CXR-HF LNDR PROT	#6 I-STR
24	ECPG TO EACH PROTECTOR ASSEMBLY	#6 I-STR
24A	LOWER PROT ASSY TO UPPER	#6 I-STR
25	RING TO NEAREST LIGHTNING ROD	#2 SBTC
26	LIGHTNING ROD SYS TO NEARBY MTL	NFPA 780
27	RING TO TOWER RING	(2) #2 SBTC
28	RING TO SHELTER RING	(2) #2 SBTC
29	BRANCH AC PNL TO BITTY CHG FRM	NSTD33-11
30	BRANCH AC PNL TO OUTLETS	NSTD33-11
31	MGB/FGB TO PWR, BITTY FRAMES	#2/0 I-STR
32	#31 TO BATTERY CHARGER FRAME	#6 I-STR
33	#31 TO BATTERY RACK FRAME	#6 I-STR
34	#31 TO PCU FRAME	#6 I-STR
35	#31 TO DSU FRAME	#6 I-STR
36	#31 TO PDU FRAME	#6 I-STR
37	MGB/FGB TO BITTY RETURN	NSTD33-14.5
37A	MGB/FGB TO RTN TERM CARR SUPP	#6 I-STR
38	FGB TO PDU GB	#750MCM I-STR
38A	FGB TO PDU GB CARRIER SUPPLY	#2/0 I-STR
39	DC BUS DUCT TO NEXT SECTION	#6 I-STR
40	DC BUS DUCT TO MGB/FGB	#6 I-STR
41A	MGB/FGB TO #58	#2/0 I-STR
42-44	NOT USED	
45	MAIN AC PNL TO BRANCH AC PNL	NSTD33-11
46	BRANCH AC PNL TO DED OUTLET	NSTD33-11
47	FGB TO INTEG FRM	#2 I-STR
48	LEAD #31 TO INTEG FRM	#6 I-STR
49	INTEG FRM TO EQUIP SHELF	BY FASTENERS
50	PDU BITTY RET TO #51	#2/0 I-STR
51	#50 TO TRANS FRM ISO DC PWR	#6 I-STR
52	TRANS FRM FUSE TO FRM OR BAR	#8 I-STR
53A	MGB/FGB TO PDF/BDFB	NSTD33-22
54	MGB/FGB TO STATIC DEVICES	#6 I-STR
55	MGB/FGB TO CABLE AT ENTRY	#6 I-STR
56	MGB/FGB TO AC PWR RADIO XMTR	#6 I-STR
57A	MGB/FGB TO CBL GRID/RUNWAY	#2/0 I-STR
58A	#41A TO AISLE FRAME	#2 I-STR
59A	#58A TO EACH SGL FRAME GRND	#6 I-STR
60-69	NOT USED	
90	GENERATOR FRAME TO EXT RING	#2 SBTC

HERZOG ENGINEERING
1334 81st AVE NE
SPRING LAKE PARK, MN 55432
(612) 844-1234
WWW.HERZOGENGINEERING.COM

LICENSED PROFESSIONAL ENGINEER
JOSHUA HERZOG
20456
IOWA

HE #: 241495 05/06/2025

DESIGN 1
9973 VALLEY VIEW RD.
EDEN PRAIRIE, MN 55444
(952) 903-9299
WWW.DESIGN1EP.COM

verizon
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

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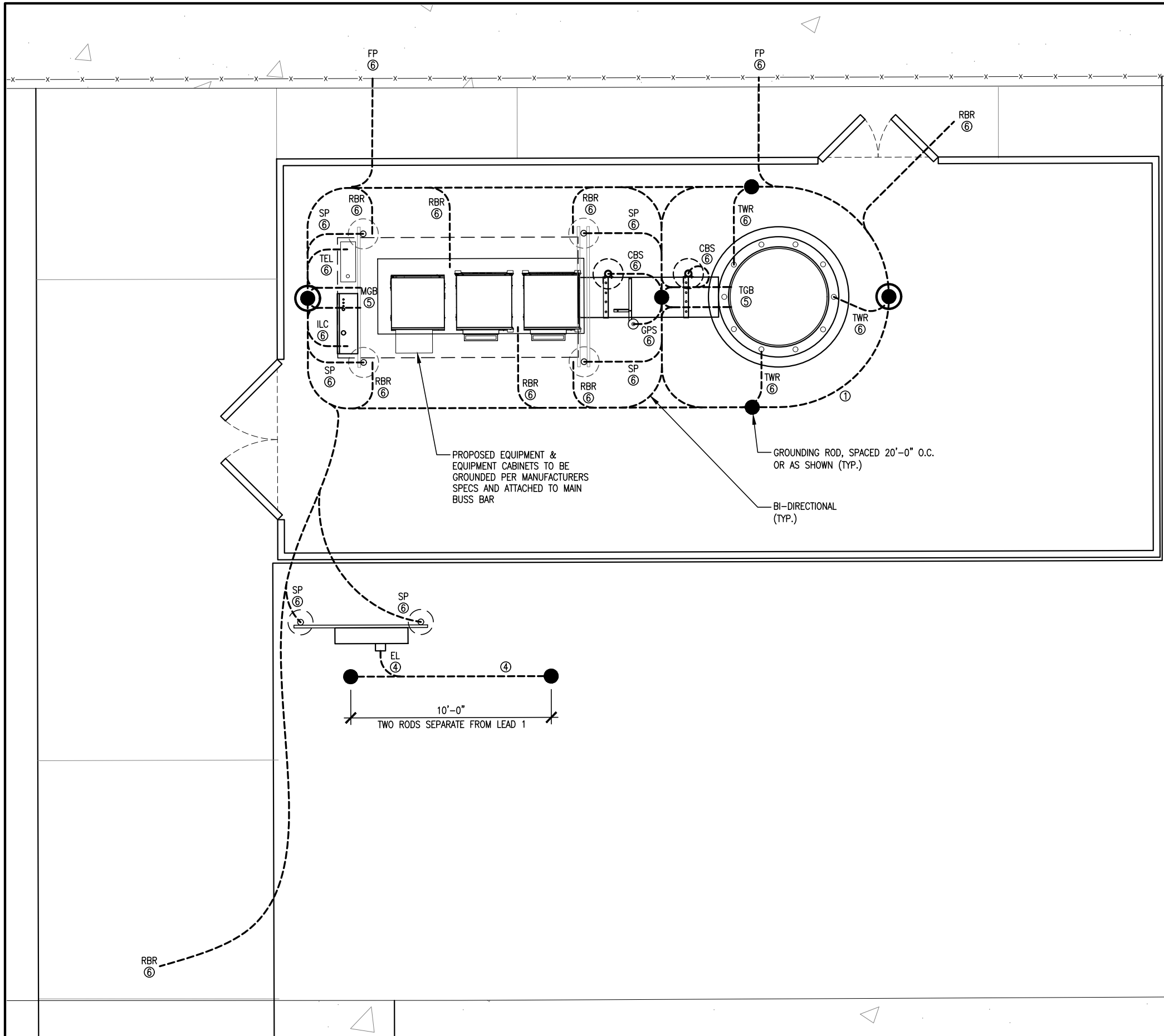
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SHEET CONTENTS:
GROUNDING & UTILITY NOTES

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G-1



GROUNDING DETAIL INDEX	
DETAIL	DETAIL DESCRIPTION
SLAB	SLAB ON GRADE GROUNDING
11.1	TEST WELL DETAIL, GROUND RING & ROD DETAIL
11.3	REBAR GROUNDING DETAIL
11.4	CONDUIT DETAIL
11.5	TYPICAL GROUNDING CABLE BRIDGE DETAIL
11.6	TYPICAL TOWER GROUNDING DETAIL

HERZOG ENGINEERING
 1334 81ST AVE NE
 SPRING LAKE PARK, MN 55432
 (612) 844-1234
 WWW.HERZOGENGINEERING.COM



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DESIGN 1
 9973 VALLEY VIEW RD.
 EDEN PRAIRIE, MN 55344
 (952) 903-9299
 WWW.DESIGN1EP.COM

verizon
 10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 (952) 946-4700

PROJECT

 LOC. CODE: 573148

DES
 BEAVER CREEK

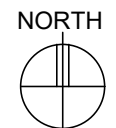
NE HERITAGE DR
 GRIMES, IA 50111

SHEET CONTENTS:
 GROUNDING PLAN
 GROUNDING DETAIL INDEX

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

NOTES:
 1. NO PORTION OF THE GROUNDING SYSTEM SHALL PASS THROUGH OR BE CONNECTED TO A CONCRETE FOUNDATION PER SECTION 10.4.2 OF ANSI/TIA-222-H.
 2. SEE SHEET G-1 FOR ADDITIONAL NOTES.

1 GROUNDING PLAN
 SCALE: NTS



G-2

POWER TYPE:
120/240V, SINGLE
PHASE, 200 AMPS

**HERZOG
ENGINEERING**
1334 81st AVE NE
SPRING LAKE PARK, MN 55432
(612) 844-1234
WWW.HERZOGENGINEERING.COM



HE #: 241495 05/06/2025

DESIGN
9973 VALLEY VIEW RD.
EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGN1EP.COM

verizon
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

PROJECT
LOC. CODE: 573148

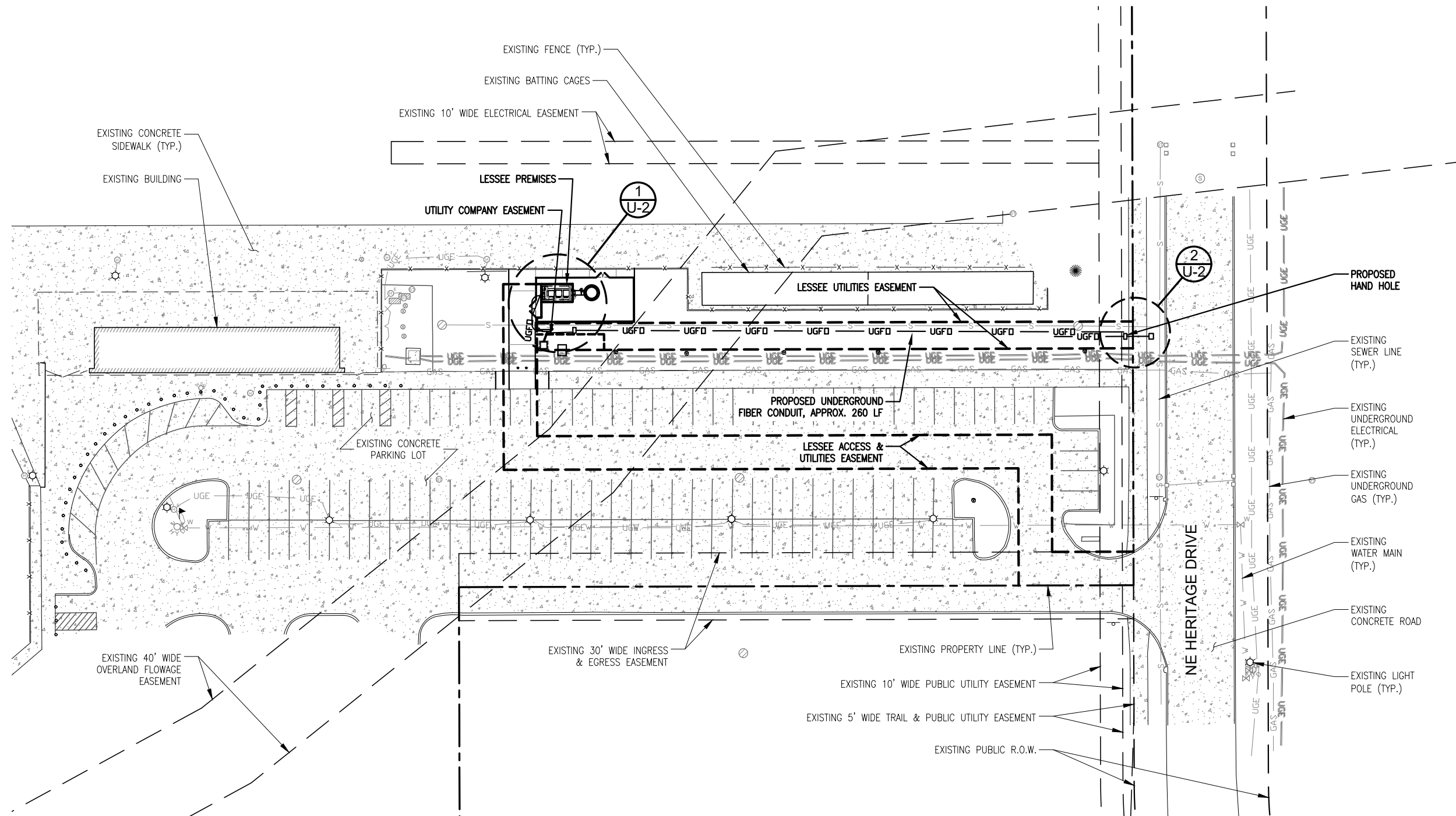
DES
BEAVER CREEK

NE HERITAGE DR
GRIMES, IA 50111

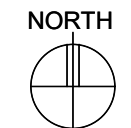
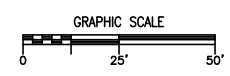
SHEET CONTENTS:
SITE UTILITY PLAN

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

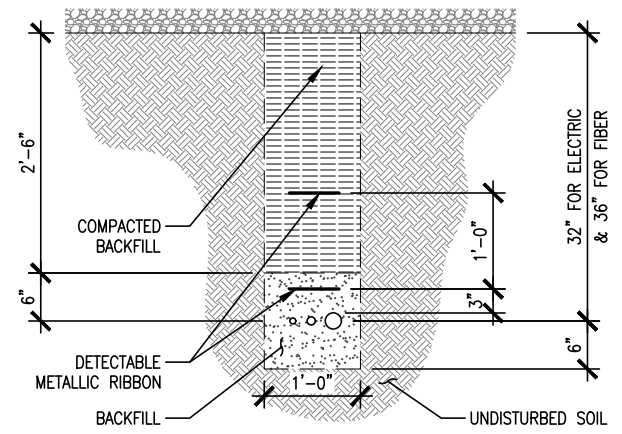
NOTE:
SEE SHEET G-1 FOR ADDITIONAL NOTES



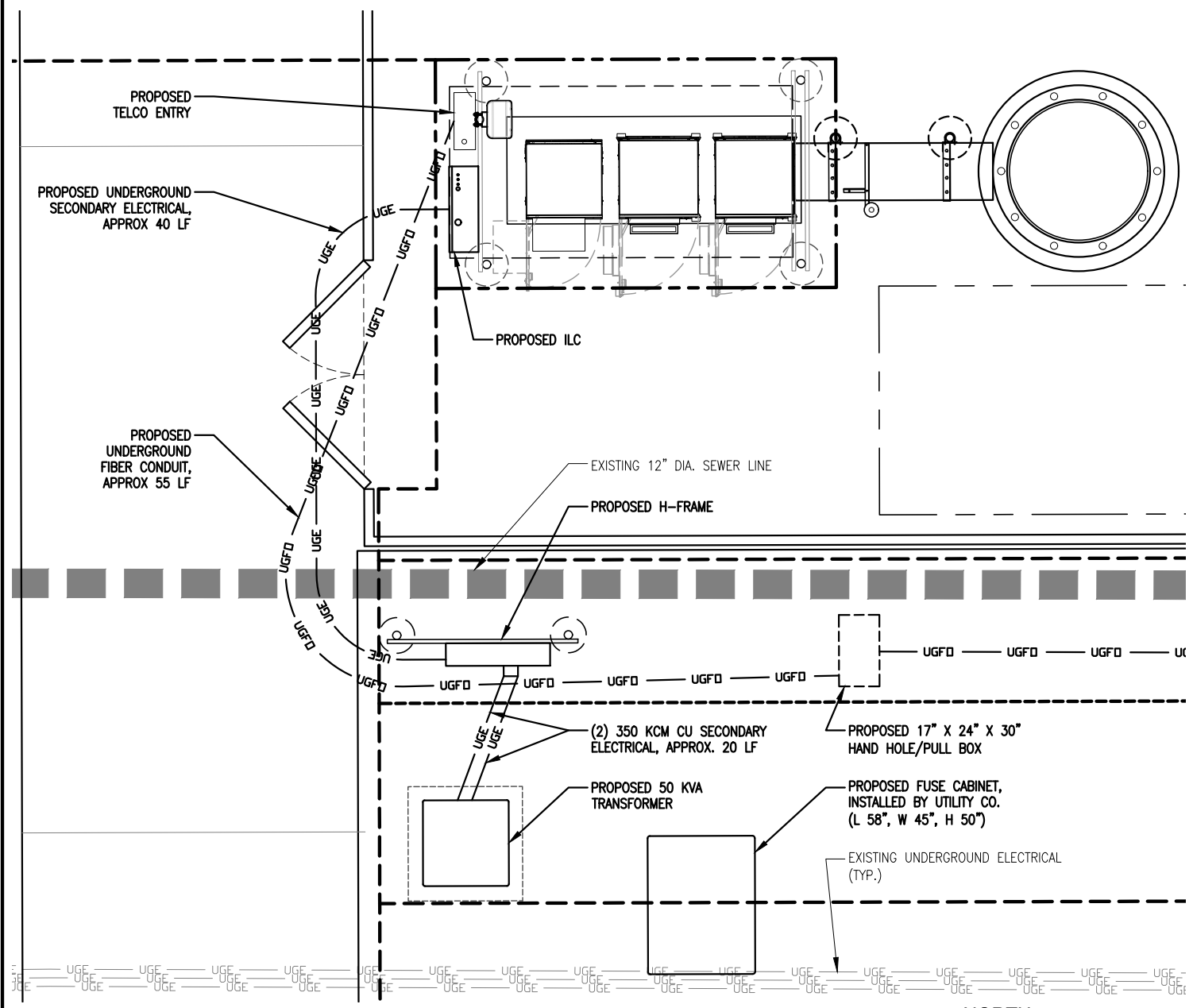
1 SITE UTILITY PLAN
SCALE: 1" = 50'-0"



U-1



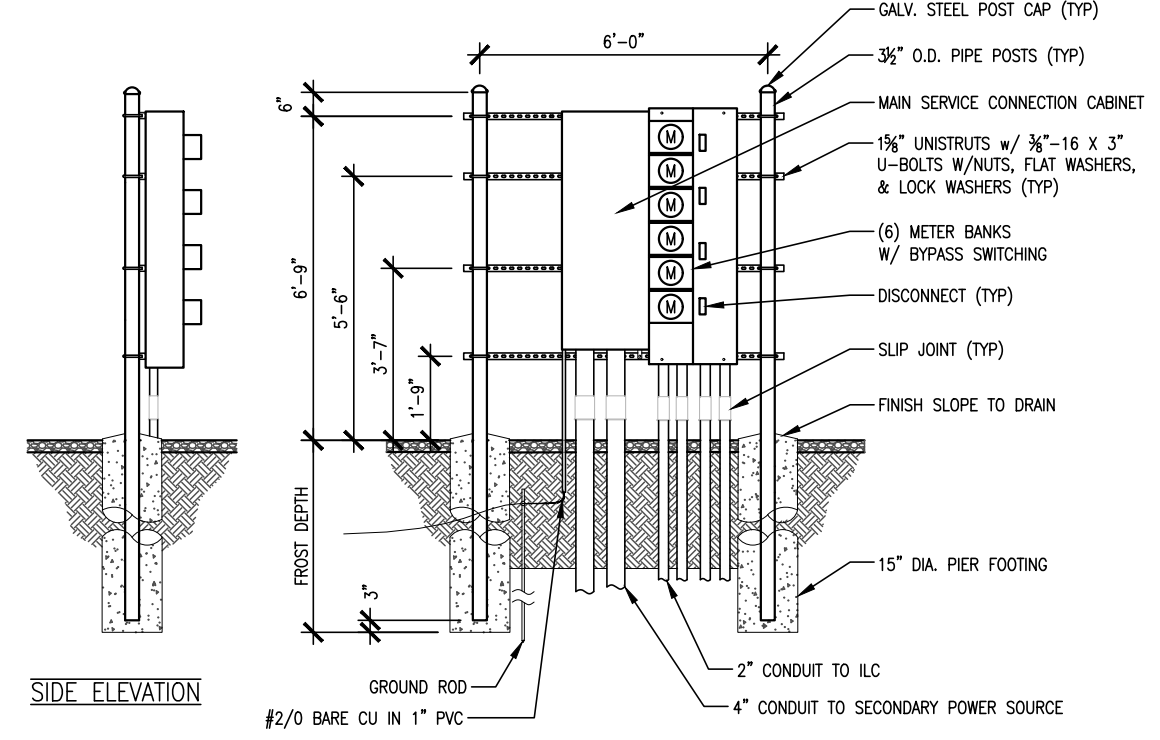
4 CONDUIT TRENCH DETAIL
SCALE: 3/4" = 1'-0"
GRAPHIC SCALE



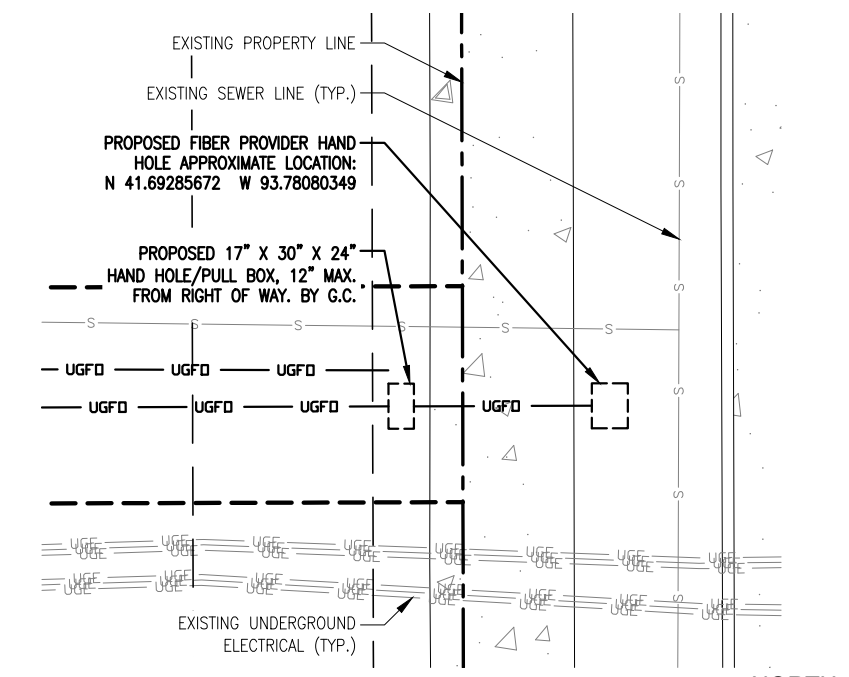
1 ENLARGED SITE PLAN
SCALE: 3/16" = 1'-0"
GRAPHIC SCALE

NOTE:
1. ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE AND THE LOCAL BUILDING CODES. ALL COMPONENTS SHALL BE U.L. APPROVED.
2. ALL COMPONENTS TO BE AS SPECIFIED OR EQUIVALENT AS APPROVED BY OWNER.
3. ALL BREAKERS SUPPLIED BY CONTRACTOR.

NOTE:
CONTRACTOR TO PROVIDE TWO RUNS 2" PVC WITH PULL STRING FROM ROW TO PROPOSED TRANSFORMER LOCATION. 90 DEGREE SWEEPS TO BE FIBERGLASS AND TOP OF CONDUIT TO BE 42" BELOW FINAL GRADE. UTILITY PROVIDER TO PROVIDE FINAL UTILITY ROUTE AND TRANSFORMER LOCATION.



3 H-FRAME DETAIL
SCALE: 1/4" = 1'-0"
GRAPHIC SCALE



2 PULLBOX LOCATION PLAN
SCALE: 3/32" = 1'-0"
GRAPHIC SCALE

HERZOG ENGINEERING
1334 81st AVE NE
SPRING LAKE PARK, MN 55432
(612) 844-1234
WWW.HERZOGENGINEERING.COM

LICENSED PROFESSIONAL ENGINEER
JOSHUA HERZOG
20456
IOWA

HE #: 241495 05/06/2025

DESIGN 1
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EDEN PRAIRIE, MN 55344
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PROJECT
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DES BEAVER CREEK

NE HERITAGE DR
GRIMES, IA 50111

SHEET CONTENTS:
ENLARGED SITE UTILITY PLAN
PULLBOX LOCATION PLAN

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

U-2

SITE SURVEY

PROPERTY DESCRIPTION: (per U.S. Title Solutions File No. UST77584, effective date June 14, 2024)

Lot 14 in HOPE COMMERCIAL PLAT 4, an Official Plat, now included in and forming a part of the City of Grimes, Polk County, Iowa.

SCHEDULE III: (per U.S. Title Solutions File No. UST77584, effective date June 14, 2024)

Easements and Right of Ways

- 4.1) Underground Electric Easement by City of Grimes, Iowa to Midamerican Energy Company, Dated April 25, 2023, Recorded May 12, 2023, in Book 19472, Page 407.
This document describes a 10 foot wide easement for electrical purposes. Said easement is shown on the survey.
- 4.2) Ingress/Egress Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 213.
This document describes a 30 foot wide easement for ingress and egress purposes. Said easement is shown on the survey.
- 4.3) Trail and Public Utility Access Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 193.
This document describes a 5 foot wide easement for trail and public utilities purposes. Said easement is shown on the survey.
- 4.4) Buffer Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 183.
This document describes a 30 foot wide buffer easement on the west line of the parent parcel. Said easement is shown on the survey.
- 4.5) Overland Flowage Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 178.
This document describes a 30 foot wide overland flowage easement along the north line of the parent parcel. Said easement is shown on the survey.
- 4.6) Water Main Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 173.
This document describes a 15 foot wide easement for watermain purposes. Said easement is shown on the survey.
- 4.7) Public Utility Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 167.
This document describes a 10 foot wide public utility easement. Said easement is shown on the survey.
- 4.8) Storm Sewer Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 155.
This document describes a 20 foot wide storm sewer easement. Said easement is shown on the survey.
- 4.9) Underground Electric Easement by Hope K. Farms, LLC to Midamerican Energy Company, Dated October 08, 2020, Recorded October 26, 2020, in Book 18147, Page 507.
This document describes a 10 foot electrical easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.10) Water Main Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated June 03, 2020, Recorded June 23, 2020, in Book 17906, Page 557.
This document describes an easement for watermain purposes. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.11) Sanitary Sewer Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated June 03, 2020, Recorded June 23, 2020, in Book 17906, Page 542.
This document describes a 30 foot wide sanitary sewer easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.12) Public Utility Line Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated June 03, 2020, Recorded June 23, 2020, in Book 17906, Page 537.
This document describes a 10 foot wide utility easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.13) Public Utility Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated December 17, 2018, Recorded January 22, 2020, in Book 17673, Page 892.
This document describes a 10 foot wide public utility easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.14) Water Main Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated December 17, 2018, Recorded January 22, 2020, in Book 17673, Page 886.
This document describes a 15 foot wide watermain easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.15) Public Utility Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated November 19, 2018, Recorded November 26, 2018, in Book 17157, Page 319.
This document describes a 10 foot wide public utility easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.16) Overland Flowage Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated November 19, 2018, Recorded November 26, 2018, in Book 17157, Page 314.
This document describes a 40 foot wide overland flowage easement. Said easement is shown on the survey.
- 4.17) Storm Sewer Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated November 19, 2018, Recorded November 26, 2018, in Book 17157, Page 309.
This document describes multiple storm sewer easements. Said easements do not affect the proposed tower area and are not shown on the survey.
- 4.18) Sanitary Sewer Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated November 19, 2018, Recorded November 26, 2018, in Book 17157, Page 304.
This document describes a 30 foot wide sanitary sewer easement. Said easement does not affect the proposed tower area and is not shown on the survey.

- 4.19) Public Water Main Easement by Heritage at Grimes, LLC to City of Grimes, Iowa, Dated December 07, 2016, Recorded January 09, 2017, in Book 16338, Page 360.
This document describes an irregular shaped watermain easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.20) Public Trail Easement by Heritage at Grimes, LLC to City of Grimes, Iowa, Dated December 07, 2016, Recorded January 09, 2017, in Book 16338, Page 354.
This document describes an irregular shaped public trail easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.21) Public Storm Sewer Easement by Heritage at Grimes, LLC to City of Grimes, Iowa, Dated December 07, 2016, Recorded January 09, 2017, in Book 16338, Page 347.
This document describes multiple storm sewer easements. Said easements do not affect the proposed tower area and are not shown on the survey.
- 4.22) Public Sanitary Sewer Easement by Heritage at Grimes, LLC and Beaverbrooke Development Company to City of Grimes, Iowa, Dated December 07, 2016, Recorded January 09, 2017, in Book 16338, Page 332.
This document describes an irregular shaped sanitary sewer easement. Said easement is shown on the survey.
- 4.23) Public Utility Line Easement by Beaverbrooke Development Company and Beaverbrooke North No. 1, L.L.C. to City of Grimes, Iowa, Dated September 10, 2015, Recorded September 23, 2015, in Book 15743, Page 387.
This document describes a public utility easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.24) Trail Easement by Howard H. Bauman, Darrell J. Bauman, Lynda M. Bauman, Donald H. Bauman and Colleen M. Bauman to City of Grimes, Iowa, Dated August 30, 2013, Recorded September 24, 2013, in Book 14969, Page 489.
This document describes a 10 foot wide trail easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.25) Permanent Sanitary Sewer Easement by Howard H. Bauman and Agnes V. Bauman to City of Grimes, Iowa, Dated August 11, 2000, Recorded August 15, 2000, in Book 8566, Page 525.
This easement describes a permanent sanitary sewer easement. Said easement does not affect the proposed tower area and is not shown on the survey.

Other Recorded Documents:

- 5.1) Hope Commercial Plat 4 Recorded November 03, 2021, in Book 18844, Page 119.
Part of the described plat is shown on the survey.
- 5.2) Resolution between City of Grimes Dated February 23, 2021, Recorded March 02, 2021, in Book 18388, Page 628.
Not related to the survey.
- 5.3) Hope Commercial Plat 2 Recorded June 23, 2020, in Book 17906, Page 514.
This plat was referenced to determine if existing easements affect the proposed tower area.
- 5.4) Hope Commercial Plat 1 Recorded November 26, 2018, in Book 17157, Page 281.
This plat was referenced to determine if existing easements affect the proposed tower area.
- 5.5) Heritage at Grimes Plat 2 Recorded January 09, 2017, in Book 16338, Page 205.
This plat was referenced to determine if existing easements affect the proposed tower area.
- 5.6) Plat of Survey Recorded February 18, 2016, in Book 15900, Page 199.
Not related to this survey.
- 5.7) Plat of Survey Recorded February 18, 2016, in Book 15900, Page 199.
Not related to this survey.

PROPOSED UTILITY COMPANY EASEMENT DESCRIPTION:

A 7.00 foot wide easement for utility purposes over, under and across Lot 14, HOPE COMMERCIAL PLAT 4, Polk County, Iowa, the centerline of said easement is described as follows:

Commencing the northeast corner of Lot 55, said HOPE COMMERCIAL PLAT 4; thence South 89 degrees 50 minutes 18 seconds West along the north line of said Lot 55, a distance of 279.87 feet; thence North 0 degrees 10 minutes 12 seconds West, a distance 535.39 feet; thence South 89 degrees 49 minutes 48 seconds West, a distance of 23.53 feet; thence South 89 degrees 12 seconds East, a distance of 26.00 feet to the Point of Beginning of the centerline to be described; thence North 89 degrees 49 minutes 48 seconds East, a distance of 37.50 feet and said centerline there terminating.

LESSEE PREMISES DESCRIPTION:

That part of Lot 14, HOPE COMMERCIAL PLAT 4, according to the recorded plat thereof, Polk County, Iowa, described as follows:

Commencing the northeast corner of Lot 55, said HOPE COMMERCIAL PLAT 4; thence South 89 degrees 50 minutes 18 seconds West along the north line of said Lot 55, a distance of 279.87 feet; thence North 0 degrees 10 minutes 12 seconds West, a distance 535.39 feet to the Point of Beginning of the premises to be described; thence South 89 degrees 49 minutes 48 seconds West, a distance of 14.00 feet; thence South 0 degrees 10 minutes 12 seconds East, a distance of 8.00 feet; thence North 89 degrees 49 minutes 48 seconds East, a distance of 14.00 feet; thence North 0 degrees 10 minutes 12 seconds West, a distance of 8.00 feet to the Point of Beginning.

LESSEE ACCESS & UTILITIES EASEMENT:

A 15.00 foot wide easement for access and utility purposes over, under and across Lot 14, HOPE COMMERCIAL PLAT 4, Polk County, Iowa, the centerline of said easement is described as follows:

Commencing the northeast corner of Lot 55, said HOPE COMMERCIAL PLAT 4; thence South 89 degrees 50 minutes 18 seconds West along the north line of said Lot 55, a distance of 279.87 feet; thence North 0 degrees 10 minutes 12 seconds West, a distance 535.39 feet; thence South 89 degrees 49 minutes 48 seconds West, a distance of 23.53 feet to the Point of Beginning of the centerline to be described; thence South 0 degrees 10 minutes 12 seconds East, a distance of 7.50 feet to a point hereinafter referred to as Point "A"; thence continue South 0 degrees 10 minutes 12 seconds East, a distance of 68.00 feet; thence North 89 degrees 49 minutes 48 seconds East, a distance of 230.00 feet; thence South 0 degrees 10 minutes 12 seconds East, a distance of 52.43 feet; thence North 89 degrees 49 minutes 48 seconds East, a distance of 43.86 feet to the west right of way line of NE Heritage Drive and said centerline there terminating.

The sidelines of said easement shall be shortened or lengthened to terminate at said west right of way line of NE Heritage Drive.

TOGETHER WITH:

A 15.00 foot wide easement for access and utility purposes over, under and across said Lot 14, the centerline of said easement is described as follows:

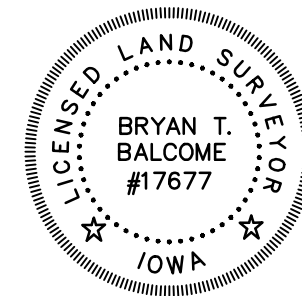
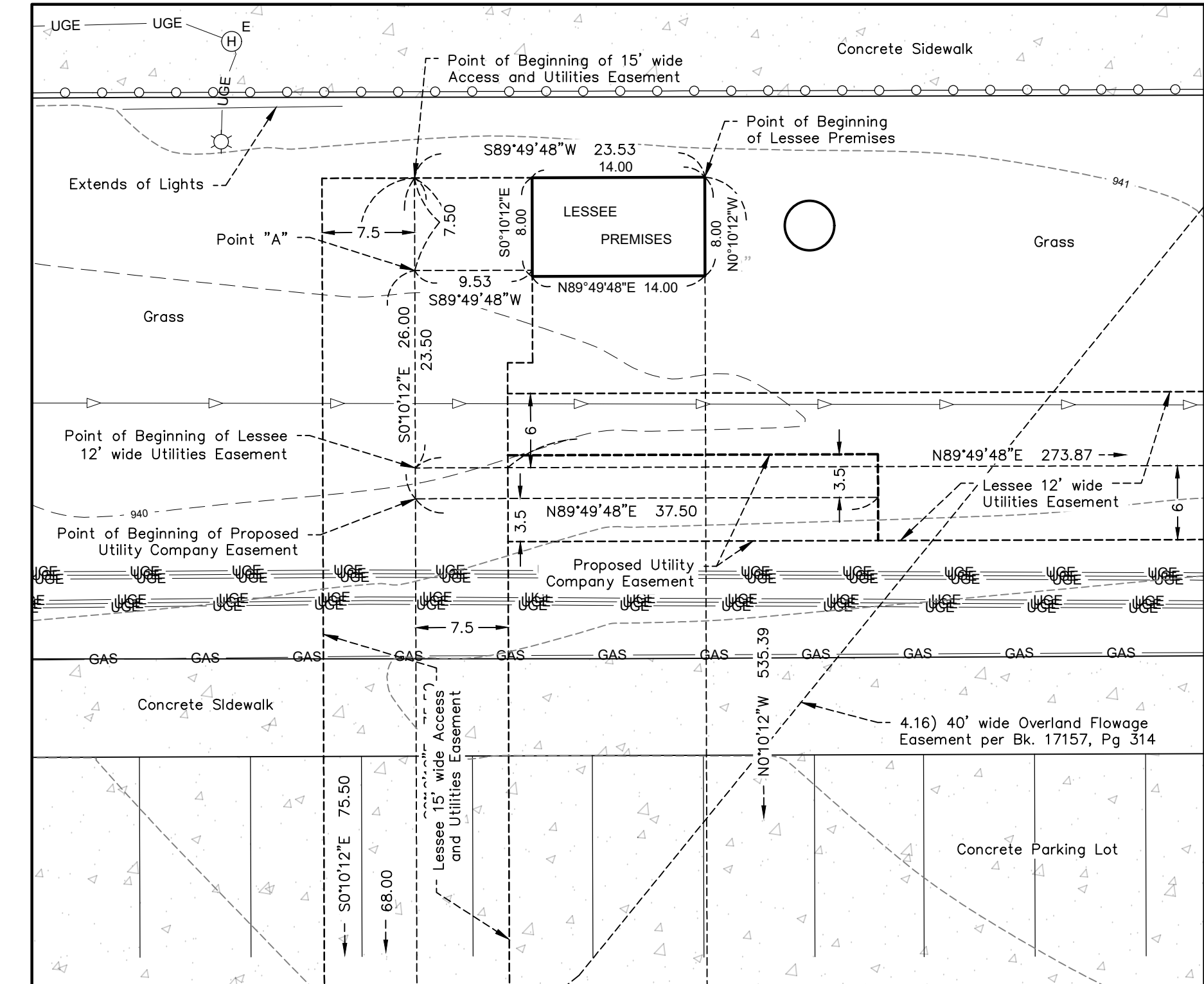
Beginning at the previously described Point "A"; thence South 89 degrees 49 minutes 48 seconds West, a distance of 9.53 feet and said centerline there terminating.

LESSEE UTILITIES EASEMENT:

A 12.00 foot wide easement for utility purposes over, under and across Lot 14, HOPE COMMERCIAL PLAT 4, Polk County, Iowa, the centerline of said easement is described as follows:

Commencing the northeast corner of Lot 55, said HOPE COMMERCIAL PLAT 4; thence South 89 degrees 50 minutes 18 seconds West along the north line of said Lot 55, a distance of 279.87 feet; thence North 0 degrees 10 minutes 12 seconds West, a distance 535.39 feet; thence South 89 degrees 49 minutes 48 seconds West, a distance of 23.53 feet; thence South 0 degrees 10 minutes 12 seconds East, a distance of 23.50 feet to the Point of Beginning of the centerline to be described; thence North 89 degrees 49 minutes 48 seconds East, a distance of 273.87 feet to the west right of way line of NE Heritage Drive and said centerline there terminating.

The sidelines of said easement shall be shortened or lengthened to terminate at said west right of way line of NE Heritage Drive.



SHEET 1 OF 2 SHEETS



SITE NAME:
DES BEAVER CREEK

Polk County, IA

No.	Date	REVISIONS	By	CHK	APP'D				
	9/24/24	CHECKED BY: BTB	DRAWN BY:	BAM					

I HEREBY CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED AND THE RELATED SURVEY WORK WAS PERFORMED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE: *Bryan T. Balcome*
BRYAN T. BALCOME, L.S.
LICENSE # 17677
DATE: 12/18/24
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2026

FULL SCALE ON 22"x34"
HALF SCALE ON 11"x17"
2024-10896





Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

~~April 29, 2025~~

May 21, 2025

NEVCO Wireless

Attn: Chad Skinner

12106 Ridegview Drive

Urbandale, IA 50323

RE: Verizon Des Beaver Creek Site Plan Amendment

Dear Chad:

The Development Services Department is in receipt of a proposed Site Plan Amendment for the Verizon Des Beaver Creek. Based on the review of the submittal materials, staff have the following comments:

General Comments:

- ~~1. Provide signed site plan application.~~
2. Staff will provide the preconstruction packet upon receipt of the final plan set.
3. CAD files are required with the final plan set with the information below included:
 - a. All new utilities to be installed and any removed.
 - b. Pavement within the project site
 - c. Finished grade surface of grading area.
 - d. All trees that are to be added or removed.
 - e. Survey file of existing conditions with any private utilities located.
 - f. Sign locations and pavement markings
 - g. Any recorded easements
- ~~4. As-built plans are required in accordance with the as-built policy provided.~~
- ~~5. Add City of Grimes stand notes. Notes are provided.~~
6. Provide floodplain permit. Staff understand the work is not within the floodplain but is located on the property which has a floodplain. The permit is for audit purposes.
Staff are reviewing the permit

- ~~7. Please provide a site rendering or 3D file of the tower that we can put into our GIS system.~~
8. Provide a plan showing how the area will be blocked off during construction and provide staging locations.
9. Please confirm if a generator will be provided.

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE:	May 28, 2025 (1 PDF of Site plan with Elevation Plan included)
PLANNING & ZONING:	June 3, 2025 at 5:30
COUNCIL MEETING:	June 24, 2025 at 5:30

Please feel free to contact me at emartin@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,

Evann Martin
Senior Planner

Building Comments Complete

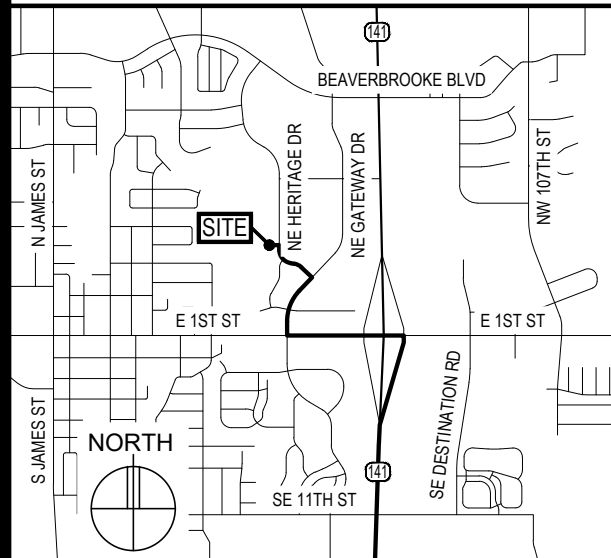


DES BEAVER CREEK NEW BUILD

PROJECT INFORMATION

SITE NAME: DES BEAVER CREEK
 SITE ADDRESS: NE HERITAGE DR GRIMES, IA 50111
 COUNTY: POLK
 LATITUDE: N 41° 41' 34.46"
 LONGITUDE: W 93° 46' 54.20"
 DRAWING BASED ON RFDS DATED: 04-12-24
 CONSTRUCTION TYPE: IIB
 SITE AREA: 8' X 14' - 112 S.F.

VICINITY MAP



MAP DATA ©2023 GOOGLE

LOCATION SCAN



ISSUE SUMMARY

REV	DESCRIPTION	SHEET/DETAIL
A	ISSUED FOR REVIEW 11-08-24	ALL
B	ISSUED FOR OWNER SIGNOFF 12-13-24	ALL
C	ISSUED FOR REVISED ANTENNA KEYS 12-20-24	A-3
D	ISSUED FOR CITY REQUIREMENTS 04-10-25	ALL
E	ISSUED FOR CITY COMMENTS 05-06-25	ALL

DEPARTMENTAL APPROVALS

JOB TITLE	NAME	DATE
RF ENGINEER	NICHOLAS CLAUSEN	04-15-25
OPERATIONS MANAGER		
CONSTRUCTION ENGINEER	JUSTIN RUCH	04-15-25

LESSOR / LICENSOR APPROVAL

SIGNATURE	PRINTED NAME	DATE

LESSOR / LICENSOR: PLEASE CHECK THE APPROPRIATE BOX BELOW
 NO CHANGES. CHANGES NEEDED. SEE COMMENTS.

CONTACTS

LESSOR / LICENSOR: CITY OF GRIMES
 410 SE MAIN ST, SUITE 102
 GRIMES, IA 50111
 ALEX PFALTZGRAFF (515) 986-4050

LESSEE: VERIZON WIRELESS
 10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 CONSTRUCTION DEPT (952) 946-4700

POWER UTILITY COMPANY CONTACT: MIDAMERICA ENERGY
 500 EAST COURT AVE
 DES MOINES, IA 50309
 LAYNE OGLE (515) 252-6797

TELCO UTILITY COMPANY CONTACT: ONEFIBER
 250 SE DESTINATION DRIVE
 GRIMES, IA 50111
 RYAN HESELTINE (515) 986-7325

DESIGNER: DESIGN 1 OF EDEN PRAIRIE
 9973 VALLEY VIEW ROAD
 EDEN PRAIRIE, MN 55344
 (952) 903-9299

SURVEYOR: WIDSETH
 610 FILLMORE STREET - PO BOX 1028
 ALEXANDRIA, MN 56308-1028
 320-762-8149

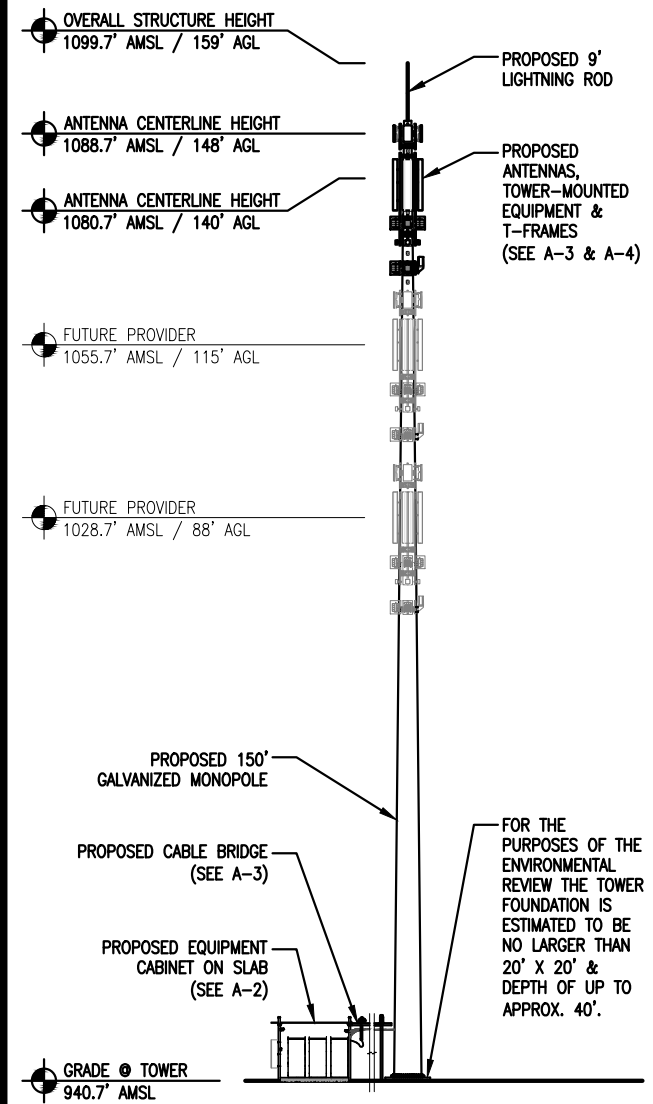
STRUCTURAL ENGINEER: T.B.D

GEOTECHNICAL ENGINEER: CERTIFIED TESTING SERVICES, INC
 419 WEST 6TH ST, PO BOX 1193
 SIOUX CITY, IA 51102
 JAMES BERTSCH, PE (712) 252-5132

NOTES:
 1. THESE DRAWINGS DO NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, OF THE ACCURACY OF THE STRUCTURAL ANALYSES AND THE PERFORMANCE OF THE COMPLETED CONSTRUCTION AS SHOWN ON THESE DOCUMENTS AND THE STRUCTURAL ANALYSES.
 2. NO STRUCTURAL ANALYSIS FOR THE TOWER, MOUNTS OR FOUNDATION HAVE BEEN PERFORMED AS PART OF THESE DRAWINGS. THE STRUCTURAL ANALYSIS FOR THE TOWER AND FOUNDATION ARE BY THE TOWER SUPPLIER AND SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT.
 3. PLEASE COORDINATE ANY STRUCTURAL CONCERNS/MATTERS OR ANY LOADING MODIFICATIONS TO THE CONSULTANT WHO AUTHORED THE ANALYSIS AND NOTIFY DESIGN 1 IMMEDIATELY OF THE ISSUE.
 4. TOWER FOUNDATION, EQUIPMENT SLAB, GENERATOR FOUNDATION, AND THE ACCESS DRIVE TO BE EXCAVATED AND CONSTRUCTED IN ACCORDANCE WITH RECOMMENDATIONS AND SPECIFICATIONS OF THE GEOTECHNICAL REPORT WHICH IS NOT INCLUDED IN THIS PACKAGE. DISCREPANCIES BETWEEN THE REPORT AND THE OTHER DOCUMENTS TO BE IMMEDIATELY REPORTED TO VERIZON WIRELESS AND THE DESIGNER.

TOWER ELEVATION

NOTES:
 1. TOWER TO BE ERECTED AND INSTALLED IN ACCORDANCE WITH TOWER MANUFACTURER'S DRAWINGS NOT INCLUDED WITH THIS PACKAGE. DISCREPANCIES BETWEEN TOWER DRAWINGS AND DESIGNER DRAWINGS TO BE REPORTED TO VERIZON WIRELESS AND THE DESIGNER IMMEDIATELY.
 2. CONTRACTOR TO ENSURE TIP OF ANTENNAS DO NOT EXCEED TOWER HEIGHT.
 3. ELEVATION IS SHOWN FOR GENERAL DIAGRAMMATIC PURPOSES ONLY. DO NOT SCALE.
 4. THE STRUCTURAL DESIGN FOR THE MOUNTS (BY OTHERS) SHALL BE PER THE VERIZON NETWORK STANDARD NSTD-445. ALL LOADING AND DESIGN SHALL BE PER THE TIA-222-H STANDARD.



1 NORTH ELEVATION
 SCALE: 1" = 30'-0"

SHEET INDEX

SHEET	SHEET DESCRIPTION
T-1	PROJECT INFORMATION, TOWER ELEVATION & SHEET INDEX
A-1	OVERALL SITE PLAN
A-1.1	SITE PLAN, DETAIL INDEX & PHOTO
A-2	ENLARGED SITE PLAN
A-3	ANTENNA AND COAX KEY, CABLE BRIDGE PLAN & DETAILS
A-4	TOWER ELEVATION, MOUNTING DETAILS & BOLLARD DETAILS
A-5	FENCE & GATE DETAILS
A-6	CABINET DETAILS
A-7	OUTLINE SPECIFICATIONS
G-1	GROUNDING & UTILITY NOTES
G-2	GROUNDING PLAN & GROUNDING DETAIL INDEX
U-1	SITE UTILITY PLAN
U-2	ENLARGED SITE UTILITY & PULLBOX LOCATION PLANS
-	SURVEY (2 SHEETS)

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

(signature) Joshua Herzog (date) 05/06/2025

Printed or typed name: Joshua Herzog
 License number: P20456
 My license renewal date is December 31, 2026

Pages or sheets covered by this seal:
 T-1, A-1, A-1.1, A-2, A-3, A-4, A-5, A-6, A-7, G-1, G-2, U-1, AND U-2

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 1334 81st AVE NE
 SPRING LAKE PARK, MN 55432
 (612) 844-1234
 WWW.HERZOGENGINEERING.COM

JOSHUA HERZOG
 20456
 HE #: 241495 05/06/2025

DESIGN 1

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verizon

10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 (952) 946-4700

PROJECT

 LOC. CODE: 573148

DES
 BEAVER CREEK

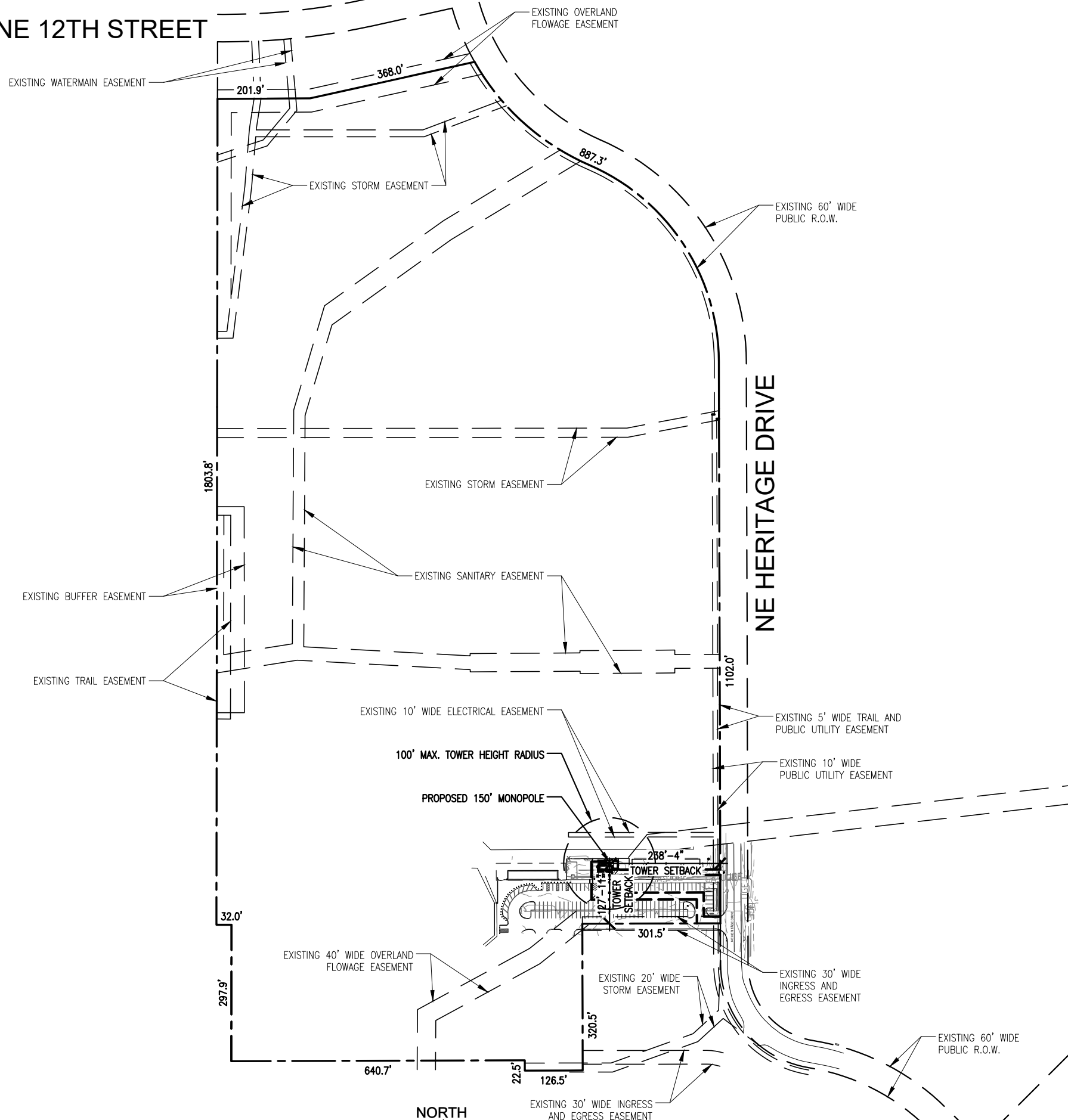
NE HERITAGE DR
 GRIMES, IA 50111

SHEET CONTENTS:
 CONTACTS
 ISSUE SUMMARY
 SHEET INDEX
 DEPARTMENTAL APPROVALS
 LESSOR APPROVAL
 PROJECT INFORMATION
 AREA & VICINITY MAPS
 GENERAL NOTES

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CHECKED BY:	TRB
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T-1

NE 12TH STREET



NOTES:
 1. PROPOSED STRUCTURES TO PROVIDE CELLULAR SERVICE TO THE SURROUNDING AREA.
 2. PROJECT PROPERTY ZONING REFERENCE: R-4 (HOPE COMMERCIAL PUD)
 3. AREA OF LOT: 2,139,136.8 SF/49.1 ACRES
 4. CONTRACTOR TO COORDINATE APPROVAL TO START CONSTRUCTION BETWEEN THE SCHOOL, CITY (BUILDING PERMIT) AND VERIZON. THEN ABOUT 4 WEEKS FOR ACTUAL CONSTRUCTION.
 5. CONTRACTOR TO PROVIDE TEMPORARY LOCKING SECURITY FENCING AROUND THE CONSTRUCTION SITE FOR SAFETY OF PUBLIC AND PROTECTION OF CONSTRUCTION IMPROVEMENTS.

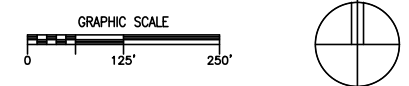
City of Grimes Standard Notes for Site Plans:

- General Notes:**
 - All work shall be done in accordance with the current version of the Iowa Statewide Urban Design and Specifications (SUDAS) for Public Improvements on the date of approval and the City of Grimes Supplemental Specifications.
 - The contractor shall be responsible for reviewing, signing, and returning the preconstruction packet to the Development Services Department prior to the start of construction.
 - All permits (IDNR, NPDES, IDOT, Army Corp., etc.) shall be obtained prior to the start of construction.
 - Provide the City of Grimes with record drawings (as-builts) of all improvements and easements as per City commercial as-built policy.
 - The record drawings should include a certified grading sheet and as-built plans of all stormwater management facilities on site with a certification statement signed by the design engineer indicating that the facilities were constructed as designed.
 - Record drawings to include one electronic file in .dwg and .pdf file extensions.
 - Typical building service layout to reflect the City's service order from left to right facing the lot sanitary, water, sump. Mark the ends of services with a steel fence post and paint green for sanitary, blue for water, and white for storm. Mark the ends of sanitary and sump with a 2 x 4 from end of pipe to 2' above grade.
 - A Knox box is required by the fire department.
 - All site lighting shall not spill onto adjacent properties or rights-of-way.
 - Provide a 4-year maintenance bond for all public improvements (utility, paving, subgrade) with an itemized cost breakdown.
 - The contractor shall be responsible for locating all newly constructed public and private utilities associated with the project at their expense until the City accepts the project through the Grimes City Council.
- Sanitary Sewer Notes:**
 - The contractor is required to place a temporary plug in the existing downstream sanitary sewer manhole prior to the start of construction. The contractor shall remove the plug following approval of construction by the City of Grimes.
 - Sanitary gravity pipe material shall be PVC SDR 26 or Truss (8" to 15").
 - Sanitary gravity service pipe material shall be PVC SDR 23.5 (4" to 6").
 - All sanitary sewer manholes shall have steps.
 - All sanitary sewer manholes castings shall be sealed with heat shrink sleeves.
 - All sanitary sewer manhole castings located within pavement shall be Type B:PCC W/adjusting mechanism.
 - Sanitary sewer cleaning & televising shall be completed prior to paving. Run sufficient dyed water through pipe prior to televising. Provide the video and inspection report to the City Engineering Division.
- Water Main Notes:**
 - All fire hydrants shall be American Flow Control-Waterous Pacer WB-67-250, Mueller Super Centurion 250 (3-way A-423), or Clow Medallion F-2545. All hydrants shall have the following: 6" MI Shoe, 2-1/2" Hose Nozzle, 4-1/2" Steamer Nozzle, NST Threads, Pentagon Operating Nut, Chain on cap, open left, 5-1/2" bury, and factory painted red. The minimum spool pipe length from auxiliary valve to hydrant shoe shall be 2.0'.
 - All hydrants will immediately be covered with a black plastic bag (or equivalent) once the hydrant is installed. The City of Grimes will notify the contractor when the bags can be removed.
 - A tracer wire receptacle shall be installed at each hydrant, AA Manufacturing Tracer Wire Receptacle Model TW-18-2.
 - All valves shall be resilient wedge gate valves.
 - Water service shall be 1-inch minimum type K copper.

FLOODPLAIN DESIGNATIONS:
 1. ZONE A SPECIAL FLOOD HAZARD AREA WITHOUT BASE FLOOD ELEVATION (NORTH OF THE SITE)
 2. ZONE AE SPECIAL FLOOD HAZARD AREA WITH BASE FLOOD ELEVATION (IN SOUTHWEST CORNER OF THE PARENT PARCEL)
 3. REGULATORY FLOODWAY (IN SOUTHWEST CORNER OF THE PARENT PARCEL)

VARIANCES GRANTED (PER 3-19-25 MEETING):
 1. REQUEST TO INCREASE TOWER HEIGHT.
 2. REDUCE SETBACK REQUIREMENTS FOR THE TOWER.

1 OVERALL SITE PLAN
 SCALE: 1" = 250'-0"



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 BLOOMINGTON, MN 55438
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SHEET CONTENTS:
 OVERALL SITE PLAN
 NOTES

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REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
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A-1



2 SITE PHOTO
VIEW: LOOKING EAST

PROPOSED
FENCED COMPOUND

LESSEE ACCESS &
UTILITIES EASEMENT

FROST DEPTH DESIGN =
3'-6" MIN. OR EXTENDING
BELOW THE FROST LINE
OF THE LOCALITY,
WHICHEVER IS GREATER

DETAIL INDEX	
DETAIL	DETAIL DESCRIPTION
SLAB	SEE SHEET A-6
3.1	CABLE BRIDGE SECTION
4.3	CABLE BRIDGE ELEVATION
7.1	GPS MOUNTING DETAIL (DETAIL 1)
8.1	TELCO ENTRY DETAIL
9.1	CMPH DETAIL
10.8	ONE-LINE ELECTRICAL DIAGRAM
12.1	METER ON H-FRAME (DETAIL 1)

HERZOG ENGINEERING
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IOWA

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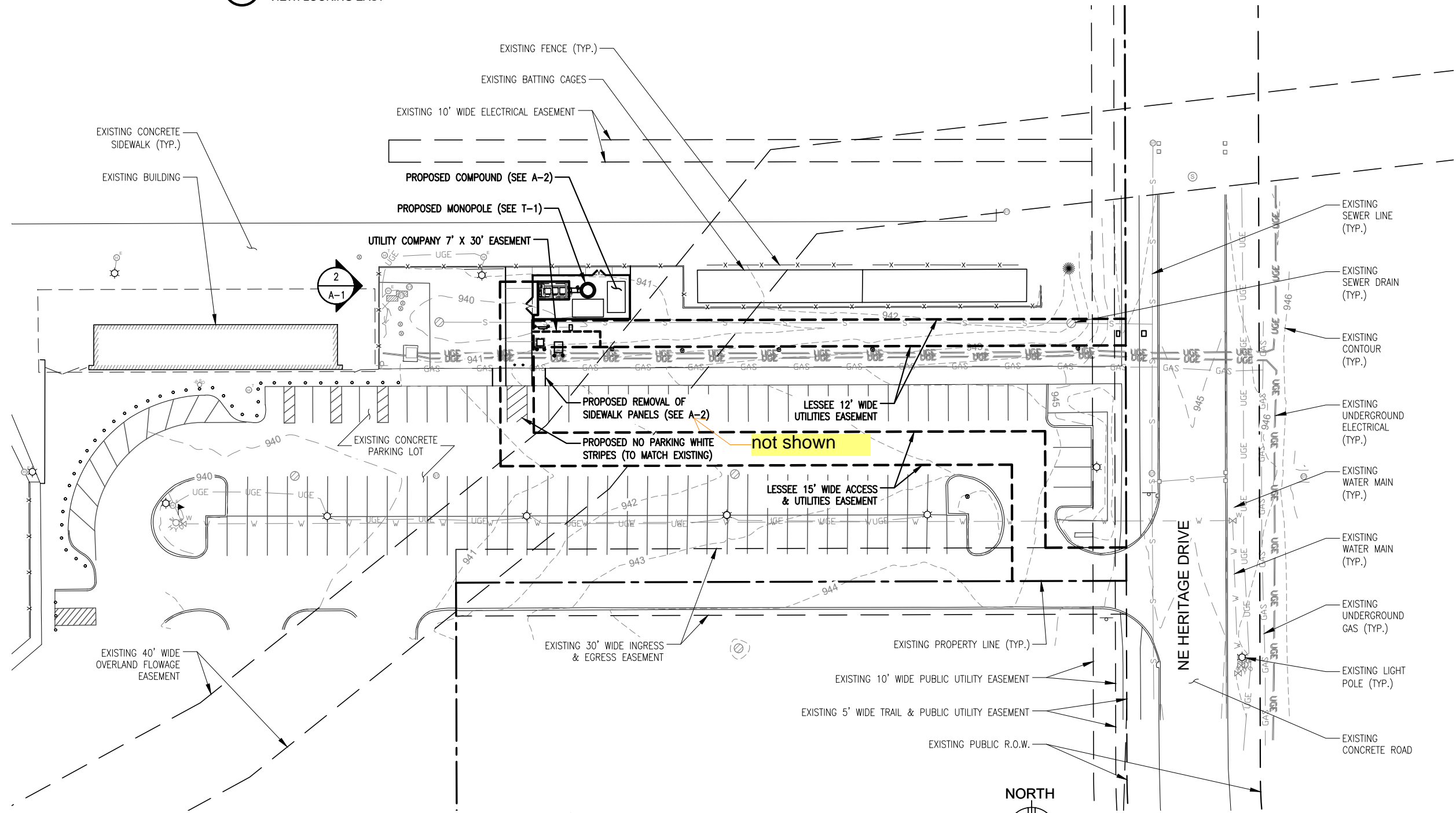
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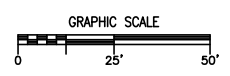
SHEET CONTENTS:
SITE PLAN
DETAIL INDEX
PHOTO


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A-1.1



1 SITE PLAN
SCALE: 1" = 50'-0"



LANDSCAPE KEY					
SYMBOL	QTY.	COMMON NAME	BOTANICAL NAME	MATURE SIZE	PLANTING SIZE
	4	TRAUTMAN JUNIPER	JUNIPERUS CHINENSIS 'TRAUTMAN'	H: 12' W: 4'	2 EA. @ 8' TALL

2 LANDSCAPE KEY

NOTE:
SEE SHEET G-1 FOR ADDITIONAL NOTES

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SHEET CONTENTS:
 ENLARGED SITE PLAN

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REV. E	05-06-25

A-2

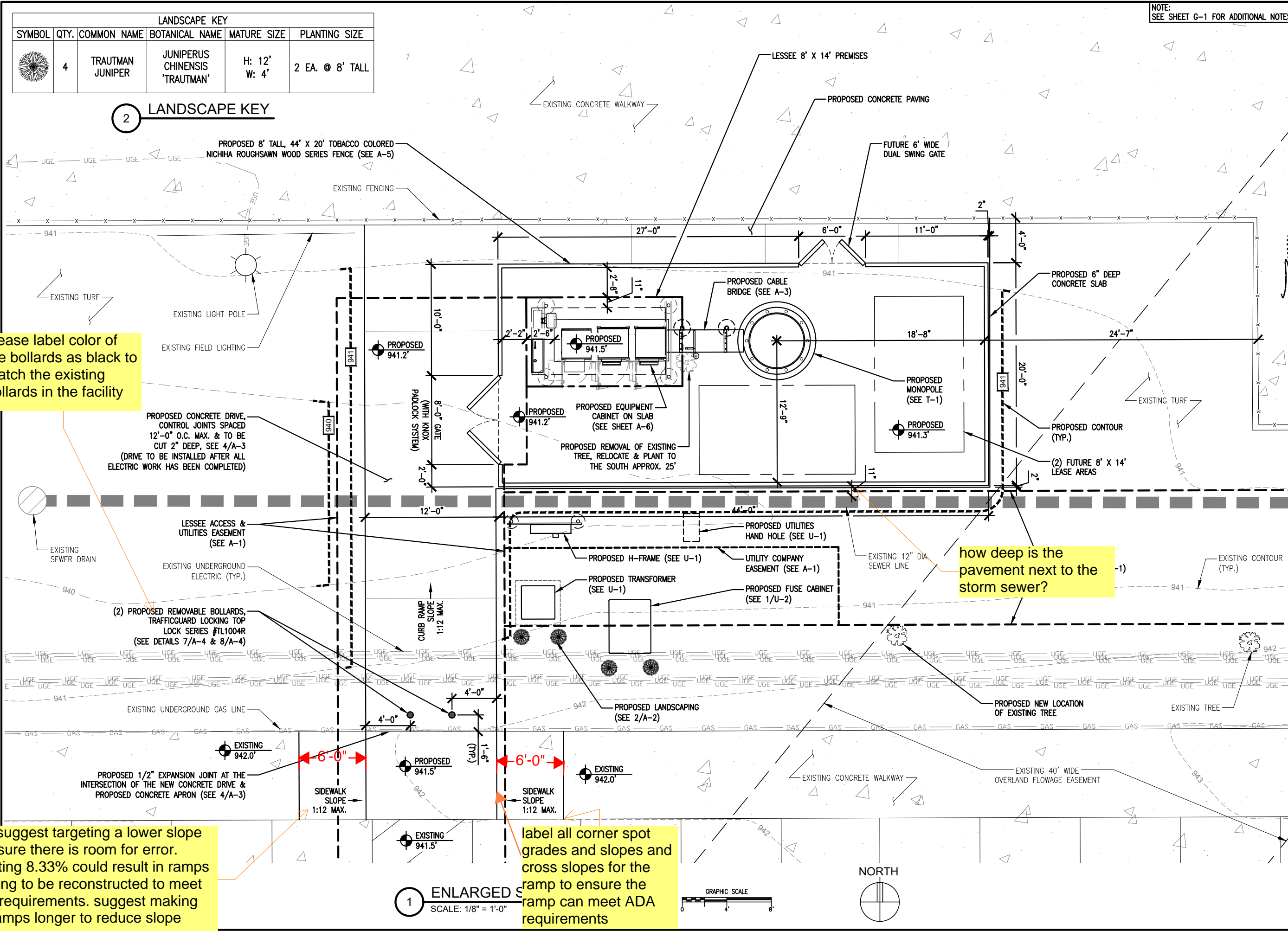
please label color of the bollards as black to match the existing bollards in the facility

how deep is the pavement next to the storm sewer?

staff suggest targeting a lower slope to ensure there is room for error. targeting 8.33% could result in ramps needing to be reconstructed to meet ADA requirements. suggest making the ramps longer to reduce slope

label all corner spot grades and slopes and cross slopes for the ramp to ensure the ramp can meet ADA requirements

1 ENLARGED SITE PLAN
 SCALE: 1/8" = 1'-0"

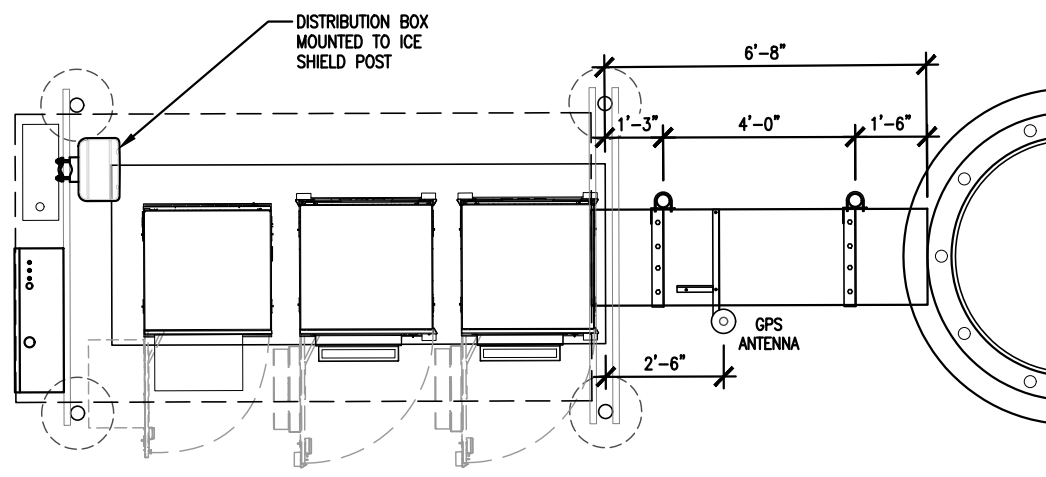


ANTENNA KEY													EQUIPMENT KEY				
	AZIMUTH	POSITION	FUNCTION	QTY	MANUFACTURER	MODEL	MOD TYPE	ANTENNA LENGTH	ANTENNA TIP	ANTENNA CENTER	ELEC DOWNTILT	MECH DOWNTILT	QTY	MANUFACTURER	MODEL	RRU PORT	
"X" SECTOR	30°	1.1	-	1	ERICSSON	AIR 6419	L-SUB6	28"	149.2'	148.0'	3'	0'	-	-	-	-	
	30°	2.1	TX/RX1	1	JMA	MX16FT865-02	700/850	96"	144.0'	140.0'	2'	0'	1	ERICSSON	4490	1	
	-	2.2	TX/RX2	-	-	2ND PORT	700/850	-	-	-	-	-	-	-	-	2	
	-	2.3	TX/RX3	-	-	3RD PORT	700/850	-	-	-	-	-	0'	-	-	3	
	-	2.4	TX/RX4	-	-	4TH PORT	700/850	-	-	-	-	-	0'	-	-	4	
	-	2.5	TX/RX1	-	-	5TH PORT	AWS	-	-	-	2'	0'	-	1	ERICSSON	4890	1
	-	2.6	TX/RX2	-	-	6TH PORT	AWS	-	-	-	-	-	-	-	-	3	
	-	2.7	TX/RX3	-	-	7TH PORT	AWS	-	-	-	-	-	-	-	-	5	
	-	2.8	TX/RX4	-	-	8TH PORT	AWS	-	-	-	-	-	-	-	-	7	
	-	2.9	TX/RX1	-	-	9TH PORT	PCS	-	-	-	2'	0'	-	-	-	2	
	-	2.10	TX/RX2	-	-	10TH PORT	PCS	-	-	-	-	-	-	-	-	4	
	-	2.11	TX/RX3	-	-	11TH PORT	PCS	-	-	-	-	-	-	-	-	6	
	-	2.12	TX/RX4	-	-	12TH PORT	PCS	-	-	-	-	-	-	-	-	8	
	-	2.13	TX/RX1	-	-	13TH PORT	CBRS	-	-	-	2'	0'	-	1	ERICSSON	4408	1
	-	2.14	TX/RX2	-	-	14TH PORT	CBRS	-	-	-	-	-	-	-	-	2	
	-	2.15	TX/RX3	-	-	15TH PORT	CBRS	-	-	-	-	-	-	-	-	3	
-	2.16	TX/RX4	-	-	16TH PORT	CBRS	-	-	-	-	-	-	-	-	4		
"Y" SECTOR	150°	1.1	-	1	ERICSSON	AIR 6419	L-SUB6	28"	149.2'	148.0'	3'	0'	-	-	-	-	
	150°	2.1	TX/RX1	1	JMA	MX16FT865-02	700/850	96"	144.0'	140.0'	2'	0'	1	ERICSSON	4490	1	
	-	2.2	TX/RX2	-	-	2ND PORT	700/850	-	-	-	-	-	-	-	-	2	
	-	2.3	TX/RX3	-	-	3RD PORT	700/850	-	-	-	-	-	0'	-	-	3	
	-	2.4	TX/RX4	-	-	4TH PORT	700/850	-	-	-	-	-	0'	-	-	4	
	-	2.5	TX/RX1	-	-	5TH PORT	AWS	-	-	-	2'	0'	-	1	ERICSSON	4890	1
	-	2.6	TX/RX2	-	-	6TH PORT	AWS	-	-	-	-	-	-	-	-	3	
	-	2.7	TX/RX3	-	-	7TH PORT	AWS	-	-	-	-	-	-	-	-	5	
	-	2.8	TX/RX4	-	-	8TH PORT	AWS	-	-	-	-	-	-	-	-	7	
	-	2.9	TX/RX1	-	-	9TH PORT	PCS	-	-	-	2'	0'	-	-	-	2	
	-	2.10	TX/RX2	-	-	10TH PORT	PCS	-	-	-	-	-	-	-	-	4	
	-	2.11	TX/RX3	-	-	11TH PORT	PCS	-	-	-	-	-	-	-	-	6	
	-	2.12	TX/RX4	-	-	12TH PORT	PCS	-	-	-	-	-	-	-	-	8	
	-	2.13	TX/RX1	-	-	13TH PORT	CBRS	-	-	-	2'	0'	-	1	ERICSSON	4408	1
	-	2.14	TX/RX2	-	-	14TH PORT	CBRS	-	-	-	-	-	-	-	-	2	
	-	2.15	TX/RX3	-	-	15TH PORT	CBRS	-	-	-	-	-	-	-	-	3	
-	2.16	TX/RX4	-	-	16TH PORT	CBRS	-	-	-	-	-	-	-	-	4		
"Z" SECTOR	270°	1.1	-	1	ERICSSON	AIR 6419	L-SUB6	28"	149.2'	148.0'	3'	0'	-	-	-	-	
	270°	2.1	TX/RX1	1	JMA	MX16FT865-02	700/850	96"	144.0'	140.0'	2'	0'	1	ERICSSON	4490	1	
	-	2.2	TX/RX2	-	-	2ND PORT	700/850	-	-	-	-	-	-	-	-	2	
	-	2.3	TX/RX3	-	-	3RD PORT	700/850	-	-	-	-	-	0'	-	-	3	
	-	2.4	TX/RX4	-	-	4TH PORT	700/850	-	-	-	-	-	0'	-	-	4	
	-	2.5	TX/RX1	-	-	5TH PORT	AWS	-	-	-	2'	0'	-	1	ERICSSON	4890	1
	-	2.6	TX/RX2	-	-	6TH PORT	AWS	-	-	-	-	-	-	-	-	3	
	-	2.7	TX/RX3	-	-	7TH PORT	AWS	-	-	-	-	-	-	-	-	5	
	-	2.8	TX/RX4	-	-	8TH PORT	AWS	-	-	-	-	-	-	-	-	7	
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-	2.16	TX/RX4	-	-	16TH PORT	CBRS	-	-	-	-	-	-	-	-	4		

ADDITIONAL:
 (1) DISTRIBUTION BOX, MODEL RVZDC-6627-PF-48 (ON TOWER)
 (1) DISTRIBUTION BOX, MODEL RVZDC-4520-RM-48 (IN CABINET)
 (2) HUBER+SUHNER HYBRID CABLE, MODEL #85205110 (DIST BOX AT SLAB TO DIST BOX ON TOWER)
 (12) HUBNER+SUHNER HYBRID JUMPER, MODEL #85243898 (DIST. BOX TO RRU)
 (48) ANDREW COAX JUMPER, MODEL LDF4-50A, 1/2"Ø FOAM DIELECTRIC, 10' EACH (RRU TO ANTENNA)
 (1) POWERSHIFT EQUIPMENT, DC-DC UP-CONVERTER UNITS (IN CABINET)
 (5) POWERSHIFT EQUIPMENT, DC-DC UP-CONVERTER MODULE (IN CABINET)

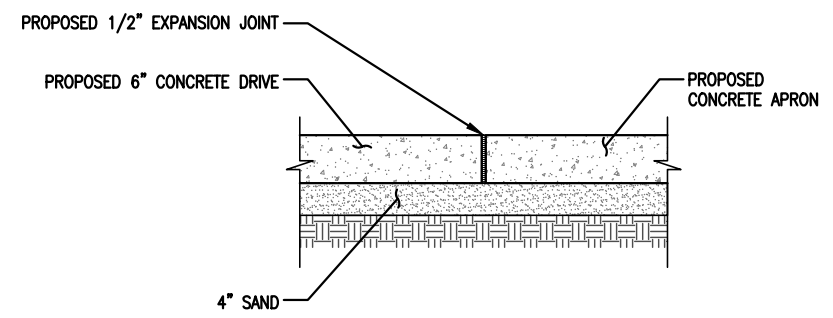
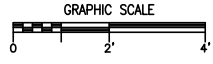
CABLE BRIDGE	=	7'
RAD CENTER	=	127'
CANOPY	=	12'
TOTAL	=	146'

2 PROPOSED KEYS

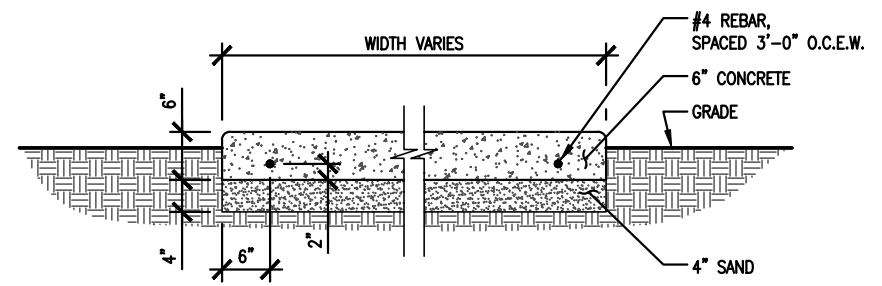
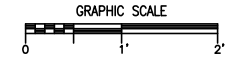


NOTE:
 CABLE BRIDGE SUPPORTS ARE REQUIRED AT INTERVALS NOT TO EXCEED 6'-0" WITH OVERHANG EXTENSIONS NOT TO EXCEED 1'-6"

1 CABLE BRIDGE PLAN
 SCALE: 1/4" = 1'-0"



4 EXPANSION JOINT DETAIL
 SCALE: 1/2" = 1'-0"



3 DRIVEWAY DETAIL
 SCALE: 1/2" = 1'-0"



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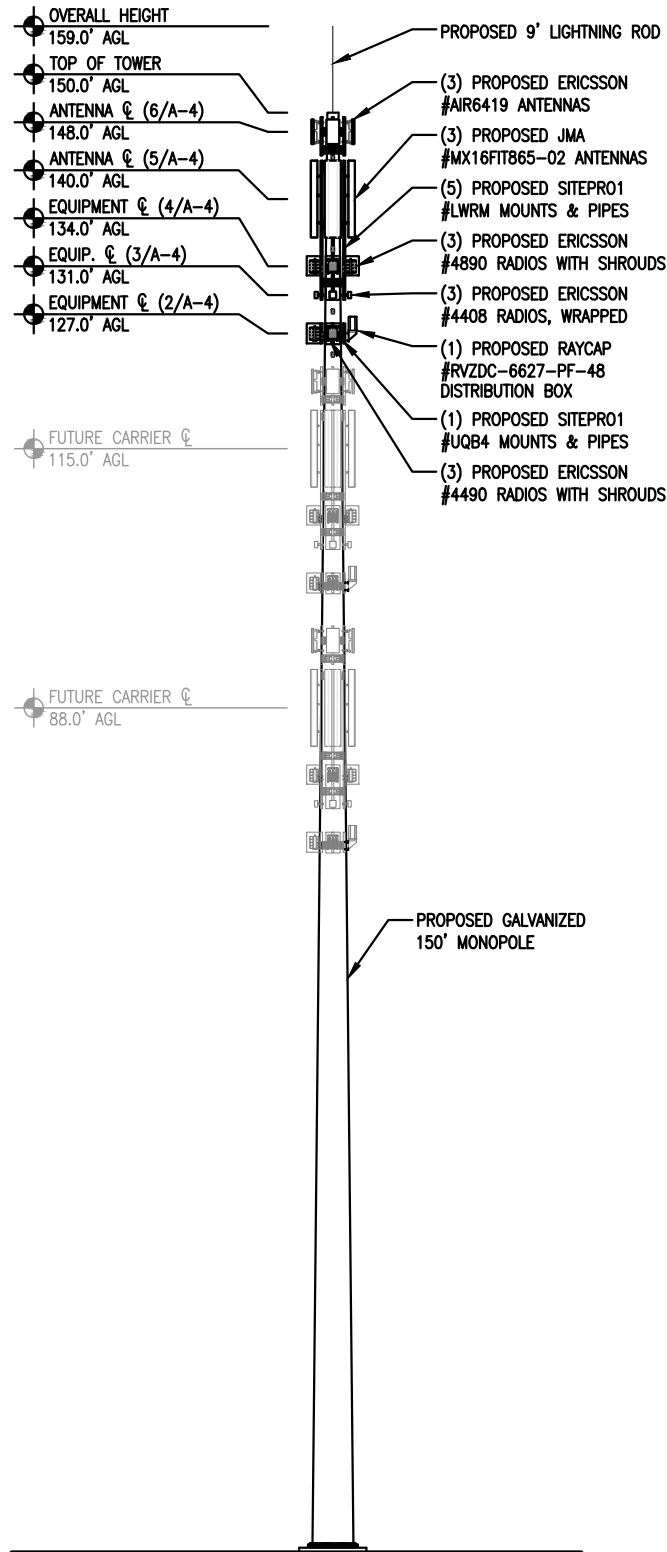
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SHEET CONTENTS:
 PROPOSED KEYS
 CABLE BRIDGE PLAN
 DETAILS

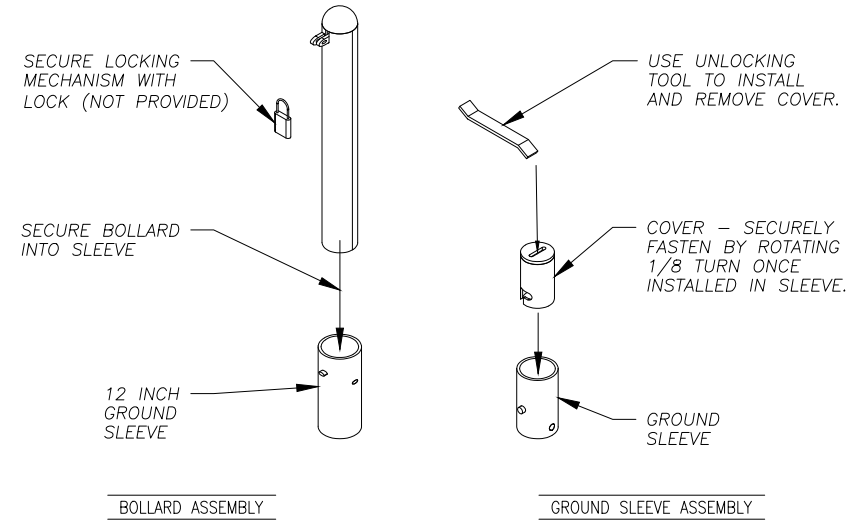
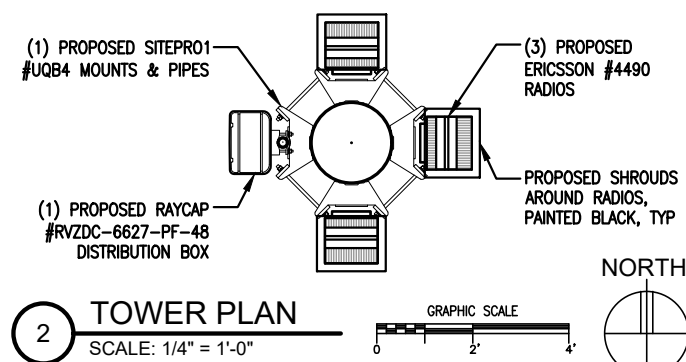
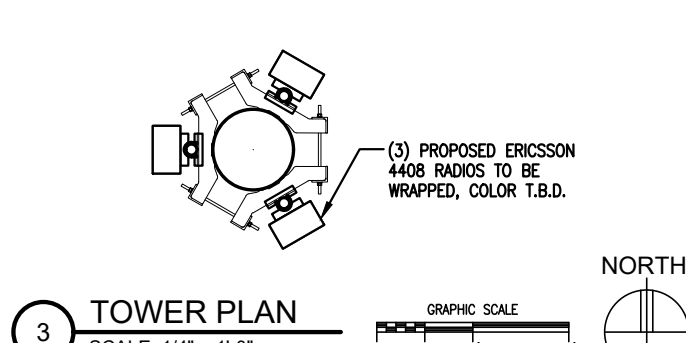
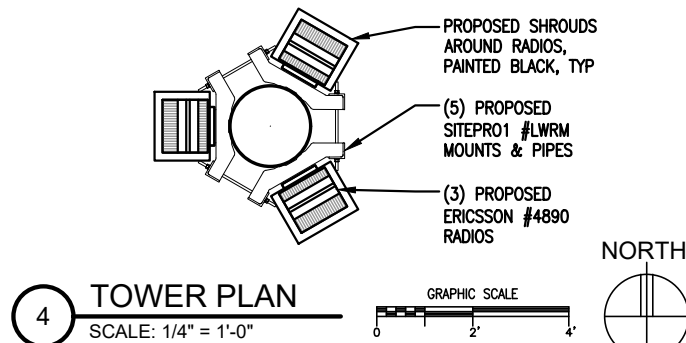
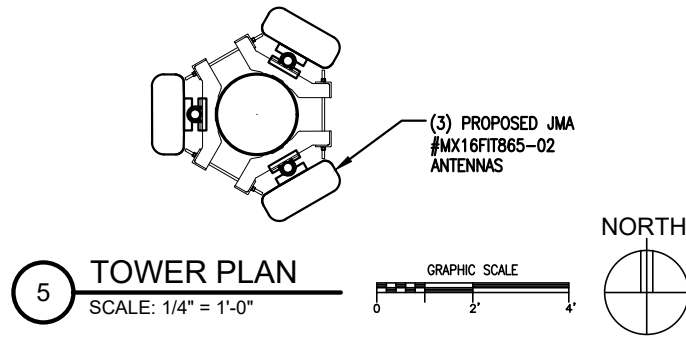
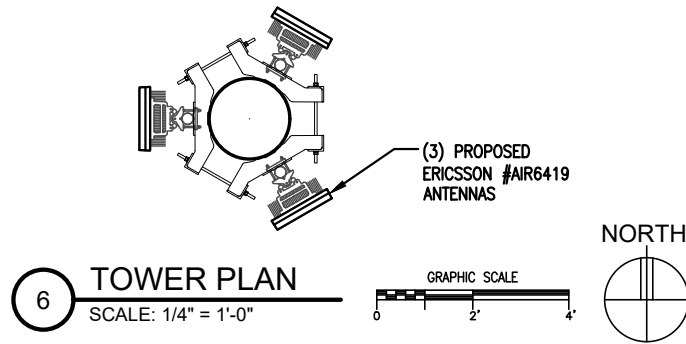
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A-3

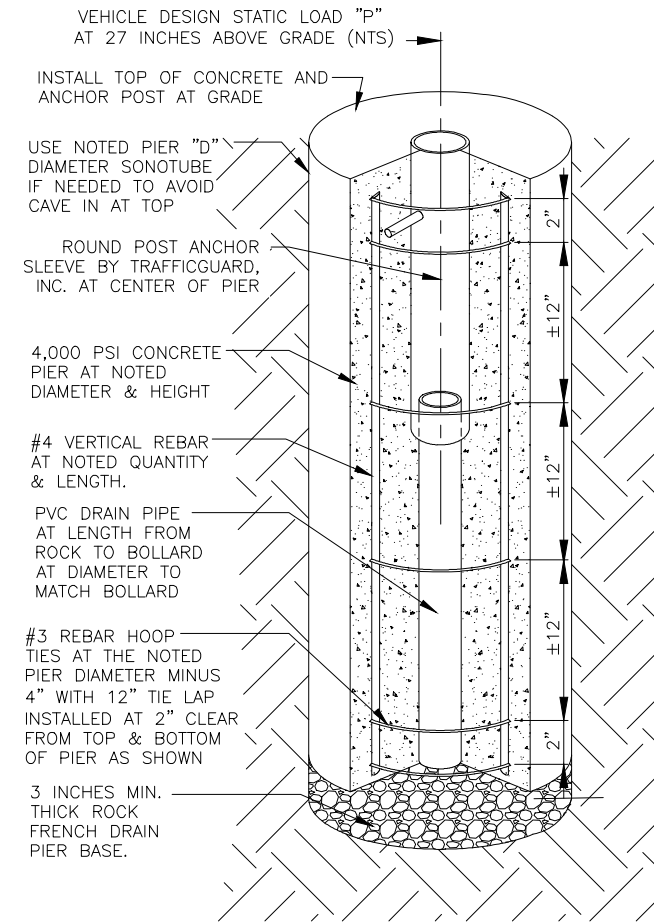
- NOTE:**
- 1.) VERIZON WIRELESS GC TO SUPPLY & INSTALL THE MOUNTS. THE MOUNTS MEET THE VERIZON WIRELESS MOUNT STANDARD NSTD-445. THE GC SHOULD OBTAIN A MOUNT CLASSIFICATION BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF THE PROJECT & SUBMIT THE PE-STAMPED REPORT TO VERIZON PRIOR TO CONSTRUCTION. THE GC SHALL BRING ANY CONCERNS OR DISCREPANCIES TO THE ATTENTION OF THE CONSTRUCTION ENGINEER & ENGINEER OF RECORD.
 - 2.) ALL QUAD MOUNT AZIMUTHS TO BE 0°, 90°, 180° & 270°.
 - 3.) CONTRACTOR TO ENSURE MOUNT & ANTENNA ARRAY DOES NOT IMPEDE SAFETY CLIMB/CABLES.
 - 4.) CABLE TO BE BUNDLED & STRAPPED TO PIPE OR USE CLICK BLOCKS IN A NEAT, ORDERLY MANNER.



1 TOWER ELEVATION
SCALE: 1" = 20'-0"
GRAPHIC SCALE



7 BOLLARD ASSEMBLY



8 PIER ELEVATION SECTION



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verizon
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

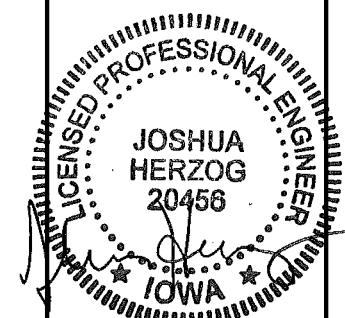
PROJECT
LOC. CODE: 573148

DES
BEAVER CREEK

NE HERITAGE DR
GRIMES, IA 50111

SHEET CONTENTS:
TOWER ELEVATION
MOUNTING DETAILS
BOLLARD DETAILS

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25



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PROJECT

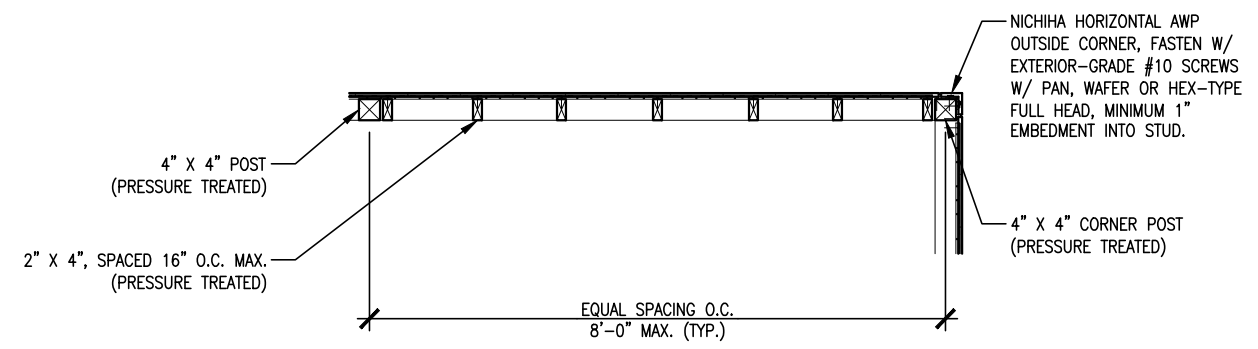
 LOC. CODE: 573148

DES
BEAVER CREEK

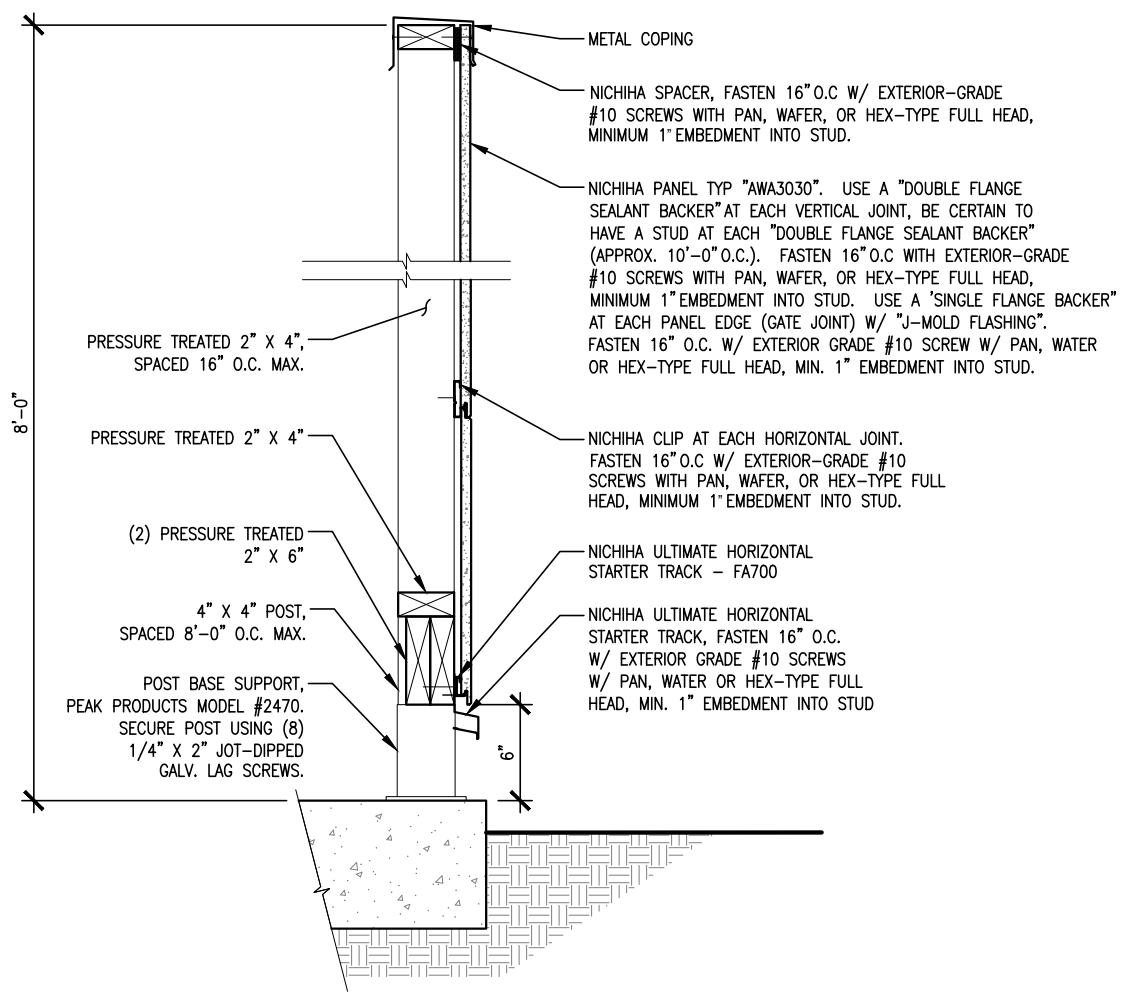
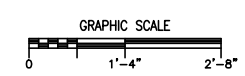
NE HERITAGE DR
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SHEET CONTENTS:
 FENCE & GATE DETAILS

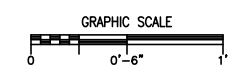
DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25



1 FENCE PLAN
 SCALE: 3/8" = 1'-0"

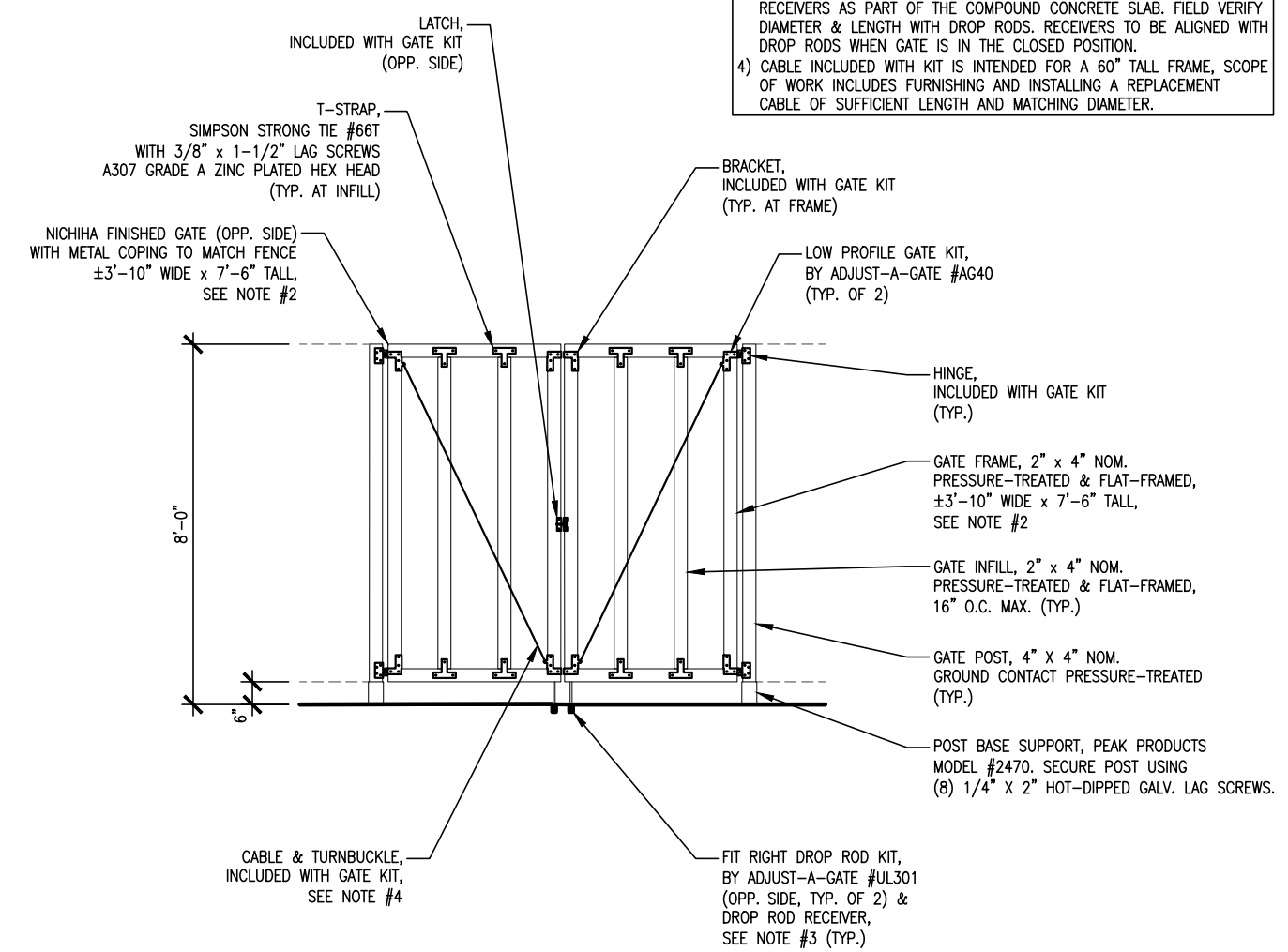


2 FENCE SECTION
 SCALE: 1" = 1'-0"

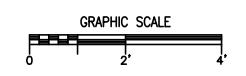


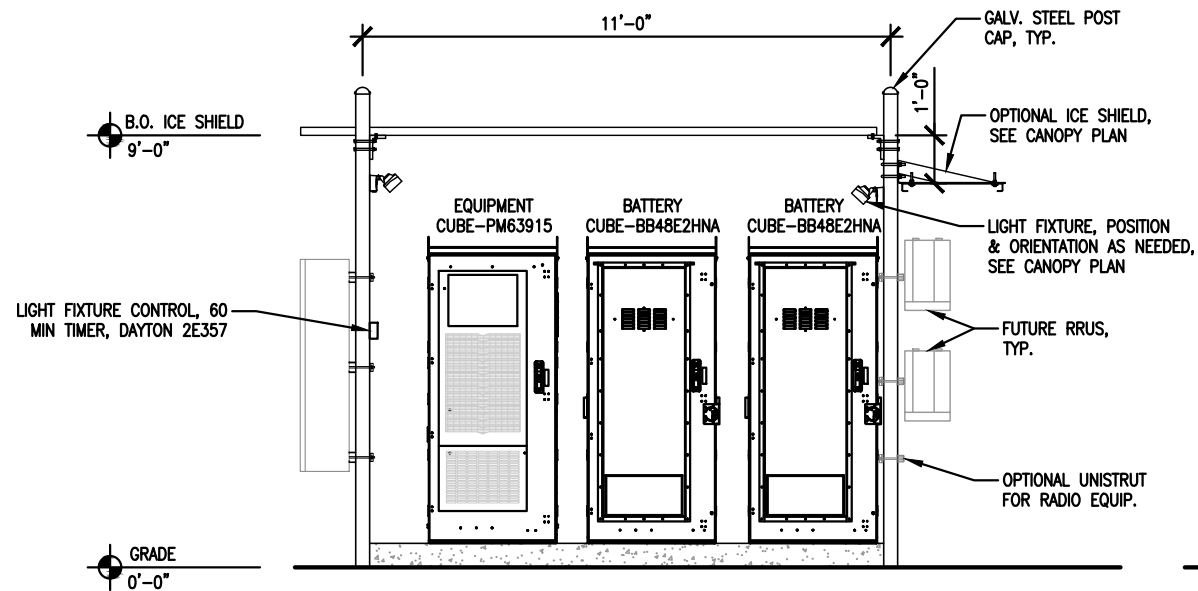
GATE NOTES:

- 1) LOW-PROFILE GATE KIT INCLUDES RECOMMENDED FASTENERS, SEE ASSEMBLY INSTRUCTIONS.
- 2) FIELD VERIFY GATE WIDTH, USE HINGE OFFSET DIMENSIONS & RECOMMENDED LATCH SPACING IN THE ASSEMBLY INSTRUCTIONS.
- 3) SCOPE OF WORK INCLUDES FURNISHING & INSTALLING DROP ROD RECEIVERS AS PART OF THE COMPOUND CONCRETE SLAB. FIELD VERIFY DIAMETER & LENGTH WITH DROP RODS. RECEIVERS TO BE ALIGNED WITH DROP RODS WHEN GATE IS IN THE CLOSED POSITION.
- 4) CABLE INCLUDED WITH KIT IS INTENDED FOR A 60" TALL FRAME, SCOPE OF WORK INCLUDES FURNISHING AND INSTALLING A REPLACEMENT CABLE OF SUFFICIENT LENGTH AND MATCHING DIAMETER.

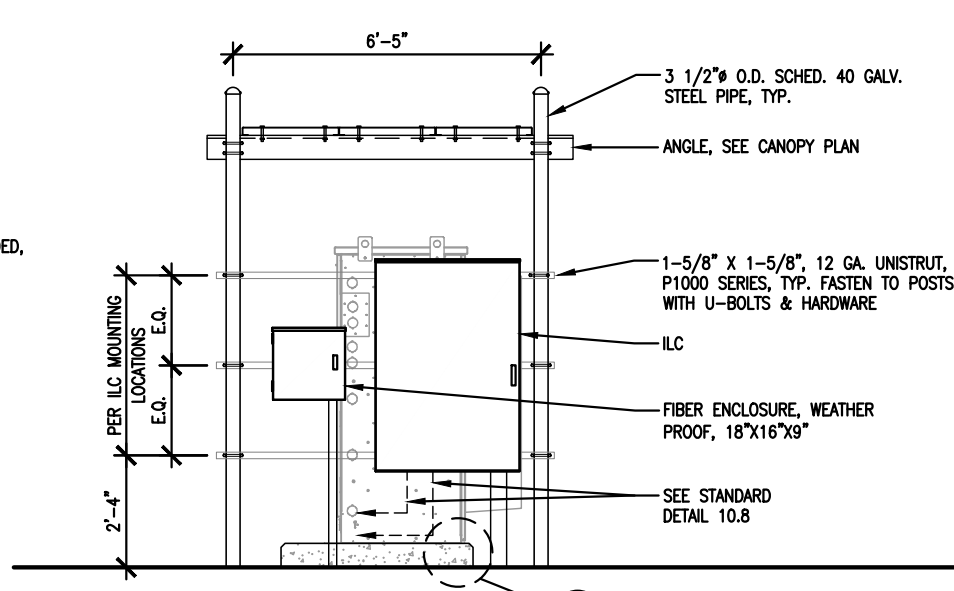


3 GATE INTERIOR ELEVATION
 SCALE: 1/4" = 1'-0"

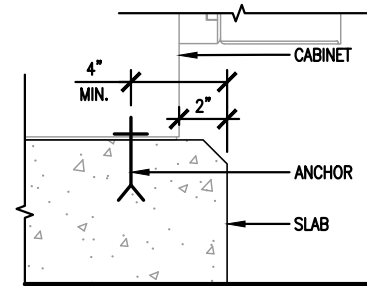




5 FRONT ELEVATION
SCALE: 1/4" = 1'-0"

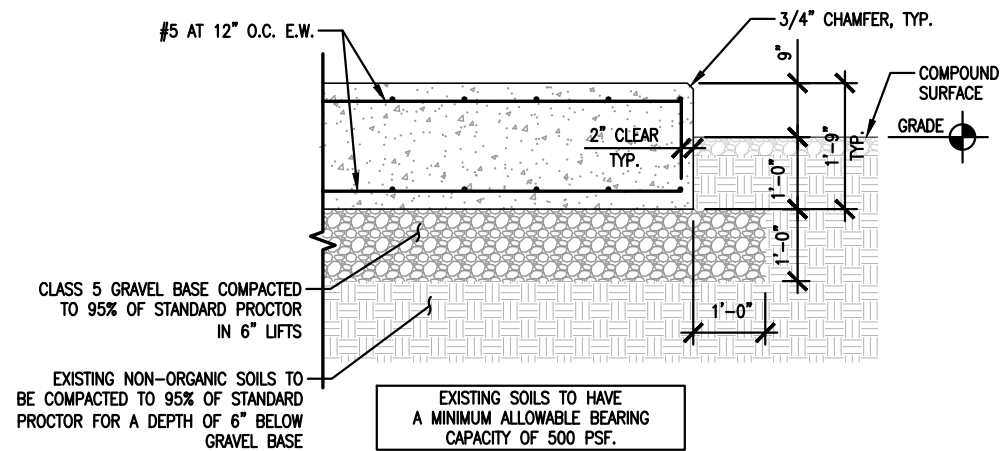


6 SIDE ELEVATION
SCALE: 1/4" = 1'-0"

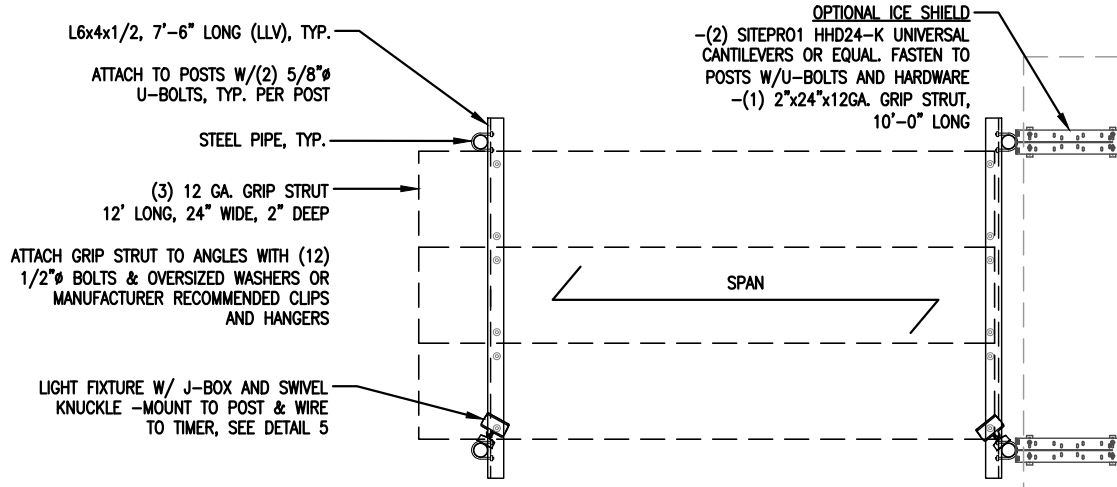


TYPICAL CAB. FRAME ANCHOR BOLT:
HILTI KWIK BOLT TZ (GALV.) EXP.
ANCHOR-5/8" X 3-9/16" NOM.
EMBED, MIN.
ANCHOR PER CABINET MANUFACTURER
SPECIFIED LOCATIONS

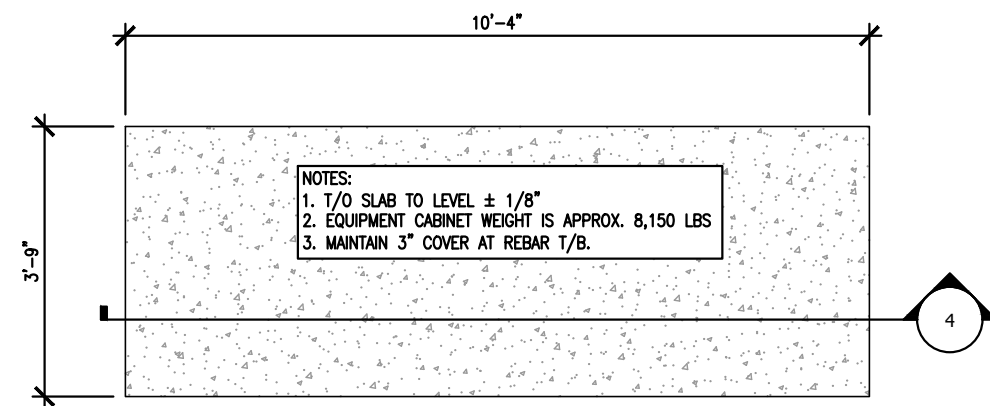
7 DETAIL
SCALE: 1-1/2" = 1'-0"



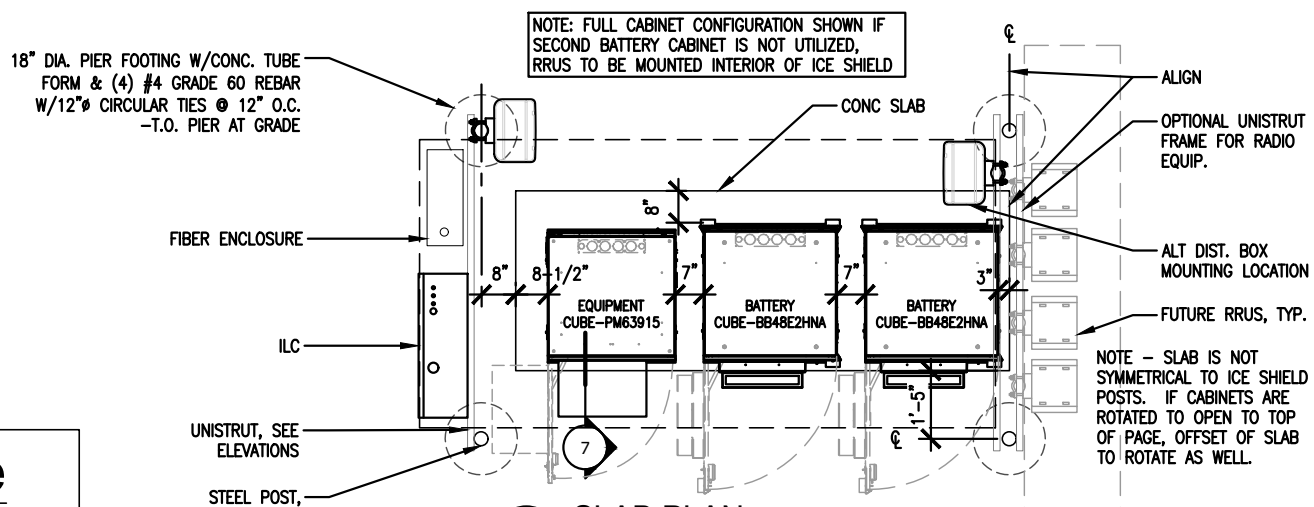
4 FOUNDATION SECTION
SCALE: 3/8" = 1'-0"



2 CANOPY PLAN
SCALE: 1/4" = 1'-0"



3 FOUNDATION PLAN
SCALE: 3/8" = 1'-0"



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

**Slab On Grade
Slab W/ 3 Cabinets**



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PROJECT
LOC. CODE: 573148

**DES
BEAVER CREEK**

NE HERITAGE DR
GRIMES, IA 50111

SHEET CONTENTS:
FOUNDATION PLAN & DETAILS
FLOOR PLAN
ELEVATIONS

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

GENERAL CONDITIONS

00 0001 PERMITS

Construction Permit shall be acquired by, or in the name of, Verizon Wireless, to be hereinafter referred to as the OWNER. Other permits shall be acquired by the Contractor.

00 0002 SURVEY FEES

Survey shall be furnished by the Designer. Layout Staking shall be coordinated with the Surveyor per "Request For Quote", (RFQ).

01 0010 INSURANCE & BONDS

Contractor is to furnish Insurance certificates for themselves and subcontractors. Contractor will provide any required Bonding. Contractor agrees to warranty the project for (1) one year after completion.

01 0400 SUPERVISION & COORDINATION

Contractor shall provide supervision throughout the Project, coordinating the work of the Subcontractors, and delivery & installation of Owner-furnished items. Contractor's responsibilities include arranging & conducting of Underground Utilities Locates. Contractor shall comply with municipal, county, state and/or federal codes, including OSHA.

01 0600 TESTING

Contractor is responsible for providing Agencies with sufficient notice to arrange for Test Samples (i.e.: Concrete Cylinders), and for Special Inspections.

01 2000 MEETINGS

Contractor shall make themselves aware of, and attend, meetings with the Owner and/or Designer. Contractor is to attend a Pre-Construction Meeting of all parties involved, prior to the start of construction.

01 5100 TEMPORARY UTILITIES

Contractor shall maintain the job site in a clean and orderly fashion, providing temporary sanitary facilities, waste disposal, and security (fence area or trailer module).

01 5300 EQUIPMENT RENTAL

Contractor shall furnish equipment necessary to expedite work.

01 5900 FIELD OFFICES & SHEDS

Contractor shall provide security (fence area or trailer module) for tools and materials that remain overnight on site.

01 7000 CLEAN UP & CLOSE OUT

Contractor shall clean up the Site to the satisfaction of Owner. Contractor shall complete the items listed on the Owner's Punch List, and shall sign and return the List to the Owner. Contractor shall maintain a set of drawings during the job, on which changes shall be noted in red ink. A full set of redlined drawings (As-Builts) are to be given to the Designer at Job completion and submit "construction work complete memo" to Construction Engineer.

01 8000 TRUCKS & MILEAGE

Contractor shall provide transportation for their own personnel.

01 8300 TRAVEL TIME & PER DIEM

Contractor shall provide room and board for their own personnel, and reasonable time for traveling to & from job site.

01 9200 TAXES

Contractor shall pay sales and/or use tax on materials and taxable services.

SITWORK

02 1000 SITE PREPARATION & DEMOLITION

Contractor is to mobilize within 7 calendar days of the Owner issuing a 'START' document. Contractor will immediately report to Designer if any environmental considerations arise. Site shall be scraped to a depth of 3" minimum to remove vegetative matter, and scrapings shall be stockpiled on site. Excess material to be disposed of in accordance with RFQ.

02 1100 ROAD IMPROVEMENT & CONSTRUCTION

Contractor shall furnish & install culverts as necessary to prevent ponding or washing-out from normal surface runoff. Contractor shall obtain city, county, state and/or federal approvals for road approach and culvert work within or adjacent to right-of ways. Road shall be graded smooth, and edges dressed, at job completion.

02 2000 EARTHWORK & EXCAVATION

Excavation material shall be used for surface grading as necessary; excess to be stockpiled on site. Excess material to be disposed of in accordance with RFQ. For dewatering excavated areas, contractor shall utilize sock or sediment filter for filtering of water discharge.

02 5000 PAVING & SURFACING

New paving shall be according to plans, or match existing adjacent paving. Concrete paving shall be 5" thick, reinforced with 6"x6" welded wire mesh or #3 steel bars 18" o.c.e.w., over a 3" sand cushion.

02 7800 POWER TO SITE

Contractor shall coordinate the electrical service to the building with the Utility Provider. Conduits shall include pull strings. Underground conduits shall be 2-1/2" Schedule 40 PVC. (schedule 80 PVC under roads and drives) Cable to be 3/0 THWN CU. Trenches shall be backfilled in a timely fashion, using a compactor, and including two (2) detectable ribbons; one each at 3" and 15" above conduit. Service shall be 200 amp, single phase, 120/240 volt. Service type shall be "General Time-Of-Day" if available, and meter base shall be approved by utility provider. Contractor to provide and install expansion joint sleeve connections to prevent differential movement at utility connections.

02 7900 TELCO TO SITE

Contractor shall provide 2" SDR-11 HDPE conduit for fiber conduit as noted on Drawings when directional boring is utilized. Contractor shall provide 2" schedule 40 PVC conduit and 2" schedule 80 PVC conduit under roadways with large-sweep elbows for fiber conduit as noted on Drawings when hand trenched. Trenches shall be as in 02 7800.

Contractor to provide and install handholes as noted in the Drawings. Additional handholes shall be provided and installed a maximum of 500 feet on center; at 90° bends if directional boring; and every third bend if hand trenched. Handholes size per Drawings and traffic-rated in roadways.

Contractor to provide and install Carlon expansion joint connections at cabinets/shelter location per manufacturer's specifications and recommendations.

02 8000 SITE IMPROVEMENTS

Areas bounded by fence and adjacent to Cabinet Slab shall receive polyethylene geotextile, 200 mesh woven, topped with 3" deep 3/4" to 1 1/2" clean rock (no fines), raked smooth.

02 8001 FENCING

Fence enclosures shall be completed within 7 days of tower erecting and Contractor shall provide for temporary security fence at base of Tower. Existing fences shall be protected against damage during this work, and any damage that may occur shall be repaired or replaced to equal existing pre-construction condition.

02 8500 IRRIGATION SYSTEMS

Contractor shall provide temporary irrigation of relocated tree and new/relocated sod, to be maintained so it survives 1 year after planting.

02 9000 LANDSCAPING

Contractor to restore turf areas damaged by construction by preparing soil, seeding & watering to maintain grass survival for 1 year.

Contractor shall protect existing landscape elements that are not in the Scope of Work. Reasonable precautions shall be taken to assure the health of existing trees and shrubbery. If conflicts arise regarding the location of root systems, branch lines, etc., the Architect must be contacted prior to performing Work that may cause damage. Damage resulting from disregard of this Article shall be compensated by the Responsible Party and at a cost to be determined by the Property Owner, Designer, and Owner. Contractor shall furnish and install new trees, shrubs, and sod. Watering shall be as described in 02 8500.

CONCRETE

03 1000 CONCRETE FORMWORK

Concrete forms shall be dimensional lumber, modular, or steel.

03 8000 TOWER FOUNDATION

Contractor shall arrange for delivery of anchors, and shall furnish and install materials per Tower Manufacturer Plans. Tower foundation concrete and reinforcing to be per tower manufacturer's specification. Contractor shall comply with the Owner's Standard CONSTRUCTION SPECIFICATIONS MINIMUM CONCRETE STANDARDS.

03 8001 CATHODIC PROTECTION

N/A

03 9000 EQUIPMENT CABINETS FOUNDATION

Contractor shall furnish & install materials for Equipment Cabinets foundation. Concrete shall be 6% ±1% air entrained, and 4,000 psi at 28 days.

All reinforcing steel is to be Grade 60 (ASTM 615). Anchor bolts are furnished by Contractor. Contractor shall comply with the Owner's Standard CONSTRUCTION SPECIFICATIONS MINIMUM CONCRETE STANDARDS.

MASONRY

N/A

METALS

05 0000 METALS

Contractor will furnish and install steel shapes and fabricated steel items not specifically furnished by Owner, and install Owner-furnished materials. Fabrication and erection of steel items per AISC standards. Welding shall conform to AWS standards. Fabrications shall be shop welded and galvanized before delivery to site unless noted otherwise.

Steel shapes shall meet ASTM A36 and steel pipe ASTM A53 Grade B. Steel shapes and fabrications shall be hot-dip galvanized per ASTM A123 with minimum coating thickness Grade 55 (2.2 mil). Bolts shall meet ASTM F3125 and U-bolts SAE J429 Grade 5 minimum. Bolts and hardware to be hot-dip galvanized per ASTM A153. Field repair of galvanized coatings shall be per ASTM A780.

WOOD & PLASTICS

N/A

THERMAL & MOISTURE

N/A

DOORS AND HARDWARE

N/A

FINISHES

09 9000 PAINTING

Contractor shall provide materials and labor for all painting indicated in the architectural documents and shall touch-up construction related scrapes & scratches with appropriate paint.

Contractor to field verify finish coat colors/sheens and select appropriate swatches corresponding to the colors described below. Contractor to obtain Lessor and Designer approvals of all swatches prior to application of paint:

- Tobacco colored Nichiha Roughsawn Wood Series Fence Panels.

SPECIAL CONSTRUCTION

13 1260 CABLE BRIDGE, CANOPY, & ICE SHIELDS

Contractor shall furnish & install materials for the Cable Bridge as indicated on the drawings and Verizon Wireless Standard Details.

Contractor shall furnish & install materials for the Ice Shields as indicated on the Drawings & Verizon Wireless Standard Details.

13 1400 ANTENNA INSTALL

Contractor shall install Owner's antennas and feed lines during erecting. Contractor shall test and certify feed lines per current VZW standards.

13 3423 TRANSPORT AND SET EQUIPMENT CABINETS

Contractor shall provide crane(s) and/or truck for transporting, setting and erecting Equipment Cabinets per RFQ. Contractor shall install items shipped loose with the Equipment Cabinets.

13 3613 TRANSPORT AND ERECT TOWER/ANTENNA MOUNTS

Contractor shall schedule delivery of Owner-furnished Tower, and provide cranes for unloading and erecting. Contractor to Install antenna mounts. Contractor shall ensure the existence of a 3/8" cable safety climb (DBI/Sala or equal) on the Tower.

MECHANICAL

15 4000 PLUMBING

N/A

15 5000 HVAC

N/A

ELECTRIC

16 5000 LIGHTING AND ELECTRICAL

Contractor shall provide labor and materials as necessary to complete the work shown on Drawings including items shipped loose with the Equipment Cabinets assembly.

LITHONIA OLFL – MINI LED FLOOD LIGHT FIXTURE:

Brand: Lithonia Lighting	Lumens: 1,351
Part #: OLFL 14 PE BZ M4	Voltage: 120
UPC: 75373853497	Beam Angle: Flood
DLC Listed: No	Metal Halide Equal: 50 Watt
Safety Rating: UL indoor/outdoor	Housing: Aluminum
CRI: 72	Height: 7.4 in.
Color: Cool White	Width: 6.4 in.
Color Temp: 4000 Kelvin	Depth: 4.4 in.
Life Hours: 5000	Weight: 1.5 lbs.
Wattage: 18 Watt	Warranty: 5 Years
LPW: 75	

16 6000 GROUNDING

Contractor shall make themselves familiar with and follow the current GROUNDING STANDARDS of VERIZON WIRELESS. Contractor shall perform work as shown on Grounding Plans. Any site-specific grounding issues not covered by the GROUNDING STANDARD are to be addressed by the Contractor to the Owner.

OWNER-FURNISHED EQUIPMENT & FEES

MONOPOLE

CABINETS

COAX AND/OR CABLES

ANTENNAS & DOWNTILT BRACKETS

GPS & GPS MOUNTING

BUILDING PERMIT FEES

MATERIALS TESTING FEES

SPECIAL INSPECTIONS FEES

CONTRACTOR-FURNISHED EQUIPMENT

ANTENNA MOUNTS

POWER TO SITE

TELCO TO SITE

CABLE BRIDGE & ICE SHIELDS

GROUNDING MATERIALS

FENCING

CONNECTORS, BOOTS, & RELATED HARDWARE

BOLLARDS

SCOPE OF WORK:

CONTRACTOR SHALL PROVIDE MATERIALS, LABOR, TOOLS, TRANSPORTATION, SUPERVISION, ETC. TO FULLY EXECUTE WORK. WORK REQUIREMENTS ARE DETAILED ON THE DRAWINGS AND SPECIFICATIONS AND SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING ITEMS:

SITE PREPARATION

SITE WORK & ROAD CONSTRUCTION

CABINET SLAB & TOWER FOUNDATIONS

SET EQUIPMENT CABINETS & ERECT TOWER

ROUTING OF GROUND, POWER, FIBER & ALARM

SITE GROUNDING

ELECTRICAL & TELEPHONE SERVICES

INSTALL ANTENNAS & CABLES

CABLE BRIDGE & ICE SHIELDS

GRAVEL SURFACING & FENCING

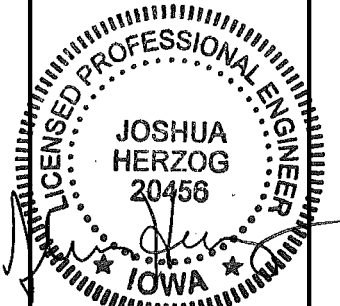
Contractor to compare drawings against Owner's "Request for Quote", (RFQ). If discrepancies arise, Contractor shall verify with Owner that the RFQ supersedes the drawings.

EQUIPMENT

The Designer/E.O.R. makes no warranty, expressed or implied, on the structural adequacy for proprietary brackets, clips & parts from a manufacturer.



1334 81ST AVE NE
SPRING LAKE PARK, MN 55432
(612) 844-1234
WWW.HERZOGENGINEERING.COM



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EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGN1EP.COM



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PROJECT

LOC. CODE: 573148

**DES
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GRIMES, IA 50111

**SHEET CONTENTS:
OUTLINE SPECIFICATIONS**

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

A-7

GENERAL GROUNDING NOTES:

An external buried ground ring (Lead 1) shall be established around the equipment cabinets and tower foundations. Lead 1 shall be kept 24" from foundations; if foundations are less than 48" apart, keep Lead 1 centered between them. If the tower base is over 20'-0" from the equipment cabinets, a separate Lead 1 shall be established around each foundation, and the two Lead 1s shall be bonded with two parallel leads at least 6 feet apart horizontally. Connections between the two Lead 1s shall be bi-directional.

All subgrade connections shall be by exothermic weld, brazed weld, or gas-tight UL467-listed compression fittings pre-filled with anti-oxidant compound. Subgrade connections shall not be 'cold galvanize' coated.

Self-Support Towers:

* Two whips to flange(s) on each tower leg base. If none are provided, attach to the baseplate or consult tower manufacturer.

Guyed Towers:

* Two whips to flange(s) on the tower base. If none are provided, attach to the baseplate or consult tower manufacturer.
 * Establish a Lead 1 within the fence enclosure of each guy anchor, at least 40 foot perimeter and having 4 ground rods.
 * #2 SBTC leads shall extend up, and be clamped (bronze clamshell or equal), to any two guy wires. NEVER weld leads to the guy wires. The lead to the guy anchor 'hand' plate may be welded.

Fences:

Metallic fence within 25 feet of tower Lead 1, or within 6 feet of shelter lead 1, shall have whip leads as follows:
 * Each corner post.
 * Each pair of gate posts.
 * Any line post over 20'-0" from a grounded post.
 * Each gate leaf to its respective gatepost using braided trap (3/4", tin-clad copper w/ lug ends).
 * Fences around guy anchors shall be grounded in similar fashion.

Fuel tanks:

NEVER WELD to any fuel enclosure. NEVER penetrate the fuel containment. Metal tanks shall have one whip lead attached. Use an approved clamp or two-hole lug on an available flange.

Equipment Shelter/Platform and Other General Requirements (including but not limited to):

- Extend new Lead 21B up to shelter halo, remaking two-way connections as needed. Generator-equipped shelters have 6 such connections. Connections within the shelter shall be by compression; NEVER weld inside the shelter.
- Each vertical support pipe of the exterior cable bridge. Bridge end shall be kept at least 6" from the tower structure. The cable bridge shall be jumpered to the vertical support pipes with #2 SBTC at each vertical support pipe.
- Opposite corners of the steel equipment platform.
- Opposite corners of the roof shield over the equipment shelter.
- Each HVAC unit shield, if separate (may be 'jumpered' to main roof shield).
- Each HVAC package unit.
- Commercial electric meter box.
- Generator receptacle, if present.
- Steel building skid, if shelter is metal frame.
- Each air intake or exhaust fan vent louver.
- Each generator vent hood or louver.
- Generator exhaust stack, external.
- Opposite corners of generator support frame, if separate from shelter.
- Generator fuel tank, if separate from generator unit.
- Host building rain gutter, downspouts, and roof flashings within 25 feet.
- Telco MPOP (Main Point of Presence), if external to equipment shelter.
- Within cable vaults, one each to the ladder and to the manhole rim.

Note: The door frame is connected to the interior ground halo, and need no separate connection to the external ground ring.

Inspection & Testing

Test lead #1 and ground rods after installation but before backfilling or connecting to any other grounding, using the 3-point fall of potential method. Contractor to notify Verizon Wireless senior construction engineer at least 48 hours prior to testing. Document installation and test results with photographs.

General Contractor Notes:

1. Contractor to coordinate public & private utility locates prior to construction start. Notify the Designer & VZW Construction Engineer immediately of any utility line issues.
2. General contractor is responsible for confirming that the installation of all grounding meets the Verizon Network Standard Number "NSTD46" document titled "Cell Site and Microwave Radio Station Protection - Engineering Considerations".
3. Contractor shall ensure that each whip is routed to lead 1 by the shortest path, and bends shall not be less than 12" radius.
4. Primary Electrical - Depth and specification by Power Utility Company.
5. Secondary Electrical - Install conduit 32" below grade with two (2) detectable ribbons.
6. Fiber Optic - Install conduit 36" below grade with pull string, traceable wire and two (2) detectable ribbons.

SPECIAL CONSIDERATIONS FOR GROUND RODS:

When ground rods are not specified to be backfilled w/ Bentonite Slurry: If boulders, bedrock, or other obstructions prevent driving of ground rods, the Contractor will need to have drilling equipment bore a hole for ground rod placement. Hole to be backfilled w/ Bentonite Slurry.

When specified with slurried Bentonite encasement, drilling equipment will be needed to be used to bore a hole for ground rod placement. Slurry shall be made from pelletized material ("Grounding Gravel"); powdered Bentonite is not allowed. If boulders, bedrock, or other obstructions are found, Contractor shall drill to the specified depth and provide Bentonite encasements.

Above-grade connections shall be by lugs w/ two-hole tongues unless noted otherwise, joined to solid leads by welding (T&B 54856BE "BROWN"), self-threading (RECOGNIZED, EM 2522DH.75.312), or 10,000psi crimping (BURNDY YA3C 2TC 14E2). Surfaces that are galvanized or coated shall have coating(s) removed prior to bolting. Bolts shall be stainless steel with flat washers on each side of the connection and a lock washer beneath the fastening nut. Star-tooth washers shall be used between lug & dissimilar metal (copper-to-steel, etc) but are not required between tin-clad CU lugs & tin-clad CU bus bars. Lug tongues shall be coated with anti-oxidant compound, and excess compound wiped clean after bolting. The connection shall then be coated with cold-galvanizing compound, or with color-matching paint.

Ground bars exposed to weather shall be tin-clad copper, and shall be clean of any oxidation prior to lug bolting.

Galvanized items shall have zinc removed within 1" of weld area, and below lug surface contact area. After welding or bolting, the joint shall be coated with cold galvanizing compound.

Ground Bar leads

Ground bars are isolated electrically from tower bottoms and equipment cabinets by their standoff mounts. Leads from each ground bar to the ground ring shall be a pair of #2 SBTC, each connected to Lead 1 bi-directionally with #2 SBTC 'jumpers'. Pairs of #2 SBTC may be required between ground bars. Leads shall be routed to ground bars as follows:

- * The Main Ground Bar (MGB), typically mounted adjacent to the ILC (location varies).
- * The Port Ground Bars (PGB), mounted inside and outside on the equipment shelter walls beneath the transmission line port. Note: Transmission line grounds also attach to the PGBs.
- * The Tower Ground Bar (TGB) mounted at the base of the tower. Note: Transmission line grounds also attach to the TGBs.

NOTE: Contractor shall confirm that TGBs exist at 75-foot vertical intervals on any guyed or self-support tower, and that transmission lines are grounded to each TGB. Only the bottom-most TGB is isolated from the tower steel frame; upper TGBs may use the tower steel frame as common ground, requiring no copper leads between TGBs.

#2 SBTC Whip leads

"Whip" leads shall connect the buried external ground ring to the following items:

Monopole Towers:

* Three whips to flanges on the monopole base, at least 90° apart. If none are provided, attach to the baseplate or consult tower manufacturer.

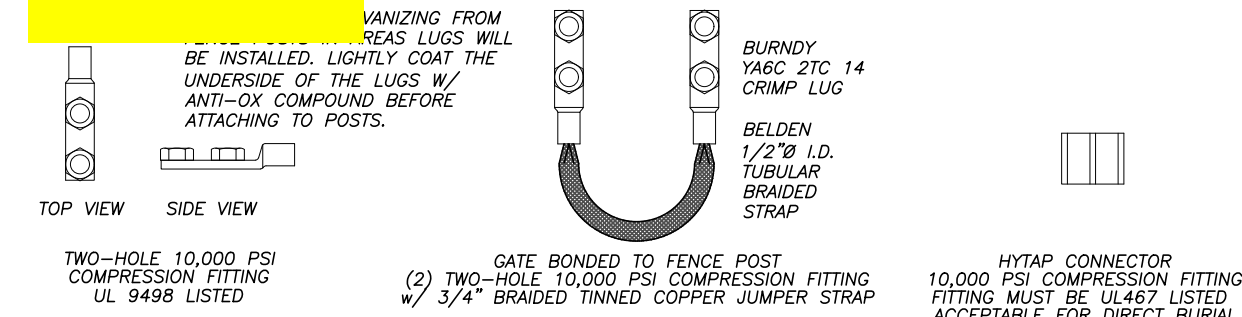
SYMBOL AND NOTE LEGEND

- ① #2 SBTC AROUND CABINET SLAB, TOWER, OR GUY ANCHOR
- 5/8" X 10'-0" GALVANIZED STEEL GROUND ROD
- ⊙ TEST WELL PREFERRED LOCATION
- #2 SBTC 'WHIP' LEAD
- ⑤ (2) #2 SBTC FROM MGB, PGB, OR TGB TO LEAD 1
- ⑥ AC HVAC UNIT
- ②①② BC BUILDING CORNER
- ⑥ BO BOLLARD
- ⑥ CBS CABLE BRIDGE SUPPORT POST
- ④ EL ELECTRICAL SERVICE GROUND
- ⑥ EM COMMERCIAL ELECTRICAL METER
- ⑥ FAN GUY ANCHOR PLATE
- ⑥ FP FENCE POST
- ⑨⑩ GEN GENERATOR
- ⊕ GP GATE POST, 3/4" BRAID STRAP TO LEAF
- ⑥ GPS GPS UNIT
- ⑥ GUY GUY WIRE, MECH. CLAMP ONLY - NO WELDS
- ⑥ HL HOOD OR LOUVER
- ⑥ HB OUTSIDE OF HOFFMAN BOX
- ⑥ ILC INTEGRATED LOAD CENTER
- ⑤ MGB MAIN GROUND BAR
- ⑥ MU GENERATOR MUFFLER
- ⑤ PGB PORT GROUND BAR
- ⑥ RBR FOUNDATION REINFORCING
- ⑥ RS ROOF SHIELD
- ⑥ SB STEEL BEAM
- ⑥ SP STEEL POST
- ⑥ STP STEEL PLATFORM
- ⑥ TEL HOFFMAN BOX
- ⑤ TGB TOWER GROUND BAR
- ⑥ TWR TOWER BASE
- ⑥ VP DIESEL FUEL VENT PIPE

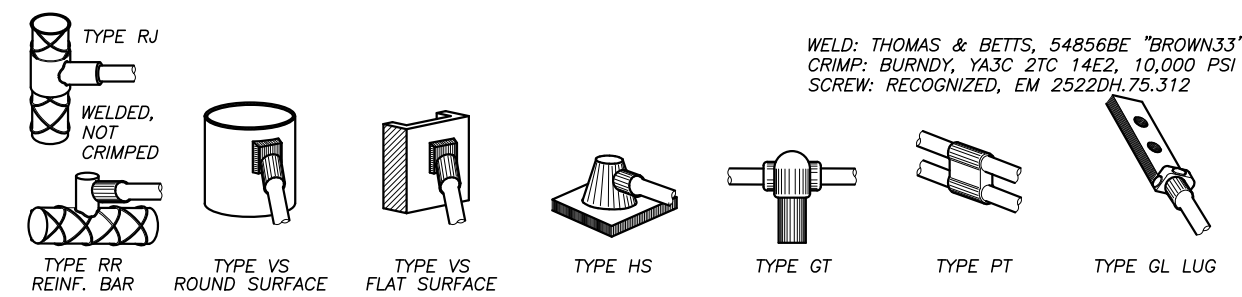
Note:

Contractor to provide #2 solid bare tin-clad (SBTC) copper wire lead from #1 ground ring to air conditioner & ice shield if provided by VZW.

Please modify to conform with article 250 subsection 250.52 (A)(5) of the 2020 NEC. Must be stainless steel rods. Galvanized steel not listed.



2 COMPRESSION CONNECTOR DETAILS
SCALE: NTS



1 EXOTHERMIC WELD DETAILS
SCALE: NTS

LEAD IDENTIFICATION & DESCRIPTION:

1 RING, EXTERNAL BURIED w/ RODS	#2 SBTC
1A RING, CONCRETE ENCASED	#2 SBTC
2 DEEP ANODE (TO IMPROVE OHMS)	ROD OR PIPE
3 RING TO BLDG STL FRAME	#2 SBTC
4 MAIN AC PANEL NEUTRAL BUS TO (2) GROUND RODS, ISOLATED FROM LEAD #1	NEC 250.66
5 RING TO GROUND BAR	(2) #2 SBTC
6 RING TO EXT MTL OBJECT	#2 SBTC
7 DEEP ANODE TO MGB	NSTD33-9
8 AC PANEL TO WATER METER	NEC 250.66
9 EXT WATER TO INT WATER PIPES	NSTD33-9
10 INT WATER PIPE TO MGB	NSTD33-9
11-12 NOT USED	
13 AC PANEL TO MGB	NSTD33-9
14 MGB/FG TO BLDG STL FRAME	#2/0 I-STR
14C MGB/FG TO ROOF/WALL MTL PNL	#1/0 I-STR
15 MGB/FG TO FGB-HE SAME FLOOR	#2/0 I-STR
16 NOT USED	
16A ECPGB TO CABLE ENTRY RACK	#1/0 I-STR
17 MGB TO CABLE SHIELDING	#6 I-STR
17A ECPGB TO CABLE SHIELDING	#6 I-STR
17B MGB/FG TO F-0 SPLICE SHELF	#1 I-STR
18 LOWEST MGB/FG TO HIGHEST FGB	#2/0 I-STR
19 LEAD 18 TO OTHER FGBs, <6'	#2/0 I-STR
20 MGB/FG TO BRANCH AC PNL	#6 I-STR
20A NEAREST GRND TO DISCONNECT PNL	NEC 250.66
20B GWB TO AC DISTR PNL	#6 I-STR
21 MGB/FG TO INT HALO	#2 I-STR
21A INTERIOR 'GREEN' HALO	#2 I-STR
21B INT HALO TO EXT RING	#2 SBTC
21C INT HALO TO EQUIPMENT MTL	#6 I-STR
22 ROOF TOWER RING TO ROOF GRND	NFPA 780
23 MGB/FG TO ECPGB, SAME FLOOR	#1 I-STR
23A MGB/FG TO CXR-HF LINR PROT	#6 I-STR
24 ECPGB TO EACH PROTECTOR ASSEMBLY	#6 I-STR
24A LOWER PROT ASSY TO UPPER	#6 I-STR
25 RING TO NEAREST LIGHTNING ROD	#2 SBTC
26 LIGHTNING ROD SYS TO NEARBY MTL	NFPA 780
27 RING TO TOWER RING	(2) #2 SBTC
28 RING TO SHELTER RING	(2) #2 SBTC
29 BRANCH AC PNL TO BITTY CHG FRM	NSTD33-11
30 BRANCH AC PNL TO OUTLETS	NSTD33-11
31 MGB/FG TO PWR, BITTY FRAMES	#2/0 I-STR
32 #31 TO BATTERY CHARGER FRAME	#6 I-STR
33 #31 TO BATTERY RACK FRAME	#6 I-STR
34 #31 TO PCU FRAME	#6 I-STR
35 #31 TO DSU FRAME	#6 I-STR
36 #31 TO PDU FRAME	#6 I-STR
37 MGB/FG TO BITTY RETURN	NSTD33-14.5
37A MGB/FG TO RTN TERM CARR SUPP	#6 I-STR
38 FGB TO PDU GB	#750MCM I-STR
38A FGB TO PDU GB CARRIER SUPPLY	#2/0 I-STR
39 DC BUS DUCT TO NEXT SECTION	#6 I-STR
40 DC BUS DUCT TO MGB/FG	#6 I-STR
41A MGB/FG TO #58	#2/0 I-STR
42-44 NOT USED	
45 MAIN AC PNL TO BRANCH AC PNL	NSTD33-11
46 BRANCH AC PNL TO DED OUTLET	NSTD33-11
47 FGB TO INTEG FRM	#2 I-STR
48 LEAD #31 TO INTEG FRM	#6 I-STR
49 INTEG FRM TO EQUIP SHELF	BY FASTENERS
50 PDU BITTY RET TO #51	#2/0 I-STR
51 #50 TO TRANS FRM ISO DC PWR	#6 I-STR
52 TRANS FRM FUSE TO FRM OR BAR	#8 I-STR
53A MGB/FG TO PDF/BDFB	NSTD33-22
54 MGB/FG TO STATIC DEVICES	#6 I-STR
55 MGB/FG TO CABLE AT ENTRY	#6 I-STR
56 MGB/FG TO AC PWR RADIO XMTRR	#6 I-STR
57A MGB/FG TO CBL GRID/RUNWAY	#2/0 I-STR
58A #41A TO AISLE FRAME	#2 I-STR
59A #58A TO EACH SGL FRAME GRND	#6 I-STR
60-89 NOT USED	
90 GENERATOR FRAME TO EXT RING	#2 SBTC

Please verify that the listed grounding conductor conforms with article 250 subsection 250.62 of the 2020 NEC.

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 1334 81st AVE NE
 SPRING LAKE PARK, MN 55432
 (612) 844-1234
 WWW.HERZOGENGINEERING.COM

LICENSED PROFESSIONAL ENGINEER
 JOSHUA HERZOG
 20456
 IOWA

HE #: 241495 05/06/2025

DESIGN
 9973 VALLEY VIEW RD.
 EDEN PRAIRIE, MN 55344
 (952) 903-9299
 WWW.DESIGN1EP.COM

verizon
 10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 (952) 946-4700

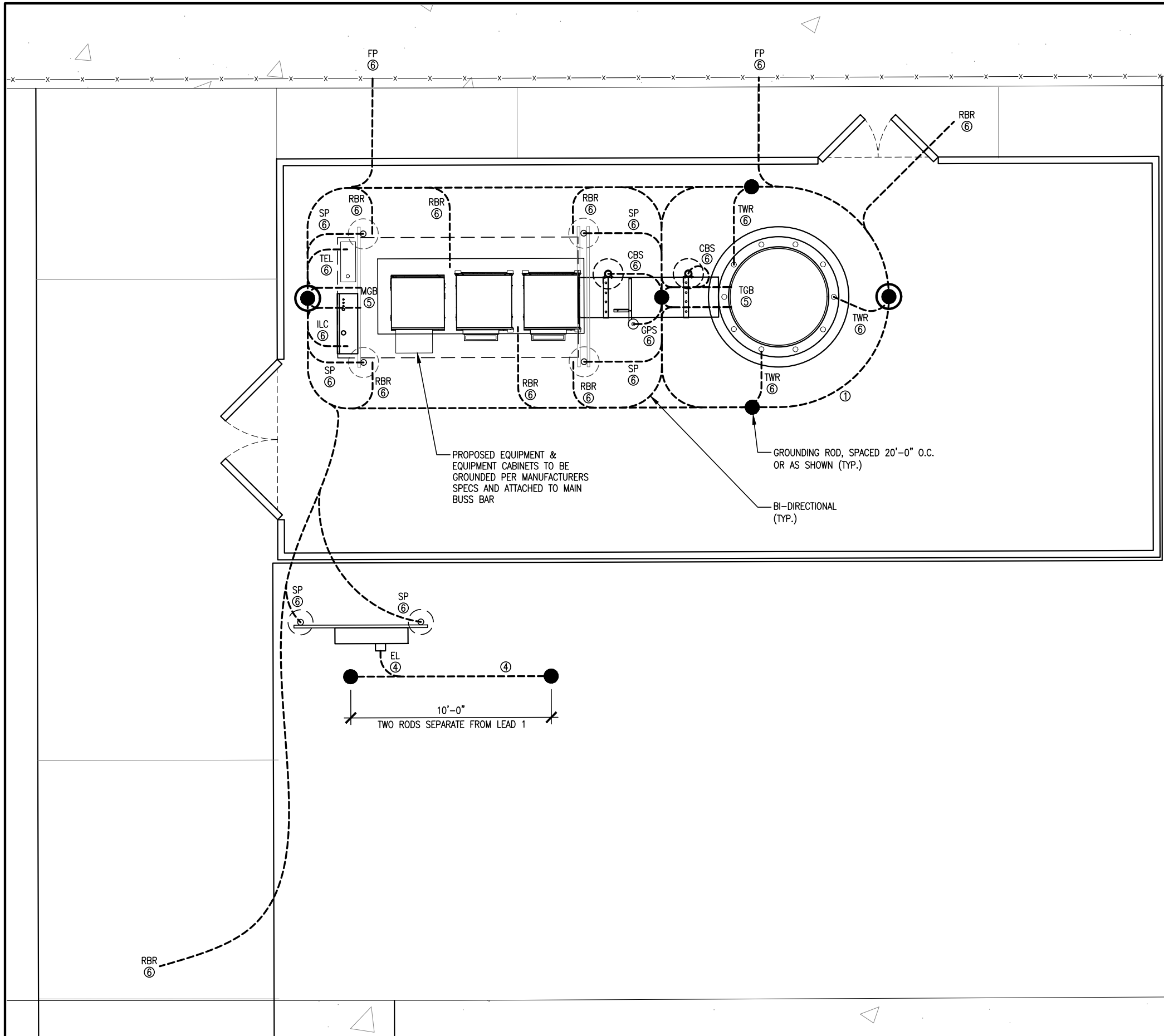
PROJECT
 LOC. CODE: 573148

DES
 BEAVER CREEK
 NE HERITAGE DR
 GRIMES, IA 50111

SHEET CONTENTS:
 GROUNDING & UTILITY NOTES

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

G-1



GROUNDING DETAIL INDEX	
DETAIL	DETAIL DESCRIPTION
SLAB	SLAB ON GRADE GROUNDING
11.1	TEST WELL DETAIL, GROUND RING & ROD DETAIL
11.3	REBAR GROUNDING DETAIL
11.4	CONDUIT DETAIL
11.5	TYPICAL GROUNDING CABLE BRIDGE DETAIL
11.6	TYPICAL TOWER GROUNDING DETAIL

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 1334 81ST AVE NE
 SPRING LAKE PARK, MN 55432
 (612) 844-1234
 WWW.HERZOGENGINEERING.COM



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DESIGN 1
 9973 VALLEY VIEW RD.
 EDEN PRAIRIE, MN 55344
 (952) 903-9299
 WWW.DESIGN1EP.COM

verizon
 10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 (952) 946-4700

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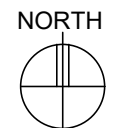
NE HERITAGE DR
 GRIMES, IA 50111

SHEET CONTENTS:
 GROUNDING PLAN
 GROUNDING DETAIL INDEX

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

NOTES:
 1. NO PORTION OF THE GROUNDING SYSTEM SHALL PASS THROUGH OR BE CONNECTED TO A CONCRETE FOUNDATION PER SECTION 10.4.2 OF ANSI/TIA-222-H.
 2. SEE SHEET G-1 FOR ADDITIONAL NOTES.

1 GROUNDING PLAN
 SCALE: NTS



G-2

POWER TYPE:
120/240V, SINGLE
PHASE, 200 AMPS

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ENGINEERING**
1334 81st AVE NE
SPRING LAKE PARK, MN 55432
(612) 844-1234
WWW.HERZOGENGINEERING.COM



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DESIGN
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EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGN1EP.COM

verizon
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

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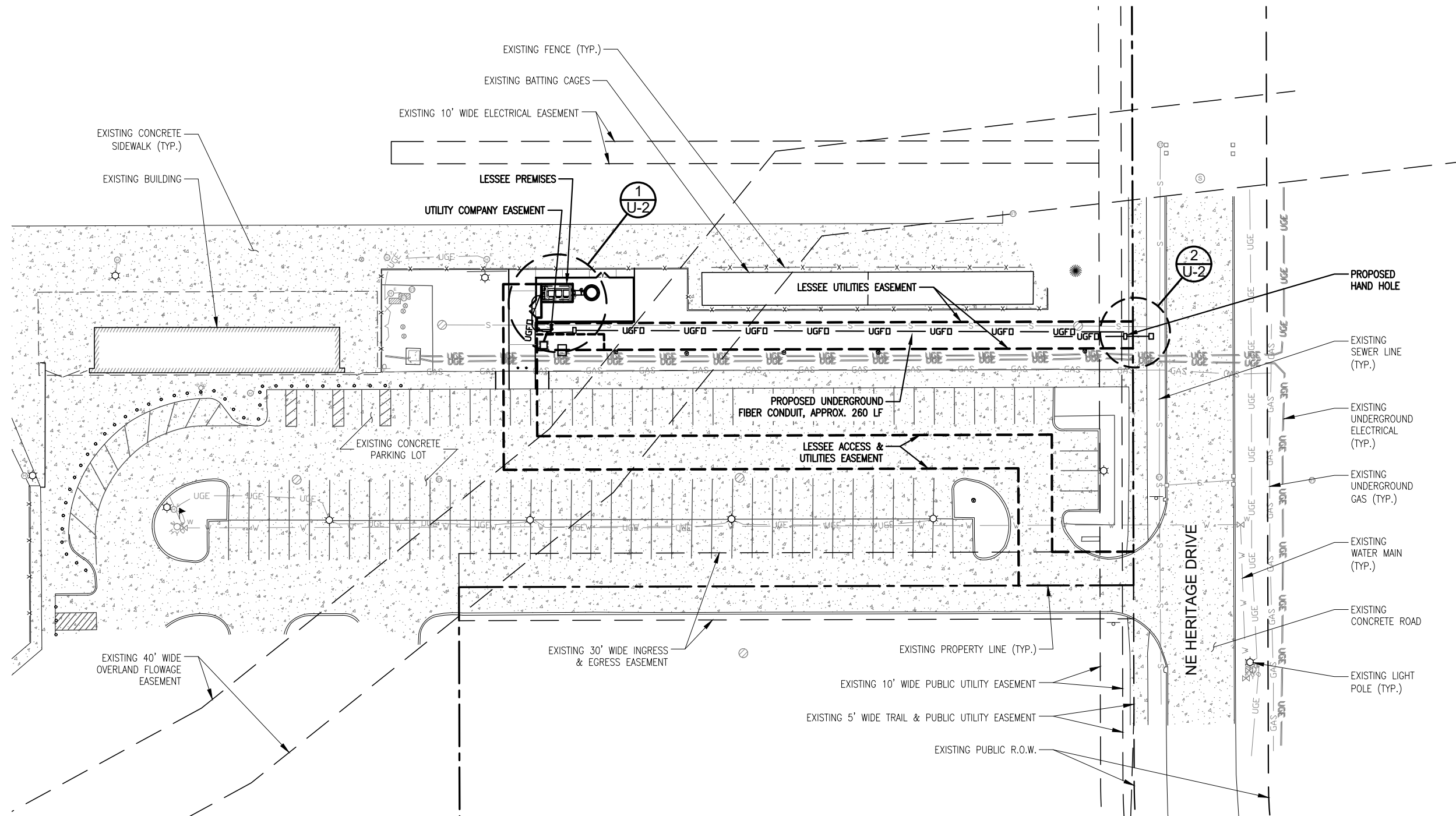
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SHEET CONTENTS:
SITE UTILITY PLAN

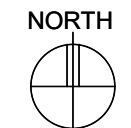
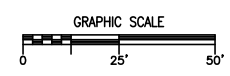
DRAWN BY: JP
CHECKED BY: TRB
REV. A 11-08-24
REV. B 12-13-24
REV. C 12-20-24
REV. D 04-10-25
REV. E 05-06-25

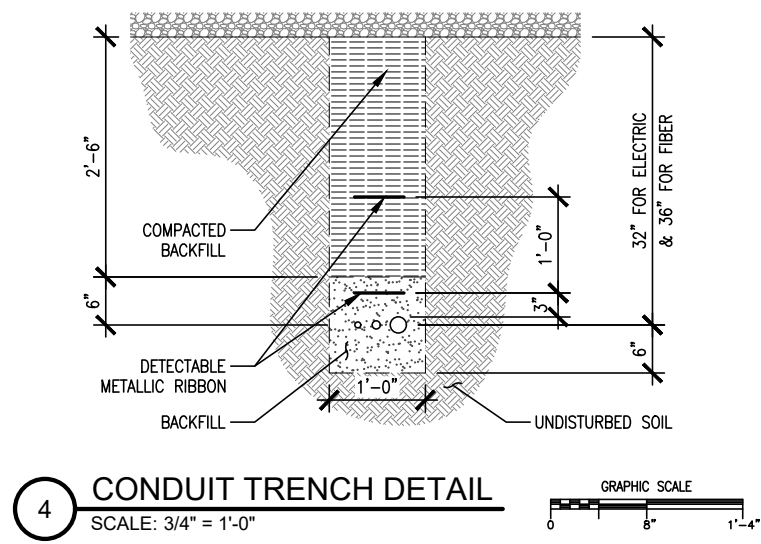
U-1

NOTE:
SEE SHEET G-1 FOR ADDITIONAL NOTES

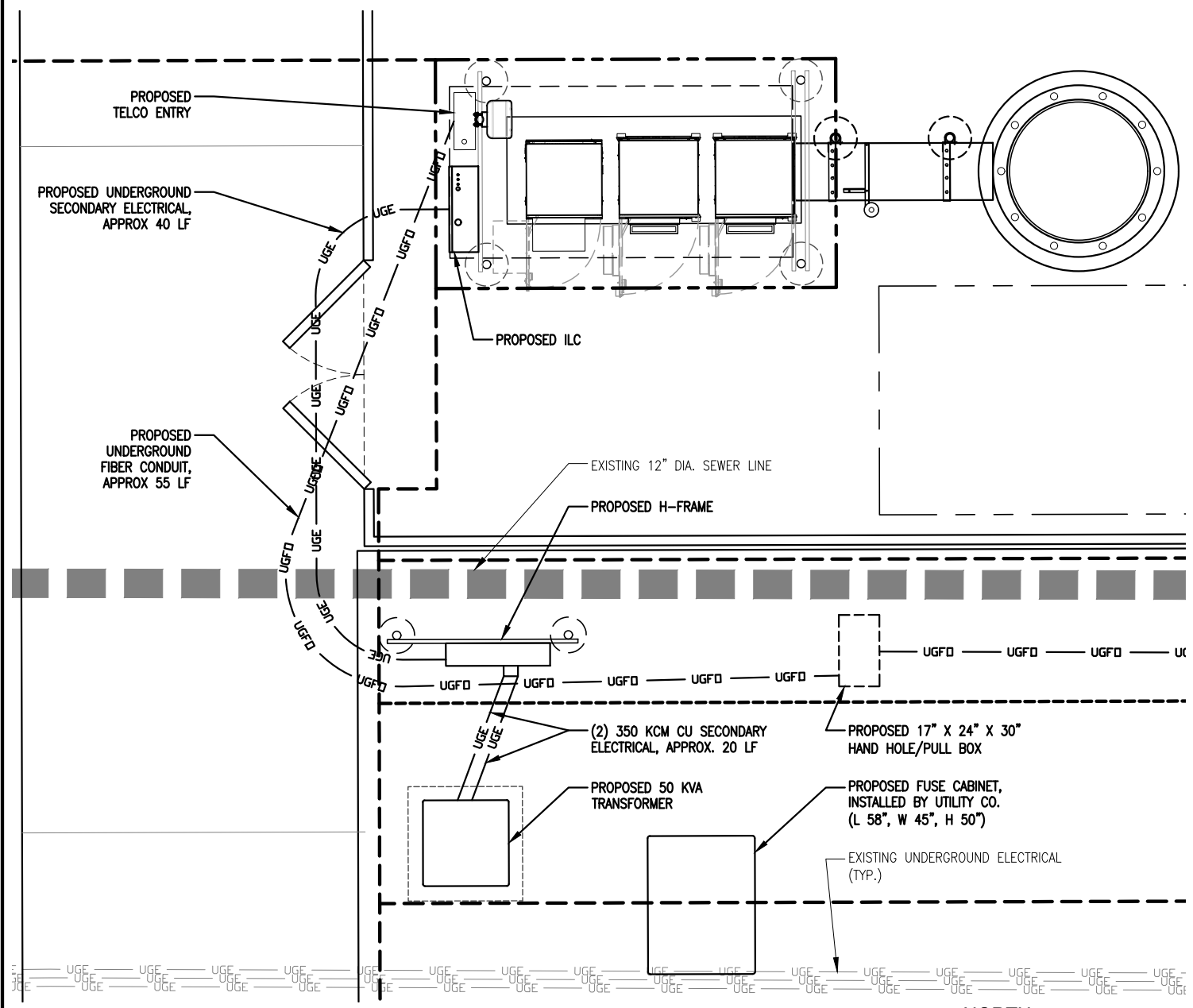


1 SITE UTILITY PLAN
SCALE: 1" = 50'-0"





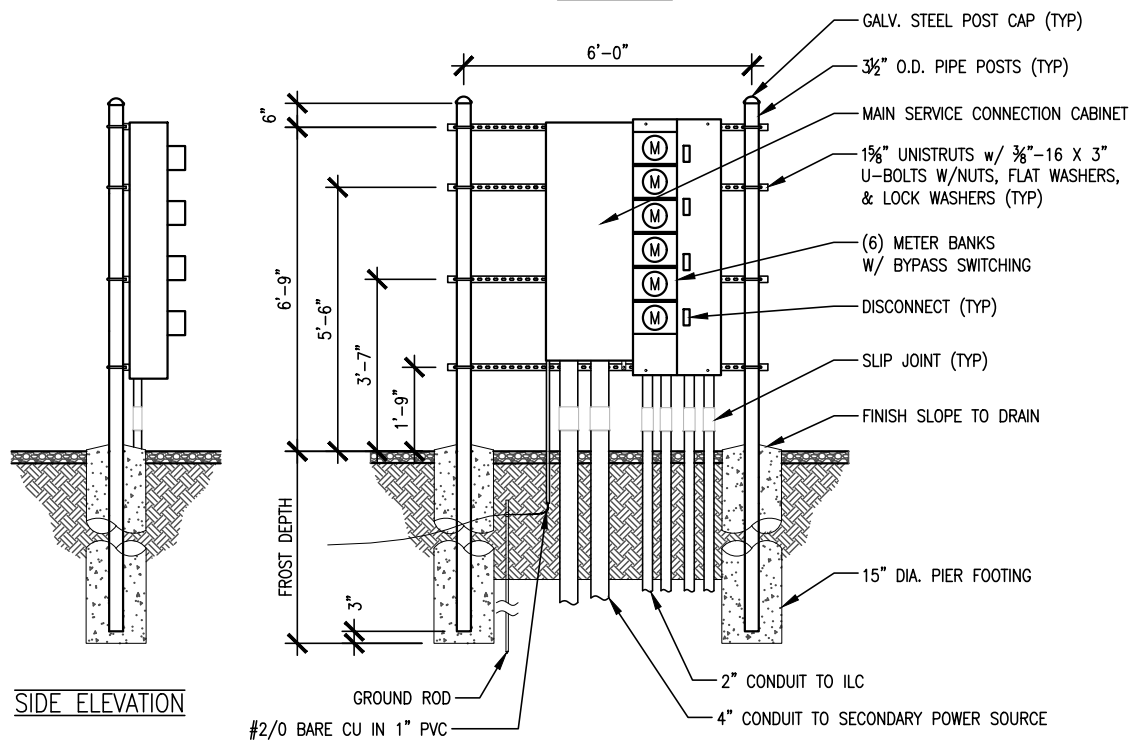
4 CONDUIT TRENCH DETAIL
SCALE: 3/4" = 1'-0"



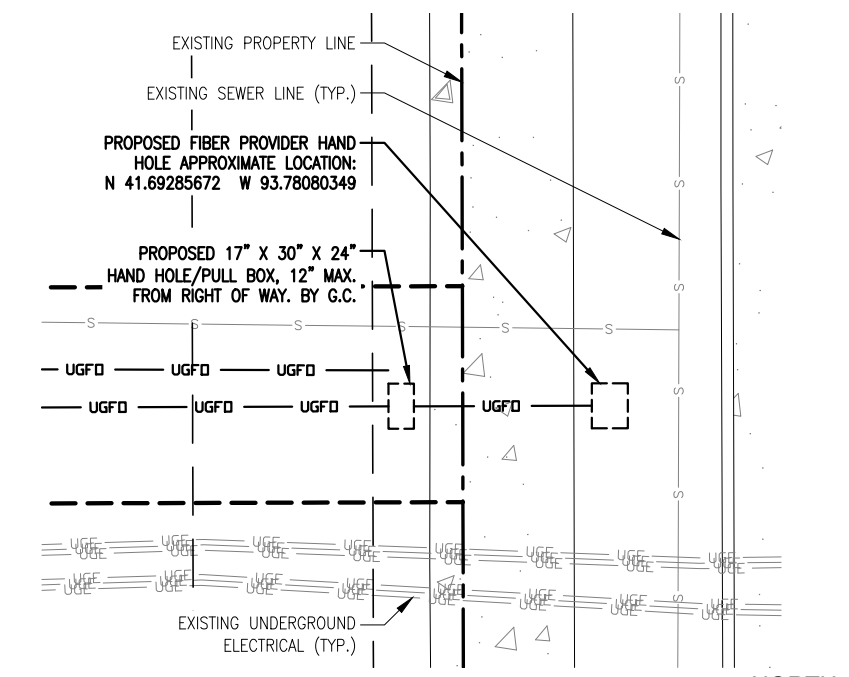
1 ENLARGED SITE PLAN
SCALE: 3/16" = 1'-0"

NOTE:
1. ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE AND THE LOCAL BUILDING CODES. ALL COMPONENTS SHALL BE U.L. APPROVED.
2. ALL COMPONENTS TO BE AS SPECIFIED OR EQUIVALENT AS APPROVED BY OWNER.
3. ALL BREAKERS SUPPLIED BY CONTRACTOR.

NOTE:
CONTRACTOR TO PROVIDE TWO RUNS 2" PVC WITH PULL STRING FROM ROW TO PROPOSED TRANSFORMER LOCATION. 90 DEGREE SWEEPS TO BE FIBERGLASS AND TOP OF CONDUIT TO BE 42" BELOW FINAL GRADE. UTILITY PROVIDER TO PROVIDE FINAL UTILITY ROUTE AND TRANSFORMER LOCATION.



3 H-FRAME DETAIL
SCALE: 1/4" = 1'-0"



2 PULLBOX LOCATION PLAN
SCALE: 3/32" = 1'-0"

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1334 81st AVE NE
SPRING LAKE PARK, MN 55432
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EDEN PRAIRIE, MN 55344
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10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

PROJECT
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DES
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NE HERITAGE DR
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SHEET CONTENTS:
ENLARGED SITE UTILITY PLAN
PULLBOX LOCATION PLAN

DRAWN BY:	JP
CHECKED BY:	TRB
REV. A	11-08-24
REV. B	12-13-24
REV. C	12-20-24
REV. D	04-10-25
REV. E	05-06-25

U-2

SITE SURVEY

PROPERTY DESCRIPTION: (per U.S. Title Solutions File No. UST77584, effective date June 14, 2024)

Lot 14 in HOPE COMMERCIAL PLAT 4, an Official Plat, now included in and forming a part of the City of Grimes, Polk County, Iowa.

SCHEDULE III: (per U.S. Title Solutions File No. UST77584, effective date June 14, 2024)

Easements and Right of Ways

- 4.1) Underground Electric Easement by City of Grimes, Iowa to Midamerican Energy Company, Dated April 25, 2023, Recorded May 12, 2023, in Book 19472, Page 407.
This document describes a 10 foot wide easement for electrical purposes. Said easement is shown on the survey.
- 4.2) Ingress/Egress Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 213.
This document describes a 30 foot wide easement for ingress and egress purposes. Said easement is shown on the survey.
- 4.3) Trail and Public Utility Access Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 193.
This document describes a 5 foot wide easement for trail and public utilities purposes. Said easement is shown on the survey.
- 4.4) Buffer Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 183.
This document describes a 30 foot wide buffer easement on the west line of the parent parcel. Said easement is shown on the survey.
- 4.5) Overland Flowage Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 178.
This document describes a 30 foot wide overland flowage easement along the north line of the parent parcel. Said easement is shown on the survey.
- 4.6) Water Main Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 173.
This document describes a 15 foot wide easement for watermain purposes. Said easement is shown on the survey.
- 4.7) Public Utility Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 167.
This document describes a 10 foot wide public utility easement. Said easement is shown on the survey.
- 4.8) Storm Sewer Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated October 27, 2021, Recorded November 03, 2021, in Book 18844, Page 155.
This document describes a 20 foot wide storm sewer easement. Said easement is shown on the survey.
- 4.9) Underground Electric Easement by Hope K. Farms, LLC to Midamerican Energy Company, Dated October 08, 2020, Recorded October 26, 2020, in Book 18147, Page 507.
This document describes a 10 foot electrical easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.10) Water Main Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated June 03, 2020, Recorded June 23, 2020, in Book 17906, Page 557.
This document describes an easement for watermain purposes. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.11) Sanitary Sewer Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated June 03, 2020, Recorded June 23, 2020, in Book 17906, Page 542.
This document describes a 30 foot wide sanitary sewer easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.12) Public Utility Line Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated June 03, 2020, Recorded June 23, 2020, in Book 17906, Page 537.
This document describes a 10 foot wide utility easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.13) Public Utility Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated December 17, 2018, Recorded January 22, 2020, in Book 17673, Page 892.
This document describes a 10 foot wide public utility easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.14) Water Main Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated December 17, 2018, Recorded January 22, 2020, in Book 17673, Page 886.
This document describes a 15 foot wide watermain easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.15) Public Utility Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated November 19, 2018, Recorded November 26, 2018, in Book 17157, Page 319.
This document describes a 10 foot wide public utility easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.16) Overland Flowage Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated November 19, 2018, Recorded November 26, 2018, in Book 17157, Page 314.
This document describes a 40 foot wide overland flowage easement. Said easement is shown on the survey.
- 4.17) Storm Sewer Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated November 19, 2018, Recorded November 26, 2018, in Book 17157, Page 309.
This document describes multiple storm sewer easements. Said easements do not affect the proposed tower area and are not shown on the survey.
- 4.18) Sanitary Sewer Easement by Hope K. Farms, LLC to City of Grimes, Iowa, Dated November 19, 2018, Recorded November 26, 2018, in Book 17157, Page 304.
This document describes a 30 foot wide sanitary sewer easement. Said easement does not affect the proposed tower area and is not shown on the survey.

- 4.19) Public Water Main Easement by Heritage at Grimes, LLC to City of Grimes, Iowa, Dated December 07, 2016, Recorded January 09, 2017, in Book 16338, Page 360.
This document describes an irregular shaped watermain easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.20) Public Trail Easement by Heritage at Grimes, LLC to City of Grimes, Iowa, Dated December 07, 2016, Recorded January 09, 2017, in Book 16338, Page 354.
This document describes an irregular shaped public trail easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.21) Public Storm Sewer Easement by Heritage at Grimes, LLC to City of Grimes, Iowa, Dated December 07, 2016, Recorded January 09, 2017, in Book 16338, Page 347.
This document describes multiple storm sewer easements. Said easements do not affect the proposed tower area and are not shown on the survey.
- 4.22) Public Sanitary Sewer Easement by Heritage at Grimes, LLC and Beaverbrooke Development Company to City of Grimes, Iowa, Dated December 07, 2016, Recorded January 09, 2017, in Book 16338, Page 332.
This document describes an irregular shaped sanitary sewer easement. Said easement is shown on the survey.
- 4.23) Public Utility Line Easement by Beaverbrooke Development Company and Beaverbrooke North No. 1, L.L.C. to City of Grimes, Iowa, Dated September 10, 2015, Recorded September 23, 2015, in Book 15743, Page 387.
This document describes a public utility easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.24) Trail Easement by Howard H. Bauman, Darrell J. Bauman, Lynda M. Bauman, Donald H. Bauman and Colleen M. Bauman to City of Grimes, Iowa, Dated August 30, 2013, Recorded September 24, 2013, in Book 14969, Page 489.
This document describes a 10 foot wide trail easement. Said easement does not affect the proposed tower area and is not shown on the survey.
- 4.25) Permanent Sanitary Sewer Easement by Howard H. Bauman and Agnes V. Bauman to City of Grimes, Iowa, Dated August 11, 2000, Recorded August 15, 2000, in Book 8566, Page 525.
This easement describes a permanent sanitary sewer easement. Said easement does not affect the proposed tower area and is not shown on the survey.

Other Recorded Documents:

- 5.1) Hope Commercial Plat 4 Recorded November 03, 2021, in Book 18844, Page 119.
Part of the described plat is shown on the survey.
- 5.2) Resolution between City of Grimes Dated February 23, 2021, Recorded March 02, 2021, in Book 18388, Page 628.
Not related to the survey.
- 5.3) Hope Commercial Plat 2 Recorded June 23, 2020, in Book 17906, Page 514.
This plat was referenced to determine if existing easements affect the proposed tower area.
- 5.4) Hope Commercial Plat 1 Recorded November 26, 2018, in Book 17157, Page 281.
This plat was referenced to determine if existing easements affect the proposed tower area.
- 5.5) Heritage at Grimes Plat 2 Recorded January 09, 2017, in Book 16338, Page 205.
This plat was referenced to determine if existing easements affect the proposed tower area.
- 5.6) Plat of Survey Recorded February 18, 2016, in Book 15900, Page 199.
Not related to this survey.
- 5.7) Plat of Survey Recorded February 18, 2016, in Book 15900, Page 199.
Not related to this survey.

PROPOSED UTILITY COMPANY EASEMENT DESCRIPTION:

A 7.00 foot wide easement for utility purposes over, under and across Lot 14, HOPE COMMERCIAL PLAT 4, Polk County, Iowa, the centerline of said easement is described as follows:

Commencing the northeast corner of Lot 55, said HOPE COMMERCIAL PLAT 4; thence South 89 degrees 50 minutes 18 seconds West along the north line of said Lot 55, a distance of 279.87 feet; thence North 0 degrees 10 minutes 12 seconds West, a distance 535.39 feet; thence South 89 degrees 49 minutes 48 seconds West, a distance of 23.53 feet; thence South 0 degrees 10 minutes 12 seconds East, a distance of 26.00 feet to the Point of Beginning of the centerline to be described; thence North 89 degrees 49 minutes 48 seconds East, a distance of 37.50 feet and said centerline there terminating.

LESSEE PREMISES DESCRIPTION:

That part of Lot 14, HOPE COMMERCIAL PLAT 4, according to the recorded plat thereof, Polk County, Iowa, described as follows:

Commencing the northeast corner of Lot 55, said HOPE COMMERCIAL PLAT 4; thence South 89 degrees 50 minutes 18 seconds West along the north line of said Lot 55, a distance of 279.87 feet; thence North 0 degrees 10 minutes 12 seconds West, a distance 535.39 feet to the Point of Beginning of the premises to be described; thence South 89 degrees 49 minutes 48 seconds West, a distance of 14.00 feet; thence South 0 degrees 10 minutes 12 seconds East, a distance of 8.00 feet; thence North 89 degrees 49 minutes 48 seconds East, a distance of 14.00 feet; thence North 0 degrees 10 minutes 12 seconds West, a distance of 8.00 feet to the Point of Beginning.

LESSEE ACCESS & UTILITIES EASEMENT:

A 15.00 foot wide easement for access and utility purposes over, under and across Lot 14, HOPE COMMERCIAL PLAT 4, Polk County, Iowa, the centerline of said easement is described as follows:

Commencing the northeast corner of Lot 55, said HOPE COMMERCIAL PLAT 4; thence South 89 degrees 50 minutes 18 seconds West along the north line of said Lot 55, a distance of 279.87 feet; thence North 0 degrees 10 minutes 12 seconds West, a distance 535.39 feet; thence South 89 degrees 49 minutes 48 seconds West, a distance of 23.53 feet to the Point of Beginning of the centerline to be described; thence South 0 degrees 10 minutes 12 seconds East, a distance of 7.50 feet to a point hereinafter referred to as Point "A"; thence continue South 0 degrees 10 minutes 12 seconds East, a distance of 68.00 feet; thence North 89 degrees 49 minutes 48 seconds East, a distance of 230.00 feet; thence South 0 degrees 10 minutes 12 seconds East, a distance of 52.43 feet; thence North 89 degrees 49 minutes 48 seconds East, a distance of 43.86 feet to the west right of way line of NE Heritage Drive and said centerline there terminating.

The sidelines of said easement shall be shortened or lengthened to terminate at said west right of way line of NE Heritage Drive.

TOGETHER WITH:

A 15.00 foot wide easement for access and utility purposes over, under and across said Lot 14, the centerline of said easement is described as follows:

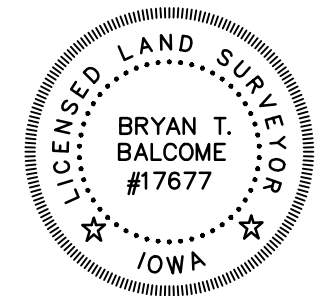
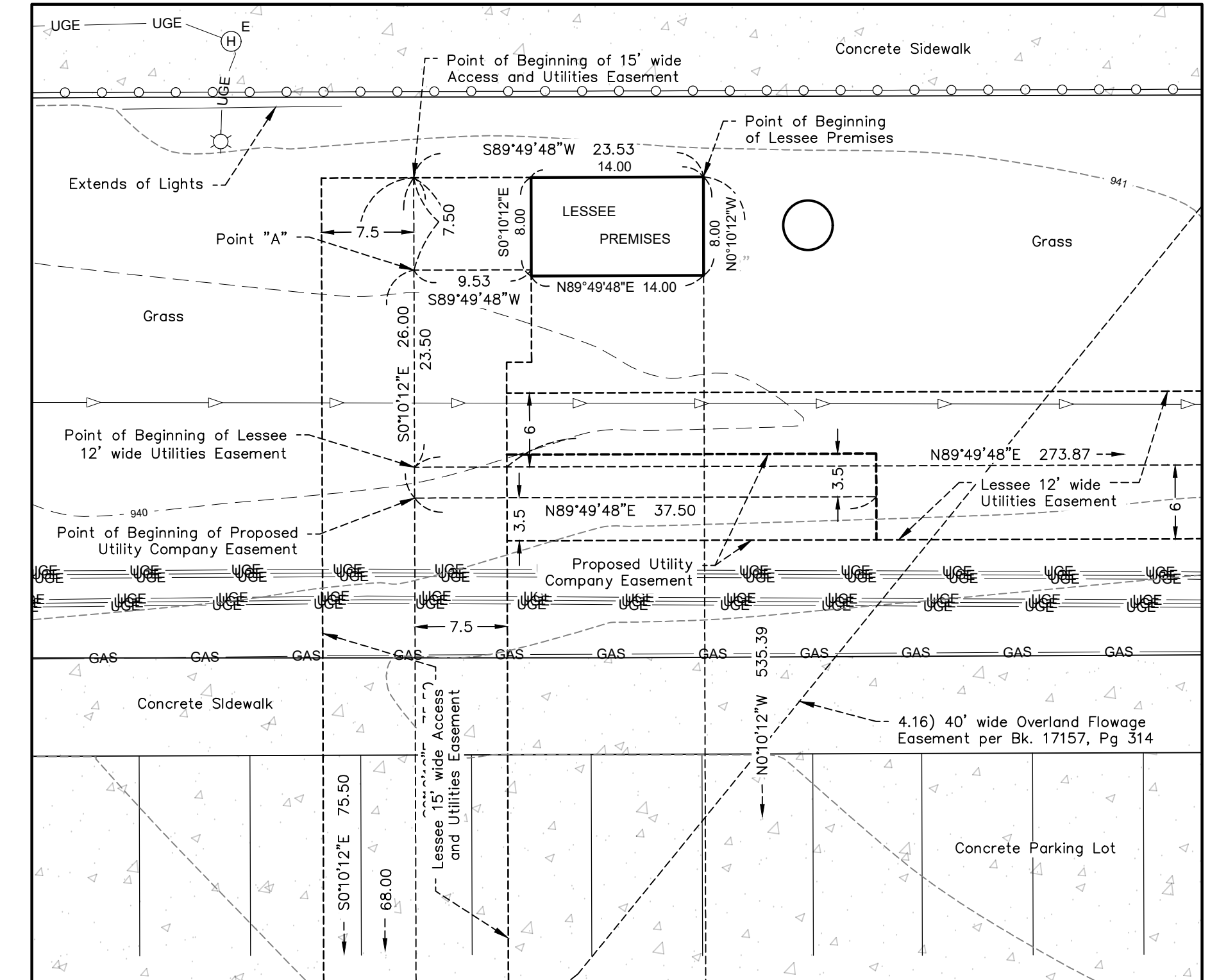
Beginning at the previously described Point "A"; thence South 89 degrees 49 minutes 48 seconds West, a distance of 9.53 feet and said centerline there terminating.

LESSEE UTILITIES EASEMENT:

A 12.00 foot wide easement for utility purposes over, under and across Lot 14, HOPE COMMERCIAL PLAT 4, Polk County, Iowa, the centerline of said easement is described as follows:

Commencing the northeast corner of Lot 55, said HOPE COMMERCIAL PLAT 4; thence South 89 degrees 50 minutes 18 seconds West along the north line of said Lot 55, a distance of 279.87 feet; thence North 0 degrees 10 minutes 12 seconds West, a distance 535.39 feet; thence South 89 degrees 49 minutes 48 seconds West, a distance of 23.53 feet; thence South 0 degrees 10 minutes 12 seconds East, a distance of 23.50 feet to the Point of Beginning of the centerline to be described; thence North 89 degrees 49 minutes 48 seconds East, a distance of 273.87 feet to the west right of way line of NE Heritage Drive and said centerline there terminating.

The sidelines of said easement shall be shortened or lengthened to terminate at said west right of way line of NE Heritage Drive.



SHEET 1 OF 2 SHEETS



SITE NAME:
DES BEAVER CREEK
Polk County, IA

No.	Date	REVISIONS	By	CHK	APP'D
FIELD WORK: 9/24/24		CHECKED BY: BTB	DRAWN BY: BAM		

I HEREBY CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED AND THE RELATED SURVEY WORK WAS PERFORMED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE: *Bryan T. Balcome*
BRYAN T. BALCOME, L.S.
DATE: 12/18/24 LICENSE # 17677
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2026

FULL SCALE ON 22"x34"
HALF SCALE ON 11"x17"
2024-10896

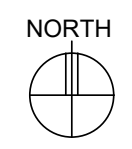




PROPOSED COMPOUND
& TOWER LOCATION

VIEW #1,
SEE PS-1A & PS-1B

1 AERIAL KEY



DESIGN 1
 9973 VALLEY VIEW RD.
 EDEN PRAIRIE, MN 55344
 (952) 903-9299
 WWW.DESIGN1EP.COM

verizon
 10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 (952) 946-4700

PROJECT

 LOC. CODE: 573148

DES
 BEAVER CREEK

NE HERITAGE DR
 GRIMES, IA 50111

SHEET CONTENTS:
 PHOTO SIMULATION

DRAWN BY: MJS
 CHECKED BY: JP/TJR
 v.1 05-05-25

PS-0



① EXISTING PHOTO

DESIGN 

9973 VALLEY VIEW RD.
EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGN1EP.COM

verizon 

10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

PROJECT

LOC. CODE: 573148

DES
BEAVER CREEK

NE HERITAGE DR
GRIMES, IA 50111

SHEET CONTENTS:
PHOTO SIMULATION

DRAWN BY:	MJS
CHECKED BY:	JP/TJR
v.1	05-05-25

PS-1A



please provide a view of the tower from the NE Gateway Dr and E 1st St intersection as well



1 PROPOSED IMAGE

DESIGN
 9973 VALLEY VIEW RD.
 EDEN PRAIRIE, MN 55344
 (952) 903-9299
 WWW.DESIGN1EP.COM

verizon
 10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 (952) 946-4700

PROJECT

 LOC. CODE: 573148

DES
 BEAVER CREEK

NE HERITAGE DR
 GRIMES, IA 50111

SHEET CONTENTS:
 PHOTO SIMULATION

DRAWN BY: MJS
 CHECKED BY: JP/TJR
 v.1 05-05-25

PS-1B