

CONSULTANT TEAM


PROJECT CONSULTANT: TERRA CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
(847) 698-6400

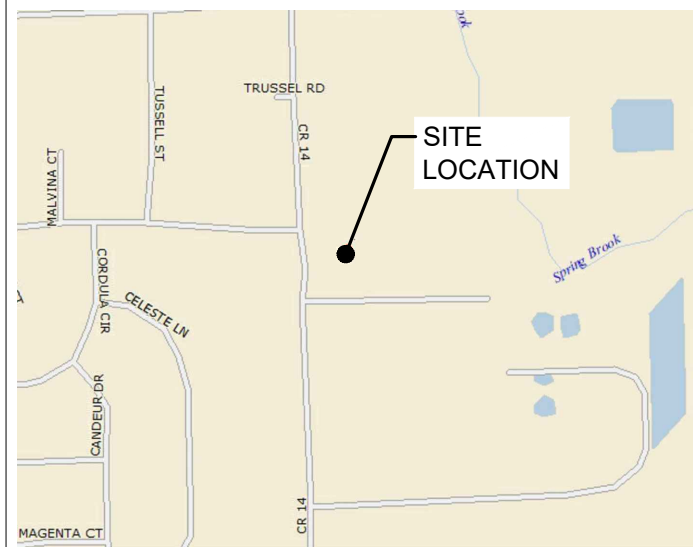
SURVEYOR: XCEL CONSULTANTS
120 10TH AVENUE EAST, SUITE 3
MILAN, IL 61624
(309) 787-9988

STRUCTURAL: (TOWER ANALYSIS)


STRUCTURAL ANALYSIS DATE:

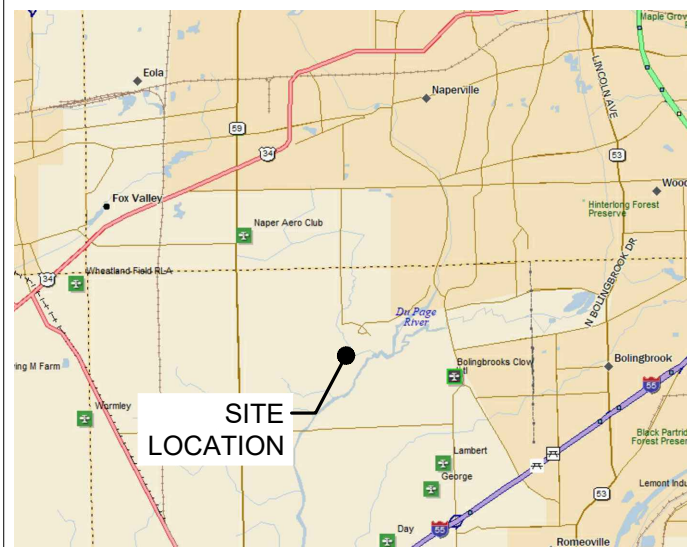
VICINITY MAP

N.T.S. 



REGIONAL MAP

N.T.S. 



PROJECT TYPE

PROPOSED VERIZON WIRELESS ANTENNAS TO BE MOUNTED ON MONOPOLE TOWER WITH PROPOSED 11'-0" x 4'-0" CONCRETE EQUIPMENT PAD AT BASE.

PROJECT INFORMATION

SITE COORDINATES: LATITUDE: 41° 41' 47.02" N (PER 1A CERTIFICATION)
LONGITUDE: 88° 09' 54.51" W (PER 1A CERTIFICATION)

ELEVATION: ±632.8' AMSL (1A)

P.I.N. #: 07-01-12-301-001-0010

ADDRESS: 3712 PLAINFIELD NAPERVILLE RD.
NAPERVILLE, IL 60564

UTILITIES: POWER: T.B.D. FIBER: TRANSPORT BY OTHERS

JURISDICTION: CITY OF NAPERVILLE

OCCUPANCY: UNINHABITED

ZONING: RESIDENTIAL

CONSTRUCTION TYPE: RAW LAND

PROPERTY OWNER: CITY OF NAPERVILLE
1200 W. OGDEN AVE.
NAPERVILLE, IL 60563

TOWER OWNER: CITY OF NAPERVILLE

CONTACT PERSON: SHANNON MCNELIS (630) 420-6681

APPLICANT: VERIZON WIRELESS
1701 GOLF ROAD, TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008

CONSTRUCTION MANAGER: HENRY PATERSEN

REAL ESTATE MANAGER: LISA ESSARY

GENERATOR TYPE: DIESEL

MAKE: GENERAC

MODEL #: SD030-1PE-190JT: GEN-GENSET-WP-30KW-DSL-1PH-190G-AHJ-TANK



1701 GOLF ROAD, TOWER 2, SUITE 400
ROLLING MEADOWS, ILLINOIS 60008
PHONE: (847) 619-5397 FAX: (847) 706-7415

MDG LOCATION NUMBER: 5000975492

FUZE ID NUMBER: 17562059

SITE NAME: NAPERVILLE_KNOLLS_PRELO

**3712 PLAINFIELD NAPERVILLE RD.
NAPERVILLE, IL 60564**

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR



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48 HOURS BEFORE
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SHEET	DRAWING INDEX	REVISION
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SP-2	SPECIFICATIONS	-
P-1	EXISTING SITE PHOTOS	-
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22" x 34" IS FULL SCALE.
11" x 17" IS HALF SCALE.

ATTACHMENTS	
B1 - B4	SITE SURVEY RFDS (BY OTHERS)



REVISIONS	BY	DATE	DESCRIPTION
	APD	01/08/26	ISSUED FOR REVIEW
TJS	01/19/26	ADDITION OF LANDSCAPE PLAN	
PP	01/26/26	ADDITION OF GRADING PLAN	
TJS	02/23/26	REVISED PER COMMENTS	
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NAPERVILLE_KNOLLS_PRELO

3712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

LEGEND

	BENCHMARK		PEDESTAL (ELECTRIC, TELEPHONE)
	FOUND MONUMENT (AS NOTED)		ELECTRIC METER
	ELECTRIC MANHOLE		TRAFFIC VAULT
	FIRE HYDRANT		UTILITY POLE
	WATER VALVE		GUY WIRE
	DRAINAGE INLETS		CONCRETE BOLLARD
	AREA LIGHT		TRANSFORMER
	TRAFFIC SIGNAL LIGHT		

PROPERTY LINE	---	---
FENCE LINE	-X-X-X-X-	-X-X-X-X-
UNDERGROUND ELECTRIC	--- UGE --- UGE ---	---
UNDERGROUND FIBER	--- UGF --- UGF ---	---
UNDERGROUND TELCO	--- UGT --- UGT ---	---
UNDERGROUND GAS LINE	--- GAS --- GAS ---	---
OVERHEAD ELECTRIC	--- OHE --- OHE ---	---
OVERHEAD FIBER	--- OHF --- OHF ---	---
OVERHEAD TELCO	--- OHT --- OHT ---	---
OVERHEAD UTILITY LINE	--- OHE-OHF --- OHE-OHF ---	---
STORM SEWER LINE	--->---	---
SANITARY SEWER LINE	--->---	---
WATERMAIN LINE	--- W --- W ---	---
BURIED GAS LINE	--- G --- G --- G --- G ---	---
EDGE OF BUSH/TREES	~~~~~	~~~~~
BITUMINOUS		
GRAVEL		

SURVEY PERFORMED BY:

XCEL
Consultants

8300 42ND STREET WEST
ROCK ISLAND, IL 61201
(O) 309-787-9988
(F) 309-756-5540
(E) XCEL@XCELCONSULTANTSINC.COM

TEMPORARY BENCHMARK

NORTHING: 131973.69300000
EASTING: 1030093.86400000
ELEVATION: 835.2'
DESCRIPTION: SET MAG NAIL

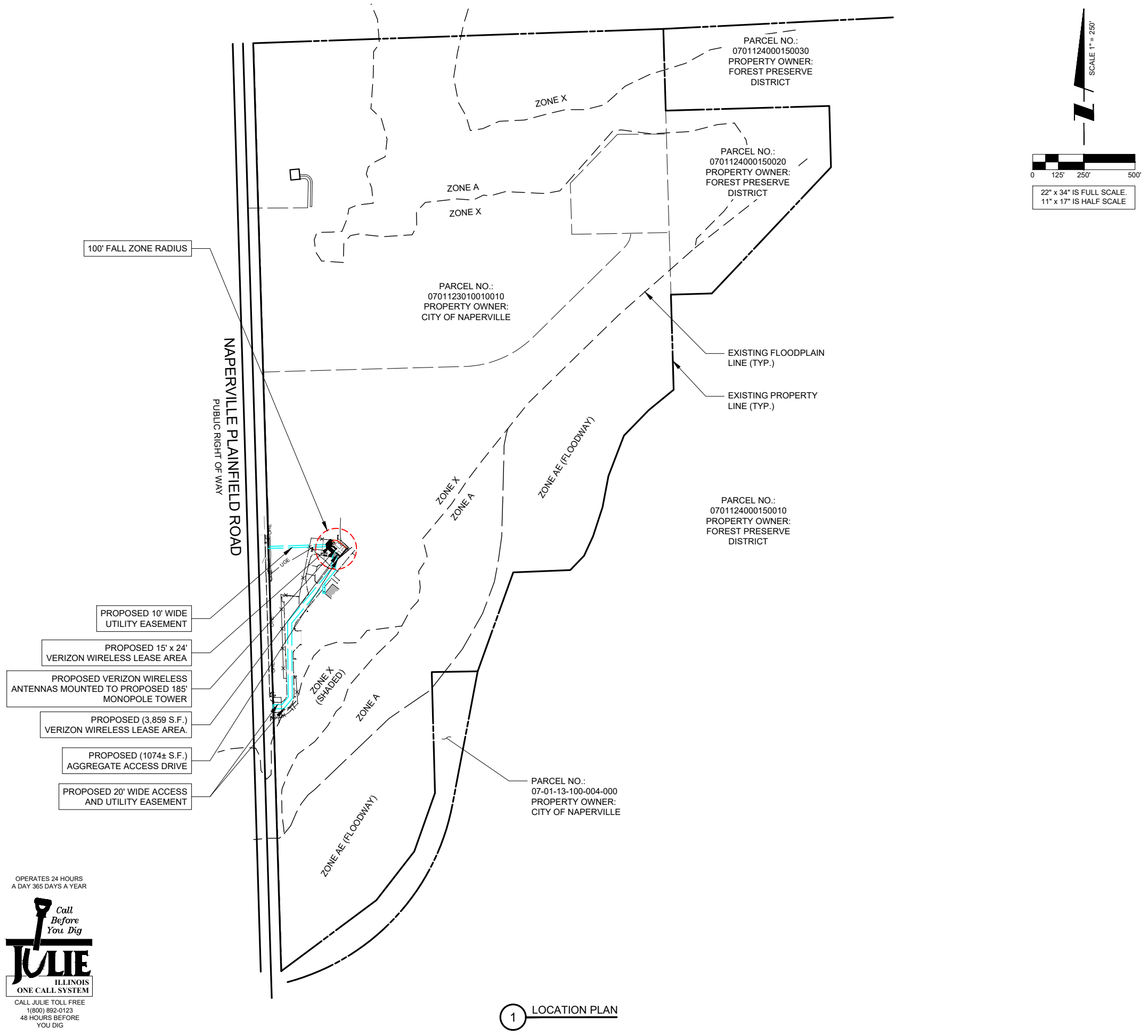
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FUZE ID#: 17562059

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DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
LOCATION PLAN

SHEET NUMBER
LP-1

LEGEND

	BENCHMARK		PEDESTAL (ELECTRIC, TELEPHONE)
	FOUND MONUMENT (AS NOTED)		ELECTRIC METER
	ELECTRIC MANHOLE		TRAFFIC VAULT
	FIRE HYDRANT		UTILITY POLE
	WATER VALVE		GUY WIRE
	DRAINAGE INLETS		CONCRETE BOLLARD
	AREA LIGHT		TRANSFORMER
	TRAFFIC SIGNAL LIGHT		

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WATERMAIN LINE	--- W --- W ---	---
BURIED GAS LINE	--- G --- G --- G ---	---
EDGE OF BUSH/TREES	~~~~~	~~~~~
BITUMINOUS		
GRAVEL		

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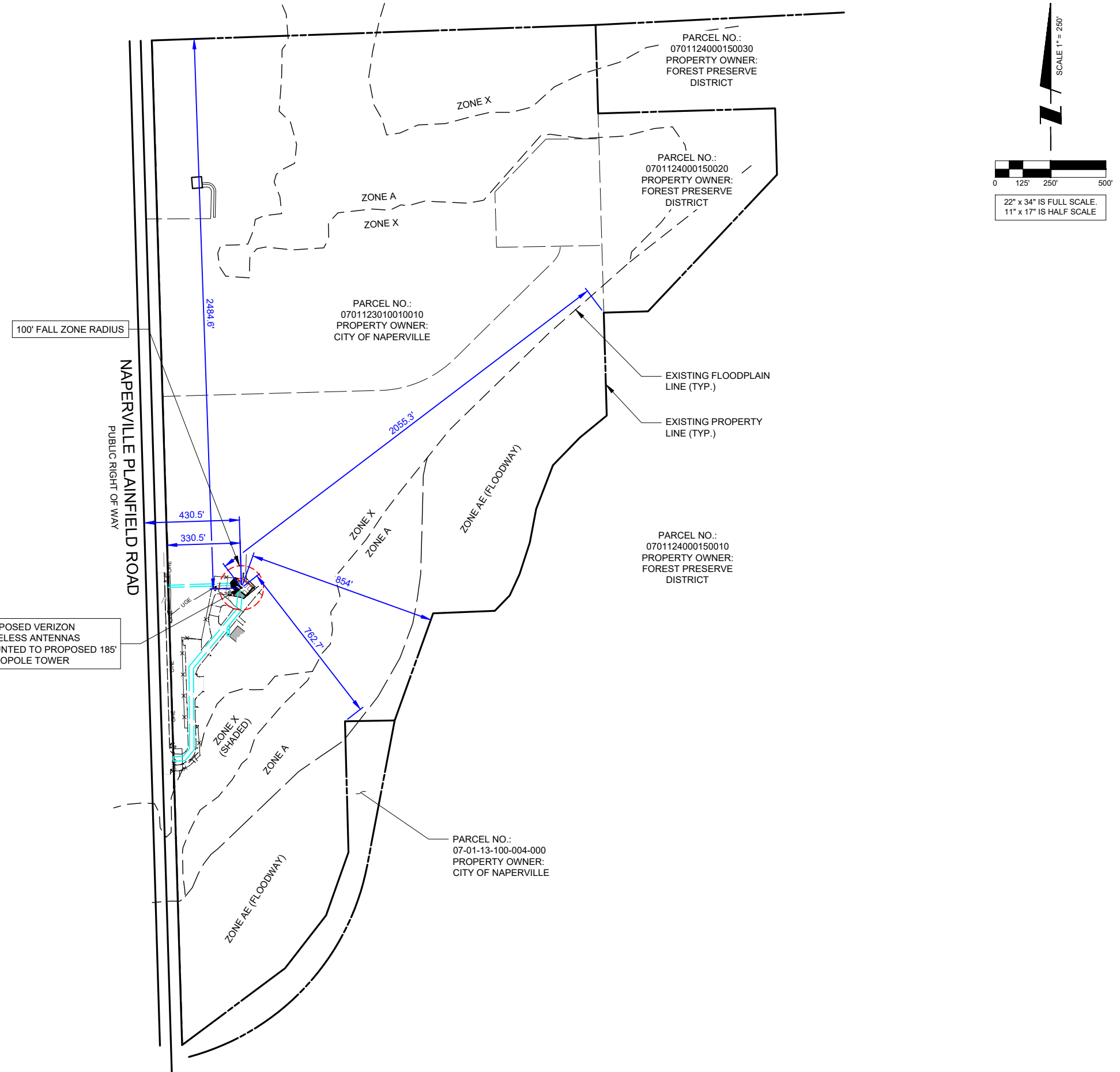
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EASTING: 1030093.86400000
ELEVATION: 835.2'
DESCRIPTION: SET MAG NAIL

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6	REVISED PER COMMENTS			03/04/26	
6	REVISED PER COMMENTS			03/23/26	

MGD LOC#
5000975492
FUZE ID#: 17562059

NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
LOCATION PLAN

SHEET NUMBER
LP-2

LEGEND

- BENCHMARK
- FOUND MONUMENT (AS NOTED)
- ELECTRIC MANHOLE
- FIRE HYDRANT
- WATER VALVE
- DRAINAGE INLETS
- AREA LIGHT
- TRAFFIC SIGNAL LIGHT
- PEDESTAL (ELECTRIC, TELEPHONE)
- ELECTRIC METER
- TRAFFIC VAULT
- UTILITY POLE
- GUY WIRE
- CONCRETE BOLLARD
- TRANSFORMER

- PROPERTY LINE
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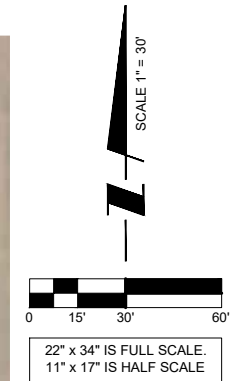
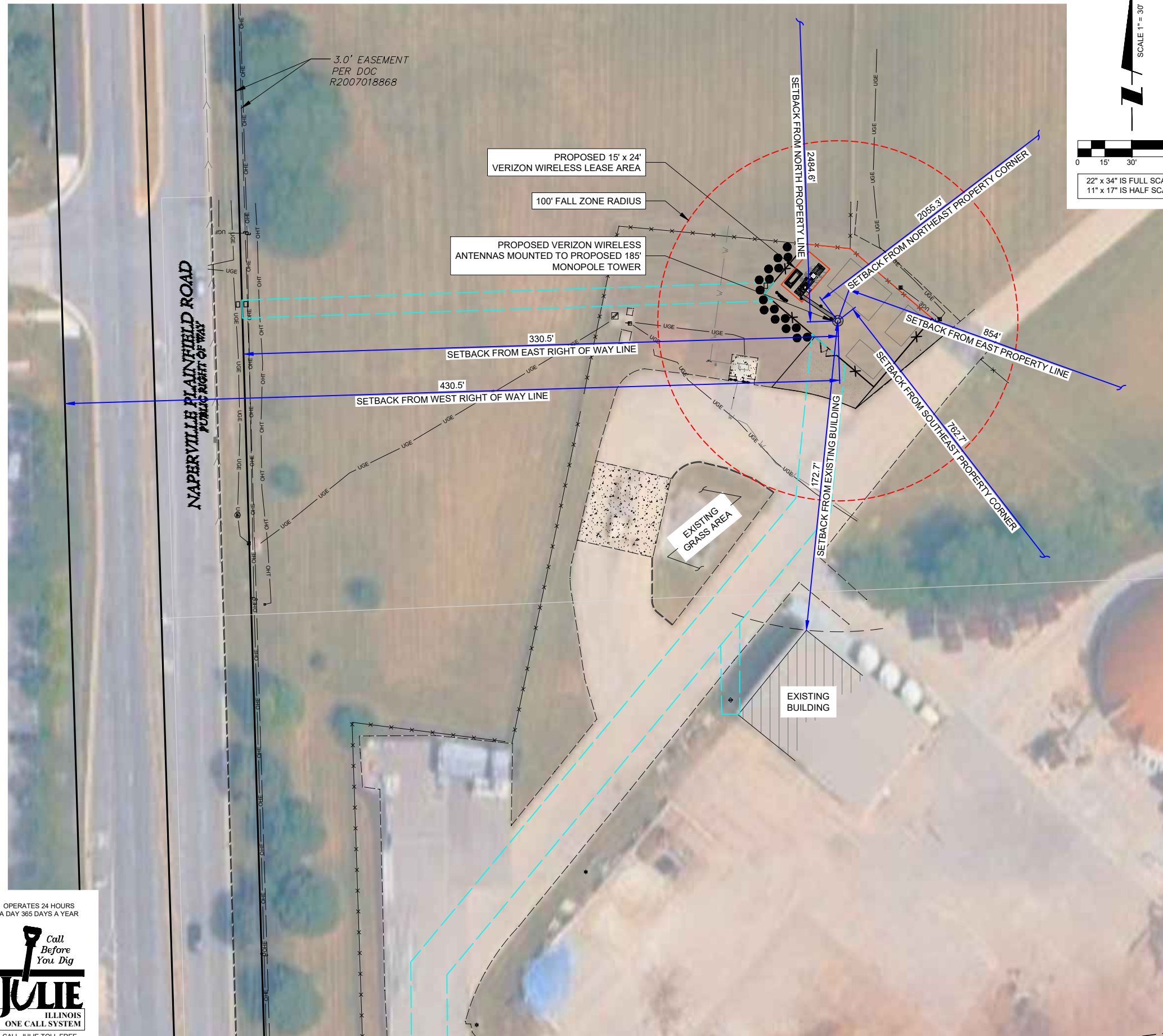
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1 SITE PLAN

verizon
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KNOLLS_PRELO

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NAPERVILLE, IL 60564

DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
SETBACK PLAN

SHEET NUMBER
SB-1

LEGEND

- BENCHMARK
- FOUND MONUMENT (AS NOTED)
- ELECTRIC MANHOLE
- FIRE HYDRANT
- WATER VALVE
- DRAINAGE INLETS
- AREA LIGHT
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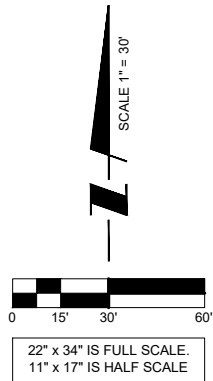
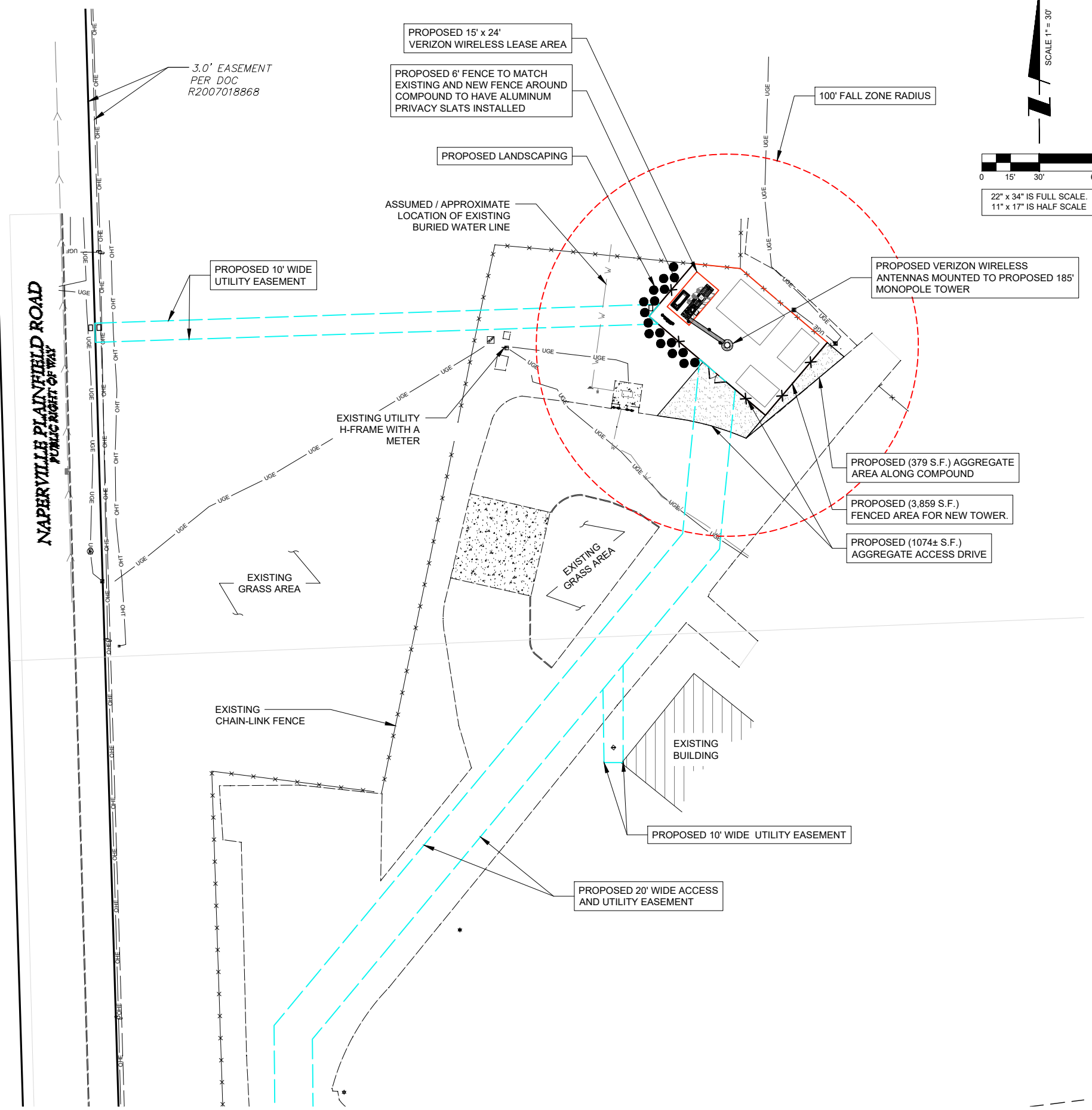
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1 SITE PLAN

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New Jersey Collins Engineering & Design

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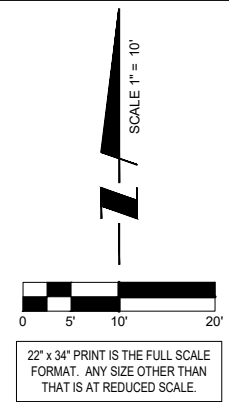
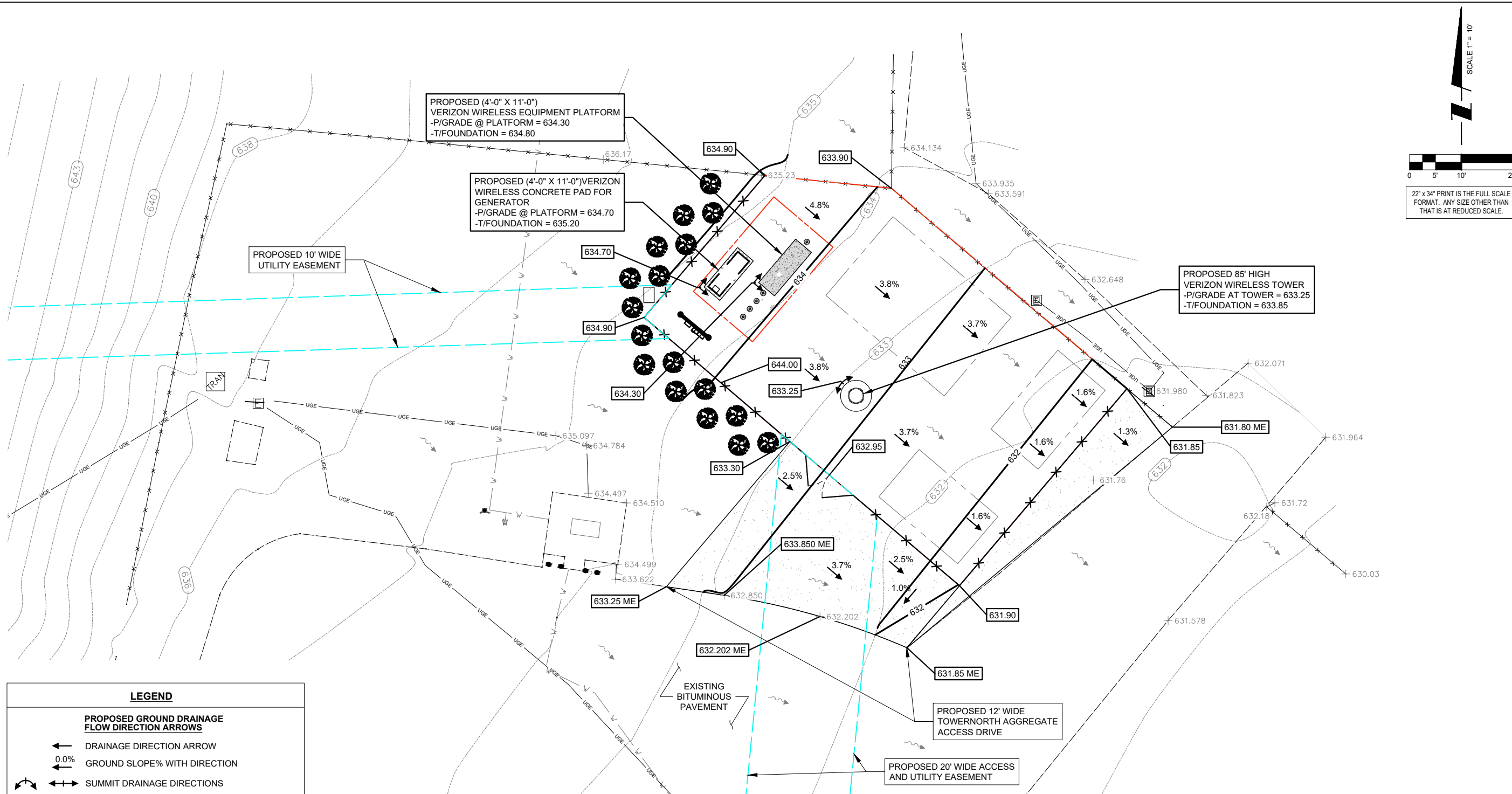
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PROJECT #:	33-3735

SHEET TITLE
SITE PLAN

SHEET NUMBER
C-0



LEGEND

PROPOSED GROUND DRAINAGE FLOW DIRECTION ARROWS

- ← DRAINAGE DIRECTION ARROW
- ← 0.0% GROUND SLOPE% WITH DIRECTION
- ↔ SUMMIT DRAINAGE DIRECTIONS
- ↔ EXISTING GROUND DRAINAGE FLOW DIRECTION

PROPOSED SPOT GRADES

- PROPOSED ELEVATION
- ME MATCH EXISTING
- L.P. LOW POINT

PROPOSED LINES

- - - PROPOSED GROUND RIDGE LINE
- 000 — PROPOSED CONTOUR
- ... 000 ... EXISTING CONTOUR
- □ PROPOSED CULVERT & FLARED END SECTIONS

SURVEY PERFORMED BY:

XCEL
Consultants

8300 42ND STREET WEST
ROCK ISLAND, IL 61201
(O) 309-787-9988
(F) 309-756-5540
(E) XCEL@XCELCONSULTANTSINC.COM

TEMPORARY BENCHMARK

NORTHING: 131973.69300000
EASTING: 1030093.86400000
ELEVATION: 835.2'
DESCRIPTION: SET MAG NAIL

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR

JULIE
ILLINOIS
ONE CALL SYSTEM

CALL JULIE TOLL FREE
1(800) 892-0123
48 HOURS BEFORE
YOU DIG

1 SITE GRADING PLAN
SCALE: 1" = 10'

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (847) 619-5397
FAX: (847) 706-7415



NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	01/08/26	APD
2	ADDITION OF LANDSCAPE PLAN	01/19/26	TJS
3	ADDITION OF GRADING PLAN	01/26/26	PP
4	REVISED PER COMMENTS	02/23/26	TJS
5	ISSUED FOR PERMIT	02/27/26	TJS
6	REVISED PER COMMENTS	03/04/26	APD
6	REVISED PER COMMENTS	03/23/26	APD

MGD LOC#
5000975492
FUZE ID#: 17562059

NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
SITE GRADING PLAN
(SHEET 1 OF 1)

SHEET NUMBER
C-2

NO.	DESCRIPTION	BY	DATE
1	ISSUED FOR REVIEW	APD	01/08/26
2	ADDITION OF LANDSCAPE PLAN	TJS	01/19/26
3	ADDITION OF GRADING PLAN	PP	01/26/26
4	REVISED PER COMMENTS	TJS	02/23/26
5	ISSUED FOR PERMIT	TJS	02/27/26
6	REVISED PER COMMENTS	APD	03/04/26
6	REVISED PER COMMENTS	APD	03/23/26

MGD LOC#
 5000975492
 FUZE ID#: 17562059

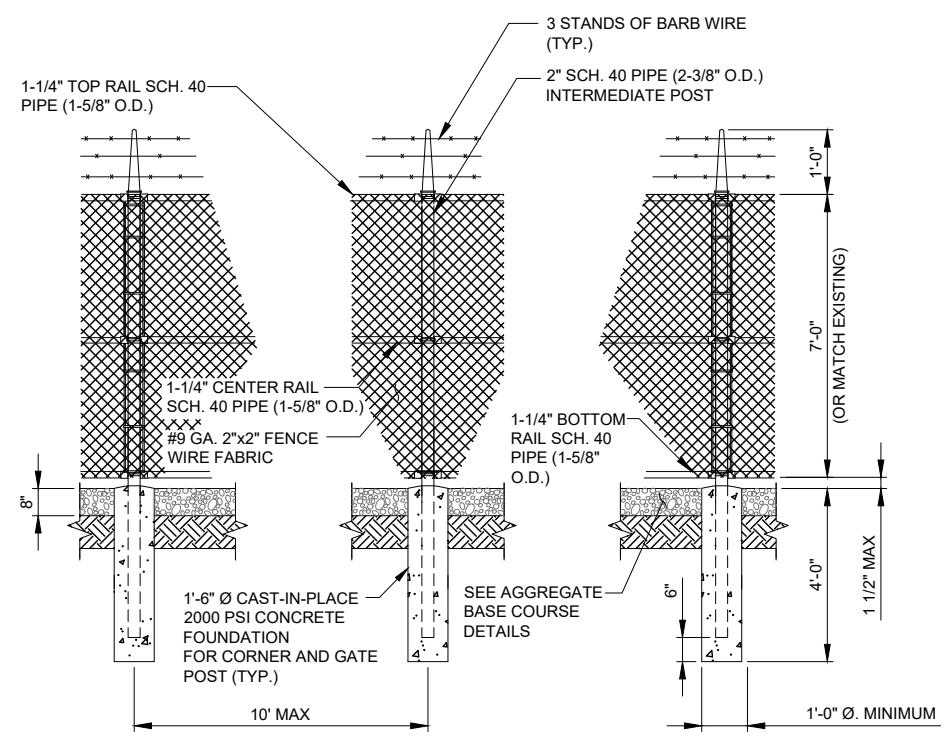
**NAPERVILLE
 KNOLLS_PRELO**

8712 PLAINFIELD NAPERVILLE RD
 NAPERVILLE, IL 60564

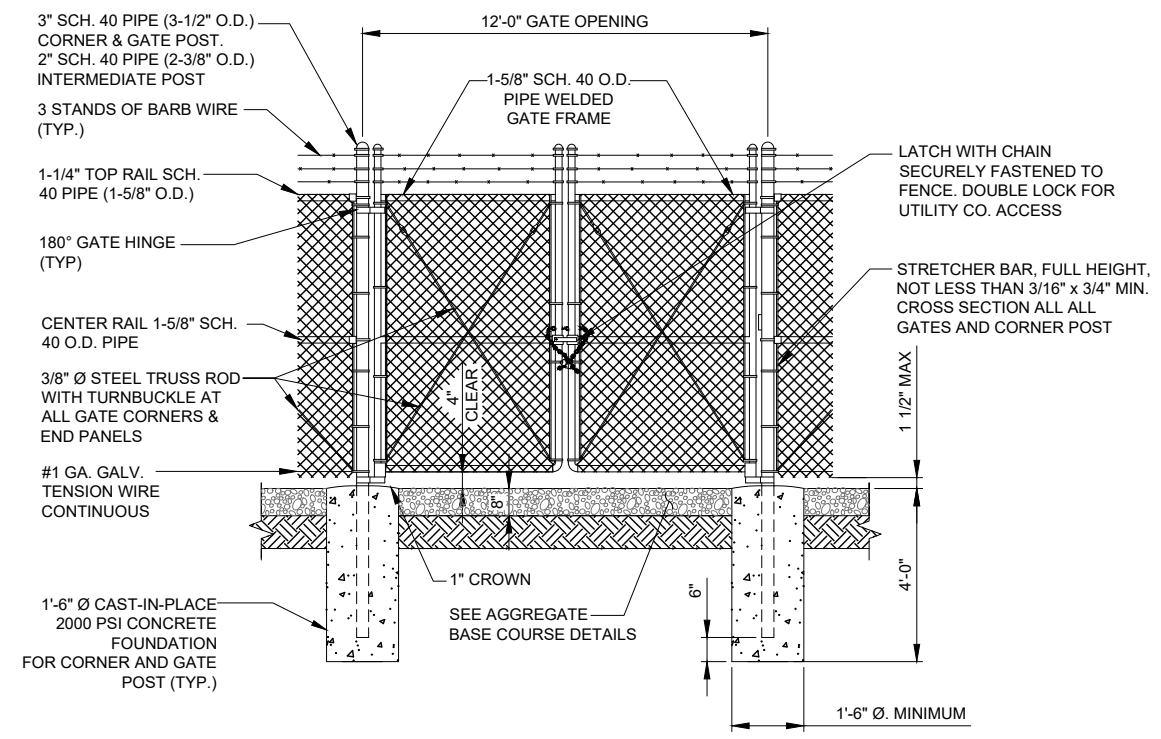
DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
FENCE DETAILS

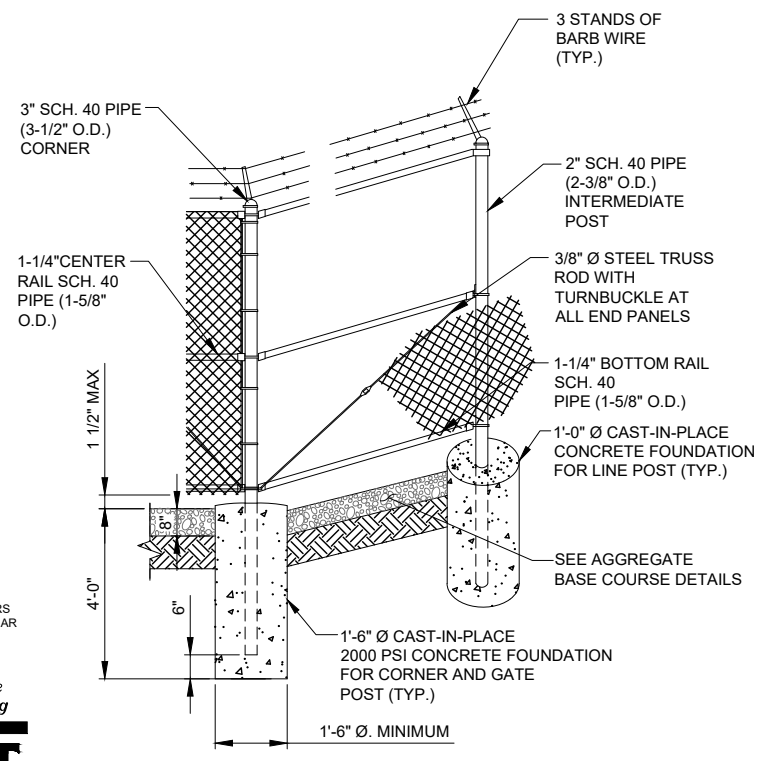
SHEET NUMBER
C-3



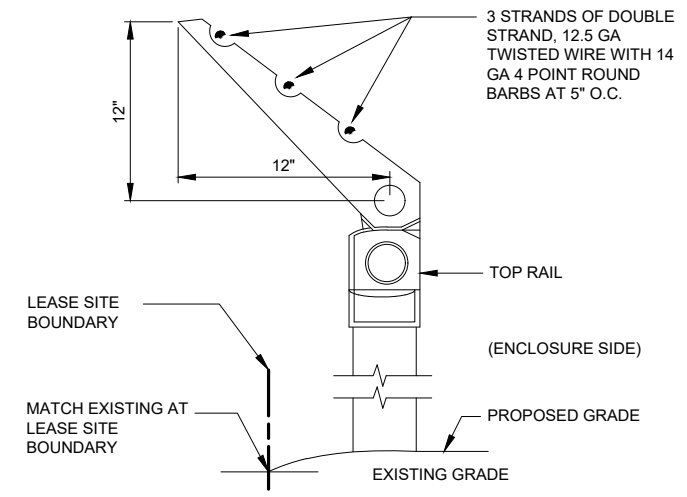
1 FENCE POST DETAILS
 N.T.S.



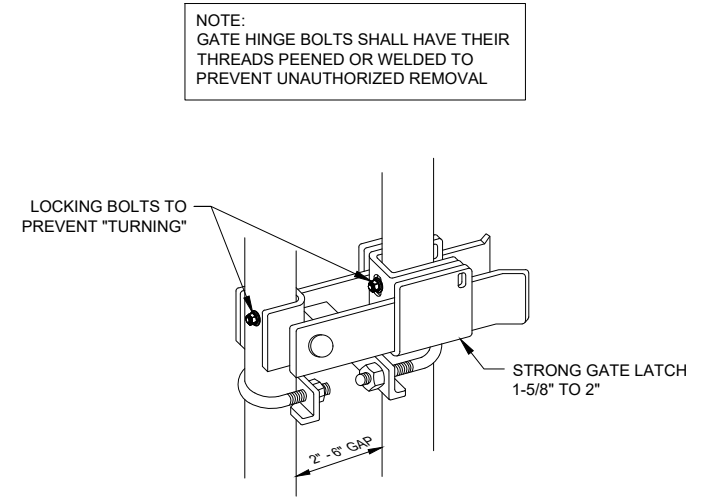
2 12'-0" DOUBLE SWING GATE
 N.T.S.



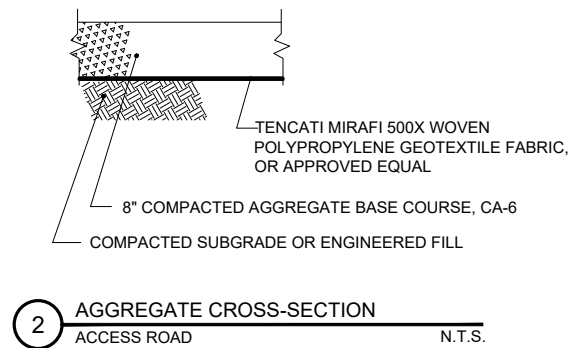
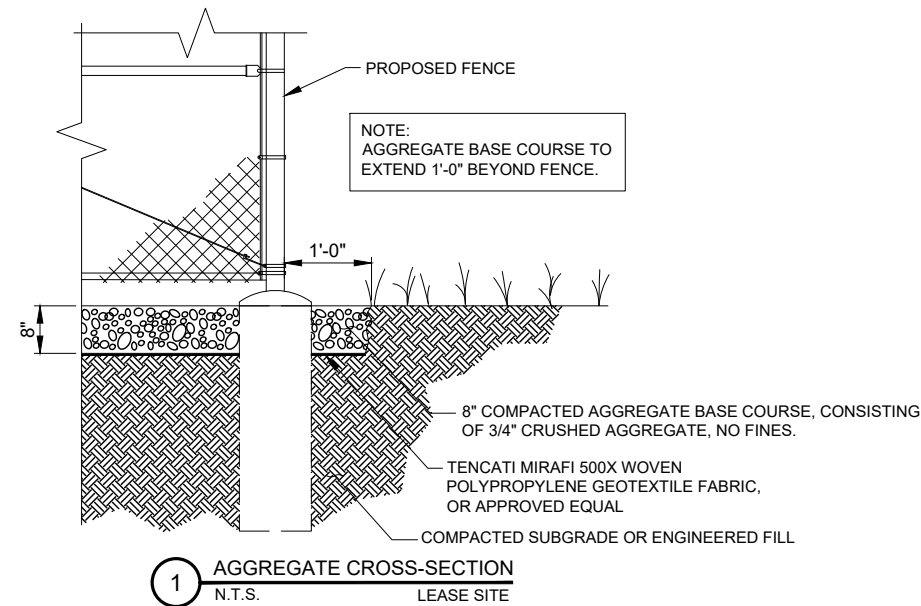
3 CORNER POST DETAIL
 N.T.S.



4 BARBED WIRE DETAIL
 N.T.S.



5 STRONG ARM GATE LATCH DETAIL
 N.T.S.



NO.	DESCRIPTION	DATE	BY	
			DATE	BY
1	ISSUED FOR REVIEW	01/08/26	APD	TJS
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3	ADDITION OF GRADING PLAN	01/26/26	TJS	TJS
4	REVISED PER COMMENTS	02/23/26	TJS	TJS
5	ISSUED FOR PERMIT	02/27/26	APD	APD
6	REVISED PER COMMENTS	03/04/26	APD	APD
6	REVISED PER COMMENTS	03/23/26	APD	APD

MGD LOC#
 5000975492
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NAPERVILLE
 KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
 NAPERVILLE, IL 60564

DRAWN BY:	JJR
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DATE:	12/11/2025
PROJECT #:	33-3735

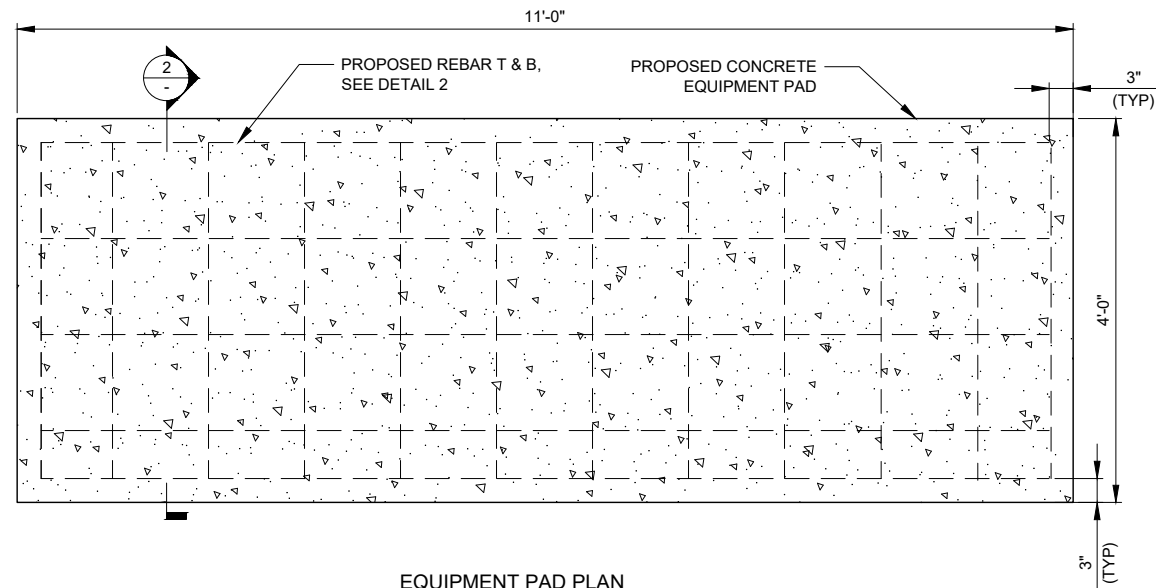
SHEET TITLE
 SITE DETAILS

SHEET NUMBER

C-4

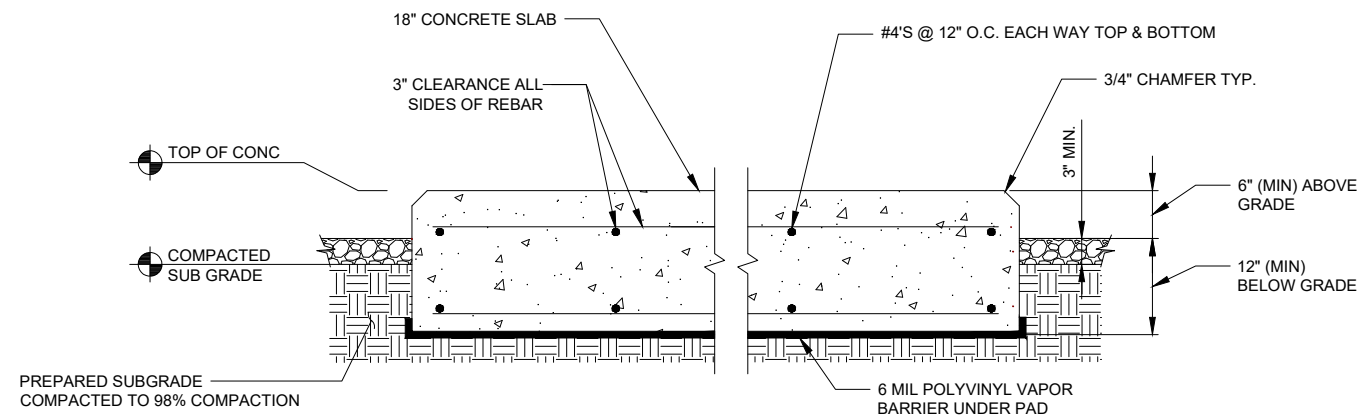
OPERATES 24 HOURS
 A DAY 365 DAYS A YEAR





EQUIPMENT PAD PLAN

1 EQUIPMENT SLAB DETAIL
SCALE: N.T.S.



NOTES:

1. SLAB TO BE LEVEL (\pm) 1/4".
2. FOUNDATION SHALL HAVE A MINIMUM 6" PROJECTION ABOVE GRADE.
3. CONCRETE STRENGTH SHALL BE A MINIMUM OF 4000 PSI @ 28 DAYS.

2 EQUIPMENT PAD DETAIL
SCALE: N.T.S.

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (847) 619-5397
FAX: (847) 706-7415



REVISIONS		BY	DATE
NO.	DESCRIPTION	APD	01/08/26
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5000975492
FUZE ID#: 17562059

NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

DRAWN BY:	JJR
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PROJECT #:	33-3735

SHEET TITLE
FOUNDATION DETAILS

SHEET NUMBER
C-5

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR

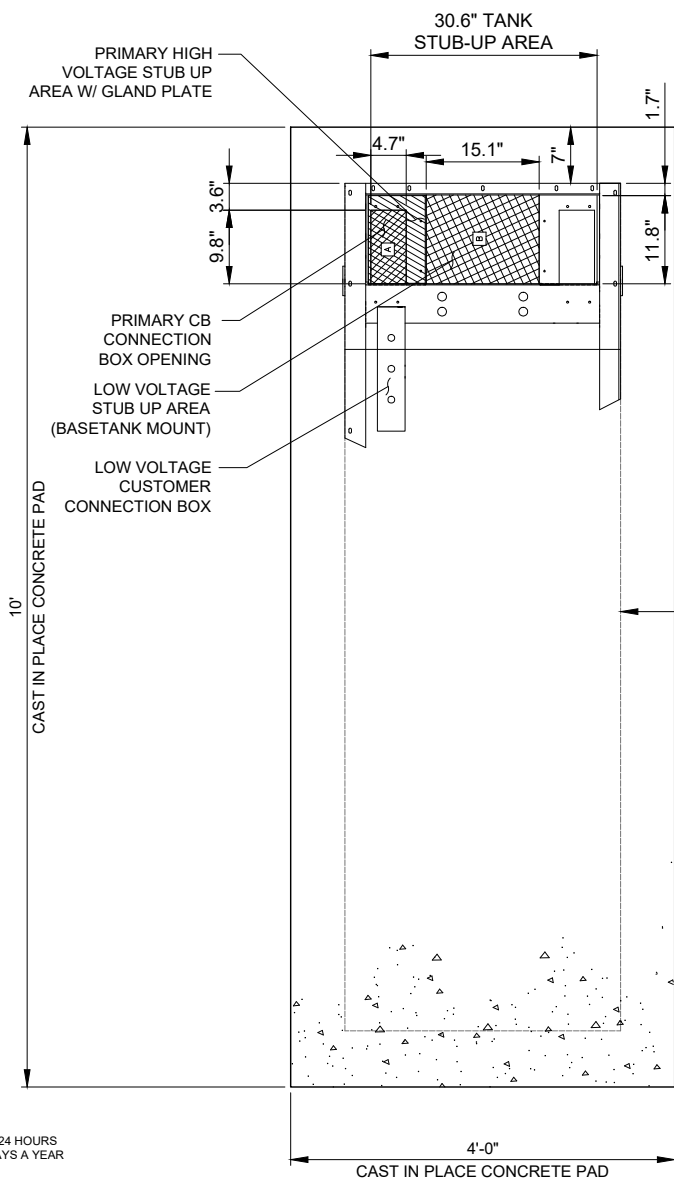


CALL JULIE TOLL FREE
1(800) 892-0123
48 HOURS BEFORE
YOU DIG

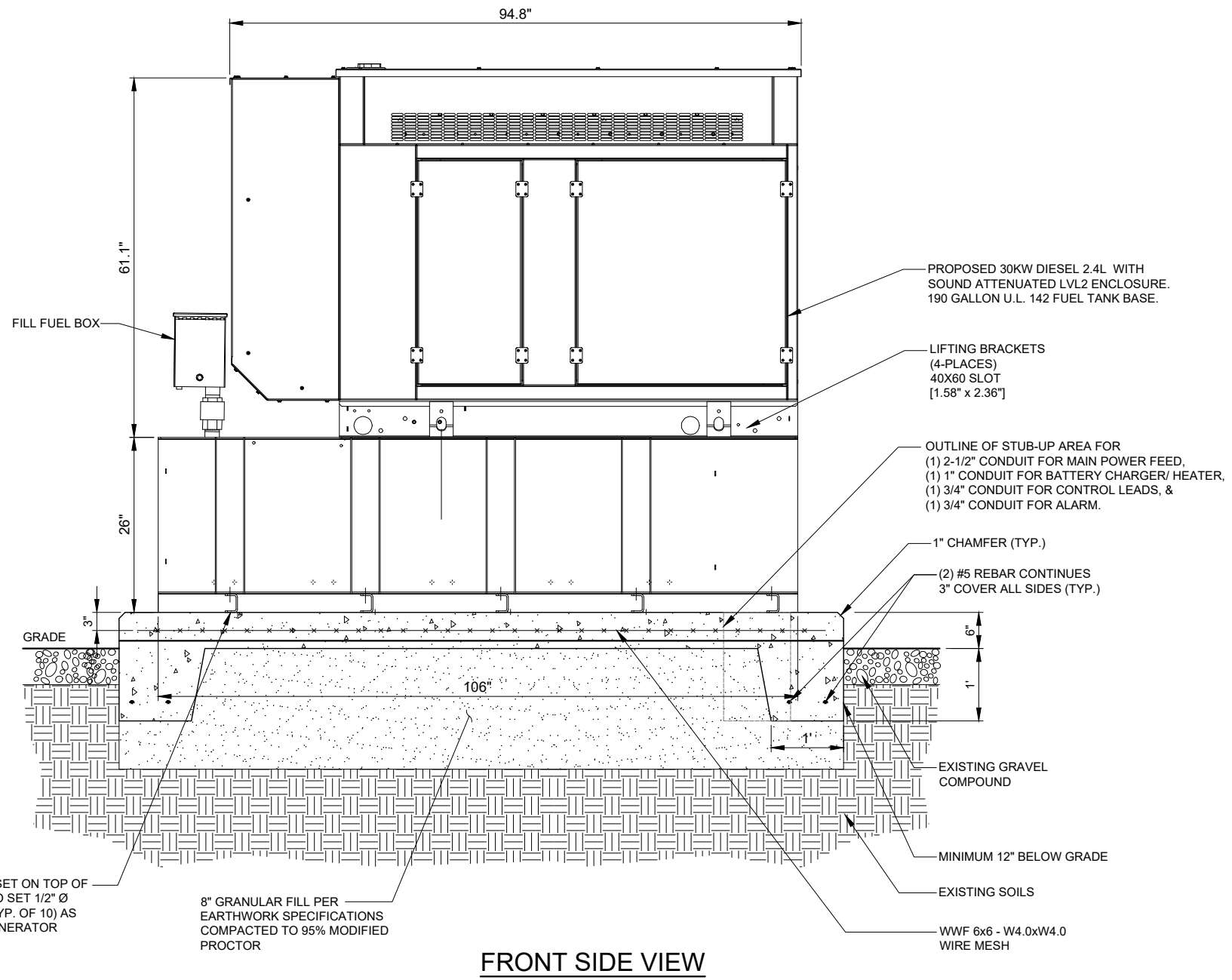
RECOMMENDED ELECTRICAL STUB-UPS
(SEE DETAILED VIEW & TOP VIEW)

(LOW VOLTAGE STUB UP)
1. TRANSFER SWITCH/COMMUNICATIONS CONDUITS, COMMUNICATIONS AND 2-WIRE START MUST NOT BE RUN IN CONDUIT W/ AC WIRING.

(HIGH VOLTAGE STUB UP)
1. AC LOAD LEAD CONDUIT AREA.
2. 120/240 VAC FROM UTILITY FOR OPTIONAL LOADS SUCH AS GFCI OUTLET, BLOCK HEATER, BATTERY CHARGER, AND OTHER 120/240 VAC OPTIONS. (GLAND PLATE INCLUDED)



1 TYPICAL GENERAC FOUNDATION DETAIL
SCALE: 1" = 1'



FRONT SIDE VIEW

2 TYPICAL GENERAC FOUNDATION DETAIL
SCALE: 1" = 1'

NOTES:

- SEE GENERATOR MANUFACTURE'S DRAWINGS FOR PHYSICAL LOCATION OF FUEL LINES, CONTROL AND POWER INTERCONNECTIONS AND OTHER INTERFACES THAT ARE TO BE CAST INTO THE CONCRETE. THE PREFERRED METHOD IS TO BRING THE CONDUIT THROUGH THE PAD TO THE UNDERSIDE OF THE GENERATOR (MINIMIZES RODENT DAMAGE). FINISH CONNECTIONS WITH FLEXIBLE CONDUIT PER GENERATOR MANUFACTURES SPECS. RIGID CONDUITS SHALL BE SECURED TO THE EXISTING SLAB, THEN BURIED BETWEEN SLAB AND SHELTER.
- THE GENERATOR SHALL BE LOCATED A MIN 5' AWAY FROM A COMBUSTIBLE WALL.
-THE GENERATOR SHALL BE LOCATED A MIN OF 3' AWAY FROM A NON-COMBUSTIBLE WALL.

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR



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NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

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DATE:	12/11/2025
PROJECT #:	33-3735

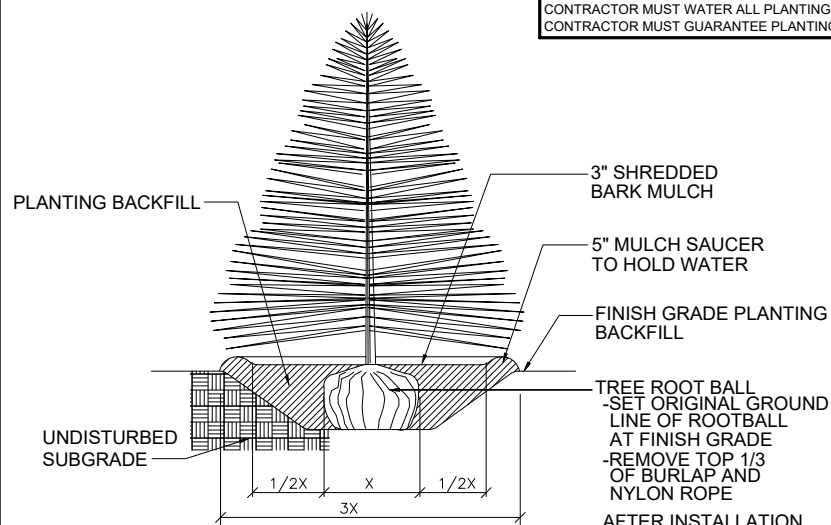
SHEET TITLE
GENERATOR
FOUNDATION DETAILS

SHEET NUMBER
C-6

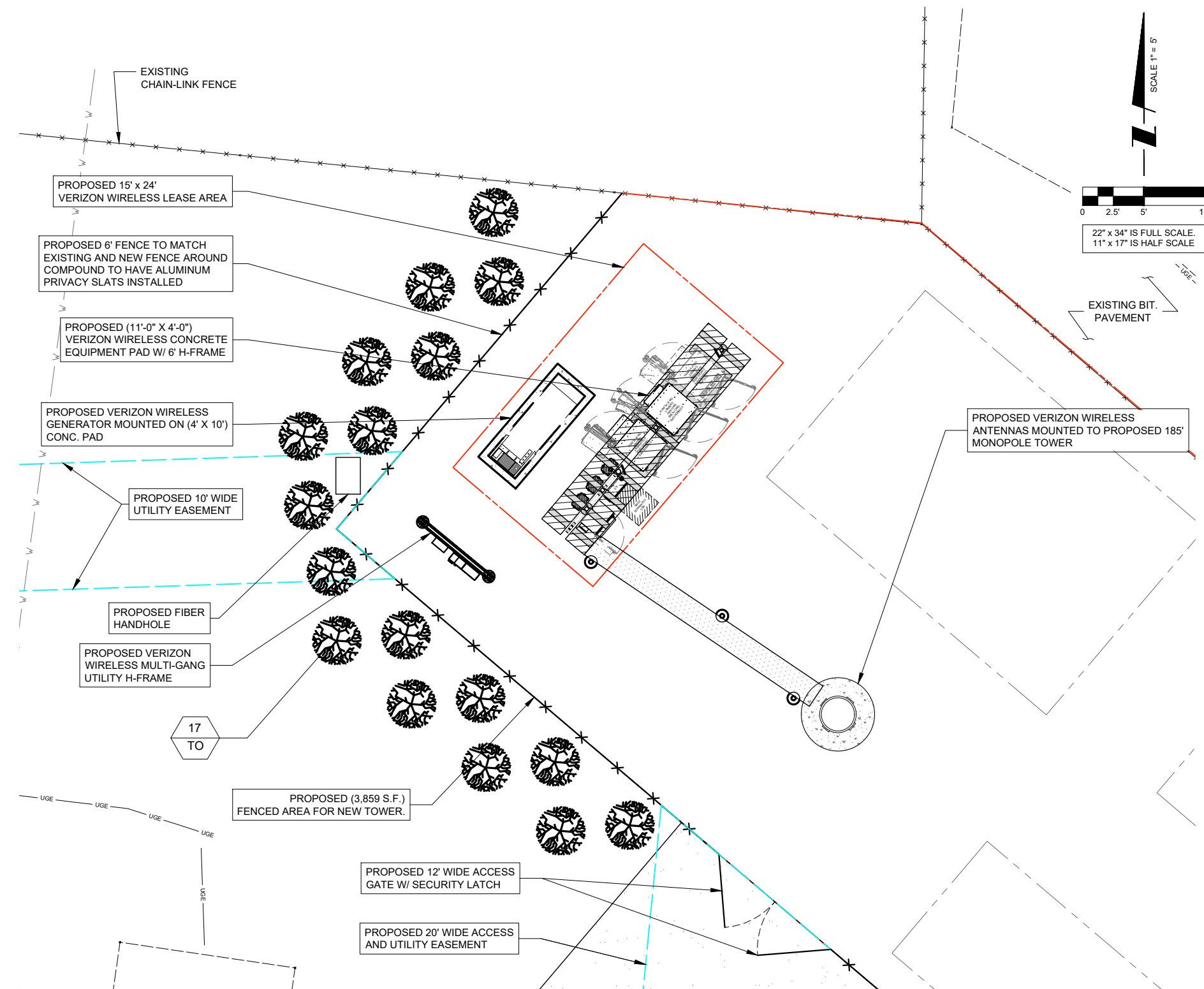
GENERAL LANDSCAPE NOTES

1. PRUNE NEWLY INSTALLED SHRUBS. WORK SHALL BE DONE BY EXPERIENCED PERSONNEL TO THE ACCEPTED HORTICULTURAL AND ARBORICULTURAL STANDARDS. PRUNING SHALL RESULT IN A LOOSE OUTLINE CONFORMING TO THE GENERAL SHAPE OF THE SHRUB TYPE. DO NOT USE HEDGE SHEARS.
2. ALL PLANTING STOCK SHALL BE NURSERY-GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. PLANTS SHALL BE FREE OF DISEASE, INSECTS EGGS, LARVAE AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS OR DISFIGUREMENT. THEY SHALL HAVE SOUND, HEALTHY VIGOROUS AND UNIFORM GROWTH TYPICAL OF THE SPECIES AND VARIETY, WELL-FORMED, FREE FROM IRREGULARITIES, WITH THE MINIMUM QUALITY AND SIZE CONFORMING TO AMERICAN STANDARD FOR NURSERY STOCK.
3. GUARENTEE: WARRANT ALL PLANT MATERIAL TO BE TRUE TO BOTANICAL NAME AND SPECIFIED SIZE. AFTER COMPLETION OF PLANTING, ALL PLANT MATERIALS SHALL BE WARRANTED AGAINST DEFECTS, INCLUDING DEATH AND UNSATISFACTORY GROWTH FOR A WARRANTY PERIOD OF ONE YEAR. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR DEFECTS RESULTING FROM NEGLIGENCE, DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS BEYOND THE CONTRACTORS CONTROL WHICH RESULT FROM NATURAL CAUSES SUCH AS FLOODS STORMS, FIRES OR VANDALISM.
REPLACEMENTS: DURING THE WARANTY PERIOD, REPLACE ONE TIME, AT NO ADDITIONAL COST TO THE OWNER, PLANT MATERIALS THAT ARE DEAD, OR IN THE OPINION OF THE LANDSCAPE ARCHITECT, IN AN UNHEALTHY OR UNSIGHTLY CONDITION. REJECTED PLANT MATERIALS SHALL BE REMOVED FROM THE SITE AT CONTRACTOR'S EXPENSE. REPLACEMENTS ARE TO BE MADE NO LATER THAN THE SUBSEQUENT PLANTING SEASON. RESTORE AREAS DISTURBED BY REPLACEMENT OPERATIONS.
4. MULCHING SHALL BE DONE WITHIN 48 HOURS AFTER PLANTING. MULCH SHRUB BEDS TO A UNIFORM DEPTH OF THREE INCHES. MULCH SHALL BE CLEAN COMPOSTED PINE BARK MULCH FREE OF FOREIGN MATERIAL AND LARGE PIECES OVER THREE INCHES LONG. DO NOT MULCH TREE AND SHRUB PLANTING PITS.
5. TOPSOIL SHALL CONSIST OF FERTILE FRIABLE NATURAL LOAM, CONTAINING A LIBERAL AMOUNT OF HUMUS AND SHALL BE SUBJECT TO INSPECTION AND APPROVAL. IT SHALL BE FREE OF ADMIXTURES OF SUBSOIL AND FREE OF CRAB GRASS, ROOTS, STICKS AND OTHER EXTRANEIOUS MATTER, AND SHALL NOT BE USED FOR PLANTING OPERATIONS WHILE IN A FROZEN OR MUDDY CONDITIONS.
6. REPAIR ALL TURF AREAS BY SEEDING. SEEDING INSTALLATION SHALL BE EXECUTED ONLY AFTER ALL FINISH GRADING HAS BEEN COMPLETED. NO SEEDING WORK SHALL BE DONE PAST SEPTEMBER 15, UNLESS APPROVED BY THE OWNER'S REPRESENTATIVE.
SEED: SEED MIX SHALL MATCH EXISTING TURF, OR BE A 50/50 MIX OF CERTIFIED IMPROVED BLEND OF BLUEGRASS AND CERTIFIED IMPROVED PERENNIAL RYE. MIX SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO PLANTING. SEEDING SHALL BE APPLIED AT A MINIMUM RATE OF 120 POUNDS PER ACRE. FUTERRA BLANKET, OR EQUAL, SHALL BE USED FOR EROSION CONTROL MULCH WHERE NECESSARY IN LIEU OF HYDRO MULCH.

NOTE:
CONTRACTOR MUST WATER ALL PLANTINGS
CONTRACTOR MUST GUARANTEE PLANTINGS FOR 1 YEAR.



2 EVERGREEN TREE PLANTING
N.T.S.



OPERATES 24 HOURS
A DAY 365 DAYS A YEAR



CALL JULIE TOLL FREE
1(800) 892-0123
48 HOURS BEFORE
YOU DIG

PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	COMMENTS
TO	THUJA OCCIDENTALIS	AMERICAN ARBORVITAE	17	5 FT. HT. MIN.	B & B (BALLED & BURLAPPED)

X PLANT QUANTITY
XX PLANT SYMBOL

1 LOCATION PLAN

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (647) 619-5397
FAX: (647) 706-7415



NO.	DESCRIPTION	BY	DATE	REVISIONS					
				ISSUED FOR REVIEW	ADDITION OF LANDSCAPE PLAN	ADDITION OF GRADING PLAN	REVISED PER COMMENTS	ISSUED FOR PERMIT	REVISED PER COMMENTS
1	ISSUED FOR REVIEW	APD	01/08/26						
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MGD LOC#
5000975492
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NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

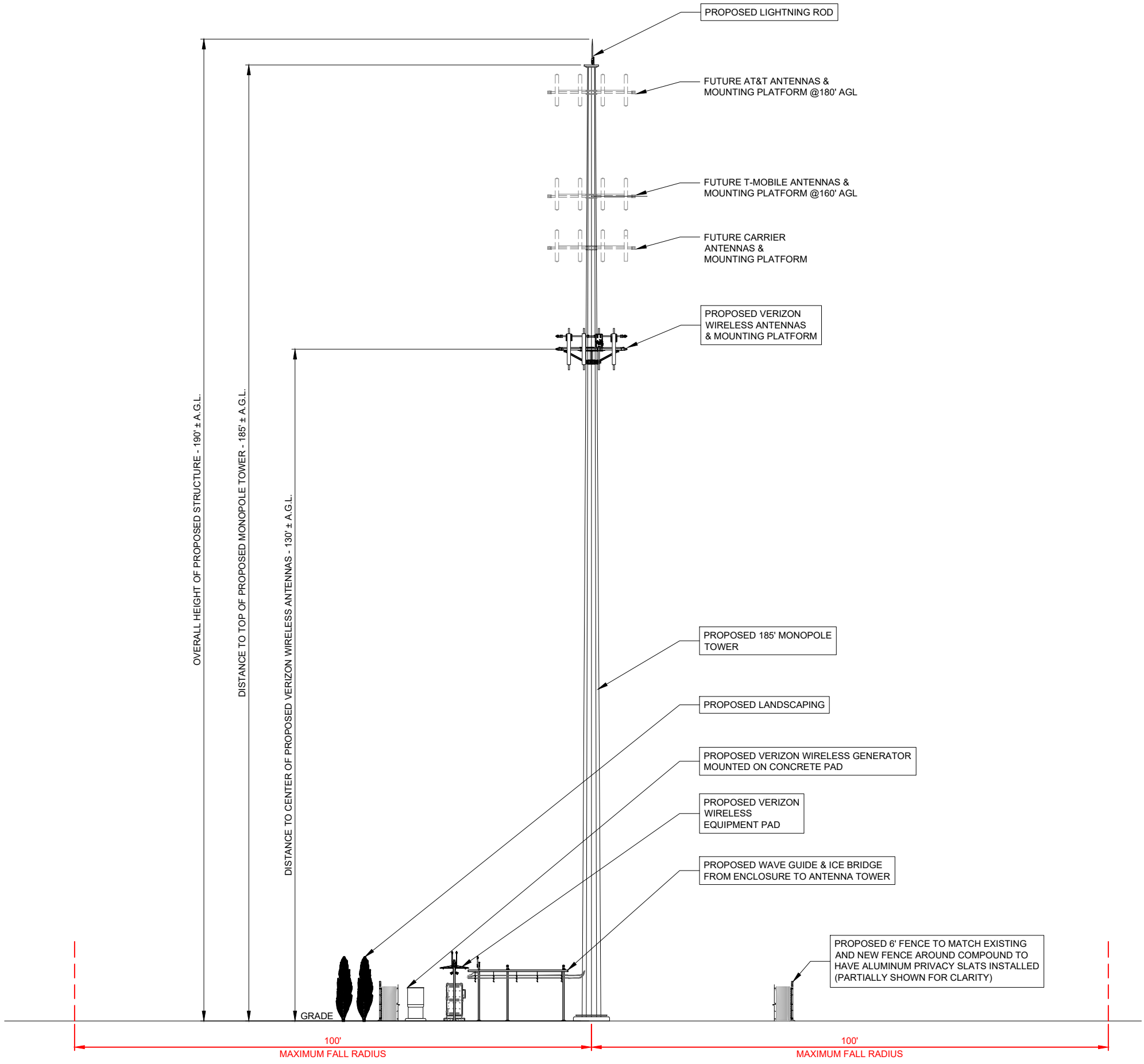
DRAWN BY: JUR
CHECKED BY: DSS
DATE: 12/11/2025
PROJECT #: 33-3735

SHEET TITLE
LANDSCAPE PLAN

SHEET NUMBER

L-1

NOTES:
 THIS DRAWING IS FOR EXHIBIT AND LAYOUT PURPOSES ONLY.
 REFER TO STRUCTURAL ANALYSIS REPORT PROVIDED BY TOWER OWNER.
 G.C. TO ADJUST HEIGHT OF MOUNT BY ±6" AS NEEDED TO AVOID CLIMBING FACILITIES. G.C. IS NOT TO REMOVE OR DAMAGE CLIMBING FACILITIES DURING INSTALLATION.



1 SOUTH ELEVATION
 SCALE: 3/32" = 1'-0"

verizon
 1701 GOLF ROAD,
 TOWER 2, SUITE 400
 ROLLING MEADOWS, IL 60008
 PHONE: (847) 619-5397
 FAX: (847) 706-7415



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MGD LOC#
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NAPERVILLE
 KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
 NAPERVILLE, IL 60564

DRAWN BY: JUR
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SHEET TITLE
 SITE ELEVATION

SHEET NUMBER
ANT-1

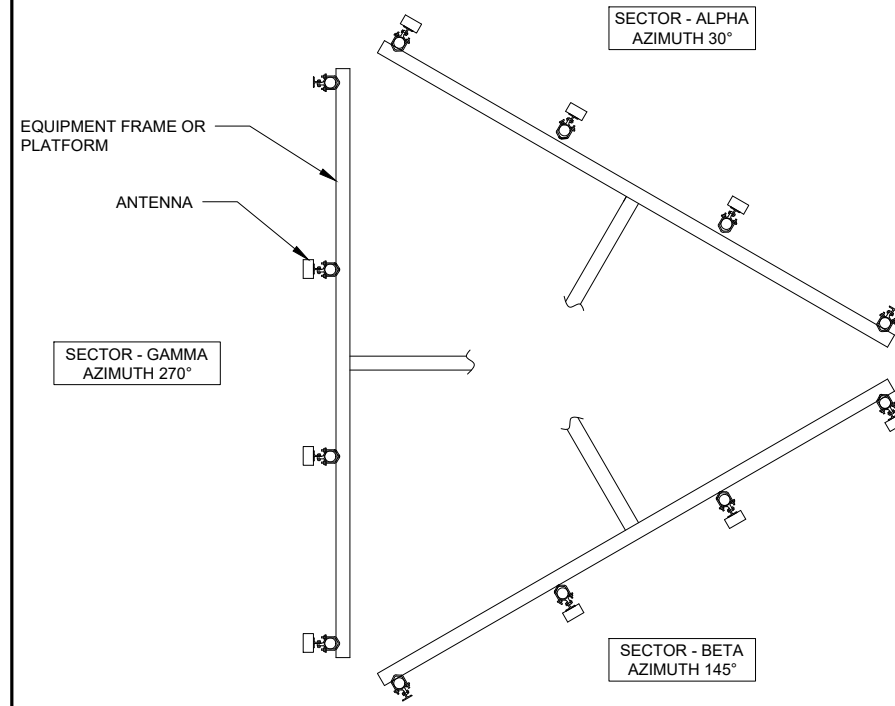
Antenna Summary

Added													
700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Centerline	Tip Height	Azimuth	Inst. Type	Quantity	Item ID
				5G	Ericsson	AIR6419	AIR 6419 B77D Radio Unit	130	131.2	30(A) 145(B) 270(C)	PHYSICAL	3	1900483699
		5G	LTE		Ericsson	AIR3283	AIR 3283 B25 B66	130	132	30(A) 145(B) 270(C)	PHYSICAL	3	1900486642
LTE	5G				JMA Wireless	MX04FIT865-03E		130	134	30(A) 145(B) 270(C)	PHYSICAL	3	
Removed													
700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Centerline	Tip Height	Azimuth	Inst. Type	Quantity	Item ID
No data available.													
Retained													
700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Centerline	Tip Height	Azimuth	Inst. Type	Quantity	Item ID
No data available.													

Added: 9 Removed: 0 Retained: 0

1 ANTENNA SUMMARY
N.T.S.

NOTE:
THIS DETAIL IS SCHEMATIC AND IS INTENDED TO IDENTIFY ANTENNA AZIMUTHS. REFER TO DETAILS 1 & 2 ON THIS SHEET FOR EQUIPMENT MODELS AND QUANTITIES. REFER TO SHEET ANT-3A FOR MOUNT DETAILS.



3 ANTENNA PLAN SCHEMATIC
N.T.S.

Equipment Summary

Added														
Equipment Type	Location	700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Cable Length	Cable Size	Install Type	Quantity	Item ID
RRU	Tower			5G	LTE		ERICSSON INC	AIR3283 B25+B66	AIR 3283 B25 B66			PHYSICAL	0	1900486642
RRU	Tower	LTE	5G				ERICSSON INC	4490	DB Radio 4490HP B5+B13- Rem Radio Unit			PHYSICAL	3	1900483084
RRU	Tower					5G	ERICSSON INC	AIR6419_B77D	AIR 6419 B77D Radio Unit			PHYSICAL	0	1900483699
Hybrid Cable	Tower						HUBER & SUHNER INC	6X12 STD HYB (6AWG)_xxx FT W/GLAND			1-5/8 inch	PHYSICAL	3	
OVP Box	Tower						RAYCAP INC	RVZDC-3315-PF-48	TOWER TOP AND BASE POWER PROTECTION FIBE			PHYSICAL	3	1900422667
Alarm	Tower						RAYCAP INC	3315-ALM-RS485	RETROFIT FOR THE 6OVP DIST BOX			PHYSICAL	3	1900070685
Removed														
Equipment Type	Location	700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Cable Length	Cable Size	Install Type	Quantity	Item ID
No data available.														
Retained														
Equipment Type	Location	700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Cable Length	Cable Size	Install Type	Quantity	Item ID

2 EQUIPMENT SUMMARY
N.T.S.



NO.	DESCRIPTION	BY	DATE
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NAPERVILLE, IL 60564

DRAWN BY:	JJR
CHECKED BY:	DSS
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PROJECT #:	33-3735

SHEET TITLE
ANTENNA INFORMATION

SHEET NUMBER
ANT-2

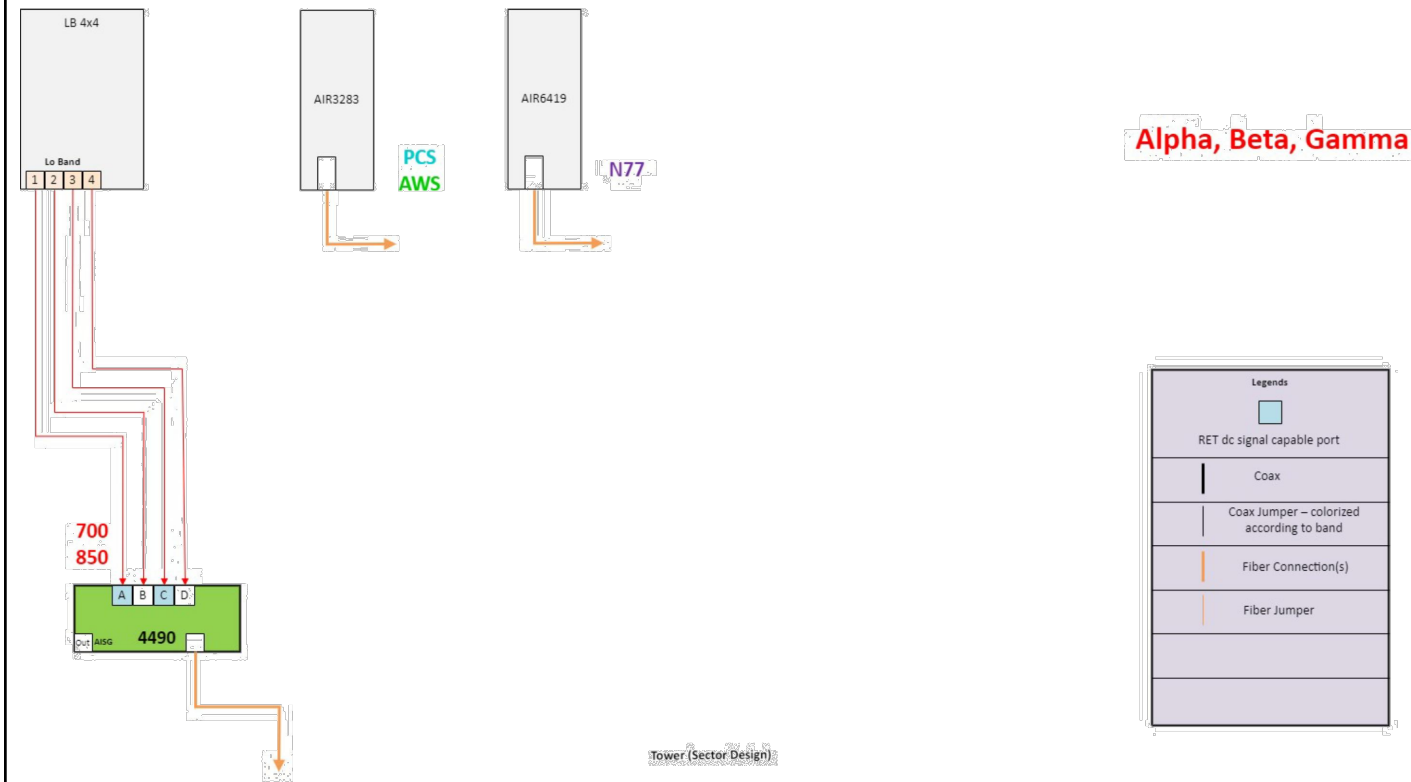
SECTOR	HYBRID LENGTH				TOTAL (±)
	AT GROUND		AT STRUCTURE		
	HOR (±)	VER (±)	HOR (±)	RAYCAP CL (±)	
MAIN	23'	8'	8'	130'	169'

RF EMISSIONS REPORT REQUIRED

YES NO

DATE OF REPORT: _____

verizon
 1701 GOLF ROAD,
 TOWER 2, SUITE 400
 ROLLING MEADOWS, IL 60008
 PHONE: (647) 619-5397
 FAX: (647) 706-7415



Alpha, Beta, Gamma

NOTE TO RF, G.C. & IMPLEMENTATION:
 RAYCAP CHART IS CURRENTLY BEING UPDATED BY VERIZON WIRELESS. PRIOR TO FINAL AND CONSTRUCTION, CHART TO BE INSERTED. GC TO NOTIFY VERIZON WIRELESS IF THIS NOTE IS STILL ON THE DRAWINGS PRIOR TO CONSTRUCTION.

Raycap Layout - Raycap Per Sector					
POWER					
3	700 RRU	6	700 RRU2/A2		
2	PCSLT RRU	5	PCSLT RRU2/A2		
1	AWS RRU	4	AWS RRU2/A2		
FIBER					
1	2	3	4	5	6
AWS RRU	AWS RRU2/A2	PCSLT RRU	PCSLT RRU2/A2	700 RRU	700 RRU/A2
7	8	9	10	11	12

NO.	DESCRIPTION	DATE	BY	REVISIONS	
				ISSUED FOR REVIEW	REVISOR COMMENTS
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 PROJECT #: 33-3735

SHEET TITLE
 ANTENNA INFORMATION

SHEET NUMBER
ANT-2A

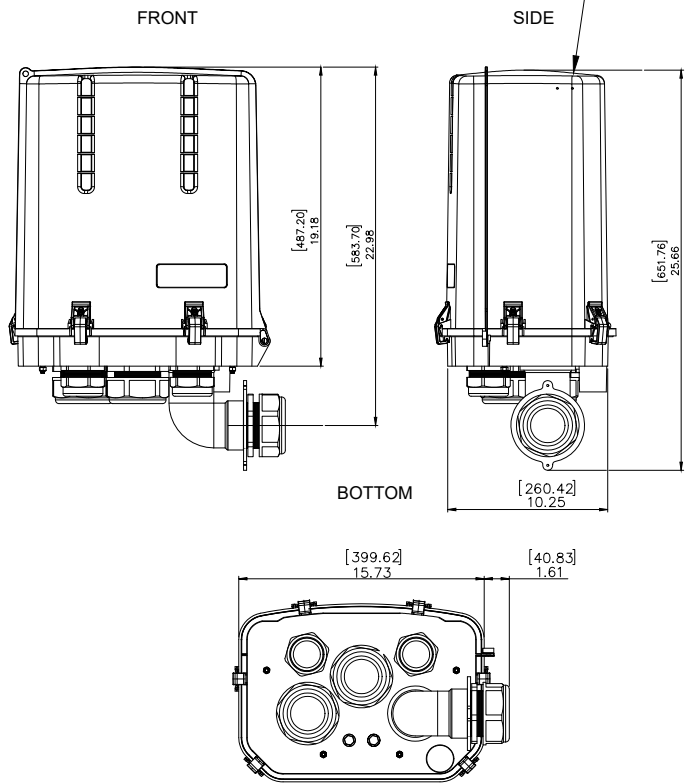
1 CABLE DIAGRAM
 N.T.S.

2 RAYCAP TABLE
 N.T.S.

SPECIFICATIONS DC SURGE PROTECTION FOR RRU/INTEGRATED ANTENNA RADIO HEAD
 APPLICATION: TOWER / BASE / ROOFTOP / ROOFTOP DISTRIBUTION MODELS
 WEIGHT: 32LBS (14.51 KG)

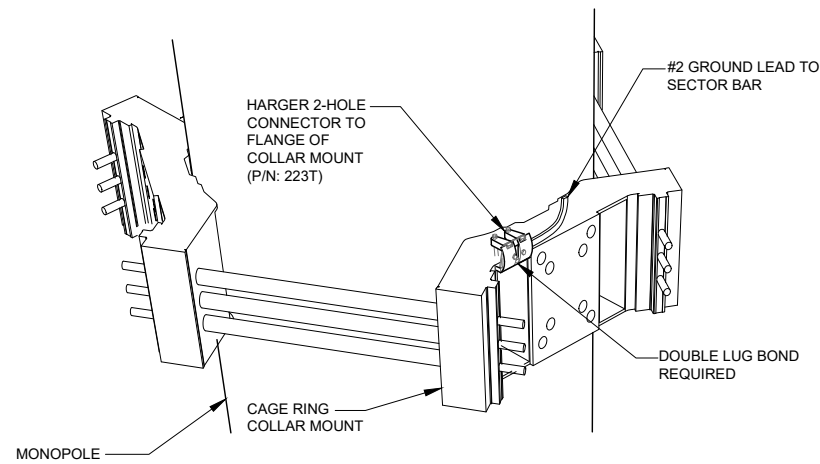
[mm]
 INCHES

PROPOSED RAYCAP JUNCTION
 BOX MODEL# RCMD-3315-PF-48

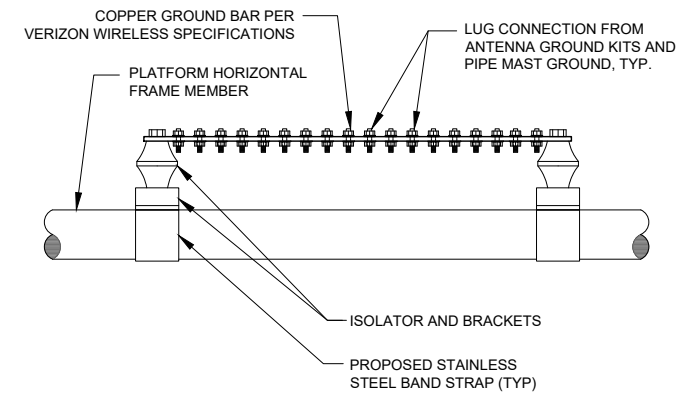


1 RAYCAP JUNCTION BOX DETAIL
 SCALE: N.T.S.

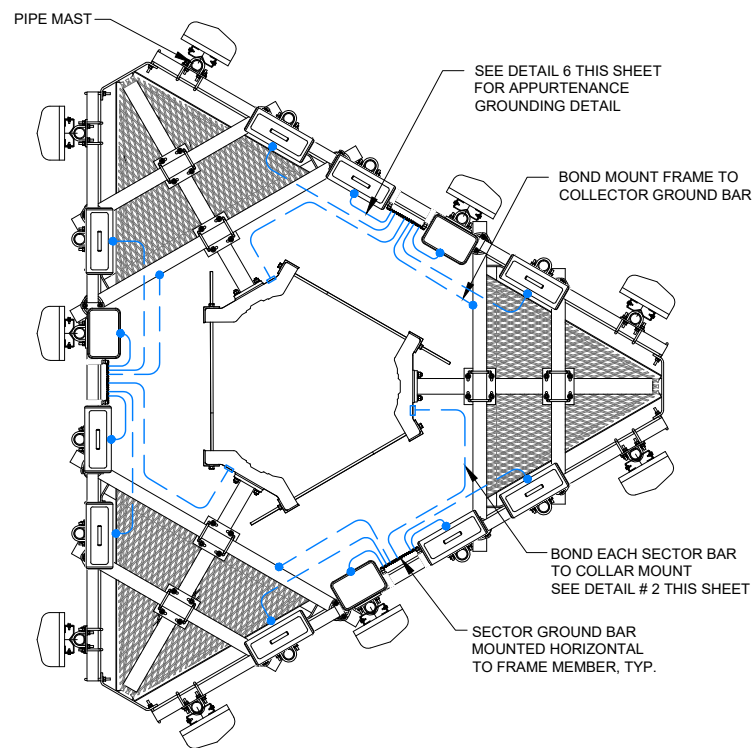
NOTE: EACH SECTOR BAR TO HAVE TO HAVE SEPARATE GROUND LEAD TO COLLAR MOUNT



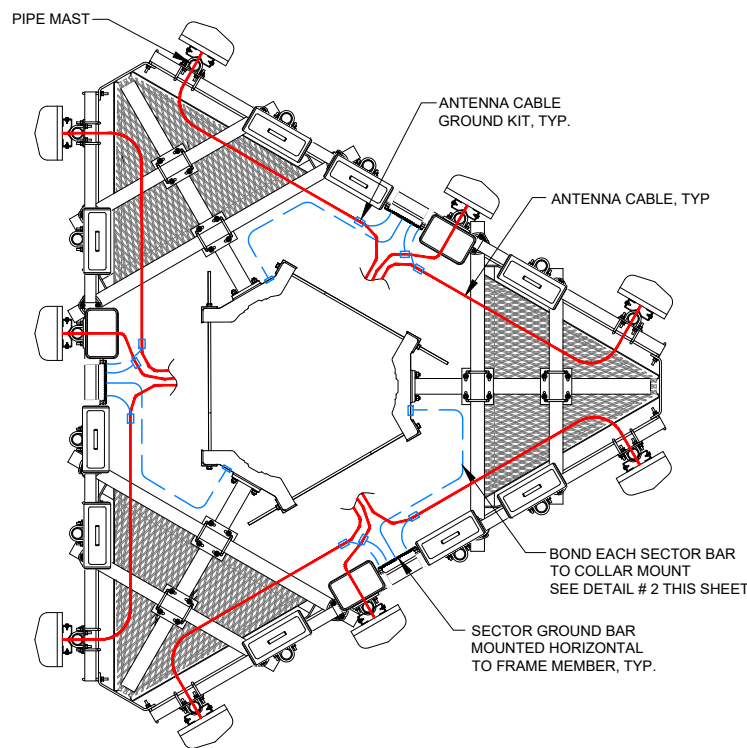
2 MONOPOLE GROUND AT ANTENNA LEVEL
 SCALE: N.T.S.



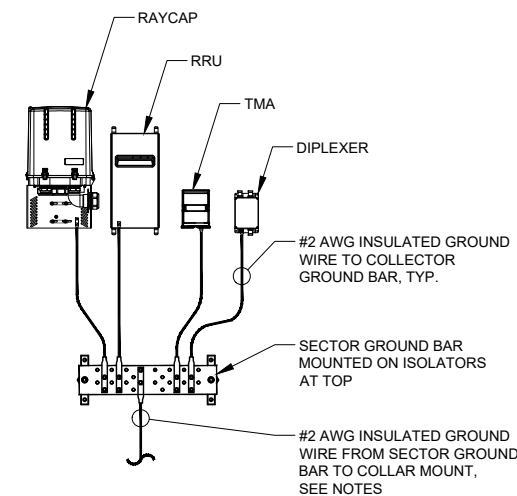
3 GROUND BAR AT SECTOR
 N.T.S.



4 EQUIPMENT GROUNDING AT ANTENNA ELEVATION
 N.T.S.



5 ANTENNA CABLE GROUNDING AT ANTENNA ELEVATION
 N.T.S.



THIS DETAIL IS CONCEPTUAL TO DEMONSTRATE GROUNDING AT THE ANTENNA LEVEL. VERIFY EQUIPMENT, MOUNTING FRAME, AND AZIMUTH WITH ANT-1 SHEET & ECR.

6 TYPICAL APPURTENANCE GROUNDING AT ANTENNA LEVEL
 N.T.S.

APPROVED UL LISTED GROUND CLAMPS

APPLICATION	UL LISTED HARGER PART #
METAL FLANGE	213, 213T, 213TTP
PIPE MEMBER	CPC SERIES (SIZED TO FIT DIAMETER OF PIPE)
LARGER PIPE MEMBER	UPC SERIES (UNIVERSAL PIPE CLAMP) SIZED TO FIT DIAMETER OF PIPE
TO COLLAR MOUNT	233T

NOTES:

- THE BOND BETWEEN THE SECTOR BAR AND THE TOWER IS TO BE MECHANICALLY BONDED TO COLLAR MOUNT. THE MECHANICAL BOND IS TO BE A UL APPROVED MECHANICAL CONNECTION CLAMP.
- GROUND CONNECTIONS MUST BE DOUBLE HOLE CONNECTION. SPECIAL EXCEPTION ONLY TO EQUIPMENT THAT WILL NOT ALLOW FOR A DOUBLE HOLE CONNECTION.

verizon
 1701 GOLF ROAD,
 TOWER 2, SUITE 400
 ROLLING MEADOWS, IL 60008
 PHONE: (847) 619-5397
 FAX: (847) 706-7415



NO.	DESCRIPTION	DATE	BY					
			APD	TJS	PP	TJS	TJS	APD
1	ISSUED FOR REVIEW	01/08/26	APD	TJS	PP	TJS	TJS	APD
2	ADDITION OF LANDSCAPE PLAN	01/19/26						
3	ADDITION OF GRADING PLAN	01/26/26						
4	REVISED PER COMMENTS	02/23/26						
5	ISSUED FOR PERMIT	02/27/26						
6	REVISED PER COMMENTS	03/04/26						
	REVISED PER COMMENTS	03/23/26						

MGD LOC#
 5000975492
 FUZE ID#: 17562059

NAPERVILLE
 KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
 NAPERVILLE, IL 60564

DRAWN BY: JJR
 CHECKED BY: DSS
 DATE: 12/11/2025
 PROJECT #: 33-3735

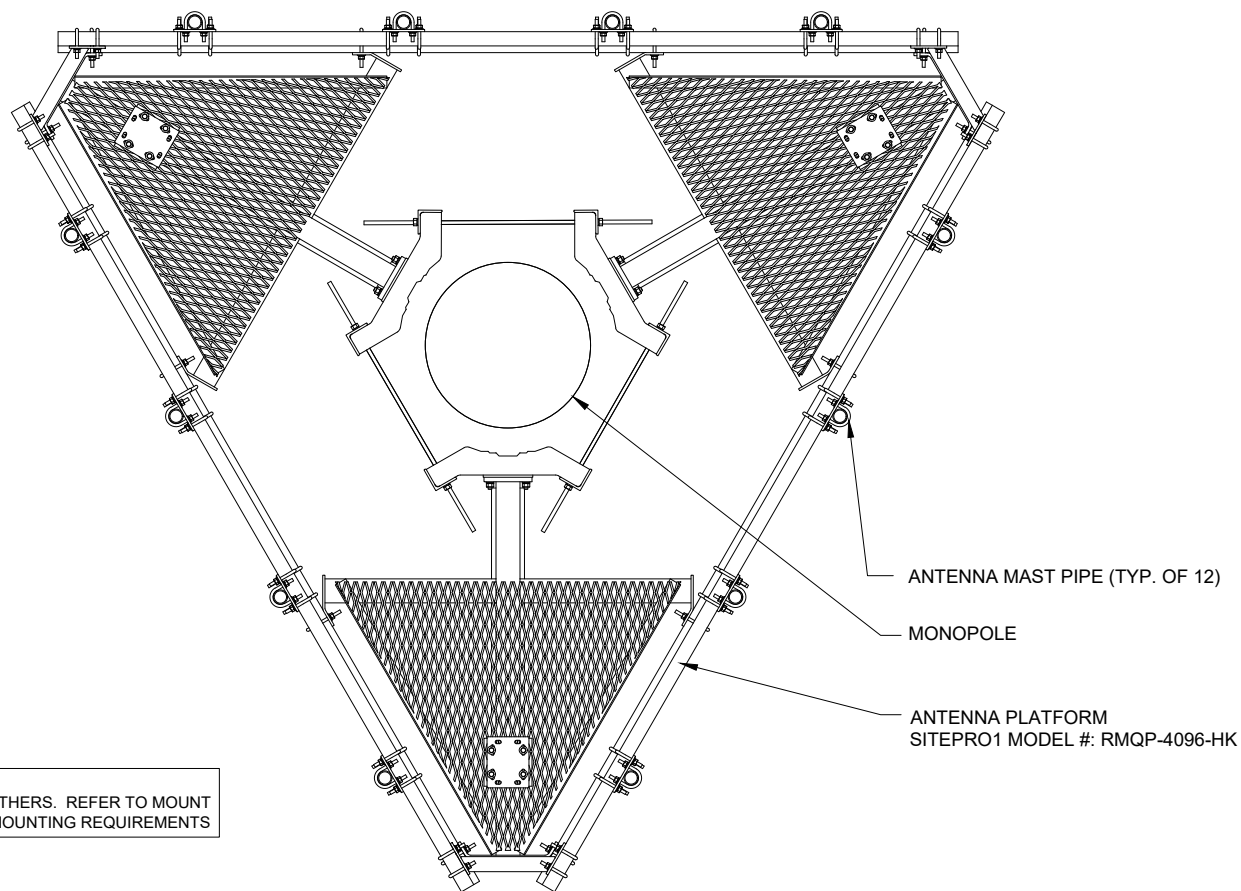
SHEET TITLE
 SITE
 DETAILS

SHEET NUMBER

ANT-3

VERIZON WIRELESS NSTD-445 ANTENNA MOUNTING SYSTEM CLASSIFICATION
STANDARD ASSUMPTIONS:

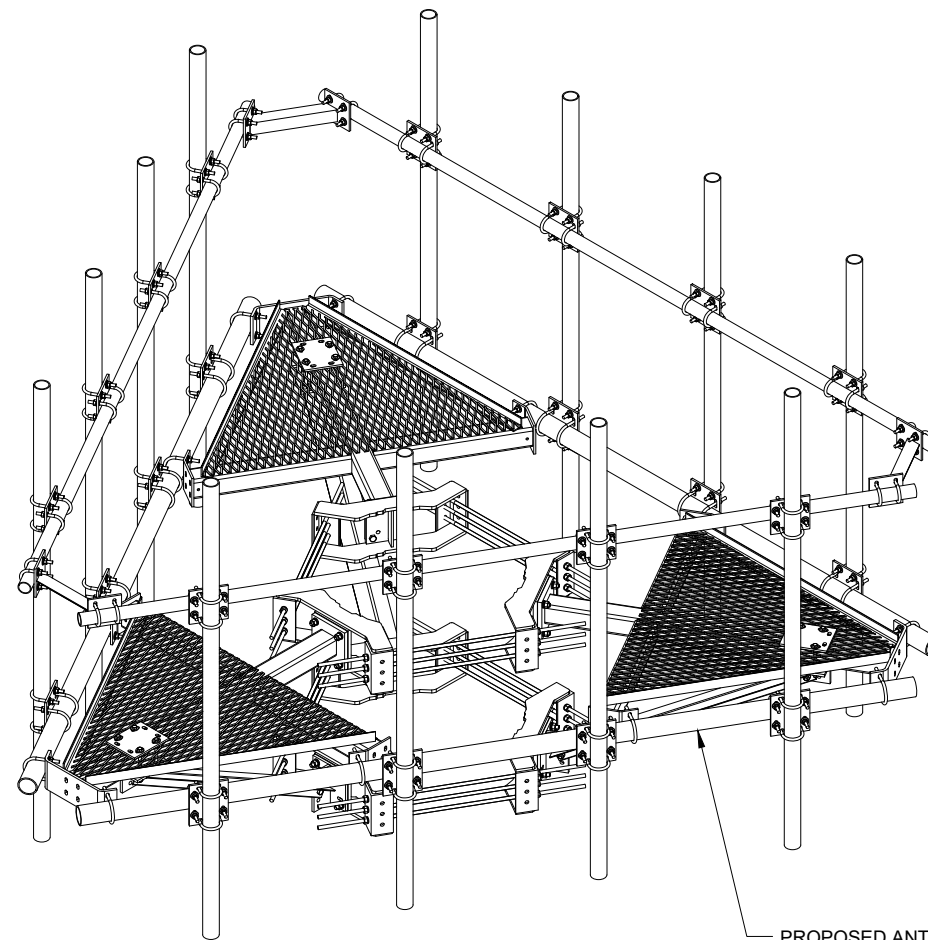
- MAXIMUM ALLOWABLE VERTICAL OFFSET FROM MOUNT CENTERLINE TO ANTENNA CENTERLINE IS 6".
- MOUNT PIPES ARE ASSUMED TO BE EQUALLY SPACED ON EACH SECTOR, WITH AN ALLOWABLE 6" MAXIMUM HORIZONTAL OFFSET FROM EQUAL SYMMETRIC SPACING.
- ALL APPURTENANCES/EQUIPMENT MUST BE ATTACHED TO MOUNT PIPES ON MOUNT FACE (NOT ON SECTOR FRAME ARMS).
- ANTENNAS MOUNTED ON SIDE-BY-SIDE BRACKETS ARE NOT PERMITTED.
- MAXIMUM NUMBER OF MOUNT PIPES IS INDICATED IN MOUNT CLASSIFICATION.
- IF SITE CONDITIONS ARE OUTSIDE OF THESE PARAMETERS, CONTACT ENGINEER OF RECORD FOR ALTERNATIVE OPTIONS.



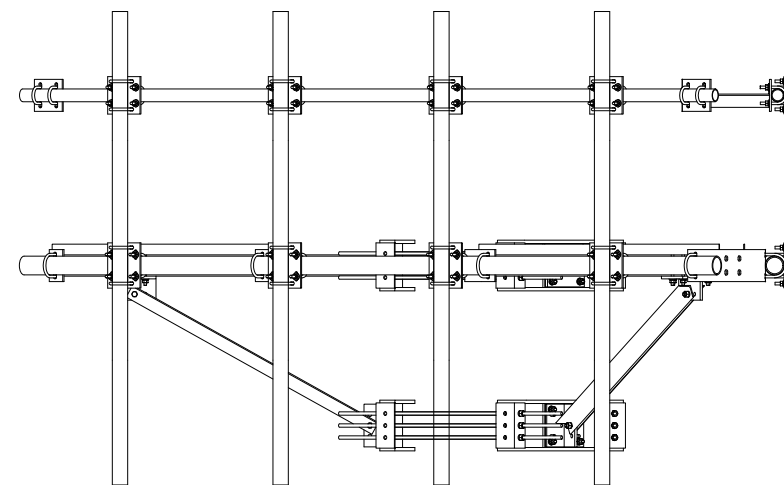
1 PLAN VIEW
N.T.S.

NOTE:
MOUNT SPECIFICATION BY OTHERS. REFER TO MOUNT ANALYSIS BY OTHERS FOR MOUNTING REQUIREMENTS

- NOTES:
1. UNLESS SPECIFIED DIFFERENTLY IN RFDS, G.C. TO MOUNT ANTENNAS WITH 700 TECHNOLOGY ON OPPOSITE ENDS OF FRAME.
 2. ANTENNAS & EQUIPMENT TO BE INSTALLED PER MOUNT MANUFACTURER'S RECOMMENDED MOUNTING LOCATIONS
 3. TO ADJUST HEIGHT OF PLATFORM BY ±6" AS NEEDED TO AVOID CLIMBING FACILITIES. G.C. IS NOT TO REMOVE OR DAMAGE CLIMBING FACILITIES DURING INSTALLATION.



2 ISOMETRIC VIEW
N.T.S.



3 PROPOSED PLATFORM SUPPORT SIDE VIEW
N.T.S.

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (847) 619-5397
FAX: (847) 706-7415



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6	REVISED PER COMMENTS	03/23/26	APD

MGD LOC#
5000975492
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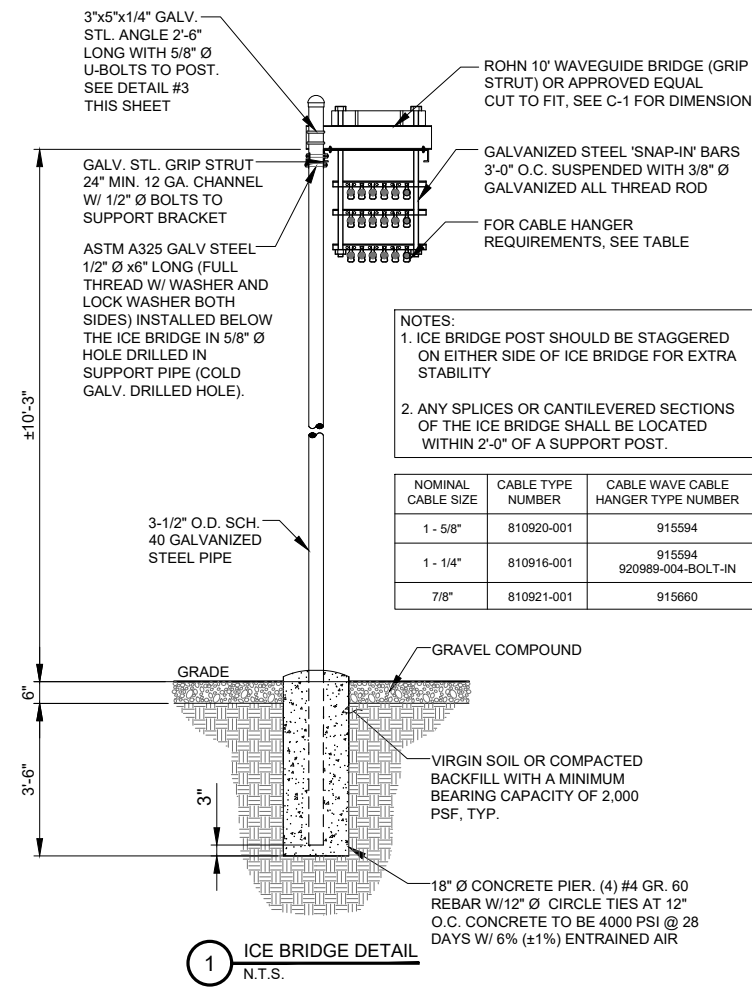
NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

DRAWN BY: JUR
CHECKED BY: DSS
DATE: 12/11/2025
PROJECT #: 33-3735

SHEET TITLE
ANTENNA
MOUNTING DETAILS

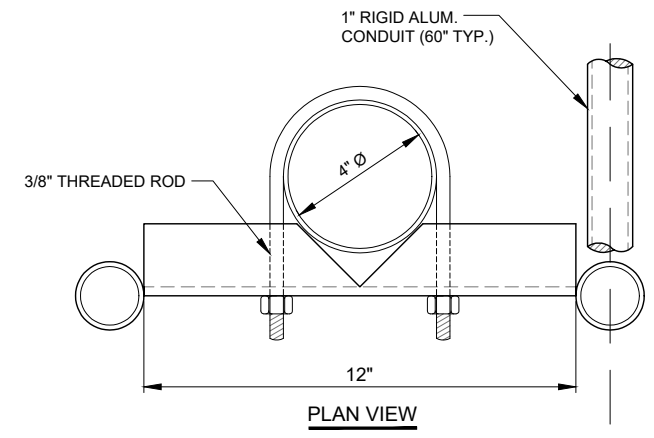
SHEET NUMBER
ANT-3A



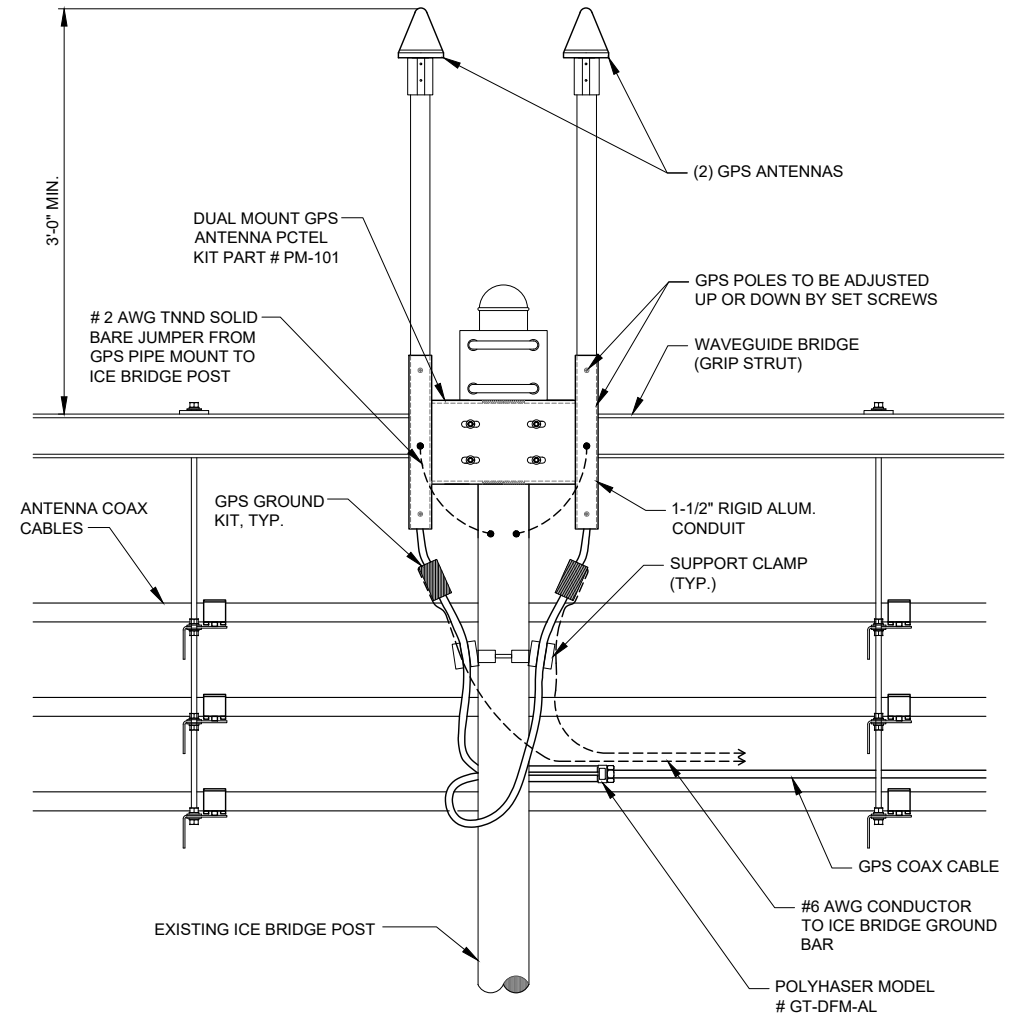
NOTES:
 1. ICE BRIDGE POST SHOULD BE STAGGERED ON EITHER SIDE OF ICE BRIDGE FOR EXTRA STABILITY
 2. ANY SPLICES OR CANTILEVERED SECTIONS OF THE ICE BRIDGE SHALL BE LOCATED WITHIN 2'-0" OF A SUPPORT POST.

NOMINAL CABLE SIZE	CABLE TYPE NUMBER	CABLE WAVE CABLE HANGER TYPE NUMBER
1 - 5/8"	810920-001	915594
1 - 1/4"	810916-001	915594 920989-004-BOLT-IN
7/8"	810921-001	915660

1 ICE BRIDGE DETAIL
N.T.S.

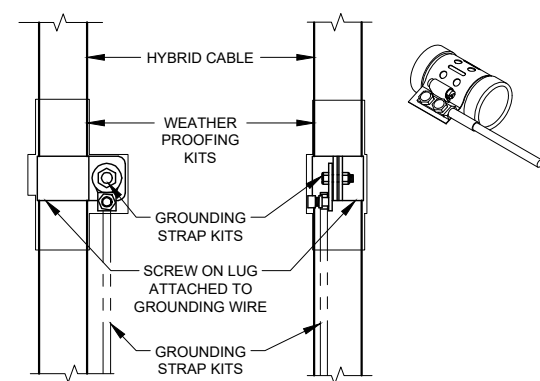


PLAN VIEW



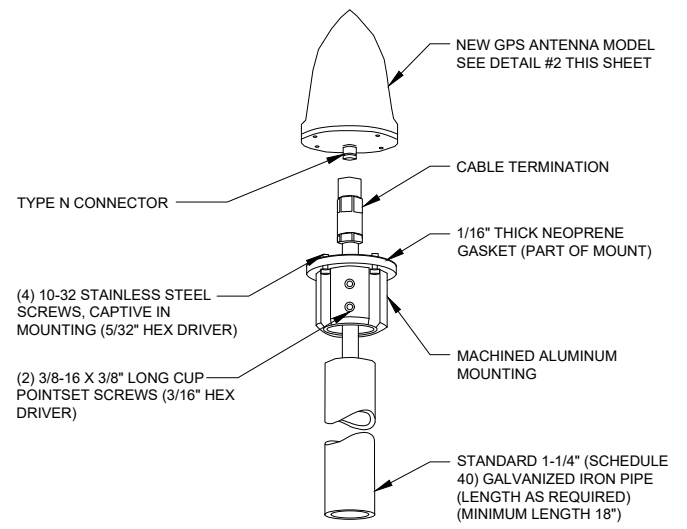
2 GPS MOUNTING DETAIL
N.T.S.

NOTES:
 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 2. THIS DETAIL IS TYPICAL FOR EACH CABLE WHERE IT IS SPECIFIED TO BE GROUNDED.
 3. CABLE TO BE GROUNDED AT ANTENNA LEVEL AND PRIOR TO ENTERING SHELTER ENTRY PANEL.
 4. CABLE ALSO TO BE GROUNDED TO GROUND BAR AT TOWER BASE IF APPLICABLE.
 5. USE ONLY TIN PLATED GROUNDING KITS.



4 COAX/HYBRID GROUND KIT DETAIL
N.T.S.

NOTE:
 INSTALL EACH GPS ON THE CLOSEST ICE BRIDGE POSTS TO SHELTER (TYP. AT 2 LOCATIONS).



3 TYPICAL GPS DETAIL
N.T.S.

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MGD LOC#
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 FUZE ID#: 17562059

NAPERVILLE
 KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
 NAPERVILLE, IL 60564

DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
 SITE
 DETAILS

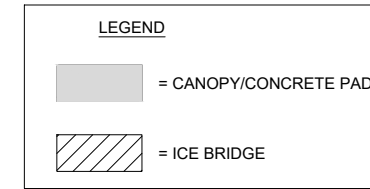
SHEET NUMBER
ANT-4

NOTES:

1. THIS IS AN UNMANNED STORAGE AND EQUIPMENT PAD ONLY.
2. PAD SHALL BE PLACED ACCORDING TO STATE AND LOCAL CODE FROM ANY PROPERTY LINE, INTERIOR LOT LINE OR ANY OTHER BUILDING.
3. ALL ITEMS NOTED AS "FIELDWORK" SHALL BE INSTALLED AND TESTED AT THE FACTORY THEN REMOVED FOR TRANSPORT AND REINSTALLED AT THE FINAL SITE.
4. PAD NOT DESIGNED FOR INSTALLATION IN A FLOOD PRONE AREA.
5. THIS PAD DOES NOT CONTAIN PLUMBING FACILITIES.
6. THIS ENCLOSURE IS CLASSIFIED AS USE S-2 (IBC, FBC), U (OBC)
2006-2015 INTERNATIONAL BUILDING CODE
2009-2012 UNIFORM MECHANICAL CODE
2006-2015 INTERNATIONAL MECHANICAL CODE
2004 CHICAGO BUILDING CODE

7. CONCRETE PAD AND ASSOCIATED EQUIPMENT IS PROVIDED BY OWNER UNDER SEPARATE CONTRACT. EQUIPMENT ENCLOSURE INFORMATION INDICATED HEREIN IS PROVIDED FOR REFERENCE ONLY AND IS TAKEN FROM MANUFACTURER'S AVAILABLE DATA. REFER TO CIVIL, STRUCTURAL AND ELECTRICAL DRAWINGS FOR WORK TO BE PERFORMED UNDER THIS CONTRACT.

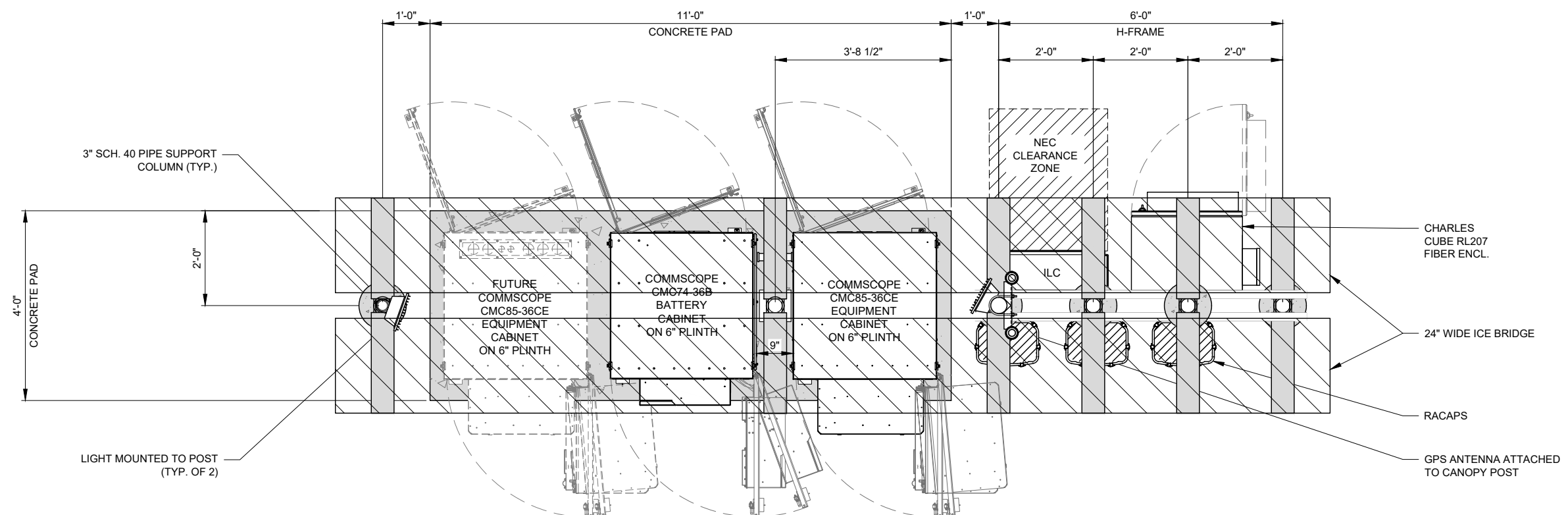
DESIGN PARAMETERS
 USE GROUP: S-2 (IBC, FBC)
 U (OBC)
 CONSTRUCTION TYPE: V-B (IBC, FBC)
 OCCUPANCY CATEGORY: II
 ROOF LIVE LOAD: 81 PSF
 FLOOR LIVE LOAD: 986 PSF
 GROUND SNOW LOAD: 96 PSF (N/A FOR FBC 2014)
 WIND SPEED: 150 MPH/EXPOSURE C
 SEISMIC ZONE FOR SBC & UBC: 4
 SEISMIC DESIGN CATEGORY FOR IBC: E (IBC)
 USE GROUP-III (OBC)
 SITE CLASS-D (OBC)
 BULLET RESISTANCE LEVEL 4 FOR 4" CONCRETE PER IBC
 CONCRETE f_c: 5000 PSI AT 28 DAYS
 CONCRETE UNIT WEIGHT: 115 PCF



verizon
 1701 GOLF ROAD,
 TOWER 2, SUITE 400
 ROLLING MEADOWS, IL 60008
 PHONE: (847) 619-5397
 FAX: (847) 706-7415



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NAPERVILLE
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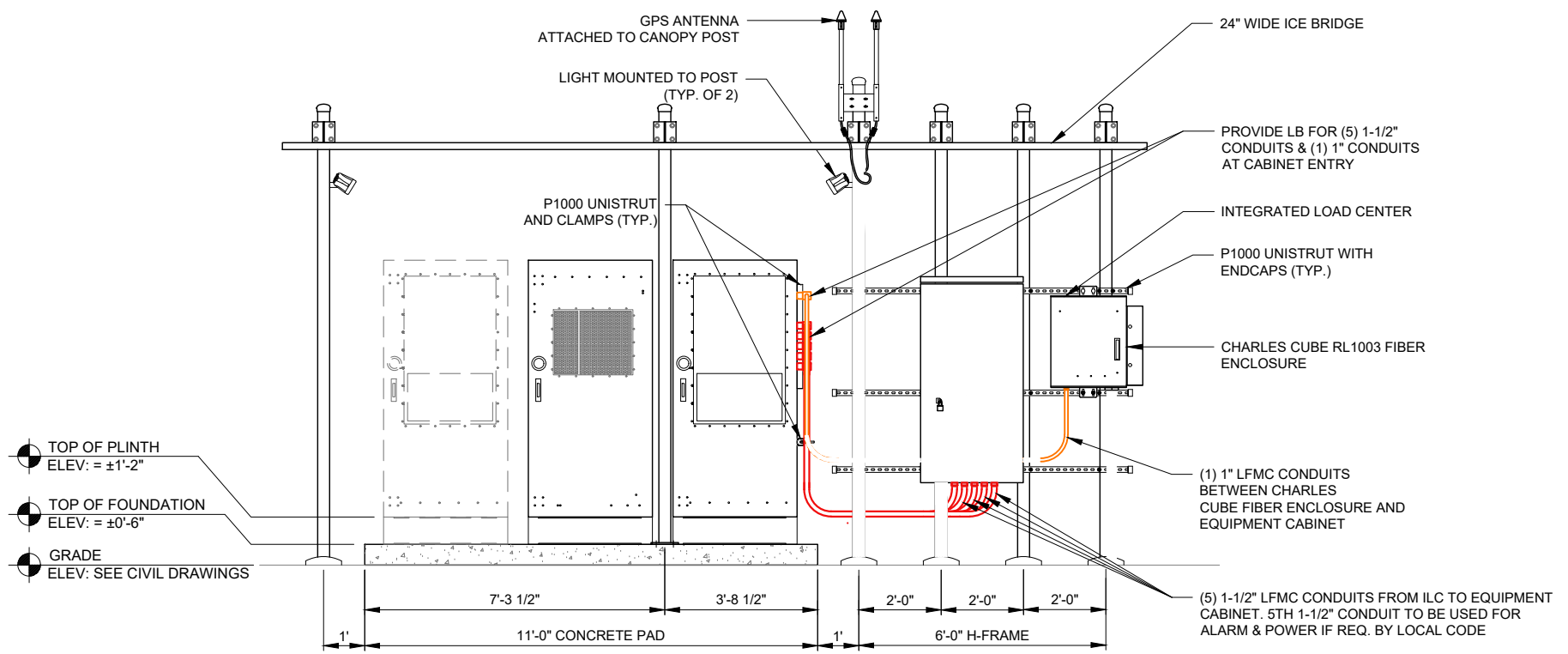
8712 PLAINFIELD NAPERVILLE RD
 NAPERVILLE, IL 60564

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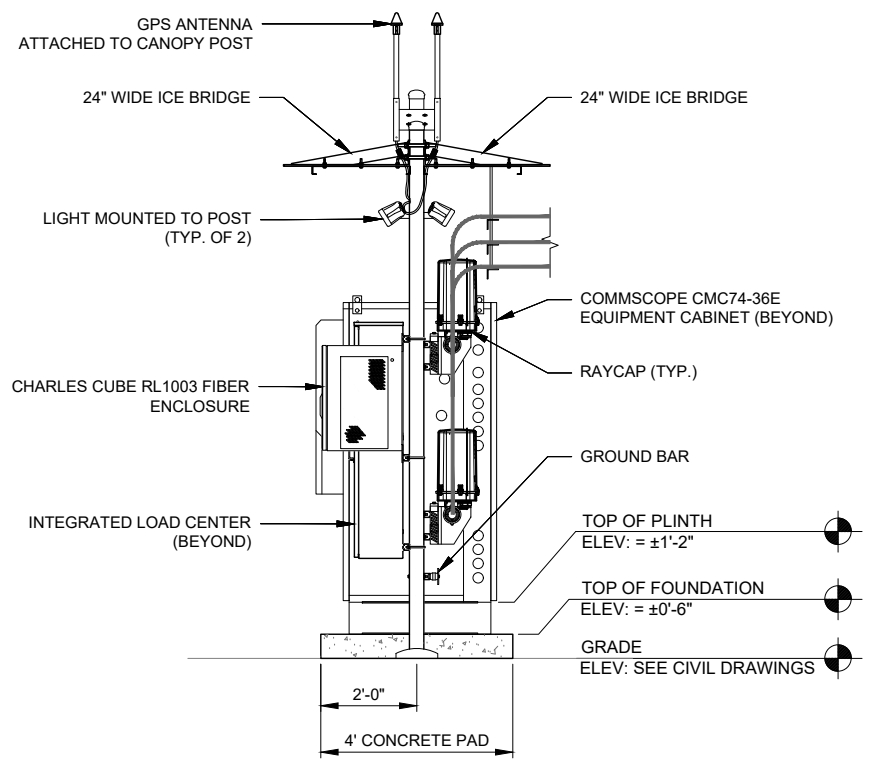
SHEET TITLE
**EQUIPMENT
 PAD
 PLAN & NOTES**

SHEET NUMBER
B-1

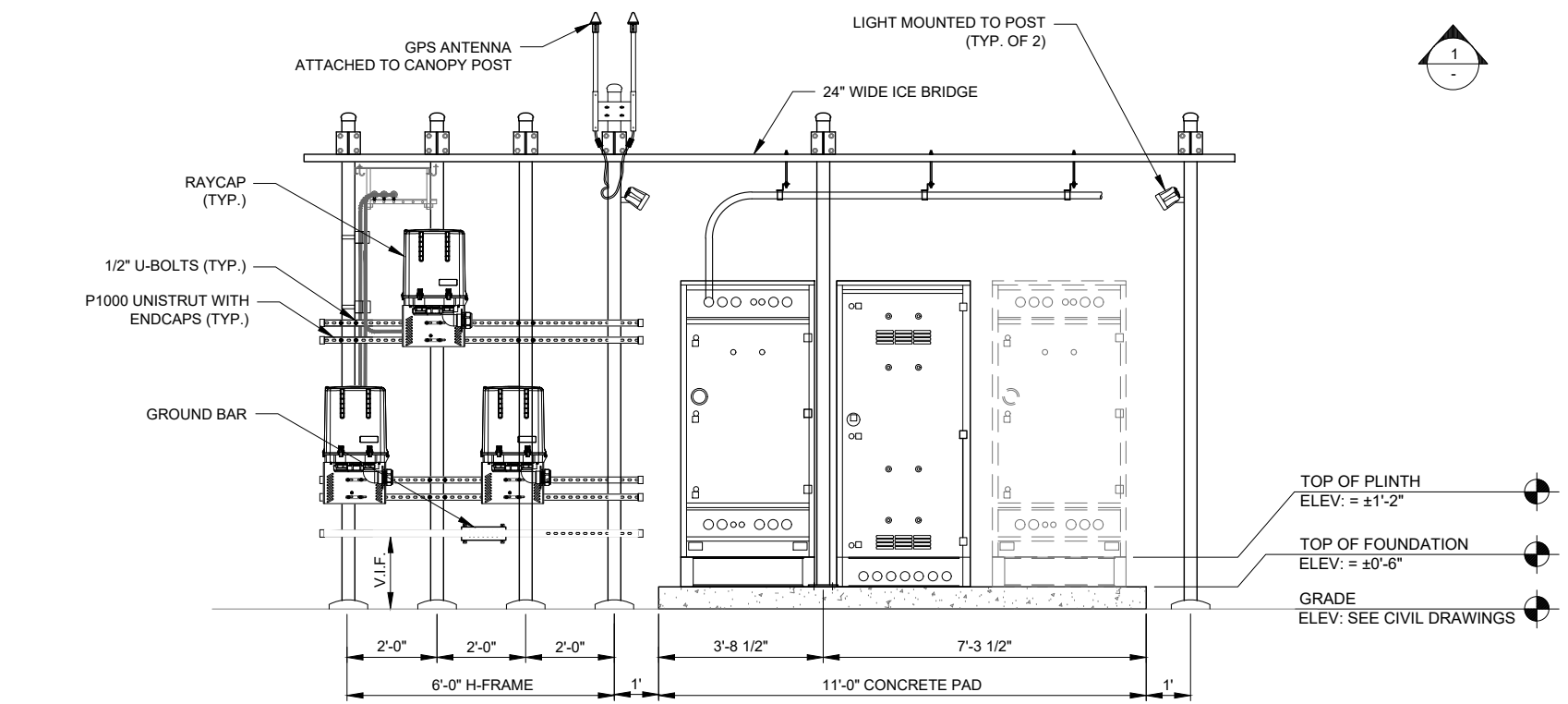
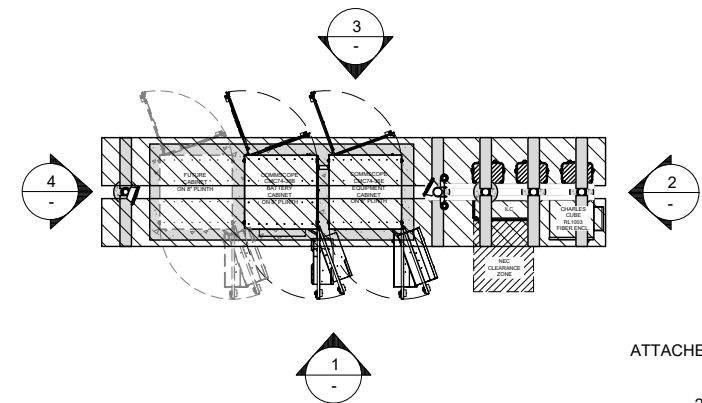
1 EQUIPMENT PAD - LAYOUT PLAN
 SCALE: 3/4" = 1'-0"



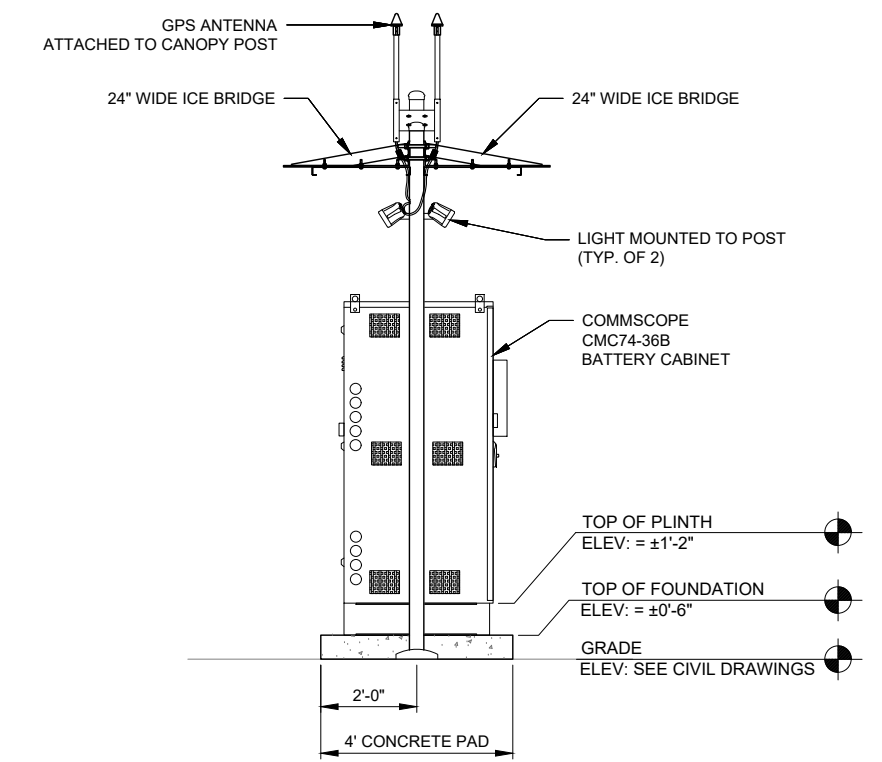
1 EQUIPMENT PAD ELEVATION
 SCALE: N.T.S.



2 EQUIPMENT PAD ELEVATION
 SCALE: N.T.S.



3 EQUIPMENT PAD ELEVATION
 SCALE: N.T.S.



4 EQUIPMENT PAD ELEVATION
 SCALE: N.T.S.

NOTE: FOR REFERENCE ONLY

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NAPERVILLE
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 NAPERVILLE, IL 60564

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SHEET TITLE
**EQUIPMENT
 PAD
 ELEVATIONS**

SHEET NUMBER
B-2

UTILITY NOTES:

WORK INCLUDES:
 THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR, OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS VERIZON WIRELESS SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION, AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH A BUILDING AND SECONDARY GROUNDING, CELLULAR TELEPHONE COMMUNICATIONS TOWER AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISION AND INSTALLATION OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. THE PROVISION, INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL TELEPHONE SERVICE.
4. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT WITHIN THE ENCLOSURE.
5. TWO INCH (2") AND THREE INCH (3") DIAMETER PVC CONDUITS SCHEDULE 40.
6. ALL PVC CONDUITS SHOULD BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
7. EXCAVATION, TRENCHING, AND BACKFILLING FOR CONDUIT(S), CABLE(S), AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS, AND FEES:

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES: STATE, LOCAL AND NATIONAL, AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AUTHORITIES:

N.E.C.	NATIONAL ELECTRIC CODE
A.N.S.I.	AMERICAN NATIONAL STANDARDS INSTITUTE
I.E.E.E.	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
A.S.T.M.	AMERICAN SOCIETY FOR TESTING MATERIALS
N.E.M.A.	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
U.L.	UNDERWRITERS LABORATORIES, INC.
N.F.P.A.	NATIONAL FIRE PROTECTION ASSOCIATION

RACEWAYS AND WIRING:

1. WIRING OF EVERY KIND MUST BE INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THWN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
3. RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULLBOXES FOR CONDUIT RUNS WITH MORE THAN (360) DEGREES OF BENDS.
5. PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
6. ELECTRICAL PANELBOARD TO BE FURNISHED BY VERIZON WIRELESS AND INSTALLED BY THE GENERAL CONTRACTOR/ELECTRICAL CONTRACTOR.
7. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:

SEE DETAILS AND SCHEDULES ON DRAWINGS AND SPECIFICATIONS FOR MEANING OF ABBREVIATIONS AND ADDITIONAL REQUIREMENTS AND INFORMATION. CHECK ARCHITECTURAL, STRUCTURAL AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO ENGINEER BEFORE SUBMITTING BID. ALL EQUIPMENT FURNISHED BY OTHERS (FBO) SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANY:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BID ANY OPTIONAL OR EXCESS FACILITY CHARGES ASSOCIATED WITH PROVIDING ELECTRICAL SERVICE FROM LOCAL UTILITY COMPANY. VERIFY BEFORE BIDDING TO INCLUDE ALL COSTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING BID. ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION EQUIPMENT AS REQUIRED TO COORDINATE WITH AVAILABLE FAULT CURRENT FROM LOCAL UTILITY COMPANY. ALL GROUNDING RODS PROVIDED BY THE POWER OR TELEPHONE UTILITY COMPANIES MUST BE TIED INTO THE MAIN EXTERNAL GROUND RING.

UTILITY CONTACTS:

POWER: T.B.D.

FIBER: TRANSPORT BY OTHERS

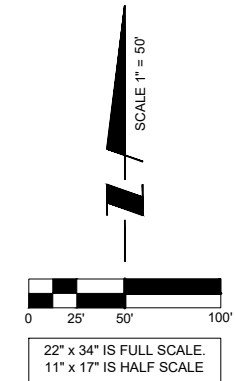
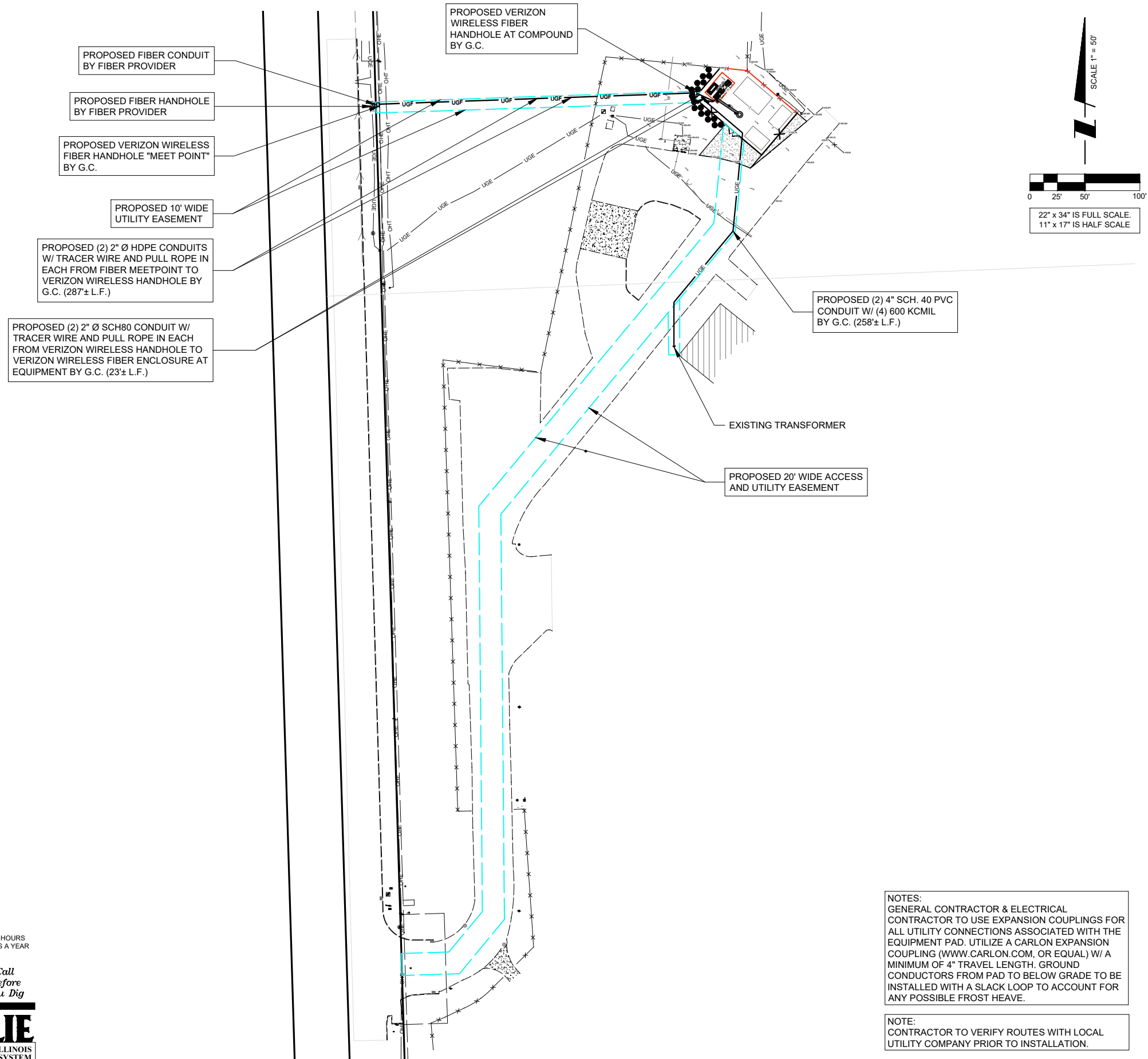
ELECTRICAL CONTRACTOR SHALL COORDINATE WITH POWER COMPANY FOR ENTRY INTO FENCED AREA BY EITHER MAILING A KEY TO A SLAVE LOCKED CHAIN AT THE FENCE GATE OR CALLING AND LEAVING A COMBINATION.

FOR CONTINUATION AND CONNECTION OF ELECTRIC AND FIBER SERVICE. COORDINATE WITH ELECTRIC AND FIBER COMPANY.

OPERATES 24 HOURS
 A DAY 365 DAYS A YEAR



CALL JULIE TOLL FREE
 1(800) 892-0123
 48 HOURS BEFORE
 YOU DIG



NOTES:
 GENERAL CONTRACTOR & ELECTRICAL CONTRACTOR TO USE EXPANSION COUPLINGS FOR ALL UTILITY CONNECTIONS ASSOCIATED WITH THE EQUIPMENT PAD. UTILIZE A CARLON EXPANSION COUPLING (WWW.CARLON.COM, OR EQUAL) W/ A MINIMUM OF 4" TRAVEL LENGTH. GROUND CONDUCTORS FROM PAD TO BELOW GRADE TO BE INSTALLED WITH A SLACK LOOP TO ACCOUNT FOR ANY POSSIBLE FROST HEAVE.

NOTE:
 CONTRACTOR TO VERIFY ROUTES WITH LOCAL UTILITY COMPANY PRIOR TO INSTALLATION.

FIBER COORDINATION IS NOT COMPLETE (PENDING FIBER CONTACT). PRIOR TO CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.

1 SITE UTILITY ROUTING PLAN



REVISIONS		BY	DATE
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SHEET TITLE
**OVERALL
 UTILITY ROUTING PLAN**

SHEET NUMBER
E-1

UTILITY NOTES:

WORK INCLUDES:

THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR, OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS VERIZON WIRELESS SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION, AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH A BUILDING AND SECONDARY GROUNDING, CELLULAR TELEPHONE COMMUNICATIONS TOWER AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISION AND INSTALLATION OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. THE PROVISION, INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL TELEPHONE SERVICE.
4. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT WITHIN THE ENCLOSURE.
5. TWO INCH (2") AND THREE INCH (3") DIAMETER PVC CONDUITS SCHEDULE 40.
6. ALL PVC CONDUITS SHOULD BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
7. EXCAVATION, TRENCHING, AND BACKFILLING FOR CONDUIT(S), CABLE(S), AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS, AND FEES:

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES: STATE, LOCAL AND NATIONAL, AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AUTHORITIES:

N.E.C.	NATIONAL ELECTRIC CODE
A.N.S.I.	AMERICAN NATIONAL STANDARDS INSTITUTE
I.E.E.E.	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
A.S.T.M.	AMERICAN SOCIETY FOR TESTING MATERIALS
N.E.M.A.	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
U.L.	UNDERWRITERS LABORATORIES, INC.
N.F.P.A.	NATIONAL FIRE PROTECTION ASSOCIATION

RACEWAYS AND WIRING:

1. WIRING OF EVERY KIND MUST BE INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THWN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
3. RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULLBOXES FOR CONDUIT RUNS WITH MORE THAN (360) DEGREES OF BENDS.
5. PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
6. ELECTRICAL PANELBOARD TO BE FURNISHED BY VERIZON WIRELESS AND INSTALLED BY THE GENERAL CONTRACTOR/ELECTRICAL CONTRACTOR.
7. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:

SEE DETAILS AND SCHEDULES ON DRAWINGS AND SPECIFICATIONS FOR MEANING OF ABBREVIATIONS AND ADDITIONAL REQUIREMENTS AND INFORMATION. CHECK ARCHITECTURAL, STRUCTURAL AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO ENGINEER BEFORE SUBMITTING BID. ALL EQUIPMENT FURNISHED BY OTHERS (FBO) SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANY:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BID ANY OPTIONAL OR EXCESS FACILITY CHARGES ASSOCIATED WITH PROVIDING ELECTRICAL SERVICE FROM LOCAL UTILITY COMPANY. VERIFY BEFORE BIDDING TO INCLUDE ALL COSTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING BID. ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION EQUIPMENT AS REQUIRED TO COORDINATE WITH AVAILABLE FAULT CURRENT FROM LOCAL UTILITY COMPANY. ALL GROUNDING RODS PROVIDED BY THE POWER OR TELEPHONE UTILITY COMPANIES MUST BE TIED INTO THE MAIN EXTERNAL GROUND RING.

UTILITY CONTACTS:

POWER: T.B.D.

FIBER: TRANSPORT BY OTHERS

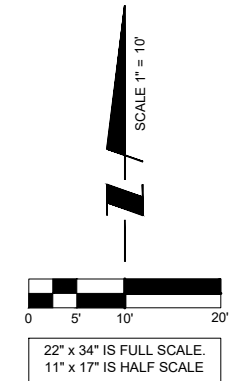
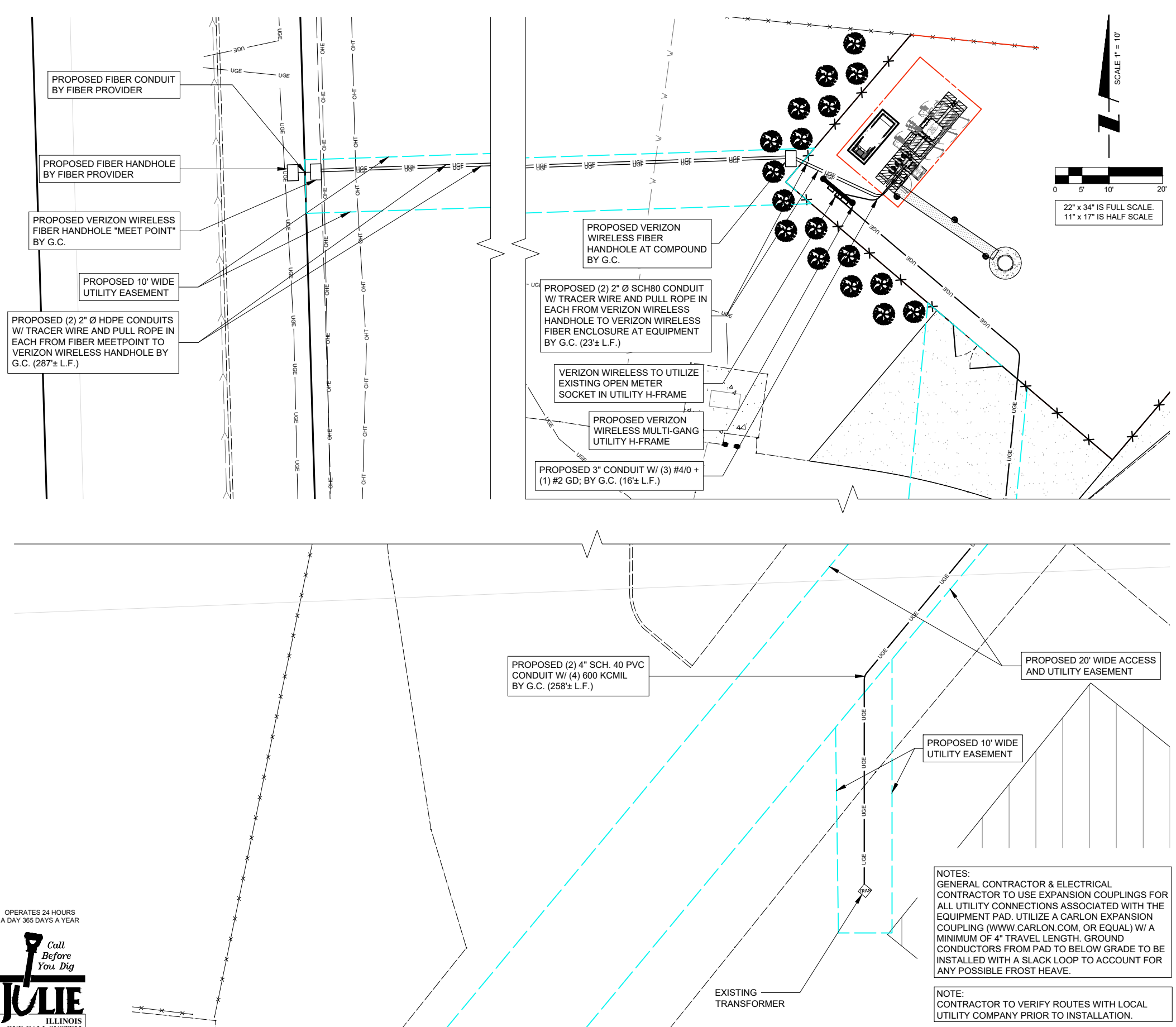
ELECTRICAL CONTRACTOR SHALL COORDINATE WITH POWER COMPANY FOR ENTRY INTO FENCED AREA BY EITHER MAILING A KEY TO A SLAVE LOCKED CHAIN AT THE FENCE GATE OR CALLING AND LEAVING A COMBINATION.

FOR CONTINUATION AND CONNECTION OF ELECTRIC AND FIBER SERVICE. COORDINATE WITH ELECTRIC AND FIBER COMPANY.

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR



CALL JULIE TOLL FREE
1(800) 892-0123
48 HOURS BEFORE
YOU DIG



1 SITE UTILITY ROUTING PLAN

NOTES:
GENERAL CONTRACTOR & ELECTRICAL CONTRACTOR TO USE EXPANSION COUPLINGS FOR ALL UTILITY CONNECTIONS ASSOCIATED WITH THE EQUIPMENT PAD. UTILIZE A CARLON EXPANSION COUPLING (WWW.CARLON.COM, OR EQUAL) W/ A MINIMUM OF 4" TRAVEL LENGTH. GROUND CONDUCTORS FROM PAD TO BELOW GRADE TO BE INSTALLED WITH A SLACK LOOP TO ACCOUNT FOR ANY POSSIBLE FROST HEAVE.

NOTE:
CONTRACTOR TO VERIFY ROUTES WITH LOCAL UTILITY COMPANY PRIOR TO INSTALLATION.

FIBER COORDINATION IS NOT COMPLETE (PENDING FIBER CONTACT). PRIOR TO CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.



REVISIONS		NO.	DESCRIPTION	DATE	BY
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3	ADDITION OF GRADING PLAN	01/26/26	PP		
4	REVISED PER COMMENTS	02/23/26	TJS		
5	ISSUED FOR PERMIT	02/27/26	TJS		
6	REVISED PER COMMENTS	03/04/26	APD		
7	REVISED PER COMMENTS	03/23/26	APD		

MGD LOC#
5000975492
FUZE ID#: 17562059

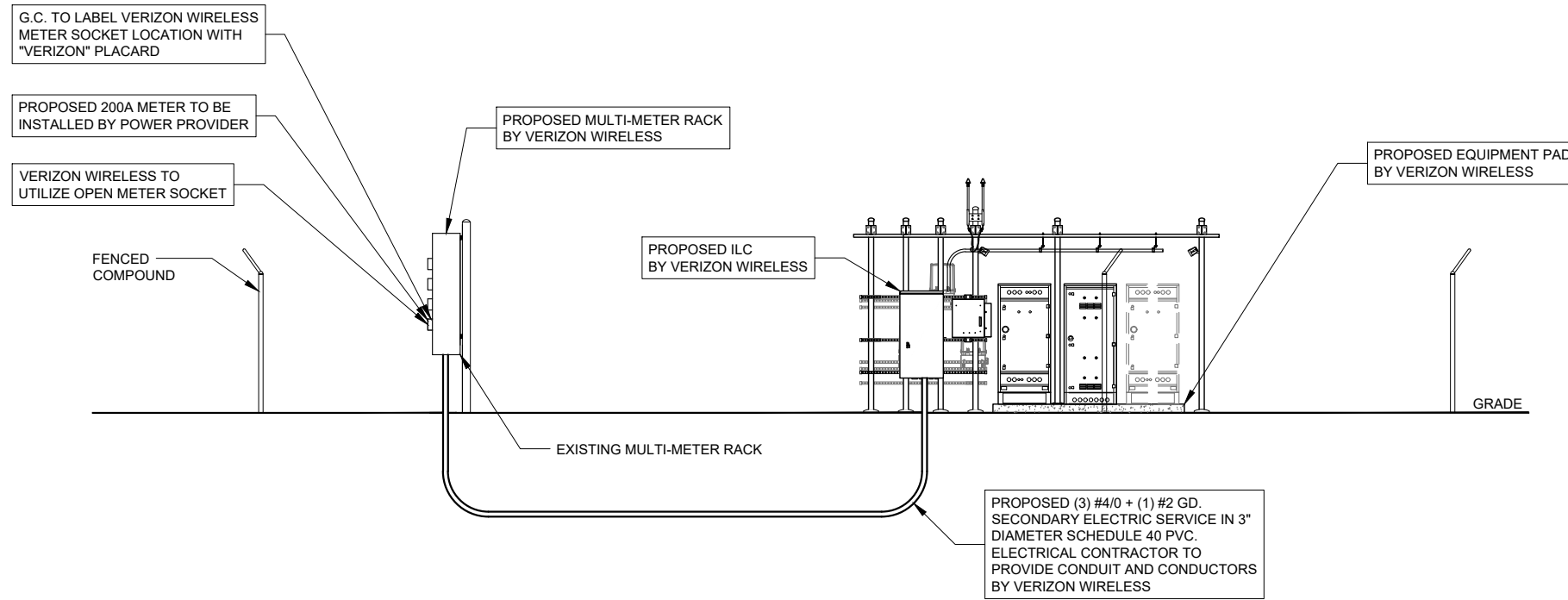
NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
**ENLARGED
UTILITY ROUTING PLAN**

SHEET NUMBER
E-1A

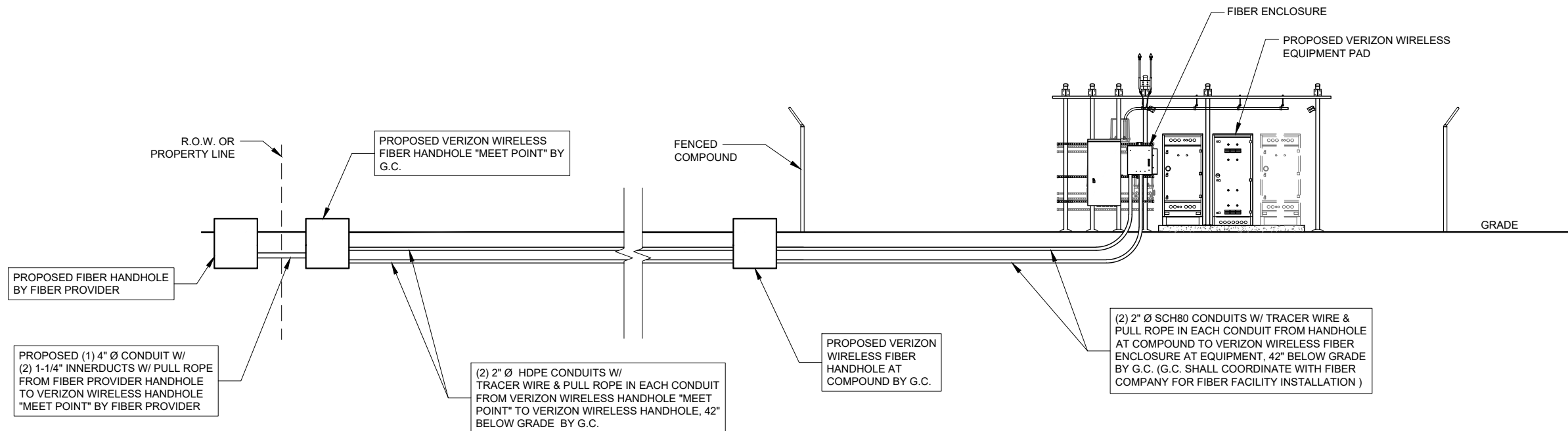


ELECTRICAL SERVICE: 200 AMP 120/240V SINGLE PHASE 3 WIRE

1 POWER RISER DIAGRAM
SCALE: N.T.S.

CONTRACTOR SHALL BUILD INTO THE PRICE OF THE BID THE COST OF TWO (2) MOBILIZATIONS:
1) POWER/FIBER PERMIT PULLED PRIOR TO BUILDING PERMIT AND PRELIMINARY WORK (SMART JACK ON A STICK, ETC) COMPLETED PRIOR TO GENERAL CONSTRUCTION
2) RETURN TO COMPLETE GENERAL ELECTRICAL CONSTRUCTION

• TRANSPORT BY OTHERS



NOTE: VERIFY FIBER ROUTING REQUIREMENTS WITH FIBER COMPANY

2 FIBER RISER DIAGRAM
SCALE: N.T.S.

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (847) 619-5397
FAX: (847) 706-7415



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KNOLLS_PRELO

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SHEET TITLE
UTILITY RISER
DIAGRAMS

SHEET NUMBER

E-1B

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR
Call Before You Dig
JULIE
ILLINOIS
ONE CALL SYSTEM
CALL JULIE TOLL FREE
1(800) 892-0123
48 HOURS BEFORE
YOU DIG

GROUNDING ELECTRODE SYSTEM NOTES:

1. ALL GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC PROCESS CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, ETC. ALL CABLE TO GROUND RODS, GROUND RODS SPLICES AND LIGHTNING PROTECTION SYSTEM AS INDICATED. GROUND FOUNDATION ONLY AS INDICATED BY PM. ALL MATERIALS USED (MOLDS, WELDING, METAL, TOOLS, ETC.) SHALL BE BY EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND PROCEDURES. GROUND CONDUCTOR SHALL HAVE A MINIMUM 24" BENDING RADIUS.
2. ALL EXOTHERMIC CONNECTIONS ON GALVANIZED SURFACES SHALL BE CLEANED THOROUGHLY AND COLORED TO MATCH SURFACE WITH (2) TWO COATS OF SHERWIN-WILLIAMS GALVITE (WHITE) PAINT B50W3 (OR EQUAL) OR SHERWIN- WILLIAMS SILVERBRITE (ALUMINUM) B59S11 (OR EQUAL).
3. ALL ELECTRICAL & MECHANICAL GROUND CONNECTIONS SHALL HAVE ANTI-OXIDANT COMPOUND APPLIED TO CONNECTION
4. FENCE/GATE: GROUND FENCE POSTS WITHIN 6 FEET OF PLATFORM AND 25 FEET OF TOWER AS INDICATED ON DRAWINGS. GROUND EACH GATE POST AND CORNER POST. GROUND CONNECTIONS TO FENCE POSTS SHALL BE MADE BY THE EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES. ALL OTHER CONNECTIONS FOR THE GROUND GRID SYSTEM SHALL BE MADE BY THE EXOTHERMIC PROCESS, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.
6. UTILITY COMPANY COORDINATION: ELECTRICAL CONTRACTOR SHALL CONFIRM THAT ALL WORK IS IN ACCORDANCE WITH THE RULES OF THE LOCAL UTILITY COMPANY BEFORE SUBMITTING THE BID, THE CONTRACTOR SHALL CHECK WITH THE UTILITY COMPANIES SUPPLYING SERVICE TO THIS PROJECT AND SHALL DETERMINE FROM THEM ALL EQUIPMENT AND CHARGES WHICH THEY WILL REQUIRE AND SHALL INCLUDE THE COST IN THE BID.
7. GROUND TEST: GROUND TESTS SHALL BE PERFORMED AS REQUIRED BY LESSEE STANDARD PROCEDURES. GROUND GRID RESISTANCE SHALL NOT EXCEED 5 OHMS.
8. CONTRACTOR SHALL SUBMIT THE GROUND RESISTANCE TEST REPORT AS FOLLOWS:
 1. ONE (1) COPY TO OWNER REPRESENTATIVE
 2. ONE (1) COPY TO ENGINEER
 3. ONE (1) COPY TO KEEP INSIDE EQUIPMENT ENCLOSURE

TYPICAL KEYED GROUNDING NOTES

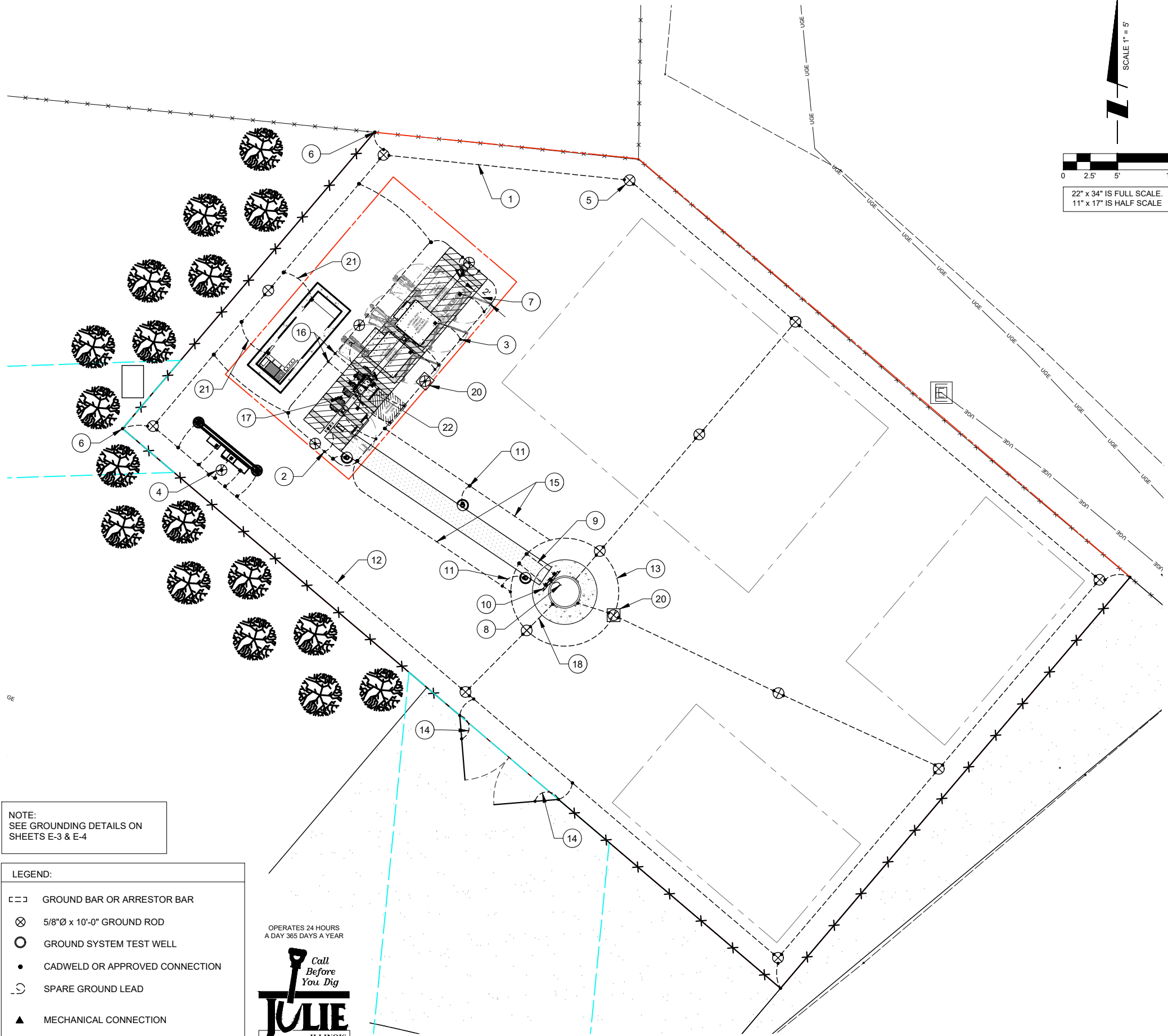
- 1 #2 AWG T1NND SOLID BARE COPPER CONDUCTOR 42" BELOW GRADE (TYPICAL) MINIMUM 24" BENDING RADIUS
- 2 PLATFORM CORNER POST, STEEL COLUMN, STEEL BEAM & CANOPY GROUND.
- 3 CABINET GROUND BOLTED TO UNIT HOUSING
- 4 DISCONNECT AND ELECTRIC SERVICE GROUND TO GROUND ROD
- 5 5/8" x 10' COPPER CLAD GROUND ROD
- 6 GROUND CHAIN LINK FENCE (TYPICAL) EXOTHERMIC CONNECTION (TYPE VS) GROUND FENCE POSTS WITHIN 6 FEET OF EQUIPMENT AND 25 FEET OF TOWER. (SEE DETAIL, SHEET E-5)
- 7 MAINTAIN TWO FOOT DISTANCE OFF OF STRUCTURES
- 8 GROUND COAXIAL ANTENNA CABLES TO GROUND BAR BY ANTENNA CONTRACTOR. TERMINATE CABLES 1'-0" FROM PLATFORM AND INSTALL LIGHTNING SURGE ARRESTORS ON EACH CABLE GROUND.
- 9 EXOTHERMICALLY WELD COPPER GROUND BAR TAIL TO HALO GROUND RING (EXOTHERMIC CONNECTION TYPE TA) BY ANTENNA CONTRACTOR. FINAL CONNECTION BY ELECTRICAL CONTRACTOR.
- 10 4"x20"x1/4" T1NND INSULATED COPPER GROUND BAR, NON ISOLATED WITH 10.0' LONG #2 AWG T1NND SOLID COPPER WIRE WELDED TAILS (HARGER GBIT 14420VW)
- 11 GROUND CABLE WAVEGUIDE BRIDGE (TYP.) BY ELECTRICAL CONTRACTOR.
- 12 PROPOSED PERIPHERAL GROUND RING SHOULD BE INSTALLED 1' TO 2' INSIDE THE FENCE LINE, THE TOWER GROUND RING SHOULD BE INSTALLED A MINIMUM 2' OFF ANY STRUCTURES.
- 13 EXISTING TOWER OR COMPOUND COPPER GROUND RING (V.I.F.)
- 14 GATE JUMPERS (SEE DETAIL, SHEET E-4)
- 15 BOND EXISTING / PROPOSED TOWER GROUND RING TO PROPOSED EQUIPMENT GROUND RING WITH #2 AWG T1NND SOLID COPPER CONDUCTOR IN 2 LOCATIONS.
- 16 TWO #2 LEADS FROM THE EGR TO THE GROUND BAR AT UTILITY FRAME. CADWELD AT EGR AND DOUBLE HOLE LUGS ON H-FRAME.
- 17 BOND RAYCAP TO MGB (TYP. OF 3).
- 18 EACH TOWER FOUNDATION REBAR MESH/CAGE TO BE BONDED TO TOWER GROUND RING WITH #2 T1NND SOLID COPPER CONDUCTOR
- 19 EACH TOWER FOUNDATION TO HAVE AT LEAST ONE ANCHOR BOLT BONDED TO TOWER GROUND RING WITH #2 T1NND SOLID COPPER CONDUCTOR
- 20 COPPER CLAD GROUND ROD WITH INSPECTION WELL TOP OF GROUND ROD MAX 24" BURY.
- 21 EXTEND GROUND CONDUCTORS IN 1/2" RIGID H.W. CONDUIT ADJACENT TO PAD, OFFSET AND ATTACH TO EXTERIOR OF GENERATOR HOUSING AND EXTEND TO GROUND LUGS AS REQUIRED, VERIFY LOCATION WITH GENERAC.
- 22 MGB MOUNTED ON H-FRAME.

NOTE:
SEE GROUNDING DETAILS ON
SHEETS E-3 & E-4

LEGEND:

	GROUND BAR OR ARRESTOR BAR
	5/8" x 10'-0" GROUND ROD
	GROUND SYSTEM TEST WELL
	CADWELD OR APPROVED CONNECTION
	SPARE GROUND LEAD
	MECHANICAL CONNECTION
	EXISTING GROUNDING
	NEW GROUNDING

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR



1 SITE GROUNDING PLAN
SCALE: 1" = 4'

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (647) 619-5397
FAX: (647) 706-7415



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MGD LOC#
5000975492
FUZE ID#: 17562059

NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

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DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
SITE
GROUNDING PLAN

SHEET NUMBER

E-2

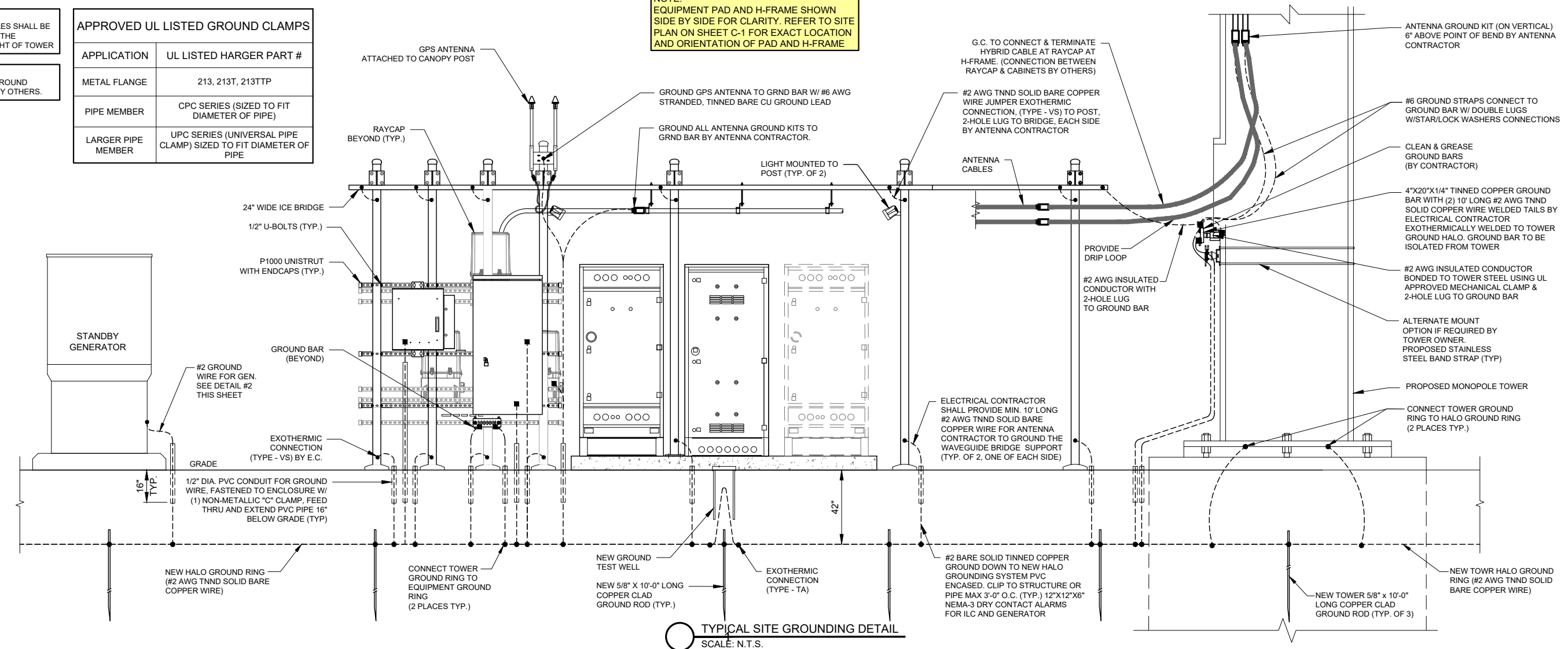
NOTE:
ANTENNA CABLES SHALL BE GROUNDED AT THE ANTENNA HEIGHT OF TOWER

NOTE:
ALL CABINET GROUND CONNECTION BY OTHERS.

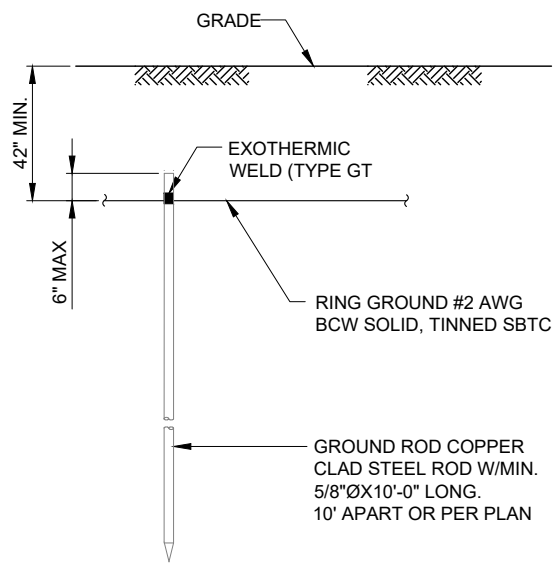
APPROVED UL LISTED GROUND CLAMPS

APPLICATION	UL LISTED HARGER PART #
METAL FLANGE	213, 213T, 213TTP
PIPE MEMBER	CPC SERIES (SIZED TO FIT DIAMETER OF PIPE)
LARGER PIPE MEMBER	UPC SERIES (UNIVERSAL PIPE CLAMP) SIZED TO FIT DIAMETER OF PIPE

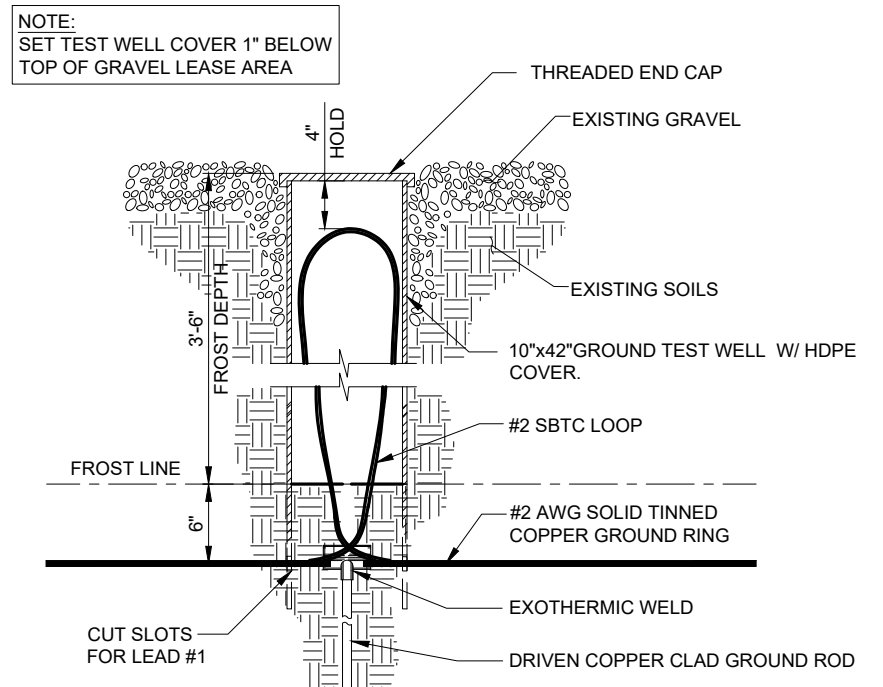
NOTE:
EQUIPMENT PAD AND H-FRAME SHOWN SIDE BY SIDE FOR CLARITY. REFER TO SITE PLAN ON SHEET C-1 FOR EXACT LOCATION AND ORIENTATION OF PAD AND H-FRAME



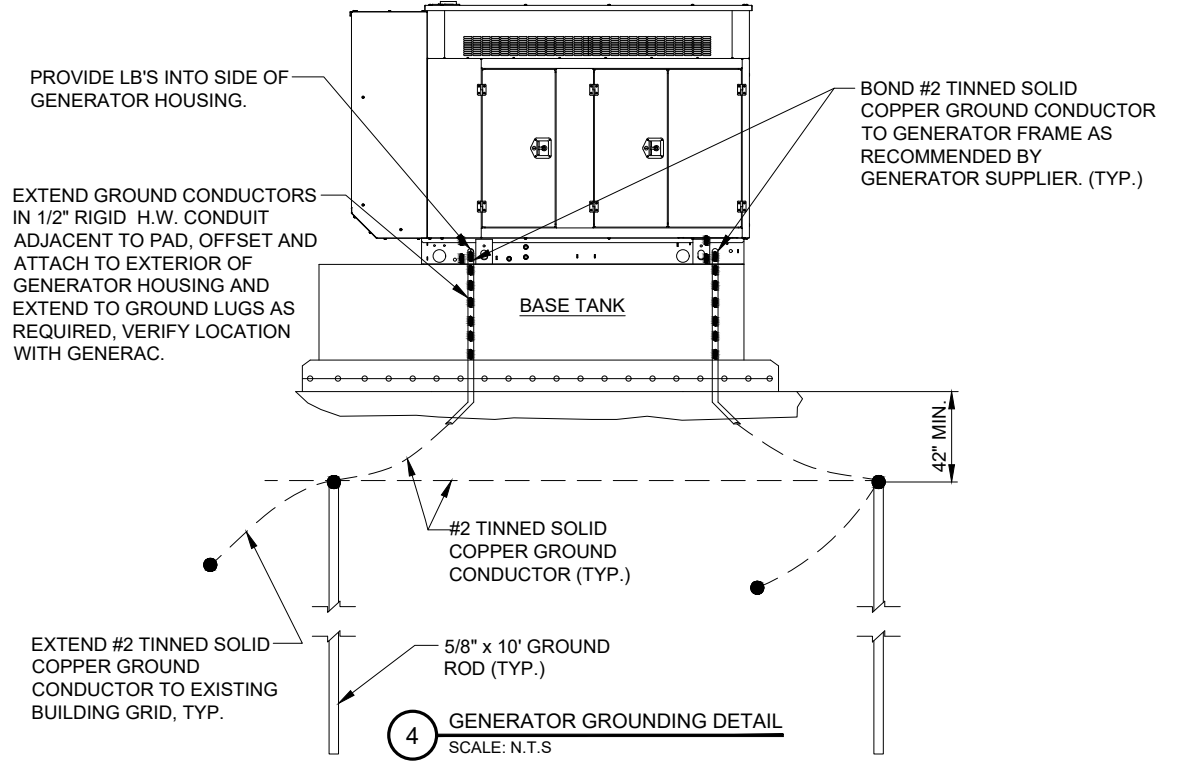
TYPICAL SITE GROUNDING DETAIL
SCALE: N.T.S.



2 GROUND ROD DETAIL
SCALE: N.T.S.



3 TEST WELL DETAIL
SCALE: N.T.S.



4 GENERATOR GROUNDING DETAIL
SCALE: N.T.S.

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
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KNOLLS_PRELO

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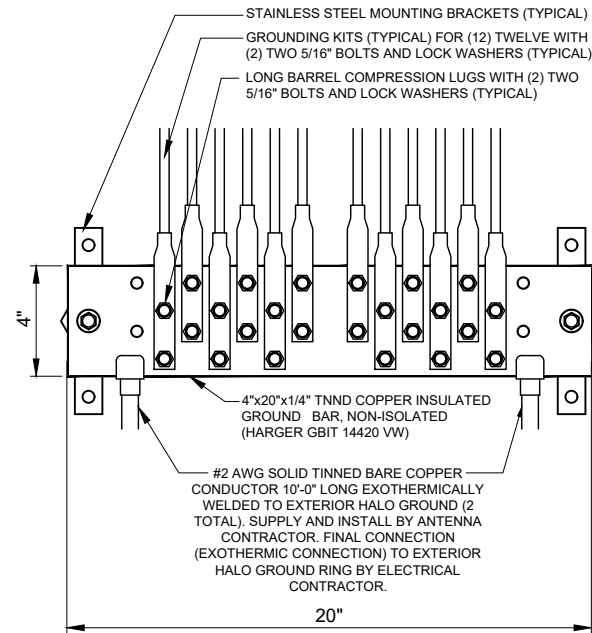
DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
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SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
E-2A

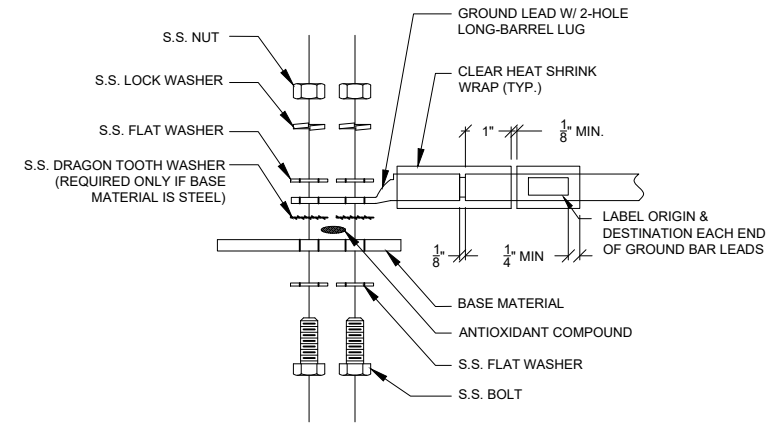
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- AFTER INSTALLATION OF THE CANOPY AT THE DOOR, GC/EC IS TO BOND THE CANOPY TO THE DOOR FRAME WITH A #2 CONDUCTOR. USE DOUBLE-LUG CONNECTION. PREP AND PAINT SURFACE TO MATCH AFTER INSTALLATION.
- UTILITY COMPANY COORDINATION: ELECTRICAL CONTRACTOR SHALL CONFIRM THAT ALL WORK IS IN ACCORDANCE WITH THE RULES OF THE LOCAL UTILITY COMPANY BEFORE SUBMITTING THE BID. THE CONTRACTOR SHALL CHECK WITH THE UTILITY COMPANIES SUPPLYING SERVICE TO THIS PROJECT AND SHALL DETERMINE FROM THEM ALL EQUIPMENT AND CHARGES WHICH THEY WILL REQUIRE AND SHALL INCLUDE THE COST IN THE BID.
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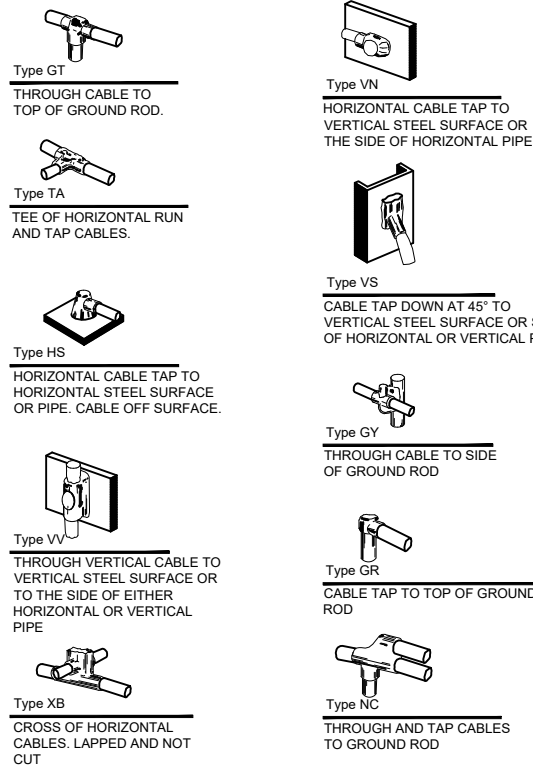


1 EXTERIOR GROUND BAR DETAIL
N.T.S.

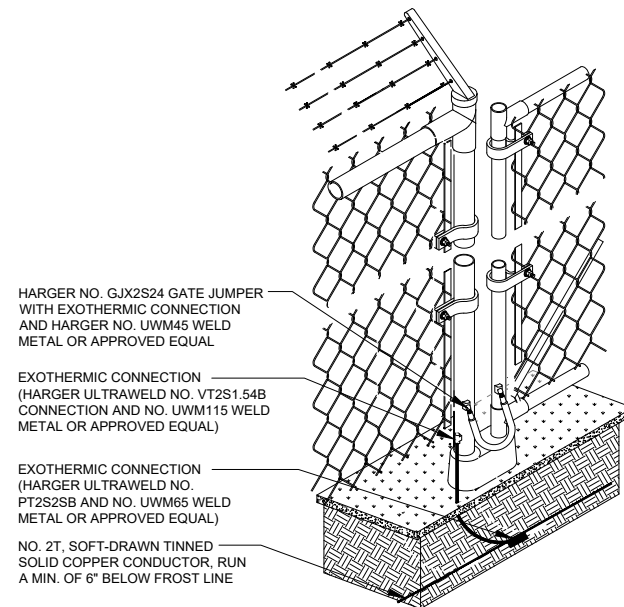
- NOTES:**
- ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING BELLEVILLES. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
 - FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR-SHIELD.
 - GROUND BARS, INSTALL BOLT HEAD TOWARD WALL
 - ENCLOSURES, INSTALL BOLT HEAD ON OUTSIDE OF ENCLOSURE



2 GROUND LUG INSTALLATION DETAIL
N.T.S.



3 EXOTHERMIC WELD DETAILS
EXOTHERMIC AND HARGER ULTRAWELD OR APPROVED EQUAL



4 FENCE GROUNDING DETAIL
N.T.S.

5 NO DETAIL
SCALE: N.T.S.

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KNOLLS_PRELO

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SHEET TITLE
GROUNDING DETAILS

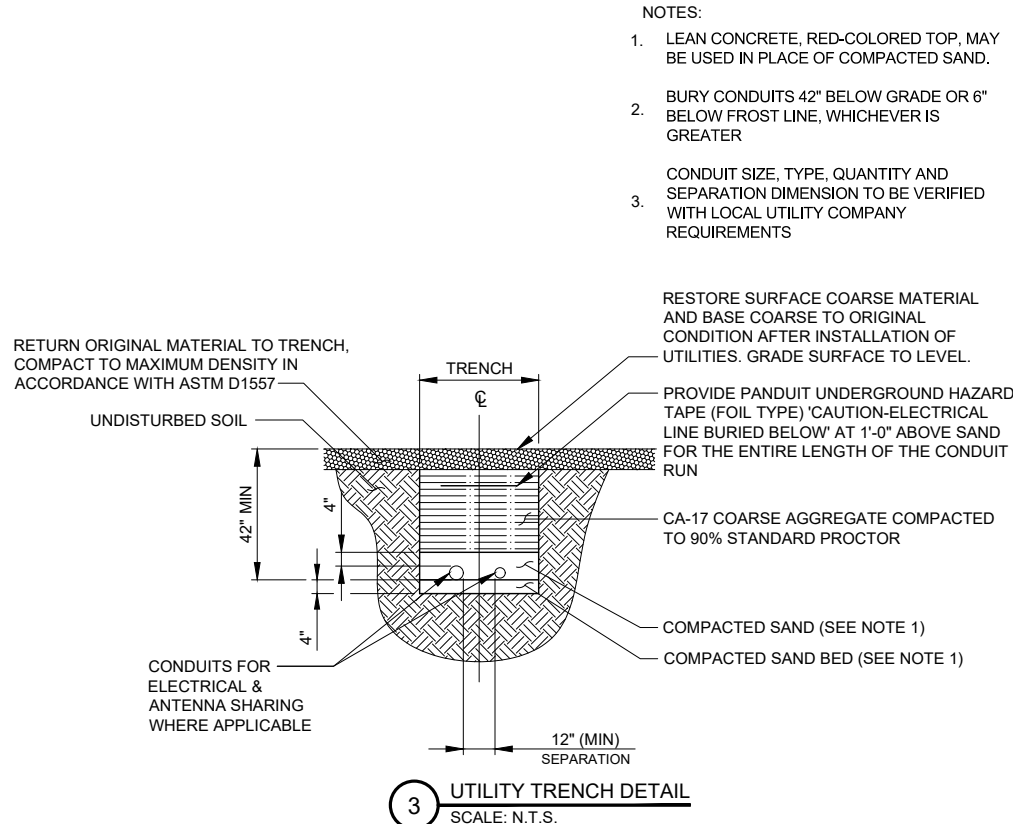
SHEET NUMBER
E-2B

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR

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ILLINOIS
ONE CALL SYSTEM

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48 HOURS BEFORE
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VERIZON WIRELESS PANEL "A" SCHEDULE

MAIN: 200A VOLTAGE: 120/240 PHASE: 1 WIRE: 3

TO AUTOMATIC TRANSFER SWITCH

DESCRIPTION	BRKR.	WATTS	SIG	A	B	S/N	WATTS	BRKR.	DESCRIPTION
RECTIFIER 1	40/2	1250	1			2	1250	40/2	RECTIFIER 5
RECTIFIER 2	40/2	1250	3			4	1250	40/2	RECTIFIER 6
RECTIFIER 3	40/2	1250	5			6	1250	40/2	RECTIFIER 7
RECTIFIER 4	40/2	1250	7			8	1250	40/2	RECTIFIER 8
EXIST. HVAC UNIT #1	TBD	TBD	9			10	TBD	TBD	EXIST. HVAC UNIT #2
LIGHTING	20/1		11			12			SPARE
EXIST. RECEPTACLES	20/1		13			14			SPARE
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SPACE			37			38	360	20/1	GFCI RECEPTACLE *
SPACE			39			40	1200	20/1	EQUIPMENT
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NOTES:

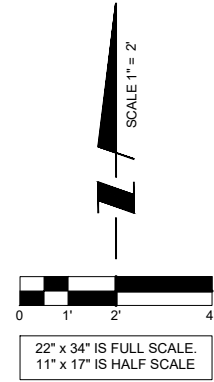
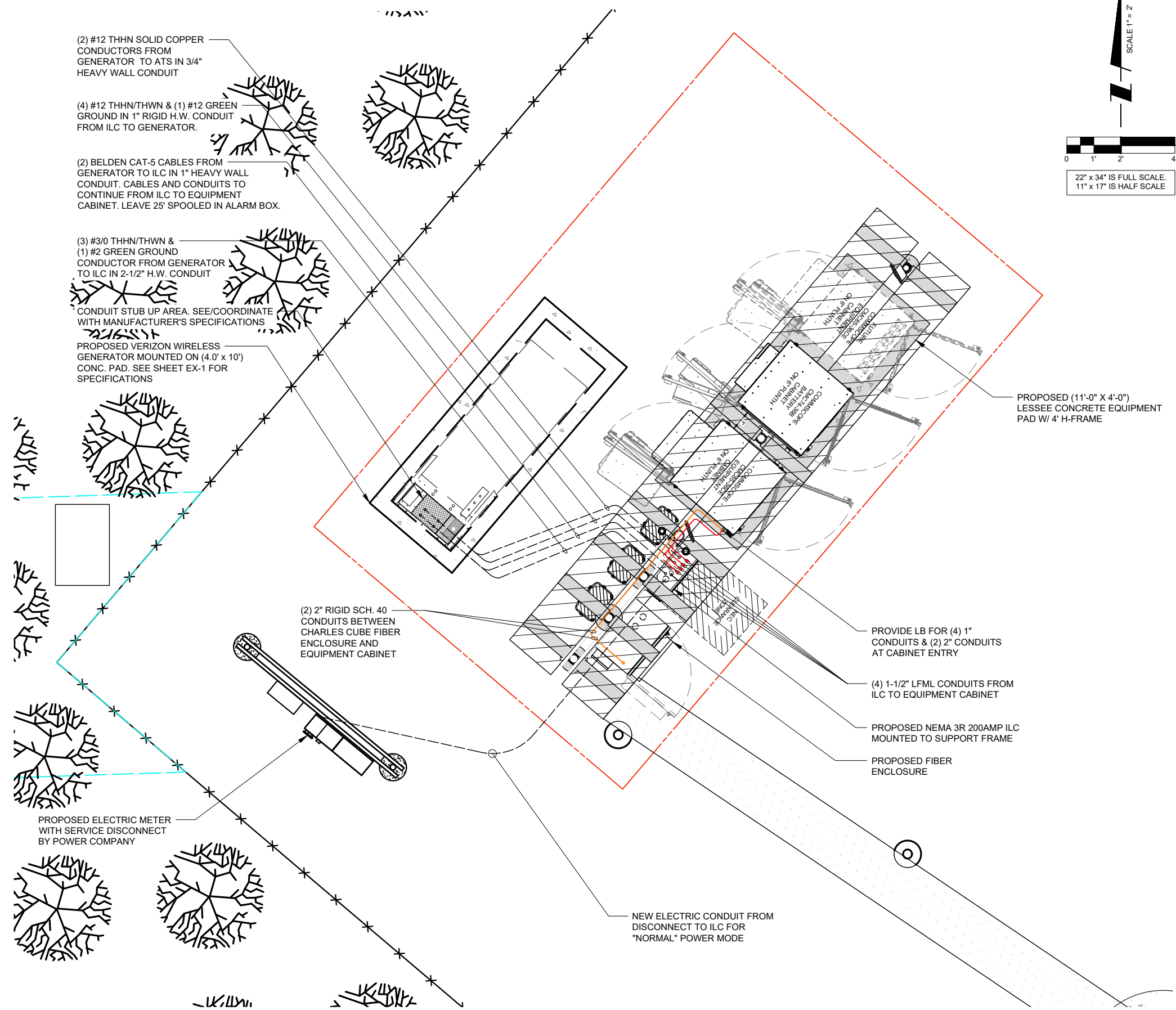
- 1) SEE DETAILS ON EXISTING GROUND GRID AND GENERATOR GROUND GRID FOR REQUIRED GROUNDING SYSTEM.
- 2) NEW AUTOMATIC TRANSFER SWITCH, INSTALLED AND WIRED BY E.C. CONNECT EXTERNAL GROUND LUG AND GROUNDING CONDUCTOR THAT WAS REMOVED FROM MANUAL TRANSFER SWITCH.
- 3) E.C. MUST LOCATE GROUND GRID INSTALLED FOR NEW EQUIPMENT PAD & PROVIDE THE ATTACHMENT OF THE GENERATOR GROUND TO THE EQUIPMENT GRID FOR SINGLE POINT GROUNDING.
- 4) E.C. TO EXTEND #2 TINNED SOLID COPPER GROUND CONDUCTORS FROM (2) LOCATIONS ON GENERATOR FRAME (SEE MANUFACTURERS RECOMMENDATIONS) PROVIDE GROUND LUGS ON GENERATOR AS REQUIRED. EXTEND #1/0 STRANDED GROUND CONDUCTOR AND CONNECT TO COPPER CLAD GROUND RODS VIA HEAVY DUTY EXOTHERMIC TERMINATIONS AND THEN EXTENDED AND ATTACH TO BUILDING GROUND GRID VIA EXOTHERMIC TERMINATIONS.
- 5) NEW GENERATOR FURNISHED BY LESSEE. INSTALLED AND WIRED BY E.C. DELIVERED AND SET BY CONTRACTOR.
- 6) E.C. MUST MONITOR DC POWER WHEN ON BATTERY BACK-UP DURING PORTIONS OF CONSTRUCTION. IF LEVEL FALLS BELOW RECOMMENDED LEVEL 2256 DC, E.C. MUST TURN ON THE MAIN POWER. THE CELL SITE CANNOT GO OFF LINE AT ANYTIME.

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR



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48 HOURS BEFORE
YOU DIG

NOTE:
CONTRACTOR TO VERIFY ROUTES
WITH LOCAL UTILITY COMPANY
PRIOR TO INSTALLATION.



verizon
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TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (847) 619-5397
FAX: (847) 706-7415



NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	01/08/26	APD
2	ADDITION OF LANDSCAPE PLAN	01/19/26	TJS
3	ADDITION OF GRADING PLAN	01/26/26	PP
4	REVISED PER COMMENTS	02/23/26	TJS
5	ISSUED FOR PERMIT	02/27/26	TJS
6	REVISED PER COMMENTS	03/04/26	APD
7	REVISED PER COMMENTS	03/23/26	APD

MGD LOC#
5000975492
FUZE ID#: 17562059

NAPERVILLE
KNOLLS_PRELO

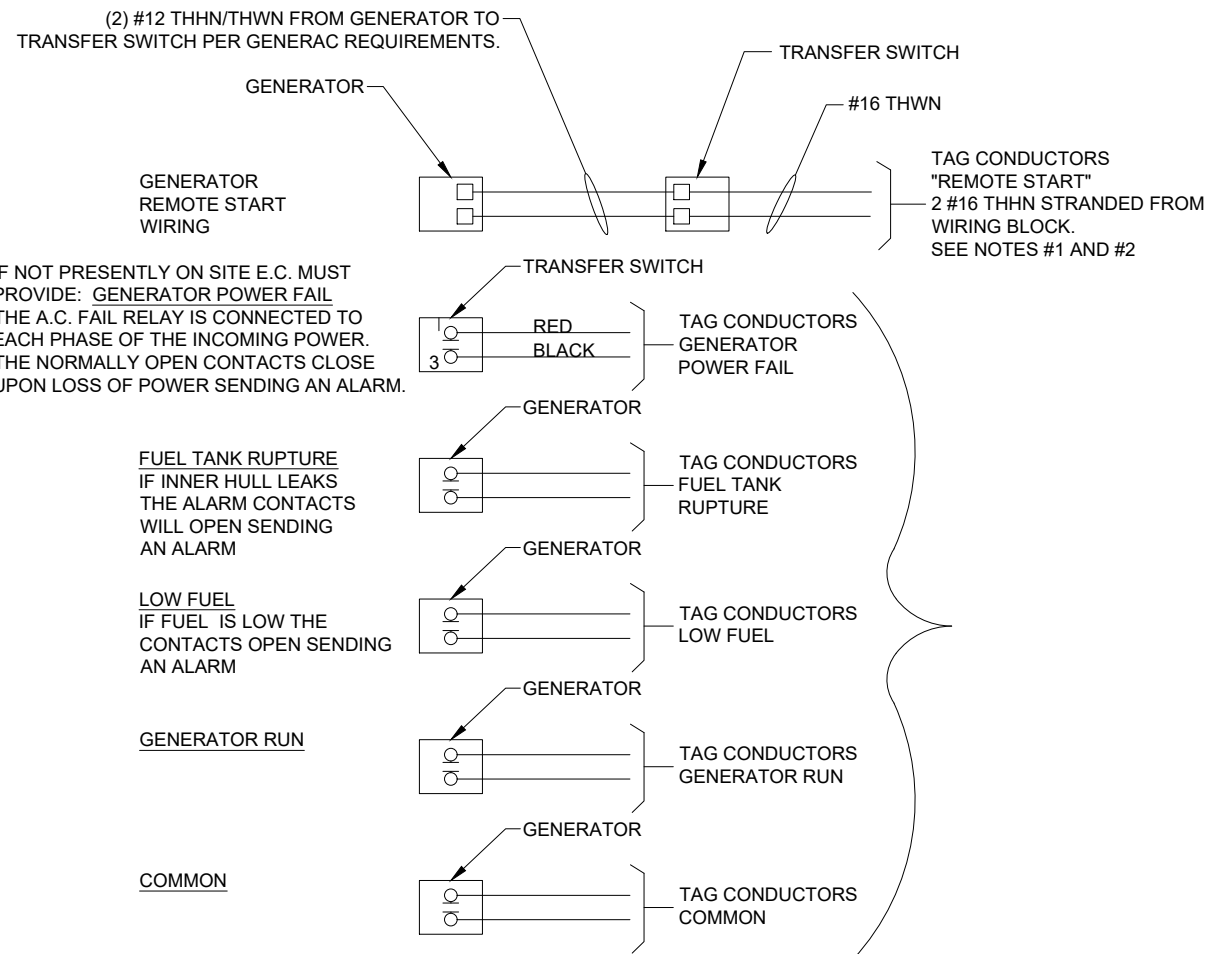
8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
EQUIPMENT
UTILITY ROUTING PLAN

SHEET NUMBER
E-4

1 GEN UTILITY ROUTING PLAN



NOTES:

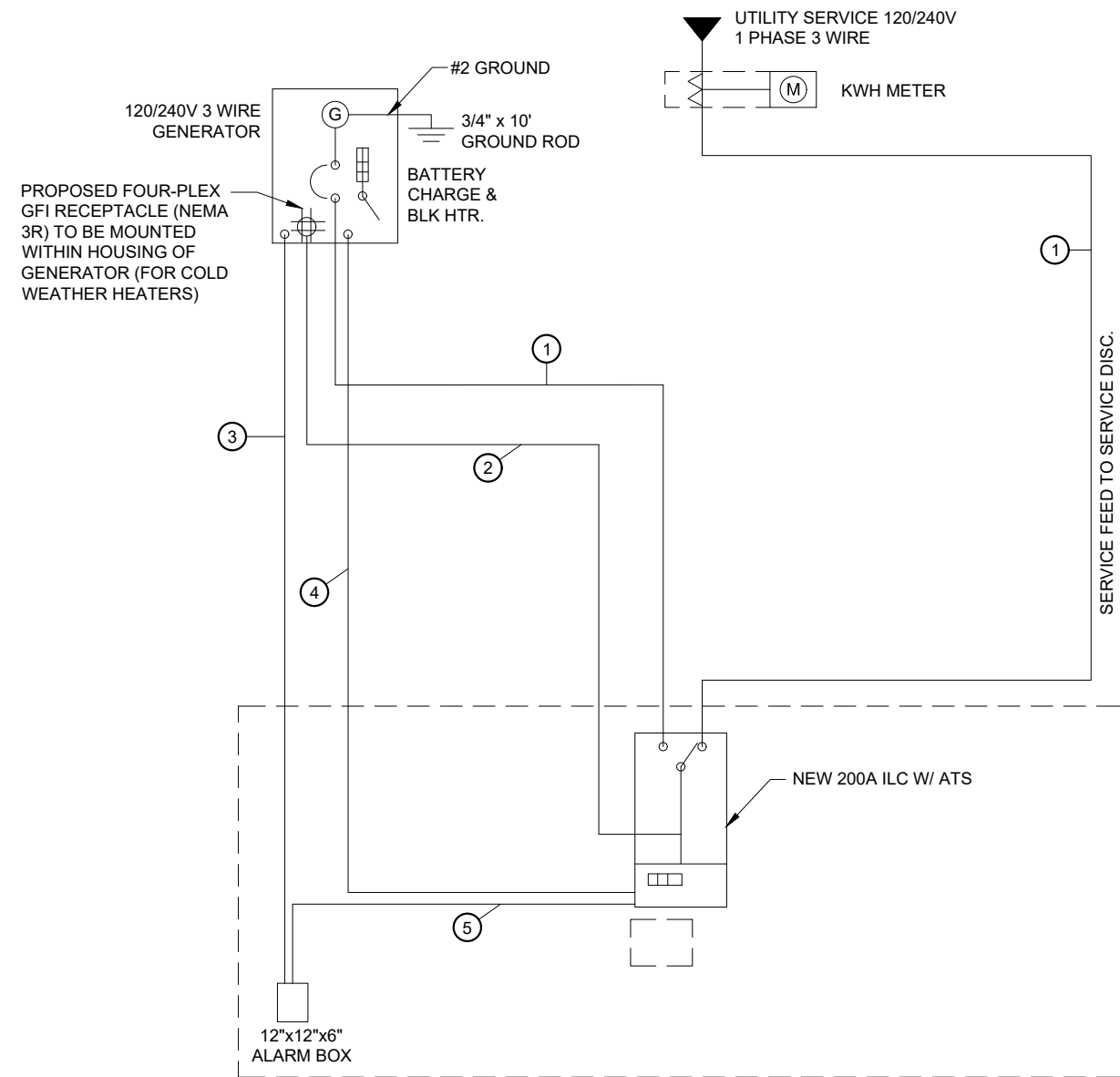
1) E.C. TO PULL A #16 AWG SOLID RED AND A #16 AWG SOLID BLACK FROM THE TRANSFER SWITCH TO ALARM WIRING BLOCK FOR REMOTE START.

2) E.C. TO PULL ALL ALARM LEADS TO EXISTING ALARM WIRING BLOCK. LEAVE A MINIMUM OF 24" PIGTAILS AT ALARM WIRING BLOCK AND TAG CONDUCTORS AS INDICATED. TERMINATIONS ON ALARM POINT WIRING BLOCK BY OTHERS. CONDUCTORS CAN BE RUN EXPOSED. THEY SHALL BE NEATLY BUNDLED USING NYLON TIES AND SUPPORTED AT 2'-0" INTERVALS FOR A NEAT INSTALLATION.

1 **ALARM WIRING**
N.T.S.

- KEY**
- ① (3) #3/0 & (1) #2 GND IN 2-1/2" C
 - ② (4) #12 & (1) #12 GND IN 1" C (SEE NOTE)
 - ③ (2) CAT-5 BELDEN IN 1" C FROM GENERATOR TO ALARM BOX. LEAVE 25' SPOOLED IN ALARM BOX
 - ④ (2) #12 THWN IN 3/4" C
 - ⑤ (2) #16 THWN. LEAVE 25' OF #16 IN ALARM BOX

NOTE:
E.C. TO PROVIDE (2) 20A 1-POLE CIRCUIT BREAKERS FOR BATTERY CHARGER AND JACKET HEATER



2 **NEW SINGLE LINE DIAGRAM**
N.T.S.

NO.	DESCRIPTION	DATE	BY		APD		TJS		PP		TJS		TJS		APD	
			DATE	BY	DATE	BY	DATE	BY	DATE	BY	DATE	BY	DATE	BY		
1	ISSUED FOR REVIEW	01/08/26														
2	ADDITION OF LANDSCAPE PLAN	01/19/26														
3	ADDITION OF GRADING PLAN	01/26/26														
4	REVISED PER COMMENTS	02/23/26														
5	ISSUED FOR PERMIT	02/27/26														
6	REVISED PER COMMENTS	03/04/26														
6	REVISED PER COMMENTS	03/23/26														

MGD LOC#
5000975492
FUZE ID#: 17562059

NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
**GENERATOR SINGLE
LINE DIAGRAM &
ALARM WIRING**

SHEET NUMBER

E-4A

GENERAL

THE CONSTRUCTION DOCUMENT DRAWINGS ARE INTERRELATED. WHEN PERFORMING THE WORK, EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

DIVISION 1: GENERAL REQUIREMENTS
SECTION 01700 - PROJECT CLOSEOUT

PART 1 - GENERAL

- A. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES; INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES.
B. SUBMIT RECORD DRAWINGS, DAMAGE OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.
C. COMPLETE FINAL CLEAN UP REQUIREMENTS. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES.

PART 2 - FINAL CLEANING

- 1. COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION OF COMPLETION.
a. CLEAN THE PROJECT SITE, YARD AND GROUNDS, IN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING LANDSCAPE DEVELOPMENT AREAS, OF RUBBISH, WASTE MATERIALS, LITTER AND FOREIGN SUBSTANCES. SWEEP PAVED AREAS BROOM CLEAN. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS, RAKE GROUNDS THAT ARE NEITHER PLANTED NOR PAVED, TO A SMOOTH EVEN-TEXTURED SURFACE.
b. REMOVE TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIAL FROM THE SITE
c. REMOVE SNOW AND ICE TO PROVIDE SAFE ACCESS TO THE SITE AND EQUIPMENT ENCLOSURE.
d. CLEAN EXPOSED EXTERIOR AND INTERIOR HARD-SURFACED FINISHES TO A DIRT-FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES. AVOID DISTURBING NATURAL WEATHERING OF EXTERIOR SURFACES.
e. REMOVE DEBRIS FROM LIMITED ACCESS SPACES, INCLUDING ROOFS, EQUIPMENT ENCLOSURE, MANHOLES, AND SIMILAR SPACES.
f. TOUCH-UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES AND SURFACES. REPLACE FINISHES AND SURFACES THAT CAN NOT BE SATISFACTORILY REPAIRED OR RESTORED, OR THAT SHOW EVIDENCE OF REPAIR OR RESTORATION. DO NOT PAINT OVER "UL" AND SIMILAR LABELS, INCLUDING ELECTRICAL NAME PLATES.
g. LEAVE THE PROJECT CLEAN AND READY FOR OCCUPANCY
2. REMOVAL OF PROTECTION: REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED DURING CONSTRUCTION TO PROTECT PREVIOUSLY COMPLETED INSTALLATIONS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

DIVISION 2: SITE WORK

SECTION 02200 - EARTHWORK AND DRAINAGE

PART 1 - GENERAL

- 1. WORK INCLUDED: SEE SITE PLAN.
2. SEQUENCING
a. CONSTRUCT TEMPORARY CONSTRUCTION AREA ALONG EAST FENCE LINE.
b. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILITY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AREA AND ACCESS DRIVE W/ TURNAROUND TO BASE COURSE ELEVATION, WATER TO ENSURE GROWTH

PART 2 - EXECUTION

- 1. INSPECTIONS: LOCAL BUILDING INSPECTORS SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, UNLESS OTHERWISE SPECIFIED BY JURISDICTION.
2. PREPARATION
a. CLEAR TREES, BRUSH AND DEBRIS FROM SITE AS REQUIRED.
b. PRIOR TO OTHER EXCAVATION AND CONSTRUCTION, GRUB ORGANIC MATERIAL TO A MINIMUM OF SIX INCHES (6") BELOW GRADE.
c. UNLESS OTHERWISE INSTRUCTED BY OWNER, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.
d. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.
e. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.
3. INSTALLATION
a. GRADE OR FILL THE SITE AS REQUIRED IN ORDER THAT UPON DISTRIBUTION OF SOILS, RESULTING FROM EXCAVATIONS, THE RESULTING GRADE WILL CORRESPOND WITH SAID SUB-BASE COURSE. ELEVATIONS ARE TO BE CALCULATED FROM BENCHMARK, FINISHED GRADES, OR INDICATED SLOPES.
b. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.
c. AVOID CREATING DEPRESSIONS WHERE WATER MAY POND.
d. THE CONTRACT SHALL INCLUDE GRADING, BANKING, AND DITCHING, UNLESS OTHERWISE INDICATED.
e. PLACE FILL OR STONE IN SIX INCH (6") MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.
f. THE TOP SURFACE COURSE, SHALL EXTEND A MINIMUM OF ONE FOOT (1') BEYOND THE SITE FENCE (UNLESS OTHERWISE NOTED) AND SHALL

COVER THE AREA AS INDICATED.

- g. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAP.
h. UNDER NO CIRCUMSTANCES WILL DITCHES, SWALES, OR CULVERTS BE PLACED SO THAT THEY DIRECT WATER TOWARDS, OR PERMIT STANDING WATER IMMEDIATELY ADJACENT TO SHELTER OR EQUIPMENT. IF DESIGNS OR ELEVATIONS ARE IN CONFLICT WITH THIS, ADVISE CONSTRUCTION MANAGER IMMEDIATELY.
i. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAP.
j.
k. IN DITCHES WITH SLOPES GREATER THAN 10% MOUND DIVERSIONARY HEADWALLS IN THE DITCH AT CULVERT ENTRANCES. POSITION THE HEADWALL AT AN ANGLE NO GREATER THAN THAT 60° OFF THE DITCH LINE. RIPRAP THE UPSTREAM SIDE OF THE HEADWALL AS WELL AS THE DITCH FOR SIX FEET (6') ABOVE THE CULVERT ENTRANCE.
l. APPLY SEED AND FERTILIZER TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
m. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.
n. ENSURE GROWTH OF SEEDED AND LANDSCAPED AREAS, BY WATERING, UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.
4. FIELD QUALITY CONTROL: COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.
5. PROTECTION
a. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1-2 INCHES, STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET WILL BE AN ACCEPTABLE ALTERNATIVE.
b. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. PLACE STRAW BALES AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS. WHERE THE SITE OR ROAD AREAS HAVE BEEN ELEVATED IMMEDIATELY ADJACENT TO THE RAIL LINE, STAKE EROSION CONTROL FABRIC FULL LENGTH IN THE SWALE TO PREVENT CONTAMINATION OF THE RAIL BALLAST. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

SECTION 02830 - FENCING AND GATE(S)

PART 1 - GENERAL

- 1. WORK INCLUDED - SEE PLAN FOR SITE AND LOCATION OF FENCE
2. QUALITY ASSURANCE
a. ALL STEEL MATERIALS UTILIZED IN CONJUNCTION WITH THIS SPECIFICATION WILL BE GALVANIZED OR STAINLESS STEEL. WEIGHT OF ZINC COATING ON THE FABRIC SHALL NOT BE LESS THAN 12 OUNCES PER SQUARE FOOT OF MATERIAL COVERED. POSTS SHALL BE HOT-DIPPED IN GRADE "E" ZINC, 18 OUNCES PER SQUARE FOOT.
3. SEQUENCING
a. IF THE SITE AREA HAS BEEN BROUGHT UP TO SURFACE COURSE ELEVATION (PRIOR TO THE FENCE CONSTRUCTION), FENCE POST EXCAVATION SPOILS MUST BE CONTROLLED TO PRECLUDE CONTAMINATION OF SAID SURFACE COURSE.
4. SUBMITTALS
a. MANUFACTURER'S DESCRIPTIVE LITERATURE.
b. CERTIFICATE OR STATEMENT OF COMPLIANCE WITH THE SPECIFICATIONS.

PART 2 - PRODUCTS

- 1. FENCE MATERIAL
a. ALL FABRIC WIRE, RAILS, HARDWARE, AND OTHER STEEL MATERIALS SHALL BE HOT-DIPPED GALVANIZED.
b. FABRIC SHALL BE SEVEN-FOOT (7') HIGH OR TO MATCH EXISTING FENCE TWO-INCH CHAIN LINK MESH OF NO. 9 GAUGE (0.148") WIRE. THE FABRIC SHALL HAVE A KNUCKLED FINISH FOR THE TOP SELVAGES. FABRIC SHALL CONFORM TO THE SPECIFICATIONS OF ASTM A-392 CLASS 1.
c. ALL POSTS SHALL BE SCHEDULE - 40 MECHANICAL SERVICE PIPE AND SHALL BE TYPE 1 ASTM A-128 AND OF THE FOLLOWING DIAMETER
i. LINE 2" SCHEDULE 40 (2 3/8" O.D.)
ii. CORNER 3" SCHEDULE 40 (3 1/2" O.D.)
iii. GATE 3" SCHEDULE 40 (3 1/2" O.D.)
d. ALL TOP AND BRACE RAILS SHALL BE 1" DIAMETER SCHEDULE - 40 MECHANICAL - SERVICE PIPE.
e. GATE FRAMES AND BRACES SHALL BE 1.90 INCH DIAMETER SCHEDULE 40 MECHANICAL - SERVICE PIPE. FRAMES SHALL HAVE WELDED CORNERS.
f. GATE FRAMES SHALL HAVE A FULL-HEIGHT VERTICAL BRACE, AND A FULL-WIDTH HORIZONTAL BRACE, SECURED IN PLACE BY USE OF GATE BRACE CLAMPS.
g. GATE HINGES SHALL BE MERCHANTS METAL MODEL 64386 HINGE ADAPTER WITH MODEL 6409, 188-DEGREE ATTACHMENT.
h. A NO. 7 GAUGE ZINC COATED TENSION WIRE SHALL BE USED AT THE BOTTOM OF THE FABRIC, TERMINATED WITH BAND CLIPS AT CORNER AND GATE POSTS.
i. A SIX-INCH BY 1/2-INCH DIAMETER EYEBOLT TO HOLD TENSION WIRE

SHALL BE PLACED AT LINE POSTS.

- j. STRETCHER BARS SHALL BE 3/16-INCH BY 3/4-INCH OR HAVE EQUIVALENT CROSS-SECTIONAL AREA.
k. ALL CORNER GATE AND PANELS SHALL HAVE A 3/8-INCH TRUSS ROD WITH TURNBUCKLES.
l. ALL POST EXCEPT GATE POSTS SHALL HAVE A COMBINATION CAP AND BARBED WIRE SUPPORTING ARM. GATE POSTS SHALL HAVE A DOME CAP.
m. OTHER HARDWARE INCLUDES BUT MAY NOT BE LIMITED TO TIE CLIPS, BAND CLIPS, AND TENSION BAND CLIPS.
n. ALL CAPS SHALL BE MALLEABLE IRON, DOME OR ACORN SHAPED AS REQUIRED BY PIPE SIZE.

PART 3 - EXECUTION

- 1. INSPECTION: TO CONFIRM PROPER DEPTH AND DIAMETER OF POST HOLE EXCAVATIONS. ALL POST HOLES WILL BE EXCAVATED AS PER CONSTRUCTION DOCUMENTS,
2. INSTALLATION
a. FOUNDATIONS SHALL HAVE A MINIMUM SIX INCH (6") CONCRETE COVER UNDER POST.
b. ALL FENCE POSTS SHALL BE VERTICALLY PLUMB; ON QUARTER INCH (1/4")
c. AT CORNER POSTS, GATE POSTS, AND SIDES OF GATE FRAME, FABRIC SHALL BE ATTACHED WITH STRETCHER AND TENSION BAND-CLIPS AT FIFTEEN (15) INCH INTERVALS.
d. AT LINE POSTS, FABRIC SHALL BE ATTACHED WITH BAND-CLIPS AT FIFTEEN (15) INCH INTERVALS.
e. FABRIC SHALL BE ATTACHED TO BRACE RAILS, TENSION WIRE AND TRUSS RODS WITH TIE-CLIPS AT TWO FOOT (2') INTERVALS.
f. A MAXIMUM GAP OF ONE INCH WILL BE PERMITTED BETWEEN TIE CHAIN LINE FABRIC AND THE FINAL GRADE.
g. GATE SHALL BE INSTALLED SO LOCKS ARE ACCESSIBLE FROM BOTH SIDES.
h. GATE HINGE BOLTS SHALL HAVE THEIR THREADS PEENED OR WELDED TO PREVENT UNAUTHORIZED REMOVAL.
i. CONCRETE TO BE A MINIMUM OF 4,000 PSI AT 7 DAYS. CEMENT SHALL EXCEED ASTM C150, TYPE IIIA.
3. PROTECTION: UPON COMPLETION OF ERECTION, INSPECT FENCE MATERIAL AND PAINT FIELD CUTS OR GALVANIZING BREAKS WITH ZINC-BASED PAINT, COLOR TO MATCH THE GALVANIZED METAL. APPLICABLE STANDARDS:
ASTM-A120 SPECIFICATION FOR PIPE, STEEL, BLACK AND HOT-DIPPED ZINC COATED (GALVANIZED) WELDED AND SEAMLESS, FOR ORDINARY USES.
ASTM-A123 ZINC (HOT-DIP GALVANIZED) COATING ON IRON AND STEEL PRODUCTS.
ASTM-A153 STANDARD SPECIFICATION FOR ZINC COATING (HOT-DIP) ON IRON AND STEEL HARDWARE.
ASTM-A392 SPECIFICATION FOR ZINC-COATED STEEL CHAIN FENCE FABRIC.
ASTM-A491 SPECIFICATION FOR ALUMINUM-COATED STEEL CHAIN LINK FENCE FABRIC
ASTM-A525 STANDARD SPECIFICATION FOR STEEL SHEET ZINC COATED (GALVANIZED) BY THE HOT-DIPPED PROCESS.
ASTM-A570 SPECIFICATION FOR HOT-ROLLED CARBON STEEL SHEET AND STRIP. STRUCTURAL QUALITY.

- A. FEDERAL SPECIFICATION RR-F-191-FENCING, WIRE AND POST METAL (AND GATES, CHAIN LINK FENCE FABRIC, AND ACCESSORIES)

DIVISION 3: CONCRETE

SECTION 03000 - BASIC CONCRETE MATERIALS AND METHODS

PART 1 - GENERAL

- 1. WORK INCLUDED: FORMWORK, REINFORCEMENT, ACCESSORIES, CAST-IN-PLACE CONCRETE, FINISHING, AND CURING.
2. INSPECTIONS
a. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING BUILDING DEPARTMENT INSPECTIONS REQUIRED FOR HIS SCOPE OF WORK.
b. ALL REINFORCING STEEL SHALL BE INSPECTED AND APPROVED BY THE LESSEE'S CONSTRUCTION MANAGER PRIOR TO PLACEMENT OF CONCRETE.
c. THE LESSEE'S CONSTRUCTION MANAGER SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS.
3. QUALITY ASSURANCE
a. CONSTRUCT AND ERECT CONCRETE FORMWORK IN ACCORDANCE WITH ACI 301 AND ASTM 318.
b. PERFORM CONCRETE REINFORCING WORK IN ACCORDANCE WITH ACI 301, ACI 318, AND ASTM A184.
c. PERFORM CAST-IN-PLACE CONCRETE WORK IN ACCORDANCE WITH ACI 301, ACI 318, AND ACI 117-90.
d. OPEN FOUNDATION TRENCHES SHALL BE INSPECTED BY MES PRIOR TO CONCRETE INSTALLATION.
4. SUBMITTALS: SUBMIT CONCRETE MIX AND REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL BY LESSEE CONSTRUCTION MANAGER/ENGINEER. THE SHOP DRAWING SHALL BE SUBMITTED IN THE FORM OF TWO (2) CONCRETE MIX DESIGN INFORMATION SHEETS AND TWO (2) BLUELINE DRAWINGS FOR REINFORCING STEEL.

PART 2 - PRODUCTS

1. REINFORCEMENT MATERIALS

- a. REINFORCEMENT STEEL, ASTM A615, 60 ksi YIELD GRADE, DEFORMED BILLET STEEL BARS, PLAIN FINISH.
b. WELDED STEEL WIRE FABRIC ASTM A185 PLAIN TYPE IN FLAT SHEETS, PLAIN FINISH.
c. CHAIRS, BOLSTERS, BAR SUPPORTS, SPACERS. SIZED AND SHAPED FOR SUPPORTS OR REINFORCING.
d. FABRICATE CONCRETE REINFORCING IN ACCORDANCE WITH ACI 315, ACI 318, ASTM A184.

2. CONCRETE MATERIALS

- a. CEMENT: ASTM C150, PORTLAND TYPE
b. FINE AND COURSE AGGREGATES: ASTM C33 - MAXIMUM SIZE OF CONCRETE AGGREGATE SHALL NOT EXCEED; ONE INCH (1") SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR ONE-THIRD (1/3) CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING.
c. WATER: CLEAN AND NOT DETRIMENTAL TO CONCRETE
d. AIR ENTRAINING ADMIXTURE: ASTM C260
e. BONDING AGENT: LATEX EMULSION FOR BONDING NEW TO OLD CONCRETE AS MANUFACTURED BY DAYTON SUPERIOR.
f. NON-SHRINK GROUT: PREMIXED COMPOUND CONSISTING OF NONMETALLIC AGGREGATE. CEMENT, WATER REDUCING AND PLASTICISING AGENTS.
3. CONCRETE MIX
a. CONCRETE MATERIALS SHALL CONFORM TO THE APPROPRIATE A.C.I. REQUIREMENTS FOR EXPOSED STRUCTURAL CONCRETE.
b. MIX AND DELIVER CONCRETE IN ACCORDANCE WITH ASTM C94, ALT. 3.
c. PROPORTIONS OF CONCRETE MATERIALS SHALL BE SUITABLE FOR THE INSTALLATION METHOD UTILIZED AND SHALL RESULT IN DURABLE CONCRETE FOR LOCAL ANTICIPATED AGGRESSIVE ACTIONS. THE DURABILITY REQUIREMENTS OF ACI 318 CHAPTER 4 SHALL BE SATISFIED BASED ON THE CONDITIONS EXPECTED AT THE SITE. PROVIDE CONCRETE AS FOLLOWS:
i. COMPRESSIVE STRENGTH: 4000 psi AT 7 DAYS. SEE SHEET 2-1 FOR CAISSON CONCRETE COMPRESSIVE STRENGTH.
ii. SLUMP: 3 INCHES

PART 3 - EXECUTION

- 1. INSERTS, EMBEDDED COMPONENTS AND OPENINGS
a. THE CONSTRUCTOR SHALL COORDINATE AND CROSS-CHECK ARCHITECTURAL, BUILDING & ELECTRICAL DRAWINGS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, AND OTHER ITEMS RELATED TO CONCRETE WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THE PROPER LOCATION BEFORE PLACING CONCRETE.
b. PROVIDE FORMED OPENINGS WHERE REQUIRED FOR WORK TO BE EMBEDDED IN AND PASSING THROUGH CONCRETE MEMBERS.
c. COORDINATE WORK OF OTHER SECTIONS IN FORMING AND SETTING OPENING, SLOTS, RECESSES, CHASES, SLEEVES, BOLTS, ANCHORS, AND OTHER INSERTS.
d. INSTALL CONCRETE ACCESSORIES STRAIGHT, LEVEL AND PLUMB.
2. REINFORCEMENT PLACEMENT
a. PLACEMENT REINFORCEMENT, SUPPORTED AND SECURED AGAINST DISPLACEMENT.
b. ENSURE REINFORCING IS CLEAN, FREE OF LOOSE SCALE, DIRT, OR OTHER FOREIGN COATINGS.
c. WELDING IS PROHIBITED ON REINFORCING STEEL AND EMBEDMENTS.
d. MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE THREE INCHES (3") UNLESS OTHERWISE NOTED.
e. CONCRETE COVER FROM TOP OF FOUNDATION TO ENDS OF VERTICAL REINFORCEMENT SHALL NOT EXCEED THREE INCHES (3") NOR BE LESS THAN TWO INCHES (2").
3. PLACING CONCRETE
a. VIBRATE ALL CONCRETE.
b. ALL CONCRETE WORK SHALL ADHERE TO THE LATEST A.C.I. STANDARDS FOR WINTER POURING AND CURING PROCEDURES IF SEASONAL CONDITIONS APPLY.
4. CURING
a. AFTER PLACEMENT, PROTECT CONCRETE FROM PREMATURE DRYING.
b. MAINTAIN CONCRETE WITH MINIMAL MOISTURE LOSS AT RELATIVELY CONSTANT TEMPERATURE FOR A PERIOD NECESSARY FOR HYDRATION OF CEMENT AND HARDENING OF CONCRETE.
5. PROVIDE HAND RUBBED SMOOTH FINISH TO ALL EXPOSED VERTICAL FORMED CONCRETE SURFACES.
6. FIELD QUALITY CONTROL
a. SUBMIT THREE (3) CONCRETE TEST CYLINDERS - TAKEN FOR EVERY 15 CUBIC YARD OR LESS. SUBMIT CONCRETE TESTS TO THE PROJECT MANAGER IN ACCORDANCE WITH ASTM, C-31 AND C-39.
b. SUBMIT ONE (1) ADDITIONAL TEST CYLINDER - TAKEN DURING COLD WEATHER POURS, AND CURED ON JOB SITE UNDER SAME CONDITIONS AS CONCRETE IT REPRESENTS.
c. SUBMIT ONE (1) SLUMP TEST - TAKEN FOR EACH SET OF TEST CYLINDERS TAKEN.
7. DEFECTIVE CONCRETE: MODIFY OR REPLACE CONCRETE NOT CONFORMING TO REQUIRED LINES, DETAILS OR ELEVATIONS AT COST OF GC, AS DIRECTED BY ARCHITECT/ENGINEER.



Table with 6 columns: NO, DESCRIPTION, DATE, BY, APD, TJS, PP, TJS, TJS, APD, TJS, APD. Includes revision details for landscape plan, grading plan, and permit comments.

MGD LOC# 5000975492
FUZE ID#: 17562059

NAPERVILLE_KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

Table with 2 columns: DRAWN BY (JUR), CHECKED BY (DSS), DATE (12/11/2025), PROJECT # (33-3735)

SHEET TITLE
SPECIFICATIONS

SHEET NUMBER
SP-1

DIVISION 5: METALS

SECTION 05000 - METALS

PART 1 - GENERAL

- SECTION INCLUDES:
STRUCTURAL STEEL FRAMING MEMBERS, BASE PLATES, PLATES, BARS, AND GROUTING UNDER BASE PLATES.
- SUBMITTALS:
SHOP DRAWINGS: INDICATE SIZES, SPACING, AND LOCATIONS OF STRUCTURAL MEMBERS, OPENINGS, CONNECTIONS, CAMBERS, LOADS, AND WELDED SECTIONS.
- QUALITY ASSURANCE
 - FABRICATE STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
 - PERFORM DESIGN UNDER DIRECT SUPERVISION OF A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE.

PART 2 - PRODUCTS

- MATERIALS:
 - STRUCTURAL STEEL MEMBERS: ASTM A572, GRADE 50
 - STRUCTURAL TUBING: ASTM A500, GRADE B
 - PIPE: ASTM A53, TYPE E OR S, GRADE B
 - BOLTS, NUTS, AND WASHERS: ASTM A325
 - ANCHOR BOLTS: ASTM A307
 - WELDING MATERIALS: AWS 01.1, TYPE REQUIRED FOR MATERIALS BEING WELDED
 - GROUT: NON - SHRINK TYPE, PREMIXED COMPOUND CONSISTING OF NONMETALLIC AGGREGATE, CEMENT, WATER REDUCING AND PLASTICIZING ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 7000 PSI AT 28 DAYS.
 - SHOP AND TOUCH-UP PRIMER: SSPC 15, TYPE 1, RED OXIDE
 - TOUCH-UP PRIMER FOR GALV. SURFACES: ZINC RICH TYPE
- FABRICATION:
 - CONTINUOUSLY SEAL JOINTED MEMBERS BY CONTINUOUS WELDS. GRIND EXPOSED WELDS SMOOTH.
 - FINISH:
 - PREPARE STRUCTURAL COMPONENT SURFACES IN ACCORDANCE WITH SSPC SP-1 TO SP-10 PROCEDURES.
 - STRUCTURAL STEEL MEMBERS SHALL BE HOT DIPPED GALVANIZED.

PART 3 - EXECUTION

- EXAMINATION AND PREPARATION:
VERIFY THAT THE FIELD CONDITIONS ARE ACCEPTABLE.
- ERECTION:
 - ALLOW FOR ERECTION LOADS. PROVIDE TEMPORARY BRACING TO MAINTAIN FRAMING IN ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRIDGING AND BRACING.
 - FIELD WELD COMPONENTS INDICATED ON SHOP DRAWINGS.
 - DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER.
 - AFTER ERECTION, TOUCH-UP WELDS, ABRASIONS, AND SURFACES NOT SHOP PRIMED OR GALVANIZED WITH TOUCH-UP PRIMERS AS SPECIFIED UNDER SECTION 05000, 0METALS, PART 2 - PRODUCTS, H & I. SURFACES TO BE IN CONTACT WITH CONCRETE NOT INCLUDED.
- FIELD QUALITY CONTROL:
FIELD INSPECTION OF MEMBERS, CONNECTIONS, WELDS, AND TORQUING

DIVISION 16: ELECTRICAL

SECTION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS

- CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.
- ELECTRICAL PLANS, DETAILS AND DIAGRAMS ARE DIAGRAMMATIC ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANEL BOARD, PULL BOX, JUNCTION BOX, SWITCH BOX, ETC. THE TYPE OF TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED "J" WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU, AND "UL" LISTED.
- ALL CONDUIT SHALL HAVE A PULL CORD.
- PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS

INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.

- ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY UBC, NEC AND ALL APPLICABLE CODES.
- PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE SIERRA #WPD-8 LIFT COVERPLATES.

SECTION 16400 - SERVICE AND DISTRIBUTION

- WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THHN OR THWN, WITH A MIN. SIZE OF #12 AWG, COLOR CODED, ALL RECTIFIER DROPS SHALL BE STRANDED TO ACCEPT CRIMP CONNECTORS.
- ALL CHEMICAL GROUND RODS SHALL BE "UL" APPROVED.
- METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS. MANUFACTURED BY MILBANK OR APPROVED EQUAL, AND SHALL BE UTILITY COMPANY APPROVED.
- CONDUIT:
 - RIGID CONDUIT SHALL BE U.L LABEL GALVANIZED ZINC COATED WITH GALVANIZED ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR, RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE ½ LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
 - ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTING SHALL BE GLAND RING COMPRESSION TYPE.
 - FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. ALL FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.
 - ALL UNDERGROUND CONDUIT SHALL BE AS NOTED ON THE DRAWINGS AT A MINIMUM DEPTH OF 42" BELOW GRADE. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY J.U.L.I.E. AT 1-800-892-0123 OR OTHER SUCH NOTIFYING AGENCY FORTY-EIGHT (48) HOURS PRIOR TO DIGGING.

- CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE ONE FORTH INCH (1/4"). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS, NOT ADHESIVE.
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.

GROUNDING ELECTRODE SYSTEM

A. PREPARATION

- SURFACE PREPARATION:
ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTS SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT. NO WASHERS ARE ALLOWED BETWEEN THE ITEMS BEING GROUNDED. ALL CONNECTIONS ARE TO HAVE A NO-OXIDIZING GENT APPLIED PRIOR TO INSTALLATION.
- GROUND BAR PREPARATION:
ALL COPPER GROUND BARS SHALL BE CLEANED, POLISHED AND A NON-OXIDIZING AGENT APPLIED. NO FINGERPRINTS OR DISCOLORED COPPER WILL BE PERMITTED.

SLEEVES:

ALL GROUNDING CONDUCTORS SHALL RUN THROUGH PVC SLEEVES WHEREVER CONDUCTORS RUN THROUGH WALLS, FLOORS OR CEILINGS. IF CONDUCTORS MUST RUN THROUGH EMT, BOTH ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.

B. GROUND BARS

- ALL GROUND BARS SHALL BE ONE FORTH INCH (1/4" THICK TINNED COPPER PLATE AND OF AND OF SIZE INDICATED ON DRAWINGS.
- ALL CONNECTIONS TO THE GROUND BAR SHALL OBSERVE THE FOLLOWING SEQUENCE:
 - BOLT-HEAD
 - 2-HOLE LUG
 - TINNED COPPER BUSS BAR
 - STAR WASHER
 - NUT
- EXTERNAL CONNECTIONS

- ALL BURIED GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, TEE'S, CROSSES, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES AND LIGHTNING PROTECTION SYSTEMS ARE TO BE AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE BY "CADWELD" AND INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES.
- ALL ABOVE GRADE GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACEG AND GROUND ROD) MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON SOLDIER SHALL NOT BE USED. ALL CABLE TO CABLE CONNECTIONS SHALL BE HIGH PRESSURE DOUBLE CRIMP TYPE CONNECTIONS. CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTHERMIC WELDS.

D. GROUND RODS

ALL GROUND RODS SHALL BE 5/8 -INCH DIAMETER X 10' -0" LONG "COPPERWELD" OR APPROVED EQUAL, OF THE NUMBER AND LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH.

E. GROUND RODS

ALL GROUND RODS SHALL BE STANDARD TINNED SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON DRAWINGS UNLESS NOTED OTHERWISE.

F. LUGS

- LUGS SHALL BE 2 - HOLE, LONG BARREL, STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS SERIES #548__BE OR EQUIVALENT

A. 535 MCM DLO	54880BE
B. 262 MCM DLO	54872BE
C. #1/0 DLO	54862BE
D. #4/0 THWN AND BARE	54866BE
E. #2/0 THWN	54862BE
F. #2 THHN	54207BE
G. #6 DLO	54205BE

- WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

	MINIMUM BENDING	
	GROUNDING CONDUCTOR SIZE	RADIUS TO INSIDE EDGE
NO. 6 AWG TO NO. 4 AWG		6 INCHES
NO. 2 AWG TO NO. 1/0 AWG		8 INCHES
NO. 2/0 AWG TO 4/0 MCM		12 INCHES
250 MCM TO 750 MCM		24 INCHES

G. GROUND RING

- THE EXTERNAL GROUND RING ENCIrcLING THE TOWER (IF APPLICABLE) AND BETWEEN THE EQUIPMENT SHELTER PLATFORM ANCHORS SHALL BE MINIMUM NO. 2 SOLID TINNED BARE COPPER CONDUCTOR IN DIRECT CONTACT WITH THE EARTH AT THE DEPTH INDICATED ON THE DRAWINGS. CONDUCTOR BENDS SHALL HAVE A MINIMUM BENDING RADIUS OF EIGHT INCHES (8").

- ALL EXTERNAL GROUND RINGS ARE TO BE JOINED TOGETHER AND ALL CONNECTIONS MUST BE CADWELDED. NO LUNGS OR CLAMPS WILL BE ACCEPTED.

H. FENCE/GATE

GROUND EACH GATE POST, CORNER POST AND GATE AS INDICATED ON DRAWING GROUND CONNECTIONS TO FENCE POST AND ALL OTHER CONNECTIONS FOR THE GROUND GRID SYSTEM SHALL BE MADE BY EXOTHERMIC WELD PROCESS, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES, AND SPRAYED WITH COLD-GALVANIZED PAINT.

- I.E.E.E. FALL POTENTIAL TESTS

A. FOR RAW LAND SITE

- GROUND TESTS SHALL BE PERFORMED AS INDICATED ON DRAWINGS. A BIDDLE GROUND OHMER OR THE METHOD OF USING TWO AUXILIARY GROUND RODS (AS DESCRIBED IN I.E.E.E. STANDARDS NO. 81-1983, PART 1) MAY BE USED. THE I.E.E.E. METHOD REQUIRES THE USE OF AN A.C. TEST CURRENT. THE AUXILIARY TEST RODS MUST BE SUFFICIENTLY FAR AWAY FROM THE ROD UNDER TEST SO THAT THE REGIONS IN WHICH THEIR RESISTANCE IS LOCALIZED DO NOT OVERLAP. THE TEST POINT WILL BE GROUND ROD AND WILL CONSIST OF THE THREE POINT FALL OF POTENTIAL MEGGER TEST METHOD, USING THE BIDDLE NULL-BALANCE EARTH TESTER (MEGGER #250220-2 OR EQUIVALENT)

- CONTRACTOR TO CONDUCT GROUND RESISTANCE TEST IN THE FORMAT AS FOLLOWS:

B. EQUIPMENT PAD

- FIRST TEST - SHALL BE WITH FOUR GROUND RODS INSTALLED, ONE AT EACH CORNER OF THE PAD BUT NOT CONNECTED TO THE MAIN GROUNDING BUS. FURNISH WIRE TO CONNECT (TEMPORARY CLAMP) ALL FOUR GROUND RODS TOGETHER TO MAKE A SYSTEM TEST AFTER EACH ROD IS INDIVIDUALLY TESTED. IF ANY INDIVIDUAL ROD TESTS 35 OHMS OR MORE, THE ELECTRICAL CONTRACTOR AND OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT THE ROD CAN BE DRIVEN DEEPER UNTIL ALL FOUR RODS HAVE A RESISTANCE OF 10 OHMS OR LESS ON A DRY DAY.
- SECOND TEST- SHALL BE WITH THE GROUND RODS CONNECTED, WITH DRY SOIL AND WHEN NO STANDING WATER HAS BEEN PRESENT FOR THE PAST TEN (10) DAYS. THE MAXIMUM ALLOWABLE READING IS 5 OHMS TO GROUND. IF THE RESISTANCE OF THE ENTIRE SYSTEM EXCEEDS 5 OHMS, NOTIFY THE CONTRACTOR AND OWNER'S REPRESENTATIVE SO THAT ADDITIONAL AND/OR DEEPER RODS CAN BE INSTALLED.

C. TOWER

- FIRST TEST - SHALL BE WITH THREE GROUND RODS INSTALLED (MINIMUM), EQUALLY SPACED AROUND THE TOWER FOUNDATION, BUT NOT CONNECTED TO THE SHELTER PAD EXTERNAL GROUND RING. FURNISH WIRE TO CONNECT (TEMPORARY CLAMP) ALL THREE GROUND RODS TOGETHER TO MAKE A SYSTEM TEST AFTER EACH ROD IS INDIVIDUALLY TESTED. IF ANY INDIVIDUAL ROD TESTS 25 OHMS OR MORE, NOTIFY THE CONTRACTOR AND OWNER'S REPRESENTATIVE SO THAT THE ROD CAN BE DRIVEN DEEPER UNTIL ALL THREE (3) RODS HAVE A RESISTANCE OF 10 OHMS OR LESS ON A DRY DAY.
- SECOND TEST- SHALL BE WITH THE GROUND RODS CONNECTED, WITH DRY SOIL AND WHEN NO STANDING WATER HAS BEEN PRESENT FOR THE PAST (10) DAYS, THE MAXIMUM ALLOWABLE READING IS 5 OHMS THE ELECTRICAL CONTRACTOR AND OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT EITHER

ADDITIONAL AND/OR DEEPER RODS CAN BE INSTALLED.

D. EQUIPMENT PAD AND TOWER

- AFTER THE EQUIPMENT PAD AND TOWER GROUND RESISTANCE TEST IS COMPLETED, CONTRACTOR SHALL TIE EQUIPMENT PAD EXTERNAL GROUND RING AND TOWER EXTERNAL GROUND RING TOGETHER. AFTER FIRST AND SECOND TEST ALL CONNECTIONS MUST BE MADE USING EXOTHERMIC WELD. NO LUGS OR CLAMPS WILL BE ACCEPTED.
- AFTER ALL THE EXTERNAL GROUND RINGS ARE TIED TOGETHER, COMPETE A MEGGER CHECKER OF THE GROUND SYSTEM SHOULD BE DONE. THE MAXIMUM ALLOWABLE LEADING IS 5 OHMS TO GROUND.

- GROUNDING RESISTANCE TEST REPORT

UPON COMPLETION OF THE TESTING FOR EACH SITE, A TEST REPORT SHOWING RESISTANCE IN OHMS WITH AUXILIARY POTENTIAL ELECTRODES AT 5 FEET AND 10 FEET INTERVALS UNTIL THE AVERAGE RESISTANCE STARTS INCREASING AND ALSO NOTE THAT 10-15 PHOTOS MUST BE TAKEN TO PROOF ENTIRE EXTERNAL GROUND RING SYSTEM BEFORE BACKFILL. TWO (2) SETS OF TEST DOCUMENTS AREA OF THE INDEPENDENT TESTING SERVICE TO BE BOUND AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

SECTION 16503 - POLES, POSTS, AND STANDARDS (SINGLE MAST AND SELF SUPPORTING TOWERS)

1. GENERAL

- LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED
- PROVIDE TEMPORARY LIGHTING FOR TOWER AS PER FAA REGULATIONS DURING CONSTRUCTION, IF REQUIRED.

C. GROUNDING:

GROUND TOWER WITH A MINIMUM OF #2 AWG TINNE SOLID BARE COPPER CONDUCTOR CADWELDED TO TOWER BASE PLATE. TWO (2) GROUNDING LEADS PER TOWER BASE PLATE.

NO EXOTHERMIC WELDS SHALL BE ATTACHED DIRECTLY TO THE MONOPOLE TOWER SHAFT

SECTION 16745- TELECOMMUNICATIONS WIRING COMPONENT

(COAXIAL ANTENNA CABLE)

1. GENERAL

- ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
- CERTAIN MATERIALS AND PRODUCTS WILL BE SUPPLIED BY THE OWNER (REFER TO GENERAL CONDITIONS FOR THE LIST OF OWNER FURNISHED EQUIPMENT, MATERIALS AND SUPPLIES FOR THESE ITEMS). THE CONTRACTOR IS RESPONSIBLE FOR PICKUP AND DELIVERY OF ALL SUCH MATERIALS
- ALL OTHER MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR.

2. MATERIALS

a. COAXIAL CABLE:

- INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.

- ALL COAX RUN LENGTHS GREATER THAN 175 FEET SHALL BE 1-5/8", ALL COAX. RUN LENGTH BETWEEN 101 FEET AND 174 FEET SHALL BE 1-1/4", AND IN LENGTH LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".

3. ANTENNA AND COAXIAL CABLE GROUNDING

- ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

4. COAXIAL CABLE IDENTIFICATION

- TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING, PLASTIC TAGS SHALL BE USED AT THE FOLLOWING LOCATIONS:

- FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED).
- SECOND LOCATION IS INSIDE THE EQUIPMENT SHELTER NEAR THE WAVEGUIDE ENTRY PORT.

- USE ANDREW CABLE TIES (PT. # 7290) TO SECURE IDENTIFICATION TAGS.

5. TESTING

LESSEE SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PERFORM THE COAXIAL SWEEP TEST & REPORT. THE CONTRACTOR IS TO PROVIDE ONE CLIMBER / QUALIFIED PERSONNEL TO ASSIST IN ANY REPAIRS AND WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE LESSEE WITH A MINIMUM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.



NO.	DESCRIPTION	DATE	BY	APD	TJS	PP	TJS	TJS	APD
		DATE	BY						
1	ISSUED FOR REVIEW	01/08/26							
1	ADDITION OF LANDSCAPE PLAN	01/19/26							
2	ADDITION OF GRADING PLAN	01/26/26							
3	REVISED PER COMMENTS	02/23/26							
4	ISSUED FOR PERMIT	02/27/26							
5	REVISED PER COMMENTS	03/04/26							
6	REVISED PER COMMENTS	03/23/26							

MGD LOC# 5000975492
FUZE ID#: 17562059

NAPERVILLE KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
SPECIFICATIONS

SHEET NUMBER
SP-2



1 PROPOSED SITE LOCATION
VIEW FACING WEST



2 EXISTING METER CENTER
SCALE: N.T.S.



3 EXISTING TRANSFORMER
SCALE: N.T.S.



4 EXISTING ACCESS
SCALE: N.T.S.

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (847) 619-5397
FAX: (847) 706-7415



NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	01/08/26	APD
2	ADDITION OF LANDSCAPE PLAN	01/19/26	TJS
3	ADDITION OF GRADING PLAN	01/26/26	PP
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5	ISSUED FOR PERMIT	02/27/26	TJS
6	REVISED PER COMMENTS	03/04/26	APD
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MGD LOC#
5000975492
FUZE ID#: 17562059

NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

DRAWN BY: JJR
CHECKED BY: DSS
DATE: 12/11/2025
PROJECT #: 33-3735

SHEET TITLE
EXISTING SITE PHOTOS

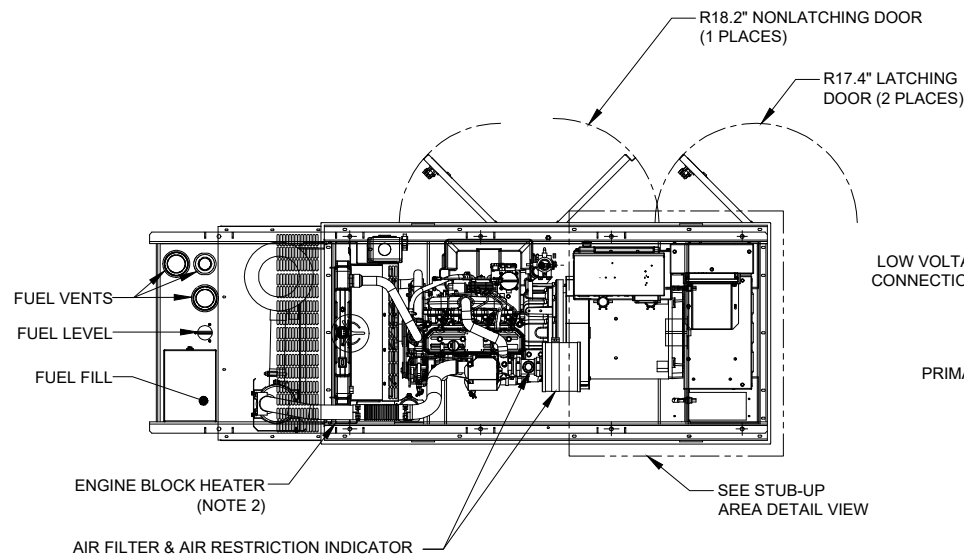
SHEET NUMBER
P-1

NOTES

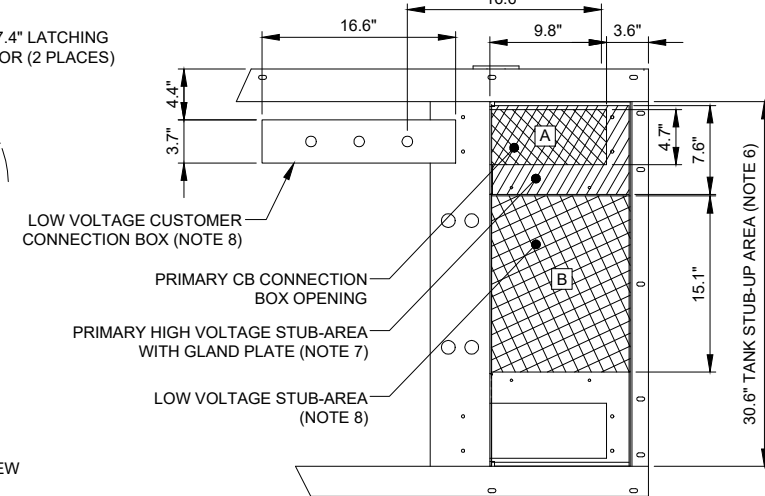
- CONTROL PANEL INCLUDES BATTERY CHARGER WITH THREE PRONG CORD.
- 1500W 120VAC ENGINE BLOCK HEATER WITH THREE PRONG CORD.
- 12 VOLT NEGATIVE GROUND SYSTEM.
- GENERATOR MUST BE GROUNDED.
- CENTER OF GRAVITY & WEIGHT MAY BE SHIFTED SLIGHTLY DUE TO UNIT OPTION.
- STUB-UPS: BASE TANK REQUIRES ALL STUB-UPS TO BE IN THE REAR TANK STUB UP AREA.
- HIGH VOLTAGE STUB-UP AREA INCLUDES THE AC LOAD LEAD CONNECTION TO THE MAIN LINE CIRCUIT BREAKER, THE NEUTRAL CONNECTION, AND AUXILIARY 120/240V CONNECTION.
- CONNECTION POINTS FOR CONTROL WIRES. BOTTOM OF LOW VOLTAGE CUSTOMER CONNECTION BOX HAS KNOCKOUTS FOR 1/2" AND 3/4" CONDUIT FITTINGS.
- MUST ALLOW FREE FLOW OF DISCHARGE AIR AND EXHAUST. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
- MUST ALLOW FREE FLOW OF INTAKE AIR. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
- GENERATOR MUST BE INSTALLED SUCH THAT FRESH COOLING AIR IS AVAILABLE AND THAT DISCHARGE AIR FROM THE RADIATOR IS NOT RECIRCULATED.
- IT IS THE RESPONSIBILITY OF THE INSTALLATION TECHNICIAN TO ENSURE THAT THE GENERATOR INSTALLATION COMPLIES WITH ALL APPLICABLE CODES, STANDARDS, AND REGULATIONS.
- 190 GALLON USEABLE CAPACITY BASE TANK IS INCLUDED WITH GENERATOR.
- UNIT IS SHIPPED WITH FUEL SUPPLY AND RETURN LINES DISCONNECTED AND PLUGGED BETWEEN ENGINE AND FUEL TANK. THIS HAS BEEN DONE TO FACILITATE PRESSURE TESTING OF THE TANK IN THE FIELD. FOR INFORMATION REGARDING CONNECTING THE FIELD TANK FIELD TESTING PROCEDURE (0E5082) SUPPLIED IN THE TANK LOOSE VENTS KIT, WHICH IS SHIPPED WITH THIS GENERATOR.
- SEE DRAWING 0C3850 FOR DISCHARGE DUCT REMOVAL. REMOVAL OF DUCT WILL PROVIDE ACCESS TO MUFFLER FOR SERVICING.

**RECOMMENDED ELECTRICAL STUB-UPS
(SEE DETAILED VIEW & TOP VIEW)**

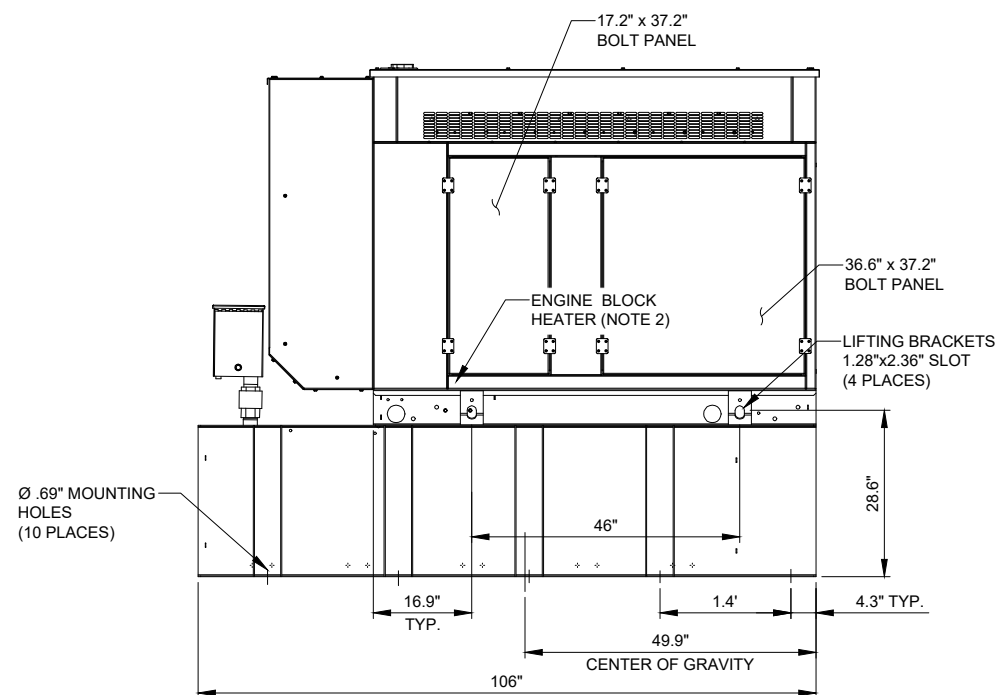
DESCRIPTION	INSIDE BASE
(HIGH VOLTAGE STUB UP) 1. AC LOAD LEAD CONDUIT AREA. 2. 120/240 VAC FROM UTILITY FOR OPTIONAL LOADS. (GLAND PLATE INCLUDED)	A
LOW VOLTAGE STUB UP 1. TRANSFER SWITCH/ COMMUNICATIONS CONDUITS. COMMUNICATIONS AND 2-WIRE START MUST NOT BE RUN IN CONDUIT W/ AC WIRING. (SEE NOTE 8)	B



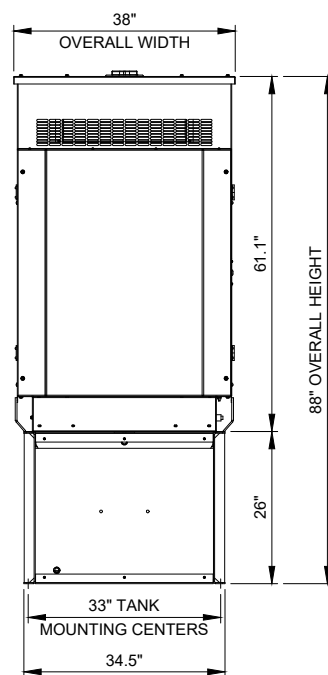
TOP OR PLAN VIEW



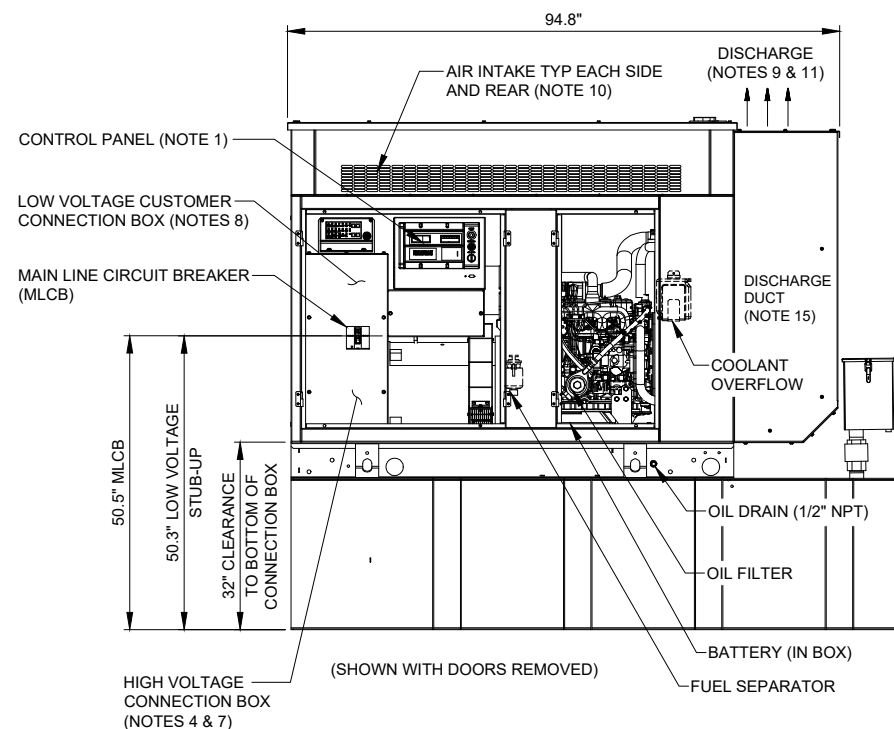
STUB-UP AREA DETAILED VIEW



LEFT SIDE VIEW



REAR VIEW



RIGHT SIDE VIEW

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (847) 619-5397
FAX: (847) 706-7415

TERRA
CONSULTING GROUP
New Joint Venture: Engineering & Design

NO.	DESCRIPTION	BY	DATE
		APD	01/08/26
1	ISSUED FOR REVIEW	TJS	01/19/26
2	ADDITION OF LANDSCAPE PLAN	PP	01/26/26
3	ADDITION OF GRADING PLAN	TJS	02/23/26
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MGD LOC#
5000975492
FUZE ID#: 17562059
NAPERVILLE
KNOLLS_PRELO

8712 PLAINFIELD NAPERVILLE RD
NAPERVILLE, IL 60564

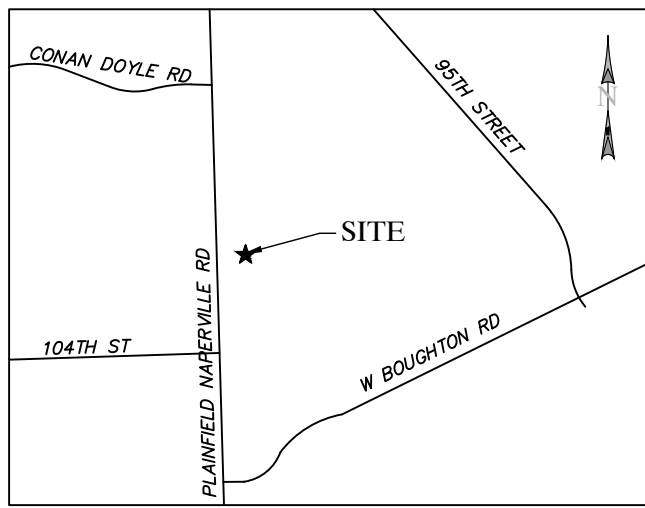
DRAWN BY:	JJR
CHECKED BY:	DSS
DATE:	12/11/2025
PROJECT #:	33-3735

SHEET TITLE
**GENERATOR
CUT-SHEET**

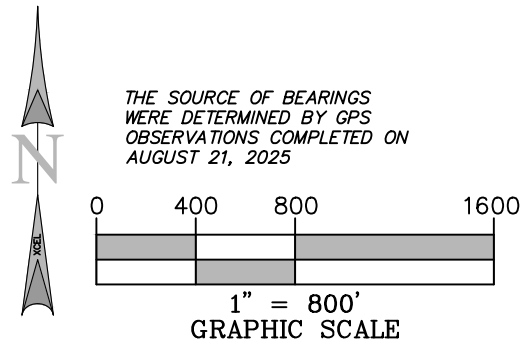
SHEET NUMBER
EX-1

1 GENERAC 30kW DIESEL GENERATOR
SCALE: N.T.S. GENERAC MODEL: SD030-1P-190JT

WEIGHT DATA: (INCLUDING EMPTY FUEL TANK)
GENERATOR : 3106 LBS



VICINITY MAP
NOT TO SCALE



THE SOURCE OF BEARINGS
WERE DETERMINED BY GPS
OBSERVATIONS COMPLETED ON
AUGUST 21, 2025

*** FAA COORDINATE POINT**

NAD 83
LATITUDE: 41°41'47.0288" (41.69639690)
LONGITUDE: -88°09'54.5185" (-88.16514402)
NAVD88 ELEVATION: 632.8'± AMSL

● TEMPORARY BENCHMARK

NORTHING: 1831973.69300000
EASTING: 1030083.86400000
ELEVATION: 635.2'
DESCRIPTION: SET MAG NAIL

GLOBAL POSITIONING SYSTEMS NOTE

1. RANDOM TRAVERSE CONTROL MONUMENTS WERE SET USING GPS METHODS. A PORTION OF THE TOPOGRAPHY AND FOUND BOUNDARY MONUMENTS WERE ALSO LOCATED USING GPS METHODS.
2. THE TYPE OF GPS UTILIZES AS NETWORK ADJUSTED REAL TIME KINEMATIC (HYPER SR NETWORK), NAD 83 HARN/L ILLINOIS STATE PLANES, EAST ZONE, US FOOT.
3. TOPCON HIPER VR AND/OR VRX RECEIVERS WERE USED TO PERFORM THE SURVEY.

GENERAL NOTES

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY XCEL CONSULTANTS TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE PARENT PARCEL.

THIS SURVEY IS FOR THE PROPOSED LEASE AREA AND THE PROPOSED EASEMENTS ONLY, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT PARCEL HAS BEEN PERFORMED.

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

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

XCEL CONSULTANTS HAS RECEIVED AND REVIEWED THE TITLE COMMITMENT PREPARED BY CHICAGO TITLE INSURANCE COMPANY, COMMITMENT NO. IL2508372, DATED JUNE 4, 2025 AT 12:00 AM, PREPARED FOR THE SUBJECT PROPERTY, TO DETERMINE THE IMPACTS OF EXISTING TITLE EXCEPTIONS.

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE "X" (AREA OF MINIMAL FLOOD HAZARD), ZONE "X(SHADED)" (AREA OF 0.2% ANNUAL CHANCE FLOOD), ZONE "A" (SPECIAL FLOOD HAZARD AREA WITHOUT BASE FLOOD ELEVATION), AND ZONE "AE(FLOODWAY)" (AREA OF REGULATORY FLOODWAY) OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 17197C0033G, WHICH BEARS AN EFFECTIVE DATE OF FEBRUARY 15, 2019 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

NO WETLANDS AREAS HAVE BEEN INVESTIGATED BY THIS SURVEY

THERE WERE NO STREAMS, DRAINAGE DITCHES OR PIPES, OR RIVERS RUNNING THROUGH OR BORDERING THE PARENT PARCEL, LEASE AREA NOR NEW EASEMENTS AT THE TIME OF SURVEY.

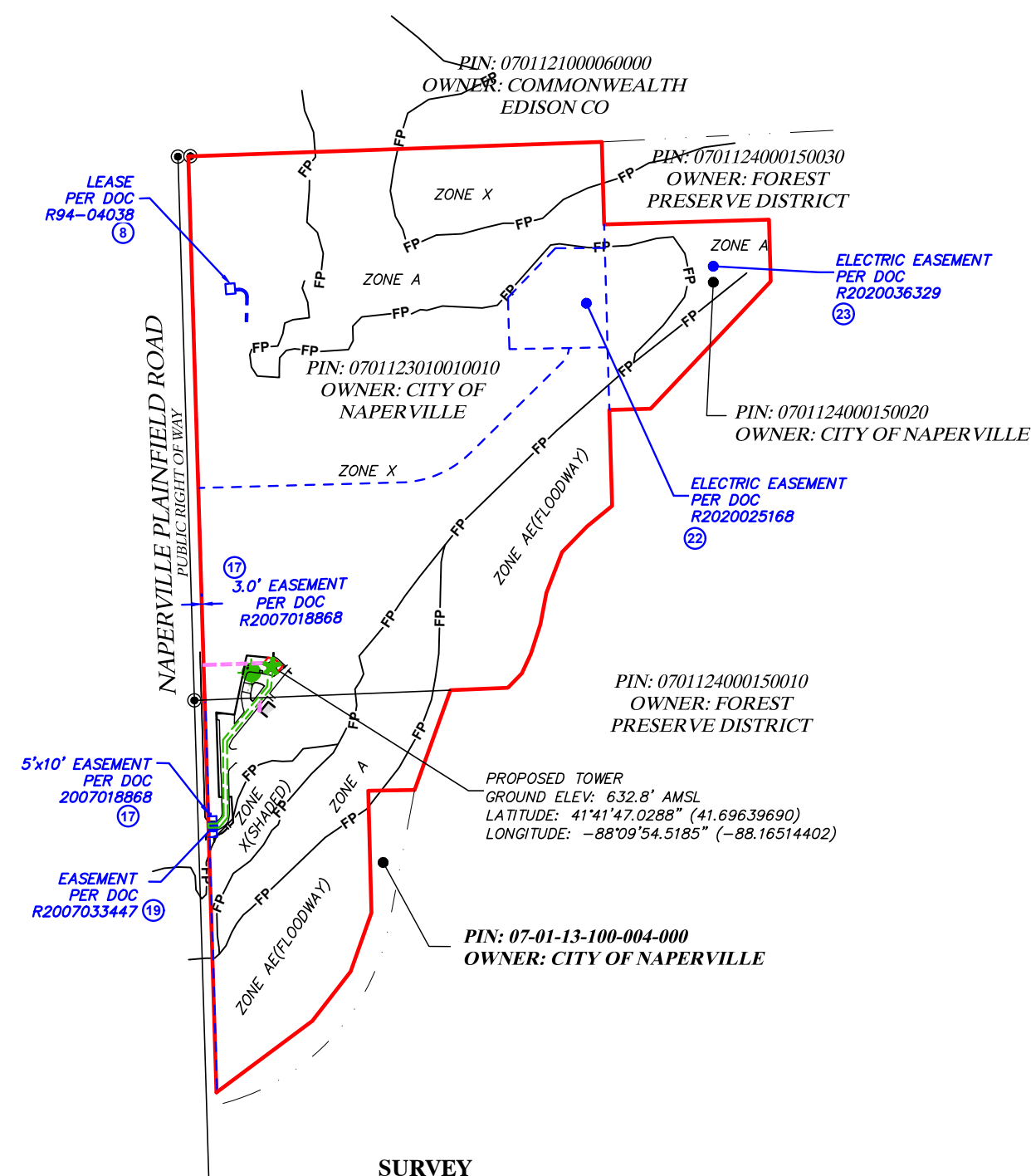
THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON MARKINGS CREATED BY BLVD ON AUGUST 15, 2025 AND OBSERVED GROUND FEATURES AND/OR EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ALL UNDERGROUND UTILITIES SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING ANY ON SITE WORK

TO: CHICAGO TITLE INSURANCE COMPANY; VERIZON; TOWNORTH; TERRA CONSULTING GROUP, LTD.

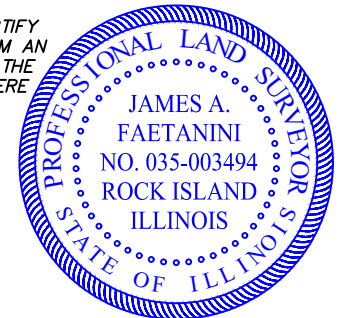
I, JAMES A. FAETANINI, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREIN WERE CONDUCTED IN ACCORDANCE WITH THE ILLINOIS MINIMUM STANDARDS OF PRACTICE. THE FIELD WORK WAS COMPLETED ON AUGUST 21, 2025

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- LEASE LINE
- ACCESS/UTILITY EASEMENT
- RIGHT OF WAY LINE
- SURVEY TIE LINE
- CONTOURS
- FLOODPLAIN LINE
- BUILDING
- FENCE
- STORM DRAIN LINE
- WATER LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND ELECTRIC LINE
- FIBER OPTIC LINE
- OVERHEAD ELECTRIC LINE
- BENCHMARK
- FOUND MONUMENT (AS NOTED)
- ELECTRIC MANHOLE
- FIRE HYDRANT
- WATER VALVE
- DRAINAGE INLETS
- AREA LIGHT
- TRAFFIC SIGNAL LIGHT
- PEDESTAL (ELECTRIC, TELEPHONE)
- ELECTRIC METER
- TRAFFIC VAULT
- UTILITY POLE
- GUY WIRE
- CONCRETE BOLLARD
- TRANSFORMER
- POINT OF BEGINNING
- POINT OF COMMENCEMENT
- CENTERLINE OF TOWER LOCATION
- MEASURED & RECORD
- SQUARE FEET



SURVEY



PRELIMINARY

JAMES A. FAETANINI
LICENSE NUMBER 035-003494
MY LICENSE RENEWAL DATE IS NOVEMBER 30, 2026
SHEETS COVERED BY THIS SEAL B-1, B-2, B-3, AND B-4

750 W CENTER ST, SUITE 301
WEST BRIDGEWATER, MA 02379
PHONE: (844) 748-8878 FAX: (508) 819-3017

600 Busse Highway
Park Ridge, IL 60068
Ph: 847/698-6400
Fax: 847/698-6401

SURVEYED BY:

120 10TH AVENUE EAST, SUITE 3
MILAN, IL 61264
(O) 309-787-9988
(F) 309-756-5540
(E) XCEL@XCELCONSULTANTSINC.COM

XCEL PROJECT NUMBER: 255922

SURVEY		
REV.	DATE	DESCRIPTION

SITE NAME:
NAPERVILLE KNOLLS

SITE NUMBER: 17426234

3712 PLAINFIELD ROAD
NAPERVILLE, IL 60540

OWNER: CITY OF NAPERVILLE
PARCEL #: 0701123010010010
400 S EAGLE STREET
PO BOX 3020
NAPERVILLE, IL 60566
WARRANTY DEED R93-0003769

WILL COUNTY
ILLINOIS

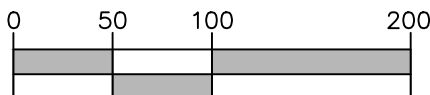
DRAWN BY: KJM
CHECKED BY: BCH
SURVEY DATE: 8/21/2025
PLAT DATE:

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

SHEET NUMBER:
B-1



THE SOURCE OF BEARINGS WERE DETERMINED BY GPS OBSERVATIONS COMPLETED ON AUGUST 21, 2025



1" = 100'
GRAPHIC SCALE

*** FAA COORDINATE POINT**

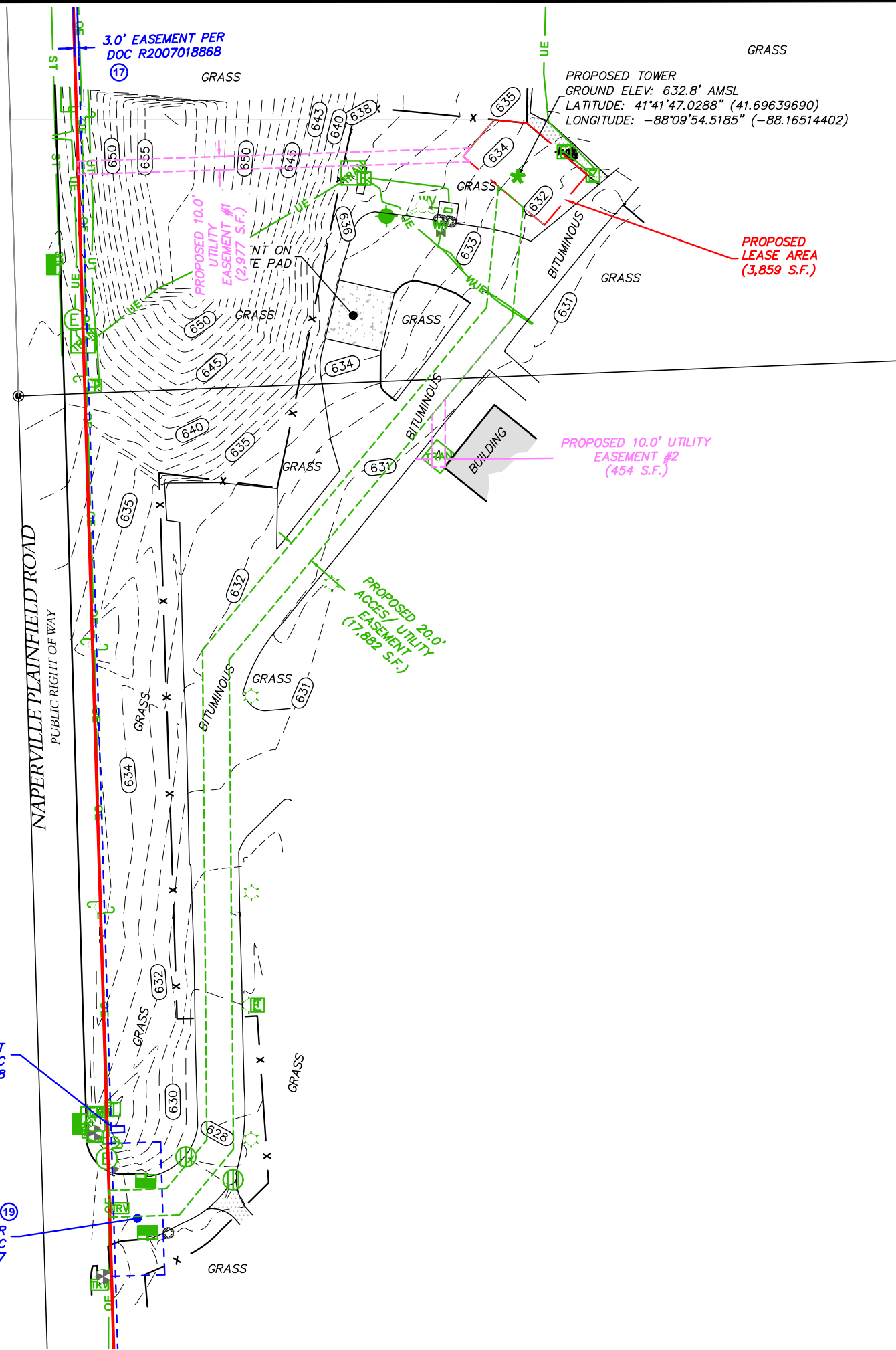
NAD 83
LATITUDE: 41°41'47.0288" (41.69639690)
LONGITUDE: -88°09'54.5185" (-88.16514402)
NAVD88 ELEVATION: 632.8'± AMSL

● TEMPORARY BENCHMARK

NORTHING: 1831973.69300000
EASTING: 1030083.86400000
ELEVATION: 635.2'
DESCRIPTION: SET MAG NAIL

LEGEND

- PROPERTY LINE
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- ST STORM DRAIN LINE
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- ⊕ GUY WIRE
- ⊕ CONCRETE BOLLARD
- ⊕ TRANSFORMER
- POB POINT OF BEGINNING
- POC POINT OF COMMENCEMENT
- * CENTERLINE OF TOWER LOCATION
- (M&R) MEASURED & RECORD
- S.F. SQUARE FEET



TowerNorth
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TERRA
600 Busse Highway
Park Ridge, IL 60068
Ph: 847/698-6400
Fax: 847/698-6401

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MILAN, IL 61264
(O) 309-787-9988
(F) 309-756-5540
(E) XCEL@XCELCONSULTANTSINC.COM

XCEL PROJECT NUMBER: 255922

SURVEY		
REV.	DATE	DESCRIPTION

SITE NAME:
NAPERVILLE KNOLLS

SITE NUMBER: 17426234

3712 PLAINFIELD ROAD
NAPERVILLE, IL 60540

OWNER: CITY OF NAPERVILLE
PARCEL #: 0701123010010010
400 S EAGLE STREET
PO BOX 3020
NAPERVILLE, IL 60566
WARRANTY DEED R93-0003769

WILL COUNTY
ILLINOIS

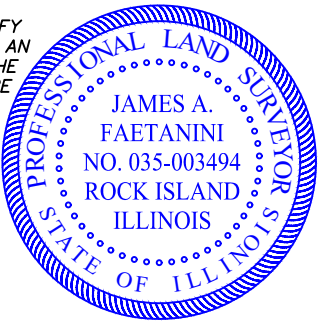
DRAWN BY: KJM
CHECKED BY: BCH
SURVEY DATE: 8/21/2025
PLAT DATE:

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

SHEET NUMBER:
B-2

TO: CHICAGO TITLE INSURANCE COMPANY; VERIZON; TOWNORTH; TERRA CONSULTING GROUP, LTD.

I, JAMES A. FAETANINI, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREIN WERE CONDUCTED IN ACCORDANCE WITH THE ILLINOIS MINIMUM STANDARDS OF PRACTICE. THE FIELD WORK WAS COMPLETED ON AUGUST 21, 2025

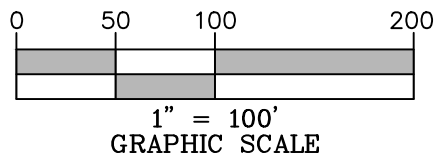


PRELIMINARY

JAMES A. FAETANINI
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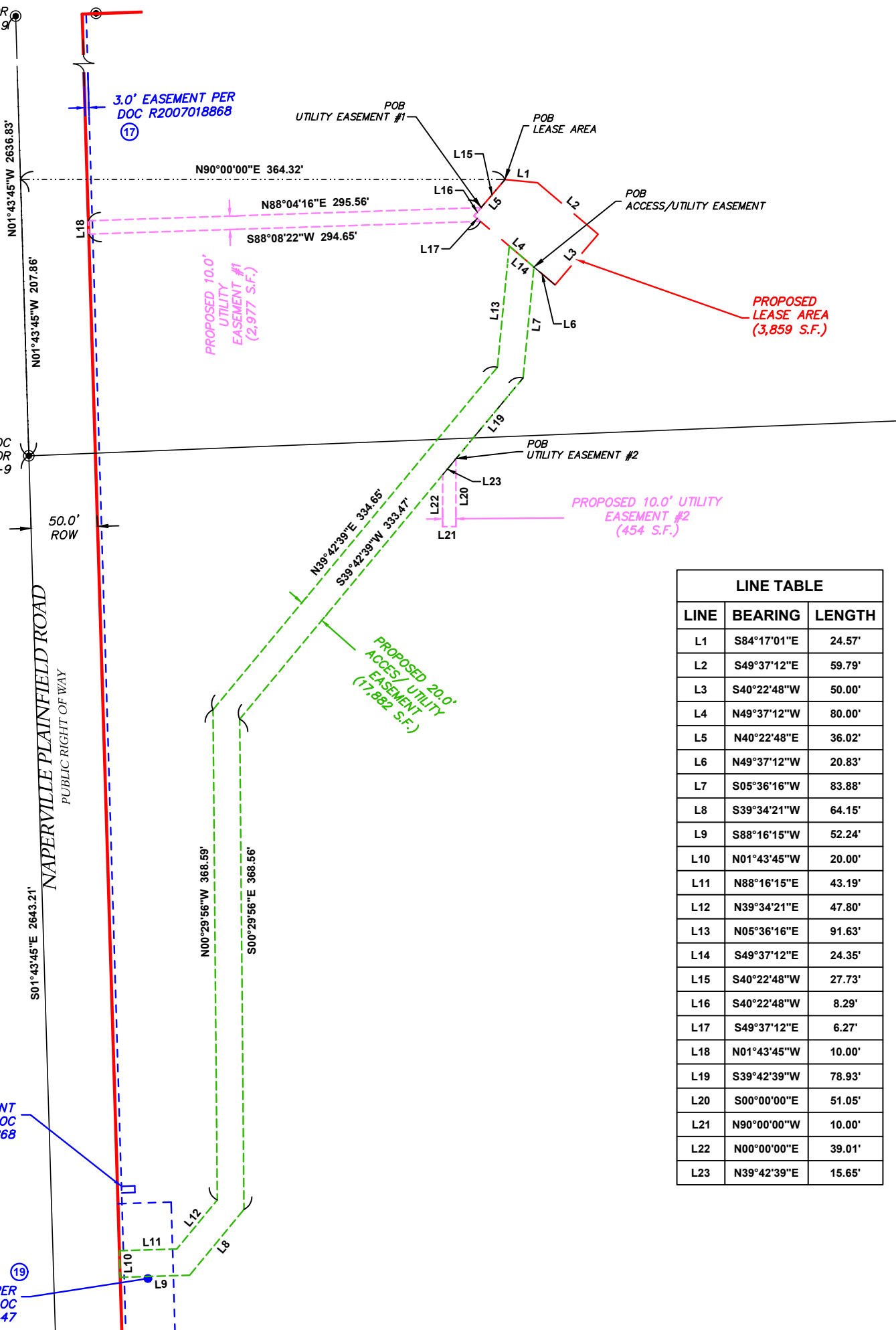


THE SOURCE OF BEARINGS WERE DETERMINED BY GPS OBSERVATIONS COMPLETED ON AUGUST 21, 2025



W1/4 COR
SEC.12-37-9

POC
SW COR
SEC.12-37-9



LINE TABLE		
LINE	BEARING	LENGTH
L1	S84°17'01"E	24.57'
L2	S49°37'12"E	59.79'
L3	S40°22'48"W	50.00'
L4	N49°37'12"W	80.00'
L5	N40°22'48"E	36.02'
L6	N49°37'12"W	20.83'
L7	S05°36'16"W	83.88'
L8	S39°34'21"W	64.15'
L9	S88°16'15"W	52.24'
L10	N01°43'45"W	20.00'
L11	N88°16'15"E	43.19'
L12	N39°34'21"E	47.80'
L13	N05°36'16"E	91.63'
L14	S49°37'12"E	24.35'
L15	S40°22'48"W	27.73'
L16	S40°22'48"W	8.29'
L17	S49°37'12"E	6.27'
L18	N01°43'45"W	10.00'
L19	S39°42'39"W	78.93'
L20	S00°00'00"E	51.05'
L21	N90°00'00"W	10.00'
L22	N00°00'00"E	39.01'
L23	N39°42'39"E	15.65'

750 W CENTER ST, SUITE 301
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Fax: 847/698-6401

SURVEYED BY:

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(F) 309-756-5540
(E) XCEL@XCELCONSULTANTSINC.COM

XCEL PROJECT NUMBER: 255922

SURVEY

REV.	DATE	DESCRIPTION

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SITE NUMBER: 17426234

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NAPERVILLE, IL 60540

OWNER: CITY OF NAPERVILLE
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WARRANTY DEED R93-0003769

WILL COUNTY ILLINOIS

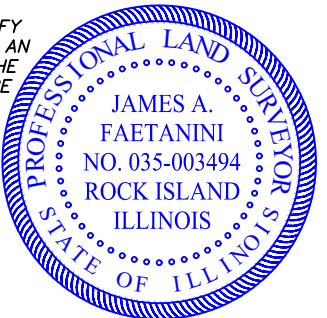
DRAWN BY: KJM
CHECKED BY: BCH
SURVEY DATE: 8/21/2025
PLAT DATE:

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

SHEET NUMBER:
B-3

TO: CHICAGO TITLE INSURANCE COMPANY; VERIZON; TOWNORTH; TERRA CONSULTING GROUP, LTD.

I, JAMES A. FAETANINI, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREIN WERE CONDUCTED IN ACCORDANCE WITH THE ILLINOIS MINIMUM STANDARDS OF PRACTICE. THE FIELD WORK WAS COMPLETED ON AUGUST 21, 2025



⑰
5'x10' EASEMENT
PER DOC
2007018868

⑱
EASEMENT PER
DOC
R2007033447

PRELIMINARY

JAMES A. FAETANINI
LICENSE NUMBER 035-003494
MY LICENSE RENEWAL DATE IS NOVEMBER 30, 2026
SHEETS COVERED BY THIS SEAL B-1, B-2, B-3, AND B-4

REPORT OF TITLE:

XCEL CONSULTANTS HAS RECEIVED AND REVIEWED THE TITLE COMMITMENT PREPARED BY CHICAGO TITLE INSURANCE COMPANY, COMMITMENT NO. IL2508372, DATED JUNE 4, 2025 AT 12:00 AM, PREPARED FOR THE SUBJECT PROPERTY, TO DETERMINE THE IMPACTS OF EXISTING TITLE EXCEPTIONS.

SURVEY MATTERS OR EASEMENTS LISTED IN SCHEDULE 'B':

- 8. MEMORANDUM OF LEASE DATED FEBRUARY 28, 1994 AND RECORDED APRIL 18, 1994 AS DOCUMENT R94-040378 MADE BY AND BETWEEN THE CITY OF NAPERVILLE, AN ILLINOIS MUNICIPAL CORPORATION (LANDLORD) AND CHICAGO SMSA LIMITED PARTNERSHIP, AN ILLINOIS LIMITED PARTNERSHIP (TENANT) WHICH DEMISES THE LAND FOR A PERIOD ENDING SEPTEMBER 30, 2024, AND THE RIGHTS OF ALL PARTIES CLAIMING THEREUNDER, IF ANY. NOTE: THE AFORESAID LEASE CONTAINS OPTIONS TO RENEW FOR 2 PERIODS OF 1 YEARS EACH. LIES ON PARENT TRACT - AS SHOWN
9. EASEMENT AGREEMENT DATED OCTOBER 17, 1974 AND RECORDED DECEMBER 13, 1974 AS DOCUMENT R74-30899, MADE BY AND BETWEEN CHICAGO TITLE AND TRUST COMPANY, AS TRUSTEE UNDER TRUST AGREEMENT DATED DECEMBER 1, 1973 AND KNOWN AS TRUST NO. 63431 AND THE CITY OF NAPERVILLE, TO INSTALL, CONSTRUCT, RECONSTRUCT, OPERATE, MAINTAIN, ALTER, REPAIR, REPLACE AND REMOVE AN INTERCEPTOR SANITARY SEWER LINE AND CONNECTING TRUNK SEWER WITH NECESSARY APPURTENANCES, ALL FOR THE PURPOSE OF THE EXPANSION AND EXTENSION OF THE SANITARY SEWER SYSTEM. DOES NOT LIE ON PARENT TRACT
10. EASEMENT IN FAVOR OF NORTHERN ILLINOIS GAS COMPANY FOR UTILITY AND INCIDENTAL PURPOSES AS CREATED BY GRANT RECORDED ON MAY 4, 1983 AS DOCUMENT R83-11890. DOES NOT LIE ON PARENT TRACT
11. DECLARATION OF EASEMENT DATED JULY 1, 1988 AND RECORDED JULY 13, 1988 AS DOCUMENT R88-31124, TO INSTALL, CONSTRUCT, RECONSTRUCT, OPERATE, MAINTAIN, ALTER, REPAIR AND REPLACE AN INTERCEPTOR SANITARY SEWER, MAIN OR TRUNK LINE. DOES NOT LIE ON PARENT TRACT
12. NOTICE TO AFFECTED PARTIES OF PENDING ANNEXATION DATED MAY 23, 1990 AND RECORDED JUNE 13, 1990 AS DOCUMENT R90-031867. REFERS TO PARENT TRACT - NOTHING TO PLOT
13. AN ORDINANCE ANNEXING CERTAIN TERRITORY COMMONLY KNOWN AS SPRINGBROOK REGIONAL WATER RECLAMATION CENTER TO THE CITY OF NAPERVILLE, ORDINANCE NO. 90-115, DATED JUNE 6, 1990 AND RECORDED JUNE 13, 1990 AS DOCUMENT R90-031869. REFERS TO PARENT TRACT - NOTHING TO PLOT
14. AN ORDINANCE AMENDING THE ZONING ORDINANCE OF THE CITY OF NAPERVILLE, ILLINOIS, BY RE-ZONING CERTAIN PROPERTY A1 (AGRICULTURAL) ZONING IN WILL COUNTY TO R1 ZONING IN THE CITY OF NAPERVILLE AND GRANTING A CONDITIONAL USE FOR PUBLIC UTILITIES, ORDINANCE NO. 90-116, DATED JUNE 6, 1990 AND RECORDED JUNE 13, 1990 AS DOCUMENT R90-031873. REFERS TO PARENT TRACT - NOTHING TO PLOT
15. ANNEXATION TO NAPERVILLE PARK DISTRICT (PROPERTY KNOWN AS SPRINGBROOK WATER RECLAMATION DISTRICT, ORDINANCE #329, DATED AUGUST 2, 1990 AND RECORDED AUGUST 23, 1990 AS DOCUMENT R90-046810. REFERS TO PARENT TRACT - NOTHING TO PLOT
16. ANNEXATION OF CERTAIN PROPERTY TO THE VILLAGE OF BOLINGBROOK, ILLINOIS DATED JULY 5, 1996 AND RECORDED OCTOBER 29, 1996 AS DOCUMENT R96-097595. REFERS TO PARENT TRACT - NOTHING TO PLOT
17. EASEMENT IN FAVOR OF COMMONWEALTH EDISON COMPANY AND ILLINOIS BELL TELEPHONE COMPANY FOR UTILITY AND INCIDENTAL PURPOSES AS CREATED BY GRANT RECORDED ON FEBRUARY 1, 2007 AS DOCUMENT R2007018868. LIES ON PARENT TRACT - AS SHOWN
18. DONATION OF DEDICATION OF RIGHT OF WAY FOR PUBLIC ROAD PURPOSES, DATED NOVEMBER 21, 2006 AND RECORDED MARCH 1, 2007 AS DOCUMENT R2007033446. LIES WITHIN CURRENT RIGHT OF WAY - NOTHING TO PLOT
19. PERMANENT EASEMENT DONATION DATED FEBRUARY 22, 2007 AND RECORDED MARCH 1, 2007 AS DOCUMENT R2007033447. LIES ON PARENT TRACT - AS SHOWN
20. AGREEMENT CONCERNING LAND FOR A TEMPORARY EASEMENT DONATION DATED FEBRUARY 22, 2007 AND RECORDED MARCH 1, 2007 AS DOCUMENT R2007033448. TERMS OF TEMPORARY EASEMENT HAS EXPIRED
21. AN ORDINANCE APPROVING A MINOR CHANGE TO THE CONDITIONAL USE FOR PUBLIC UTILITIES FOR THE PROPERTY LOCATED 3712 PLAINFIELD-NAPERVILLE ROAD, ORDINANCE NO. 08-166, DATED SEPTEMBER 16, 2008 AND RECORDED MARCH 16, 2009 AS DOCUMENT R2009030814 REFERS TO PARENT TRACT - NOTHING TO PLOT
22. EASEMENT AGREEMENT DATED MARCH 4, 2020 AND RECORDED APRIL 3, 2020 AS DOCUMENT R2020025168, MADE BY AND BETWEEN THE CITY OF NAPERVILLE, A MUNICIPAL CORPORATION AND THE ILLINOIS MUNICIPAL ELECTRIC AGENCY, A BODY POLITIC AND CORPORATE, MUNICIPAL CORPORATION. LIES ON PARENT TRACT - AS SHOWN
23. MEMORANDUM OF LICENSE AGREEMENT DATED MAY 8, 2020 AND RECORDED MAY 13, 2020 AS DOCUMENT R2020036329, BY AND BETWEEN ILLINOIS MUNICIPAL ELECTRIC AGENCY, A MUNICIPAL CORPORATION AND SCS PLAINFIELD 011755 NAPERVILLE, LLC, A NEW YORK LIMITED LIABILITY COMPANY. LIES ON PARENT TRACT - AS SHOWN
24. AN ORDINANCE ANNEXING CERTAIN PROPERTY LOCATED TO THE NORTHEAST OF SPRINGBROOK WATER RECLAMATION CENTER (SPRINGBROOK SOLAR), ORDINANCE NO. 20-021, DATED MARCH 4, 2020 AND RECORDED JUNE 12, 2020 AS DOCUMENT R2020045480. REFERS TO PARENT TRACT - NOTHING TO PLOT
25. PLAT OF ANNEXATION RECORDED JUNE 12, 2020 AS DOCUMENT R2020045481. REFERS TO PARENT TRACT - NOTHING TO PLOT
26. AN ORDINANCE REZONING CERTAIN PROPERTY LOCATED TO THE NORTHEAST OF SPRINGBROOK WATER RECLAMATION CENTER (SPRINGBROOK SOLAR) TO R1 (LOW DENSITY SINGLE-FAMILY RESIDENCE DISTRICT), ORDINANCE NO. 20-022, DATED MARCH 4, 2020 AND RECORDED JUNE 12, 2020 AS DOCUMENT R2020045482. REFERS TO PARENT TRACT - NOTHING TO PLOT
27. AN ORDINANCE APPROVING THE PRELIMINARY/FINAL PLAT OF SUBDIVISION FOR THE PROPERTY LOCATED AT 3712 PLAINFIELD-NAPERVILLE (SPRINGBROOK SOLAR), ORDINANCE NO. 20-023, DATED MARCH 4, 2020 AND RECORDED JUNE 12, 2020 AS DOCUMENT R2020045483. REFERS TO PARENT TRACT - NOTHING TO PLOT
28. MATTERS OF RECORD, INCLUDING:
A) COVENANTS, CONDITIONS AND RESTRICTIONS (BUT OMITTING ANY SUCH COVENANT OR RESTRICTION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN UNLESS AND ONLY TO THE EXTENT THAT SAID COVENANT (A) IS EXEMPT UNDER CHAPTER 42, SECTION 3607 OF THE UNITED STATES CODE OR (B) RELATES TO HANDICAP BUT DOES NOT DISCRIMINATE AGAINST HANDICAPPED PERSONS), WHICH DOES NOT CONTAIN A REVERSIONARY OR FORFEITURE CLAUSE;
B) EASEMENTS, AND THE EASEMENT PROVISIONS AND GRANTEE AS SHOWN OF RECORD AND ON PLAT OF SUBDIVISION FOR SPRINGBROOK WATER RECLAMATION FACILITY RECORDED JUNE 12, 2020 AS DOCUMENT R2020045484; AND
C) BUILDING LINES AS SET FORTH ON PLAT OF SUBDIVISION FOR SPRINGBROOK WATER RECLAMATION FACILITY RECORDED JUNE 12, 2020 AS DOCUMENT R2020045484. REFERS TO PARENT TRACT - NOTHING TO PLOT
29. AN ORDINANCE APPROVING A MAJOR CHANGE TO A CONDITIONAL USE FOR A PUBLIC UTILITY IN THE R1 DISTRICT, A CONDITIONAL USE FOR GROUND-MOUNTED PHOTOVOLTAIC SYSTEM IN THE R1 DISTRICT, AND FENCE VARIANCES FOR THE PROPERTY LOCATED AT 3712 PLAINFIELD-NAPERVILLE ROAD (SPRINGBROOK SOLAR), ORDINANCE NO. 20-024, DATED MARCH 4, 2020 AND RECORDED JUNE 12, 2020 AS DOCUMENT R2020045485. REFERS TO PARENT TRACT - NOTHING TO PLOT
30. NOTICE TO AFFECTED PARTIES OF PENDING ANNEXATION DATED MARCH 3, 2020 AND RECORDED JUNE 12, 2020 AS DOCUMENT R2020045486. REFERS TO PARENT TRACT - NOTHING TO PLOT
31. ANNEXATION TO NAPERVILLE PARK DISTRICT, ORDINANCE #977, DATED MARCH 12, 2020 AND RECORDED JUNE 22, 2020 AS DOCUMENT R2020048190. REFERS TO PARENT TRACT - NOTHING TO PLOT

PARENT PARCEL:

LOT 1 IN SPRINGBROOK WATER RECLAMATION FACILITY, BEING PART OF THE SOUTH HALF OF SECTION 12 AND THE NORTH HALF OF SECTION 13, TOWNSHIP 37 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, WILL COUNTY, ILLINOIS.

PROPOSED LEASE AREA:

A PART OF LOT 1 IN SPRINGBROOK WATER RECLAMATION FACILITY, BEING PART OF THE SOUTH HALF OF SECTION 12 AND THE NORTH HALF OF SECTION 13, TOWNSHIP 37 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, WILL COUNTY, ILLINOIS, MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE SW CORNER OF SAID SECTION 12; THENCE N01°43'45"W, ALONG THE WEST LINE OF SAID SECTION 12, 207.86 FEET; THENCE N90°00'00"E, 364.32 FEET TO THE POINT OF BEGINNING OF THE LEASE AREA HEREIN INTENDED TO BE DESCRIBED; THENCE S84°17'01"E, 24.57 FEET; THENCE S49°37'12"E, 59.79 FEET; THENCE S40°22'48"W, 50.00 FEET; THENCE N49°37'12"W, 80.00 FEET; THENCE N40°22'48"E, 36.02 FEET TO THE POINT OF BEGINNING, CONTAINING 3,859 SQUARE FEET.

PROPOSED ACCESS/UTILITY EASEMENT:

A PART OF LOT 1 IN SPRINGBROOK WATER RECLAMATION FACILITY, BEING PART OF THE SOUTH HALF OF SECTION 12 AND THE NORTH HALF OF SECTION 13, TOWNSHIP 37 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, WILL COUNTY, ILLINOIS, MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE SW CORNER OF SAID SECTION 12; THENCE N01°43'45"W, ALONG THE WEST LINE OF SAID SECTION 12, 207.86 FEET; THENCE N90°00'00"E, 364.32 FEET; THENCE S84°17'01"E, 24.57 FEET; THENCE S49°37'12"E, 59.79 FEET; THENCE S40°22'48"W, 50.00 FEET; THENCE N49°37'12"W, 20.83 FEET TO THE POINT OF BEGINNING OF THE EASEMENT AREA HEREIN INTENDED TO BE DESCRIBED; THENCE S05°36'16"W, 83.88 FEET; THENCE S39°42'39"W, 333.47 FEET; THENCE S00°29'56"E, 368.56 FEET; THENCE S39°34'21"W, 64.15 FEET; THENCE S88°16'15"W, 52.24 FEET TO THE EAST LINE OF NAPERVILLE/PLAINFIELD ROAD; THENCE N01°43'45"W, ALONG THE SAID EAST LINE OF ROAD, 20.00 FEET; THENCE N88°16'15"E, 43.19 FEET; THENCE N39°34'21"E, 47.80 FEET; THENCE N00°29'56"W, 368.59 FEET; THENCE N39°42'39"E, 334.65 FEET; THENCE N05°36'16"E, 91.63 FEET TO THE SOUTHERLY LINE OF LEASE AREA; THENCE S49°37'12"E, ALONG THE SAID SOUTHERLY LEASE LINE, 24.35 FEET TO THE POINT OF BEGINNING, CONTAINING 17,882 SQUARE FEET.

PROPOSED UTILITY EASEMENT #1:

A PART OF LOT 1 IN SPRINGBROOK WATER RECLAMATION FACILITY, BEING PART OF THE SOUTH HALF OF SECTION 12 AND THE NORTH HALF OF SECTION 13, TOWNSHIP 37 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, WILL COUNTY, ILLINOIS, MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE SW CORNER OF SAID SECTION 12; THENCE N01°43'45"W, ALONG THE WEST LINE OF SAID SECTION 12, 207.86 FEET; THENCE N90°00'00"E, 364.32 FEET; THENCE S40°22'48"W, 27.73 FEET TO THE POINT OF BEGINNING OF THE EASEMENT AREA HEREIN INTENDED TO BE DESCRIBED; THENCE CONTINUING, S40°22'48"W, 8.29 FEET; THENCE S49°37'12"E, 6.27 FEET; THENCE S88°08'22"W, 294.65 FEET TO THE EAST LINE OF NAPERVILLE/PLAINFIELD ROAD; THENCE N01°43'45"W, ALONG THE SAID EAST LINE OF ROAD, 10.00 FEET; THENCE N88°04'16"E, 295.56 FEET TO THE POINT OF BEGINNING, CONTAINING SQUARE FEET.

PROPOSED UTILITY EASEMENT #2:

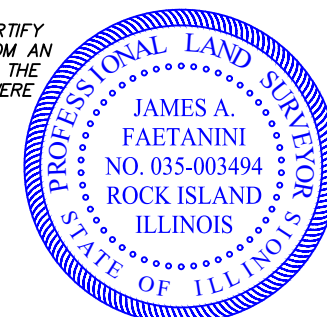
A PART OF LOT 1 IN SPRINGBROOK WATER RECLAMATION FACILITY, BEING PART OF THE SOUTH HALF OF SECTION 12 AND THE NORTH HALF OF SECTION 13, TOWNSHIP 37 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, WILL COUNTY, ILLINOIS, MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE SW CORNER OF SAID SECTION 12; THENCE N01°43'45"W, ALONG THE WEST LINE OF SAID SECTION 12, 207.86 FEET; THENCE N90°00'00"E, 364.32 FEET; THENCE S84°17'01"E, 24.57 FEET; THENCE S49°37'12"E, 59.79 FEET; THENCE S40°22'48"W, 50.00 FEET; THENCE N49°37'12"W, 20.83 FEET; THENCE S05°36'16"W, 83.88 FEET; THENCE S39°42'39"W, 78.93 FEET TO THE POINT OF BEGINNING OF THE EASEMENT AREA HEREIN INTENDED TO BE DESCRIBED; THENCE S00°00'00"E, 51.05 FEET; THENCE N90°00'00"W, 10.00 FEET; THENCE N00°00'00"E, 39.01 FEET; THENCE N39°42'39"E, 15.65 FEET TO THE POINT OF BEGINNING, CONTAINING 454 SQUARE FEET.

TO: CHICAGO TITLE INSURANCE COMPANY; VERIZON; TOWNORTH; TERRA CONSULTING GROUP, LTD.

I, JAMES A. FAETANINI, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREIN WERE CONDUCTED IN ACCORDANCE WITH THE ILLINOIS MINIMUM STANDARDS OF PRACTICE. THE FIELD WORK WAS COMPLETED ON AUGUST 21, 2025

PRELIMINARY

JAMES A. FAETANINI
LICENSE NUMBER 035-003494
MY LICENSE RENEWAL DATE IS NOVEMBER 30, 2026
SHEETS COVERED BY THIS SEAL B-1, B-2, B-3, AND B-4



XCEL PROJECT NUMBER: 255922

SURVEY

Table with 3 columns: REV., DATE, DESCRIPTION

SITE NAME: NAPERVILLE KNOLLS

SITE NUMBER: 17426234

3712 PLAINFIELD ROAD NAPERVILLE, IL 60540

OWNER: CITY OF NAPERVILLE
PARCEL #: 0701123010010010
400 S EAGLE STREET
PO BOX 3020
NAPERVILLE, IL 60566
WARRANTY DEED R93-0003769

WILL COUNTY ILLINOIS

DRAWN BY: KJM
CHECKED BY: BCH
SURVEY DATE: 8/21/2025
PLAT DATE:

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

SHEET NUMBER: B-4

Project Details	
Project Name:	TRADITIONAL RELO
Project Alt Name:	NAPERVILLE_KNOLLS_PRELO
Project Type:	Initial Build
Modification Type:	
Designed Sector Carrier 4G:	12
Designed Sector Carrier 5G:	6
Additional Sector Carrier 4G:	N/A
Additional Sector Carrier 5G:	N/A
FP Solution Type & Tech Type:	MCR;4G_700,4G_850,4G_AWS,4G_PCS,5G_L-Sub6
Carrier Aggregation:	false
MPT Id:	
eCIP-O:	false
Suffix:	

Location Information	
Site ID:	617486165
E-NodeB ID:	
MDG Location ID:	5000975492
PSLC:	
Switch Name:	
Tower Owner:	
Tower Type:	Monopole
Site Type:	MACRO
Site Sub Type:	TRADITIONAL
Street Address:	3712 Plainfield Road
City:	Naperville
State:	IL
Zip Code:	60540
County:	Will
Latitude:	41.696505 / 41° 41' 47.418" N
Longitude:	-88.165397 / 88° 9' 55.4292" W

RFDS Project Scope: 8/1/25 EE tower equip BOM submitted.(BAT)

Antenna Summary

Added														
700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Centerline	Tip Height	Azimuth	Inst. Type	Quantity	Item ID	
				5G	Ericsson	AIR6419	AIR 6419 B77D Radio Unit	130	131.2	30(A) 145(B) 270(C)	PHYSICAL	3	1900483699	
				5G	LTE	Ericsson	AIR3283	AIR 3283 B25 B66	130	132	30(A) 145(B) 270(C)	PHYSICAL	3	1900486642
LTE	5G				JMA Wireless	MX04FIT865-03E		130	134	30(A) 145(B) 270(C)	PHYSICAL	3		

Removed													
700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Centerline	Tip Height	Azimuth	Inst. Type	Quantity	Item ID
No data available.													

Retained													
700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Centerline	Tip Height	Azimuth	Inst. Type	Quantity	Item ID
No data available.													

Added: 9 Removed: 0 Retained: 0

Equipment Summary

Added														
Equipment Type	Location	700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Cable Length	Cable Size	Install Type	Quantity	Item ID
RRU	Tower				5G	LTE	ERICSSON INC	AIR3283 B25+B66	AIR 3283 B25 B66			PHYSICAL	0	1900486642
RRU	Tower	LTE	5G				ERICSSON INC	4490	DB Radio 4490HP BS+B13- Rem Radio Unit			PHYSICAL	3	1900483084
RRU	Tower					5G	ERICSSON INC	AIR6419_B77D	AIR 6419 B77D Radio Unit			PHYSICAL	0	1900483699
Hybrid Cable	Tower						HUBER & SUHNER INC	6X12 STD HYB (6AWG)_xxx FT W/GLAND			1-5/8 inch	PHYSICAL	3	
OVP Box	Tower						RAYCAP INC	RVZDC-3315-PF-48	TOWER TOP AND BASE POWER PROTECTION FIBER			PHYSICAL	3	1900422667
Alarm	Tower						RAYCAP INC	3315-ALM-RS485	RETROFIT FOR THE 60VP DIST BOX			PHYSICAL	3	1900070685

Removed														
Equipment Type	Location	700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Cable Length	Cable Size	Install Type	Quantity	Item ID
No data available.														

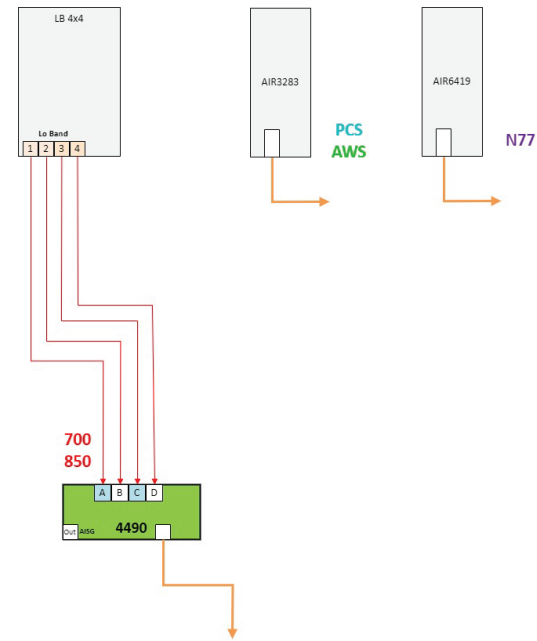
Retained														
Equipment Type	Location	700	850	1900	AWS	CBAND	Make	Atoll Model	Item Description	Cable Length	Cable Size	Install Type	Quantity	Item ID
No data available.														

Service Info

700 MHz LTE			
Sector	Azimuth	Cell / ENode B ID	Antenna Model
30	145	270	
MX04FIT865-03E	MX04FIT865-03E	MX04FIT865-03E	
JMA Wireless	JMA Wireless	JMA Wireless	
130	130	130	
0	0	0	
5	5	5	
134	134	134	
147.49	147.49	147.49	
5230	5230	5230	
10	10	10	
1327.39	1327.39	1327.39	
Ericsson	Ericsson	Ericsson	
4490	4490	4490	
4.4	4.4	4.4	
1	1	1	
25156385	25156388	25156391	
ATOLL_API	ATOLL_API	ATOLL_API	

850 MHz 5GNR			
Sector	Azimuth	Cell / ENode B ID	Antenna Model
30	145	270	
MX04FIT865-03E	MX04FIT865-03E	MX04FIT865-03E	
JMA Wireless	JMA Wireless	JMA Wireless	
130	130	130	
0	0	0	
5	5	5	
134	134	134	
390.24	390.24	390.24	
177000	177000	177000	
10	10	10	
926.83	926.83	926.83	
Ericsson	Ericsson	Ericsson	
4490	4490	4490	
4.4	4.4	4.4	
1	1	1	
25156993	25156994	25156995	
ATOLL_API	ATOLL_API	ATOLL_API	

KNLF207	Chicago	CW	MTA003	B	17197	Will	Celco Partnership	Yes	10.000	1880.000-1885.000	1960.000-1965.000	.000-.000	.000-.000	1077.22	1640	832.05	Active	added	Yes
WRHD639	Chicago, IL	UU	PEA003	M8	17197	Will	Celco Partnership	Yes	100.000	38300.000-38400.000	.000-.000	.000-.000	.000-.000		0	832.05	Active		Yes
WRNE597	Chicago, IL	PM	PEA003	A2	17197	Will	Celco Partnership	Yes	20.000	3720.000-3740.000	.000-.000	.000-.000	.000-.000	803.87	1640	832.05	Active	added	Yes
WQGB264	Chicago, IL	AW	CMA003	A	17197	Will	Celco Partnership	Yes	20.000	1710.000-1720.000	2110.000-2120.000	.000-.000	.000-.000	627.66	1640	832.05	Active	added	Yes
WRHD638	Chicago, IL	UU	PEA003	M7	17197	Will	Celco Partnership	Yes	100.000	38200.000-38300.000	.000-.000	.000-.000	.000-.000		0	832.05	Active		Yes
WRNE602	Chicago, IL	PM	PEA003	B2	17197	Will	Celco Partnership	Yes	20.000	3820.000-3840.000	.000-.000	.000-.000	.000-.000	803.87	1640	832.05	Active	added	Yes
WRNE596	Chicago, IL	PM	PEA003	A1	17197	Will	Celco Partnership	Yes	20.000	3700.000-3720.000	.000-.000	.000-.000	.000-.000	803.87	1640	832.05	Active	added	Yes
WRBA752	Chicago, IL	UU	BTA078	L1	17197	Will	Celco Partnership	Yes	325.000	27600.000-27925.000	.000-.000	.000-.000	.000-.000		0	832.05	Active		Yes
WRNE601	Chicago, IL	PM	PEA003	B1	17197	Will	Celco Partnership	Yes	20.000	3800.000-3820.000	.000-.000	.000-.000	.000-.000	803.87	1640	832.05	Active	added	Yes



Alpha, Beta, Gamma

Legends	
	RET dc signal capable port
	Coax
	Coax Jumper - colored according to band
	Fiber Connection(s)
	Fiber Jumper

Notes:

- Antenna view is from the back of the antennas
- Colors of connection are just for clarification
- Follow RET cabling standard for non-Smart Bias-T Ants
- Non-RET path elements like OVP/HTTA Box and Hybrid cables not shown
- Size of objects in drawing doesn't reflect equipment true dimension