

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Board of Zoning Adjustment



BZA Application No. 20573
AT&T
2500 Benning Road, NE (Square 160, Lot 42)

HEARING DATE: December 15, 2021
DECISION DATE: December 15, 2021

SUMMARY ORDER

RELIEF REQUESTED. The application requests the following relief in order to raze an existing monopole and construct a new monopole in the RA-2 zone:

- Special exception from the use permissions of Subtitle C § 1313.2, pursuant to Subtitle C § 1313.1 and Subtitle X § 901.2

The zoning relief requested in this case was self-certified. (Exhibit 15.)

PARTIES. The parties to this case were the Applicant and Advisory Neighborhood Commission ("ANC") 5D and 7D, the "affected ANCs" pursuant to Subtitle Y §§ 101.8 and 403.5(b) of the Zoning Regulations (Title 11 of the DCMR, Zoning Regulations of 2016, to which all references are made unless otherwise specified).

NOTICE OF THE APPLICATION AND PUBLIC HEARING. The Board of Zoning Adjustment (the "Board") referred the application to the appropriate agencies and provided proper and timely notice of the public hearing in accordance with Subtitle Y § 402.1.

ANC REPORT. ANC 5D submitted a report that indicated at a regularly scheduled, properly noticed public meeting on December 14, 2021, at which a quorum was present, the ANC voted to support the application. (Exhibit 46.) The ANC report raised no issues or concerns.

OFFICE OF PLANNING ("OP") REPORT. OP submitted a report recommending approval of the application. (Exhibit 40.)

DISTRICT DEPARTMENT OF TRANSPORTATION ("DDOT") REPORT. DDOT submitted a report indicating that it had no objection to the application because it concluded that the relief would not result in any adverse impacts to the District's transportation network. (Exhibit 42.)

PERSONS IN SUPPORT. The Board received a letter from FirstNet Authority in support of the application. (Exhibits 37 and 38.) The Board also received a letter in support from Two Rivers Public Charter School in support of the application. (Exhibit 41.)

Board of Zoning Adjustment

441 4th Street, N.W., Suite 200/210-S, Washington, D.C. 20001
Telephone: (202) 727-6311 Facsimile: (202) 727-6072 E-Mail: dcoz@dc.gov Web Site: www.dcoz.dc.gov

District of Columbia
CASE NO.20573A
EXHIBIT NO.3

PERSONS IN OPPOSITION. The Board received three letters from the Kingman Park Civic Association in opposition to the application. (Exhibits 11, 16, and 45.) The Board also received two letters from ANC SMD 5D04 Commissioner Bernice Blacknell in opposition to the application. (Exhibits 13 and 14.) Additionally, a neighbor submitted a letter in opposition to the application. (Exhibit 35.)

Veronica Raglin, Frazer Walton, and ANC SMD 5D04 Commissioner Bernice Blacknell testified in opposition to the application at the public hearing.

CONCLUSIONS

Pursuant to Subtitle Y § 604.3, the order of the Board may be in summary form where granting an application when there was no party in opposition. As a summary order, it does not constitute binding legal precedent on the Board and shall not be considered by the Board in evaluating future applications.

Based upon the record before the Board, and having given great weight to the appropriate reports and recommendations filed in this case, the Board concludes that the Applicant has met the burden of proof that the requested special exception relief can be granted because:

- It is in harmony with the general purpose and intent of the Zoning Regulations and Map;
- It will not tend to affect adversely the use of neighboring property; and
- Pursuant to Subtitle X § 901.2(c), the relief satisfies the specified conditions for special exception relief.

DECISION

Based on the case record and the testimony at the hearing, the Board concludes that the applicant has satisfied the burden of proof for the requested relief and therefore **APPROVES** the following relief:

- Special exception from the use permissions of Subtitle C § 1313.2, pursuant to Subtitle C § 1313.1 and Subtitle X § 901.2

Subject to the following **CONDITION**:

1. The project shall be constructed in accordance with the plans submitted as Exhibit 3 in the record,¹ as required by Subtitle Y §§ 604.9 and 604.10.

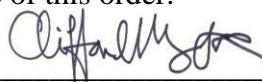
VOTE: 4-0-1 (Lorna L. John, Chrishaun S. Smith, Carl H. Blake, and Peter A. Shapiro to APPROVE; Frederick L. Hill not present, not participating)

¹ Self-Certification. The zoning relief requested in this case was self-certified, pursuant to Subtitle Y § 300.6. In granting the requested self-certified relief subject to the plans submitted with the Application, the Board makes no finding that the requested relief is either necessary or sufficient to authorize the proposed construction project described in the Application and depicted on the approved plans. Instead, the Board expects the Zoning Administrator to undertake a thorough and independent review of the building permit and certificate of occupancy applications filed for this project and to deny any such application that would require additional or different zoning relief from what is granted by this Order.

BY ORDER OF THE D.C. BOARD OF ZONING ADJUSTMENT

A majority of the Board members approved the issuance of this order.

ATTESTED BY:



SARA A. BARDIN
Director, Office of Zoning

FINAL DATE OF ORDER: December 21, 2021

PURSUANT TO 11 DCMR SUBTITLE Y § 604.11, NO ORDER OF THE BOARD SHALL TAKE EFFECT UNTIL TEN (10) DAYS AFTER IT BECOMES FINAL PURSUANT TO SUBTITLE Y § 604.7.

PURSUANT TO 11 DCMR SUBTITLE Y § 702.1, THIS ORDER SHALL NOT BE VALID FOR MORE THAN TWO YEARS AFTER IT BECOMES EFFECTIVE UNLESS, WITHIN SUCH TWO-YEAR PERIOD, THE APPLICANT FILES PLANS FOR THE PROPOSED STRUCTURE WITH THE DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS FOR THE PURPOSE OF SECURING A BUILDING PERMIT, OR THE APPLICANT FILES A REQUEST FOR A TIME EXTENSION PURSUANT TO SUBTITLE Y § 705 PRIOR TO THE EXPIRATION OF THE TWO-YEAR PERIOD AND THE REQUEST IS GRANTED. PURSUANT TO SUBTITLE Y § 703.14, NO OTHER ACTION, INCLUDING THE FILING OR GRANTING OF AN APPLICATION FOR A MODIFICATION PURSUANT TO SUBTITLE Y §§ 703 OR 704, SHALL TOLL OR EXTEND THE TIME PERIOD.

PURSUANT TO 11 DCMR SUBTITLE Y § 604, APPROVAL OF AN APPLICATION SHALL INCLUDE APPROVAL OF THE PLANS SUBMITTED WITH THE APPLICATION FOR THE CONSTRUCTION OF A BUILDING OR STRUCTURE (OR ADDITION THERETO) OR THE RENOVATION OR ALTERATION OF AN EXISTING BUILDING OR STRUCTURE. AN APPLICANT SHALL CARRY OUT THE CONSTRUCTION, RENOVATION, OR ALTERATION ONLY IN ACCORDANCE WITH THE PLANS APPROVED BY THE BOARD AS THE SAME MAY BE AMENDED AND/OR MODIFIED FROM TIME TO TIME BY THE BOARD OF ZONING ADJUSTMENT.

IN ACCORDANCE WITH THE D.C. HUMAN RIGHTS ACT OF 1977, AS AMENDED, D.C. OFFICIAL CODE § 2-1401.01 *ET SEQ.* (ACT), THE DISTRICT OF COLUMBIA DOES NOT DISCRIMINATE ON THE BASIS OF ACTUAL OR PERCEIVED: RACE, COLOR, RELIGION, NATIONAL ORIGIN, SEX, AGE, MARITAL STATUS, PERSONAL APPEARANCE, SEXUAL ORIENTATION, GENDER IDENTITY OR EXPRESSION, FAMILIAL STATUS, FAMILY RESPONSIBILITIES, MATRICULATION, POLITICAL AFFILIATION, GENETIC INFORMATION, DISABILITY, SOURCE OF INCOME, OR PLACE OF RESIDENCE OR BUSINESS. SEXUAL HARASSMENT IS A FORM OF SEX DISCRIMINATION WHICH IS PROHIBITED BY THE ACT. IN ADDITION, HARASSMENT

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BASED ON ANY OF THE ABOVE PROTECTED CATEGORIES IS PROHIBITED BY THE ACT. DISCRIMINATION IN VIOLATION OF THE ACT WILL NOT BE TOLERATED. VIOLATORS WILL BE SUBJECT TO DISCIPLINARY ACTION.

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Board of Zoning Adjustment



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As Director of the Office of Zoning, I hereby certify and attest that on December 21, 2021, pursuant to 11 DCMR Subtitle Y §§ 205.3, 604.5, and 604.6, a copy of the order entered on that date in this matter was mailed first class, delivered via inter-agency mail, or delivered by electronic mail to each party who appeared and participated in the public hearing concerning the matter, the Councilmember representing the ward within which the property is located, and any affected ANC, as defined by Subtitle Y § 101.8, and the Council Chair and At-Large Councilmembers, all of whom are listed below:

Cynthia Giordano, Esq.
Douglas Sampson, Esq.
Saul Ewing Arnstein & Lehr, LLP
Cynthia.Giordano@saul.com
Douglas.Sampson@saul.com

Ryan Triller
SmartLink LLC
ryan.triller@smartlinkgroup.com

District of Columbia Dept. of General Services
trip.rice@dc.gov

Chair
Advisory Neighborhood Commission 5D
5D@anc.dc.gov

Single Member District Commissioner 5D04
5D04@anc.dc.gov

Chair
Advisory Neighborhood Commission 7D
7D@anc.dc.gov

Kenyan McDuffie, Councilmember
Ward 5
Council of the District of Columbia
kcmduffie@dccouncil.us

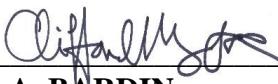
Esther McGraw, Esq.
General Counsel, DCRA
esther.mcgraw2@dc.gov

Melanie Konstantopoulos, Esq.
Deputy General Counsel, DCRA
melanie.konstantopoulos@dc.gov

Hugh Green, Esq.
Assistant General Counsel, DCRA
hugh.green@dc.gov

Chair and At-Large Councilmembers
Council of the District of Columbia
pmendelson@dccouncil.us
chenderson@dccouncil.us
abonds@dccouncil.us
rwhite@dccouncil.us

ATTESTED BY:


SARA A. BARDIN
Director, Office of Zoning

441 4th Street, N.W., Suite 200/210-S, Washington, D.C. 20001

Telephone: (202) 727-6311

Facsimile: (202) 727-6072

E-Mail: dcoz@dc.gov

Web Site: www.dcoz.dc.gov



at&t

FA NUMBER: 12573553
SITE ID: 4882
SPINGARN

2500 BENNING RD NE
WASHINGTON, DC 20002

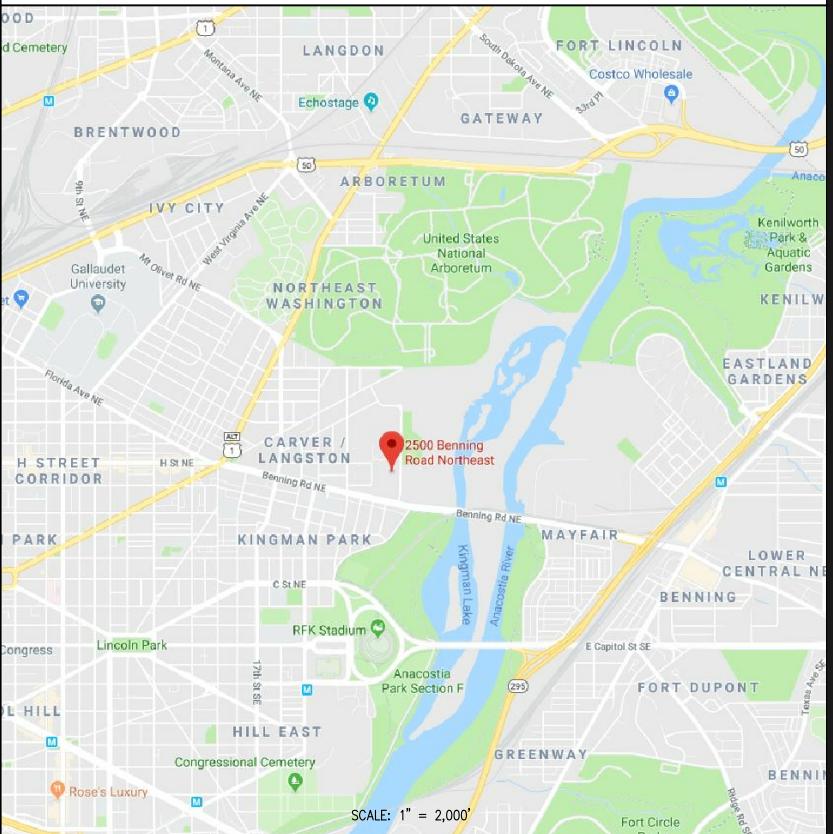
SITE INFORMATION

SCOPE OF WORK:
 1. REPLACE EXISTING LIGHPOLE WITH A NEW 89' MONPOLE.
 2. INSTALL 6 NEW ANTENNAS & ASSOCIATED RRH'S ON NEW PLATFORM ON NEW MONPOLE.
 3. INSTALL NEW WIC AND GENERATOR ON NEW WIC COMBO GENERATOR PLATFORM GRAVITY MOUNTING KIT AT GRADE LEVEL, ON HELICAL PIERS.
 4. RUN NEW FIBER & DC POWER CABLES FROM NEW WIC TO NEW RRH'S.
 5. RUN CABLES FROM RRH UNITS UP TO ANTENNAS.
 6. PROVIDE POWER AND TELCO SERVICE TO WIC FROM EXISTING DEMARCTION POINTS.
 7. RELOCATE EXISTING STADIUM LIGHTS AND SPEAKERS TO NEW MONPOLE.

FA#: 12573553
SITE ID: 4882
JURISDICTION: DISTRICT OF COLUMBIA
ZONING: RESIDENTIAL - RA - 2
TAX ACCOUNT NUMBER: 4486 0802
PARCEL AREA: ± 931,107 SF
PARCEL OWNER: DISTRICT OF COLUMBIA
ADDRESS: 2000 14TH ST NW (8TH FLOOR)
WASHINGTON, DC 20009
STRUCTURE TYPE: MONOPOLE
LATITUDE: N 38° 54' 05.453" (NAD83)
LONGITUDE: W 76° 58' 12.398" (NAD83)

NOTE TO GENERAL CONTRACTOR
NO WORK IS TO BE PERFORMED ON THIS SITE WITHOUT REVIEW OF THE APPROVED STRUCTURAL ANALYSIS. IF ANY DISCREPANCIES ARE FOUND THE GENERAL CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING. AT NO TIME WILL ANY ADDITIONAL ANTENNAS BE INSTALLED WITHOUT WRITTEN CONSENT FROM TOWER ENGINEER.

VICINITY MAP



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- T-1 TITLE SHEET
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- C-2 EROSION & SEDIMENT CONTROL PLAN
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- S-1 ANTENNA SCHEDULE
- S-2 RF PLUMBING DIAGRAM
- S-3 ANTENNA AND RRH DETAILS
- S-4 EQUIPMENT & WIC PLANS AND SITE DETAILS
- S-5 EQUIPMENT PLAN & ELEVATIONS
- S-6 SITE DETAILS
- E-1 ELECTRICAL PLAN & DETAILS
- E-2 UTILITY DIAGRAM PANEL SCHEDULES AND DETAILS
- E-3 GROUNDING PLAN, DIAGRAM AND DETAILS



PROJECT TEAM

APPLICANT: AT&T MOBILITY
7150 STANDARD DRIVE
HANOVER, MD 21076

ARCHITECT/ENGINEER: ENTREX COMMUNICATION SERVICES, INC.
6100 EXECUTIVE BLVD, SUITE 350
ROCKVILLE, MD 20852
CAMILLE SHABSHAB (202) 408-0960

PROJECT MANAGEMENT: SMARTLINK LLC
1362 MELLON RD, SUITE 140
HANOVER, MD 21076
PHONE: (410) 582-8043

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.

- 2017 DISTRICT OF COLUMBIA CONSTRUCTION CODE
- 2015 INTERNATIONAL BUILDING CODE
- 2017 DCMR 12C, DC ELECTRICAL CODE
- 2014 NATIONAL ELECTRICAL CODE
- 2017 DCMR 12H, DC FIRE CODE
- 2015 INTERNATIONAL FIRE CODE
- 2017 DCMR 12J, DC EXISTING BUILDING CODE
- AMERICAN CONCRETE INSTITUTE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION
- MANUAL OF STEEL CONSTRUCTION 13TH EDITION
- ANSI/TIA-222-G
- TIA 607
- INSTITUTE FOR ELECTRICAL & ELECTRONICS ENGINEER 81
- IEEE C2 NATIONAL ELECTRIC SAFETY CODE LATEST EDITION
- TELECORDIA GR-1275
- ANSI/T 311

APPROVAL BLOCK

OWNER REPRESENTATIVE	DATE	APPROVED	APPROVED REVISE & AS NOTED RESUBMIT
		<input type="checkbox"/>	<input type="checkbox"/>
SITE AQUISITION	DATE	<input type="checkbox"/>	<input type="checkbox"/>
CONSTRUCTION MANAGER	DATE	<input type="checkbox"/>	<input type="checkbox"/>
ZONING	DATE	<input type="checkbox"/>	<input type="checkbox"/>
RF ENGINEER	DATE	<input type="checkbox"/>	<input type="checkbox"/>

SUBMITTALS

DATE	DESCRIPTION	REVISION
03-01-2019	ADDITIONAL COMMENTS	1
03-27-2019	ELECTRICAL COMMENTS	2
03-28-2019	AT&T COMMENTS & CONCRETE PIERS	4
12-10-2020	CHANGE TOWER & ANTENNA HEIGHTS	5
03-12-2021	CHANGE TOWER & ANTENNA HEIGHTS	6

TITLE:

TITLE SHEET

Board of Zoning Adjustment
District of Columbia

SHEET NUMBER: CASE NO.20573

T-1 EXHIBIT NO.3

SEAL:



entrex
communication services, inc.
6100 Executive Blvd, Suite 350
Rockville, MD 20852
PHONE: (202) 408-0960
FAX: (202) 408-0961

at&t
7150 STANDARD DRIVE
HANOVER, MD 21076

smartlink
1362 MELLON RD, STE 140
HANOVER, MD 21076
PHONE: (410) 582-8043
FAX: (410) 221-2962

FA NUMBER: 12573553
SITE ID: 4882
SPINGARN
2500 BENNING RD NE
WASHINGTON, DC 20002

STRUCTURAL NOTES

1. THE STRUCTURAL STEEL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ANCHOR BOLT LOCATIONS, ELEVATIONS OF TOP OF CONCRETE AND BEARING PLATES, ALIGNMENT ETC. PRIOR OF STEEL ERECTION.

2. THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS SHALL GOVERN:
 A. AISC- "ALLOWABLE STRESS DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS".
 B. AISC- "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
 C. AWS- "D1.1 STRUCTURAL WELDING CODE-STEEL".

3. MATERIAL, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

STRUCTURAL WIDE FLANGE & M SHAPES	A992 OR A572, FY = 50KSI
OTHER STRUCTURAL SHAPES AND PLATES	A36, F = 36KSI
STRUCTURAL TUBING	A500, GRADE B, FY = 46KSI
HIGH STRENGTH BOLTS	A325
THREADED RODS	A354, GRANDE BC
ANCHOR BOLTS	A325 OR A354 BC
PIPE (HANDRAIL)	SCH 40 PIPE

4. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 USING E70XX ELECTRODES. UNLESS OTHERWISE NOTED PROVIDE CONTINUOUS MINIMUM SIZED FILLET WELDS PER AISC REQUIREMENTS.

5. HOLES IN STEEL SHALL BE DRILLED OR PUNCHED. ALL SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES. BURNING OF HOLES AND TORCH CUTTING AT THE SITE IS NOT PERMITTED. ALL HOLES IN BEARING PLATES SHALL BE DRILLED.

6. ALL STEEL TO BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123.

7. EPOXY ANCHORS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

8. ALL BOLTS SHALL BE TIGHTENED USING TURN-OF-THE-NUT METHOD PER AISC SPECIFICATIONS USING STANDARD HOLES.

9. THE INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED BY FIELD MEASUREMENT. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH CONSTRUCTION.

10. THE GENERAL CONTRACTOR AND HIS SUB CONSULTANTS SHALL BE RESPONSIBLE FOR OBTAINING ALL BUILDING AND OR TRADE PERMITS AND INSPECTIONS THAT MAY BE REQUIRED FOR THE WORK.

11. STRUCTURAL THREADED FASTENERS FOR STEEL ANTENNA MOUNTING ASSEMBLIES SHALL CONFORM TO ASTM A307 OR ASTM A36. STRUCTURAL FASTENERS FOR STRUCTURAL STEEL FRAMING SHALL CONFORM TO ASTM A325. STRUCTURAL FASTENERS SHALL BE 5/8" DIAMETER BEARING TYPE CONNECTIONS WITH THE THREADS EXCLUDED FROM THE SHEAR PLANE FOR ANGLES. STRUCTURAL FASTENERS SHALL BE 3/4" DIAMETER BEARING TYPE CONNECTIONS WITH THE THREADS EXCLUDED FROM THE SHEAR PLANE FOR ALL OTHER STRUCTURAL SHAPES. ALL EXPANDED STRUCTURAL FASTENERS, NUTS AND WASHERS SHALL BE HOT DIP GALVANIZED UNLESS OTHERWISE NOTED.

12. EXPANSION ANCHORS INSTALLED IN CONCRETE SHALL BE HILTI STAINLESS STEEL ANCHORS AS SPECIFIED ON THE PLANS. THE EXPANSION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.

13. NORTH ARROW SHOWN ON PLANS REFERS TO TRUE NORTH. CONTRACTOR SHALL VERIFY NORTH AND INFORM ARCHITECT/ENGINEER OF ANY DISCREPANCY BEFORE STARTING CONSTRUCTION.

14. ROOF PROTECTION PADS UNDER THE CABLE BRIDGE SLEEPERS AND ROOF PAVERS SHALL BE 0.30" THICK RUBBER FIRESTONE PROTECTION PADS. THE ROOF PROTECTION PADS SHALL EXTEND A MINIMUM OF 2" BEYOND THE PERIMETER OF THE SLEEPERS. PROVIDE A 28 LB FELT SEPARATOR SHEET 2" LARGER THAN THE ROOF PROTECTION PAD DIRECTLY ON THE ROOF. REMOVE ALL LOOSE STONES PRIOR TO PLACING THE SEPARATOR SHEET. ROOF PROTECTION PADS SHALL NOT BE PLACED WITHIN 6" OF AN ADJACENT PAD OR OTHER ROOF OBSTRUCTION TO FACILITATE DRAINAGE.

15. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE BUILDING OWNER'S ROOF CONTRACTOR WHO WILL COMPLETE ALL WORK ASSOCIATED WITH THE ROOF. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE BUILDING OWNER'S ROOF CONTRACTOR BEFORE INSTALLATION OF ANY ROOF MOUNTED EQUIPMENT.

16. ALL CAST IN PLACE CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 AND ACI 301, AND SHALL HAVE A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 3000 psi (U.O.N.). CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL, UNLESS OTHERWISE NOTED. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE 3 INCHES UNLESS OTHERWISE NOTED.

17. CONCRETE SHALL BE 4 TO 6% AIR ENTRAINED.

18. ALL REINFORCING STEEL SHALL CONFORM TO ASTM 615 GRADE 60. DEFORMED BILLET STEEL BARS. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.

19. FENCED AREA SHALL BE CLEARED AND GRUBBED. REMOVE UNSUITABLE LOOSE OR SOFT SOIL, ORGANIC MATERIAL OR RUBBLE, TO FIRM SUBGRADE. FILL UNDER CUT AND COMPACT UP TO 6" BELOW FINISH GRADE. PLACE A MIRAFI 500X SOIL STABILIZATION FABRIC ON SUBGRADE. FILL WITH 6" OF AASHTO 57 STONE TO FINISH GRADE.

20. WHERE FILL IS REQUIRED, FILL IN LAYERS WHICH DO NOT EXCEED 8" BEFORE COMPACTION. SPREAD LAYER UNIFORMLY AND EVENLY. BLADE MIX EACH LAYER TO ENSURE MATERIAL UNIFORMITY. FILL MATERIAL SHALL NOT CONTAIN MATERIAL MORE THAN 3" IN DIAMETER. COMPACT EACH LAYER NOT LESS THAN 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557 MODIFIED PROCTOR TEST OR (ASTM D698 STANDARD PROCTOR TEST). USE FILL MATERIAL WITH MOISTURE CONTENT AS REQUIRED TO ATTAIN THE SPECIFIED DEGREE OF COMPACTION. COMPACT USING MULTIPLE WHEEL PNEUMATIC TIRE ROLLED, VIBRATORY ROLLER, OR SHEEPS FOOT ROLLERS.

GENERAL NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITIES COMPANY OR OTHER PUBLIC AUTHORITIES.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.

3. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK. MINOR OMISSIONS OR ERRORS IN THE BID DOCUMENTS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR THE OVERALL INTENT OF THESE DRAWINGS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED AS A RESULT OF CONSTRUCTION OF THIS FACILITY.

5. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

6. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING A BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

7. CONTRACTOR SHALL VERIFY ANTENNA ELEVATION AND AZIMUTH WITH RF ENGINEERING PRIOR TO INSTALLATION.

8. TRANSMITTER EQUIPMENT AND ANTENNAS ARE DESIGNED TO MEET ANSI/EIA/TIA 222-G REQUIREMENTS.

9. ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.

10. CONTRACTOR SHALL MAKE A UTILITY "ONE CALL" TO LOCATE ALL UTILITIES PRIOR TO EXCAVATING.

11. IF ANY UNDERGROUND UTILITIES OR STRUCTURES EXIST BEHIND THE PROJECT AREA, CONTRACTOR MUST LOCATE IT AND CONTACT THE APPLICANT & THE OWNER'S REPRESENTATIVE.

12. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION BY TECHNICIANS APPROXIMATELY 2 TIMES PER MONTH.

13. PROPERTY LINE INFORMATION WAS PREPARED USING DEEDS, TAX MAPS, AND PLANS OF RECORD AND SHOULD NOT BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY.

14. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.

15. THE PROPOSED FACILITY WILL CAUSE ONLY A "DE MINIMIS" INCREASE IN STORMWATER RUNOFF. THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.

16. NO SIGNIFICANT NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.

17. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED).

18. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.

19. POWER TO THE FACILITY WILL BE MONITORED BY A SEPARATE METER UNLESS OTHERWISE NOTED IN THIS DRAWING SET.

20. ALL ANTENNA SCREENING SHALL BE FINISHED OR PAINTED TO MATCH THE STRUCTURE AS DIRECTED BY THE FACILITIES MANAGEMENT DIVISION.

21. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE BUILDING OWNER'S ROOF CONTRACTOR WHO WILL COMPLETE ALL WORK ASSOCIATED WITH THE ROOF. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE BUILDING OWNER'S ROOF CONTRACTOR BEFORE INSTALLATION OF ANY ROOF MOUNTED EQUIPMENT.

22. ALL CAST IN PLACE CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 AND ACI 301, AND SHALL HAVE A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 3000 psi (U.O.N.). CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL, UNLESS OTHERWISE NOTED. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE 3 INCHES UNLESS OTHERWISE NOTED.

23. CONCRETE SHALL BE 4 TO 6% AIR ENTRAINED.

24. ALL REINFORCING STEEL SHALL CONFORM TO ASTM 615 GRADE 60. DEFORMED BILLET STEEL BARS. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.

25. FENCED AREA SHALL BE CLEARED AND GRUBBED. REMOVE UNSUITABLE LOOSE OR SOFT SOIL, ORGANIC MATERIAL OR RUBBLE, TO FIRM SUBGRADE. FILL UNDER CUT AND COMPACT UP TO 6" BELOW FINISH GRADE. PLACE A MIRAFI 500X SOIL STABILIZATION FABRIC ON SUBGRADE. FILL WITH 6" OF AASHTO 57 STONE TO FINISH GRADE.

26. WHERE FILL IS REQUIRED, FILL IN LAYERS WHICH DO NOT EXCEED 8" BEFORE COMPACTION. SPREAD LAYER UNIFORMLY AND EVENLY. BLADE MIX EACH LAYER TO ENSURE MATERIAL UNIFORMITY. FILL MATERIAL SHALL NOT CONTAIN MATERIAL MORE THAN 3" IN DIAMETER. COMPACT EACH LAYER NOT LESS THAN 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557 MODIFIED PROCTOR TEST OR (ASTM D698 STANDARD PROCTOR TEST). USE FILL MATERIAL WITH MOISTURE CONTENT AS REQUIRED TO ATTAIN THE SPECIFIED DEGREE OF COMPACTION. COMPACT USING MULTIPLE WHEEL PNEUMATIC TIRE ROLLED, VIBRATORY ROLLER, OR SHEEPS FOOT ROLLERS.

GROUNDING NOTES

1. GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.

2. ALL GROUNDING DEVICES SHALL BE U.L. APPROVED OR LISTED FOR THEIR INTENDED USE.

3. ALL WIRES SHALL BE AWG THHN/THWN COPPER UNLESS NOTED OTHERWISE.

4. GROUNDING CONNECTIONS TO GROUND RODS, GROUND RING WIRE, TOWER BASE AND FENCE POSTS SHALL BE EXOTHERMIC ("CADWELDS") UNLESS NOTED OTHERWISE. CLEAN SURFACES TO SHINY METAL WHERE GROUND WIRES ARE CADWELDED TO GALVANIZED SURFACE, SPRAY CADWELD WITH GALVANIZING PAINT.

5. GROUNDING CONNECTIONS TO GROUND BARS ARE TO BE TWO HOLE BRASS MECHANICAL CONNECTORS WITH STAINLESS STEEL HARDWARE (INCLUDING SCREW SET) CLEAN GROUND BAR TO SHINY METAL. AFTER MECHANICAL CONNECTION, TREAT WITH PROTECTIVE ANTI-OXIDANT COATING.

6. GROUND COAXIAL CABLE SHIELDS AT BOTH ENDS WITH MANUFACTURER'S GROUNDING KITS.

7. ROUTE GROUNDING CONDUCTORS THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 12" RADIUS.

8. INSTALL 2 AWG GREEN-INSULATED STRANDED WIRE FOR ABOVE GRADE GROUNDING AND 2 BARE TINNED COPPER WIRE FOR BELOW GRADE GROUNDING UNLESS OTHERWISE NOTED.

9. REFER TO GROUNDING PLAN FOR GROUND BAR LOCATIONS. GROUNDING CONNECTIONS SHALL BE EXOTHERMIC TYPE ("CADWELDS") TO ANTENNA MOUNTS AND GROUND RING. REMAINING GROUNDING CONNECTIONS SHALL BE COMPRESSION FITTINGS. CONNECTION TO GROUND BARS SHALL BE MADE WITH 15' APART, AND A MINIMUM OF 8' APART TO ACHIEVE CONE OF PROTECTION.

10. THE GROUND ELECTRODE SYSTEM SHALL CONSIST OF DRIVEN GROUND RODS POSITION ACCORDING TO GROUNDING PLAN. THE GROUND RODS SHALL BE 5/8"x8'-0" COPPER CLAD STEEL INTERCONNECTED WITH 2 BARE TINNED COPPER WIRE BURIED 30" BELOW GRADE. BURY GROUND RODS A MAXIMUM OF 15' APART, AND A MINIMUM OF 8' APART TO ACHIEVE CONE OF PROTECTION.

11. IF ROCK IS ENCOUNTERED GROUND RODS SHALL BE PLACED AT AN OBLIQUE ANGLE NOT TO EXCEED 45°.

12. EXOTHERMIC WELDS SHALL BE MADE IN ACCORDANCE WITH ERICO PRODUCTS BULLETIN A-AT.

13. CONSTRUCTION OF GROUND RING AND CONNECTIONS TO EXISTING GROUND RING SYSTEM SHALL BE DOCUMENTED WITH PHOTOGRAPHS PRIOR TO BACKFILLING SITE. PROVIDE PHOTOS TO THE AT&T CONSTRUCTION MANAGER.

14. GROUND RING & CONNECTIONS TO IT SHALL BE 2 AWG SOLID BARE TINNED COPPER WIRE. EQUIPMENT GROUND CONNECTIONS TO MGB SHALL BE 2 AWG STRANDED TO WIRE.

15. PRIOR TO INSTALLING LUGS ON GROUND WIRES, APPLY THOMAS & BETTS KOPR-SHIELD (TM OF JET LUBE INC.). PRIOR TO BOLTING GROUND WIRE LUGS TO GROUND BARS, APPLY KOPR-SHIELD OR EQUIVALENT.

16. ENGAGE AN INDEPENDENT ELECTRICAL TESTING FIRM TO TEST AND VERIFY THAT IMPEDANCE DOES NOT EXCEED FIVE OHMS TO GROUND BY MEANS OF "FALL OF POTENTIAL TEST". TEST SHALL BE WITNESSED BY A AT&T REPRESENTATIVE, AND RECORDED ON THE "GROUND RESISTANCE TEST" FORM.

17. WHERE BARE COPPER GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO GROUND RING, INSTALL WIRE IN 3/4" PVC SLEEVE, FROM 1' BELOW GRADE AND SEAL TOP WITH SILICONE MATERIAL.

18. PREPARE ALL BONDING SURFACES FOR GROUNDING CONNECTIONS BY REMOVING ALL PAINT AND CORROSION DOWN TO SHINY METAL. FOLLOWING CONNECTIONS, APPLY APPROPRIATE ANTI-OXIDATION PAINT.

19. WHERE METALLIC ENCLOSURES AND OBJECTS ARE LOCATED WITHIN 6 FEET OF METAL FENCING, THE GROUND RING SHALL BE BONDED TO THE NEAREST FENCE POST.

20. TOWER BASE GROUND BAR REQUIRES (2) SOLID LEADS EXOTHERMICALLY WELDED TO THE GROUND BAR.

21. OUTDOOR SITES: MAIN GROUND BAR REQUIRES (2) SOLID LEADS EXOTHERMICALLY WELDED TO IT AND TO THE GROUND RING.

22. INDOOR/ROOFTOP SITES: MAIN GROUND BAR SHALL BE BONDED TO BUILDING PRINCIPAL GROUND AS SHOWN ON PLAN.

23. ALL SOLID LEADS TERMINATED TO GROUND BARS SHALL BE PROTECTED WITH CARFLEX.

24. ALL SOLID GROUND LEADS NOT BEING USED SHALL BE COILED (PIGTAILS) FOR FUTURE USE AS NEEDED.

25. DO NOT ROUTE GROUNDING CONDUCTORS THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR. CLIPS AND FASTENERS USED TO SECURE ANY GROUND WIRE SHALL BE NON-METALLIC TO PREVENT "CHOKE EFFECT."

26. PVC CONDUIT MAY BE PROVIDED ONLY WHERE SHOWN, OR IN UNDERGROUND INSTALLATIONS. PROVIDE UV-RESISTANT CONDUIT WHERE EXPOSED TO THE ATMOSPHERE. PROVIDE GROUND CONDUCTOR IN ALL PVC RUNS, EXCEPT WHERE PERMITTED BY CODE TO OMIT.

27. THE TOTAL RADIUS OF BENDS IN A CONDUIT SHALL NOT EXCEED 360°.

28. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PHENOLIC PLASTIC NAMEPLATES. BACKGROUND SHALL BE BLACK WITH WHITE LETTERS; EXCEPT AS REQUIRED BY CODE TO FOLLOW A DIFFERENT SCHEME.

29. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL OF POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO AT&T PROJECT MANAGER. GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE AT&T PROJECT MANAGER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE.

30. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION. LEGALLY DISPOSE OF ALL REMOVED, UNUSED AND EXCESS MATERIAL GENERATED BY THE WORK OF THIS CONTRACT. DELIVER ITEMS INDICATED ON THE DRAWINGS TO THE OWNER IN GOOD CONDITION. OBTAIN SIGNED RECEIPT UPON DELIVERY.

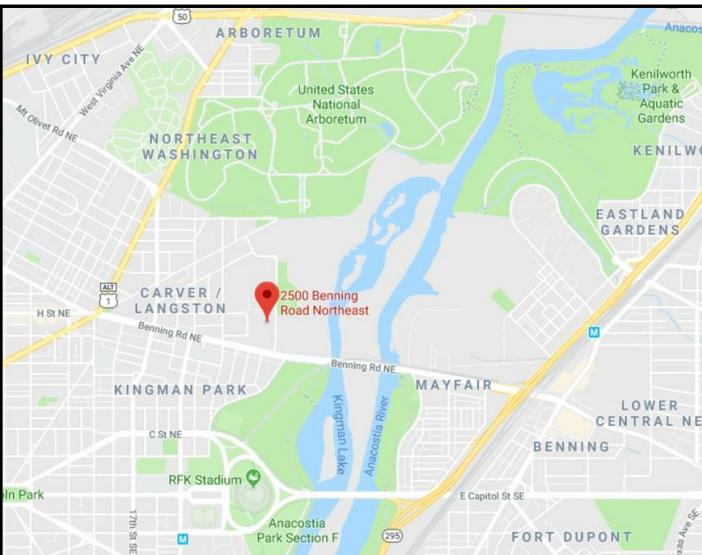
31. COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS SHALL BE PAID BY THE CONTRACTOR.

32. VERIFY ALL EXISTING CIRCUITY PRIOR TO REMOVAL AND NEW WORK. MAINTAIN POWER TO ALL OTHER AREAS AND CIRCUITS NOT SCHEDULED FOR REMOVAL.

33. RED LINED AS-BUILT PLANS SHALL BE PROVIDED TO THE AT&T CONSTRUCTION MANAGER.

ELECTRICAL NOTES

1. SUBMITTAL OF BID INDICATES THAT THE CONTRACTOR IS COGNIZANT OF

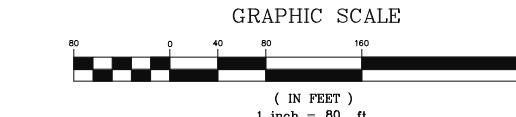


LEGEND

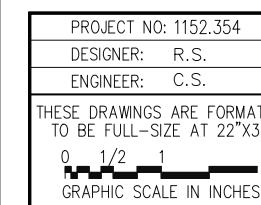
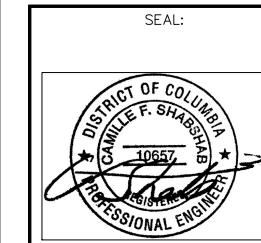
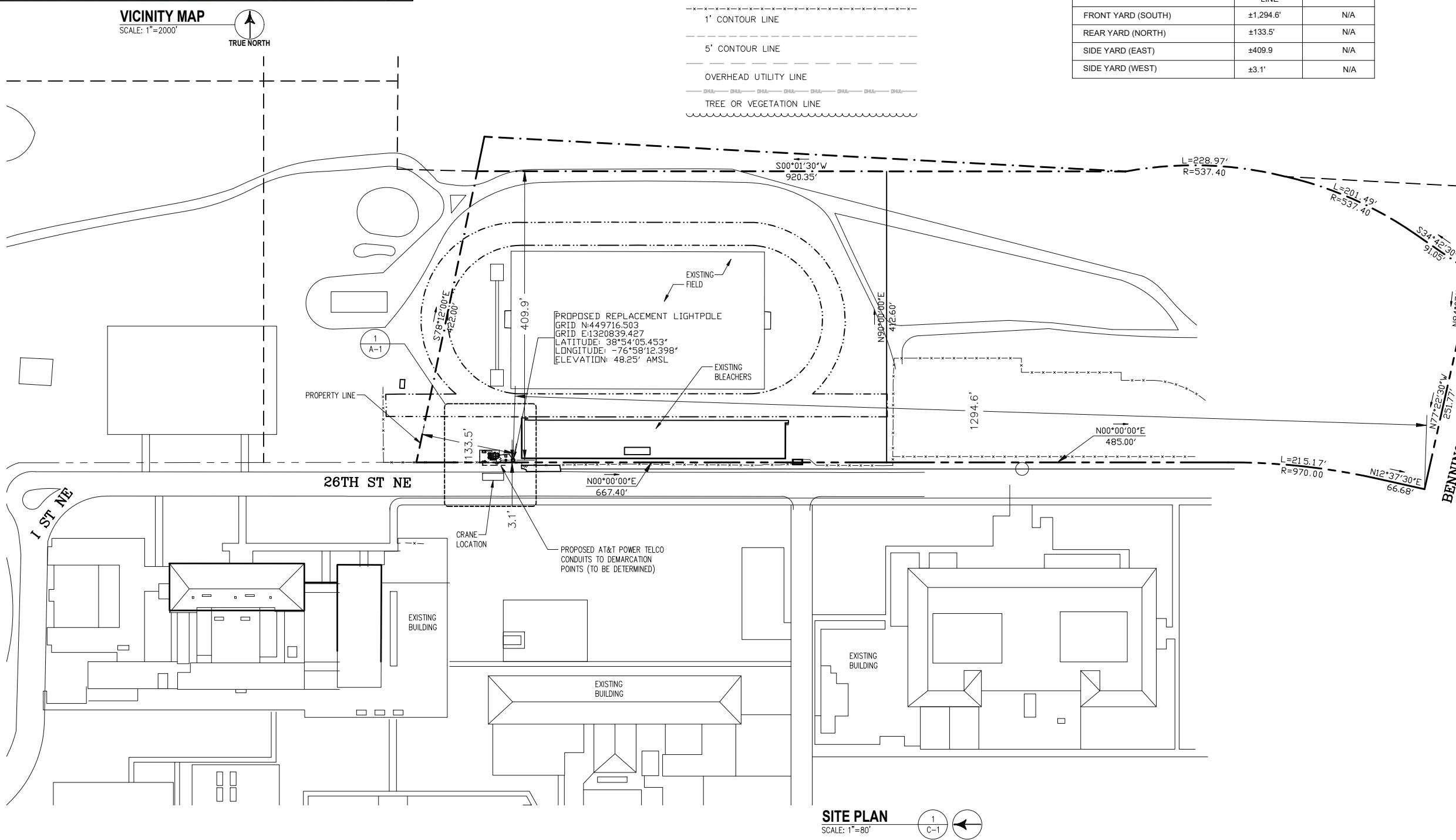
- FOUND PROPERTY CORNER
- SET PROPERTY CORNER
- △ BENCH MARKS
- UTILITY POLE
- ← GUY ANCHOR
- SIGN
- ← FLOOD LIGHT
- ★ LIGHT POLE
- INDIVIDUAL TREE - DECIDUOUS
- INDIVIDUAL TREE - CONIFER
- BUSH
- ◆ TRANSFORMER
- WATER SHUT OFF
- FIRE HYDRANT

LINE TYPES

- BOUNDARY LINE - SUBJECT PARCEL
- UNSURVEYED LINE - BOUNDARY OF ADJOINERS
- TIE LINE FOR DIMENSIONS
- EASEMENT BOUNDARY
- RIGHT OF WAY BOUNDARY
- INTERIOR LOT LINES
- EDGE OF ASPHALT
- EDGE OF CONCRETE
- RETAINING WALL
- CURB
- FENCE LINE - CHAIN
- 1' CONTOUR LINE
- 5' CONTOUR LINE
- OVERHEAD UTILITY LINE
- TREE OR VEGETATION LINE



MONOPOLE SETBACKS		
	EXISTING TO PROPERTY LINE	REQUIRED
FRONT YARD (SOUTH)	±1,294.6'	N/A
REAR YARD (NORTH)	±133.5'	N/A
SIDE YARD (EAST)	±409.9	N/A
SIDE YARD (WEST)	±3.1'	N/A



FA NUMBER: 12573553
SITE ID: 4882
SPINGARN
2500 BENNING RD NE
WASHINGTON, DC 20002

SUBMITTALS		
DATE	DESCRIPTION	REVISION
03-01-2019	ADDITIONAL COMMENTS	1
03-07-2019	ELECTRICAL COMMENTS	2
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12-10-2020	CHANGE TOWER & ANTENNA HEIGHTS	5
03-12-2021	CHANGE TOWER & ANTENNA HEIGHTS	6

TITLE:

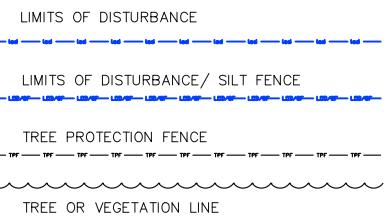
SITE PLAN

SHEET NUMBER:

C-1

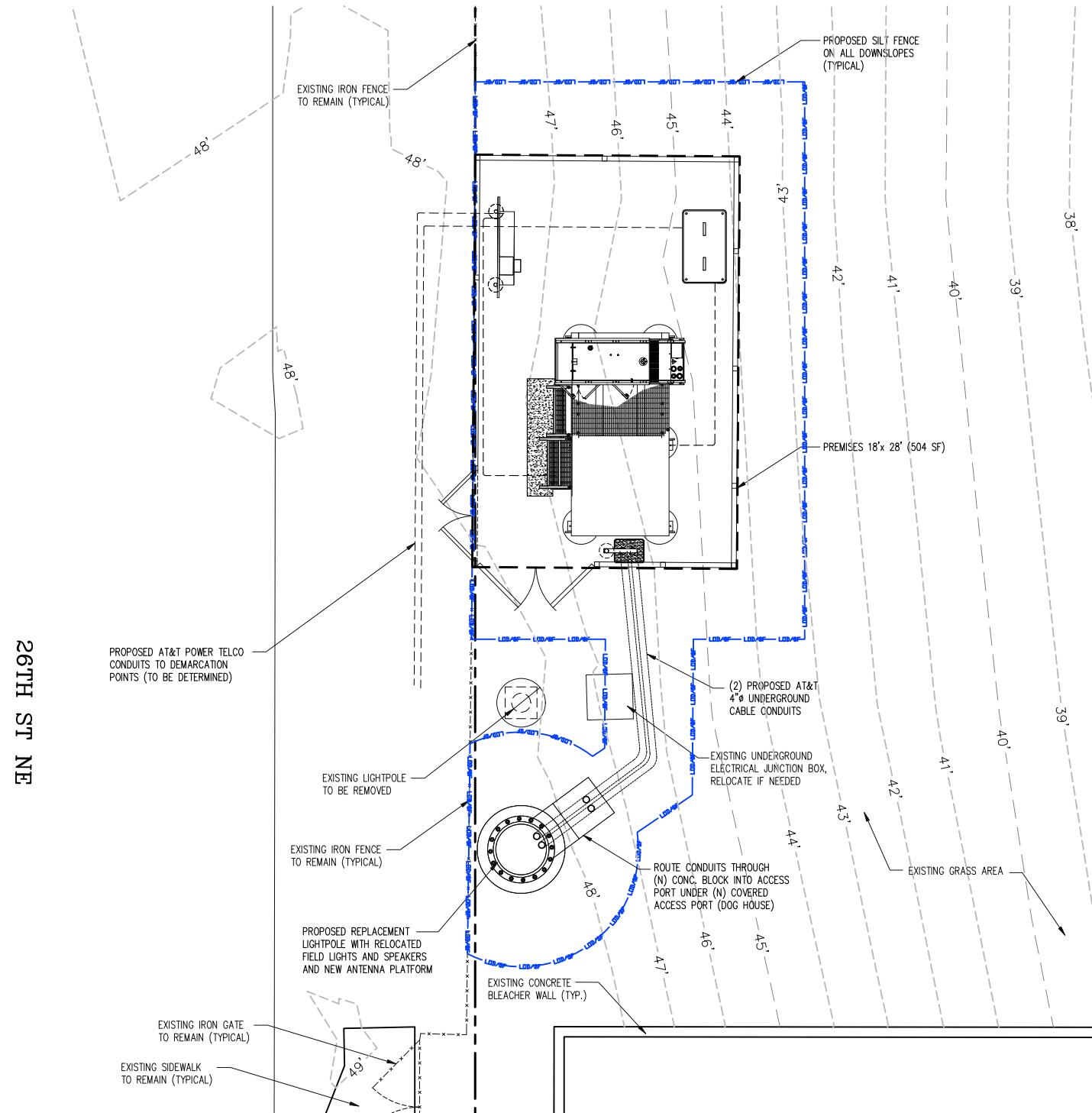
LINE TYPES

BOUNDARY LINE - PARENT PARCEL
RIGHT OF WAY BOUNDARY
EDGE OF ASPHALT
EDGE OF CONCRETE
FENCE LINE - CHAIN
1' CONTOUR LINE
5' CONTOUR LINE



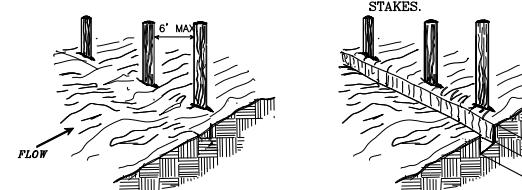
AREA TABULATION

SITE AREA: 13.32 AC
DISTURBED AREA: 1,082 SF

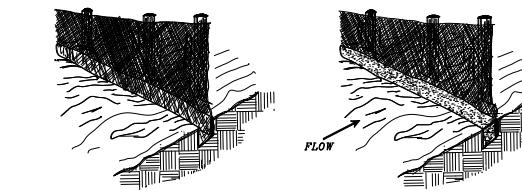


CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)

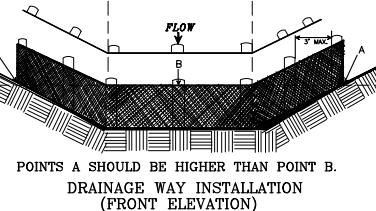
1. SET THE STAKES.
2. EXCAVATE A 4"X 4" TRENCH UPSLOPE ALONG THE LINE OF STAKES.



3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.
4. BACK FILL AND COMPACT THE EXCAVATED SOIL.



SHEET FLOW INSTALLATION (PERSPECTIVE VIEW)

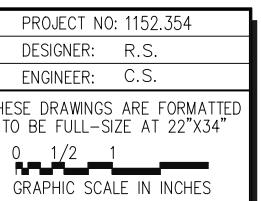
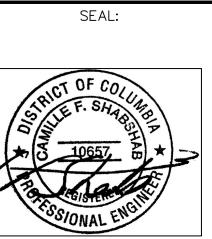


SILT FENCE

SCALE: N.T.S.

NOTES:

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING.
3. SHOULD THE FABRIC OF A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.



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SUBMITTALS

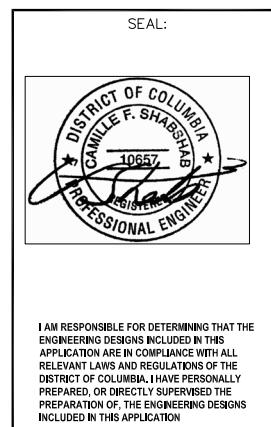
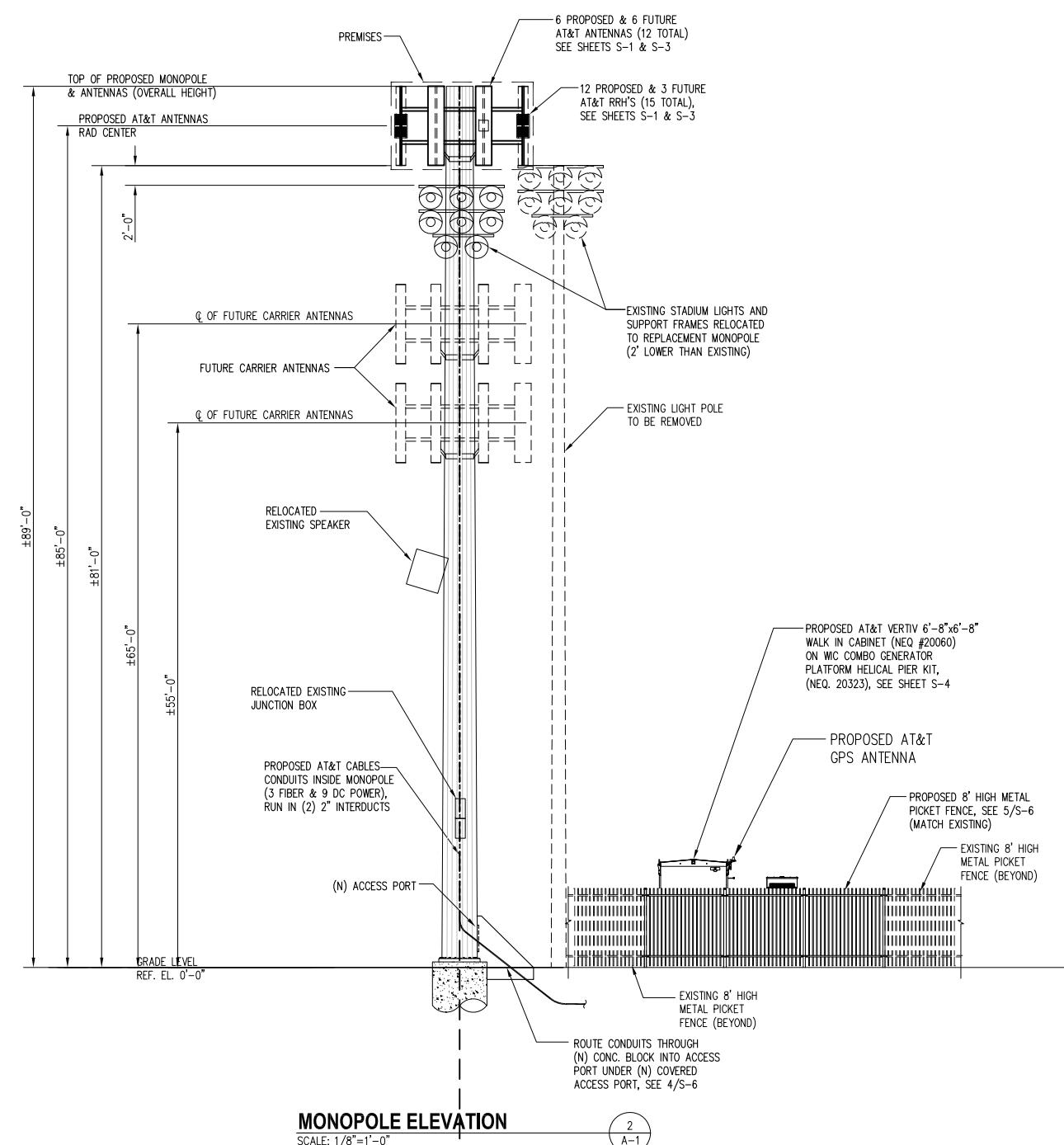
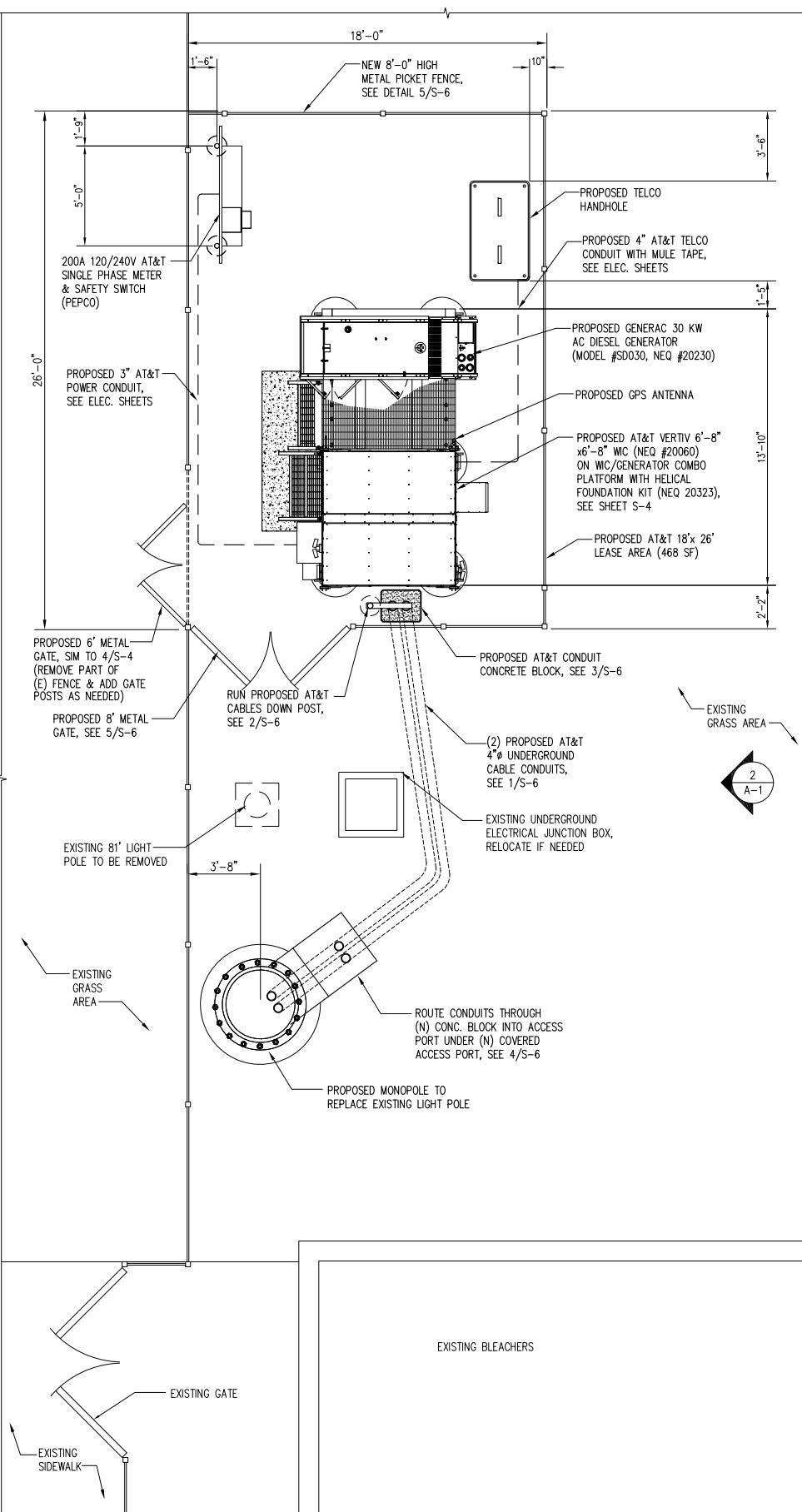
DATE	DESCRIPTION	REVISION
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TITLE:

EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER:

C-2



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TITLE:

**EQUIPMENT LOCATION
PLAN AND TOWER
ELEVATION**

SHEET NUMBER:

A-1

CABLE SCHEDULE AND RF SYSTEM DESIGN PLAN																			
SECTOR	ANTENNA POSITION	ANTENNA STATUS	TECHNOLOGY/FREQUENCY	MAKE	MODEL	RAD CTR. FT. AGL	AZIMUTH	ELECTRICAL DOWNTILT	MECHANICAL DOWNTILT	RRH/TMA QUANTITY AND MODEL	TRANSMISSION CABLE								
											LENGTH	STATUS	QUANTITY	TYPE					
ALPHA	#1				FUTURE														
	#2	NEW	LTE 700	COMMSCOPE	NNHH-65C-R4	85'	340°	2°	0°	(1) B12/B14 AIRSCALE RRH 4T4R 320 AHLBA	130'	NEW	1	FIBER					
			LTE 1900					2.5°				NEW	1	FIBER					
			LTE 700					2°				NEW	1	FIBER					
			LTE AWS					2.5°		(1) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB		NEW	1	FIBER					
	#3	NEW	LTE AWS			85'	340°	2°	0°	(1) AHCA B5 AIRSCALE RRH 4T4R B5 160W AHCA	130'	NEW	1	FIBER					
			LTE 850					2.5°				NEW	1	FIBER					
			LTE WCS					2°		(1) AIRSCALE RRH 4T4R B30 100W AHNA		NEW	1	FIBER					
			5G 850																
	#4				FUTURE					FUTURE 700 RRH									
BETA	#5				FUTURE														
	#6	NEW	LTE 700	COMMSCOPE	NNHH-65C-R4	85'	110°	2°	0°	(1) B12/B14 AIRSCALE RRH 4T4R 320 AHLBA	130'	NEW	1	FIBER					
			LTE 1900					2.5°				NEW	1	FIBER					
			LTE 700					2°				NEW	1	FIBER					
			LTE AWS					2.5°		(1) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB		NEW	1	FIBER					
	#7	NEW	LTE AWS			85'	110°	2°	0°	(1) AHCA B5 AIRSCALE RRH 4T4R B5 160W AHCA	130'	NEW	1	FIBER					
			LTE 850					2.5°				NEW	1	FIBER					
			LTE WCS					2°		(1) AIRSCALE RRH 4T4R B30 100W AHNA		NEW	1	FIBER					
			5G 850																
	#8				FUTURE					FUTURE 700 RRH									
GAMMA	#9				FUTURE														
	#10	NEW	LTE 700	COMMSCOPE	NNHH-65C-R4	85'	230°	2°	0°	(1) B12/B14 AIRSCALE RRH 4T4R 320 AHLBA	130'	NEW	1	FIBER					
			LTE 1900					2.5°				NEW	1	FIBER					
			LTE 700					2°				NEW	1	FIBER					
			LTE AWS					2.5°		(1) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB		NEW	1	FIBER					
	#11	NEW	LTE AWS			85'	230°	2°	0°	(1) AHCA B5 AIRSCALE RRH 4T4R B5 160W AHCA	130'	NEW	1	FIBER					
			LTE 850					2.5°				NEW	1	FIBER					
			LTE WCS					2°		(1) AIRSCALE RRH 4T4R B30 100W AHNA		NEW	1	FIBER					
			5G 850																
	#12				FUTURE					FUTURE 700 RRH									
GPS				TOTAL # OF RRH'S = 12 (4 PER SECTOR): RRH 4T4R B12/14 320W AHLBA, (1 PER SECTOR) RRH 4T4R B25/66 320W AHFIB, (1 PER SECTOR) RRH 4T4R B5 160W AHCA, (1 PER SECTOR) RRH 4T4R B30 100W AHNA, (1 PER SECTOR)			TOTAL # OF FUTURE ANTENNAS: 6 (2 PER SECTOR): 700 RRH, (1 PER SECTOR)			TOTAL # OF FUTURE RRH'S = 6 (2 PER SECTOR): 700 RRH, (1 PER SECTOR)									
NEW EQUIPMENT: YES		EQUIPMENT PLATFORM SIZE: 26'-0" x 18'-0"																	
NOTES: 1. SUBCONTRACTOR SHALL COORDINATE COLOR CODING WITH THE MASTER COLOR CODE DOCUMENT. 2. INSTALL SURGE ARRESTORS ON NEW MAIN COAXIAL CABLES. GROUND TO NEAREST GROUND BAR.																			

RF DESIGN NOTE:

This Antenna and Coax Cable schedule has been created using the RFDS dated 01/16/2019 Revision V2018_1.0. All antenna design, zoning, structural analysis, permits and compliance submissions are coordinated with the fore mentioned document.



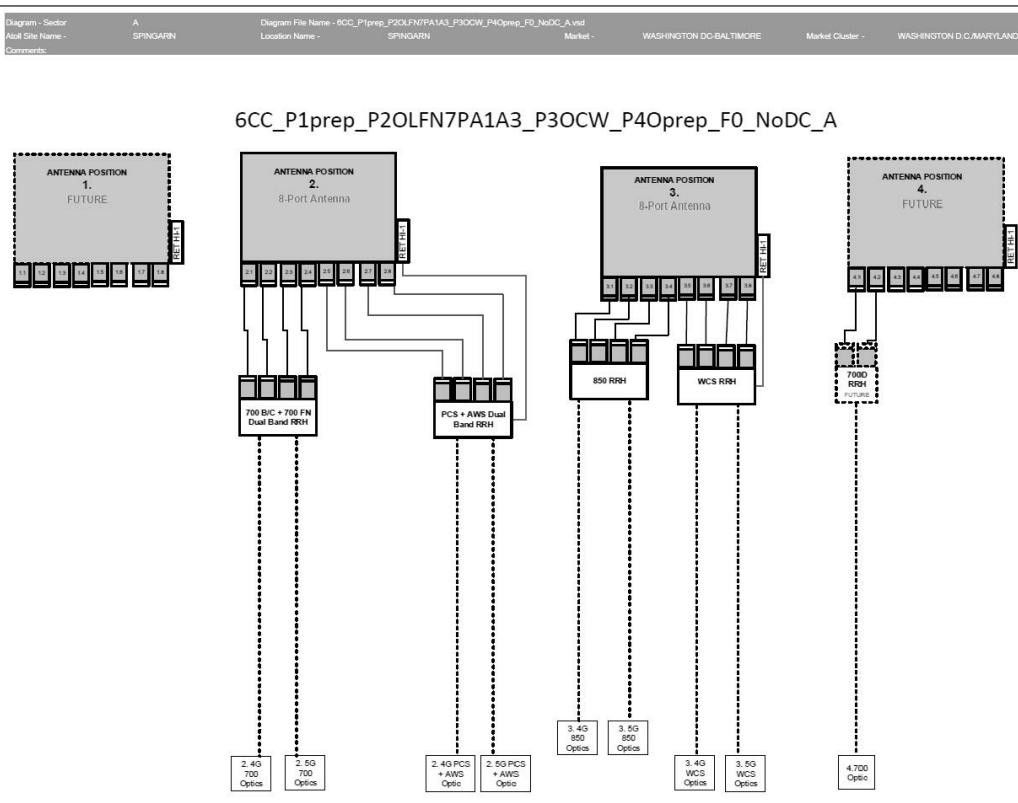
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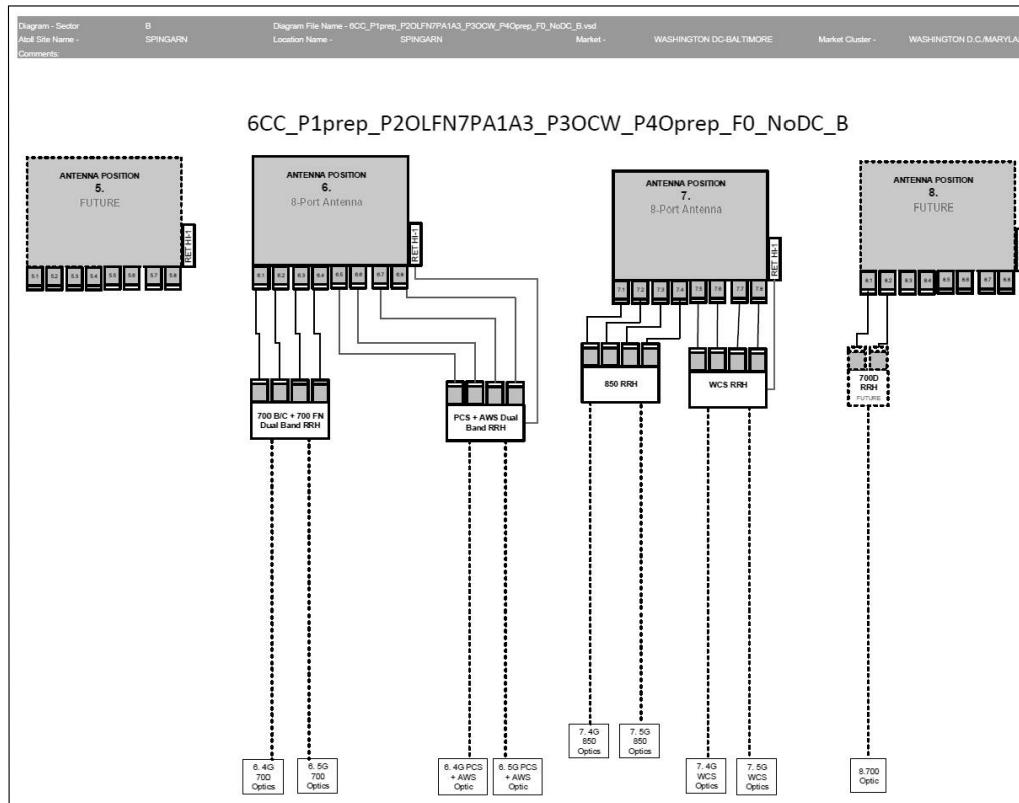
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ANTENNA SCHEDULE

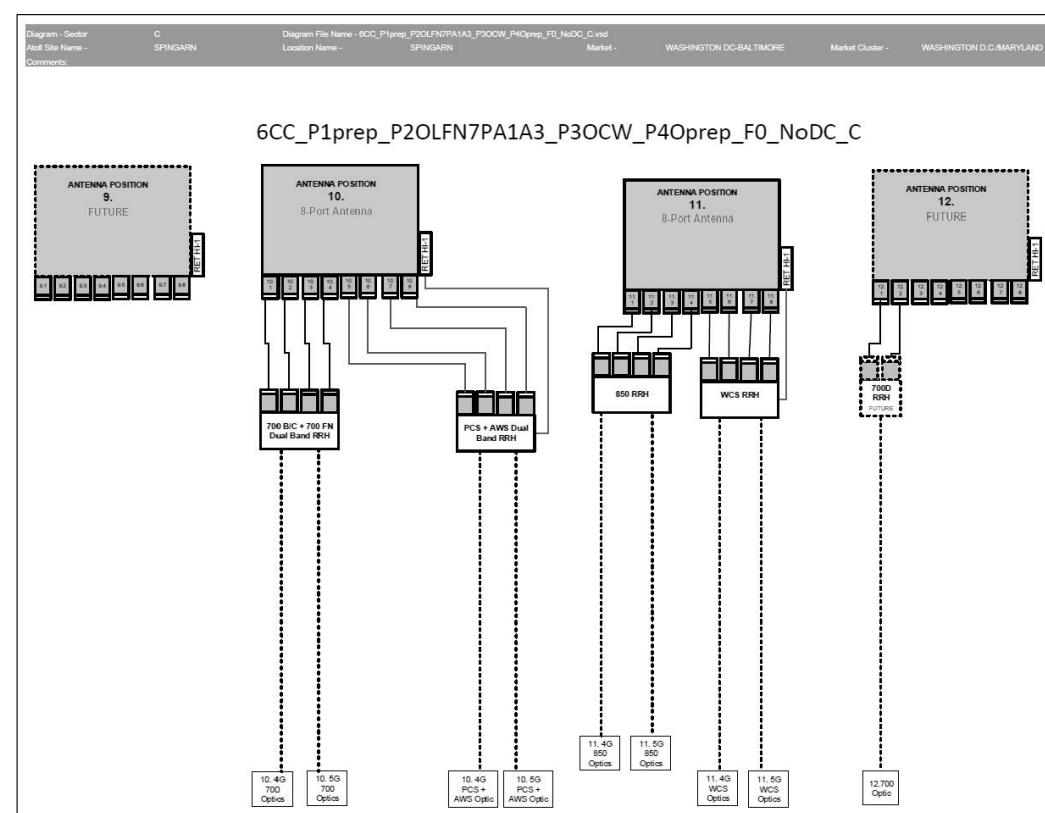
S-1



ALPHA SECTOR

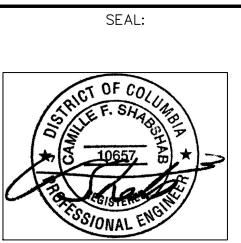


BETA SECTOR



GAMMA SECTOR

BASED ON RF ENGINEERING DESIGN ENTITLED "WASHINGTON-D.C.-MARYLAND_WASHINGTON-DC-BALTIMORE_SPINGARN_2020-New-Site_LTE_of245e_2251A0FJBQ_12573553_221719_01-16-2019_Preliminary-Approved_v1.00.1.22.19"



entrex
communication services, inc.
6100 Executive Blvd, Suite 350
Rockville, MD 20852
PHONE: (202) 408-0960
FAX: (202) 408-0961



I AM RESPONSIBLE FOR DETERMINING THAT THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION ARE IN COMPLIANCE WITH ALL RELEVANT LAWS AND REGULATIONS OF THE DISTRICT OF COLUMBIA. I HAVE PERSONALLY PREPARED, OR DIRECTLY SUPERVISED THE PREPARATION OF, THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION

PROJECT NO: 1152.354
DESIGNER: A.J.
ENGINEER: C.S.
THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"X34"
0 1/2 1
GRAPHIC SCALE IN INCHES

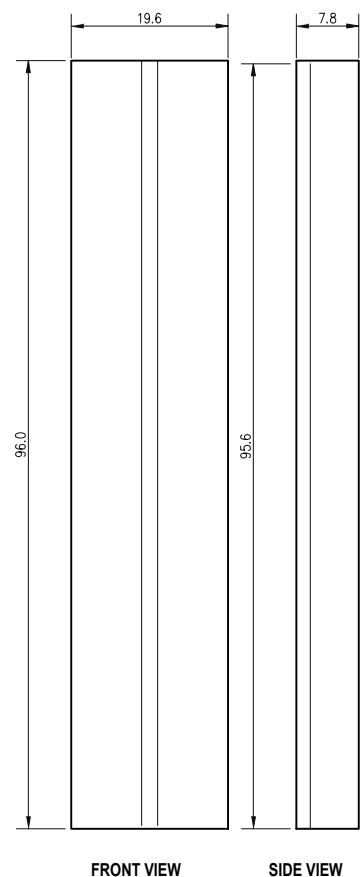


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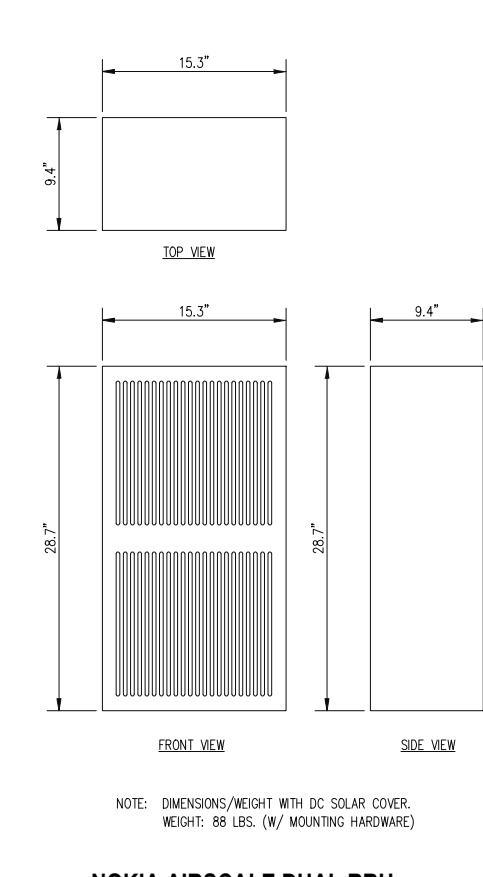
RF PLUMBING
DIAGRAM



FRONT VIEW
SIDE VIEW
COMMSCOPE NNHH-65C-R4 ANTENNA DETAIL
SCALE: 1"=1'-0"

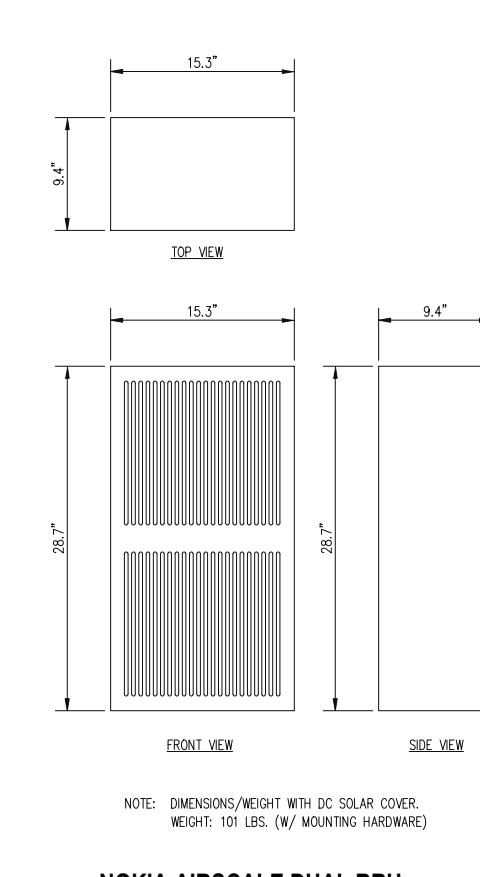
1
S-3

2
S-3



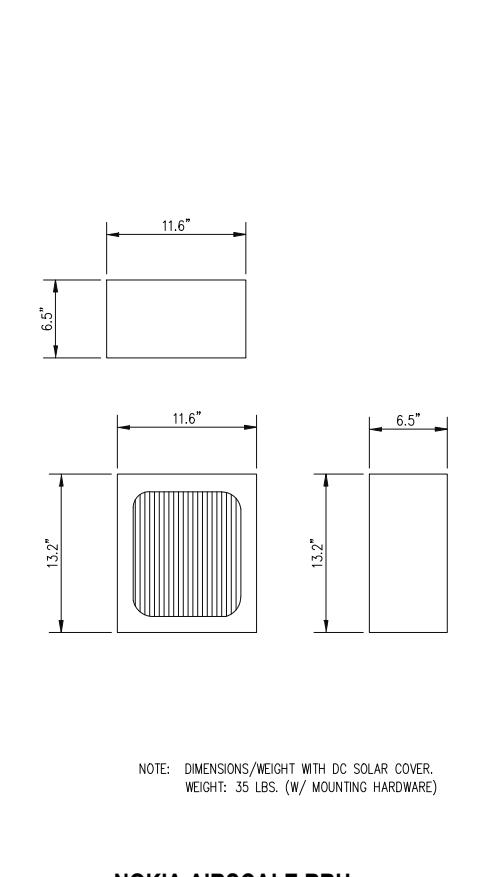
FRONT VIEW
SIDE VIEW
NOKIA AIRSCALE DUAL RRH
4T4R B25/66 320W AHFIB
SCALE: 1-1/2"= 1'-0"

2
S-3



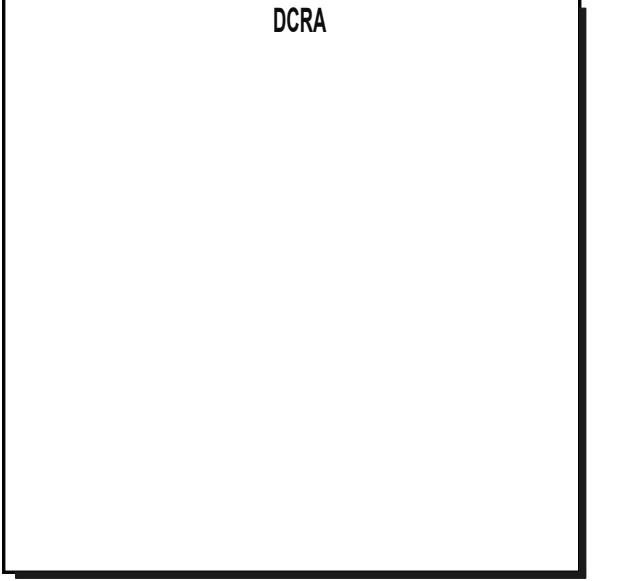
FRONT VIEW
SIDE VIEW
NOKIA AIRSCALE DUAL RRH
4T4R B12/14 320W AHLBA
SCALE: 1-1/2"= 1'-0"

3
S-3



FRONT VIEW
SIDE VIEW
NOKIA AIRSCALE RRH
4T4R B5 160W AHCA
SCALE: 1-1/2"= 1'-0"

4
S-3



entrex
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6100 Executive Blvd, Suite 350
Rockville, MD 20852
PHONE: (202) 408-0960
FAX: (202) 408-0961

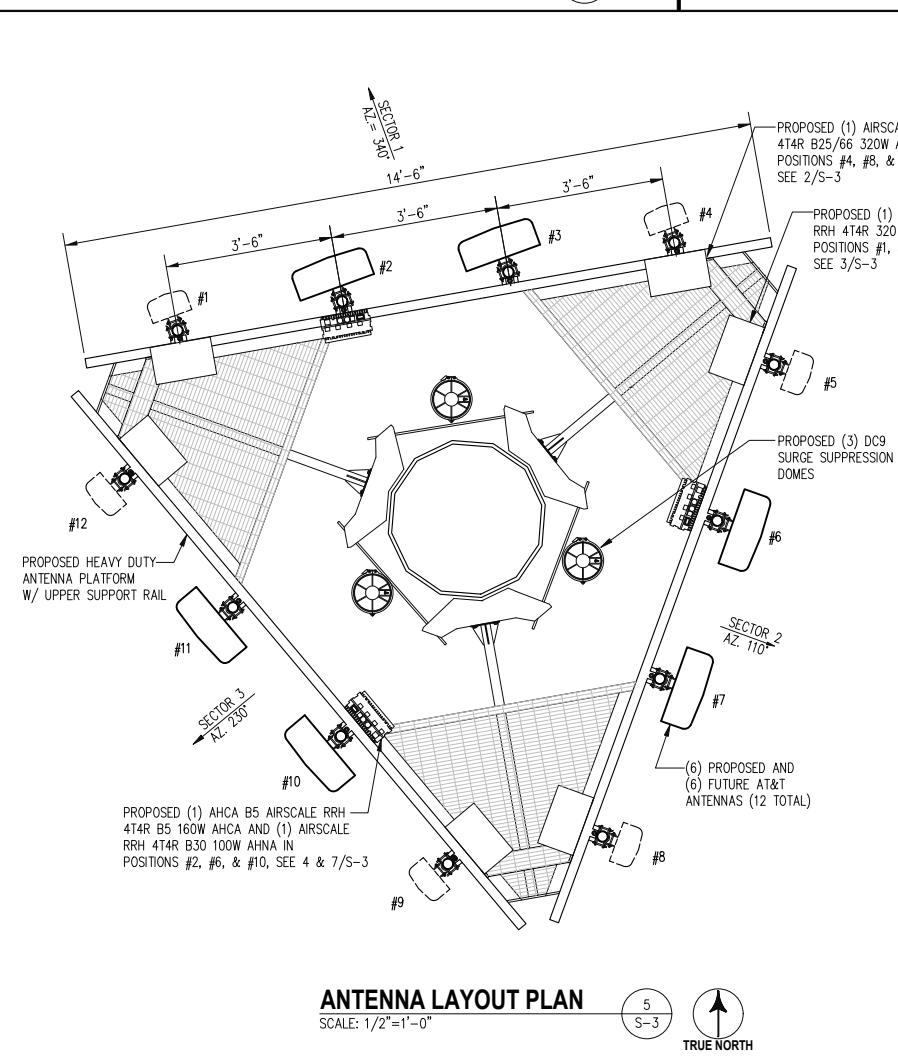
at&t
7150 STANDARD DRIVE
HANOVER, MD 21076

I AM RESPONSIBLE FOR DETERMINING THAT THE
ENGINEERING DESIGNS INCLUDED IN THIS
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GRAPHIC SCALE IN INCHES

smartlink
1362 MELLON RD, STE 140
HANOVER, MD 21076
PHONE: (410) 582-8043
FAX: (410) 221-2962

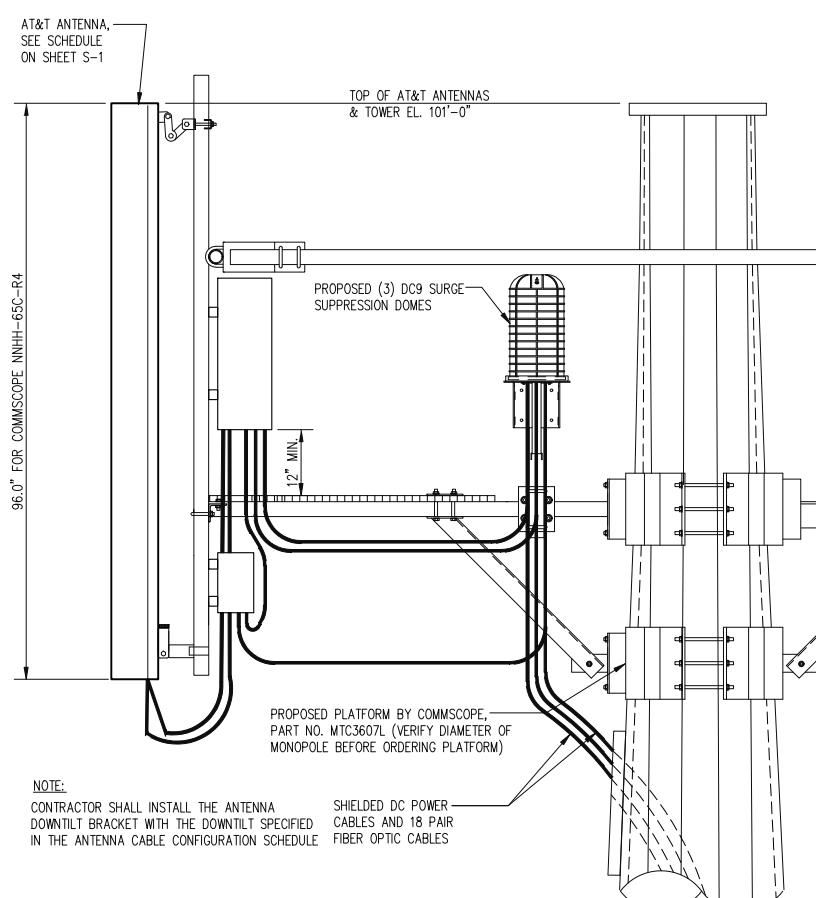
FA NUMBER: 12573553
SITE ID: 4882
SPINGARN
2500 BENNING RD NE
WASHINGTON, DC 20002



ANTENNA LAYOUT PLAN
SCALE: 1/2"=1'-0"

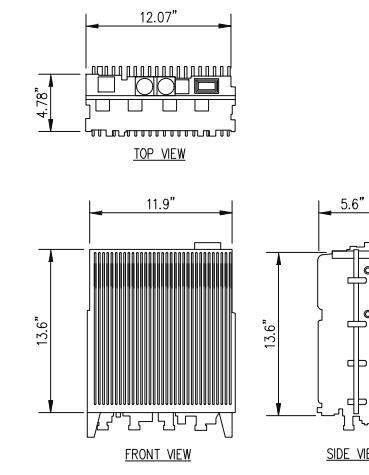
5
S-3

TRUE NORTH



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

6
S-3



AHNA AIRSCALE RRH
4T4R B30 100W
SCALE: 1-1/2"= 1'-0"

7
S-3

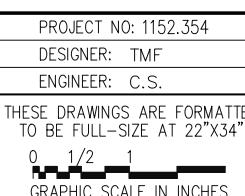
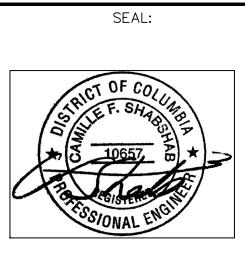
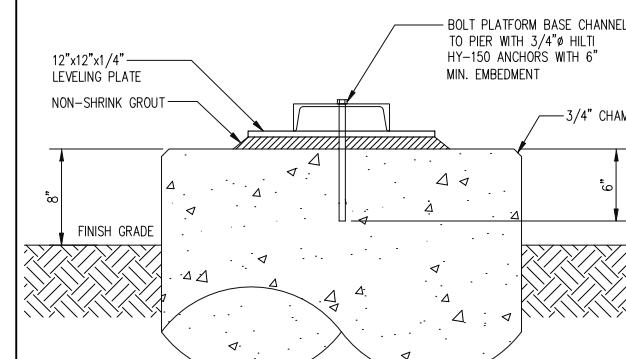
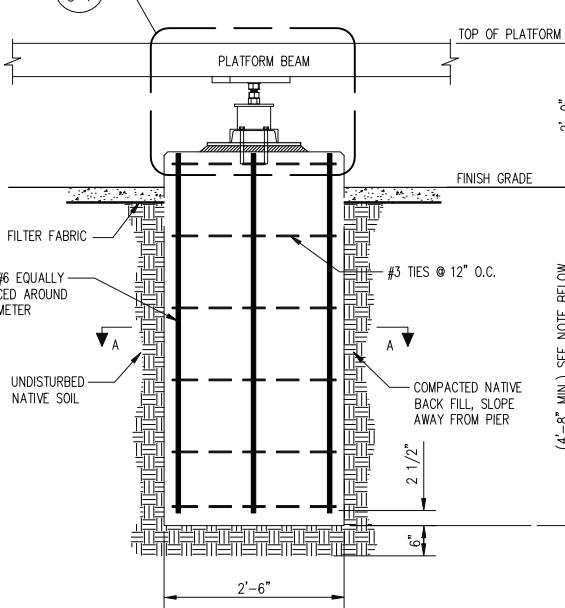
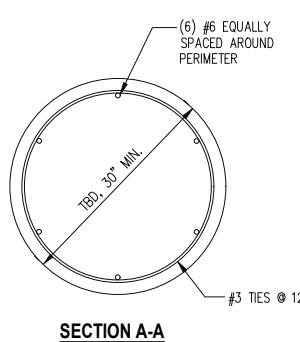
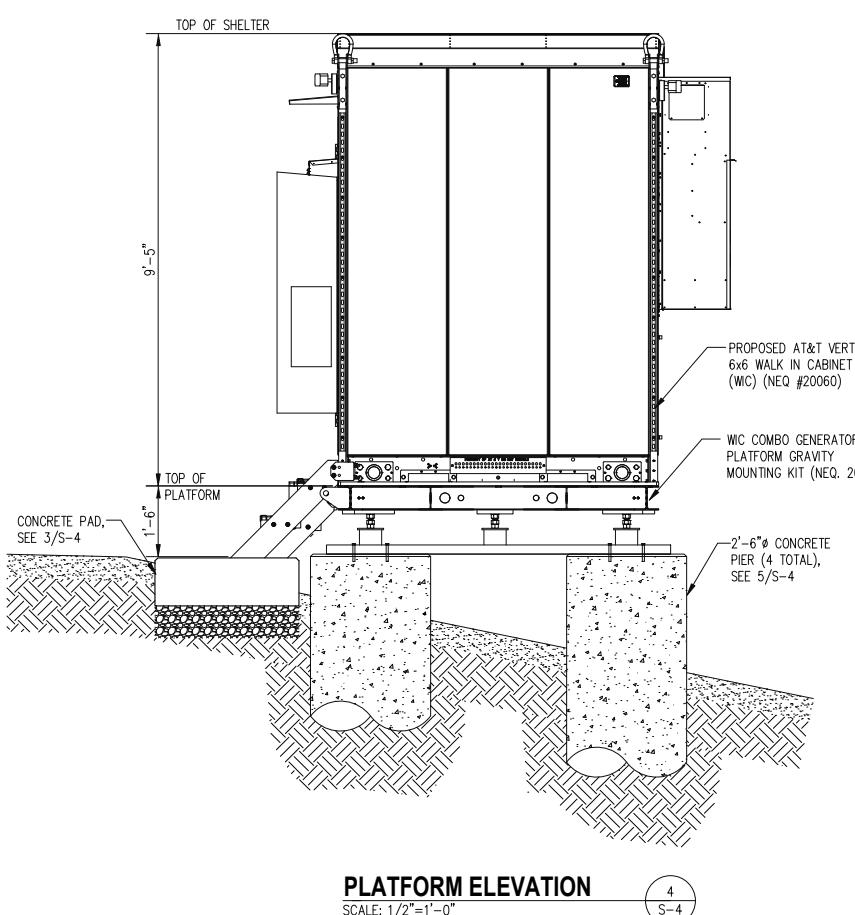
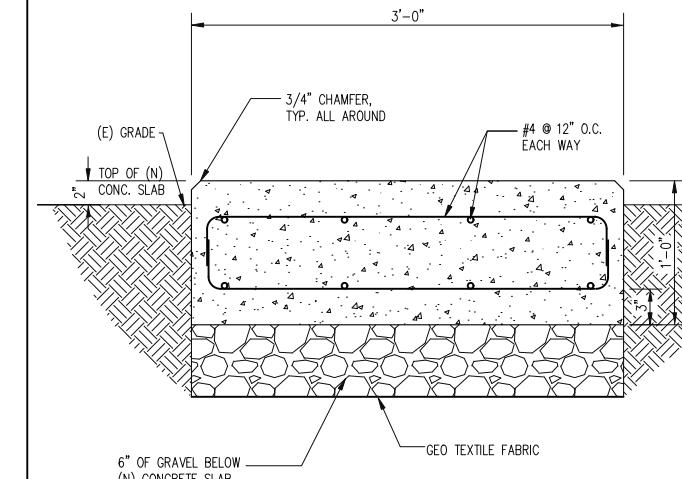
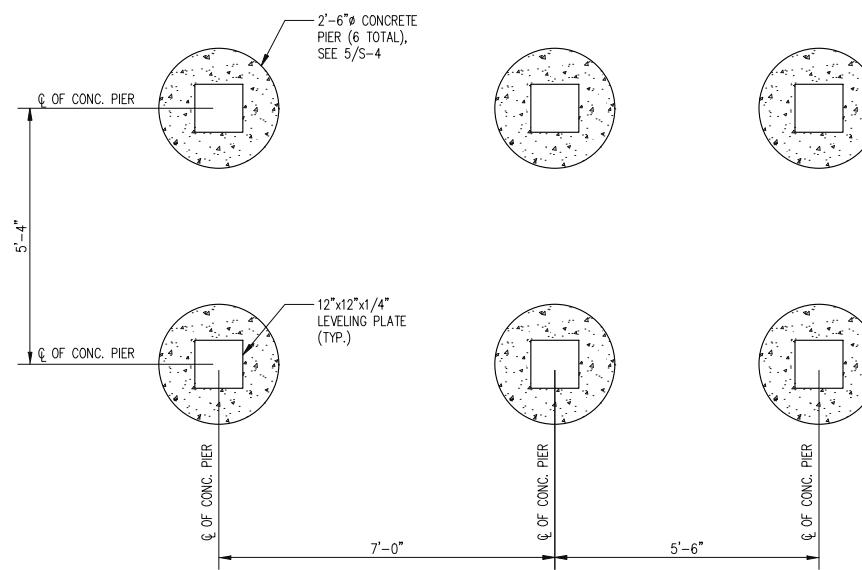
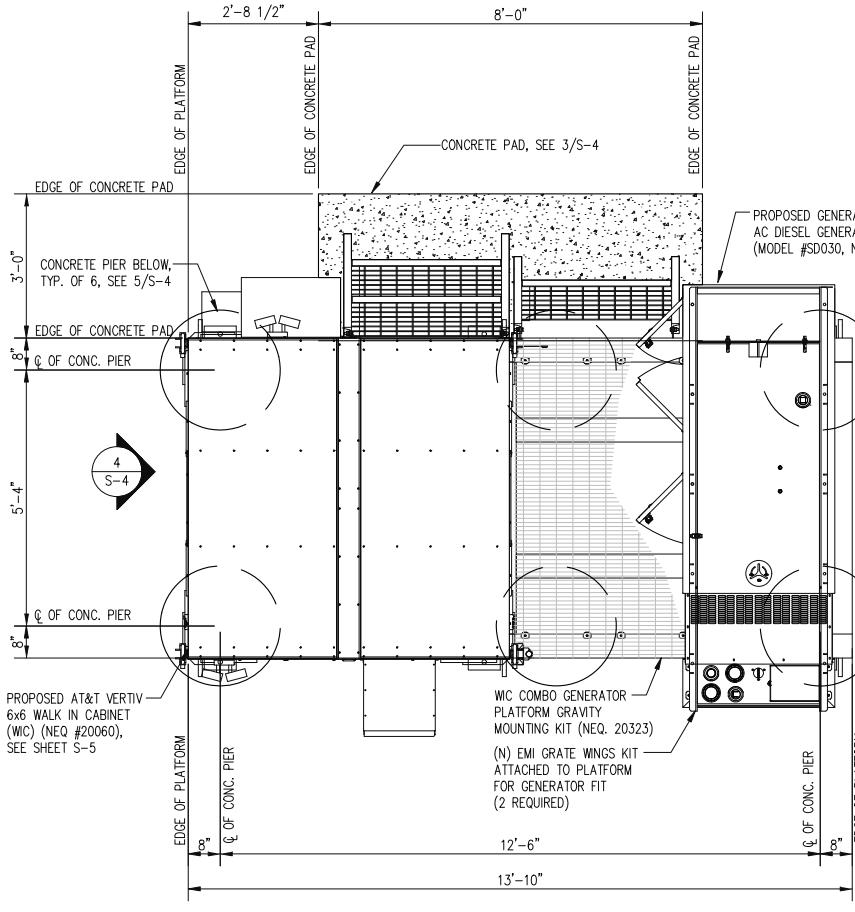
SUBMITTALS		
DATE	DESCRIPTION	REVISION
03-01-2019	ADDITIONAL COMMENTS	1
03-07-2019	ELECTRICAL COMMENTS	2
03-28-2019	AT&T COMMENTS & CONCRETE PIERS	4
12-10-2020	CHANGE TOWER & ANTENNA HEIGHTS	5
03-12-2021	CHANGE TOWER & ANTENNA HEIGHTS	6

TITLE:

**ANTENNA AND
RRH DETAILS**

SHEET NUMBER:

S-3

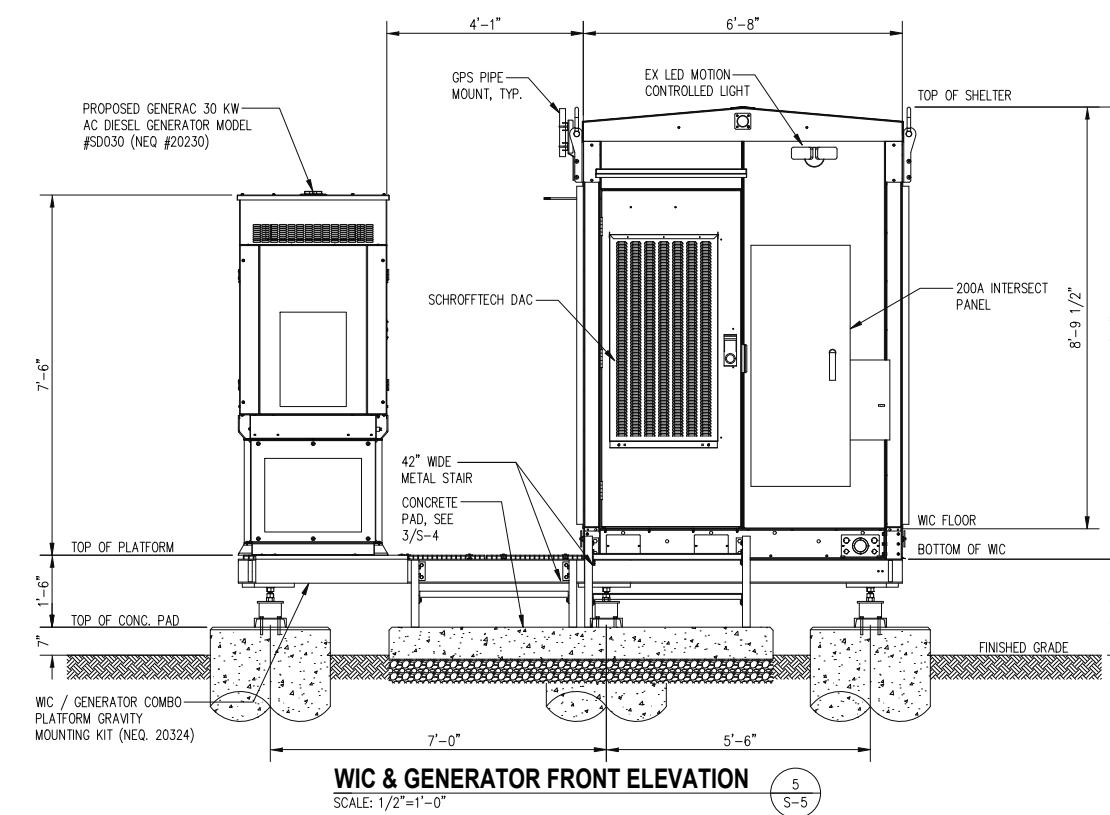
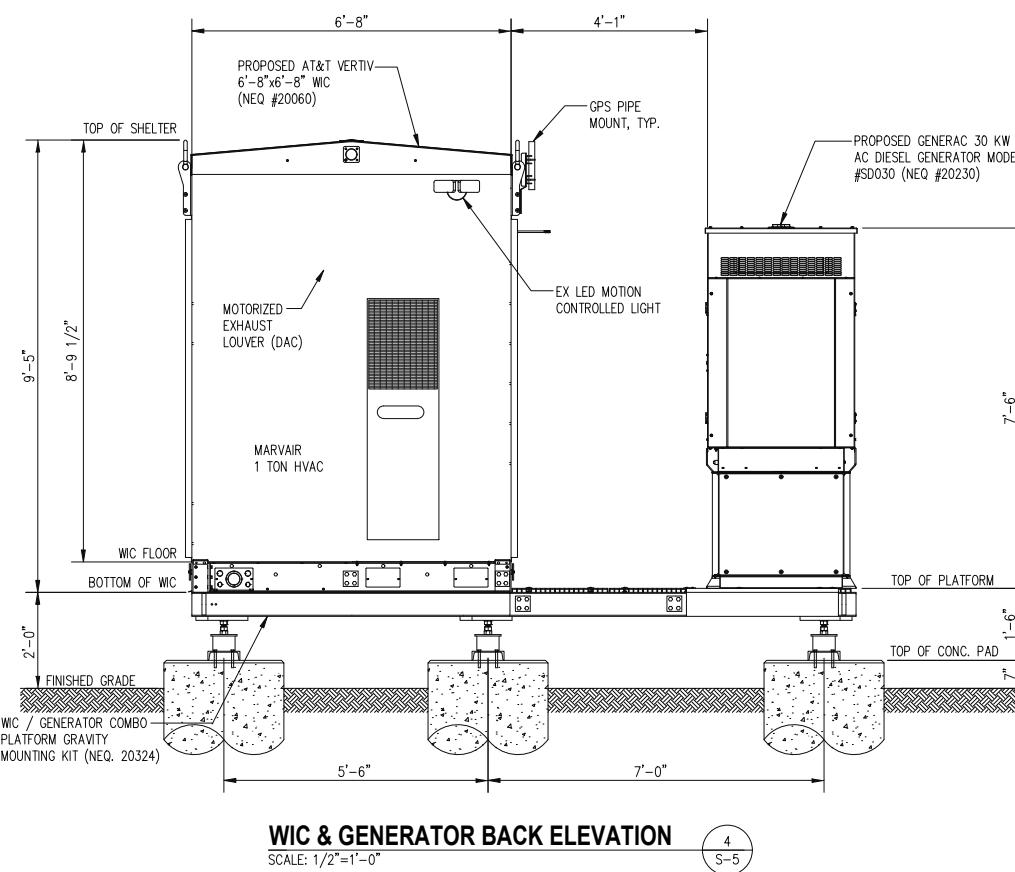
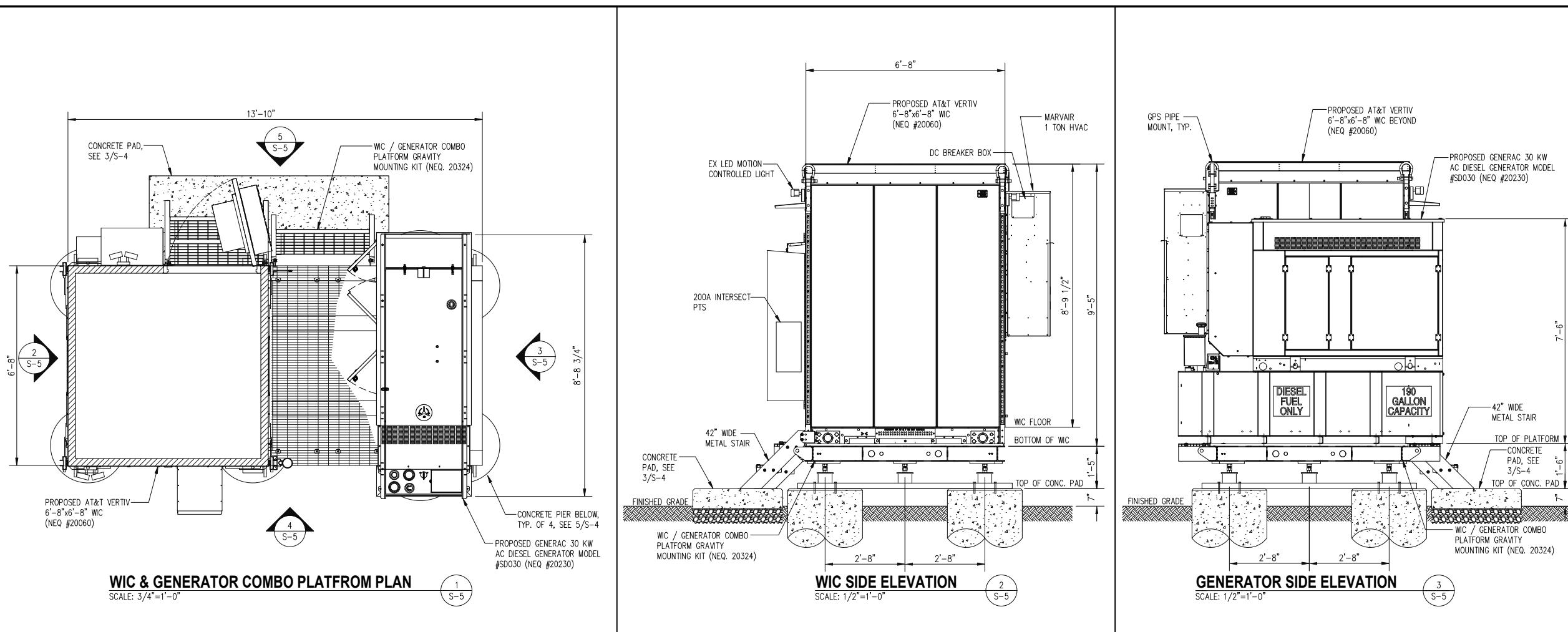


**FA NUMBER: 12573553
SITE ID: 4882
SPINGARN
2500 BENNING RD NE
WASHINGTON, DC 20002**

SUBMITTALS		
DATE	DESCRIPTION	REVISION
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03-12-2021	CHANGE TOWER & ANTENNA HEIGHTS	6

TITLE:

**EQUIPMENT & WIC PLANS
& SITE DETAILS**



FA NUMBER: 12573553
SITE ID: 4882
SPINGARN
2500 BENNING RD NE
WASHINGTON, DC 20002

SUMMITALS

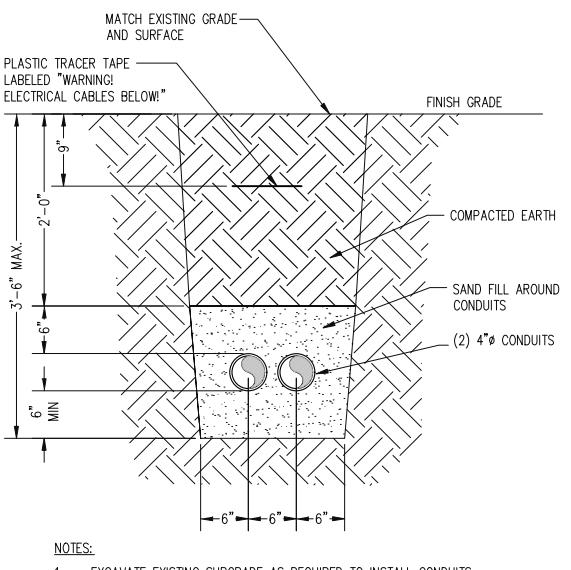
DESCRIPTION	REVISION
COMMENTS	1
COMMENTS	2
ENTS & CONCRETE PIERS	4
RR & ANTENNA HEIGHTS	5
RR & ANTENNA HEIGHTS	6

111

EQUIPMENT PLAN & ELEVATIONS

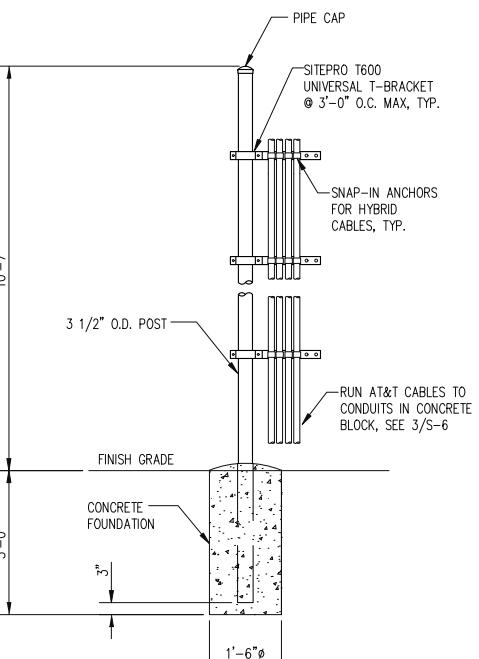
SHEET NUMBER:

S-5



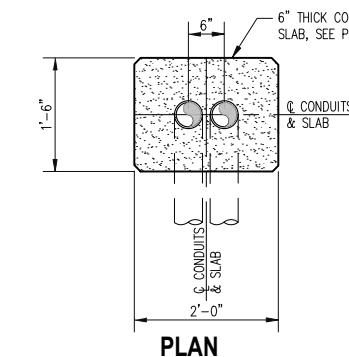
CONDUIT TRENCH DETAIL

SCALE: 1"=1'-0" 1 S-6



SECTION

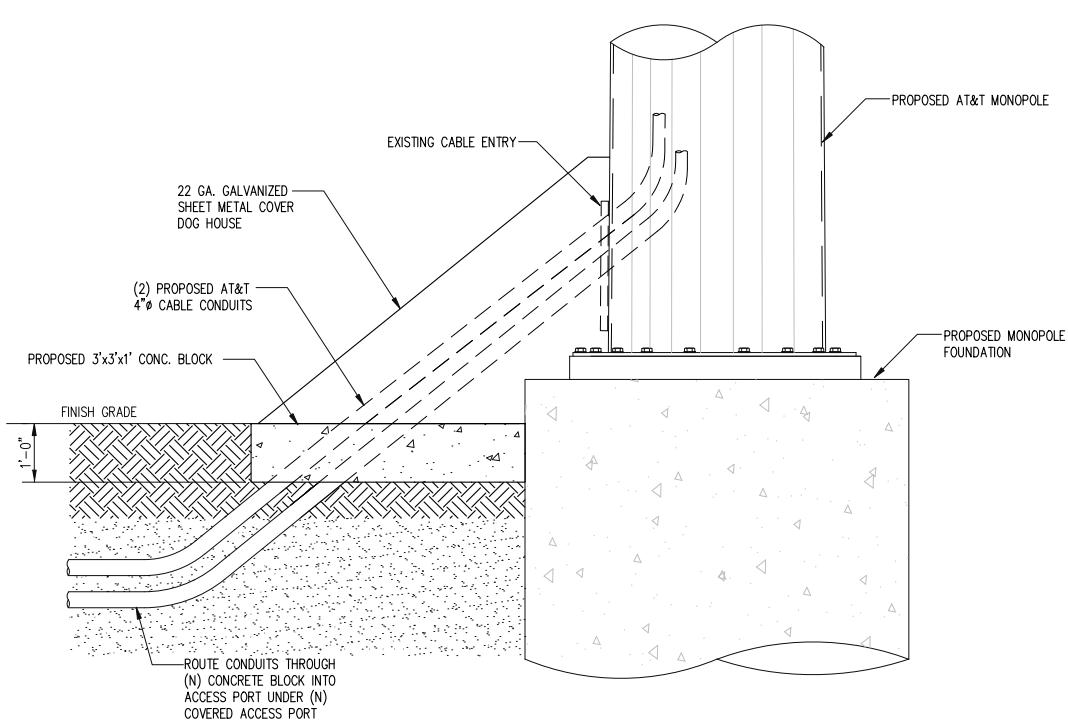
SCALE: 1/2"=1'-0" 2 S-6



PLAN

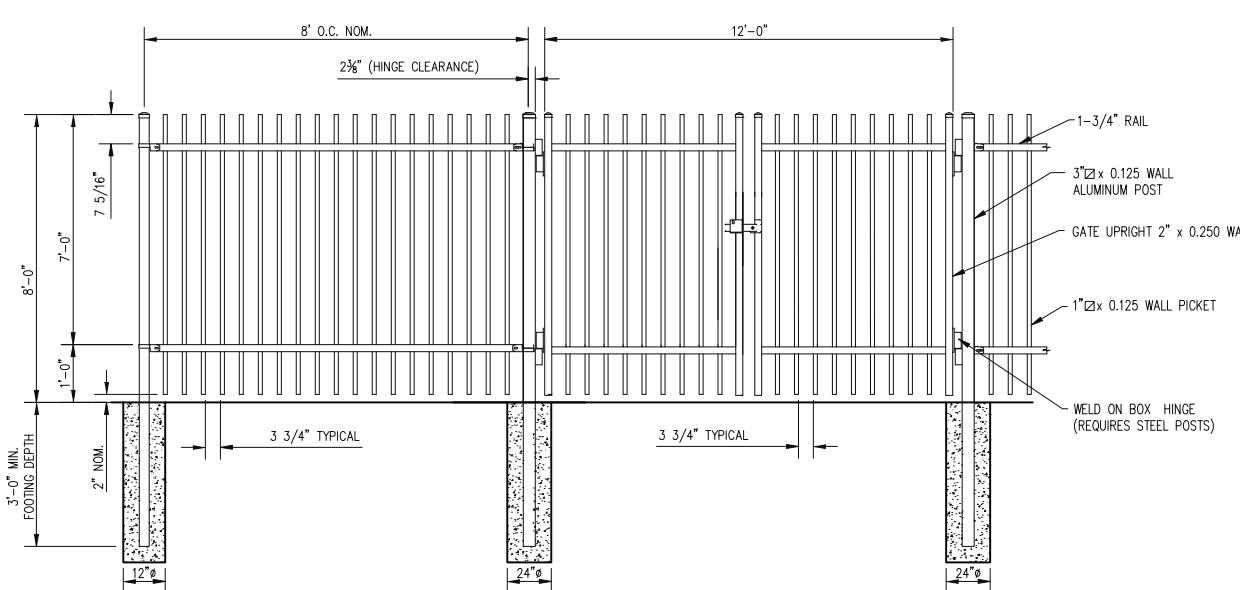
CONDUIT BLOCK DETAILS

SCALE: N.T.S. 3 S-6



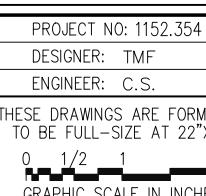
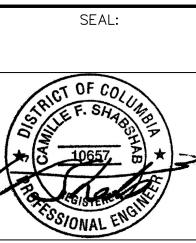
CONDUIT DETAIL

SCALE: N.T.S. 4 S-6



METAL FENCE DETAIL

SCALE: N.T.S. 5 S-6



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SUBMITTALS

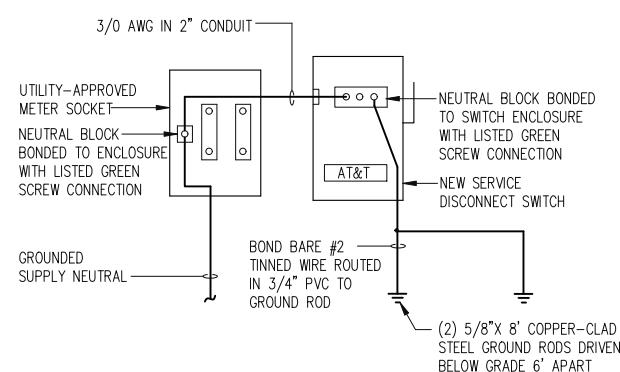
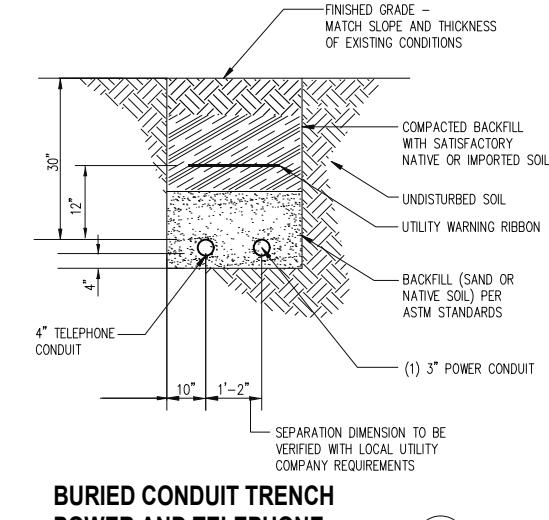
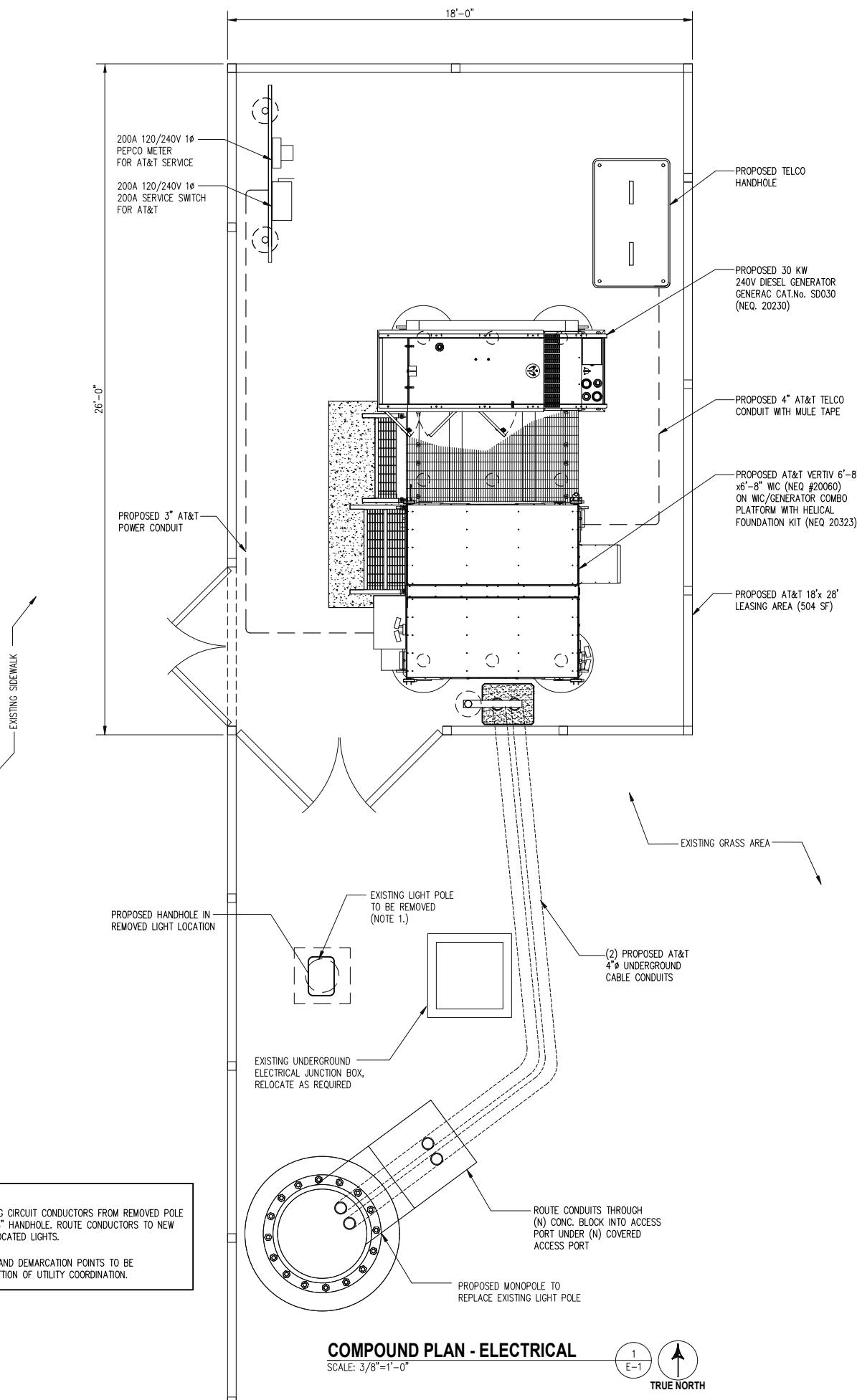
DATE	DESCRIPTION	REVISION
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03-12-2021	CHANGE TOWER & ANTENNA HEIGHTS	6

TITLE:

SITE DETAILS

SHEET NUMBER:

S-6



NOTES:

1. AND O O O REPRESENT A GROUNDING TERMINAL WITH A LISTED GREEN SCREW THAT ACHIEVES CONTINUOUS METALLIC CONTACT WITH THE METAL ENCLOSURE
2. NEUTRAL WIRES SHALL BE INSULATED AND MARKED WITH WHITE TAPE.
3. DRIVE 8' LONG GROUND RODS COMPLETELY BELOW GRADE.

SUBMITTALS

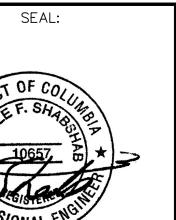
DATE	DESCRIPTION	REVISION
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12-10-2020	CHANGE TOWER & ANTENNA HEIGHTS	5
03-12-2021	CHANGE TOWER & ANTENNA HEIGHTS	6

TITLE:

ELECTRICAL PLAN AND DETAILS

SHEET NUMBER:

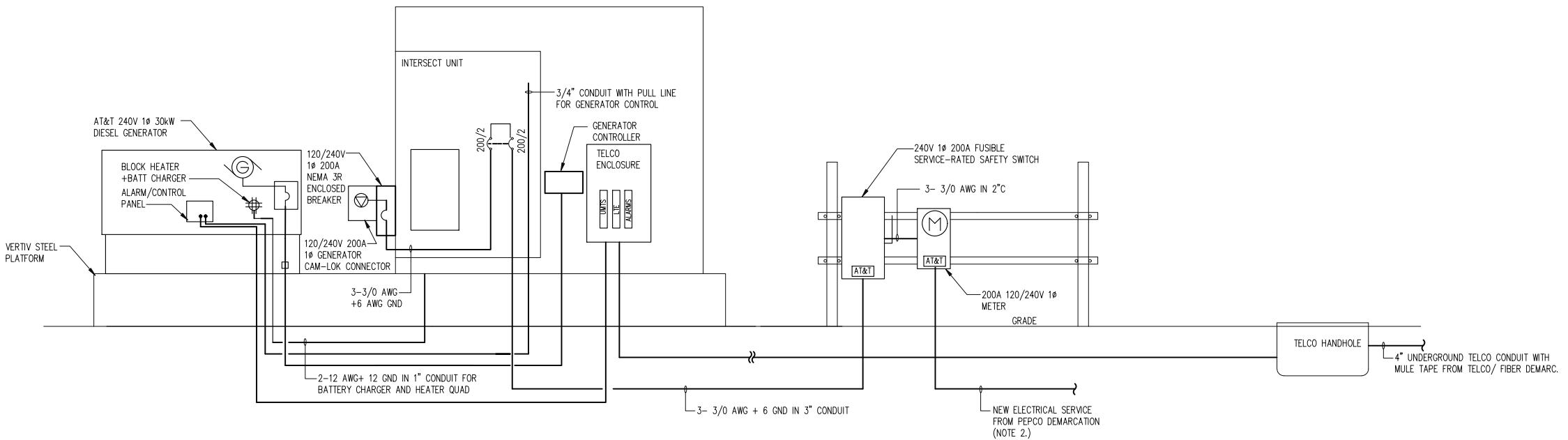
E-1



entrex
communication services, inc.
6100 Executive Blvd, Suite 350
Rockville, MD 20852
PHONE: (202) 408-0960
FAX: (202) 408-0961



FA NUMBER: 12573553
SITE ID: 4882
SPINGARN
2500 BENNING RD NE
WASHINGTON, DC 20002



NOTES:

1. ALL ITEMS SHOWN ARE PROPOSED, NEW, UNLESS NOTED AS EXISTING
2. COORDINATE NEW SERVICE WITH PEPCO AT A SITE MEETING WITH METER DEPARTMENT REPRESENTATIVE.
3. ENCLOSURES ARE NEMA-3R RATED.

UTILITY DIAGRAM

SCALE: N.T.S.

1
E-2

AT&T PANEL PTLC										
120/240 VOLTS 1 PHASE 3 WIRE 200 AMP MCB										
LOAD DESCRIPTION	VA	B K R	C K T	Ø A	Ø B	C K T	B K R	VA	LOAD DESCRIPTION	
RECTIFIER 1	720	30	1	1440		2		720	RECTIFIER 4	
	720		3		1440	4		720		
RECTIFIER 2	720	30	5	1440		6		30	RECTIFIER 5	
	720		7		1440	8		720		
RECTIFIER 3	720	30	9	1440		10		30	RECTIFIER 6	
	720		11		1440	12		720		
RECTIFIER 7	720	30	13	1440		14		30	RECTIFIER 10	
	720		15		1440	16		720		
RECTIFIER 8	720	30	17	1440		18		30	RECTIFIER 11	
	720		19		1440	20		720		
RECTIFIER 9	720	30	21	1440		22		30	RECTIFIER 12	
	720		23		1440	24		720		
HVAC	1800	25	25	2020		26	20	220	LIGHTS + RECEPTACLE	
	1800		27		2600	28	20	1250	GEN BLOCK HTR & CHARGER	
GFI RECEPTACLE	180	25	29	180		30				
PHASE TOTALS (VA):		10840	11690							
PANEL TOTAL (kVA):		22.6								

PANELBOARD CAPACITY: 48 kVA

PANELBOARD CONNECTED LOAD: 22.6 kVA

22.6 kVA x 1.25 (CONTINUOUS LOAD FACTOR): 28.25

THE CONTINUOUS LOAD DOES NOT EXCEED THE PANELBOARD'S CAPACITY.

AC POWER PANEL SCHEDULE

2
E-2

DISTRIBUTION ROW #3		DISTRIBUTION ROW #2		DISTRIBUTION ROW #1	
POSITION	VOLTAGE	POSITION	VOLTAGE	POSITION	VOLTAGE
FIF FUSE PANEL #1-A	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	FIF FUSE PANEL #1-B	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	FIF FUSE PANEL #2-B	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
FIF FUSE PANEL #2-A	100 100				
AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB		AIRSCALE DUAL RRH 4T4R B12/14 320W AHLBA		AIRSCALE RRH 4T4R B5 160W AHCA	
AIRSCALE DUAL RRH 4T4R B12/14 320W AHLBA		AIRSCALE RRH 4T4R B30 100W AHNA		AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB	
AIRSCALE RRH 4T4R B5 160W AHCA		AIRSCALE DUAL RRH 4T4R B12/14 320W AHLBA		AIRSCALE DUAL RRH 4T4R B12/14 320W AHLBA	
AIRSCALE RRH 4T4R B30 100W AHNA		AIRSCALE RRH 4T4R B5 160W AHCA		AIRSCALE RRH 4T4R B5 160W AHCA	
AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB		AIRSCALE RRH 4T4R B30 100W AHNA		AIRSCALE RRH 4T4R B30 100W AHNA	
AIRSCALE DUAL RRH 4T4R B12/14 320W AHLBA		AIRSCALE RRH 4T4R B5 160W AHCA		AIRSCALE RRH 4T4R B5 160W AHCA	
AIRSCALE RRH 4T4R B5 160W AHCA		AIRSCALE RRH 4T4R B30 100W AHNA		AIRSCALE RRH 4T4R B30 100W AHNA	
AIRSCALE RRH 4T4R B30 100W AHNA		AIRSCALE RRH 4T4R B5 160W AHCA		AIRSCALE RRH 4T4R B5 160W AHCA	
AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB		AIRSCALE RRH 4T4R B30 100W AHNA		AIRSCALE RRH 4T4R B30 100W AHNA	
AIRSCALE DUAL RRH 4T4R B12/14 320W AHLBA		AIRSCALE RRH 4T4R B5 160W AHCA		AIRSCALE RRH 4T4R B5 160W AHCA	
AIRSCALE RRH 4T4R B5 160W AHCA		AIRSCALE RRH 4T4R B30 100W AHNA		AIRSCALE RRH 4T4R B30 100W AHNA	
AIRSCALE RRH 4T4R B30 100W AHNA		AIRSCALE RRH 4T4R B5 160W AHCA		AIRSCALE RRH 4T4R B5 160W AHCA	
S A I D		S A I D		S A I D	
D A C F A N		T R A N S P O R T N I D		T R A N S P O R T N I D	
H V A C C O N T R O L L E R		F S M 4		F S M 4	
D C L I G H T S		F S M 4		F S M 4	

DC POWER BREAKER SCHEDULE

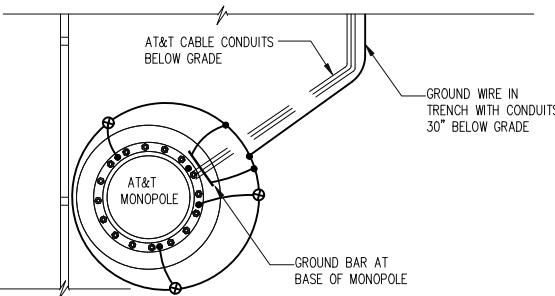
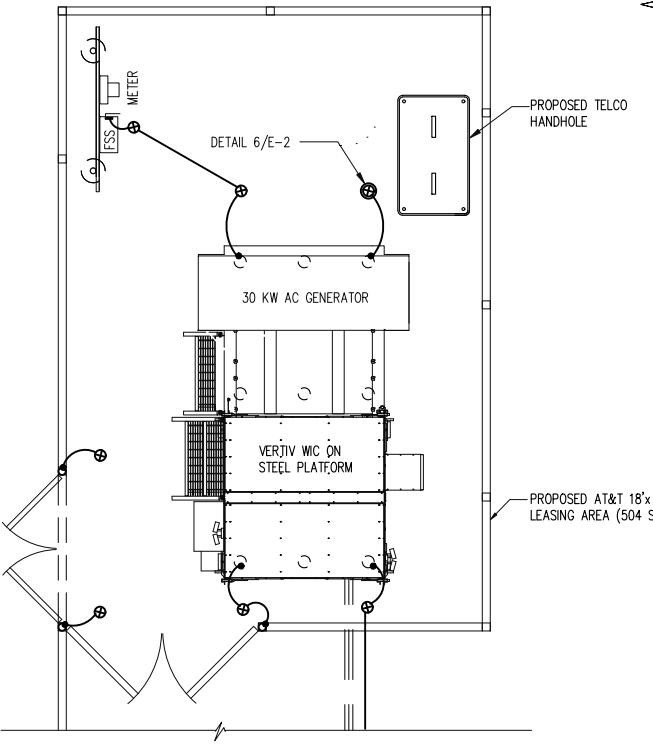
3
E-2

SUBMITTALS		
DATE	DESCRIPTION	REVISION
03-01-2019	ADDITIONAL COMMENTS	1
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03-12-2021	CHANGE TOWER & ANTENNA HEIGHTS	6
TITLE:		

UTILITY DIAGRAM
PANEL SCHEDULES AND DETAILS

SHEET NUMBER:

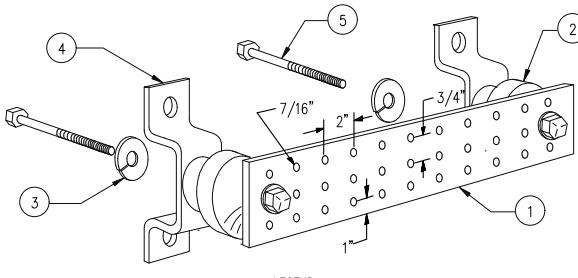
E-2



NOTES:

1. ALL ITEMS ON THIS PLAN ARE PROPOSED, NEW, UNLESS NOTED OTHERWISE.
2. EXOTHERMICALLY MELD BARE 2 AWG COPPER WIRE TO (5) HELICAL PIERS, FENCE POSTS AND GROUND RODS.
3. BOND HALO PIGTAILS TO HELICAL PIERS.

GROUNDING PLAN
SCALE: 1/4"=1'-0" 1 E-3
TRUE NORTH

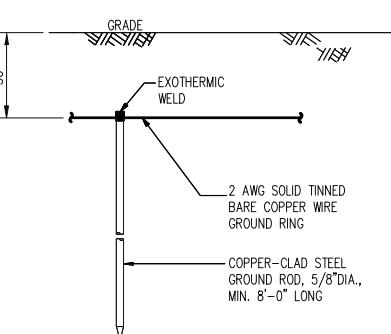
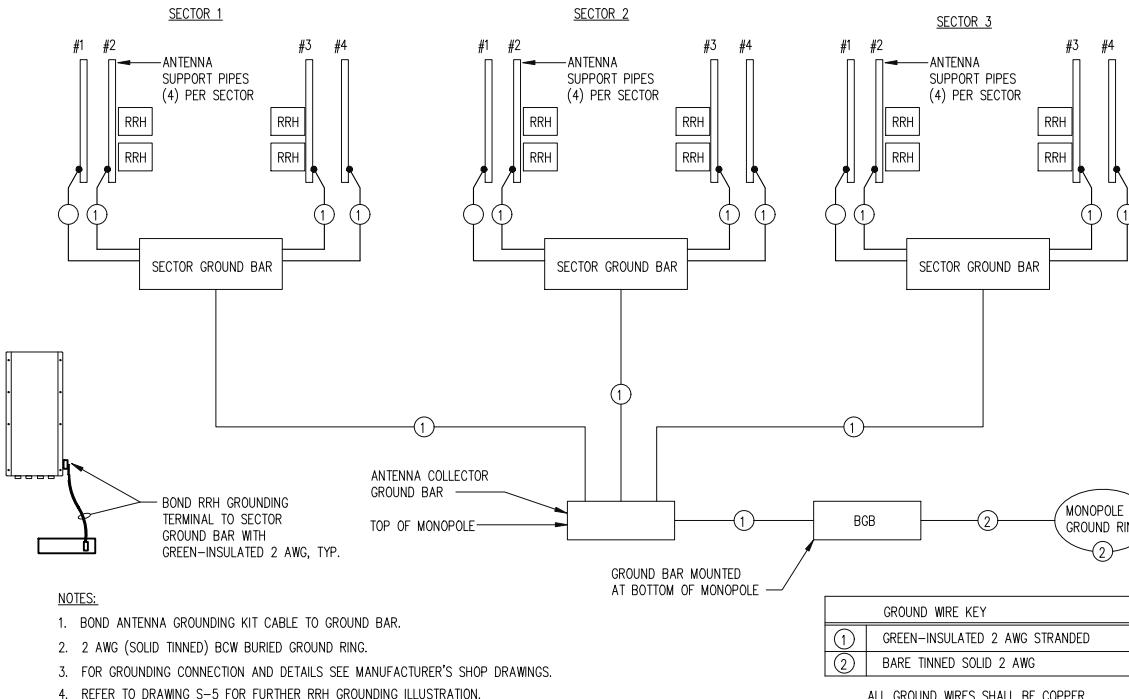


1. TINNED COPPER GROUND BAR, 1/4"X 4"X 20", NEWTON INSTRUMENT CO. CAT. NO. B-6142. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4
3. 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A-6056
5. 5/8-11 X 1" H.H.C.S.BOLTS, NEWTON INSTRUMENT CO. CAT NO. 3012-1
6. PRIOR TO CONNECTION, APPLY OXIDATION INHIBITING MATERIAL TO MATING SURFACES.

GROUND BAR ISOMETRIC

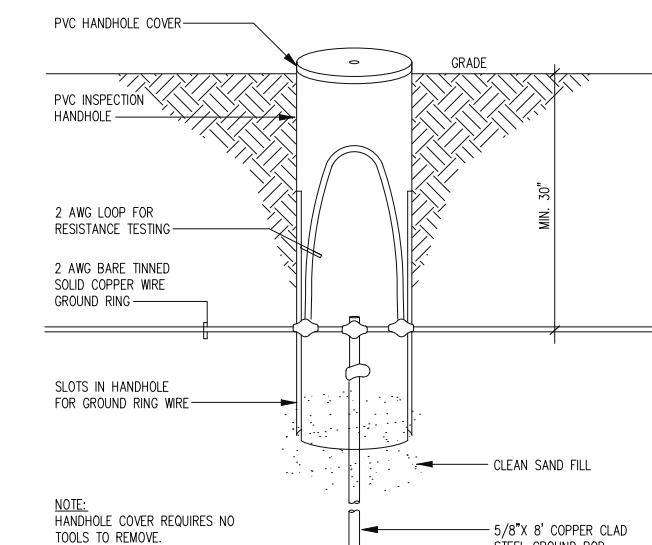
SCALE: N.T.S.

2 E-3



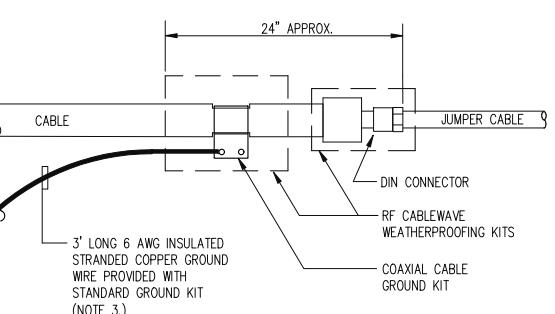
1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.

GROUND ROD DETAIL
SCALE: N.T.S. 4 E-3



NOTE:
HANDHOLE COVER REQUIRES NO TOOLS TO REMOVE.
HARGER CAT. NO. 358PP42

GROUND ACCESS HANDHOLE
SCALE: N.T.S. 6 E-3

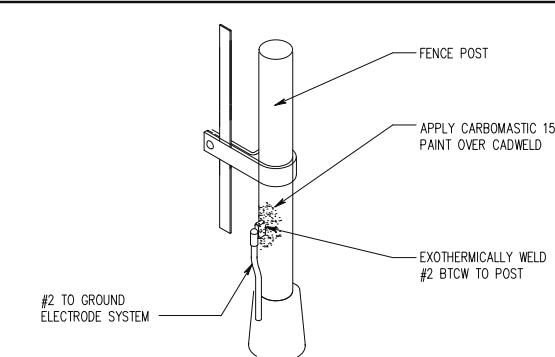


NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND. ALWAYS DIRECT GROUND KIT WIRE DOWNWARD TO GROUND BAR.
2. 1"X 2"X 1" TAPE WRAPPING SHALL BE INSTALLED OVER ALL WEATHERPROOFING CONNECTIONS. EXTEND TAPING A MINIMUM OF 6" BEYOND CONNECTION POINT ON COAXIAL CABLES. EACH WRAP SHALL OVERLAY THE PRECEDING LAYER TO ENSURE WATERTIGHT INTEGRITY.
3. WHERE GROUND KITS ARE LOCATED GREATER THAN (3) FEET FROM GROUND BAR, PROVIDE INSULATED 6 AWG OF LENGTH REQUIRED FOR CONNECTION TO GROUND BAR.

COAXIAL CABLE GROUND KIT DETAIL

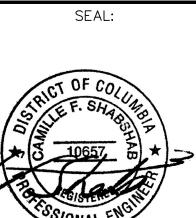
SCALE: N.T.S.



FENCE BONDING DETAIL

SCALE: N.T.S.

7 E-3



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TITLE:

**GROUNDING PLAN,
DIAGRAM AND DETAILS**

SHEET NUMBER:

E-3