Commission of Architectural Review
SUBMISSION APPLICATION

City of Richmond, Room 510 – City Hall
900 East Broad Street, Richmond, Virginia 23219
PHONE: (804) 646-6335 FAX: (804) 646-5789

12 COPIES OF SUPPORTING DOCUMENTATION ARE REQUIRED FOR PROCESSING YOUR SUBMISSION

LOCATION OF WORK: 3012 MONUMENT AVE DATE: 05/25/2016

OWNER'S NAME: WALID M DANIEL TEL NO.: _____

AND ADDRESS: 3904 LONGVIEW LANDING CT EMAIL: _____

CITY, STATE AND ZIPCODE: RICHMOND, VA 23223

ARCHITECT/CONTRACTOR'S NAME: TRENT SNARR NB&C TEL. NO.: _____

AND ADDRESS: 4435 WATERFRONT DR STE 100 EMAIL: tsnarr@nbcllc.com

CITY, STATE AND ZIPCODE: GLEN ALLEN, VA 23060

Would you like to receive your staff report via email? Yes ☑ No ☐

REQUEST FOR CONCEPTUAL REVIEW

☐ I hereby request Conceptual Review under the provisions of Chapter 114, Article IX, Division 4, Section 114-930.6(d) of the Richmond City Code for the proposal outlined below in accordance with materials accompanying this application. I understand that conceptual review is advisory only.

APPLICATION FOR CERTIFICATE OF APPROPRIATENESS

☐ I hereby make application for the issuance of a certificate under the provisions of Chapter 114, Article IX, Division 4 (Old and Historic Districts) of the Richmond City Code for the proposal outlined below in accordance with plans and specifications accompanying this application.

DETAILED DESCRIPTION OF PROPOSED WORK (*Required*):

STATE HOW THE DESIGN REVIEW GUIDELINES INFORM THE DESIGN OF THE WORK PROPOSED. (Include additional sheets of description if necessary, and **12 copies** of artwork helpful in describing the project. The 12 copies are not required if the project is being reviewed for an administrative approval. *See instruction sheet for requirements.*)

PLEASE SEE ATTACHED.

Signature of Owner or Authorized Agent: X Melissa Harred

Name of Owner or Authorized Agent (please print legibly): MELISSA HARRELD

2:47 pm mharreld@nbcllc.com
804 892-0310

(Space below for staff use only)

Received by Commission Secretary RECEIVED

DATE MAY 25 2016

APPLICATION NO. _____

SCHEDULED FOR _____

Note: CAR reviews all applications on a case-by-case basis.

Revised 10-02-2014

NB+C
TOTALLY COMMITTED.

Secretary, C.A.R.
City Hall Room 510
900 East Broad Street
Richmond, VA 23219

May 25, 2016

Re: C.A.R. Submission for 3012 Monument Avenue

To Whom It May Concern:

Please find attached an application for review for a project located at 3012 Monument Avenue. The project consists of installing a small cell antenna and associated equipment on the building.

The antenna will be located at near the front of the building at the southeast corner. A faux chimney made of RF friendly material and designed to blend into the building will be installed to camouflage the antenna.

The equipment will be installed in the basement of the building and will not be visible at all. The coax cables will run along the outside of the building and be painted to match. That side of the building currently has utility meters and cables of other kinds running along it. Great effort will be taken to hide the cables as much as possible.

Along with the application form, there are twelve sets of the following:

Complete construction drawings
Structural letter
Photo simulations

If there are any questions or you would like any more information, please don't hesitate to contact me.

4435 Waterfront Drive
Suite 100
Glen Allen, VA 23060
www.networkbuilding.com

NB+C
TOTALLY COMMITTED

Best Regards,

Melissa Harreld
Zoning Manager
NB+C, LLC
mharreld@nbcllc.com
(m) 804.892.0310

NB+C
TOTALLY COMMITTED

August 7, 2015

Alan Gummo
Verizon Wireless
1831 Rady Court
Richmond, VA 23222

Re: **Structural Evaluation Letter for Verizon Network Node Project**
Site Address: 3012 Monument Avenue, Richmond, VA 23221
Verizon Site Name: Richmond Fan N024 "Lord Fairfax"

Dear Mr. Gummo:

Pursuant to your request, **Network Building + Consulting Engineering Services ("NB+C ES")** has evaluated the structural impact of installing one (1) proposed Commscope-Andrew NH180QS-DG-F0M antenna and two (2) 7/8"ø coax on the building's brick parapet on an 35' AGL tall apartment building at a centerline elevation of 37" AGL. Verizon will also installing one (1) proposed RRH4x30-B25, one (1) proposed RRH 2x60, one (1) DBC0051F2V51 Diplexer, and one (1) proposed Cube-SC1042NNN3 equipment (with battery backup) cabinet on the building's basement brick wall.

NB+C ES has reviewed the site walk notes and photos by NB+C ES dated June 2, 2015, Lease Exhibit Drawings by NB+C ES dated June 17, 2015, and RF Design Sheet provided by Verizon Wireless dated August 3, 2015 for this site. The proposed antenna will be installed inside a RF friendly chimney on a 2-3/8"ø SCH 80 pipe with (2) Site Pro 1 wall mounts (P/N WWM01) connected to the brick parapet using four (4) 1/2"ø threaded rods with a 8.5"x8.5"x3/8" thick backing plate. The proposed RRHs and equipment cabinet will be attached using unistrut connected to the brick basement wall using at least four (4) 1/2"ø bolts with HILTI HIT-IC Inserts into Hilti HIT-SC screen with a drilled hole diameter of 7/8". Use an embedment depth of 3-3/4" for the screen and a 3-1/8" embedment for the steel anchor in HLTI HIT-HY 70 epoxy. Proposed RF friendly chimney to be designed by others.

Based on an evaluation of the existing conditions and per the provisions of *2012 International Building Code* and *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures ANSI/TIA-222-G* for applied gravity and lateral loads, **NB+C ES** has determined that the existing structure and proposed antenna and equipment mounts are ***adequate*** and can support the proposed installation without any structural modification to the Structure. Please see the construction drawings prepared by **NB+C ES** for additional details. Any deterioration or damage to the existing mounts or localized damage or distress to the structure should be documented and reported to the engineer and repaired by the contractor prior to the installation of the proposed equipment. No structural qualification is made or implied by this report for existing structural members not supporting the proposed installation. Should you have any question or require additional information, please feel free to contact us.

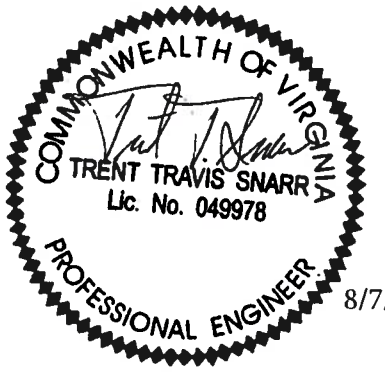
4435 Waterfront Drive
Suite 100
Glen Allen, VA 23060
www.networkbuilding.com

NB+C
TOTALLY COMMITTED

Respectfully Prepared by: Lesley Read

NB+C ENGINEERING SERVICES, LLC

Trent Snarr, P.E.
Engineering Manager - South
VA PE # 49978

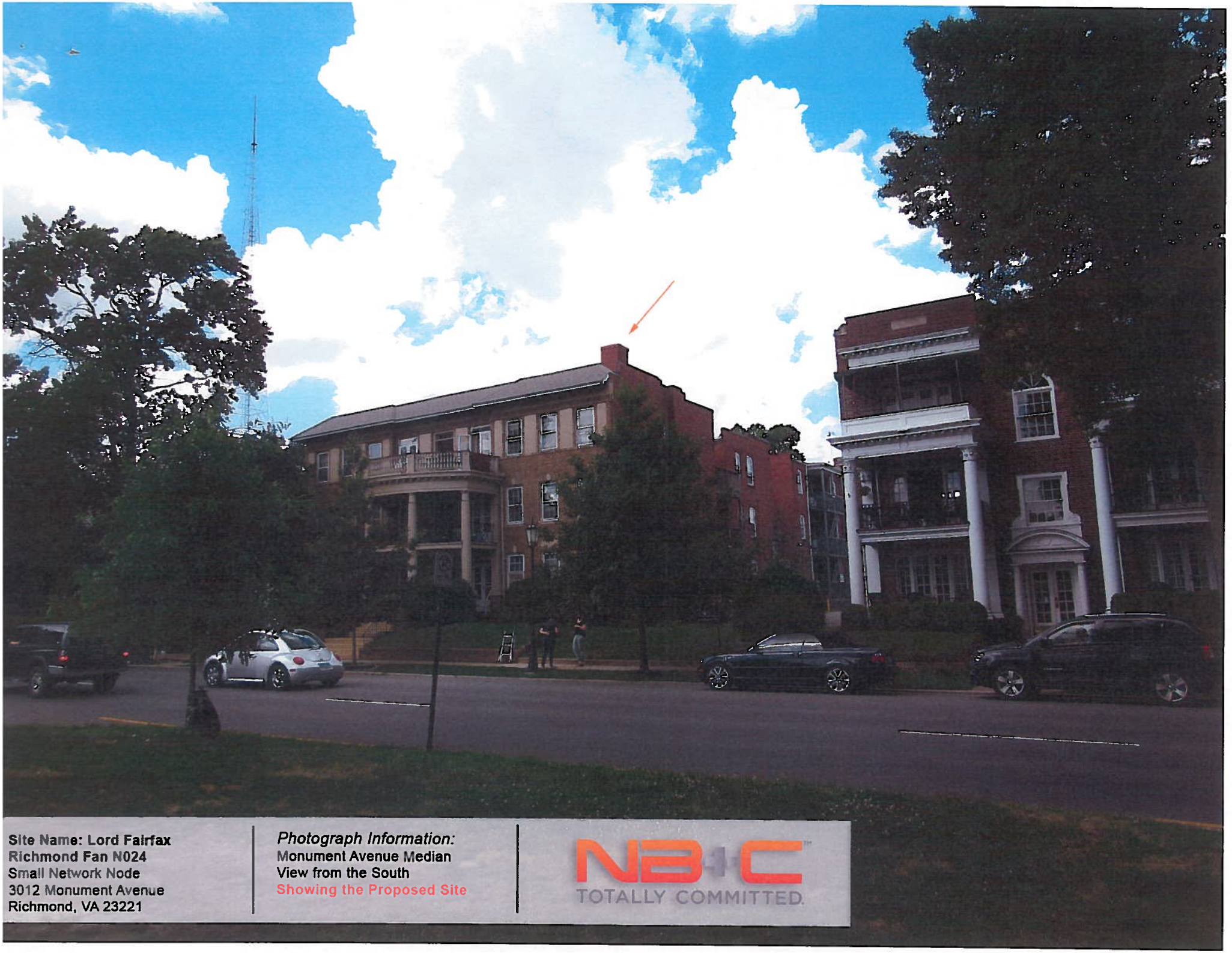


8/7/2015

Site Name: Lord Fairfax
Richmond Fan N024
Small Network Node
3012 Monument Avenue
Richmond, VA 23221

Photograph Information:
Monument Avenue Median
View from the South
Showing the Existing Site

NB+C™
TOTALLY COMMITTED.



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Photograph Information:
Monument Avenue Median
View from the South
Showing the Proposed Site

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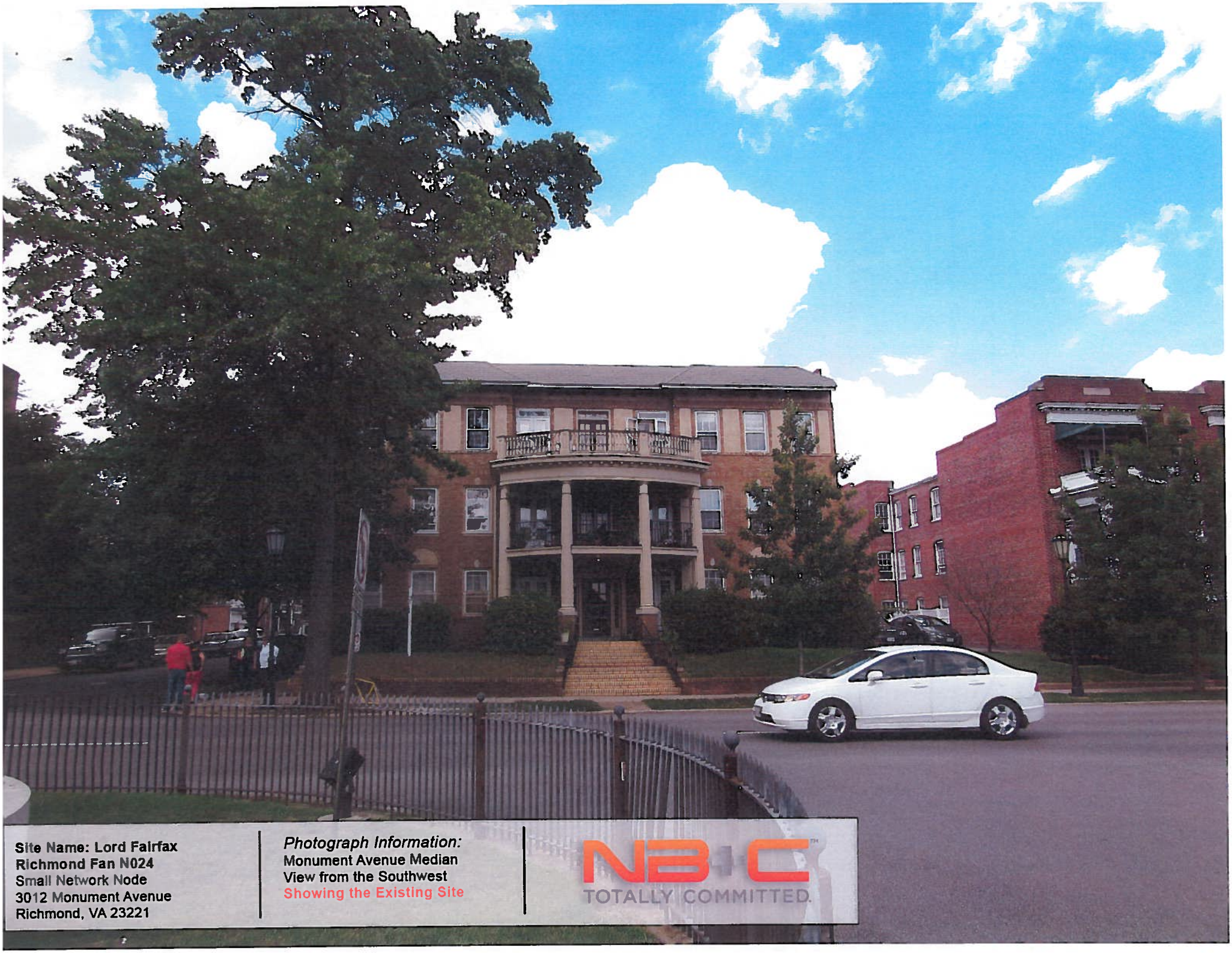

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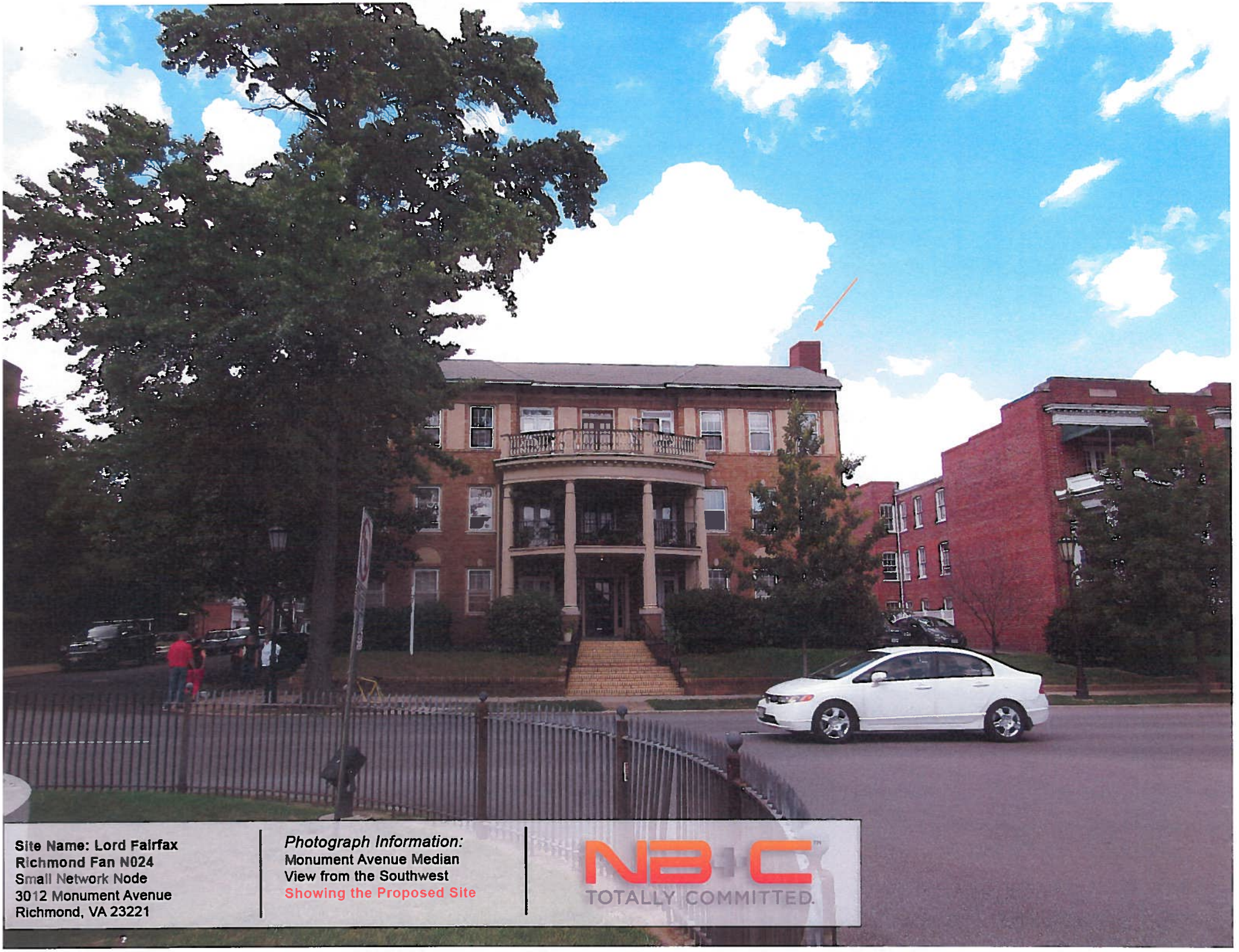
Small Network Node
3012 Monument Avenue
Richmond, VA 23221

Photograph Information:
Monument Avenue Median
View from the Southwest
Showing the Existing Site

NBC
TOTALLY COMMITTED.



Site Name: Lord Fairfax
Richmond Fan N024
Small Network Node
3012 Monument Avenue
Richmond, VA 23221

Photograph Information:
Monument Avenue Median
View from the Southwest
Showing the Proposed Site

NBC
TOTALLY COMMITTED.

ENVIRONMENTAL CONDITION

THE RED PAINT ON THE ROOFTOP PARAPET WALL CAPPING IS LEAD-BASED PAINT (LBP).
THE ROOFING MATERIALS ARE PRESUMED ASBESTOS-CONTAINING MATERIALS (ACMS).

REFER TO THE EES/NTC FOR PROPER MANAGEMENT OF THE ACMS AND LBP, IF DISTURBANCE IS NEEDED.

verizonwireless

POLYGON NAME: RICHMOND FAN N024
SITE NAME: LORD FAIRFAX

3012 MONUMENT AVENUE
RICHMOND, VA 23221
CITY OF RICHMOND

811 Know what's **below.** **Call** before you dig.

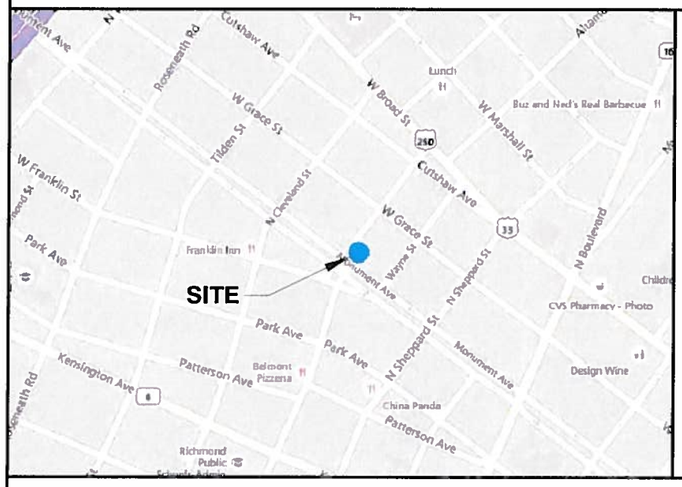
SITE INFORMATION

STREET ADDRESS:	3012 MONUMENT AVENUE RICHMOND, VA 23221
GOOGLE EARTH LATITUDE (NAD 83): LONGITUDE (NAD 83):	 N 37° 33' 46.35" W 77° 28' 28.46"
GROUND ELEVATION:	212.0' (AMSL)
JURISDICTION:	CITY OF RICHMOND
PARCEL ID:	W0001369017
ZONING:	R-48 - RESIDENTIAL (MULTI-FAMILY)
ACREAGE:	0.138
PARCEL OWNER:	DANIEL M WALID 3904 LONGVIEW LANDING COURT RICHMOND, VA 23223
STRUCTURE TYPE:	ROOFTOP
STRUCTURE HEIGHT:	35.0' (AGL)
ANTENNA RAD CENTER:	37.0' (AGL)
STRUCTURAL ANALYSIS:	AUGUST 2015
LEASE AREA:	21 SQ. FT.
USE GROUP:	U
CONSTRUCTION GROUP:	2B
CHANGE OF USE:	NO
FLOODPLAN:	N/A
OCCUPANCY LOAD:	N/A
STEALTH JOB#:	VZ15-01200W-17R0

PROJECT TEAM

APPLICANT:	VERIZON WIRELESS 1831 RADY COURT RICHMOND, VA 23222 GLENN RAY (757) 374-7065
PROJECT MANAGEMENT FIRM:	NETWORK BUILDING + CONSULTING, LLC. 4435 WATERFRONT DRIVE SUITE 100 GLEN ALLEN, VA 23060 (804) 548-4079
ENGINEERING FIRM:	NB+C ENGINEERING SERVICES, LLC. 4435 WATERFRONT DRIVE SUITE 100 GLEN ALLEN, VA 23060 (804) 548-4079 tsnarr@nbcllc.com

VICINITY MAP



DIRECTIONS

DEPART RADY CT TOWARD RADY ST. TURN LEFT ONTO RADY ST. TURN LEFT ONTO MAGNOLIA ST. TURN RIGHT ONTO MECHANICSVILLE TURNPIKE/US-360 W. TAKE RAMP RIGHT ONTO I-64 W. AT EXIT 78, TAKE RAMP RIGHT TOWARD BOULEVARD. TURN LEFT ONTO HERMITAGE RD. TURN RIGHT ONTO ROBIN HOOD RD. TURN LEFT ONTO VA-161 / N BOULEVARD. TURN RIGHT ONTO MONUMENT AVENUE. 3012 MONUMENT AVE IS ON THE RIGHT.

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.

- 2012 INTERNATIONAL BUILDING CODE
- 2011 NATIONAL ELECTRICAL CODE
- 2009 NFPA 101, LIFE SAFETY CODE
- 2009 IFC
- 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

DRAWING INDEX

T-1	TITLE SHEET
Z-1	SITE PLAN
C-1	ROOFTOP PLAN
C-2	ELEVATION
S-1	STRUCTURAL DETAILS & NOTES
A-1	ANTENNA PLAN, SCHEDULE & DETAILS
A-2	ANTENNA WIRING DIAGRAM
E-1	ELECTRICAL PLAN & DETAILS
E-2	ELECTRICAL PANEL SCHEDULE, DIAGRAM & NOTES
G-1	GROUNDING PLAN, DETAILS & NOTES
G-2	GROUNDING RISER DIAGRAM & DETAILS

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 24"X36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE DESIGNER / ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME. CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICE TO PREVENT STORM WATER POLLUTION DURING CONSTRUCTION.

SITE DEVELOPMENT TEAM

SITE ACQUISITION:	ZELIC JONES, (804) 901-5580
CONSTRUCTION MANAGER:	MIKE WHORTON, (804) 873-8114
ZONING MANAGER:	MELISSA HARRELD, (804) 892-0310
RF ENGINEER:	JEFF DUBIEL, (804) 218-5477
PROJECT MANAGER:	SHANA SUTTON, (443) 838-0300

ENGINEER

NB+C™ TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
4435 WATERFRONT DRIVE, SUITE 100
GLEN ALLEN, VA 23060

APPLICANT

verizonwireless
1831 RADY COURT
RICHMOND, VA 23222

SITE INFORMATION

RICHMOND FAN N024
"LORD FAIRFAX"
NB+C PROJ. # 27758
3012 MONUMENT AVENUE
RICHMOND, VA 23221
CITY OF RICHMOND

DESIGN RECORD

REVISIONS

REV	DATE	DESCRIPTION	BY
2	10/16/15	REVISED	PJP
1	08/13/15	FINAL	TWD
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PROFESSIONAL STAMP

COMMONWEALTH OF VIRGINIA
TRENT TRAVIS SNARR
Lic. No. 049978
DATE 10/16/15
PROFESSIONAL ENGINEER

ENGINEER

TRENT T. SNARR, P.E.
VA PROFESSIONAL ENGINEER LIC. #49978

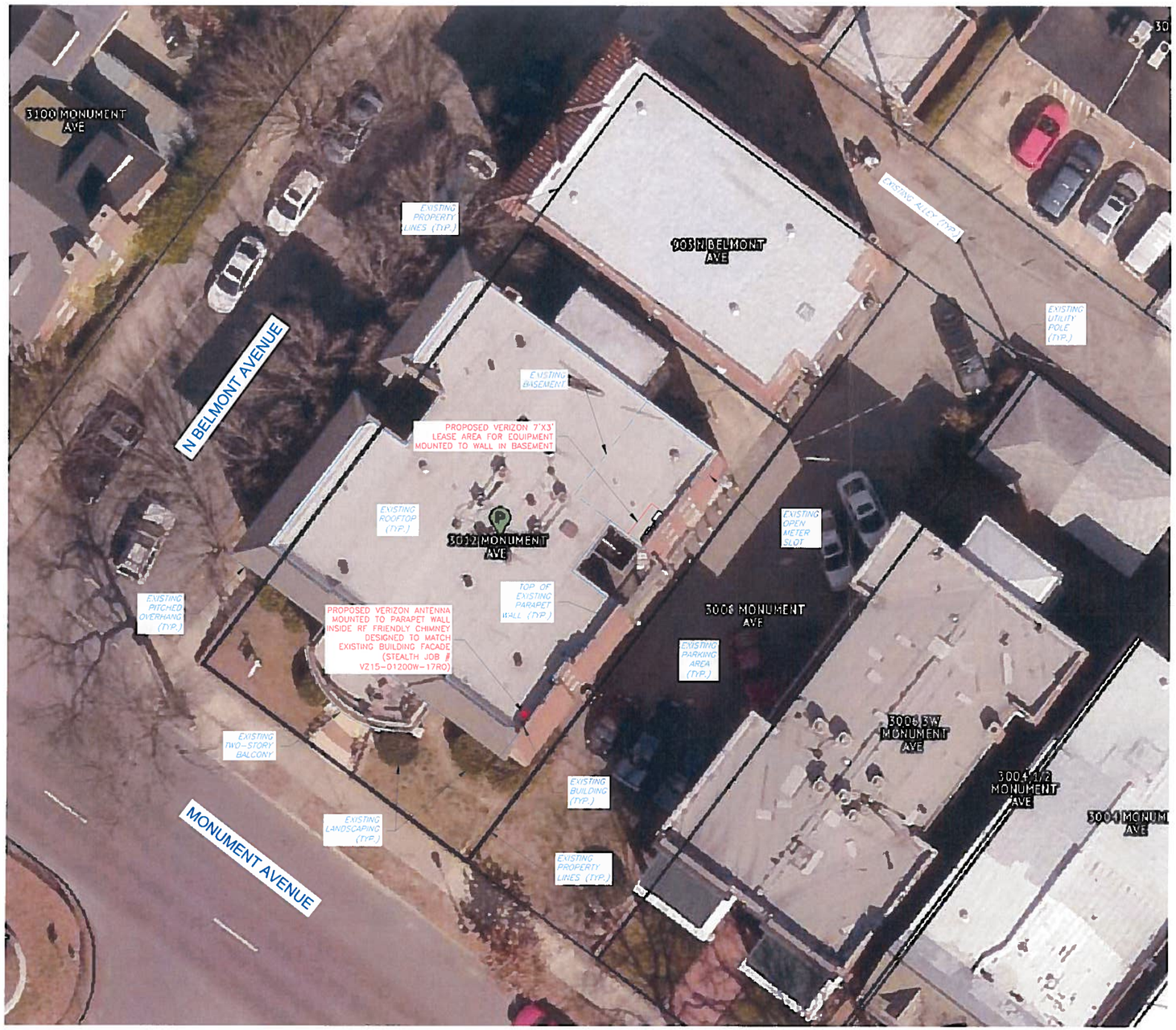
SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

TRUE NORTH



1 / Z-1 SITE PLAN
SCALE: 1" = 10'

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 INCH = 10 FEET

GENERAL NOTES

1. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
2. NO SIGNIFICANT NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
3. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
4. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.

PARCEL INFORMATION:
OWNER: DANIEL M WALID
PARCEL ID: W0001309017
ZONING CLASS: R-48 - RESIDENTIAL (MULTI-FAMILY)
ACREAGE: 0.138
ELEVATION: 212.0' AMSL

Know what's below. Call before you dig.

ENGINEER

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4435 WATERFRONT DRIVE, SUITE 100
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verizonwireless
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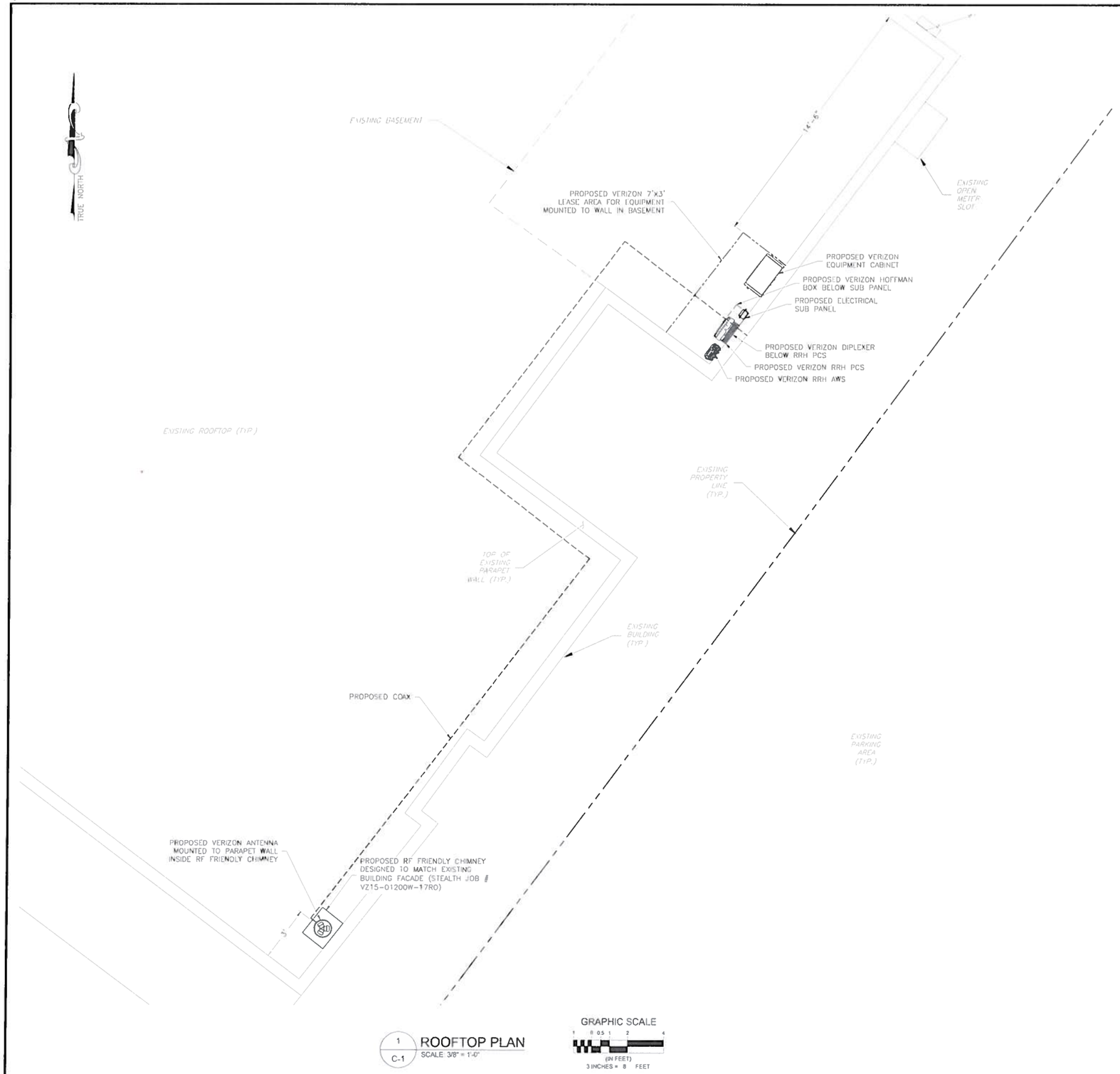
SHEET TITLE

SITE PLAN

SHEET NUMBER

Z-1



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

GRAPHIC SCALE
1 0 0.5 1 2 4
(IN FEET)
3 INCHES = 8 FEET

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 BENEATH 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. PRIOR TO THE INSTALLATION OF THE PROPOSED EQUIPMENT OR MODIFICATION OF THE EXISTING STRUCTURE, A STRUCTURAL ANALYSIS SHALL BE PERFORMED BY THE OWNER'S AGENT TO CERTIFY THAT THE EXISTING/PROPOSED COMMUNICATION STRUCTURE AND COMPONENTS ARE STRUCTURALLY ADEQUATE TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, COAXIAL CABLES AND OTHER APPURTENANCES.
14. PROPERTY LINE INFORMATION WAS PREPARED USING DEEDS, TAX MAPS, AND PLANS OF RECORD AND SHOULD NOT BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY.
15. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
16. THE PROPOSED FACILITY WILL CAUSE ONLY A "DE MINIMIS" INCREASE IN STORMWATER RUNOFF. THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
17. NO SIGNIFICANT NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
18. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED).
19. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
20. POWER TO THE FACILITY WILL BE MONITORED BY A SEPARATE METER.

VIRGINIA ONE CALL SYSTEM, INC. 1-800-552-7001 STOP! CALL BEFORE YOU DIG!

VIRGINIA LAW REQUIRES THREE WORKING DAYS NOTICE PRIOR TO ANY EARTH MOVING ACTIVITIES

ENGINEER

NB+C™ TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
4435 WATERFRONT DRIVE, SUITE 100
GLEN ALLEN, VA 23060

APPLICANT

verizonwireless
1831 RADY COURT
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DATE 10/16/15
PROFESSIONAL ENGINEER

ENGINEER

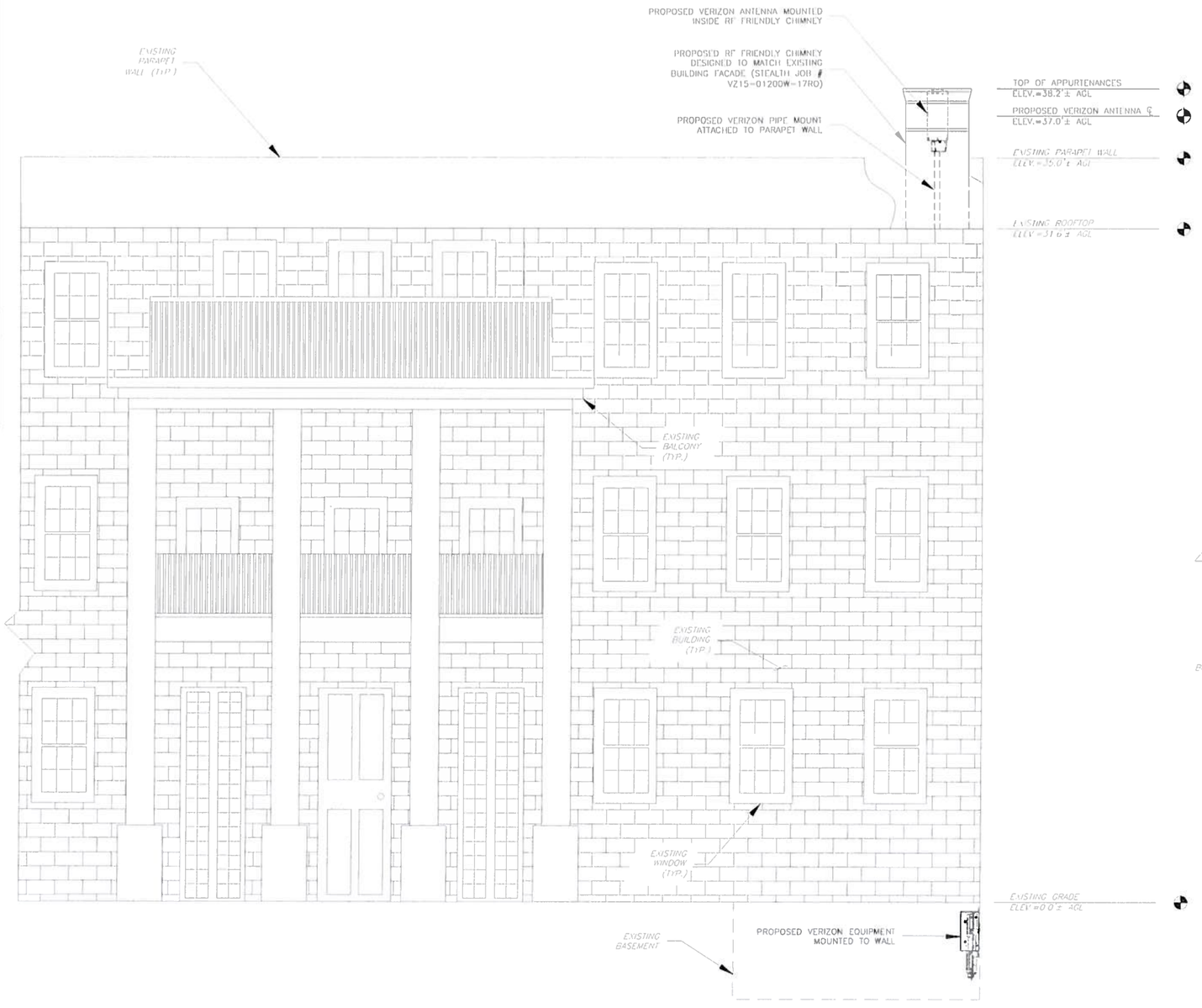
TRENT T. SNARR, P.E.
VA PROFESSIONAL ENGINEER LIC. #49978

SHEET TITLE

ROOFTOP PLAN

SHEET NUMBER

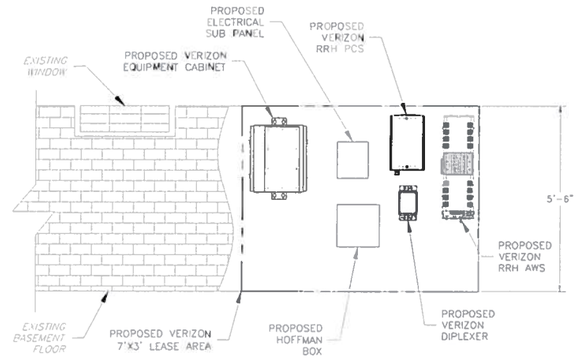
C-1



NOTE:
ALL EQUIPMENT NOT SHOWN FOR CLARITY.

1 / C-2 ELEVATION
SCALE: 3/8" = 1'-0"

GRAPHIC SCALE
1 0 0.5 1 2 4
(IN FEET)
3 INCHES = 8 FEET



2 / C-2 EQUIPMENT ELEVATION
SCALE: 1/2" = 1'-0"

GRAPHIC SCALE
2 0 1 2 4 8
(IN FEET)
1 INCH = 2 FEET

VIRGINIA ONE CALL SYSTEM, INC. 1-800-552-7001 STOP-CALL BEFORE YOU DIG!

VIRGINIA LAW REQUIRES THREE WORKING DAYS NOTICE PRIOR TO ANY EARTH MOVING ACTIVITIES

ENGINEER

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ENGINEER

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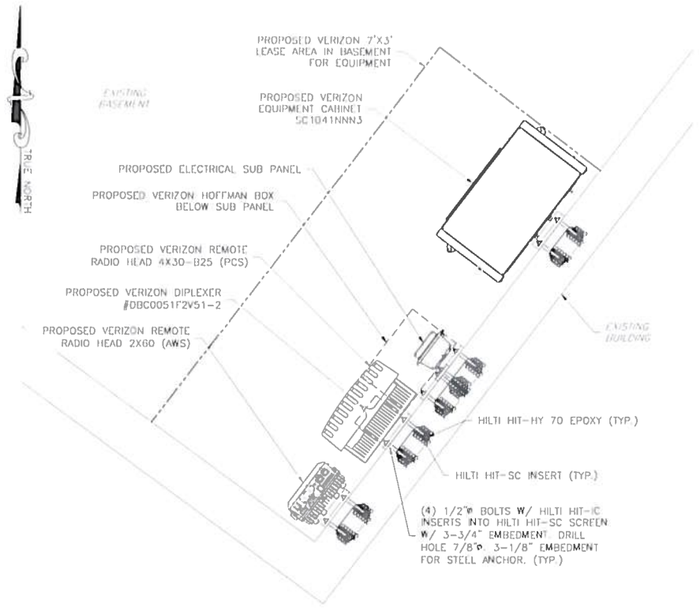
SHEET TITLE

ELEVATION

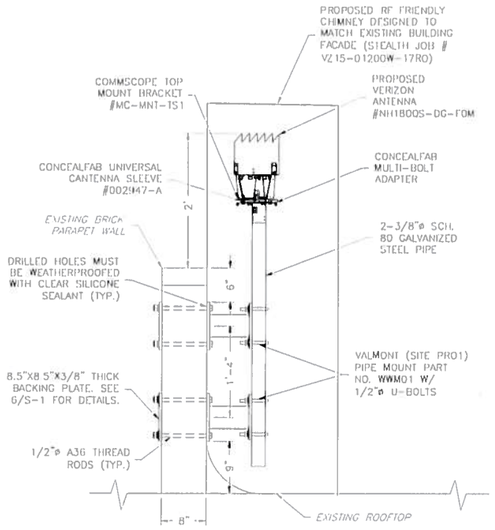
SHEET NUMBER

C-2



1 / S-1 EQUIPMENT MOUNTING PLAN
1"=1'

GRAPHIC SCALE
1 0 5 1 2 4
(IN FEET)
1 INCH = 1 FEET



2 / S-1 ANTENNA MOUNTING PROFILE
1"=1'

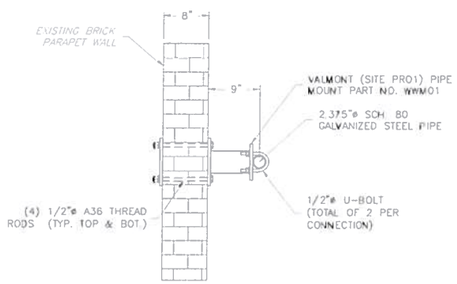
GRAPHIC SCALE
1 0 5 1 2 4
(IN FEET)
1 INCH = 1 FEET

STRUCTURAL NOTES

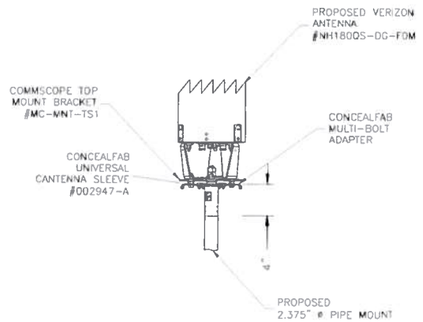
1. MOUNT DESIGN FOR BELOW LOADS:
   1). ASCE 7-10/IBC2012 115MPH WIND LOAD, EXPOSURE B.
   2). ANTENNA EQUIPMENT AND MISC. WEIGHT.
   CANTENNA MODEL # ANDREW NH18OOS-DG-FOM = 25.4 LBS.
   SC1041NNN3 CABINETS = 80 LBS.
   RRH4x30-B25 (PCS) = 51 LBS.
   RRH2x60 (AWS) = 55 LBS.
   DIPLEXER MODEL # DBC0051F2V51-2 = 12.4 LBS.
1. REFER TO SITE PLAN FOR MOUNT LOCATION.
2. ALL FABRICATION AND INSTALLATION SHOULD BE DONE BY A CONTRACTOR EXPERIENCED IN SIMILAR WORK.
3. CONTRACTOR SHOULD OBSERVE ALL OSHA AND OTHER APPLICABLE SAFETY GUIDELINES DURING INSTALLATION.
4. ALL FABRICATION AND INSTALLATION PROCEDURES AND SITE SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
5. CONTRACTOR SHOULD FIELD VERIFY ALL DIMENSIONS AND FIT BEFORE FABRICATION.
6. THE DRAWINGS DO NOT INCLUDE ALL THE EXISTING FIELD CONDITIONS, SOME OF WHICH MAY INTERFERE WITH THE INSTALLATION. CONTRACTOR SHOULD CONDUCT A FIELD SURVEY TO IDENTIFY ANY POTENTIAL DIFFICULTIES IN THE INSTALLATION BEFORE WORK COMMENCES. CONTACT THE ENGINEER IF THE FIELD CONDITIONS REQUIRE ANY CHANGES IN THE DESIGN.
7. CONTRACTOR MAY HAVE TO TEMPORARILY REMOVE EXISTING TRANSMISSION LINES AND OTHER OBSTRUCTIONS TO INSTALL NEW STRUCTURE. COORDINATE ALL SUCH PROCEDURES WITH THE BUILDING OWNER.
8. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LICENSES, PERMITS AND ANY OTHER APPROVALS REQUIRED FOR CONSTRUCTION.
9. ALL SPECIFICATIONS BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SHOULD BE FOLLOWED FOR FABRICATION AND INSTALLATION.
10. ALL NEW STEEL TUBE MEMBERS SHALL MEET THE ASTM A36 STEEL SPECIFICATIONS, 36 KSI MIN. YIELD STRENGTH OR ASTM A53-GR. B, 35 KSI MIN. YIELD STRENGTH.
11. ALL STEEL PLATES AND OTHER MISCELLANEOUS MEMBERS SHALL MEET ASTM A36 STEEL SPECIFICATIONS, 36 KSI MIN. YIELD STRENGTH. ALL STEEL W-SHAPES SHALL BE ASTM A992 STEEL SPECIFICATIONS, 50ksi YIELD STRENGTH. ALL THREADED ROD STEEL TO BE ASTM 36 STEEL.
12. ALL STEEL SHALL BE HOT DIPPED GALVANIZED AS PER ASTM A123 SPECIFICATIONS.
13. ALL STEEL HARDWARE SHALL BE HOT DIPPED GALVANIZED AS PER ASTM A153.
14. ALL BOLTS SHALL BE DOMESTIC, NEW 1/2 INCH DIAMETER HIGH STRENGTH GALVANIZED BOLTS, BEARING TYPE 'X', UNLESS NOTED OTHERWISE IN THE DRAWINGS AND SHALL CONFORM TO ASTM A325 SPECIFICATIONS. USE ANCO LOCKNUTS & FLAT WASHERS ON ALL BOLTS.
15. ALL FINISHED BOLT HOLES SHALL NOT BE MORE THAN 1/16 INCH LARGER THAN THE BOLT DIAMETER UNLESS NOTED OTHERWISE.
16. ALL BOLTS SHALL BE TIGHTENED USING TURN-OF-THE-NUT METHOD.
17. ALL BOLT HOLES EDGE DISTANCES SHALL BE 1 1/2 INCH UNLESS OTHERWISE NOTED.
18. ANY FIELD CUTS MUST BE THOROUGHLY CLEANED AND DOUBLE COATED.
19. DO NOT HEAT STRUCTURAL MATERIAL FOR STRAIGHTENING BENT OR WARPED MEMBERS.
20. CLEAN THE SITE OF ALL DEBRIS UPON COMPLETION OF THE WORK. STORE ALL SURPLUS MATERIALS NEATLY IN AN AREA APPROVED BY THE OWNER.
21. THE THREADED STRUCTURAL FASTENERS FOR ANTENNA SUPPORT ASSEMBLIES SHALL CONFIRM TO ASTM A307 OR ASTM A36. ALL STRUCTURAL FASTENERS FOR STRUCTURAL STEEL FRAMING SHALL CONFORM TO A325. FASTENERS SHALL BE 5/8" MIN. DIAMETER BEARING TYPE CONNECTIONS WITH THREADED INCLUDED IN THE SHEAR PLANE. ALL EXPOSED FASTENERS, NUTS AND WASHERS SHALL BE GALVANIZED UNLESS OTHERWISE NOTED. CONCRETE EXPANSION ANCHORS SHALL BE HILTI KWIK BOLTS UNLESS OTHERWISE NOTED.
22. ALL COXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE AS SPECIFIED BY THE OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL FINISH ALL CONNECTION HARDWARE REQUIRED TO SECURE THE CABLES. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.
23. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED BY FIELD MEASUREMENTS AND FROM EXISTING STRUCTURAL DRAWINGS. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH CONSTRUCTION.

HILTI NOTES
1) INSTALL EPOXY ANCHORS PER MANUFACTURERS SPECS.

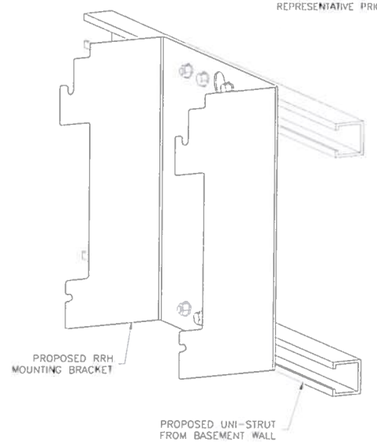
2) ANY CONTRACTOR INSTALLING ADHESIVE ANCHOR SHOULD BE TRAINED BY A MANUFACTURERS REPRESENTATIVE PRIOR TO INSTALLATION.



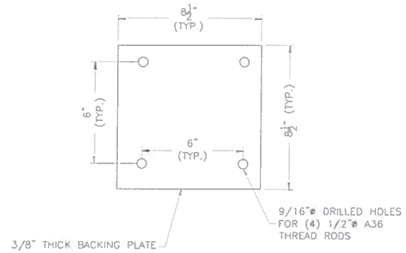
3 / S-1 ANTENNA MOUNTING PLAN
NTS



4 / S-1 ANTENNA MOUNTING DETAIL
NTS



5 / S-1 RRH MOUNTING DETAIL
NTS



6 / S-1 BACKING PLATE DETAIL
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COMMONWEALTH OF VIRGINIA
TRENT TRAVIS SNARR
Lic. No. 049978
DATE 10/16/15
PROFESSIONAL ENGINEER

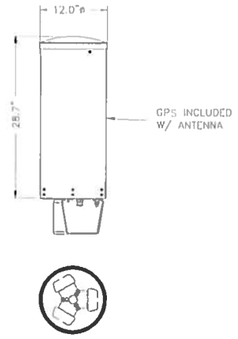
ENGINEER
TRENT T. SNARR, P.E.
VA PROFESSIONAL ENGINEER LIC. #49978

SHEET TITLE
STRUCTURAL DETAILS & NOTES

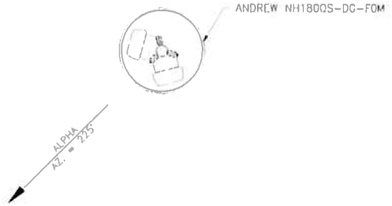
SHEET NUMBER
S-1

GENERAL NOTES

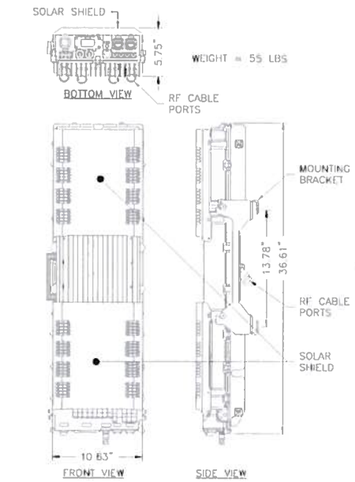
1. ANTENNA RAD CENTER IS IN REFERENCE TO ELEVATION 0'-0" (EXISTING GRADE).
2. CONTRACTOR IS TO VERIFY ALL ANTENNA MODELS AZIMUTHS WITH THE VzW CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.



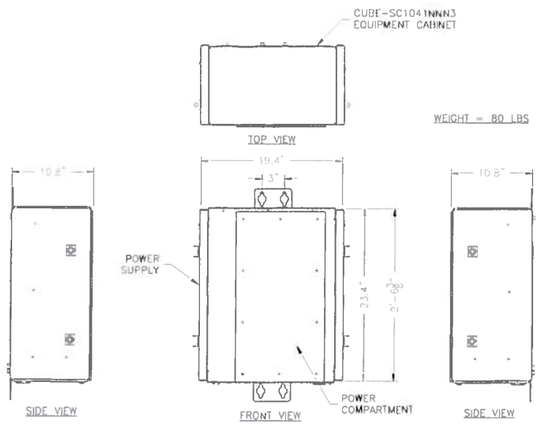
1 / A-1 ANDREW NH180QS-DG-F0M
NTS



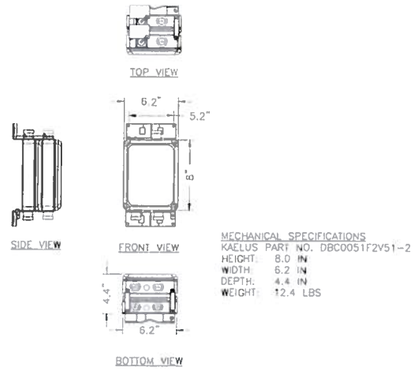
2 / A-1 PROPOSED ANTENNA ORIENTATION PLAN
NTS



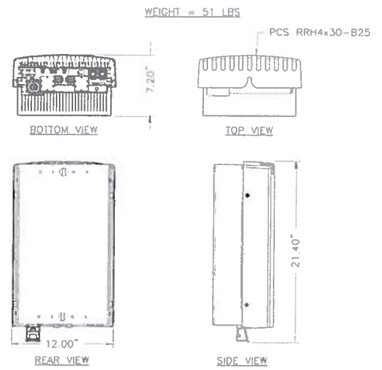
3 / A-1 AWS RRH 2x60 (REMOTE RADIO HEAD)
NTS



4 / A-1 CUBE-SC1041NNN3 EQUIPMENT CABINET
NTS



5 / A-1 DIPLEXER DBC0051F2V51-2 DETAIL
NTS



6 / A-1 PCS RRH4x30-B25 (REMOTE RADIO HEAD)
NTS

PROPOSED ANTENNA INFORMATION

SECTOR	STATUS	ANTENNA MANUFACTURER	ANTENNA MODEL	RAD CENTER	AZIMUTH	DOWN TILT	RRH QUANTITY & MODEL	CABLE SIZE & QUANTITY
ALPHA	PROPOSED	ANDREW	NH180QS-DG-F0M	37.0'	225°	N/A	(1) PCS RRH4x30-B25 (1) AWS RRH2x60	(2) 7/8" COAX 100'± LONG
BETA	–	–	–	–	–	N/A	N/A	–
GAMMA	–	–	–	–	–	N/A	N/A	–
GPS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTES:
1. CONTRACTOR TO VERIFY PROPOSED ANTENNA INFORMATION IS THE MOST CURRENT DATA AT TIME OF CONSTRUCTION.
2. CONTRACTOR TO CONFIRM CABLE LENGTHS PRIOR TO CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE TO BUILD FROM THE LATEST RF SHEET.
4. CONTRACTOR SHALL PROVIDE SIGNAGE AS SHOWN IN THE EME STUDY, WHICH WILL BE PROVIDED BY THE CONSTRUCTION MANAGER IN THE BID PACKAGE.

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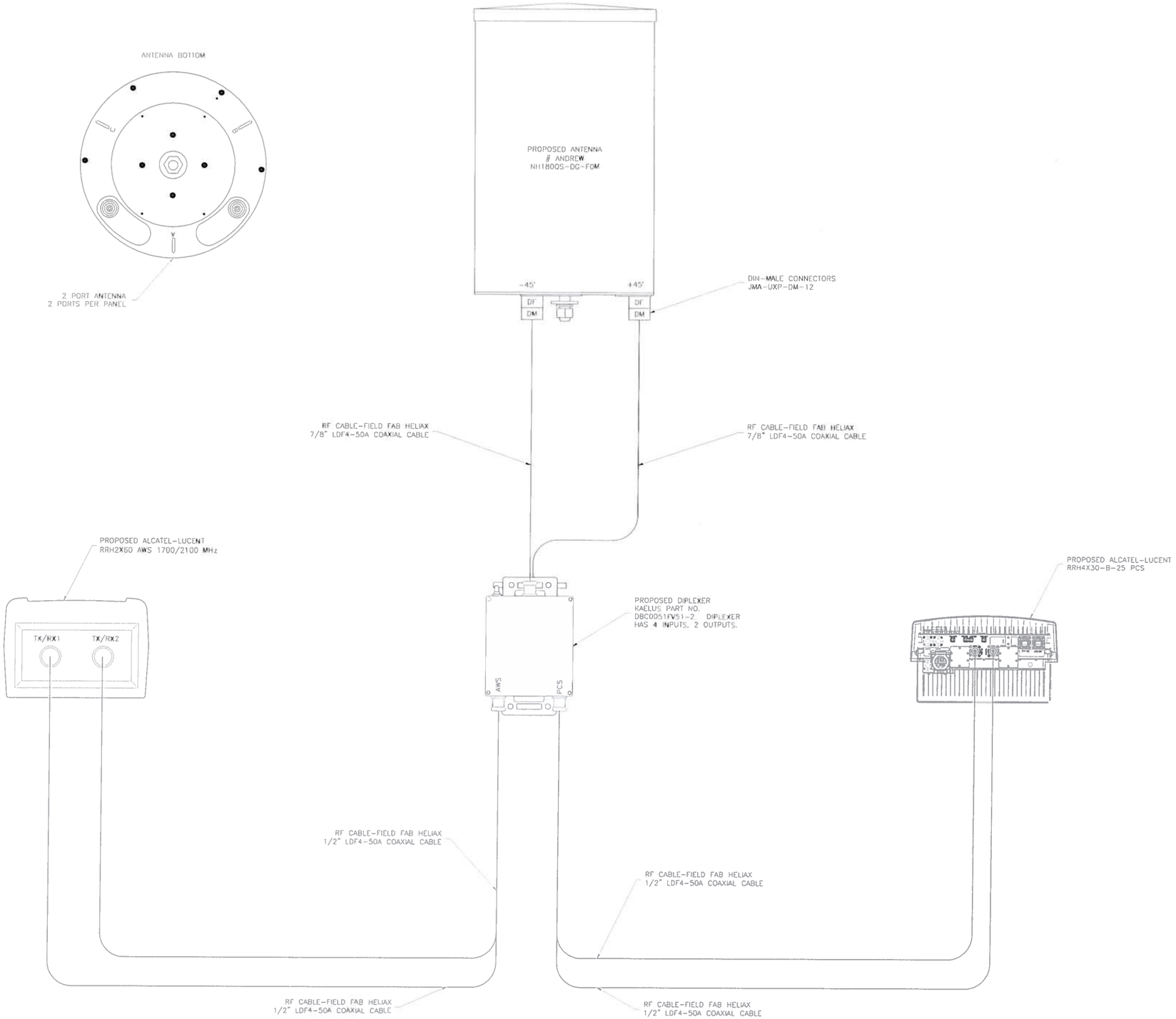
SHEET TITLE

ANTENNA PLAN, SCHEDULE & DETAILS

SHEET NUMBER

A-1



1/A-2 ANTENNA WIRING DIAGRAM
SCALE: NTS

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ANTENNA WIRING DIAGRAM

SHEET NUMBER

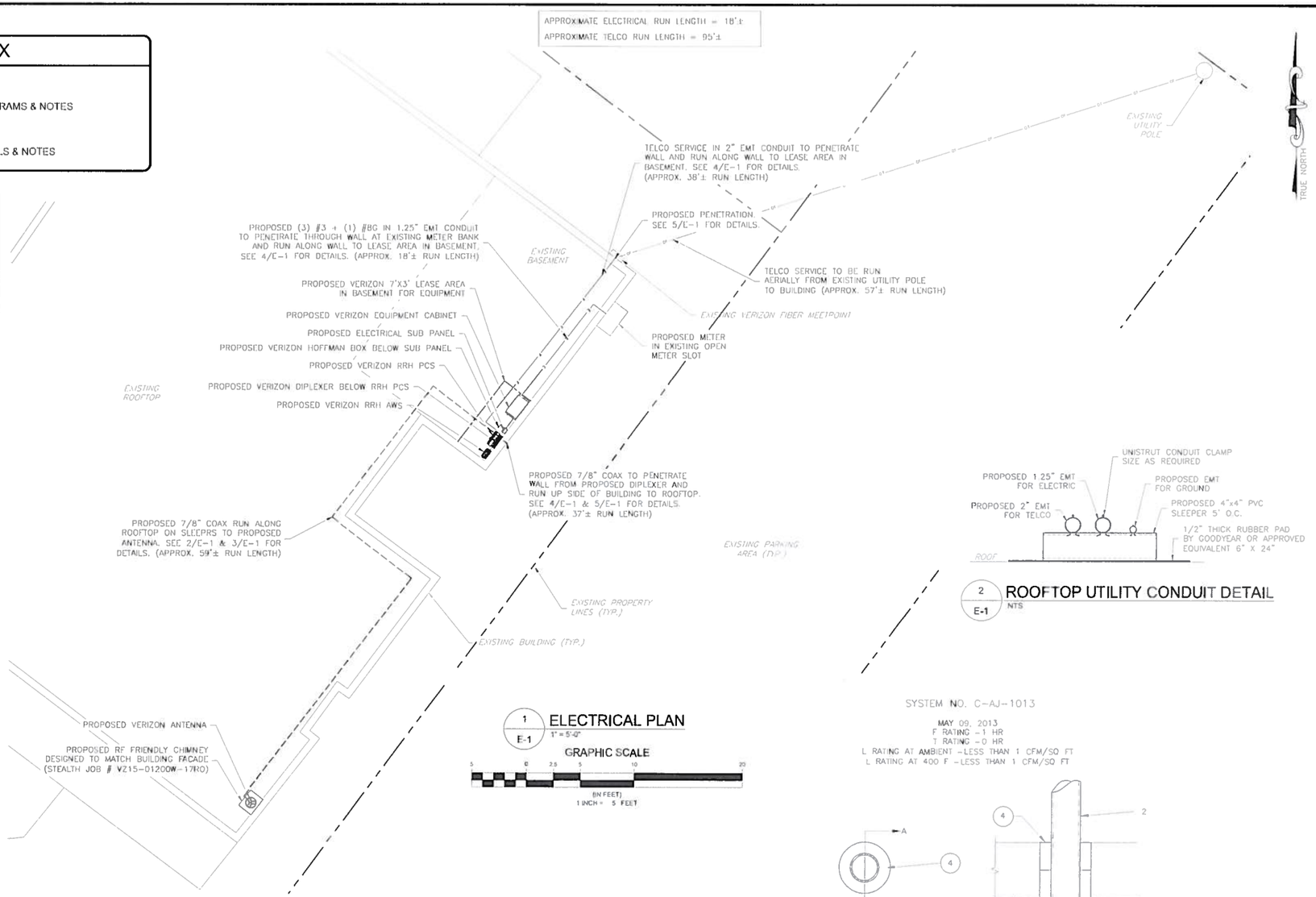
A-2

DRAWING INDEX

E-1	ELECTRICAL PLAN & DETAILS
E-2	ELECTRICAL PANEL SCHEDULE DIAGRAMS & NOTES
G-1	GROUNDING PLAN & DETAILS
G-2	GROUNDING RISER DIAGRAM, DETAILS & NOTES

LEGEND

- PROPOSED LEASE AREA
- EXISTING FEATURES
- PROPOSED GROUNDING
- GAS — PROPOSED GAS
- E — PROPOSED ELECTRIC
- T — PROPOSED TELCO



1 E-1 ELECTRICAL PLAN
1" = 5'-0"
GRAPHIC SCALE
5 0 2.5 5 10 20
(IN FEET)
1 INCH = 5 FEET

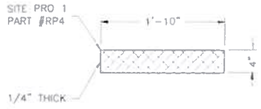
2 E-1 ROOFTOP UTILITY CONDUIT DETAIL
NTS

ABBREVIATIONS

ATS	AUTOMATIC TRANSFER SWITCH
SCH 40	SCHEDULE 40
PVC	POLYVINYL CHLORIDE
PPC	POWER PROTECTION CABINET
W/	WITH
EMT	ELECTRIC METALLIC TUBING

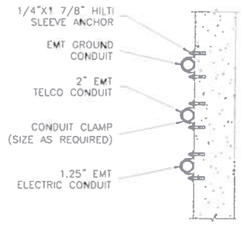
PROJECT INFORMATION

BUILDING CODE YEAR:	2012 IBC
ELECTRICAL CODE YEAR:	2011 NEC
NEC GENERATOR CODE:	ARTICLE 702: OPTIONAL STANDBY SYSTEMS
CONSTRUCTION TYPE:	2B
USE GROUP:	U
CHANGE OF USE:	NO
OCCUPANCY LOAD:	N/A
FLOOD PLAIN:	N/A
BASE FLOOD ELEVATION:	N/A
DESIGN FLOOD ELEVATION:	N/A
LEASE AREA:	21.0 SQ. FT.
SQUARE FOOTAGE OF BUILDING:	N/A



NOTES:
1. EACH NON-PENETRATING CABLE TRAY REQUIRES 3 MATS.
2. MANUFACTURED FROM UV-RESISTANT 1/4" THICK RUBBER.

3 E-1 SLEEPER RUBBER MAT
NTS



4 E-1 CONDUIT ROUTING DETAIL
NTS

SYSTEM NO. C-AJ-1013
MAY 09, 2013
F RATING - 1 HR
T RATING - 0 HR
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT

SECTION A-A

1. FLOOR OR WALL ASSEMBLY - MIN 5 IN. (127 MM) THICK REINFORCED NORMAL WEIGHT (140-155) PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS 6 IN. (152 MM). SEE CONCRETE BLOCK (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY
2. THROUGH PENETRANTS - ONE METALLIC PIPE, OR CONDUIT TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:
   A. STEEL PIPE - NOM 4 IN. (102 MM) DIAM (OR SMALLER) SCHEDULE 5 (OR HEAVIER) STEEL PIPE. A NOM ANNULAR SPACE OF 3/4 IN. (19 MM) IS REQUIRED WITHIN THE FIRESTOP SYSTEM.
   B. CONDUIT - NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR STEEL CONDUIT. A NOM ANNULAR SPACE OF 3/4 IN. (19 MM) IS REQUIRED WITHIN THE FIRESTOP SYSTEM.
3. PACKING MATERIAL - (NOT SHOWN) - NOM 1 IN. (25 MM) DIAM OPEN CELL POLYURETHANE FOAM BACKER ROD FRICTION-FITTED INTO THE OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
4. FILL, VOID OR CAVITY MATERIAL* - SEALANT - MIN 3/4 IN. (19 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR WITH BOTH SURFACES OF WALL.

3M COMPANY - TYPES FB-1000 NS, FB-1003SL (FLOORS ONLY), FB-2000 OR FB-2000+. BEARING THE UL CLASSIFICATION MARK

5 E-1 UL RATED FIRE STOP PENETRATION DETAIL
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SHEET TITLE

ELECTRICAL PLAN & DETAILS

SHEET NUMBER

E-1

ELECTRICAL NOTES

1. SUBMITTAL OF BID INDICATES THAT THE CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
2. CONTRACTOR SHALL PERFORM ALL VERIFICATIONS, OBSERVATION TESTS, AND EXAMINATION WORK PRIOR TO ORDERING OF ANY EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE PROJECT MANAGER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
3. VERIFY HEIGHTS WITH PROJECT MANAGER PRIOR TO INSTALLATION.
4. THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE. MAKE REVISIONS AS REQUIRED TO MEET PROJECT INTENT.
5. CONTRACTOR SHALL COORDINATE ALL WORK BETWEEN TRADES AND ALL OTHER SCHEDULING AND PROVISIONARY CIRCUMSTANCES SURROUNDING THE PROJECT.
6. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR COMPLETE AND FUNCTIONALLY OPERATING SYSTEMS ENERGIZED AND READY FOR USE THROUGHOUT AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
7. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. ELECTRICAL MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION OVER THE CONSTRUCTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH ALL CURRENT APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NBFU. ALL MATERIALS AND EQUIPMENT SHALL BE APPROVED FOR THEIR INTENDED USE AND LOCATION.
8. ALL WORK SHALL COMPLY WITH ALL APPLICABLE GOVERNING STATE, COUNTY AND CITY CODES AND OSHA, NFPA, NEC & ASHRAE REQUIREMENTS.
9. ENTIRE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE. ALL WORK, MATERIAL AND EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
10. PROPERLY SEAL ALL PENETRATIONS. PROVIDE UL LISTED FIRE-STOPS WHERE PENETRATIONS ARE MADE THROUGH FIRE-RATED ASSEMBLIES. WATER-TIGHT USING SILICONE SEALANT.
11. DELIVER ALL BROCHURES, OPERATING MANUALS, CATALOGS AND SHOP DRAWINGS TO THE PROJECT MANAGER AT JOB COMPLETION. PROVIDE MAINTENANCE MANUALS FOR MECHANICAL EQUIPMENT. AFFIX MAINTENANCE LABELS TO MECHANICAL EQUIPMENT.
12. ALL CONDUCTORS SHALL BE COPPER. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG., UNLESS OTHERWISE NOTED. CONDUCTORS SHALL BE TYPE THHW, RATED IN ACCORDANCE WITH NEC 110-14(C).
13. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM INTERRUPTING CURRENT TO WHICH THEY MAY BE SUBJECTED.
14. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE; ARTICLES 250 & 810 AND THE UTILITY COMPANY STANDARDS.
15. CONDUIT:
    - A. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH 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 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
    - B. ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
    - C. LIQUID-TIGHT FLEXIBLE METAL CONDUIT SHALL BE U.L. LISTED AND SHALL BE USED AT FINAL CONNECTIONS TO MECHANICAL EQUIPMENT & RECTIFIERS AND WHERE PERMITTED BY CODE. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL CONTAIN A FULL-SIZE GROUND CONDUCTOR.
    - D. CONDUIT RUNS SHALL BE SURFACE MOUNTED ON CEILINGS OR WALLS UNLESS NOTED OTHERWISE. ALL CONDUIT SHALL RUN PARALLEL OR PERPENDICULAR TO WALLS, FLOOR, CEILING, OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH THE PROJECT MANAGER PRIOR TO INSTALLING.
    - E. 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.
16. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS. BACKGROUND SHALL BE BLACK WITH WHITE LETTERS; EXCEPT AS REQUIRED BY CODE TO FOLLOW A DIFFERENT SCHEME.
17. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL OF POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE PROJECT MANAGER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE.
18. 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.
19. 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.
20. VERIFY ALL EXISTING CIRCUITRY PRIOR TO REMOVAL AND NEW WORK. MAINTAIN POWER TO ALL OTHER AREAS & CIRCUITS NOT SCHEDULED FOR REMOVAL.
21. RED LINED AS-BUILT PLANS SHALL BE PROVIDED TO THE CONSTRUCTION MANAGER.
22. INDOOR CONDUCTORS SHALL BE INSTALLED IN EMT UNLESS NOTED OTHERWISE. OUTDOOR CONDUCTORS SHALL BE INSTALLED IN RIGID GALVANIZED STEEL CONDUIT UNLESS NOTED OTHERWISE.
23. SEAL AROUND PENETRATIONS RESULTING FROM CONDUIT ROUTING WITH FIRE-STOPPING FOAM SEALANT HAVING A UL-LISTED RATING OF 2 HOURS. HAMMER-DRILLING IS NOT PERMITTED. CORE-DRILLING TO BE COORDINATED WITH BUILDING OWNER'S REPRESENTATIVE.

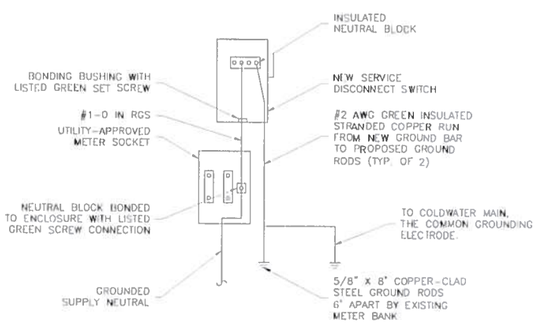
PANEL SCHEDULE "A"

VOLTS: 120/240 WIRE: 3 RMS: 65kAIC NEUTRAL BAR: YES BRANCH CB: 8 NEMA TYPE: 1 MFR: TBD
PHASE: 1 AMP: 100 MAIN CB AMP: 100 GROUND BAR: YES KEY LOCK: NO MOUNTING: SURFACE

WATTS A	WATTS B	CIRCUIT DESCRIPTION	CONDUCTOR	POLES	BRK	CKT	CKT	BRK	POLES	CONDUCTOR	CIRCUIT DESCRIPTION	WATTS A	WATTS B
2000		CHARLES CUBE #SC1041NNN3	(2)#10+(1)#10G	1	30	1	2		1	–	SPARE	–	
	360	EXTERIOR GFCI OUTLET	(2)#12+(1)#12G	1	20	3	4		1	–	SPARE		–
–		SPARE	–	1	–	5	6		1	–	SPARE	–	
2000	360	– TOTAL									TOTAL –	0	0

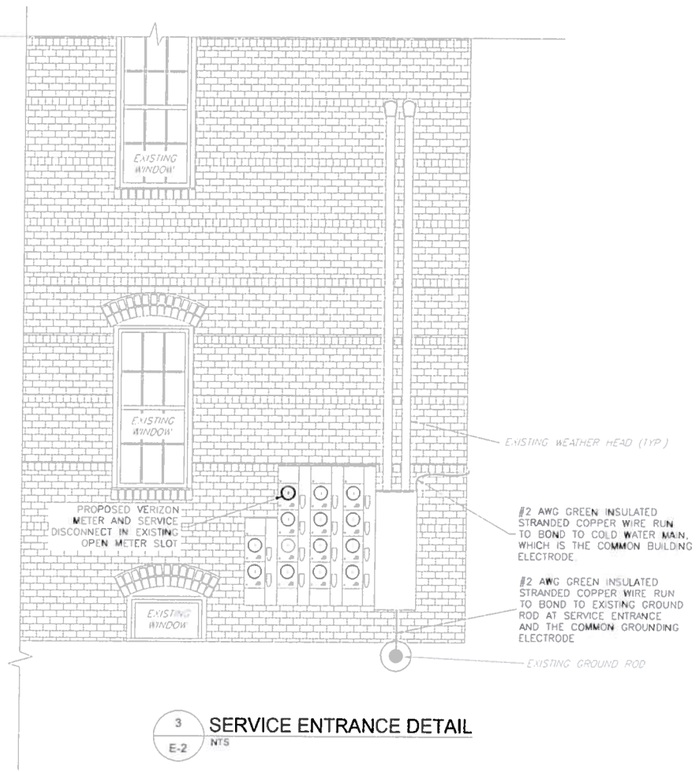
LOAD DESCRIPTION	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD	TOTAL CONNECTED LOAD BY PHASE
LIGHTS	0	1.00	0	PHASE A WATTS = 2000
EQUIPMENT	2000	1.00	2000	PHASE B WATTS = 360
RECEPTACLES	360	1.00	360	TOTAL CONNECTED LOAD KvA = 2.36
MISC	0	1.00	0	TOTAL PANEL LOADING KvA = 2.36
HVAC	0	1.00	0	TOTAL PANEL CAPACITY KvA = 24.0
TOTAL	2360		2360	

1 / E-2 PANEL SCHEDULE
NTS

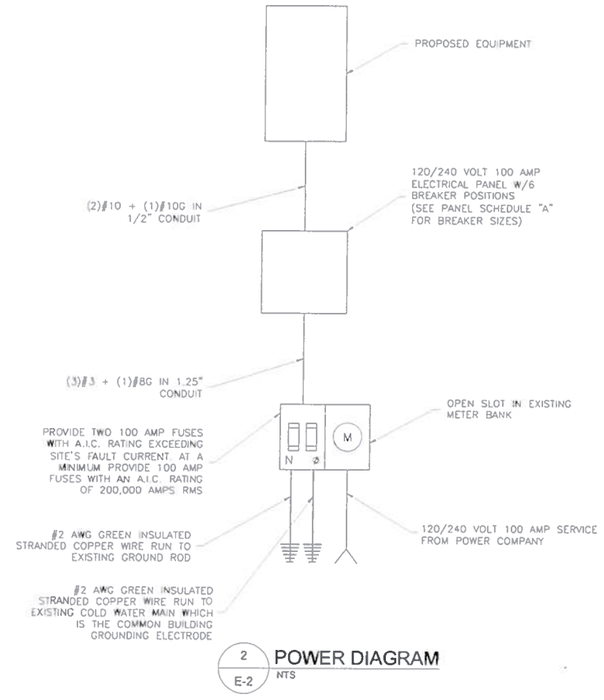


NOTES:
1. [0] & [000] REPRESENT A GROUNDING TERMINAL WITH A LISTED GREEN SCREW THAT ACHIEVES CONTINOUS METALLIC CONTACT WITH THE METAL ENCLOSURE
2. NEUTRAL WIRES SHALL BE INSULATED AND MARKED WITH WHITE TAPE
3. DRIVE 8' LONG GROUND ROAD COMPLETELY BELOW GRADE

2 / E-2 SERVICE GROUND DETAIL
NTS



3 / E-2 SERVICE ENTRANCE DETAIL
NTS



2 / E-2 POWER DIAGRAM
NTS

NOTE:
FAULT CURRENT LETTER FROM POWER COMPANY SHOWING THE INCOMING FAULT CURRENT MUST BE PROVIDED WITH FINAL CONSTRUCTION DRAWINGS TO THE ELECTRICAL PLANS REVIEW DEPARTMENT.

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PROFESSIONAL STAMP

COMMONWEALTH OF VIRGINIA
TRENT TRAVIS SNARR
Lic. No. 049978
DATE 10/16/15
PROFESSIONAL ENGINEER

ENGINEER

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VA PROFESSIONAL ENGINEER LIC. #49978

SHEET TITLE

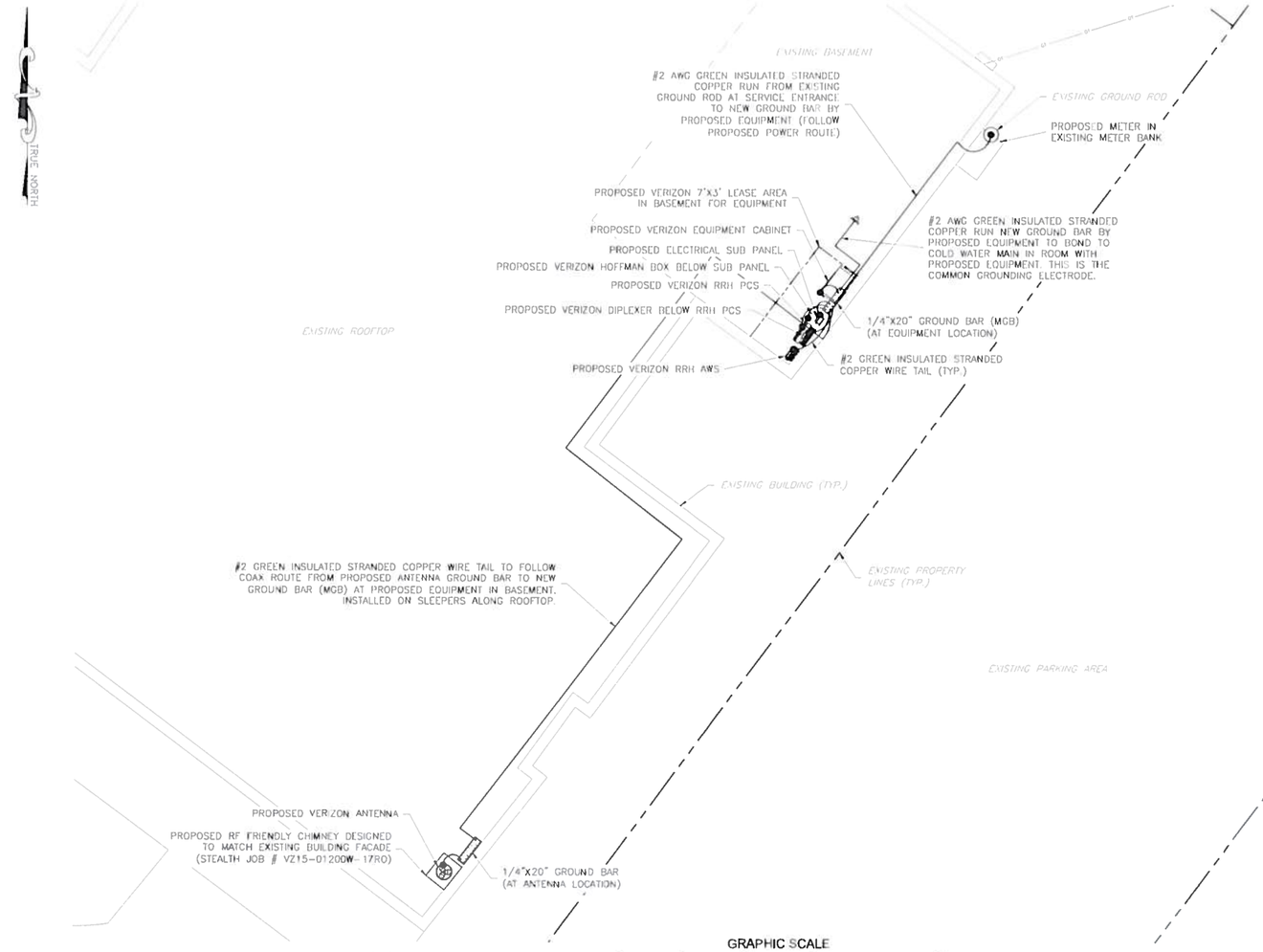
ELECTRICAL PANEL SCHEDULE, DIAGRAM & NOTES

SHEET NUMBER

E-2

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 SURFACES, 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 ANTIOXIDANT 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 TINNED SOLID 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. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO-HOLE LUGS.
10. THE GROUND ELECTRODE SYSTEM SHALL CONSIST OF DRIVEN GROUND RODS POSITION ACCORDING TO GROUNDING PLAN. THE GROUND RODS SHALL BE 5/8"X10'-0" COPPER CLAD STEEL INTERCONNECTED WITH #2 TINNED SOLID COPPER WIRE BURIED 30" BELOW GRADE. BURY GROUND RODS A MAXIMUM OF 15' APART, AND A MINIMUM OF 8' APART.
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 VERIZON CONSTRUCTION MANAGER.
14. ALL GROUND LEADS EXCEPT THOSE TO THE EQUIPMENT ARE TO BE #2 TINNED SOLID COPPER WIRE. ALL EXTERIOR GROUND BARS TINNED COPPER.
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 EQUAL.
16. IF A SINGLE GROUND ROD CAN BE PROVEN TO HAVE A RESISTANCE TO THE EARTH OF 25 OHMS OR LESS, A SECOND GROUND ROD IS NOT REQUIRED. A 3RD PARTY MUST CONDUCT THE TEST AND PROVIDE RESULTS TO VERIZON CONSTRUCTION MANAGER.
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 CONNECTION, APPLY APPROPRIATE ANTI-OXIDIZATION PAINT.
19. ANY SITE WHERE THE EQUIPMENT (BTS, CABLE BRIDGE, PPC, GENERATOR, ETC.) IS LOCATED WITHIN 6 FEET OF METAL FENCING, THE GROUND RING SHALL BE BONDED TO THE NEAREST FENCE POST USING (3) RUNS OF #2 BARE TINNED COPPER WIRE.



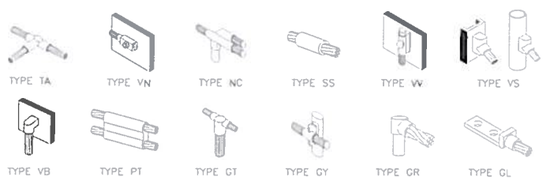
1 G-1 GROUNDING PLAN 1/4" = 1'

GRAPHIC SCALE
4 0 2 4 8 16
(IN FEET)
1 INCH = 4 FEET

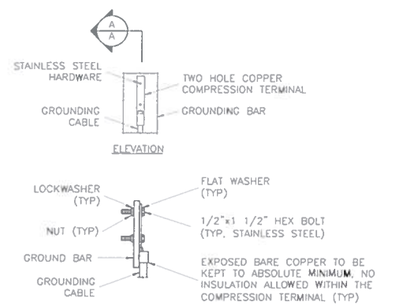
NOTE:
CONTRACTOR TO VERIFY AND GROUND TO ALL COMMON GROUNDING ELECTRODES.

GROUNDING LEGEND

	COAXIAL CABLE SHIELD GROUND KIT CONNECTION
■	COMPRESSION FITTING CONNECTION
•	EXOTHERMIC WELD CONNECTION
◉	5/8"X10' COPPER-CLAD STEEL GROUND ROD
◉	5/8"X10' COPPER-CLAD STEEL GROUND ROD WITH INSPECTION WELL
———	PROPOSED GROUND WIRING
- - - - -	EXISTING GROUND WIRING
▭	TINNED COPPER GROUND BAR 1/4"X4"X12" OR 1/4"X4"X20"
CGB	COLLECTOR GROUND BAR
MGB	MAIN GROUND BAR



2 G-1 CADWELD GROUNDING CONNECTION DETAILS NTS



NOTE:
1. "DOUBLING UP" OR "STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

3 G-1 TYPICAL GROUND BAR CONN DETAIL NTS

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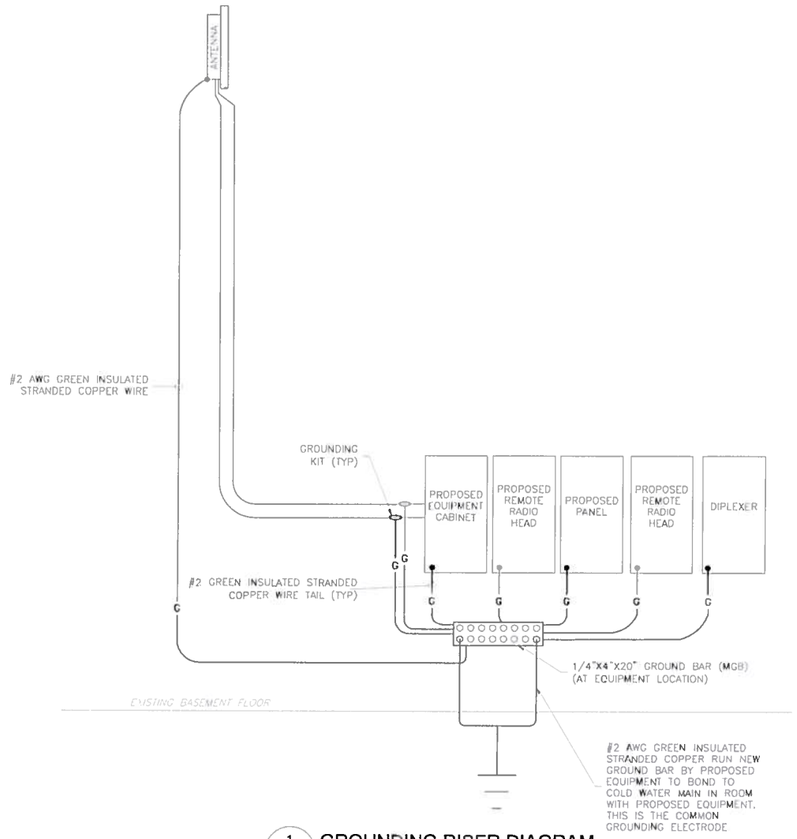
VA PROFESSIONAL ENGINEER LIC. #49978

SHEET TITLE

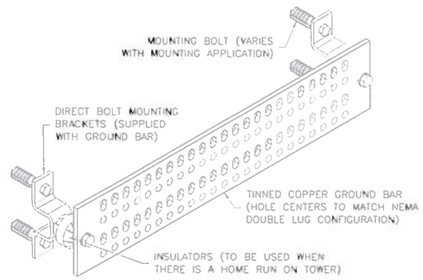
GROUNDING PLAN, DETAILS & NOTES

SHEET NUMBER

G-1



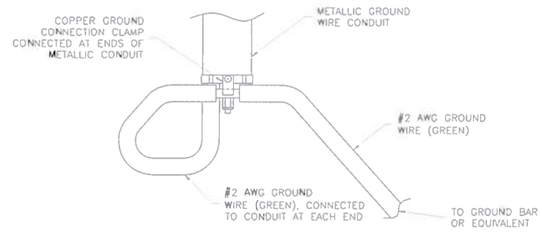
1 / G-2 GROUNDING RISER DIAGRAM
NTS



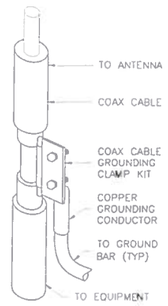
GROUND BAR SCHEDULE

TYPE	QTY	MANUFACTURER	PART NO.	REMARKS
MGB	2	ANDREW	UGBKIT-0420-T	OR EQUAL
CBG	3	ANDREW	UGBKIT-0412	OR EQUAL

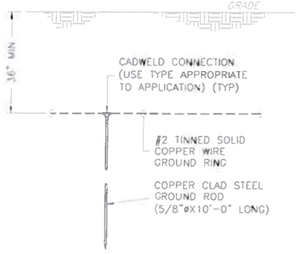
2 / G-2 GROUND BAR DETAIL
NTS



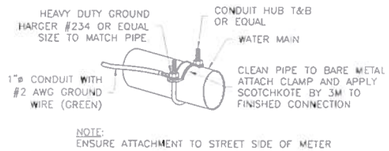
3 / G-2 CONDUIT GROUNDING DETAIL
NTS



4 / G-2 COAX CABLE GROUNDING DETAIL
NTS

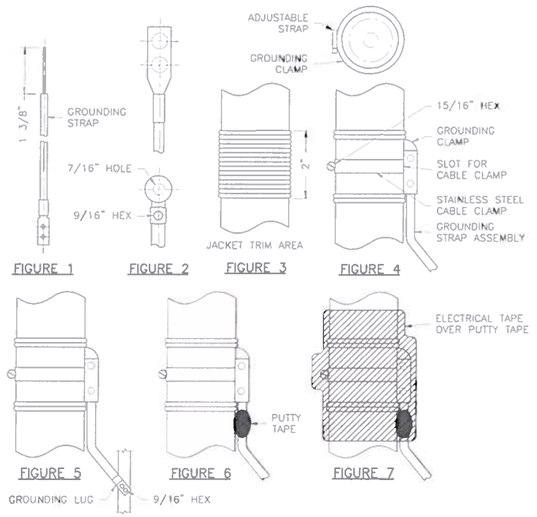


5 / G-2 TYPICAL GROUND ROD DETAIL
NTS



NOTE:
ENSURE ATTACHMENT TO STREET SIDE OF METER

6 / G-2 GROUND AT WATER MAIN DETAIL
NTS



7 / G-2 TYPICAL COAX WEATHERPROOFING DETAIL
NTS

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SHEET TITLE

GROUNDING RISER DIAGRAM & DETAILS

SHEET NUMBER

G-2

GENERAL

1. THE TYPICAL NOTES SHALL APPLY FOR ALL CASES UNLESS OTHERWISE SPECIFICALLY DETAILED WITHIN THE DRAWINGS. SOME NOTES MAY NOT BE APPLICABLE IN PART OR IN WHOLE FOR EVERY PROJECT.
2. ANY ITEMS REFERENCED AS BEING ON "HOLD" ARE TO BE INCLUDED IN THE WORK AS SHOWN. HOWEVER, CONSTRUCTION OR FABRICATION IS NOT TO BEGIN UNTIL THE "HOLD" REFERENCE IS REMOVED.
3. DIMENSIONS CONTAINED WITHIN MUST BE FIELD VERIFIED AND CUSTOMER APPROVED PRIOR TO FABRICATION OF MATERIALS.
4. THE MODIFICATIONS DEPICTED IN THESE DRAWINGS ARE INTENDED TO PROVIDE STRUCTURAL SUPPORT FOR THE ADDITION OF THE ANTENNA SCREENING SYSTEMS OUTLINED WITHIN. THE EXISTING STRUCTURE OR BUILDING SHALL BE ANALYZED AND RETROFITTED AS REQUIRED, BY OTHERS, TO WITHSTAND THE LOADS IMPOSED BY THE NEW STEALTH ® ENCLOSURE SHOWN ON THE DRAWINGS.
5. ANTENNA CONCEALMENT PRODUCTS SHALL BE INSTALLED BY A CONTRACTOR EXPERIENCED IN SIMILAR WORK. CARE SHALL BE TAKEN IN THE INSTALLATION OF ANY AND ALL MEMBERS IN ACCORDANCE WITH RECOGNIZED INDUSTRY STANDARDS AND PROCEDURES. ALL APPLICABLE OSHA SAFETY GUIDELINES ARE TO BE FOLLOWED. STEALTH® IS NOT PROVIDING FIELD INSTALLATION SUPERVISION.
6. THESE DRAWINGS INDICATE THE MAJOR OPERATIONS TO BE PERFORMED, BUT DO NOT SHOW EVERY FIELD CONDITION THAT MAY BE ENCOUNTERED. THEREFORE, PRIOR TO BEGINNING OF WORK THE CONTRACTOR SHOULD SURVEY THE JOB SITE THOROUGHLY TO MINIMIZE FIELD PROBLEMS.
7. PROTECTION OF EXISTING STRUCTURES DURING THE COURSE OF THE CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
8. THE STRUCTURAL INTEGRITY OF THIS STRUCTURE IS DESIGNED TO BE ATTAINED IN ITS COMPLETED STATE. WHILE UNDER CONSTRUCTION ANY TEMPORARY BRACING OR SHORING WHICH MAY BE REQUIRED TO MAINTAIN STABILITY PRIOR TO COMPLETION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
9. THE PLANS AND DETAILS WITHIN DO NOT INCLUDE DETAILS OR DESIGN FOR DRAINAGE FROM OR WATERPROOFING OF EXTERIOR OR INTERIOR SURFACES OF THE EXISTING BUILDING OR STRUCTURE. THESE DETAILS MUST BE COMPLETED BY OTHERS.

DESIGN NOTES:

STRUCTURAL DESIGN IS BASED ON THE INTERNATIONAL BUILDING CODE, 2012 EDITION
& THE ASCE 7-10 STANDARD

DESIGN LOADS:
WIND:
BASIC WIND SPEED: 115 MPH (3-SEC GUST) PER ASCE 7-10 STANDARD
IMPORTANCE FACTOR: 1.00
RISK CATEGORY: II
EXPOSURE: B

STEALTHSKIN PANELS

1. FASTENER HOLES IN STEALTHSKIN FOAM COMPOSITE PANELS ARE NOT FACTORY DRILLED AND MUST BE DRILLED IN THE FIELD.
2. PANEL FASTENERS TO BE SPACED 12" O.C. MAX. AND LOCATED 6" MAX. HORIZONTALLY FROM EACH EDGE AT TOP AND BOTTOM OF PANEL. MAINTAIN 1 ½" MIN. EDGE DISTANCE FROM ALL EDGES. 4' WIDE PANELS REQUIRE (4) FASTENERS TOP AND BOTTOM. 5' WIDE PANELS REQUIRE (4) FASTENERS TOP AND BOTTOM. CORNER PANELS REQUIRE (3) FASTENERS TOP AND BOTTOM PER SIDE.
3. WHEN FASTENER BOLT HEAD OR NUT BEARS DIRECTLY ON SURFACE OF STEALTHSKIN PANEL, TIGHTEN PANEL BOLTS ONLY ½ TURN PAST SNUG. APPLY THREAD LOCK COMPOUND TO THE THREADS OF METAL BOLTS. USE THIN BEAD OF EPOXY TO LOCK THE NUTS OF FRP BOLTS AND STEALTH® STAINLESS STEEL PANEL BOLTS. USE WASHER OR FLANGED HEAD BOLT, OR FASTENER WITH LARGE BEARING SURFACE.
4. PANELS WILL EXPAND AND CONTRACT DUE TO TEMPERATURE. WHEN INSTALLING PANELS IN COLD TEMPERATURES, EVENLY SPACE PANELS ALONG LENGTH OF SCREEN WALL WITH EQUAL GAPS BETWEEN PANELS TO ALLOW FOR EXPANSION DURING WARM TEMPERATURES.
5. ADJACENT FLAT PANELS ARE JOINED BY A VERTICAL FOAM SPLINE THAT IS INSERTED INTO GROOVES CUT INTO THE SIDE OF EACH PANEL. DO NOT LIFT PANELS BY GROOVES. PANELS MUST BE LIFTED WITH FORCE DIRECTED ONTO PANEL SURFACE.
6. ADJACENT RADIUS PANELS ARE JOINED BY A VERTICAL H-CHANNEL. INSERT PANELS INTO EACH SIDE OF H-CHANNEL.
7. RADIUS PANELS MUST BE EVENLY SPACED ALONG RADIUS SUPPORT. CONTRACTOR TO MEASURE LENGTH OF RADIUS SUPPORT AND DIVIDE BY THE NUMBER OF RADIUS PANELS TO DETERMINE PROPER SPACING. H-CHANNEL CONNECTORS ARE USED TO COVER THE GAP BETWEEN PANELS AND TO ALLOW FOR PANEL EXPANSION AND CONTRACTION.
8. SURFACES OF PANELS SHALL BE COATED WITH SUITABLE PAINT FOR UV PROTECTION. TOP EDGE OF PANEL MUST BE COVERED TO PREVENT WATER TRAVEL BETWEEN PANELS. USE SHERWIN WILLIAMS "COROTHANE II" OR PRE APPROVED EQUIVALENT.
9. EXPOSED TOP AND SIDE FOAM EDGES OF PANELS MUST BE COVERED OR COATED FOR UV PROTECTION. STEALTH® WILL PROVIDE PANEL EDGE CAPS TO BE FIELD APPLIED FOR THIS PURPOSE FOR MOST APPLICATIONS. PANEL EDGE CAPS TO BE SECURED WITH TEK SCREW INSTALLED @ 18" MAXIMUM SPACING ON THE INSIDE FACE OF THE PANEL.

DESIGN REACTIONS (ASD):

R = 30 PLF (1.0 DEAD)
V = 40 PLF (0.6 WIND)

APPROXIMATE WEIGHT OF CHIMNEY (EXCLUDING ANTENNAS, MOUNTS, AND STEEL): 175 lbs

THE DESIGN REACTIONS V & R ARE TYPICAL ALONG THE FRP VERTICAL ANGLES. THE DESIGN REACTION 'V' IS CONSIDERED TO ACT IN ANY HORIZONTAL DIRECTION. THE CONNECTION OF THE FRP ANGLES TO THE EXISTING STRUCTURE TO BE BY OTHERS FOR THE DESIGN REACTIONS LISTED ABOVE. THE ADEQUACY OF THE EXISTING STRUCTURE TO SUPPORT THE DESIGN REACTIONS TO BE DETERMINED BY OTHERS.

STRUCTURAL STEEL

1. STEEL FABRICATION AND INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL AND SPECIFICATIONS.
2. STEEL I-SHAPE, ANGLE, CHANNEL, AND MISCELLANEOUS MEMBERS SHALL CONFORM TO ASTM A36 (36 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
3. STEEL PLATE MEMBERS SHALL CONFORM TO ASTM A36 (36 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS U.N.O.
4. STEEL PIPE AND ROUND TUBE MEMBERS SHALL CONFORM TO ASTM A500 GRADE B (42 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
5. STEEL RECTANGULAR AND SQUARE TUBE MEMBERS SHALL CONFORM TO ASTM A500 GRADE B (46 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
6. STEEL WIDEFLANGE MEMBERS SHALL CONFORM TO ASTM A992 (50 KSI MIN, YIELD STRENGTH) STEEL SPECIFICATIONS U.N.O.
7. BOLTS SHALL BE DOMESTIC, NEW HIGH STRENGTH GALVANIZED BOLTS, BEARING TYPE "X" (THREADS EXCLUDED), U.N.O., AND SHALL CONFORM TO ASTM A325 SPECIFICATIONS, U.N.O.
8. STRUCTURAL BOLTS SHALL BE TIGHTENED USING TURN-OF-THE-NUT METHOD.
9. BOLT HOLE EDGE DISTANCES SHALL BE A MINIMUM 1", U.N.O.
10. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS AND PROCEDURES OF THE AMERICAN WELDING SOCIETY (AWS) BY CERTIFIED WELDERS PER AWS D1.1 FOR STEEL AND AWS D1.2 FOR ALUMINUM. ALL WELDING SHALL BE PERFORMED IN A SHOP APPROVED BY THE BUILDING OFFICIAL. STEEL WELDS SHALL BE BY E70XX, LOW HYDROGEN ELECTRODES.
11. STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123 SPECIFICATIONS AFTER FABRICATION OR PAINTED WITH RUST INHIBITIVE PRIMER.
12. STEEL HARDWARE SHALL BE HOT DIP GALVANIZED PER ASTM A153, U.N.O.
13. AFTER ANY FIELD HOLE PUNCHING / DRILLING OR CUTTING HAS BEEN COMPLETED, OR FOR ANY DAMAGED STRUCTURAL MEMBER, TOUCH UP ALL BARE MATERIAL AND WELDED AREAS WITH TWO COATS OF GAL-CON OR SIMILAR MATERIAL TO RESTORE THE GALVANIZED PROTECTION ON THE MEMBERS.
14. ALL WELDED STEEL ASSEMBLIES AND INDIVIDUAL STEEL PARTS SHOULD HAVE THE PART NUMBER WELDED ONTO THE PART OR ASSEMBLY. THE PART NUMBERS SHOULD BE LOCATED CONSISTENTLY AND AWAY FROM ANY CONNECTION POINT TO AVOID ANY INTERFERENCE ISSUES WITH THE WELD.

FRP STRUCTURAL MEMBERS

1. FRP STRUCTURAL SHAPES SHALL BE STEALTH FRP SERIES 1525, MANUFACTURED USING THE PULTRUSION PROCESS.
2. IF PREFABRICATED MEMBERS DO NOT ASSEMBLE PER PLAN, CONTACT STEALTH ® CONCEALMENT SOLUTIONS, INC. BEFORE CUTTING OR ALTERING FABRICATED MEMBERS.
3. FRP STRUCTURAL MEMBERS SHALL BE FABRICATED AND ASSEMBLED AS INDICATED ON THE DRAWINGS.
4. THE CONTRACTOR SHALL PROTECT THE FRP STRUCTURAL MEMBERS FROM ABUSE TO PREVENT BREAKAGE, NICKS, GOUGES, ETC. DURING FABRICATION, HANDLING, AND INSTALLATION.
5. FRP BOLTS SHOULD BE TIGHTENED ½ TURN PAST SNUG AND LOCKED WITH EPOXY.

DISCLAIMERS:

1. ALL STRUCTURAL COMPONENTS TO BE CONNECTED TOGETHER SHALL BE COMPLETELY FIT UP ON THE GROUND OR OTHERWISE VERIFIED FOR COMPATIBILITY PRIOR TO LIFTING ANY COMPONENT INTO PLACE. REPAIRS REQUIRED DUE TO FIT-UP OR CONNECTION COMPATIBILITY PROBLEMS AFTER PARTIAL ERECTION ARE THE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR.

SPECIAL INSPECTIONS & STRUCTURAL OBSERVATION:

1. STEEL FABRICATION SHALL BE DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED AS REQUIRED BY THE IBC TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION.
2. NO FIELD WELDING SHALL BE PERMITTED.
3. NO STRUCTURAL OBSERVATION IS REQUIRED.

VECTOR ENGINEERS
9138 S. STATE STREET, SUITE 101
SANDY, UT 84070
P: (801) 990-1775 F: (801) 990-1776
PROJECT: U0142-855-151
COA: 0413000316
ROGER T. ALWORTH, P.E.

STEALTH®
FIRST IN CONCEALMENT ™
3034-A ASHLEY PHOSPHATE RD.
NORTH CHARLESTON, SC 29418
P: (800)-755-0689 F: (843)-207-0207
WWW.STEALTHCONCEALMENT.COM

COMMONWEALTH OF VIRGINIA
ROGER T. ALWORTH
Lic. No. 042165
PROFESSIONAL ENGINEER
10/01/2015

DRAWING NOT TO SCALE. UNLESS SPECIFIED OTHERWISE DIMENSIONS SHOWN ARE IN INCHES
TOLERANCES
DECIMALS X ± 1/16" .XXX ± 0.01" ANGULAR X ± 0.5°

NOTES & SPECIFICATIONS

NETWORK BUILDING & CONSULTING

SITE: RICHMOND FAN N024; LORD FAIRFAX
3012 MONUMENT AVE
RICHMOND, VA 23221

JOB #: VZ15-01200W-17R0
DRAWN: TPH-VSE
DESIGNED: TPH-VSE
REVISED: TPH-VSE

N1
10/1/15
REVISION 1

We are STEALTH®. The ® Makes the Difference!

REVISION TABLE			
REVISION	DESIGNER	DATE	SCOPE OF REVISION
0	TPH-VSE	9/8/2015	FINAL ENGINEERING
1	TPH-VSE	10/1/2015	REVISED PER CUSTOMER REDLINES

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N2
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REVISION 1

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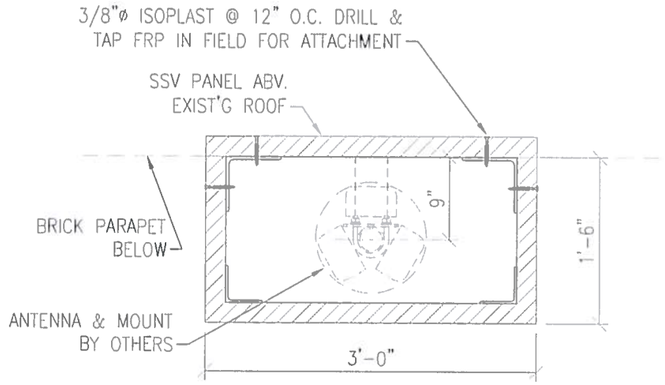
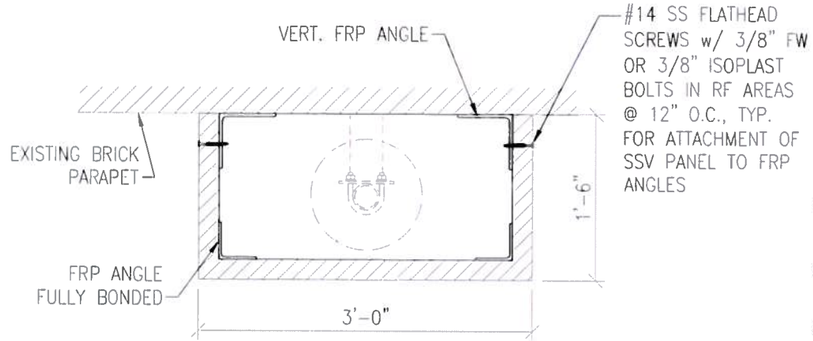
NOTES:

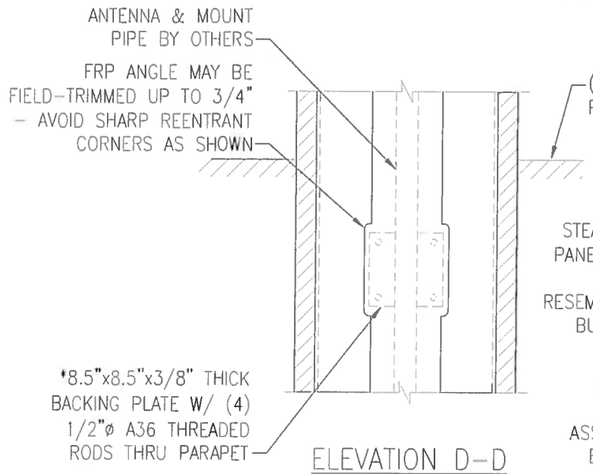
1.) THE INTEGRITY OF THE EXISTING STRUCTURE MUST BE VERIFIED BY OTHERS.
2.) THE ATTACHMENT TO EXISTING (DESIGN AND FASTENERS) MUST BE PROVIDED BY OTHERS. STEALTH® WILL ONLY SUPPLY FASTENER SIZE AND QUANTITY REQUIRED, FOR ATTACHMENT TO EXISTING.
3.) THE PANELS ARE TO BE PAINTED / TEXTURED ACCORDING TO THE CUSTOMER APPROVED SAMPLE(S).
4.) IT IS THE RESPONSIBILITY OF THE CUSTOMER TO VERIFY ANTENNA FIT AND COAX CLEARANCE.
5.) IT IS STRONGLY RECOMMENDED THAT THE CUSTOMER REVIEWS THE RF CONSIDERATIONS IN THIS DESIGN.
6.) DUE TO THE USE OF NON-CONVENTIONAL MATERIALS FOR RF PERFORMANCE, THIS CONCEALMENT WAS NOT DESIGNED TO BE WATERPROOF. A WATERPROOF MEMBRANE OR CONNECTION METHOD MUST BE INSTALLED BELOW CONCEALMENT BY CONTRACTOR TO PREVENT WATER INTRUSION TO THE EXISTING STRUCTURE.



SECTION A-A



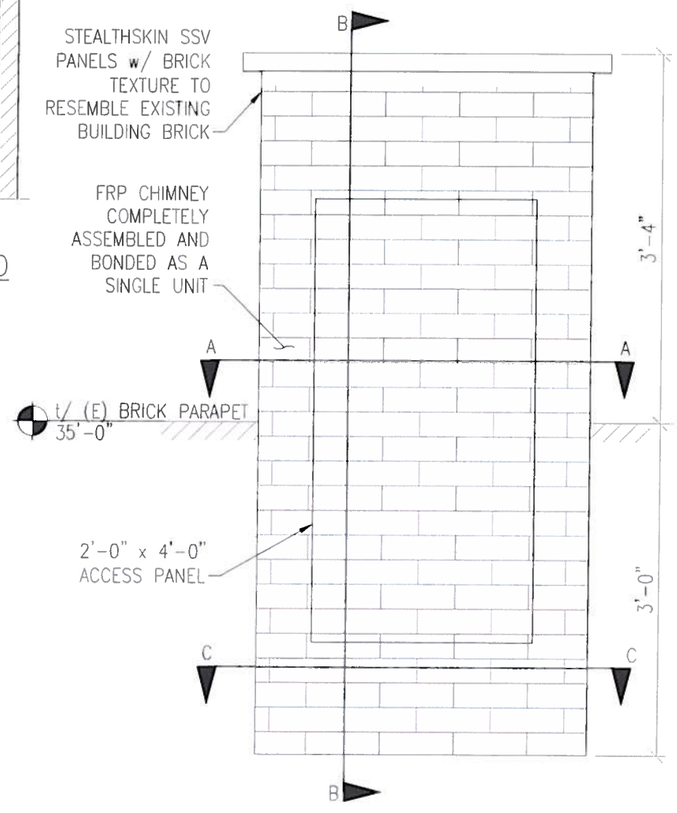
SECTION C-C

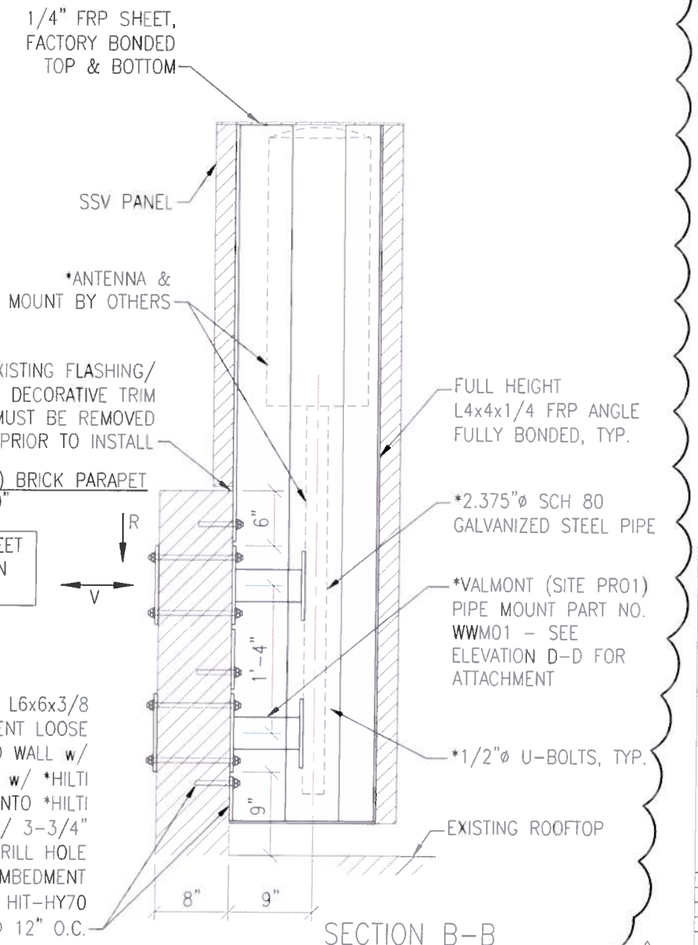


ELEVATION D-D

NOTE: VIEW SHOWS FRONT PANEL REMOVED FOR CLARITY

NOTE: ELEMENTS MARKED WITH AN ASTERISK (*) ARE DESIGNED AND PROVIDED BY NB&C.





SECTION B-B

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ASSEMBLY - ELEVATIONS

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REVISION 1