ADDRESS OF PROJECT:
DISTRICT: ☐ Old & Historic Alexandria ☐ Parker – Gray ☐ 100 Year Old Building
TAX MAP AND PARCEL:ZONING:
APPLICATION FOR: (Please check all that apply)
☐ CERTIFICATE OF APPROPRIATENESS
PERMIT TO MOVE, REMOVE, ENCAPSULATE OR DEMOLISH (Required if more than 25 square feet of a structure is to be demolished/impacted)
□ WAIVER OF VISION CLEARANCE REQUIREMENT and/or YARD REQUIREMENTS IN A VISION CLEARANCE AREA (Section 7-802, Alexandria 1992 Zoning Ordinance)
WAIVER OF ROOFTOP HVAC SCREENING REQUIREMENT (Section 6-403(B)(3), Alexandria 1992 Zoning Ordinance)
Applicant: Property Owner Business (Please provide business name & contact person)
Name:
Address:
City: State: Zip:
Phone: E-mail :
Authorized Agent (if applicable): Attorney Architect
Name: Phone:
E-mail:
Legal Property Owner:
Name:
Address:
City: State: Zip:
Phone: E-mail:
Yes No Is there an historic preservation easement on this property? Yes No If yes, has the easement holder agreed to the proposed alterations? Yes No Is there a homeowner's association for this property? Yes No If yes, has the homeowner's association approved the proposed alterations?

BAR Case # _____

If you answered yes to any of the above, please attach a copy of the letter approving the project.

NATURE OF PROPOSED WORK: Please check all that apply
NEW CONSTRUCTION EXTERIOR ALTERATION: Please check all that apply. awning fence, gate or garden wall HVAC equipment shutters doors windows siding shed lighting pergola/trellis painting unpainted masonry other
ADDITION DEMOLITION/ENCAPSULATION SIGNAGE
DESCRIPTION OF PROPOSED WORK: Please describe the proposed work in detail (Additional pages may be attached).
SUBMITTAL REQUIREMENTS:
Items listed below comprise the minimum supporting materials for BAR applications. Staff may request additional information during application review. Please refer to the relevant section of the <i>Design Guidelines</i> for further information on appropriate treatments.
Applicants must use the checklist below to ensure the application is complete. Include all information and material that are necessary to thoroughly describe the project. Incomplete applications will delay the docketing of the application for review. Pre-application meetings are required for all proposed additions. All applicants are encouraged to meet with staff prior to submission of a completed application.
Demolition/Encapsulation : All applicants requesting 25 square feet or more of demolition/encapsulation must complete this section. Check N/A if an item in this section does not apply to your project.
N/A Survey plat showing the extent of the proposed demolition/encapsulation. Existing elevation drawings clearly showing all elements proposed for demolition/encapsulation. Clear and labeled photographs of all elevations of the building if the entire structure is proposed to be demolished.
 Description of the reason for demolition/encapsulation. Description of the alternatives to demolition/encapsulation and why such alternatives are not considered feasible.

BAR Case #

BAR Case #	

Additions & New Construction: Drawings must be to scale and should not exceed 11" x 17" unless approved by staff. Check N/A if an item in this section does not apply to your project.

	<u>N/A</u>	
		Scaled survey plat showing dimensions of lot and location of existing building and other structures on the lot, location of proposed structure or addition, dimensions of existing structure(s), proposed addition or new construction, and all exterior, ground and roof mounted equipment.
		FAR & Open Space calculation form. Clear and labeled photographs of the site, surrounding properties and existing structures, if applicable.
		Existing elevations must be scaled and include dimensions. Proposed elevations must be scaled and include dimensions. Include the relationship to
		adjacent structures in plan and elevations. Materials and colors to be used must be specified and delineated on the drawings. Actual samples may be provided or required.
		Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
	Ц	For development site plan projects, a model showing mass relationships to adjacent properties and structures.
illun	ninat	& Awnings: One sign per building under one square foot does not require BAR approval unless ed. All other signs including window signs require BAR approval. Check N/A if an item in this section does y to your project.
		Linear feet of building: Front:Secondary front (if corner lot): Square feet of existing signs to remain: Photograph of building showing existing conditions. Dimensioned drawings of proposed sign identifying materials, color, lettering style and text. Location of sign (show exact location on building including the height above sidewalk). Means of attachment (drawing or manufacturer's cut sheet of bracket if applicable). Description of lighting (if applicable). Include manufacturer's cut sheet for any new lighting fixtures and information detailing how it will be attached to the building's facade.
Alt	erat	ions: Check N/A if an item in this section does not apply to your project.
		Clear and labeled photographs of the site, especially the area being impacted by the alterations, all sides of the building and any pertinent details. Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls. Drawings accurately representing the changes to the proposed structure, including materials and overall dimensions. Drawings must be to scale. An official survey plat showing the proposed locations of HVAC units, fences, and sheds. Historic elevations or photographs should accompany any request to return a structure to an
		earlier appearance.

	BAR Case #
ALL	APPLICATIONS: Please read and check that you have read and understand the following items:
	I have submitted a filing fee with this application. (Checks should be made payable to the City of Alexandria. Please contact staff for assistance in determining the appropriate fee.)
	I understand the notice requirements and will return a copy of the three respective notice forms to BAR staff at least five days prior to the hearing. If I am unsure to whom I should send notice I will contact Planning and Zoning staff for assistance in identifying adjacent parcels.
	I, the applicant, or an authorized representative will be present at the public hearing.
	I understand that any revisions to this initial application submission (including applications deferred for restudy) must be accompanied by the BAR Supplemental form and revised materials.
eleva accur action grants Section this a insperion	undersigned hereby attests that all of the information herein provided including the site plan, building tions, prospective drawings of the project, and written descriptive information are true, correct and rate. The undersigned further understands that, should such information be found incorrect, any in taken by the Board based on such information may be invalidated. The undersigned also hereby is the City of Alexandria permission to post placard notice as required by Article XI, Division A, on 11-301(B) of the 1992 Alexandria City Zoning Ordinance, on the property which is the subject of pplication. The undersigned also hereby authorizes the City staff and members of the BAR to ct this site as necessary in the course of research and evaluating the application. The applicant, if than the property owner, also attests that he/she has obtained permission from the property owner ake this application.

Signature:	Joshua Schakola
Printed Na	0
Date:	

OWNERSHIP AND DISCLOSURE STATEMENT Use additional sheets if necessary

an interest in the applicant, ur	iddress and percent of ownership nless the entity is a corporat nore than three percent. The te	ion or partnership, in which
	interest held at the time of the	
Name	Address	Percent of Ownership
1.	7 10 0.	. с. с. с. т. с. т
2.		
3.		
an interest in the property locate	ddress and percent of ownership ed at_ rship, in which case identify each	(address), unless the
percent. The term ownership in	terest shall include any legal or eal property which is the subject of	quitable interest held at the
Name	Address	Percent of Ownership
1.		
2.		
3.		
ownership interest in the applicationship business or financial relationship existing at the time of this applications.	ionships. Each person or entity listent or in the subject property is reported by Section 11-350 cation, or within the 12-month perior of the Alexandria City Council, s of Architectural Review.	equired to disclose any of the Zoning Ordinance, od prior to the submission of
Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1.		
2.		
3.		
	relationships of the type descr ion and before each public hea	
As the applicant or the applican the information provided above	t's authorized agent, I hereby attois true and correct.	est to the best of my ability that
		Schakola Signature
Date Printed	l Name	Signature

GENERAL NOTES

- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK, THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE VERIZON REPRESENTATIVE OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
- THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
- THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS OTHERWISE NOTED OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- 8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- IO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVEMENTS, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- THE CONTRACTOR SHALL MAINTAIN THE GENERAL WORK AREA AS CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DEBRIS, TRASH, AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. DETAILS OF EQUIPMENT TO BE INCLUDED IN RFQ PACKAGE. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
- 13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
- THE CONTRACTOR SHALL NOTIFY THE VERIZON REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE VERIZON REPRESENTATIVE.
- 15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
- I6. ALL UNISTRUT, HARDWARE, AND OUTDOOR JUNCTION BOXES SHALL BE GALVANIZED STEEL. FOR FIELD CUTS OF GALVANIZED ITEMS, FIRST COAT SHALL BE COLD GALVANIZED AND SECOND COAT SHALL BE MARINE GRADE GALVANIZED.
- RETURN ANY UNUSED MATERIALS WITH REQUIRED DOCUMENTATION TO THE VERIZON WAREHOUSE WITHIN 14 DAYS OF PROJECT COMPLETION. RETURNED MATERIAL NEEDS TO BE ACCOMPANIED WITH AN RMA FORM AND PACKAGING REQUIREMENTS STIPULATED BY THE VZW CONSTRUCTION ENGINEER.
- 18. CONTRACTOR IS RESPONSIBLE FOR STORAGE OF ALL MATERIALS PROVIDED BY VERIZON, AND IS LIABLE FOR THOSE DIFFERENCES ONCE PICKED UP FROM THE
- 9. CONTRACTOR SHALL PERFORM A PUNCH WALK WITH VZW CONSTRUCTION & OPERATION REPRESENTATIVE PRIOR TO DECLARING CONSTRUCTION COMPLETE.
- 20. GENERAL CONTRACTOR SHALL PROVIDE A IOLBS.
 DRY-CHEMICAL FIRE EXTINGUISHER ON SITE DURING
 CONSTRUCTION. UPON COMPLETION OF ALL WORK,
 CONTRACTOR SHALL REMOVE FIRE EXTINGUISHER FROM

Verzon

ALEXOLDT OOF - SMALL CEL RONNEAR IOOI CAMERON ALEXANDRIA, VIRGINIA 22314

INDEX OF DRAWINGS

- SITE LOCATION AND VICINITY PLAN, INDEX OF DRAWINGS, AND CODE ANALYSIS
- C-I SITE PLAN
- C-2 SITE DETAILS
- TRANSPORTATION MANAGEMENT PLAN
- STRUCTURAL SECTIONS AND DETAILS
- GENERAL NOTES SPECIFICATIONS, SYMBOLS LIST, PANEL SCHEDULE
- AND DETAILS
- POWER RISER DIAGRAM, EQUIPMENT PLAN, AND E-2
- GROUNDING DIAGRAM, DETAILS, AND NOTES
- E-4 DIAGRAMS

CODE ANALYSIS

APPLICABLE BUILDING CODE:

IBC 2015 USE GROUP: UTILITY (U)

CONSTRUCTION TYPE: IIB

UTILITY COMPANY: DOMINION

NO VICINITY PLAN Mhite House Black Market Alexandria Cupcake (۱) (۱) Asian Bistro 🖤 Nicecream • Friendship Firehouse Museum 🟦 SynGlyphX =

RAND MCNALLY LICENSE # R.L.04-S-97

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE INSTALLATION OF VERIZON WIRELESS TELECOMMUNICATIONS EQUIPMENT ON A PROPOSED UTILITY POLE TO REPLACE EXISTING. THE ASSOCIATED ANTENNA WILL BE MOUNTED ON THE PROPOSED UTILITY POLE AT A RAD CENTER OF 39'-8" AND NOKIA ANTENNAS WILL BE MOUNTED AT A RAD CENTER 36'-0".

DIRECTIONS TO SITE

FROM JUNCTION DRIVE - TURN LEFT ONTO HENKELS LANE - TAKE RAMP ON LEFT FOR MD-32 EAST

- DESTINATION WILL BE ON THE LEFT

- TAKE EXIT #IOC RAMP ON RIGHT FOR BALTIMORE WASHINGTON PARKWAY SOUTH
- TAKE EXIT #IA RAMP ON LEFT AND FOLLOW SIGNS FOR 1-295 SOUTH TAKE EXIT #IC RAMP ON RIGHT FOR I-495 SOUTH - TAKE EXIT #177B-C RAMP ON RIGHT FOR US-1 NORTH

VERIZON WIRELESS REVIEW

DATE BUILDING OWNER DATE ENGINEERING **OPERATIONS** DATE DATE CONSTRUCTION

l'elegent Engineering li 2216 Commerce Road, Suite 1 Forest Hill, MD 21050

TIMPTHY YOHN SMIDT

410-692-5816 www.tel-eng.com

 \triangleleft

REVISIONS: NO. | DESCRIPTION | DATE |PERMIT DWGS.|1/24/20 LAST REV.:

|PROJECT NO:191656

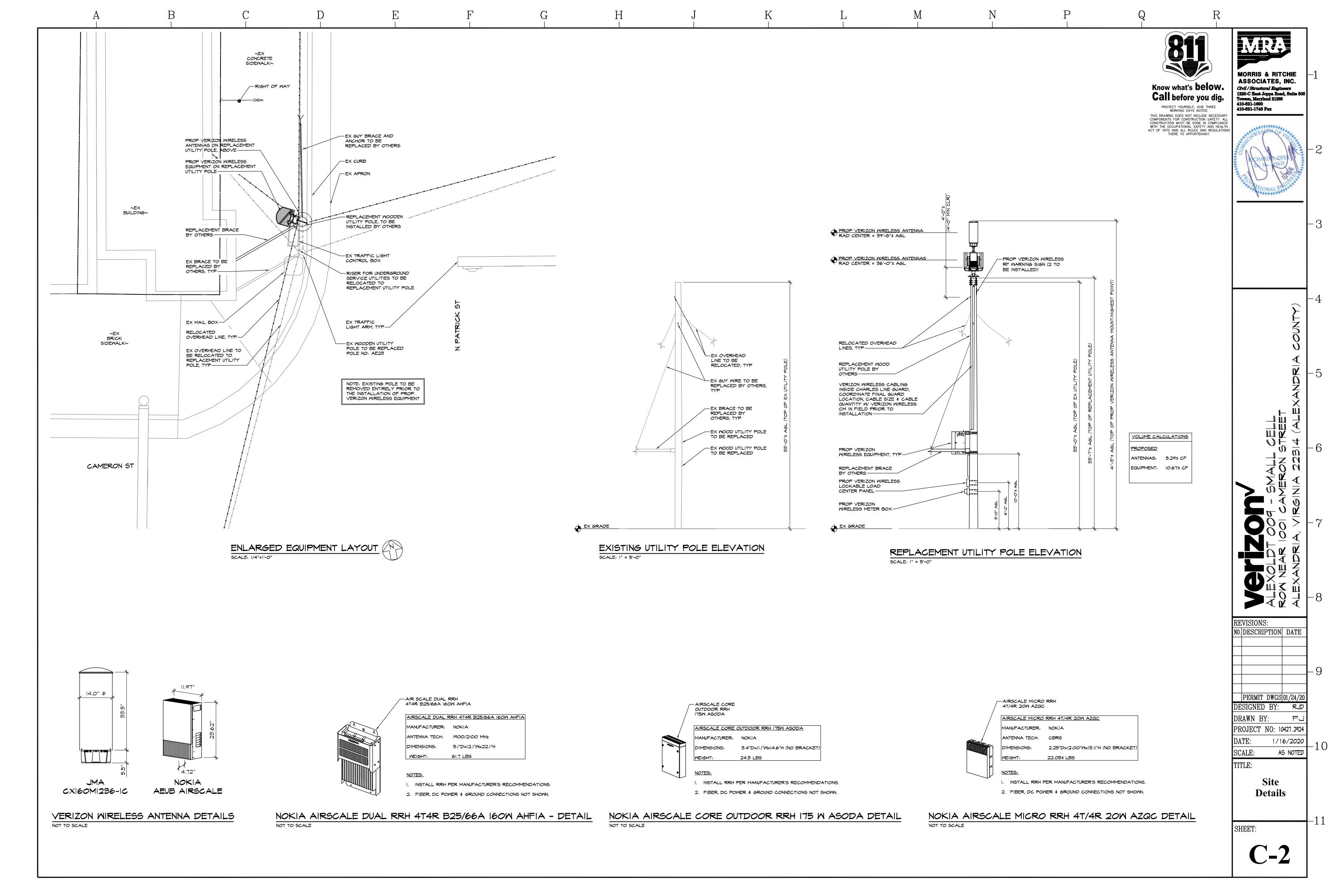
DATE: JANUARY 24, 2020 SCALE: AS NOTEI

SITE LOCATION AND VICINITY PLAN, INDEX OF DRAWINGS, AND CODE ANALYSIS

SHEET:

CS-





TRANSPORTATION MANAGEMENT PLAN

TEMPORARY TRAFFIC CONTROL PLAN NOTES & WORK AREA PROTECTION MANUAL TTC'S

Virginia Department of Transportation VERIFICATION OF COMPLETION OF ADVANCED WORK ZONE TRAFFIC CONTROL TRAINING AND FLAGGER CERTIFICATION

This is to verify that Jon K. Erickson has successfully completed training and an examination by the Department on the proper practices and methods for the installation, maintenance, removal of temporary traffic control devices and flagging operations.

Date: 9/25/2019

State Traffic Engineer

Verification No.: 092519410

Expiration Date: 9/30/2023

MORRIS & RITCHIE ASSOCIATES, INC. Civil / Structural Engineers 1220-C East Joppa Road, Suite 505 Towson, Maryland 21286 410-821-1690 410-821-1748 Fax JON K. ERICKSON Lic. No. 32355 OI/24/20

REVISIONS:

NO. DESCRIPTION DATE

|PERMIT_DWGS|01/24/20

PROJECT NO: 10427.2924

TRANSPORTATION

MANAGEMENT

PLAN

C-3

1/16/2020

AS NOTED

DESIGNED BY:

DRAWN BY:

PROJECT INFORMATION

- 1. THE PROJECT'S TMP PLAN HAS BEEN DESIGNED IN CONFORMANCE WITH TMP TYPE A.
- 2. WORK ZONE AREAS SHALL BE SETUP AS SHOWN ON TTC'S ON THIS PLAN SHEET. THE WORK ZONE LENGTHS AND WIDTHS MAY VARY BY LOCATION IN ACCORDANCE WITH APPLICABLE TTC.
- 3. CONSTRUCTION HOURS: 9AM-3:30PM MONDAY-THURSDAY. 9AM-2PM FRIDAY.
- NO WORK ON NIGHTS, WEEKENDS OR HOLIDAYS. NO LANE CLOSURES WILL BE ALLOWED FROM NOON ON THE DAY BEFORE A HOLIDAY UNTIL NOON ON THE WORKDAY FOLLOWING THE HOLIDAYS.

 HOLIDAYS INCLUDE ALL STATE AND FEDERAL HOLIDAYS.
- 4. EXISTING INTERSECTIONS: THE NEAREST INTERSECTION IS N PATRICK ST AND CAMERON ST.
- 5. EXISTING PEDESTRIAN ACCESS POINTS: THERE IS EXISTING SIDEWALK LOCATED WITHIN THE PROJECT LIMITS.
- EXISTING BUS STOPS: THERE ARE NO BUS STOPS NEAR THE PROJECT LIMITS.
- EXISTING ENTRANCES: THERE ARE RESIDENTIAL ENTRANCES LOCATED WITHIN THE CONSTRUCTION LIMITS
- 6. THE TRAFFIC ON THE ROADWAY CONSIST PRIMARILY OF PASSENGER VEHICLES AND PEDESTRIANS. THE SURROUNDING AREA IS RESIDENTIAL
- 7. THE CONTRACTOR SHALL:

DESIGNATE A PERSON ASSIGNED TO THE PROJECT WHO WILL HAVE THE PRIMARY RESPONSIBILITY, WITH SUFFICIENT AUTHORITY, FOR IMPLEMENTING THE TMP/SOC AND OTHER SAFETY AND MOBILITY ASPECTS OF THE PERMITTED WORK. THIS PERSON SHALL COORDINATE WITH THE INSPECTOR FOR THE DURATION OF CONSTRUCTION.

ENSURE THAT PERSONNEL IMPLEMENTING THE MOT ARE TRAINED IN TRAFFIC CONTROL TO A LEVEL COMMENSURATE WITH THEIR RESPONSIBILITY IN ACCORDANCE WITH VIRGINIA WORK ZONE TRAFFIC CONTROL TRAINING GUIDELINES.

INFORM COUNTY OF ANY WORK REQUIRING LANE SHIFTS, LANE CLOSURES, AND/OR PHASE CHANGES A MINIMUM OF TWO WORKING DAYS PRIOR TO IMPLEMENTING THIS ACTIVITY

PERFORM REVIEWS OF THE CONSTRUCTION AREA TO ENSURE COMPLIANCE WITH CONTRACT DOCUMENTS AT REGULARLY SCHEDULED INTERVALS AT THE DIRECTION OF COUNTY ENGINEERS. CONTRACTOR SHALL MAINTAIN A COPY OF THE TEMPORARY TRAFFIC CONTROL PLAN AT THE WORK SITE AT ALL TIMES

COORDINATE WITH CITY OF ALEXANDRIA POLICE DEPARTMENT AND CITY OF ALEXANDRIA FIRE/RESCUE DEPARTMENT FOR ANY LANE CLOSURES AND ANY DETOURS OF ANY NATURE, AT NO ADDITIONAL COST TO THE PROJECT.

SCHEDULE ALL PHASES OF CONSTRUCTION IN SUCH A MANNER THAT WATER, SANITARY SEWER, CABLE, FIBER CABLE/OPTIC CABLE, ANY OVERHANGING UTILITIES, AND ANY UNDERGROUND UTILITIES SERVICES WILL NOT BE INTERRUPTED.

- 8. THIS TMP PLAN IS INTENDED AS A GUIDE. IF THE CONTRACTOR IS TO DEVIATE FROM THE APPROVED TMP, A NEW OR REVISED TMP MUST BE SUBMITTED TO COUNTY FOR REVIEW AND APPROVAL.
- 9. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FOR THE DURATION OF THE PROJECT. CONTRACTOR SHALL ADD ANY ADDITIONAL TEMPORARY MEASURES NECESSARY TO FACILITATE PROPER, POSITIVE DRAINAGE FOR THE DURATION OF CONSTRUCTION.
- 10. WHERE GROUP 2 CHANNELIZING DEVICES ARE USED TO SEPARATE THE CONSTRUCTION AREA AND TRAFFIC, A MINIMUM CLEAR ZONE AREA SUCH AS DEFINED IN THE VWAPM IS TO BE MAINTAINED.
- 11. CONTRACTOR IS TO COORDINATE WITH CITY FOR LOCATION(S) OF THE CONSTRUCTION STAGING AREA. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL
- 12. IMPLEMENTING THE TRANSPORTATION MANAGEMENT PLAN

PERMITS AND/OR EASEMENTS AS NECESSARY.

DURING THE TRANSPORTATION MANAGEMENT PLAN

DURING THE FIRST DAY OF THE NEW WORK ZONE TRAFFIC PATTERN, THE PROJECT'S MANAGER AND CITY'S INSPECTOR SHALL INSPECT THE WORK ZONE TO

ENSURE COMPLIANCE WITH THE TMP. ON THE THIRD TO FIFTH DAY OF IMPLEMENTATION OF THE TMP'S NEW WORK ZONE TRAFFIC PATTERN THE

CONSTRUCTION INSPECTOR SHALL CONDUCT AN ON—SITE REVIEW OF THE WORK ZONE'S PERFORMANCE IN COORDINATION WITH COUNTY AND RECOMMEND

TO THE CONTRACTOR ANY REQUIRED CHANGES TO THE TMP TO ENHANCE THE WORK ZONE'S SAFETY AND MOBILITY. ALL SUCH CHANGES SHALL BE

DOCUMENTED. AN ON—SITE REVIEW OF THE PROJECT'S WORK ZONE TRAFFIC CONTROL BY THE PROJECT MANAGER AND CONTRACTOR SHALL BE CONDUCTED

(WITH COORDINATION FROM COUNTY) WITHIN 48 HOURS OF ANY FATAL INCIDENT/CRASH WITHIN THE WORK ZONE.

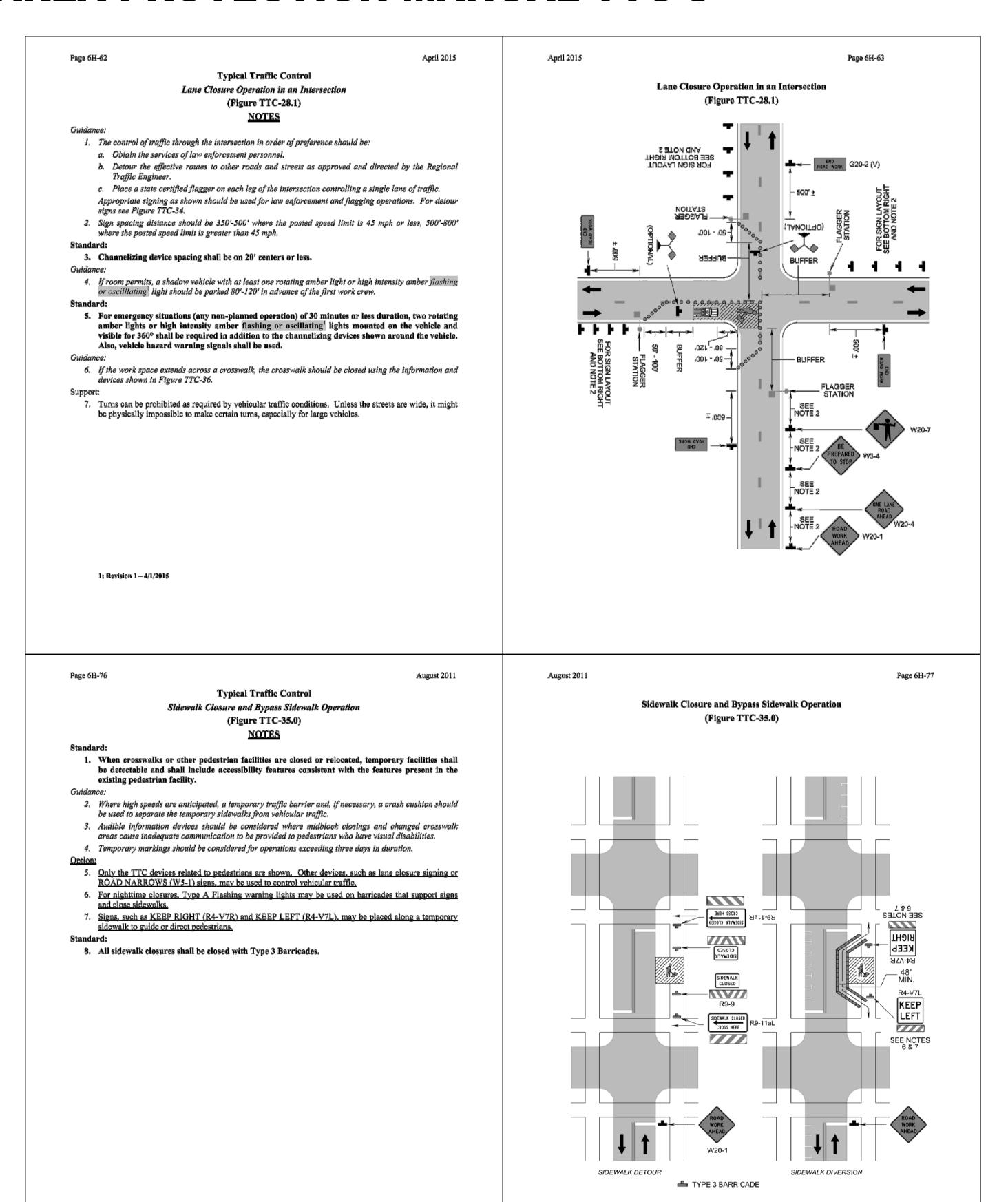
- 13 DUDUC COMMUNICATIONS DIAN
- 13. PUBLIC COMMUNICATIONS PLAN
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR:
 - A. NOTIFYING THE PROJECT MANAGER AND CITY INSPECTOR TWO WEEKS IN ADVANCE OF ANY SCHEDULED WORK PLANS AND TRAFFIC DELAYS.
 B. NOTIFYING THE PROJECT MANAGER, CITY INSPECTOR, AND CORRESPONDING COUNTY ENGINEER OF ANY UNSCHEDULED TRAFFIC DELAYS.
- 16. TRANSPORTATION OPERATIONS
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND PROVIDING THE FOLLOWING:
 - A. NOTIFY THE REGIONAL TRANSPORTATION OPERATIONS CENTER (TOC) 1 WEEK IN ADVANCE IN ORDER TO PLAN LANE CLOSURE INFORMATION ON
 - THE 511 SYSTEM AND VA-TRAFFIC.

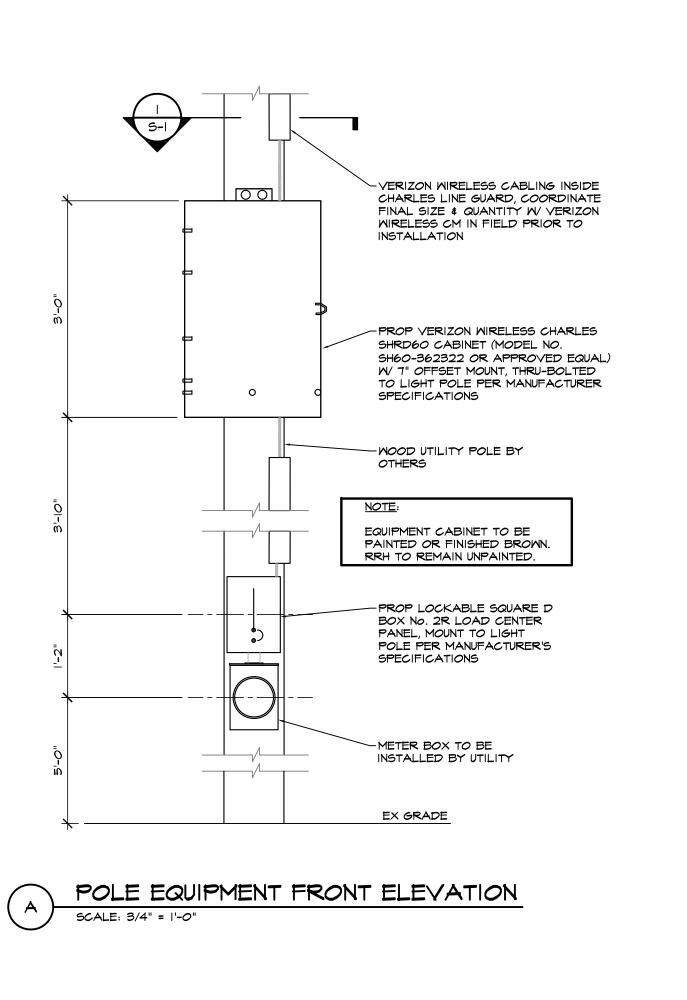
 B. IMMEDIATELY REPORT ANY TRAFFIC INCIDENTS THAT MAY OCCUR IN THE WORK ZONE.
 - C. NOTIFY THE PROJECT'S CONSTRUCTION INSPECTOR AND COUNTY ENGINEER OF ANY INCIDENTS AND EXPECTED TRAFFIC DELAYS.
 - D. WITHIN 24 HOURS OF ANY INCIDENTS WITHIN THE CONSTRUCTION WORK ZONE, A REVIEW OF THE TRAFFIC CONTROLS SHALL BE COMPLETED AND NECESSARY ADJUSTMENT MADE TO REDUCE THE FREQUENCY AND SEVERITY OF ANY FUTURE INCIDENTS.
- 17. CONTACT NUMBERS
- PROJECT MANAGER: TBD CITY INSPECTOR: TBD EMERGENCY CALL: 911
- NON-EMERGENCY NUMBERS:
- CITY OF ALEXANDRIA POLICE: 703-746-4444
 CITY OF ALEXANDRIA FIRE & RESCUE: 703-746-4357

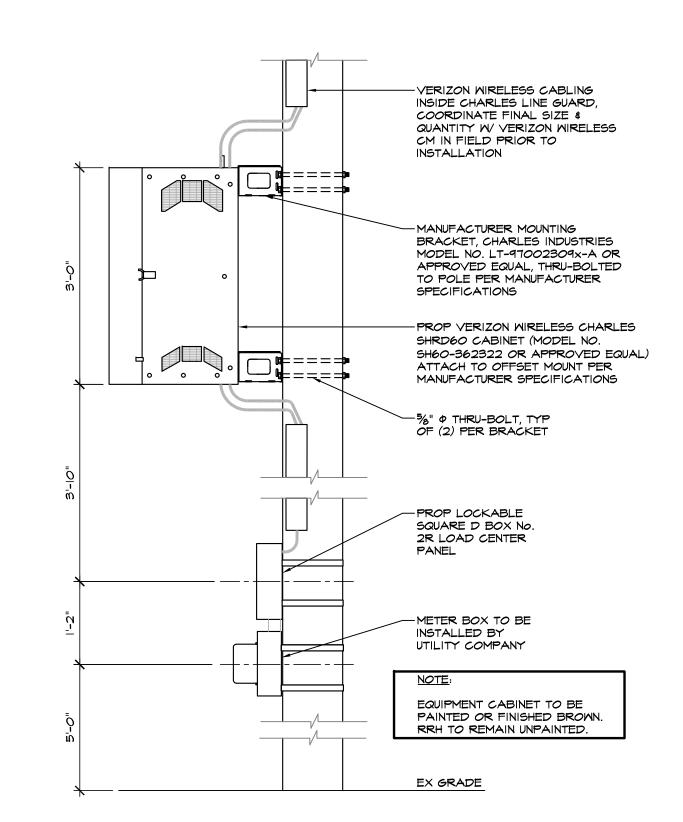
GENERAL CONSTRUCTION NOTES

NOTE: VWAPM VIRGINIA WORK AREA PROTECTION MANUAL (2011) INCLUDING REVISION 1 DATED 2015.

1. THE CONTRACTOR SHALL MAKE ANY NECESSARY ADJUSTMENTS DURING BOTH WORK AND NON-WORK HOURS TO ENSURE THE PROTECTION AND SAFETY OF PEDESTRIANS, VEHICULAR TRAFFIC, AND THE GENERAL PUBLIC FROM ANY CONSTRUCTION RELATED ACTIVITY, CONSTRUCTION EQUIPMENT, AND THE CONSTRUCTION SITE ITSELF.

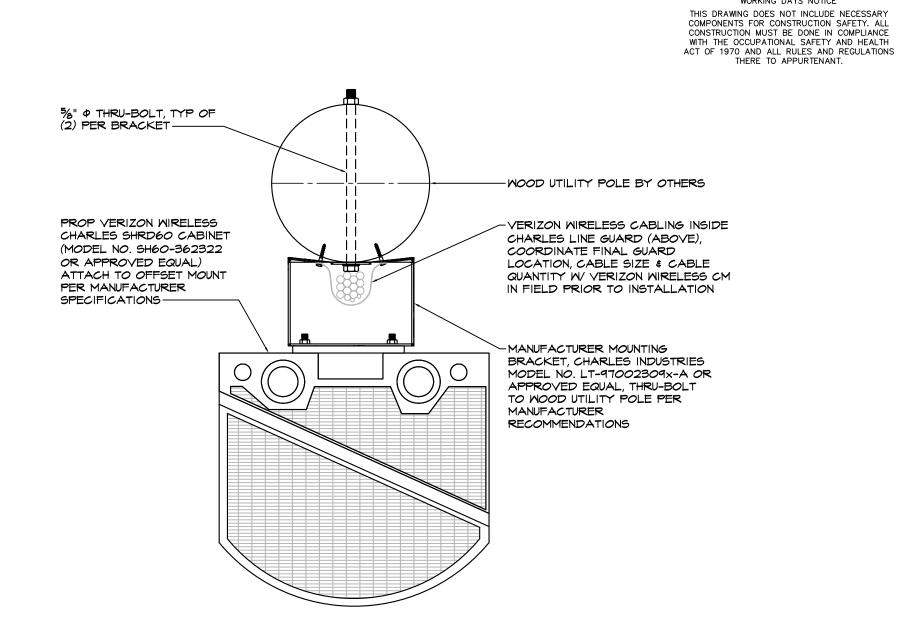






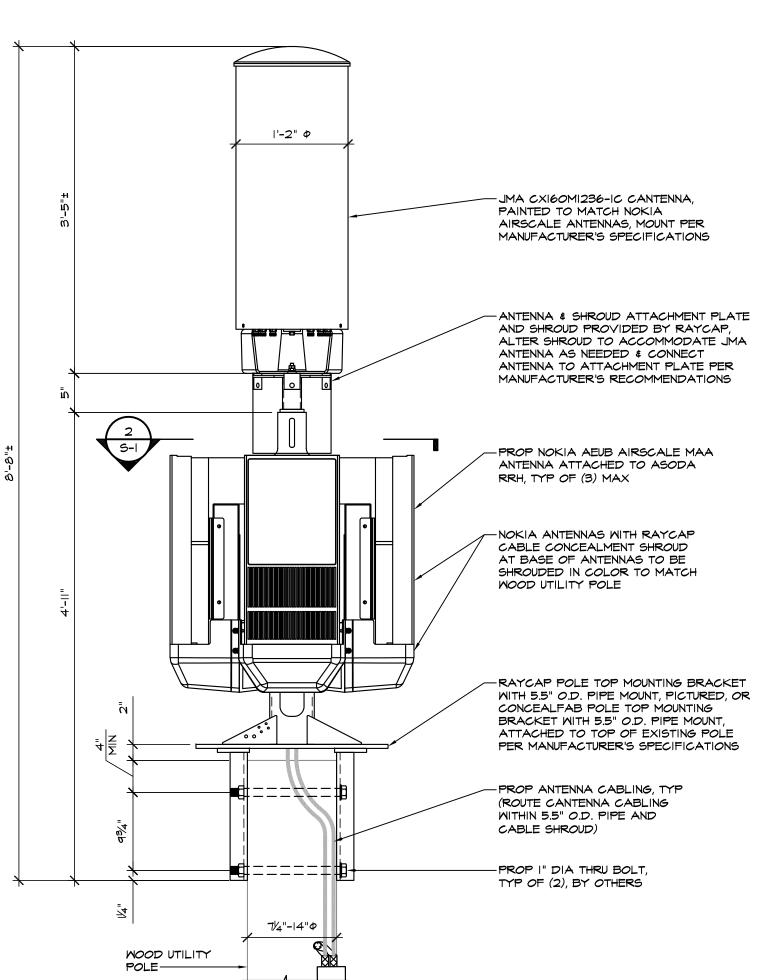
POLE EQUIPMENT SIDE ELEVATION

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



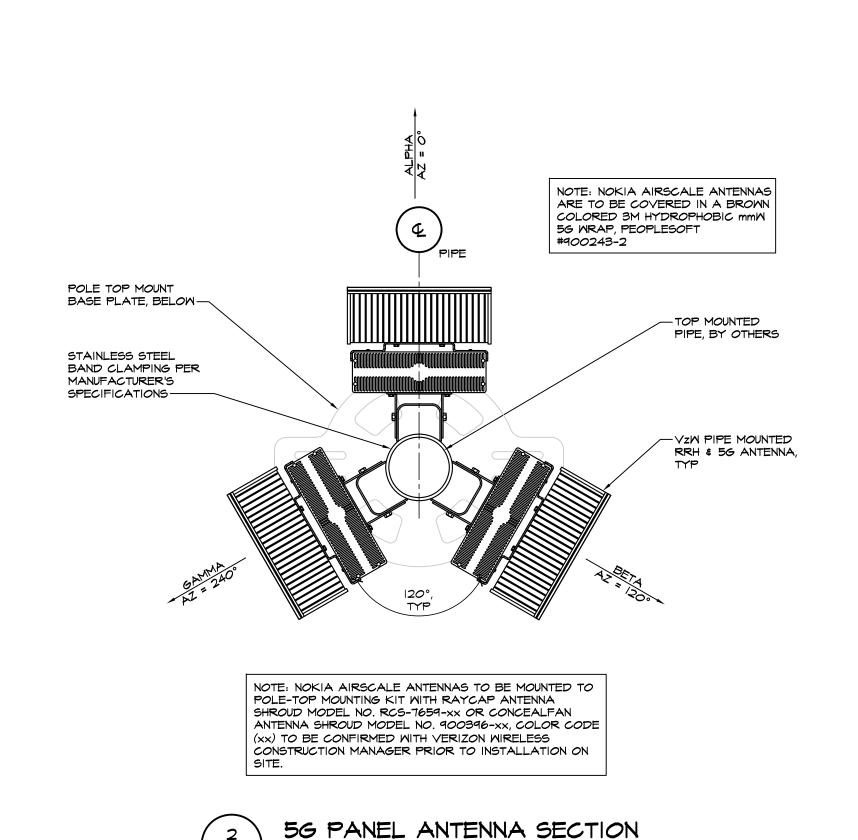
EQUIPMENT CABINET

SCALE: | |/2" = |'-0"

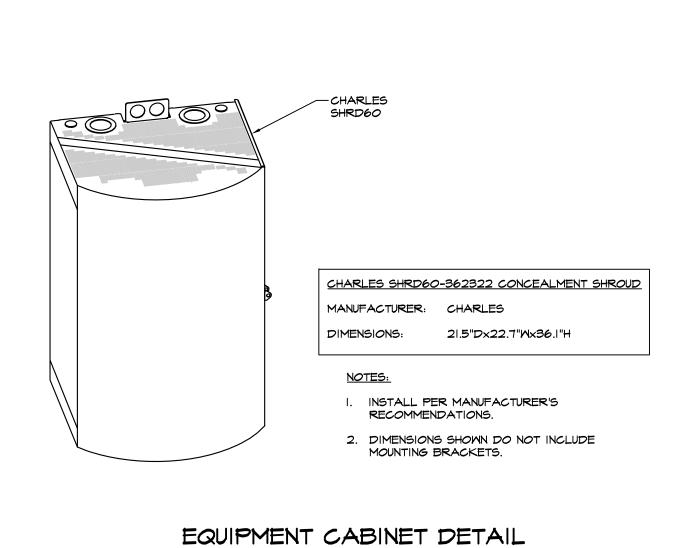


CANTENNA \$ 56 PANEL ANTENNA MOUNT

SCALE: |" = |'-0"



SCALE: |-|/2" = |'-0"



NOT TO SCALE

ASSOCIATES, INC.

Civil / Structural Engineers 1220-C East Joppa Road, Suite 505 Towson, Maryland 21286 410-821-1690

410-821-1748 Fax

Know what's **below.**

Call before you dig.

PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

GENERAL STRUCTURAL NOTES

BUILDING CODES

A. ALL CONSTRUCTION SHALL CONFORM WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE 2015 CONSTRUCTION CODE, THE TIA STANDARD (TIA-222-G) AND ALL SUBSEQUENT SUPPLEMENTS, THE INTERNATIONAL BUILDING CODE (IBC 2015) AND ALL SUBSEQUENT SUPPLEMENTS & DOCUMENTS.

116 MPH

90 MPH

B. IN ADDITION, ALL CONSTRUCTION SHALL CONFORM WITH ANY LOCAL CODES AND REQUIREMENTS.

A. THE DESIGN DEAD LOADING FOR ALL FRAMING IS BASED ON THE CONSTRUCTION MATERIALS SHOWN ON THE

- DRAWINGS. ALL FRAMING IS DESIGNED FOR THE WEIGHT OF THE EQUIPMENT INDICATED ON THE DRAWINGS.
- B. WIND LOAD DESIGN DATA

BASIC WIND SPEED (ULTIMATE 3-SECOND GUST): BASIC WIND SPEED (NOMINAL 3-SECOND GUST): RISK CATEGORY: WIND EXPOSURE CATEGORY:

C. SEISMIC LOAD DESIGN DATA

NOT APPLICABLE: Ss

MISCELLANEOUS

- A. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE CONTRACTOR OR OWNER FOR REVIEW BY THE ENGINEER. IF THE CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE ENGINEER WILL NOT BE RESPONSIBLE FOR STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT. THE SHOP DRAWINGS SHALL INDICATE ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMISSION AND MAKE ALL CORRECTIONS DEEMED NECESSARY.
- B. SEE CIVIL AND MEP CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION RELATING TO THE COORDINATION OF STRUCTURAL COMPONENTS.
- C. THE CONTRACTOR SHALL NOT SUBMIT REPRODUCTIONS OF THE STRUCTURAL CONTRACT DOCUMENTS AS SHOP
- D. SCALES SHOWN ON THE STRUCTURAL CONTRACT DRAWINGS ARE FOR GENERAL INFORMATION ONLY.
 DIMENSIONAL INFORMATION SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
- E. APPLY DETAILS, SECTIONS AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR NOTE.

STRUCTURAL AND MISCELLANEOUS STEEL

- A. ALL STEEL CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE AISC STEEL CONSTRUCTION MANUAL "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (ANSI/AISC 360) AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
- B. ALL MISCELLANEOUS STEEL (CHANNELS AND PLATES) SHALL CONFORM TO ASTM A36 (Fy = 36 KSI).
- C. ALL HSS SQUARE OR RECTANGULAR SHAPES SHALL CONFORM TO ASTM A500, GRADE B (FY = 46 KSI).
- D. ALL PIPES SHALL CONFORM TO ASTM A53, GRADE B (Fy = 35KSI)
- E. ALL THRU BOLTS SHALL CONFORM TO ASTM A307 (Fu = 60 KSI).
- F. ALL NUTS SHALL CONFORM TO ASTM A563. ALL WASHERS SHALL CONFORM TO ASTM F436.
- G. ALL SHOP WELDS SHALL BE PERFORMED BY CERTIFIED WELDERS AND CONFORM TO THE AMERICAN WELDING SOCIETY CODE FOR BUILDINGS AWS DI.I. WELDS SHALL DEVELOP THE FULL STRENGTH OF MATERIALS BEING WELDED UNLESS OTHERWISE INDICATED.
- H. AN INDEPENDENT INSPECTION AGENCY SHALL INSPECT ALL STRUCTURAL STEEL AND VERIFY THAT IT CONFORMS TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FIELD INSPECTION REPORTS SHALL BE SUBMITTED TO THE ENGINEER WITHIN 5 DAYS OF THE INSPECTION. THE CONTRACTOR SHALL NOTIFY THE INSPECTION AGENCY OF ALL PHASES OF STEEL CONSTRUCTION AND WELDING.
- I. STEEL MEMBERS, FABRICATIONS AND ASSEMBLIES EXPOSED TO WEATHER OR INDICATED TO BE GALVANIZED SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM AI23 AFTER FABRICATION. ALL BOLTS, SCREMS, WASHERS & NUTS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM F2329.
- J. PROVIDE HOLES IN STEEL AS REQUIRED TO PREVENT ANY ACCUMULATION OF WATER. ALL PENETRATIONS THROUGH MAIN MEMBERS SHALL NOT EXCEED I-1/2" DIA. AND SHALL BE GROUND SMOOTH. THESE DRAINS MUST BE KEPT CLEAN AND OPEN.
- K. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS INDICATING THE SIZES, EXTENT, AND LOCATION OF ALL STRUCTURAL AND MISCELLANEOUS STEEL FRAMING INCLUDING ALL CONNECTIONS, FASTENERS, AND BEARINGS.
- L. SHOW ALL COPES, HOLES, OPENINGS AND MODIFICATIONS REQUIRED IN STRUCTURAL STEEL MEMBERS FOR ERECTION OR THE WORK OF OTHER TRADES ON THE SHOP DRAWINGS FOR APPROVAL BY THE STRUCTURAL ENGINEER.

DOMINION NOTES:

A. A 9"XII" RF NOTICE SIGN MUST BE INSTALLED ON BOTH SIDES OF THE POLE A MINIMUM OF ONE FOOT ABOVE THE UPPERMOST ELECTRIC SUPPLY FACILITIES. THIS SIGN MARKS THE POINT WHERE RF EXPOSURE LEVELS MAY EXCEED "FCC OET-65 APPENDIX A" LIMITS FOR UNCONTROLLED GENERAL POPULATION EXPOSURE. WORKING ABOVE THIS POINT REQUIRES DE-ENERGIZING THE ANTENNA. THIS SIGN MUST INCLUDE THE STANDARD RF SYMBOL AND STATE "NON RF WORKERS MUST POWER DOWN DEVICE WHEN WORKING ABOVE THIS POINT." THE

SIGN SHALL BE 60 MIL LEXAN WITH U.V. INHIBITORS AND SIGNS SHALL ADHERE TO IEEE C95.2 STANDARDS.

- B. A POWER DISCONNECT MUST BE INSTALLED. THIS DEVICE MUST PROVIDE DISCONNECTING MEANS FOR DE-ENERGIZING AC AND DC (BATTERY BACK UP) POWER TO THE ANTENNA. THE DISCONNECT SHOULD BE A STANDARD NEMA TYPE HINGED ENCLOSURE AND IS SUBJECT TO COMPANY APPROVAL. THE DISCONNECT SHALL BE CLEARLY LABELED AS THE ANTENNA POWER DISCONNECT.
- C. AN ADDITIONAL RF LABEL ON THE EQUIPMENT MUST INCLUDE COMMUNICATION COMPANY NAME, AND A 24-HR CONTACT PHONE NUMBER. THE LABEL SHALL ADHERE TO IEEE C95.2 STANDARDS.
- D. THE ANTENNA SHALL BE MOUNTED THE GREATER VALUE OF NESC MINIMUM CLEARANCE OR THE MINIMUM CLEARANCE REQUIRED TO MEET OET UNCONTROLLED EXPOSURE GUIDELINES AT A POINT I' ABOVE THE ELECTRIC FACILITIES. THE ANTENNA INCLUDING ATTACHING HARDWARE SHALL BE MOUNTED A MINIMUM OF 45" ABOVE PRIMARY INSTALLATIONS AND 40" ABOVE SECONDARY INSTALLATIONS. (NESC TABLE 238-I)
- E. ANTENNA EQUIPMENT IS PERMISSIBLE ON WOOD POLES ONLY.
- F. ONLY NON METALLIC ELECTRIC GRADE CONDUIT OR RISERS CAN BE USED FOR ROUTING THE COMMUNICATION CABLES THROUGH THE SUPPLY SPACE. THE CONDUIT INSTALLATION SHALL NOT OBSTRUCT THE CLIMBING SPACE OR WORKING SPACE ON THE POLE AND SHALL NOT OBSTRUCT SUPPLY EQUIPMENT. (NESC 239B, AND NESC 238H4)
- G. THE INSTALLATION MUST MEET ALL NESC REQUIREMENTS.
- H. A DOMINION DISTRIBUTION REPRESENTATIVE MUST APPROVE ALL ANTENNA ATTACHMENT POLES. ANTENNAS ARE NOT ALLOWED ON POLES FREQUENTLY VISITED BY OPERATIONS PERSONNEL. THESE INCLUDE EQUIPMENT POLES SUCH AS RECLOSERS, THREE PHASE TRANSFORMER BANKS, THREE PHASE TERMINALS, CAPACITORS, SMITCHES, ETC.
- 1. INSTALLERS WORKING IN THE AREA OF THE POLE ABOVE THE NORMAL COMMUNICATIONS SPACE MUST MEET OSHA 1910.269 REQUIREMENTS.
- J. AN ANTENNA GROUND MIRE AND GROUNDING ELECTRODE IS REQUIRED. THIS GROUND SHALL BE BONDED TO THE COMPANY GROUND MIRE.
- K. VERIZON TO LEAVE MINIMUM 3' LEADS COILED AND SECURED TO PREVENT ACCIDENTAL CONTACT WITH SECONDARY CONDUCTORS.

- L. SERVICE WILL BE CONNECTED BY VERIZON IN COMPLIANCE WITH FILED RATE PLAN.
- M. LINE ARRESTER INSTALLATIONS ARE REQUIRED ON POLES WITH PRIMARY CONDUCTORS.
- N. VERIZON'S GROUND MAY NOT BE USED TO SATISFY NEC REQUIREMENTS FOR THE EQUIPMENT BRACKET AC SERVICE GROUND. THE EQUIPMENT AND ITS AC SERVICE GROUND ARE REQUIRED TO BE BONDED TO THE COMPANY GROUND CONDUCTOR ON THE POLE AT LEAST 6" ABOVE GROUND LEVEL USING A NO. 6 CU CONDUCTOR. CONNECTION TO THE COMPANY'S GROUND ROD OR CONNECTOR IS NOT APPROVED.
- O. BONDS SHALL BE MADE BETWEEN THE GROUND WIRE AND THE EQUIPMENT CABINET (NOT NEUTRAL BUS) OF THE POWER SUPPLY/SWITCH. THESE CONNECTIONS ARE TO AVOID POTENTIAL DIFFERENCES BETWEEN DEVICES ON THE POLES. BOND TO THE POWER SUPPLY/SWITCH SHALL BE EXTERNAL AND VISIBLE FROM THE GROUND. WHEN A COMPANY DRIVEN GROUND EXISTS ON THE POLE, THE EQUIPMENT CASE BONDING WIRE NEED EXTEND ONLY FROM THE SWITCH TO THE COMPANY GROUND WIRE.
- P. THE METER BASE, EQUIPMENT BRACKET, AND DISCONNECT SHOULD BE MOUNTED PROVIDING EIGHT FEET MINIMUM GROUND CLEARANCE. THEY MAY BE MOUNTED AT OPERATIONAL HEIGHT THAT: I. THE EQUIPMENT BRACKET DOES NOT OBSTRUCT A WALKWAY OR IS SUBJECT TO VEHICULAR TRAFFIC. 2. THE EQUIPMENT BRACKET CAN NOT BE USED ALONE OR IN CONJUNCTION WITH A FENCE, PEDESTAL, ETC. AS
- Q. FOR SAFETY PURPOSES DEVICES WITH LEAD ACID BATTERIES SHALL NOT BE USED.
- R. DUE TO OPERATIONAL CONCERNS, SECONDARY POLES OR GUY STUB POLES ARE PREFERRED FOR ANTENNA ATTACHMENTS. PRIMARY POLES SHOULD ONLY BE CONSIDERED WHEN THERE IS NO OTHER SUITABLE POLE IN THE AREA.
- S. 60 WATT REMOTE RADIO HEAD (RRH) CAN BE SUBSTITUTED FOR THE 90 WATT RRH AS NEEDED.
- T. THE WEATHERHEAD WILL BE INSTALLED 4" ABOVE THE NEUTRAL.

POST-INSTALLATION INSPECTION

A CLIMBING AID.

- A. A POST-INSTALLATION INSPECTION REPORT IS REQUIRED AND SHALL BE INCLUDED IN THE CONTRACTOR'S BID. A POST-INSTALLATION INSPECTION IS A VISUAL INSPECTION OF TOWER INSTALLATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE INSTALLATION DRAWINGS.
- B. THE POST-INSTALLATION INSPECTION REPORT SHALL BE COMPLETED BY A PROFESSIONAL ENGINEER LICENSED IN THE JURISDICTION IN WHICH THE PROJECT IS LOCATED.
- C. THE INTENT OF THE POST-INSTALLATION INSPECTION REPORT IS TO CONFIRM INSTALLATION AND CONFIGURATION AND WORKMANSHIP ONLY AND IS <u>NOT</u> A REVIEW OF THE INSTALLATION DESIGN ITSELF.
- D. TO ENSURE THAT THE REQUIREMENTS OF THE POST-INSTALLATION INSPECTION REPORT ARE MET, IT IS VITAL THAT THE CONTRACTOR AND POST-INSTALLATION INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PO IS RECEIVED.

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EXOLDT OOG - SMALL CELL
ON NEAR IOOI CAMERON STREET
EXANDRIA, VIRGINIA 22314 (ALEXAND

REVISIONS:

NO. DESCRIPTION DATE

PERMIT DWGS 01/24/20

DESIGNED BY: RJD

DRAWN BY: FJ

PROJECT NO: 10427.2924

DATE: 1/16/2020

SCALE: A5 NOTED

ITLE:

General

Notes

GIIDDE

S-2

ELECTRICAL SPECIFICATIONS

- SECTION 16010 BASIC ELECTRICAL REQUIREMENTS
 - A. THE WORK INCLUDES FURNISHING AND INSTALLING THE MATERIAL, EQUIPMENT AND SYSTEMS COMPLETE AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS. THE ELECTRICAL INSTALLATIONS, WHEN FINISHED, SHALL BE COMPLETE AND COORDINATED AND READY FOR SATISFACTORY SERVICE.
- B. ALL WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE MUNICIPAL, STATE, BOCA, AND LOCAL ELECTRICAL CODES THAT GOVERN EACH PARTICULAR TRADE AND THE 2014 NATIONAL ELECTRICAL CODE.
- C. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL EQUIPMENT INSTALLATION WITH ALL TRADES.
- D. THE CONTRACTOR SHALL MAKE APPLICATION AND PAY ALL CHARGES FOR ALI NECESSARY PERMITS, LICENSES, AND INSPECTIONS AS REQUIRED UNDER THE ABOVE CODES. UPON COMPLETION OF THE WORK, THE CUSTOMARY CERTIFICATIONS OF APPROVAL SHALL BE FURNISHED.
- E. NO MATERIALS OR EQUIPMENT SHALL BE USED IN THE WORK UNTIL APPROVED. ALL MATERIALS SHALL BE U.L. LISTED.
- F. THE CONTRACTOR SHALL EXAMINE ALL DRAWINGS AND SHALL INSPECT THE EXISTING CONDITIONS OF THE SITE. FAILURE TO COMPLY WITH THIS REQUIREMENT WILL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.
- G. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF THE ELECTRICAL INSTALLATIONS. DETAILS OF PROPOSED DEPARTURES DUE TO ACTUAL FIELD CONDITIONS OR OTHER CAUSES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION. REWORK OF COMPLETED ITEMS DUE TO IMPROPER FIELD COORDINATION SHALL BE AT THE CONTRACTOR'S EXPENSE
- H. PROVIDE SUFFICIENT ACCESS AND CLEARANCE FOR ALL ITEMS OF EQUIPMENT REQUIRING SERVICING AND MAINTENANCE.
- I. THE CONTRACTOR SHALL PERFORM ALL NECESSARY CUTTING AND PATCHING AS REQUIRED TO COMPLETE THE INSTALLATIONS. PATCHING OF WALLS, FLOORS, CEILINGS, ETC. SHALL MATCH THE ADJACENT SURFACES.
- J. UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PRINTS OF THE ELECTRICAL CONTRACT DRAWINGS WHICH SHALL BE LEGIBLY MARKED IN RED TO SHOW ALL CHANGES AND DEPARTURES OF THE INSTALLATIONS COMPARED WITH THE ORIGINAL DESIGN. THEY SHALL BE SUITABLE FOR USE IN PREPARATION OF RECORD DRAWINGS.
- K. GUARANTEE: ALL NEW ELECTRICAL INSTALLATIONS SHALL BE GUARANTEED FOR A PERIOD OF ONE (I) YEAR BEGINNING THE DAY OF THE FINAL ACCEPTANCE OF THE WORK OR BENEFICIAL OCCUPANCY OF THE OWNER, WHICHEVER OCCURS FIRST. THE ABOVE SHALL NOT IN ANY WAY VOID OR ABBROGATE EQUIPMENT MANUFACTURER'S GUARANTEE OR WARRANTY. CERTIFICATES OF GUARANTEE SHALL BE DELIVERED TO THE OWNER. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE ELECTRICAL INSTALLATION DURING THE GUARANTEE PERIOD, NEW REPLACEMENT PARTS SHALL BE FURNISHED AND INSTALLED PROMPTLY AND AT NO COST TO VERIZON.
- L. ANY ELECTRICAL WORK WHICH WILL INTERFERE WITH THE NORMAL OPERATION OF THE STREET LIGHT SHALL BE DONE AT SUCH TIME OR TIMES AS SHALL BE MUTUALLY AGREED UPON BETWEEN THE CONTRACTOR AND THE BGE/BALTIMORE CITY REPRESENTATIVE.
- M. SUPPORTS, HANGERS, AND FOUNDATIONS: PROVIDE ALL SUPPORTS, HANGERS BRACES, ATTACHMENTS, AND FOUNDATIONS REQUIRED FOR THE WORK. SUPPORT AND SET THE WORK IN A THOROUGHLY SUBSTANTIAL AND WORKMANLIKE MANNER WITHOUT PLACING STRAINS ON THE MATERIALS, EQUIPMENT, OR THE BUILDING STRUCTURE. SUPPORTS, HANGERS, BRACES AND ATTACHMENTS SHALL BE STANDARD MANUFACTURED ITEMS *O*R FABRICATED STRUCTURAL STEEL SHAPES
- N. THERE SHALL BE NO INTERRUPTION OF POWER TO EXISTING ELECTRICAL SYSTEMS WITHOUT PRIOR CONSENT FROM VERIZON. SUCH INTERRUPTIONS SHALL BE KEPT TO A MINIMUM AND SHALL BE SCHEDULED WITH THE OWNER AT LEAST THREE BUSINESS DAYS IN ADVANCE OF THE OUTAGE. ANY COST FOR WORK THAT MUST BE DONE ON AN OVERTIME BASIS SHALL BE INCLUDED IN THE BID.
- O. MOUNTING AND SUPPORTING OF ALL EQUIPMENT PROVIDED BY THIS CONTRACTOR SHALL BE COORDINATED WITH VERIZON IN THE FIELD.
- P. PROVIDE ALL CUTTING AND PATCHING NECESSARY FOR THE INSTALLATION OF THE ELECTRICAL WORK. ANY DAMAGE DONE TO THE WORK ALREADY IN PLACE BY REASON OF THIS WORK SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE BY A QUALIFIED MECHANIC EXPERIENCED IN SUCH WORK. PATCHING SHALL BE UNIFORM IN APPEARANCE AND SHALL MATCH THE SURROUNDING SURFACE. ALL PENETRATIONS THROUGH WALLS OF NEW ROOM SHALL BE SEALED WEATHERTIGHT

2. <u>SECTION 16050 - BASIC ELECTRICAL MATERIALS & METHODS</u>

A. CONDUIT & BOXES:

- ALL CONDUIT BELOW GRADE SHALL BE SCHEDULE 40 PVC. ALL CONDUIT ABOVE GRADE SHALL BE NON METALLIC ELECTRIC GRADE.
- 2. JUNCTION AND PULL BOXES SHALL BE FURNISHED AND INSTALLED AS SHOWN OR WHERE REQUIRED TO FACILITATE PULLING OF WIRES OR CABLES. SUCH BOXES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS. GASKETED COVER PLATES BE FURNISHED FOR OUTDOOR INSTALLATIONS.
- 3. ALL BOXES, WHETHER OUTLET, JUNCTION, PULL, OR EQUIPMENT SHALL BE FURNISHED WITH APPROPRIATE COVERS.
- 4. NO SECTIONALIZED BOXES SHALL BE USED.
- 5. ALL EMT CONDUIT FITTINGS SHALL BE COMPRESSION TYPE.
- 6. ALL FIELD CUTS OF GALVANIZED ITEMS SHALL BE BRUSHED WITH MARINE GRADE GALVANIZING.
- 7. ALL METALLIC OBJECTS EXPOSED TO MEATHER SHALL BE GALVANIZED.

B. <u>MIRES & CABLE:</u>

- BUILDING WIRE, UNLESS OTHERWISE INDICATED, SHALL BE 600 VOLT, TYPE THWN INSULATION FOR INTERIOR AND EXTERIOR USE. CONDUCTORS SHALL BE SOFT DRAWN COPPER OF NOT LESS THAN 98% CONDUCTIVITY. NO ROMEX OR AC (BX) CABLE WILL BE ALLOWED ON THE PROJECT.
- 2. NO WIRE SMALLER THAN NO. TWELVE (12) AWG SHALL BE USED UNLESS OTHERWISE INDICATED. CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND FROM TERMINAL BOARD TO POINT OF FINAL CONNECTION, AND NO SPLICE SHALL BE MADE EXCEPT WITHIN OUTLET OR JUNCTION BOXES. ÁLL CONDUCTORS SHALL BE OF THE SIZES AS INDICATED. ALL WIRES NO. EIGHT (8) AWG AND LARGER SHALL BE STRANDED. THE CONTRACTOR SHALL MAKE WIRING CONNECTIONS OF ALL ELECTRICAL EQUIPMENT REQUIRING ELECTRICAL SERVICE. WIRES AND CABLES SHALL BE AS MANUFACTURED BY PIRELLI, ROYAL, AND TRIANGLE OR EQUIVALENT.
- 3. ALL WIRING SHALL BE COLOR CODED. MATCH EXISTING SYSTEM COLOR CODING WHERE APPLICABLE.

C. <u>DISCONNECTS:</u>

FURNISH AND INSTALL SAFETY SWITCHES WHERE INDICATED AND AS REQUIRED FOR MOTOR OUTLETS OR OTHER EQUIPMENT. SWITCHES SHALL BE OF SIZE, NUMBER OF POLES AND FUSED OR NON-FUSED, AS REQUIRED FOR JOB CONDITIONS AND THE NATIONAL ELECTRICAL CODE.

D. GROUNDING:

- PROVIDE GROUND FOR ALL RACEWAYS, DEVICES, AND UTILIZATION EQUIPMENT PERMANENTLY AND EFFECTIVELY IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, AS HERINAFTER SPECIFIED. ALL GROUNDING AND BONDING CONNECTIONS SHALL BE SOLDERLESS.
- 2. PROVIDE INSULATED GROUNDING CONDUCTORS FOR FEEDER AND BRANCH CIRCUIT WIRING AS CALLED FOR ON THE PLANS. PROVIDE GROUNDING BLOCKS, FERMINALS, ETC., FOR CONNECTION OF GROUND WIRE IN ALL DISTRIBUTION
- 3. <u>SECTION 16400 SERVICE & DISTRIBUTION</u>

A. ELECTRICAL SERVICE:

ELECTRICAL POWER TO THE NEW EQUIPMENT SHALL BE EXTENDED FROM THE PROPOSED UTILITY METER AND SERVICE ENTRANCE RATED LOAD CENTER PANEL MOUNTED ON NEW POLE. LABEL METER WITH PHENOLIC NAMEPLATE READING "VERIZON WIRELESS". LABEL PANEL WITH PHENOLIC NAMEPLATE READING "VERIZON WIRELESS SERVICE DISCONNECT".

B. COMMUNICATIONS SERVICE:

- TELEPHONE SERVICE SHALL BE EXTENDED BY THE TELEPHONE COMPANY. PROVIDE SERVICE CONDUITS, BACKBOARDS, SLEEVES, AND OTHER EQUIPMENT SHOWN ON THE DRAWINGS FOR USE BY THE TELEPHONE COMPANY. ALL CHARGES BY THE UTILITY COMPANY SHALL BE PAID BY THE OWNER.
- 2. ALL ELBOWS IN CONDUIT RUNS SHALL BE WIDE SWEEP FIELD BENDS. INSTALL PULL BOXES AS REQUIRED AND WHERE DIRECTED BY THE TELEPHONE COMPANY AND/OR AS REQUIRED BY THE NATIONAL ELECTRICAL CODE.

DOMINION SPECIFICATIONS

- I. A 9"XII" RF NOTICE SIGN MUST BE INSTALLED ON BOTH SIDES OF THE POLE A MINIMUM OF ONE FOOT ABOVE THE UPPERMOST ELECTRIC SUPPLY FACILITIES. THIS SIGN MARKS THE POINT WHERE RF EXPOSURE LEVELS MAY EXCEED "FCC OET-65 APPENDIX A" LIMITS FOR UNCONTROLLED GENERAL POPULATION EXPOSURE. WORKING ABOVE THIS POINT REQUIRES DE-ENERGIZING THE ANTENNA. THIS SIGN MUST INCLUDE THE STANDARD RF SYMBOL AND STATE "NON RF WORKERS MUST POWER DOWN DEVICE WHEN WORKING ABOVE THIS POINT." THE SIGN SHALL BE 60 MIL LEXAN WITH U.V. INHIBITORS AND SIGNS SHALL ADHERE TO IEEE C95.2 STANDARDS.
- 2. A POWER DISCONNECT MUST BE INSTALLED. THIS DEVICE MUST PROVIDE DISCONNECTING MEANS FOR DE-ENERGIZING AC AND DC (BATTERY BACK UP) POWER TO THE ANTENNA. THE DISCONNECT SHOULD BE A STANDARD NEMA TYPE HINGED ENCLOSURE AND IS SUBJECT TO COMPANY APPROVAL. THE DISCONNECT SHALL BE CLEARLY LABELED AS THE ANTENNA POWER DISCONNECT.
- 3. AN ADDITIONAL RF LABEL ON THE EQUIPMENT MUST INCLUDE COMMUNICATION COMPANY NAME, AND A 24-HR CONTACT PHONE NUMBER. THE LABEL SHALL ADHERE TO IEEE C95.2 STANDARDS.
- 4. THE ANTENNA SHALL BE MOUNTED THE GREATER VALUE OF NESC MINIMUM CLEARANCE OR THE MINIMUM CLEARANCE REQUIRED TO MEET OF UNCONTROLLED EXPOSURE GUIDELINES AT A POINT I' ABOVE THE ELECTRIC FACILITIES. THE ANTENNA INCLUDING ATTACHING HARDWARE SHALL BE MOUNTED A MINIMUM OF 45" ABOVE PRIMARY INSTALLATIONS AND 40" ABOVE SECONDARY INSTALLATIONS. (NESC TABLE 238-I)
- 5. ANTENNA EQUIPMENT IS PERMISSIBLE ON WOOD POLES ONLY.
- 6. ONLY NON METALLIC ELECTRIC GRADE CONDUIT OR RISERS CAN BE USED FOR ROUTING THE COMMUNICATION CABLES THROUGH THE SUPPLY SPACE. THE CONDUIT INSTALLATION SHALL NOT OBSTRUCT THE CLIMBING SPACE OR WORKING SPACE ON THE POLE AND SHALL NOT OBSTRUCT SUPPLY EQUIPMENT. (NESC 239B, AND NESC 239H4).
- 7. THE INSTALLATION MUST MEET ALL NESC REQUIREMENTS.
- 8. A DOMINION DISTRIBUTION REPRESENTATIVE MUST APPROVE ALL ANTENNA ATTACHMENT POLES. ANTENNAS ARE NOT ALLOWED ON POLES FREQUENTLY VISITED BY OPERATIONS PERSONNEL. THESE INCLUDE EQUIPMENT POLES SUCH AS RECLOSERS, THREE PHASE TRANSFORMER BANKS, THREE PHASE TERMINALS, CAPACITORS, SWITCHES, ETC.
- 9. INSTALLERS WORKING IN THE AREA OF THE POLE ABOVE THE NORMAL COMMUNICATIONS SPACE MUST MEET OSHA 1910.269 REQUIREMENTS

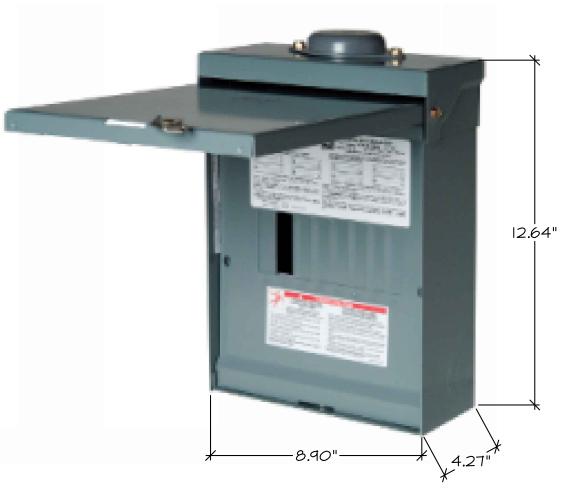
- IO. AN ANTENNA GROUND WIRE AND GROUNDING ELECTRODE IS REQUIRED. THIS GROUND SHALL BE BONDED TO THE COMPANY GROUND WIRE.
- II. VERIZON TO LEAVE MINIMUM 3' LEADS COILED AND SECURED TO PREVENT ACCIDENTAL CONTACT WITH SECONDARY CONDUCTORS.
- 12. SERVICE WILL BE CONNECTED BY VERIZON IN COMPLIANCE WITH FILED RATE PLAN.
- 13. LINE ARRESTER INSTALLATIONS ARE REQUIRED ON POLES WITH PRIMARY CONDUCTORS.
- 14. VERIZON'S GROUND MAY NOT BE USED TO SATISFY NEC REQUIREMENTS FOR THE EQUIPMENT BRACKET AC SERVICE GROUND. THE EQUIPMENT AND ITS AC SERVICE GROUND ARE REQUIRED TO BE BONDED TO THE COMPANY GROUND CONDUCTOR ON THE POLE AT LEAST 6" ABOVE GROUND LEVEL USING A No. 6 CU CONDUCTOR. CONNECTION TO THE COMPANY'S GROUND ROD OR CONNECTOR IS NOT APPROVED.
- 15. BONDS SHALL BE MADE BETWEEN THE GROUND WIRE AND THE EQUIPMENT CABINET (NOT NEUTRAL BUS) OF THE POWER SUPPLY/SWITCH. THESE CONNECTIONS ARE TO AVOID POTENTIAL DIFFERENCES BETWEEN DEVICES ON THE POLES. BOND TO THE POWER SUPPLY/SWITCH SHALL BE EXTERNAL AND VISIBLE FROM THE GROUND. WHEN A COMPANY DRIVEN GROUND EXISTS ON THE POLE, THE EQUIPMENT CASE BONDING WIRE NEED EXTEND ONLY FROM THE SWITCH TO THE COMPANY GROUND WIRE.
- 16. THE METER BASE, EQUIPMENT BRACKET, AND DISCONNECT SHOULD BE MOUNTED PROVIDING EIGHT FEET MINIMUM GROUND CLEARANCE. THEY MAY BE MOUNTED AT OPERATIONAL HEIGHT THAT: A. THE EQUIPMENT BRACKET DOES NOT OBSTRUCT A WALKWAY OR IS SUBJECT TO VEHICULAR TRAFFIC B. THE EQUIPMENT BRACKET CAN NOT BE USED ALONE OR IN CONJUNCTION WITH A FENCE, PEDESTAL, ETC. AS A CLIMBING AID.
- 17. FOR SAFETY PURPOSES DEVICES WITH LEAD ACID BATTERIES SHALL NOT BE USED.
- 18. DUE TO OPERATIONAL CONCERNS, SECONDARY POLES OR GUY STUB POLES ARE PREFERRED FOR ANTENNA ATTACHMENTS. PRIMARY POLES SHOULD ONLY BE CONSIDERED WHEN THERE IS NO OTHER SUITABLE POLE IN THE AREA.
- 19. ONE RADIO CABINET, A SERVICE DISCONNECT AND THE METER BASE MAY BE POLE MOUNTED. ADDITIONAL EQUIPMENT, OR LARGE CABINETS SHALL BE PAD MOUNTED. PAD MOUNTED EQUIPMENT MUST BE LOCATED A MINIMUM OF 10' FROM THE BASE OF THE POLE.

ELECTRICAL SYMBOLS LIST

ALL MOUNTING HEIGHTS ARE TO CENTER LINE OF THE OUTLET BOX UNLESS OTHERWISE INDICATED.



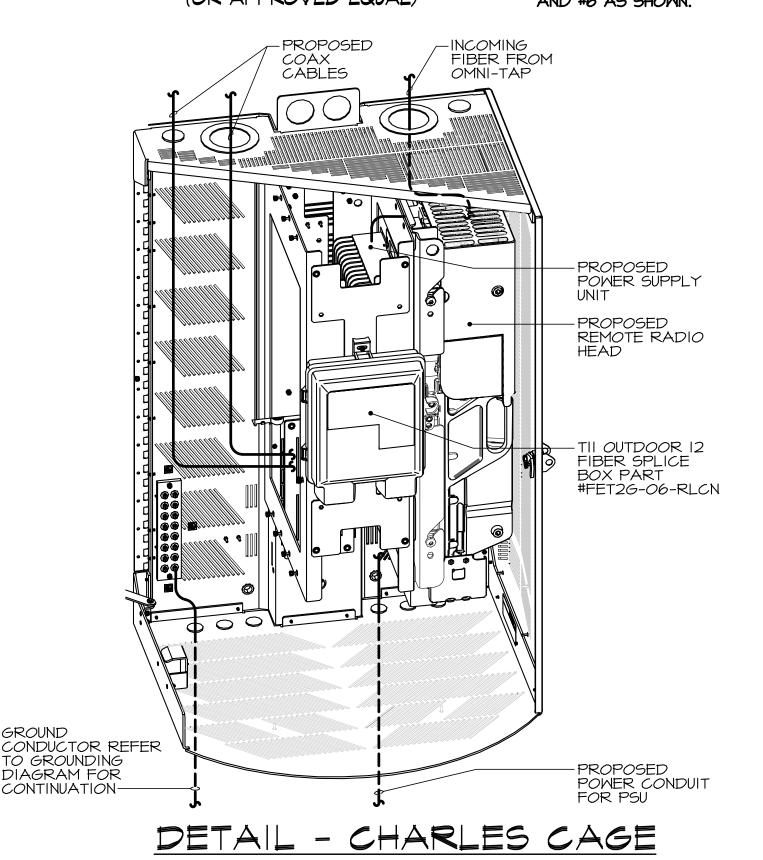
DETAIL - LOAD BURIED GROUND ROD CENTER PLACARD NO SCALE DESIGNATES FRONT



DETAIL - SQUARE-D QOSIGLIOORB (OR APPROVED EQUAL

(PROPOSED) (NEMA 3R)										
PANEL "VERIZON WIRELESS"										
120/2	40 VOLTS	143	M	RE	: 10	00	Α١	1P	MAIN	l L.O.
ο⊻⊢	1 2	3	4	1	Ę	5	6	ć	7	8
$v \propto r \propto$	40	15	15	15	15	15	5	5	١	_
DESCRIPTION	MAIN	NOKIA PSU	NOKIA RADIO UNIT #I	ASODA #	NOKIA RADIO UNIT #2	ASODA #2	NOKIA RADIO UNIT #3	ASODA #3	SPACE	SPACE
POME	POWER LOAD: 3.31 KVA x 125% = 4.14 KVA = 17.25 AMPS @ 120/240V, 1Φ, 3W									

- * PANEL SHALL BE LOCKABLE WITH PADLOCK. ** PANEL SHALL BE SERVICE ENTRANCE RATED.
- *** PANELBOARD SHALL BE EQUIPPED WITH A TYPEWRITTEN DIRECTORY, INDICATING PLAINLY WHAT EACH CIRCUIT OF THE PANEL CONTROLS. THIS SCHEDULE SHALL BE PLACED ON FRONT COVER OF PANEL.
- **** CONTRACTOR SHALL PROVIDE AND INSTALL 15 AMP TANDEM BREAKERS IN SPACE #4, #5 AND #6 AS SHOWN.



NOT TO SCALE

ELEGENT ENGINEERING I 2216 Commerce Road, Suite 1 Forest Hill, MD 21050 410-692-5816 www.tel-eng.com

REVISIONS: NO.|DESCRIPTION| DATE |PERMIT DWGS.|1/24/2 LAST REV.: PROJECT NO:191656 DATE: January 24, 2020 AS NOTE

SPECIFICATIONS,

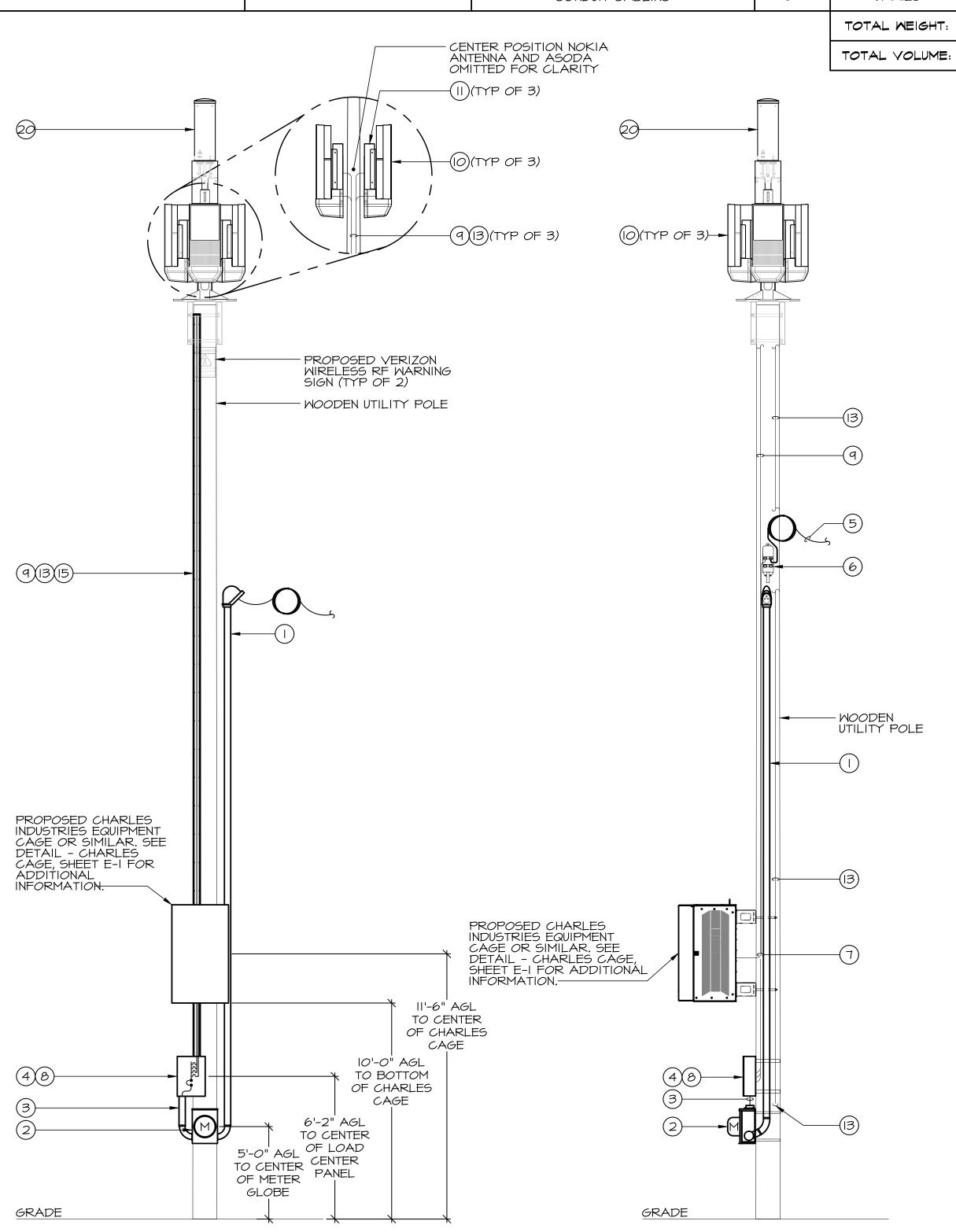
PANEL SCHEDULE

SYMBOLS LIST

and details

SHEET

TEI#191656



14 POWER RISER DIAGRAMS NO SCALE

SIDE VIEW

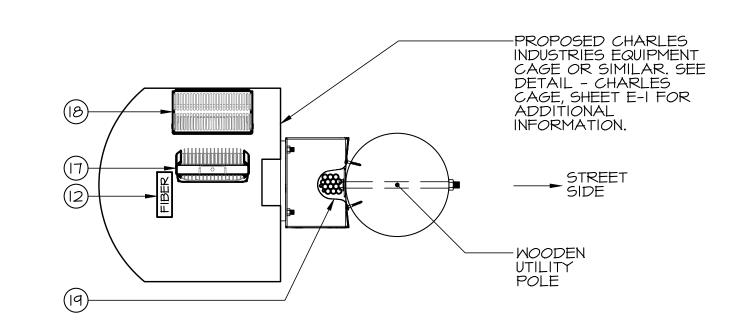
FRONT VIEW

DRAWING NOTES

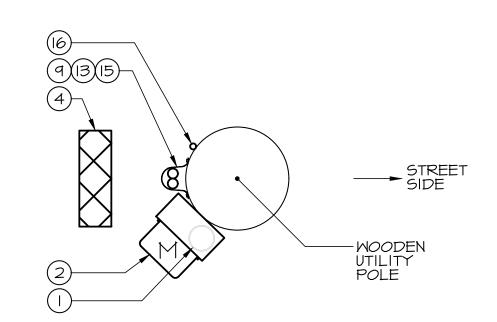
360.46 LB9

7.62 CU.FT

- EXTEND 3#1/O AWG + #6 GRD IN ONE (I) 2" PVC CONDUIT VERTICALLY UP UTILITY POLE FROM LINE SIDE OF METER CAN FOR EXTENSION OF OVERHEAD ELECTRIC SERVICE CABLES. COORDINATE FINAL CONDUIT TERMINATION POINT WITH UTILITY REPRESENTATIVE IN THE FIELD. PROVIDE WEATHER HEAD AT TOP END OF CONDUIT AS NECESSARY. CONTRACTOR SHALL TRANSITION TO FLEX PRIOR TO FINAL CONNECTION TO METER CAN. ELECTRICIAN SHALL ALLOW 3'-O" OF SLACK AT WEATHERHEAD AND METER FOR FINAL TERMINATIONS BY UTILITY COMPANY. CONTRACTOR MUST REFER TO DOMINION BLUE BOOK 2017. OVERHEAD SERVICE REQUIREMENTS FOR ADDITIONAL INFORMATION.
- 2 PROVIDE WEATHERPROOF UTILITY COMPANY LIGHT DUTY METER CAN MOUNTED ON UTILITY POLE. METER GLOBE PROVIDED AND INSTALLED BY UTILITY COMPANY. PROVIDE PHENOLIC NAMEPLATE READING "VERIZON WIRELESS".
- (3) EXTEND 3#6 AWG + #8 GRD I" CONDUIT. FROM METER UP TO PANEL.
- PROVIDE AND INSTALL WEATHERPROOF SERVICE ENTRANCE RATED, 120/240 VOLT, 1¢, 3W, 100 AMP M.L.O EIGHT (8) POSITION QO LOAD CENTER PANEL (MODEL #QO816L100RB) OR APPROVED EQUAL WITH FIELD INSTALLED 2P40A MAIN CIRCUIT BREAKER MOUNTED ABOVE METER CAN ON UTILITY POLE. PROVIDE PHENOLIC NAMEPLATE READING, "VERIZON WIRELESS SERVICE DISCONNECT". REFER TO PANEL SCHEDULE, SHEET E-1 FOR ADDITIONAL INFORMATION.
- 5 PROPOSED ROUTE OF INCOMING OVERHEAD FIBER CABLE BY UTILITY COMPANY. EXCESS FIBER SHALL BE COILED AND SECURED TO UTILITY POLE ABOVE ALL EQUIPMENT. COORDINATE FINAL INCOMING FIBER ROUTE WITH UTILITY COMPANY.
- 6 UTILITY COMPANY PROVIDED AND INSTALLED OPTISHEATH MULITPORT TERMINAL MOUNTED ON UTILITY POLE. EXACT MOUNTING LOCATION SHALL BE COORDINATED WITH VERIZON TELEPHONE IN FIELD.
- 7 EXTEND NECESSARY FIBER STRANDS FROM OPTISHEATH MULTIPORT TERMINAL TO TII FIBER BOX MOUNTED WITHIN CHARLES
- 8 VERIZON CONTRACTOR SHALL COORDINATE FINAL AVAILABLE SERVICE CHARACTERISTICS (VOLTAGE, PHASE, ETC.) WITH UTILITY COMPANY PRIOR TO START OF WORK. PREFERRED VOLTAGE IS: 120/240V, 10, ACCEPTABLE VOLTAGE IS: 120/208V, 10
- 9 EXTEND 4#12 AWG + #12 GRD FROM EACH 15 AMP TANDEM BREAKER (TYP OF 3) IN 1" CONDUIT VERTICALLY UP UTILITY POLE TO EACH NOKIA ANTENNA/ ASODA RADIO UNIT MOUNTED ON UTILITY POLE. REFER TO PANEL SCHEDULE, SHEET E-I, FOR ADDITIONAL INFORMATION.
- (IO) VERIZON WIRELESS PROVIDED, CONTRACTOR INSTALLED NOKIA ANTENNA MOUNTED ON UTILITY POLE.
- (I) VERIZON WIRELESS PROVIDED, CONTRACTOR INSTALLED NOKIA ASODA MOUNTED BEHIND NOKIA ANTENNA ON UTILITY POLE.
- PROVIDE AND INSTALL TII OUTDOOR FIBER BOX PART #FET26-12-RLCN 12 FIBER SPLICE BOX WITHIN CHARLES CAGE FOR FIBER DISTRIBUTION
- (3) EXTEND ONE (1) WEATHERPROOF RATED CAT 5E CABLE FROM EACH ASODA AND COIL UP AT BASE OF LOAD CENTER. PROVIDE AND INSTALL RJ45 PLUG KIT WITH CAP TO KEEP CONNECTION WEATHERPROOF (TYP OF 3).
- (14) CONTRACTOR SHALL REFER TO LATEST EDITION OF VZW FIBER DESIGN STANDARDS FOR FIBER QUANTITIES, ETC.
- (5) CONTRACTOR SHALL PROVIDE AND INSTALL SCHEDULE 40 PV MOLD (POLE RISER) FOR EXTENSION OF POWER AND FIBER CONDUITS TO NOKIA ANTENNAS. REFER TO STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION.
- (6) CONTRACTOR SHALL PROVIDE AND INSTALL 1/2" GROUND WIRE MOLDING. SECURE GROUND WIRE MOLDING TO UTILITY POLE VIA GALVANIZED 2"X5/8" STAPLES. REFER TO SHEET E-3 FOR ADDITIONAL INFORMATION.
- VERIZON WIRELESS PROVIDED AND CONTRACTOR INSTALLED NOKIA AIRSCALE POWER SUPPLY UNIT FOR EXTENSION OF DC WIRING TO RRH. CONTRACTOR SHALL EXTEND 2#12 AWG + #12 GRD 3/4" CONDUIT FROM POWER SUPPLY UNIT TO IPI5A CIRCUIT BREAKER IN VERIZON WIRELESS LOAD CENTER PANEL. VERIFY FINAL LENGTH WITH EXISTING CONDITIONS IN THE FIELD. REFER TO PANEL SCHEDULE, SHEET E-I, FOR ADDITIONAL INFORMATION.
- (B) PROPOSED LOCATION OF REMOTE RADIO HEAD MOUNTED IN CHARLES CAGE ON UTILITY POLE.
- (9) EXTEND FOUR (4) COAX AND ONE (1) RET CABLE INSIDE SCHEDULE 40 PV MOLD FROM REMOTE RADIO HEAD MOUNTED IN CHARLES CAGE AND TURN VERTICALLY UP TO ANTENNA MOUNTED ON TOP OF UTILITY POLE. UTILIZE PV MOLD FOR EXTENSION OF INCOMING FIBER BY VERIZON LAND LINE TO OPTISHEATH MULITPORT TERMINAL.
- (2) VERIZON WIRELESS PROVIDED AND CONTRACTOR INSTALLED ANTENNA MOUNTED ON TOP OF UTILITY POLE.



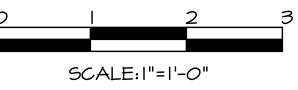
UPPER EQUIPMENT



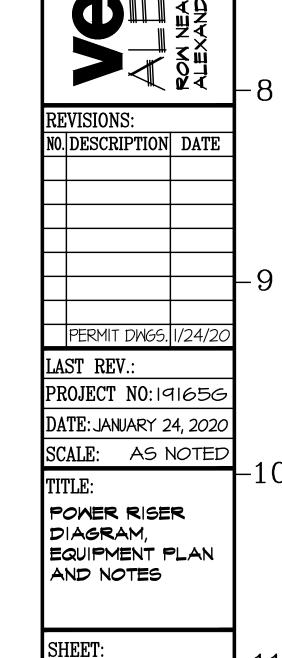
LOWER EQUIPMENT

- * COORDINATE FINAL MOUNTING LOCATION OF METER WITH UTILITY COMPANY REPRESENTATIVE PRIOR TO START OF WORK.
- ** CONTRACTOR TO COORDINATE THE FINAL PLACEMENT OF THE CABLE SHROUD AS INDICATED ON SHEET S-I.

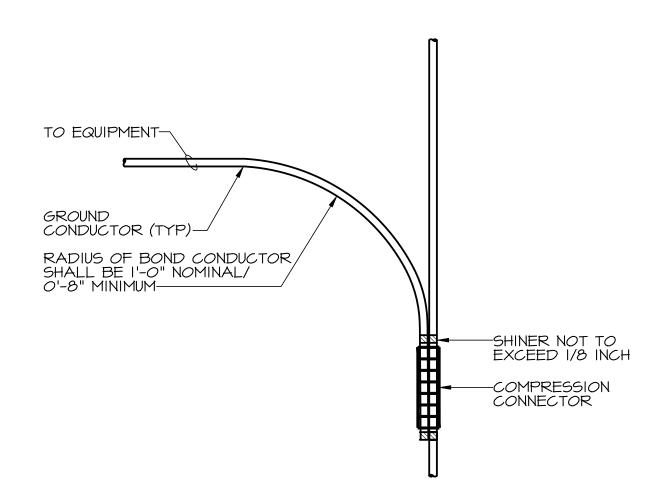
EQUIPMENT PLAN SCALE: I" =1'-0"



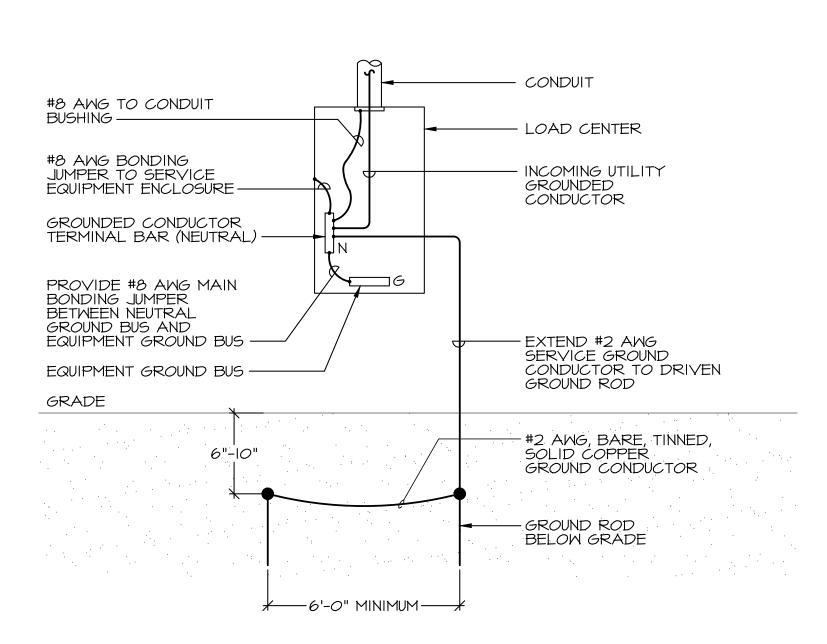
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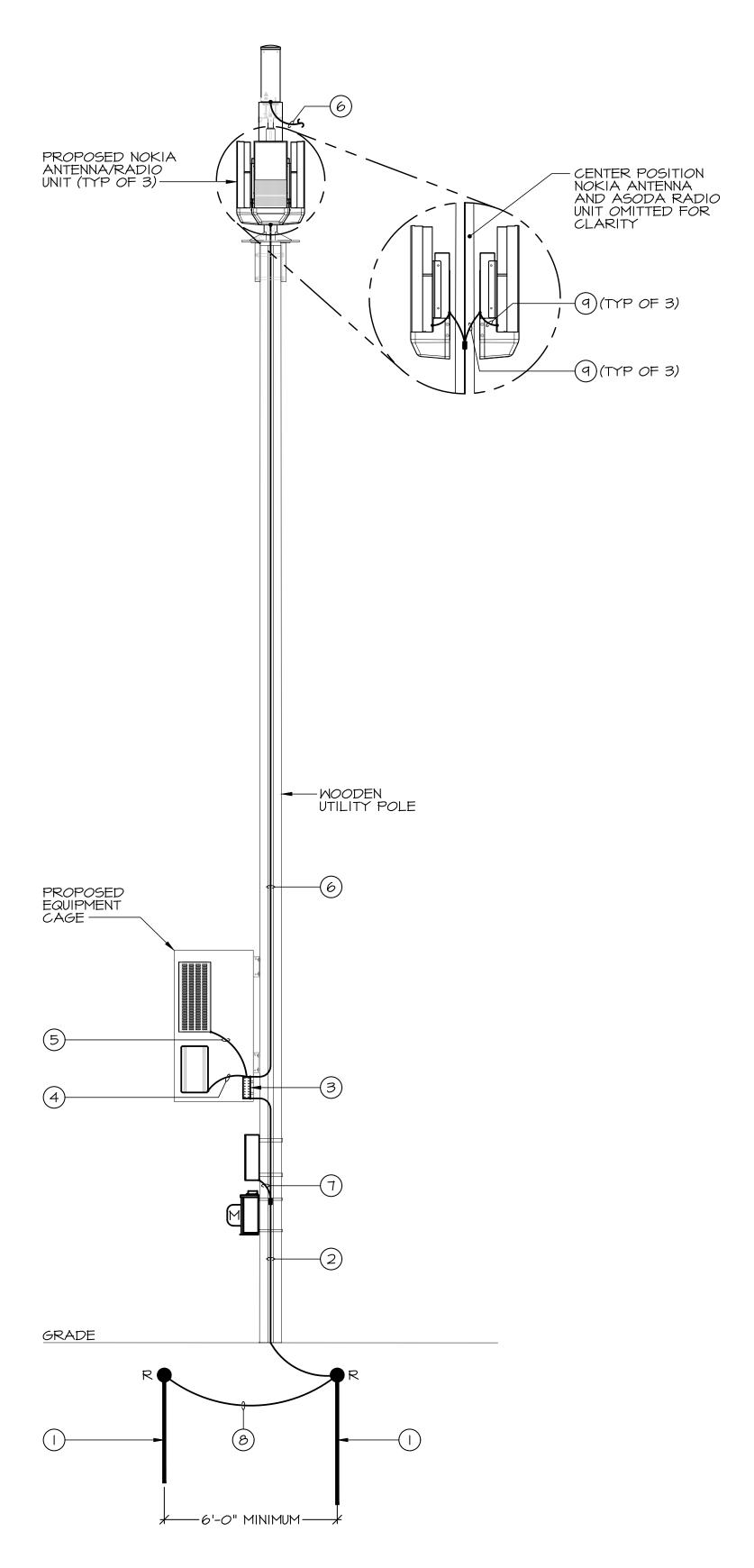
A B C D E F G H J K L M N P Q



DETAIL - DIRECTIONAL SPLICE NO SCALE



DETAIL - ELECTRIC SERVICE GROUNDING ELECTRODE NO SCALE



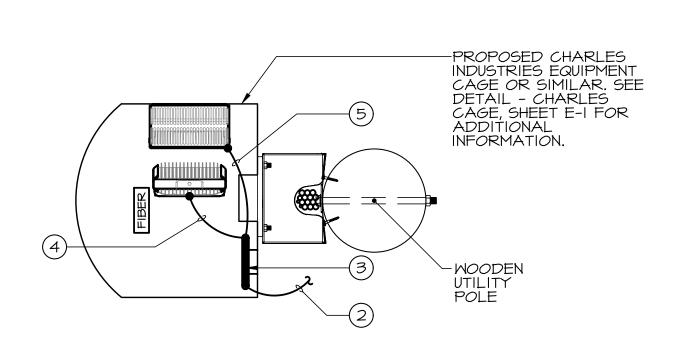
UTILITY POLE GROUNDING DIAGRAM
NO SCALE

GROUNDING GENERAL NOTES

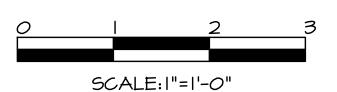
- I. ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD)TO NEAREST REINFORCING BAR USING ERICO CADWELD "ONE-SHOT" CONNECTIONS.
- 2. ALL EXTERIOR GROUND CONDUCTORS SHALL BE #2 AWG BARE, TINNED SOLID COPPER, UNLESS NOTED OTHERWISE.
- 3. ALL GROUND CONNECTIONS ABOVE GRADE SHALL BE TWO-HOLE COPPER COMPRESSION TYPE WITH STANDARD LENGTH BARREL (BURNDY # YA2CL- 2TC14EI). SINGLE HOLE LUGS ARE NOT
- 4. ALL MOUNTING HARDWARE FOR EXTERIOR LOCATIONS SHALL BE GALVANIZED INCLUDING NUTS, BOLTS, FLAT AND LOCK WASHERS.
- 5. ALL EXTERIOR MECHANICAL CONNECTIONS SHALL BE MADE USING OXIDE-INHIBITING JOINT COMPOUND. THE COMPOUND SHALL BE APPLIED TO ALL SURFACES OF BOLTS, WASHERS, NUTS AND CONNECTING SURFACES OF GROUND BAR PLATES. ALL BARE COPPER SURFACES OF CONDUCTORS SHALL BE COATED PRIOR TO LUGGING. JOINT COMPOUND SHALL BE NO-OX.
- 6. TYPICAL BI-DIRECTIONAL BONDING CONNECTIONS TO THE INTERIOR GROUND RING SHALL BE MADE USING DOUBLE CRIMP TYPE "C" TAP CONNECTORS.
- 7. ALL EXOTHERMIC WELD CONNECTIONS AND FIELD CUTS OF METALLIC OBJECTS EXPOSED TO WEATHER SHALL BE FIRST SPRAYED WITH COLD GALVANIZING (AFTER COOL DOWN) THEN BE TOPPED WITH BRUSH ON MARINE GRADE GALVANIZING.
- 8. ALL CONDUIT USED AS SLEEVES FOR GROUNDING OR BONDING CONDUCTORS SHALL BE PVC.
- 9. ALL GROUND RODS SHALL BE DRIVEN VERTICALLY USING A GROUND ROD SHIELD TO PREVENT THE ENDS FROM "MUSHROOMING".
- IO. PROVIDE ANDREW 36" GROUNDING CABLE REQUIRING FIELD ATTACHABLE CRIMP-ON LUG. DO NOT USE THE LUGS PROVIDED WITH THE GROUNDING KIT; PROVIDE TWO HOLE LUGS. GROUNDING CABLE SHALL BE CUT TO SHORTEST LENGTH POSSIBLE. ALL BONDING CONNECTIONS TO THE EXTERIOR GROUND BAR PLATE SHALL BE MADE USING STAINLESS STEEL NUTS AND BOLTS. CORROSION INHIBITOR SHALL BE APPLIED BETWEEN NUTS AND BOLTS AND GROUND BAR PLATE.
- II. JOINT COMPOUND FOR GROUNDING SHALL BE NO-OX.

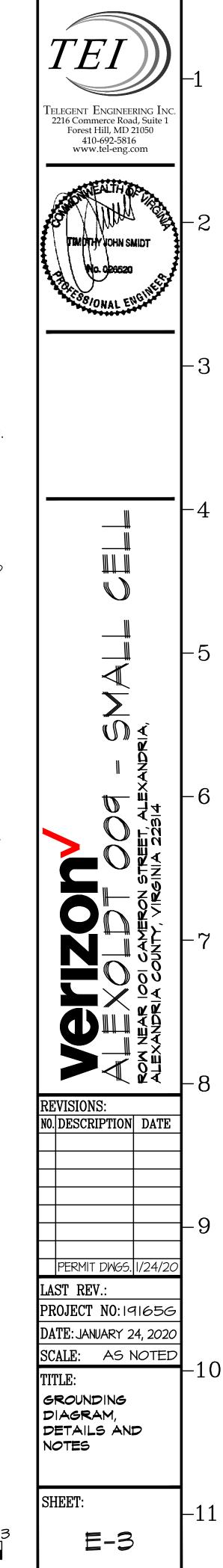
DRAWING NOTES

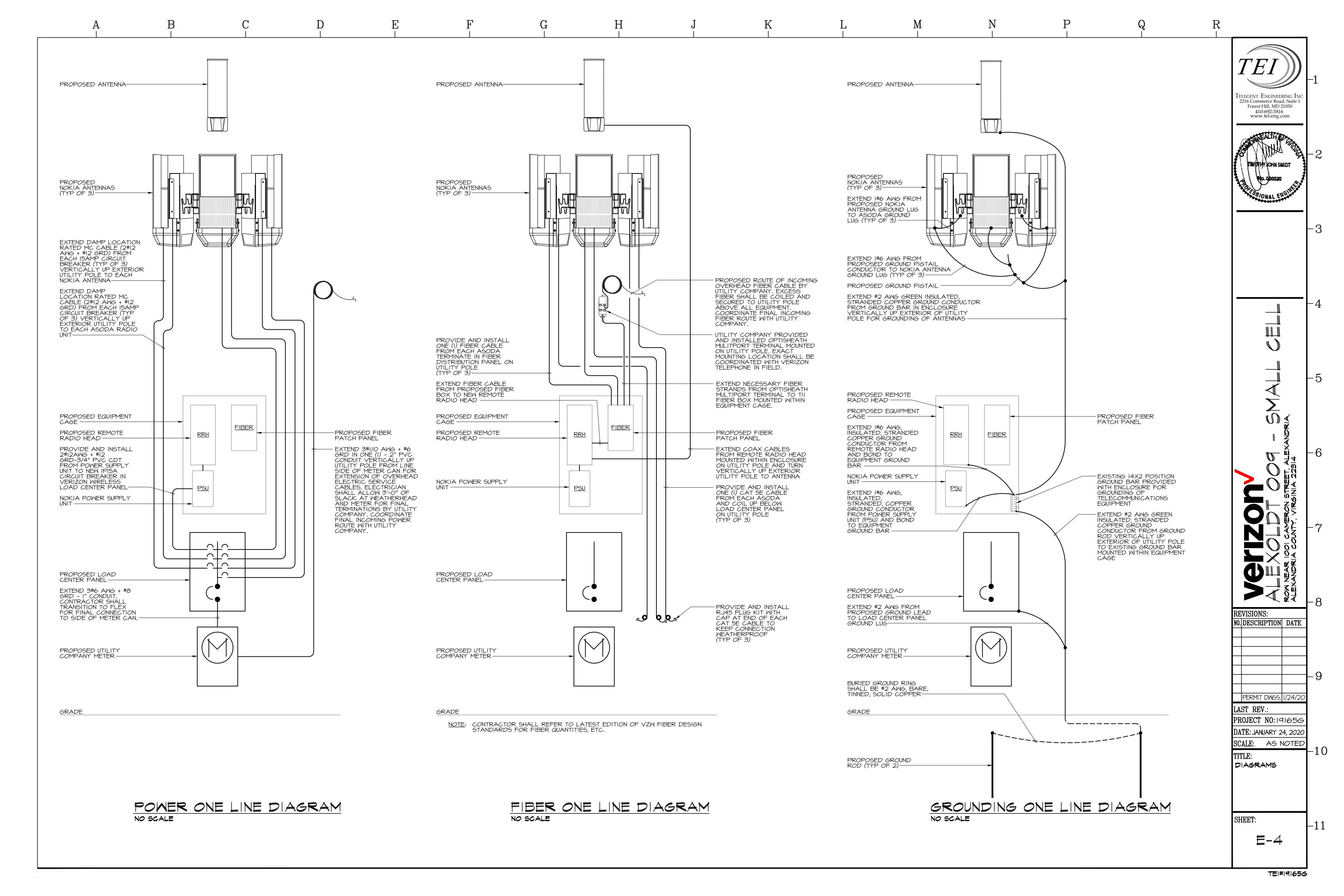
- (I) PROVIDE 8'-0" (MINIMUM) X 5/8" COPPER CLAD STEEL GROUND ROD.
- 2 EXTEND I#2 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM BURIED GROUND ROD AND BOND TO EXISTING GROUND BAR PROVIDED WITH EQUIPMENT CAGE. GROUND CONDUCTOR SHALL BE HOUSED WITHIN I/2" GROUND WIRE MOLDING. SECURE GROUND WIRE MOLDING TO UTILITY POLE VIA GALVANIZED 2"X5/8" STAPLES.
- 3 EXISTING 14X2 POSITION GROUND BAR PROVIDED WITH ENCLOSURE FOR GROUNDING OF TELECOMMUNICATIONS EQUIPMENT.
- 4 EXTEND I#6 AMG, INSULATED, STRANDED, COPPER GROUND CONDUCTOR FROM POWER SUPPLY UNIT (PSU) AND BOND TO EQUIPMENT GROUND BAR.
- 5 EXTEND I#6 AWG, INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM REMOTE RADIO HEAD AND BOND TO EQUIPMENT GROUND BAR.
- (6) EXTEND I#2 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM GROUND BAR VERTICALLY UP EXTERIOR OF POLE TO PROPOSED ANTENNA/ NOKIA ANTENNAS/ ASODA RADIO UNITS. GROUND CONDUCTOR SHALL BE HOUSED WITHIN SCHEDULE 40 PV MOLD. SECURE POLE RISER TO UTILITY POLE VIA GALVANIZED LAG BOLTS.
- TEXTEND I#2 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM ENCLOSURE OF PROPOSED LOAD CENTER PANEL AND BOND TO GROUND CONDUCTOR EXTENDING TO BURIED GROUND ROD. REFER TO SERVICE GROUNDING DETAIL, THIS SHEET.
- (8) BURIED GROUND RING SHALL BE #2 AWG, BARE, TINNED, SOLID COPPER.
- 9 EXTEND I#6 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM EACH NOKIA ANTENNA/RADIO UNIT/ASODA AND BOND TO GROUND PIGTAIL CONDUCTOR. EXTEND GROUND PIGTAIL AND BOND TO GROUND CONDUCTOR EXTENDING DOWN LIGHT POLE TO BURIED GROUND ROD. REFER TO DIRECTIONAL SPLICE DETAIL, THIS SHEET.
- (IO) REFER TO DOMINION SPECIFICATIONS FOR ADDITIONAL GROUNDING REQUIREMENTS.



GROUNDING PLAN
SCALE: |" = |'-0"











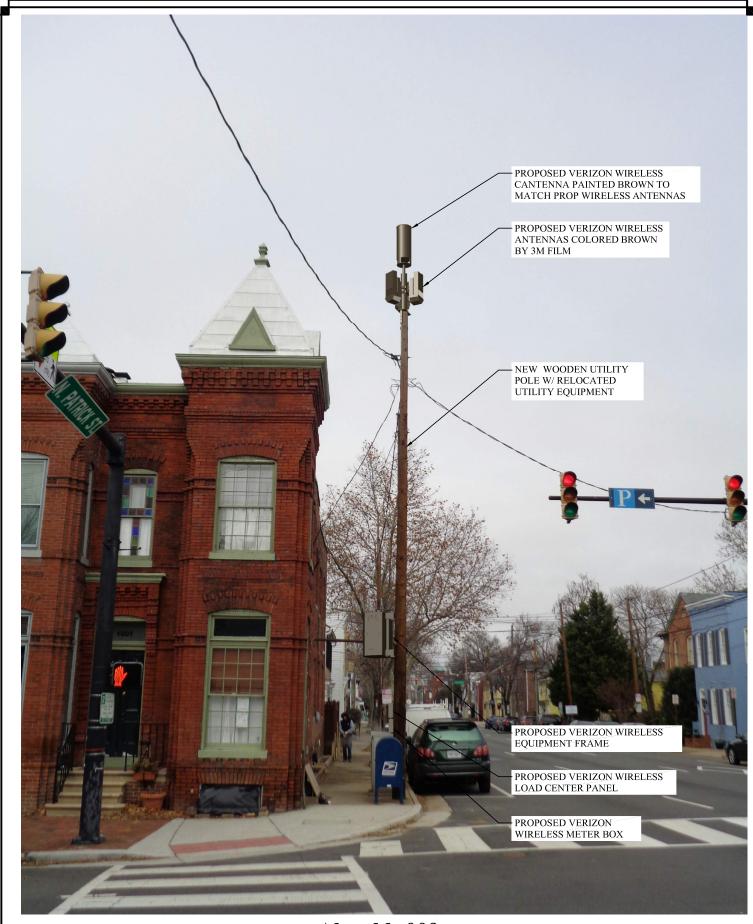
Alexoldt 009 Overall Site Layout







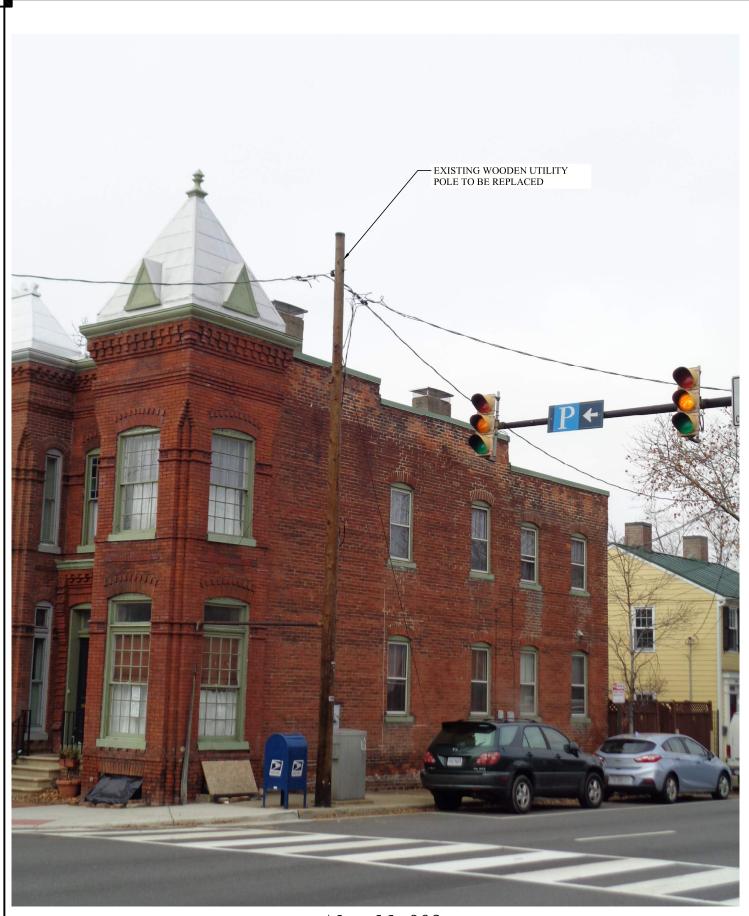
Alexoldt 009 Existing View 1





Alexoldt 009 Proposed View 1







Alexoldt 009 Existing View 2





Alexoldt 009 Proposed View 2







Alexoldt 009 Existing View 3



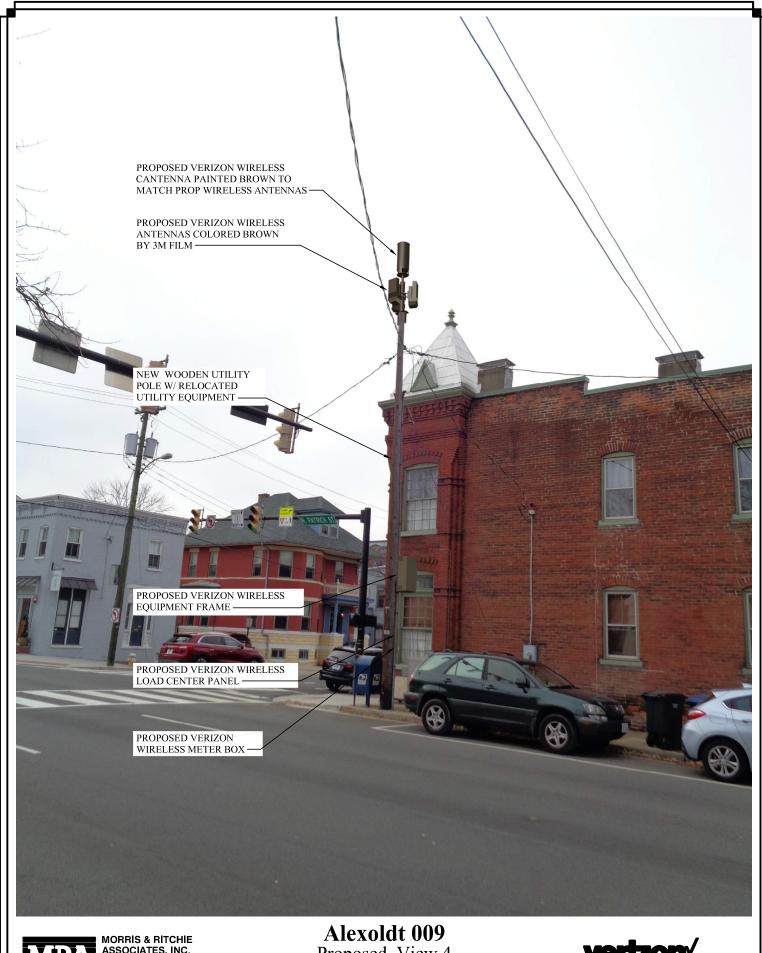


Alexoldt 009 Proposed View 3





Alexoldt 009 Existing View 4





Alexoldt 009 Proposed View 4