**ISSUE:** Certificate of Appropriateness for alterations (small cell facility)

**APPLICANT:** Cello Partnership dba Verizon Wireless

**LOCATION:** Parker-Gray District

Dominion Energy utility pole near 215 North Patrick Street

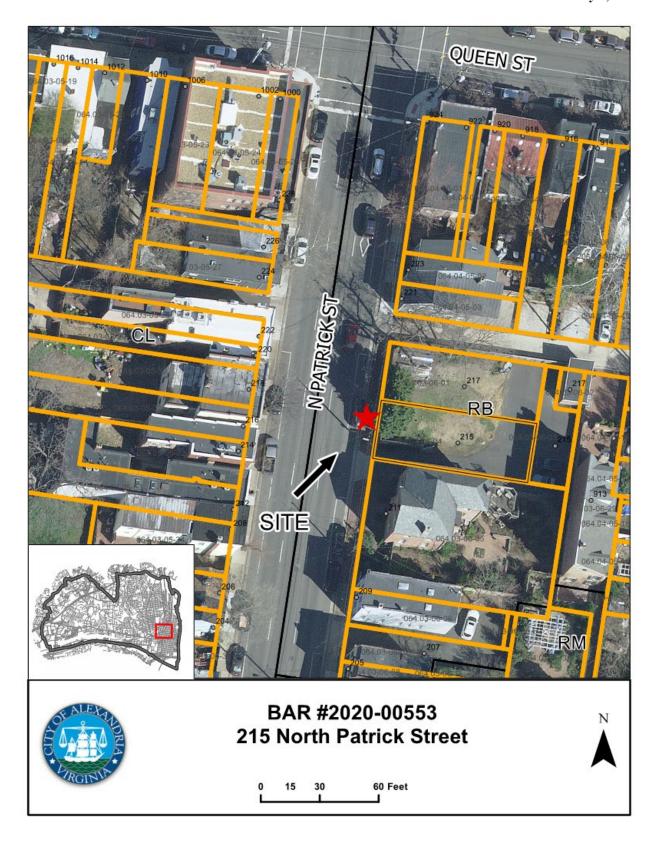
**ZONE:** RB/Residential Townhouse Zone

#### STAFF RECOMMENDATION

Staff recommends approval of the Certificate of Appropriateness, as submitted.

#### GENERAL NOTES TO THE APPLICANT

- 1. APPEAL OF DECISION: In accordance with the Zoning Ordinance, if the Board of Architectural Review denies or approves an application in whole or in part, the applicant or opponent may appeal the Board's decision to City Council on or before 14 days after the decision of the Board.
- 2. COMPLIANCE WITH BAR POLICIES: All materials must comply with the BAR's adopted policies unless otherwise specifically approved.
- 3. BUILDING PERMITS: Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Department of Code Administration (<u>including signs</u>). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-746-4200 for further information.
- 4. ISSUANCE OF CERTIFICATES OF APPROPRIATENESS AND PERMITS TO DEMOLISH: Applicants must obtain a copy of the Certificate of Appropriateness or Permit to Demolish PRIOR to applying for a building permit. Contact BAR Staff, Room 2100, City Hall, 703-746-3833, or preservation@alexandriava.gov for further information.
- 5. EXPIRATION OF APPROVALS NOTE: In accordance with Sections 10-106(B), 10-206(B) and 10-307 of the Zoning Ordinance, any Board of Architectural Review approval will expire 12 months from the date of issuance if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.
- 6. HISTORIC PROPERTY TAX CREDITS: Applicants performing extensive, certified rehabilitations of historic properties may separately be eligible for state and/or federal tax credits. Consult with the <u>Virginia Department of Historic Resources (VDHR)</u> prior to initiating any work to determine whether the proposed project may qualify for such credits.



#### I. APPLICANT'S PROPOSAL

The applicant is requesting a Certificate of Appropriateness to replace the existing wood utility pole in the right-of-way near the property at 215 North Patrick Street with a taller wood pole on top of which a triple band 5G small cell facility and a 4G antenna will be installed along with the associated equipment which will be mounted to the pole. The new pole will be installed adjacent to the existing pole that will be removed once the existing utilities been moved to the new one.

#### Certificate of Appropriateness

- Replace the existing 34'-5" tall wood utility pole with a new 39'-2" wood utility pole
- Install a triple band Nokia AirScale AEUB 5G small cell antenna facility on top of the new utility pole, the overall height of the equipment is 3'-8". The antennas will be shrouded in color to match the pole
- Install a JMA CXI60MI236 -1C 4G antenna on top of the 5G facility, the 1'-2" diameter antenna is 3'-5" tall
- Install a prop Verizon wireless Charles SHRD60 cabinet 10'-0" above grade and required cabling to be bracket mounted to the pole
- Install a prop Verizon wireless lockable load center panel on the pole at 6'-0" from grade and required cabling
- Install a prop Verizon wireless meter box on the pole at 4'-5" from grade and required cabling
- Relocate the existing overhead lines and existing light fixture from the old pole to the new pole
- Remove the existing pole

#### Site context

The parcel at 215 North Patrick Street is a vacant lot in the middle of the 200 block of North Patrick Street on the east side.

#### II. <u>HISTORY</u>

Not applicable.

#### III. ANALYSIS

To address the growing demand for wireless services across the United States, telecommunication providers are increasing the capacity of their networks by deploying small cell antennas within the public right-of-way to reduce the data traffic load on roof-mounted equipment and larger cell towers. Small cell facilities are low-powered antennas that provide wireless service coverage to a limited geographic area (often with ranges of a few hundred feet) and are used to supplement and expand the coverage provided by the traditional, larger-scale network.

In the past three years, Federal and State legislation has been enacted to further streamline the local approval process for cellular facilities, shortening the approval time and limiting jurisdictions'

Docket #5 BAR #2020-00553 Parker-Gray District January 6, 2021

authority. The laws can be contradictory between federal and state in some instances but do recognize that additional guidelines may be necessary in historic districts.

The City has adopted Interim Wireless Facility Aesthetic Guidelines for wireless infrastructure throughout the City which outline specific guidelines related to the replacement of existing utility poles, including:

- pole height may not increase more than 10 feet and may not exceed 50 feet without a special use permit
- replacement poles must be in the same general location as the existing pole
- replacement poles may not cause the removal of an existing tree or cause damaging impacts to trees located in the right-of-way
- wireless facilities must be shrouded, enclosing wires and equipment, and no separate ground mounted equipment is permitted
- wireless facilities must be painted to match the infrastructure

Many of the wireless carriers are working with Dominion Energy to deploy their facilities on replacement utility poles in the City right-of-way. Dominion's safety guidelines require that the existing poles be replaced with taller poles so that there is adequate separation between the utilities and the new cellular equipment. The wood poles come in 10-foot increments but must be buried deeper in the ground, so the net increase in height will be less.

A Certificate of Appropriateness is required in the historic districts under Section 10-203(A) and 203 (A) of the zoning ordinance, which state that "No building or structure shall be erected, reconstructed, altered or restored within the Parker-Gray District unless and until an application for a certificate of appropriateness shall have been approved..."

The overall height of the new pole including the small cell facility is 46'-9". The antennas and equipment volumes are 5.48 CU FT and 12.28 CU FT respectively. BAR staff has no objection to the taller wood pole or the installation of the small cell facility in this location and finds that painting the equipment the same color as the pole will make them less obvious. The existence of utility poles and overhead wires, street signs, and light poles are part of the urban streetscape, and staff does not believe that the installation of the taller pole with the small cell equipment will adversely impact existing viewsheds.

Therefore, staff recommends approval of the Certificate of Appropriateness as submitted.

#### **STAFF**

Marina Novaes, Historic Preservation Planner, Planning & Zoning Tony LaColla, AICP, Land Use Services Division Chief, Planning & Zoning

#### IV. CITY DEPARTMENT COMMENTS

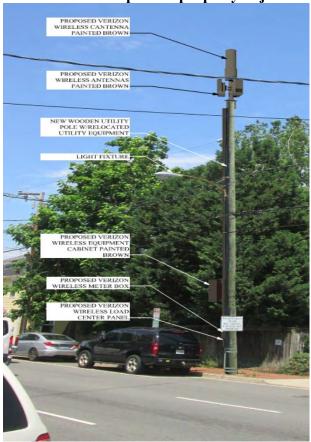
Legend: C- code requirement R- recommendation S- suggestion F- finding

#### **Zoning**

- F-1 Height of the pole shall not exceed 50.00 feet without a Special Use Permit. Pole height is 39' 2"' feet and overall height is 46' 9"
- F-2 Pole must be in the same general location as existing pole.

  In Compliance
- F-3 The replacement pole is not located in a manner that requires the removal of an existing tree or impacts of root zone.

There is a tree on private property adjacent to proposed poles.



F-4 Replacement people shall be located that meets ADA requirements that do not impede or hinder pedestrian or vehicular travel.

#### In Compliance

F-5 Wireless facility shall be painted to match similar infrastructure on the block or earth tone color.

## Plans indicate facility to be wood pole with equipment shrouded to match wooden pole

#### **Code Administration**

Code Administration has no comments

#### **Transportation and Environmental Services**

- R-1 The building permit must be approved and issued prior to the issuance of any permit for demolition, if a separate demolition permit is required. (T&ES)
- R-2 Applicant shall be responsible for repairs to the adjacent city right-of-way if damaged during construction activity. (T&ES)
- R-3 No permanent structure may be constructed over any existing private and/or public utility easements. It is the responsibility of the applicant to identify any and all existing easements on the plan. (T&ES)
- F-1 The City is in the process of establishing a written policy regarding pole height for small cells. The poles will not be permitted to increase in height by more than 10-ft from the existing pole height, and not to exceed 50-ft in height. More details will be available in June 2019.
- F-2 After review of the information provided, an approved grading plan is not required at this time. Please note that if any changes are made to the plan it is suggested that T&ES be included in the review. (T&ES)
- F-3 If the alley located at the rear of the parcel is to be used at any point of the construction process the following will be required:
  - <u>For a Public Alley</u> The applicant shall contact T&ES, Construction Permitting & Inspections at (703) 746-4035 to discuss any permits and accommodation requirements that will be required.
  - <u>For a Private Alley</u> The applicant must provide proof, in the form of an affidavit at a minimum, from owner of the alley granting permission of use. (T&ES)
- C-1 The applicant shall comply with the City of Alexandria's Solid Waste Control, Title 5, Chapter 1, which sets forth the requirements for the recycling of materials (Sec. 5-1-99). (T&ES)
- C-2 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C-3 All secondary utilities serving this site shall be placed underground. (Sec. 5-3-3) (T&ES)
- C-4 Any work within the right-of-way requires a separate permit from T&ES. (Sec. 5-2) (T&ES)

- C-5 All improvements to the city right-of-way such as curbing, sidewalk, driveway aprons, etc. must be city standard design. (Sec. 5-2-1) (T&ES)
- C-6 An encroachment request will be required for projections into the public right of way. (T&ES)
- C-7 The owner shall obtain and maintain a policy of general liability insurance in the amount of \$1,000,000 which will indemnify the owner (and all successors in interest); and the City as an Additional Insured, against claims, demands, suits and related costs, including attorneys' fees, arising from any bodily injury or property damage which may occur as a result of the encroachment. (Sec. 5-29 (h)(1)) (T&ES)

Please submit Insurance Certificate: City of Alexandria T&ES Attn: Development Services 301 King Street, Room 4130 Alexandria, VA 22314

#### Alexandria Archaeology

F-1 No archaeological oversight necessary.

#### V. <u>ATTACHMENTS</u>

1 - Application Materials

2 – Supplemental Materials

ADDRESS OF PROJECT:	
DISTRICT: ☐ Old & Historic Alexandria ☐ Parker – Gray ☐ 10	0 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 YARI CLEARANCE AREA (Section 7-802, Alexandria 1992 Zoning Ordinance)	D REQUIREMENTS IN A VISION
WAIVER OF ROOFTOP HVAC SCREENING REQUIREMENT (Section 6-403(B)(3), Alexandria 1992 Zoning Ordinance)	
Applicant: Property Owner Business (Please provide business	ss 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:	<u> </u>
Yes No Is there an historic preservation easement on this property?  Yes No If yes, has the easement holder agreed to the proposed Is there a homeowner's association for this property?  Yes No If yes, has the homeowner's association approved the	d alterations?

BAR Case # \_\_\_\_\_

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

	BAR Case #
NATURE OF PROPOSED WORK: Please check all that apply	
doors windows siding	C equipment
<b>DESCRIPTION OF PROPOSED WORK:</b> Please describe the be attached).	proposed work in detail (Additional pages may
SUBMITTAL REQUIREMENTS:  Items listed below comprise the minimum supporting material request additional information during application review. Please Design Guidelines for further information on appropriate treatment Applicants must use the checklist below to ensure the application material that are necessary to thoroughly describe the project. In	refer to the relevant section of the ents. on is complete. Include all information and
docketing of the application for review. Pre-application meetings All applicants are encouraged to meet with staff prior to submiss	s are required for all proposed additions. sion of a completed application.
<b>Demolition/Encapsulation :</b> All applicants requesting 25 square must complete this section. Check N/A if an item in this section does not be a section of the section of the section does not be a section of the section.	
N/A  Survey plat showing the extent of the proposed demoliti  Existing elevation drawings clearly showing all elements  Clear and labeled photographs of all elevations of the bit to be demolished.  Description of the reason for demolition/encapsulation.  Description of the alternatives to demolition/encapsulation.	s proposed for demolition/encapsulation. uilding if the entire structure is proposed
considered feasible.	

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
П		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.
		For development site plan projects, a model showing mass relationships to adjacent properties and structures.
illun	ninat	<b>&amp; Awnings:</b> 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 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.
	N/A	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	indersigned 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

other than the property owner, also attests that he/she has obtained permission from the property owner

#### **APPLICANT OR AUTHORIZED AGENT:**

to make this application.

Signature:	Joshua Schakola
Printed Naı	me:
Date:	

## OWNERSHIP AND DISCLOSURE STATEMENT Use additional sheets if necessary

an interest in the applicant, ur case identify each owner of n	address and percent of ownership nless the entity is a corporat nore than three percent. The te interest held at the time of the cation.	ion or partnership, in which rm ownership interest shall
Name	Address	Percent of Ownership
1.		, , , , , , , , , , , , , , , , , , ,
2.		
3.		
an interest in the property locate entity is a corporation or partner percent. The term ownership in	ddress and percent of ownership ed at	(address), unless the owner of more than three 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 in the second control of the second	ionships. Each person or entity list ant or in the subject property is reported by Section 11-350 cation, or within the 12-month perior of the Alexandria City Council, and Architectural Review	equired to disclose <b>any</b> 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 atte is true and correct.	est to the best of my ability that
	Joshua Schako	la
Date Printed	i 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 9. 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.
- II. 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
- 12. 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.
- 14. 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.
- 16. 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.
- 17. 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 MATERIALS ONCE PICKED UP FROM THE WAREHOUSE.
- 19. 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
  SITE

# Verizon<sup>4</sup>

ALEXOLDT 009 SC - D - SMALL CELL RIGHT OF MAY ADJACENT TO 215 N PATRICK STREET ALEXANDRIA, VIRGINIA 22314

## INDEX OF DRAWINGS

- CS-I SITE LOCATION AND VICINITY PLAN, INDEX OF DRAWINGS, AND CODE ANALYSIS
- C-I SITE PLAN
- C-2 SITE DETAILS
- TMP-I TRANSPORTATION MANAGEMENT PLAN NOTES
- TMP-2 TRANSPORTATION MANAGEMENT PLAN
- S-I STRUCTURAL SECTIONS AND DETAILS
- S-2 GENERAL NOTES
- E-I ROUTING SITE PLAN
- E-I ROUTING SITE FLAN
- E-2 SPECIFICATIONS, SYMBOLS LIST, PANEL SCHEDULE AND DETAILS
- E-3 POWER PLAN, POWER RISER, DETAILS, AND NOTES
- E-4 GROUNDING DIAGRAM, DETAILS, AND NOTES
- E-5 DIAGRAMS

## CODE ANALYSIS

APPLICABLE BUILDING CODE: IBC 2015
USE GROUP: UTILITY (U)

CONSTRUCTION TYPE: IIB

UTILITY COMPANY: DOMINION

Princess St.

Pr

NO VICINITY PLAN

## 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 45'-2" AND NOKIA ANTENNAS WILL BE MOUNTED AT A RAD CENTER OF 41'-4".

## DIRECTIONS TO SITE

- FROM JUNCTION DRIVE:
   TURN RIGHT ONTO DORSEY RUN ROAD
   TAKE RAMP ON LEFT FOR MD-32 EAST
- TAKE RAMP ON LEFT FOR MID-32 EAST - TAKE EXIT #IOC RAMP ON RIGHT FOR BALTIMORE WASHINGTON PARKWAY SOUTH - KEEP STRAIGHT ONTO MD-201 SOUTH
- TAKE EXIT #IC RAMP ON RIGHT FOR I-495 SOUTH - TAKE EXIT #I77B RAMP ON RIGHT FOR US-I NORTH/ N PATRICK STREET
- DESTINATION WILL BE ON THE RIGHT

## VERIZON WIRELESS REVIEW

BUILDING OWNER	DATE
ENGINEERING	DATE
OPERATIONS	DATE
CONSTRUCTION	DATE

TELEGENT ENGINEERING INC. 2216 Commerce Road, Suite 1 Forest Hill, MD 21050 410-692-5816

TIMOTHY JOHN SMIDT
No. 026520

 $\begin{array}{c|c} & & & & \\ \hline &$ 

REVISIONS:

NO. DESCRIPTION DATE

PERMIT DWGS. 7/14/20

LAST REV.:

PROJECT NO: 20084P

LAST REV.:
PROJECT NO:20084F

DATE:JULY 14, 2020

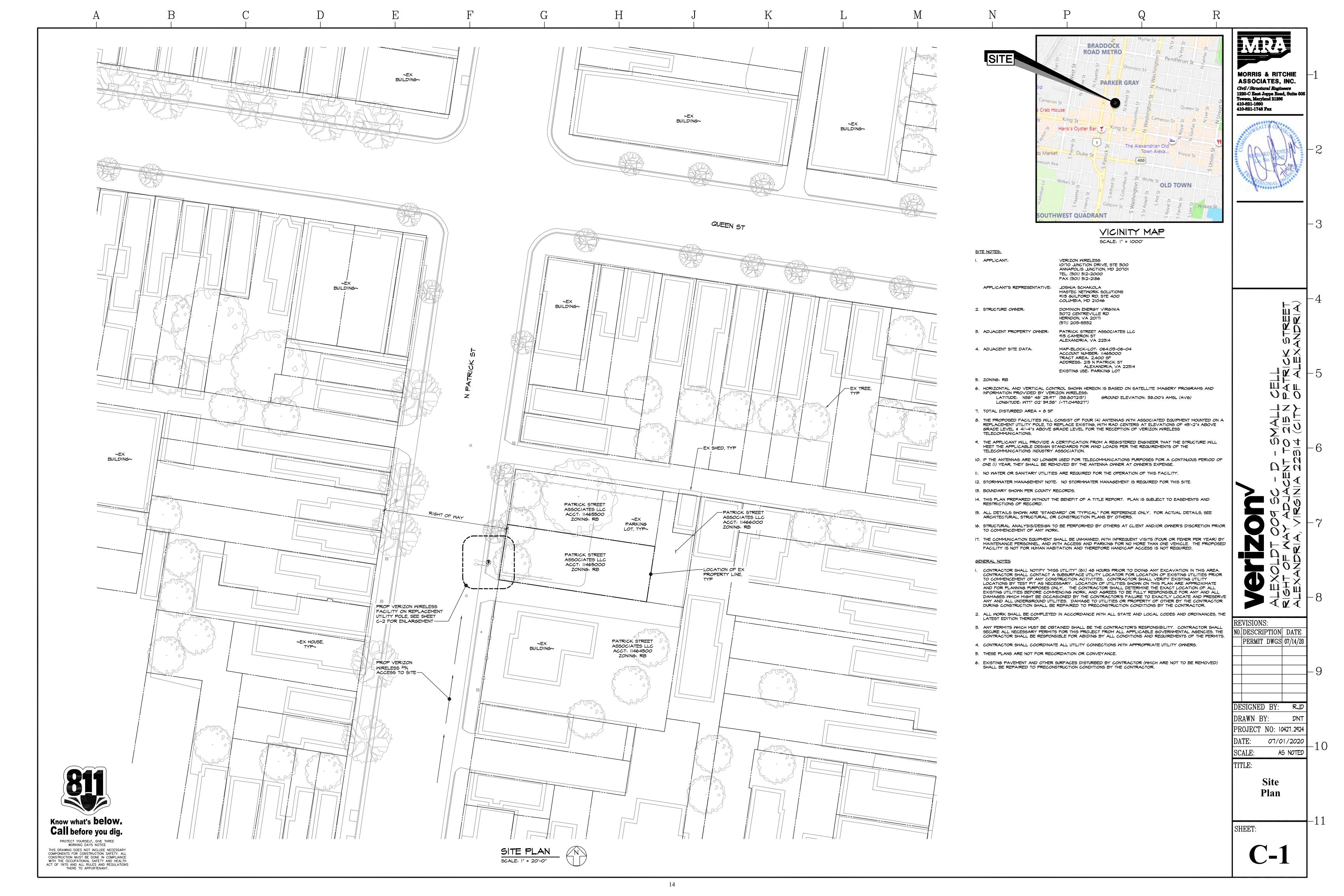
SCALE: AS NOTED

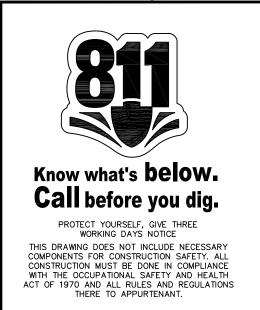
TITLE:
SITE LOCATION
AND VICINITY
PLAN, INDEX OF
DRAWINGS, AND
CODE ANALYSIS

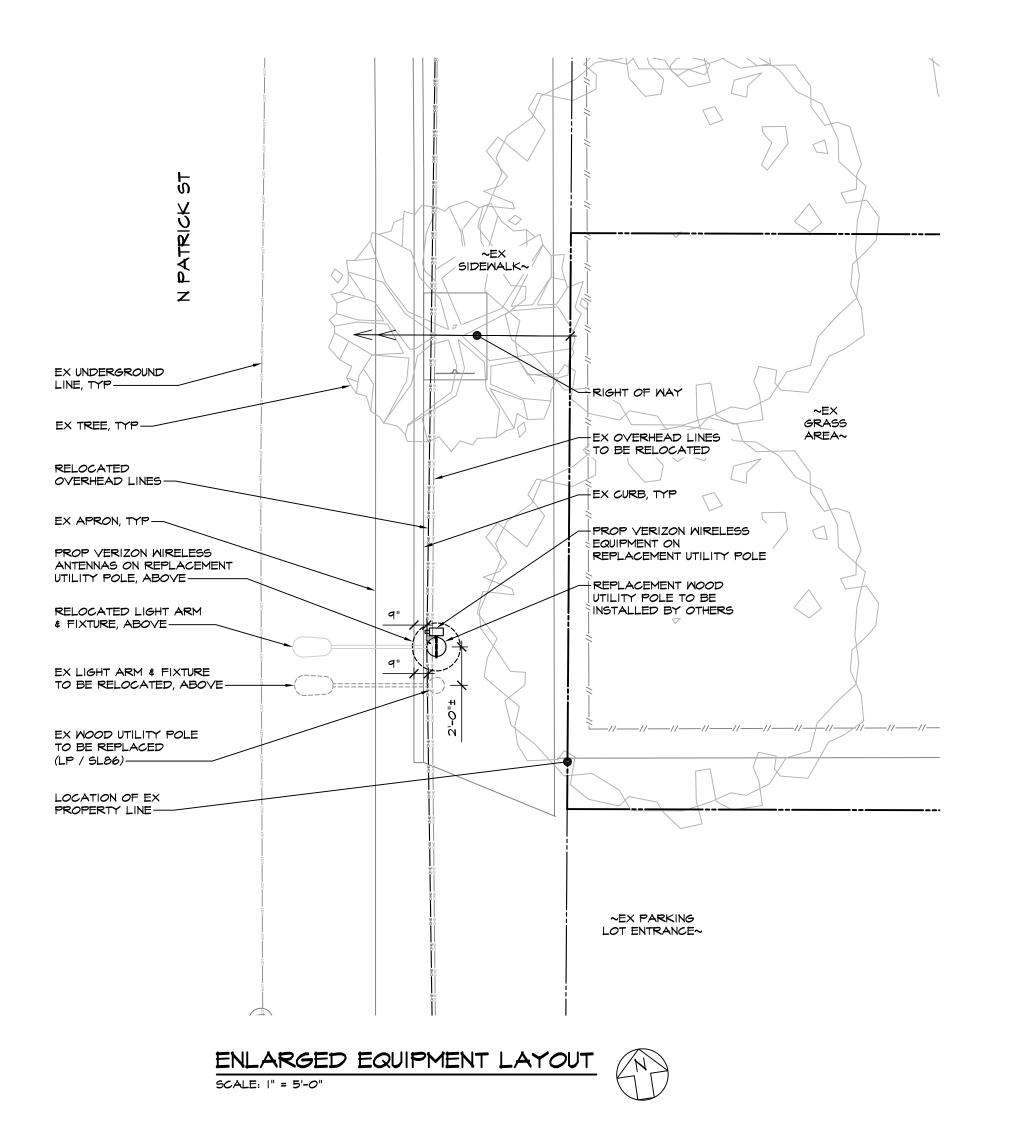
SHEET:

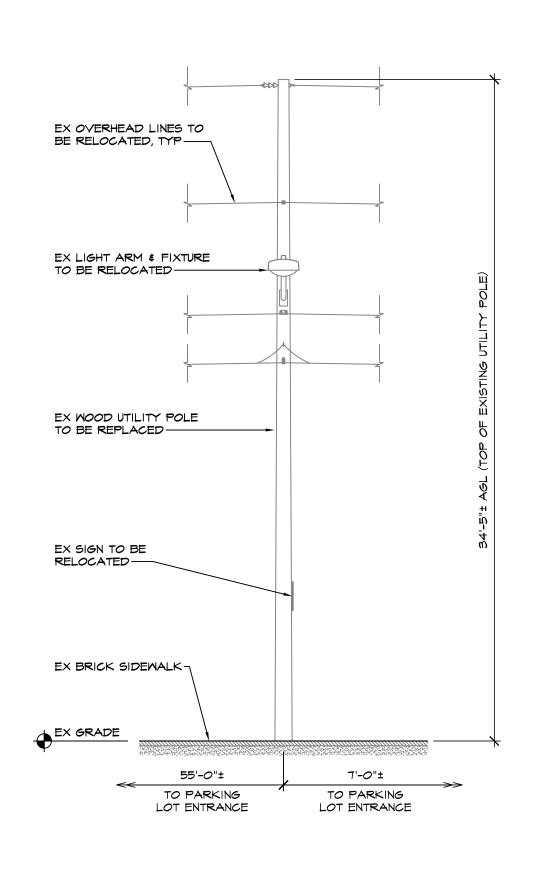
**CS-**|

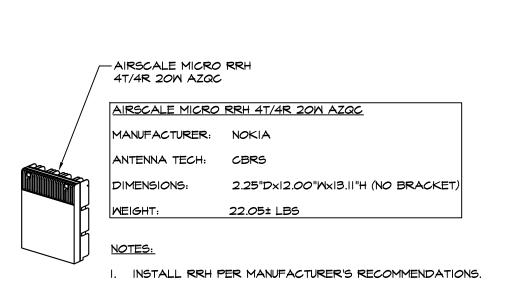
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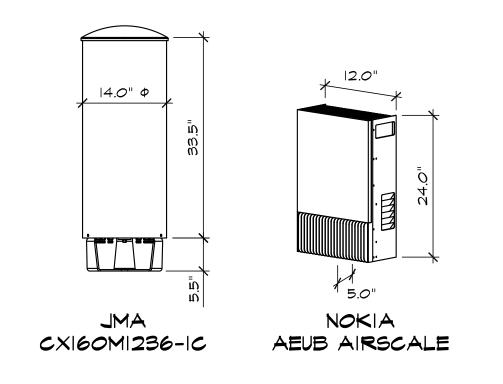




EXISTING UTILITY POLE ELEVATION

## NOKIA AIRSCALE MICRO RRH 4T/4R 20W AZQC DETAIL

2. FIBER, DC POWER & GROUND CONNECTIONS NOT SHOWN.



CHARLES SHRD60-362322 CONCEALMENT SHROUD

21.5"Dx22.7"Mx36.1"H

MANUFACTURER: CHARLES

 INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

MOUNTING BRACKETS.

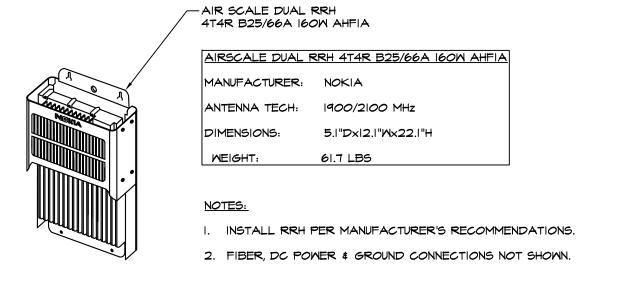
2. DIMENSIONS SHOWN DO NOT INCLUDE

DIMENSIONS:

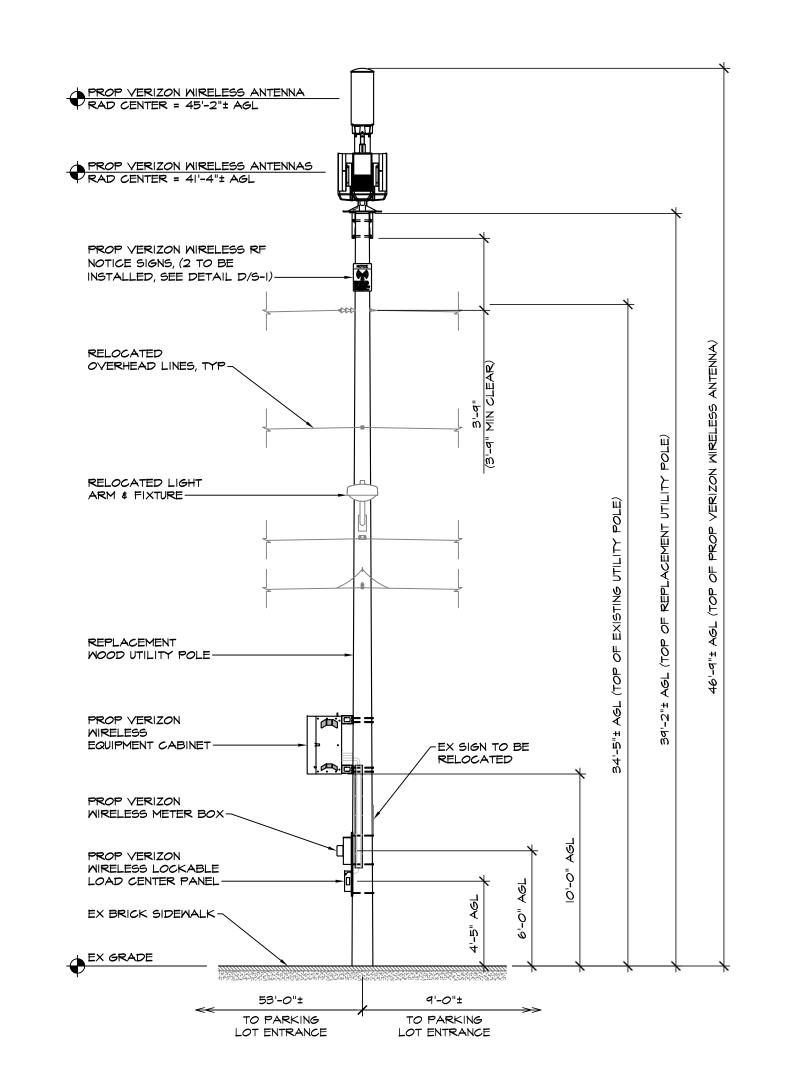
EQUIPMENT CABINET DETAIL

NOT TO SCALE

VERIZON WIRELESS ANTENNA DETAILS

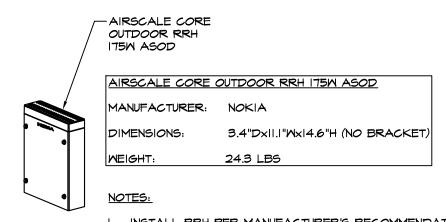


NOKIA AIRSCALE DUAL RRH 4T4R B25/66A 160W AHFIA - DETAIL



## REPLACEMENT UTILITY POLE ELEVATION

VO	LUMETRIC	CA	_CULATIONS	
ANTENNA VOLUMETRIC CALCULATION			EQUIPMENT VOLUMETRIC CA	ALCULATION
JMA CXI6OMI236-IC (I ANTENNA, 2.98 CU FT	2.98 CU FT		CHARLES SHRD60	10.5 CU FT
EACH) NOKIA AEUB (3 ANTENNAS, 0.83 CU FT	UB .83 CU FT 2.50 CU FT		SQUARE D BOX No. 2R LOAD CENTER PANEL	0.28 CU FT
EACH)			200 AMP RINGLESS HORN OVERHEAD METER SOCKET	0.54 CU FT
TOTAL	5.48 CU FT		NOKIA ASODA RRH (3 UNITS, O.32 CU FT EACH)	0.96 CU FT
		Ì	TOTAL	12.28 CU FT



INSTALL RRH PER MANUFACTURER'S RECOMMENDATIONS.
 FIBER, DC POWER & GROUND CONNECTIONS NOT SHOWN.

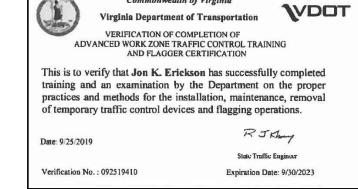
NOKIA AIRSCALE CORE OUTDOOR RRH 175 W ASOD DETAIL

ASSOCIATES, INC. Civil / Structural Engineers 1220-C East Joppa Road, Suite 505 Towson, Maryland 21286 410-821-1690 410-821-1748 Fax **REVISIONS:** NO. DESCRIPTION DATE PERMIT DWGS 07/14/20 DESIGNED BY: DRAWN BY: PROJECT NO: 10427.2924 DATE: 07/01/2020 SCALE: AS NOTED TITLE: Site **Details** 

15

## TRANSPORTATION MANAGEMENT PLAN

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





07/01/2020

REVISIONS:

DESIGNED BY:

PROJECT NO: 10427.2924

TRANSPORTATION **MANAGEMENT** 

**PLAN** 

07/01/2020

AS NOTED

DRAWN BY:

NO. DESCRIPTION DATE

PERMIT DWGS 07/01/20

#### 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 HOLIDAY. HOLIDAYS INCLUDE ALL STATE AND FEDERAL HOLIDAYS.
- 4. EXISTING INTERSECTIONS: THE NEAREST INTERSECTION IS N PATRICK ST AND MUIRS CT.
- 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
- PERMITS AND/OR EASEMENTS AS NECESSARY.
- 12. IMPLEMENTING 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. 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

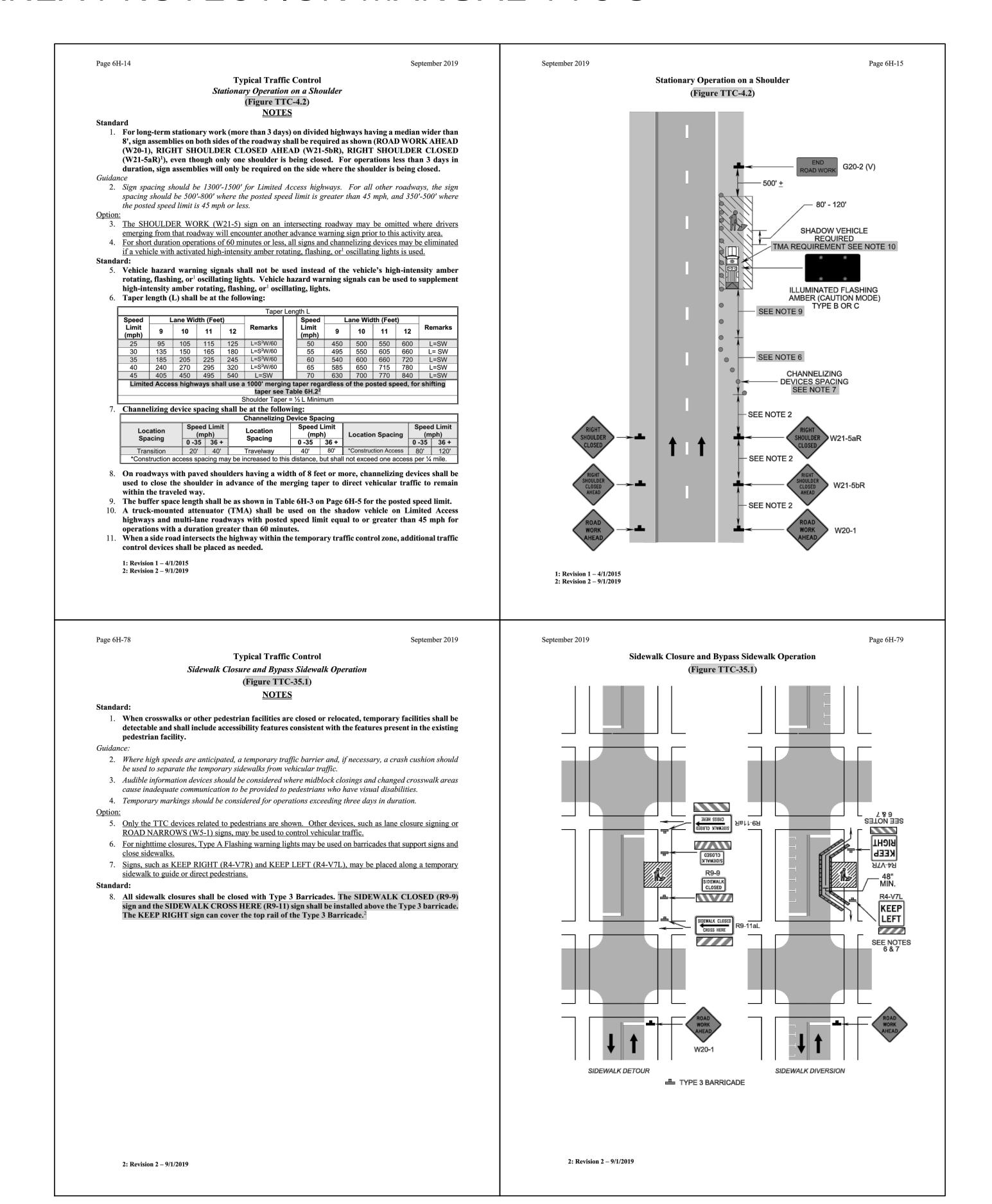
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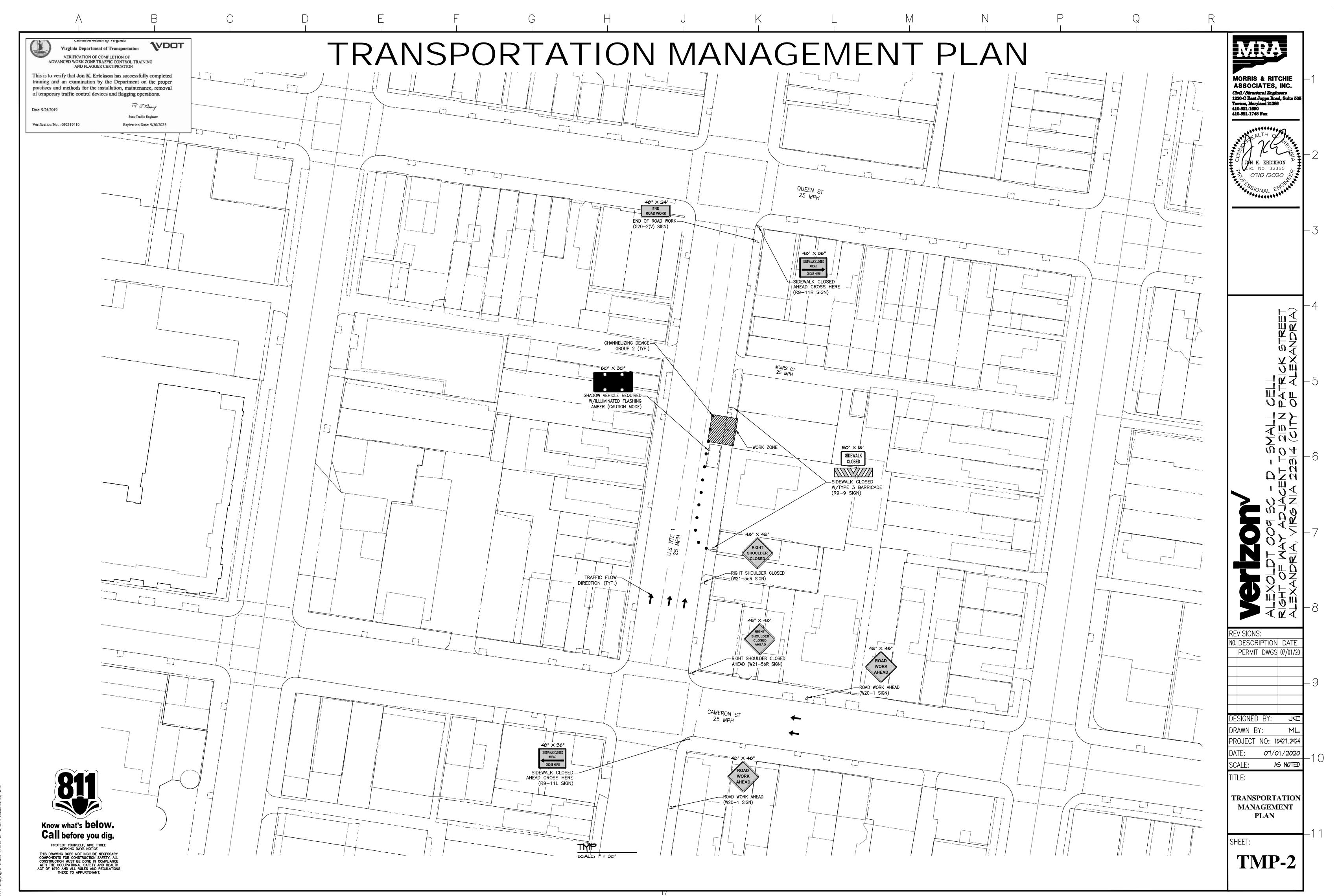
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND PROVIDING THE FOLLOWING:
- - A. NOTIFY THE REGIONAL TRANSPORTATION OPERATIONS CENTER (TOC) 1 WEEK IN ADVANCE IN ORDER TO PLAN LANE CLOSURE INFORMATION ON THE 511 SYSTEM AND VA-TRAFFIC.
  - - IMMEDIATELY REPORT ANY TRAFFIC INCIDENTS THAT MAY OCCUR IN THE WORK ZONE. NOTIFY THE PROJECT'S CONSTRUCTION INSPECTOR AND COUNTY ENGINEER OF ANY INCIDENTS AND EXPECTED TRAFFIC DELAYS.
    - 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: EMERGENCY CALL: 911
- NON-EMERGENCY NUMBERS:
- CITY OF ALEXANDRIA POLICE:
- 703-746-4444 CITY OF ALEXANDRIA FIRE & RESCUE: 703-746-4357

#### GENERAL CONSTRUCTION NOTES

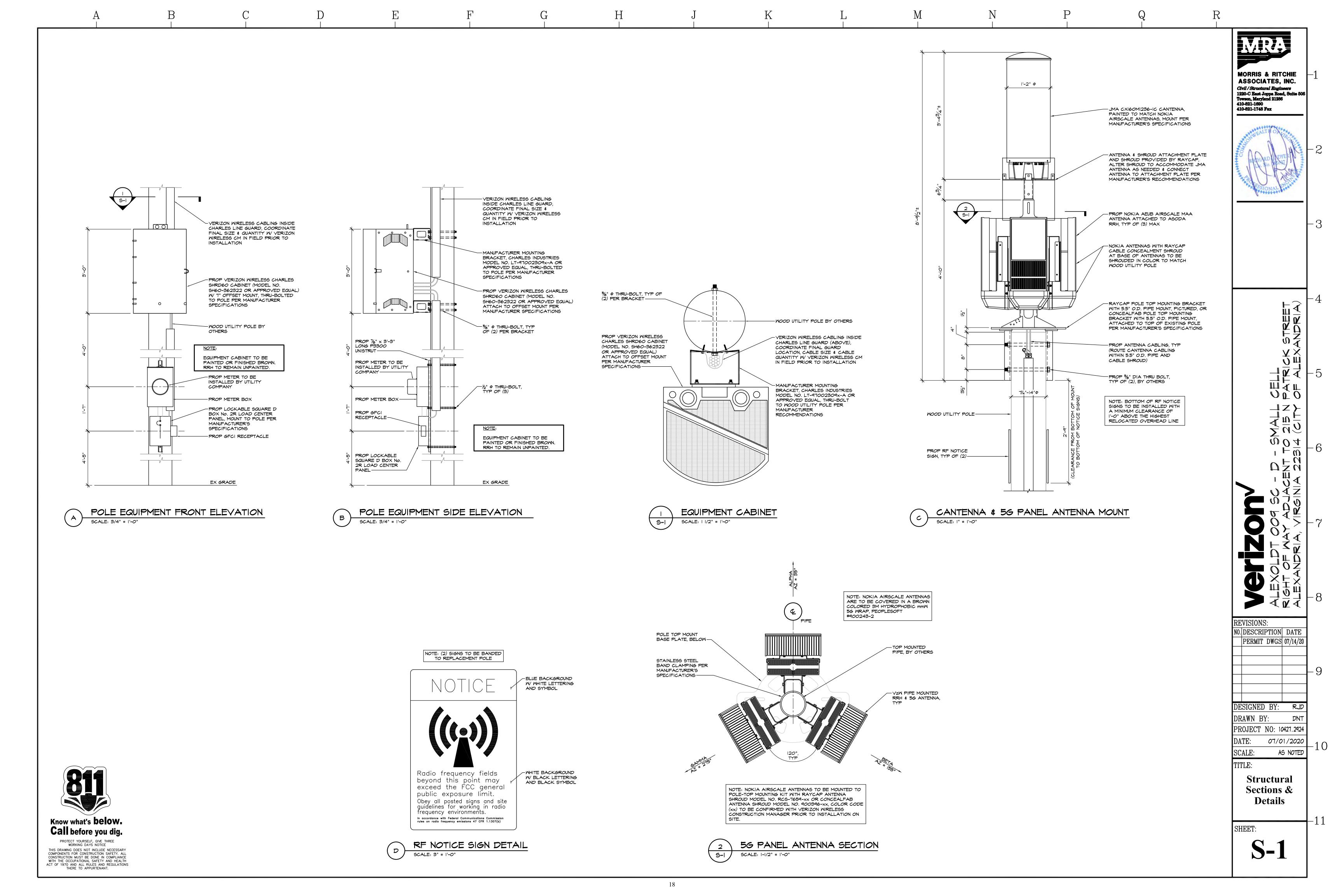
NOTE: VWAPM VIRGINIA WORK AREA PROTECTION MANUAL (2011) INCLUDING REVISION 2 DATED SEPTEMBER 1, 2019.

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.





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

#### DESIGN LOADS

- 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): II6 MPH
BASIC WIND SPEED (NOMINAL 3-SECOND GUST): 90 MPH
RISK CATEGORY: II
WIND EXPOSURE CATEGORY: C

C. SEISMIC LOAD DESIGN DATA

NOT APPLICABLE: Ss < 1.0

#### 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 DRAWINGS.
- 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, SCREWS, 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-1/8" 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

#### 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.
- INSTALLERS WORKING IN THE AREA OF THE POLE ABOVE THE NORMAL COMMUNICATIONS SPACE MUST MEET OSHA 1910.269 REQUIREMENTS.
- J. AN ANTENNA GROUND WIRE AND GROUNDING ELECTRODE IS REQUIRED. THIS GROUND SHALL BE BONDED TO THE COMPANY GROUND WIRE.
- 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 CABINET AND DISCONNECT SHALL BE MOUNTED AT AN OPERATIONAL HEIGHT AS DETAILED ON THE CONSTRUCTION DOCUMENTS:

  THE METER BASE, EQUIPMENT CABINET OR DISCONNECT SHALL NOT OBSTRUCT A WALKWAY OR BE SUBJECT TO VEHICULAR TRAFFIC.
  THE EQUIPMENT BRACKET SHALL NOT BE USED ALONE OR IN CONJUNCTION WITH A FENCE, PEDESTAL, ETC. AS A CLIMBING AID.
- 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. THE WEATHERHEAD WILL BE INSTALLED 4" ABOVE THE NEUTRAL.

#### POST-INSTALLATION INSPECTION

- 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 NOT 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.

MORRIS & RITCHIE ASSOCIATES, INC. Civil/Structural Engineers 1220-C East Joppa Road, Suite 505 Towson, Maryland 21286 410-821-1690 410-821-1748 Fax



-3

09 50 - D - SMALL CELL ADJACENT TO 215 N PATRICA VIRGINIA 22314 (CITY OF ALE)

REVISIONS:

NO. DESCRIPTION DATE

PERMIT DWGS 07/14/20

DESIGNED BY: RJD

DRAWN BY: DNT

PROJECT NO: 10421.2924

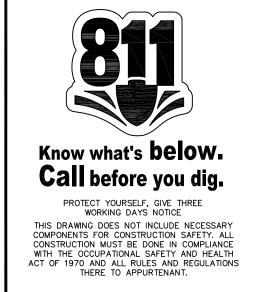
DATE: 07/01/2020

General Notes

AS NOTED

SHEET

**S-2** 



## ELECTRICAL SPECIFICATIONS

#### I. 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 ALL 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. 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.
- J. 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 ABROGATE 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.
- K. 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 DOMINION REPRESENTATIVE (IF APPLICABLE).
- L. 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, OR EQUIPMENT. SUPPORTS, HANGERS, BRACES AND ATTACHMENTS SHALL BE STANDARD MANUFACTURED ITEMS OR FABRICATED STRUCTURAL STEEL SHAPES.
- M. THERE SHALL BE NO INTERRUPTION OF POWER TO EXISTING ELECTRICAL SYSTEMS WITHOUT PRIOR CONSENT FROM VERIZON. SUCH INTERRUPTIONS SHALL BE KEPT TO A MINIMUM. ANY COST FOR WORK THAT MUST BE DONE ON AN OVERTIME BASIS SHALL BE INCLUDED IN THE BID.
- N. MOUNTING AND SUPPORTING OF ALL EQUIPMENT PROVIDED BY THIS CONTRACTOR SHALL BE COORDINATED WITH VERIZON IN THE FIELD PRIOR TO CONSTRUCTION.

#### 2. SECTION 16050 - BASIC ELECTRICAL MATERIALS & METHODS

#### A. <u>CONDUIT & BOXES:</u>

I. 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 SHALL 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 FIELD CUTS OF GALVANIZED ITEMS SHALL BE BRUSHED WITH MARINE GRADE GALVANIZING.
- 6. ALL METALLIC OBJECTS EXPOSED TO WEATHER SHALL BE GALVANIZED.

#### B. <u>WIRES & CABLE:</u>

- I. 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. ALL 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>

I. 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. <u>GROUNDING:</u>

- I. PROVIDE GROUND FOR ALL RACEWAYS, DEVICES, AND UTILIZATION EQUIPMENT PERMANENTLY AND EFFECTIVELY IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, AS HEREINAFTER 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, TERMINALS, ETC., FOR CONNECTION OF GROUND WIRE IN ALL DISTRIBUTION FOUIPMENT

#### 3. <u>SECTION 16400 - SERVICE & DISTRIBUTION</u>

#### A. <u>ELECTRICAL SERVICE:</u>

I. 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:

- I. TELEPHONE SERVICE SHALL BE EXTENDED BY THE TELEPHONE COMPANY. PROVIDE SERVICE CONDUITS, 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.

## ELECTRICAL SYMBOLS LIST

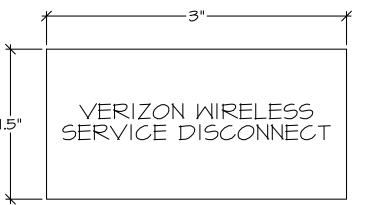
NOTE: ALL MOUNTING HEIGHTS ARE TO CENTER LINE OF THE OUTLET BOX UNLESS OTHERWISE INDICATED.

	120/240V, IΦ, SQUARE D LOAD CENTER
5	DRAWING NOTE
— —E— —	ELECTRIC FEEDERS
— — T— —	TELEPHONE SERVICE
	BRANCH CIRCUIT
M	METER
	GROUND CONDUCTOR
● <sup>R</sup>	BURIED GROUND ROD

DESIGNATES FRONT



DETAIL - SQUARE-D QOSIGLIOORB NOT TO SCALE



\* PHENOLIC NAMEPLATE SHALL HAVE A BLACK BACKGROUND WITH WHITE LETTERING AND BE PERMANENTLY INSTALLED ON FRONT OF LOAD CENTER PANEL.

## DETAIL - LOAD CENTER PLACARD NO SCALE

(PROPOSED) (NEMA 3R)											
PANEL "VERIZON WIRELESS"											
120/2	40 VOI	_TS	ΙΦ	3	MI	RE	10	00	AMP	MAIN	l L.O.
ο⊻⊢	1	2	Ξ	3	4	1	Ë	5	6	7	8
ወጽ木ዪ	40		ū	<u>5</u>	15	15	<u>5</u>	15	15	15	-
DESCRIPTION	MAIN		NOKIA ANTENNA - ALPHA	ASODA RADIO UNIT - ALPHA	NOKIA ANTENNA - BETA	ASODA RADIO UNIT - BETA	NOKIA ANTENNA - GAMMA	ASODA RADIO UNIT - GAMMA	GFCI RECEPTACLE	NOKIA PSU	SPACE
POWER LOAD: 2.05 KVA x 125% = 2.57 KVA = 10.68 AMPS @ 120/240V, 1¢, 3W											

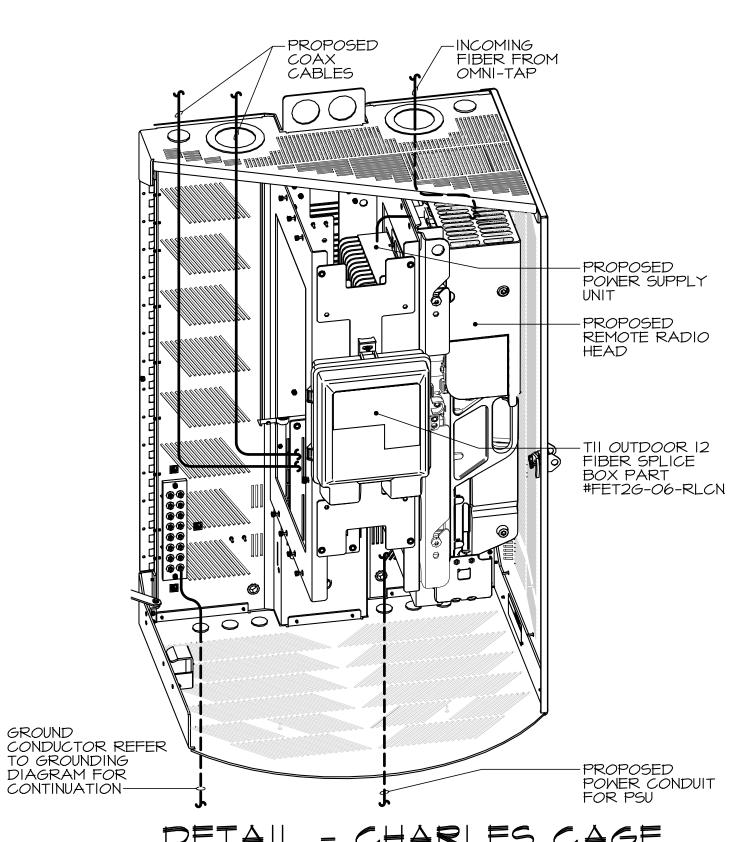
- \* PANEL SHALL BE LOCKABLE WITH PADLOCK.

  \*\* 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 IS AMP TANDEM BREAKERS IN SPACES PROVIDED.

## 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 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)
- 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 DOMINION BLUE BOOK AND NEC 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.



DETAIL - CHARLES CAGE NOT TO SCALE

TEI#20084F

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TEI

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TIMOTHY JOHN SMIDT
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REVISIONS:

NO. DESCRIPTION DATE

PERMIT DWGS. 7/14/20

LAST REV.:

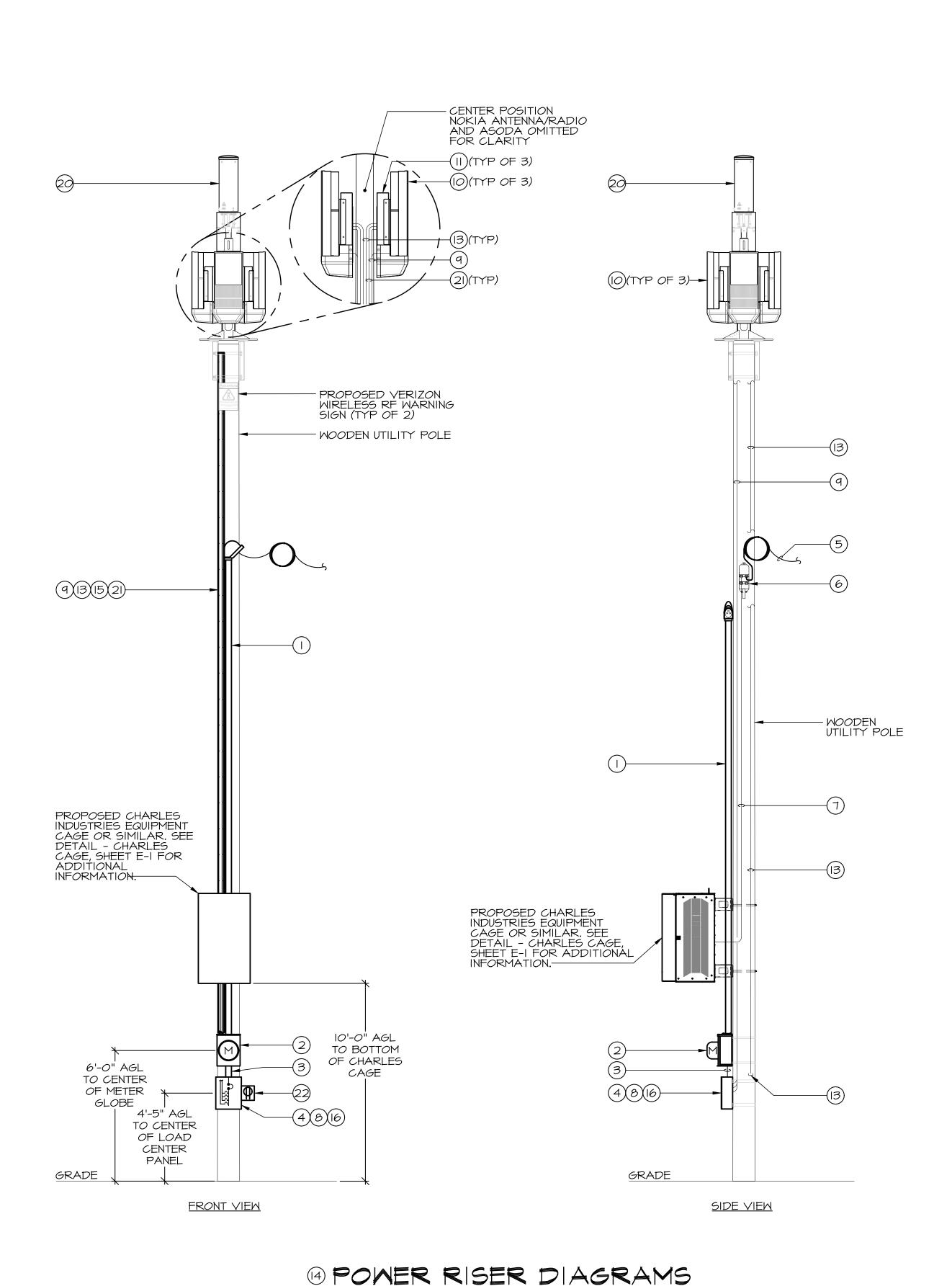
PROJECT NO: 20084P

DATE: JULY 14, 2020

DATE: JULY 14, 2020
SCALE: AS NOTE:
TITLE:

SPECIFICATIONS, SYMBOLS LIST, PANEL SCHEDULE AND DETAILS

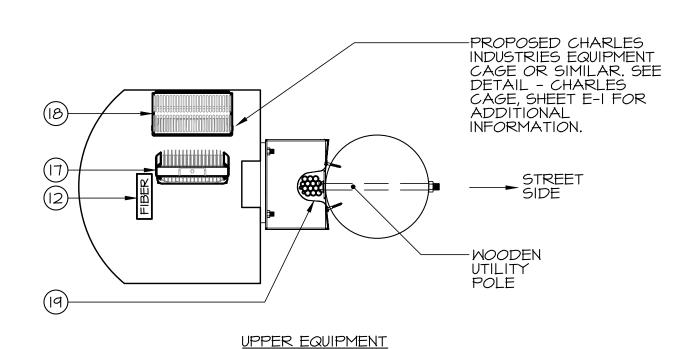
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NO SCALE

## DRAWING NOTES

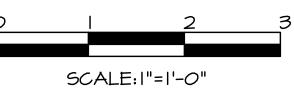
- EXTEND 3#1/O AWG + #6 GRD IN ONE (1) 2" GRAY SCHEDULE 40 PVC CONDUIT VERTICALLY UP UTILITY POLE FROM LINE SIDE OF METER CAN FOR EXTENSION OF OVERHEAD ELECTRIC SERVICE CABLES. COORDINATE FINAL CONDUIT TERMINATION POINT WITH UTILITY REPRESENTATIVE IN THE FIELD. PROVIDE WEATHER HEAD AT TOP END OF CONDUIT. ELECTRICIAN SHALL ALLOW 3'-O" OF SLACK AT WEATHERHEAD AND METER FOR FINAL TERMINATIONS BY UTILITY COMPANY.
- PROVIDE WEATHERPROOF UTILITY COMPANY 120/240V, 1¢, 200 AMP RATED 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 TO PANEL.
- 4 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) WITH FIELD INSTALLED 2P40A MAIN CIRCUIT BREAKER MOUNTED ON UTILITY POLE. PROVIDE PHENOLIC NAMEPLATE READING, "VERIZON WIRELESS SERVICE DISCONNECT". REFER TO PANEL SCHEDULE, SHEET E-I 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.
- TEXTEND NECESSARY FIBER STRANDS FROM OPTISHEATH MULTIPORT TERMINAL TO TIL 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 DAMP LOCATION RATED MC CABLE (4#12 AWG + 2#12 GRD) FROM EACH 15 AMP CIRCUIT BREAKER (TYP OF 3) IN I"
  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.
- $\widehat{(\mathsf{II})}$  verizon wireless provided, contractor installed nokia asoda mounted behind nokia antenna on utility pole.
- PROVIDE AND INSTALL TII OUTDOOR FIBER BOX PART #FET2G-I2-RLCN I2 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 PANEL. PROVIDE AND INSTALL RJ45 PLUG KIT WITH CAP TO KEEP CONNECTION WEATHERPROOF.
- (4) CONTRACTOR SHALL REFER TO LATEST EDITION OF VZW FIBER DESIGN STANDARDS FOR FIBER QUANTITIES, ETC.
- (15) CONTRACTOR SHALL PROVIDE AND INSTALL 3" SCHEDULE 40 PV MOLD (POLE RISER) FOR EXTENSION OF POWER AND FIBER CONDUITS TO NOKIA ANTENNAS. REFER TO STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL PROVIDE AND INSTALL ONE (I) MASTER LOCK BRASS 4 DIGIT PAD LOCK SET TO STANDARD VERIZON WIRELESS COMBINATION. PAD LOCK SHALL BE PLACED THROUGH CLASP ON LOAD CENTER PANEL TO PROHIBIT COVER FROM BEING OPENED. COMBINATION FOR MASTER LOCK IS THE STANDARD VERIZON WIRELESS FOUR DIGIT CODE. CONTRACTOR CAN'T INSTALL THE COMBINATION LOCK ON THE LOAD CENTER PANEL UNTIL ALL INSPECTIONS ARE DONE AND
- 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 IPISA 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.
- (18) PROPOSED LOCATION OF REMOTE RADIO HEAD MOUNTED IN CHARLES CAGE ON UTILITY POLE.
- (9) EXTEND FOUR (4) COAX AND ONE (1) RET CABLE INSIDE 3" 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.
- QO VERIZON WIRELESS PROVIDED AND CONTRACTOR INSTALLED ANTENNA MOUNTED ON TOP OF UTILITY POLE.
- (21) EXTEND NECESSARY FIBER JUMPERS FROM FIBER DISTRIBUTION BOX VERTICALLY UP EXTERIOR OF POLE TO EACH NOKIA ASODA MOUNTED BEHIND NOKIA ANTENNA/RADIO UNIT ON LIGHT POLE.
- CONTRACTOR SHALL PROVIDE AND INSTALL 15 AMP, DUPLEX, GFCI OUTLET IN SINGLE GANG, WEATHERPROOF, THREADED BOX WITH SINGLE GANG METAL, WEATHERPROOF COVER WHICH ACCEPTS A STANDARD VERIZON WIRELESS PAD LOCK. PROVIDE AND INSTALL PADLOCK WITH STANDARD VERIZON WIRELESS FOUR DIGIT CODE. CONTRACTOR CAN'T INSTALL THE COMBINATION LOCK ON THE GFCI OUTLET UNTIL INSPECTIONS ARE DONE AND FINAL.



\* COORDINATE FINAL MOUNTING LOCATION OF METER WITH UTILITY COMPANY REPRESENTATIVE PRIOR TO START OF WORK.

\*\* ALL VERTICAL UTILITY RUNS TO BE LOCATED IN THE SAME QUADRANT ON POLE, CONTRACTOR TO COORDINATE THE FINAL PLACEMENT OF THE CABLE SHROUD AS INDICATED ON SHEET S-I.

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



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REVISIONS:

NO. DESCRIPTION DATE

PERMIT DWGS. 7/14/20

LAST REV.:

PROJECT NO: 20084P

DATE: JULY 14, 2020

SCALE: AS NOTED

TITLE:

POWER RISER

DIAGRAM,

EQUIPMENT PLAN

AND NOTES

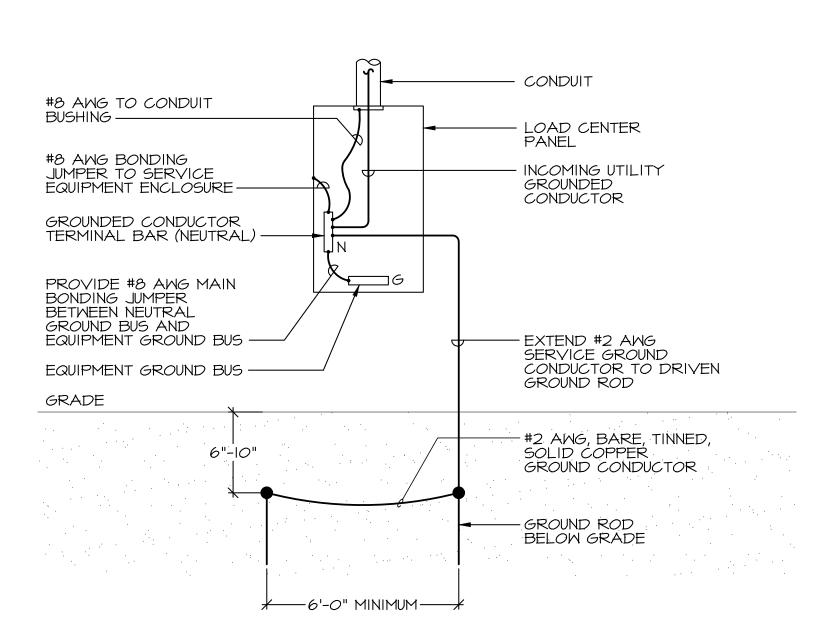
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TEI#20084P

## TO EQUIPMENT-GROUND CONDUCTOR (TYP)-RADIUS OF BOND CONDUCTOR/ SHALL BE I'-O" NOMINAL/ O'-8" MINIMUM— -SHINER NOT TO EXCEED 1/8 INCH COMPRESSION CONNECTOR

#### DETAIL - DIRECTIONAL SPLICE NO SCALE



DETAIL - ELECTRIC SERVICE GROUNDING ELECTRODE NO SCALE

# PROPOSED NOKIA ANTENNA/RADIO CENTER POSITION NOKIA ANTENNA AND ASODA RADIO UNIT OMITTED FOR CLARITY → WOODEN UTILITY POLE -6 PROPOSED EQUIPMENT CAGE -

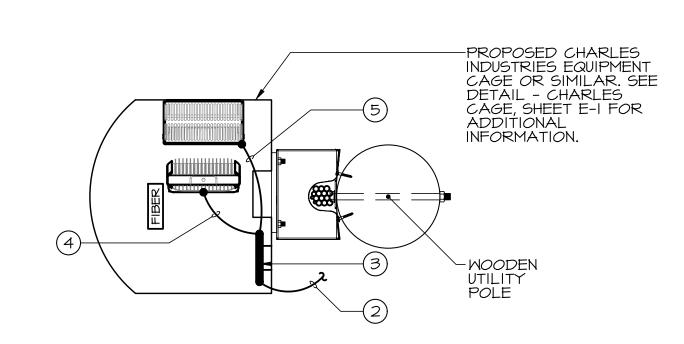
"UTILITY POLE GROUNDING DIAGRAM NO SCALE

## GROUNDING GENERAL NOTES

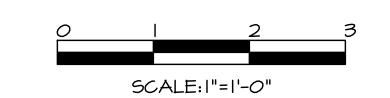
- ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD) TO NEAREST REINFORCING BAR USING ERICO CADWELD "ONE-SHOT" CONNECTIONS.
- 2. ALL EXTERIOR GROUND CONDUCTORS SHALL BE #2 AWG BARE, TINNED SOLID COPPER, UNLESS NOTED OTHERWISE.
- 3. ALL GROUND CONNECTIONS ABOVE GRADE SHALL BE TWO-HOLE COPPER 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. KOPR-SHIELD SHALL NOT BE PERMITTED.
- 6. TYPICAL BI-DIRECTIONAL BONDING CONNECTIONS TO THE INTERIOR GROUND RISER 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".
- 10. JOINT COMPOUND FOR GROUNDING SHALL BE NO-OX. KOPR-SHIELD SHALL NOT BE PERMITTED.

## DRAMING 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 1/2" 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 AWG, 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.
- T EXTEND 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 ASODA AND BOND TO GROUND PIGTAIL CONDUCTOR. EXTEND GROUND PIGTAIL AND BOND TO GROUND CONDUCTOR EXTENDING DOWN EXTERIOR OF POLE TO BURIED GROUND ROD. REFER TO DIRECTIONAL SPLICE DETAIL, THIS SHEET.
- EXTEND I#6 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM EACH NOKIA ANTENNA GROUND LUG AND BOND TO NOKIA ASODA GROUND LUG.
- (II) REFER TO DOMINION SPECIFICATIONS FOR ADDITIONAL GROUNDING REQUIREMENTS.



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

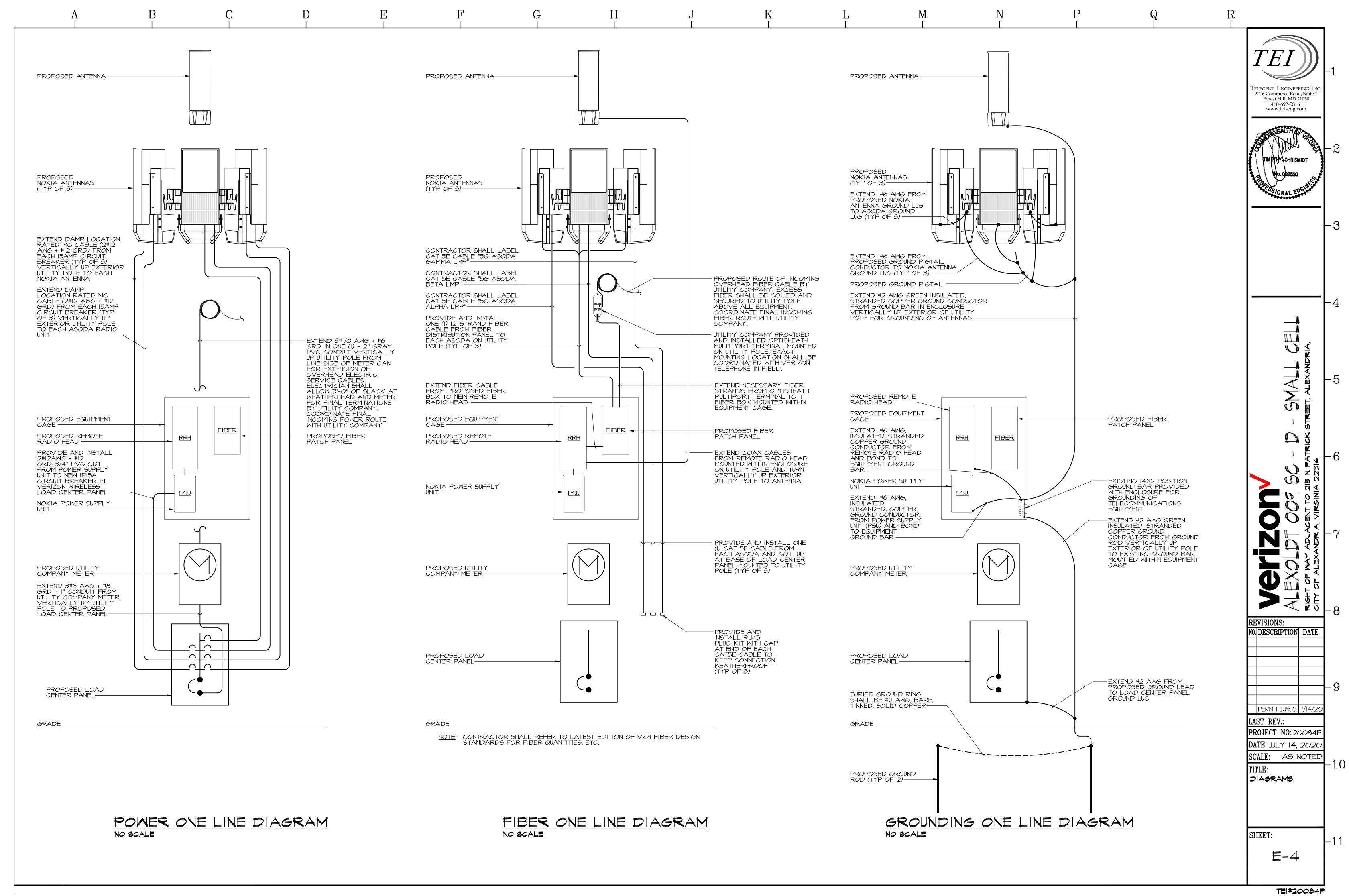


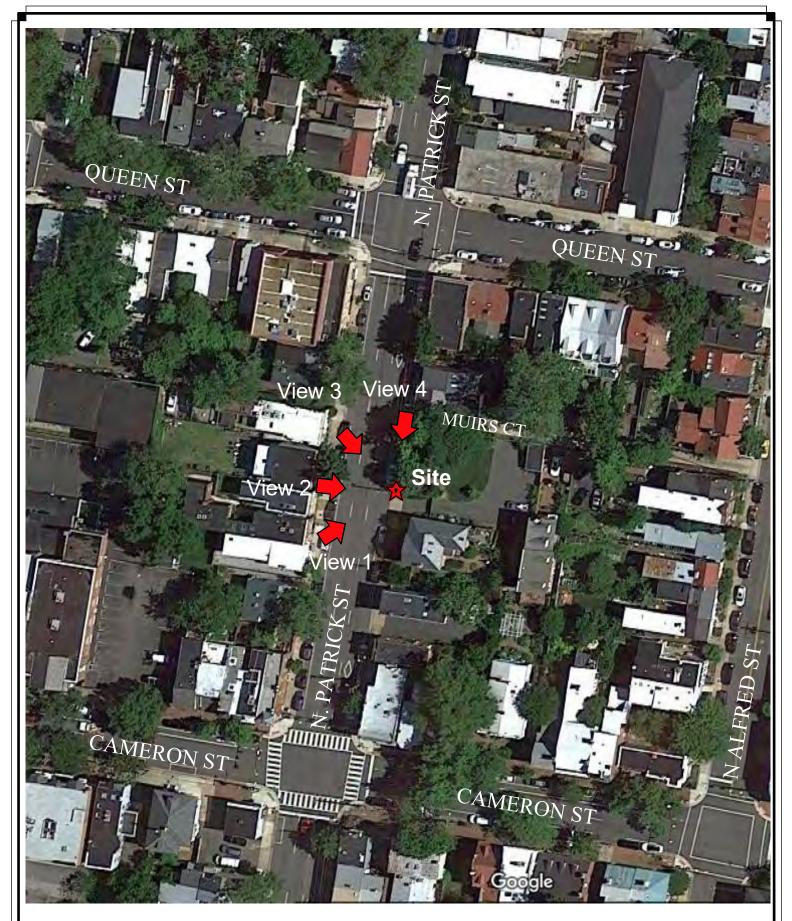
ELEGENT ENGINEERING I 2216 Commerce Road, Suite 1 Forest Hill, MD 21050 410-692-5816 www.tel-eng.com TIM DTHY YOHN SMIDT Mo. 026520 REVISIONS: NO. DESCRIPTION DATE |PERMIT DWGS.|7/14/20 LAST REV.: PROJECT NO: 20084F DATE: JULY 14, 2020 SCALE: AS NOTEI TITLE:

GROUNDING DIAGRAM, DETAILS AND NOTES

TEI#20084P

SHEET:







**Alexoldt 009 - D**Overall Site Layout

vertzon/





Alexoldt 009 - D
Existing View 1

14 July 2020

vertzon/

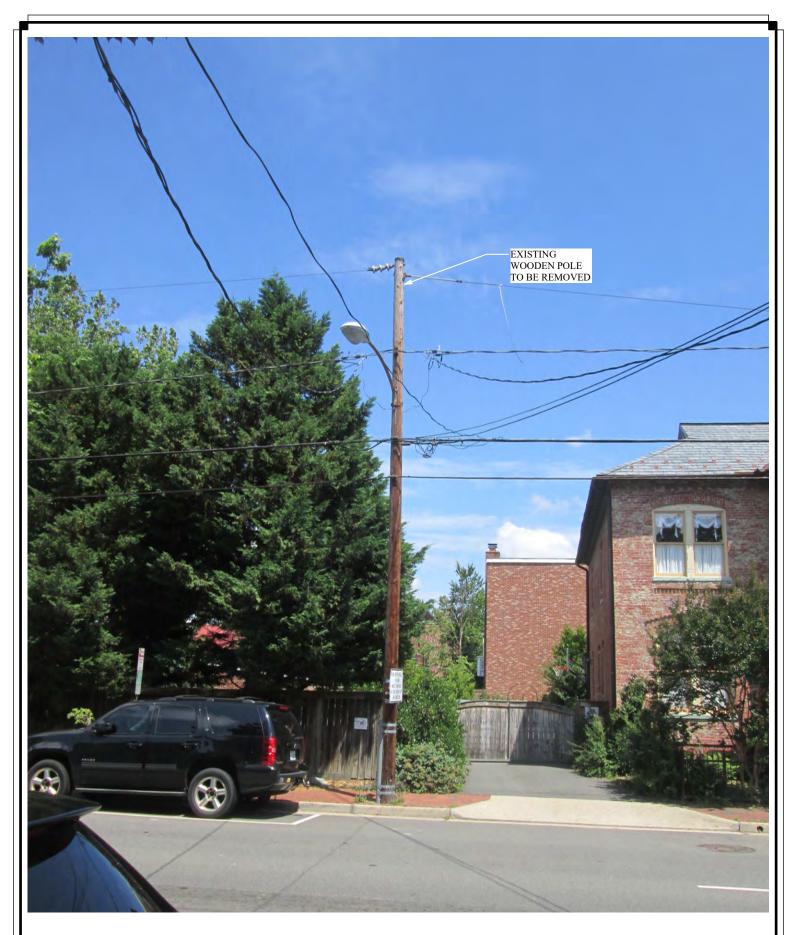




**Alexoldt 009 - D**Proposed View 1



14 July 2020

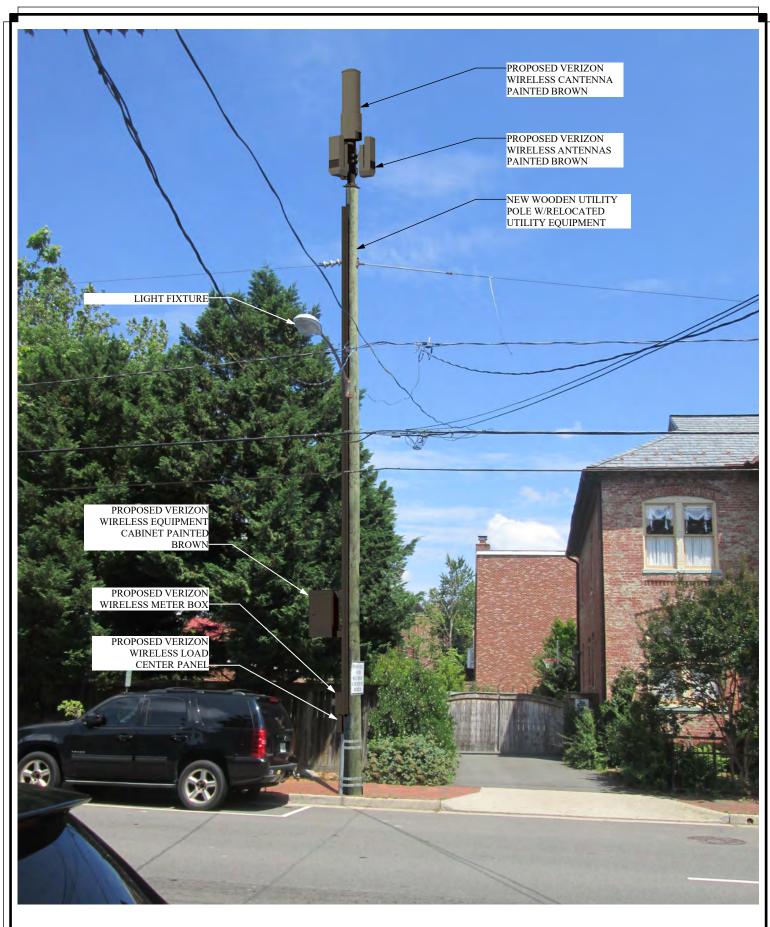




Alexoldt 009 - D
Existing View 2

14 July 2020







**Alexoldt 009 - D**Proposed View 2

vertzon/

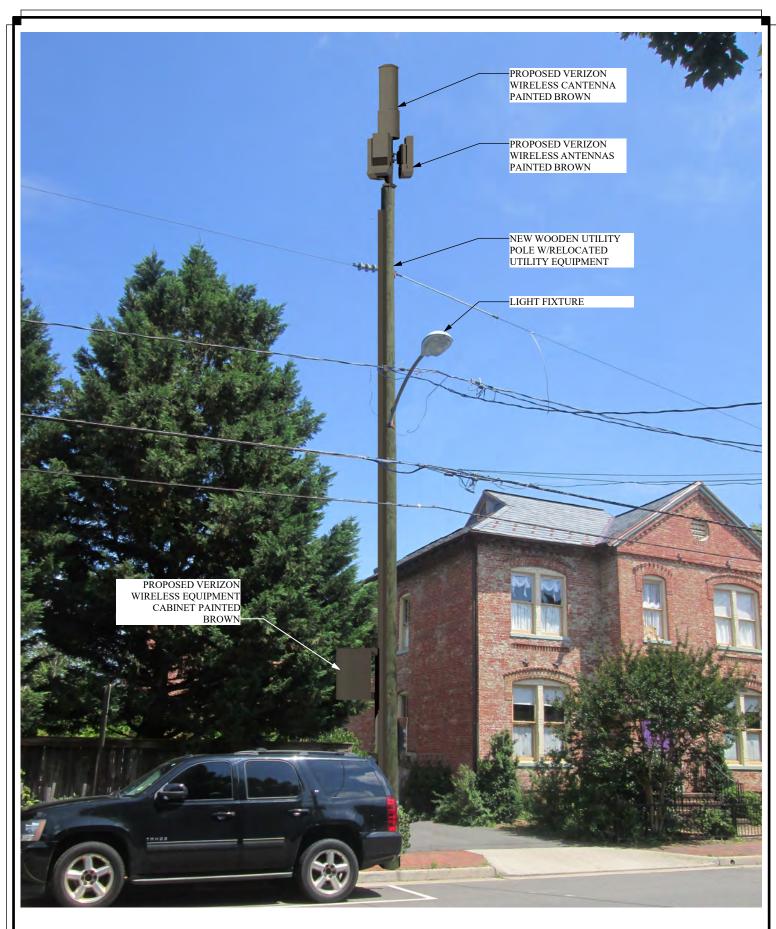




**Alexoldt 009 - D**Existing View 3

vertzon/

14 July 2020





**Alexoldt 009 - D**Proposed View 3

14 July 2020



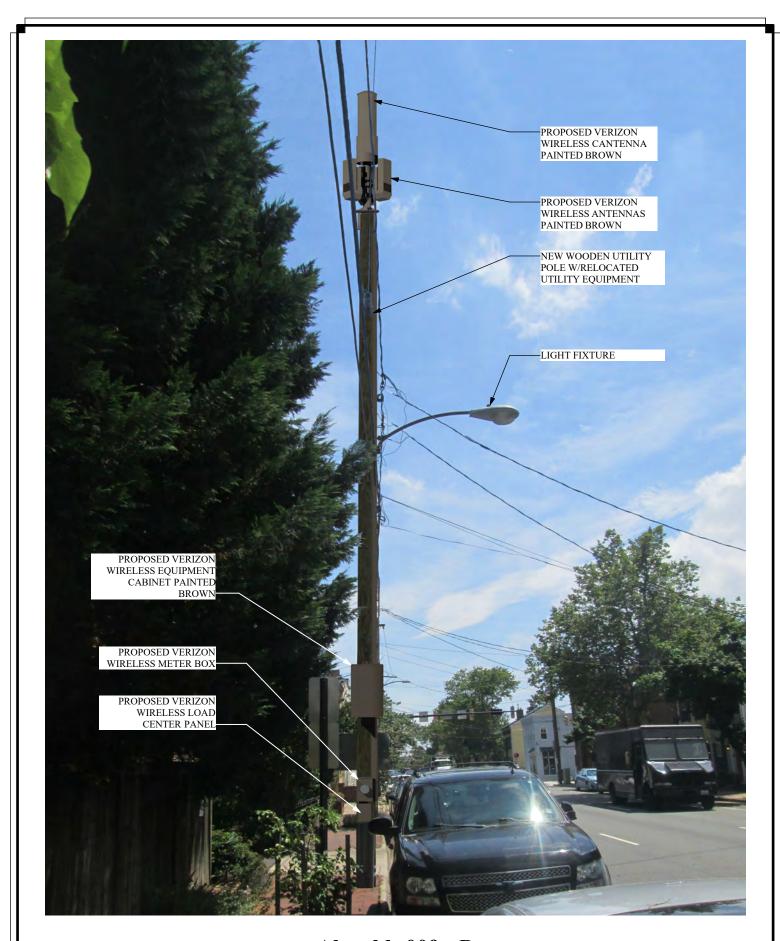




Alexoldt 009 - D
Existing View 4

14 July 2020







**Alexoldt 009 - D**Proposed View 4



14 July 2020

From: Craig Miller < cmillerjr@comcast.net > Sent: Monday, December 14, 2020 10:19 AM

To: Preservation < Preservation@alexandriava.gov>; Lisa Brock < IH2OCOLOR@comcast.net>

**Subject:** re: Historic Preservation - William Conkey - 211 North Patrick Street

Mr. Conkey,

Good morning! My name is Craig Miller and I co-own 211, 215 & 217 North Patrick Street. I see Staff has a "small cell Site" adjacent to 215 North Patrick Street on the consent calendar for this Wed, 12/16/20. I am formally requesting you pull this off the consent calendar so we can discuss with the BAR at the 12/16/20 meeting.

The history of 211 North Patrick has been difficult to research over the years so I can understand if staff had a difficult time discovering the historical significance of this property. A brief history:

- 211 North Patrick was built in ~1886 by Frederick Paff an immigrant from Germany that started a shoe and boot factory in Alexandria.
- After Paff's death in 1903, His son Frederick Paff Jr. lived at 211 North Patrick and was the Mayor of Alexandria from 1905 1912.
- ~1943-1945, Dr James Carpenter bought 211 North Patrick and started his medical career in Alexandria as the first African-American medical doctor in Alexandria with rights to practice at Alexandria Hospital.
- Dr. Carpenter's private medical practice was on the first floor of 211 with nurses quarters on the 2<sup>nd</sup> floor.
- 211 North Patrick is deep in Alexandria History and African American history.

We recently replaced the roof of 211 North Patrick Street according to BAR rules with an "in-kind" slate roof to preserve the property and its "site-lines." The proposed "small cell site" by Verizon is 25 feet from the physical structure at 211 North Patrick and has a vertical height in direct site-line of the slate roof. This "small cell structure" will ruin the "grandness" of this old and important home.

I am not against technology, however, there is a another telephone pole approximately 50' north on the corner of North Patrick and the common alley way that is more appropriate, in my opinion, that protects 211 North Patrick which is an important piece of Alexandria's architectural history. Please do not approve the installation of a "small cell site" at 215 North Patrick Street.

Mr. Conkey, please advise me if I need to provide you and staff with more or supporting information.

Best Regards,

Craig Miller 915 Cameron St 703-628-9574

Sent from Mail for Windows 10