



McGOEY, HAUSER and EDSALL
CONSULTING ENGINEERS D.P.C.

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RICHARD D. McGOEY, P.E. (NY & PA)
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**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT: MOBILITIE, LLC
PROJECT NO.: 2017-23
PROJECT LOCATION: SECTION 96, BLOCK 1, LOT 11.1
REVIEW DATE: 20 DECEMBER 2017
MEETING DATE: 21 DECEMBER 2017
PROJECT REPRESENTATIVE: MOBILITIE, LLC

1. The Applicant's representative has submitted additional surveyed information based on maps of record. No field survey has been performed. From the stamp survey map shown, the power utility pole is located in the right of way of Orr Avenue.
2. Status of the Town of Newburgh Town Board's review and/or approval of the project should be discussed with the Planning Board.
3. A public hearing for the site is required.
4. Submission to the Orange County Planning Department for review is required.
5. The plans have been modified pursuant to our previous comments which addressed discrepancies in the height of the pole, the antenna and various equipment proposed.

Respectfully submitted,

**McGoey, Hauser and Edsall
Consulting Engineers, D.P.C.**

Patrick J. Hines
Principal

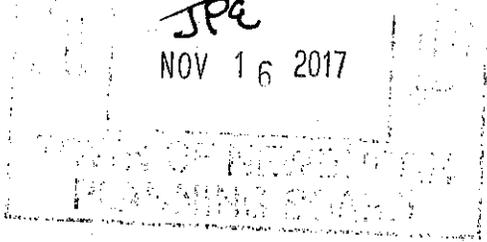


PAT

Moblittie LLC
594 Broadway
Suite 301
New York, NY 10012
www.moblittie.com

JPC

NOV 16 2017



November 10th, 2017

John P. Ewasutyn
Planning Board Chairman
Town of Newburgh
1496 Route 300
Newburgh, NY 12550

RE: MOBILITIE, LLC's SITE PLAN APPLICATION PB# 2017-23

Dear Mr. Ewasutyn,

Moblittie is currently seeking to build its small cell facility on an existing Central Hudson utility pole along Orr Avenue. While Moblittie is attaching to a pole owned by Central Hudson the underlining property which Moblittie seeks to build upon is located within the Town's right-of-way and controlled by the Town Board. Moblittie has been requested by the Planning Board to receive the Town Board's permission or consent for the placement of its facility.

Enclosed portions of our application which describe our proposal, equipment and network need. Please kindly forward this information to the Town Board for their review. I look forward to speaking with the Board at the next work session. Please contact me if you have any questions or comments.

Thank you,

Paul Costa
Permitting Manager

Enclosures

New York State Public Service Commission Certificate
Construction Drawings of Proposed Site
Photosimulation of site
Network Deficiency and Propagation Map



Moblite, LLC
594 Broadway
Suite 301
New York, NY 10012
www.moblite.com

Town Of Newburgh Proposal

Moblite is seeking Site Plan approval to build one small cell site on an existing Central Hudson wooden utility pole within the Town's ROW of Orr Avenue located at Latitude 41.4997 and Longitude -74.071735 in a 1B Zoning District. Moblite is the largest privately-held wireless infrastructure provider in the United States. Moblite funds, installs, and operates DAS, Small Cell, and Wi-Fi networks, communication tower sites, used by wireless carriers to enable high speed mobile communications. Moblite has been granted a Certificate of Public Convenience and Necessity ("PCN") by the New York State Public Service Commission and is a utility under the laws of the state. Moblite's PCN status allows it to place its telecommunication equipment in the ROW with other telecommunication and utilities services.

The Small Cells are a vital component to the overall telecommunications network as they increase capacity and strengthen network connections to improve coverage with the need for larger sites. The small cells are small, low-powered wireless facilities, consisting of a transmit-receive antenna that communicates with wireless devices, a wireless backhaul antenna that connects the facility to the carrier's core network, and compact radio equipment mounted on either new or existing utility or light poles with no ground equipment. Small cells have a range of 300 to 500 meters. The small cells boost the capacity by offloading data demands to existing macro networks.

The location of the proposed small cell site was selected due to the critical needs in the area for more data capacity. The surrounding area consists of large commercial shopping centers. The surrounding area is served by two Transit Orange bus lines the Northside Route and Southside Route with stops near the Walmart and Kohl's. In addition to being located near Route 87 and State Route 17K. The highly trafficked commercial establishments create a high data demands on the existing network.

The network deficiency map enclosed shows the area's current the data demand. The immediate area in red represents a critical level of competing data demand requiring immediate action to supplement network resources. The small cell site will create a coverage area (enclosed is the proposed solution map) of area of 6.4 acres or .01 square miles. It would cover the commercial shopping area directly north of the site and the Speedway south of the site and 300 plus feet of Orr Avenue. The site also cover vehicles traveling along Route 300 and portions of the Home Depot parking lot and Mid-Hudson Valley Bank. The small cell will offload the data through its wireless backhaul to the macro site located at Snake Hill in the City of Newburgh. By offloading the area's demand, the site will allow for improved service to Sprint's network in the area.

Moblite will be building its facility on an existing Central Hudson utility pole along the Town owned Orr Avenue. This collocation benefits the Town by using existing ROW infrastructure and eliminates the need for a new pole. The current pole is 30 feet 2 inches tall and contains a guidewire attached to a pole across the street. Moblite will install the small cell equipment on the side of the pole which will transport the data to the donor macro site.

On top of the pole will be a 2.5 Mhz omni antenna that has a height of 29.5 inches and a diameter of 4.7 inches. The antenna will be attached to the pole with a 21.6-inch bracket. A portion of the bracket will wrap around the pole leaving a 10-inch space from the top of the pole to the bottom of the antenna. In total,



Mobilitie, LLC
594 Broadway
Suite 301
New York, NY 10012
www.mobilitie.com

the antenna will extend the structure height to 33 feet 6 inches – this is consistent with the poles along the Orr Avenue.

Mounted onto the side of the pole will be the remaining equipment used as part of the small cell facility. At 5 feet from the ground, there will be a Central Hudson meter and 2 feet above the meter will be a power disconnect, extending 5.95 inches off the pole. These will be attached with a .5-inch steel band. At 11 feet from the ground will be the A/C distribution box connected to the pole with a .5-inch steel band. The center line of the radio will be located 15 feet from the ground. The radio has a height of 20.3 inches, is 10.3 inches wide, and will extend 8.3 inches from the pole. It will be attached to the pole with a 3/8 inch through bolt. On top of the radio will be a small GPS antenna that will extend 2 inches off the radio. The UE relay will be located 17 feet from the ground. The UE relay has a height of 13 inches and a diameter of 7 inches. The UE relay will extend 10 inches from the pole. Power for the site will be overhead from the existing utility lines along Orr Avenue on the southwest side of the street adjacent to the Speedway Entrance. Enclosed is a photo simulation of the proposed facility.

Construction of the site will can take up to two days but may vary. The first day of construction consist of prep work and pulling of aerial power. The second day will include the installation of equipment and integration of equipment. Mobilitie will not be boring, trenching or digging up any part of the Right-of-Way.

The construction of the small cell wireless facility allows Sprint to provide precisely placed facility that will provide improved high-speed, high-capacity bandwidth network and meet the ever-growing demand for connectivity. Using existing infrastructure in the ROW allows for this improve coverage without any additional impacts on the ROW and blends in with the current infrastructure.

STATE OF NEW YORK DEPARTMENT OF PUBLIC SERVICE
THREE EMPIRE STATE PLAZA, ALBANY, NY 12223-1350
Internet Address: <http://www.dps.state.ny.us>

PUBLIC SERVICE COMMISSION

WILLIAM M. FLYNN
Chairman
PATRICIA L. ACAMPORA
MAUREEN F. HARRIS
ROBERT E. CURRY JR.
CHERYL A. BULEY



PETER MCGOWAN
Acting General Counsel

JACLYN A. BRILLING
Secretary

October 3, 2006

John C. Dodge, Esq.
Cole Raywid & Braveman, LLP
1919 Pennsylvania Avenue, NW
Washington, DC 20006

Re: Case No. 06-C1049

Dear Mr. Dodge:

The application, by Mobilite, LLC, on August 29, 2006, for a Certificate of Public Convenience and Necessity to operate in New York State as a facilities-based provider and reseller of telephone service, without authority to provide local exchange service, is hereby approved. This approval is based upon the accuracy of the information provided in the company's application and may be revoked if the application is found to contain false or misleading information, for failure to file or maintain current tariffs, or for violation of Commission rules and regulations.

The company's tariff, P.S.C. No. 1 – Telephone, is also approved.

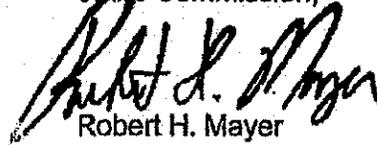
The company is not authorized to use its own operators to handle 0- (emergency or non-emergency) calls. Such calls must be routed to another telephone company or operator services provider authorized to handle such calls, until such time as an amended Certificate of Public Convenience and Necessity is obtained pursuant to Part 649.6 of the Commission's rules.

The company must obtain any required consents of municipal authorities before commencing construction of telephone lines. It must also comply with applicable federal laws, New York State Public Service Law and related statutes, and the Commission's rules and regulations.

The company is also required to file a Statement of Gross Intrastate Operating Revenues by March 31 each year. It will be notified in writing each year of the required content and format of this report.

If you have any questions, please contact Jim Kittleman at (518) 486-2812.

By direction and delegation
of the Commission,

A handwritten signature in black ink, appearing to read "Robert H. Mayer".

Robert H. Mayer

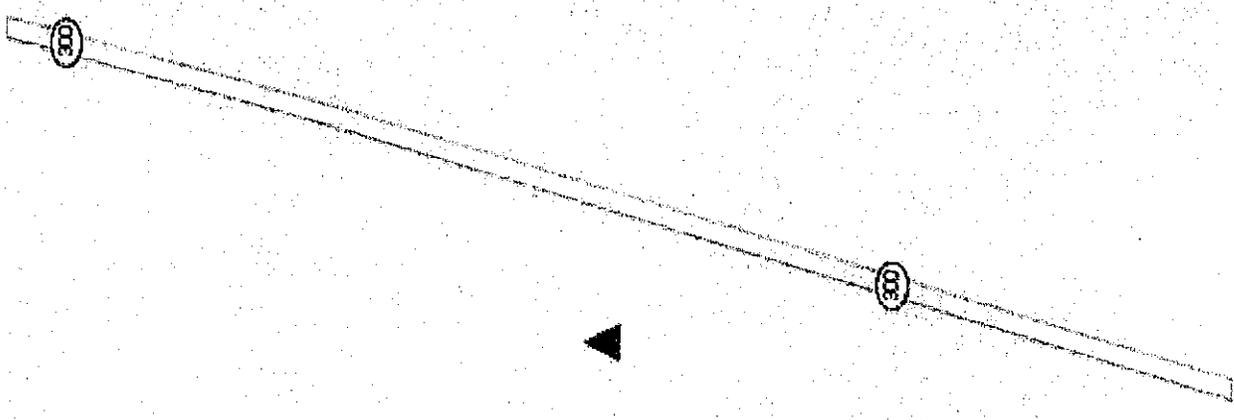
Director

Office of Telecommunications

cc: Maria LeBoeuf
Greg Pattenaude
Central Operations (2)

AREA OF INTEREST

City Ave



9NYB007805-A
Site Lat: 41.499700
Site Long: -74.071735
Pole Height: 35 ft
▲ Proposed Small Cell

Additional comments below:

PROPRIETARY & CONFIDENTIAL



November 10th, 2017

John P. Ewasutyn
Planning Board Chairman
Town of Newburgh
1496 Route 300
Newburgh, NY 12550

Re: Orr Road Small Cell Site PB # 2017-23

Dear Mr. Ewasutyn,

Please find the enclosed documents and comments to the November 2nd, Planning Board technical review memo in regard to Mobilitie's Site Plan application PB# 2017-23

In response to our previous comments a sheet S-1 Existing Conditions Survey has been submitted. However note #1 on the survey identifies "that it is an existing condition plans and not intended to define property boundaries. Property lines shown are based on references below and evidenced found in the field. This plan is assigned to the parties indicated hereon and use of this plan by others is prohibited." Use of the Orange County GIS Mapping for boundary surveys is not appropriate.

Please find the attached survey which marked the space between the Right-of-Way of Orr Avenue and Property line.

The Applicants representative have submitted a response letter which identifies the height of the pole at two different elevations, 29 feet 6 inches a 38 feet 4 inches, while the plan sheets the maximum height of the pole at 26 feet 2 inches.

Please find revised plans which show the correct height of the pole without the antenna at 30'-2" and with the antenna at 33'-6".

The Applicant may wish to request additional waivers for section 168-6 F, various items 1-24.

Mobilitie has attached a letter describing the requested waviars. Mobilitie is not seeking full wavier of section 168-6 F as it has provide documents on the November 2nd meeting to meet the requirements of Section 168-6 F 1-24

The Applicant requires permission or consent of the Town Board for placement of the facility within the town road right-of-way.

Mobilitie has submitted documents to the Town Board and has requested to discuss the project at the next work session. Mobilitie will not build its facility till it the Site Plan application has been approved and been given permission from the Town Board to access the Right-of-Way.

Thank you,



Paul Costa
Permitting Manager

Mobilitie is seeking the below waivers pursuant to Chapter 168 Telecommunications Facilities, Wireless code of the Town of Newburgh.

- Mobilitie is seeking waiver request for § 168-6 F Item 6,7,8,9,17,18,21,22. Mobilitie has met the requirements for items 1-5,10-16,19,20,23 in the documents provided to the Planning Board. Mobilitie has provided construction drawings detailing the proposed location and dimensions, equipment specifications, Radio Frequency – Electromagnetic Energy compliance report and a structural analysis of the existing pole. These documents provide the necessary information required in Section F.
- Mobilitie is seeking a waiver request for Chapter § 168-8 Section J & K – as the proposed facility is attaching to an existing wooden utility pole and will only extend the height of the structure by 3”- 4’. The design of the facilities attached to the existing utility pole and is consistent with the color and scale of existing wooden utility pole along the right-of-way of Orr Avenue and within the Town limits.
- Mobilitie is seeking a waiver request for Chapter § 168-8 Section N –Mobilitie proposes to pull power using an overhead powerline from Central Hudson power lines across the street. The overhead power line will not be detrimental to the health, safety, general welfare and environment, including the visual and scenic characteristics of the area.
- Mobilitie is seeking a waiver request for Chapter § 168-8 Section Q – The proposed facility is collocated on an existing wooden utility pole within in the right-of-way of Orr Avenue. The site’s location prevents Mobilitie from meeting this request. The site will have continued access through the public right-of-way of Orr Avenue.
- Mobilitie is seeking a waiver request for Chapter § 168-8 Section Z – The proposed facility is collocated on an existing wooden utility pole and will extend the height of the structure to 33”-6’ which is consistent with the color and scale of existing wooden utility poles along the western portion of Orr Avenue.
- Mobilitie is seeking a waiver request for § 168-13 - Lot size and setbacks. The proposed facility is located on an existing wooden utility pole within the right-of-way. The location of the facility prevents Mobilitie from meeting the required setbacks abutting parcels, right-of-way’s and of the underlying zoning district.

NETWORK DEFICIENCY

300

300

9NYB007805-A
Site Lat: 41.499700
Site Long: -74.071735
Pole Height: 35 ft
▲ Proposed Small Cell
■ -Critical
■ -Above Average
■ -Average

0.02 0.04 0.06 mi

These levels are determined by complex algorithms which consider many variables including usage patterns, non-preferred user events, and data trends.
Critical | Red -Areas which represent a critical level of competing data demand requiring immediate action to supplement network resources
Above Average | Yellow -Areas which represent contentious data demand at greater than average levels and projected toward critical levels
Average | Green -Areas which represent average data demand growth

mobilite[®]
intelligent infrastructure

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PROPOSED SOLUTION

Major roads will require data services from the connected cars and connected emergency vehicles of the future

100

100

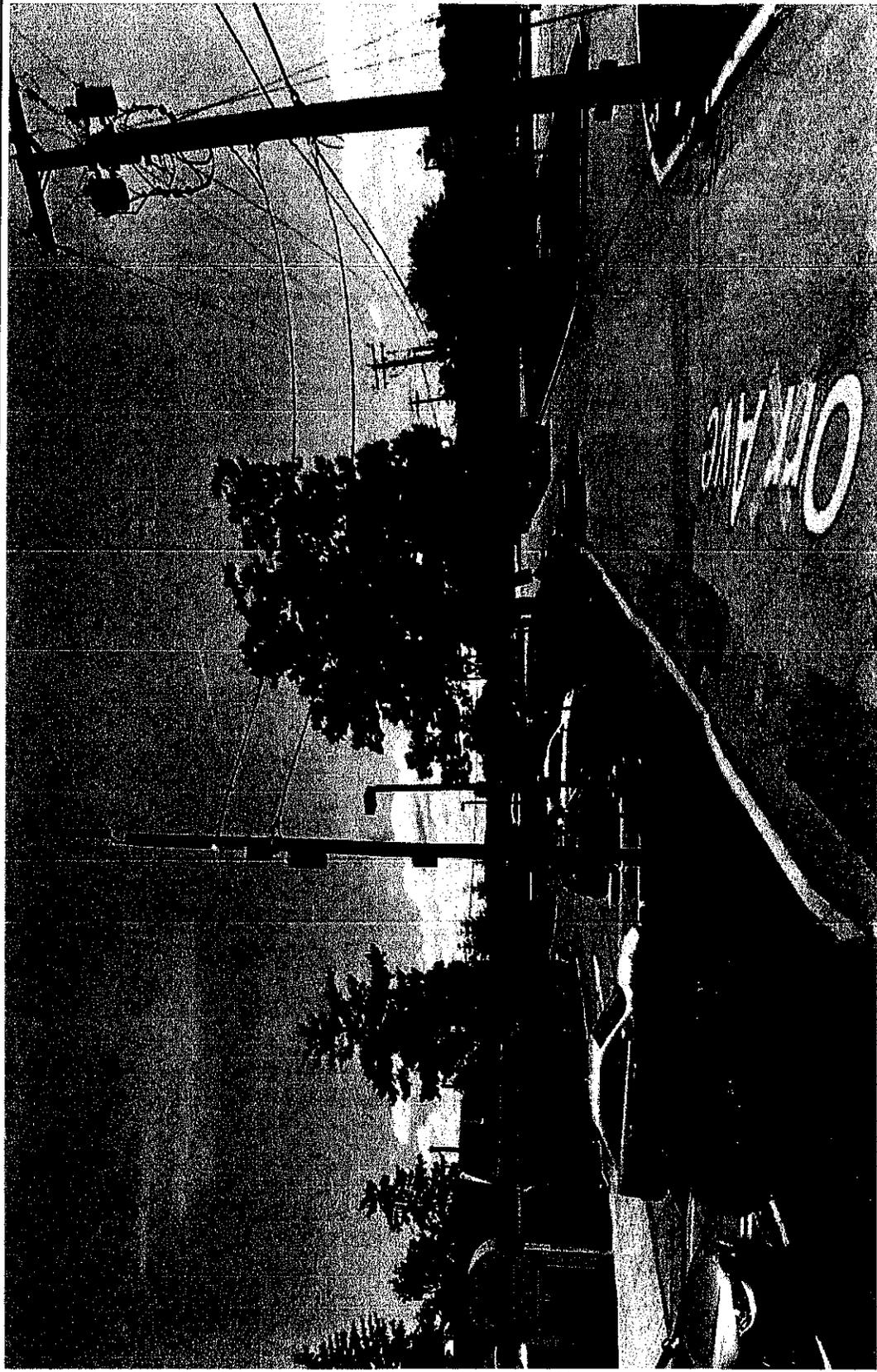
9NYB007805-A
Site Lat: 41.499700
Site Long: -74.071735
Pole Height: 35 ft
▲ Proposed Small Cell Coverage
■ Existing Coverage

0 0.02 0.04 0.06 mi

total area covered: 0.01 sq mi
total roads covered: 0.28 mi
the wireless demand in this area is driven from transient wireless devices which have shown increasing need for wireless infrastructure sources

PROPRIETARY & CONFIDENTIAL





PROPOSED VIEW
9NYB007805A/NY90XSWY1A
41.499700/-74.071735
ORR AVE & NY-300/UNION AVE
NEWBURGH, NY 12550

DATE: 8/23/17



1800 Hwy. 34 • Suite 209 • Wall, NJ 07719
Phone: (732) 280-5623 Fax: (732) 280-3980 - www.kimbldg.com

mobilite
intelligent infrastructure

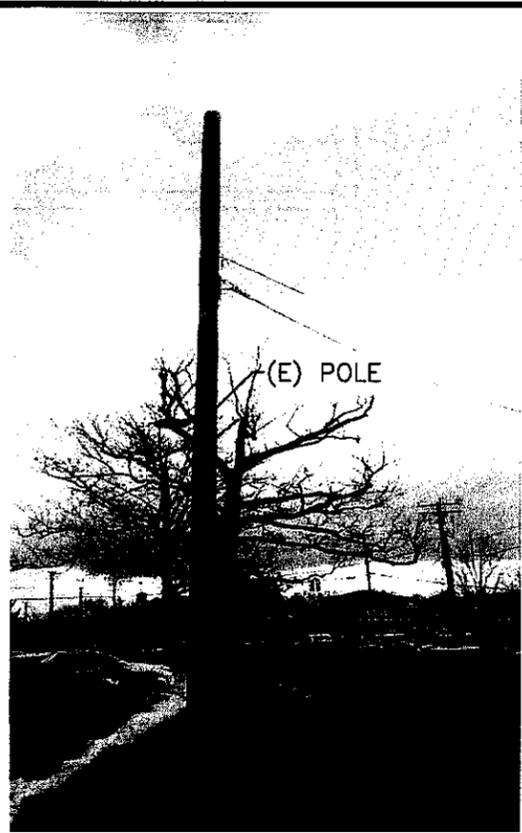


EXHIBIT PHOTO

SCALE: NOT TO SCALE

1



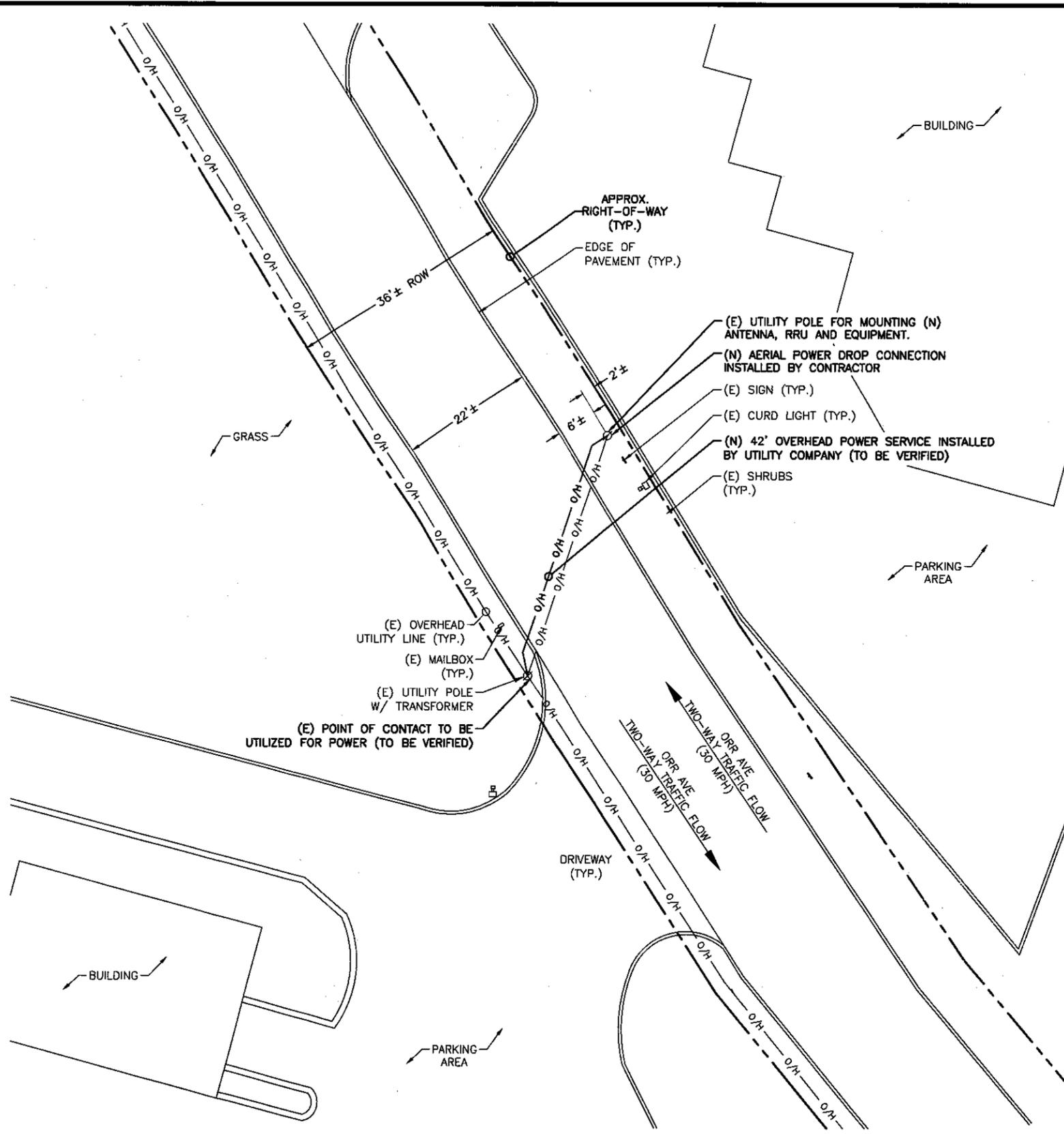
SITE LOCATION

AERIAL SITE LOCATION

SCALE: NOT TO SCALE

2

NOTE:
THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, RIGHT-OF-WAYS, POWER & TELCO UTILITY POINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED. ALL ITEMS AND DIMENSIONS SHOULD BE VERIFIED IN THE FIELD.



ENLARGED SITE PLAN

SCALE: 1" = 20'-0" (1" = 10'-0" ON 24"x36" SHEET)

3

mobilitie
Intelligent infrastructure

3475 PIEDMONT ROAD NE
SUITE 1000
ATLANTA, GEORGIA 30305
PHONE: (312) 638-5400

PROJECT NO: ER600221

DRAWN BY: C. O'DELL

CHECKED BY: W. WOODS

E	11.09.17	UPDATE UE RELAY
D	11.06.17	UPDATE POLE HGT. & TEMPLATE
C	08.18.17	CHANGE POLE HEIGHT
B	08.08.17	POLE HEIGHT REVISION
A	06.29.17	PRELIM - NOT FOR CONSTRUCTION



IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

NY90XSWY1A
9NYB007805A
ORR AVE &
NY-300/UNION AVE
NEWBURGH, NY 12550
UTILITY POLE

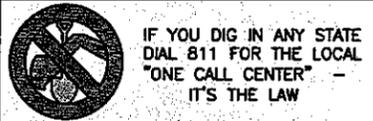
SHEET TITLE
EXHIBIT PHOTO & SITE PLAN

SHEET NUMBER
SP-1

**SITE ID-CANDIDATE LETTER/CASCADE ID-CANDIDATE LETTER:
9NYB007805A/NY90XSWY1A**

**LATITUDE/LONGITUDE:
41.499700/-74.071735**

**CROSS STREET:
ORR AVE & NY-300/UNION AVE
CITY, STATE, ZIP:
NEWBURGH, NY 12550**



IF YOU DIG IN ANY STATE
DIAL 811 FOR THE LOCAL
"ONE CALL CENTER" -
IT'S THE LAW

THE UTILITIES SHOWN HEREIN ARE FOR THE CONTRACTOR'S
CONVEYANCE ONLY. THERE MAY BE OTHER UTILITIES NOT
SHOWN ON THESE PLANS. THE ENGINEER/SURVEYOR ASSUMES
NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL
BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL THE
UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE
TO THE (E) UTILITIES BY THE CONTRACTOR SHALL BE THE
SOLE RESPONSIBILITY OF THE CONTRACTOR.

DO NOT SCALE DRAWINGS

CONTRACTORS SHALL VERIFY ALL PLANS, (E) DIMENSIONS & FIELD
CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE
ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE
PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A
TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE
MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT
DISTURBANCE OF EFFECT ON DRAINAGE; NO SANITARY SEWER
SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND
NO COMMERCIAL SIGNAGE IS PROPOSED.

PRIOR TO ANY CONSTRUCTION WORK, CONTRACTOR SHALL LOCATE
ALL UNDERGROUND UTILITIES. ALL UTILITIES SHALL BE MARKED.

THIS DESIGN IS SUBJECT TO ANY JURISDICTIONAL AND OWNER
APPROVALS INCLUDING JURISDICTIONAL REQUIREMENTS, RF
EQUIPMENT CONFIGURATION, AND FINAL UTILITY COORDINATION WITH
PUBLIC POWER AND UTILITY PROVIDERS/ CONTRACTOR TO CONFIRM
FINAL REQUIREMENTS WITH OWNER.

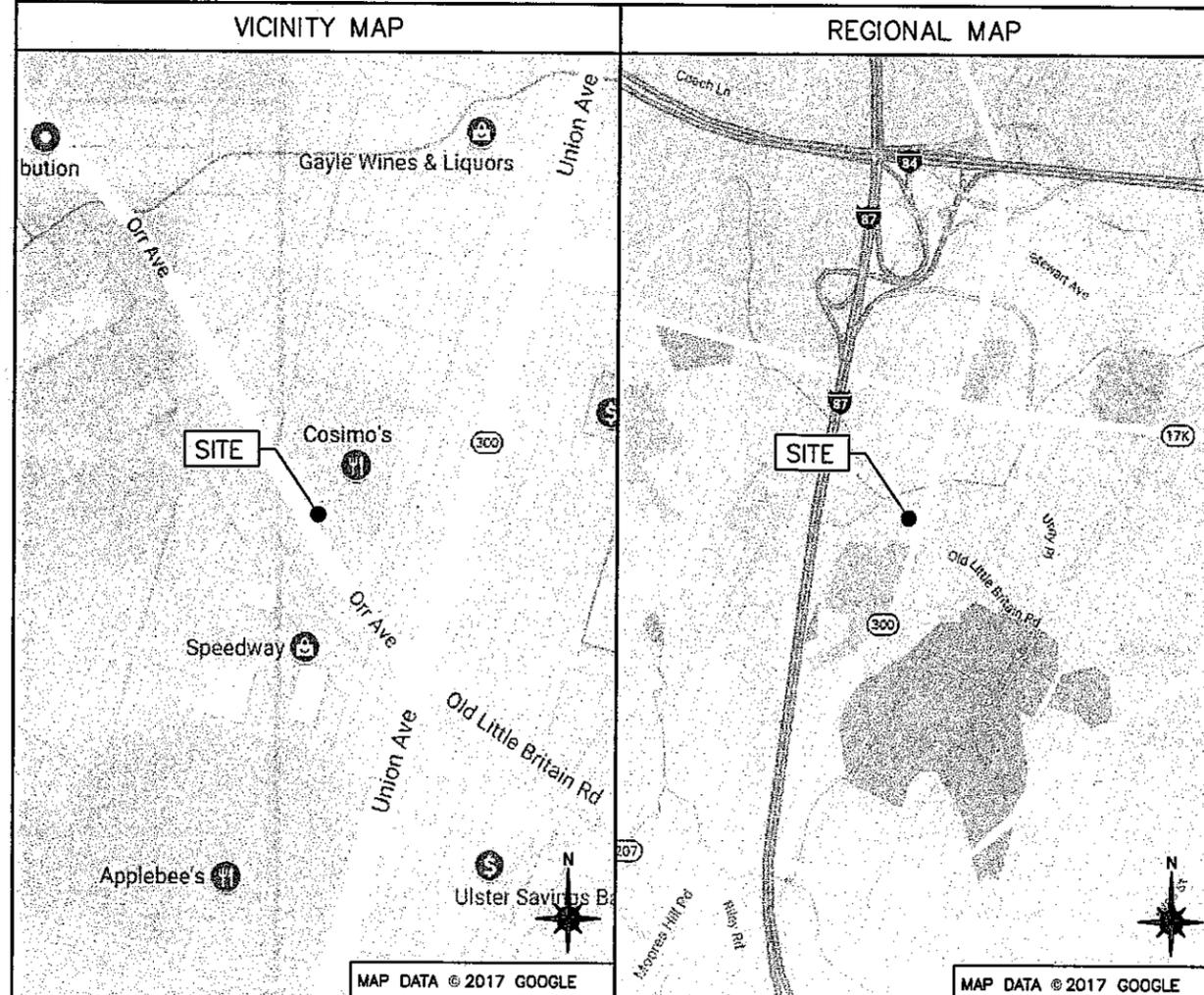
SITE INFORMATION

SITE ID:	9NYB007805A
CASCADE ID:	NY90XSWY1A
LATITUDE:	41.499700
LONGITUDE:	-74.071735
CROSS STREET:	ORR AVE & NY-300/UNION AVE
CITY, STATE, ZIP:	NEWBURGH, NY 12550
COUNTY:	ORANGE COUNTY
JURISDICTION:	TOWN OF NEWBURGH
PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY
APPLICANT:	MOBILITE, LLC 3475 PIEDMONT ROAD NE; SUITE 1000 ATLANTA, GEORGIA 30305 PHONE: (312) 638-5400

ENGINEER

JACOBS ENGINEERING GROUP, INC. CONTACT: KARL KRATINA
5449 BELLS FERRY ROAD PROJECT MANAGER
ACWORTH, GA 30102 TEL: (678) 460-1416
PROJECT: ER600221

LOCATION MAPS



PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON AN
EXISTING WOOD POLE WITHIN AN EXISTING RIGHT-OF-WAY.
THE SCOPE WILL CONSIST OF THE FOLLOWING:
- INSTALL PROPOSED BACKHAUL TRANSPORT EQUIPMENT ON
AN EXISTING WOOD UTILITY POLE

CODES

INTERNATIONAL BUILDING CODE
NATIONAL ELECTRICAL SAFETY CODE
TIA/EIA-222-G-2 OR LATEST EDITION
LOCAL BUILDING/PLANNING CODE

DRAWING INDEX

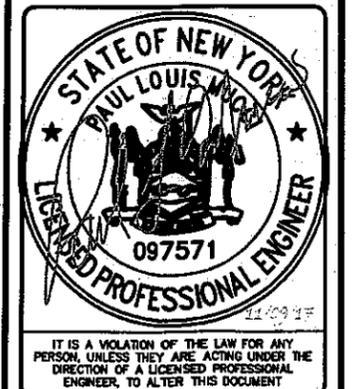
SHEET NO:	SHEET TITLE
T-1	TITLE SHEET
SP-1	EXHIBIT PHOTO & SITE PLAN
EV-1	POLE ELEVATIONS
EV-2	POLE ELEVATIONS
PL-1	PLUMBING & RISER DIAGRAM
EQ-1	EQUIPMENT DETAILS
EQ-2	EQUIPMENT DETAILS
E-1	ELECTRICAL DETAILS
G-1	GROUNDING DETAILS
TC-1	VEHICULAR TRAFFIC CONTROL PLAN
TC-2	PEDESTRIAN SAFETY PLAN
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
GN-3	GENERAL NOTES



3475 PIEDMONT ROAD NE
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ATLANTA, GEORGIA 30305
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NY90XSWY1A
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ORR AVE &
NY-300/UNION AVE
NEWBURGH, NY 12550
UTILITY POLE

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL BUILDING CODE, THE LATEST ADOPTED EDITION AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
2. CONTRACTOR SHALL CONSTRUCT SITE IN ACCORDANCE WITH THESE DRAWINGS AND LATEST MOBILITIE CONSTRUCTION STANDARDS. THE SPECIFICATION IS THE RULING DOCUMENT AND ANY DISCREPANCIES BETWEEN THE SPECIFICATION AND THE CONSTRUCTION DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OR MOBILITIE CM PRIOR TO THE COMMENCEMENT OF WORK.
3. CONTRACTOR SHALL VISIT THE JOB SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE (N) WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED, AS SHOWN, PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OR MOBILITIE CM PRIOR TO THE COMMENCEMENT OF WORK. NO COMPENSATION WILL BE AWARDED BASED ON CLAIM OF LACK OF KNOWLEDGE OF FIELD CONDITIONS.
4. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. CONTRACTOR IS REQUIRED TO FURNISH AND INSTALL ANY/ALL ITEMS FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM SUBJECT ONLY TO OWNER-SUPPLIED ITEMS. CONTRACTOR SHALL PROVIDE ANY/ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
5. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT AND APPURTENANCES, AND LABOR NECESSARY TO EFFECT ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS. OWNER PROVIDED AND CONTRACTOR INSTALLED MATERIALS WILL INCLUDE THE FOLLOWING, UNLESS NOTED OTHERWISE:
 - A) TRANSMITTER
 - B) UHF ANTENNA AND MOUNTING BRACKETS, GPS UNIT AND KU BACKHAUL
 - C) UHF COAX AND HANGERS
 - D) INTEGRATED LOAD CENTER
6. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS. SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, (E) CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ANY DISCREPANCIES TO THE ATTENTION OF THE MOBILITIE CM, IN WRITING, PRIOR TO THE COMMENCEMENT OF WORK.
7. DETAILS PROVIDED ARE FOR THE PURPOSE OF SHOWING DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR SITE CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
8. CONTRACTOR SHALL PAY FOR APPLICABLE PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO ORDERING MATERIALS AND THE COMMENCEMENT OF WORK.
9. THE TERM 'PROVIDE' USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.
10. CONTRACTOR SHALL RECEIVE CLARIFICATION IN WRITING, AND SHALL RECEIVE IN WRITING AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEMS NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
11. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING ACCEPTED INDUSTRY-STANDARD SKILLS AND ATTENTION. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT, UNLESS OTHERWISE NOTED.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS.
13. CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE MOBILITIE CM AND SCHEDULE THEIR ACTIVITIES AND WORKING HOURS IN ACCORDANCE WITH THE REQUIREMENTS.

14. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THEIR WORK WITH THE WORK OF OTHERS AS IT MAY RELATE TO RADIO EQUIPMENT, ANTENNAS AND ANY OTHER PORTIONS OF THE WORK.
15. CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
16. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT (E) SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING ETC. AND IMMEDIATE REPAIR, TO NEW CONDITION, ANY DAMAGE THAT OCCURS DURING CONSTRUCTION AT THE SOLE COST OF THE CONTRACTOR.
17. IN DRILLING HOLES, OR CORING, INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., MUST BE CLEARLY UNDERSTOOD THAT REINFORCING STEEL SHALL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES (UNLESS NOTED OTHERWISE). LOCATIONS OF REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE LOCATED BY THE CONTRACTOR USING APPROPRIATE METHODS AND EQUIPMENT PRIOR TO ANY DRILLING OR CORING OPERATIONS IN (E) CONCRETE.
18. CONTRACTOR SHALL REPAIR, TO NEW CONDITION, ALL (E) WALL SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND IN WITH ADJACENT SURFACES.
19. CONTRACTOR SHALL SEAL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES OR MATERIALS WITH U.L. LISTED AND FIRE CODE APPROVED MATERIALS AND SYSTEMS THAT MEET OR EXCEED THE RATING OF THE ASSEMBLY IN WHICH THE NEW PENETRATION IS PLACED.
20. CONTRACTOR SHALL KEEP CONTRACT AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OF THE OWNER SHALL BE REMOVED. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ITEMS UNTIL COMPLETION OF CONSTRUCTION.
21. MINIMUM BEND RADIUS OF ANTENNA CABLES SHALL BE IN ACCORDANCE WITH CABLE MANUFACTURERS RECOMMENDATIONS.
22. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO (E) SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION SHALL BE IN CONFORMANCE WITH JURISDICTIONAL OR STATE AND LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL AND COORDINATED WITH LOCAL REGULATORY AUTHORITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ANY EROSION CONTROL MEASURES, RECORD-KEEPING, MONITORING, AND REPORTING TO THE OWNER AND REGULATORY AUTHORITIES.
23. ALL CONSTRUCTION WORK IS TO ADHERE TO APPLICANT'S INTEGRATED CONSTRUCTION STANDARDS UNLESS STATE OR LOCAL CODE IS MORE STRINGENT.
24. THE INTENT OF THE PLANS AND SPECIFICATIONS IS TO PERFORM THE CONSTRUCTION IN ACCORDANCE PER STATE BUILDING STANDARDS CODE AND STATE CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE APPROVED PLANS AND SPECIFICATIONS WHEREIN THE FINISHED WORK WILL NOT COMPLY PER STATE CODE OF REGULATIONS, A SCOPE OF WORK DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE JURISDICTION BEFORE PROCEEDING WITH THE WORK. A CHANGE ORDER FOR THAT SCOPE SHALL BE SUBMITTED TO THE MOBILITIE CM PRIOR TO PROCEEDING WITH THE WORK.
25. ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED BY THE CONTRACTOR FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.
26. CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE. ANY CORRECTIVE WORK SHALL BE COMPLETED AT THE SOLE COST OF THE CONTRACTOR.

ELECTRICAL NOTES:

1. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE W/DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY MOBILITIE CM AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE MOBILITIE CM HAS DIRECTED THE CORRECTIVE ACTIONS TO BE TAKEN.

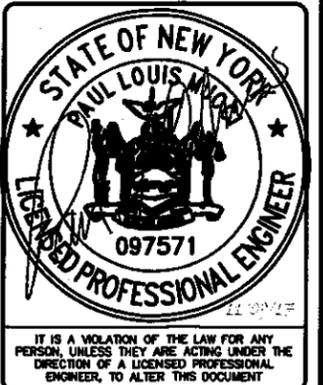
2. ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. ALL (E) CONDITIONS OF ELECTRICAL EQUIP., ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTING OF THEIR BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC, ALL CODES AND ORDINANCES OF THE LOCAL JURISDICTION, AND POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT ARE NOT BE LIMITED TO:
 - A) UL - UNDERWRITERS LABORATORIES
 - B) NEC - NATIONAL ELECTRICAL CODE
 - C) NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
 - D) OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT
 - E) SBC - STANDARD BUILDING CODE
 - F) NFPA - NATIONAL FIRE PROTECTION AGENCY
 - G) ANSI - AMERICAN NATIONAL STANDARDS INSTITUTE
 - H) IEEE - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
 - I) ASTM - AMERICAN SOCIETY FOR TESTING MATERIALS
4. REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, AND CONFIRM WITH MOBILITIE CM ANY SIZES AND LOCATIONS WHEN NEEDED.
5. (E) SERVICES: CONTRACTOR SHALL NOT INTERRUPT (E) SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.
6. CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC... ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE MOBILITIE CM, PRIOR TO BEGINNING ANY WORK.
7. MINIMUM WIRE SIZE SHALL BE #12 AWG, NOT INCLUDING CONTROL WIRING, UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH THWN INSULATION, UNLESS OTHERWISE NOTED.
8. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
9. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
10. ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATIONS, SET FORTH BY APPLICANT.
11. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY FUNCTIONAL AND SHALL BE APPROVED BY THE MOBILITIE CM AND LOCAL JURISDICTION. ANY DEFICIENCIES SHALL BE CORRECTED BY AN ELECTRICAL CONTRACTOR AT THE SOLE COST OF THE CONTRACTOR.
12. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.

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SUITE 1000
ATLANTA, GEORGIA 30305
PHONE: (312) 638-5400

PROJECT NO: ER600221
DRAWN BY: C. O'DELL
CHECKED BY: W. WOODS

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D	11.06.17	UPDATE POLE HGT. & TEMPLATE
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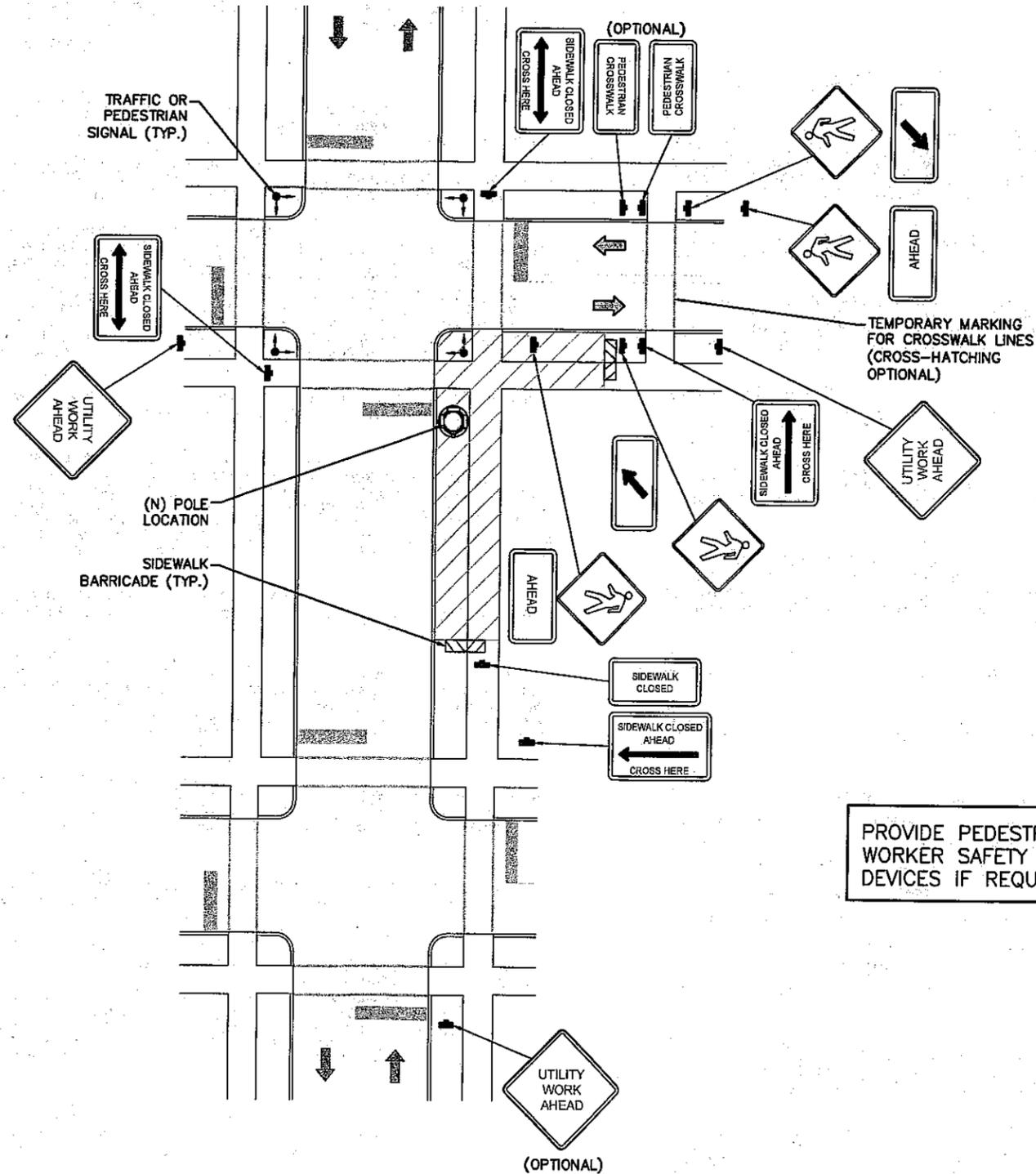
NY90XSWY1A
9NYB007805A
ORR AVE &
NY-300/UNION AVE
NEWBURGH, NY 12550
UTILITY POLE

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-1

TRAFFIC CONTROL GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL SIGNAGE, LAYOUTS AND PROCEDURES SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, WHICHEVER IS MORE STRINGENT.
2. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
3. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
4. SELECTION, PLACEMENT, MAINTENANCE, AND PROTECTION OF TRAFFIC, PEDESTRIANS, AND WORKERS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - PART VI "TEMPORARY TRAFFIC CONTROL", AND LOCAL JURISDICTIONAL REQUIREMENTS UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE APPROVED BY THE APPROPRIATE HIGHWAY AUTHORITY HAVING JURISDICTION.
5. ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY AND FOR ACTUAL TRAFFIC SPEEDS IF IN EXCESS OF POSTED SPEED LIMITS.
6. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.
7. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON THE (E) TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
8. ALL (E) ROAD SIGNS, PAVEMENT MARKINGS AND/OR FLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE (N) TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED, OR RELOCATED. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITION AFTER COMPLETION OF WORK.
9. CONTRACTOR SHALL CONTACT LOCAL AUTHORITY HAVING HIGHWAY JURISDICTION AND PROVIDE ADDITIONAL "FLAGMEN" OR POLICE SUPERVISION, IF REQUIRED.
10. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 6H:1V SLOPE PRIOR TO END OF EACH WORK DAY. OTHER EXCAVATED AREAS WITHIN THE CLEAR ZONE ARE TO BE EITHER BACKFILLED OR PRECAST CONCRETE CURB BARRIER CONSTRUCTION BARRIER SET TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC.
11. WHERE DICTATED BY LOCAL CONDITIONS, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN AND WORKER CROSSING LOCATIONS IN ACCORDANCE WITH ALL APPLICABLE CODES AND OSHA REQUIREMENTS.
12. CONSTRUCTION ZONE SPEED LIMIT IF REDUCED FROM POSTED LIMITS SHALL BE IN ACCORDANCE WITH MUTCD AND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
13. THERE SHALL BE NO WORKERS, EQUIPMENT, OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD SPACE.
14. DRIVEWAYS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-1 SIGN (ROAD WORK AHEAD) AS A MINIMUM.
15. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION PROVIDED THEY COMPLY WITH MUTCD.
16. THE SPACING BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRICADES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TANGENT CHANNELIZATION.
17. WHEN CHANNELIZATION DEVICES HAVE THE POTENTIAL OF LEADING VEHICULAR TRAFFIC OUT OF THE INTENDED VEHICULAR TRAFFIC SPACE, THE CHANNELIZATION DEVICES SHOULD BE EXTENDED A DISTANCE IN FEET OF 2.0 TIMES THE SPEED LIMIT IN MPH BEYOND THE DOWNSTREAM END OF THE TRANSITION AREA.
18. TAPER LENGTHS ARE CALCULATED AS FOLLOWS:
 $L = WS^2/60$ (40 MPH AND HIGHER) OR $L2 = WS$ (OVER 40 MPH),
 WHERE W = OFFSET WIDTH (FT), S = TRAFFIC SPEED (MPH).



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CHECKED BY: W. WOODS

E	11.09.17	UPDATE UE RELAY
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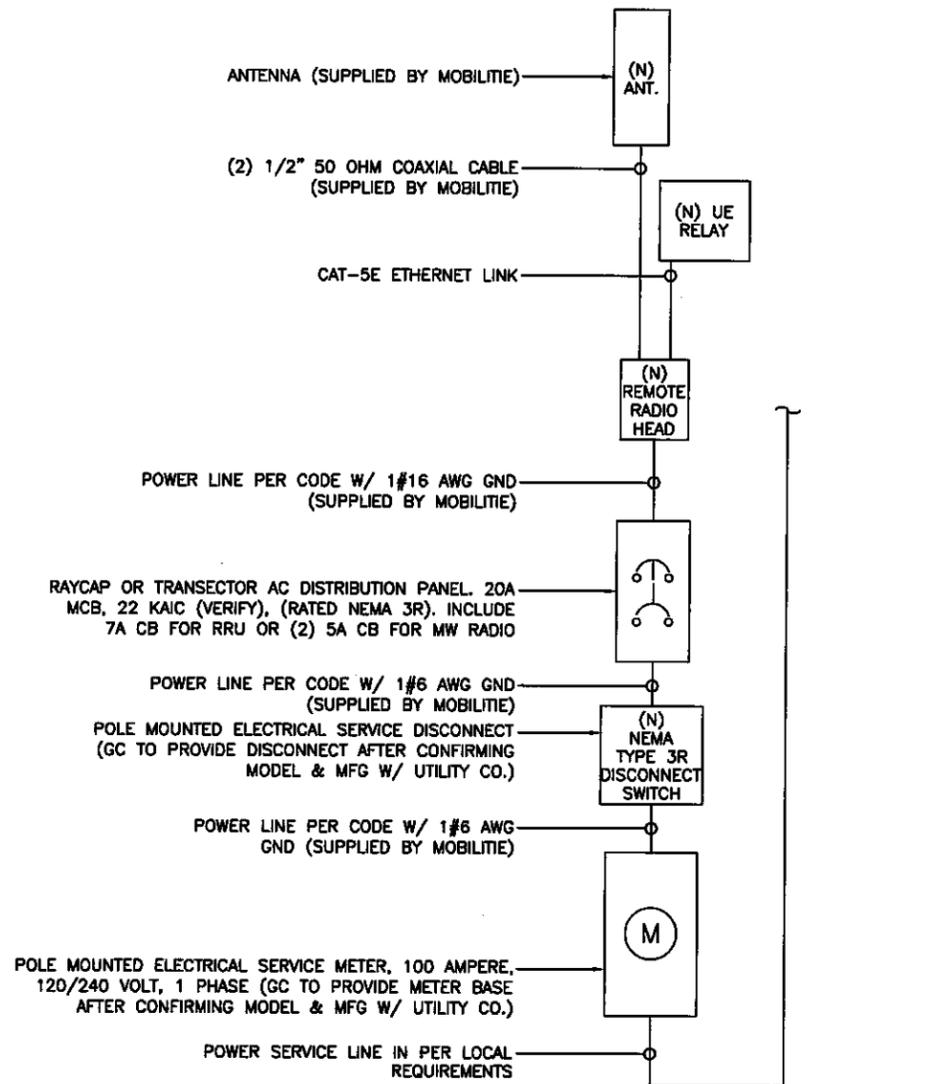
NY90XSWY1A
9NYB007805A
ORR AVE &
NY-300/UNION AVE
NEWBURGH, NY 12550
UTILITY POLE

SHEET TITLE
PEDESTRIAN SAFETY PLAN

SHEET NUMBER
TC-2

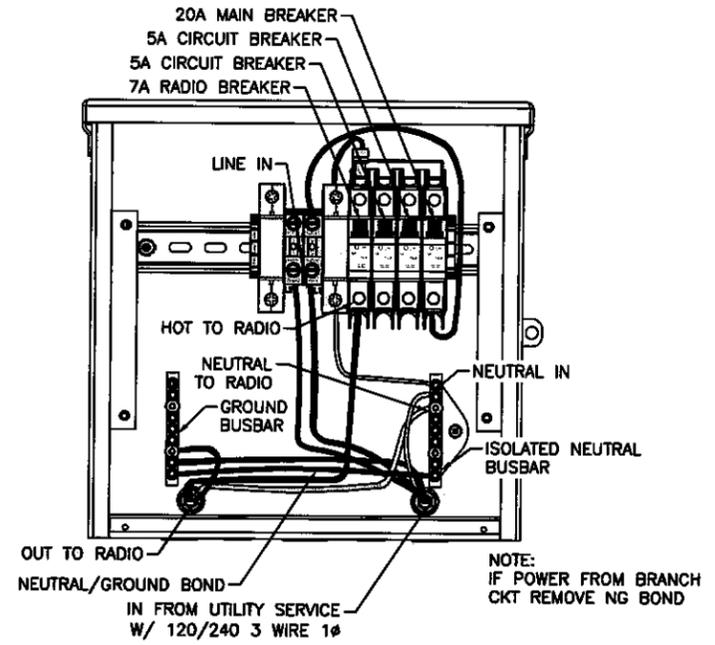
TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SCALE: NOT TO SCALE



ELECTRICAL ONE-LINE DIAGRAM
SCALE: NOT TO SCALE

1



RAYCAP AC DISTRIBUTION BOX

BREAKER SCHEDULE
SCALE: NOT TO SCALE

2

NOTES:

1. NOMINAL POWER IS CALCULATED AS 80% OF OEM DOCUMENTED MAXIMUM POWER.
2. CALCULATIONS FOR UE W/ NOKIA DO NOT NEED TO INCLUDE THE POWER FOR THE UE ANTENNA AS IT IS INCLUDED IN THE MAX POWER FIGURE. CALCULATIONS FOR UE W/ AIRSPAN MUST INCLUDE UE AS IT IS NOT INCLUDED
3. KVA IS CALCULATED FROM THE CONSUMPTION VALUE ASSUMING A PF=1. MAXIMUM POWER WAS USED FOR KVA. WHERE MAXIMUM WAS NOTED BY THE OEM THE QUOTED FIGURE WAS USED. WHERE AVERAGE/NOMINAL POWER WAS NOTED BY THE OEM MAXIMUM POWER WAS CALCULATED BY INCREASING AVERAGE/NOMINAL POWER BY A FACTOR OF 50%

Nokia Scenario 6 B41 High Power Radio and Nokia UE Backhaul

Unit	Sub Description	Max Power (W)	Max Current (A)	KVA	kWh/Yr
NSN - B41 High - FWHR	LTE Base Station	360	4.00	0.36	3153.6
Nokia Gemtek	UE Relay	N/A	N/A	N/A	N/A
Total		360	4.00	0.36	3153.6

LOAD CALCULATIONS
SCALE: NOT TO SCALE

3



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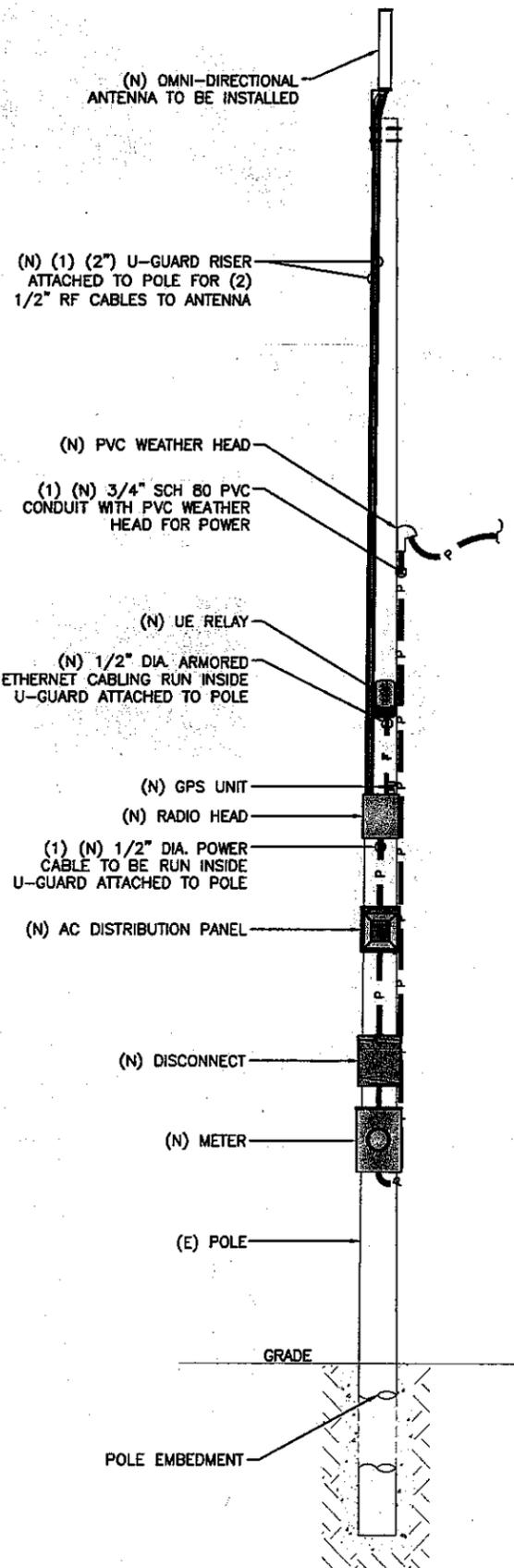
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NY90XSWY1A
9NYB007805A
ORR AVE &
NY-300/UNION AVE
NEWBURGH, NY 12550
UTILITY POLE

SHEET TITLE
ELECTRICAL DETAILS

SHEET NUMBER
E-1

NOTE:
(E) POLE MOUNTED EQUIPMENT
NOT SHOWN FOR CLARITY.



NOTE:
CABLING DIAGRAM IS FOR CLARITY OF
CABLE ROUTE AND TERMINATION ONLY.
CONTRACTOR SHALL INSTALL CABLES
WITH MINIMAL VISUAL IMPACT ON (E)
WOOD POLE. SEE ELEVATION DRAWING
FOR EQUIPMENT AND ANTENNA
LOCATIONS.

CABLING NOTES:

- A) WOOD, CONCRETE AND EXISTING METALLIC POLES
 - i) FROM GRADE LINE TO 11'-0" ABOVE GRADE, ALL CABLES/CONDUCTORS EXCEPT GROUNDING CONDUCTOR MUST RUN IN RIGID GALVANIZED STEEL CONDUIT (RGS)
 - ii) GROUNDING CONDUCTORS IN EXPOSED LOCATIONS MUST BE INSTALLED IN PVC.
 - iii) IN EARTH INSTALL PVC CONDUIT FOR BACKHAUL AND ELECTRICAL SERVICE. TRANSITION TO RGS AT GRADE LINE.
 - iv) ABOVE 11'-0" ALL CABLES (POWER, ETHERNET, COAXIAL) MUST RUN IN PVC UTILITY POLE RISER.
 - (1) AT MAJOR EQUIPMENT, EXTEND UTILITY DUCT IMMEDIATELY ADJACENT TO THE EQUIPMENT. INSTALL CABLES IN THE UTILITY POLE RISER CREATING CABLE DRIP LOOPS NOT LESS THAN THE CABLE BENDING RADIUS.
 - (2) INSIDE THE UTILITY POLE RISER, UTILIZE 1/2" COAX BLOCKS WITH LAG SCREWS TO SUPPORT COAX, RADIO AND MW POWER, RF COAX, AND ETHERNET CABLES TO WITHIN 12" OF THE EQUIPMENT BEING SERVED AND ON INTERVALS NOT TO EXCEED 4'.
 - v) FOR UNDERGROUND HFC/PUBLIC BACKHAUL, ROUTE ETHERNET CABLE IN CONDUIT UP THE POLE AND ENTER THE UTILITY POLE RISER. SEAL EXPOSED END OF CONDUIT WITH A CABLE TERMINATION FITTING.
 - vi) BY APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX. EXAMPLE: UTILITY-REQUIRED DISCONNECT ON POLE W/ AC DISTRIBUTION BOX ON OPPOSITE SIDE OF POLE. NOT REQUIRED FOR COAX.
- B) NEW METALLIC POLES
 - i) PROCURE NEW POLES WITH SUITABLE HAND HOLES SUCH THAT HAND HOLES EXIST AT ALL EQUIPMENT LOCATIONS.
 - ii) WHERE REQUIRED, INSTALL POLE BASE SUCH THAT THE ELECTRICAL FEED AND BACKHAUL (IF UNDERGROUND) CIRCUIT ENTER THE POLE THROUGH THE POLE BASE.

PLUMBING DIAGRAM

SCALE: NOT TO SCALE

1

BILL OF MATERIALS

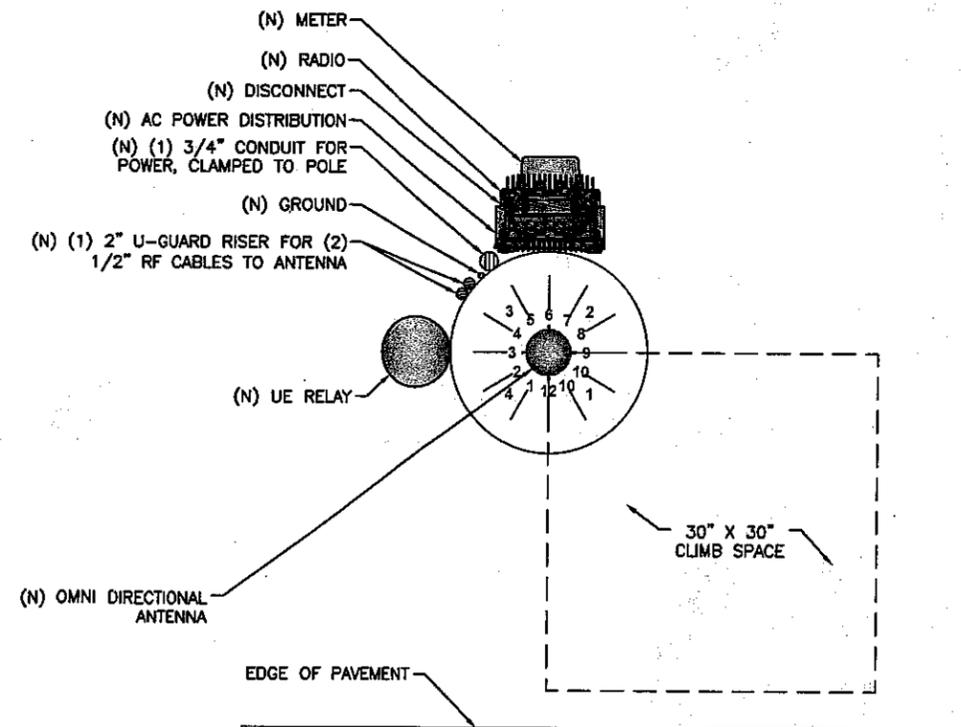
QTY.	DESCRIPTION	MANUFACTURER	MODEL NUMBER	AZIMUTH	CABLE	DIMENSIONS (HxWxD)	WEIGHT
1	ANTENNA	ALPHA WIRELESS	AW3477-S	TBD	18'-2"±	30.7" X 4.7" DIAMETER	7 LBS
1	UE RELAY	NOKIA/GEMTEK	FTHC/473763A	TBD	3'±	24.62" X 7.87" DIAMETER	5.5 LBS
-	-	-	-	-	-	-	-
1	GPS	NOKIA	FAWD/472932A	-	-	3.1" X 2.1" DIAMETER	0.3 LBS
1	RADIO	NOKIA	FWHR B41 HP	-	3'±	9.7" X 12.9" X 6.3"	27.3 LBS
-	-	-	-	-	-	-	-
1	AC DISTRIBUTION PANEL	RAYCAP	RSTAC-3112-P-120	-	1'±	9.25" X 9.5" X 3.81"	14 LBS
1	NEMA TYPE-3R DISCONNECT	SIEMENS	GF222NR (EXAMPLE)	-	1'±	15.45" X 8.7" X 5.95"	14 LBS
1	METER SOCKET	MILBANK	U4801-XL-5T9 (EXAMPLE)	-	53'±	19" X 13" X 4.84"	21 LBS

RFDS REVISION TYPE: NOT FINAL
RFDS REVISION NUMBER: N/A
RFDS REVISION TIMESTAMP: N/A

BILL OF MATERIALS

SCALE: NOT TO SCALE

2



RISER ORIENTATION DIAGRAM

SCALE: NOT TO SCALE

3

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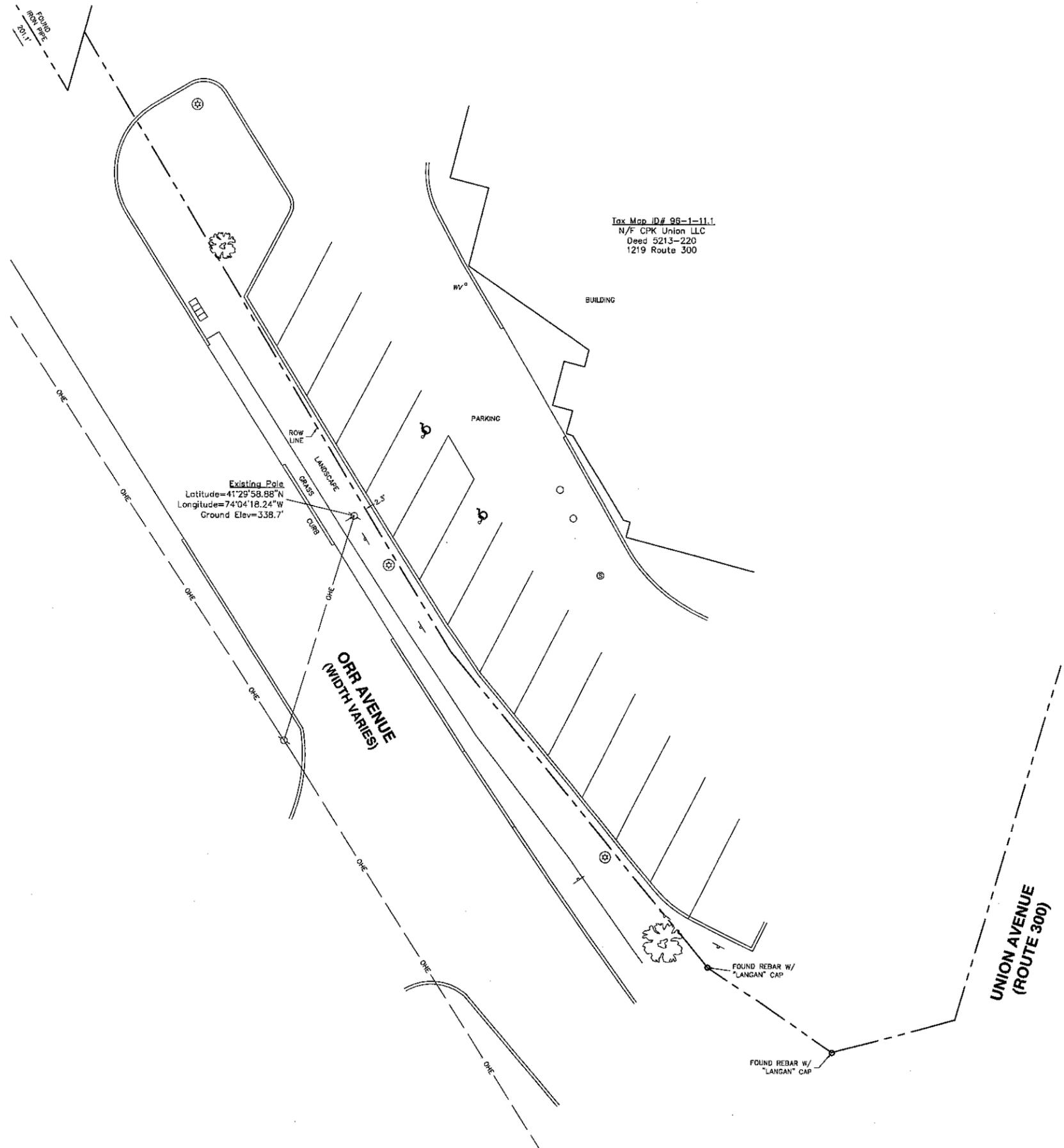
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UTILITY POLE

SHEET TITLE
PLUMBING & RISER DIAGRAM

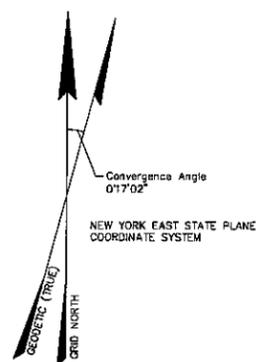
SHEET NUMBER

PL-1



Tax Map ID# 96-1-11.1
 N/F CPK Union LLC
 Deed 5213-220
 1219 Route 300

Existing Pole
 Latitude=41°29'58.88\"/>

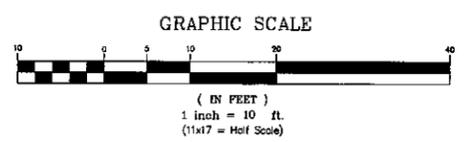


Legend

Water Line	---	UGW
Gas Line	---	UGG
Communication Line	---	COMM
Electric Line	---	UGE
Overhead Wire	---	OHE
Sanitary Sewer	---	SS
Storm Drain	---	SD
Property Line	---	
Contour	---	100
Metal Fence	x x x	
Wood Fence	□ □ □	
Tree Line	~ ~ ~	
Monument	⊠	Gas Valve
Iron Pipe or Bar	⊙	Water Valve
Manhole	⊖	Monitor Well
Utility Pole	⊕	Hydrant
Deciduous Tree	⊗	Bollard
Evergreen Tree	⊗	Wetland Flag
Inlet	⊠	Light Post

Notes

- Property lines shown here on are the determination of a retracement survey that has been performed in order to verify the direction and length of property lines and to identify the monuments and other marks of a boundary description of record and/or an established prior survey. This retracement does not modify these existing records or establish new lines of ownership. Its purpose is to report: a) the character and condition of the previous record information and b) whether or not the retracement is corroborative of the former record information.
- Based on field work performed October 2017.
- Datum (Established with GPS)
 Horizontal: NAD83, New York East State Plane
 Vertical: NAVD88 (Geoid12a)
- References:
 4.1. Orange County NY GIS Mapping-Town of Newburgh Tax Map 96
 4.2. Deed Book 5213 Page 220
 4.3. Maps 51-12 filed 3/13/2012
 4.4. Mapping provided as a courtesy by Langan Engineering.
- Survey was performed without the benefit of a Title Report and is subject to the findings of such.
- Utilities shown hereon are per surface evidence. No additional underground utility investigation was performed.



SUBMITTALS	
▲	10/06/17 PRELIMINARY SUBMITTAL
▲	10/06/17 ISSUED S&S SURVEY
▲	11/06/17 ROW & NOTES REVISED



THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

SITE NUMBER

NY90XSWY1A

SITE ADDRESS

1219 Route 300
 Newburgh, NY 12550
 Town of Newburgh
 Orange County

SHEET TITLE

Existing Conditions
 Survey

GLS JOB # 17028

SHEET NUMBER

S1