

GENERAL NOTES

1.

TOPOGRAPHIC SURVEY INFORMATION HAS BEEN OBTAINED FROM A SURVEY PREPARED BY COLLIERS ENGINEERING & DESIGN, CT P.C., DATED 11/20/23. NYSDOT RECORD PLANS RC 58-097 MAY ALSO BE MADE AVAILABLE TO THE CONTRACTOR UPON REQUEST.
2.

MATERIAL AND CONSTRUCTION SPECIFICATIONS: NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (US CUSTOMARY) CURRENT REVISION OFFICIALLY ADOPTED AS OF THE EFFECTIVE LETTING DATE, EXCEPT AS MODIFIED IN THE CONTRACT DOCUMENTS.
3.

CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES, EXISTING STRUCTURE LOCATIONS AND OTHER EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE FOR FURTHER RESOLUTION.
4.

THE CONTRACTOR SHALL COMPLETE SURVEY TASKS (I.E., STATION ROADWAY, MARK OUT EXISTING/PROPOSED RIGHT-OF-WAY LINES, MARK OUT UTILITIES, SURVEY MANHOLES, VALVES, AND CATCH BASINS REQUIRING ADJUSTMENT TO PROVIDE A SMOOTH RIDING SURFACE AND PROMOTE PROPER DRAINAGE, ETC.) AS DIRECTED BY THE ENGINEER PRIOR TO BEGINNING ANY CONSTRUCTION WORK. PAYMENT FOR THIS WORK WILL BE MADE UNDER ITEM 625.01. ALL SURVEY NOTES FOR EACH LOCATION SHALL BE SUBMITTED TO THE ENGINEER.
5.

THE CONTRACTOR SHALL BE AWARE THAT OTHER CONTRACTORS MAY BE WORKING IN THE AREA ON OTHER CONSTRUCTION AT THE SAME TIME THAT WORK IS PERFORMED UNDER THIS CONTRACT. THE CONTRACTOR SHALL BE REQUIRED TO COORDINATE PROJECT WORK WITH OTHER CONTRACTORS AND SHALL SCHEDULE ITS OPERATIONS SO AS TO CAUSE A MINIMUM DISRUPTION TO TRAFFIC.
6.

THIS PROJECT INVOLVES CONSTRUCTION WITHIN AN ACTIVE ROADWAY. WORK SHALL BE PERFORMED SO AS TO ENSURE THAT PROPER TRAFFIC FLOW IS MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE WORK ZONE TRAFFIC CONTROL IN ACCORDANCE WITH THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) INCLUDING NEW YORK STATE SUPPLEMENT, THE CONTRACT DOCUMENTS AND AS DIRECTED BY THE ENGINEER.
7.

THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS AND SHALL BE RESPONSIBLE FOR FIELD FIT FINISH AND QUALITY OF WORK AND MATERIAL USED IN THE CONSTRUCTION. NO ALLOWANCE SHALL BE MADE ON BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLECT ON HIS PART.
8.

THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT AND RESTORATION OF ALL NATURAL AND MANMADE FEATURES WHETHER SHOWN ON THE PLANS OR ENCOUNTERED IN THE FIELD. IT IS THE INTENTION OF THE PLANS TO SHOW ONLY MAJOR FEATURES TO BE PROTECTED, RESTORED, OR REPLACED.
9.

PROTECTION AND RESTORATION OF PROPERTY SHALL BE IN ACCORDANCE WITH THE NYSDOT STANDARD SPECIFICATIONS.
10.

TOPSOIL (ITEM 610.1402 - TOPSOIL ROADSIDE) SHALL BE PLACED, AND AREAS SHALL BE SEEDED (ITEM 610.1601 - TURF ESTABLISHMENT ROADSIDE) AS SOON AS FINAL GRADES ARE ESTABLISHED ON PERMANENT SLOPES. SLOPES SHALL BE MULCHED (ITEM 209.100101 - MULCH TEMPORARY).
11.

THE CONTRACTOR SHALL CONTACT ALL THE APPROPRIATE PARTIES WITH JURISDICTION OVER THE UTILITIES ENTERING ON OR NEAR THE PROJECT AREA PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES AND PROVIDE THOSE AGENCIES 72-HOURS NOTIFICATION.
12.

THE CONTRACTOR SHALL VERIFY THE LOCATION OF AND SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION, IN SO FAR AS THEY MAY BE ENDANGERED BY HIS OPERATIONS. THIS SHALL HOLD TRUE WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATIONS ARE NOT GUARANTEED EVEN THOUGH THE INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE SOURCES, AND IN ANY EVENT, OTHER UTILITIES NOT SHOWN ON THESE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE DAMAGES AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION OF UTILITY SERVICES.
13.

IF TEMPORARY UTILITY SERVICES ARE REQUIRED, AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL FURNISH AND MAINTAIN SUCH SERVICES UNTIL THE ENGINEER DEEMS THEY ARE NO LONGER REQUIRED. THE CONTRACTOR SHALL PROVIDE THE TEMPORARY UTILITY SERVICES AT NO ADDITIONAL COST TO THE STATE/TOWN. ALL PAVEMENT MARKINGS AND SIGNS SHALL BE IN CONFORMANCE WITH THE MUTCD AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
14.

ALL DISTURBED AREAS WITHIN THE ROW SHALL BE RESTORED AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER ITEM 610.1402 - TOPSOIL ROADSIDE, ITEM 610.1601 - TURF ESTABLISHMENT ROADSIDE AND ITEM 209.100101 - MULCH TEMPORARY.
15.

THE CONTRACTOR SHALL INSTALL AND MAINTAIN SOIL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH §209 OF THE NYSDOT STANDARD SPECIFICATION AND STANDARD SHEETS 209-01 THROUGH 209-07.
16.

ALL MATERIALS, SHOP, ERECTION, DEMOLITION, TEMPORARY STRUCTURE, PROCEDURAL AND OTHER DRAWINGS WHICH NEED NYSDOT APPROVAL SHALL BE SUBMITTED TO THE ENGINEER FOR DISTRIBUTION TO THE APPROPRIATE APPROVAL OFFICE. THIS INCLUDES DRAWINGS FROM FABRICATORS AND PRE-CASTERS. THE CONTRACTOR IS CAUTIONED NOT TO ORDER EQUIPMENT AND/OR MATERIALS UNTIL THE REQUIRED DRAWINGS ARE APPROVED IN WRITING.

EXCAVATION SPECIAL NOTES

1.

TRANSVERSE UTILITY CROSSINGS UNDER NYSDOT PAVEMENT SHALL BE A MINIMUM OF FIVE (5) FEET BETWEEN THE TOP OF THE PAVEMENT AND THE TOP OF UTILITY.
2.

LONGITUDINAL UTILITY RUNS, OUTSIDE THE PAVEMENT LIMITS MUST BE A MINIMUM OF THREE (3) FEET FROM TOP OF GRADE TO TOP OF UTILITY. THE PAVEMENT LIMITS ARE 50 FEET FROM THE HIGHWAY CENTER LINE.
3.

LONGITUDINAL UTILITY RUNS SHOULD BE KEPT AS CLOSE TO THE RIGHT OF WAY LINE OR AS FAR FROM THE PAVEMENT AS POSSIBLE.
4.

ANY EXCAVATION WHICH EXCEEDS FIVE FEET IN DEPTH AND HAS LIVE TRAFFIC OR UTILITIES WITHIN IV:1H PROJECTION FROM THE BOTTOM EXCAVATION SHALL UTILIZE A SHEETING/SHORING SYSTEM WHICH PROVIDES DIRECT CONTACT AND SUPPORT OF THE EXCAVATION SIDES (A TRENCH BOX DOES NOT MEET THESE REQUIREMENTS). THE CONTRACTOR SHALL PROVIDE VERIFICATION (I.E., MANUFACTURER'S DATA SHEETS AND/OR P.E. DESIGN COMPUTATIONS) TO THE ENGINEER DEMONSTRATING THAT THE SYSTEM CHOSEN CAN ACCOMMODATE THE ANTICIPATED SOIL, WATER, TRAFFIC AND SURCHARGE LOADINGS. PAYMENT SHALL BE MADE UNDER ITEM 552.17 - SHIELDS AND SHORING AS SPECIFIED IN THE CONTRACT DOCUMENTS
5.

DESIGN DOCUMENTS FOR PREFABRICATED "SHEETING BOX," WHERE USED, SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW YORK.

EXISTING UTILITIES

1.

THE UTILITY LOCATION QUALITY LEVEL LABELING CONVENTION SHOWN ON THE PLANS DOES NOT RELIEVE THE CONTRACTOR OF HIS OBLIGATIONS UNDER SECTIONS 660 THROUGH 680 OF THE STANDARD SPECIFICATIONS.

THE QUALITY LEVEL DEFINITIONS ARE:

QUALITY LEVEL A - THE HIGHEST DEGREE OF ACCURACY; THE UTILITY INFORMATION ON THE CONTRACT PLANS HAS BEEN FIELD LOCATED AND VERIFIED BY EXCAVATION, WHEN APPROPRIATE. (SHOWN AS QLA)

QUALITY LEVEL B - SUBSURFACE GEOPHYSICAL LOCATING TECHNIQUES (THAT IS, UNDERGROUND CAMERAS, RADAR, SONAR, TONE OUTS, ETC.) AND EXISTING RECORD PLANS HAVE BEEN USED TO LOCATE UTILITIES. NO EXCAVATIONS WERE PERFORMED. (SHOWN AS QLB)

QUALITY LEVEL C - RECORD INFORMATION PROVIDED BY UTILITY OWNERS WAS PLOTTED ON THE CONTRACT PLANS. DEPTHS WERE NOT FIELD VERIFIED, PHYSICAL SURFACE FEATURES LIKE MANHOLES, VALVE BOXES AND HYDRANTS HAVE BEEN FIELD LOCATED. (SHOWN AS QLC)

QUALITY LEVEL D - EXISTING NYSDOT AND UTILITY COMPANY RECORDS WERE USED TO LOCATE SUBSURFACE UTILITIES. (SHOWN AS QLD)

THE UTILITY QUALITY LEVELS FOR ALL PLAN SHEETS IN THIS CONTRACT ARE AS FOLLOWS:

UTILITIES	QUALITY LEVEL
ELECTRIC	QLD
GAS	QLD
TELEPHONE	QLD
CABLE TV	QLD
SEWER	QLB
DRAINAGE	QLB
NYSDOT LIGHTING	QLD
WATER	QLB

2.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR, UNDER PART 753 OF THE NEW YORK STATE INDUSTRIAL CODE, TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND FACILITIES PRIOR TO WORKING IN THE AREA. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
3.

THE CONTRACTOR IS ALERTED TO THE FACT THAT THE PROVISIONS OF NEW YORK STATE INDUSTRIAL CODE, PROTECTION OF UNDERGROUND FACILITIES, APPLY TO THIS PROJECT. NO DIRECT PAYMENT FOR ANY WORK REQUIRED BY THE CODE WILL BE MADE. WHERE EXISTING UTILITIES ARE LOCATED WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PROVIDE AT LEAST 72 HOURS' NOTICE BEFORE PERFORMING ANY WORK AT OR NEAR UNDERGROUND FACILITIES. THE CONTRACTOR WILL BE RESPONSIBLE FOR ASSERTING THE ACTUAL LOCATION OF ALL UTILITIES NOT MARKED OUT THROUGH THE ONE CALL CENTER.
4.

ALL EXISTING UTILITIES WITHIN THE LIMITS OF THE WORK ZONE WILL BE SERVICED AND MAINTAINED BY THE UTILITY COMPANY OR ORGANIZATION HAVING CONTROL AND JURISDICTION THEREOF. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES TO ACCOMMODATE THESE MAINTENANCE REQUIREMENTS. NO SEPARATE PAYMENT IS MADE FOR THIS WORK. THE COST OF THIS EFFORT IS TO BE INCLUDED UNDER THE VARIOUS ITEMS OF THE CONTRACT.
5.

THE ENGINEER SHALL BE NOTIFIED A MINIMUM OF 5 WORKING DAYS IN ADVANCE OF ALL COMMUNICATION AND COORDINATION MEETINGS RELATED TO THIS PROJECT BETWEEN THE CONTRACTOR AND ANY UTILITY COMPANY.
6.

THE CONTRACTOR IS ADVISED THAT DURING THE COURSE OF THIS WORK IT MAY BECOME NECESSARY TO DETERMINE THE PRESENCE OF EXISTING UNDERGROUND UTILITY TYPE, SIZE, PROXIMITY AND/OR CONDITION BY MEANS OF EXCAVATION WHICH IS NON-DESTRUCTIVE AND IS LOCALIZED AND DOES NOT CAUSE ANY DIRECT OR INDIRECT DAMAGE TO THE EXISTING UTILITY IN ANY WAY. AT ALL SUCH LOCATIONS OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL EXCAVATE AND BACKFILL TEST PITS OR EXAMINATION PITS BY HAND AND/OR VACUUM EXCAVATION IN A MANNER THAT IS APPROVED BY THE ENGINEER AND PREVENTS DAMAGE TO THE WRAPPING, COATING OR OTHER PROTECTIVE COVERING OF THE UTILITY LINE. THE SIZE OF THE EXCAVATION SHALL BE SUFFICIENT TO DETERMINE THE PRESENCE OF EXISTING UNDERGROUND UTILITY TYPE, SIZE, PROXIMITY AND/OR CONDITION. THE PAYMENT SHALL BE INCLUDED AT A SET QUANTITY OF 2.5 CY PER TEST HOLE REGARDLESS OF THE CAUSE OF THE TEST PIT HOLE.

Table of Maintenance Jurisdiction					
Highway	Limits	Features to Be Maintained	CL Miles	Agency	Jurisdiction
NYS ROUTE 118 (S.H. 148)	STA 124+07.18 to STA 128+71.97	Sidewalks, landscaped areas & sidewalk snow removal	0.09	Town of Yorktown	Section 140 of Highway Law
NYS ROUTE 118 (S.H. 148)	STA 123+61.63	Traffic Signal No. W-213	-	New York State	Sections 340 of Highway Law
NYS ROUTE 118 (S.H. 148)	STA 124+07.18 to STA 128+71.97	All other features including pavement snow removal, curbing, pavement markings, and signs	0.09	New York State	Sections 340 of Highway Law
NYS ROUTE 118 (S.H. 148)	STA 127+52.30 to STA 128+89.83	Drainage Structures DMH-10 its inlet and outlet pipes, and the end section terminus ES-2	0.03	370 Underhill Avenue Property Owner	-
Underhill Avenue	STA P119+12.55 to STA P124+12.87 and STA P125+86.49 to STA P+127+83.45	Sidewalks, landscaped areas & sidewalk snow removal, pavement snow removal, curbing, pavement markings, signs and drainage.	0.13	Town of Yorktown	Section 10 of Highway Law

NOTES:

1) Intersecting roads or driveways not on the State Highway system shall be maintained by the owning agency, municipality, or private individual(s) from the extension of the outside edge of shoulder , or curb line, or back of ditch of the state highway to the limit of work as shown on the contract plans.

2) All existing sanitary sewers and other sewers not deemed to be part of the project by the commissioner, water mains, hydrants and other municipally or privately owned facilities within the limits of the highway Right-of-Way which remain in service unchanged and all such facilities relocated or protected as part of the work performed under this project, whether crossing, located within or adjacent to the R.O.W., shall be maintained, as the case may be, by the municipality or by the agency or unit owning or having control and jurisdiction thereof at no cost or expense to the State.

2020/06/25/TA/Transportation/Plans/Plan Test/PL02-NOTE-SG/01-GENERAL NOTES By: MARIANECIOA

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.



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FOR STATE SPECIFIC DIRECT PHONE NUMBERS
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REV	DATE	DESCRIPTION
1	4/8/24	REVISED PER NYSDOT COMMENTS RECEIVED 3/19/24
2	4/26/24	REVISED PER NYSDOT 4/25/24 COMMENTS
3	5/16/24	REVISED PER NYSDOT 5/2/24 COMMENTS
4	5/29/24	REVISED TRAFFIC SIGNAL PLAN AND EXISTING PER NYSDOT SIGNAL GROUP 5/23/24 EMAIL COMMENTS
5	7/1/24	REVISED PER NYSDOT 7/1/24 COMMENTS
6	8/7/24	REVISED PER NYSDOT 7/31/24 COMMENTS
7	8/15/24	REVISED PER QA/QC REVIEW
8	9/12/24	REVISED PER NYSDOT 8/30/24 COMMENTS
9	9/23/24	REVISED PER NYSDOT 9/12/24 COMMENTS
10	1/31/25	FINAL SET FOR SUBMITTAL
		REVISED FOR REBID



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TRAFFIC SIGNAL PLANS

FOR
UNDERHILL AVENUE
IMPROVEMENTS
(SEQR # 22-092)

NYS ROUTE 118 (S.H. 148) AT
UNDERHILL AVENUE

TOWN OF YORKTOWN
WESTCHESTER COUNTY
NEW YORK



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COLLIERS ENGINEERING & DESIGN
ARCHITECTURE, LANDSCAPE ARCHITECTURE,
SURVEYING CT, P.C.

SCALE: AS SHOWN	DATE: 1/8/23	DRAWN BY: M.J.A.	CHECKED BY: R.G.D.
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PROJECT NUMBER: 20006297A	DRAWING NAME: R-PL02-NOTE-SG/01
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SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-01

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

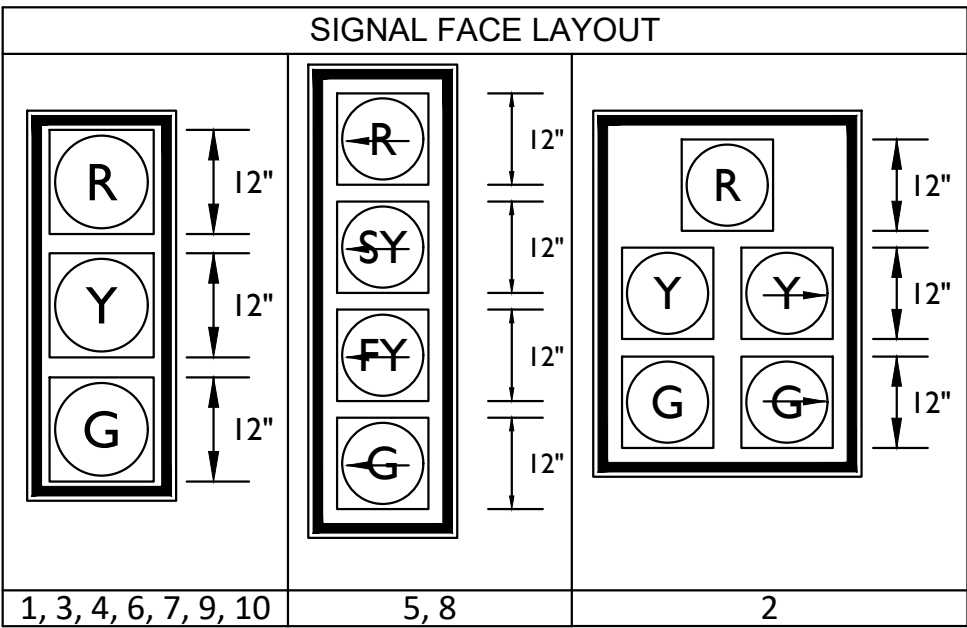
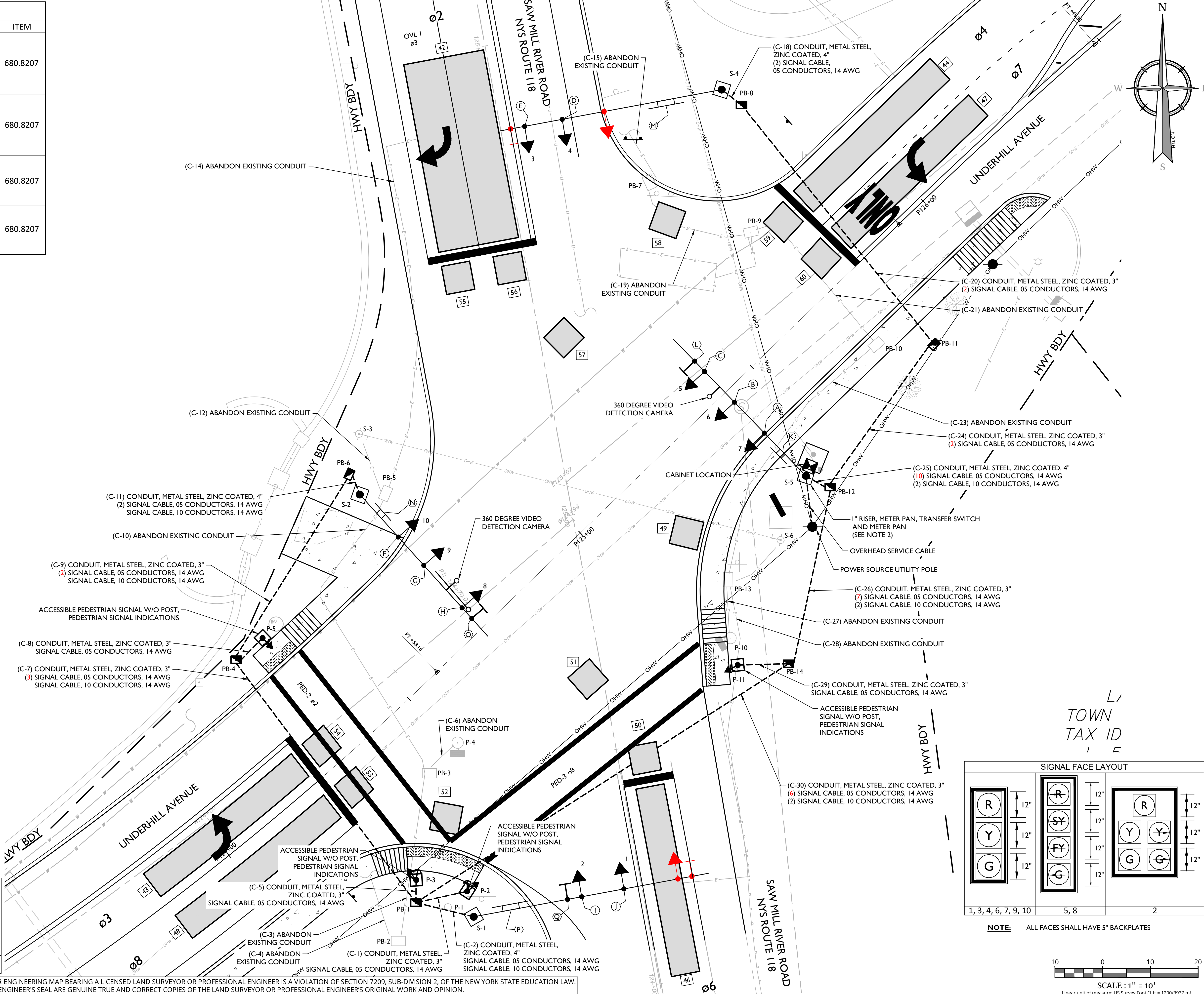
SIGN TEXT LEGEND			
NO.	SIGN TEXT	M.U.T.C.D. NO.	ITEM
L, O		R3 - 5L	680.8207
Q		R3 - 5R	680.8207
K, N		R3 - 5R	680.8207
M, P		R3 - 5R	680.8207

LEGEND	
	PROPOSED SIGNAL HEAD
	POTENTIAL FUTURE SIGNAL HEAD
	PROPOSED OVERHEAD SIGN
	POTENTIAL FUTURE OVERHEAD SIGN
	SIGNAL CONTROLLER CABINET
	18" X 26" PULLBOX
	360 DEGREE VIDEO DETECTION CAMERA
	6' X 40' DETECTION ZONE
	6' X 6' DETECTION ZONE COUNT

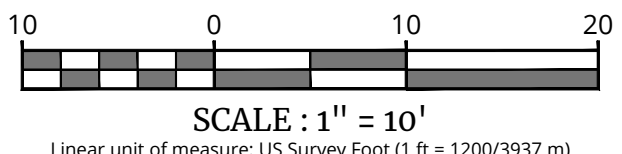
- NOTE:
- FOR PAVEMENT MARKINGS SEE SHEET NO. SP-02.
 - INSTALL 1" RISER ASSEMBLY (ITEM 680.700603), METER PAN (680.9402) AND GENERATOR TRANSFER SWITCH (ITEM 680.9499) ON POLE S-5 IN ACCORDANCE WITH NYSOT STANDARD SHEET 680-05.

NOTE
SCALE REDUCTION
ALL INDICATED SCALES ARE
REDUCED TO HALF SIZE.
ORIGINAL DRAWING SIZE: 22"X34"

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NOTE: ALL FACES SHALL HAVE 5" BACKPLATES



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REV	DATE	DRAWN BY	DESCRIPTION
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2	4/26/24	J.F.M.	REVISED PER NYS DOT 4/25/24 COMMENTS
3	5/1/24	M.J.A.	REVISED PER NYS DOT 5/2/24 COMMENTS
4	5/1/24	M.J.A.	REVISED TRAFFIC SIGNAL PLAN AND STREET PER NYS DOT
5	5/2/24	M.J.A.	REVISED PER NYS DOT 5/2/24 EMAIL COMMENTS
6	8/7/24	M.J.A.	REVISED PER NYS DOT 7/1/24 COMMENTS
7	8/15/24	R.G.D.	REVISED PER QA/QC REVIEW
8	9/12/24	M.J.A.	REVISED PER NYS DOT 8/30/24 COMMENTS
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TRAFFIC SIGNAL PLANS

FOR
UNDERHILL AVENUE
IMPROVEMENTS
(SEQR # 22-092)

NYS ROUTE 118 (S.H. 148) AT
UNDERHILL AVENUE

TOWN OF YORKTOWN
WESTCHESTER COUNTY
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SURVEYING, P.C.

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	1/8/23	M.J.A.	R.G.D.

PROJECT NUMBER:	DRAWING NAME:
20006297A	R-PL10-SGNL

SHEET TITLE:
TRAFFIC SIGNAL PLAN NYS ROUTE 118 & UNDERHILL AVENUE (SIGNAL NO. W-213)

SHEET NUMBER:
TSP-01

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

TRAFFIC SIGNAL NOTES:

1. ALL WORK IS TO BE COMPLETED ACCORDING TO THE LATEST "NYSDOT STANDARD SPECIFICATIONS," REGION 8 SIGNAL DETAILS SHEETS AND STANDARD STRUCTURE SHEETS. THE REGION 8 SIGNAL DETAILS SHEETS ARE TO BE A PART OF THE SIGNAL PLAN.
2. SIGNAL HEAD ROADWAY CLEARANCE SHOULD BE 16'-6".
3. ALL MATERIALS INCORPORATED IN THE SIGNAL INSTALLATION SHALL CONFORM TO THE CURRENT NYSDOT REQUIREMENTS AS PER NOTE 1 ABOVE. CONFORMANCE SHALL BE MET BY THE STATE APPROVAL OF THE FOLLOWING SUBMISSIONS BY THE CONTRACTOR.

A. TRAFFIC SIGNAL POLES AND PEDESTRIAN POLES:

MANUFACTURER'S SHOP DRAWINGS AND CALCULATIONS MUST BE SUBMITTED TO NYSDOT FOR EACH SIGNAL POLE. THE SHOP DRAWINGS AND CALCULATIONS MUST BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK

B. TRAFFIC SIGNAL HEADS (SECTIONS) & BRACKET ASSEMBLIES, PEDESTRIAN HEADS AND BRACKET ASSEMBLIES, CONCRETE PULLBOXES, CAST ALUMINUM JUNCTION BOXES, AND OVERHEAD SIGN ASSEMBLIES:

MANUFACTURER'S CATALOG CUTS MUST BE SUBMITTED TO THE STATE AS WELL AS MANUFACTURER'S CERTIFICATION OF COMPLIANCE WITH "NYSDOT STANDARD SPECIFICATIONS"

C. TRAFFIC SIGNAL CONDUIT, CABLE, WIRE:

MANUFACTURER'S CATALOG CUTS MUST BE SUBMITTED TO NYSDOT.

D. TRAFFIC SIGNAL LOOP EMBEDDING SEALER:

ONLY THOSE PRODUCTS ON THE LATEST NYSDOT MATERIALS BUREAU "APPROVED LIST" SHALL BE USED.

4. THE SIGNAL INSTALLATION CONTRACTOR SHALL CONTACT THE STATE PRIOR TO PERFORMING ANY WORK. A MEETING SHALL TAKE PLACE AS DETERMINED NECESSARY BY NYSDOT OR AT THE REQUEST OF THE CONTRACTOR.
5. NYSDOT SHALL BE NOTIFIED PRIOR TO THE INSTALLATION OF ANY VEHICLE DETECTOR LOOPS, FAILURE TO DO SO MAY RESULT IN THE REJECTION OF LOOPS SO INSTALLED.

6. THE PERMITTEE/CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL LOCAL PERMITS REQUIRED.

7. PAVEMENT MARKINGS, IF REQUIRED, SHALL BE IN ACCORDANCE WITH CURRENT NYSDOT PRACTICE FOR THE SIGNAL LOCATION.

8. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING ELECTRIC SERVICE TO THE SIGNAL.

9. IT IS THE PERMITTEE'S RESPONSIBILITY TO RESTORE ANY DISTURBED AREAS TO THEIR ORIGINAL CONDITION AS PER THE APPROPRIATE SECTIONS OF THE STANDARD SPECIFICATIONS.

10. NYSDOT SHALL PROVIDE A TABLE OF SWITCH PACKS AND TABLE OF INPUT WIRING TO THE PERMITTEE (CONTRACTOR). IT IS THE PERMITTEE'S (CONTRACTOR'S) RESPONSIBILITY TO NOTIFY NYSDOT IN ADVANCE OF WHEN THESE ARE NEEDED.

11. LOOP DETECTORS ARE TO BE WIRED IN PARALLEL IN THE CABINET.

12. ELECTRICAL CABLE SPLICES:

ALL CABLE SPLICES MADE IN CABLE RUNS TO BE LOCATED BELOW GROUND WILL BE ACCOMPLISHED USING METHOD # 2 (TWO COMPONENT ELECTRICAL INSULATING RESIN REJACKETING MATERIAL) AS DESCRIBED IN SECTION 680.3.16 OF THE STANDARDS SPECIFICATIONS.

13. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES NYS SUPPLEMENT AND THE NYSDOT STANDARD SPECIFICATIONS.

14. PULLBOXES:

- a. UNLESS OTHERWISE SHOWN ON THE PLANS ALL PULLBOXES SHALL BE INSTALLED OUTSIDE OF THE PAVEMENT OR SHOULDER AREA.
- b. THE FINISHED GROUND SURFACE ON THE BACK SLOPE IN THE VICINITY OF THE PULLBOX SHALL BE ADJUSTED SO THAT NO FILL SHALL BE SPILLED ON THE TOP OF THE BOX AND THE MAXIMUM DISTANCE FROM THE TOP OF THE FINISHED GROUND AT THE BOX SHALL NOT EXCEED 4 INCHES. ALL MATERIALS AND LABOR NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE PULLBOX.

15. THE CONTRACTOR SHALL REFERENCE NYSDOT STANDARD SHEETS 680-1, 680-2, 680-4, 680-5, 680-6, 680-8, 680-10, 680-11, 680-13 AND 680-14, 685-01 FOR THIS INSTALLATION.

16. PER NYSDOT STANDARD SPECIFICATION SECTION 619.3.17 - MAINTAIN OR MODIFY TRAFFIC SIGNAL EQUIPMENT - TRAFFIC SIGNALS SHALL BE MAINTAINED IN PROPER OPERATION, INCLUDING THE MAINTENANCE OF ALL FEATURES OF THE TRAFFIC SIGNAL OPERATION IN EFFECT AND OPERATING AT THE TIME ANY WORK BEGINS ON THE CONTRACT. TRAFFIC ACTUATED PHASES SHALL REMAIN ACTUATED, AND SIGNALS OPERATING WITHIN SIGNAL SYSTEMS SHALL REMAIN COORDINATED WITH THE REMAINDER OF THE SYSTEM UNLESS OTHERWISE APPROVED BY THE ENGINEER. EXCEPT FOR EMERGENCIES, NO CHANGES IN THE SIGNAL OPERATION OR TIMING SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE ENGINEER. IF EMERGENCY CONDITIONS DICTATE A CHANGE IN THE OPERATION, THE ENGINEER SHALL BE NOTIFIED BY THE START OF THE NEXT WORK DAY. UNLESS OTHERWISE APPROVED BY THE ENGINEER, AN ALTERED SIGNAL OPERATION MUST BE RETURNED TO THE ORIGINAL SIGNAL OPERATION WITHIN 24 HOURS.

THE CONTRACTOR SHALL MAINTAIN IN OPERATION ALL EQUIPMENT INCLUDING SIGNAL HEADS, SUPPORTS, CABLE, WIRING, SPAN-WIRE-MOUNTED SIGNING, CONTROLLERS, MASTER CONTROLLERS, DETECTOR SYSTEMS, CONFLICT AND CURRENT MONITORS, RELAYS, SWITCH PACKS, AND ALL OTHER ACCESSORY AND NECESSARY EQUIPMENT. MAINTENANCE SHALL ALSO INCLUDE THE REPAIR AND REPLACEMENT OF EXISTING DETECTOR LOOPS, PAID FOR SEPARATELY.

THE CONTRACTOR SHALL HAVE CAPABLE TRAFFIC SIGNAL REPAIR PERSONNEL ON CALL 24 HOURS A DAY, SEVEN DAYS A WEEK, AND SHALL PROVIDE TO THE ENGINEER A SINGLE TELEPHONE NUMBER FOR CONTACTING THEM. IF FOR ANY REASON A SIGNAL IS NOT FUNCTIONING PROPERLY, THE CONTRACTOR SHALL COMMENCE WORK ON THE SIGNAL WITHIN TWO (2) HOURS OF NOTIFICATION. IF DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE POLICE AGENCY FOR TRAFFIC CONTROL OPERATIONS. IF THE POLICE AGENCY CANNOT OR WILL NOT PROVIDE TRAFFIC CONTROL, THE CONTRACTOR SHALL PROVIDE FLAGGERS AT LOCATIONS SPECIFIED BY THE ENGINEER WITHIN THE 2-HOUR TIME PERIOD. THE CONTRACTOR SHALL CONTINUE THE FLAGGER SERVICES UNTIL THE SIGNAL IS IN PROPER OPERATION. A FLAGGER WARNING (W20-7 OR W20-7a) SIGN SHALL BE USED ON ALL APPROACHES TO AN INTERSECTION CONTROLLED BY FLAGGERS.

17. THE CLEARANCES BETWEEN ANY SIGNAL EQUIPMENT AND UTILITY LINES SHALL BE 10' FOR PRIMARY, 5.5' SECONDARY AND 2' FOR ALL OTHERS. CONTRACTOR SHALL COORDINATE HIS WORK WITH THE APPROPRIATE UTILITY COMPANY TO ENSURE PROPER CLEARANCES ARE ACHIEVED..

18. IF SOFT CLAY OR ORGANIC DEPOSITS ARE ENCOUNTERED DURING THE FOOTING AUGERING/DIGGING OPERATION, OR IF AUGERING/DIGGING IS UNDERTAKEN IN AREAS HAVING A HIGH WATER TABLE, THE CONTRACTOR SHALL CONSULT THE ENGINEER-IN-CHARGE.

19. CONTRACTOR SHALL CONTACT ALL THE APPROPRIATE PARTIES WITH JURISDICTION OVER THE UTILITIES (OVERHEAD AND UNDERGROUND) ENTERING ON OR NEAR THE PROJECT AREA PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES AND PROVIDE THOSE AGENCIES 72 HOURS NOTIFICATION. CONTRACTOR SHALL BE AWARE THAT OTHER UTILITIES (OVERHEAD AND/OR UNDERGROUND) NOT SHOWN ON THE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL AT HIS/HER OWN EXPENSE, REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE/SHE DAMAGES, AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION TO UTILITY SERVICES.

20. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES IN AREA TO RESOLVE ANY CONFLICTS BETWEEN SIGNAL EQUIPMENT AND UTILITY.

21. AT THE CONCLUSION OF INSTALLATION WORK AND UPON ACCEPTANCE BY THE STATE THE CONTRACTOR SHALL FURNISH AN AS-BUILT DRAWING TO NYSDOT ALONG WITH A LIST OF ALL INSTALLED EQUIPMENT.

22. PHASE 2 & 6 SHALL BE SET ON RECALL GREEN.

23. FOR PAVEMENT MARKINGS SEE SHEET NO. SP-01.

24. PEDESTRIAN PUSHBUTTONS:

PEDESTRIAN PUSHBUTTONS SHOULD BE LOCATED TO MEET ALL OF THE FOLLOWING CRITERIA:

A. UNOBSTRUCTED AND ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR;

B. BETWEEN THE EDGE OF THE CROSSWALK LINE (EXTENDED) FARTHEST FROM THE CENTER OF THE INTERSECTION AND THE SIDE OF A CURB RAMP (IF PRESENT), BUT NOT GREATER THAN 5 FEET FROM SAID CROSSWALK LINE;

C. A DISTANCE OF 10" MAXIMUM FROM THE PEDESTRIAN ACCESS ROUTE (PUSHBUTTON EXTENSION ARMS MAY BE USED UP TO 18" IN LENGTH);

D. BETWEEN 1.5 AND 6 FEET FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT;

E. WITH THE FACE OF THE PUSHBUTTON PARALLEL TO THE CROSSWALK TO BE USED; AND

F. AT A MOUNTING HEIGHT OF APPROXIMATELY 3.5 FEET, BUT NO MORE THAN 4 FEET, ABOVE THE SIDEWALK.

WHERE THERE ARE PHYSICAL CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 AND 6 FEET FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FARTHER THAN 10 FEET FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

EXCEPT AS PROVIDED BELOW, WHERE TWO PEDESTRIAN PUSHBUTTONS ARE PROVIDED ON THE SAME CORNER OF A SIGNALIZED LOCATION, THE PUSHBUTTONS SHOULD BE SEPARATED BY A DISTANCE OF AT LEAST 10 FEET.

WHERE THERE ARE PHYSICAL CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10-FOOT SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

IF TWO ACCESSIBLE PEDESTRIAN PUSHBUTTONS ARE PLACED LESS THAN 10 FEET APART OR ON THE SAME POLE, EACH ACCESSIBLE PEDESTRIAN PUSHBUTTON SHALL BE PROVIDED WITH THE FOLLOWING FEATURES:

A. A PUSHBUTTON LOCATOR TONE,

B. A TACTILE ARROW,

C. A SPEECH WALK MESSAGE FOR THE WALKING PERSON (SYMBOLIZING WALK) INDICATION, AND

D. A SPEECH PUSHBUTTON INFORMATION MESSAGE

THE ACCESSIBLE PEDESTRIAN PUSHBUTTON SHALL BE LOCATED WITHIN 10" OF THE PEDESTRIAN ACCESS ROUTE. A MAXIMUM PUSHBUTTON EXTENSION ARM LENGTH OF 24" MAY BE USED TO ACHIEVE THIS WHERE REQUIRED.

ANY DEVIATIONS FROM THE ABOVE SHALL BE PRESENTED TO THE E.I.C. FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

25. SEQUENCE OF EVENTS FOR SIGNAL CONSTRUCTION CONTRACTS (CONTRACTOR SHALL CONTACT REGION 8 SIGNALS UNIT AT 845-437-3320):

A. THE EIC OR INSPECTOR SHALL BE COPIED ON ALL COMMUNICATION TO AND FROM THE SIGNAL CONTRACTOR.

B. PRECONSTRUCTION/UTILITY MEETING: NOTIFY TRAFFIC & SAFETY AS TO THE TIME AND PLACE. IT SHOULD BE CONFIRMED THAT THE CONTRACTOR HAS THE LATEST SET OF PLANS. THE EIC/INSPECTOR SHOULD DIRECT THE CONTRACTOR TO FORWARD SIGNAL POLE/MAST ARM SHOP DRAWINGS/CALCULATIONS TO THE TRAFFIC & SAFETY OFFICE FOR REVIEW. THIS IS TIME SENSITIVE SINCE THE MANUFACTURER MAY NEED TO REDESIGN THE POLES.

C. REQUEST FOR POWER: REQUEST A SUBMITTAL THROUGH THE POWER REQUEST COORDINATOR THREE MONTHS BEFORE THE START OF ANY TRAFFIC SIGNAL RELATED WORK.

D. FIRST DAY OF CONSTRUCTION: THE EIC/INSPECTOR SHALL NOTIFY THE REGIONAL TRAFFIC SIGNAL ENGINEER AND ALL SIGNAL CREW SUPERVISORS WITH THE CONTRACTOR'S EMERGENCY CONTACT INFORMATION. AN EMAIL REQUEST FOR A CABINET SHOULD BE MADE BY THE EIC/INSPECTOR TO THE REGIONAL TRAFFIC SIGNAL ENGINEER WHICH INCLUDES THE PIN#, D#, SIGNAL#, LOCATION, NUMBER OF CABINETS/DISCONNECTS NEEDED, AND IF THE CABINET IS NEEDED EARLY FOR PAINTING.

E. SIGNAL POLE STAKE OUT: THE STAKE OUT OF THE POLE LOCATIONS SHALL BE APPROVED BY THE TRAFFIC SIGNAL UNIT BEFORE THE FOUNDATIONS ARE INSTALLED. THIS IS TO IDENTIFY ANY POSSIBLE UTILITY CLEARANCE PROBLEMS BEFORE THE POLE LOCATION IS FINALIZED. ADDITIONAL CLEARANCE CHECKS MAY BE REQUIRED BEFORE POLES/SPAN WIRES/MAST ARMS ARE INSTALLED. THE SIGNAL UTILITY COORDINATOR WILL SCHEDULE ADDITIONAL CHECKS WITH THE CONTRACTOR WHILE ON SITE.

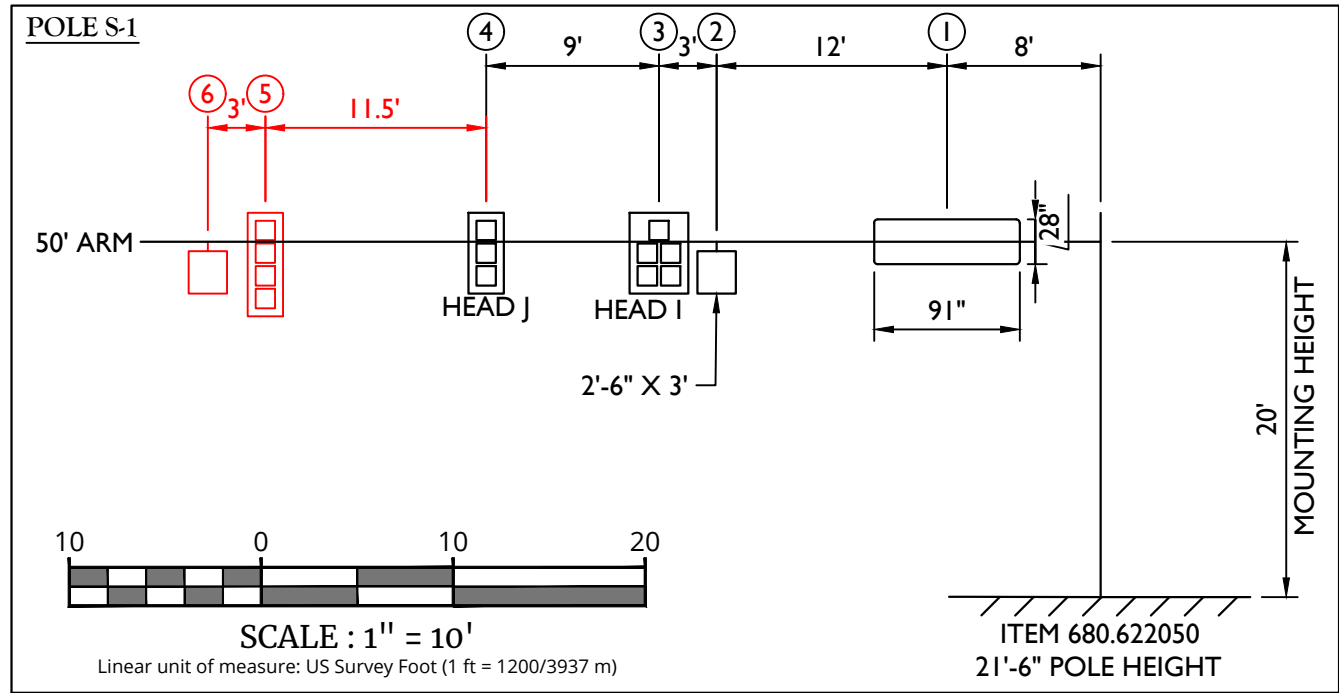
F. CABINET RELEASE: WIRING SHEETS WILL BE E-MAILED TO EIC/INSPECTOR AT THE TIME OF CABINET RELEASE. THE CABINET WILL NOT BE RELEASED UNTIL ALL UTILITY CONFLICTS HAVE A RESOLUTION IN PLACE.

G. SIGNALS UNDER CONSTRUCTION: THE CONTRACTOR IS EXPECTED TO MAINTAIN AND OPERATE TRAFFIC SIGNALS WHILE UNDER CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAKING TIMING ADJUSTMENTS AND SHIFTING HEADS DURING CONSTRUCTION TO ACCOUNT FOR UNFINISHED DETECTION, LANE CLOSURES, AND OTHER ACTIVITIES THAT AFFECT THE OPERATION OF THE SIGNAL. TEMPORARY TURN ONS ARE ONLY ALLOWED WHEN IT IS NECESSARY TO REMOVE THE EXISTING SIGNAL TO FINISH CONSTRUCTION OF THE NEW SIGNAL. THE NEW SIGNAL CAN BE TURNED ON IF THERE ARE STOP BARS, IT PASSES THE GROUND TEST, ALL LEDS ARE WORKING, AND THE HEADS ALIGN IN THE LANES. NYSDOT WILL PROVIDE THE FINAL TIMING PLAN BEFORE A TEMPORARY TURN ON.

H. TURN-ON: THE EIC/INSPECTOR SHOULD NOTIFY THE REGIONAL TRAFFIC SIGNAL ENGINEER WHEN THE SIGNAL IS READY FOR INSPECTION. A PRE INSPECTION WILL BE DONE TO VERIFY THAT ALL WORK IS COMPLETE. WITHIN 2 WEEKS FROM THE REQUEST, A FULL TURN ON DATE WILL BE SCHEDULED.

I. THE CONTRACTOR SHALL INSTALL PORTABLE VARIABLE MESSAGE SIGNS (PVMS) ON ALL INTERSECTION APPROACHES FOR A MINIMUM OF ONE-WEEK PRIOR TO THE SCHEDULED TURN ON DATE. PVMS SHALL BE PAID FOR UNDER ITEM 619.110511 - PVMS STANDARD SIZE - FULL MATRIX (LED) NO OPTIONAL EQUIPMENT SPECIFIED. NO CELLULAR COMMUNICATIONS REQUIRED. CONTRACTOR SHALL CONTACT REGION 8 TRAFFIC SIGNALS UNIT TO CONFIRM PVMS MESSAGING PRIOR TO INSTALLATION.

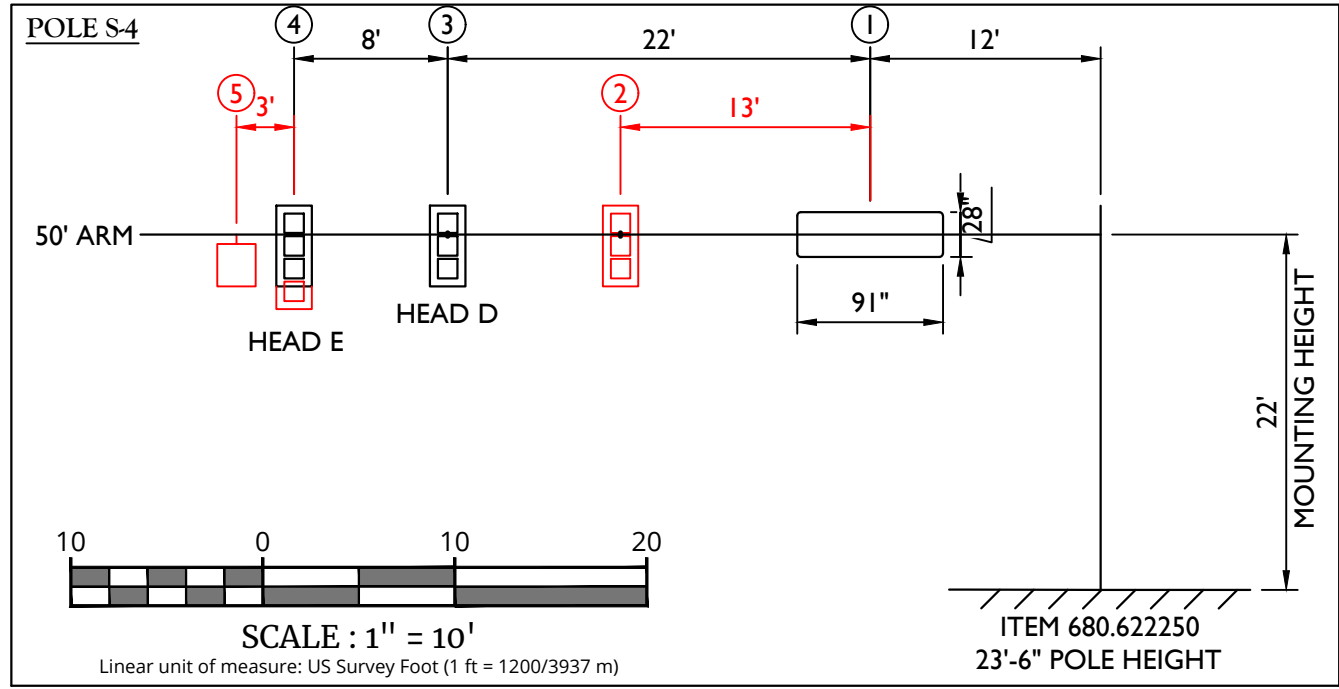
J. 10-DAY FUNCTIONAL TEST: A PUNCH LIST OF ANY ITEMS TO BE CORRECTED WILL BE GIVEN TO THE CONTRACTOR AT THE TURN ON. ONCE ALL OF THE ITEMS ARE COMPLETE THE 10-DAY FUNCTIONAL TEST WILL BEGIN. THE SIGNAL WILL BE ACCEPTED ONCE THE FUNCTIONAL TEST IS COMPLETE.



MAST ARM LOAD TABLE POLE S-1					
LOAD NO.	TYPE	NO. OF 12" SIGNAL SECTIONS	DEAD LOAD (LB)	PROJECTED WIND AREA (SF)	PROJECTED ICE AREA (SF)
1	SIGN	-	43.50	18.0	18.0
2	SIGN	-	22.50	7.5	7.5
3	SIGNAL HEAD I	5	85.83	118.83	360.21
4	SIGNAL HEAD J	3	47.32	8.2	20.9
5	FUTURE SIGNAL HEAD	4	59.45	10.9	27.9
6	FUTURE SIGN	-	22.50	7.5	7.5

NOTES:

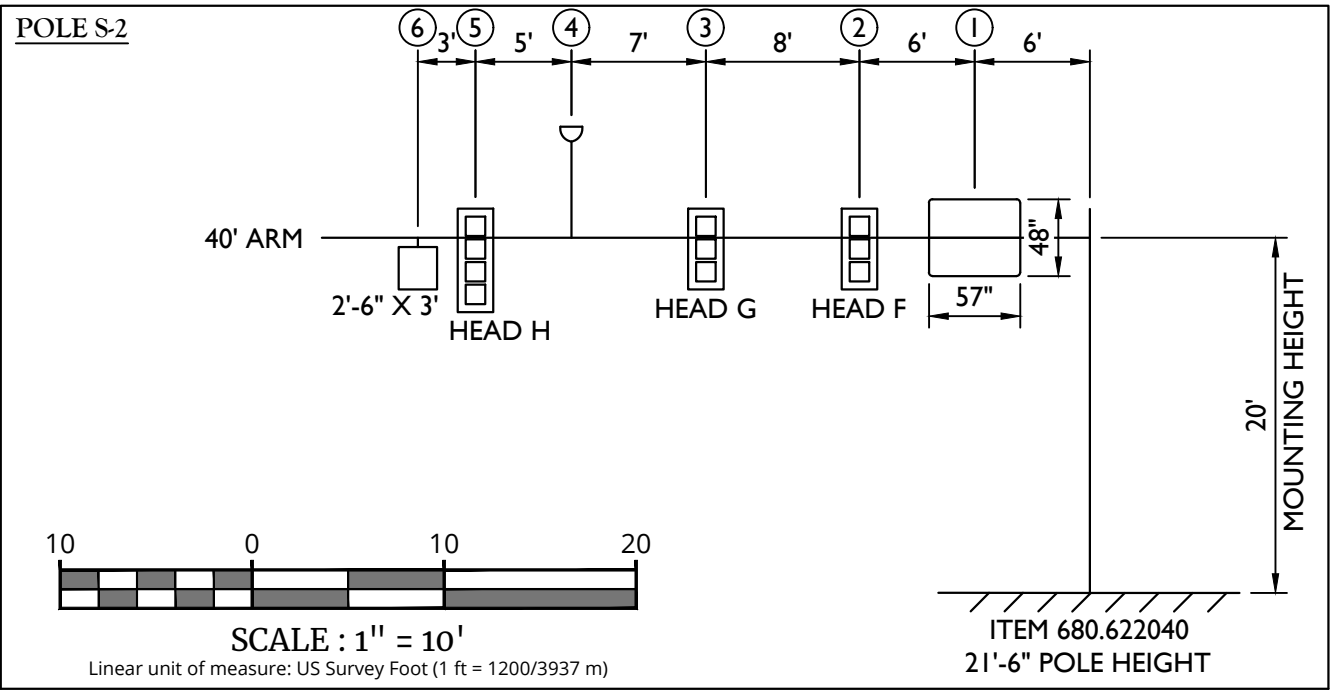
1. WIND SPEEDS PER STANDARD SPECIFICATION SECTION 724-03.
2. DEAD LOADS INCLUDE SIGNAL SECTIONS OF SIGN, BRACKETS AND HARDWARE, EXCLUSIVE OF MAST ARM AND UPRIGHT.



MAST ARM LOAD TABLE POLE S-4					
LOAD NO.	TYPE	NO. OF 12" SIGNAL SECTIONS	DEAD LOAD (LB)	PROJECTED WIND AREA (SF)	PROJECTED ICE AREA (SF)
1	SIGN	-	43.50	18.0	18.0
2	FUTURE SIGNAL HEAD	3	47.32	8.2	20.9
3	SIGNAL HEAD D	3	47.32	8.2	20.9
4	SIGNAL HEAD E	4	59.45	10.9	27.9
5	FUTURE SIGN	-	22.50	7.5	7.5

NOTES:

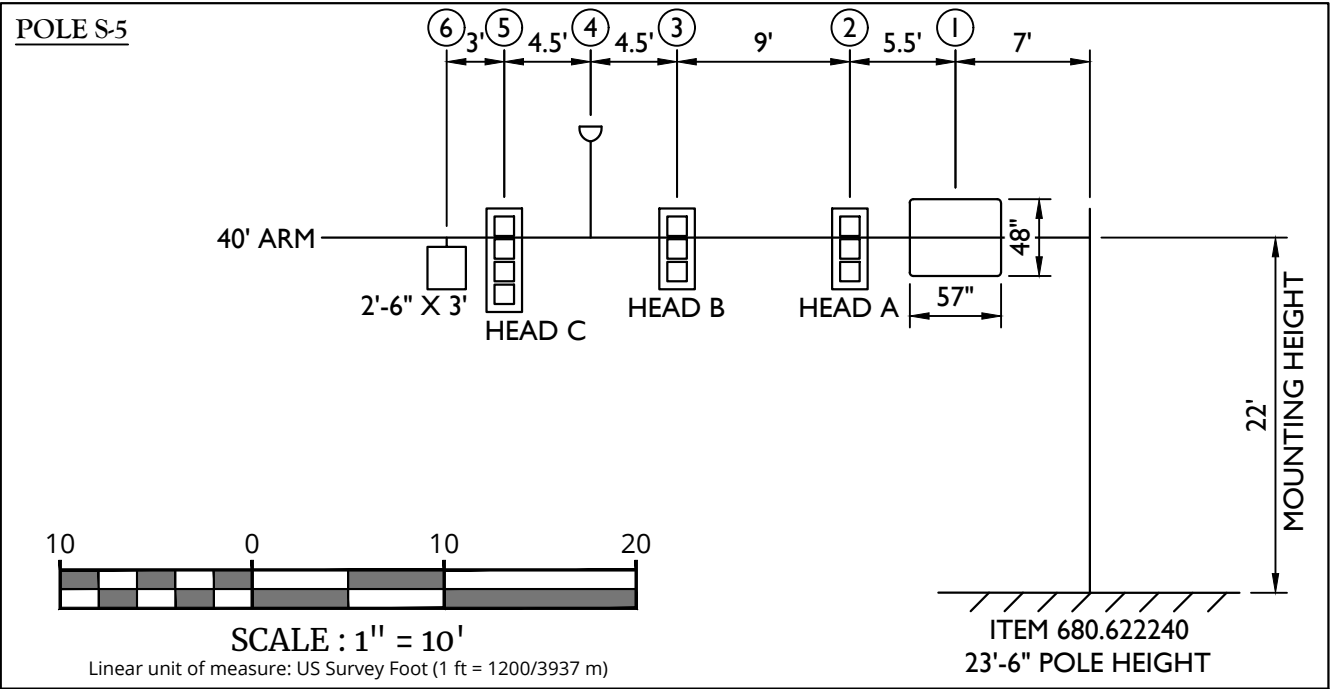
1. WIND SPEEDS PER STANDARD SPECIFICATION SECTION 724-03.
2. DEAD LOADS INCLUDE SIGNAL SECTIONS OF SIGN, BRACKETS AND HARDWARE, EXCLUSIVE OF MAST ARM AND UPRIGHT.
3. LOAD NO. 3, SIGNAL HEAD E SHALL BE A 3-SECTION HEAD WITH BACKPLATE AS INSTALLED UNDER THIS CONTRACT. HOWEVER LOADING DESIGN SHALL ACCOUNT FOR A FUTURE 4-SECTION HEAD WITH BACKPLATE AT THIS LOCATION.



MAST ARM LOAD TABLE POLE S-2					
LOAD NO.	TYPE	NO. OF 12" SIGNAL SECTIONS	DEAD LOAD (LB)	PROJECTED WIND AREA (SF)	PROJECTED ICE AREA (SF)
1	SIGN	-	45.50	19.0	19.0
2	SIGNAL HEAD F	3	47.32	8.2	20.9
3	SIGNAL HEAD G	3	47.32	8.2	20.9
4	GRIDSMA RT CAMERA	-	10.00	1.5	1.5
5	SIGNAL HEAD H	4	59.45	10.9	27.9
6	SIGN	-	22.50	7.5	7.5

NOTES:

1. WIND SPEEDS PER STANDARD SPECIFICATION SECTION 724-03.
2. DEAD LOADS INCLUDE SIGNAL SECTIONS OF SIGN, BRACKETS AND HARDWARE, EXCLUSIVE OF MAST ARM AND UPRIGHT.



MAST ARM LOAD TABLE POLE S-5					
LOAD NO.	TYPE	NO. OF 12" SIGNAL SECTIONS	DEAD LOAD (LB)	PROJECTED WIND AREA (SF)	PROJECTED ICE AREA (SF)
1	SIGN	-	45.50	19.0	19.0
2	SIGNAL HEAD A	3	47.32	8.2	20.9
3	SIGNAL HEAD B	3	47.32	8.2	20.9
4	GRIDSMA RT CAMERA	-	10.00	1.5	1.5
5	SIGNAL HEAD C	4	59.45	10.9	27.9
6	SIGN	-	22.50	7.5	7.5

NOTES:

1. WIND SPEEDS PER STANDARD SPECIFICATION SECTION 724-03.
2. DEAD LOADS INCLUDE SIGNAL SECTIONS OF SIGN, BRACKETS AND HARDWARE, EXCLUSIVE OF MAST ARM AND UPRIGHT.

NOTE
SCALE REDUCTION
ALL INDICATED SCALES ARE
REDUCED TO HALF SIZE.
ORIGINAL DRAWING SIZE: 22"x34"

0 1 2 3 4

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS
VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION	REVISED PER NYSDOT COMMENTS RECEIVED 3/19/24	REVISED PER NYSDOT 4/25/24 COMMENTS	REVISED PER NYSDOT 5/2/24 COMMENTS	REVISED PER NYSDOT 5/2/24 COMMENTS	REVISED PER NYSDOT 5/2/24 COMMENTS	REVISED PER NYSDOT 7/1/24 COMMENTS	REVISED PER NYSDOT 7/31/24 COMMENTS	REVISED PER NYSDOT 8/30/24 COMMENTS	REVISED PER NYSDOT 9/2/24 COMMENTS	REVISED PER NYSDOT 9/2/24 COMMENTS	REVISED PER NYSDOT 10/2/24 COMMENTS	REVISED FOR REGD.
1	4/8/24	M.J.A.													
2	4/26/24	J.F.M.													
3	5/16/24	M.J.A.													
4	5/24/24	M.J.A.													
5	7/1/24	M.J.A.													
6	8/7/24	M.J.A.													
7	8/15/24	REGD													
8	9/12/24	M.J.A.													
9	9/22/24	M.J.A.													
10	10/1/25	M.J.A.													



Philip John Grealy
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 059858-1
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A.#: 0017609

TRAFFIC SIGNAL PLANS

FOR
UNDERHILL AVENUE
IMPROVEMENTS
(SEQR # 22-092)

NYS ROUTE 118 (S.H. 148) AT
UNDERHILL AVENUE

TOWN OF YORKTOWN
WESTCHESTER COUNTY
NEW YORK

Colliers

Engineering
& Design

WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595

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COLLIERS ENGINEERING & DESIGN
ARCHITECTURE, LANDSCAPE ARCHITECTURE,
SURVEYING CT, P.C.

SCALE: AS SHOWN	DATE: 1/8/23	DRAWN BY: M.J.A.	CHECKED BY: R.G.D.
PROJECT NUMBER: 20006297A	DRAWING NAME: R-PL10-SGNL		

SHEET TITLE:	TRAFFIC SIGNAL PLAN NYS ROUTE 118 & UNDERHILL AVENUE (SIGNAL NO. W-213)
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SHEET NUMBER:	TSP-02
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NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2020-08-26 2:17 PM Importation Report File: R:\SP110-SGN.dwg TSP-03 By: MAMEKOLA

TABLE OF SIGNAL POLES										
POLE NO.	LOCATION			ELEV. OF FOOTING CAP	ITEM	MOUNTING HEIGHT	ARM LENGTH	FOOTING MOMENT (FT-KIP)	FOUNDATION	
	CENTERLINE STATION	OFFSET	SIDE						CODE	CY
S-1	124+20.98	35.79	LT	468.2' ±	680.622050	20'	50'	80	K5	1.9
S-2	125+12.37	43.03	LT	468.0' ±	680.622040	20'	40'	60	K3	1.8
S-3	125+24.90	40.88	LT	-	680.99040010	EXIST.	-	EXIST.	EXIST.	EXIST.
S-4	125+81.92	47.08	RT	465.0' ±	680.622250	22'	50'	80	K5	1.9
S-5	124+99.08	49.58	RT	464.0' ±	680.622240	22'	40'	60	K3	1.8
S-6	124+86.84	41.89	RT	-	680.99040010	EXIST.	-	EXIST.	EXIST.	EXIST.
P-1	124+23.92	40.74	LT	-	680.82250608	EXIST.	-	EXIST.	EXIST.	EXIST.
P-2	124+26.47	36.17	LT	468.3' ±	680.6808	8'	-	-	J1	1.1
P-3	124+30.77	46.24	LT	468.5' ±	680.6808	8'	-	-	J1	1.1
P-4	124+57.48	32.42	LT	-	680.82250608	EXIST.	-	-	EXIST.	EXIST.
P-5	124+86.54	68.57	LT	468.4' ±	680.6808	8'	-	-	J1	1.1
P-10	124+68.54	27.81	RT	-	680.82250608	EXIST.	-	-	EXIST.	EXIST.
P-11	124+62.71	28.28	RT	466.8' ±	680.6808	8'	-	-	J1	1.1
TOTAL (CY)										11.8

ESTIMATE OF QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
206.03	CONDUIT EXCAVATION AND BACKFILL INCLUDING SURFACE RESTORATION	LF	407
619.1612	MAINTAIN TRAFFIC SIGNAL EQUIPMENT (REQUIREMENT B)	INTM	6
625.01000108	SURVEY AND STAKEOUT (TRAFFIC SIGNALS)	EA	4
662.60000108	FURNISH ELECTRICAL SERVICE	DC	1
680.05010007	360 DIGITAL CAMERA VIDEO DETECTION SYSTEM	EA	1
680.05020007	360 DEGREE CAMERA ASSEMBLY	EA	1
680.5001	POLE EXCAVATION AND CONCRETE FOUNDATION	CY	11.8
680.510501	PULLBOX - RECTANGULAR, 26" X 18", REINFORCED CONCRETE	EA	7
680.520108	CONDUIT, METAL STEEL, ZINC COATED, 3"	LF	375
680.520110	CONDUIT, METAL STEEL, ZINC COATED, 4"	LF	32
680.622040	TRAFFIC SIGNAL POLE - MAST ARM, 20 FT. MOUNTING HEIGHT, 40 FT. ARM LENGTH	EA	1
680.622050	TRAFFIC SIGNAL POLE - MAST ARM, 20 FT. MOUNTING HEIGHT, 50 FT. ARM LENGTH	EA	1
680.622240	TRAFFIC SIGNAL POLE - MAST ARM, 22 FT. MOUNTING HEIGHT, 40 FT. ARM LENGTH	EA	1
680.622250	TRAFFIC SIGNAL POLE - MAST ARM, 22 FT. MOUNTING HEIGHT, 50 FT. ARM LENGTH	EA	1
680.6808	TRAFFIC SIGNAL POLE-BRACKET MOUNT 8 FEET MOUNTING HEIGHT	EA	4
680.700603	RISER ASSEMBLY, 1" DIAMETER	EA	1
680.730514	SIGNAL CABLE, 5 CONDUCTORS, 14 AWG	LF	2120
680.731014	SIGNAL CABLE, 10 CONDUCTORS, 14 AWG	LF	648
680.79000005	REMOVE TRAFFIC SIGNAL INSTALLATION	EA	1
680.80324515	INSTALL MICROCOMPUTER CABINET	EA	1
680.810101	TRAFFIC SIGNAL MODULE - 12 INCH, RED BALL, LED	EA	8
680.810102	TRAFFIC SIGNAL MODULE - 12 INCH, RED ARROW, LED	EA	2
680.810103	TRAFFIC SIGNAL MODULE - 12 INCH, YELLOW BALL, LED	EA	8
680.810104	TRAFFIC SIGNAL MODULE - 12 INCH, YELLOW ARROW, LED	EA	5
680.810105	TRAFFIC SIGNAL MODULE - 12 INCH, GREEN BALL, LED	EA	8
680.810106	TRAFFIC SIGNAL MODULE - 12 INCH, GREEN ARROW, LED	EA	3
680.810107	TRAFFIC SIGNAL SECTION - TYPE I, 12 INCH	EA	34
680.81230008	TRAFFIC SIGNAL BRACKET ASSEMBLY - 1 WAY, MAST ARM MOUNT (CABLETYPE)	EA	9
680.81240008	TRAFFIC SIGNAL BRACKET ASSEMBLY - 2 WAY, MAST ARM MOUNT (CABLETYPE)	EA	1
680.8151	ACCESSIBLE PEDESTRIAN SIGNAL (APS) WITHOUT POST	EA	4
680.813103	PEDESTRIAN SIGNAL SECTION - TYPE I, 12 INCH	EA	8
680.813105	PEDESTRIAN SIGNAL MODULE - 12 INCH BI-MODAL, HAND/MAN SYMBOLS LED	EA	4
680.8141	PEDESTRIAN SIGNAL BRACKET MOUNT ASSEMBLY	EA	4
680.815001	PEDESTRIAN SIGNAL MODULE - 12 INCH COUNTDOWN TIMER, LED	EA	4
680.8199	BACKPLATES FOR TRAFFIC SIGNAL HEADS	EA	10
680.8207	OVERHEAD SIGN ASSEMBLY, TYPE G	EA	7
680.8223	BREAKAWAY TRANSFORMER BASE	EA	4
680.82250608	REMOVE AND DISPOSE PEDESTRIAN POLE AND FOUNDATION	EA	3
680.82250801	REMOVE TRAFFIC SIGNAL PULLBOXES	EA	7
680.90920008	ELECTRIC METER SOCKET, 200 AMP, SINGLE PHASE, 240/120VOLT W/ BYPASS SWITCH FOR SIGNAL INSTALLATIONS	EA	1
680.94000008	TRAFFIC SIGNAL SERVICE ENTRANCE	EA	1
680.9499	INSTALL ELECTRICAL DISCONNECT/GENERATOR TRANSFER SWITCH	EA	1
680.950206	ELECTRICAL SERVICE CABLE 2 WIRE 6 GAUGE	LF	14
680.99040010	REMOVE TRAFFIC SIGNAL POLE	EA	2

TABLE OF INPUTS				
SDLC CHANNEL	FUNCTION	DETECTION ZONE NUMBER	SIZE	REMARKS
42	Ø2	42	6' X 40'	PRESENCE
43	Ø3	43	6' X 40'	PRESENCE
44	Ø4	44	6' X 40'	PRESENCE
46	Ø6	46	6' X 40'	PRESENCE
47	Ø7	47	6' X 40'	PRESENCE
48	Ø8	48	6' X 40'	PRESENCE
49	Ø6	49	6' X 6'	NB RIGHT COUNT
50	Ø6	50	6' X 6'	NB THROUGH COUNT
51	Ø6	51	6' X 6'	NB LEFT COUNT
52	Ø8	52	6' X 6'	EB RIGHT COUNT
53	Ø8	53	6' X 6'	EB THROUGH COUNT
54	Ø3	54	6' X 6'	EB LEFT COUNT
55	Ø2	55	6' X 6'	SB RIGHT COUNT
56	Ø2	56	6' X 6'	SB THROUGH COUNT
57	Ø2	57	6' X 6'	SB LEFT COUNT
58	Ø4	58	6' X 6'	WB RIGHT COUNT
59	Ø4	59	6' X 6'	WB THROUGH COUNT
60	Ø7	60	6' X 6'	WB LEFT COUNT

TABLE OF PULLBOXES						
PULLBOX NO.	LOCATION			ELEV. OF TOP	680.510501	680.82250801
	CENTERLINE STATION	OFFSET	SIDE		RECTANGULAR 26" X 18" RC	REMOVE TRAFFIC SIGNAL PULLBOXES
PB-1	124+26.10	47.15	LT	468.9' ±	1	0
PB-2	124+18.87	52.24	LT	-	0	1
PB-3	124+52.26	39.41	LT	-	0	1
PB-4	124+83.08	74.85	LT	469.0' ±	1	0
PB-5	125+11.61	37.68	LT	-	0	1
PB-6	125+16.94	44.40	LT	468.7' ±	1	0
PB-7	125+65.59	28.61	RT	-	0	1
PB-8	125+78.01	50.55	RT	465.0' ±	1	0
PB-9	125+51.46	47.66	RT	-	0	1
PB-10	125+23.44	69.14	RT	-	0	1
PB-11	125+21.24	81.03	RT	462.0' ±	1	0
PB-12	124+95.82	54.16	RT	463.0' ±	1	0
PB-13	124+80.66	29.56	RT	-	0	1
PB-14	124+61.03	38.77	RT	462.8' ±	1	0
TOTAL					7	7

ESTIMATE OF CONDUITS					
CONDUIT NO.	LOCATION		2" STEEL	680.520108	680.520110
	FROM	TO		3" STEEL	4" STEEL
C-1	P-2	PB-1	-	11	-
C-2	S-1	PB-1	-	-	13
C-3	PB-3	PB-2	EX. TO BE ABANDONED	-	-
C-4	INDUCTION LOOP	PB-2	EX. TO BE ABANDONED	-	-
C-5	P-3	PB-1	-	5	-
C-6	P-4	PB-3	EX. TO BE ABANDONED	-	-
C-7	PB-4	PB-1	-	65	-
C-8	P-5	PB-4	-	7	-
C-9	PB-6	PB-4	-	44	-
C-10	PB-3	PB-5	EX. TO BE ABANDONED	-	-
C-11	S-2	PB-6	-	-	9
C-12	PB-5	S-3	EX. TO BE ABANDONED	-	-
C-14	INDUCTION LOOP	PB-5	EX. TO BE ABANDONED	-	-
C-15	INDUCTION LOOP	PB-7	EX. TO BE ABANDONED	-	-
C-18	S-4	PB-8	-	-	5
C-19	PB-7	PB-9	EX. TO BE ABANDONED	-	-
C-20	PB-8	PB-11	-	64	-
C-21	PB-9	PB-10	EX. TO BE ABANDONED	-	-
C-23	PB-10	PB-13	EX. TO BE ABANDONED	-	-
C-24	PB-11	PB-12	-	39	-
C-25	PB-12	S-5	-	-	5
C-26	PB-14	PB-12	-	38	-
C-27	P-10	PB-13	EX. TO BE ABANDONED	-	-
C-28	INDUCTION LOOP	PB-13	EX. TO BE ABANDONED	-	-
C-29	P-11	PB-14	-	12	-
C-30	PB-1	PB-14	-	90	-
TOTAL (FEET)			0	375	32

TABLE OF OPERATION													
PHASE	FACE	1	2	3	4	5	6	7	8	9	10	PED 2	PED 3
ø2		G	G	R	R	<R-	R	R	<R-	R	R	DW ¹	DW
ø3		R	G →	R	R	<G-	R	R	<R-	R	R	DW	DW
ø4		R	R	R	R	<FY-	R	R	<R-	G	G	DW	DW
ø6		R	R	G	G	<R-	R	R	<R-	R	R	DW	DW
ø7		R	R	R	R	<R-	R	R	<G-	R	R	DW	DW
ø8		R	R	R	R	<R-	G	G	<FY-	R	R	DW	DW ¹
ø2+ø6		G	G	G	G	<R-	R	R	<R-	R	R	DW ¹	DW
ø3+ø7		R	G →	R	R	<G-	R	R	<G-	R	R	DW	DW
ø3+ø8		R	G →	R	R	<G-	G	G	<FY-	R	R	DW	DW ¹
ø4+ø7		R	R	R	R	<FY-	R	R	<G-	G	G	DW	DW
ø4+ø8		R	R	R	R	<FY-	G	G	<FY-	G	G	DW	DW ¹
FLASH OPERATION	FY	FY	FY	FY	FY	DARK	FR	FR	DARK	FR	FR	DARK	DARK

NOTES:

- I. PEDESTRIAN SIGNAL TO BE DEMAND ACTUATED ONLY UPON ACTUATION OF A PEDESTRIAN PUSH BUTTON THE INDICATIONS SHALL DISPLAY A STEADY "MAN" FOLLOWED BY A FLASHING "HAND" AND COUNTDOWN TIMER AND THEN A STEADY "HAND".



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REV	DATE	DRAWN BY	DESCRIPTION	REVIEWED PER NYSDOT COMMENTS RECEIVED 3/19/24	REVIEWED PER NYSDOT 4/25/24 COMMENTS	REVIEWED PER NYSDOT 5/2/24 COMMENTS	REVIEWED TRAFFIC SIGNAL PLAN REQUEST PER NYSDOT SIGNAL GROUP 5/22/24 EMAIL COMMENTS	REVIEWED PER NYSDOT 7/1/24 COMMENTS	REVIEWED PER NYSDOT 7/31/24 COMMENTS	REVIEWED PER QA/QC REVIEW	REVIEWED PER NYSDOT 8/30/24 COMMENTS	REVIEWED PER NYSDOT 9/2/24 COMMENTS	REVIEWED FOR REBID
1	4/8/24	M.J.A.											
2	4/26/24	J.F.M.											
3	5/16/24	M.J.A.											
4	5/24/24	M.J.A.											
5	7/1/24	M.J.A.											
6	8/7/24	M.J.A.											
7	8/15/24	R.G.D.											
8	9/12/24	M.J.A.											
9	9/29/24	M.J.A.											
10	1/31/25	M.J.A.											



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TRAFFIC SIGNAL PLANS

FOR
UNDERHILL AVENUE
IMPROVEMENTS
(SEQR # 22-092)

NYS ROUTE 118 (S.H. 148) AT
UNDERHILL AVENUE

TOWN OF YORKTOWN
WESTCHESTER COUNTY
NEW YORK



400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500

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SCALE: AS SHOWN	DATE: 1/8/23	DRAWN BY: M.J.A.	CHECKED BY: R.G.D.
PROJECT NUMBER: 20006297A	DRAWING NAME: R-PL10-SGNL		

SHEET TITLE:	TRAFFIC SIGNAL PLAN NYS ROUTE 118 & UNDERHILL AVENUE (SIGNAL NO. W-213)
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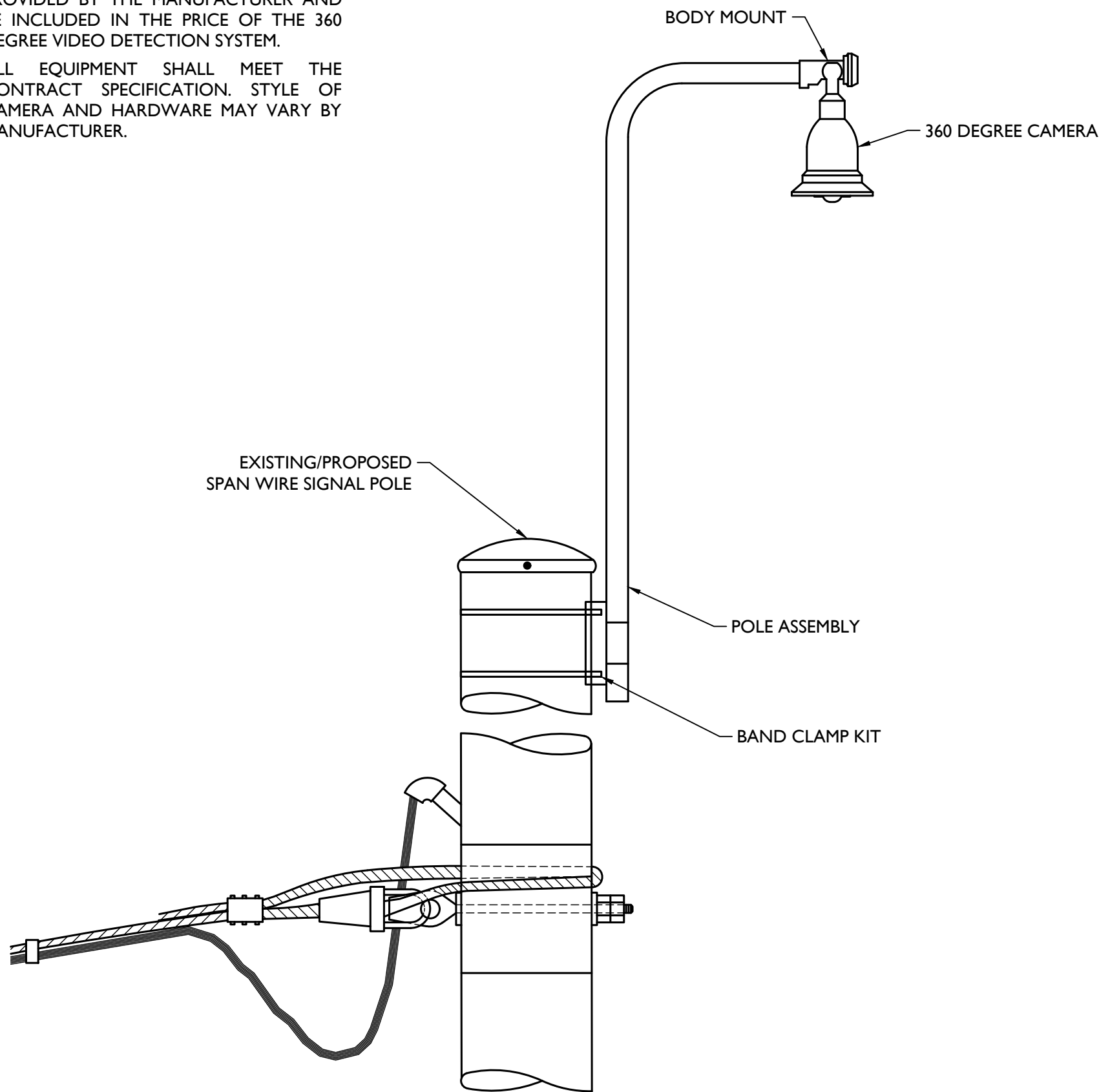
SHEET NUMBER:	TSP-03
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NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2020/06/29/11:51 AM Transportation Report File: R:\SPL10-SGNL.dwg(TSP-04) By: MAMEC004

NOTES:

- ALL MOUNTING HARDWARE SHALL BE PROVIDED BY THE MANUFACTURER AND BE INCLUDED IN THE PRICE OF THE 360 DEGREE VIDEO DETECTION SYSTEM.
- ALL EQUIPMENT SHALL MEET THE CONTRACT SPECIFICATION. STYLE OF CAMERA AND HARDWARE MAY VARY BY MANUFACTURER.



1

VIDEO DETECTION CAMERA DETAIL MOUNTED ON A SPAN WIRE POLE

NOT TO SCALE

NYDT-SGNL-1000

08/16/21

TABLE OF PEDESTRIAN INDICATIONS										
ITEM NUMBER	DESCRIPTION	UNIT	P-1	P-2	P-3	P-4	P-5	P-10	P-11	TOTAL
680.5001	POLE EXCAVATION AND CONCRETE FOUNDATION	CY	-	1.1	1.1	-	1.1	-	1.1	4.4
680.6808	TRAFFIC SIGNAL POLE-BRACKET MOUNT 8 FEET MOUNTING HEIGHT	EA	-	1	1	-	1	-	1	4
680.8151	ACCESSIBLE PEDESTRIAN SIGNAL (APS) WITHOUT POST	EA	-	1	1	-	1	-	1	4
680.813103	PEDESTRIAN SIGNAL SECTION - TYPE I, 12 INCH	EA	-	2	2	-	2	-	2	8
680.813105	PEDESTRIAN SIGNAL MODULE - 12 INCH BI-MODAL,HAND/MAN SYMBOLS LED	EA	-	1	1	-	1	-	1	4
680.8141	PEDESTRIAN SIGNAL BRACKET MOUNT ASSEMBLY	EA	-	1	1	-	1	-	1	4
680.815001	PEDESTRIAN SIGNAL MODULE - 12 INCH COUNTDOWN TIMER, LED	EA	-	1	1	-	1	-	1	4
680.8223	BREAKAWAY TRANSFORMER BASE	EA	-	1	1	-	1	-	1	4
680.82250608	REMOVE AND DISPOSE PEDESTRIAN POLE AND FOUNDATION	EA	1	-	-	1	-	1	-	3

ESTIMATE OF CABLES						
ROUTE			CABLE DESCRIPTION	# OF CABLES	680.730514	680.731014
FROM	THROUGH	TO			5 C, 14 AWG	10 C, 14 AWG
CONTROLLER	S-5	SIGNAL HEAD A	14-05C-A-X/X	1	42	-
CONTROLLER	S-5	SIGNAL HEAD B	14-05C-B-X/X	1	54	-
CONTROLLER	S-5	SIGNAL HEAD C	14-10C-C-X/X	1	-	64
CONTROLLER	S-5, C-25, PB-12, C-24, PB-11, C-20, PB-8, C-18, S-4	SIGNAL HEAD D	14-05C-D-X/X	1	200	-
CONTROLLER	S-5, C-25, PB-12, C-24, PB-11, C-20, PB-8, C-18, S-4	SIGNAL HEAD E	14-05C-E-X/X	1	208	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-7, PB-4, C-9, PB-6, C-11, S-2	SIGNAL HEAD F	14-05C-F-X/X	1	341	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-7, PB-4, C-9, PB-6, C-11, S-2	SIGNAL HEAD G	14-05C-G-X/X	1	351	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-7, PB-4, C-9, PB-6, C-11, S-2	SIGNAL HEAD H	14-10C-H-X/X	1	-	360
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-2, S-1	SIGNAL HEAD I	14-10C-I-X/X	1	-	224
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-2, S-1	SIGNAL HEAD J	14-05C-J-X/X	1	238	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-1, P-2	PED P-2	14-05C	1	184	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-5, P-3	PED P-3	14-05C	1	177	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-7, PB-4, C-8, P-5	PED P-5	14-05C	1	253	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-29, P-11	PED P-11	14-05C	1	72	-
TOTAL					2120	648

TABLE OF SIGNAL HEADS										
HEAD	BRACKET	FACE	MODULES						SECTION	
			680.810101 RED BALL - 12 IN.	680.810102 RED ARROW - 12 IN.	680.810103 YELLOW BALL - 12 IN.	680.810104 YELLOW ARROW - 12 IN.	680.810105 GREEN BALL - 12 IN.	680.810106 GREEN ARROW - 12 IN.	680.810107 TRAFFIC SIGNAL SECTION, TYPE I - 12 IN.	680.8109 TRAFFIC SIGNAL BACKPLATE
A	680.81230008	7	1	-	1	-	1	-	3	1
B	680.81230008	6	1	-	1	-	1	-	3	1
C	680.81230008	5	-	1	-	2	-	1	4	1
D	680.81230008	4	1	-	1	-	1	-	3	1
E	680.81230008	3	1	-	1	-	1	-	3	1
F	680.81230008	10	1	-	1	-	1	-	3	1
G	680.81230008	9	1	-	1	-	1	-	3	1
H	680.81230008	8	-	1	-	2	-	1	4	1
I	680.81240008	2	1	-	1	1	1	1	5	1
J	680.81230008	1	1	-	1	-	1	-	3	1
TOTAL (EACH)			8	2	8	5	8	3	34	10

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2	4/26/24	J.F.M.	REVISED PER NYSDOT 4/25/24 COMMENTS
3	5/1/24	M.J.A.	REVISED PER NYSDOT 5/2/24 COMMENTS
4	5/2/24	M.J.A.	REVISED TRAFFIC SIGNAL PLAN AND TRAFFIC SIGNAL SECTION, TYPE I FOR NYSDOT
5	7/1/24	M.J.A.	REVISED PER NYSDOT 7/1/24 COMMENTS
6	8/7/24	M.J.A.	REVISED PER NYSDOT 7/31/24 COMMENTS
7	8/15/24	R.G.D.	REVISED PER QA/QC REVIEW
8	9/12/24	M.J.A.	REVISED PER NYSDOT 8/30/24 COMMENTS
9	9/2/24	M.J.A.	REVISED PER NYSDOT 9/2/24 COMMENTS
10	1/31/25	M.J.A.	REVISED FOR REBID



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TRAFFIC SIGNAL PLANS

FOR
UNDERHILL AVENUE
IMPROVEMENTS
(SEQR # 22-092)

NYS ROUTE 118 (S.H. 148) AT
UNDERHILL AVENUE

TOWN OF YORKTOWN
WESTCHESTER COUNTY
NEW YORK



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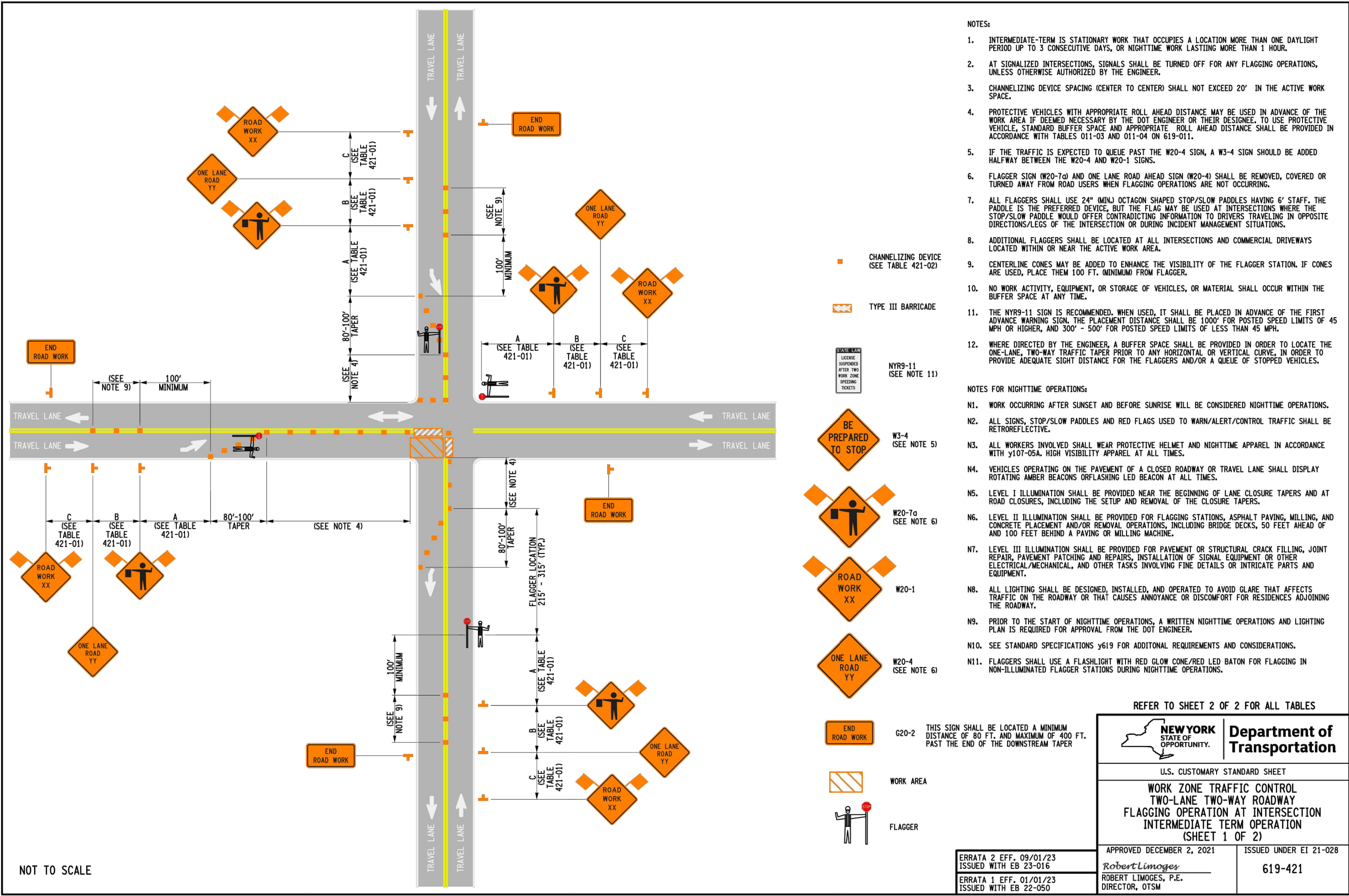
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SCALE: AS SHOWN	DATE: 1/8/23	DRAWN BY: M.J.A.	CHECKED BY: R.G.D.
PROJECT NUMBER: 20006297A	DRAWING NAME: R-PL10-SGNL		

SHEET TITLE: TRAFFIC SIGNAL PLAN NYS ROUTE 118 & UNDERHILL AVENUE (SIGNAL NO. W-213)

SHEET NUMBER: TSP-04

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



WORK ZONE TRAFFIC CONTROL COORDINATION NOTE:

TRAFFIC SIGNAL CONTRACTOR SHALL COORDINATE DAILY WORK ACTIVITIES WITH ROADWORK CONTRACTOR TO ENSURE CONSISTENCY OF WORK ZONE TRAFFIC CONTROL THROUGHOUT CONSTRUCTION.

TABLE 421-01: ADVANCE WARNING SIGN SPACING					
ROAD TYPE	DISTANCE BETWEEN SIGNS			SIGN LEGEND	
	A (FT.)	B (FT.)	C (FT.)	XX	YY
URBAN (≤ 30 MPH)	100	100	100	AHEAD	AHEAD
URBAN (35-40 MPH)	200	200	200	AHEAD	AHEAD
URBAN (45 MPH)	350	350	350	[1000 FT.]	AHEAD
RURAL	500	500	500	[1500 FT.]	1000 FT.
* PRECONSTRUCTION POSTED SPEED LIMIT					

TABLE 421-02: CHANNELIZING DEVICE APPLICATION FOR INTERMEDIATE-TERM STATIONARY WORK ZONES									
WORK ZONE PROVISIONS		MAXIMUM DEVICE SPACING (CENTER TO CENTER)	MUTCD COMPLIANT CHANNELIZING DEVICE						
INTERMEDIATE-TERM STATIONARY WORK ZONES INVOLVE WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR			DRUMS	STANDARD CONES	TALL CONES	EXTRA TALL CONES	TEMPORARY TUBULAR MARKERS	INTERIM TUBULAR BARRIERS	VERTICAL PANELS
SHOULDER/MERGING/SHIFTING TAPERS	20 FT. *	X							X
	40 FT.	X							X
MARKING FOR TRANSVERSE BUMPS ¹	N/A	X ²			X ²				X ²
TRANSVERSE DEVICE WITHIN CLOSED TRAFFIC LANE AND/OR SHOULDER	800 FT.	X		X	X				X
REMOVAL OF EXISTING GUIDE RAIL	80 FT.	X		X	X	X			X
	40 FT.	X		X	X	X			X

NOTES: X= ALLOWED, BLANK = NOT ALLOWED, O = OPTIONAL.
1. - A TYPE 1 OBJECT MARKER MAY BE USED IN LIEU OF CHANNELIZING DEVICE.
2. - CHANNELIZING DEVICES SHALL BE EQUIPPED WITH A FLASHING WARNING LIGHT.

* SEE NOTE 3 ON SHEET 1 OF 2.

TABLE 421-03: REQUIRED SIGN SIZES*		
SIGN	NON-FREEWAY	FREEWAY
W20-1	36x36	48x48
W20-4	36x36	48x48
W20-7a	36x36	48x48
G20-2	36x48	48x64
WARNING FLAG	18x18	18x18
*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST.		

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL
TWO-LANE, TWO-WAY ROADWAY
FLAGGING OPERATION AT INTERSECTION
INTERMEDIATE TERM OPERATION
(SHEET 2 OF 2)

APPROVED APRIL 8, 2022 ISSUED UNDER ET 22-008
Robert L. Lemos, P.E. DIRECTOR, OTSM 619-421

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DESCRIPTION	DRAWN BY	DATE	REV
REVISED PER NYSDOT COMMENTS RECEIVED 3/19/24	M.J.A.	4/8/24	1
REVISED PER NYSDOT 4/25/24 COMMENTS.	J.E.M.	4/26/24	2
REVISED PER NYSDOT 5/9/24 COMMENTS.	M.J.A.	5/14/24	3
REVISED TRAFFIC SIGNAL PLAN COMMENTS PER NYSDOT SIGNAL GROUP 5/23/24 EMAIL COMMENTS.	M.J.A.	5/24/24	4
REVISED PER NYSDOT 7/11/24 COMMENTS.	M.J.A.	7/11/24	5
REVISED PER NYSDOT 7/18/24 COMMENTS.	M.J.A.	8/7/24	6
REVISED PER QA/QC REVIEW	R.G.D.	8/15/24	7
REVISED PER NYSDOT 8/29/24 COMMENTS.	M.J.A.	9/12/24	8
REVISED PER NYSDOT 9/23/24 COMMENTS.	M.J.A.	9/23/24	9
REVISED FOR REBID.	M.J.A.	10/1/25	10

STATE OF NEW YORK

PHILIP JOHN GREALY

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FOR

UNDERHILL AVENUE IMPROVEMENTS (SEQR # 22-092)

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SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	1/8/23	M.J.A.	R.G.D.

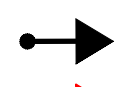
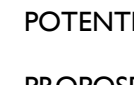

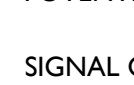

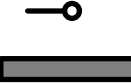

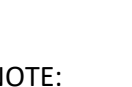
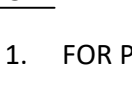
PROJECT NUMBER:	DRAWING NAME:
20006297A	R-PL11-WZTC-SGNL

SHEET TITLE:
TWO-LANE TW-WAY ROADWAY FLAGGING OPERATION AT INTERSECTION

SHEET NUMBER:
WZTC-01

ADD ALTERNATE S1

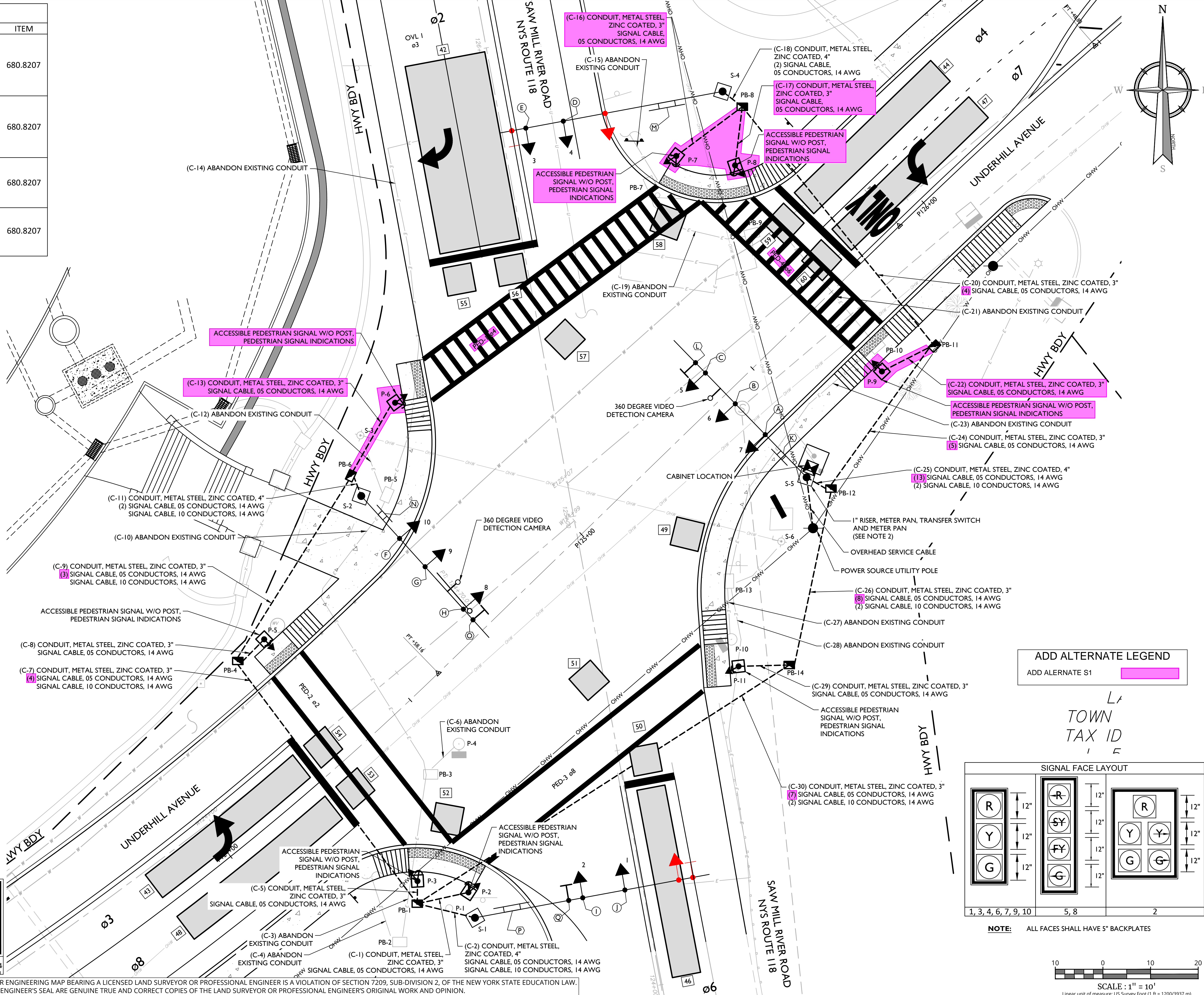
SIGN TEXT LEGEND			
NO.	SIGN TEXT	M.U.T.C.D. NO.	ITEM
L, O		R3 - 5L	680.8207
Q		R3 - 5R	680.8207
K, N		R3 - 5R	680.8207
M, P		R3 - 5R	680.8207

LEGEND	
	PROPOSED SIGNAL HEAD
	POTENTIAL FUTURE SIGNAL HEAD
	PROPOSED OVERHEAD SIGN
	POTENTIAL FUTURE OVERHEAD SIGN
	SIGNAL CONTROLLER CABINET
	18" X 26" PULLBOX
	360 DEGREE VIDEO DETECTION CAMERA
	6' X 40' DETECTION ZONE
	6' X 6' DETECTION ZONE COUNT

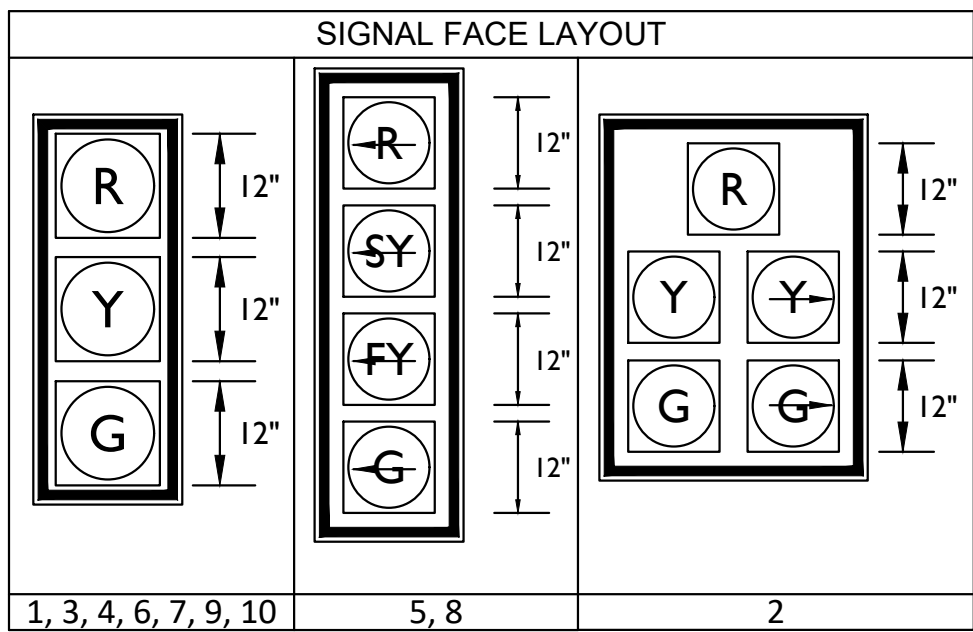
- NOTE:
- FOR PAVEMENT MARKINGS SEE SHEET NO. SP-02.
 - INSTALL 1" RISER ASSEMBLY (ITEM 680.700603), METER PAN (680.9402) AND GENERATOR TRANSFER SWITCH (ITEM 680.9499) ON POLE S-5 IN ACCORDANCE WITH NYSOT STANDARD SHEET 680-05.

NOTE
SCALE REDUCTION
 ALL INDICATED SCALES ARE REDUCED TO HALF SIZE.
 ORIGINAL DRAWING SIZE: 22"X34"

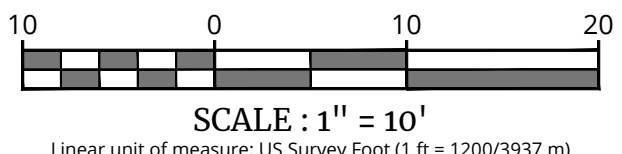
UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.



ADD ALTERNATE LEGEND
 ADD ALTERNATE S1



NOTE: ALL FACES SHALL HAVE 5" BACKPLATES



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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DESCRIPTION
1	4/8/24	REVISED PER NYSOT COMMENTS RECEIVED 3/19/24
2	4/26/24	REVISED PER NYSOT 4/25/24 COMMENTS
3	5/14/24	REVISED PER NYSOT 5/2/24 COMMENTS
4	5/14/24	REVISED FOR DESIGNER PLAN CHECKS PER NYSOT
5	7/1/24	SIGNAL GROUP 5/22/24 EMAIL COMMENTS
6	8/7/24	REVISED PER NYSOT 7/1/24 COMMENTS
7	8/15/24	REVISED PER QA/QC REVIEW
8	9/12/24	REVISED PER NYSOT 8/30/24 COMMENTS
9	9/29/24	REVISED PER NYSOT 9/20/24 COMMENTS
10	1/31/25	REVISED FOR REBID



Philip John Grealy
 NEW YORK LICENSED PROFESSIONAL ENGINEER
 LICENSE NUMBER: 059858-1
 COLLIER'S ENGINEERING & DESIGN CT, P.C.
 N.Y. C.O.A.#: 0017609

HIGHWAY IMPROVEMENT PLANS

FOR
UNDERHILL AVENUE IMPROVEMENTS
 (SEQR # 22-092)

NYS ROUTE 118 (S.H. 148) AT UNDERHILL AVENUE

TOWN OF YORKTOWN WESTCHESTER COUNTY NEW YORK



400 Columbus Avenue, Suite 180E
 Valhalla, NY 10595
 Phone: 914.347.7500
 FAX: 914.347.7501
 COLLIER'S ENGINEERING & DESIGN
 ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C.

SCALE: AS SHOWN DATE: 1/8/23 DRAWN BY: M.J.A. CHECKED BY: R.G.D.

PROJECT NUMBER: 2006297A DRAWING NAME: R-PL10-SGNL

SHEET TITLE: TRAFFIC SIGNAL PLAN NYS ROUTE 118 & UNDERHILL AVENUE (SIGNAL NO. W-213)

SHEET NUMBER: TSP-01

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

202006297A17 Transportation of Plan 59858-11 03-SGNL.dwg TSP-03 By: MARIENLOA

TABLE OF SIGNAL POLES										
POLE NO.	LOCATION			ELEV. OF FOOTING CAP	ITEM	MOUNTING HEIGHT	ARM LENGTH	FOOTING MOMENT (FT-KIP)	FOUNDATION	
	CENTERLINE STATION	OFFSET	SIDE						CODE	CY
S-1	124+20.98	35.79	LT	468.2' ±	680.622050	20'	50'	80	K5	1.9
S-2	125+12.37	43.03	LT	468.0' ±	680.622040	20'	40'	60	K3	1.8
S-3	125+24.90	40.88	LT	-	680.99040010	EXIST.	-	EXIST.	EXIST.	EXIST.
S-4	125+81.92	47.08	RT	465.0' ±	680.622250	22'	50'	80	K5	1.9
S-5	124+99.08	49.58	RT	464.0' ±	680.622240	22'	40'	60	K3	1.8
S-6	124+86.84	41.89	RT	-	680.99040010	EXIST.	-	EXIST.	EXIST.	EXIST.
P-1	124+23.92	40.74	LT	-	680.82250608	EXIST.	-	EXIST.	EXIST.	EXIST.
P-2	124+26.47	36.17	LT	468.3' ±	680.6808	8'	-	-	J1	1.1
P-3	124+30.77	46.24	LT	468.5' ±	680.6808	8'	-	-	J1	1.1
P-4	124+57.48	32.42	LT	-	680.82250608	EXIST.	-	-	EXIST.	EXIST.
P-5	124+86.54	68.57	LT	468.4' ±	680.6808	8'	-	-	J1	1.1
P-6	125+30.31	32.46	LT	466.9' ±	680.6808	8'	-	-	J1	1.1
P-7	125+70.39	35.05	RT	464.0' ±	680.6808	8'	-	-	J1	1.1
P-8	125+66.20	46.82	RT	463.7' ±	680.6808	8'	-	-	J1	1.1
P-9	125+18.03	69.18	RT	463.5' ±	680.6808	8'	-	-	J1	1.1
P-10	124+68.54	27.81	RT	-	680.82250608	EXIST.	-	-	EXIST.	EXIST.
P-11	124+62.71	28.28	RT	466.8' ±	680.6808	8'	-	-	J1	1.1
TOTAL (CY)										16.2

ESTIMATE OF QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
206.03	CONDUIT EXCAVATION AND BACKFILL INCLUDING SURFACE RESTORATION	LF	471
619.1612	MAINTAIN TRAFFIC SIGNAL EQUIPMENT (REQUIREMENT B)	INTM	6
625.01000108	SURVEY AND STAKEOUT (TRAFFIC SIGNALS)	EA	4
662.60000108	FURNISH ELECTRICAL SERVICE	DC	1
680.05010007	360 DIGITAL CAMERA VIDEO DETECTION SYSTEM	EA	1
680.05020007	360 DEGREE CAMERA ASSEMBLY	EA	1
680.5001	POLE EXCAVATION AND CONCRETE FOUNDATION	CY	16.2
680.510501	PULLBOX - RECTANGULAR, 26" X 18", REINFORCED CONCRETE	EA	7
680.520108	CONDUIT, METAL STEEL, ZINC COATED, 3"	LF	439
680.520110	CONDUIT, METAL STEEL, ZINC COATED, 4"	LF	32
680.622040	TRAFFIC SIGNAL POLE - MAST ARM, 20 FT. MOUNTING HEIGHT, 40 FT. ARM LENGTH	EA	1
680.622050	TRAFFIC SIGNAL POLE - MAST ARM, 20 FT. MOUNTING HEIGHT, 50 FT. ARM LENGTH	EA	1
680.622240	TRAFFIC SIGNAL POLE - MAST ARM, 22 FT. MOUNTING HEIGHT, 40 FT. ARM LENGTH	EA	1
680.622250	TRAFFIC SIGNAL POLE - MAST ARM, 22 FT. MOUNTING HEIGHT, 50 FT. ARM LENGTH	EA	1
680.6808	TRAFFIC SIGNAL POLE-BRACKET MOUNT 8 FEET MOUNTING HEIGHT	EA	8
680.700603	RISER ASSEMBLY, 1" DIAMETER	EA	1
680.730514	SIGNAL CABLE, 5 CONDUCTORS, 14 AWG	LF	2830
680.731014	SIGNAL CABLE, 10 CONDUCTORS, 14 AWG	LF	648
680.79000005	REMOVE TRAFFIC SIGNAL INSTALLATION	EA	1
680.80324515	INSTALL MICROCOMPUTER CABINET	EA	1
680.810101	TRAFFIC SIGNAL MODULE - 12 INCH, RED BALL, LED	EA	8
680.810102	TRAFFIC SIGNAL MODULE - 12 INCH, RED ARROW, LED	EA	2
680.810103	TRAFFIC SIGNAL MODULE - 12 INCH, YELLOW BALL, LED	EA	8
680.810104	TRAFFIC SIGNAL MODULE - 12 INCH, YELLOW ARROW, LED	EA	5
680.810105	TRAFFIC SIGNAL MODULE - 12 INCH, GREEN BALL, LED	EA	8
680.810106	TRAFFIC SIGNAL MODULE - 12 INCH, GREEN ARROW, LED	EA	3
680.810107	TRAFFIC SIGNAL SECTION - TYPE I, 12 INCH	EA	34
680.81230008	TRAFFIC SIGNAL BRACKET ASSEMBLY - 1 WAY, MAST ARM MOUNT (CABLETYPE)	EA	9
680.81240008	TRAFFIC SIGNAL BRACKET ASSEMBLY - 2 WAY, MAST ARM MOUNT (CABLETYPE)	EA	1
680.8151	ACCESSIBLE PEDESTRIAN SIGNAL (APS) WITHOUT POST	EA	8
680.813103	PEDESTRIAN SIGNAL SECTION - TYPE I, 12 INCH	EA	16
680.813105	PEDESTRIAN SIGNAL MODULE - 12 INCH BI-MODAL, HAND/MAN SYMBOLS LED	EA	8
680.8141	PEDESTRIAN SIGNAL BRACKET MOUNT ASSEMBLY	EA	8
680.815001	PEDESTRIAN SIGNAL MODULE - 12 INCH COUNTDOWN TIMER, LED	EA	8
680.8199	BACKPLATES FOR TRAFFIC SIGNAL HEADS	EA	10
680.8207	OVERHEAD SIGN ASSEMBLY, TYPE G	EA	7
680.8223	BREAKAWAY TRANSFORMER BASE	EA	8
680.82250608	REMOVE AND DISPOSE PEDESTRIAN POLE AND FOUNDATION	EA	3
680.82250801	REMOVE TRAFFIC SIGNAL PULLBOXES	EA	7
680.90920008	ELECTRIC METER SOCKET, 200 AMP, SINGLE PHASE, 240/120VOLT W/ BYPASS SWITCH FOR SIGNAL INSTALLATIONS	EA	1
680.94000008	TRAFFIC SIGNAL SERVICE ENTRANCE	EA	1
680.9499	INSTALL ELECTRICAL DISCONNECT/GENERATOR TRANSFER SWITCH	EA	1
680.950206	ELECTRICAL SERVICE CABLE 2 WIRE 6 GAUGE	LF	14
680.99040010	REMOVE TRAFFIC SIGNAL POLE	EA	2

NOTE:
ABOVE QUANTITIES ARE TOTAL QUANTITIES INCLUDE ADD ALTERNATE S1 ITEMS. FOR SPECIFICS OF ADDED QUANTITIES ASSOCIATED WITH ADD ALTERNATE S1 SEE BID SHEETS.

TABLE OF INPUTS				
SDLC CHANNEL	FUNCTION	DETECTION ZONE NUMBER	SIZE	REMARKS
42	Ø2	42	6' X 40'	PRESENCE
43	Ø3	43	6' X 40'	PRESENCE
44	Ø4	44	6' X 40'	PRESENCE
46	Ø6	46	6' X 40'	PRESENCE
47	Ø7	47	6' X 40'	PRESENCE
48	Ø8	48	6' X 40'	PRESENCE
49	Ø6	49	6' X 6'	NB RIGHT COUNT
50	Ø6	50	6' X 6'	NB THROUGH COUNT
51	Ø6	51	6' X 6'	NB LEFT COUNT
52	Ø8	52	6' X 6'	EB RIGHT COUNT
53	Ø8	53	6' X 6'	EB THROUGH COUNT
54	Ø3	54	6' X 6'	EB LEFT COUNT
55	Ø2	55	6' X 6'	SB RIGHT COUNT
56	Ø2	56	6' X 6'	SB THROUGH COUNT
57	Ø2	57	6' X 6'	SB LEFT COUNT
58	Ø4	58	6' X 6'	WB RIGHT COUNT
59	Ø4	59	6' X 6'	WB THROUGH COUNT
60	Ø7	60	6' X 6'	WB LEFT COUNT

TABLE OF PULLBOXES						
PULLBOX NO.	LOCATION			ELEV. OF TOP	680.510501	680.82250801
	CENTERLINE STATION	OFFSET	SIDE		RECTANGULAR 26" X 18" RC	REMOVE TRAFFIC SIGNAL PULLBOXES
PB-1	124+26.10	47.15	LT	468.9' ±	1	0
PB-2	124+18.87	52.24	LT	-	0	1
PB-3	124+52.26	39.41	LT	-	0	1
PB-4	124+83.08	74.85	LT	469.0' ±	1	0
PB-5	125+11.61	37.68	LT	-	0	1
PB-6	125+16.94	44.40	LT	468.7' ±	1	0
PB-7	125+65.59	28.61	RT	-	0	1
PB-8	125+78.01	50.55	RT	465.0' ±	1	0
PB-9	125+51.46	47.66	RT	-	0	1
PB-10	125+23.44	69.14	RT	-	0	1
PB-11	125+21.24	81.03	RT	462.0' ±	1	0
PB-12	124+95.82	54.16	RT	463.0' ±	1	0
PB-13	124+80.66	29.56	RT	-	0	1
PB-14	124+61.03	38.77	RT	462.8' ±	1	0
TOTAL					7	7

ADD ALTERNATE LEGEND
ADD ALERNATE S1

TABLE OF OPERATION															
	FACE	1	2	3	4	5	6	7	8	9	10	PED 1	PED 2	PED 3	PED 4
PHASE															
ø2		G	G	R	R	←R	R	R	←R	R	R	DW	DW ¹	DW	DW
ø3		R	<div><div>R</div><div>←G</div></div>	R	R	←G	R	R	←R	R	R	DW	DW	DW	DW
ø4		R	R	R	R	←FY	R	R	←R	G	G	DW ¹	DW	DW	DW
ø6		R	R	G	G	←R	R	R	←R	R	R	DW	DW	DW	DW ¹
ø7		R	R	R	R	←R	R	R	←G	R	R	DW	DW	DW	DW
ø8		R	R	R	R	←R	G	G	←FY	R	R	DW	DW	DW ¹	DW
ø2+ø6		G	G	G	G	←R	R	R	←R	R	R	DW	DW ¹	DW	DW ¹
ø3+ø7		R	<div><div>R</div><div>←G</div></div>	R	R	←G	R	R	←G	R	R	DW	DW	DW	DW
ø3+ø8		R	<div><div>R</div><div>←G</div></div>	R	R	←G	G	G	←FY	R	R	DW	DW	DW ¹	DW
ø4+ø7		R	R	R	R	←FY	R	R	←G	G	G	DW ¹	DW	DW	DW
ø4+ø8		R	R	R	R	←FY	G	G	←FY	G	G	DW ¹	DW	DW ¹	DW
FLASH OPERATION		FY	FY	FY	FY	DARK	FR	FR	DARK	FR	FR	DARK	DARK	DARK	DARK

- NOTES:
- I. PEDESTRIAN SIGNAL TO BE DEMAND ACTUATED ONLY UPON ACTUATION OF A PEDESTRIAN PUSH BUTTON THE INDICATIONS SHALL DISPLAY A STEADY "MAN" FOLLOWED BY A FLASHING "HAND" AND COUNTDOWN TIMER AND THEN A STEADY "HAND".

ESTIMATE OF CONDUITS					
CONDUIT NO.	LOCATION		2" STEEL	680.520108	680.520110
	FROM	TO		3" STEEL	4" STEEL
C-1	P-2	PB-1	-	11	-
C-2	S-1	PB-1	-	-	13
C-3	PB-3	PB-2	EX. TO BE ABANDONED	-	-
C-4	INDUCTION LOOP	PB-2	EX. TO BE ABANDONED	-	-
C-5	P-3	PB-1	-	5	-
C-6	P-4	PB-3	EX. TO BE ABANDONED	-	-
C-7	PB-4	PB-1	-	65	-
C-8	P-5	PB-4	-	7	-
C-9	PB-6	PB-4	-	44	-
C-10	PB-3	PB-5	EX. TO BE ABANDONED	-	-
C-11	S-2	PB-6	-	-	9
C-12	PB-5	S-3	EX. TO BE ABANDONED	-	-
C-13	P-6	PB-6	-	20	-
C-14	INDUCTION LOOP	PB-5	EX. TO BE ABANDONED	-	-
C-15	INDUCTION LOOP	PB-7	EX. TO BE ABANDONED	-	-
C-16	P-7	PB-8	-	18	-
C-17	P-8	PB-8	-	13	-
C-18	S-4	PB-8	-	-	5
C-19	PB-7	PB-9	EX. TO BE ABANDONED	-	-
C-20	PB-8	PB-11	-	64	-
C-21	PB-9	PB-10	EX. TO BE ABANDONED	-	-
C-22	P-9	PB-11	-	13	-
C-23	PB-10	PB-13	EX. TO BE ABANDONED	-	-
C-24	PB-11	PB-12	-	39	-
C-25	PB-12	S-5	-	-	5
C-26	PB-14	PB-12	-	38	-
C-27	P-10	PB-13	EX. TO BE ABANDONED	-	-
C-28	INDUCTION LOOP	PB-13	EX. TO BE ABANDONED	-	-
C-29	P-11	PB-14	-	12	-
C-30	PB-1	PB-14	-	90	-
TOTAL (FEET)			0	439	32

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REV	DATE	DRAWN BY	DESCRIPTION	REVISED PER NYSDOT COMMENTS RECEIVED 3/19/24									
				1	2	3	4	5	6	7	8	9	10
	4/8/24	M.J.A.											
	4/26/24	J.E.M.											
	5/16/24	M.J.A.											
	5/24/24	M.J.A.											
	7/1/24	M.J.A.											
	8/7/24	M.J.A.											
	8/15/24	R.G.D.											
	9/12/24	M.J.A.											
	9/29/24	M.J.A.											
	1/31/25	M.J.A.											



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HIGHWAY IMPROVEMENT PLANS

FOR
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(SEQR # 22-092)

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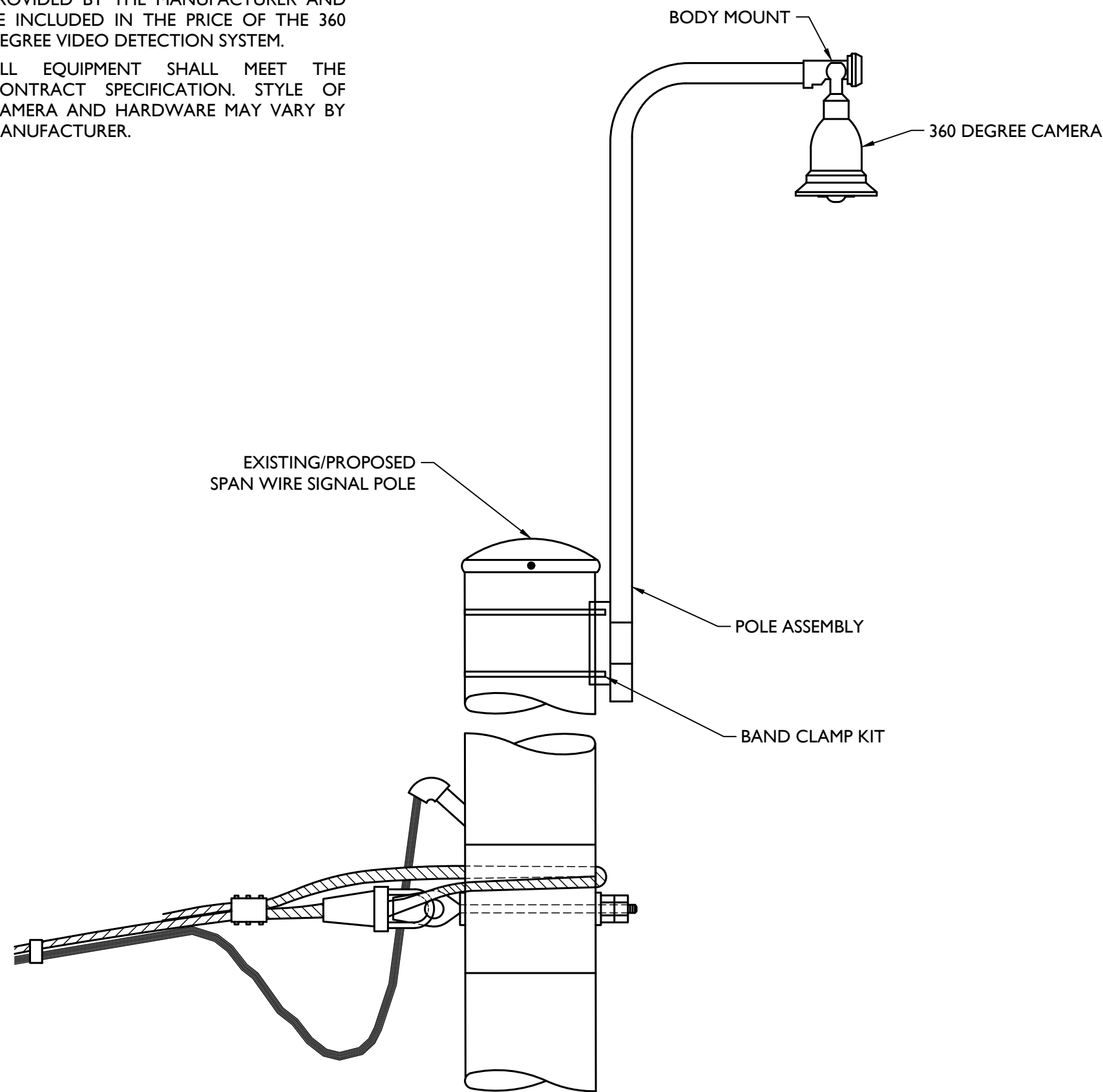
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ARCHITECTURE, LANDSCAPE ARCHITECTURE,
SURVEYING CT, P.C.

SCALE: AS SHOWN	DATE: 1/8/23	DRAWN BY: M.J.A.	CHECKED BY: R.G.D.
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2020/06/29 11:41 AM Transportation of Plans, Specifications, and Details (TSP-04) By: MARIEN DOLLA

NOTES:

1. ALL MOUNTING HARDWARE SHALL BE PROVIDED BY THE MANUFACTURER AND BE INCLUDED IN THE PRICE OF THE 360 DEGREE VIDEO DETECTION SYSTEM.
2. ALL EQUIPMENT SHALL MEET THE CONTRACT SPECIFICATION. STYLE OF CAMERA AND HARDWARE MAY VARY BY MANUFACTURER.



1

VIDEO DETECTION CAMERA DETAIL MOUNTED ON A SPAN WIRE POLE

NOT TO SCALE

NYDT-SGNL-1000

08/16/21

TABLE OF PEDESTRIAN INDICATIONS														
ITEM NUMBER	DESCRIPTION	UNIT	P-1	P-2	P-3	P-4	P-5	P-6	P-7	P-8	P-9	P-10	P-11	TOTAL
680.5001	POLE EXCAVATION AND CONCRETE FOUNDATION	CY	-	1.1	1.1	-	1.1	1.1	1.1	1.1	1.1	-	1.1	8.8
680.6808	TRAFFIC SIGNAL POLE-BRACKET MOUNT 8 FEET MOUNTING HEIGHT	EA	-	1	1	-	1	1	1	1	1	-	1	8
680.8151	ACCESSIBLE PEDESTRIAN SIGNAL (APS) WITHOUT POST	EA	-	1	1	-	1	1	1	1	1	-	1	8
680.813103	PEDESTRIAN SIGNAL SECTION - TYPE I, 12 INCH	EA	-	2	2	-	2	2	2	2	2	-	2	16
680.813105	PEDESTRIAN SIGNAL MODULE - 12 INCH BI-MODAL,HAND/MAN SYMBOLS LED	EA	-	1	1	-	1	1	1	1	1	-	1	8
680.8141	PEDESTRIAN SIGNAL BRACKET MOUNT ASSEMBLY	EA	-	1	1	-	1	1	1	1	1	-	1	8
680.815001	PEDESTRIAN SIGNAL MODULE - 12 INCH COUNTDOWN TIMER, LED	EA	-	1	1	-	1	1	1	1	1	-	1	8
680.8223	BREAKAWAY TRANSFORMER BASE	EA	-	1	1	-	1	1	1	1	1	-	1	8
680.82250608	REMOVE AND DISPOSE PEDESTRIAN POLE AND FOUNDATION	EA	1	-	-	1	-	-	-	-	-	1	-	3

ESTIMATE OF CABLES						
ROUTE			CABLE DESCRIPTION	# OF CABLES	680.730514	680.731014
FROM	THROUGH	TO			5 C, 14 AWG	10 C, 14 AWG
CONTROLLER	S-5	SIGNAL HEAD A	14-05C-A-X/X	1	42	-
CONTROLLER	S-5	SIGNAL HEAD B	14-05C-B-X/X	1	54	-
CONTROLLER	S-5	SIGNAL HEAD C	14-10C-C-X/X	1	-	64
CONTROLLER	S-5, C-25, PB-12, C-24, PB-11, C-20, PB-8, C-18, S-4	SIGNAL HEAD D	14-05C-D-X/X	1	200	-
CONTROLLER	S-5, C-25, PB-12, C-24, PB-11, C-20, PB-8, C-18, S-4	SIGNAL HEAD E	14-05C-E-X/X	1	208	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-7, PB-4, C-9, PB-6, C-11, S-2	SIGNAL HEAD F	14-05C-F-X/X	1	341	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-7, PB-4, C-9, PB-6, C-11, S-2	SIGNAL HEAD G	14-05C-G-X/X	1	351	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-7, PB-4, C-9, PB-6, C-11, S-2	SIGNAL HEAD H	14-10C-H-X/X	1	-	360
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-2, S-1	SIGNAL HEAD I	14-10C-I-X/X	1	-	224
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-2, S-1	SIGNAL HEAD J	14-05C-J-X/X	1	238	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-1, P-2	PED P-2	14-05C	1	184	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-5, P-3	PED P-3	14-05C	1	177	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-7, PB-4, C-8, P-5	PED P-5	14-05C	1	253	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-30, PB-1, C-7, PB-4, C-9, PB-6, C-13, P-6	PED P-6	14-05C	1	324	-
CONTROLLER	S-5, C-25, PB-12, C-24, PB-11, C-20, PB-8, C-16, P-7	PED P-7	14-05C	1	158	-
CONTROLLER	S-5, C-25, PB-12, C-24, PB-11, C-20, PB-8, C-17, P-8	PED P-8	14-05C	1	152	-
CONTROLLER	S-5, C-25, PB-12, C-24, PB-11, C-22, P-9	PED P-9	14-05C	1	76	-
CONTROLLER	S-5, C-25, PB-12, C-26, PB-14, C-29, P-11	PED P-11	14-05C	1	72	-
TOTAL					2830	648

TABLE OF SIGNAL HEADS										
HEAD	BRACKET	FACE	MODULES						SECTION	
			680.810101 RED BALL - 12 IN.	680.810102 RED ARROW - 12 IN.	680.810103 YELLOW BALL - 12 IN.	680.810104 YELLOW ARROW - 12 IN.	680.810105 GREEN BALL - 12 IN.	680.810106 GREEN ARROW - 12 IN.	680.810107 TRAFFIC SIGNAL SECTION, TYPE I - 12 IN.	680.8109 TRAFFIC SIGNAL BACKPLATE
A	680.81230008	7	1	-	1	-	1	-	3	1
B	680.81230008	6	1	-	1	-	1	-	3	1
C	680.81230008	5	-	1	-	2	-	1	4	1
D	680.81230008	4	1	-	1	-	1	-	3	1
E	680.81230008	3	1	-	1	-	1	-	3	1
F	680.81230008	10	1	-	1	-	1	-	3	1
G	680.81230008	9	1	-	1	-	1	-	3	1
H	680.81230008	8	-	1	-	2	-	1	4	1
I	680.81240008	2	1	-	1	1	1	1	5	1
J	680.81230008	1	1	-	1	-	1	-	3	1
TOTAL (EACH)			8	2	8	5	8	3	34	10

ADD ALTERNATE LEGEND

ADD ALERNATE S1

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REV	DATE	DRAWN BY	DESCRIPTION
1	4/8/24	M.J.A.	REVISED PER NYSDOT COMMENTS RECEIVED 3/19/24
2	4/26/24	J.F.M.	REVISED PER NYSDOT 4/25/24 COMMENTS
3	5/1/24	M.J.A.	REVISED PER NYSDOT 5/2/24 COMMENTS
4	5/2/24	M.J.A.	REVISED TRAFFIC SIGNAL PLAN ANY COMMENTS PER NYSDOT
5	7/1/24	M.J.A.	REVISED TRAFFIC SIGNAL PLAN ANY COMMENTS PER NYSDOT
6	8/7/24	M.J.A.	REVISED PER NYSDOT 7/1/24 COMMENTS
7	8/15/24	R.G.D.	REVISED PER QA/QC REVIEW
8	9/12/24	M.J.A.	REVISED PER NYSDOT 8/30/24 COMMENTS
9	9/22/24	M.J.A.	REVISED PER NYSDOT 9/12/24 COMMENTS
10	1/31/25	M.J.A.	FINAL SET FOR SUBMITTANCE



Philip John Grealy
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N.Y. C.O.A.#: 0017609

HIGHWAY IMPROVEMENT
PLANS

FOR
UNDERHILL AVENUE
IMPROVEMENTS
(SEQR # 22-092)

NYS ROUTE 118 (S.H. 148) AT
UNDERHILL AVENUE

TOWN OF YORKTOWN
WESTCHESTER COUNTY
NEW YORK

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COLLIERS ENGINEERING & DESIGN
ARCHITECTURE, LANDSCAPE ARCHITECTURE,
SURVEYING CT, P.C.

SCALE: AS SHOWN	DATE: 1/8/23	DRAWN BY: M.J.A.	CHECKED BY: R.G.D.
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PROJECT NUMBER: 20006297A	DRAWING NAME: R-PL10-SGNL
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SHEET TITLE: TRAFFIC SIGNAL PLAN NYS ROUTE 118 & UNDERHILL AVENUE (SIGNAL NO. W-213)

SHEET NUMBER: TSP-04
