## TRAFFIC SIGNAL NOTES:

- ALL WORK SHALL BE DONE ACCORDING TO THE LATEST "NYSDOT" STANDARD SPECIFICATIONS, SIGNAL DETAIL SHEETS AND STANDARD STRUCTURE SHEETS. UNLESS OTHERWISE NOTED, ALL ITEM NUMBERS FOR SPECIFIC WORK TASKS RELATE TO THE NYSDOT STANDARD SPECIFICATIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN CLEARANCES FROM UTILITY LINES AND TRAFFIC SIGNAL EQUIPMENT ACCORDING TO THE LATEST "NYSDOT" STANDARD SPECIFICATIONS, STANDARD SHEETS AND DETAILS. MODIFICATIONS MAY BE REQUIRED BY UTILITY COMPANIES AT PERMITEE'S EXPENSE, SUCH AS RELOCATING OVERHEAD WIRES AND/OR POLES. THE CONTRACTOR SHALL COORDINATE WITH ALL APPLICABLE PERSONS PRIOR TO CONSTRUCTION.
- THE SIGNAL INSTALLATION CONTRACTOR SHALL CONTACT NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) PRIOR TO PERFORMING ANY WORK. A MEETING SHALL TAKE PLACE AS DETERMINED NECESSARY BY THE NYSDOT, OR AT THE REQUEST OF THE CONTRACTOR.
- ALL MATERIALS INCORPORATED IN THE SIGNAL INSTALLATION SHALL CONFORM TO THE CURRENT NYSDOT REQUIREMENTS AS PER NOTE 1 ABOVE. CONFORMANCE SHALL BE BY NYSDOT APPROVAL OF THE FOLLOWING SUBMISSION BY THE CONTRACTOR.

## TRAFFIC SIGNAL POLES AND PEDESTRIAN POLES:

MANUFACTURER'S SHOP DRAWINGS AND POLE LOADING CALCULATIONS MUST BE SUBMITTED TO NYSDOT FOR EACH SIGNAL POLE AND INCLUDE FOUNDATION LOADS. SHOP DRAWINGS SHALL ALSO INCLUDE FOOTING MOVEMENT, NYSDOT ANCHOR BOLT DIAMETER, ANCHOR BOLT LENGTH, AND ANCHOR BOLT CIRCLE DIAMETER. THE SHOP DRAWINGS AND CALCULATIONS MUST BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.

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

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

## TRAFFIC SIGNAL CONDUIT, CABLE WIRE:

- MANUFACTURER'S CERTIFICATION OF COMPLIANCE WITH "NYSDOT STANDARD SPECIFICATIONS" MUST BE SUBMITTED TO NYSDOT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL LOCAL PERMITS REQUIRED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ANY DISTURBED AREAS TO THEIR ORIGINAL CONDITIONS AS PER THE APPROPRIATE SECTIONS OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ELECTRIC SERVICE TO THE SIGNAL FROM THE UTILITY COMPANY.
- SIGNAL POLE FOOTING (FOUNDATIONS) SHALL BE INSTALLED AS PER STANDARD SHEET 680.01. PARTICULAR NOTE SHOULD BE MADE OF THE "METHODS FOR PLACING FOOTINGS" AS THEY RELATE TO APPROVED METHODS OF BACKFILL. IF ROCK IS ENCOUNTERED, NYSDOT SHALL BE NOTIFIED FOR THE PROPER METHOD OF INSTALLATION. NO CONCRETE SHALL BE PLACED FOR THE TRAFFIC SIGNAL POLE FOUNDATION UNTIL THE WIDTH, EMBANKMENT AND REINFORCEMENT PARAMETERS HAVE BEEN APPROVED BY NYSDOT PERMIT ENGINEER. FAILURE TO COMPLY COULD RESULT IN THE REJECTION OF THE FOUNDATION INSTALLATION.
- UNDER INDUSTRIAL CODE RULE 53 (753), THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY ALL OPERATORS OF UTILITIES LISTED ON THE CURRENT 'MASTER LIST OF OPERATORS' ON FILE WITH THE CENTRAL REGISTRY PRIOR TO THE START OF THIS WORK SO THAT ALL THE VARIOUS UNDERGROUND UTILITY OPERATORS WILL BE ABLE TO LOCATE AND MARK THE LOCATIONS OF THEIR OWN UTILITIES. NO WORK BY THE CONTRACTOR SHALL COMMENCE UNTIL ALL THE OPERATORS HAVE LOCATED THEIR UTILITIES OR ADVISED THAT THEY HAVE NO UTILITIES IN THE WORK AREA. THE CONTRACTOR 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, INSOFAR AS THEY MAY BE ENDANGERED BY HIS OPERATIONS. THIS SHALL HOLD TRUE WHETHER OR NOT THEY ARE SHOWN ON THE DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATION ARE NOT GUARANTEED. 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 TO UTILITY SERVICE.

- 10. WORK ZONE TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND NYSDOT SUPPLEMENT. SEE DRAWINGS HP-21 TO HP-26.
- 11. IF TEMPORARY UTILITIES ARE REQUIRED, THE CONTRACTOR SHALL SEE TO IT THAT THEY ARE PROVIDED AT NO ADDITIONAL COST AND IT SHALL BE HIS OR HER RESPONSIBILITY TO MAINTAIN SUCH TEMPORARY FACILITIES FOR THE DURATION OF THE PROJECT AS NECESSARY.
- 12. SIGNAL TIMING SHALL BE DETERMINED BY THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION.
- 13. SIGNAL SHALL BE MAINTAINED BY THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION.
- 14. ALL SIGNAL CABLES ENTERING THE CONTROLLER CABINET SHALL HAVE MYLAR OR BRASS TAGS PERMANENTLY AFFIXED WHICH SHALL IDENTIFY THE CABLE. EXAMPLE 14/10C-1. PAYMENT WILL BE INCLUDED UNDER VARIOUS SIGNAL CABLE ITEMS.
- 15. ALL SIGNAL HEADS SHALL BE ALUMINUM AND PAINTED DARK GREEN.
- 16. NYSDOT WILL PROVIDE TABLE OF SWITCH PACKS AND TABLE OF INPUT WIRING TO THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY NYSDOT WHEN THESE ARE NEEDED. NYSDOT WILL PROGRAM THE APPROVED CONTROLLER AND INSTALL IT DURING FINAL INSPECTION.
- 17. CONTRACTOR SHALL PERFORM TEST PITS AT THE TRAFFIC SIGNAL POLE FOUNDATION LOCATIONS TO CONFIRM THAT THERE ARE NO UNDERGROUND UTILITY CONFLICTS PRIOR TO ORDERING POLES. CONTRACTOR TO VERIFY POLE HEIGHTS BEFORE ORDERING.
- 18. ALL SIGNAL SECTIONS SHALL BE FITTED WITH STANDARD OPEN TYPE VISORS UNLESS OTHERWISE NOTED.
- 19. UPON COMPLETION OF WORK AT AN INTERSECTION AND INSTALLATION OF THE SERVICE CONNECTION BY THE APPROPRIATE UTILITY COMPANY, THE CONTRACTOR SHALL NOTIFY THE ENGINEER-IN-CHARGE THAT THE SIGNAL IS READY FOR INSPECTION BY THE NYSDOT TRAFFIC SIGNAL MAINTENANCE PERSONNEL. AT THE TIME OF INSPECTION, THE CONTRACTOR SHALL UNBAG THE NEW SIGNAL HEADS AND PROVIDE ACCESS TO ALL PULLBOXES FOR INSPECTION PURPOSES. THE CONTRACTOR SHALL REPOSITION ANY MAGNETIC DETECTOR PROBES AS REQUESTED BY THE ENGINEER-IN-CHARGE DURING THE INSPECTION. THE CONTRACTOR WILL BE NOTIFIED OF ANY DEFECTS FOUND DURING THE INSPECTION, AND SHALL MAKE THE NECESSARY CORRECTIONS FOR THE SIGNAL SYSTEM TO BE ACCEPTED. THE CONTRACTOR SHALL PROVIDE SUFFICIENT PERSONNEL AND TRAFFIC CONTROL DEVICES TO SAFELY MAINTAIN TRAFFIC THROUGH THE INTERSECTION WHILE THE INSPECTION IS BEING PERFORMED. THE CONTRACTOR SHALL REBAG THE SIGNAL HEADS SHOULD THE SYSTEM FAIL.
- 20. ALL SIGNAL IMPROVEMENTS SHOWN ON THE PLANS, INCLUDING LANE DESTINATION SIGNS, TURNING LANES, CHANNELIZATION, PAVEMENT MARKINGS, ETC., SHALL BE IN PLACE BEFORE THE NEW SIGNAL SYSTEM IS PLACED IN OPERATION.
- 21. AT LOCATIONS WHERE A 3-COLOR TRAFFIC SIGNAL IS TO BE INSTALLED AND NO 3-COLOR SIGNAL EXISTS, PORTABLE VARIABLE MESSAGE SIGNS (PVMS) SHALL BE INSTALLED ON ALL APPROACHES. ONE WEEK PRIOR TO THE TURN ON OF THE TRAFFIC SIGNAL, THE PVMS SHALL DISPLAY TWO ALTERNATING MESSAGES ON A LOOP. THE FIRST MESSAGE SHALL STATE "NEW SIGNAL PATTERN" FOLLOWED BY THE SECOND MESSAGE STATING "WEEK OF MMMM DD" WHERE 'MMMM' REPRESENTS THE ABBREVIATION FOR THE SPECIFIC MONTH AND 'DD' REPRESENTS THE SPECIFIC DATE NUMBER. WHEN THE TRAFFIC SIGNAL IS TURNED ON AND OPERATIONAL, THE PVMS SHALL DISPLAY "NEW SIGNAL PATTERN" FOR ONE WEEK AFTER TRAFFIC SIGNAL IS TURNED ON. THE COST OF THE MULTIPLE PVMS AND CHANGING OF THE VARIOUS MESSAGES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
- 22. ALL ANCHOR BASE TRAFFIC SIGNAL SPAN WIRE, MAST ARM, AND PEDESTRIAN SIGNAL HEAD POLES SHALL BE EQUIPPED WITH ANCHOR BOLT COVERS.
- 23. ALL POLES SHALL BE EQUIPPED WITH A GROUNDING TERMINAL LOCATED ON THE OPPOSITE SIDE OF THE POLE FROM THE HANDHOLE. GROUNDING TERMINALS LOCATED ADJACENT TO THE HANDHOLE ARE UNACCEPTABLE.
- 24. ALL HOLES FOR L.B. CONDULETS, THIMBLEBOLTS, AND POLE-MOUNTED SIGNAL AND/OR PEDESTRIAN HEADS SHALL BE DRILLED. THE USE OF CUTTING TORCHES IS NOT PERMITTED.
- 25. A CARD SHALL BE ATTACHED TO THE INSIDE DOOR OF EACH CONTROLLER CABINET AND LIST ALL THE PARTS BY SERIAL NUMBER, THE DATE OF INSTALLATION, AND THE DATE OF OFFICIAL OPERATION. WHERE STATE MICRCOCOMPUTERS ARE INSTALLED, THIS WILL BE DONE BY STATE SIGNAL MAINTENANCE PERSONNEL.
- 26. THE BOTTOMS OF ALL TRAFFIC SIGNAL HEADS SHALL BE LOCATED AT LEAST 16.5 FEET ABOVE THE PAVEMENT SURFACE.

VEHICLE DETECTORS										
DETECTION ZONE NUMBER	TYPE	FUNCTION	SIZE	REMARKS						
42	VIDEO	<b>ø</b> 2	18'x40'	EB THRU						
44	VIDEO	ø4	18'x40'	SB LEFT/RIGHT						
45	VIDEO	<b>ø</b> 5	6'x40'	EB LEFT						
46	VIDEO	<b>ø</b> 6	18'x40'	WB THRU/RIGHT						
49	VIDEO	_	6'x6'	SB RIGHT COUNT						
50	VIDEO	_	6'x6'	SB LEFT/RIGHT COUNT						
51	VIDEO	_	6'x6'	SB LEFT COUNT						
52	VIDEO	_	6'x6'	WB RIGHT COUNT						
53	VIDEO	_	6'x6'	WB THRU/RIGHT COUNT						
54	VIDEO	_	6'x6'	WB THRU COUNT						
55	VIDEO	_	6'x6'	EB THRU COUNT						
56	VIDEO	_	6'x6'	EB THRU COUNT						
57	VIDEO	_	6'x6'	EB LEFT COUNT						

S-2	21+82.10	40.47	L	680.621856	18	56	100	J7	SEE NOTE 4			
				17	TEM NUN	1BERS						
	ITEM DESCRIPTION  203.02 UNCLASSIFIED EXCAVATION AND DISPOSAL  206.03 CONDUIT EXCAVATION AND BACKFILL INCLUDING SURFACE RESTORATION											
	304.11000008 SUBBASE COURSE 608.0101 CONCRETE SIDEWALKS AND DRIVEWAYS											
	645.61	OVERH	IEAD	SIGN PANELS								
	619.1612	MAINT	AIN TI	RAFFIC SIGNAL	<b>EQUIPMENT</b>							
	680.05010007	360 D	EGRE	E CAMERA VIDE	O DETECTIO	n systei	์ (GRIDSM	ART)				
	680.5001	POLE	EXCA'	VATION AND CO	NCRETE FO	UNDATION	l					
	680.510501	PULL	BOX-	RECTANGULAR :	26 INCH x	18 INCH	REINFORCE	D CON	ICRETE			
	680.520108	CONDU	JIT, M	ETAL STEEL, ZI	NC COATED	3 INCH	DIAMETER					
	680.520110	CONDU	JIT, M	ETAL STEEL, ZI	NC COATED	4 INCH	DIAMETER					
	680 621856	TDAFE	ור פור	NAI DOLE MAS	ST ADM 18	EEET MC	N DINTINIC L	EIUT	56 FEET ADM LENCTH			

SIGNAL POLES

MOUNTING

HEIGHT

18

MAST FOOTING

ARM

56

MOMENT

100

**FOUNDATION** 

SEE NOTE 4

ANCHOR

ANCHOR

LENGTH (FT-KIP) CODE BOLT DIA. BOLT LENGTH

										000.320110	CONDUIT, METAL STEEL, ZING COATED 4 INCH DIAMETER
SIGNAL HEADS										680.621856	TRAFFIC SIGNAL POLE, MAST ARM, 18 FEET MOUNTING HEIGHT, 56 FEET ARM LENGTH
										680.730514	SIGNAL CABLE, 5 CONDUCTORS, 14 AWG.
						. <u>J</u>		JEC HONS	BACK.	680.731014	SIGNAL CABLE, 10 CONDUCTORS, 14 AWG.
										680.80324515	INSTALL MICROCOMPUTER CABINET
										680.810101	TRAFFIC SIGNAL MODULE - 12 INCH, RED BALL, LED
										680.810103	TRAFFIC SIGNAL MODULE - 12 INCH, YELLOW BALL, LED
				4	30W		O	680.810107 TRAFFIC SIGNAL SECTION, TYPE I 12 INCH	680.81990008 TRAFFIC SIGNAL BACKPLATE	680.810104	TRAFFIC SIGNAL MODULE - 12 INCH, YELLOW ARROW, LED
			2 7	03 BAL	04 ARF	05 ALL	06 RR(	SIG T		680.810105	TRAFFIC SIGNAL MODULE - 12 INCH, GREEN BALL, LED
			3AL	<u>1</u> 2	10 10 10 10 10	10 N	101	2 S S S S S S S S S S S S S S S S S S S	198 198	680.810106	TRAFFIC SIGNAL MODULE - 12 INCH, GREEN ARROW, LED
			0.8	680.810103 YELLOW BALL	680.810104 YELLOW ARF	680.810105 GREEN BALL	30.8 EEI	680.8101 TRAFFIC SECTION, 12 INCH	S. A.	680.810107	TRAFFIC SIGNAL SECTION - TYPE I, 12 INCH
HEAD	BRACKET	FACE	88 RE	89 X	89 XE	89	68 GF	68 TR SE 12	68   R   A	680.81230008	TRAFFIC SIGNAL BRACKET ASSEMBLY - 1 WAY MAST ARM MOUNT (CABLETYPE)
Α	680.81230008	4	1	1	1	1	1	5	1	680.81240008	TRAFFIC SIGNAL BRACKET ASSEMBLY - 2 WAY MAST ARM MOUNT (CABLETYPE)
В	680.81240008	2,8	2	2		2		6	2	680.81990008	TRAFFIC SIGNAL BACK PLATES WITH YELLOW REFLECTIVE TAPE
С	680.81240008	1,7	2	2		2		6	2	680.8207	OVERHEAD SIGN ASSEMBLY, TYPE G
D	680.81230008	3	1	1		1		3	1	680.94000008	TRAFFIC SIGNAL SERVICE ENTRANCE
Ē	680.81230008	5	1	1	1	1	1	5	1	680.94997008	FURNISH AND INSTALL ELECTRICAL DISCONNECT GENERATOR TRANSFER SWITCH
F	680.81230008	6	1	1		1		3	1	680.95020615	SERVICE CABLE 2 CONDUCTOR, NO. 06 AWG
										· · · · · · · · · · · · · · · · · · ·	

LOCATION

OFFSET SIDE

20+89.46 | 51.69 | L | 680.621856 |

CENTERLINE

STATION

POLE

NO.

		TABL	E OF	OPE	RATIO			CONDUIT	S					
DLIACE	FACE									FACE CONDUIT LOCATION 680				
PHASE	1	2	3	4	5	6	7	8	NO.	FROM	TO	3" STEEL	4" STEEL	
ø6	G	G	G	R	R	R	R	R	C-1	S-1	PB-1		X	
<b>ø</b> 2	R	R	R	G	G	G	R	R	C-2	PB-1	PB-2	X		
ø2+ø6	G	G	G	G	G	G	R	R	C-3	PB-2	S-2	X		
<b>ø</b> 5	R	R	R	<del>≺G</del> /R	<del>∢G</del> /R	R	R	R						
ø2+ø5	R	R	R	<del>≺G</del> /G	<del>≺G</del> /G	G	R	R						
ø4	R	R	R	R	R	R	G	G						
FLASHING OPERATION	FL. Y	FL. Y	FL. Y	FL. Y	FL. Y	FL. Y	FL. R	FL. R						

	1	680.95020	615 SERVIC	CE CABLE 2	CONDUCTOR,	NO. 06 AW	G			
			CONDUIT	S			PUL	LBOXE	:S	
	CONDUIT	CONDUIT LOCATION			680.520110	DULLDOY	LOCA		680.510501	
	NO.	FROM	TO	3" STEEL	4" STEEL	PULLBOX NO.	CENTERLINE	OFFSET	SIDE	RECTANGULAR
	C-1	S-1	PB-1		X	140.	STATION	OFFSET	SIDE	26X18 RC
	C-2	PB-1	PB-2	X		PB-1	20+94.82	50.53	L	X
	C-3	PB-2	S-2	X		PB-2	21+76.53	40.63	L	X
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120 BE voice

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OWNER SUITE 803 07073

TRIAL PLAZA, ORD, N.

INDUST WLANDS F RUTHERFO

WSTER
1 MEADO
EAST

CORNER O Z

SIGN, AMPUS 2 & PUC AFFIC (N

CABLES												
	ROUTE		CABLE	# OF	680.730514	680.731014	680.95020615					
FROM	THROUGH	TO	DESCRIPTION	CÄBLES	5C, 14 AWG	10C, 14 AWG	2C, 6 AWG					
CONTROLLER	TO	SIGNAL HEAD A	14/10C-A-X/X	1		X						
CONTROLLER	TO	SIGNAL HEAD B	14/10C-B-X/X	1		X						
CONTROLLER	TO	SIGNAL HEAD C	14/10C-C-X/X	1		X						
CONTROLLER	TO	SIGNAL HEAD D	14/05C-D-X/X	1	X							
CONTROLLER	TO	SIGNAL HEAD E	14/10C-E-X/X	1		X						
CONTROLLER	TO	SIGNAL HEAD F	14/05C-F-X/X	1	X							
UTILITY POLE	OVERHEAD, S-1	CONTROLLER	SERVICE CABLE	1			X					

	010						
	SIG	SNS		No.	Revision	Date	Ву
OCATION	ITEMS	MUTCD	TEXT	1.	REVISED PER NYSDOT COMMENTS	05/20/2022	KRM
G		NYR3-27 36" X 36"		2.	REVISED PER NYSDOT COMMENTS	08/08/2022	SPG
	680.8207			3.	REVISED PER NYSDOT COMMENTS	10/14/2022	KRM
				4.	REVISED PER NYSDOT COMMENTS	12/09/2022	KRM
Н	680.8207	R3-5 L 30" X 36"					
	333.3207	30" X 36"	ONLY		Previous Editions Obsolete		

NOT TO SCALE 11/24/2021 Project No: 14012/21121 14012-HWY-PLOT-SIGNAL SIGNAL-NOTES-A HWY-)\_SIGNAL.s Drawing No:

RAS S