

E. STATE STREET (NYS ROUTE 79) AND MITCHELL STREET (NYS ROUTE 366) TRAFFIC SIGNAL & ROADWAY IMPROVEMENTS CITY OF ITHACA TOMPKINS COUNTY, NY

PREPARED FOR:

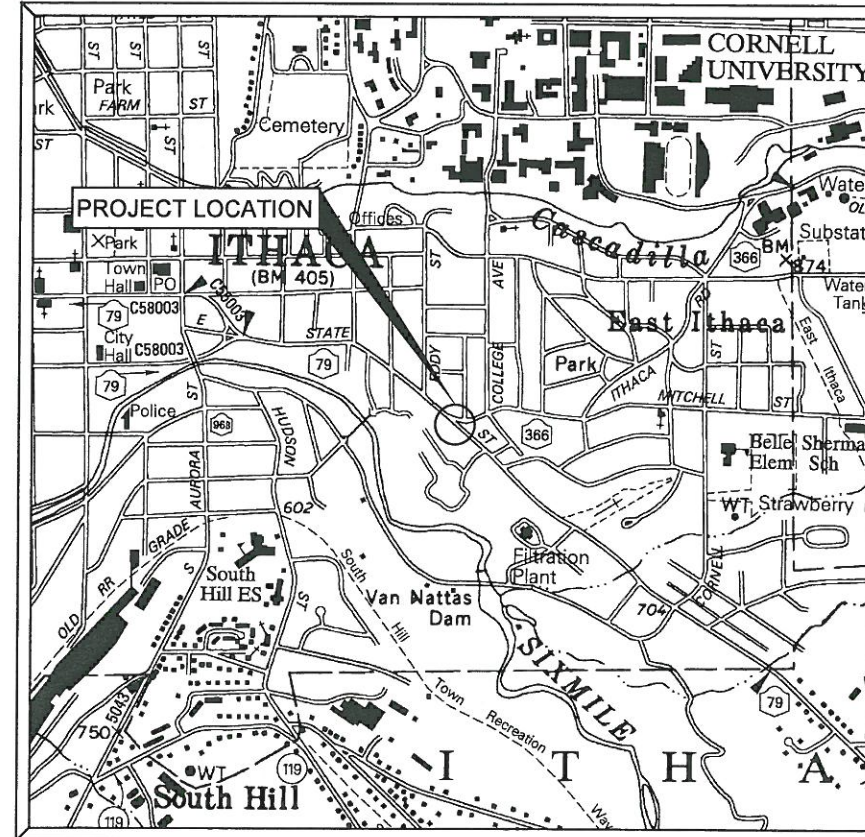
City of Ithaca
Office of the City Engineer
108 East Green Street
Ithaca, NY 14850

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21 SHEETS

TOMPKINS COUNTY



PROJECT LOCATION

NOT TO SCALE

CITY OF ITHACA
CAPITAL PROJECT #775

PREPARED AND RECOMMENDED BY:



DONALD A. ADAMS, P.E.
LIC. NO. 071963

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CM PROJECT NO. 112-203

E. STATE STREET & MITCHELL STREET
TRAFFIC SIGNAL & ROADWAY IMPROVEMENTS

CITY OF ITHACA

TOMPKINS COUNTY, NY


SUBMISSION: FINAL

JUNE, 2013

FED. ROAD REG. NO.	STATE	SHEET NO.	TOTAL SHEETS
3	N.Y.	1	21

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<div>EAST STATE STREET / MITCHELL STREET TRAFFIC SIGNAL IMPROVEMENTS CITY OF ITHACA, NEW YORK</div>		<div><div>Creighton Manning</div><div>CREIGHTON MANNING ENGINEERING, LLP 2 WINNERS CIRCLE • ALBANY • NEW YORK • 12245 P: (518) 446-0396 F: (518) 446-0397 WWW.CMELL.P.COM</div></div>		<div>UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND / OR LOCAL LAWS</div>		<div>FINAL PLAN SEE COVER FOR STAMP</div>		<div>City of Ithaca Office of the City Engineer 108 East Green Street Ithaca, NY 14850</div>		NO.	REVISION	DATE
<div>IN-1</div>		<div>INDEX AND ABBREVIATIONS</div>		DESIGNED: A.M.	DRAWN BY: K.H.D.	CHECKED: K.W.						
				DATE: JUNE 2013	CME No.: 112-203	SCALE: AS NOTED						
SHEET NUMBER		2 of 2										

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ALIGNMENT			DRAINAGE			ITS			ROW MAPPING			SIGNS			UTILITIES		
CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION
	ACC	CENTER OF CURVATURE		DINV	INVERT		IANT P	ANTENNAS		MDL1P	DEED LINE, TYPE 1		S	SINGLE POST		UEB	ELECTRIC, BOX
	ACOGO	COGO		DS	STRUCTURE, RECTANGULAR		IASCTS	ACCOU. SPEED/COUNT SNSR.S		MDL2P	DEED LINE, TYPE 2		S.P	SINGLE POST, PROPOSED		UEM	ELECTRIC, METER
	ACS	CURVE TO SPIRAL		DSI	STRUCTURE, INVERT		ICABPAD	CABINET & PAD		MDL3P	DEED LINE, TYPE 3		SB.P	BACK TO BACK, PROPOSED		UEMH	ELECTRIC, MANHOLE
	ADPI.P	DETOUR, POINT OF INTERSECT.		DSM	STRUCTURE, MANHOLE		ICCTV	CCTV SITE		MDL4P	DEED LINE, TYPE 4		SDEL	DELINEATORS		UEPT	ELECTRIC, POLE, TRANS.
	ADPL.P	DETOUR, POINT ON LINE		DSMTXX.P	STRUCTURE, MANHOLE, TYPE "XX" "XX" = 48, 60, 72, 96		ICDPD	CDPD TRANSCEIVER		MDL5P	DEED LINE, TYPE 5		SPM	PARKING METER		UGM	GAS, METER
	AEQN	EQUATION		DSR	STRUCTURE, ROUND		ICELLT	CELL PHONE TOWER		MEEP	EASEMENT, EXISTING		SRM	REFERENCE MARKERS		UGMH	GAS, MANHOLE
	AEQNAHD	EQUATION AHEAD		DST"X"CB P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R		ICJB	CONDUIT JACK OR BORING		MEPAP.P	EASEMENT, PERM., APPROX.		SRSC3	SHLD, CTY, 123 DIG.		UGLM	GAS, LINE MARKER
	AEQNBK	EQUATION BACK		DST"X" P	STRUCTURE, RECT., TYPE "X" "X" = I, K, L, M, O, P, U		ICNTLCAB	CONTROLLER CABINET		MEPP.P	EASEMENT, PERM., BACK LINE		SRSC4	SHLD, CTY, 4 DIG.		UGP	GAS/FUEL PUMP
	AEVT	EVENT STATION	ENVIRONMENTAL				ICPB	COMMUNICATION PULL BOX		MEPSP.P	EASEMENT, PERM., SHAPE		SRSCT2	SHLD, CTY TOUR, 1-2 DIG.		UCV	GAS, VALVE
	APC	POINT OF CURVATURE					ICTD	CONDUIT TURNING DOWN		MFAP.P	FEE ACQUISITION, APPROX.		SRSCT4	SHLD, CTY TOUR, 3-4 DIG.		UCVT	GAS, VENT
	APCC	POINT OF COMPOUND CURVATURE	ENVIRONMENTAL				ICTU	CONDUIT TURNING UP		MFP.P	FEE ACQUISITION, BACK LINE		SRSI	SHLD, INTERSTATE		ULP	LIGHTING, POLE
	API	POINT OF INTERSECTION					ICVTRT	COMM. VEH. ROAD TRANSCEIVER		MFSP.P	FEE ACQUISITION, SHAPE		SRSN2	SHLD, NATIONAL, 2 DIG.		ULPM	LIGHTING, POLE, MEDIAN
	APOB	POINT OF BEGINNING		IDEFAULT	DEFAULT		MHBAP	HIGHWAY BNDRY., APPROX.		SRSN3	SHLD, NATIONAL, 3 DIG.		ULPP	LIGHTING, POLE, PED.			
	APOC	POINT OF CURVATURE		IEZR	E-ZPASS READER		MHBCP	HISTORICAL, BLDG. CORNERS		SRSS2	SHLD, STATE, 2 DIG.		UMFC	MISC. FILLER CAP			
	APOE	POINT OF END		IEZTR	TRANSMITTAL READER		MHBP	HIGHWAY BNDRY, PT.		SRSS3	SHLD, STATE, 3 DIG.		UOLM	OIL, LINE MARKER			
	APOL	POINT ON LINE		IFXCAB	FIBER OPTIC X-CONNECT CABINET		MJCP	PT., JURIS. CITY		SRSS4	SHLD, STATE, 4 DIG.		UP	POLE, WITH UTILITY			
	APOS	POINT ON SPIRAL		IFUSSPL	FUSION SPLICE		MPBC	PT., BUILDING CORNER	TRAFFIC CONTROL					UPD	POLE, DEAD (NO UTILITY)		
	APOT	POINT ON TANGENT		IHARADV	HAR ADVISORY SIGN		MPCC	PT., CROSS CUT						UPL	POLE, WITH LIGHT		
	APOVC	POINT ON VERTICAL CURVE		IHARST	HAR SITE		MPDH	PT., DRILL HOLE		TCBJ	BOX, JUNCTION		USMH	SANITARY SEWER MANHOLE			
	APOVT	POINT ON VERTICAL TANGENT		ILC	LOAD CENTER		MPF	PT., FENCE LOCATION		TCBP	BOX, PULL BOX		UTB	TELEPHONE, BOOTH			
	APORC	POINT ON REVERSE CURVE		IMECSPL	MECHANICAL SPLICE		MPIP	PT., IRON PIPE		TCBS	BOX, SPLICE		UTLM	TELEPHONE, LINE MARKER			
	APT	POINT OF TANGENCY		IMSCS	PORT. SPEED & COUNT SENSOR		MPIR	PT., IRON ROD		TCMC	MICROCOMPUTER CABINET		UTMH	TELEPHONE, MANHOLE			
	APVC	POINT OF VERTICAL CURVATURE		IMSCTS	MICRO SPEED & COUNT SENSOR		MPM	PT., MONUMENT		TCPP	PED POLE		UTVLM	CABLE TV, LINE MARKER			
	APVCC	POINT OF VERT. CMPND CURVE		IMT	MICROWAVE TRANSCEIVER		MPMM	PT., MONUMENT, MISC.		TCSH	SIGNAL HEADS		UTVPB	CABLE TV, PULL BOX			
	APVI	POINT OF VERT. INTERSECTION		IOVHVMS	PERM. OVERHEAD VMS		MPN	PT., NAIL		TCSP	SIGNAL POLE		UUB	UNKNOWN, BOX			
	APVRC	POINT OF VERT. REVERSE CURVE		IPASCS	PORT. ACCOU. SPD & CNT. SENSOR		MPRS	PT., RAILROAD SPIKE	TRAFFIC WORK ZONE					UUJB	UNKNOWN, JUNCTION BOX		
	APVT	POINT OF VERTICAL TANGENCY		IPEDS	PEDESTRIAN SIGNAL HEAD		MPSP	PT., SPIKE						UUMH	UNKNOWN, MANHOLE		
	ASC	SPIRAL TO CURVE		IPSS	PAVEMENT SURFACE SENSOR		MPST	PT., STAKE		TWZAP.P	ARROW PANEL		UUPB	UNKNOWN, PULL BOX			
	ASPI	SPIRAL POINT OF INTERSECTION		IPVMS	PERM. VMS		MPTW	PT., TREE W/ WIRE		TWZAPT.P	ARROW PANEL, TRAILER OR SUPPORT		UUVL	UNKNOWN, VALVE			
	ASTS	SPIRAL TO SPIRAL		IRM	RAMP METER		MPWL	PT., WALL LOCATION		TWZBCD.P	BARRICADE (TYPE III)		UUVT	UNKNOWN, VENT			
	AST	SPIRAL TO TANGENT		IRWIS	RDWY WEATHER INFO. SENSOR	ROW ACQUISITION				TWZCMS.P	CHANGEABLE MESSAGE SIGN (PVMS)		UUW	UNKNOWN, WELL			
	ATS	TANGENT TO SPIRAL		ISP	SOLAR PANEL					TWZFLG.P	FLAGGER		UWFH	WATER, FIRE HYDRANT			
	AVEVT	VERTICAL EVENT POINT		ISST	SPREAD SPECT. TRANSCEIVER		MFS.P.T	FEE ACQUISITION		TWZFT.P	FLAG TREE		UWM	WATER, METER			
	AVHIGH	VERTICAL HIGH POINT		ITDB	TELEPHONE DEMARCATION BLK		MEPS.P.T	EASEMENT, PERMANENT		TWZIA.P	IMPACT ATTENUATOR / CRASH CUSHION (TEMPORARY)		UWMH	WATER, MANHOLE			
	AVLOW	VERTICAL LOW POINT		ITP	SUBSURFACE TEMP. PROBE		METS.P.T	EASEMENT, TEMPORARY		TWZLUM.P	LUMINAIRE (TEMPORARY)		UWV	WATER, VALVE			
BRIDGE				IWMD	WEIGHT IN MOTION DETECTOR		METS.P.T	OCCUPANCY, TEMPORARY		TWZSDT.P	SYMBOL, DIRECTION OF TRAFFIC		UWW	WATER, WELL			
				IWVR	WIRELESS VIDEO REPEATER		MFS.P.T	FEE ACQUISITION W/O ACCESS		TWZSDTD.P	SYMBOL, DIRECTION OF TEMPORARY TRAFFIC DETOUR	POINT LEGEND					
CONTROL				IWVRC	WIRELESS VIDEO RECEIVER		RES P	ELEVATION, SPOT		TWZSGN.P	SIGN (TEMPORARY)						
				IWVTT	WIRELESS VIDEO TRANSMITTER		RGA	GUIDE RAIL, ANCHOR		TWZSIG.P	SIGNAL, TRAFFIC OR PEDESTRIAN (TEMPORARY)						
				LUKP	UNKNOWN POINT		RGP	GUIDE POST, SINGLE		TWZWL.P	WARNING LIGHT						
			1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED). 2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.). 3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES. 4. PROPOSED FEATURE SYMBOLOGY IS IDENTICAL TO EXISTING FEATURE SYMBOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR PROPOSED FEATURES IS THICKER (0.015 in ON B SIZE DRAWINGS). 5. MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET DO NOT HAVE A UNIQUE SYMBOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT EDGE OF TRAVEL WAY) AND SHOULD BE LABELED ON THE PLANS. 6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.							TWZWV.P	WORK VEHICLE						
										TWZWVA.P	WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR						

EAST STATE STREET / MITCHELL STREET
TRAFFIC SIGNAL IMPROVEMENTS
CITY OF ITHACA, NEW YORK

POINT LEGEND

Creighton Manning
CREIGHTON MANNING ENGINEERING, LLP

FINAL PLAN
SEE COVER
FOR STAMP

City of Ithaca
Office of the City Engineer
108 East Green Street
Ithaca, NY 14850

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DATE: JUNE 2013 CME No.: 112-203 SCALE: AS NOTED DESIGNED: A.M. DRAWN BY: K.H.D. CHECKED: K.W.

NO.	REVISION	DATE	BY

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ALIGNMENT		
STYLE	NAME	DESCRIPTION
	AC	CONTROL (CENTERLINE)
	AD_P	DETOUR
	AT_P	TRANSITION CONTROL
BRIDGE		
	BR	RAIL
	BSHT	SHEET PILING
CONTROL		
	CB	BASELINE
	CBPR	BASELINE, PROJECTION
DRAINAGE		
	DCP	CULVERT PIPE
	DCP.P	CULVERT PIPE (DIR)
	DDG.P	DITCH, GRASS LINED
	DDP.P	DITCH, PAVED INVERT
	DDS.P	DITCH, STONE LINED
	DFL.P	FLOW LINE
	DSSD	SLOTTED DRAIN
	DUD.P	UNDERDRAIN
ENVIRONMENTAL		
	EBLHS	BALE, STRAW
	ECT	CURTAIN, TURBIDITY
	EDMC	DAM, COFFER TYPE
	EDMEC.P	DAM, EARTHEN, CHECK
	EDMPC.P	DAM, PREFAB, CHECK
	EDMSC.P	DAM, STONE, CHECK
	EFNS	FENCE, SILT
	EFNSV	FENCE, SILT & VEGETATION
	EFNV	FENCE, VEGETATION
	EWAA_P	WETLAND, ADJACENT AREA
	EWf	WETLAND, FEDERAL
	EWFS	WETLAND, FEDERAL AND STATE
	EWM	WETLAND, MITIGATION AREA
	EWS	WETLAND, STATE

LANDSCAPE		
STYLE	NAME	DESCRIPTION
	LABL	AREA, BRUSH LINE
	LAHR	AREA, HEDGE ROW
	LAPB	AREA, PLANTING BED
	LAWA	AREA, WOODED AREA OUTLINE
	LAWe	AREA, WATERS EDGE
	LCUT_P	CUT LIMIT
	LFILL_P	FILL LIMIT
	LFNC	FENCE
	LTRC	TREE ROW, CONIFEROUS
	LTRD	TREE ROW, DECIDUOUS
	LWH	WALL, H PILE
	LWR	WALL, RETAINING
	LWS	WALL, STONE
ROW MAPPING		
	MDL	DEED LINE
	MEE	EASEMENT, EXISTING
	MEP_P	EASEMENT, PERMANENT
	MEPA_P	EASEMENT, PERMANENT, APPROX.
	MET_P	EASEMENT, TEMPORARY
	META_P	EASEMENT, TEMPORARY, APPROX.
	MF_P	FEE ACQUISITION, W/ ACCESS
	MFA_P	FEE ACQUISITION, APPROXIMATE
	MFS_P	FEE ACQUISITION, SHAPE
	MFWOA_P	FEE ACQUISITION, W/O ACCESS
	MHA	HISTORICAL, ACQUISITION
	MHB	HIGHWAY BOUNDARY
	MHBA	HIGHWAY BOUNDARY, APPROX.
	MHBW	HWY BOUNDARY, FACE OF WALL
	MHBWOA	HIGHWAY BOUNDARY, W/O ACCESS
	MJC	JURISDICTION, CITY
	MJCY	JURISDICTION, COUNTY
	MJHD	JURISDICTION, HISTORIC DISTRICT
	MJLL	JURIS., (GREAT, MILITARY) LOT LINE
	MJN	JURISDICTION, NATION
	MJPB	JURISDICTION, PUBLIC LANDS
	MJS	JURISDICTION, STATE
	MJT	JURISDICTION, TOWN
	MJV	JURISDICTION, VILLAGE
	MPL	PROPERTY LOT LINE
	MPLA	PROPERTY LOT LINE, APPROXIMATE
	MSL	SUB LOT LINE

ROADWAY		
STYLE	NAME	DESCRIPTION
	RCZ_P	CLEAR ZONE
	RG	GUIDE RAIL, MISCELLANEOUS
	RGB	GUIDE RAIL, BOX BEAM
	RGBM	GUIDE RAIL, BOX BEAM, MEDIAN
	RCC	GUIDE RAIL, CABLE
	RCCB	GUIDE RAIL, CONCRETE BARRIER
	RGP_P	GUIDE POST
	RGW	GUIDE RAIL, W BEAM
	RGWM	GUIDE RAIL, W BEAM, MEDIAN
	RPB	PARKING BUMPER
	RRC	RAIL ROAD, CATENARY
	RRER	RAIL ROAD, 3RD RAIL
	RRPLS_P	RAIL, PHOTO, LARGE SCALE
	RRPSS	RAIL, PHOTO, SMALL SCALE
	RRS	RUMBLE STRIP
	RRSLS_P	RAIL, SURVEY, LARGE SCALE
	RRSSS	RAIL, SURVEY, SMALL SCALE
SIGNS		
	SBLB	BILLBOARDS
	SM	MULTIPLE POST
	SSO	STRUCTURE, OVERHEAD
	SSOC	STRUCTURE, OVHD. CANTILEVER
STRIPING		
	STB•	BROKEN LINE
	STDB•	DOUBLE BROKEN LINE
	STD•	DOTTED LINE LONG
	STDS•	DOTTED LINE SHORT
	STFB•	FULL BARRIER LINE
	STH•	HATCH LINE
	STPB•	PARTIAL BARRIER LINE
	STRCT	ROUNDAABOUT, CAT TRACKS
	STRYL	ROUNDAABOUT, YIELD LINE
	STSB	STOP BAR
	STSE•	SOLID, EDGE
	STXL•	X WALK, LADDER LINE
• = W (WHITE) OR Y (YELLOW)		
TRAFFIC CONTROL		
	TCSW	SIGNAL, SPAN WIRE
TRAFFIC WORK ZONE		
	TWZBT_P	BARRIER, TEMPORARY
	TWZBTWL_P	BARRIER, TEMPORARY, W/ WARNING LIGHTS
	TWZCD_P	CHANNELIZING DEVICE
	TWZPMRC_P	PAVEMENT MARKING REMOVAL OR COVERING

UTILITIES		
STYLE	NAME	DESCRIPTION
	UC	CONDUIT, UNDERGROUND
	UCH	CONDUIT, HANGING
	UCO	CONDUIT, OVERHEAD
	UE	ELECTRIC LINE, UNDERGROUND
	UEH	ELECTRIC LINE, HANGING
	UEO	ELECTRIC LINE, OVERHEAD
	UETO	ELECTRIC TRANSMISSION, OVERHEAD
	UESS	ELECTRIC, SUBSTATIONS
	UFO	FIBER OPTIC, UNDERGROUND
	UFOH	FIBER OPTIC, HANGING
	UFOO	FIBER OPTIC, OVERHEAD
	UG	GAS, UNDERGROUND
	UGH	GAS, HANGING
	UGO	GAS, OVERHEAD
	UIC	INFORM CABLE, UNDERGROUND
	UICH	INFORM CABLE, HANGING
	UO	OIL LINE, UNDERGROUND
	UOH	OIL LINE, HANGING
	UPBP	POLE, BRACE, PUSH BRACE
	UPGW	POLE, GUY WIRE
	USA	SANITARY SEWER, UNDERGROUND
	USAH	SANITARY SEWER, HANGING
	USAF	SANITARY SEWER, FORCE MAIN, UGND
	USAFH	SANITARY SEWER, FORCE MAIN, HANG
	UT	TELEPHONE, UNDERGROUND
	UTH	TELEPHONE, HANGING
	UTO	TELEPHONE, OVERHEAD
	UTV	CABLE TV, UNDERGROUND
	UTVH	CABLE TV, HANGING
	UTVO	CABLE TV, OVERHEAD
	UUU	UNKNOWN, UNDERGROUND
	UUH	UNKNOWN, HANGING
	UUO	UNKNOWN, OVERHEAD
	UW	WATER LINE, UNDERGROUND
	UWH	WATER LINE, HANGING
	UWO	WATER LINE, OVERHEAD

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- FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.

NO.

DATE

REVISION

City of Ithaca
Office of the City Engineer
108 East Green Street
Ithaca, NY 14850

FINAL PLAN
SEE COVER
FOR STAMP

Creighton Manning
CREIGHTON MANNING ENGINEERING, LLP

EAST STATE STREET / MITCHELL STREET
TRAFFIC SIGNAL IMPROVEMENTS
CITY OF ITHACA, NEW YORK

LINE LEGEND

DATE: JUNE 2013

CME No.: 112-203

SCALE: AS NOTED

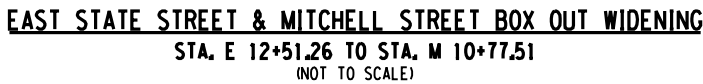
SHEET NUMBER 4 of 21

DESIGNED: A.M.

DRAWN BY: K.H.D.

CHECKED: K.W.

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NOTES:

1. FIELD CONDITIONS MAY REQUIRE FLATTER OR STEEPER SLOPES THAN THOSE SHOWN TO PROVIDE A SMOOTH TRANSITION BETWEEN PROPOSED AND EXISTING SIDE SLOPES A.O.B.E.
2. TACK COAT SHALL BE APPLIED TO ALL SAWCUTS, ON EXISTING SURFACES, AND BETWEEN ALL PAVEMENT LIFTS.
3. CROSS SLOPES ARE SET BASED ON THE NEW CURB LINE PROFILE AND THE EXISTING GROUND AT THE SAWCUT.
4. ON EAST STATE STREET THE SAWCUT IS CUT 3' FROM THE EXISTING CURB TO REMOVE THE CONCRETE GUTTER AND 2' FROM THE SOUTH EDGE OF THE MEDIAN, ON MITCHELL STREET THE SAWCUT IS THE PROPOSED ROADWAY CENTERLINE. (SEE DWG. MD-2)
5. 7" UNREINFORCED CONCRETE SLAB BENEATH EXISTING ASPHALT SECTION TO BE REMOVED AND PAID UNDER ITEM 203.02.

TYPICAL SECTIONS

SHEET NUMBER 5 of 21

DESIGNED: A.M.	DRAWN BY: K.H.D.	CHECKED: K.W.
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UNAUTHORIZED ALTERATION OR ADDITION
TO THIS DOCUMENT IS A VIOLATION OF
APPLICABLE STATE AND / OR LOCAL LAWS

City of Ithaca
Office of the City Engineer
108 East Green Street
Ithaca, NY 14850

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1. UNLESS OTHERWISE NOTED ALL ITEM NUMBERS FOR SPECIFIC WORK TASKS RELATE TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED MAY 1, 2008, OR AS AMENDED.
2. LOCATION OF UTILITIES, PUBLIC AND/OR PRIVATE, INDICATED ON THE PLANS AS EXISTING AND/OR TO BE CONSTRUCTED ARE APPROXIMATE ONLY. THEIR EXACT LOCATION SHALL BE DETERMINED IN THE FIELD. ADDITIONAL UTILITY LINES, WHETHER ABANDONED OR IN SERVICE, MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT HIS OPERATIONS, AND TAKE NECESSARY PRECAUTIONS SUCH THAT INTERFERENCE WITH OR DAMAGE TO THESE OR OTHER FACILITIES DURING THE COURSE OF CONSTRUCTION IS PREVENTED.
3. THE CONTRACTOR SHALL BE AWARE THAT THE QUALITY LEVEL OF THE EXISTING SUBSURFACE UTILITY MAPPING IS LEVEL D AND BID ACCORDINGLY.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CALL "DIG SAFELY" (1-800-962-7962) TO HAVE UNDERGROUND UTILITIES LOCATED.
5. IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICE CAUSING AN INTERRUPTION IN SAID SERVICE, HE SHALL IMMEDIATELY CONTACT SAID UTILITY AND IF NECESSARY, COMMENCE WORK TO RESTORE THAT SERVICE AT HIS OWN EXPENSE. HE MAY NOT CEASE HIS WORK OPERATION UNTIL THAT SERVICE IS RESTORED. PLEASE NOTE THAT SOME UTILITIES REQUIRE DAMAGE REPAIRED BY THEIR OWN CREWS. THE CONTRACTOR SHALL THEN PROVIDE ANY PROVISIONS NECESSARY TO AID IN THIS RESTORATION.
6. THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD ALL EXISTING AND GIVEN CONDITIONS, ELEVATIONS AND DIMENSIONS SHOWN ON THE PLANS. IF FIELD CONDITIONS AND DIMENSIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL MAKE APPROPRIATE CHANGES TO THOSE SHOWN ON THE PLANS, AS APPROVED BY THE ENGINEER. ALL FIELD CONDITIONS AND DIMENSIONS SHALL BE NOTED ON THE AS-BUILT DRAWINGS SUBMITTED FOR APPROVAL.
7. THERE SHALL BE NO CLAIM MADE BY THE CONTRACTOR FOR WORK PERTAINING TO SUCH MODIFICATIONS AS MAY BE REQUIRED DUE TO DIFFERENCES BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN BY THE DETAILS AND DIMENSIONS ON THE PLANS.
8. THE CONTRACTOR SHOULD NOTE THAT ADDITIONAL WORK, NOT SHOWN OR NOTED ON THE PLANS, MAY BE REQUIRED AS THE CONTRACT PROGRESSES. THIS WORK SHALL BE PERFORMED BY THE CONTRACTOR AS ORDERED BY THE ENGINEER AND PAYMENT WILL BE BY THE UNIT PRICE BID FOR THE APPROPRIATE ITEM.
9. NO ADDITIONAL PAYMENT SHALL BE MADE FOR WORK CALLED FOR BY NOTES ON THE PLAN, IN THE SPECIFICATIONS, OR UNDER THE HEADING "GENERAL NOTES" UNLESS PAYMENT IS SPECIFICALLY INDICATED BY ITEM NUMBER, THE COST OF WORK FOR WHICH NO PAYMENT IS INDICATED SHALL BE INCLUDED IN THE BID PRICE FOR THE VARIOUS ITEMS IN THE CONTRACT.
10. THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN THE PROPERTY OF THE MUNICIPALITY WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN THE PROPERTY OF THE SAID AGENCIES, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR IN A MANNER SATISFACTORY TO THE ENGINEER.
11. THE CONTRACTOR IS ADVISED THAT ADDITIONAL NOTES WILL BE FOUND ON SUBSEQUENT SHEETS OF THE PLANS AND SUCH NOTES, WHILE PERTAINING TO THE SPECIFIC DRAWINGS THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES LISTED HEREIN.
12. WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING THE DISPOSAL AREA AND OF TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE BID PRICE FOR THESE ITEMS.
13. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORTS, BRACING OR OTHER DEVICES THAT MAY BE REQUIRED, OR THAT MAY BE DIRECTED BY THE ENGINEER, TO PROTECT THE SAFETY OF ADJACENT STRUCTURES, ROADWAYS OR UTILITIES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE VARIOUS ITEMS IN THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
14. ALL DISTURBED UNPAVED AREAS WITHIN THE DESIGNATED WORK LIMITS SHALL BE GRADED, FERTILIZED, SEEDED AND MULCHED AS SPECIFIED UNDER SECTION 610 (TURF ESTABLISHMENT), OF THE NYSDOT STANDARD SPECIFICATIONS.
15. AREAS DISTURBED BY THE CONTRACTOR THAT ARE OUTSIDE THE DESIGNATED WORK LIMITS SHALL BE GRADED IN A MANNER APPROVED BY THE ENGINEER AND SEEDED AS SPECIFIED FOR ITEM 610.0203. THE COST FOR THE RESTORATION OF AREA OUTSIDE THE WORK LIMITS SHALL BE INCLUDED IN THE PRICE FOR THE VARIOUS ITEMS IN THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 107-08 (PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE) OF THE NYSDOT STANDARD SPECIFICATIONS.
16. THE METHOD OF REMOVAL OF EXISTING ROADWAY OR SHOULDER PAVEMENT IN THE IMMEDIATE VICINITY OF ANY UNDERGROUND UTILITIES, INCLUDING CROSS-CULVERTS, SHALL BE REVIEWED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF WORK.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS IN ACCORDANCE WITH THE PROVISION OF SECTION 107-05 (SAFETY AND HEALTH REQUIREMENTS) OF THE NYSDOT STANDARD SPECIFICATIONS.
18. IF THE ENGINEER NOTIFIES THE CONTRACTOR OF ANY HAZARDOUS CONSTRUCTION PRACTICES, ALL OPERATIONS IN THE AFFECTED AREA SHALL BE DISCONTINUED AND IMMEDIATE ACTION SHALL BE TAKEN TO CORRECT THE SITUATION TO THE SATISFACTION OF THE ENGINEER BEFORE WORK IS RESUMED.
19. THE CONTRACTOR SHALL PROVIDE SAFE AND ADEQUATE ACCESS INTO OR THROUGH THE WORK SITE BY EMERGENCY VEHICLES AT ALL TIMES.
20. ALL EXISTING PAVEMENT AND SHOULDER SURFACES THAT ARE TO BE RESURFACED SHALL BE CLEANED IN ACCORDANCE WITH SECTION 633 (CONDITIONING OF EXISTING PAVEMENT) OF THE NYSDOT STANDARD SPECIFICATIONS.
21. TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL MEASURES, ACCORDING TO SECTION 209 OF THE NYSDOT STANDARD SPECIFICATIONS, SHALL BE USED DURING THE LIFE OF THE CONTRACT AS ORDERED BY THE ENGINEER.
22. WHEN CONSTRUCTION ACTIVITY IS EXPECTED TO BE AT OR NEAR THE EXISTING RIGHT-OF-WAY LIMITS, THE CONTRACTOR SHALL HAVE THE PROPOSED WORK LIMITS MARKED IN THE FIELD BY A NYS LICENSED SURVEYOR.

23. AS NECESSARY, FIELD ADJUST PIPE INVERTS TO ALLOW NEW PIPES TO PROPERLY FUNCTION, MEETING EXISTING DRAINAGE PATTERNS. ALL CHANGES WILL BE APPROVED BY THE ENGINEER.
24. ALL EXISTING TRAFFIC SIGNS REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CITY. THE CONTRACTOR SHALL DELIVER REMOVED SIGNS TO THE CITY DPW NO LATER THAN 2 WEEKS AFTER THEIR REMOVAL.
25. TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL SUBMIT A PROPOSED CONSTRUCTION SEQUENCE TO THE ENGINEER FOR APPROVAL.
26. FIELD CONDITIONS MAY REQUIRE ADDITIONAL FULL DEPTH REPLACEMENT AREAS NOT SHOWN ON PLANS. THIS WORK WILL BE A.O.B.E. AND WILL BE PAID FOR UNDER THE APPROPRIATE UNIT BID PRICE ITEMS IN THE CONTRACT.
27. BASE MAPPING AND RIGHT-OF-WAY, TG MILLER, P.C.
28. ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, STANDARDS, ORDINANCES, RULES, AND REGULATIONS.
29. EXPLORATORY EXCAVATIONS SHALL BE PERFORMED AS NEEDED BY THE CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO WORK IN CONGESTED UTILITY AREAS. ALL TEST PITS IDENTIFIED ON THESE DRAWINGS ARE TO BE COMPLETED AND TEST PIT LOGS SUBMITTED TO THE ENGINEER WITHIN FOURTEEN (14) DAYS FOLLOWING NOTICE TO PROCEED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
30. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND EFFORTS SHALL BE COORDINATED WITH THE ENGINEER, AND/OR THE CITY OF ITHACA. TEMPORARY PAVEMENT SHALL BE PLACED WITHIN 24 HOURS OF COMPLETION OF EXCAVATION AND BACKFILL OPERATIONS WITHIN THE PAVEMENT LIMITS. WORK TO BE INCLUDED UNDER ITEM 619.01.
31. THE CONTRACTOR SHALL NOTIFY THE CITY 72 HOURS PRIOR TO ANY STREET, LANE OR PARKING CLOSURES OR ANY WORK AFFECTING TRAFFIC SIGNALS.
32. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL COMMERCIAL AND RESIDENTIAL PROPERTIES AT ALL TIMES TO THE SATISFACTION OF THE ENGINEER. RAMPING CONSTRUCTION TO PROVIDE ACCESS MAY BE CONSTRUCTED WITH SUBBASE MATERIAL EXCEPT THAT TEMPORARY ASPHALT CONCRETE SHALL BE PLACED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE PEDESTRIAN ACCESS AT ALL TIMES.
33. THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF EXISTING EDGE OF PAVEMENT ALONG ALL RIGHTS-OF-WAY.
34. THE CONTRACTOR SHALL NOTIFY ALL RESIDENTS AND BUSINESSES LOCATED IN THE WORK ZONE 72 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. SUCH NOTICES WILL BE FURNISHED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER AND/OR THE CITY.
35. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES. APPLICABLE SAFETY CODES MEAN THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS, AND ADDITIONS THERE TO, TO THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA); AND APPLICABLE SAFETY, HEALTH REGULATIONS AND BUILDING CODES FOR CONSTRUCTION IN THE STATE OF NEW YORK. SHEET PILING SHALL BE DESIGNED AND SEALED BY A NEW YORK STATE PROFESSIONAL ENGINEER.
36. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK. HE SHALL SUBMIT A DEWATERING PLAN (IF NECESSARY) DESIGNED AND SEALED BY A NEW YORK STATE PROFESSIONAL ENGINEER.
37. WHEN BACKFILLING AROUND PROPOSED OR EXISTING STRUCTURES, COMPACTION EFFORTS MUST CONFORM TO SECTION 203.3.15 OF THE N.Y.S. STANDARD SPECIFICATIONS.
38. SUBMITTALS, CATALOG CUTS, SAMPLES, AND SHOP DRAWINGS MUST BE RECEIVED, REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ORDERING OR FABRICATION OF MATERIALS AND PRIOR TO INSTALLATION OF MATERIALS. FAILURE TO DO SO MAY BE CAUSE FOR TIME DELAYS IN INSTALLATION OF THE CONTRACTOR. THE CONTRACTOR WILL NOT BE ENTITLED TO COMPENSATION FOR SAID TIME DELAYS, REMOVALS, OR REPLACEMENTS.
39. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT, DUE TO THE NATURE OF RECONSTRUCTION PROJECTS, THE EXACT EXTENT OF CONSTRUCTION WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO THE COMMENCEMENT OF WORK. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTION AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM WORK IN ACCORDANCE WITH FIELD CONDITIONS TO THE SATISFACTION OF THE ENGINEER.
40. DURING CONSTRUCTION, NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE INTO THE WATERS OF NEW YORK STATE, NOR SHALL WASHINGS FROM READY-MIX TRUCKS, MIXERS OR OTHER DEVICES BE ALLOWED TO ENTER ANY WETLAND OR WATERS. DESIGNATED WASH OUT AREAS TO BE APPROVED BY THE ENGINEER IN CHARGE.
41. MAINTENANCE OF EQUIPMENT ON SITE WHICH REQUIRES THE EQUIPMENT TO BE RUNNING SHALL BE APPROVED BY THE ENGINEER IF THE MAINTENANCE IS PERFORMED OUTSIDE THE WORK HOUR RESTRICTIONS.

1. SIDEWALKS SHALL HAVE TOOLED JOINTS. SAWCUTS ARE NOT ALLOWED.
2. THE CONTRACTOR SHALL SUBMIT A SIDEWALK JOINT LAYOUT PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO SIDEWALK INSTALLATION. THE LAYOUT SHALL DETAIL THE LOCATIONS OF FULL DEPTH CONSTRUCTION JOINTS AND INTERMITTENT SCORING IN ALL NEW CONCRETE PLACEMENTS GREATER THAN 5 FEET IN WIDTH. THE LAYOUT WILL BE BASED ON AN ASPECT RATIO 1:1 BEING DESIRED AND 1.5:1 MAXIMUM. JOINT LAYOUT AND UTILITY ISOLATION SHOULD REFERENCE SECTION 502 PCC PAVEMENT JOINT DETAILS. ALL CONDUIT, PULLBOXES, AND OTHER PROTRUSIONS MUST BE SHOWN ON JOINT LAYOUT PLAN.
3. WHERE NEW SIDEWALK MEETS BUILDINGS, STAIRS OR SIMILAR, JOINTS SHALL BE CONSTRUCTED USING BITUMINOUS JOINT FILLER WITH "ZIP STRIP", OR APPROVED EQUAL, AOE, AND LIGHT GREY SILICONE JOINT FILLER. COST FOR LABOR AND MATERIAL SHALL BE INCLUDED IN UNIT PRICE BID FOR ITEM 608.0101.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE CITY WITH RESPECT TO CLOSURES OF PARKING LANES AND SPACES. THE CONTRACTOR SHALL OBEY PARKING RESTRICTIONS AND BAGGING PROCEDURES.
5. ALL CONDUIT SHALL BE LEFT WILL PULL STRING FOR EACH RUN.
6. EACH ELECTRIC PULLBOX SHALL BE EQUIPPED WITH A GROUND ROD. PRICE SHALL BE INCLUDED UNDER ITEM 680.510501.
7. ALL RIGID PLASTIC CONDUIT SHALL BE SCHEDULE 80.
8. ALL PLASTIC CONDUIT WITHIN THE PAVEMENT SHALL BE ENCASED IN CONCRETE TO BE INCLUDED IN UNIT PRICE BID OF CONDUIT ITEM.
9. HORIZONTAL AND VERTICAL CONTROL, ALONG WITH BASELINE TIES WILL BE PROVIDED BY THE ENGINEER.
10. ALL NEW OR MODIFIED SIDEWALK RAMPS SHALL BE EQUIPPED WITH ITEM 608.21000003 - DETECTABLE WARNING SURFACES. SEE STANDARD SHEETS 608-01 FOR DETAILS.

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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

WORK_ZONE_TRAFFIC_CONTROL_NOTES:

1. GENERAL NOTES

- A. WORK_ZONE_TRAFFIC_CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 619 - WORK_ZONE_TRAFFIC_CONTROL - OF THE NYSDOT STANDARD SPECIFICATIONS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, NYSDOT STANDARD SHEETS 619 SERIES, AND ANY PROVISIONS CONTAINED IN THESE PLANS.
- B. THE TYPICAL DETAILS DEPICTED ON THE STANDARD SHEETS, THE TRAFFIC CONTROL PLANS, AND IN THE MUTCD REFLECT THE MINIMUM REQUIREMENTS. ADDITIONAL SIGNS AND/ OR TRAFFIC CONTROL DEVICES MAY BE REQUIRED AS DETERMINED BY THE ENGINEER, COST TO BE INCLUDED IN THE PRICE BID FOR THE APPROPRIATE ITEMS. IF AT ANY TIME THE ENGINEER DETERMINES THAT TRAFFIC IS NOT BEING PROPERLY MAINTAINED WITHIN A WORK_ZONE, THE CONTRACTOR SHALL IMMEDIATELY CORRECT THE INDICATED DEFICIENCY, AOE.
- C. THE CONTRACTOR MUST SUBMIT TO THE ENGINEER, IN WRITING, PROPOSED REVISIONS TO THE TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL BY THE CITY FIVE (5) WORKING DAYS PRIOR TO THE PLANNED IMPLEMENTATION OF SUCH PROPOSED REVISIONS, EXCEPT FOR CHANGES THAT ALTER THE BASIC CONCEPT OF THE TRAFFIC CONTROL PLAN. SUCH CONCEPTUAL CHANGES MUST BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL THIRTY (30) WORKING DAYS PRIOR TO IMPLEMENTATION OF SUCH REVISIONS.
- D. THE CONTRACTOR SHALL PROVIDE THE ENGINEER, IN WRITING, WITH THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF STAFF WHO ARE AUTHORIZED TO SECURE LABOR, MATERIALS, AND EQUIPMENT FOR EMERGENCY REPAIRS OUTSIDE NORMAL WORKING HOURS. THE ENGINEER WILL PROVIDE THE SUBMITTED INFORMATION TO THE CITY ENGINEER, THE NEW YORK STATE POLICE, AND THE LOCAL POLICE.
- E. PRIOR TO THE START OF ANY WORK OPERATIONS, ALL RELATED WORK FOR PROPOSED WORK_ZONE_TRAFFIC_CONTROL, AOE, SHALL BE COMPLETE. THIS INCLUDES BUT IS NOT LIMITED TO, ALL SIGNS, SIGNALS, PAVEMENT MARKINGS, BARRIERS, DELINEATION (CONES, DRUMS, ETC.) FLAGGERS, PAVEMENT MODIFICATIONS, AND ANY OTHER RELATED WORK.
- F. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SAFE AND ADEQUATE INGRESS AND EGRESS TO AND FROM INTERSECTION HIGHWAYS, HOMES AND COMMERCIAL ESTABLISHMENTS AT ALL TIMES TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 619.01 SECTION 619-3.02(C).
- G. THE CONTRACTOR SHALL COORDINATE THE MAINTENANCE AND PROTECTION OF TRAFFIC SHOWN IN THESE PLANS WITH ANY OTHER ROADWAY OR CONSTRUCTION WORK PROPOSED OR ONGOING IN THE VICINITY OF THE SUBJECT WORK_ZONE.
- H. THE WORK_ZONE_TRAFFIC_CONTROL SIGNS SHOWN ON THESE PLANS AND ON THE NYSDOT STANDARD SHEETS SHALL BE SUBJECT TO THE COORDINATED INSTALLATION OF SIGNS FOR OTHER WORK_ZONE'S OVERLAPPING THE AREA COVERED UNDER THIS CONTRACT.

2. STANDARD SHEETS 619-10, 11, AND 12 CRITERIA

- A. PRECONSTRUCTION POSTED SPEED LIMIT: 30 MPH
- B. TYPE OF ROADWAY: CONVENTIONAL HIGHWAY
- C. SETTING: URBAN

3. TIME / DATE RESTRICTIONS

- A. THERE SHALL BE NO TEMPORARY LANE CLOSURES ON THE FOLLOWING DATES/HOLIDAY DATES:
- | | |
|-----------------|-----------------|
| 2013 | 2014 |
| MAY 24-27 | MAY 23-26 |
| JUNE 7-10 | JULY 3-6 |
| JULY 3-7 | AUG. 29-SEPT. 1 |
| AUG. 16-19 | OCT. 10-13 |
| AUG. 23-26 | NOV. 26-30 |
| AUG. 30-SEPT. 2 | DEC. 19-JAN. 4 |
| OCT. 11-14 | |
| NOV. 20-24 | |
| DEC. 23-JAN. 3 | |
- B. THERE SHALL BE NO TEMPORARY LANE CLOSURES BETWEEN THE FOLLOWING HOURS:
- | |
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| MONDAY THROUGH FRIDAY 7 AM TO 9 AM |
| 4 PM TO 6 PM |
- C. THE FOLLOWING WORK HOUR RESTRICTIONS SHALL BE STRICTLY ENFORCED:
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|--|
| MONDAY THROUGH FRIDAY 7:30 AM TO 7:30 PM |
| SATURDAY NO WORK HOURS |
| SUNDAY NO WORK HOURS |
- D. THE CONTRACTOR SHALL NOT BEGIN WARMING UP EQUIPMENT BEFORE THE SCHEDULED START TIMES, NOR KEEP THE EQUIPMENT RUNNING AFTER THE SCHEDULED QUIT TIMES. MAINTENANCE OF EQUIPMENT ON SITE WHICH REQUIRES THE EQUIPMENT TO BE RUNNING SHALL BE APPROVED BY THE ENGINEER IF THE MAINTENANCE IS PERFORMED OUTSIDE THE WORK HOUR RESTRICTIONS.

4. WORK_ZONE_REQUIREMENTS

- A. THE MINIMUM WIDTH OF TRAVEL LANES WITHIN THE WORK_ZONE IS 10 FEET.
- B. THE MINIMUM OFFSET TO CHANNIZATION DEVICES OR BARRIERS IS 1 FOOT. WORK_ZONE'S ON OPPOSITE SIDES OF THE ROAD SHALL NOT OVERLAP. A WORK_ZONE IS DEFINED AS THAT AREA IN WHICH TRAFFIC IS RESTRICTED BECAUSE OF CONSTRUCTION ACTIVITIES, OR THAT AREA WHICH INVOLVES A DROP-OFF WITHIN 10 FEET OF THE EDGE OF PAVEMENT.

5. CONSTRUCTION VEHICLES, EQUIPMENT, AND MATERIALS

- A. THE CLEAR ROADSIDE AREA IS DEFINED AS THE AREA WITHIN 10 FEET OF THE EDGE OF THE TRAVEL WAY.
- B. CONTRACTOR VEHICLES NOT IN USE AND PRIVATE VEHICLES OWNED BY CONTRACTOR'S EMPLOYEES SHALL NOT BE PARKED IN THE CLEAR ROADSIDE AREA, OR ANY OTHER LOCATION CONSIDERED BY THE ENGINEER TO BE A HAZARD. THIS REQUIREMENT IS NOT LIMITED TO THE CONTRACT LIMITS.
- C. NO MATERIAL IS TO BE STORED WITHIN THE CLEAR ROADSIDE AREA WITHOUT THE APPROVAL OF THE ENGINEER.
- D. VEHICLES BELONGING TO THE CONTRACTOR OR THE CONTRACTOR'S EMPLOYEES SHALL NOT BE PARKED IN A MANNER WHICH OBSTRUCTS SIGNS, BARRIERS, BARRICADES, OR OTHER TRAFFIC CONTROL DEVICES.
- E. VEHICLES BELONGING TO THE CONTRACTOR OR THE CONTRACTOR'S EMPLOYEES SHALL NOT BE PARKED IN A MANNER WHICH INTERFERES WITH ACCESS TO ABUTTING PROPERTIES.
- F. THE CONTRACTOR SHALL PLAN AND INCORPORATE ACCESS POINTS INTO THE WORK_ZONE SUCH THAT, TO THE EXTENT PRACTICAL, THE CONTRACTOR'S VEHICLES ENTERING AND LEAVING THE WORK_ZONE SHALL NOT IMPEDE THE MOVEMENT OF THROUGH TRAFFIC IN THE ADJACENT OPEN LANES.

6. CHANNELIZING DEVICES

- A. WHERE POSSIBLE ALL CHANNELIZING AND GUIDING DEVICES ARE TO BE PLACED SO AS TO PROVIDE A MINIMUM 1 FOOT LATERAL CLEARANCE TO THE TRAVELED WAY.
- B. THE CONTRACTOR SHALL NOT MIX CHANNELIZATION DEVICES IN A LINEAR CLOSURE OR TAPER I.E. CONES, VERTICAL PANELS AND DRUMS SHALL NOT BE USED IN THE SAME TAPER OR CLOSURE. HOWEVER, DIFFERENT CHANNELIZATION DEVICES MAY BE USED IN DIFFERENT AREAS OF A PROJECT.
- C. REFLECTORIZED PLASTIC DRUM DELINEATORS SHALL BE USED AT HAZARDOUS LOCATIONS DETERMINED BY THE ENGINEER. DELINEATORS SHALL REMAIN IN PLACE UNTIL SATISFACTORY PROTECTION IS PROVIDED. DELINEATORS SHALL BE SPACED AT A DISTANCE NOT TO EXCEED 25 FEET, OR AS DIRECTED BY THE ENGINEER.

7. FLAGGING AND TRAFFIC CONTROL

- A. THE USE OF TEMPORARY SIGNALS AS A SUBSTITUTE FOR FLAGGERS WILL NOT BE ALLOWED ON THIS PROJECT.
- B. FLAGGER SIGNS SHALL NOT BE USED FOR BRIEF PERIODS OF INCIDENTAL FLAGGING. AOE. FLAGGER SIGNS SHALL NOT BE VISIBLE WHEN FLAGGERS ARE NOT BEING USED.
- C. WHEN A SIDE ROAD OR DRIVEWAY INTERSECTS THE ROADWAY WITHIN A WORK_ZONE TRAFFIC CONTROL AREA, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES AND/OR FLAGGERS SHALL BE PLACED AS NEEDED. ADDITIONAL FLAGGERS SHALL BE LOCATED AS NEEDED AT ALL INTERSECTIONS AND COMMERCIAL DRIVEWAYS LOCATED WITHIN OR NEAR THE ACTIVE WORK SPACE.

8. SIGNS


- A. DIAMOND-SHAPED ADVANCE WARNING SIGNS SHALL BE USED FOR ALL ADVANCE WARNING SIGNS SHOWN IN PART 6 OF THE MUTCD. COLOR REQUIREMENTS SHALL BE BLACK TEXT ON ORANGE BACKGROUND.
- B. THE CORRECT SPACING OF SIGNS, EITHER PERMANENT OR TEMPORARY MUST BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THE MUTCD UNLESS SHOWN OTHERWISE ON THE PLANS. ALL SIGNS INCLUDING GUIDE SIGNS SHALL INDICATE ACTUAL CONDITIONS AT ALL TIMES AND SHALL BE COVERED, MOVED, REMOVED, OR CHANGED IMMEDIATELY AS ORDERED BY THE ENGINEER.
- C. THE LOCATION OF THE SIGNS SHOWN ON THE WORK_ZONE_TRAFFIC_CONTROL PLANS AND DETAILS MAY BE ADJUSTED BASED ON SIGHT DISTANCE AND OTHER CONSIDERATIONS. THE FINAL LOCATIONS OF SIGNS ARE SUBJECT TO APPROVAL OF THE ENGINEER.
- D. ANY EXISTING SIGNS, INCLUDING OVERHEAD SIGNS, WHICH CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL SIGNS LAYOUT SHALL BE COVERED, REMOVED, STORED OR RESET, AS APPROVED BY THE ENGINEER. ALL APPROPRIATE EXISTING SIGNS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND/OR LOCATION UNLESS OTHERWISE REPLACED OR RELOCATED IN THIS CONTRACT.
- E. SIGNS AT OR NEAR INTERSECTIONS SHALL BE PLACED SO THAT THEY DO NOT OBSTRUCT A MOTORIST'S LINE OF SIGHT.
- F. ALL WARNING AND REGULATORY SIGNS SHALL BE POSTED ON BOTH SIDES OF ONE-WAY STREETS. IN CASES WHERE LANE RESTRICTIONS REDUCE THE TRAVEL LANE TO ONE LANE, SIGNS SHALL BE POSTED ON THE RIGHT SIDE OF THE ACTIVE TRAVEL LANE, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- G. THE DIMENSIONS OF WORK_ZONE_TRAFFIC_CONTROL SIGNS ARE DESCRIBED IN THE MUTCD AND THE NYSDOT STANDARD SHEET SERIES 619.
- H. THE CONTRACTOR SHALL COORDINATE THE WORK_ZONE_TRAFFIC_CONTROL FOR WORK IN THESE PLANS WITH THAT BEING IMPLEMENTED FOR CITY OF ITHACA ROADWAY WORK ON E STATE ST AND THE CONTRACTOR WORKING ON COLLEGETOWN TERRACE.
- I. THE TRANSPORTATION MANAGEMENT CENTER (TMC) SHALL BE NOTIFIED 7 DAYS BEFORE ANY WORK IS STARTED ON A STATE HIGHWAY. THE NOTIFICATION AND COORDINATION WITH THE TMC SHALL BE MADE THRU THE NYSDOT REPRESENTATIVE ASSIGNED TO THE PROJECT (DOT INSPECTOR OR RESIDENCY).

9. NOTIFICATION AND EMERGENCY ACCESS

- A. THE CONTRACTOR IS REQUIRED TO CONTACT THE APPROPRIATE SCHOOL AND EMERGENCY SERVICES ORGANIZATIONS WITH RESPECT TO THE EFFECT OF ROAD WORK, TRAVEL LANE REDUCTIONS, AND DETOURS ON OPERATIONS. THIS CONTACT SHALL BE MADE AS CONDITIONS CHANGE AND AT LEAST TWO WEEKS PRIOR TO IMPLEMENTING EACH TRAFFIC PHASE AND/OR DETOUR TO ALLOW ADEQUATE TIME FOR THE ORGANIZATIONS TO COORDINATE AND MAKE NECESSARY ADJUSTMENTS TO RESPONSE SCHEDULES AND ROUTES.
- B. THE CONTRACTOR IS REQUIRED TO CONTACT THE APPROPRIATE TRANSIT OFFICIALS IN RESPECT TO THE EFFECT OF ROAD ALTERATIONS ON BUS OPERATIONS. THIS SHOULD BE DONE FOUR WEEKS IN ADVANCE OF ANY CHANGES IN TRAFFIC PATTERNS OR IMPLEMENTATION OF WORK_ZONE'S SO THAT THERE WILL BE ADEQUATE TIME FOR TRANSIT OFFICIALS TO NOTIFY PERSONNEL OF THE EFFECTS TO SCHEDULES AND ROUTES. THE CONTRACTOR SHALL MAKE PROVISIONS FOR THE SAFE INGRESS AND EGRESS OF PASSENGERS AT EXISTING OR TEMPORARILY RELOCATED BUS STOPS.

10. BICYCLISTS AND PEDESTRIANS

- A. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN AND BICYCLE TRAFFIC THROUGH OR AROUND EACH WORK AREA FOR THE DURATION OF THE CONSTRUCTION. MATERIAL, EQUIPMENT OR OTHER SUCH BARRIERS SHALL NOT BE PLACED OR PARKED IN SUCH A MANNER AS TO OBSTRUCT PEDESTRIAN OR BICYCLE TRAFFIC OR TO PRESENT A SAFETY HAZARD TO THE NON-MOTORIZED PUBLIC. WHERE PEDESTRIAN TRAFFIC MUST BE RELOCATED OFF THE EXISTING FACILITY, WALKWAYS SHALL BE CLEARLY MARKED AND HAVE A LOGICAL START AND TERMINUS.
- B. THE CONTRACTOR SHALL PROVIDE, DELINEATE AND MAINTAIN A USABLE TRAVEL PATH FOR PEDESTRIANS EITHER THROUGH OR AROUND WORK_ZONE'S FOR THE DURATION OF THIS PROJECT. THE TRAVEL PATH SHALL COMPLY WITH THE CONTINUOUS PASSAGE PROVISIONS OF THE CURRENT AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG). THE CONTRACTOR MAY UTILIZE ANY COMBINATION OF THE FOLLOWING TO PROVIDE THE USABLE TRAVEL PATH: EXISTING SIDEWALKS/SHOULDERS; TEMPORARY SIDEWALKS/SHOULDERS; FINAL SIDEWALKS/SHOULDERS; AND EXISTING OR TEMPORARY SIDEWALK CURB RAMPS. THE USABLE TRAVEL PATH SHALL BE CLEARLY MARKED AND STAGED BETWEEN INTERSECTING ROADS TO ENSURE SAFE PEDESTRIAN CROSSING AND ACCESSIBILITY. PEDESTRIAN ACCESS TO RESIDENTIAL AND COMMERCIAL PROPERTIES SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION.
- C. ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL AND REMOVE TEMPORARY SIDEWALK AND CURB RAMPS, INCLUDING THE RESTORATION OF DISTURBED AREAS, SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 608.020101, ASPHALT CONCRETE SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS.
- D. FOR LOCATIONS WHERE EXISTING SIDEWALK WAS REMOVED OR NEW SIDEWALKS ARE PROPOSED, THE CONTRACTOR SHALL PROVIDE A SURFACE MEETING ADAAG REQUIREMENTS WITHIN TWO WEEKS (14 CALENDAR DAYS) OF EXISTING SIDEWALK REMOVAL OR CURB INSTALLATION, WHICHEVER IS LESS. THE CONTRACTOR MAY ALLOW PEDESTRIAN TRAFFIC TO USE THE COMPACTED SURFACE FOR A MAXIMUM OF TWO WEEKS (14 CALENDAR DAYS). AFTER THE TWO WEEK PERIOD THE CONTRACTOR MUST PROVIDE A PAVED SURFACE (FINAL OR TEMPORARY) MEETING THE ADAAG REQUIREMENTS. IF THE CONTRACTOR CHOOSES NOT TO PLACE THE FINAL SIDEWALK SURFACE, NO SEPARATE PAYMENT WILL BE MADE FOR THE TEMPORARY SURFACE. THE CONTRACTOR MUST ALSO PROVIDE CURB RAMPS IN ACCORDANCE WITH ADAAG REQUIREMENTS. IF THE CONTRACTOR CHOOSES TO PROVIDE THE FINAL SIDEWALK SURFACE AFTER THE TWO WEEK PERIOD, A TEMPORARY CURB RAMP MAY BE INSTALLED. THE COST OF THIS TEMPORARY RAMP IS TO BE INCLUDED IN THE PRICE BID FOR BASIC WORK_ZONE TRAFFIC CONTROL. FAILURE TO PROVIDE THIS PAVED SURFACE WILL RESULT IN THE ASSESSMENT OF LIQUIDATED DAMAGES AS DEFINED IN THE SPECIAL NOTES.
- E. ANY CONSTRUCTION ACTIVITY THAT RESULTS IN THE BREAKAGE OF SLABS OR THE REMOVAL OF SEGMENTS OF EXISTING SIDEWALK SERVING AS THE USABLE TRAVEL PATH SHALL BE REPAIRED IMMEDIATELY USING ASPHALT CONCRETE MEETING THE REQUIREMENTS OF SECTION 608 OF THE STANDARD SPECIFICATIONS. THE REPAIRED SURFACE SHALL BE IN CONFORMANCE WITH THE CRITERIA OUTLINED ABOVE, AS WELL AS THOSE CONTAINED IN THE ADAAG. SIDEWALK REPAIRS DUE TO REQUIRED CONSTRUCTION ACTIVITIES SHALL BE PAID FOR UNDER 608.020101, ASPHALT CONCRETE SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS. SIDEWALK THAT IS DAMAGED BY CARELESS CONSTRUCTION ACTIVITIES OR PRACTICES SHALL BE IMMEDIATELY REPAIRED, AOE, AT NO COST TO THE CLIENT OR STATE.
- F. TEMPORARY SAFETY FENCING SHALL BE PLACED ALONG ANY SIDEWALK ADJACENT TO ANY EXCAVATION OR VERTICAL DROP-OFF OVER 6 INCHES. SAFETY FENCING SHALL BE CONTINUOUS PLASTIC FLUORESCENT ORANGE SUPPORTED BY METAL OR WOOD POSTS. THE FENCING SHALL BE A MINIMUM OF 4 FEET IN HEIGHT AND MAY INCLUDE A TOP AND BOTTOM RAIL TO PROVIDE ADDITIONAL SUPPORT, AOE. THE SAFETY FENCE SHALL CONFORM TO SECTION 107-05 OF THE STANDARD SPECIFICATIONS. ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL AND REMOVE TEMPORARY SAFETY FENCING SHALL BE INCLUDED IN THE PRICE BID FOR BASIC WORK_ZONE_TRAFFIC_CONTROL.
- G. THE CONTRACTOR SHALL PROVIDE A USABLE TRAVEL PATH AT ALL BUS STOP LOCATIONS TO PROVIDE SAFE ACCESS TO AND FROM THE BUS.

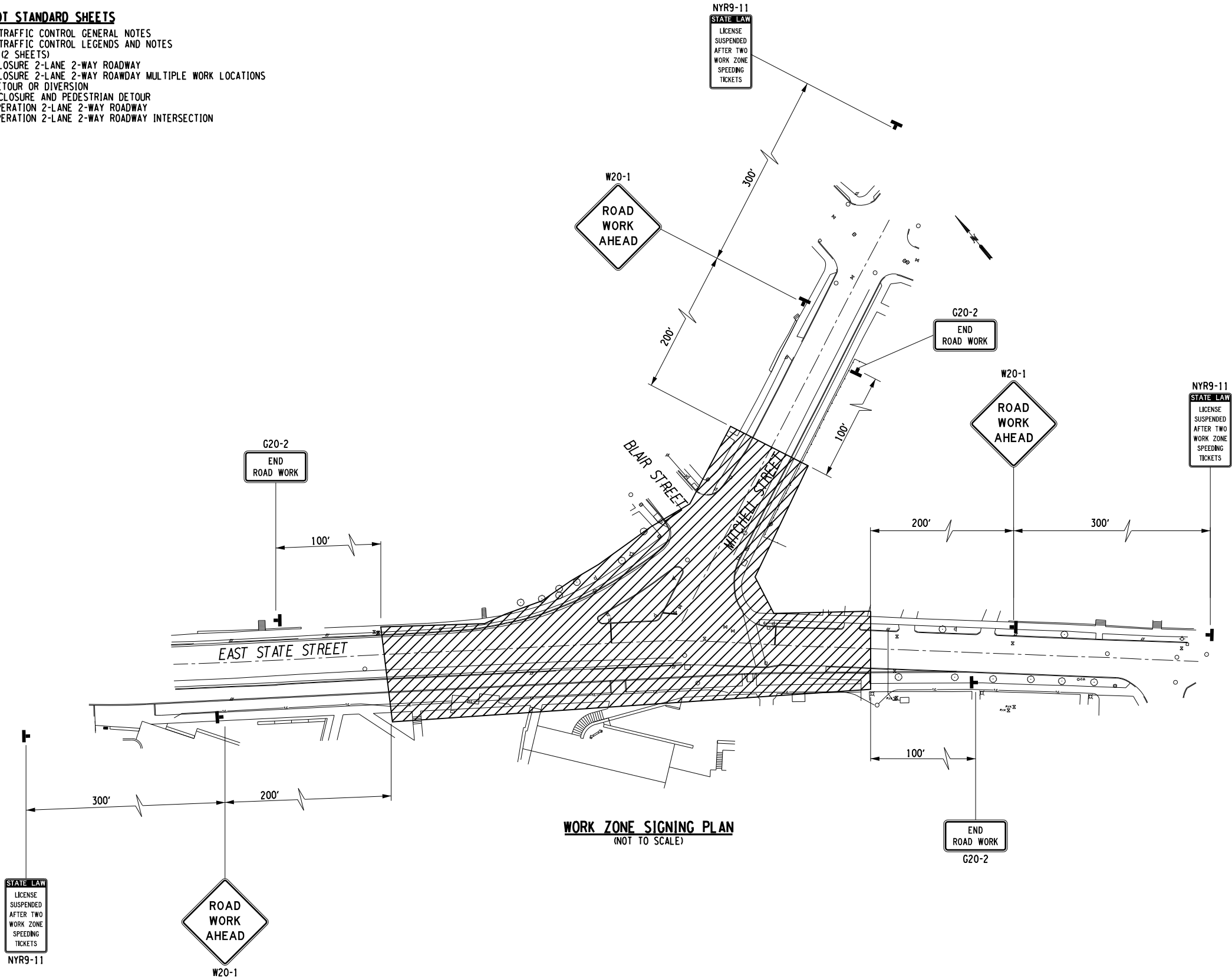
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WORK_ZONE_TRAFFIC_CONTROL_NOTES		DATE: JUNE 2013		CME No.: 112-203	
SHEET NUMBER		8		of 21	

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APPLICABLE NYSDOT STANDARD SHEETS

- 619-10 - WORK ZONE TRAFFIC CONTROL GENERAL NOTES
- 619-11 - WORK ZONE TRAFFIC CONTROL LEGENDS AND NOTES
- 619-12 - SIGN TABLE (2 SHEETS)
- 619-20 - SHOULDER CLOSURE 2-LANE 2-WAY ROADWAY
- 619-21 - SHOULDER CLOSURE 2-LANE 2-WAY ROADWAY MULTIPLE WORK LOCATIONS
- 619-50 - SIDEWALK DETOUR OR DIVERSION
- 619-51 - CROSSWALK CLOSURE AND PEDESTRIAN DETOUR
- 619-60 - FLAGGING OPERATION 2-LANE 2-WAY ROADWAY
- 619-61 - FLAGGING OPERATION 2-LANE 2-WAY ROADWAY INTERSECTION



WORK ZONE SIGNING PLAN
(NOT TO SCALE)

LEGEND:



WORK ZONE



TEMPORARY WORK
ZONE SIGN

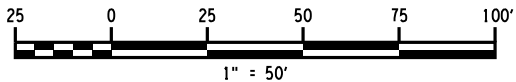
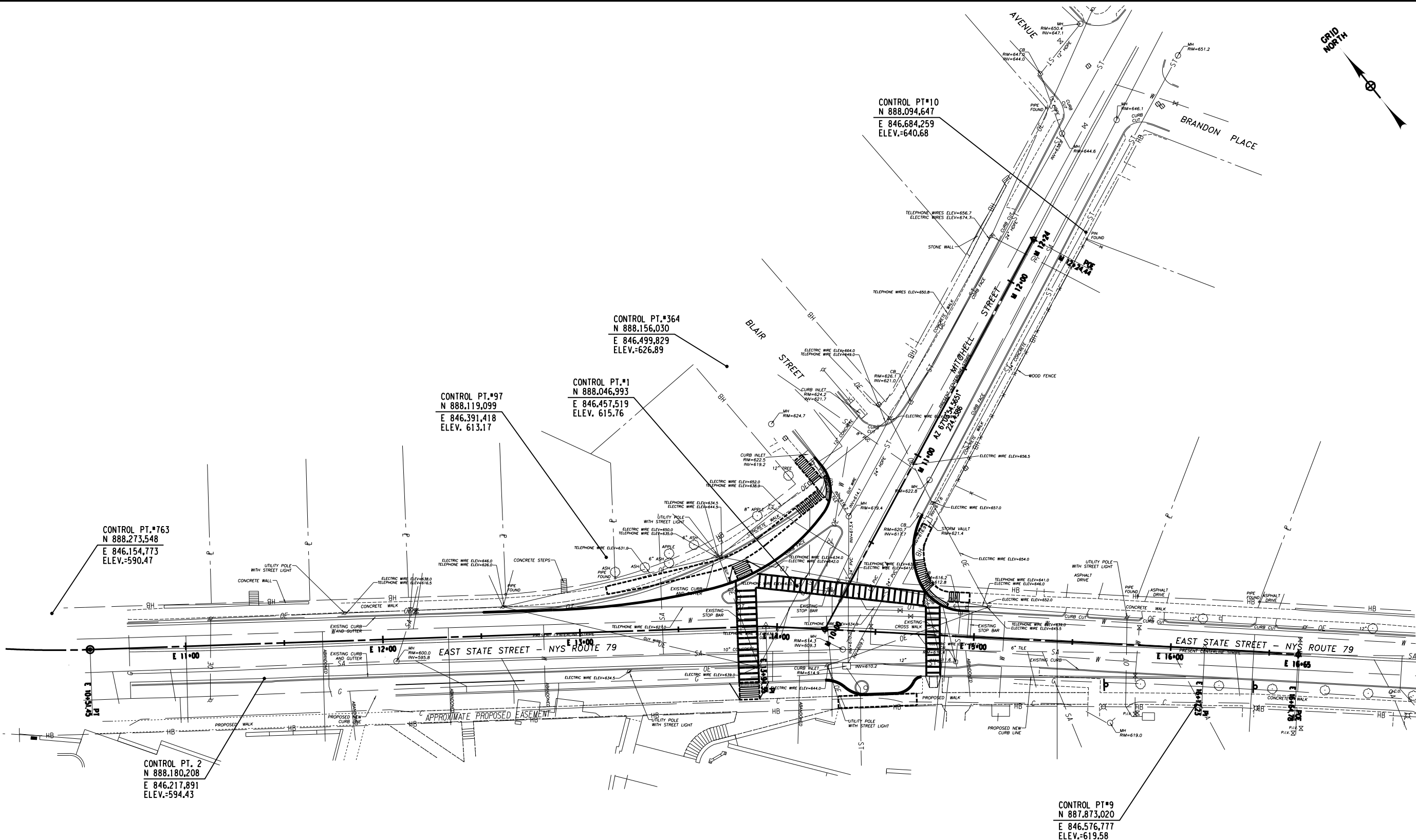
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WORK ZONE TRAFFIC CONTROL		JUNE 2013		CME No.: 112-203	SCALE: AS NOTED	DESIGNED: A.M.		DRAWN BY: K.H.D.	CHECKED: K.W.
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USER : dbar.jes

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NOTES:

1. CONTROL POINT ARE PK NAILS AND OTHER TEMPORARY POINTS ESTABLISHED BY T.G. MILLER P.C., THESE POINT ARE REPLACEMENT OF BASELINE TIES.



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CONTROL POINT PLAN

CP-1

SHEET NUMBER 10 of 21



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TABLE OF GRANITE CURB ITEM 609.0203					
FROM	OFFSET	TO	OFFSET	RADIUS	LENGTH (FT)
E 14+25.7	25.40' RT	E 14+36.5	28.49' RT	15	11.2
E 14+36.5	28.49' RT	E 14+46.7	31.59' RT	15	11.2
E 14+46.7	31.59' RT	E 14+62.7	30.21' RT	-	16.1
E 14+62.7	30.21' RT	E 14+70.4	24.14' RT	10	10.2
E 14+70.4	24.14' RT	E 14+74.5	21.13' RT	5	5.4
M 10+74.8	15.86' RT	M 10+44.3	30.17' RT	40	34.7
E 14+70.5	27.23' LT	E 14+93.4	12.72' LT	25	28.4
E 14+93.4	12.72' LT	E 14+96.8	LT	-	3.6
E 12+51.3	LT	E 12+86.5	11.70' LT	-	35.3
E 12+86.5	11.70' LT	E 13+66.6	19.60' LT	400	80.6
E 13+66.6	19.60' LT	M 10+51.4	28.22' LT	100	70.9
M 10+51.4	28.22' LT	M 10+72.3	40.90' LT	20	25.4
M 10+72.3	40.90' LT	M 10+75.8	LT	-	9.3
				TOTAL	342.3

TABLE OF SIGN REMOVALS		
ITEM	LOCATION	DESCRIPTION
647.61	E. STATE STREET; 300' EAST OF INTERSECTION	REMOVE "STOP AHEAD" SIGN PANEL AND POST
647.51	E 14+95.8, 15' LT	REMOVE "STOP/ONCOMING TRAFFIC DOES NOT STOP" SIGN PANEL ASSEMBLY
647.61	M 10+40.2, 19' LT	REMOVE "DOUBLE ARROW" SIGN PANEL AND POST
647.61	M 10+10.9, 18' LT	REMOVE "STOP" SIGN PANEL AND POST
647.61	E 13+81.2, 15' LT	REMOVE "YIELD" SIGN PANEL AND POST
647.61	E 13+80.2, 18' LT	REMOVE "ONE WAY/DO NOT ENTER" SIGN PANEL ASSEMBLY AND POST

TABLE OF HORIZONTAL ALIGNMENT				
POINT	STATION	CURVE DATA	COORDINATE	
			NORTH	EAST
EAST STATE STREET				
PC PI	E. 10+00.00 E. 10+25.75	RADIUS = 500.00 FT DELTA =5°53'45.42" LT LENGTH = 51.45 FT TANGENT =25.75 FT	888280.15 888262.64	846118.88 846137.76
PT PI	E. 10+51.45 E. 13+94.35	AZ 126°56'18.79" LENGTH =342.90 FT	888247.17 888041.10	846158.34 846432.41
PI	E. 13+94.35	AZ 131°50'11.87" LENGTH =222.87 FT	888041.10	846432.41
PI	E. 16+17.23	AZ 132°24'43.64" LENGTH =47.56 FT	887892.44	846598.47
POE	E 16+64.78		887860.36	846633.58
MITCHELL STREET				
POB	M. 10+00.00	AZ 67°03'54.57" LENGTH =224.44 FT	888021.12	846454.72
POE	M. 12+24.44		888108.58	846661.42
NEW CURB LINE				
POB	0+00.00	AZ 127°04'17.38" LENGTH =35.25 FT	888136.51	846325.13
PC PI	0+35.25 0+75.67	RADIUS = 400.00 FT DELTA =11°32'27.65" LT LENGTH = 80.57 FT TANGENT =40.42 FT	888115.26 888090.89	846353.25 846385.50
PCC PI	1+15.82 1+52.81	RADIUS = 100.00 FT DELTA =40°35'50.23" LT LENGTH = 70.86 FT TANGENT =36.99 FT	888073.47 888057.53	846421.98 846455.35
PCC PI	1+86.68 2+02.58	RADIUS = 20.00 FT DELTA =76°58'55.40" LT LENGTH = 26.87 FT TANGENT =15.90 FT	888067.14 888071.28	846491.07 846506.43
PT	2+13.55	AZ 357°57'04.10" LENGTH =5.26 FT	888087.17	846505.86
POE	2+18.81		888092.43	846505.67
NEW SIDEWALK				
POB	0+00.00	AZ 126°00'11.40" LENGTH =15.44 FT	888138.36	846326.82
PI	0+15.44	AZ 124°39'11.51" LENGTH =15.44 FT	888129.28	846339.32
PI	0+30.89	AZ 123°23'18.62" LENGTH =5.61 FT	888120.50	846352.02
PI	0+36.50	AZ 121°38'39.78" LENGTH =5.61 FT	888117.41	846356.71
PI	0+42.11	AZ 118°28'27.77" LENGTH =7.66 FT	888114.47	846361.48
PI	0+49.77	AZ 118°53'12.25" LENGTH =13.65 FT	888110.82	846368.22
PI	0+63.42	AZ 118°34'22.42" LENGTH =20.01 FT	888104.22	846380.17
PI	0+83.43	AZ 115°36'39.57" LENGTH =33.42 FT	888094.65	846397.74
PC PI	1+16.85 1+32.96	RADIUS = 70.00 FT DELTA =25°55'54.01" LT LENGTH = 31.68 FT TANGENT =16.12 FT	888080.21 888073.24	846427.88 846442.41
PT	1+48.53	AZ 89°40'45.57" LENGTH =38.31 FT	888073.33	846458.53
POE	1+86.84		888073.54	846496.84

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MISCELLANEOUS TABLES

MTB-1

SHEET NUMBER 11 of 21

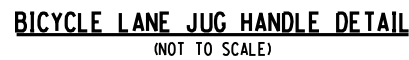
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NIC - NOT IN CONTRACT ITEMS INCLUDING SETTING THE CURB AND PAVEMENT WIDENING WILL BE COMPLETED WHEN THE WIDENING FOR E STATE STREET IS COMPLETED.



NIC

- ~~1. GRANITE CURB TO BE SET FLUSH AGAINST EXISTING SIDEWALK AT BACK EDGE OF JUG HANDLE. ANY SIDEWALK RESTORATION NEEDED SHOULD BE PAID FOR UNDER THE RESPECTIVE ITEMS, 608.0101 AND 304.12.~~
- ~~2. GRADE TO DRAIN TO INLET LOCATED WITHIN JUG HANDLE.~~



1. CONTRACTOR SHALL USE CLASS C CONCRETE AS SPECIFIED IN ORDER TO FILL VOID CREATED DURING CURB INSTALLATION. THE FINAL ELEVATION OF THE CONCRETE SHALL BE 2" BELOW EXISTING FINISHED GRADE.
2. THE CONTRACTOR SHALL NOT INSTALL ITEM 503.1010 UNTIL AFTER THE CONCRETE CURB BACKING HAS BEEN POURED AND SUFFICIENT DRYING TIME ALLOTTED TO HOLD GRANITE CURB IN PLACE AS DETERMINED BY THE ENGINEER.

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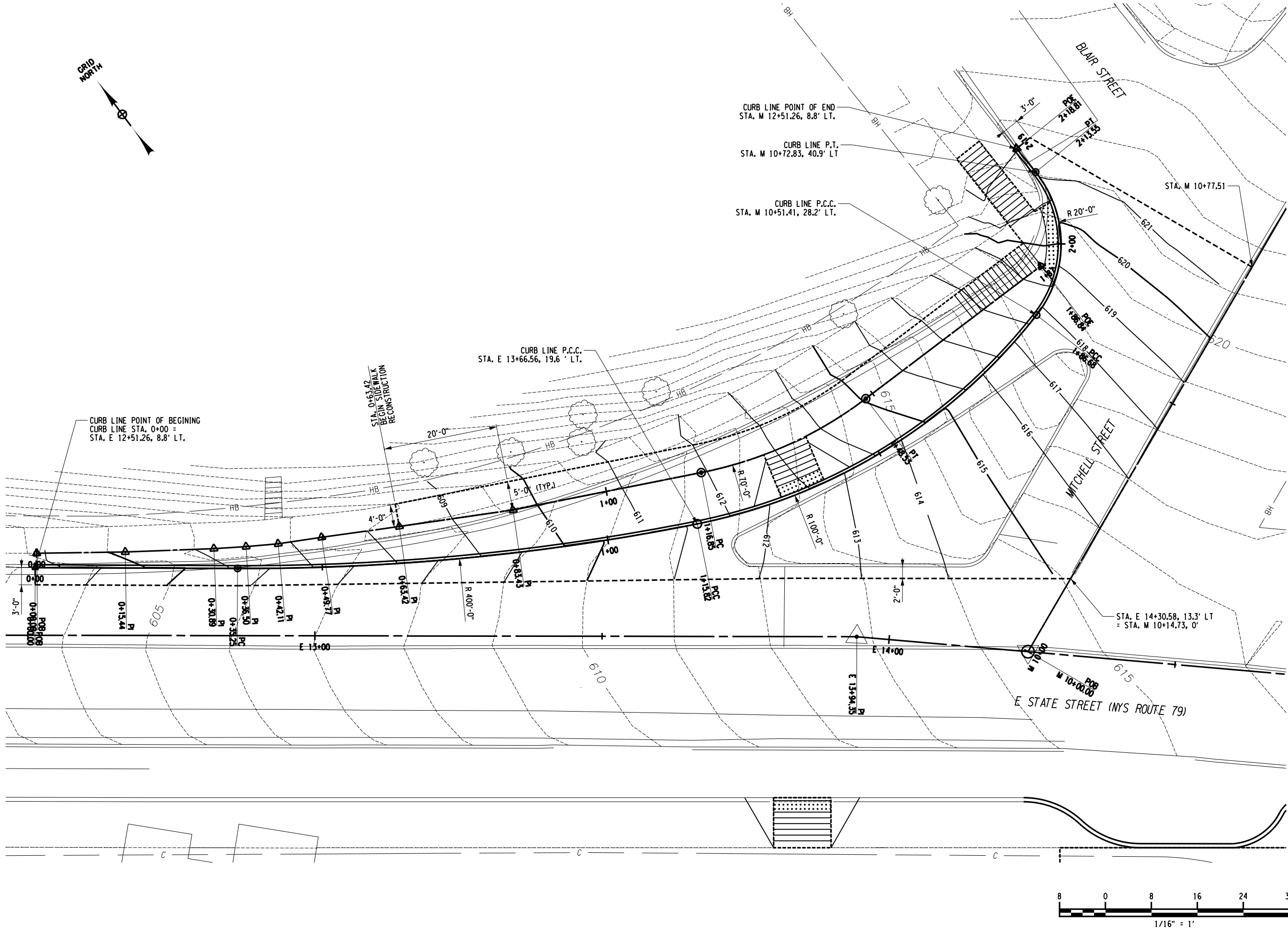
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SHEET NUMBER 12 of 21

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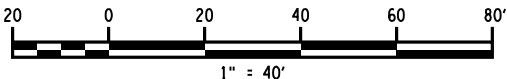
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MD-2

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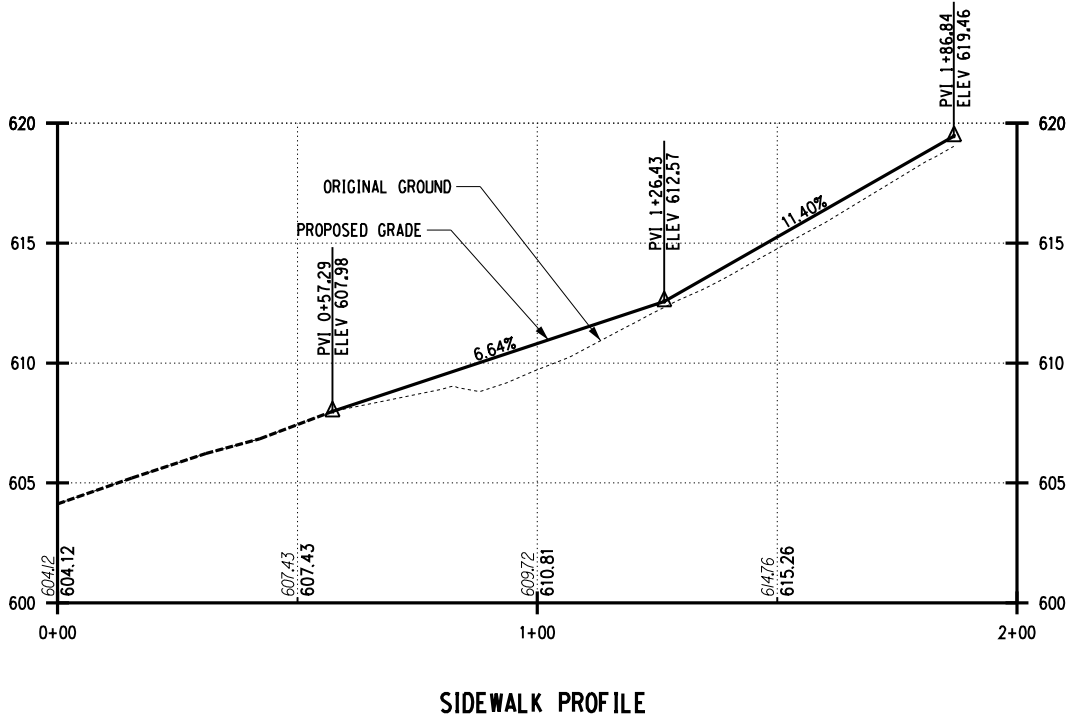
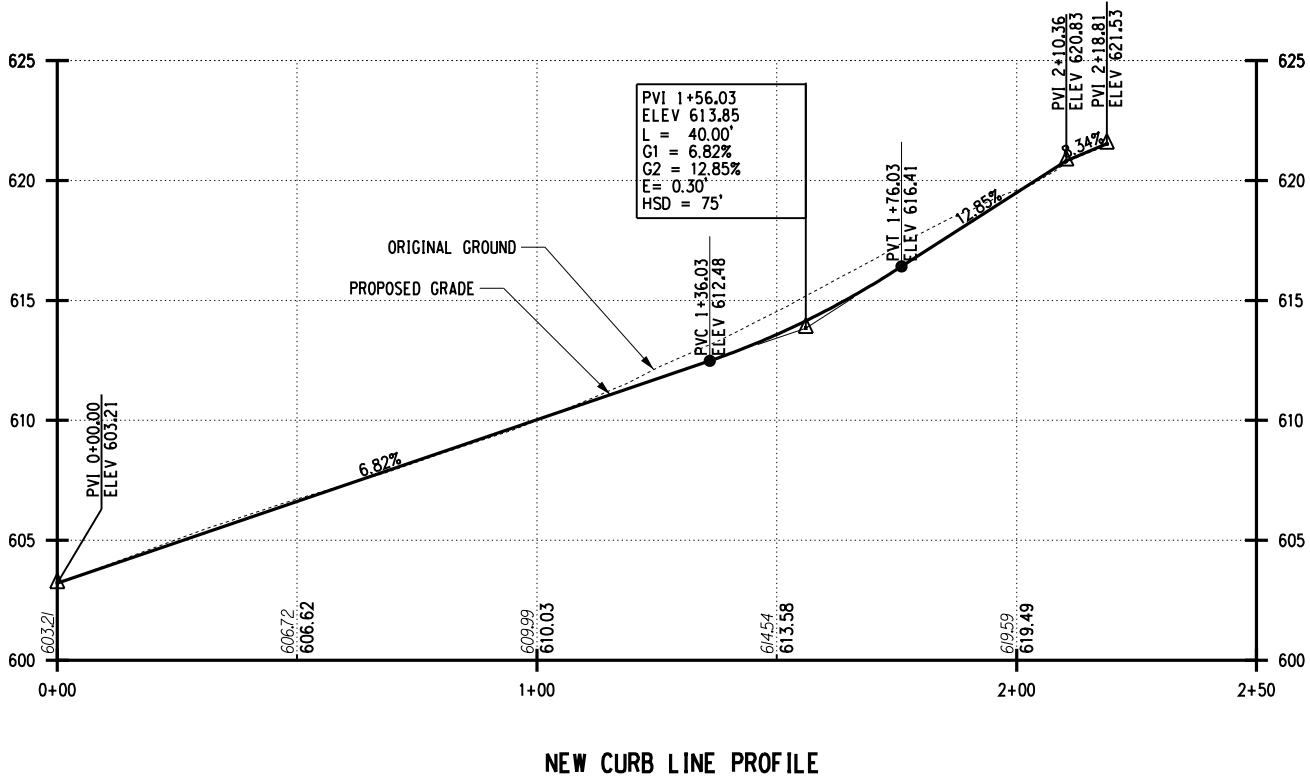
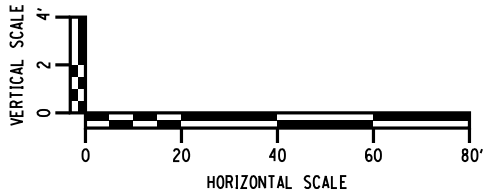
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TRAFFIC SIGNAL AND GENERAL NOTES:

1.

ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH NEW YORK STATE STANDARD SHEETS 680-01 THRU 680-16 INCLUSIVE, AS APPLICABLE, EXCEPT AS MODIFIED BELOW OR IN THE CONTRACT PLANS.
2.

WHERE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) SPECIFICATION EQUIPMENT IS TO BE INSTALLED, SUCH EQUIPMENT SHALL MEET ALL REQUIREMENTS OF N.E.M.A. SPECIFICATION TS2-2003 AS AMENDED.
3.

WORK ZONE TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 619 - WORK ZONE TRAFFIC CONTROL - OF THE NYSDOT STANDARD SPECIFICATIONS, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY PROVISIONS CONTAINED IN THE PLANS. THE CONTRACTOR SHALL INSTALL SIGNS ON ALL LEGS OF AN INTERSECTION PRIOR TO WORKING AT THAT INTERSECTION.
4.

ALL SIGNAL IMPROVEMENTS SHOWN ON THE PLANS, INCLUDING LANE DESIGNATION SIGNS, TURNING LANES, CHANNELIZATION, PAVEMENT MARKINGS, ETC., SHALL BE IN PLACE BEFORE THE NEW SIGNAL SYSTEM IS PLACED INTO OPERATION. THE CONTRACTOR SHALL WORK WITH THE E.I.C. AND THE CITY ENGINEER TO COORDINATE THESE OPERATIONS.
5.

IF, IT IS DISCOVERED THAT THE MINIMUM CLEARANCES FROM PRIMARY AND/OR SECONDARY POWER CONDUCTORS AS REQUIRED BY SECTION 23 OF THE NATIONAL ELECTRICAL SAFETY CODE (ANSI STANDARD C2-1997) AND LOCAL UTILITY CODES CANNOT BE ACHIEVED, THE UTILITY COMPANY OWNING SUCH CONDUCTORS SHALL BE NOTIFIED IN WRITING OF THE PROBLEM. NO FURTHER WORK SHALL BE DONE UNTIL SAID POWER LINES HAVE BEEN RELOCATED TO PROVIDE THE PROPER CLEARANCES.
6.

WHERE ONE CONDUIT IS TOO SMALL TO PERMIT THE PASSAGE OF THE REQUIRED SIGNAL WIRING, TWO OR MORE CONDUITS SHALL BE USED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE NUMBER OF CONDUITS NEEDED.
7.

INDIVIDUAL LENGTHS OF GALVANIZED STEEL CONDUIT SHALL BE CONNECTED TOGETHER WITH THREADED GALVANIZED STEEL COUPLINGS; SLIP FIT TYPE COUPLINGS SHOULD ONLY BE USED BETWEEN INDIVIDUAL BRIDGE SPANS OR BETWEEN A BRIDGE SPAN AND AN ABUTMENT TO ALLOW FOR THERMAL EXPANSION AND CONTRACTION OF THE INDIVIDUAL PARTS OF THE BRIDGE.
8.

THE WORDS "SHALL", "SHOULD", AND "MAY", AS USED IN THE CONTRACT DOCUMENTS, HAVE THE FOLLOWING MEANING:
SHALL - A MANDATORY CONDITION. IN THE DESIGN, APPLICATION OR LOCATION OF DEVICES REQUIREMENTS HAVING "SHALL" STIPULATIONS ARE MANDATORY. NO DISCRETION IN FOLLOWING THEM IS ALLOWED.

SHOULD - AN ADVISORY CONDITION. WHERE "SHOULD" IS USED IN RELATION TO A PROVISION, THAT PROVISION IS RECOMMENDED, AND NORMALLY IS TO BE FOLLOWED, BUT IS NOT MANDATORY. DEVIATION FROM SUCH PROVISIONS IS PERMISSIBLE IF, AND TO THE EXTENT, THERE IS JUSTIFIABLE CAUSE TO DO SO.

MAY - A PERMISSIVE CONDITION. NO REQUIREMENT FOR DESIGN OR APPLICATION IS INTENDED.
9.

ALL SIGNALS IN THIS CONTRACT SHALL BE A MINIMUM OF 16.5 FEET ABOVE THE HIGH POINT OF THE ROADWAY, WITH ALL RED INDICATIONS LEVEL ACROSS THE INTERSECTION. NO EXCEPTIONS SHALL BE MADE FOR SIGNALS MOUNTED BELOW 16.5 FEET.
10.

EACH AND EVERY CABLE ENTERING THE CONTROLLER CABINET AND PULLBOXES SHALL BE IDENTIFIED BY FUNCTION AND PHASE STAMPED ON NYSDOT APPROVED TAGS. THE TAGS SHALL BE ATTACHED TO THE CABLES WITH A STAINLESS STEEL WIRE, PLASTIC, OR NYLON LINE.
11.

THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER PRIOR TO BEGINNING WORK AT ANY SIGNAL, AND AGAIN TWO WEEKS BEFORE ATTEMPTING TO ENERGIZE A SIGNAL TO SCHEDULE A TURN ON DATE.
12.

ALL POLYCARBONATE SIGNAL HEADS WITH THREE OR MORE SECTIONS REQUIRE A REINFORCEMENT PLATE UNLESS CONNECTED TO A FIXED OBJECT (POLE OR MAST ARM) BY A BRACKET WITH TWO SEPARATE CONNECTION POINTS (TOP AND BOTTOM).
13.

THE SPLICE BETWEEN THE LOOP WIRES AND THE SHIELDED LEAD-IN CABLE SHALL BE SOLDERED AND NOT CRIMPED.
14.

PULLBOXES SHALL HAVE A TWO FOOT MINIMUM DRAINAGE BED OF NO. 2 CRUSHED STONE OR GRAVEL PLACED BELOW THE PULLBOX, AOE. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 680.510501 - "PULLBOX, RECTANGULAR 26"x18" REINFORCED CONCRETE."
15.

ON STANDARD SHEET NO 680-04, ALL PULLBOXES SHALL BE SET TO 1/2 INCH BELOW GRADE WITH ALL THE SURROUNDING SURFACES, EXCEPT SIDEWALKS, WHERE THEY SHALL BE FLUSH.
16.

ALL VEHICLE DETECTOR LOOPS SHALL HAVE THREE (3) TURNS OF WIRE PER LOOP.
17.

ON STANDARD SHEET NO 680-14, THE DISTANCE BETWEEN LOOP WIRE LEAD-INS SHALL BE INCREASED FROM 6" (TYP.) TO 2' (TYP.).
18.

WHERE NEW PAVEMENT IS TO BE PLACED, VEHICLE DETECTOR LOOPS SHALL BE INSTALLED IN THE BINDER COURSE PRIOR TO THE PLACEMENT OF THE TOP COURSE. THIS WORK SHALL BE COORDINATED WITH ANY EXISTING OR SCHEDULED PAVEMENT WORK IN THE AREA.
19.

ALL LOOPS SHALL BE INSTALLED IN THE CENTER OF THEIR RESPECTIVE LANES AS PER STANDARD SHEET NO 680-14. CUT LOOPS SQUARE AND TAKE TAILS DIRECTLY TO THE CURB.
20.

WHERE CONDUIT IS TO BE PLACED UNDER THE ROADWAY, THE CONTRACTOR SHALL USE A 3" DIAMETER CONDUIT.
21.

ALL SIGNAL CONDUITS SHALL BE BONDED WITH A #6 BARE STRANDED COPPER GROUND WIRE.
22.

A STAINLESS STEEL BOLT, NUT, AND LOCK WASHER SHALL BE INSTALLED A MINIMUM OF 2 INCHES FROM THE BOTTOM OF THE OVERHEAD MOUNTED SIGN TUBE. THE COST OF FURNISHING AND INSTALLING THIS EQUIPMENT SHALL BE INCLUDED IN THE PRICE FOR ITEM 680.8207, OVERHEAD SIGN ASSEMBLY.
23.

OVERHEAD LANE SIGNS SHALL BE CENTERED OVER THEIR RESPECTIVE LANES.
24.

SIGN NUMBERS SHOWN REFER TO THE NATIONAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND 17 NYCRR CHAPTER V (NEW YORK SUPPLEMENT).
25.

ALL OVERHEAD SIGNAL RELATED SIGNS IN THIS CONTRACT SHALL BE A MINIMUM OF 16.5 FEET ABOVE THE HIGH POINT OF THE ROADWAY, WITH THE BOTTOM OF THE SIGN EVEN WITH THE BOTTOM OF THE SIGNAL HEAD.
26.

THE DRAIN GROUND WIRE IN THE SHIELDED LEAD-IN CABLE SHALL NOT BE GROUNDED AT THE CONTROLLER OR AT ANY OTHER LOCATION.
27.

NO PROPOSAL WHICH MODIFIES THE APPROVED DESIGN PLAN SUGGESTED BY EITHER THE CONTRACTOR, OR CONSTRUCTION PERSONNEL SHALL BE MADE IN THE FIELD WITHOUT FIRST CONSULTING WITH THE CITY ENGINEER. THESE CHANGES INCLUDE, BUT ARE NOT LIMITED TO, 90 DEGREE BENDS IN THE CONDUITS.
28.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THERE MAY BE OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF THE WORK FOR THIS CONTRACT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE WORK ON THIS CONTRACT WITH THAT OF THE OTHERS SO THERE IS NO CONFLICT.
29.

THE APPROXIMATE LOCATION OF UNDERGROUND UTILITIES MAY BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE TRUE LOCATION BEFORE COMMENCING WORK. BEFORE ANY PIPE IS PLACED, THE CONTRACTOR SHALL UNCOVER ALL UTILITIES AT PIPE CROSSINGS TO ENABLE THE ENGINEER TO VERIFY THE PROPOSED PIPE WITH GRADES SHOWN ON THE PLANS IS NOT OBSTRUCTED BY EXISTING UTILITIES.
30.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL UTILITY WORK WITH THE RESPECTIVE OWNERS DURING CONSTRUCTION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.
31.

ALL SIGNAL EQUIPMENT SHALL BE PLACED IN A LOCATION THAT COMPLIES WITH THE NYS HIGH VOLTAGE PROXIMITY ACT. THIS INCLUDES, BUT IS NOT LIMITED TO, KEEPING ALL SIGNAL EQUIPMENT A MINIMUM OF 10 FEET FROM PRIMARY LINES, AND 2 FEET FROM SECONDARY AND ALL OTHER LINES.
32.

CONTRACTOR IS TO CONTACT DIG SAFELY NEW YORK AT 811 FOR MARK OUT OF ALL UNDERGROUND SIGNAL CONDUIT AND LOOP WIRE PRIOR TO ANY DIGGING. ANY BROKEN SIGNAL WIRE CAN NOT BE SPLICED. A NEW RUN OF WIRE FROM THE POLE TO THE FURTHEST END MUST BE REPLACED.
33.

UNDERGROUND UTILITY LOCATIONS ARE NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES, WHETHER FUNCTIONAL OR ABANDONED, WITHIN THE PROJECT AREA ARE SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THEIR WORK. CONTRACTOR SHALL NOTIFY DIG SAFELY NEW YORK AT 811 IN ACCORDANCE WITH 16 NYCRR PART 753.

34.

CONTRACTOR IS TO CONTACT DIG SAFELY NEW YORK AT 811 FOR MARK OUT OF ALL UNDERGROUND SIGNAL CONDUIT AND LOOP WIRE PRIOR TO ANY DIGGING. ANY BROKEN SIGNAL WIRE CAN NOT BE SPLICED. A NEW RUN OF WIRE FROM THE POLE TO THE FURTHEST END MUST BE REPLACED.
35.

UNDER ITEM 680.8207, THE CONTRACTOR SHALL PROVIDE A RIGID MOUNT OVERHEAD SIGN ASSEMBLY AS SHOWN ON DWG. TSD-2.
36.

THE CONTACTOR SHALL PROVIDE THE LOCAL POLICE THE NAME, ADDRESS, AND TELEPHONE NUMBER OF A PERSON OR PERSONS AUTHORIZED OUTSIDE THE NORMAL CONTRACT WORKING HOURS TO SECURE AND USE LABOR, MATERIALS, AND EQUIPMENT FOR EMERGENCY REPAIRS TO MAKE SAFE THE ENTIRE AREA OF THE CONTRACT. DUPLICATE COPIES OF SUCH NOTICES SHALL BE FILED WITH THE EIC, TRAFFIC SIGNAL MAINTENANCE, AND THE CITY ENGINEER.
37.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION OPERATIONS AND SIGNING FOR THIS CONTRACT WITH THE OPERATIONS AND SIGNING OF OTHER WORK WITHIN THE CONTRACT LIMITS.
38.

AT INTERSECTIONS WHERE SIGNAL POLES OR PEDESTRIAN POLES ARE BEING PLACED IN SIDEWALKS, THE TOP OF THE FOUNDATION SHALL BE FLUSH WITH THE TOP OF THE SIDEWALK.
39.

MAST ARM TRAFFIC SIGNAL POLES SHALL HAVE A TAPERED MAST ARM.
40.

ITEM 680.81990008 - TRAFFIC SIGNAL BACK PLATES WITH YELLOW REFLECTIVE TAPE SHALL BE MODIFIED TO ONLY ALLOW POLYCARBONATE OR ABS PLASTIC BACK PLATES. THE BACK PLATES SHALL ALSO HAVE A DULL BLACK FINISH, BE NON-LOUVERED, AND SHALL PROVIDE AN 8 INCH BORDER AROUND THE ENTIRE SIGNAL HEAD. THE YELLOW REFLECTIVE TAPE SHALL BORDER THE BACK PLATE AND HAVE A WIDTH OF 3 INCHES.
41.

ALL COUPLINGS AND BUSHINGS SHALL BE MECHANICALLY THREADED. COMPRESSION OR SLIP TYPE COUPLINGS OR BUSHINGS SHALL NOT BE ALLOWED.
42.

ALL PEDESTRIAN PUSH BUTTONS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. THE COST TO BE INCLUDED IN THE BID PRICES FOR ITEMS 680.8225 - PEDESTRIAN PUSH BUTTON AND SIGN WITHOUT POST AND 680.8226 - PEDESTRIAN PUSH BUTTON AND SIGN WITH POST.
43.

ALL PEDESTRIAN SIGNS SHALL BE 9 INCHES X 15 INCHES (R10-3E) REGARDLESS OF THE SIZE OF POLE THEY ARE INSTALLED ON. THE COST OF FURNISHING AND INSTALLING THESE SIGNS SHALL BE INCLUDED IN THE BID PRICE FOR ITEMS 680.8225 - PEDESTRIAN PUSH BUTTON AND SIGN WITHOUT POST AND 680.8226 - PEDESTRIAN PUSH BUTTON AND SIGN WITH POST.
44.

ITEM NUMBERS 680.95010415 SERVICE CABLE, SINGLE CONDUCTOR, NO. 04 AWG, AND 680.95010615 SERVICE CABLE, SINGLE CONDUCTOR, NO. 06 AWG, SHALL BE FURNISHED WITH HALF WHITE AND HALF BLACK COLOR CODED CABLE.
45.

POWER SERVICE TO SIGNALS INSTALLED WILL BE IN COMPLIANCE WITH REQUIREMENTS OF THE NYS BOARD OF FIRE UNDERWRITERS.
46.

THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY THAT WILL BE SUPPLYING POWER TO THE TRAFFIC SIGNAL EQUIPMENT AT EACH INTERSECTION WITHIN 30 DAYS OF THE CONTRACT AWARD. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS OF THE NEW YORK BOARD OF FIRE UNDERWRITERS IN THEIR SIGNAL INSTALLATIONS AND EACH INSTALLATION MUST PASS A FIRE UNDERWRITERS INSPECTION BEFORE SERVICE CONNECTION WILL BE MADE BY THE UTILITY COMPANY. THE COST OF THE INSPECTION SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS TRAFFIC SIGNAL ITEMS.
47.

UNDER NO CONDITION SHALL THE CONTRACTOR MAKE THE SERVICE CONNECTION; ALL SERVICE CONNECTIONS SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANY. SERVICE BETWEEN THE METER AND CABINET SHALL BE MADE BY AN ELECTRICIAN CERTIFIED BY THE CITY OF ITHACA.
48.

WHERE UNFORESEEN UNDERGROUND UTILITIES MAKE IT NECESSARY TO RELOCATE SIGNAL POLES 5 FEET OR MORE FROM THEIR ORIGINAL LOCATIONS AS SHOWN ON THE CONTRACT PLANS, THE CONTRACTOR SHALL NOTIFY THE E.I.C. AND SEEK ALTERNATE LOCATIONS FROM THE DESIGNER. SPAN WIRE OR MAST ARM POLE CAPACITIES AND ARM LENGTHS WILL ALSO REQUIRE VERIFICATION FROM THE DESIGNER.
49.

FOR NEW SIGNAL POLE INSTALLATIONS, THE CONCRETE POLE FOUNDATION SHALL CURE FOR A MINIMUM OF 7 DAYS BEFORE THE SIGNAL POLE IS ERECTED, AND FOR A MINIMUM OF 14 DAYS BEFORE THE SPAN WIRE AND SIGNAL HEADS ARE INSTALLED. AS SOON AS THE POLE BASES ARE CAST, THE ENGINEER-IN-CHARGE SHALL CONTACT THE DESIGNER, SO THAT THEY MAY PROVIDE THE CONTRACTOR WITH THE SPAN WIRE ATTACHMENT HEIGHTS.
50.

ALL ANCHOR BASES FOR TRAFFIC SIGNAL SPAN WIRE, MAST ARM, AND PEDESTRIAN POLES SHALL BE EQUIPPED WITH ANCHOR BOLT COVERS.
51.

THE MAST ARM FOOTING SHALL BE A SQUARE TYPE K8 OR SQUARE TYPE L8 FOOTING AS DETERMINED BY THE BASE PLATE BOLT CIRCLE OF THE POLES, AND THE PEDESTRIAN SIGNAL POLES SHALL BE TYPE J-2 FOOTINGS. BOTH TYPES OF FOOTINGS SHALL BE CONSTRUCTED AS PER STANDARD SHEET 680-01.
52.

AT LOCATIONS WHERE A 3 COLOR TRAFFIC SIGNAL IS TO BE INSTALLED AND NO 3 COLOR SIGNAL EXISTS, THE SIGNAL SHALL BE PLACED IN FLASHING OPERATION FOR ONE WEEK PRIOR TO 3 COLOR OPERATION. THIS WEEK SHALL NOT BE COUNTED TOWARD THE DAYS NECESSARY TO MEET THE FUNCTIONAL TEST REQUIREMENTS (SECTION 680-3.32) NOR TOWARD THE 30 DAYS NECESSARY FOR SIGNAL ACCEPTANCE ON NON-STATE MICROCOMPUTER INSTALLATIONS.
53.

AT LOCATIONS WHERE A 3-COLOR TRAFFIC SIGNAL IS TO BE INSTALLED AND NO 3-COLOR SIGNAL EXISTS, NEW SIGNAL AHEAD SIGNS (M.U.T.C.D. - W3-3) SHALL BE INSTALLED ON ALL APPROACHES; TYPE "B" FLASHING YELLOW HIGH INTENSITY WARNING LIGHTS AND THREE RED FLAGS SHALL BE INSTALLED ON THESE SIGNS FOR THE FIRST 30 DAYS THAT THE SIGNAL OPERATES AS A 3-COLOR SIGNAL. THE COST OF THESE FLAGS AND HIGH INTENSITY WARNING LIGHTS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - WORK ZONE TRAFFIC CONTROL.
54.

ALL NEW AND EXISTING SIGNAL SYSTEMS THAT ARE TO BE UPDATED WITH NEW SIGNAL CONTROLLERS SHALL BE EQUIPPED WITH A RAINLIGHT DISCONNECT BOX (ITEM 680.94000015) WHICH SHALL BE INSTALLED BETWEEN THE METER SOCKET AND THE CONTROLLER. THE SERVICE CABLE SHALL BE RUN FROM THE CHASE NIPPLE IN THE BACK OF THE DISCONNECT BOX INTO THE SIGNAL POLE AND THEN THROUGH THE LARGE L.B. CONDULET INTO THE CONTROLLER CABINET.
55.

ALL POLE BASES SHALL HAVE ONE UNUSED CONDUIT IN THE BASE, WHICH WILL BE RUN TO THE NEAREST PULLBOX.
56.

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.
57.

WHEREVER 5-SECTION CLUSTERS ARE REQUIRED ON 12" (300 mm) SIGNAL ASSEMBLIES, THE 5-SECTION CLUSTERS SHALL BE ASSEMBLED USING 2-WAY UPPER AND LOWER TRI-STUD ARM ASSEMBLIES, A TRI-STUD HARDWARE KIT, AND EITHER A) A 1 1/2 NPS TO TRI-STUD ADAPTER FOR A ONE WAY TRAFFIC SIGNAL BRACKET OR B.) A TRI-STUD TEE WITH THE TRI-STUD LOCATED ON THE STEM OF THE TEE FOR A 5-SECTION CLUSTER THAT IS PART OF A MULTI-WAY 12" (300 mm) SIGNAL BRACKET ASSEMBLY. THE PRICE BID FOR 1-WAY OR MULTI-WAY TRAFFIC SIGNAL HEAD BRACKET ASSEMBLIES SHALL INCLUDE THE COST OF THE TRI-STUD HARDWARE.
58.

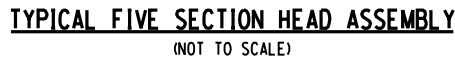
UNDER ITEM 680.80324601 THE CONTRACTOR SHALL PROVIDE AND INSTALL THE CONTROLLER (PEEK ATC 1000), CABINET, SWITCHPACKS, CONFLICT AND CURRENT MONITORS.
59.

ITEMS 680.810601 AND 680.813106 TO BE SUPPLIED AS DARK GREEN. ITEMS 680.622242, 680.622248, 680.6708 AND 680.6712 SHALL BE SUPPLIED WITH A BLACK FINISH COLOR.
60.

ITEMS 680.810101, 680.810103, AND 680.810105 SHALL INCLUDE BICYCLE SYMBOL LENS OR LENS COVERS FOR THE PURPOSE OF DISPLAYING RED, YELLOW, AND GREEN INDICATIONS IN THE BIKE SIGNAL (FACE 8).

NO.		REVISION		DATE		BY	
City of Ithaca Office of the City Engineer 108 East Green Street Ithaca, NY 14850							
FINAL PLAN SEE COVER FOR STAMP							
Creighton Manning CREDITON MANNING ENGINEERING, LLP 2 WINNERS CIRCLE • ALBANY • NEW YORK • 12245 P: (518) 446-0396 F: (518) 446-0397 WWW.CMELLP.COM							
EAST STATE STREET / MITCHELL STREET TRAFFIC SIGNAL IMPROVEMENTS CITY OF ITHACA, NEW YORK		TRAFFIC SIGNAL NOTES		DATE: JUNE 2013		CME No.: 112-203	
TSD-1		SHEET NUMBER		16		of 21	

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USER = dbor-jos



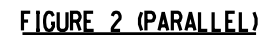
1. THE FOUNDATION FOR THE PEDESTRIAN SIGNAL SHALL BE 18" WIDE, AND MAY BE UNREINFORCED, IF A TRANSFORMER BASE IS NOT USED.
2. PUSH BUTTON SHALL BE MOUNTED ON A POST OR SIGNAL POLE BETWEEN 3'-0" AND 3'-6" ABOVE AN ACCESSIBLE SURFACE.
3. PUSH BUTTON SHALL FACE AN ACCESSIBLE APPROACH OR BE WITHIN 10" OF AN ADJACENT ACCESSIBLE SURFACE. THE ACCESSIBLE SURFACE SHALL BE A LEVEL ALL-WEATHER SURFACE.
4. BREAKAWAY TRANSFORMER BASES SHALL NOT BE USED.
5. ADDITIONAL DETAILS PROVIDED ON NYS DOT STANDARD SHEET 680-10.



1. LOOPS IN EACH LANE TO BE WIRED IN PARALLEL AT PULLBOX.
2. IN NEW CONSTRUCTION OF ASPHALT PAVEMENTS, THE LOOP SHOULD BE PLACED BELOW THE TOP COURSE, PREFERABLY IN THE BINDER.
3. EIC SHALL RECORD LOCATIONS OF LOOPS AND LEAD-INS AND SUBMIT TO CITY ENGINEER FOR MAINTENANCE RECORDS.
4. THIS IS ONLY A TYPICAL DETAIL AND THE LOOP LAYOUTS AND DIMENSIONS MAY VARY BASED ON INTERSECTION LOCATION. CONTRACTOR SHALL FIRST VERIFY LOOP LOCATIONS AND DIMENSIONS ON EACH INTERSECTION PLAN SHEET PRIOR TO BEGINNING ANY LOOP INSTALLATION WORK.
5. A RADIUS LOOP MAY NOT BE INSTALLED AT EVERY INTERSECTION. CONTRACTOR SHALL CHECK INTERSECTION PLAN SHEET PRIOR TO INSTALLING ANY RADIUS LOOP.



THE ROAD LOOP IS CONNECTED THROUGH THE ENCAPSULATED LOOP LEAD-IN WIRES (TWISTED PAIR) TO THE MAIN SHIELDED LEAD-IN CABLE AT THE CURBSIDE JUNCTION BOX WHICH IN TURN RETURNS TO THE TERMINAL BLOCK IN THE MAIN CABINET.



THE TOTAL COMBINED LENGTH OF TWISTED PAIRS IS 100 FEET MAX.

WHEN TWO ROAD LOOPS ARE LOCATED ADJACENT TO EACH OTHER IN THE SAME LANE, THE ENCAPSULATED LOOP AND LOOP LEAD-IN WIRES (TWISTED PAIR) ARE CONNECTED IN PARALLEL WITHIN THE CURBSIDE JUNCTION BOX AND THEN PROCEED THROUGH THE SHIELDED LEAD-IN CABLE WHICH IN TURN GOES TO THE TERMINAL BLOCK IN THE MAIN CABINET.

- A - TWISTED PAIR LEAD-IN
- B - CURBSIDE JUNCTION BOX
- C - SHIELDED LEAD-IN CABLE
- D - MAIN CABINET & MAIN CABINET PULLBOX
- E - FLEXIBLE LIQUID-TIGHT CONDUIT

NOT TO SCALE

City of Ithaca
Office of the City Engineer
108 East Green Street
Ithaca, NY 14850

FINAL PLAN
SEE COVER
FOR STAMP



DRAWN BY: K.H.D.

ENDED: A.M.

SALE: AS NOTED

CME No.:	112-203
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DATE: JUNE 2011

EAST STATE STREET / MITCHELL STREET
TRAFFIC SIGNAL IMPROVEMENTS
CITY OF ITHACA, NEW YORK

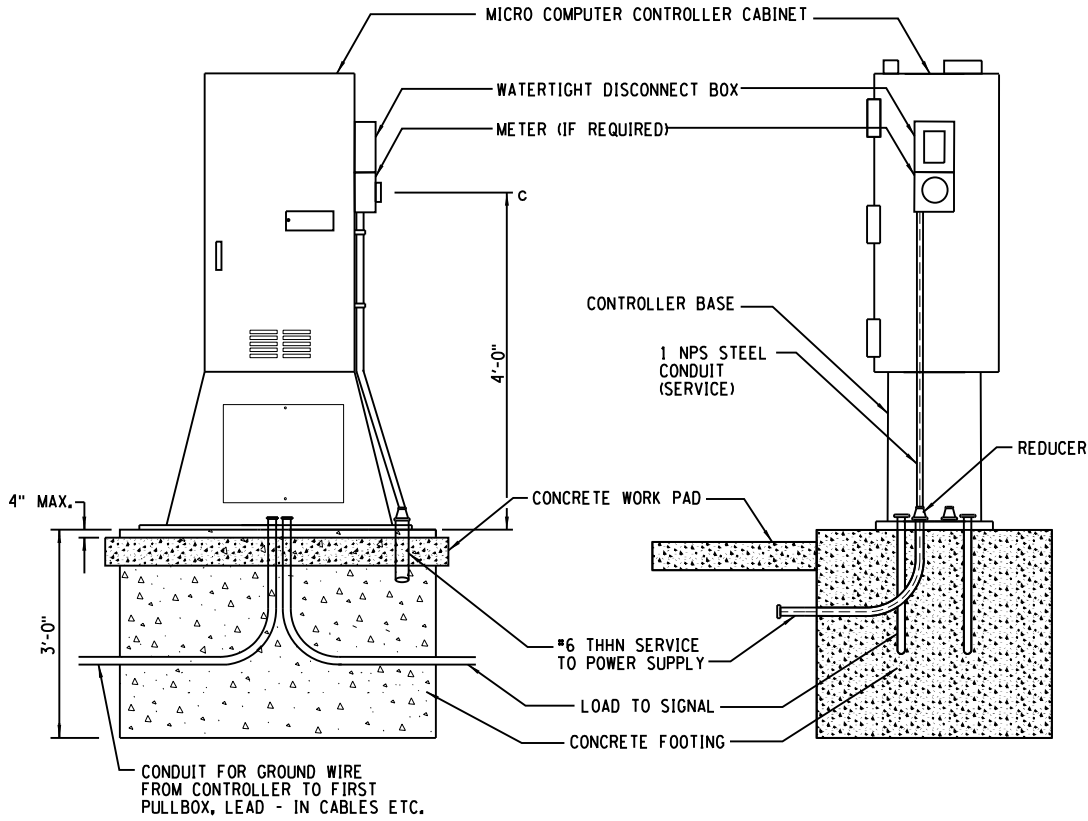
TRAFFIC SIGNAL DETAILS

TSD-1

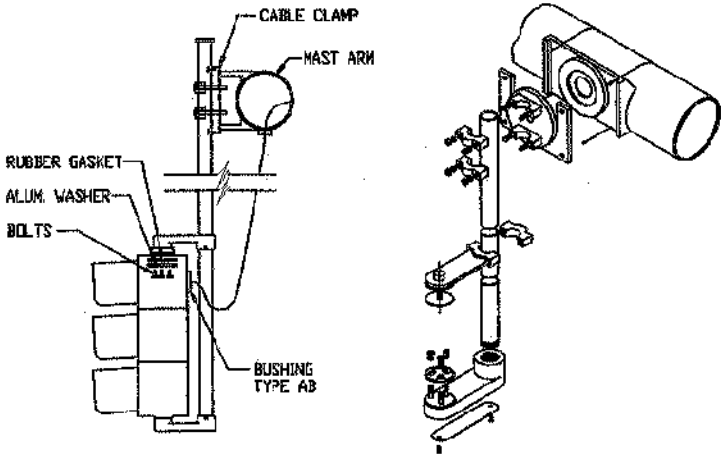
SHEET NUMBER 17 of 21

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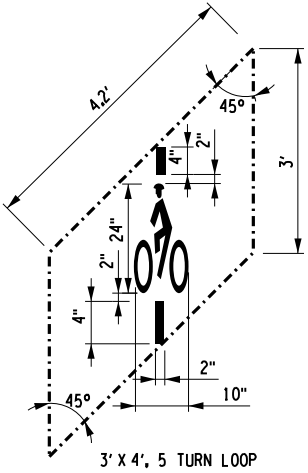
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



UNDERGROUND SERVICE - GROUND MOUNTED CONTROLLER CABINET
(NOT TO SCALE)



RIGID SIGNAL HEAD MOUNTING
(NOT TO SCALE)



S LOOP & BICYCLE SYMBOL DETAIL
(NOT TO SCALE)

EAST STATE STREET / MITCHELL STREET
TRAFFIC SIGNAL IMPROVEMENTS
CITY OF ITHACA, NEW YORK

TRAFFIC SIGNAL DETAILS



UNAUTHORIZED ALTERATION OR ADDITION
APPLICABLE STATE AND/OR LOCAL LAWS

FINAL PLAN
SEE COVER
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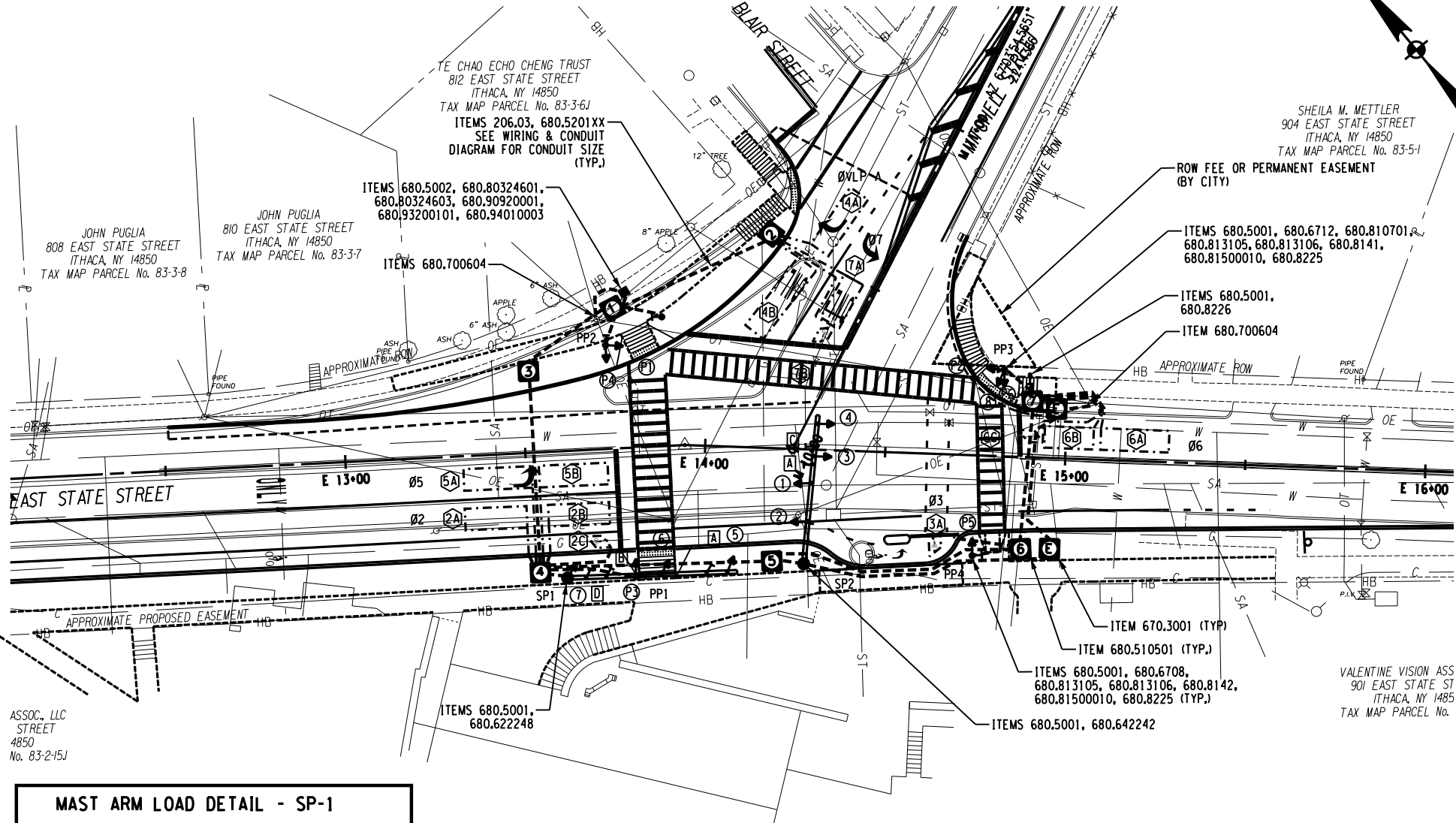
City of Ithaca
Office of the City Engineer
108 East Green Street
Ithaca, NY 14850

NO.	REVISION	DATE	BY

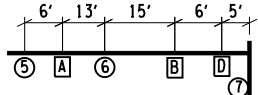
TSD-2

SHEET NUMBER 18 of 21

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



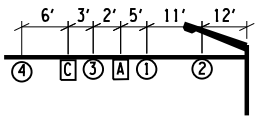
MAST ARM LOAD DETAIL - SP-1



MAST ARM MOUNTING HEIGHT = 22'
MAST ARM LENGTH = 48'

- LOADS ⑤ ⑦ = 1-WAY BRACKETS WITH (3) 12" SECTIONS
LOADS ⑥ = 1-WAY BRACKET WITH (5) 12" SECTIONS
LOADS A B = 1-WAY BRACKET WITH 30" X 36" SIGN
LOADS D = 1-WAY BRACKET WITH 30"x36" BLANKOUT SIGN

MAST ARM LOAD DETAIL - SP-2 WITH LUMINAIRE



MAST ARM MOUNTING HEIGHT = 22'
MAST ARM LENGTH = 42'

- LOADS ④ ③ ② = 1-WAY BRACKETS WITH (3) 12" SECTIONS
LOADS ① = 1-WAY BRACKET WITH (5) 12" SECTIONS
LOADS C A = 1-WAY BRACKET WITH 30" X 36" SIGN

MAST ARM LAYOUTS NOT TO SCALE

MAST ARM NOTE:

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY, IN CONJUNCTION WITH THE SUPPLIER/MANUFACTURER, TO DETERMINE THE APPROPRIATE MAST ARM POLE STRENGTH FOR THE LOADING AS SHOWN AND VERIFY THE FOOTING MOMENT. THE FOOTING DATA SHALL BE INCLUDED ON THE SHOP DRAWINGS TO BE APPROVED BY THE CITY OF ITHACA (SEE LOAD DETAIL).

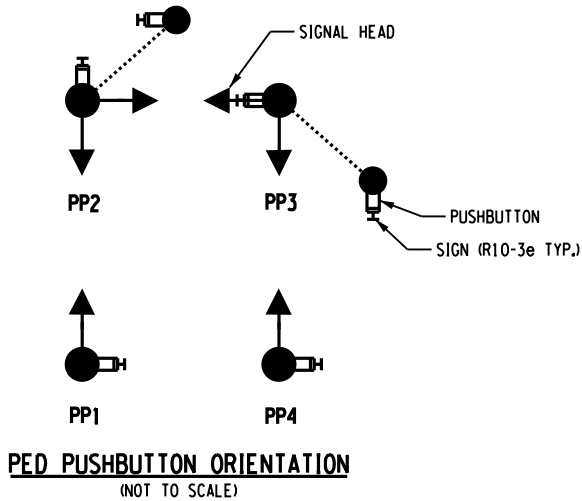


TABLE OF CLEARANCES

TO	FROM				
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	R	G	G	R	R
G	R	G	G	R	-
	R	G	G	R	-
R	R	Y	Y	R	-
	R	R	R	R	-
R	R	Y	-	-	R
	R	R	-	-	R

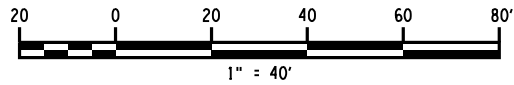


TABLE OF OPERATIONS

PHASE	FACES											
	1	2	3	4	5	6	7	8	P1	P2	P3	P4
02	G	G	R	R	R	R	R	R	BLANK	BLANK	BLANK	BLANK
05	G	R	R	R	R	R	R	R	BLANK	BLANK	BLANK	BLANK
06	R	R	G	G	R	R	R	R	BLANK	BLANK	BLANK	BLANK
07	R	R	R	R	G	G	G	R	BLANK	BLANK	BLANK	BLANK
03 BIKE	R	R	R	R	R	R	R	R	BLANK	BLANK	BLANK	BLANK
02 + 05	G	G	R	R	R	R	R	R	BLANK	BLANK	BLANK	BLANK
02 + 06	G	G	G	G	R	R	R	R	BLANK	BLANK	BLANK	BLANK
PED ONLY	R	R	R	R	R	R	R	R	NTOR	NTOR	NTOR	NTOR
FLASHING OPERATION	FY	FY	FY	FY	FR	FR	FR	FR	DARK	DARK	DARK	DARK
DISPLAY												
ALL LENSES SHALL BE 12" DIA. (300 MM)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)

* HEAD 8 SHALL PROVIDE BICYCLE IMAGE STENCIL. THERE WILL BE NO BACKPLATE FOR HEAD 8.

SIGNS TO BE INSTALLED

ITEM NO.	LOCATION NO.	TEXT	MUTCD NO.	SIZE	TYPE OF MOUNT	QUANTITY
680.8207	A	ONLY	R3-5L	30" x 36" 7.5 SF	O.H. TYPE G	2
680.8207	B	ONLY	R3-5R	30" x 36" 7.5 SF	O.H. TYPE G	1
680.8207	C	LEFT TURN YIELD ON GREEN	R10-12	30" x 36" 7.5 SF	O.H. TYPE G	1
680.84100110	D	NO TURN ON RED	R10-11	30" x 36" 7.5 SF	O.H. TYPE G	1

LEGEND

SYMBOL		DESCRIPTION
PROPOSED	EXISTING	
●	○	SIGNAL POLE
■	□	GROUND MOUNTED CONTROLLER
●	□	POLE MOUNTED CONTROLLER
—	—	SPAN WIRE ASSEMBLY
---	---	CONDUIT
①	②	PULLBOX (TRAFFIC SIGNALS & NUMBER)
→	→	TRAFFIC SIGNAL HEAD - 1 WAY
↔	↔	TRAFFIC SIGNAL HEAD - 2 WAY
↕	↕	TRAFFIC SIGNAL HEAD - 3 WAY
↕	↕	TRAFFIC SIGNAL HEAD - 4 WAY
③	③	SIGNAL FACE & NUMBER
□	□	INDUCTANCE LOOP
3A	3A	DETECTOR NUMBER (MICROPROCESSOR ONLY)
Ø	Ø	PHASE
⚡	⚡	UTILITY POLE
⚡	⚡	TRAFFIC SIGN

City of Ithaca
Office of the City Engineer
108 East Green Street
Ithaca, NY 14850

FINAL PLAN
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2 WINNERS CIRCLE - ALBANY - NEW YORK - 12205
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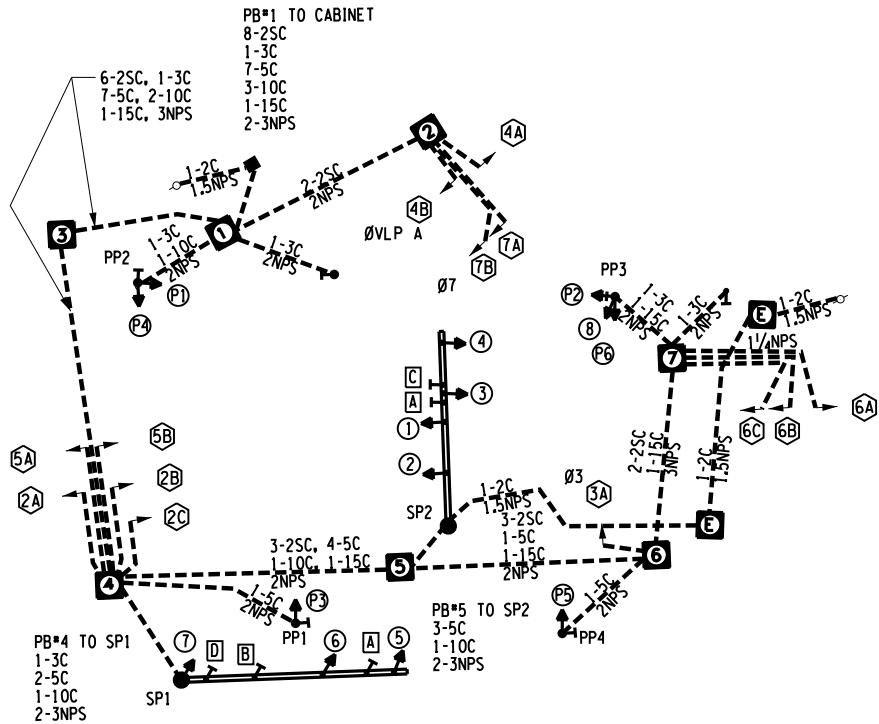
EAST STATE STREET / MITCHELL STREET
TRAFFIC SIGNAL IMPROVEMENTS
CITY OF ITHACA, NEW YORK

TRAFFIC SIGNAL PLAN

TSP-1A
SHEET NUMBER 19 of 21

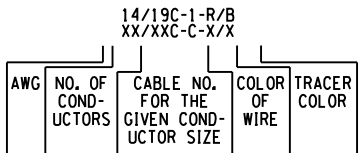
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DATE : 6/6/2013
USER : dbar.jes

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



LEGEND:

X-3C, ITEM 680.730314, SIGNAL CABLE, 3 CONDUCTOR
X-2SC, ITEM 680.71 SHIELDED LEAD-IN CABLE
X-5C, ITEM 680.730514, SIGNAL CABLE, 5 CONDUCTOR
X-10C, ITEM 680.731014, SIGNAL CABLE, 10 CONDUCTOR
X-15C, ITEM 680.731514, SIGNAL CABLE, 15 CONDUCTOR
X-1C, ITEM 680.95010615, SERVICE CABLE, 1 CONDUCTOR
X-2C, ITEM 680.95020615, SERVICE CABLE, 2 CONDUCTOR
1.5NPS, ITEM 680.520105, CONDUIT, METAL STEEL, ZINC COATED, 1.5 INCH
2NPS, ITEM 680.520106, CONDUIT, METAL STEEL, ZINC COATED, 2 INCH
3NPS, ITEM 680.520108, CONDUIT, METAL STEEL, ZINC COATED, 3 INCH
1/4NPS, ITEM 680.520204, CONDUIT, FLEXIBLE LIQUID TIGHT STEEL, 1/4 INCH



COLOR: R-RED, O-ORANGE, G-GREEN, BL-BLUE, W-WHITE, B-BLACK

OPERATIONS LEGEND

• = PHASE
R = CIRCULAR RED WITH STROBE LIGHT
Y/G = FIBEROPTIC DUAL INDICATION LEFT ARROW
Y/G = FIBEROPTIC DUAL INDICATION RIGHT ARROW

R = CIRCULAR RED
R = LEFT RED ARROW
R = RIGHT RED ARROW
FR = FLASHING RED
DW = HAND (DON'T WALK)
OVL = OVERLAP
Y = CIRCULAR YELLOW
Y = LEFT YELLOW ARROW
Y = RIGHT YELLOW ARROW
FY = FLASHING YELLOW
W = MAN (WALK)
DC = DOUBLE CLEARANCE
G = CIRCULAR GREEN
G = LEFT GREEN ARROW
G = RIGHT GREEN ARROW
VGA = VERTICAL GREEN ARROW
FDW = FLASHING HAND (DW)
PED = PEDESTRIAN

SIGNAL OPERATION SPECIFICATIONS TABLE OF INPUT WIRING

SIGNAL: E. STATE ST / MITCHELL ST				COUNTY: TOMPKINS
FUNCTION	DETECTOR NUMBER	TYPE	TERMINAL BOARD WIRING	REMARKS
Ø2	2a, 2b	SPLIT PRESENCE	1A, 1B	E. STATE ST EASTBOUND THRU
Ø2	2c	PRESENCE	2A, 2B	E. STATE ST EASTBOUND BIKE LANE
ØVLP A	4a, 4b	SPLIT PRESENCE	3A, 3B	MITCHELL ST SOUTHBOUND RIGHT
Ø5	5a, 5b	SPLIT PRESENCE	4A, 4B	E. STATE ST EASTBOUND LEFT
Ø6	6a, 6b	SPLIT PRESENCE	5A, 5B	E. STATE ST WESTBOUND THRU/RIGHT
Ø6	6c	PRESENCE	6A, 6B	E. STATE ST WESTBOUND BIKE
Ø7	7a, 7b	SPLIT PRESENCE	7A, 7B	MITCHELL ST SOUTHBOUND LEFT
Ø3	3a	PRESENCE	8A, 8B	E. STATE ST NORTHBOUND BIKE XING

SIGNAL OPERATION SPECIFICATIONS TABLE OF SWITCH PACKS

SIGNAL NUMBER: E. STATE ST AND MITCHELL ST					COUNTY: TOMPKINS	
SWITCH PACK	FUNCTION	FACE NUMBERS	TERMINAL WIRING BOARD		WIRE COLOR CODE	
			INDICATIONS	TERMINAL		
SP 1	Ø2	1,2	R Y G GROUND WIRE	SP 1R SP 1Y SP 1G GROUND BUS	14/10C-1-R 14/10C-1-O 14/10C-1-G 14/10C-1-W	14/5C-1-R 14/5C-1-O 14/5C-1-G 14/5C-1-W
SP 2	Ø5	1	* GROUND WIRE	SP 2R SP 2Y SP 2G GROUND BUS	14/10C-1-O/B 14/10C-1-G/B 14/10C-1-W/B	
SP 3	Ø6	3,4	R Y G GROUND WIRE	SP 3R SP 3Y SP 3G GROUND BUS	14/5C-2-R 14/5C-2-O 14/5C-2-G 14/5C-2-W	14/5C-3-R 14/5C-3-O 14/5C-3-G 14/5C-3-W
SP 4	Ø7	5,6	R Y G GROUND WIRE	SP 4R SP 4Y SP 4G GROUND BUS	14/5C-4-R 14/5C-4-O 14/5C-4-G 14/5C-4-W	14/10C-2-R 14/10C-2-O 14/10C-2-G 14/10C-2-W
SP 5	ØVLP A	6	* GROUND WIRE	SP 5R SP 5Y SP 5G GROUND BUS	14/10C-2-O/B 14/10C-2-G/B 14/10C-2-W/B	
SP 6	ØVLP A	7	R Y G GROUND WIRE	SP 6R SP 6Y SP 6G GROUND BUS	14/5C-5-R 14/5C-5-O 14/5C-5-G 14/5C-5-W	
SP 7	Ø3	8	R Y G GROUND WIRE	SP 7R SP 7Y SP 7G GROUND BUS	14/15C-1-R 14/15C-1-O 14/15C-1-G 14/15C-1-W	
SP 8	PED A Ø6	P1,P2	DW W GROUND WIRE	SP 8R SP 8Y SP 8G GROUND BUS	14/10C-3-R 14/10C-3-G 14/10C-3-W	14/15C-1-R/B 14/15C-1-G/B 14/15C-1-W/B
SP 9	PED B	P3,P4	DW W GROUND WIRE	SP 9R SP 9Y SP 9G GROUND BUS	14/5C-6-R 14/5C-6-G 14/5C-6-W	14/10C-3-R/B 14/10C-3-G/B 14/10C-3-W/B
SP 10	PED B	P5,P6	DW W GROUND WIRE	SP 10R SP 10Y SP 10G GROUND BUS	14/5C-7-R 14/5C-7-G 14/5C-7-W	14/15C-3-R/W 14/15C-3-G/W 14/15C-3-B/W
SP 11	PED B	Ø1	NTOR GROUND WIRE	SP 11R SP 11Y SP 11G GROUND BUS	14/3C-1-R 14/3C-1-W	

CUT CONFLICT MONITOR DIODES: 1-2, 1-3, 1-5, 1-6, 1-8, 2-5, 2-6, 3-8, 4-5, 4-6, 5-6, 7-9, 7-10, 7-11, 9-10, 9-11, 10-11

CUT CURRENT MONITOR DIODES: 2, 5, 8-10
CONFLICT MONITOR JUMPERS: SP8Y, SP9Y, SP10Y

TABLE OF SIGNAL POLES

NUMBER	ITEM	LENGTH	POLE	LOCATION	ELEVATION
SP1	680.622248	48 FT	MAST ARM	SEE TSP-1C	614.9
SP2	680.642242	42 FT	MAST ARM W/ LIGHTING ARM	SEE TSP-1C	614.9
PP1	680.6708	8 FT	PEDESTRIAN	SEE TSP-1C	FLUSH
PP2	680.6708	8 FT	PEDESTRIAN	SEE TSP-1C	FLUSH
PP3	680.6712	12 FT	SIGNAL & PEDESTRIAN	SEE TSP-1C	FLUSH
PP4	680.6708	8 FT	PEDESTRIAN	SEE TSP-1C	FLUSH

NOTE: THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL UNDERGROUND UTILITIES AND REVIEW THE FINAL LOCATION OF ALL POLE BASES WITH THE CITY OF ITHACA BEFORE DIGGING.

TABLE OF ITEMS

ITEM NUMBER	ITEM DESCRIPTION	UNIT
206.03	CONDUIT EXCAVATION & BACKFILL	FT
619.01	BASIC WORK ZONE/TRAFFIC CONTROL	NEC
670.3001	PULLBOXES, LESS THAN 5 CF, LIGHTING	EA
680.5001	POLE EXCAVATION AND CONCRETE FOUNDATION	CY
680.5002	CONCRETE BASE FOR CONTROLLER CABINET	EA
680.510501	PULLBOX - RECTANGULAR, 26 X 18 INCH REINF. CONC	EA
680.520105	CONDUIT, METAL STEEL, ZINC COATED, 1.5 INCH	FT
680.520106	CONDUIT, METAL STEEL, ZINC COATED, 2 INCH	FT
680.520108	CONDUIT, METAL STEEL, ZINC COATED, 3 INCH	FT
680.520204	CONDUIT, FLEXIBLE LIQUID TIGHT STEEL, 1/4 INCH	FT
680.54	INDUCTANCE LOOP INSTALLATION	FT
680.622248	TRAFFIC SIGNAL POLE, MAST ARM, 22 FT MNT HGT, 48 FT ARM	EA
680.642242	TRAFFIC SIGNAL POLE, MAST ARM W/LIGHTING, 22 FT MNT HGT, 42 FT ARM	EA
680.6708	TRAFFIC SIGNAL POLE, POST TOP MOUNT, 8FT MOUNTING HGT	EA
680.6712	TRAFFIC SIGNAL POLE, POST TOP MOUNT, 12 FT MOUNTING HGT	EA
680.700604	RISER ASSEMBLY 1.5 INCH DIAMETER	EA
680.71	SHIELDED LEAD-IN CABLE	FT
680.72	INDUCTANCE LOOP WIRE	FT
680.730314	SIGNAL CABLE, 3 CONDUCTOR, 14 AWG	FT
680.730514	SIGNAL CABLE, 5 CONDUCTOR, 14 AWG	FT
680.731014	SIGNAL CABLE, 10 CONDUCTOR, 14 AWG	FT
680.731514	SIGNAL CABLE, 15 CONDUCTOR, 14 AWG	FT
680.80324601	NEMA TRAFFIC SIGNAL CABINET, TYPE M	EA
680.80324603	MICROCOMPUTER TRAFFIC SIGNAL CABINET BASE	EA
680.810101	TRAFFIC SIGNAL MODULE, 12 INCH, RED BALL, LED	EA
680.810103	TRAFFIC SIGNAL MODULE, 12 INCH, YELLOW BALL, LED	EA
680.810104	TRAFFIC SIGNAL MODULE, 12 INCH, YELLOW ARROW, LED	EA
680.810105	TRAFFIC SIGNAL MODULE, 12 INCH, GREEN BALL, LED	EA
680.810106	TRAFFIC SIGNAL MODULE, 12 INCH, GREEN ARROW, LED	EA
680.810601	TRAFFIC SIGNAL SECTION - POLYCARBONATE, TYPE 1, 12 INCH	EA
680.8111	TRAFFIC SIGNAL BRACKET ASSEMBLY - 1 WAY	EA
680.813105	PEDESTRIAN SIGNAL MODULE - 12 INCH, BI-MODAL, HAND/MAN SYMBOL, LED	EA
680.813106	PEDESTRIAN SIGNAL SECTION, POLYCARBONATE, TYPE 1, 12 INCH	EA
680.8141	PEDESTRIAN SIGNAL, BRACKET MOUNT ASSEMBLY	EA
680.8142	PEDESTRIAN SIGNAL, POST TOP MOUNT ASSEMBLY	EA
680.81500010	PEDESTRIAN COUNT-DOWN TIMER MODULE	EA
680.81990003	TRAFFIC SIGNAL BACKPLATES WITH YELLOW REFLECTIVE TAPE	EA
680.8207	OVERHEAD SIGN ASSEMBLY - TYPE G	EA
680.8225	PEDESTRIAN PUSHBUTTON AND SIGN - WITHOUT POST	EA
680.8226	PEDESTRIAN PUSHBUTTON AND SIGN - WITH POST	EA
680.84100110	NO TURN ON RED LED OVERHEAD SIGN, 30x36 INCH	EA
680.90920001	ELECTRIC METER SOCKET, 100 AMPS, SNG PHASE, 120 VOLTS	EA
680.93200101	NEMA TS2 TYPE A2 CONTROLLER - BUS PRIORITY CAPABILITY	EA
680.94010003	WATERTIGHT DISCONNECT BOX	EA
680.95020615	SERVICE CABLE, 2 CONDUCTOR, 6 AWG	FT

TABLE OF NEW INDUCTANCE LOOP DESIGN

SIGNAL: E. STATE ST / MITCHELL ST				COUNTY: TOMPKINS	
NUMBER	FUNCTION	TYPE	SIZE	TURNS	WIRING FIGURE
2a, 2b	Ø2	PARALLEL	6'x17', 6' APART	3	2
2c	Ø2	DIRECT	3'x4.2'	5	1
3a	Ø3	DIRECT	3'x4.2'	5	1
4a, 4b	ØVLP A	PARALLEL	6'x20', 4' APART	3	2
5a, 5b	Ø5	PARALLEL	6'x19', 2' APART	3	2
6a, 6b	Ø6	PARALLEL	6'x19', 6'x11', 2' APART	3	2
6c	Ø6	DIRECT	3'x4.2'	5	1
7a, 7b	Ø7	PARALLEL	6'x12', 3'x4.2', 2' APART	3, 5	1

City of Ithaca
Office of the City Engineer
108 East Green Street
Ithaca, NY 14850

UNAUTHORIZED ALTERATION OR ADDITION
TO ANY PART OF THIS PLAN IS PROHIBITED
APPLICABLE STATE AND/OR LOCAL LAWS

FINAL PLAN
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Creighton Manning
CREIGHTON MANNING ENGINEERING, LLP
2 WINNERS CIRCLE - ALBANY - NEW YORK - 12205
P: (518) 446-0396 F: (518) 446-0397 WWW.CMELLP.COM

EAST STATE STREET / MITCHELL STREET
TRAFFIC SIGNAL IMPROVEMENTS
CITY OF ITHACA, NEW YORK

TRAFFIC SIGNAL PLAN

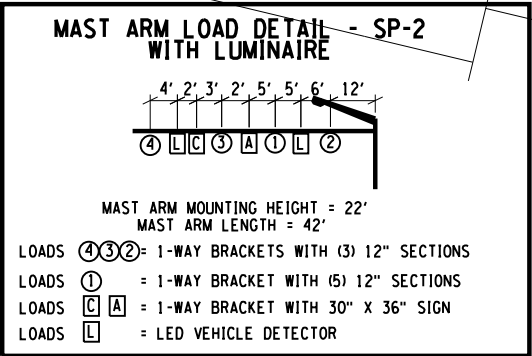
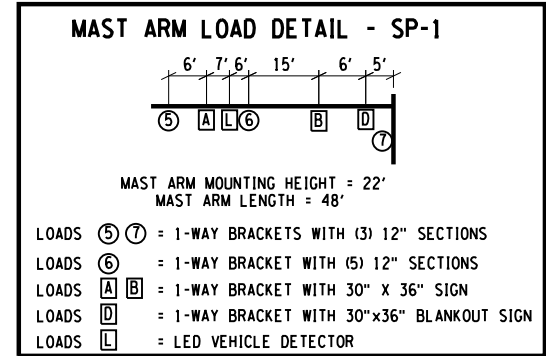
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SHEET NUMBER 20 of 21

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DATE = 6/6/2013
USER = dbar_jes

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ASSOC., LLC
STREET
4850
No. 83-215J

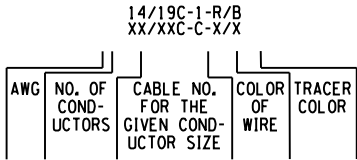


MAST ARM NOTE:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY, IN CONJUNCTION WITH THE SUPPLIER/MANUFACTURER, TO DETERMINE THE APPROPRIATE MAST ARM POLE STRENGTH FOR THE LOADING AS SHOWN AND VERIFY THE FOOTING MOMENT, THE FOOTING DATA SHALL BE INCLUDED ON THE SHOP DRAWINGS TO BE APPROVED BY THE CITY OF ITHACA (SEE LOAD DETAIL).

MAST ARM LAYOUTS

NOT TO SCALE

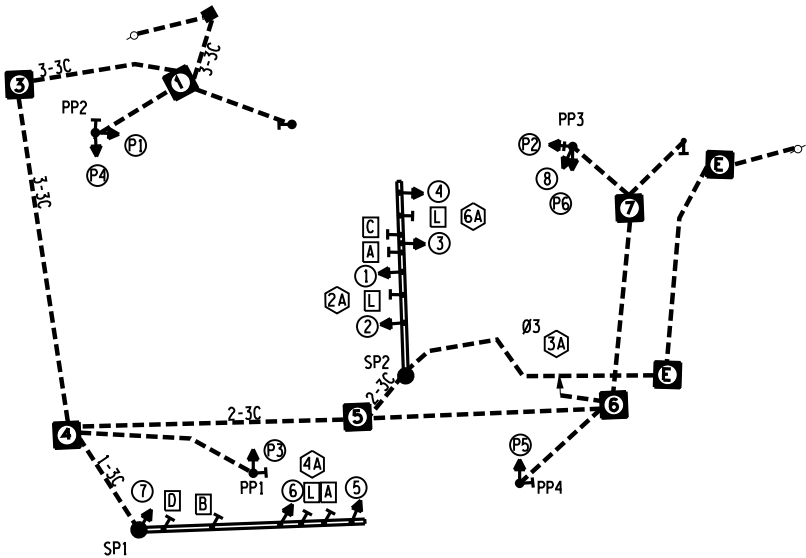
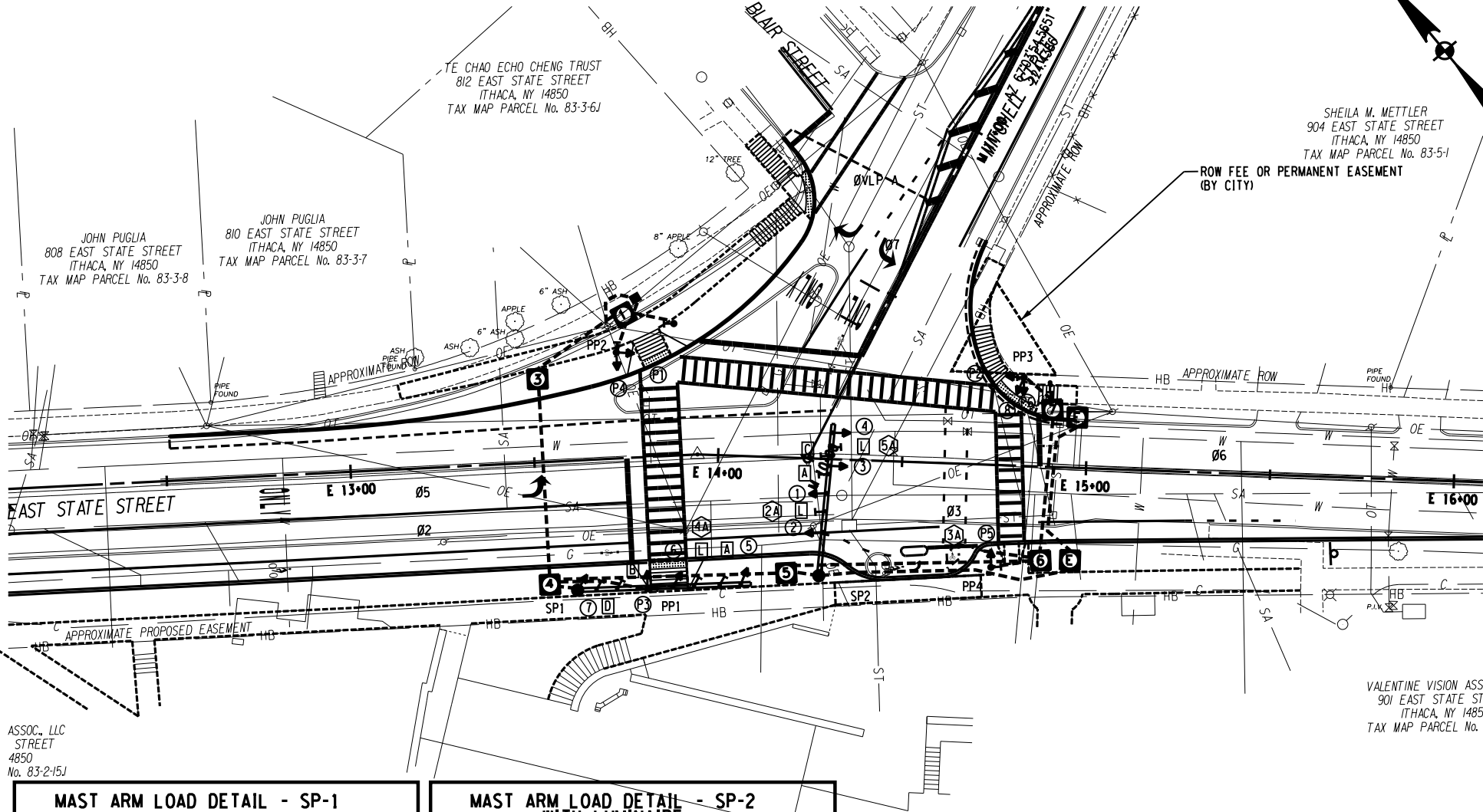


COLOR: R-RED, O-ORANGE, G-GREEN, BL-BLUE, W-WHITE, B-BLACK

OPERATIONS LEGEND

• = PHASE
•R• = CIRCULAR RED WITH STROBE LIGHT
Y/G = FIBEROPTIC DUAL INDICATION LEFT ARROW
Y/G = FIBEROPTIC DUAL INDICATION RIGHT ARROW

R = CIRCULAR RED	Y = CIRCULAR YELLOW	G = CIRCULAR GREEN
← = LEFT RED ARROW	← = LEFT YELLOW ARROW	← = LEFT GREEN ARROW
→ = RIGHT RED ARROW	→ = RIGHT YELLOW ARROW	→ = RIGHT GREEN ARROW
FR = FLASHING RED	FY = FLASHING YELLOW	VGA = VERTICAL GREEN ARROW
DW = HAND (DON'T WALK)	W = MAN (WALK)	FDW = FLASHING HAND (DW)
OVL = OVERLAP	DC = DOUBLE CLEARANCE	PED = PEDESTRIAN



LEGEND:

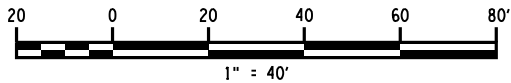
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X-15C, ITEM 680.731514, SIGNAL CABLE, 15 CONDUCTOR
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2NPS, ITEM 680.520106, CONDUIT, METAL STEEL, ZINC COATED, 2 INCH
3NPS, ITEM 680.520108, CONDUIT, METAL STEEL, ZINC COATED, 3 INCH
1/4NPS, ITEM 680.520204, CONDUIT, FLEXIBLE LIQUID TIGHT STEEL, 1/4 INCH

SIGNAL OPERATION SPECIFICATIONS TABLE OF INPUT WIRING				
SIGNAL: E. STATE ST / MITCHELL ST			COUNTY: TOMPKINS	
FUNCTION	DETECTOR NUMBER	TYPE	TERMINAL BOARD WIRING	REMARKS
Ø2, Ø5	2a	PRESENCE	1A, 1B	E. STATE ST EASTBOUND
Ø6	6a	PRESENCE	2A, 2B	E. STATE ST WESTBOUND
Ø7, ØVLP A	4a	PRESENCE	3A, 3B	MITCHELL ST SOUTHBOUND
Ø3	3a	PRESENCE	4A, 4B	E. STATE ST NORTHBOUND BIKE XING

TABLE OF NEW INDUCTANCE LOOP DESIGN					
SIGNAL: E. STATE ST / MITCHELL ST			COUNTY: TOMPKINS		
NUMBER	FUNCTION	TYPE	SIZE	TURNS	WIRING FIGURE
3a	Ø3	DIRECT	3'x4.2'	5	1

TABLE OF ITEMS		
ITEM NUMBER	ITEM DESCRIPTION	UNIT
xxx.xx	LED VEHICLE DETECTOR	EA

SYMBOL		LEGEND
PROPOSED	EXISTING	DESCRIPTION
●	○	SIGNAL POLE
■	□	GROUND MOUNTED CONTROLLER
●■	○□	POLE MOUNTED CONTROLLER
—	—	SPAN WIRE ASSEMBLY
---	---	CONDUIT
①	②	PULLBOX (TRAFFIC SIGNALS & NUMBER)
→	→	TRAFFIC SIGNAL HEAD - 1 WAY
↔	↔	TRAFFIC SIGNAL HEAD - 2 WAY
↕	↕	TRAFFIC SIGNAL HEAD - 3 WAY
↕	↕	TRAFFIC SIGNAL HEAD - 4 WAY
③	③	SIGNAL FACE & NUMBER
—	—	INDUCTANCE LOOP
3A	3A	DETECTOR NUMBER (MICROPROCESSOR ONLY)
Ø	Ø	PHASE
⚡	⚡	UTILITY POLE
⚡	⚡	TRAFFIC SIGN
L	L	LED DETECTOR



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Ithaca, NY 14850

FINAL PLAN
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EAST STATE STREET / MITCHELL STREET
TRAFFIC SIGNAL IMPROVEMENTS
CITY OF ITHACA, NEW YORK

ALTERNATE DETECTION
TRAFFIC SIGNAL PLAN

TSP-1C
SHEET NUMBER 21 of 21

NO.
REVISION
DATE
BY

DESIGNED: A.M.
DRAWN BY: K.H.D.
CHECKED: K.W.
DATE: JUNE 2013
CME No.: 1172-203
SCALE: AS NOTED