



SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	5	6	16	18	24	25	01/SAF/OT	02/S<2/PV									
					1		1			632	70000	1	EACH	POWER SERVICE			
					1		1			632	71348	1	EACH	SIGNAL SUPPORT, TYPE TC-12.31 DESIGN 10 POLE, WITH MAST ARMS TC-81.22 DESIGN 12 AND DESIGN 12			
					2		2			632	72901	2	EACH	SIGNAL SUPPORT, MECHANICAL DAMPER FOR TC-81.22 MAST ARM (GREATER THAN 39' IN LENGTH), AS PER PLAN	22		
					4		4			632	89904	4	EACH	PEDESTAL, 10', TRANSFORMER BASE			
					1		1			632	90100	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION	22		
					1		1			633	65511	1	EACH	CABINET, TYPE TS-2, AS PER PLAN	23		
					1		1			633	67101	1	EACH	CABINET FOUNDATION, AS PER PLAN	23		
					1		1			633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN	23		
					1		1			633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	21		
					4		4			809	69100	4	EACH	STOP LINE RADAR DETECTION	22		
					1		1			809	69123	1	EACH	ATC V6.24 CONTROLLER, AS PER PLAN	23		
					1		1			819	10001	1	EACH	RAILROAD PREEMPTION INTERFACE, AS PER PLAN (POLE SP-1)	22		
					2		2			828	00100	2	EACH	LED BLANKOUT SIGN, "NO TURN ON RED", 24" X 30"			
														<b>MAINTENANCE OF TRAFFIC</b>			
	5						5			410	12000	5	CY	TRAFFIC COMPACTED SURFACE, TYPE A OR B			
		16					16			614	11110	16	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE			
	LS							LS		614	12420	LS		DETOUR SIGNING			
	5						5			614	13000	5	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC			
	0.07							0.07		614	21200	0.07	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I			
								0.16		614	22210	0.16	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I			
	0.16							32		614	26400	32	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I			
														<b>INCIDENTALS</b>			
							LS	LS		614	11000	LS		MAINTAINING TRAFFIC	5		
							2	2		619	16000	4	MNTH	FIELD OFFICE, TYPE A			
							LS	LS		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING			
							LS	LS		624	10000	LS		MOBILIZATION			

DESIGN AGENCY  
  
 CLIENT  
  
 DESIGNER  
 MAH  
 REVIEWER  
 SJS 04/10/20  
 PROJECT ID  
 108798  
 SHEET TOTAL  
 P.15 39

**809 ATC V6.24 CONTROLLER, AS PER PLAN**

THE CONTROLLER UNIT SHALL BE FURNISHED AND INSTALLED PER SS 809 AND BE LISTED ON THE TRAFFIC AUTHORIZED PRODUCTS (TAP) LIST.

THE CONTROLLER SHALL BE AN ECONOLITE COBALT AND COMPATIBLE WITH THE CABINET TYPE BEING INSTALLED.

**ITEM 625 ARC FLASH CALCULATIONS AND LABEL SIGNAL CONTROLLER**

FOR THE FOLLOWING LOCATION(S), PERFORM AND SUBMIT ARC FLASH HAZARD CALCULATIONS, PREPARE THE NECESSARY LABEL, AND AFFIX THE LABEL TO THE ELECTRICAL DEVICE PER SS 825.

LOCATIONS:  
- SIGNAL CONTROLLER

**633 CABINET, TYPE TS-2, AS PER PLAN**

THE CABINET SHALL BE FURNISHED AND INSTALLED ACCORDING TO CMS 633 AND 733 AND BE LISTED ON THE TRAFFIC AUTHORIZED PRODUCTS LIST (TAP).

THE GROUND-MOUNTED CABINET SHALL BE A NEMA TS-2, TYPE 1, CABINET SIZE 7 WITH 16 LOAD SWITCH BAYS, LED UNDER-SHELF LIGHTING, POWER HARNESSSES FOR BOTH TS2 TYPE 1 AND TYPE 2 CONTROLLERS AND SHALL HAVE A MINIMUM OF THREE SHELVES.

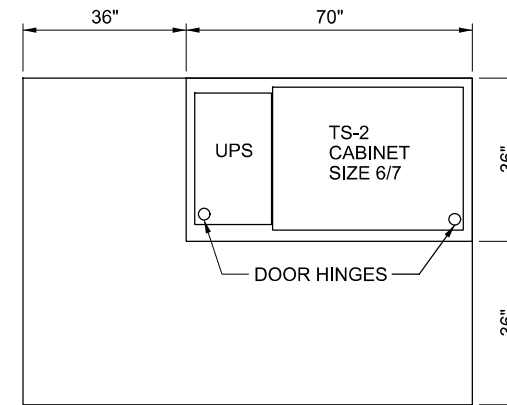
EACH CABINET SHALL COME EQUIPPED WITH TWO 16-CHANNEL CABINET DETECTOR RACKS (CDR) INCLUDING BUS INTERFACE UNITS (BIU). THE LOOP DETECTOR TERMINATION PANEL FOR THE SECOND DETECTOR RACK SHALL BE OMITTED.

THE CABINET SHALL BE FURNISHED WITH AN EDI MMU AS ALLOWED ON THE TAP/APPROVED PRODUCTS LIST.

PAYMENT FOR ITEM 633 CABINET, TYPE TS-2, AS PER PLAN WILL BE AT THE CONTRACT BID PRICE PER EACH COMPLETE AND IN PLACE INCLUDING ALL CONNECTIONS TESTED AND ACCEPTED.

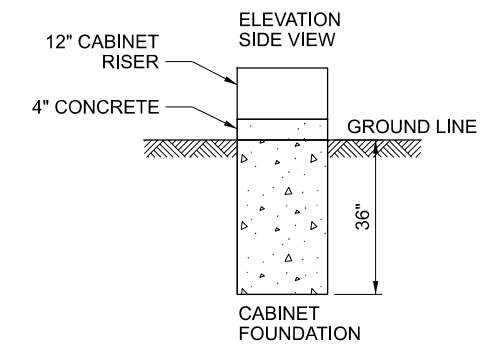
**TS-2 SIZE 6/7 CABINET DETAIL (TYP.)**

**CABINET & WORK PAD DETAIL**



PLAN VIEW

**CABINET FOUNDATION DETAIL**



**633 CONTROLLER WORK PAD, AS PER PLAN  
633 CABINET FOUNDATION, AS PER PLAN**

NOTES:

- 1) THE SIZE OF THE UPS FOUNDATION MAY VARY BASED ON THE CABINET SIZE PROVIDED.
- 2) UPS FOUNDATION ELEVATION SHOULD MATCH CABINET FOUNDATION ELEVATION.
- 3) THE UPS CABINET SHALL BE MOUNTED FLUSH UP AGAINST THE SIGNAL CABINET AND SEALED.
- 4) CONDUIT AND WIRING FROM THE SIGNAL CABINET TO THE UPS SHALL BE INSTALLED THROUGH THE CABINET RISER.

VEHICULAR/PED PEAK HOURLY VOLUME								
PHASE	1	2	3	4	5	6	7	8
DIRECTION	SB LT	NB	EB LT	WB	NB LT	SB	WB LT	EB
PLAN NO./C/S/O	JEF-CR2-2.54				PUBLIC ROAD & MARKET STREET/WILLIAM STREET			
7:00 -8:00 AM	4	10	8	39	17	28	2	30
8:00 -9:00 AM	8	11	23	36	13	28	1	39
9:00 -10:00 AM	14	25	14	38	9	26	1	36
10:00 -11:00 AM	10	20	24	50	26	38	7	46
11:00 -12:00 AM	14	37	28	46	32	40	11	56
12:00 -1:00 PM	12	30	20	63	20	38	10	56
1:00 -2:00 PM	14	23	16	50	21	41	7	56
2:00 -3:00 PM	21	32	29	52	24	43	6	74
3:00 -4:00 PM	15	33	33	76	24	50	8	81
4:00 -5:00 PM	12	29	35	44	23	58	16	61
5:00 -6:00 PM	8	39	26	29	15	53	7	61
6:00 -7:00 PM	22	27	27	43	29	60	6	62

COUNT INFORMATION

<b>MONTH/YEAR</b>	MARCH	2017	<b>DAY OF WEEK:</b>	THURSDAY
<b>TIME PERIOD(S):</b>	7:00 AM	-	7:00 PM	
<b>TOTAL NUMBER OF HOURS:</b>	12 HOURS			
<b>METHOD OF OBTAINING COUNTS:</b>	PROVIDED BY ODOT			
<b>TYPE OF COUNT:</b>	TURNING MOVEMENT OF COUNTS			

TRAFFIC SIGNAL NOTES  
PUBLIC RD & MARKET ST/WILLIAM ST

JEF-CR2-2.54

MODEL: Sheet PAPER: 205.01\06812\108798\_JEF-CR2-2.67\400-Engineer\ng\Signals\Sheet's\08798\_CN004.dgn  
X:\402500\180205.01\06812\108798\_JEF-CR2-2.67\400-Engineer\ng\Signals\Sheet's\08798\_CN004.dgn

DESIGN AGENCY  
**Mead & Hunt**  
CLIENT

DESIGNER  
DLW



REVIEWER  
SJS 04/10/20

PROJECT ID  
108798

SHEET TOTAL  
P.23 39

SHEET NO.	LOCATION	DISTANCE	611	625	625	625	625	625	625	625	632	632	632	632	632	632	632	632	632	632	632	632	632	632	633	633	633	633	809	809	819	828	
			4" CONDUIT, TYPE E, 725.051	CONDUIT, 4", 725.051	TRENCH	TRENCH IN PAVED AREA, TYPE B	PULL BOX, 725.08, 24"	GROUND ROD	PLASTIC CAUTION TAPE	ARC FLASH CALCULATIONS AND LABEL	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN	VEHICULAR SIGNAL HEAD, (LED), 4-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	COVERING OF VEHICULAR SIGNAL HEAD	COVERING OF PEDESTRIAN SIGNAL HEAD	PEDESTRIAN PUSHBUTTON	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	SIGNAL SUPPORT FOUNDATION	PEDESTAL FOUNDATION	POWER CABLE, 2 CONDUCTOR, NO. 4 AWG	SERVICE CABLE, 3 CONDUCTOR, NO. 4 AWG	POWER SERVICE	SIGNAL SUPPORT, TYPE TC-12.31, DESIGN 10 POLE, WITH MAST ARMS TC-81.22 DESIGN 12 AND DESIGN 12	SIGNAL SUPPORT, MECHANICAL DAMPER FOR TC-81.22 MAST ARM (GREATER THAN 39" IN LENGTH), AS PER PLAN	PEDESTAL, 10', TRANSFORMER BASE	REMOVAL OF TRAFFIC SIGNAL INSTALLATION	CABINET, TYPE TS-2, AS PER PLAN	CABINET FOUNDATION, AS PER PLAN	CONTROLLER WORK PAD, AS PER PLAN	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	ATC V6.24 CONTROLLER, AS PER PLAN	STOP LINE RADAR DETECTION
			FT	FT	FT	FT	EACH	EACH	FT	EACH	EACH	EACH	EACH	EACH	FT	FT	EACH	EACH	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
21-23	NOTES	100																			1			1									
26	PB-5 TO PB-4 (PULL BOX TO PULL BOX)	67		67		67	2		67																								
26	PS4 TO PB-4 (PEDESTAL TO PULL BOX)	9		9		9			9						14	14																	
26	PS4 PEDESTAL W/PED HEADS AND PUSHBUTTONS							1				2		2	1	10	15		1					1									
26	PB-4 TO PB-3 (PULL BOX TO PULL BOX)	62		62		62	1		62						67	67																	
26	PB-3 TO PS3 (PULL BOX TO PEDESTAL)	9		9	9				9						14	14																	
26	PS3 PEDESTAL W/PED HEADS AND PUSHBUTTONS							1			2		2	1	10	15		1						1									
26	PB-3 TO PB-1 (PULL BOX TO PULL BOX)	68		68		68	1		68						146	146																	
26	PB-2 TO PS2 (PULLBOX TO PEDESTAL)	12		12	12		1		12						17	17																	
26	PS2 PEDESTAL W/PED HEADS AND PUSHBUTTONS							1			2		2	1	10	15		1						1									
26	PB-2 TO PB-1 (PULL BOX TO PULL BOX)	52		52		52			52						57	57																	
26	PB-1 TO SP-1 (PULL BOX TO SIGNAL SUPPORT)	6		18	6				6																								
26	SP-1 (SIGNAL SUPPORT)							1			7	1	1	9	1		376	1	32				1	2						4		2	
26	PB-1 TO CONTROLLER (PULL BOX TO CONTROLLER)	11		33	11				11						64	144				16													
26	PB-1 TO PS-1 (PULLBOX TO PEDESTAL)	9		9	9				9						14	14																	
26	PS-1 PEDESTAL W/PED HEAD AND PUSHBUTTONS							1			1		1	1	10	15		1						1									
26	CONTROLLER							1	1						20	45			10	123						1	1	1	1	1		1	
TOTALS CARRIED TO GENERAL SUMMARY			100	339	47	258	5	6	305	1	7	1	8	9	8	4	453	1009	1	4	69	123	1	1	2	4	1	1	1	1	1	1	2

TRAFFIC SIGNAL SUBSUMMARY  
 PUBLIC RD & MARKET ST/WILLIAM ST

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