809 ADVANCE RADAR DETECTION, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR ADVANCE DETECTION UNIT (MODEL SS-200E). THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

1. POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.
2. ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.
3. THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
4. SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.
5. THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.
6. A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).
7. THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.
8. THE CONTRACTOR SHALL INSTALL THE RADAR DETECTION PRIOR TO MILLING/DISABLING EXISTING LOOPS.
9. THE INSTALLATION SHALL INCLUDE ALL CONTROLLER PROGRAMMING FOR COMPLETE INSTALLATION, WHICH INCLUDES MODIFICATIONS FOR REMOVAL OF EXISTING DETECTION.
10. UNLASHING AND RELASHING OF THE SIGNAL SPAN TO INSTALL THE NECESSARY CABLING.
11. DISCONNECT ALL LOOP LEAD-IN CABLE AND REMOVE AND DISPOSE OF IT FROM ALL PULL BOXES, CONDUITS, AND THE CABINET AFTER IT IS CONFIRMED THAT THE RADAR UNITS ARE WORKING. EXISTING PULL BOXES AND CONDUITS SHALL REMAIN IN PLACE.

PAYMENT FOR ITEM 809 ADVANCE RADAR DETECTION, AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT, CONNECTIONS TESTED AND ACCEPTED, AND ANY OTHER NECESSARY HARDWARE TO ESTABLISH A FULLY FUNCTIONAL DETECTION SYSTEM.

SR 125 @ LORI LANE/HICKS LANE/KROGERS	2 EACH

809 STOP-LINE RADAR DETECTION, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR MATRIX DETECTION UNIT. THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

1. POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.
2. ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.
3. THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
4. SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.
5. THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.
6. A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).
7. THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.
8. THE INSTALLATION SHALL INCLUDE ALL CONTROLLER PROGRAMMING FOR COMPLETE INSTALLATION, WHICH INCLUDES MODIFICATIONS FOR REMOVAL OF EXISTING DETECTION.
9. UNLASHING AND RELASHING OF THE SIGNAL SPAN TO INSTALL THE NECESSARY CABLING.
10. DISCONNECT ALL LOOP LEAD-IN CABLE AND REMOVE AND DISPOSE OF IT FROM ALL PULL BOXES, CONDUITS, AND THE CABINET AFTER IT IS CONFIRMED THAT THE RADAR UNITS ARE WORKING. EXISTING PULL BOXES AND CONDUITS SHALL REMAIN IN PLACE.

PAYMENT FOR ITEM 809 STOP-LINE RADAR DETECTION, AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT AND CONNECTIONS TESTED AND ACCEPTED.

SR 125 @ LORI LANE/HICKS LANE/KROGERS	4 EACH

632 LOOP DETECTOR

SR 125 @ CHAPEL RD./OAK ST./JENNY LIND RD.	5 EACH
SR 125 @ S. KLINE AVE	1 EACH
SR 125 @ CECELIA DR./HUNTSMAN TRACE	6 EACH
SR 125 @ WALMART/MARTIN DR.	1 EACH
SR 125 @ MT. HOLLEY LINDALE RD.	6 EACH

632 LOOP DETECTOR TIE-IN

SR 125 @ CHAPEL RD./OAK ST./JENNY LIND RD.	5 EACH
SR 125 @ S. KLINE AVE	1 EACH
SR 125 @ CECELIA DR./HUNTSMAN TRACE	6 EACH
SR 125 @ WALMART/MARTIN DR.	1 EACH
SR 125 @ MT. HOLLEY LINDALE RD.	6 EACH

ADA WAIVER

AN APPROVED ADA DESIGN WAIVER IS REQUIRED ON THIS PROJECT. THE FOLLOWING FEATURES LISTED BELOW CANNOT FEASIBLY BE CONSTRUCTED TO MEET ADA GUIDELINES.

ADA DESIGN WAIVER

ADA FEATURE	APPROVAL	DATE	SHEET NUMBERS		
CLE-125-6.747	RMP0007704	7/9/21	SHEET 20	CLEVELAND STREET	(SOUTH RAMP)
CLE-125-6.236	RMP0007705	7/9/21	SHEET 19	CHURCH STREET	(NORTH SIDE RAMP)
CLE-125-6.133	RMP0007706	7/9/21	SHEET 19	FLORAL AVE	(SOUTH SIDE RAMP)
CLE-125-6.740	RMP0007707	7/9/21	SHEET 20	CLEVELAND STREET	(NORTH RAMP)
CLE-125-6.095	RMP0007708	7/9/21	SHEET 19	HOPKINS AVE	(NORTH SIDE RAMP) NO PROPOSE WORK. JUST WAIVER
CLE-125-6.032	RMP0007709	7/9/21	SHEET 18	KLINE AVE	(SOUTH SIDE RAMP)

ALL CROSSWALKS SHALL BE UPGRADED TO HIGH VISIBILITY EXCEPT CROSSWALKS AT THE INTERSECTION OF WOODLANDS DR.

GENERAL NOTES

CLE-SR 125-5.13

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 9/16/2021 TIME: 3:19:12 PM USER: jdavis4
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DESIGN AGENCY

DESIGNER JED

REVIEWER JDO

PROJECT ID 112408

SHEET P.4 TOTAL 22

SHEET NUM.												PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	3	4	5	8	9	10	11	12	13	14		01/NHS/PV	02/NHS/CV	03/NHS/BR						
																			TRAFFIC CONTROL	
	923											923			621	00100	923	EACH	RPM	
	923											923			621	54000	923	EACH	RAISED PAVEMENT MARKER REMOVED	
									730			730			644	00500	730	FT	STOP LINE	
									2,261			2,261			644	00600	2,261	FT	CROSSWALK LINE	
									180			180			644	00700	180	FT	TRANSVERSE/DIAGONAL LINE	
									40			40			644	00900	40	SF	ISLAND MARKING	
									4			4			644	01110	4	EACH	SCHOOL SYMBOL MARKING, 96"	
									92			92			644	01300	92	EACH	LANE ARROW	
									1			1			644	01410	1	EACH	WORD ON PAVEMENT, 96"	
									7.64			7.64			807	13010	7.64	MILE	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6"	
									7.64			7.64			807	13110	7.64	MILE	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"	
									8.91			8.91			807	13200	8.91	MILE	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, CENTER LINE	
									2,360			2,360			807	10310	2,360	FT	WET REFLECTIVE TRAFFIC PAINT, CHANNELIZING LINE, 12"	
									12.32			12.32			850	10000	12.32	MILE	GROOVING FOR 4" RECESSED PAVEMENT MARKING, (ASPHALT)	
									15.28			15.28			850	10010	15.28	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	
									2,600			2,600			850	20130	2,600	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)	
																			TRAFFIC SIGNALS	
		19										19			632	26500	19	EACH	DETECTOR LOOP	
		19										19			632	27200	19	EACH	LOOP DETECTOR TIE IN	
		2										2			809	69001	2	EACH	ADVANCE RADAR DETECTION, AS PER PLAN	4
		4										4			809	69101	4	EACH	STOP LINE RADAR DETECTION, AS PER PLAN	4
																			STRUCTURE REPAIR (CLE-SR 125-5.13 BRIDGE NO. 0594)	
		500												500	843	50000	500	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	
																			MAINTENANCE OF TRAFFIC	
			14.8									14.8			614	20110	14.8	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
			17.44									17.44			614	21100	17.44	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
			15.28									15.28			614	22110	15.28	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
			4,720									4,720			614	23200	4,720	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
			1,396									1,396			614	26200	1,396	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
			3,642									3,642			614	27200	3,642	FT	WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT	
			176									176			614	30200	176	EACH	WORK ZONE ARROW, CLASS I, 642 PAINT	
																			INCIDENTALS	
												LUMP	LUMP	LUMP	614	11000	LS		MAINTAINING TRAFFIC	
												LUMP	LUMP	LUMP	623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	3
												LUMP	LUMP	LUMP	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY

DESIGNER JED

REVIEWER JDO

PROJECT ID 112408

SHEET P.7 TOTAL 22

CLE-SR 125-5.13

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