### 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 F	EATURE	L DATE	SHEET NUMBERS							
LE-125-6.747 LE-125-6.236 LE-125-6.133 LE-125-6.740 LE-125-6.095 LE-125-6.032	RMP0007 RMP0007 RMP0007 RMP0007 RMP0007 RMP0007	704 7 705 7 706 7 707 7 708 7 709 7	/9/21 /9/21 /9/21 /9/21 /9/21 /9/21	SHEET 20 SHEET 19 SHEET 19 SHEET 20 SHEET 19 SHEET 18	CLEVELAND STREET CHURCH STREET FLORAL AVE CLEVELAND STREET HOPKINS AVE KLINE AVE					

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

(SOUTH RAMP) (NORTH SIDE RAMP) (SOUTH SIDE RAMP) (NORTH RAMP) (NORTH SIDE RAMP) NO PROPOSE WORK. JUST WAIVER (SOUTH SIDE RAMP)



**GENERAL NOTE** 

		SHEET NUM.									PART.			ITEM	GRAND					
		3	4	5	8	9	10	11	12	13	14		01/NHS/PV	02/NHS/CV	03/NHS/BR	ITEM	EXT	TOTAL	UNIT	
		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 FT	TRANSVERSE/DIAGONAL LINE
			_							40			40			644	00900	40	SF	
										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 THERMOPLAS
1			-							7.64			7.64			807	13110	7.64	MILE	WET REFLECTIVE SPRAY THERMOPI AS
										8.91			8.91			807	13200	8.91	MILE	WET REFLECTIVE SPRAY THERMOPLAS
										2,360			2,360			807	10310	2,360	FT	WET REFLECTIVE TRAFFIC PAINT, CHAN
										12.32			12.32			850	10000	12.32	MILE	GROOVING FOR 4" RECESSED PAVEMEN
										10.20			10.20				10010	10.20		
										2,600			2,600			850	20130	2,600	FT	GROOVING FOR 12" RECESSED PAVEME
			19										19			632	26500	19	EACH	DETECTOR LOOP
			19										19			632	27200	19	EACH	
			4										4			809	69101	4	EACH	STOP LINE RADAR DETECTION, AS PER
	02.dgr																			
	99																			STRUCTURE F
	\$/112408		500												500	843	50000	500	SF	PATCHING CONCRETE STRUCTURES W
	y/Sheets																			
	oadwa			14.8									14.8			614	20110	14.8	MILE	WORK ZONE LANE LINE CLASS L 6" 642
	ring\R			17.44									17.44			614	21100	17.44	MILE	WORK ZONE CENTER LINE, CLASS I, 642
	lginee			15.28									15.28			614	22110	15.28	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642
				4,720									4,720			614 614	23200	4,720		WORK ZONE CHANNELIZING LINE, CLAS
	2408/4			1,000									1,000				20200	1,000		
	Dutt/112			3,642									3,642			614	27200	3,642	FT	WORK ZONE CROSSWALK LINE, CLASS
-				176									176			614	30200	1/6	EACH	WORK ZONE ARROW, CLASS I, 642 PAIN
10	108/108/108/108/108/108/108/108/108/108/																			
	NDistri																			
	ojects												LUMP	LUMP	LUMP	614	11000	IS		MAINTAINING TRAFFIC
													LUMP	LUMP	LUMP	623	10001	LS		CONSTRUCTION LAYOUT STAKES AND S
	01 Ac												LUMP	LUMP	LUMP	624	10000	LS		MOBILIZATION
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DESCRIPTION	SEE SHEET NO.	
TRAFFIC CONTROL		
TIC PAVEMENT MARKING, EDGE LINE, 6"		$\succ$
TIC PAVEMENT MARKING LANE LINE 6"		AR
		MM
INELIZING LINE, 12" IT MARKING, (ASPHALT)		SUN SU
IT MARKING, (ASPHALT)		
ENT MARKING, (ASPHALT)		R∕
TRAFFIC SIGNALS		NE
		GE
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PLAN	4	
REPAIR (CLE-SR 125-5.13 BRIDGE NO. 0594)		
TH TROWELABLE MORTAR		
PAINT PAINT		
2 PAINT S I 8" 642 PAINT		
INT		
I, 642 PAINT		
Т		
SURVEYING, AS PER PLAN	3	
		REVIEWER JDO
		PROJECT ID 112408
		SHEET TOTAL P.7 22