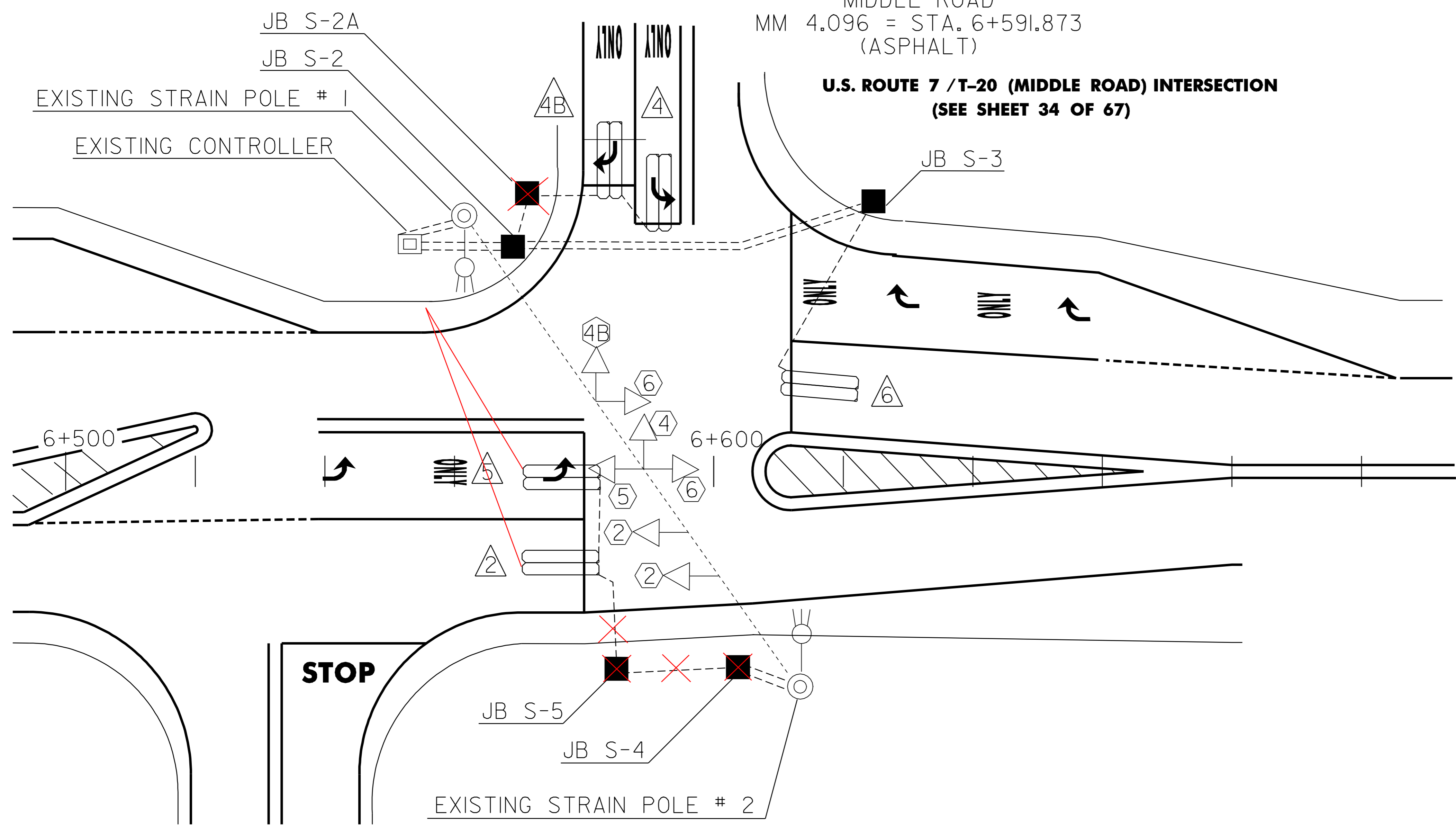


T-20  
MIDDLE ROAD  
MM 4.096 = STA. 6+591.873  
(ASPHALT)

**U.S. ROUTE 7 / T-20 (MIDDLE ROAD) INTERSECTION  
(SEE SHEET 34 OF 67)**



**NOTES:**

THIS PLAN SHEET SHALL ONLY BE USED AS A GUIDE FOR LOOP AND JUNCTION BOX PLACEMENT. THE CONTRACTOR SHALL CONFIRM ALL LOCATIONS IN THE FIELD WITH THE RESIDENT ENGINEER PRIOR TO INSTALLATION.

PRIOR TO COLD PLANING, ANY EXISTING VEHICLE DETECTOR LOOPS SHALL BE DISCONNECTED IN THE CONTROLLER CABINET AND CUT AT THE CURB. DETECTOR LOOPS # 4, # 4B AND # 5 ARE ALL EXISTING LOOPS.

ONCE A LOOP IS DISCONNECTED, THE SIGNAL PHASE THAT IT WAS CALLING SHALL BE PUT ON MAX RECALL OR THE SIGNAL PUT ON FLASH AND TRAFFIC CONTROLLED BY A UNIFORMED TRAFFIC OFFICER.

ALL BITUMINOUS AREAS TO RECEIVE NEW VEHICLE DETECTOR LOOPS SHALL BE LEVELED WITH TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT AS DIRECTED BY THE RESIDENT ENGINEER PRIOR TO THE INSTALLATION OF THE NEW DETECTOR LOOPS. LOOPS SHALL BE INSTALLED PRIOR TO THE PLACEMENT OF THE WEARING COURSE.

IF WATER VALVES, DROP INLETS OR OTHER OBSTRUCTIONS ARE ENCOUNTERED WITHIN THE AREA OF A PROPOSED LOOP, THE CONTRACTOR SHALL TAKE SPECIAL CARE TO AVOID THE OBSTRUCTION DURING LOOP INSTALLATION. IF LOOP SIZES OR SHAPES ARE TO BE MODIFIED DUE TO OBSTRUCTIONS THE RESIDENT ENGINEER MUST APPROVE LAYOUT PRIOR TO INSTALLATION.

AFTER THE NEW LOOPS ARE INSTALLED, THE INDUCTANCE RESISTANCE AND LEAKAGE TO GROUND SHALL BE TESTED USING PROPERLY CALIBRATED EQUIPMENT. THE TEST RESULTS SHALL BE COMPARED WITH THE CALCULATED VALUES AND RECORDED ON THE PLANS. ALL LOAD TESTING SHALL BE PERFORMED AS PER VTrans STANDARD E-172M.

CALCULATED VALUES AT CONTROLLER ARE BASED ON DIRECT CONDUIT ROUTING TO THE NEAREST SIGNAL POLE AND CROSSING THE SPAN WIRE OR EXISTING CONDUIT AS NECESSARY TO THE EXISTING CONTROLLER LOCATION. ANY SIGNAL MODIFICATION AND OR CONTROLLER RELOCATION PRIOR TO LOOP CONNECTION WILL REQUIRE RECALCULATION OF THESE VALUES.

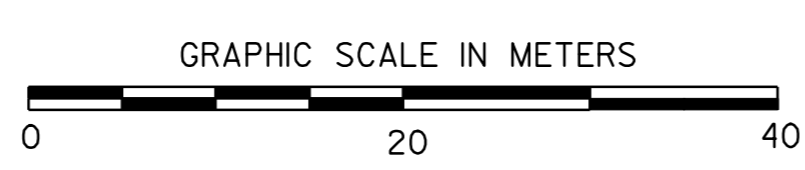
AFTER ACCEPTANCE OF THE LOOP INSTALLATION BY THE RESIDENT ENGINEER, RETURN THE SIGNAL TO NORMAL OPERATION. ALL WORK REQUIRED SHALL BE SUBSIDIARY TO ITEM 678.22, VEHICLE DETECTOR LOOP.

FOR ADDITIONAL DETAILS, SEE VTrans STANDARD E-172M.

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

THE REPLACEMENT/INSTALLATION OF LOOPS DETECTORS, JUNCTION BOXES AND WIRED CONDUIT IS IN ANTICIPATION OF FUTURE PROJECT NHG 019-3(52)S.

T-15  
ROGERS ROAD  
MM 4.059 = STA. 6+532.327  
(ASPHALT)



JUNCTION BOX	
LOCATION & DESCRIPTION	
JB S-2	6+569 LT
JB S-2A	6+571 LT
JB S-5	6+585 RT
JB S-4	6+604 RT
JB S-3	6+614 LT

ELECTRICAL CONDUIT SLEEVE (200mm)		
6+571 TO 6+614 LT	42m	

VEHICLE DETECTOR LOOPS												
LOOP NO.	LANE	CALL Ø	SIZE (M)	TYPE & NO. TURNS	EST. QTY. (M)	DELAY OR PRESENCE	INDUCTANCE (µH)		RESISTANCE (OHMS)		LEAKAGE TO GROUND (MEGOHMS)	LOCKING MEMORY
							CALC.	ACT.	CALC.	ACT.		
2	NORTHBOUND THRU (U.S. ROUTE 7)		1.8 X 12.0	QUAD - 2	55.2	PRESENCE	338		1.45			SOFT
5	NORTHBOUND LEFT ONLY (U.S. ROUTE 7)		1.8 X 12.0	QUAD - 2	55.2	PRESENCE	341		1.49			YES
4B	MIDDLE ROAD RIGHT TURN ONLY		1.8 X 12.0	QUAD - 2	55.2	DELAYED	272		0.59			NO
4	MIDDLE ROAD LEFT TURN ONLY		1.8 X 12.0	QUAD - 2	55.2	PRESENCE	338		0.63			NO
6	SOUTHBOUND THRU/RIGHT TURN (U.S. ROUTE 7)		1.8 X 12.0	QUAD - 2	55.2	PRESENCE	291		0.84			SOFT

WIRED CONDUIT (PVC)				
	# WIRES	DIA. (mm)	LENGTH (EACH) (m)	REMARKS
JB S-5 - JB S-4	1	50	18	LOOPS
JB S-4 - STRAIN POLE # 2	2	50	8	LOOPS & SIGNALS
JB S-3 - JB S-2	2	50	42	LOOPS & SIGNALS
JB S-2 - CONTROLLER	2	50	14	LOOPS & SIGNALS
JB S-2A - JB S-2	1	50	8	LOOPS
CURB - JB S-3	1	50	10	LOOPS
STR. POLE # 1 - CONTROLLER	2	50	6	LOOPS

EXISTING	NEW	LEGEND
		UTILITY POLE
		LUMINAIRE
		LIGHT OR WOOD POLE
		STRAIN POLE
		CONTROLLER CABINET
		PULLBOX/JUNCTION BOX
		SIGNAL HEAD
		CONDUIT
		VEHICLE LOOPS
		PEDESTAL POST
		STANCHION
		SWEEP
		LOOP NUMBER

<b>VEHICLE DETECTOR LOOP LAYOUT DETAIL #2</b>	PROJECT NAME: SALISBURY - MIDDLEBURY
	PROJECT NUMBER: NH 2311(1)S
	FILE NAME: ZpqveZQibQ18ZpbQ18.dgn
	PLOT DATE: 10-JUL-2006 13:30
PROJECT LEADER: LEW	DRAWN BY: LEW
DESIGNED BY: LEW	CHECKED BY:
IPARM FILE NAME: pbQ18d+2.1	SHEET 61 OF 67