PROJECT DESCRIPTION

I. GENERAL

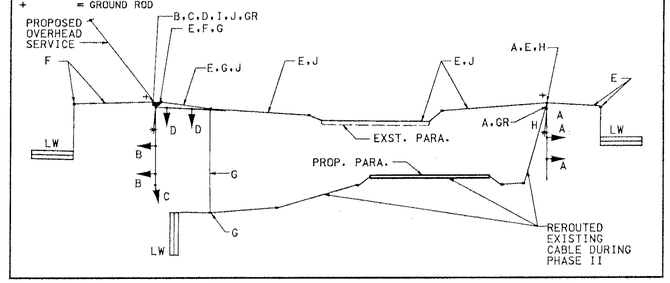
THIS PROJECT INVOLVES THE INSTALLATION OF A TEMPORARY TRAFFIC CONTROL SIGNAL FOR A ONE WAY BRIDGE OPERATION. BRIDGE NO. 21059. AT THE INTERSECTION OF MD 64 OVER CSX RAIL LINE AND MD 491.
MD 64 RUNS IN A EAST-WEST DIRECTION.

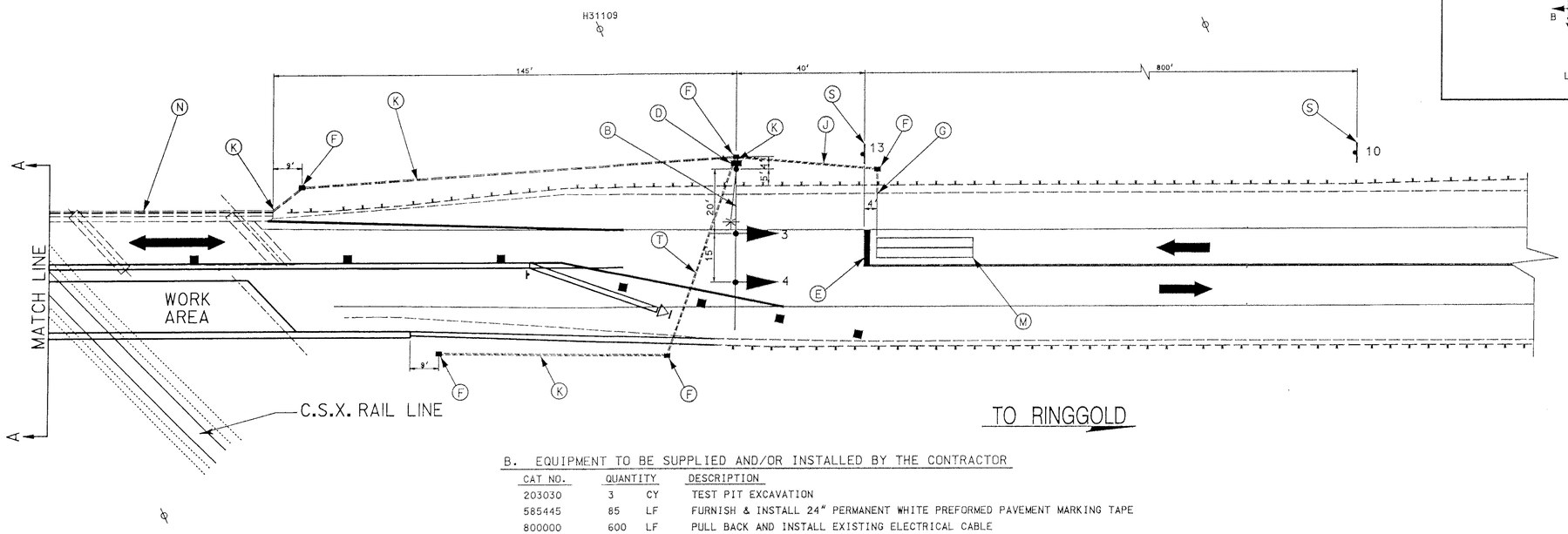
II. INTERSECTION OPERATION

THIS INTERSECTION WILL OPERATE IN A NEMA THREE PHASE FULL TRAFFIC ACTUATED MODE. FOR A ONE WAY BRIDGE OPERATION.

WIRING DIAGRAM

A,B,C,D	= 5 CONDUCTOR CABLE (NO. 14 AWG)
LW	= LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
E,F,G	= 2 CONDUCTOR ALUMINUM SHIELDED
H,I	= 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TYPE TC
J	= 12 PAIR COMMUNICATION CABLE
GR	= NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
+	= GROUND ROD





A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

ITEM NO.	QUANTITY		DESCRIPTION
	67	SF	SHEET ALUMINUM SIGNS CONSISTING OF:
	1	EA	R10-11B SIGN. 24"x24". MAST ARM MOUNTED HARDWARE
	3	EA	W3-3 "NEW" "TEMP" SIGN. 48"x48" GROUND MOUNTED HARDWARE
	3	EA	R10-6A SIGN. 24" x 30" GROUND MOUNTED HARDWARE
	1	EA	CABINET POLE MOUNT WITH ASC II CONTROLLER W/ TELEMETRY
	1	EA	G CABINET POLE MOUNT AND SPECIAL RELAY PACKAGE
	2	EA	DETECTOR AMPLIFIER 4 CHANNEL RACK MOUNT

B. EQUIPMENT TO BE SUPPLIED AND/OR INSTALLED BY THE CONTRACTOR

CAT NO.	QUANTITY		DESCRIPTION
203030	3	CY	TEST PIT EXCAVATION
585445	85	LF	FURNISH & INSTALL 24" PERMANENT WHITE PREFORMED PAVEMENT MARKING TAPE
800000	600	LF	PULL BACK AND INSTALL EXISTING ELECTRICAL CABLE
801004	9.3	CY	FURNISH & INSTALL CONCRETE FOR SIGNAL FOUNDATION
801104	96	LF	FURNISH & INSTALL WOOD SIGN SUPPORTS 4" X 4"
801106	36	LF	FURNISH & NSTALL WOOD SIGN SUPPORTS 4" X 6"
802501	800	LF	FURNISH & INSTALL NO 6 AWG STRANDED BARE COPPER GROUND WIRE
805011	20	LF	FURNISH & INSTALL 1" ELECTRICAL CONDUIT-GALVANIZED SLEEVE
805115	70	LF	FURNISH & INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT-BORED
805125	160	LF	FURNISH & INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805135	300	LF	FURNISH & INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805140	20	LF	FURNISH & INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805155	75	LF	FURNISH & INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
805160	20	LF	FURNISH & INSTALL 1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
807205	1	EA	FURNISH & INSTALL CONTROL & DISTRIBUTION EQUIPMENT
861116	910	LF	FURNISH & INSTALL ELECTRICAL CABLE 2-CONDUCTOR NO. 12 AWG COPPER TYPE T/C
811001	63	SF	INSTALL GROUND MOUNTED SIGN
813014	4	SF	INSTALL OVERHEAD SIGN
813015	1	EA	FURNISH & INSTALL STEEL POLE WITH A SINGLE 50 FT MAST ARM
818036	1	EA	FURNISH & INSTALL STEEL POLE WITH TWIN (60FT/50FT) MAST ARMS
822002	1150	LF	FURNISH & INSTALL 12-PAIR COMMUNICATION CABLE JELLYFILLED (UNDERGROUND)
831010	2	EA	FURNISH & INSTALL 250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
860022	21	EA	FURNISH & INSTALL BLACK FACE SIGNAL HEAD-MAST ARM MOUNT
861104	2050	LF	FURNISH & INSTALL ELECTRICAL CABLE-2 CONDUCTOR (ALUMINUM SHIELDED)
861107	275	LF	FURNISH & INSTALL ELECTRICAL CABLE-5 CONDUCTOR (NO 14 AWG)
861117	30	LF	FURNISH & INSTALL ELECTRICAL CABLE-3 WIRE (NO 4 AWG)
862101	1585	LF	FURNISH & INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO 14 AWG)
862102	415	LF	FURNISH & INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
864201	12	EA	INSTALL HANDHOLE
866103	2	EA	FURNISH & INSTALL 15 FT LIGHTING ARM ON SIGNAL STRUCTURE
871201	2	EA	INSTALL CONTROLLER & CABINET POLE MOUNT
873001	1	LS	REMOVE & SALVAGE EXISTING EQUIPMENT
120685	80	LF	REMOVAL EXISTING PAVEMENT MARKINGS-ANY WIDTH
800000	1	LS	REMOVE AND DISPOSED OF EXISTING EQUIPMENT
800000	1	LS	DELIVERY OF REMOVED CONTROLLER, CABINET AND GALVANIZED SIGNAL STRUCTURE

PHASE CHART

	1	2	3	4	5	6	7	
	(R)(Y)(G)	(R)(Y)(G)	(R)(Y)(G)	(R)(Y)(G)	(R)(Y)(G)	(R)(Y)(G)	(R)(Y)(G)	
Phase 2	R	R	G	G	R	R	R	←
Phase 2 Change	R	R	Y	Y	R	R	R	
Phase 3 (Clearance)	R	R	R	R	R	R	R	⊢
Phase 4	G	G	R	R	R	R	R	→
Phase 4 Change	Y	Y	R	R	R	R	R	
Phase 5 (Clearance)	R	R	R	R	R	R	R	⊣
Phase 6	R	R	R	R	G	G	G	↰ ↱
Phase 6 Change	R	R	R	R	Y	Y	Y	
Phase 7 (Clearance)	R	R	R	R	R	R	R	⊤
Flashing Operation	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	↑ ↑

REVISIONS	APPROVALS
	9/29/99 TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
	9/29/99 ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
	9-29-99 CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	9-29-99 DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

TEMPORARY SIGNAL - PHASE I
BRIDGE NO. 21059 ON MD 64
OVER C.S.X. TRANSPORTATION

DRAWN BY: GLYNIS	F.A.P. NO.	TS NO.	SHEET NO.
CHECKED BY:	S.H.A. NO. WA991B21		
SCALE: 1"= 20'	COUNTY: WASHINGTON	T.M.S. NO. D324	2 OF 4
DATE: SEPT. 29, 1999	LOG MILE:		

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