

EQUIPMENT LIST "A"

EQUIPMENT LIST "B"

F.H.W.A. REGION NO.	STATE	FED. AD PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD	SEE TITLE SHEET		

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

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

SPEC. SECTION	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
806	960022	3 EACH	12 IN., 1-WAY, 3-SECTION (R.Y.G.) SIGNAL HEAD MAST ARM MOUNT
806	960023	3 EACH	12 IN., 1-WAY, 3-SECTION (R.A.YA.GA.) SIGNAL HEAD MAST ARM MOUNT
806	960048	1 EACH	12 IN., 1-WAY, 2-SECTION PEDESTRIAN SIGNAL HEAD PEDESTAL MOUNT
817	965001	1 EACH	PEDESTRIAN PUSHBUTTON AND SIGN
813	973023	50 S.F.	SHEET ALUMINUM SIGNS
		- 1 EACH	R3-5 SIGN (30 IN. x 36 IN.) - "LANE USE CONTROL - LEFT ONLY" MAST ARM MOUNT
		- 2 EACH	D3-2 SIGN (VARIABLE x 16 IN.) - (ADVANCE STREET NAME PANEL) MAST ARM MOUNT
		- 1 EACH	R3-6 SIGN (30 IN. x 36 IN.) (LANE USE CONTROL - LEFT THRU) MAST ARM MOUNT
		- 1 EACH	R6-1(R) SIGN (36 IN. x 12 IN.) "ONE WAY" ONE PIECE SHIELD ASSEMBLY ON A BLACK BACKGROUND (30 IN. x 51 IN.) POLE MOUNT;
			M3-3 SIGN (24 IN. x 12 IN.) "SOUTH" (FOR INDEPENDENT USE)
			M1-5 SIGN (30 IN. x 24 IN.) "MARYLAND 235" (FOR INDEPENDENT USE)
			M6-1 SIGN (21 IN. x 15 IN.) "DIRECTIONAL ARROW-HORIZONTAL"

SPEC. SECTION	ITEM No.	QUANTITY	DESCRIPTION
104	120500	L.S.	MAINTENANCE OF TRAFFIC
205	203030	2 C.Y.	TEST PIT EXCAVATION
	500000	771 L.F.	FURNISH AND INSTALL 12" WHITE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS (CROSSWALK).
	500000	155 L.F.	FURNISH AND INSTALL 24" WHITE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS (STOP LINE).
801	801004	6 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
804	837001	2 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER x 10 FT. LENGTH
805	800000	75 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805	805115	75 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
805	800000	5 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805	805160	30 L.F.	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
806	831010	1 EACH	FURNISH AND INSTALL 250 WATT H.P.S. LAMP AND LUMINAIRE
810	800000	6 EACH	FURNISH AND INSTALL MICRO-LOOP PROBE SET WITH 1000 FT. LEAD-IN
810	802501	180 L.F.	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
810	861104	2179 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR ALUMINUM SHIELDED
810	861105	335 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
810	861106	345 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
810	861107	30 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
810	861108	1457 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
810	861116	395 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
810	862101	1885 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
811	811001	2 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813	813015	50 S.F.	INSTALL OVERHEAD SIGN
814	860220	6 EACH	INSTALL SIGNAL HEADS - MAST ARM MOUNT
814	860048	1 EACH	INSTALL 12 INCH 1-WAY 2 SECTION PEDESTRIAN SIGNAL HEAD PEDESTAL MOUNT
815	862102	535 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
817	865201	1 EACH	INSTALL PUSHBUTTON AND SIGN
818	818010	1 EACH	FURNISH AND INSTALL 14 FT. BREAKAWAY PEDESTAL POLE WITH T-BASE AND ANCHOR BOLTS
818	818041	2 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH A SINGLE 60 FT. MAST ARM
818	866103	1 EACH	FURNISH AND INSTALL 15 FT. LIGHTING ARM ON SIGNAL STRUCTURE
---	800000	1 EACH	INSTALL RELOCATED OPTICOM DETECTOR REMOVED FROM SPAN WIRE
---	800000	L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
---	800000	400 L.F.	FURNISH AND INSTALL ELECTRICAL OPTICOM CABLE - 4 CONDUCTOR (NO. 20 AWG)
---	873001	L.S.	REMOVE EXISTING SIGNAL EQUIPMENT TO BE SALVAGED
805	805011	38 L.F.	FURNISH AND INSTALL 1" GALVANIZED STEEL ELECTRICAL CONDUIT FOR DETECTOR SLEEVE.
---	860265	4 EACH	RELOCATE EXISTING SIGNAL HEAD.
---	800000	3 EACH	RELOCATE EXISTING SIGN ON SPAN WIRE OR MAST ARM.
---	800000	5 EACH	UNCOVER SIGNAL HEADS

CONSTRUCTION DETAILS

- A. INSTALL 27' STEEL POLE WITH 60' MAST ARM, 15' LIGHTING ARM AND LUMINAIRE, TRAFFIC SIGNAL HEADS, OPTICOM DETECTOR, AND SIGNS AS SHOWN (NOTE: 1-3" PVC 90 DEGREE ANGLE BENDS).
- B. INSTALL 14' BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEADS, PUSH BUTTON AND SIGN AS SHOWN (NOTE: 1 - 2" PVC 90 DEGREE ANGLE BEND).
- C. INSTALL 6'x30' LOOP DETECTOR, (3-6-3 TURNS) ENCASED IN 1/4" FLEXIBLE TUBING, QUADRUPOLE TYPE.
- D. INSTALL 6'x6' LOOP DETECTOR, 4 TURNS (SAMPLING STATION).
- E. INSTALL MICRO-LOOP PROBE SET WITH 1000 FT. LEAD-IN.
- F. INSTALL HANDHOLE.
- G. INSTALL 1" LIQUID - TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
- H. INSTALL 2" SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- I. INSTALL 3" SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
- J. INSTALL 1" GALVANIZED STEEL ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
- K. REMOVE AND SALVAGE EXISTING WOOD POLE RISER AND ALL SIGNAL EQUIPMENT.
- L. REMOVE AND SALVAGE EXISTING SIGNAL HEADS, SIGNS, CABLE NOTE: THE OPTICOM DETECTOR WILL BE RELOCATED TO THE NEW MAST ARM AS SHOWN ON THE PLANS.
- M. REMOVE EXISTING HANDHOLE.
- N. USE EXISTING HANDHOLE.
- O. USE EXISTING CONDUIT.
- P. REWIRE EXISTING CONTROLLER.
- Q. INSTALL 12" WHITE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS (CROSSWALKS).
- R. INSTALL 24" WHITE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS (STOP LINE).
- S. UNCOVER SIGNAL HEADS 1 AND 5.
- T. UNCOVER PEDESTRIAN SIGNAL HEADS

PHASE 3 AND FINAL
TRAFFIC SIGNAL

SS-26

RK & K
RUMMEL, KLEPPER & KAHL, LLP
CONSULTING ENGINEERS
81 MOSHER STREET
BALTIMORE, MARYLAND 21217
TEL: (410) 728-2900 FAX: (410) 728-3160

REVISIONS:	APPROVALS:
	CHIEF SIGNAL DESIGN SECTION
	ASST. DISTRICT ENGINEER - TRAFFIC
	CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR OFFICE OF TRAFFIC & SAFETY

MDOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION LOG MILE # 18023513.13

DRAWN BY: DED/SMH
DES. BY: DK/DLA/SMH
CHK. BY: BJH

MD 235 @ EXPLORATION PARK DRIVE
SIGNAL PLAN
COUNTY: ST. MARY'S

DATE: MAY 7, 1999 F.A.P. NO. SEE TITLE SHEET
SCALE: N.T.S. S.H.A. NO. SEE TITLE SHEET

TS/STD. NO.: 3787A-G12 SHEET NO. 170 OF 241

Nov. 1, 1998
Reconstruct Due To New
Geometrics. SHA No.: SMT685270