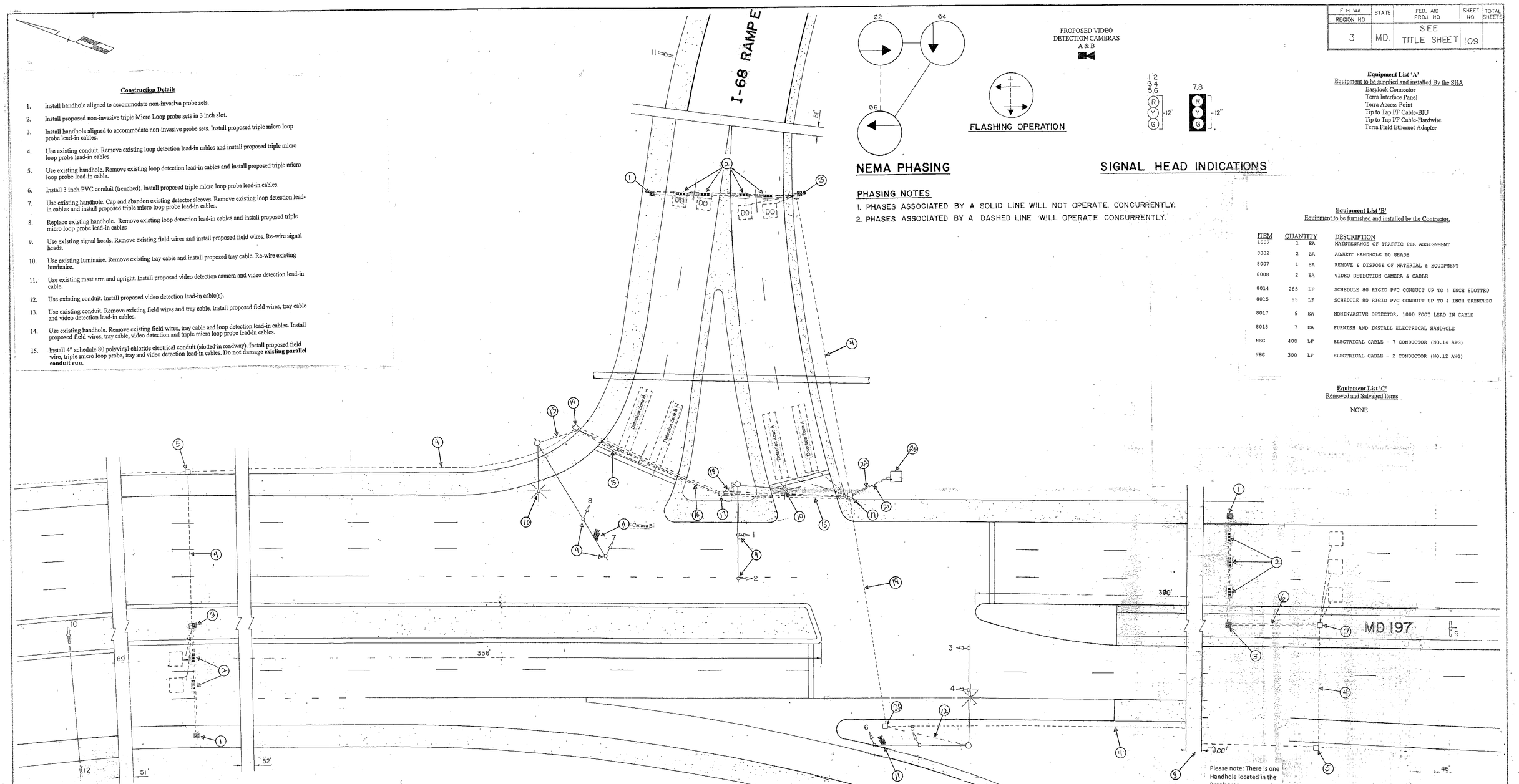
F H WA REGION NO	STATE	FED. AID PROJ. NO	SHEET NO.	TOTAL SHEETS
3	MD.	SEE TITLE SHEET	109	

Construction Details

1. Install handhole aligned to accommodate non-invasive probe sets.
2. Install proposed non-invasive triple Micro Loop probe sets in 3 inch slot.
3. Install handhole aligned to accommodate non-invasive probe sets. Install proposed triple micro loop probe lead-in cables.
4. Use existing conduit. Remove existing loop detection lead-in cables and install proposed triple micro loop probe lead-in cables.
5. Use existing handhole. Remove existing loop detection lead-in cables and install proposed triple micro loop probe lead-in cable.
6. Install 3 inch PVC conduit (trenched). Install proposed triple micro loop probe lead-in cables.
7. Use existing handhole. Cap and abandon existing detector sleeves. Remove existing loop detection lead-in cables and install proposed triple micro loop probe lead-in cables.
8. Replace existing handhole. Remove existing loop detection lead-in cables and install proposed triple micro loop probe lead-in cables
9. Use existing signal heads. Remove existing field wires and install proposed field wires. Re-wire signal heads.
10. Use existing luminaire. Remove existing tray cable and install proposed tray cable. Re-wire existing luminaire.
11. Use existing mast arm and upright. Install proposed video detection camera and video detection lead-in cable.
12. Use existing conduit. Install proposed video detection lead-in cable(s).
13. Use existing conduit. Remove existing field wires and tray cable. Install proposed field wires, tray cable and video detection lead-in cables.
14. Use existing handhole. Remove existing field wires, tray cable and loop detection lead-in cables. Install proposed field wires, tray cable, video detection and triple micro loop probe lead-in cables.
15. Install 4" schedule 80 polyvinyl chloride electrical conduit (slotted in roadway). Install proposed field wire, triple micro loop probe, tray and video detection lead-in cables. **Do not damage existing parallel conduit run.**



NEMA PHASING

PROPOSED VIDEO DETECTION CAMERAS A & B

FLASHING OPERATION

SIGNAL HEAD INDICATIONS

PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

Equipment List 'A'
Equipment to be supplied and installed By the SHA

Easylock Connector
Terra Interface Panel
Terra Access Point
Tip to Tap I/F Cable-BIU
Tip to Tap I/F Cable-Hardwire
Terra Field Ethernet Adapter

Equipment List 'B'
Equipment to be furnished and installed by the Contractor.

ITEM	QUANTITY		DESCRIPTION
1002	1	EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
8002	2	EA	ADJUST HANDHOLE TO GRADE
8007	1	EA	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT
8008	2	EA	VIDEO DETECTION CAMERA & CABLE
8014	285	LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH SLOTTED
8015	85	LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH TRENCHED
8017	9	EA	NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE
8018	7	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
NEG	400	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)
NEG	300	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.12 AWG)

Equipment List 'C'
Removed and Salvaged Items

NONE

16. Install 4" schedule 80 polyvinyl chloride electrical conduit (trenched) Install proposed field wire, triple micro loop probe, tray and video detection lead-in cables. **Do not damage existing parallel conduit run.**
17. Adjust handhole to grade. Remove existing loop detection lead-in cables, field wires and tray cables. Install proposed field wires, triple micro loop probe, tray and video detection lead-in cables.
18. Use existing conduit. Remove existing field wires and tray cable. Install proposed field wires and tray cable.
19. Use existing conduit. Remove existing loop detection lead-in cable. Install proposed triple micro loop probe and video detection lead-in cables.
20. Use existing handhole. Remove existing loop detection lead-in cable. Install proposed triple micro loop probe and video detection lead-in cables.
21. Use existing conduit. Remove existing loop detection lead-in cables, field wires and tray cables. Install proposed field wires and tray cables.
22. Use existing empty conduit. Install proposed video detection and triple micro loop probe lead-in cables.
23. Use existing controller cabinet. Remove existing loop detection lead-in cables, tray cables and field wires for affected phases. Install proposed field wires, tray cable and video detection and triple micro loop probe lead-in cables. TOD personnel will install and program video detection interface equipment and re-tune amplifiers after completion of proposed detection work.

TRAFFIC SIGNAL SYMBOLS

EXISTING		PROPOSED
	HANDHOLE	
	LOOP DETECTOR(6X30)	
	LOOP DETECTOR(6X6)	
	CONDUIT	
	MICRO LOOP PROBE SET	
	ZOOM LENS IMAGE SENSOR	

REVISIONS

4 March 2012 Upgrade to Video Detection XX6565185 TIMS: L520

APPROVALS

6/22/88
FOR: Dimitrios A. Zafirio
CHIEF, SIGNAL DESIGN SECTION

6/22/88
ASST. DISTRICT ENGINEER, TRAFFIC

6-22-88
CHIEF, BUREAU OF TRAFFIC ENGINEERING

DEPUTY CHIEF ENGINEER, OFFICE OF TRAFFIC

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION - OFFICE OF TRAFFIC
BUREAU OF TRAFFIC ENGINEERING

DRAWN BY D. J. FINGERLOS
DES. BY: H. A. BADGETT
CHK. BY: H. A. BADGETT 6/21/88
DATE: 1-20-88
SCALE: 1" = 20'

MD 197 at I-68 RAMP E (U550)

COUNTY: PRINCE GEORGES

F.A.P. NO. AC-STPG-0000(70)E
S.H.A. NO. XX6565185
TS/FILE NO. 2461 A
SHEET NO. 1 OF 1