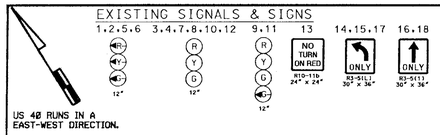
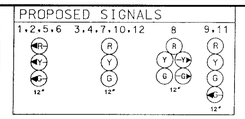
EXISTING SIGNALS & SIGNS



US 40 RUNS IN A EAST-WEST DIRECTION.

PROPOSED SIGNALS



CONSTRUCTION DETAILS

1. REMOVE THE EXISTING SIGNAL HEAD. INSTALL THE PROPOSED SIGNAL HEAD.
2. INSTALL THE PROPOSED AUTOSCOPE ON THE EXISTING SIGNAL POLE.
3. USE THE EXISTING HANDHOLE.
4. USE THE EXISTING CONDUIT.
5. REMOVE THE EXISTING SIDEWALK. INSTALL 2" PVC SCHEDULE 80 CONDUIT - TRENCHED. AND A CONDUIT BEND AT THE BOTTOM OF THE UTILITY POLE. REINSTALL THE 4" CONCRETE SIDEWALK.
6. INSTALL A 2" PVC CONDUIT BEND IN THE EXISTING FOUNDATION.
7. INSTALLATION AND WIRING OF THE MACHINE VISION PROCESSOR. AND THE SUPERVISOR COMPUTER IN THE CONTROLLER CABINET TO BE COMPLETED BY THE SHA SIGNAL SHOP. (SEE NOTES TO CONTRACTOR.)

PROJECT DESCRIPTION

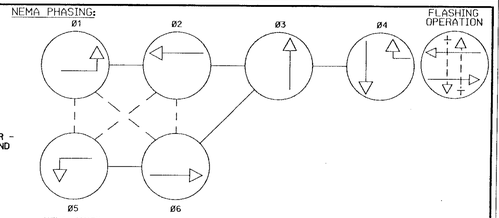
I. GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF AN RIGHT TURN OVERLAP FOR WESTBOUND US 40 TO NORTHBOUND MD 213 FOR THE INTERSECTION OF US 40 AND MD 213 IN CECIL COUNTY. AUTOSCOPE WILL ALSO BE ADDED TO NORTHBOUND AND SOUTHBOUND MD 213, AND THE EXCLUSIVE/ PERMISSIVE LEFT TURNS FOR EASTBOUND AND WESTBOUND US 40.
US 40 RUNS IN A EAST-WEST DIRECTION.

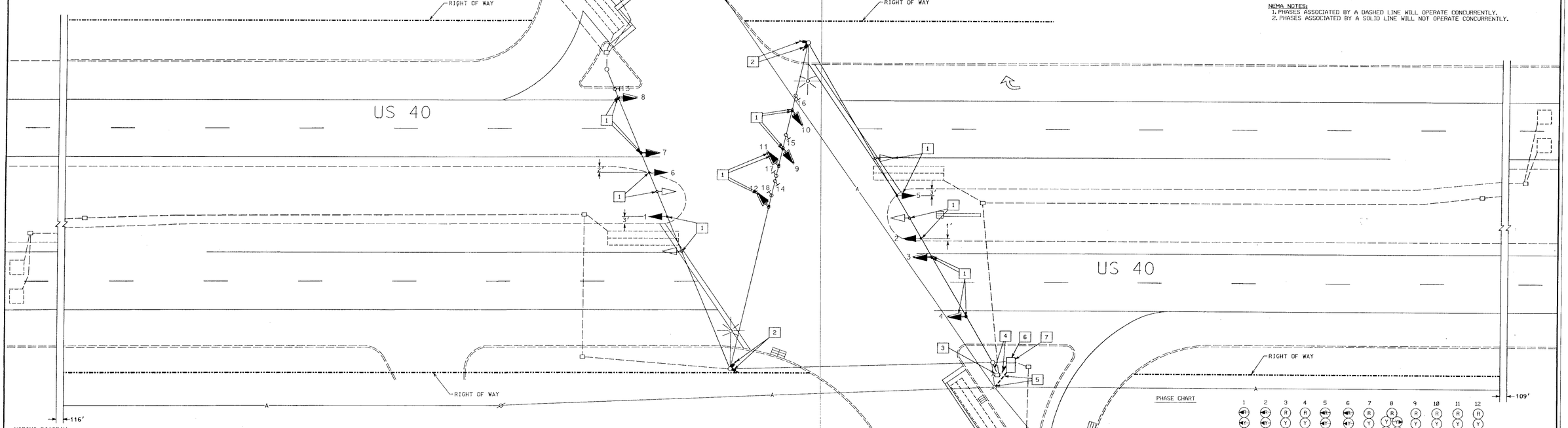
II. NOTES TO THE CONTRACTOR

THE CONTRACTOR SHALL NOTIFY THE SHA SIGNAL SHOP (MR. ED RODENHIZER - (410-787-7652) FOR THE INSTALLATION OF THE MACHINE VISION PROCESSOR, AND THE SUPERVISOR COMPUTER IN THE CONTROLLER CABINET.

NEMA PHASING:

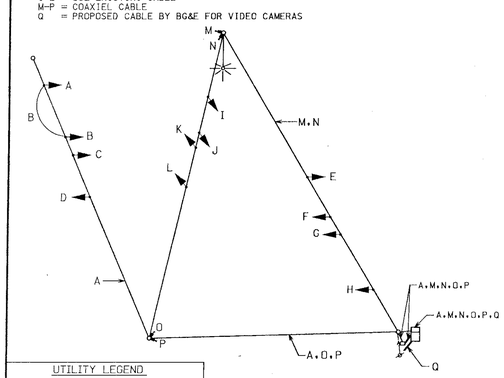


NEMA NOTES:
1. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



WIRING DIAGRAM

A-B = 7-CONDUCTOR CABLE (NO. 14 AWG)
C-L = USE EXISTING CABLE
M-P = COAXIEL CABLE
Q = PROPOSED CABLE BY BG&E FOR VIDEO CAMERAS



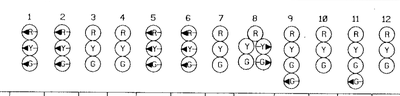
UTILITY LEGEND

G — G	GAS MAIN
W — W	WATER MAIN
S — S	SEWER MAIN
E — E	ELECTRIC CABLES
A — A	AERIAL CABLES
T — T	TELEPHONE CABLES
D — D	STORM DRAIN

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2002	1 C.Y.	TEST PIT EXCAVATION
6024	4 S.F.	F & I 4" CONCRETE SIDEWALK
8015	43 EACH	F & I 12" BLACK FACED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8022	1 EACH	F & I CONDUIT BEND IN EXISTING BASE
8031	20 L.F.	F & I 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8063	430 L.F.	F & I ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
NEG.	1 EACH	F & I VIDEO TRAFFIC DETECTION SYSTEM (INCUDES 4 CAMERAS, MACHINE VISION PROCESSOR, & SUPERVISOR COMPUTER)
NEG.	630 L.F.	F & I COAXIEL CABLE

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	
PHASE 1 & 5	◄G-	◄G-	R	R	◄G-	◄G-	R	R	R	R	R	R	
1 & 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6												
PHASE 1 & 6	◄G-	◄G-	G	G	◄R-	◄R-	R	R	R	R	R	R	
1 CHANGE	◄Y-	◄Y-	G	G	◄R-	◄R-	R	R	R	R	R	R	
PHASE 2 & 5	◄R-	◄R-	R	R	◄G-	◄G-	G	G	R	R	R	R	
5 CHANGE	◄R-	◄R-	R	R	◄Y-	◄Y-	G	G	R	R	R	R	
PHASE 2 & 6	◄R-	◄R-	G	G	◄R-	◄R-	G	G	R	R	R	R	
2 & 6 CHANGE	◄R-	◄R-	Y	Y	◄R-	◄R-	Y	Y	R	R	R	R	
PHASE 3	◄R-	◄R-	R	R	◄R-	◄R-	R	R	◄G-G	G	R	R	
3 CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R	Y	Y	R	R	
PHASE 4	◄R-	◄R-	R	R	◄R-	◄R-	R	R-G►	R	R	◄G-G	G	
4 CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R-Y►	R	R	Y	Y	
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	

REVISIONS

04/1998: RECUT LOOP DETECTORS

S.H.A. NO. CE-666-501-276

BJ | SR | DLAZ | CJP | JH

G). 09/2000: ADDED RIGHT TURN OVERLAP TO W/B US 40 TO MD 213 & ADDED AUTOSCOPE TO THE PROJECT

S.H.A. NO. 07Z000

F). 03/1998: REPLACED FAILED LOOP DETECTION

S.H.A. NO. 23855T25062
S.H.A. NO. 23859T07056

SRS | DLAZ | JH

E). 1-21-1998: REPLACE N.B. MD 213 DETECTION

S.H.A. NO. BW996M82

JMZ | DLAZ | BAK | JH

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION: ORIGINAL

ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION: ON

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION: FILE

DIRECTOR, OFFICE OF TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

US 40 and MD 213

ELKTON, MARYLAND

DRAWN BY: J. SPENCE	F.A.P. NO.	T.S. NO. TS-272 G	SHEET NO.
CHECKED BY: B. THOMPSON	S.H.A. NO. 23859T25062&814		
SCALE: 1" = 20'	COUNTY CECIL	T.I.M.S. NO. D868	1 OF 1
DATE: 6-10-1978	LOG MILE 07Z004014.88		

D:\BUILD\BPTE\WORK\TS272 Sep 01, 2009 08:22:53