

PROJECT DESCRIPTION

1. GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE TRAFFIC SIGNAL AT THE INTERSECTION MD 404 (SHORE HIGHWAY) AND MD 313 (FEDERALSBURG HIGHWAY) IN CAROLINE COUNTY.

THE INTERSECTION IS BEING RECONSTRUCTED TO PROVIDE A NEW RIGHT TURN BY-PASS LANE AT THE MD 313 APPROACH. MD 404 IS ALSO BEING WIDENED TO PROVIDE A DEDICATED LEFT TURN AND A THRU LANE AT THE WESTBOUND APPROACH. ALL TURNS WILL BE CHANNELIZED.

AN EXCLUSIVE/PERMISSIVE LAG PHASE WILL BE PROVIDED FOR THE WESTBOUND LEFT TURN MOVEMENTS. VIDEO DETECTION WILL BE INSTALLED FOR THE MD 313 APPROACH AND WESTBOUND LEFT-TURN MOVEMENTS.

MD 404 RUNS IN AN EAST-WEST DIRECTION.

THIS PHASE - PHASE 1 INVOLVES WIDENING ALONG MD 404. MOT OPERATIONS WILL UTILIZE THE EXISTING SIGNAL HEADS RELOCATED FOR THE PROPOSED LANE SHIFTS DURING THIS PHASE.

2. INTERSECTION OPERATION

NORMAL OPERATION

THE TRAFFIC SIGNAL CURRENTLY OPERATES IN A NEMA THREE-PHASE FULL TRAFFIC ACTUATED MODE.

DURING THIS PHASE, THE TRAFFIC SIGNAL WILL CONTINUE TO OPERATE IN A NEMA THREE-PHASE FULL TRAFFIC ACTUATED MODE.

3. CONTROLLER INFORMATION

THE EXISTING CONTROLLER AT THE INTERSECTION WILL BE USED DURING THIS PHASE OF OPERATION.

PROJECT CONTACTS

MR. RICHARD K. LINDSAY
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MR. BARRY CLOTHIER
DISTRICT UTILITY ENGINEER
PHONE: 410-810-3275

MR. ROBERT L. KIEL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: 410-810-3240

MR. EDWARD RODENHIZER
CHIEF, SIGNAL OPERATIONS SECTION
PHONE: 410-787-7652

MR. TERRY D. WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: 410-810-3250

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
PHONE: 410-787-7631

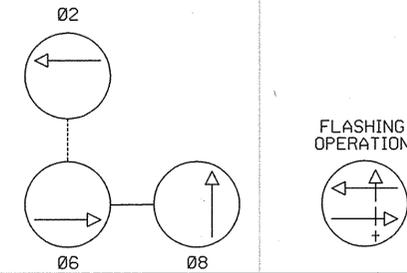
EXISTING SIGNALS

1,2,3,4
5,6
R
Y
G
12"

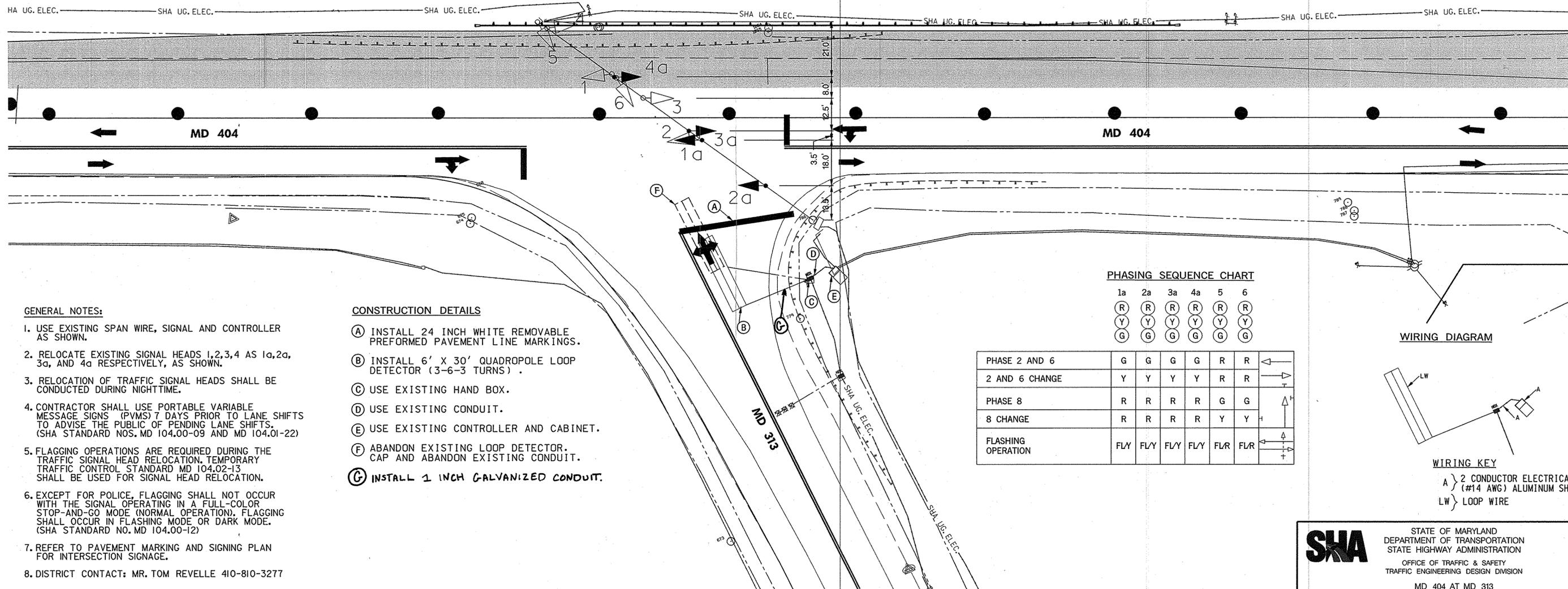
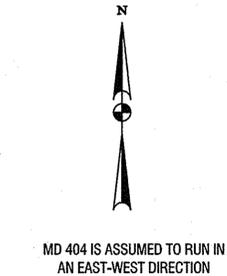
RELOCATED SIGNALS

1a,2a
3a,4a
R
Y
G
12"

NEMA PHASING



NOTE: PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



GENERAL NOTES:

- USE EXISTING SPAN WIRE, SIGNAL AND CONTROLLER AS SHOWN.
- RELOCATE EXISTING SIGNAL HEADS 1,2,3,4 AS 1a,2a, 3a, AND 4a RESPECTIVELY, AS SHOWN.
- RELOCATION OF TRAFFIC SIGNAL HEADS SHALL BE CONDUCTED DURING NIGHTTIME.
- CONTRACTOR SHALL USE PORTABLE VARIABLE MESSAGE SIGNS (PVMS) 7 DAYS PRIOR TO LANE SHIFTS TO ADVISE THE PUBLIC OF PENDING LANE SHIFTS. (SHA STANDARD NOS. MD 104.00-09 AND MD 104.01-22)
- FLAGGING OPERATIONS ARE REQUIRED DURING THE TRAFFIC SIGNAL HEAD RELOCATION. TEMPORARY TRAFFIC CONTROL STANDARD MD 104.02-13 SHALL BE USED FOR SIGNAL HEAD RELOCATION.
- EXCEPT FOR POLICE, FLAGGING SHALL NOT OCCUR WITH THE SIGNAL OPERATING IN A FULL-COLOR STOP-AND-GO MODE (NORMAL OPERATION). FLAGGING SHALL OCCUR IN FLASHING MODE OR DARK MODE. (SHA STANDARD NO. MD 104.00-12)
- REFER TO PAVEMENT MARKING AND SIGNING PLAN FOR INTERSECTION SIGNAGE.
- DISTRICT CONTACT: MR. TOM REVELLE 410-810-3277

CONSTRUCTION DETAILS

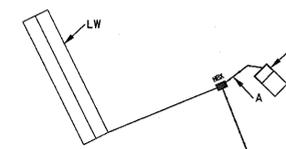
- (A) INSTALL 24 INCH WHITE REMOVABLE PREFORMED PAVEMENT LINE MARKINGS.
- (B) INSTALL 6' X 30' QUADROPOLE LOOP DETECTOR (3-6-3 TURNS).
- (C) USE EXISTING HAND BOX.
- (D) USE EXISTING CONDUIT.
- (E) USE EXISTING CONTROLLER AND CABINET.
- (F) ABANDON EXISTING LOOP DETECTOR. CAP AND ABANDON EXISTING CONDUIT.
- (G) INSTALL 1 INCH GALVANIZED CONDUIT.

PHASING SEQUENCE CHART

	1a	2a	3a	4a	5	6
(R)	R	R	R	R	R	R
(Y)	Y	Y	Y	Y	Y	Y
(G)	G	G	G	G	G	G

PHASE 2 AND 6	G	G	G	G	R	R	←
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	↑
PHASE 8	R	R	R	R	G	G	↑
8 CHANGE	R	R	R	R	Y	Y	↑
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLR	FLR	↑

WIRING DIAGRAM



WIRING KEY

- A } 2 CONDUCTOR ELECTRICAL CABLE (#14 AWG) ALUMINUM SHIELDED
- LW } LOOP WIRE

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 404 AT MD 313
SIGNAL RELOCATION DUE TO GEOMETRIC CHANGES

GEOMETRIC LEGEND

EXISTING
PROPOSED

UTILITY LEGEND

SD - STORM DRAIN
G - GAS MAIN
W - WATER MAIN
S - SEWER MAIN
E - ELECTRIC CABLES
A - AERIAL CABLES
T - TELEPHONE CABLES
F - FIBER-OPTIC

BY: Josette Wheatley

**Edwards
AND
Kelcey**

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APPROVALS	REVISIONS	TEMPORARY SIGNAL PLAN MOT PHASE 1&1A	
TEAM LEADER	12/17/07 SHA NO. C05885187 RELOCATED SIGNAL HEADS DUE TO GEOMETRIC CHANGES. AP C. J. [Signature]	SCALE 1" = 20'	DATE 7/09/02 CONTRACT NO.
ASST. DIV. CHIEF	5/8/94 SHA NO. 01-1+2-94 UPDATED EXISTING ICB TO FULLY ACTUATED TRAFFIC SIGNAL TMZ	DESIGNED BY S. RENZI	COUNTY CAROLINE
DIVISION CHIEF	SHA NO. 01-1+2-94 INSTALL MASTER CONTROLLER AND MAINLINE DEPARTURE DETECTORS. TMZ	DRAWN BY S. RENZI	LOGMILE 090404133.30
OFFICE DIRECTOR		CHECKED BY	TIMS NO. H442
		FAP NO.	TOD NO.
		TS NO. 3376-C	DRAWING TS - 1 OF 1 SHEET NO. 10 OF 18