

## SPECIAL NOTES:

1. THE CONTRACTOR SHALL NOT BLOCK VIEW OF EXISTING SIGNAL INDICATIONS DURING INSTALLATION OF MAST ARM. IF NEW MAST ARM CANNOT BE INSTALLED DUE TO CONFLICT WITH EXISTING SIGNAL INDICATIONS OR SPAN WIRES, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
2. CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.
3. ANY SIGNAL OUTAGE REQUIRED FOR NEW ELECTRICAL SERVICE SHALL BE SCHEDULED DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
4. THE TACTILE ARROWS FOR THE AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS SHALL BE LOCATED PARALLEL TO THE CROSSWALK FOR WHICH THEY APPLY.
5. INSTALL HANDHOLE WITH LONG DIMENSION PERPENDICULAR TO TRAVEL WAY FOR INSTALLATION OF NON-INVASIVE PROBES. EXTEND CONDUIT A MINIMUM OF 2 IN. AND MAXIMUM OF 3 IN. INTO HANDHOLE.

MD 22 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

## PROPOSED VIDEO DETECTION CAMERA

a.b.c.d

-V

VIDEO DETECTION ZONE

RIGHT-OF-WAY LINE

## PROPOSED SIGNS

13,14,15,16

Mt. Royal AVE

D-3(1) (DUAL FACED)

(VARIABLE X 16")

18,22,23,27

Aberdeen THRU

D-3(1) (DUAL FACED)

(VARIABLE X 16")

R10-3(1) 9' x 15'

R10-3(1) 9' x 15'

SEE SPECIAL NOTE 3

29 30

## PROPOSED SIGNAL HEADS

1,4

2,5

6-10

11,12

12" x 8"

12"

12"

16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD

EX. SIGNS TO BE RELOCATED (SHOWN AT FINAL LOCATION)

20,28

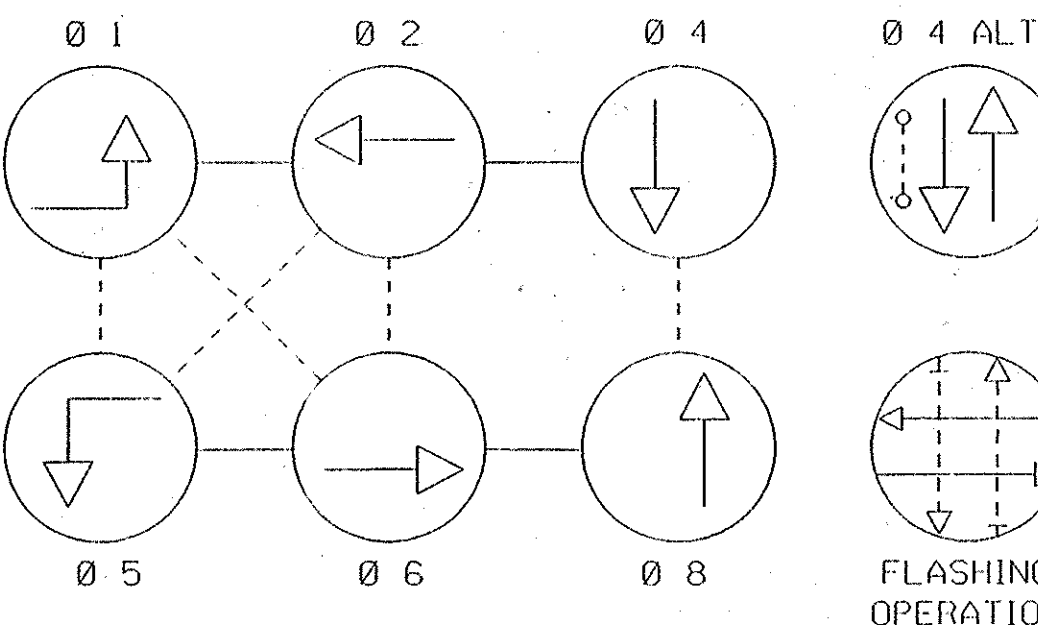
ONE WAY

17,24

ONE WAY

RIGHT-OF-WAY LINE

## NEMA PHASING



## PHASING NOTES:

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

MD 22 (ABERDEEN THRUWAY)

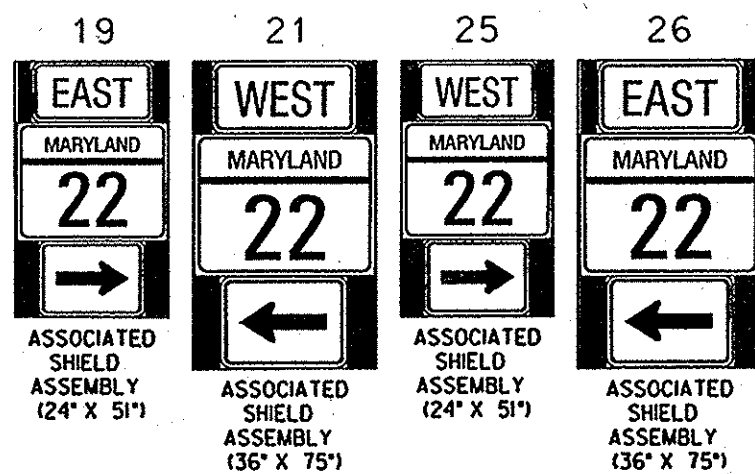
MD 22 (ABERDEEN THRUWAY)

## CONSTRUCTION DETAILS

- INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT. (CUT TO 46 FT. 1/70 FT. MAST ARMS. TRAFFIC SIGNAL HEADS, SIGNS, SHIELD ASSEMBLIES AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT. (CUT TO 40 FT. 1/70 FT. MAST ARMS. TRAFFIC SIGNAL HEADS, SIGNS, RELOCATED R6-1 SIGNS AND SHIELD ASSEMBLIES. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN (SIGN TO READ "PUSH BUTTON TO CROSS ABERDEEN THRUWAY" (INSTALL 2-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
- INSTALL HANDHOLE.
- INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 3 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).
- REMOVE EXISTING STRAIN POLE AND CONTROL AND DISTRIBUTION EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE.
- REMOVE EXISTING STRAIN POLE. PEDESTRIAN SIGNAL HEAD AND STREET LIGHTING ARM. RELOCATE EXISTING R6-1 SIGNS TO NEW STEEL POLE AS SHOWN. REMOVE FOUNDATION 12 IN. BELOW GRADE.
- REMOVE EXISTING STRAIN POLE AND STREET LIGHTING ARM. RELOCATE EXISTING R6-1 SIGNS TO NEW WOOD SUPPORT AS SHOWN. REMOVE FOUNDATION 12 IN. BELOW GRADE.
- REMOVE EXISTING STRAIN POLE AND PEDESTRIAN SIGNAL HEAD. REMOVE FOUNDATION 12 IN. BELOW GRADE.
- REMOVE EXISTING SPAN WIRE, TETHER WIRE, SIGNAL HEADS AND SIGNS.
- REMOVE EXISTING SPAN WIRE AND SIGNAL HEADS.
- USE EXISTING HANDHOLE.
- INSTALL 3 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (BORED).
- CAP AND ABANDON EXISTING CONDUIT.
- ABANDON EXISTING LOOP DETECTOR.
- REMOVE EXISTING HANDHOLE.
- CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.
- REMOVE EXISTING AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOP LINE).
- USE EXISTING BASE MOUNTED CABINET AND CONTROLLER. INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE CONDUIT BEND IN CABINET BASE.
- INSTALL EXISTING R6-1 SIGNS ON ONE 4 IN. X 4 IN. TREATED WOOD SUPPORT. (WOOD SUPPORT 1-13' 3").
- INSTALL BASE MOUNTED METERED SERVICE PEDESTAL WITH 1-2 IN. AND 1-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BEND IN PEDESTAL BASE.
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE FOR USE BY OTHERS.
- INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
- INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 500 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT.
- INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1,000 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT.
- INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN (SIGN TO READ "PUSH BUTTON TO CROSS ABERDEEN THRUWAY" (INSTALL 2-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE). THE PEDESTAL POLE SHALL BE INSTALLED TO ENSURE THE AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON IS A MAXIMUM OF 24 INCHES FROM EDGE OF SIDEWALK.

LAUREL AVENUE

## PROPOSED SIGNS



## LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

|              |    |
|--------------|----|
| AERIAL CABLE | A  |
| ELECTRICAL   | E  |
| TELEPHONE    | T  |
| GAS          | G  |
| SEWER        | SS |
| STORM DRAIN  | SD |
| WATER        | W  |
| CABLE TV     | TV |

WR&amp;A

Whitman, Reardon  
and Associates, LLP  
801 South Caroline Street  
Baltimore, Maryland 21231  
(410) 235-3450

TOD No.: AT720-12  
SHA No.: HA317A52/B52

## GENERAL NOTES

1. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCE AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
3. THE CONTRACTOR SHALL NOT CUT MAST ARM AS INDICATED ON PLANS UNTIL MAST ARM POLE LOCATION IS FINALIZED.
4. INSTALL CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
5. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
6. REFER TO SHEET IC-09 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

TSP-1

| REVISIONS                                                 | APPROVALS                                         |
|-----------------------------------------------------------|---------------------------------------------------|
| (C) REBUILD TRAFFIC SIGNAL CONTRACT NO. AT7025185 7/20/06 | TEAM LEADER - TRAFFIC ENGINEERING DESIGN DIVISION |
| (B) ADD E/P LEFT FOR MD 22 6/90                           | ASST. TRAFFIC ENGINEERING DESIGN DIVISION         |
| WM                                                        | CHIEF TRAFFIC ENGINEERING DESIGN DIVISION         |
| AS BUILT 6/90                                             | DIRECTOR, TRAFFIC & SAFETY                        |



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION  
TRAFFIC SIGNALIZATION PLAN  
MD 22 (ABERDEEN THRUWAY) AND MT. ROYAL AVE.

|                                |                       |                    |
|--------------------------------|-----------------------|--------------------|
| DRAWN BY: B.K. HILIAN          | F.A.P. NO.            | TS NO.             |
| CHECKED BY: HOWARD KILIAN, JR. | S.H.A. NO.            | 1438 C             |
| SCALE: 1" = 20'                | COUNTY: HARFORD       | T.I.M.S. NO. G 745 |
| DATE: 4/25/77                  | LOG MILE: 12002211.43 | SHEET NO. 1 OF 9   |