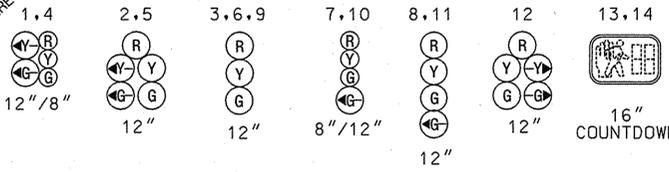


NOTE: US 1 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

PROPOSED LED SIGNALS



PROPOSED VIDEO DETECTION CAMERA

a, b, c, d

LINE HEIGHTS (LH-1)

COMMUNICATION	15'-10"
COMMUNICATION	17'-1"
GUY	25'-0"
PRIMARY	35'-0"+/-

PROPOSED AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS



17, 17a, 20, 20a
Belair RD
D3(1)
(VAR. x16")
DUAL FACE

18
M3-3
(24" x 12") +
M1-4(q)
(24" x 24") +
M6-1
(21" x 15")

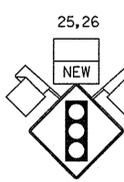
19
SHIELD ASSEMBLY
36" x 75"

21
SHIELD ASSEMBLY
24" x 51"

22
M3-3
(30" x 15") +
M1-4(q)
(36" x 36") +
M6-1
(30" x 24")

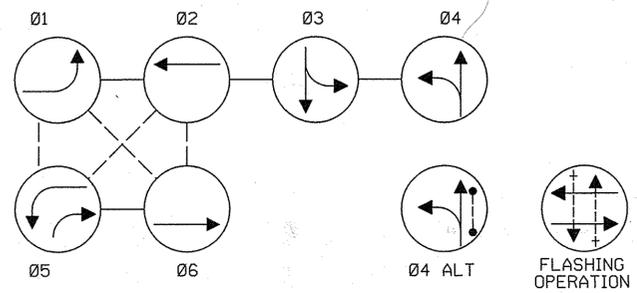
23
ONLY
R3-5(L)
(30" x 36")

24
R3-6(MQD)
(30" x 36")

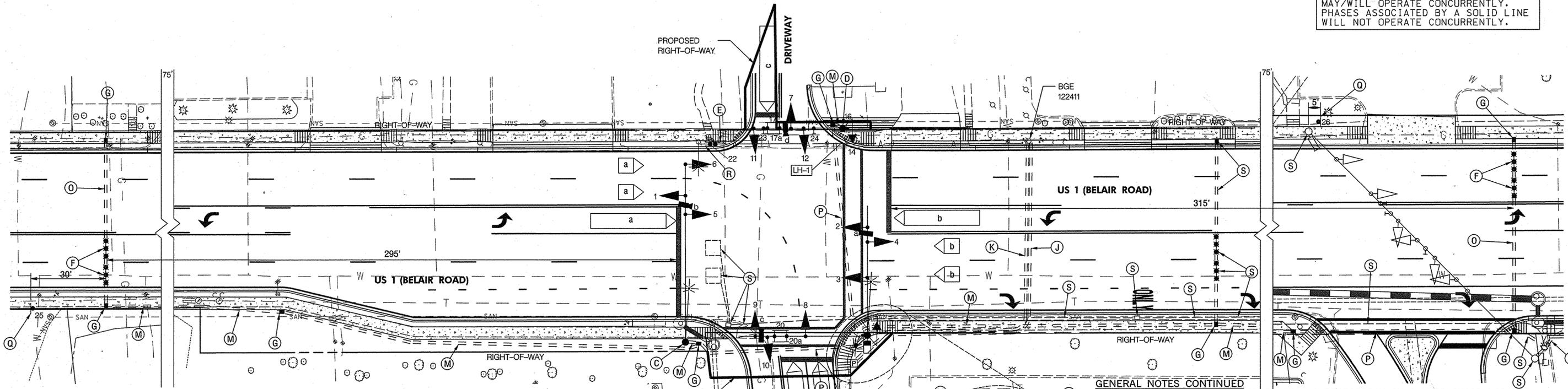


TEMPORARY SIGN
W3-3 FY (36" x 36") +
D95-25 (24" x 24")

NEMA PHASING



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



CONSTRUCTION DETAILS

- INSTALL NEMA SIZE "6" BASE MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT (NOTE: 2-2 IN. AND 2-4 IN. 90 DEGREE BENDS).
- INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT. MAST ARMS, FOUNDATION, LED TRAFFIC SIGNAL HEADS, VIDEO DETECTION CAMERA, 20 FT. LIGHTING ARM WITH 250 WATT HPS LUMINAIRE, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGN, AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS BELAIR ROAD" (NOTE: 2-3 IN. PVC 90 DEGREE BENDS).
- INSTALL 27 FT. STEEL POLE WITH A 70 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, VIDEO DETECTION CAMERA, AND 20 FT. LIGHTING ARM WITH 250 WATT HPS LUMINAIRE (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
- INSTALL 27 FT. STEEL POLE WITH A 38 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGN, AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS BELAIR ROAD", VIDEO DETECTION CAMERA, AND SIGNS. (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
- INSTALL GROUND MOUNTED SIGN (18) ON ONE 4 INCH X 6 INCH WOOD POST.
- INSTALL NON-INVASIVE MICROLOOP PROBE SET.
- INSTALL ELECTRICAL HANDHOLE.
- INSTALL METERED SERVICE PEDESTAL (NOTE: 2-2 INCH AND 1-4 INCH CONDUIT BENDS).
- INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) (SLOT UNDER ROADWAY) - FOR PROPOSED UNDERGROUND TELEPHONE SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS.
- INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) (SLOT UNDER ROADWAY) - FOR PROPOSED UNDERGROUND POWER SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS.
- INSTALL 2 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (SLOTTED).
- INSTALL 4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (SLOTTED). TRENCH CONDUIT WHEN SLOTTING IS NOT NECESSARY.
- INSTALL GROUND MOUNTED SIGN (25 AND 26) AND ASSOCIATED FLAGS ON ONE 4 IN. X 6 IN. WOOD POST. SHA DISTRICT FORCES WILL REMOVE SIGNS THREE MONTHS AFTER INSTALLATION.
- INSTALL GROUND MOUNTED SIGN (22) ON TWO 4 INCH X 6 INCH WOOD POSTS.
- SEE US 1 AT JOPPA ROAD/EBENEZER ROAD TRAFFIC SIGNALIZATION PLAN.

GENERAL NOTES

- MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MSHA STANDARD TYPICALS FOR TRAFFIC CONTROL.
- THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES 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.
- THE SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES.
- THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
- SEE GENERAL INFORMATION SHEET FOR SIGNAL POLE, VIDEO DETECTION CAMERA, CROSSWALK, STOPLINE, SIGN AND SIGNAL HEAD LAYOUTS.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
- VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.

GENERAL NOTES CONTINUED

- PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18 IN.
- THE 10 FT. MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60 IN. x 60 IN. LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- ALL AUDIBLE/TACTILE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7650 TO COORDINATE.
- ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCCELL.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2; AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- THE CONTRACTOR SHALL INSTALL ALL HANDHOLES, FOUNDATIONS, AND CONDUIT PRIOR TO PROPOSED SIDEWALK, RAMP, AND FINAL ROADWAY SURFACE.
- THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTION TO AVOID THE SANITARY AND GAS LINES IN THE NORTHWEST CORNER.
- STOPLINES AND CROSSWALKS TO BE INSTALLED BY SIGNING AND PAVEMENT MARKING CONTRACTOR.
- THE SHA SIGNAL SHOP SHALL PROGRAM VIDEO DETECTION CAMERAS (a) AND (b) FOR BOTH PRESENCE AND SAMPLING DETECTION.

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UTILITY LEGEND

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

APPROVALS	REVISIONS
<i>[Signature]</i> 5/6/08 TEAM LEADER	
<i>[Signature]</i> 5/6/08 ASSIST. DIR. CHIEF	
<i>[Signature]</i> 5/14/08 DIVISION CHIEF	
<i>[Signature]</i> 5/8/08 OFFICE DIRECTOR	

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 1 (BELAIR ROAD) AT
PERRY HALL SHOPPING CENTER DRIVE

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' DATE MARCH 2008 CONTRACT NO. BA4855187

DESIGNED BY	SBS	COUNTY	BALTIMORE
DRAWN BY	SBS	LOGMILE	03000119.59
CHECKED BY	BAB	TIMS NO.	I-425
FAP NO.	SEE TITLE SHEET	TOD NO.	

TS NO. 4645 DRAWING SG - 1 OF 6 SHEET NO. 22 OF 38