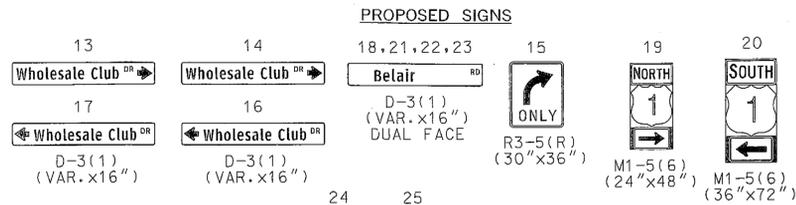
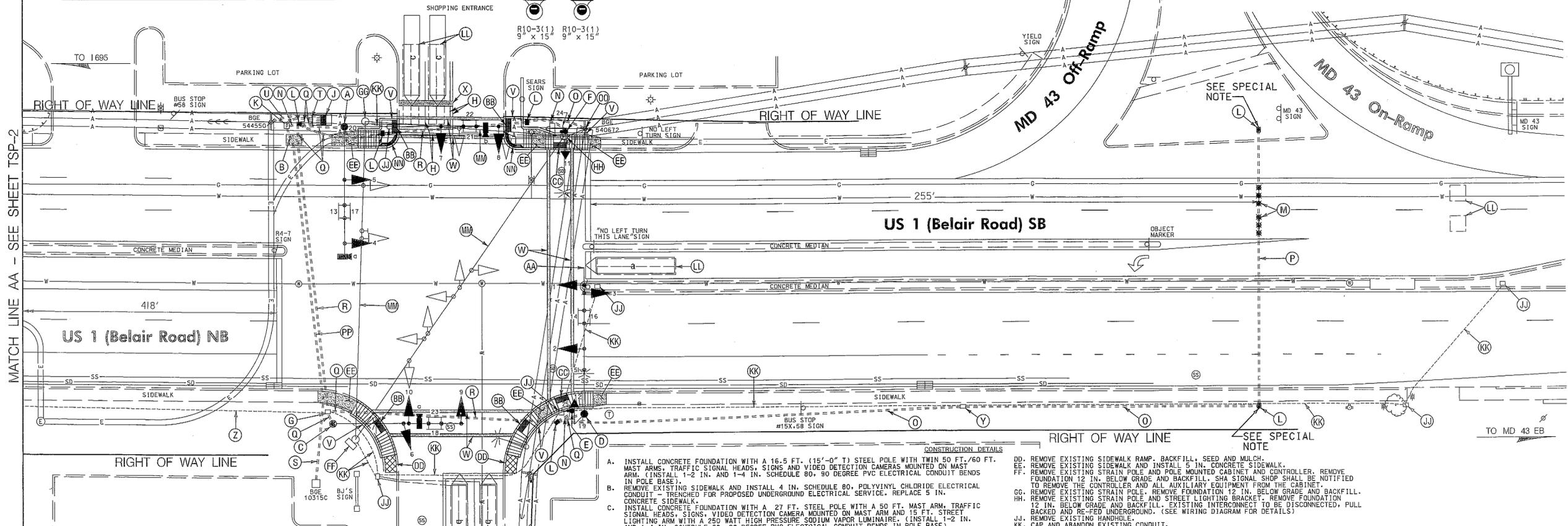


US 1 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

SPECIAL NOTE:
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.



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



- GENERAL NOTES**
- 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 CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
 - VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
 - THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
 - ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
 - ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
 - REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
 - THE CONTRACTOR SHALL NOT CUT MAST ARM AS INDICATED ON PLANS UNTIL MAST ARM POLE LOCATION IS FINALIZED.
 - PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
 - THE 10" SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
 - PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
 - 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 UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
 - ALL SIDEWALK RAMPS SHALL BE INSTALLED AS PER STANDARDS MD 655.11 AND MD 655.12.
 - THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
 - REFER TO SHEET 4 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.
 - SEE SHEET 4 FOR AERIAL HEIGHTS.

- CONSTRUCTION DETAILS**
- INSTALL CONCRETE FOUNDATION WITH A 16.5 FT. (15'-0") STEEL POLE WITH TWIN 50 FT./60 FT. MAST ARMS, TRAFFIC SIGNAL HEADS, SIGNS AND VIDEO DETECTION CAMERAS MOUNTED ON MAST ARM. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
 - REMOVE EXISTING SIDEWALK AND INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. REPLACE 5 IN. CONCRETE SIDEWALK.
 - INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 50 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM 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 PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
 - INSTALL CONCRETE FOUNDATION WITH A 60 FT. STEEL POLE WITH A 60 FT. (CUT TO 55 FT.) MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM 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 PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
 - INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01. AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS BELAIR ROAD"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
 - INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01. 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 BELAIR ROAD"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
 - USE EXISTING HANDHOLE. REBUILD HANDHOLE WITH NEW COLLAR AND FRAME.
 - REMOVE EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED MARKINGS.
 - INSTALL EMBEDDED METEDED SERVICE PEDESTAL WITH 2-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE.
 - INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1,000 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT.
 - INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
 - INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
 - INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
 - INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
 - INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
 - INSTALL 4 IN. PVC SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT TRANSFORMER BASE FOR USE BY OTHERS.
 - INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT UTILITY POLE FOR USE BY OTHERS.
 - INSTALL STANDARD TYPE A CONCRETE CURB.
 - INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
 - INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
 - USE EXISTING HANDHOLE.
 - USE EXISTING CONDUIT.
 - CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.
 - REMOVE EXISTING SIDEWALK RAMP AND INSTALL SIDEWALK RAMP (SEE SHEET TSP-4 FOR DETAILS) AND DETECTABLE WARNING SURFACE CLAY BRICK PAVERS WITH THE PLACEMENT IN ACCORDANCE WITH STANDARD NO. MD 655.40.
 - REMOVE EXISTING SIDEWALK AND INSTALL SIDEWALK RAMP (SEE SHEET TSP-4 FOR DETAILS) AND DETECTABLE WARNING SURFACE CLAY BRICK PAVERS WITH THE PLACEMENT IN ACCORDANCE WITH STANDARD NO. MD 655.40.

- REMOVE EXISTING SIDEWALK RAMP. BACKFILL, SEED AND MULCH.
- REMOVE EXISTING SIDEWALK AND INSTALL 5 IN. CONCRETE SIDEWALK.
- REMOVE EXISTING STRAIN POLE AND POLE MOUNTED CABINET AND CONTROLLER. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. SHA SIGNAL SHOP SHALL BE NOTIFIED TO REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CABINET.
- REMOVE EXISTING STRAIN POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
- REMOVE EXISTING STRAIN POLE AND STREET LIGHTING BRACKET. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. EXISTING INTERCONNECT TO BE DISCONNECTED, PULL BACK AND RE-FEED UNDERGROUND. (SEE WIRING DIAGRAM FOR DETAILS)
- REMOVE EXISTING HANDHOLE.
- CAP AND ABANDON EXISTING CONDUIT.
- ABANDON EXISTING LOOP DETECTOR. DISCONNECT AND REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
- REMOVE EXISTING SPAN WIRE AND ALL ASSOCIATED EQUIPMENT.
- INSTALL SIDEWALK RAMP SEPARATION ISLAND. (SEE SHEET TSP-4 FOR DETAILS)
- USE EXISTING WOOD UTILITY POLE AND INSTALL 3 IN. ELECTRICAL PVC RISER FOR EXISTING UNDERGROUND INTERCONNECT CABLE. PULL BACK EXISTING INTERCONNECT CABLE HEADING NORTH AND RE-FEED IN RISER AND CONDUIT TO NEW BASE MOUNTED CABINET. (SEE WIRING DIAGRAM FOR ADDITIONAL INTERCONNECT DETAILS) CONTRACTOR SHALL CUT THE EXISTING INTERCONNECT CABLE TO ALLOW FOR SUFFICIENT LENGTH OF CABLE TO BE RE-FEED TO NEW CABINET TO MAINTAIN COMMUNICATION CONNECTION TO THE NORTH. REMOVE AND DISPOSE OF ALL UNUSED INTERCONNECT CABLE.
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT - SLOTTED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.

TOD NO: XX645-21
SHA NO: BA93885H
US 1 @ Wholesale Club Drive



SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 1 (Belair Road) and Wholesale Club Drive
Perry Hall, MD

APPROVALS		REVISIONS		TRAFFIC SIGNALIZATION PLAN	
TEAM LEADER		RECONSTRUCT TRAFFIC SIGNAL		SCALE: 1" = 20'	ADVERTISED DATE: 10/25/1992
ASST. DIR. CHIEF		SHA NO. XX645-21	6/29/2012	DESIGNED BY: S. Bloss	COUNTY: Baltimore
DIVISION CHIEF		SHA NO. BA93885H		DRAWN BY: S. Bloss	LOGMILE: 03000103.98
OFFICE DIRECTOR		INSTALL MAIN LINE LOOPS	5/05/1993	CHECKED BY: N. Ieary	TIMS NO: K660
				F.A.P. NO.	TOD NO.
				TS NO. 3286C	DRAWING TSP-1 OF 5
					SHEET NO. 1 OF 5

PLOTTED: June 28, 2012
FILE: N:\31689-181\CA00\p650-P001_x860.dgn

BY: sbloss