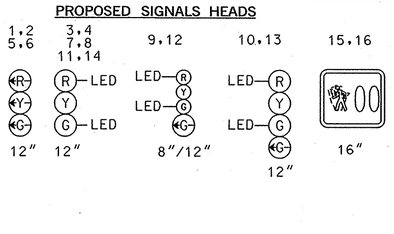
PROPOSED SIGNALS HEADS



US 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

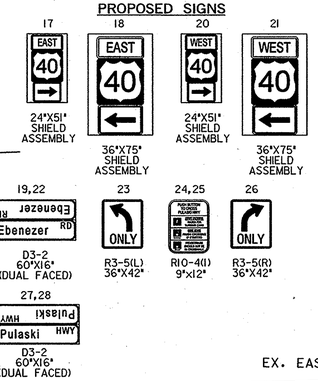
LINE HEIGHTS (LH) 1	LINE HEIGHTS (LH) 2
PRIMARY (+40'-0")	PRIMARY (+40'-0")
PRIMARY (+40'-0")	PRIMARY (+40'-0")
PRIMARY (+40'-0")	PRIMARY (+40'-0")
SECONDARY (36'-0")	SECONDARY (36'-6")
NEUTRAL (26'-1")	NEUTRAL (33'-6")
CABLE (25'-1")	GUY (28-7")
TELEPHONE (22'-8")	GUY (26'-5")
TELEPHONE (21'-2")	

LINE HEIGHTS (LH) 3	LINE HEIGHTS (LH) 4
PRIMARY (+40'-0")	PRIMARY (+40'-0")
PRIMARY (+40'-0")	SECONDARY (37'-0")
PRIMARY (+40'-0")	NEUTRAL (32'-5")
SECONDARY (38'-0")	CABLE (26'-9")
NEUTRAL (34'-7")	
CABLE (31'-1")	

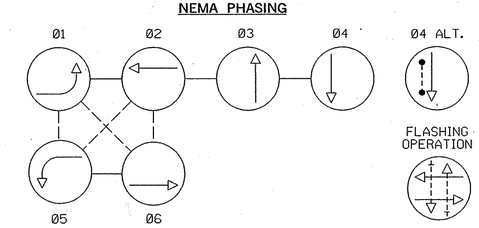
VIDEO DETECTION TO BE RELOCATED

a-d

PROPOSED SIGNS



NEMA PHASING



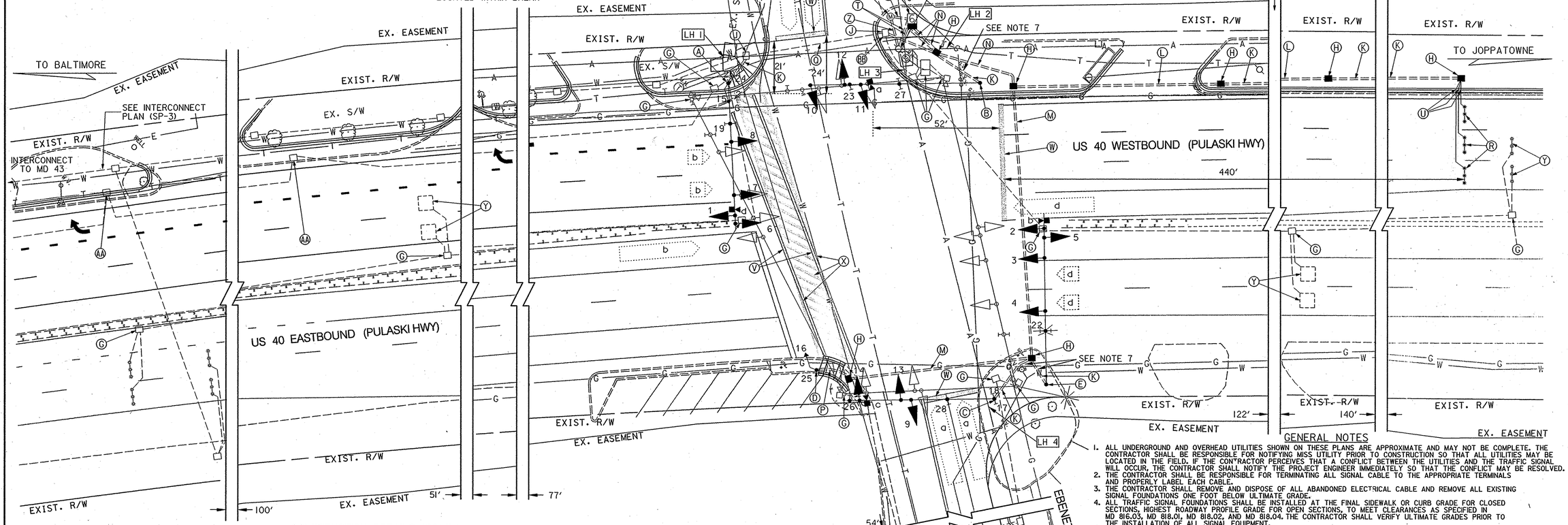
NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

CONSTRUCTION DETAILS

A. INSTALL 27 FT. STEEL POLE (CUT TO 21 FT.) WITH 60 FT. MAST ARM, VEHICLE AND PEDESTRIAN COUNTDOWN SIGNAL HEAD(S), SIGNS, RELOCATED VIDEO DETECTION CAMERA (INSTALL NEW CONTROL CABLE), AND 2-WIRE NAVIGATOR PUSH BUTTON STATION. (NOTE: 1-3 IN. PVC 90 DEGREE BEND)
B. INSTALL 27 FT. STEEL POLE (CUT TO 21 FT.) WITH 70 FT. MAST ARM, VEHICLE SIGNAL HEAD(S), SIGNS, AND VIDEO DETECTION CAMERA (INSTALL NEW CONTROL CABLE). (NOTE: 1-3 IN. AND 1-4 IN. PVC 90 DEGREE BENDS)
C. INSTALL 27 FT. STEEL POLE (CUT TO 21 FT.) WITH 60 FT. MAST ARM, VEHICLE SIGNAL HEAD(S), SIGNS, RELOCATED VIDEO DETECTION CAMERA (INSTALL NEW CONTROL CABLE). (NOTE: 1-3 IN. PVC 90 DEGREE BEND)
D. INSTALL 14 FT. BREAKAWAY PEDESTAL POLE, PEDESTRIAN COUNTDOWN SIGNAL HEAD(S), AND 2-WIRE NAVIGATOR PUSH BUTTON STATION. (NOTE: 1-3 IN. PVC 90 DEGREE BEND)

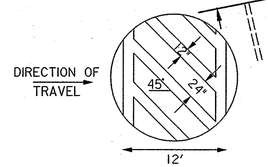
NOTE: ONE 'ONLY', ARROW AND R3-7(I)R LOCATED WITHIN BREAK

NOTE: ONE PROPOSED HANDHOLE LOCATED WITHIN BREAK



CONSTRUCTION DETAILS (CONT.)

E. INSTALL 27 FOOT STEEL POLE (CUT TO 21 FT.) WITH 70 FT. MAST ARM, VEHICLE SIGNAL HEAD(S), SIGNS, RELOCATED VIDEO DETECTION (INSTALL NEW CONTROL CABLE), AND A 20 FT. BRACKET ARM WITH A 250 WATT H.P.S. LUMINAIRE WITH PHOTOCELL. (NOTE: 1-3 IN. PVC 90 DEGREE BEND)
F. INSTALL SIZE 6 NEMA CABINET, FOUNDATION, CONTROLLER WITH ALL NECESSARY EQUIPMENT INCLUDING LOOP DETECTOR AMPLIFIERS AND VIDEO DETECTION CAMERA INTERFACE. (NOTE: 3-4 INCH PVC 90 DEGREE BENDS AND 1-2 INCH 90 DEGREE BEND.)
G. REMOVE AND DISPOSE OF EXISTING TRAFFIC SIGNAL EQUIPMENT
H. INSTALL HANDHOLE
J. USE EXISTING HANDHOLE
K. INSTALL 3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED)
L. INSTALL 3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (SLOTTED)
M. INSTALL 4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (SLOTTED)
N. INSTALL 4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED)
P. INSTALL 3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED PRIOR TO SIDEWALK CONSTRUCTION)
Q. USE EXISTING CONDUIT
R. INSTALL MICROLOOP PROBE SET (SEE MOT SEQUENCE)
S. INSTALL METERED SERVICE PEDESTAL (NOTE: 2-4 INCH PVC 90 DEGREE BENDS)
T. INSTALL 2 INCH SCHEDULE 80 PVC ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED PHONE SERVICE. THE CONTRACTOR SHALL CAP MARK AND LEAVE A 1 FOOT STUB WITH PULL STRING AT BASE OF UTILITY POLE (BGE 236348/ C&P #154) FOR USE BY OTHERS.
U. INSTALL 1 INCH LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRIC CONDUIT (FOR DETECTOR SLEEVE)
V. ERADICATE EXISTING PAVEMENT MARKING LINES NOT REMOVED WHEN GRINDING
W. INSTALL 24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR STOP LINE
X. INSTALL 12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR CROSS WALK
Y. ABANDON EXISTING LOOP DETECTOR/MICROLOOP PROBE
Z. INSTALL 4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED ELECTRICAL SERVICE. THE CONTRACTOR SHALL CAP, MARK, AND LEAVE A 1 FOOT STUB WITH PULL STRING AT BASE OF UTILITY POLE (BGE 236348) FOR USE BY OTHERS.
AA. EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED AS PART OF CLASS II EXCAVATION
BB. DISCONNECT EXISTING EASTBOUND MICROLOOP PROBE LEAD-IN CABLES, PULL AND RE-ROUTE ACCORDING TO WIRING DIAGRAM



12" HEAT-APPLIED WHITE THERMOPLASTIC PAVEMENT MARKING TYPICAL CROSSWALK DETAIL

GENERAL NOTES

1. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
3. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLE AND REMOVE ALL EXISTING SIGNAL FOUNDATIONS ONE FOOT BELOW ULTIMATE GRADE.
4. 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, AND MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
5. THE CONTRACTOR SHALL CENTER THE PROPOSED CROSSWALK ON THE NEWLY CONSTRUCTED RAMPS.
6. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
7. WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATIONS AND CONDUIT BY HAND.
8. THE SIGNAL CONTRACTOR SHALL COORDINATE WITH THE PROJECT CONTRACTOR WHEN HANDHOLES ARE REMOVED FROM TURN LANES AND/OR SHOULDERS SO THAT TO FULL DEPTH PAVEMENT PATCHES ARE CONSTRUCTED. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
9. THE CONTRACTOR SHALL PURCHASE AND DELIVER TWO 2-WIRE NAVIGATOR PUSH BUTTON STATIONS AND A 2-WIRE NAVIGATOR CENTRAL CONTROL UNIT TO THE SHA SIGNAL SHOP AT 7491 CONNELLEY DRIVE, HANOVER, MD 21076 TO TEST THE UNITS AND RECORD AUDIBLE MESSAGE. THE CONTRACTOR SHALL CONTACT MR. ED RODENHIZER AT (410) 787-7652 AT LEAST THREE (3) DAYS IN ADVANCE OF DELIVERY.
10. SEE SHEET SP-2 FOR SIGNAL HEAD, OVER HEAD SIGN AND POLE LOCATIONS

SP-1

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

REVISIONS

F	RECONSTRUCT SIGNAL DUE TO GEOMETRIC IMPROV. SHA NO. BA7655TE	7/2005
STV/ARK		
E	TEMPORARY SIGNAL TO SUPPORT MOT SHA NO. BA7655TG	6/2005
STV/ARK		
D	AS-BUILT; SPLIT THE SIDE STREET - NB & SB EBENEZER RD & REPLACED LOOP DET.(WB LT E/P) & PROBES (EB) SHA NO. XX1005485	02/2000
C	E/P LEFT TURN FOR EBENEZER ROAD	07/1989

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

ORIGINAL SIGNED IN FILE

STV Incorporated
engineers / architects / planners / scientists / construction managers
7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-9112

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

US 40 (PULASKI HIGHWAY) AND EBENEZER ROAD
TRAFFIC SIGNALIZATION PLAN

DRAWN BY:	F.A.P. NO.	TS NO. TS 605 F	SHEET NO.
CHECKED BY:	S.H.A. NO. B-284-485		
SCALE: 1"=20'	COUNTY: BALTIMORE	T.I.M.S. NO. F 470	33 OF 43
DATE:	LOG MILE: 03004021.50		

\\KPROJECTS\031780\031780.000\031780_bDrawings\031780.000_TRAffrafficSignal\spdus40.dgn
10:25:09 AM 07/08/2005