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

EXISTING SIGNALS

1,2,5,6 — 12"
3,4,7,8, 10,11,13,14 — 12"
9,12 — 8"

EXISTING SIGNS

27 — SHIELD ASSEMBLY (30"x51")
23 — SHIELD ASSEMBLY (30"x51")
28 — SHIELD ASSEMBLY (48"x75")
24 — SHIELD ASSEMBLY (48"x75")
17,19,20,22 — D-3(2) (VAR.X16")
18,21 — R10-5 (24"X30")
26,30 — R3-5(R) (30"x36")
25,29 — R3-6(L) (30"x36")

EXISTING SIGN TO BE RELOCATED

35 — R4-7 (24"X30")

EXISTING OPTICOM DETECTOR EYE

e,f

PROPOSED SIGNS

31,33 — R10-3(1) 9" x 15"
32,34 — R10-3(1) 9" x 15"

PROPOSED SIGNALS

15,16 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

PROPOSED VIDEO DETECTION CAMERAS

c,d

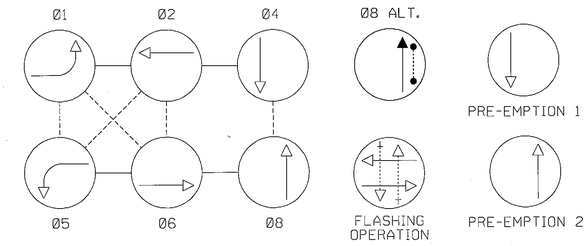
VIDEO ZONE DETECTION

a

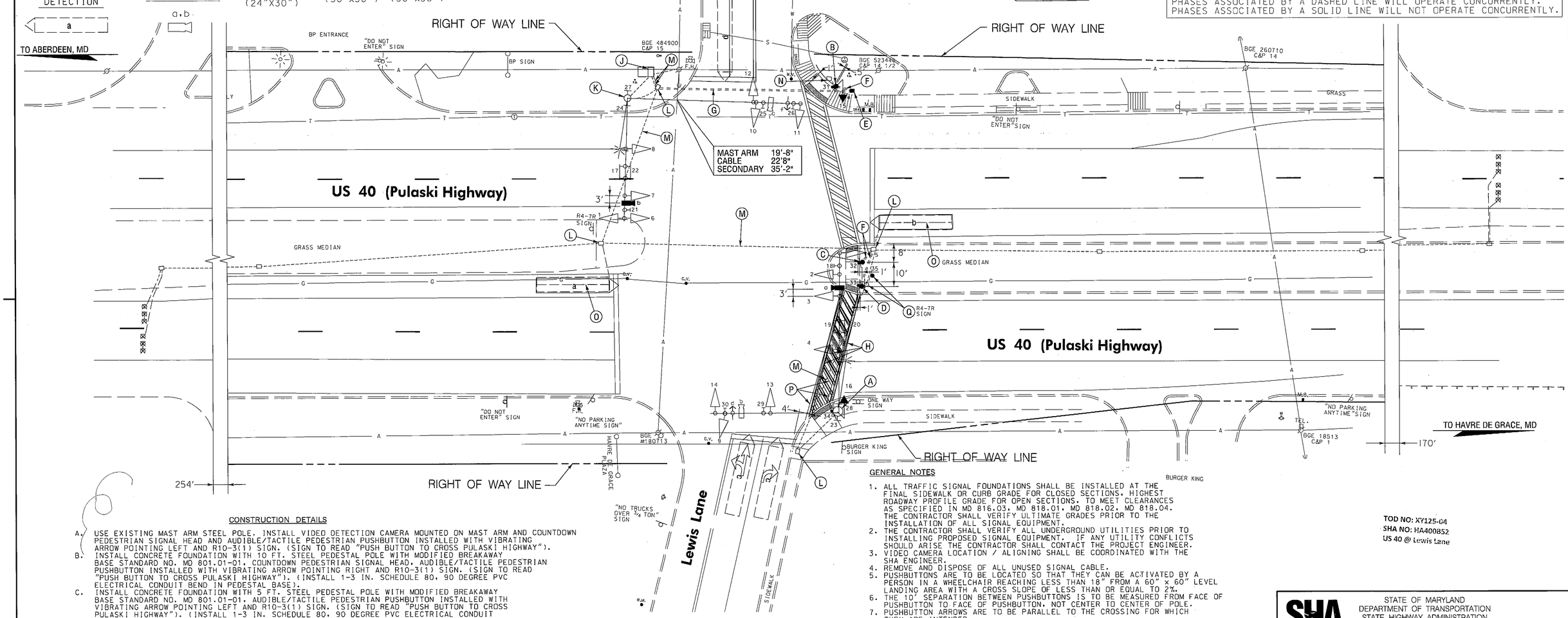
EXISTING VIDEO DETECTION CAMERAS

a,b

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. USE EXISTING MAST ARM STEEL POLE. INSTALL VIDEO DETECTION CAMERA MOUNTED ON MAST ARM AND COUNTDOWN PEDESTRIAN SIGNAL HEAD AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS PULASKI HIGHWAY").
B. 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 PULASKI HIGHWAY"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
C. INSTALL CONCRETE FOUNDATION WITH 5 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 PULASKI HIGHWAY"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
D. INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS PULASKI HIGHWAY"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
E. INSTALL HANDHOLE.
F. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
G. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
H. INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
J. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER. INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT.
K. USE EXISTING MAST ARM POLE. INSTALL VIDEO DETECTION CAMERA AS SHOWN.
L. USE EXISTING HANDHOLE.
M. USE EXISTING CONDUIT.
N. REMOVE EXISTING HANDHOLE.
O. ABANDON EXISTING LOOP DETECTOR. DISCONNECT AND REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
P. REMOVE EXISTING PAVEMENT MARKING - CROSSWALK.
Q. RELOCATE EXISTING R4-7 SIGN AND SUPPORT. R4-7 SIGN SHALL BE INSTALLED AT 15 DEGREE ANGLE WITH LINE OF MAJOR STREET.

GENERAL NOTES

1. 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.
2. 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.
3. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
4. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
5. 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%.
6. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
7. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
8. 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.
9. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS

TOD NO: XY125-04
SHA NO: HA400852
US 40 @ Lewis Lane

WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21231

APPROVALS
TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR
ORIGINAL ON FILE

REVISIONS
(D) INSTALL APS/CPS ON EAST LEG OF US 40. SHA NO. XY1255185 TIMS #L170. 3/15/2012
(C) INSTALL OPTICOM DETECTOR EYE SHA NO. XX4485185 TIMS # 1841 07-09-2008
(B) REBUILD TRAFFIC SIGNAL AND ADD INTERCONNECT 03-10-1999

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 40 (PULASKI HIGHWAY) AND LEWIS LANE
HAVRE DE GRACE, MARYLAND

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' DATE 09251981 CONTRACT NO. H 671-501-471
DESIGNED BY
DRAWN BY THOMAS ZAYDEL
CHECKED BY
F.A.P. NO.
COUNTY HARFORD
LOGMILE 12004017.17
TIMS NO.
TOD NO.
TS NO. 1836 D | DRAWING TSP-1 OF 2 | SHEET NO. 1 OF 2

PLOTTED: March 14, 2012
FILE: N:\31689-203\CADD\pSG-P001_L170.dgn

BY: bdonoway