BORDEN REV: DATE: Monen12/20/2007

BY: John Borkowski Division: P068 Highway Traff GMA Emp

MD 45 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION

PROPOSED SIGNS

15 — PUSH BUTTON TO CROSS YORK ROAD — START CROSSING Watch For Turning Vehicles — START Finish Crossing If Started — TIME REMAINING To Finish Crossing — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME IN BRAILLE TYPE 2 — R10-3(1) 9" x 15"

16 — PUSH BUTTON TO CROSS YORK ROAD — START CROSSING Watch For Turning Vehicles — START Finish Crossing If Started — TIME REMAINING To Finish Crossing — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME IN BRAILLE TYPE 2 — R10-3(1) 9" x 15"

17 — PUSH BUTTON TO CROSS INDUSTRY LANE — START CROSSING Watch For Turning Vehicles — START Finish Crossing If Started — TIME REMAINING To Finish Crossing — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME IN BRAILLE TYPE 2 — R10-3(1) 9" x 15"

18 — PUSH BUTTON TO CROSS INDUSTRY LANE — START CROSSING Watch For Turning Vehicles — START Finish Crossing If Started — TIME REMAINING To Finish Crossing — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME IN BRAILLE TYPE 2 — R10-3(1) 9" x 15"

23 — SOUTH MARYLAND 45 — M1-5(6) (24"x48")

24 — SOUTH MARYLAND 45 — M1-(6) (36"x72")

25 — NORTH MARYLAND 45 — M3-1 24"X12" — M1-5 24"X24" — M6-1 21"X15"

26 — NORTH MARYLAND 45 — M3-1 30"X15" — M1-5 30"X30" — M6-1 30"X24"

27 — R3-6L (30"x36")

28,29 — R3-5R ONLY (30"x36")

19,20 — Industry LN — D-3(1) (VAR.x16")

21,22 — Industry LN — D-3(1) (VAR.x16")

30,31 — York RD — D-3(1) (VAR.x16") DUAL FACED

PROPOSED SIGNALS

3,6,7,9,10 — 12" LED

1,4 — 12"/8" LED

8 — 12" LED

2,5 — 12" LED

11,12,13,14 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

EXISTING SIGNALS TO BE REMOVED

3A,6A 7A,9A,10A — 12"

8A — 12"

1A,4A — 12"/8"

2A,5A — 12"

11A,12A,13A,14A — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

NEMA PHASING

Ø1 Ø2 Ø4 Ø5 Ø6 Ø8

FLASHING OPERATION

Ø8 ALT.

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

a,b,c,d — PROPOSED VIDEO DETECTION

e,f — EXISTING VIDEO DETECTION TO BE REMOVED

EXISTING SIGNS TO BE REMOVED

15A,16A — Industry Lane — D-3(2) (VAR.X16") DUAL FACED

ENTRANCE TO AUTO SPA

TO HUNT VALLEY

EXISTING RIGHT-OF-WAY

G&E 496764

G&E 496765(GUY)

C&P

MD 45 (YORK ROAD) (NBL)

MD 45 (YORK ROAD) (SBL)

BG&E 217791

G&E 217792

G&E 217573

INTERCONNECT

OVERHEAD

INSTALL ONE HANDHOLE WITHIN THE BREAK

30' 130' 170' 240' 60' 30'

TO TOWSON

AERIAL CABLE DETAIL

PRIMARY	31' 9" +
SPAN	31' 9"
ELECTRIC	30' 0"
TRAFFIC	22' 1"
CABLE	21' 2"
TELEPHONE	20' 1"
	GRADE

AERIAL CABLE DETAIL

PRIMARY	30' +
SECONDARY	25' 1"
TRAFFIC	23' 6"
TRAFFIC	23' 1"
CABLE	21' 1"
TELEPHONE	20' 1"
TELEPHONE	19' 00"
	GRADE

INDUSTRY LANE

G&E 217791

Scale: 1" = 10'

CONSTRUCTION DETAILS

A. INSTALL CONCRETE FOUNDATION WITH A 15 FOOT SPECIAL "T" SIGNAL POLE, 38 FOOT MAST ARM, TRAFFIC SIGNAL HEADS, VIDEO DETECTION CAMERA, SIGNS, 10' LIGHTING BRACKET ARM AND LED LUMINAIRE (1-3" CONDUIT BEND).
B. INSTALL CONCRETE FOUNDATION WITH A TWIN MAST ARM 15 FOOT SPECIAL "T" SIGNAL POLE, AND 50 FOOT AND 70 FOOT MAST ARMS, TRAFFIC SIGNAL HEADS, PEDESTRIAN SIGNAL HEAD, PUSHBUTTON, VIDEO DETECTION CAMERAS AND SIGNS (1-3" CONDUIT BEND). (NOTE: 70 FOOT MAST ARM TO BE MOUNTED AT 15 FOOT "T").
C. INSTALL CONCRETE FOUNDATION WITH A 15 FOOT SPECIAL "T" SIGNAL POLE, AND 38 FOOT MAST ARM, TRAFFIC SIGNAL HEADS, PEDESTRIAN SIGNAL HEAD, VIDEO DETECTION CAMERA AND SIGNS (1-3" CONDUIT BEND).
D. INSTALL AN 18"X36" CONCRETE FOUNDATION WITH A 10 FOOT PEDESTAL POLE, 16-INCH COUNTDOWN LED PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON, AND SIGN (1-2" CONDUIT BEND). (STANDARD NO. MD 801.01-01)
E. INSTALL AN 18"X36" CONCRETE FOUNDATION WITH A 10 FOOT PEDESTAL POLE, (CUT TO 5 FOOT), APS PUSHBUTTON, AND SIGN (1-2" CONDUIT BEND). (STANDARD NO. MD 801.01-01)
F. INSTALL A NEMA SIZE "S" BASE MOUNTED CABINET WITH UNINTERRUPTABLE POWER SUPPLY, BATTERY PACK, AND CONTROLLER. INSTALL APS CENTRAL CONTROL UNIT, WITH MODIFIED CONCRETE BASE (NOTE: 2-4 INCH AND 2-2 INCH PVC SCHEDULE 80 CONDUIT BENDS). DO NOT INSTALL SERVICE PADS.
G. INSTALL ELECTRICAL HANDHOLE.
H. INSTALL 12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES.
J. INSTALL 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES.
K. INSTALL 4 INCH CONDUIT STUB AND CAP FOR BGE USE (INCLUDE PULL STRING IN CONDUIT).
L. FURNISH AND INSTALL NON-INVASIVE DETECTORS.
M. FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.
N. FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
P. FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
Q. FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
R. FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.
S. FURNISH AND INSTALL EMBEDDED METER SERVICE PEDESTAL.
T. REMOVE EXISTING TRAFFIC SIGNAL STRAIN POLE.
U. REMOVE EXISTING PAVEMENT LINE MARKINGS.
V. REMOVE EXISTING POLE MOUNTED CABINET. REMOVE AND SALVAGE EXISTING CONTROLLER.
W. ABANDON EXISTING LOOP DETECTOR.
X. CAP AND ABANDON EXISTING CONDUIT.
Y. REMOVE EXISTING HANDHOLE.
Z. REMOVE EXISTING DETECTOR CABLE FROM UTILITY POLE.
AA. INSTALL 5-INCH CONCRETE SIDEWALK.
BB. PULL BACK EXISTING INTERCONNECT CABLES AND REROUTE.
CC. INSTALL GROUND MOUNTED SIGN ON TWO 4"X6" WOOD POSTS.

GENERAL NOTES

1. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
2. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
3. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL, UNLESS NOTED.
4. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
6. 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.
7. 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.
8. RIGHT-OF-WAY SHOWN ON THIS PLAN IS PER SHA PLAT NUMBERS 42208, 50510, AND 50511.

APS PUSHBUTTON NOTES:

1. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60"X60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
2. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
3. PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.08 AND 4E.10 AND FIG. 4E-3 AND 4E-4 AND NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNAL: 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.
4. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
5. SIGNAL POLES WITH PUSHBUTTONS MAY HAVE THE FOUNDATION INSTALLED AS PART OF THE CURB OR SIDEWALK AS DIRECTED BY THE ENGINEER.

GEOMETRIC LEGEND

EXISTING
PROPOSED

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

TOD NO: XY125-24
SHA NO: BA087B5H
MD 45 @ Industry Ln, Warren Rd/MD 943 @ Beaver Dam Road

APPROVALS

TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
ORIGINAL ON FILE
DEPUTY DIRECTOR

REVISIONS

3 TRAFFIC SIGNAL RECONSTRUCTION 04/2013
TIMS NO.1674, CONTRACT NO. XY1255185
KCI MLP CW
2 MODIFIED SIGNAL FOR FOURTH LEG. PROVIDE SIDE STREET CONCURRENT OPERATION. 03/2005
T.H.

KCI TECHNOLOGIES
ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS
936 RIDGEBROOK ROAD SPARKS, MARYLAND 21152
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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 45 (YORK ROAD) AT INDUSTRY LANE
COCKEYSVILLE, MARYLAND

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' ADVERTISED DATE 02/1988 CONTRACT NO. N/A

DESIGNED BY
DRAWN BY WRS
CHECKED BY DEW
F.A.P. NO. N/A
COUNTY BALTIMORE
LOGMILE 03004507.04
TIMS NO.
TOD NO. N/A

TS NO. 2555B | DRAWING SG-1 OF 3 | SHEET NO. 1 OF 9

PLOTTED: "11:41 AM on Thursday, April 04, 2013"
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