MD 108 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

PROPOSED TEMPORARY SIGN

39.40 — NEW — W16-14(1) (24"x24") — W3-3 (36"x36")

PROPOSED SIGNS

9a, 10a, 11a, 13a, 12a, 14a — R10-3(1) 9" x 15"

17 — Olney Laytonsville RD — D-3(1) (VAR.x16")

22 — Bowie Mill Rd RIGHT AT SIGNAL — D3-2(1) (VAR.x24")

26 — Bowie Mill Rd LEFT AT SIGNAL — D3-2(1) (VAR.x24")

18 — EAST MARYLAND 108 — M1-5(6) (30"x48")

19 — WEST MARYLAND 108 — M1-5(6) (48"x72")

15a,16b — Bowie Mill RD

15b,16a — Bowie Mill RD — D-3(1) DUAL FACED (VAR.x16")

24,27 — D11-1 (24"x18")

32 — W1-7 (48"x24")

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERING THE SIGNAL CABINET AND VIDEO INTERFACE EQUIPMENT TO THE MONTGOMERY COUNTY SIGNAL SHOP. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE MONTGOMERY COUNTY ENGINEER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE. ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY THE MONTGOMERY COUNTY SIGNAL SHOP.
3. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH SHA STANDARDS.
4. PAVEMENT MARKING LANE WIDTHS ARE MEASURED FROM CENTER OF PAVEMENT MARKING TO CENTER OF PAVEMENT MARKING.
5. 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 THE APPROPRIATE 800 SERIES STANDARD PLATES. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
6. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY 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.
7. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
8. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
9. ALL UNUSED SIGNAL CABLES SHALL BE REMOVED AND DISPOSED.
10. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
11. THE INTERCONNECT SHALL BE MODIFIED PER THE INTERCONNECT PLAN.
12. ALL RAMPS, DETECTABLE WARNING SURFACES AND SIDEWALK SHALL BE INSTALLED PER THE ROADWAY PLAN AND THE SIDEWALK RAMP DETAIL.

EXISTING SIGNS TO BE RELOCATED

20r,21r — 20.21 SPEED LIMIT 40 — R2-1 (24"x30")

23.28

29.30 — SPEED LIMIT 40

EXISTING SIGNS TO REMAIN

25 — Queen Elizabeth Dr NEXT SIGNAL

31 — Briars Rd

33 — SPEED LIMIT 30 SNOW EMERGENCY ROUTE

EXISTING SIGNS TO BE REMOVED

22r — Bowie Mill Rd

26r — Bowie Mill Rd

34r — Bowie Mill Rd

35r

32r

24r,27r

36r,38r

37r — BOWIE MILL RD > < BOWIE MILL RD — STOP

PROPOSED SIGNALS

1,2,3 / 6,7 — 4,5 — 8 — 12" 12" 12"

9-12 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

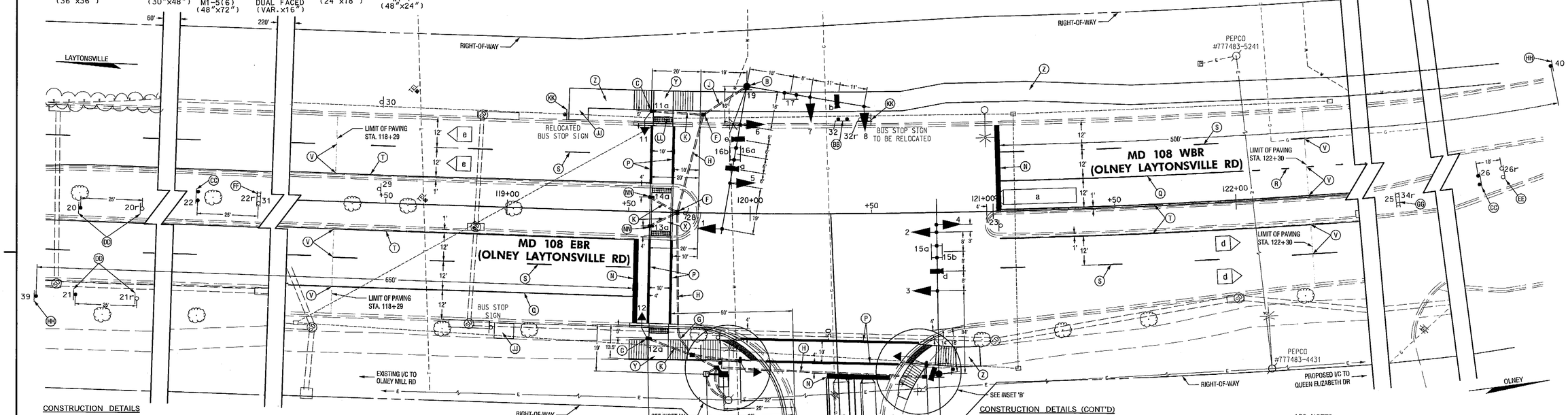
PROPOSED VIDEO DETECTION

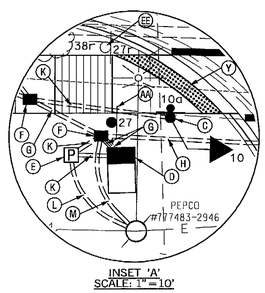
a,b,c,d,e

NEMA PHASING

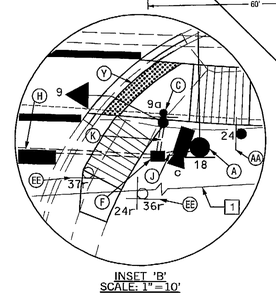
Ø2 Ø3 Ø4 ALT. Ø5 Ø6 FLASHING OPERATION

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





INSET 'A'
SCALE: 1"=10'



INSET 'B'
SCALE: 1"=10'

CONSTRUCTION DETAILS

A. INSTALL CONCRETE FOUNDATION AND A 16.5 FT. SINGLE MAST ARM POLE WITH A SPECIAL 15 FT. 'T' DIMENSION WITH A 70 FT. MAST ARM, PROPOSED SIGNAL HEADS, VIDEO DETECTION CAMERAS, AND SIGNS (NOTE: INSTALL 1-3" 90° SCHEDULE 80 PVC CONDUIT BEND).
B. INSTALL CONCRETE FOUNDATION AND A 27 FT. TWIN MAST ARM POLE WITH 50 FT. AND 60 FT. MAST ARMS ROTATED CLOCKWISE BY 10° FROM THE ROADWAY AS SHOWN, PROPOSED SIGNAL HEADS, VIDEO DETECTION CAMERAS, SIGNS, AND A 15 FT. LIGHTING ARM WITH A 250 W HPS LUMINAIRE (NOTE: INSTALL 1-3" 90° SCHEDULE 80 PVC CONDUIT BEND).
C. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH A MODIFIED BASE (STD. MD 801.01-01), COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN (NOTE: INSTALL 1-2" 90° SCHEDULE 80 PVC CONDUIT BEND). FOUNDATION SHALL BE INSTALLED FLUSH WITH SIDEWALK GRADE.
D. INSTALL CONCRETE FOUNDATION AND NEMA SIZE '6' BASE MOUNTED CABINET WITH ALL NECESSARY EQUIPMENT (NOTE: INSTALL 2-2" AND 2-4" 90° SCHEDULE 80 PVC CONDUIT BEND).
E. INSTALL EMBEDDED METERED SERVICE PEDESTAL.
F. INSTALL ELECTRICAL HANDHOLE.
G. INSTALL 4" SCHEDULE 80 PVC CONDUIT (TRENCHED).
H. INSTALL 4" SCHEDULE 80 PVC CONDUIT (BORED).
J. INSTALL 3" SCHEDULE 80 PVC CONDUIT (TRENCHED).
K. INSTALL 2" SCHEDULE 80 PVC CONDUIT (TRENCHED).
L. INSTALL 4" SCHEDULE 80 PVC CONDUIT (TRENCHED). STUB UP AT THE BASE OF PEPCO POLE #777483-2946 AND COIL 35 FT. EACH OF THE 3-1 CONDUCTOR CABLES. NOTIFY PEPCO INSPECTION 72 HOURS IN ADVANCE TO INSPECT THE CONDUIT TRENCH.
M. INSTALL 3" SCHEDULE 80 PVC CONDUIT (TRENCHED). STUB-UP AT THE BASE OF PEPCO POLE #777483-2946. INSTALL 3" SCHEDULE 80 PVC RISER WITH A 3" WEATHERHEAD FOR INTERCONNECT.
N. INSTALL 24" HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOP LINE).
P. INSTALL 12" HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (CROSSWALK).
Q. INSTALL 5" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING FOR LANE LINE (SOLID).
R. INSTALL 5" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING FOR LANE LINE (3 FT. - 9 FT.).
S. INSTALL 5" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING FOR LANE LINE (10 FT. - 30 FT.).
T. INSTALL 5" YELLOW LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING FOR CENTER LINE (SOLID).
U. INSTALL 5" YELLOW LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING FOR CENTER LINE (DOUBLE SOLID).
V. TIE INTO EXISTING MARKING.

CONSTRUCTION DETAILS (CONT'D)

W. REMOVE EXISTING PAVEMENT MARKING.
X. CUT-THRU TO BE INSTALLED PER THE ROADWAY PLAN AND SIDEWALK RAMPS DETAIL.
Y. RAMP AND DETECTABLE WARNING SURFACE TO BE INSTALLED PER THE ROADWAY PLAN AND SIDEWALK RAMPS DETAIL.
Z. SIDEWALK TO BE INSTALLED PER THE SIDEWALK PLANS.
AA. INSTALL PROPOSED SIGN ON ONE 4" X 4" WOOD POST.
BB. INSTALL PROPOSED SIGN ON TWO 4" X 4" WOOD POSTS.
CC. INSTALL PROPOSED SIGN ON TWO 4" X 6" WOOD POSTS.
DD. RELOCATE EXISTING GROUND MOUNTED SIGN ON ONE 4" X 4" WOOD POST.
EE. REMOVE EXISTING GROUND MOUNTED SIGN AND SUPPORT(S).
FF. REMOVE EXISTING EASTBOUND ADVANCE STREET NAME SIGN ONLY AS SHOWN.
GG. REMOVE EXISTING WESTBOUND ADVANCE STREET NAME SIGN ONLY AS SHOWN.
HH. INSTALL PROPOSED TEMPORARY SIGN ON ONE 4" X 6" WOOD POST. SIGN SHALL BE REMOVED BY DISTRICT 3 FORCES NOT LESS THAN 90 DAYS OR MORE THAN 120 DAYS FROM THE DATE OF TURN-ON.
JJ. BUS PAD TO BE INSTALLED PER THE ROADWAY PLAN.
KK. REMOVE EXISTING W1-7 SIGN AND SUPPORTS. RELOCATE EXISTING BUS STOP SIGN TO THE NEW BUS PAD LOCATION AS SHOWN ON A STEEL TUBULAR SUPPORT PER MD 802.04.
LL. REMOVE EXISTING HANDHOLE AND CAP AND ABANDON EXISTING CONDUITS.
NN. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE (CUT TO 5 FT.) WITH A MODIFIED BASE (STD. MD 801.01-01), AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN (NOTE: INSTALL 1-2" 90° SCHEDULE 80 PVC CONDUIT BEND). FOUNDATION SHALL BE INCORPORATED INTO CURB.

APS 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. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
4. 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 LOCATION UNTIL A DESIGN WAIVER IS OBTAINED. APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

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

1 AERIAL CABLE DETAIL

PRIMARY	30'-0"+
SECONDARY	23'-4"
COMMUNICATION	19'-9"
COMMUNICATION	19'-6"
COMMUNICATION	18'-3"
COMMUNICATION	17'-6"
COMMUNICATION	16'-8"
COMMUNICATION	16'-3"
GRADE	

PB 125 YEARS
PARSONS BRINCKERHOFF
100 S. Charles Street
Tower 1, 10th Floor
Baltimore, MD 21201
(PH) 410 727 3650
(FAX) 410 727 4608

APPROVALS: TEAM LEADER 7/14/2011; ASST. DIV. CHIEF 7/14/11; DIVISION CHIEF 7.15.11; OFFICE DIRECTOR 7/26

REVISIONS

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 108 AT BOWIE MILL RD
SIGNAL INSTALLATION
OLNEY, MD

SIGNALIZATION PLAN SHEET

SCALE 1"=20' DATE JULY 13, 2011 CONTRACT NO. MO5985187
DESIGNED BY M. FUKUI COUNTY MONTGOMERY
DRAWN BY M. FUKUI LOGMILE 15010812.49
CHECKED BY K PERMISOHN TIMS NO. K050
F.A.P. NO. SEE TITLE SHEET TOD NO.

TS NO. 4786 | DRAWING SG-01 OF 03 | SHEET NO. 01 OF 03

PLOTTED: Wednesday, July 13, 2011 AT 02:18 PM
FILE: T:\173124A-TrafficDesignServices\TRF\33\Plans\pSG_P000-MD 108 @ Bowie Mill.dgn

BY: fukui