MD 151 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

EXISTING SIGNS TO REMAIN

12,14-16 St. Monica Dr.

EXISTING SIGN TO BE REMOVED

13 LEFT TURN YIELD ON GREEN

PROPOSED SIGNS

17 SHIELD ASSEMBLY (30"x48") — SOUTH MARYLAND 151

18 SHIELD ASSEMBLY (48"x72") — NORTH MARYLAND 151

19 20 21 22 — PUSH BUTTON TO CROSS North Pt. Blvd. / St. Monica Dr.; START CROSSING WATCH FOR TURNING CARS; CONTINUE 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"

EXISTING SIGNALS TO BE REMOVED

2A 12" · 3A-5A 12" · 6A,7A 8"

PROPOSED SIGNALS

1 12"/8" · 2 12" · 3-7 12" · 8-11 16" LED COUNTDOWN PEDESTRIAN SIGNAL

PROPOSED VIDEO DETECTION CAMERA

a,b

VIDEO ZONE DETECTION

a

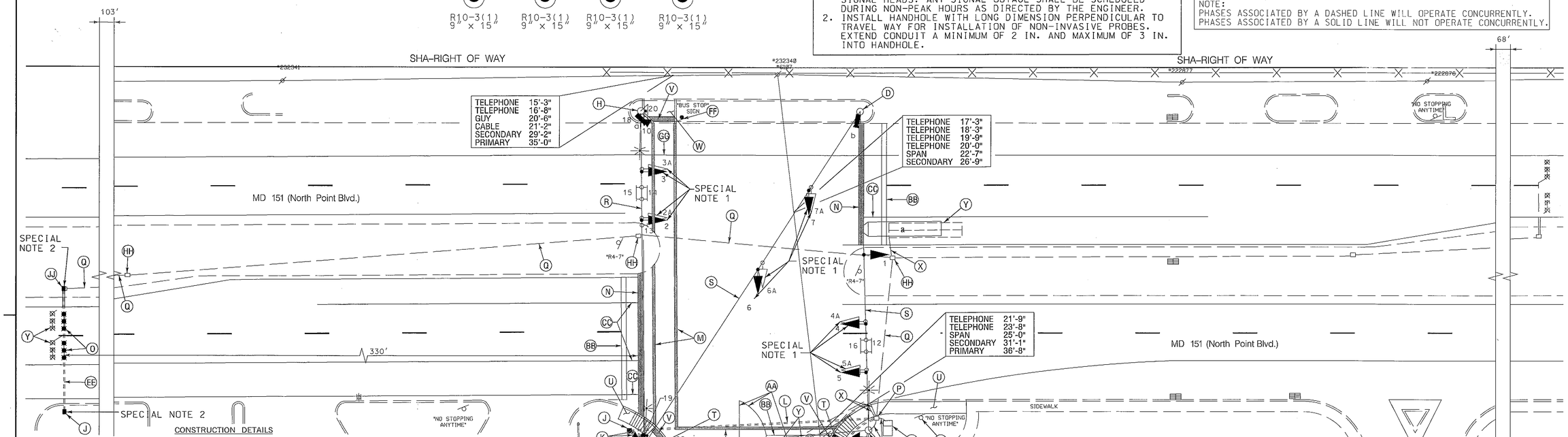
NEMA PHASING

Ø1 Ø2 Ø4 Ø4 ALT. FLASHING OPERATION Ø6

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

SPECIAL NOTES:

1. DISCONNECT EXISTING ELECTRICAL CABLE FROM EXISTING SIGNAL HEADS TO BE REMOVED AND RE-CONNECT TO PROPOSED SIGNAL HEADS. ANY SIGNAL OUTAGE SHALL BE SCHEDULED DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
2. 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.



CONSTRUCTION DETAILS

A. USE EXISTING BASE MOUNTED CONTROLLER AND CABINET. INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT.(NOTE: SHA FORCES SHALL RETROFIT CONTROLLER EQUIPMENT TO OPERATE VIDEO DETECTION EQUIPMENT).
B. USE EXISTING STEEL POLE. INSTALL 3 INCH WEATHERHEAD, COUNTDOWN PEDESTRIAN SIGNAL HEADS, AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE..
C. USE EXISTING STEEL POLE. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEAD, SIGN, AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE.
D. USE EXISTING STEEL POLE. INSTALL VIDEO DETECTION CAMERA MOUNTED WITHIN 3 FT OF TOP OF STRAIN POLE.
E. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE (CUT TO 5 FT.) 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 NORTH POINT BLVD."). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
F. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE (CUT TO 5 FT.) 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 ST. MONICA DRIVE"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
G. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE (CUT TO 5 FT.) 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 ST. MONICA DRIVE"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
H. USE EXISTING STEEL POLE. INSTALL 3 INCH WEATHERHEAD, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS NORTH POINT BLVD.") SIGN AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. INSTALL VIDEO DETECTION CAMERA MOUNTED ON STEEL POLE 20'-0" ABOVE GRADE TO CLEAR OVERHEAD UTILITY LINE-OF-SIGHT OBSTRUCTION.
J. INSTALL HANDHOLE.
K. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
L. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
M. INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
N. INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
O. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1.000 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT.
P. USE EXISTING HANDHOLE. ADJUST TO FINAL SIDEWALK GRADE ELEVATION.
Q. USE EXISTING CONDUIT.
R. USE EXISTING SPAN WIRE. REMOVE EXISTING SIGNAL HEADS AND SIGN AND INSTALL NEW L.E.D.SIGNAL HEADS. RAISE SPAN WIRE TO PROVIDE REQUIRED 17'-0" CLEARANCE FOR SIGNAL HEADS OVER ROADWAY.
S. USE EXISTING SPAN WIRE AND REMOVE EXISTING SIGNAL HEADS. INSTALL NEW L.E.D. SIGNAL HEADS.
T. INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.12) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40).
U. INSTALL 5 INCH CONCRETE SIDEWALK.
V. INSTALL DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40).
W. REMOVE EXISTING CONCRETE SIDEWALK AND INSTALL MEDIAN CUT-THROUGH AND STANDARD TYPE A COMBINATION CURB AND GUTTER PAN AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40).
X. CAP AND ABANDON EXISTING CONDUIT.
Y. ABANDON EXISTING LOOP DETECTOR AND MICROLOOP PROBE. DISCONNECT AND REMOVE LOOP DETECTOR/MICROLOOP PROBE CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
Z. RELOCATE EXISTING SIGN AND SUPPORT. (SHOWN IN FINAL LOCATION).
AA. REMOVE EXISTING PAVEMENT MARKING LINE BEYOND STOPLINE.
BB. REMOVE EXISTING PAVEMENT MARKING LINE (STOPLINE).
CC. INSTALL 5 INCH WHITE LEAD FREE REFLECTIVE THERMOSPLASTIC PAVEMENT MARKING.
DD. INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. TIE INTO EXISTING SPARE CONDUIT BEND.
EE. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
FF. RELOCATE EXISTING BUS STOP SIGN ON ONE 4 INCH X 4 INCH WOOD SIGN SUPPORT. SIGN SHOWN IN FINAL LOCATION. INSTALL PVC SLEEVE IN CONCRETE FOR SIGN SUPPORT INSTALLATION.
GG. REMOVE EXISTING PAVEMENT MARKING LINE WITHIN PROPOSED CROSSWALK.
HH. USE EXSITING HANDHOLE.
JJ. REMOVE EXISTING HANDHOLE AND RE-INSTALL IN-KIND ROTATING HANDHOLE 90 DEGREES TO ROADWAY ON TOP OF EXISTING CONDUIT HEADING SOUTH LEAVING 6 IN. PROTRUDING INTO HANDHOLE.

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. THE CONTRACTOR SHALL CONTACT SHA TO SCHEDULE RETROFITTING OF THE CONTROLLER EQUIPMENT IN ORDER TO OPERATE VIDEO DETECTION EQUIPMENT.
5. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
6. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
7. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
9. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
10. 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%.
11. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON. NOT CENTER TO CENTER OF POLE.
12. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.

GENERAL NOTES CONT.

13. 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.
14. ALL SIDEWALK RAMPS SHALL BE INSTALLED AS PER STANDARDS MD 655.11 AND MD 655.12.
15. ALL HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
16. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
17. REFER TO SHEET 2 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

GEOMETRIC LEGEND

EXISTING
PROPOSED

UTILITY LEGEND

SD — SD STORM DRAIN
G — G GAS MAIN
W — W WATER MAIN
S — S SEWER MAIN
E — E ELECTRIC CABLES
A — A AERIAL CABLES
T — T TELEPHONE CABLES
F — F FIBER-OPTIC

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

APPROVALS

ORIGINAL ON FILE

TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR

REVISIONS

(B) UPGRADE SIGNAL HEADS WITH LED AND INSTALL APS. X4485185 TIMS# K355 (A) 3/15/2010 BHD
(A) REPLACE FAILED LOOP DETECTORS SHA# 4/23/1997

PLOTTED: 04-13-2010
FILE: n:\31669-001\CADD\pSG-PD01_K355.dgn

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 151 (North Point Blvd.) and St. Monica Drive

Dundalk, Maryland

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' ADVERTISED DATE 01-05-1972 CONTRACT NO. AW759A56B58

DESIGNED BY
DRAWN BY
CHECKED BY
F.A.P. NO.
COUNTY Baltimore
LOGMILE 03015103.71
TIMS NO. K355
TOD NO.

TS NO. | DRAWING TSP-1 OF 3 | SHEET NO. 1 OF 3

BY: bdonoway