

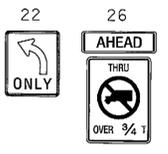
**PROPOSED VIDEO DETECTION CAMERA**  
a, b, c, d

**VIDEO ZONE DETECTION**  
c

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

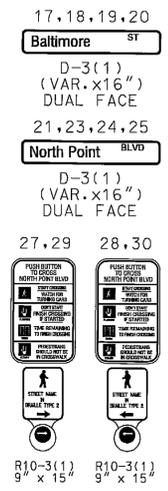
TOD NO: XX645-09  
SHA NO: BA938857  
MD 151: Kane Street to MD 157

**EXISTING SIGNS**

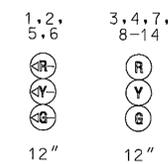


**EXISTING SIGNS TO BE REMOVED**  
19A, 20A  
Baltimore Street

**PROPOSED SIGNS**



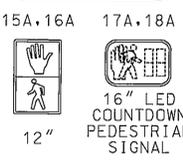
**EXISTING SIGNALS**



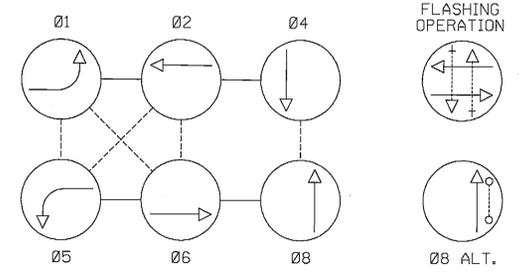
**PROPOSED SIGNALS**



**EXISTING SIGNALS TO BE REMOVED**



**NEMA PHASING**



- CONSTRUCTION DETAILS**
- USE EXISTING BASE MOUNTED CABINET AND CONTROLLER. INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT.
  - USE EXISTING STRAIN POLE. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON. CLEAN EXISTING DRILLED HOLES WITH BRUSH AND SPRAY COLD GALVANIZING COMPOUND ON THE AFFECTED AREAS.
  - INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, 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 NORTH POINT BLVD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
  - INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD AND 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 BEND IN PEDESTAL BASE).
  - INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
  - INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
  - USE EXISTING HANDHOLE.
  - USE EXISTING CONDUIT.
  - REMOVE EXISTING PEDESTAL POLE. REMOVE AND DISPOSE OF EXISTING FOUNDATION 12 IN. BELOW GRADE.
  - REMOVE EXISTING SIDEWALK RAMP AND INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.12) AND DETECTABLE WARNING SURFACE CLAY BRICK PAVERS WITH THE PLACEMENT IN ACCORDANCE WITH STANDARD NO. MD 655.40.
  - CAP AND ABANDON EXISTING CONDUIT.
  - REMOVE EXISTING SIDEWALK AND INSTALL 5 IN. CONCRETE SIDEWALK.
  - USE EXISTING SPAN WIRE. REMOVE EXISTING SIGNS AND INSTALL NEW D-3(1) SIGNS AS SHOWN.
  - REMOVE EXISTING AND INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
  - REMOVE EXISTING SIDEWALK RAMP AND INSTALL 5 IN. CONCRETE SIDEWALK AND COMBINATION CONCRETE CURB AND GUTTER (STANDARD NO. MD 620.02 TYPE 'A').
  - USE EXISTING STRAIN POLE.
  - USE EXISTING SPAN WIRE. INSTALL NEW D-3(1) SIGNS AS SHOWN.
  - INSTALL HANDHOLE.
  - 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 NORTH POINT BLVD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
  - 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 NORTH POINT BLVD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
  - INSTALL DETECTABLE WARNING SURFACE CLAY BRICK PAVERS WITH THE PLACEMENT IN ACCORDANCE WITH STANDARD NO. MD 655.40.
  - INSTALL 5 IN. DEPRESSED CONCRETE SIDEWALK (FLUSH WITH ROADWAY).

- GENERAL NOTES**
- 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.
  - 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.
  - THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
  - ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
  - REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
  - 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%.
  - THE 10" SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
  - PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
  - 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.
  - ALL SIDEWALK RAMP SHALL BE INSTALLED AS PER STANDARDS MD 655.12.
  - REFER TO SHEET TSP-4 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 151 (North Point Boulevard) at Baltimore Street  
Baltimore, Maryland

TRAFFIC SIGNALIZATION PLAN	
SCALE 1" = 20'	ADVERTISED DATE 12/22/24 CONTRACT NO.
DESIGNED BY	COUNTY Baltimore
DRAWN BY B. THOMPSON	LOGMILE
CHECKED BY A. BUDNICHUCK	TMS NO. JB64
F.A.P. NO.	TOD NO.
TS NO. 9206	DRAWING TSP-1 OF 7 SHEET NO. 1 OF 7

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

GEOMETRIC LEGEND	UTILTY LEGEND	APPROVALS	REVISIONS
— EXISTING — PROPOSED	SD - STORM DRAIN G - GAS MAIN W - WATER MAIN S - SEWER MAIN E - ELECTRIC CABLES A - AERIAL CABLES T - TELEPHONE CABLES F - FIBER-OPTIC	TEAM LEADER ASSIST. DIR. CHIEF DIRECTOR CHIEF OFFICE DIRECTOR	<ul style="list-style-type: none"> <li>① INSTALLED APS/CPS AND UPGRADED SIDEWALK RAMPS. TMS NO. JB64 SHA NO. XX645185 6/24/2011</li> <li>F UPGRADE VIDEO DETECTION. INSTALL NON-INVASIVE PROBES. TMS #6-02 SHA CONTRACT NO. XX3385185 10/14/2010</li> <li>E RERIRE INTERSECTION. REPLACE POLE BY CABINET DUE TO ACCIDENT. SHA CONTRACT NO. 21864703043 08/26/2009</li> </ul>

PLOTTED: Monday, July 11, 2011 AT 06:37 AM  
FILE: N:\38699-18\CAD\p8g-P00\_md151.dgn

BY: SJOSB