

I. GENERAL

This project involves the reconstruction of an existing traffic signal at the intersection of MD 144 (Frederick Road) at I-695 Ramps in Baltimore County. Countdown Pedestrian Signals and Accessible Pedestrian Signals (APS) shall be installed at the intersections for west crossing at I-695 Southbound Ramps, south crossing on I-695 Southbound On-Ramp, and north crossing on I-695 Northbound On-Ramp.

II. INTERSECTION OPERATION

- The existing base mounted controller will be used for this location. The intersection is to operate in a NEMA 6-phase, fully-actuated mode. The left turn phase along MD 144 shall operate in an exclusive phasing.

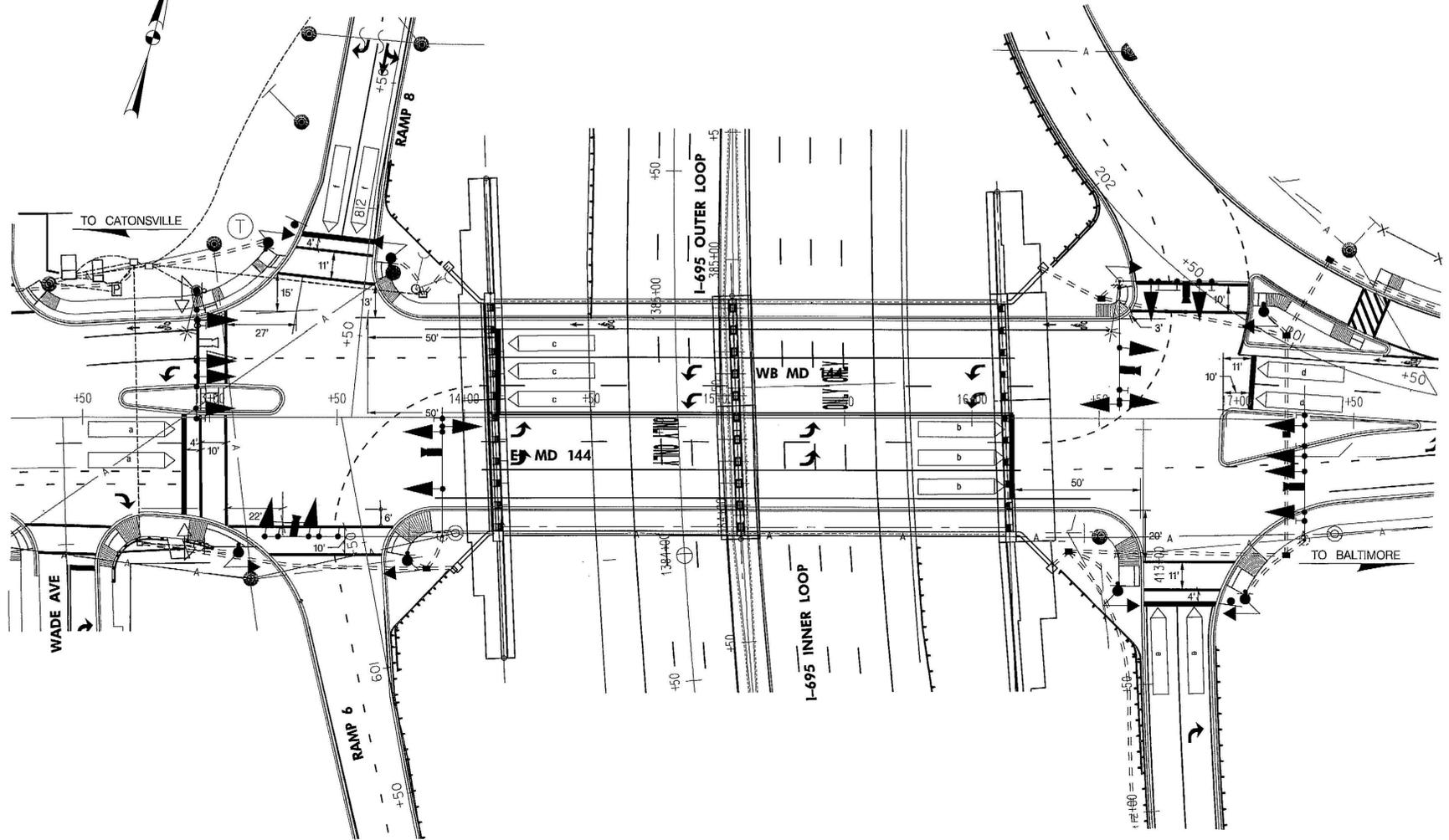
NOTES

- For final pavement markings, refer to the pavement marking plans, as applicable; other than those detailed on the plan. All pavement markings shall be installed in accordance with Administration standards.
- The contractor shall be responsible for terminating all signal cable to the appropriate terminals and properly labeling each cable.
- 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.
- 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.
- The contractor shall maintain the continuous operation of all interconnect, vehicular, pedestrian detectors, and lighting devices. If any device is damaged by the contractor, it shall be repaired within 72 hours by the contractor at no cost to the Administration after notification by the Engineer.

APS NOTES

- The APS Push Buttons shall be delivered to SHA Signal Shop at least two (2) weeks prior to beginning work, so that the programming may be checked.
- APS will function as follows:
 - To cross Frederick Road
 - When pedestrian locates and presses pushbutton for an extended time, the message will be "Wait to cross Frederick at Ramp, Wait." at first.
 - When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.
 - To cross I-695 SB Off-Ramp (Ramp 8)
 - When pedestrian locates and presses pushbutton for an extended time, the message will be "Wait to cross Ramp at Frederick, Wait. Crosswalk angles right." at first.
 - When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.
 - To cross I-695 SB On-Ramp (Ramp 6)
 - When pedestrian locates and presses pushbutton for an extended time, the message will be "Wait to cross Ramp at Frederick, Wait." at first.
 - When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.
 - To cross I-695 NB Ramps (Ramp 2 and 4)
 - When pedestrian locates and presses pushbutton for an extended time, the message will be "Wait to cross Ramp at Frederick, Wait." at first.
 - When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.
- 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 two percent (2%).
- The 10' separation between pushbuttons is to be measured from face of pushbutton to face of pushbutton, not from center of pole 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.

INTERSECTION DETAILS



CONTACTS

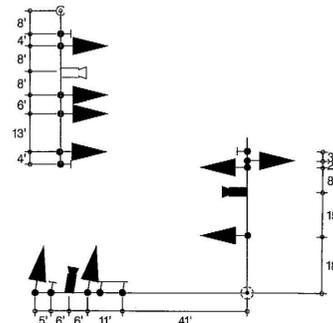
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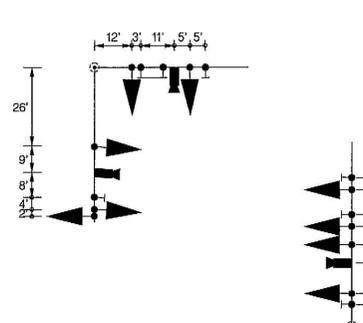
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SIGNAL HEAD DIMENSIONS
MD 144 AT RAMPS 6 & 8



SIGNAL HEAD DIMENSIONS
MD 144 AT RAMPS 2 & 4



ULTIMATE



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 144 (FREDERICK ROAD) AT I-695 SB RAMPS
INTERCHANGE RECONSTRUCTION

GENERAL INFORMATION SHEET

SCALE: 1" = 30' DATE: SEPTEMBER 2010 CONTRACT NO.: BA2725380

DESIGNED BY: J. PALADUGU COUNTY: BALTIMORE
DRAWN BY: J. PALADUGU LOGMILE:
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F.A.P. NO.: SEE TITLE SHEET TOD NO.:

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