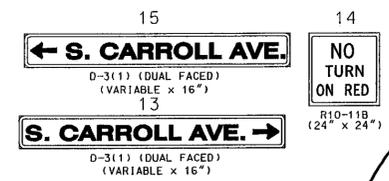
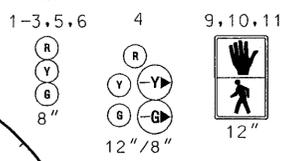


MD 195 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

**EXISTING SIGNS**



**EXISTING SIGNAL HEADS TO REMAIN**



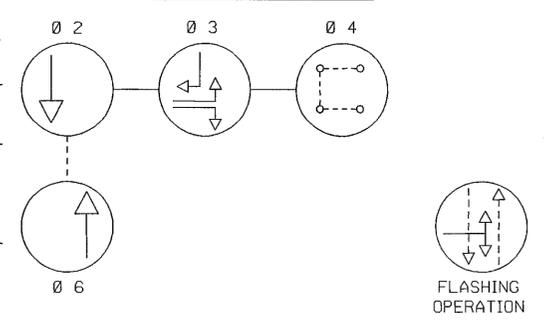
**EXISTING SIGNAL HEAD TO BE REMOVED**



**PROPOSED SIGNAL HEAD**



**NEMA PHASING**



**PHASING NOTES:**  
 1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.  
 2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

- GENERAL NOTES:**
- 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 THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
  - REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE FROM EXISTING CONDUIT.
  - CALL MONTGOMERY COUNTY TRANSPORTATION MANAGEMENT CENTER (TMC) 72 HOURS PRIOR TO ANY DIGGING TO MARK THE EXISTING TRAFFIC SIGNAL EQUIPMENT.

**CONSTRUCTION DETAILS**

- USE EXISTING PEDESTAL POLE. INSTALL 2-WIRE NAVIGATOR AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTON WITH 5 IN. x 7 IN. SIGN SIZE, BLACK FACE PLATE OPTION 'A', INSTALLED WITH VIBRATING ARROW POINTING LEFT, BRAILLE TEXT AND R10-4(1) SIGN (SIGN TO READ "PUSHBUTTON TO CROSS LAUREL AVE.") DISCONNECT EXISTING PUSHBUTTON ELECTRICAL CABLE. REMOVE EXISTING PEDESTRIAN SIGNAL AND CONNECT ELECTRICAL CABLE TO NEW AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTON. REMOVE EXISTING PEDESTRIAN SIGN.
- INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEAD, 2-WIRE NAVIGATOR AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTON WITH 5 IN. x 7 IN. SIGN SIZE, BLACK FACE PLATE OPTION 'A' INSTALLED WITH VIBRATING ARROW POINTING LEFT, BRAILLE TEXT AND R10-4(1) SIGN (SIGN TO READ "PUSHBUTTON TO CROSS LAUREL AVENUE"). (INSTALL 2-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE.)
- INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEAD, 2-WIRE NAVIGATOR AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTON WITH 5 IN. x 7 IN. SIGN SIZE, BLACK FACE PLATE OPTION 'A' INSTALLED WITH VIBRATING ARROW POINTING LEFT, BRAILLE TEXT AND R10-4(1) SIGN (SIGN TO READ "PUSHBUTTON TO CROSS CARROLL AVENUE"). (INSTALL 2-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE.)
- USE EXISTING HANDHOLE.
- INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
- INSTALL 6 FT. x 30 FT. (3-6-3 WINDING) QUADRUPOLE TYPE LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
- USE EXISTING PEDESTAL POLE. INSTALL 2-WIRE NAVIGATOR AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTON WITH 5 IN. x 7 IN. SIGN SIZE, BLACK FACE PLATE OPTION 'A' INSTALLED WITH VIBRATING ARROW POINTING RIGHT, BRAILLE TEXT AND R10-4(1) SIGN (SIGN TO READ "PUSHBUTTON TO CROSS CARROLL AVENUE"). A NEW 1/2 INCH HOLE SHALL BE DRILLED INTO THE PEDESTAL POLE FOR THE WIRING. DISCONNECT EXISTING PUSHBUTTON ELECTRICAL CABLE, REMOVE EXISTING PEDESTRIAN SIGNAL (CLEAN EXISTING DRILLED HOLE FOR WIRING WITH BRUSH AND SPRAY COLD GALVANIZING COMPOUND ON THE AFFECTED AREA) AND CONNECT ELECTRICAL CABLE TO NEW AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTON. REMOVE EXISTING PEDESTRIAN SIGN.
- REMOVE EXISTING BRICKS IN SIDEWALK. INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED) AND RESET BRICKS.
- USE EXISTING CONDUIT.
- ABANDON EXISTING LOOP DETECTOR.
- USE EXISTING POLE MOUNTED CABINET AND CONTROLLER. INSTALL CENTRAL CONTROL UNIT IN CABINET (MONTGOMERY COUNTY FORCES TO HOOK UP UNIT IN CABINET).
- INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH 2-WIRE NAVIGATOR AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTON WITH 5 IN. x 7 IN. SIGN SIZE, BLACK FACE PLATE OPTION 'A' INSTALLED WITH VIBRATING ARROW POINTING RIGHT, BRAILLE TEXT AND R10-4(1) SIGN (SIGN TO READ "PUSHBUTTON TO CROSS CARROLL AVE."). THE PEDESTAL POLE SHALL CUT ABOVE THE R10-4(1) SIGN.
- REMOVE EXISTING PEDESTAL POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE.
- ADJUST EXISTING HANDHOLE TO FINAL GRADE.
- INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- CAP AND ABANDON EXISTING CONDUIT.
- REMOVE EXISTING HANDHOLE.
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).
- USE EXISTING HANDHOLE. SPLICE EXISTING LOOP WIRE (NO. 14 A.W.G.) ELECTRICAL CABLE TO NEW 2-CONDUCTOR (NO. 14 A.W.G.) ALUMINUM SHIELDED CABLE.

- SPECIAL NOTES:**
- CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.
  - THE TACTILE ARROWS FOR THE AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTONS SHALL BE LOCATED PARALLEL TO THE CROSSWALK FOR WHICH THEY APPLY.
  - THE CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH CITY OF TAKOMA PARK STREETSCAPE CONTRACTOR, MR. EDWARD ROGERS AT 301-252-0946. THE CONTRACTOR SHALL ALSO CONTACT IIONA BLANCHARD AT (301) 891-7205 TO COORDINATE CONSTRUCTION ACTIVITIES SCHEDULE. THE TRAFFIC SIGNAL EQUIPMENT SHALL BE INSTALLED AT THE SAME TIME AS THE STREETSCAPE IMPROVEMENTS.

**LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES**

AERIAL CABLE	A
ELECTRICAL	E
TELEPHONE	T
GAS	G
SEWER	SS
STORM DRAIN	SD
WATER	W
CABLE TV	TV

**WR&A**  
 Whitman, Reardon  
 and Associates, LLP  
 801 South Caroline Street  
 Baltimore, Maryland 21231  
 (410) 235-3450

REVISIONS	APPROVALS
(1) REDLINE REVISION NO. 1 REVISED PEDESTAL POLE LOCATION CONTRACT NO. AT5829182 11/10/05 S.R.B. N.M.L. 11/10/05	TEAM LEADER - TRAFFIC ENGINEERING DESIGN DIVISION
(2) ADDED AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTONS CONTRACT NO. AT5829182 3/24/05 N.M.L.	ASST. TRAFFIC ENGINEERING DESIGN DIVISION
(3) COMPLETE SIGNAL REPLACEMENT S.H.A. NO. M-546-501-385 4-20-86	CHEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, TRAFFIC & SAFETY

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
 Office of Traffic & Safety  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
 TRAFFIC SIGNALIZATION PLAN  
 MD 195 @ LAUREL AVENUE  
 (TAKOMA PARK, MD)

DRAWN BY: GENE SIMMERS	F.A.P. NO.	TS NO.
CHECKED BY: GENE SIMMERS	S.H.A. NO. M546-501-385	1866C
SCALE: 1" = 20'	COUNTY: MONTGOMERY	T.I.M.S. NO. G796
DATE: FEB 1, 1986	LOG MILE:	SHEET NO. 1 OF 2