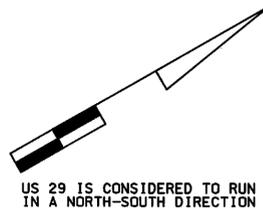


BORDER REV. DATE: June 1, 2004

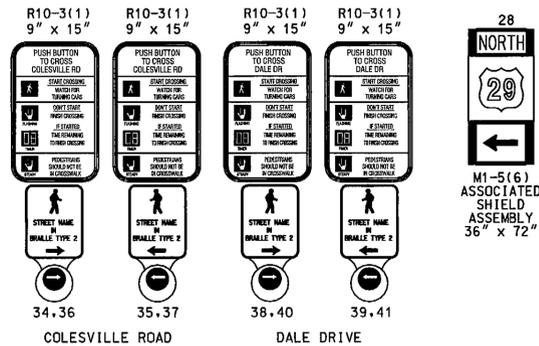
DRILL HOLES

DRILL HOLES

DRILL HOLES



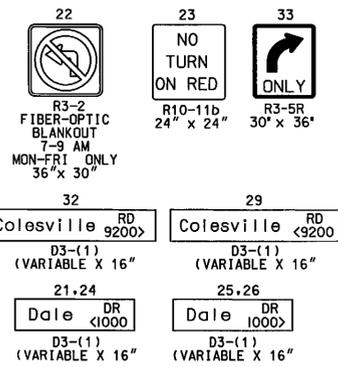
US 29 IS CONSIDERED TO RUN IN A NORTH-SOUTH DIRECTION



CONSTRUCTION DETAILS

- A. Install 27' steel pole (cut to 24') with a 15' "T" dimension, 50' mast arm, LED traffic signal heads, signs, video detection camera, 3" weatherhead with 3" PVC riser, Montgomery County Interconnect Splice Cabinet with 3 LB as shown. (Note: 1-3", 90' polyvinyl chloride (Schedule 80) bend.) Contractor is to disconnect the existing interconnect cable (both runs, north and south) from existing splice cabinet and reroute to proposed pole and splice cabinet. Montgomery County forces shall install surveillance camera, cabinet and fiber optic cable as shown.
- B. Install 16.5' steel pole with a 15' "T" dimension, 50' mast arm, LED traffic signal heads, signs, video detection camera, countdown pedestrian signal heads, audible pedestrian pushbutton and pedestrian education sign as shown. Associated Shield Assembly signs (#28, #30) must be mounted on pedestal pole using Astro Brackets and Form Tubes to offset signs from pole far enough to mount pedestrian signal head. (Note: 1-3", 90' polyvinyl chloride (Schedule 80) bend.)
- C. Install 16.5' steel pole with a 15' "T" dimension, 50' mast arm, LED traffic signal heads, signs, video detection camera, countdown pedestrian signal heads, audible pedestrian pushbutton and pedestrian education sign as shown. (Note: 1-3", 90' polyvinyl chloride (Schedule 80) bend.)
- D. Install 16.5' steel pole with a 15' "T" dimension, 32' mast arm, LED traffic signal heads, signs, video detection camera, countdown pedestrian signal heads, audible pedestrian pushbutton and pedestrian education sign as shown. (Note: 1-3", 90' polyvinyl chloride (Schedule 80) bend.)
- E. Install 10' breakaway pedestal pole with pedestrian signal heads and pedestrian education sign as shown. (Note: 1-3", 90' polyvinyl chloride (Schedule 80) bend.)
- F. Install NEMA size "6" base-mounted cabinet and controller with video interface and 2-wire control unit and all necessary equipment. (Note: 2-2", 90' polyvinyl chloride (Schedule 80) bend, and a 2-4", 90' polyvinyl chloride (Schedule 80) bends.)
- G. Install handhole.
- H. Install 3" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
- J. Install 2-4" polyvinyl chloride electrical conduit (Schedule 80) (slotted or trenched). (Note: 2nd conduit in same slot or trench)
- K. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
- L. Remove existing Montgomery County Splice Cabinet and return to Montgomery County.
- M. Remove existing strain pole, all attached equipment and foundation 12 in. below grade. Cap and abandon existing conduit.
- N. Remove existing strain pole, all attached equipment and foundation 12 in. below grade. Cap and abandon existing cabinet. Montgomery County Forces will remove surveillance camera, fiber optic cable and cabinet and relocate.
- O. Use existing handhole. Disconnect camera cables from existing cabinet and pull back to handhole. Reroute through proposed conduit to proposed cabinet.
- P. Disconnect existing camera cables from cabinet and pull back to camera pole. (See Construction Detail "A"). Reroute cables through proposed conduit to proposed cabinet.
- Q. Locate existing conduit and out. Install proposed handhole. (See Construction Detail "P").
- R. Remove existing base-mounted cabinet and controller and foundation. 12 in. Cabinet and controller shall be delivered to Montgomery County.
- S. Remove handhole. Cap and abandon existing conduit.
- T. Remove existing pavement marking and install 12" white heat applied permanent preformed thermoplastic pavement marking (crosswalk) centered on handicapped ramps.
- U. Remove existing pavement marking and install 24" white heat applied permanent preformed thermoplastic pavement marking (stop line) as shown.
- V. Install 4" polyvinyl chloride electrical conduit (Schedule 80) with 4" bend at PEPCO pole base. Coil 50' of 3 wire, 1-conductor cable (No. 250 KCMIL) at base. (trenched for electrical service).
- W. Install metered service pedestal.
- X. Install 2" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
- Y. Existing overhead I/C to be removed and relocated from strain pole to mast arm pole (See Construction Detail "A" and Wiring Diagram).
- Z. Existing overhead I/C to remain.
- aa. Existing camera.
- bb. Remove existing retaining wall.
- cc. Install concrete retaining wall. (See "Concrete Retaining Wall Detail" on General Information Sheet.)
- dd. Remove existing overhead electrical service.
- ee. Existing PEPCO pole #79342638 to be relocated by PEPCO approximately 30' north along Colesville Road.
- ff. Existing "Ride On" bus stop sign to be relocated 20' to the south by Montgomery County Forces.
- gg. Install 2-3" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
- hh. Remove existing US 29 North Shield and associated signs from post. Relocate existing US 29 South Shield to adjacent post, existing lane use sign is to remain. (See sign #27)

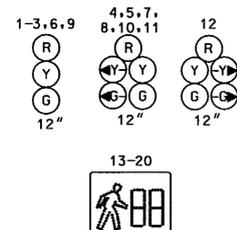
PROPOSED SIGNS



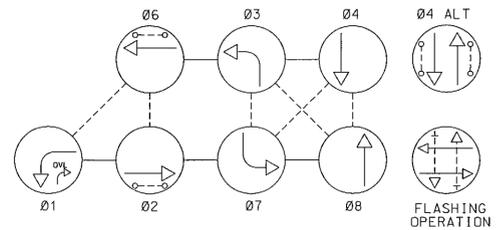
EXISTING SIGNS



PROPOSED LED SIGNALS

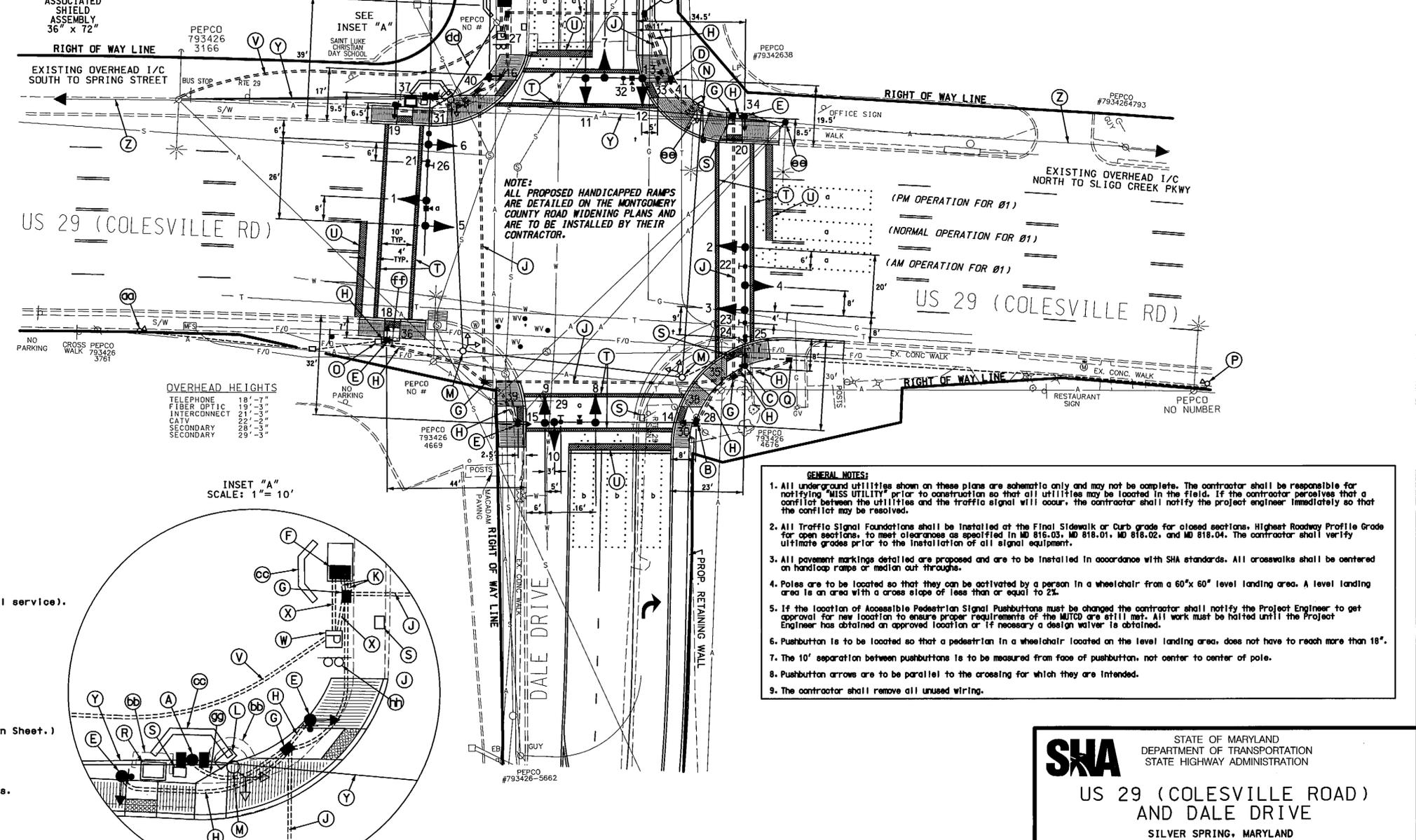


NEMA PHASING



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

● - SURVEILLANCE CAMERA
■ - VIDEO DETECTION CAMERA (a-c)



OVERHEAD HEIGHTS

TELEPHONE	18'-7"
FIBER OPTIC	19'-3"
INTERCONNECT	21'-3"
CATV	22'-3"
SECONDARY	29'-3"

INSET "A"
SCALE: 1" = 10'

- GENERAL NOTES:
- All underground 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.
 - 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 815.03, MD 818.01, MD 818.02, and MD 818.04. The contractor shall verify ultimate grades prior to the installation of all signal equipment.
 - All pavement markings detailed are proposed and are to be installed in accordance with SHA standards. All crosswalks shall be centered on handicap ramps or median cut throughs.
 - Poles are to be located so that they can be activated by a person in a wheelchair from a 60"x 60" level landing area. A level landing area is an area with a cross slope of less than or equal to 2%.
 - If the location of Accessible Pedestrian Signal Pushbuttons must be changed the contractor shall notify the Project Engineer to get approval for new location to ensure proper requirements of the MUTCD are still met. All work must be halted until the Project Engineer has obtained an approved location or if necessary a design waiver is obtained.
 - Pushbutton is to be located so that a pedestrian in a wheelchair located on the level landing area, does not have to reach more than 18".
 - The 10' separation between pushbuttons is to be measured from face of pushbutton, not center to center of pole.
 - Pushbutton arrows are to be parallel to the crossing for which they are intended.
 - The contractor shall remove all unused wiring.

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

US 29 (COLESVILLE ROAD) AND DALE DRIVE
SILVER SPRING, MARYLAND

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' DATE _____ CONTRACT NO. _____

DESIGNED BY MONTGOMERY COUNTY COUNTY MONTGOMERY
DRAWN BY MONTGOMERY COUNTY LOGMILE 15002901.51
CHECKED BY _____ TMS NO. J762
F.A.P. NO. _____ TOD NO. _____

TS NO. 1717B DRAWING NO. 1 OF 4 SHEET NO. OF _____

APPROVALS	REVISIONS
TEAM LEADER	
ASST. DIV.	
DIVISION CHIEF	
OFFICE DIRECTOR	

ST
STREET TRAFFIC STUDIES, LTD.

400 Crain Hwy., NW
Crestview, MD 21032
PH (410) 590-5500 Fax (410) 590-6657

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