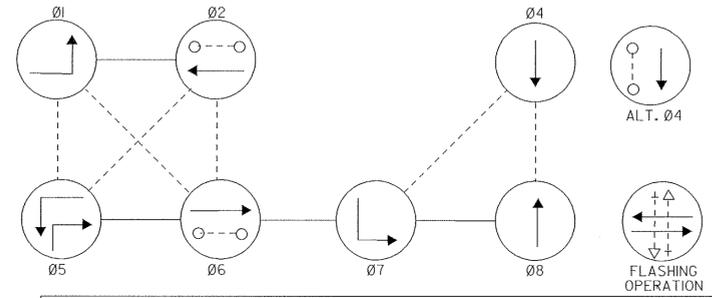
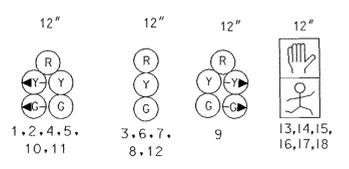


NEMA PHASING

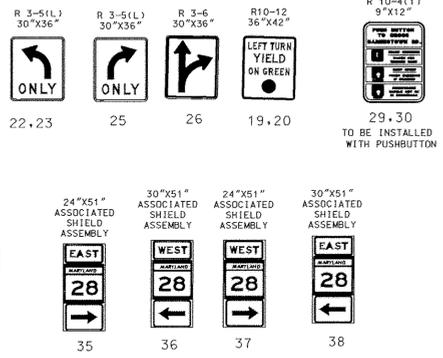


NEMA PHASING NOTES
 1. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
 2. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

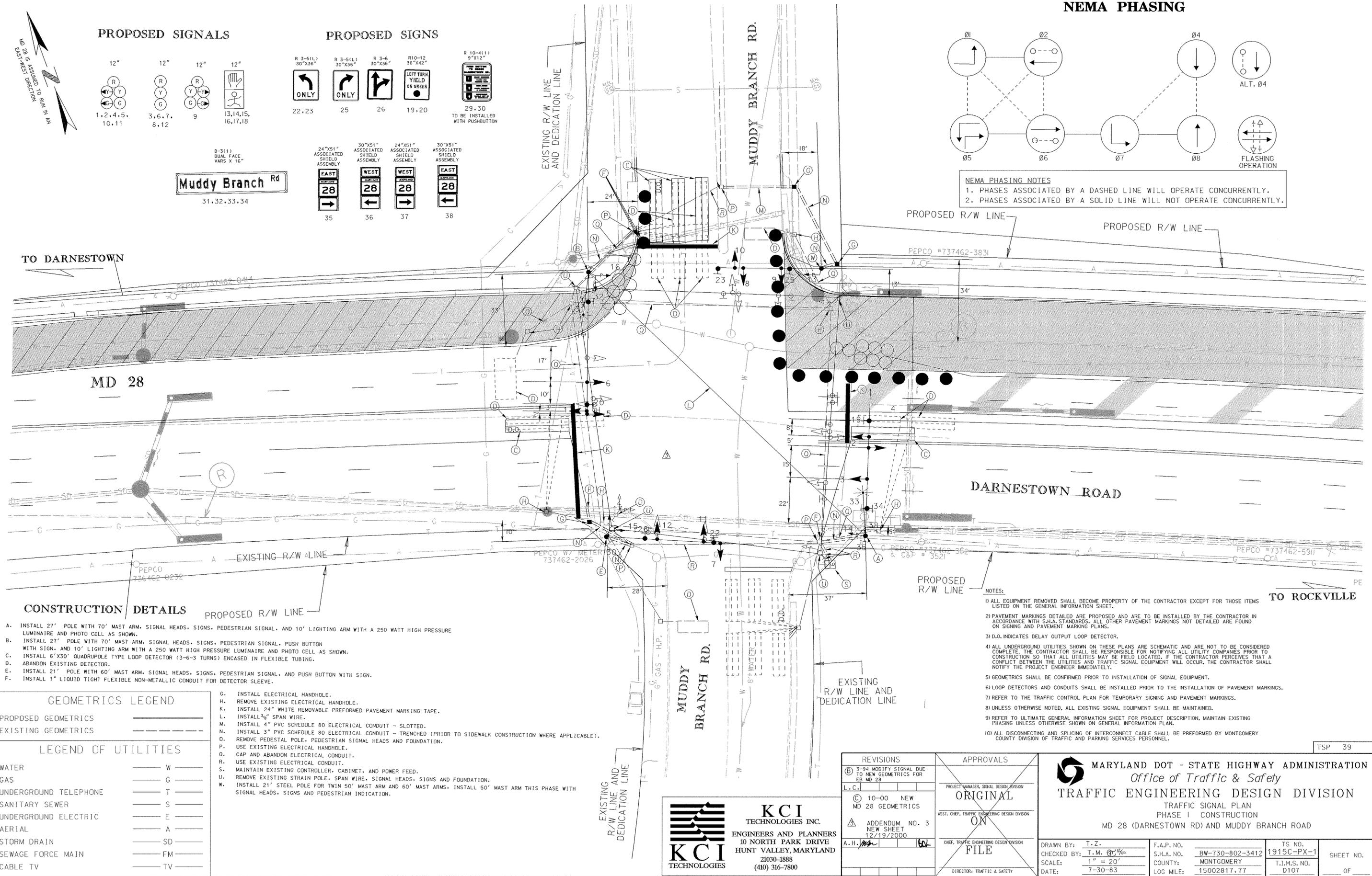
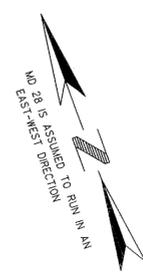
PROPOSED SIGNALS



PROPOSED SIGNS



Muddy Branch Rd
 31.32.33.34



CONSTRUCTION DETAILS

- A. INSTALL 27' POLE WITH 70' MAST ARM, SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL, AND 10' LIGHTING ARM WITH A 250 WATT HIGH PRESSURE LUMINAIRE AND PHOTO CELL AS SHOWN.
- B. INSTALL 27' POLE WITH 70' MAST ARM, SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL, PUSH BUTTON WITH SIGN, AND 10' LIGHTING ARM WITH A 250 WATT HIGH PRESSURE LUMINAIRE AND PHOTO CELL AS SHOWN.
- C. INSTALL 6'X30' QUADRIPOLE TYPE LOOP DETECTOR (3-6-3 TURNS) ENCASED IN FLEXIBLE TUBING.
- D. ABANDON EXISTING DETECTOR.
- E. INSTALL 21' POLE WITH 60' MAST ARM, SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL, AND PUSH BUTTON WITH SIGN.
- F. INSTALL 1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE.

GEOMETRICS LEGEND

PROPOSED GEOMETRICS	—————
EXISTING GEOMETRICS	- - - - -

LEGEND OF UTILITIES

WATER	— W —
GAS	— G —
UNDERGROUND TELEPHONE	— T —
SANITARY SEWER	— S —
UNDERGROUND ELECTRIC	— E —
AERIAL	— A —
STORM DRAIN	— SD —
SEWAGE FORCE MAIN	— FM —
CABLE TV	— TV —

- G. INSTALL ELECTRICAL HANDHOLE.
- H. REMOVE EXISTING ELECTRICAL HANDHOLE.
- K. INSTALL 24" WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE.
- L. INSTALL 3/8" SPAN WIRE.
- M. INSTALL 4" PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
- N. INSTALL 3" PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED (PRIOR TO SIDEWALK CONSTRUCTION WHERE APPLICABLE).
- O. REMOVE PEDESTAL POLE, PEDESTRIAN SIGNAL HEADS AND FOUNDATION.
- P. USE EXISTING ELECTRICAL HANDHOLE.
- Q. CAP AND ABANDON ELECTRICAL CONDUIT.
- R. USE EXISTING ELECTRICAL CONDUIT.
- S. MAINTAIN EXISTING CONTROLLER, CABINET, AND POWER FEED.
- U. REMOVE EXISTING STRAIN POLE, SPAN WIRE, SIGNAL HEADS, SIGNS AND FOUNDATION.
- W. INSTALL 21' STEEL POLE FOR TWIN 50' MAST ARM AND 60' MAST ARMS, INSTALL 50' MAST ARM THIS PHASE WITH SIGNAL HEADS, SIGNS AND PEDESTRIAN INDICATION.

- NOTES:**
- 1) ALL EQUIPMENT REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR EXCEPT FOR THOSE ITEMS LISTED ON THE GENERAL INFORMATION SHEET.
 - 2) PAVEMENT MARKINGS DETAILED ARE PROPOSED AND ARE TO BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH S.H.A. STANDARDS. ALL OTHER PAVEMENT MARKINGS NOT DETAILED ARE FOUND ON SIGNING AND PAVEMENT MARKING PLANS.
 - 3) D.O. INDICATES DELAY OUTPUT LOOP DETECTOR.
 - 4) ALL UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE FIELD LOCATED. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY.
 - 5) GEOMETRICS SHALL BE CONFIRMED PRIOR TO INSTALLATION OF SIGNAL EQUIPMENT.
 - 6) LOOP DETECTORS AND CONDUITS SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
 - 7) REFER TO THE TRAFFIC CONTROL PLAN FOR TEMPORARY SIGNING AND PAVEMENT MARKINGS.
 - 8) UNLESS OTHERWISE NOTED, ALL EXISTING SIGNAL EQUIPMENT SHALL BE MAINTAINED.
 - 9) REFER TO ULTIMATE GENERAL INFORMATION SHEET FOR PROJECT DESCRIPTION, MAINTAIN EXISTING PHASING UNLESS OTHERWISE SHOWN ON GENERAL INFORMATION PLAN.
 - 10) ALL DISCONNECTING AND SPLICING OF INTERCONNECT CABLE SHALL BE PERFORMED BY MONTGOMERY COUNTY DIVISION OF TRAFFIC AND PARKING SERVICES PERSONNEL.

TSP 39

REVISIONS	APPROVALS
(B) 3-94 MODIFY SIGNAL DUE TO NEW GEOMETRICS FOR EB MD 28	PROJECT MANAGER, SIGNAL DESIGN DIVISION ORIGINAL ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION ON CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION FILE DIRECTOR, TRAFFIC & SAFETY
(C) 10-00 NEW MD 28 GEOMETRICS	
(A) ADDENDUM NO. 3 NEW SHEET 12/19/2000	

KCI TECHNOLOGIES INC.
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 10 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 21030-1888
 (410) 316-7800

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
 Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
 TRAFFIC SIGNAL PLAN
 PHASE I CONSTRUCTION
 MD 28 (DARNESTOWN RD) AND MUDDY BRANCH ROAD

DRAWN BY: T.Z.	F.A.P. NO.	TS NO.
CHECKED BY: T.M.	S.H.A. NO.	1915C-PX-1
SCALE: 1" = 20'	COUNTY: MONTGOMERY	T.I.M.S. NO. D107
DATE: 7-30-83	LOG MILE: 15002817.77	SHEET NO. OF