

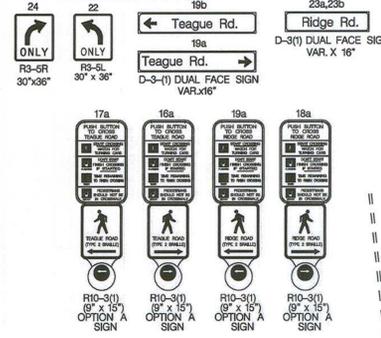


MD 713 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

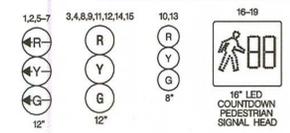
**EXISTING SIGNS**



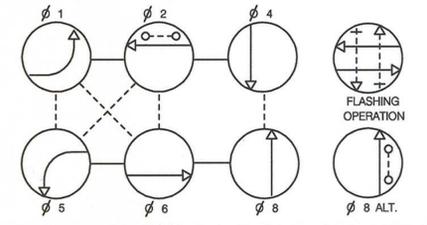
**PROPOSED SIGNS**



**PROPOSED SIGNALS**



**NEMA PHASING**

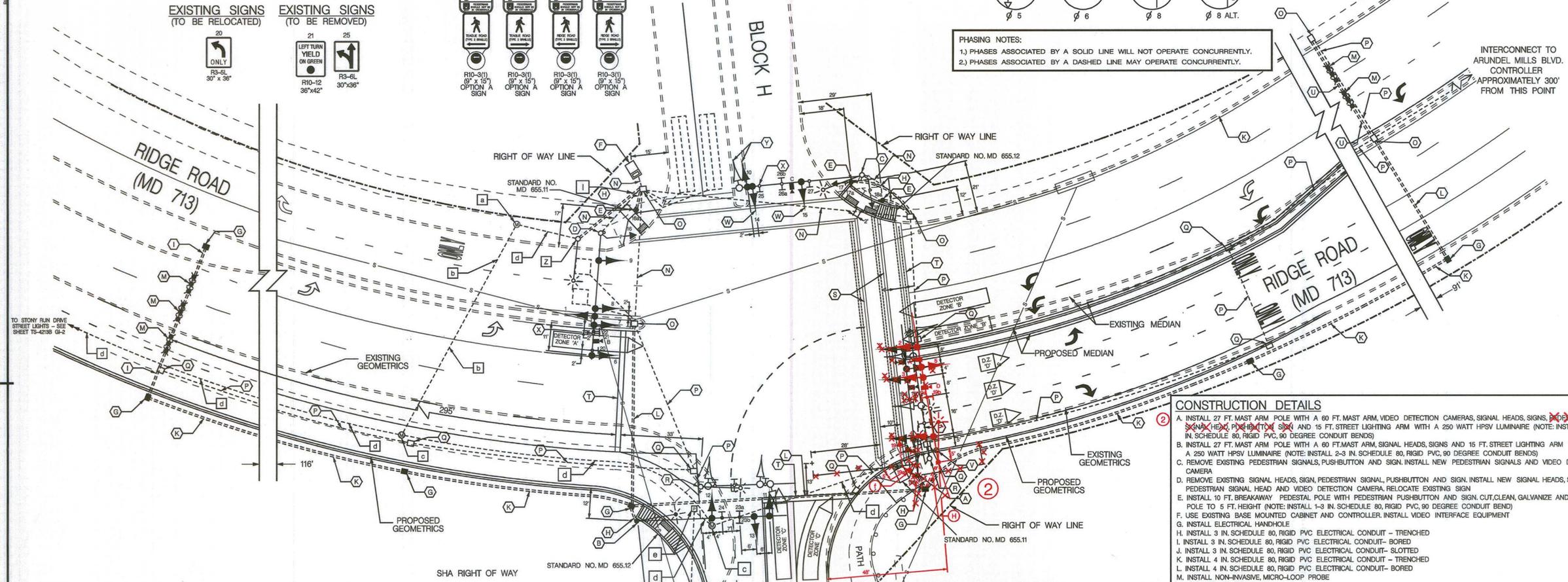


**PHASING NOTES:**  
 1.) PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.  
 2.) PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.

**PROPOSED VIDEO DETECTION CAMERAS**



INTERCONNECT TO ARUNDEL MILLS BLVD. CONTROLLER APPROXIMATELY 300' FROM THIS POINT



**GENERAL NOTES**

1. THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE YEAR FROM THE DATE OF APPROVAL SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME THESE PLANS SHALL BE NULL AND VOID WITHOUT A REVIEW FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.
2. 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 UTILITIES AND TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THE CONFLICT MAY BE RESOLVED.
3. 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 CLEARANCE 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.
4. ALL INTERNAL CABINET WIRING TO BE PERFORMED BY THE STATE HIGHWAY ADMINISTRATION SIGNAL SHOP.
5. THE CONTRACTOR SHALL REMOVE ALL UNUSED CABLE.
6. FOR ADDITIONAL SIGNING AND PAVEMENT MARKING SEE PLAN SHEETS TS-4213B GI-1 AND GI-2
7. INSTALL CONDUIT AND DETECTION PRIOR TO THE INSTALLATION OF THE PAVEMENT MARKINGS.
8. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT BEING REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE WORK.
9. THE LOCATION OF PROPOSED GEOMETRICS MUST BE CONFIRMED PRIOR TO THE INSTALLATION OF SIGNAL EQUIPMENT.
10. PUSHBUTTONS ARE TO BE LOCATED SO 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%.
11. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM THE FACE OF THE PUSHBUTTON TO THE FACE OF THE PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
12. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
13. 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 LOCATION UNTIL A DESIGN WAIVER IS OBTAINED AND APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
14. ALL APS CENTRAL CONTROL UNITS SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR PROGRAMMING AND TESTING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7650 TO COORDINATE.

**GEOMETRIC LEGEND**

EXISTING \_\_\_\_\_  
 PROPOSED \_\_\_\_\_

**UTILITY LEGEND**

AERIAL CABLE \_\_\_\_\_ A  
 ELECTRICAL \_\_\_\_\_ E  
 TELEPHONE \_\_\_\_\_ T  
 GAS \_\_\_\_\_ G  
 SEWER \_\_\_\_\_ S  
 WATER \_\_\_\_\_ W  
 CABLE TV \_\_\_\_\_ TV

**RED LINE REVISION NO. 2**  
 January 18, 2012  
 Relocate Equipment in NE Corner Due to Utilities  
 TEDD Approval: [Signature]

**CONSTRUCTION DETAILS**

1. INSTALL 27 FT. MAST ARM POLE WITH A 60 FT. MAST ARM, VIDEO DETECTION CAMERAS, SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL HEAD, PUSHBUTTON SIGN AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HPSV LUMINAIRE (NOTE: INSTALL 2-3 IN. SCHEDULE 80, RIGID PVC, 90 DEGREE CONDUIT BENDS)
2. INSTALL 27 FT. MAST ARM POLE WITH A 60 FT. MAST ARM, SIGNAL HEADS, SIGNS AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HPSV LUMINAIRE (NOTE: INSTALL 2-3 IN. SCHEDULE 80, RIGID PVC, 90 DEGREE CONDUIT BENDS)
3. REMOVE EXISTING PEDESTRIAN SIGNALS, PUSHBUTTON AND SIGN, INSTALL NEW PEDESTRIAN SIGNALS AND VIDEO DETECTION CAMERA
4. REMOVE EXISTING SIGNAL HEADS, SIGN, PEDESTRIAN SIGNAL, PUSHBUTTON AND SIGN, INSTALL NEW SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL HEAD AND VIDEO DETECTION CAMERA, RELOCATE EXISTING SIGN
5. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN PUSHBUTTON AND SIGN, CUT, CLEAN GALVANIZE AND CAP POLE TO 5 FT. HEIGHT (NOTE: INSTALL 1-3 IN. SCHEDULE 80, RIGID PVC, 90 DEGREE CONDUIT BEND)
6. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER, INSTALL VIDEO INTERFACE EQUIPMENT
7. INSTALL ELECTRICAL HANDHOLE
8. INSTALL 3 IN. SCHEDULE 80, RIGID PVC ELECTRICAL CONDUIT - TRENCHED
9. INSTALL 3 IN. SCHEDULE 80, RIGID PVC ELECTRICAL CONDUIT - BORED
10. INSTALL 3 IN. SCHEDULE 80, RIGID PVC ELECTRICAL CONDUIT - SLOTTED
11. INSTALL 4 IN. SCHEDULE 80, RIGID PVC ELECTRICAL CONDUIT - TRENCHED
12. INSTALL 4 IN. SCHEDULE 80, RIGID PVC ELECTRICAL CONDUIT - BORED
13. INSTALL NON-INVASIVE, MICRO-LOOP PROBE
14. USE EXISTING CONDUIT
15. USE EXISTING HANDHOLE
16. CAP AND ABANDON EXISTING CONDUIT
17. REMOVE EXISTING HANDHOLE
18. REMOVE EXISTING MAST ARM POLE, MAST ARM AND ALL ASSOCIATED EQUIPMENT
19. INSTALL 12 IN. SOLID WHITE, HEAT APPLIED, PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE
20. INSTALL 24 IN. SOLID WHITE, HEAT APPLIED, PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE
21. INSTALL 3 IN. SCHEDULE 80, RIGID PVC ELECTRICAL CONDUIT - SLOTTED
22. REMOVE EXISTING STEEL POLE AND LUMINAIRE
23. REMOVE EXISTING SIGNAL HEAD AND INSTALL NEW SIGNAL HEAD IN SAME LOCATION, USE EXISTING WIRING
24. REMOVE EXISTING OVERHEAD SIGN
25. REMOVE EXISTING SIGNAL HEAD AND INSTALL NEW SIGNAL HEAD AS SHOWN, USE EXISTING WIRING

1. USE EXISTING STREET LIGHT
2. ABANDON EXISTING ELECTRIC MANHOLE
3. ABANDON EXISTING LIGHTING CONDUIT
4. REMOVE EXISTING ELECTRIC MANHOLE
5. DISCONNECT AND ABANDON EXISTING LIGHTING DUCT CABLE
6. EXISTING ELECTRIC SERVICE PEDESTAL TO BE REMOVED BY BGE

1. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN PUSHBUTTON, PEDESTRIAN SIGNAL HEAD AND SIGN. (NOTE: INSTALL 1-3 IN. SCHEDULE 80, RIGID PVC, 90 DEGREE CONDUIT BEND)

**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION  
 STATE HIGHWAY ADMINISTRATION  
 OFFICE OF TRAFFIC & SAFETY  
 TRAFFIC ENGINEERING DESIGN DIVISION  
 MD 713 (RIDGE ROAD) AND  
 TEAGUE ROAD / ARUNDEL MILLS H-BLOCK

**TRAFFIC CONCEPTS, INC.**  
 325 Gambrills Road  
 Suite B  
 Gambrills, MD 21054  
 (410) 923-7101  
 FAX: (410) 923-6473  
 EMAIL: TRAFFIC@TRAFFIC-CONCEPTS.COM

APPROVALS	REVISIONS
TEAM LEADER	10-17-11 REPLACE EQUIPMENT DUE TO WIDENING SHA, NO. BW-898M82
ASST. DIV. CHIEF	10-17-11 REPLACE DETECTION DUE TO GEOMETRIC IMPROVEMENTS SHA, NO. BW-898M82
DIVISION CHIEF	
OFFICE DIRECTOR	

**TRAFFIC SIGNAL PLAN**

SCALE 1"=20' DATE 11-25-02 CONTRACT NO. AT 3585185

DESIGNED BY \_\_\_\_\_ COUNTY ANNE ARUNDEL  
 DRAWN BY WT LOGMILE Q2871300.06  
 CHECKED BY CT T.I.M.S. NO. K970  
 F.A.P. NO. NA TOD NO. \_\_\_\_\_

DRAWING NO. TS-42408 SHEET NO. 1 OF 4