



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

**CONSTRUCTION DETAILS**

- A. INSTALL 27' STEEL POLE WITH TWIN 50'/60' MAST ARMS, TRAFFIC SIGNAL HEADS, 15' LIGHTING ARM WITH A 250W-HPS LUMINAIRE AND SIGNS. (NOTE: 1-3", 90° PVC SCHEDULE 80) BEND.
- B. INSTALL 27' STEEL POLE WITH A 38' MAST ARM, SIGNS, TRAFFIC SIGNAL HEADS, AND 15' LIGHTING ARM WITH A 250W-HPS LUMINAIRE. (NOTE: 1-3", 90° PVC SCHEDULE 80) BEND.
- C. INSTALL A BASE MOUNTED CABINET WITH ALL THE NECESSARY EQUIPMENT FOR AN UNDERGROUND FEED AND A PHONE DROP.
- D. INSTALL 10' BREAKAWAY PEDESTAL POLE, PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND SIGN R10-4 SIGN TO READ "PUSHBUTTON TO CROSS BALLENGER CREEK PIKE". (NOTE: 1-3", 90° PVC (SCHEDULE 80) BEND).
- E. INSTALL 4" PVC, SCHEDULE 80 ELECTRICAL CONDUIT (TRENCHED).
- F. INSTALL 3" PVC, SCHEDULE 80 ELECTRICAL CONDUIT (TRENCHED).
- G. INSTALL 4" PVC, SCHEDULE 80 ELECTRICAL CONDUIT (BORED).
- H. INSTALL HANDHOLE.
- J. INSTALL 6' x 30' LOOP DETECTOR WIRE ENCASED IN FLEXIBLE TUBING QUADRUPOLE TYPE 3-6-3 WINDING.
- K. INSTALL 1" GALVANIZED ELECTRICAL CONDUIT (DETECTOR SLEEVE).
- L. INSTALL 2" PVC SCHEDULE 80 ELECTRICAL CONDUIT (TRENCHED).
- M. INSTALL 3" PVC SCHEDULE 80 ELECTRICAL CONDUIT FOR PROPOSED UNDERGROUND SERVICE BY ALLEGHENY POWER COMPANY AND INSTALL 2" PVC SCHEDULE 80 ELECTRICAL CONDUIT FOR PROPOSED TELEPHONE DROP.
- N. REMOVE EXISTING SIDEWALK SECTIONS AND REPLACE IN KIND AFTER THE INSTALLATION OF THE PROPOSED EQUIPMENT.
- O. INSTALL 3" PVC, SCHEDULE 80 ELECTRICAL CONDUIT (BORED).
- R. INSTALL 12" IN. THERMOPLASTIC PAVEMENT MARKING (WHITE) FOR CROSSWALK.
- S. INSTALL 24" IN. THERMOPLASTIC PAVEMENT MARKING-(WHITE) FOR STOPLINE.
- T. REMOVE EXISTING S1-1 AND W16-7 SIGNS AND POST. RELOCATED EXISTING SIGNS AND POST TO THE NORTH BUS EXIT AS SHOWN.
- U. INSTALL ELECTRICAL SERVICE PEDESTAL EQUIPMENT - UNDERGROUND.
- V. REMOVE EXISTING PAVEMENT MARKINGS.
- W. REMOVE EXISTING GROUND MOUNTED STOP SIGN.

**GENERAL NOTES:**

1. THE LOOP DETECTORS AND CONDUIT ARE TO BE INSTALLED PRIOR TO THE INSTALLATION OF THE PAVEMENT MARKINGS.
2. 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.
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 CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.04 THE CONTRACTOR SHALL VERIFY GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.

**LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES**

— A —	A	AERIAL CABLE
— E —	E	ELECTRIC
— T —	T	TELEPHONE
— G —	G	GAS
— S —	S	SEWER
— W —	W	WATER
— TV —	TV	CABLE TV
— SD —	SD	STORM DRAIN

**APPROVALS**

TEAM LEADER	
ASST. DIV. CHIEF	
DIVISION CHIEF	
OFFICE DIRECTOR	

FREDERICK COUNTY, MARYLAND  
 DIVISION OF PUBLIC WORKS  
 OFFICE OF TRANSPORTATION ENGINEERING  
 FREDERICK, MARYLAND

**MD 351(BALLENGER CREEK PIKE)  
 TUSCARAORA HIGH SCHOOL N. EXIT  
 TRAFFIC SIGNAL PLAN**

THIS MODIFICATION DESIGNED BY: \_\_\_\_\_ DATE \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_ SCALE \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 \* BA1 PERSONNEL

APPROVED: \_\_\_\_\_ DATE \_\_\_\_\_  
 DIVISION OF PUBLIC WORKS, DIRECTOR

APPROVED: \_\_\_\_\_ DATE \_\_\_\_\_  
 DEPARTMENT OF HIGHWAYS AND TRANSPORTATION, HEAD

APPROVED: \_\_\_\_\_ DATE \_\_\_\_\_  
 OFFICE OF TRANSPORTATION ENGINEERING, ENGINEERING MANAGER

**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION  
 STATE HIGHWAY ADMINISTRATION  
 OFFICE OF TRAFFIC & SAFETY  
 TRAFFIC ENGINEERING DESIGN DIVISION

**MD 351(BALLENGER CREEK PIKE)  
 TUSCARAORA HIGH SCHOOL N. EXIT  
 TRAFFIC SIGNAL PLAN**

SCALE 1"=20' DATE 04/04/2005 CONTRACT NO. \_\_\_\_\_

DESIGNED BY M.A. MEARS COUNTY FREDERICK  
 DRAWN BY M.A. MEARS LOGMILE \_\_\_\_\_  
 CHECKED BY RJM T.I.M.S. NO. \_\_\_\_\_  
 F.A.P. NO. \_\_\_\_\_ TOD NO. \_\_\_\_\_

DRAWING NO. SG-1 OF SG-2 SHEET NO. 5 OF 6

**BAI**  
 BRUDIS & ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 9220 RUMSEY ROAD SUITE 110  
 COLUMBIA, MARYLAND 21045  
 410-864-3607 410-864-3609(FAX)

*Amy K. Orrell 4-21-05*