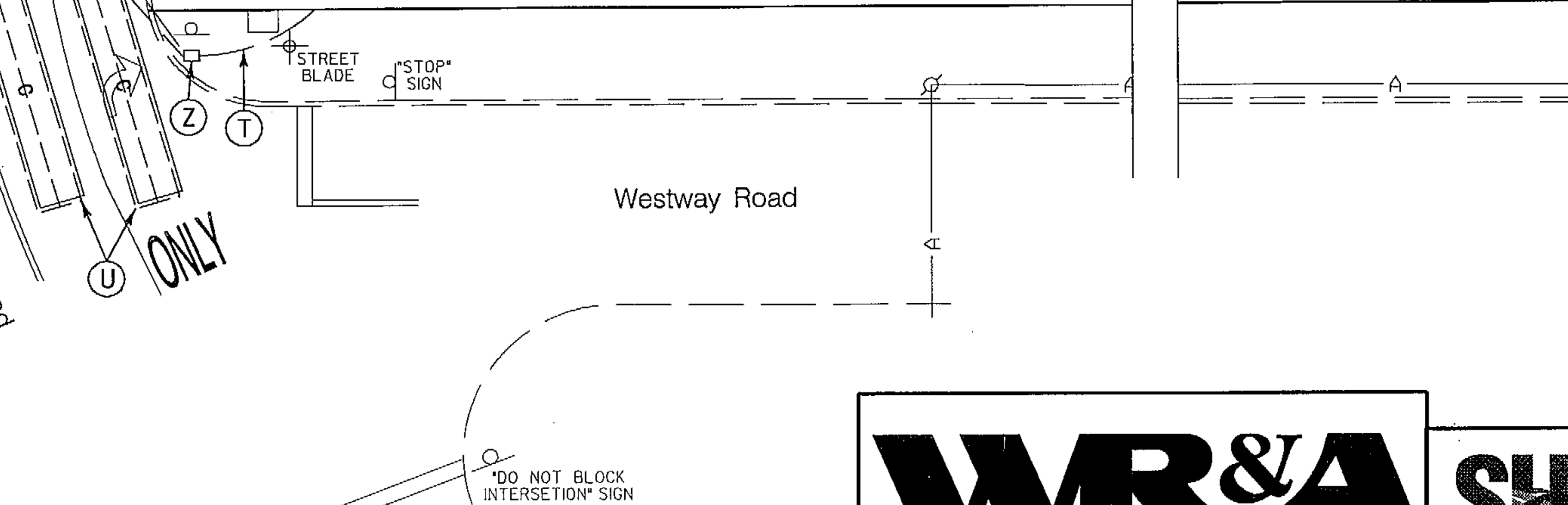

CONSTRUCTION DETAILS

A. INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 70 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM, AND 20 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
B. INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A TWIN 70 FT/50 FT. MAST ARMS, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM AND 20 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
C. INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 38 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM, AND 20 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
D. REMOVE EXISTING SIDEWALK AND RAMP AND INSTALL 5 IN. DEPRESSED CONCRETE SIDEWALK (FLUSH WITH ROADWAY).
E. INSTALL EMBEDDED METERED SERVICE PEDESTAL WITH 2-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS IN PEDESTAL BASE.
F. INSTALL HANDHOLE.
G. INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
H. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
J. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
K. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
L. INSTALL 4 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
M. INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CONDUIT SHALL TIE INTO EXISTING 2 IN. ELBOW IN FOUNDATION CURRENTLY BEING UTILIZED FOR EXISTING ELECTRICAL FEED.
N. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER. INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT. (NOTE: SHA FORCES SHALL RETROFIT CONTROLLER EQUIPMENT TO OPERATE VIDEO DETECTION EQUIPMENT). SEE SPECIAL NOTE 2. (INSTALL 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN CABINET BASE).
O. USE EXISTING HANDHOLE.
P. USE EXISTING CONDUIT.
Q. EXISTING R4-7 SIGN (#20) TO BE RELOCATED ONTO ONE 4 IN. x 4 IN. TREATED WOOD SUPPORT (L=15 FT.).
R. REMOVE EXISTING STRAIN POLE, PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
S. REMOVE EXISTING STRAIN POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
T. CAP AND ABANDON EXISTING CONDUIT.
U. ABANDON EXISTING LOOP DETECTOR. DISCONNECT AND REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
V. REMOVE EXISTING SPAN WIRE AND ALL ASSOCIATED EQUIPMENT.
W. REMOVE EXISTING SIDEWALK RAMP AND INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.11) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40).
X. REMOVE EXISTING SIDEWALK AND INSTALL 5 IN. CONCRETE SIDEWALK.
Y. REMOVE EXISTING SIDEWALK. BACKFILL, SEED, AND MULCH.
Z. REMOVE EXISTING HANDHOLE.
AA. EXISTING OVERHEAD ELECTRICAL SERVICE TO BE REMOVED BY OTHERS (SEE SPECIAL NOTE 3).
BB. INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
CC. REMOVE EXISTING PAVEMENT MARKINGS (CROSSWALK AND HATCHING).
DD. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 500 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT (THRU LANE ONLY).
EE. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
FF. ABANDON EXISTING MICROLOOP PROBE SET. DISCONNECT AND REMOVE MICROLOOP PROBE CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
GG. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS GOV. RITCHIE HWY"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
HH. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS GOV. RITCHIE HWY"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
JJ. USE EXISTING HANDHOLE AND ADJUST TO FINAL GRADE.
KK. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1000 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT (THRU LANE ONLY).
LL. USE EXISTING HANDHOLE. PULL BACK EXISTING INTERCONNECT CABLE HEADING NORTH AND RE-FEED IN NEW CONDUIT TO EXISTING BASE MOUNTED CABINET. REMOVE AND DISPOSE OF ALL UNUSED INTERCONNECT CABLE. (SEE WIRING DIAGRAM FOR ADDITIONAL INTERCONNECT DETAILS)
MM. INSTALL DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40).
NN. REMOVE EXISTING CONCRETE RAMP AND SIDEWALK AND INSTALL MEDIAN CUT-THROUGH AND STANDARD TYPE A COMBINATION CURB AND GUTTER PAN. MEDIAN CUT-THROUGH TO BE INSTALLED AFTER REMOVAL OF EXISTING SIGNAL POLE.
OO. EXISTING R10-6a SIGN (#32) TO BE RELOCATED ONTO ONE 4 IN. x 4 IN. TREATED WOOD SUPPORT (L=15 FT.).
PP. EXISTING S1-1 AND M6-2 SIGNS (#36 AND #37) TO BE RELOCATED ONTO ONE 4 IN. x 4 IN. TREATED WOOD SUPPORT (L=17 FT.) AS SHOWN.
QQ. EXISTING S1-1 (#35) RELOCATED ONTO ONE 4 IN. x 4 IN. TREATED WOOD SUPPORT (L=17 FT.). SIGN SHALL BE INSTALLED FACING SOUTHBOUND MD 2. EXISTING M6-2 SIGN SHALL BE REMOVED AND A NEW M6-2 SHALL BE INSTALLED AS SHOWN.

GENERAL NOTES

1. 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 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
2. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
4. THE CONTRACTOR SHALL CONTACT SHA TO SCHEDULE RETROFITTING OF THE CONTROLLER EQUIPMENT IN ORDER TO OPERATE VIDEO DETECTION EQUIPMENT.
5. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
6. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
7. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
9. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
10. ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. ED RODENHIZER 410-787-7652 TO COORDINATE.
11. PUSHBUTTONS ARE TO BE LOCATED SO THAT 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%.
12. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
13. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
14. 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 LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
15. ALL SIDEWALK RAMPS SHALL BE INSTALLED AS PER STANDARD MD 655.11.
16. REFER TO SHEET TSP-2 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

SPECIAL NOTES:

1. THE CONTRACTOR SHALL NOT BLOCK VIEW OF EXISTING SIGNAL INDICATIONS DURING INSTALLATION OF MAST ARM. IF NEW MAST ARM CANNOT BE INSTALLED DUE TO CONFLICT WITH EXISTING SIGNAL INDICATIONS OR SPAN WIRES, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHALL COORDINATE WITH SHA FORCES TO SHUTDOWN SIGNAL OPERATION TO PULL BACK EXISTING SIGNAL CABLES AND RE-FEED PROPOSED SIGNAL CABLES THROUGH EXISTING HANDBOX AND CONDUITS INTO CABINET BASE. THIS SHALL BE DONE IN ONE NIGHTTIME SHIFT.
3. THE CONTRACTOR SHALL COORDINATE WITH SHA TRAFFIC OPERATION DIVISION TO CONTACT LOCAL POWER COMPANY TO SET-UP WORK WITH TO DISCONNECT THE EXISTING ELECTRICAL SERVICE AND HAVE THE NEW SERVICE ENERGIZED.
4. INSTALL HANDHOLE WITH LONG DIMENSION PERPENDICULAR TO TRAVEL WAY FOR INSTALLATION OF NON-INVASIVE PROBES. EXTEND CONDUIT A MINIMUM OF 2 IN. AND MAXIMUM OF 3 IN. INTO HANDHOLE.

GEOMETRIC LEGEND

═ ═ ═	EXISTING
═══	PROPOSED

UTILITY LEGEND

—SD—SD—	STORM DRAIN
—G—G—	GAS MAIN
—W—W—	WATER MAIN
—S—S—	SEWER MAIN
—E—E—	ELECTRIC CABLES
—A—A—	AERIAL CABLES
—T—T—	TELEPHONE CABLES
—F—F—	FIBER-OPTIC

APPROVALS

TEAM LEADER

ASST. DIV. CHIEF

DIVISION CHIEF

OFFICE DIRECTOR

ORIGINAL ON FILE

REVISIONS

D	TRAFFIC SIGNAL RECONSTRUCTION AND APS/CPS INSTALLATION TIMS NO. K593 CONTRACT NO. XX3535168 12/02/2010
	JHR NML
C	REMOVED PEDESTAL POLES IN MEDIAN AND INSTALLED SIGNAL HEADS ON SPAN CONTRACT XX1065485 5/10/04
	SRB NML
B	REPLACED LOOPS AND HANDBOXES FAP. NO. RES. 3003(1) SHA NO. AA-424-301-576 4/21/86

WHITMAN, REQUARDT & ASSOCIATES, LLP
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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 2 at Guildford Road/Farrington Road

Glen Burnie, Maryland

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' ADVERTISED DATE 11-8-72 CONTRACT NO. XX1065285

DESIGNED BY		COUNTY	ANNE ARUNDEL
DRAWN BY	TOWNSEND	LOGMILE	02000235.69
CHECKED BY	N. LEARY	TIMS NO.	G255
F.A.P. NO.	N/A	TOD NO.	

TS NO. 781-D | DRAWING TSP-1 OF 3 | SHEET NO. 1 OF 3

PLOTTED: 12-03-2010
FILE: N:\31669-090\CADD\pSG-P001_K593.dgn

BY: sbloss