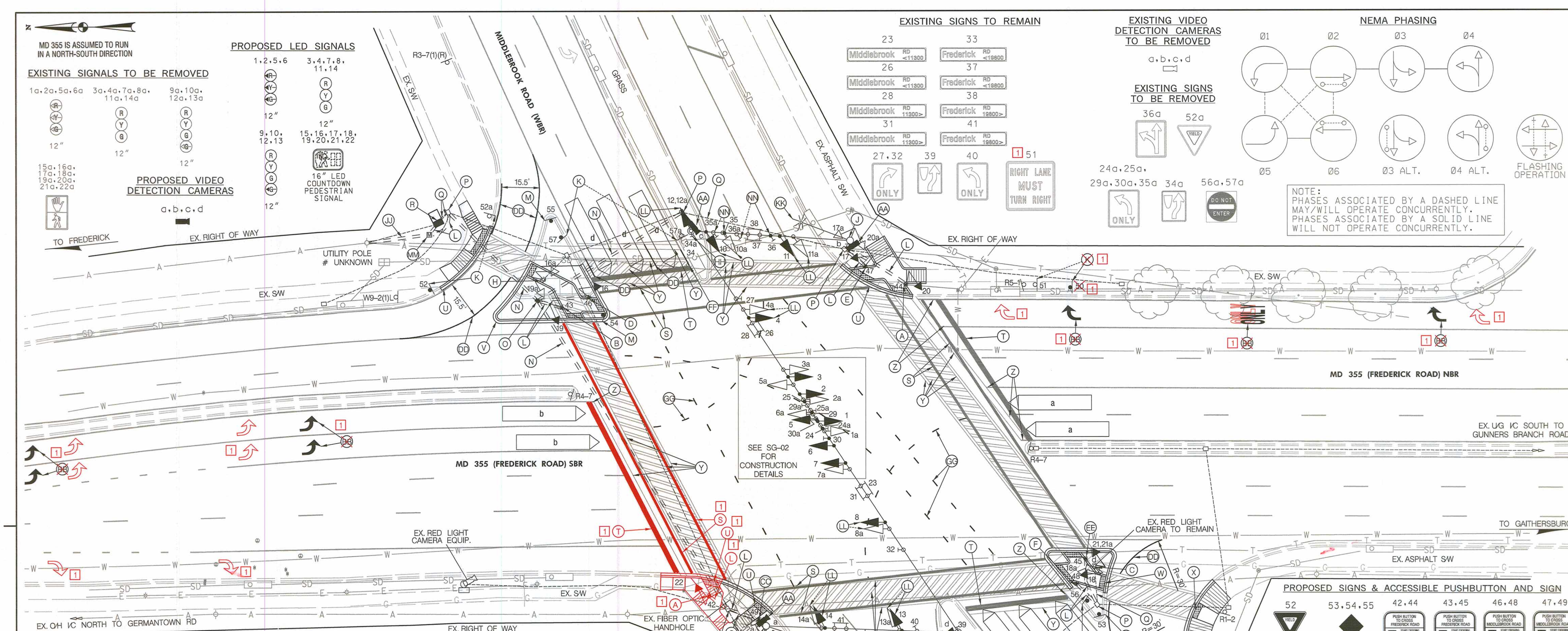

CONSTRUCTION DETAILS

A. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PUSHBUTTON (ARROW RIGHT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS FREDERICK ROAD" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
B. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PUSHBUTTON (ARROW LEFT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS FREDERICK ROAD" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
C. REMOVE EXISTING PEDESTRIAN PUSHBUTTON AND PEDESTRIAN SIGNAL HEADS AND INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL HEADS ON EXISTING PEDESTAL POLE. EXISTING RED LIGHT CAMERA EQUIPMENT TO REMAIN.
D. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PUSHBUTTON (ARROW RIGHT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS MIDDLEBROOK ROAD" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
E. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PUSHBUTTON (ARROW LEFT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS MIDDLEBROOK ROAD" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
F. INSTALL A 5 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD. 801.01-01, BREAKAWAY COUPLINGS, ACCESSIBLE PUSHBUTTON (ARROW RIGHT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS MIDDLEBROOK ROAD" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
G. REMOVE EXISTING PEDESTRIAN PUSHBUTTON AND PEDESTRIAN SIGNAL HEADS FROM EXISTING STRAIN POLE. INSTALL NEW LED COUNTDOWN PEDESTRIAN SIGNAL HEAD ON EXISTING STRAIN POLE. (SEE NOTE 18).
H. REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. CAP AND ABANDON EXISTING CONDUIT.
J. REMOVE EXISTING PEDESTRIAN PUSHBUTTON AND PEDESTRIAN SIGNAL HEADS FROM EXISTING STRAIN POLE (SEE NOTE 18).
K. REMOVE EXISTING GROUND MOUNTED SIGN AND INSTALL NEW GROUND MOUNTED SIGN ON ONE 4 IN. X 4 IN. WOOD SUPPORT.
L. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED.
M. INSTALL OBJECT MARKER ON ONE 4 IN. X 4 IN. WOOD SUPPORT.
N. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED.
O. INSTALL ELECTRICAL HANDHOLE
P. USE EXISTING HANDHOLE.
Q. USE EXISTING CONDUIT.
R. REMOVE EXISTING BASE MOUNTED CABINET AND INSTALL SIZE "S" BASE MOUNTED CABINET WITH BATTERY BACKUP, CONTROLLER WITH ALL NECESSARY EQUIPMENT AND EXTENDER BASE ON EXISTING FOUNDATION.
S. INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES FOR CROSSWALK.
T. INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES FOR STOPLINE.
U. REMOVE EXISTING SIDEWALK RAMP AND CONSTRUCT NEW SIDEWALK RAMP WITH DETECTABLE WARNING SURFACE PER MD STD. 655.40. (SEE DETAIL SG-02).
V. CONSTRUCT ISLAND EXTENSION WITH CUT-THROUGH AND DETECTABLE WARNING SURFACE PER MD STD. 655.40. (SEE DETAIL SG-02).
W. REMOVE EXISTING SIDEWALK RAMPS AND INSTALL CUT-THROUGH AND DETECTABLE WARNING SURFACE PER MD STD. 655.40. (SEE DETAIL SG-02).
X. REMOVE EXISTING SIDEWALK AND RAMP. CONSTRUCT NEW SIDEWALK AND RAMP PER SHA STD. MD 655.12 TO BE 10 FT. WIDE (MATCH TO EXISTING ASPHALT PATH WIDTH) AND DETECTABLE WARNING SURFACE PER SHA STD. MD 655.40.
Y. REMOVE EXISTING PAVEMENT MARKINGS.
Z. REMOVE EXISTING PAVEMENT MARKINGS BETWEEN PROPOSED STOPLINE AND CROSSWALK.
AA. REMOVE EXISTING VIDEO DETECTION CAMERA AND INSTALL NEW VIDEO DETECTION CAMERA. (SEE NOTE 22).
1 ~~BB. SEE SG-04 FOR PAVEMENT MARKING SYMBOL AND LEGEND INSTALLATION DETAIL.~~
CC. INSTALL A 5 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, ACCESSIBLE PUSHBUTTON (ARROW LEFT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS MIDDLEBROOK ROAD".
DD. INSTALL 5 IN. HEAT APPLIED WHITE PERMANENT PAVEMENT MARKING LINE.
EE. INSTALL A 5 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD. 801.01-01, BREAKAWAY COUPLINGS, ACCESSIBLE PUSHBUTTON (ARROW LEFT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS FREDERICK ROAD" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
FF. INSTALL 5 IN. HEAT APPLIED YELLOW PERMANENT PAVEMENT MARKING LINE.
GG. INSTALL 5 IN. HEAT APPLIED WHITE PERMANENT PAVEMENT MARKING LANE EXTENSION LINES (3' STRIPE - 3' GAP - 3' STRIPE).
HH. REMOVE SIGN FROM STRAIN POLE AND INSTALL NEW SIGN ON STRAIN POLE.
JJ. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR PROPOSED UNDERGROUND POWER SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS.
KK. REWIRE EXISTING STREET LIGHT LUMINAIRE (SEE WIRING DIAGRAM).
LL. REMOVE EXISTING SIGNAL HEAD AND INSTALL NEW LED SIGNAL HEAD.
MM. INSTALL 100 AMP METERED SERVICE PEDESTAL.
NN. REMOVE EXISTING OVERHEAD SIGN AND INSTALL NEW OVERHEAD SIGN.
OO. USE EXISTING SPAN WIRE.

GENERAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSHA STANDARD TYPICALS FOR TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
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 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
4. THE CONTRACTOR SHALL INTEGRATE PROPOSED CONCRETE FOUNDATIONS WITH NEW SIDEWALK RAMP WHERE NECESSARY. THE FOUNDATIONS SHALL BE FLUSH WITH AND PART OF THE FINAL CURB OR SIDEWALK GRADE TO INCREASE ACCESSIBILITY FOR PEDESTRIANS.
5. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
6. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATION.
7. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE LOCATION(S) PRIOR TO INSTALLATION.
8. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSHA STANDARDS.
9. 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 THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
10. 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 IN. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60 IN. x 60 IN. LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
11. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSWALK FOR WHICH THEY ARE INTENDED.
12. ALL TRAFFIC SIGNAL MODIFICATIONS SHALL BE CONSTRUCTED PRIOR TO SIDEWALK INSTALLATION.
13. THE CONTRACTOR SHALL REMOVE AND REPLACE CONCRETE SIDEWALK AT THE NEAREST JOINT.
14. THE CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD AT 240-777-8761 OF THE MONTGOMERY COUNTY DOT SEVENTY TWO (72) HOURS PRIOR TO BEGINNING CONSTRUCTION.
15. THE CONTRACTOR SHALL CENTER THE PROPOSED CROSSWALKS ON THE NEWLY CONSTRUCTED RAMPS.
16. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID THE UNDERGROUND GAS AND TELEPHONE UTILITIES WHEN INSTALLING THE FOUNDATION IN THE SOUTHWEST CHANNELIZING ISLAND.
17. WOOD SUPPORTS INSTALLED IN CONCRETE SHALL BE INSTALLED WITH SLEEVED FOUNDATIONS AS PER STANDARDS MD 812.05-01 AND MD 812.05-02.
18. THE CONTRACTOR SHALL PLUG AND CLEAN THE HOLES FROM EXISTING EQUIPMENT REMOVED FROM THE EXISTING STRAIN POLE.
19. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS THROUGH THE INTERSECTION DURING CONSTRUCTION WITH NECESSARY DETOURS AT THE DISCRETION OF THE PROJECT ENGINEER.
20. THE 10 FT. MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
22. THE CONTRACTOR SHALL COORDINATE WITH THE MONTGOMERY COUNTY SIGNAL SHOP FOR THE REALIGNING OF EXISTING VIDEO DETECTION CAMERAS.
23. THE CONTRACTOR SHALL REMOVE ALL ABANDONED LOOP DETECTOR WIRES FROM ALL CONDUITS AND HANDHOLES PRIOR TO THE WIRING OF PROPOSED SIGNAL EQUIPMENT.
24. SEE GENERAL INFORMATION SHEET FOR PROPOSED ACCESSIBLE PUSHBUTTONS AND SIGNS.
1 25. SEE SG-04 FOR PAVEMENT MARKING SYMBOL AND LEGEND INSTALLATION DETAIL.

PROPOSED SIGNS & ACCESSIBLE PUSHBUTTON AND SIGN

Sign no.	Sign	Size
52	R1-2	(36"X36")
53, 54, 55	OM1-3	(18"X18")
56, 57	R5-1	(30"X30") 15°
42, 44	R10-3(1)	(9"x15")
43, 45	R10-3(1)	(9"x15")
46, 48	R10-3(1)	(9"x15")
47, 49	R10-3(1)	(9"x15")

PROPOSED SIGNS

Sign no.	Sign	Size
24, 25, 29, 30, 35	R3-5L	(36"x30")
34	R4-7	(24"x30") @ 15°
36	R3-6L	(36"x30")
1 ~~50~~	~~R3-7(R)~~	~~(30"x30")~~

1 REDLINE REVISION NO. 1 JULY 2012
TEDD APPROVAL 7/20/12
SHA NO. XX4395185

UTILITY LEGEND

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

GEOMETRIC LEGEND

EXISTING
PROPOSED

STV Incorporated
7125 Ambassador Road, Suite 200
Baltimore, MD 21244
www.stvinc.com

BY: tarnovk –

APPROVALS: TEAM LEADER; ASST. DIV. CHIEF; DIVISION CHIEF; OFFICE DIRECTOR — ORIGINAL ON FILE

REVISIONS

G	INSTALL APS, CPS AND ADA RAMPS ON ALL LEGS ALONG WITH LED VEH. SIGNAL SIGNAL HEADS. SHA NO. XX4395185 TIMS # K911 01/2012 — STV KXT
F	REPLACE LOOP DETECTION WITH VIDEO CAMERAS. SHA NO. AT7245185 TIMS # G591 06/2005 — JWA
E	INSTALL PEDESTRIAN SIGNALS, PUSHBUTTONS AND CROSSWALKS. SHA NO. XX1065285 03/12/2002 — BRD BAM

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

MD 355 (FREDERICK ROAD)
AT MIDDLEBROOK ROAD
GERMANTOWN, MD

TRAFFIC SIGNALIZATION PLAN SHEET

SCALE 1" = 20' ADVERTISED DATE 12/22/96 CONTRACT NO.

DESIGNED BY	G.E. COOK	COUNTY	MONTGOMERY
DRAWN BY	G.E. COOK	LOGMILE	15035518.02
CHECKED BY	D.A. DODA	TIMS NO.	
F.A.P. NO.		TOD NO.	

TS NO. 2283G DRAWING SG- 01 OF 04 SHEET NO. 01 OF 04

PLOTTED: Monday, July 16, 2012 AT 09:34 AM
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