MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

CONSTRUCTION DETAILS

A. INSTALL NEMA 6 BASE-MOUNTED CABINET AND CONTROLLER WITH NECESSARY EQUIPMENT. NOTE: SUPPLY EXTRA 3" SCHEDULE 80, 90° PVC BEND FOR THE RE-ROUTED WESTBOUND INTERCONNECT CABLE.

B. INSTALL 24' STEEL POLE WITH 15' 'T' DIM. WITH STANDARD (STRAIGHT) TWIN 50' MAST ARMS (ANGLE ARM AWAY FROM CABLES). TRAFFIC SIGNAL HEADS, 250 WATT LUMINAIRE ON 10' LIGHTING ARM. VIDEO DETECTION CAMERAS, AND SIGNS (BUILD THE FOUNDATION 3' ABOVE CURB GRADE: AND NOTE: 1-3" SCHEDULE 80, 90° PVC BEND).

C. INSTALL 27' STEEL POLE WITH 50' MAST ARM, TRAFFIC SIGNAL HEADS, 250 WATT LUMINAIRE ON 10' LIGHTING ARM AND SIGNS (NOTE: 1-3" SCHEDULE 80, 90° PVC BEND). THE HANDHOLE AND CONDUIT SHALL BE REMOVED PRIOR TO POLE INSTALLATION. (CABLES PULLED BACK AND CONDUIT CAPPED).

D. INSTALL 10' PEDESTAL POLE WITH BREAK-AWAY COUPLING, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE PEDESTRIAN PUSHBUTTON STATION (NOTE: 18"x 36" FOUNDATION WITH 1-2" SCHEDULE 80, 90° BEND)

E. REMOVE AND REPLACE RAMP WITH MD 655.12 TYPE RAMP AND CURB/GUTTER WITH 2' WIDE MD 665.40 DETECTABLE WARNING SURFACE THE LENGTH OF THE RAMP OPENING WITHIN THE CROSSWALKS (SEE INSETS 1 & 2). INSTALL BACK CURB AS SHOWN.

F. REMOVE AND RE-INSTALL EXISTING SCHOOL SIGN ON WOOD SUPPORTS (NEW HARDWARE REQUIRED).

G. INSTALL ELECTRICAL HANDHOLE.

H. INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

J. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

PROPOSED SIGNS

17: Annapolis Road — WEST / MARYLAND 450 / EAST — M1-5(4) 78" x 36"

14a,16a / 14b,16b: Ardwick-Ardmore RD — D3-1(1) VAR x 16" (DUAL-FACED)

11p, 12p, 9p,10p: PUSHBUTTON SIGN NUMBERS INDICATE THE ASSOCIATED PEDESTRIAN SIGNAL HEAD; R10-3(1) 9" x 15"; AUDIBLE TACTILE PUSHBUTTON AND SIGN

PROPOSED SIGNALS

1, 2, 4, 5, 3,6,7, 8 — 12"/8", 12", 12"/8", 12", 12", 12"

9-12: 16" LED COUNTDOWN PEDESTRIAN SIGNAL

VIDEO DETECTION ZONE

a,b,c,d,e,f: PROPOSED VIDEO DETECTION CAMERA

NEMA PHASING

Ø1, Ø2, Ø4, Ø4 ALT, Ø5, Ø6, FLASHING OPERATION

PHASING NOTES:

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

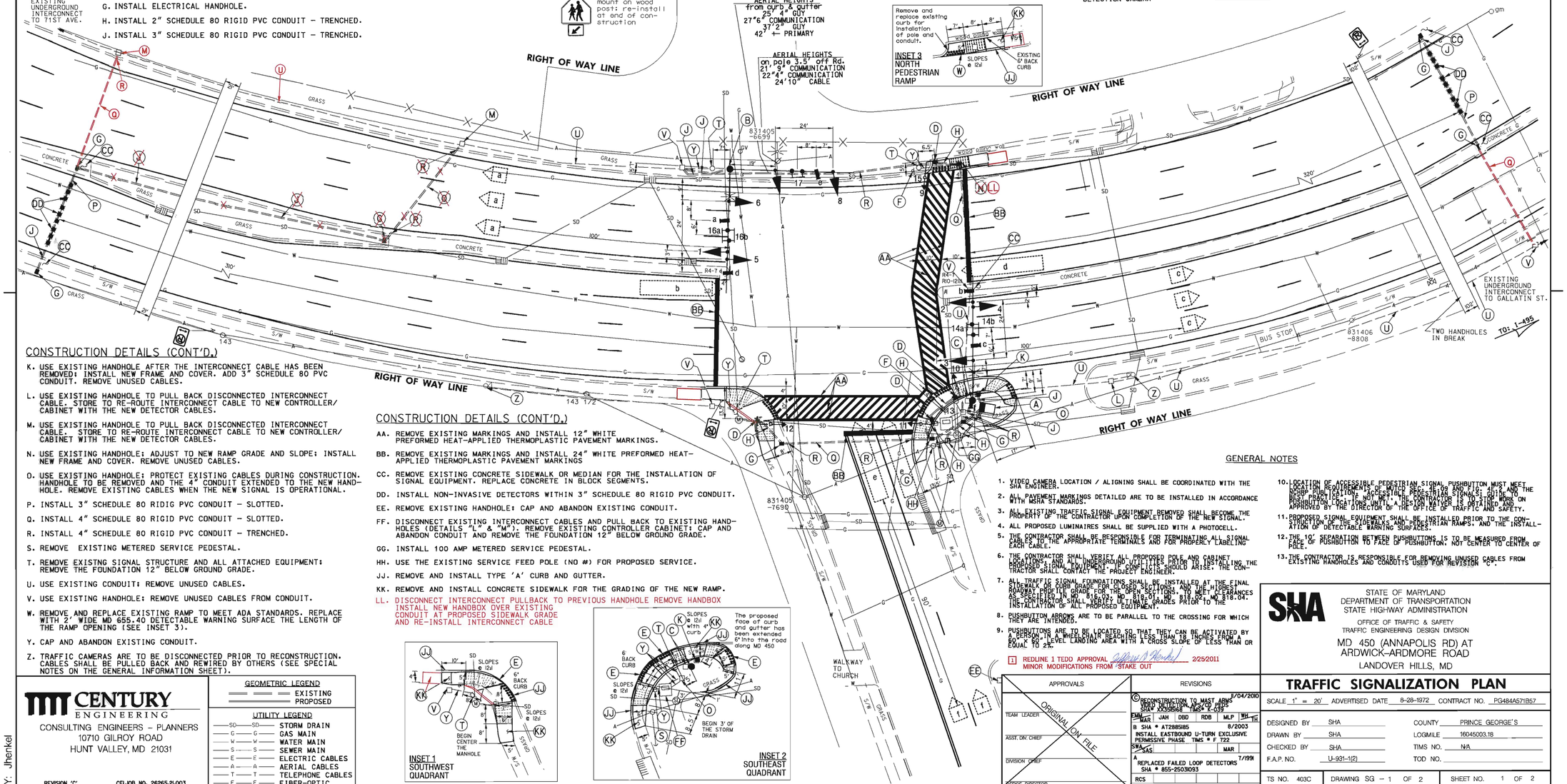
EXISTING SIGNS

13,15: Remove and re-mount on wood post: re-install at end of construction

AERIAL HEIGHTS from curb & gutter: 25' 4" GUY; 27'6" COMMUNICATION; 37'2" GUY; 42' ± PRIMARY

AERIAL HEIGHTS on pole 3.5' off Rd.: 21' 9" COMMUNICATION; 22'4" COMMUNICATION; 24'10" CABLE

INSET 3 NORTH PEDESTRIAN RAMP: Remove and replace existing curb for installation of pole and conduit. SLOPES @ 12:1. EXISTING 6" BACK CURB.



CONSTRUCTION DETAILS (CONT'D.)

K. USE EXISTING HANDHOLE AFTER THE INTERCONNECT CABLE HAS BEEN REMOVED: INSTALL NEW FRAME AND COVER. ADD 3" SCHEDULE 80 PVC CONDUIT. REMOVE UNUSED CABLES.

L. USE EXISTING HANDHOLE TO PULL BACK DISCONNECTED INTERCONNECT CABLE. STORE TO RE-ROUTE INTERCONNECT CABLE TO NEW CONTROLLER/ CABINET WITH THE NEW DETECTOR CABLES.

M. USE EXISTING HANDHOLE TO PULL BACK DISCONNECTED INTERCONNECT CABLE. STORE TO RE-ROUTE INTERCONNECT CABLE TO NEW CONTROLLER/ CABINET WITH THE NEW DETECTOR CABLES.

N. USE EXISTING HANDHOLE: ADJUST TO NEW RAMP GRADE AND SLOPE: INSTALL NEW FRAME AND COVER. REMOVE UNUSED CABLES.

O. USE EXISTING HANDHOLE: PROTECT EXISTING CABLES DURING CONSTRUCTION. HANDHOLE TO BE REMOVED AND THE 4" CONDUIT EXTENDED TO THE NEW HAND-HOLE. REMOVE EXISTING CABLES WHEN THE NEW SIGNAL IS OPERATIONAL.

P. INSTALL 3" SCHEDULE 80 RIDIG PVC CONDUIT - SLOTTED.

Q. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.

R. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

S. REMOVE EXISTING METERED SERVICE PEDESTAL.

T. REMOVE EXISTNG SIGNAL STRUCTURE AND ALL ATTACHED EQUIPMENT: REMOVE THE FOUNDATION 12" BELOW GROUND GRADE.

U. USE EXISTING CONDUIT: REMOVE UNUSED CABLES.

V. USE EXISTING HANDHOLE: REMOVE UNUSED CABLES FROM CONDUIT.

W. REMOVE AND REPLACE EXISTING RAMP TO MEET ADA STANDARDS. REPLACE WITH 2' WIDE MD 655.40 DETECTABLE WARNING SURFACE THE LENGTH OF THE RAMP OPENING (SEE INSET 3).

Y. CAP AND ABANDON EXISTING CONDUIT.

Z. TRAFFIC CAMERAS ARE TO BE DISCONNECTED PRIOR TO RECONSTRUCTION. CABLES SHALL BE PULLED BACK AND REWIRED BY OTHERS (SEE SPECIAL NOTES ON THE GENERAL INFORMATION SHEET).

CONSTRUCTION DETAILS (CONT'D.)

AA. REMOVE EXISTING MARKINGS AND INSTALL 12" WHITE PREFORMED HEAT-APPLIED THERMOPLASTIC PAVEMENT MARKINGS.

BB. REMOVE EXISTING MARKINGS AND INSTALL 24" WHITE PREFORMED HEAT-APPLIED THERMOPLASTIC PAVEMENT MARKINGS

CC. REMOVE EXISTING CONCRETE SIDEWALK OR MEDIAN FOR THE INSTALLATION OF SIGNAL EQUIPMENT. REPLACE CONCRETE IN BLOCK SEGMENTS.

DD. INSTALL NON-INVASIVE DETECTORS WITHIN 3" SCHEDULE 80 RIGID PVC CONDUIT.

EE. REMOVE EXISTING HANDHOLE: CAP AND ABANDON EXISTING CONDUIT.

FF. DISCONNECT EXISTING INTERCONNECT CABLES AND PULL BACK TO EXISTING HAND-HOLES (DETAILS "L" & "M"). REMOVE EXISTING CONTROLLER CABINET: CAP AND ABANDON CONDUIT AND REMOVE THE FOUNDATION 12" BELOW GROUND GRADE.

GG. INSTALL 100 AMP METERED SERVICE PEDESTAL.

HH. USE THE EXISTING SERVICE FEED POLE (NO #) FOR PROPOSED SERVICE.

JJ. REMOVE AND INSTALL TYPE 'A' CURB AND GUTTER.

KK. REMOVE AND INSTALL CONCRETE SIDEWALK FOR THE GRADING OF THE NEW RAMP.

LL. DISCONNECT INTERCONNECT PULLBACK TO PREVIOUS HANDHOLE REMOVE HANDBOX INSTALL NEW HANDBOX OVER EXISTING CONDUIT AT PROPOSED SIDEWALK GRADE AND RE-INSTALL INTERCONNECT CABLE

GENERAL NOTES

1. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
2. ALL PAVEMENT MARKINGS DETAILED ARE TO BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
3. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
4. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND FOR PROPERLY LABELING EACH CABLE.
6. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS, AND ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING THE PROPOSED SIGNAL EQUIPMENT. IF CONFLICTS SHOULD ARISE, THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
7. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, AND THE FINAL ROADWAY PROFILE GRADE FOR THE OPEN SECTIONS, AS MEET TOLERANCES AS SPECIFIED IN MD 515.021, MD 515.030, AND MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL PROPOSED EQUIPMENT.
8. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
9. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 15 INCHES FROM A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
10. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON MUST MEET LOCATION REQUIREMENTS OF ADA SECTIONS 4E.09 AND 4E.10 AND THE NCHRP PUBLICATION "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO RECOMMENDED PRACTICES". NO SHA PEDESTRIAN SIGNAL PUSHBUTTON LOCATION TYPE UNTIL A RE-LOC WAIVER IS OBTAINED AND APPROVED BY THE DIRECTOR OF THE OFFICE OF TRAFFIC AND SAFETY.
11. PROPOSED SIGNAL EQUIPMENT SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF THE SIDEWALKS AND PEDESTRIAN RAMPS, AND THE INSTALLATION OF DETECTABLE WARNING SURFACES.
12. THE 10' RESERATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM THE CENTER OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
13. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNUSED CABLES FROM EXISTING HANDHOLES AND CONDUITS USED FOR REVISION "C".

REDLINE 1 TEDD APPROVAL Jeffrey S. Henkel 2/25/2011
MINOR MODIFICATIONS FROM 'STAKE OUT'

CENTURY ENGINEERING
CONSULTING ENGINEERS - PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031

REVISION 'C' CEI JOB NO. 26265.2L003

GEOMETRIC LEGEND: EXISTING / PROPOSED

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

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

REVISIONS

C	RECONSTRUCTION TO MAST ARMS VIDEO DETECTION, ADS/CD PEDS SHA# XX059868 TMS# K-039					1/04/2010
EMG MAR	JAH	DBD	RDB	MLP	WH TH	
B	SHA # AT2885185 INSTALL EASTBOUND U-TURN EXCLUSIVE PERMISSIVE PHASE TMS # F T22					8/2003
SHA SAS				MAR		
A	REPLACED FAILED LOOP DETECTORS SHA # 855-25030093					7/1991
RCS						

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

MD 450 (ANNAPOLIS RD) AT ARDWICK-ARDMORE ROAD
LANDOVER HILLS, MD

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' ADVERTISED DATE 8-28-1972 CONTRACT NO. PG484A571B57

DESIGNED BY SHA — COUNTY PRINCE GEORGE'S
DRAWN BY SHA — LOGMILE 16045003.18
CHECKED BY SHA — TIMS NO. N/A
F.A.P. NO. U-931-1(2) — TOD NO.

TS NO. 403C | DRAWING SG - 1 OF 2 | SHEET NO. 1 OF 2

PLOTTED: Thursday, February 24, 2011 AT 03:03 PM
FILE: J:\DATA\K039\K039_Redline1_Stakeout_Changes\mSG-p001_MD450 Ardwick-Ardmore (2).dgn

BY: JHenkel