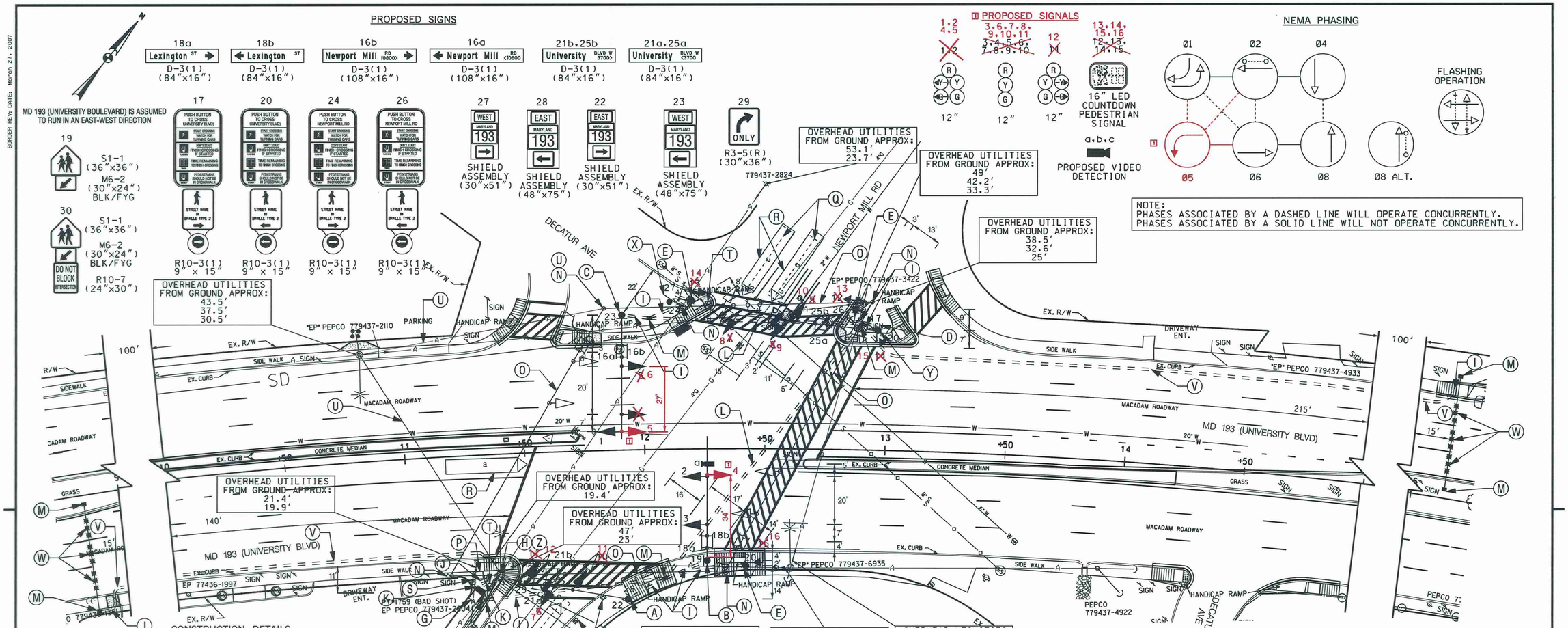

CONSTRUCTION DETAILS

A. INSTALL CONCRETE FOUNDATION WITH A 27 FT. (CUT TO 21' AND CAP) STEEL POLE WITH 50 FT. MAST ARM WITH SIGNAL HEADS. SIGNS AND OVERHEAD VIDEO DETECTION CAMERA. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
B. INSTALL CONCRETE FOUNDATION WITH A 15 FT. "T" STEEL POLE WITH 50 FT. MAST ARM WITH PEDESTRIAN SIGNAL. PUSHBUTTON AND SIGN. SIGNAL HEADS. SIGNS AND OVERHEAD VIDEO DETECTION CAMERA (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
C. INSTALL CONCRETE FOUNDATION WITH A 27 FT. (CUT TO 21' AND CAP) STEEL POLE WITH 50 FT. MAST ARM WITH SIGNAL HEADS AND SIGNS. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
D. INSTALL CONCRETE FOUNDATION WITH A 27 FT. (CUT TO 21' AND CAP) STEEL POLE WITH 60 FT. MAST ARM WITH PEDESTRIAN SIGNAL. PUSHBUTTON AND SIGN. SIGNAL HEADS. SIGNS AND OVERHEAD VIDEO DETECTION CAMERA. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
E. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE. PEDESTRIAN SIGNALS. PUSHBUTTON AND SIGN. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
G. INSTALL A NEMA SIZE 6 BASE MOUNTED CONTROLLER AND CABINET WITH ELECTRICAL UTILITY SERVICE EQUIPMENT FOR UNDERGROUND SERVICE. (NOTE: TWO-4 IN. PVC. AND TWO-2 IN. PVC SCHEDULE 80 CONDUIT BENDS).
H. INSTALL 2 IN. RISER ON EXISTING UTILITY POLE (FOR INTERCONNECT).
I. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
J. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
K. INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
L. INSTALL (2) 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
M. INSTALL HANDHOLE.
N. REMOVE EXISTING POLE AND FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
O. REMOVE EXISTING SPAN WIRE AND ALL ASSOCIATED EQUIPMENT.
P. REMOVE EXISTING BASE MOUNTED CONTROLLER. CABINET AND FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
Q. ABANDON EXISTING LOOP DETECTOR.
R. VIDEO DETECTION ZONE.
S. INSTALL METERED SERVICE PEDESTAL (NOTE: 2-2 IN. AND 1-4 IN. 90° BENDS).
T. REMOVE EXISTING HANDHOLE.
U. DISCONNECT EXISTING OVERHEAD INTERCONNECT CABLE FROM EXISTING CONTROLLER. PULL BACK TO "EP" PEPCO 779437-2110 AND REROUTE OVERHEAD TO "EP" PEPCO 779437-2604. RUN DOWN POLE IN NEW RISER INTO NEW CONDUIT AND TO NEW CONTROLLER.
V. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
W. INSTALL NON-INVASIVE DETECTOR PROBES IN 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
X. INSTALL GROUND MOUNTED SIGN ON (1) 4" X 4" WOOD SUPPORT.
Y. REMOVE EXISTING GROUND MOUNTED SIGN.
Z. STUB UP 4" PVC CONDUIT AT BASE OF "EP" PEPCO 779437-2604 FOR POWER SERVICE WITH 3 RUNS OF KCML CABLE/30' COILED SLACK EACH.

UTILITY LEGEND

—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

GENERAL NOTES

1. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
2. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
3. FOR FINAL PAVEMENT MARKINGS AND R4-7 SIGN INSTALLATION REFER TO THE SIGNING AND PAVEMENT MARKING PLANS. MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
4. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
5. SLOT CONDUIT ALONG MD 193 PRIOR TO INSTALLATION OF FINAL SURFACE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
7. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITIY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
8. 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.
9. REFER TO ROADWAY PLANS FOR INSTALLATION OF AND MODIFICATIONS TO ALL ADA RAMPS.
10. MAINTAIN EXISTING SIGNAL UNTIL PROPOSED SIGNAL IS IN FULL SERVICE.
11. TRENCH CONDUIT PRIOR TO RAMP AND SIDEWALK INSTALLATION.
12. PUSHBUTTONS TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60"X60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
13. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON. NOT CENTER TO CENTER OF POLE.
14. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
15. 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.
16. THE CONTRACTOR SHALL ENSURE THAT THERE IS A 5 FOOT MINIMUM CLEARANCE ALONG THE SIDEWALK FOR ADA COMPLIANCE.

WHITNEY BAILEY COX & MAGNANI, LLC
849 Fairmount Ave. Suite 100 Baltimore, MD 21286
Tel. 410-512-4500 Fax. 410-324-4100
www.wbcm.com
WBCM
ARCHITECTURE ENGINEERING CONSTRUCTION

APPROVALS

TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR

ORIGINAL ON FILE

REVISIONS

1 RED LINE #1 - 03/25/2009 INSTALL EXCLUSIVE/PERMISSIVE PHASING FOR WB MD 193.
WS
4 05/02/2008 Full Signal Reconstruction 1786
DSU

PLOTTED: $DATETIME$
FILE: $FILES

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

MD 193 (UNIVERSITY BLVD) -- FARRAGUT AVE TO MD 586
MD 193 (UNIVERSITY BLVD) @ NEWPORT MILL RD

SIGNALIZATION PLAN SHEET

SCALE 1"=20' ADVERTISED DATE _____ CONTRACT NO. MO5785177

DESIGNED BY N/A
DRAWN BY N/A
CHECKED BY N/A
F.A.P. NO. SEE TITLE SHEET
COUNTY MONTGOMERY
LOGMILE 15019300.21
TIMS NO. 1786
TOD NO. N/A

TS NO. 4756A1 | DRAWING SG-1 OF 8 | SHEET NO. 38 OF 45

BY: $USERNAME$
BORDER REV: DATE: March 27, 2007
DRILL HOLES