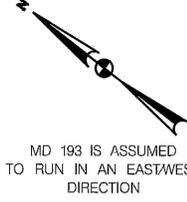


DRILL HOLES

DRILL HOLES

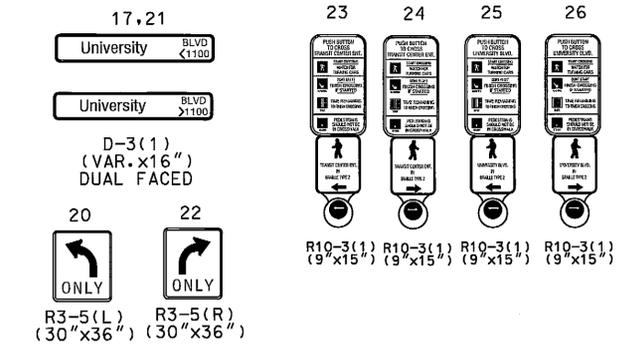
DRILL HOLES

BY: \$USERNAMES

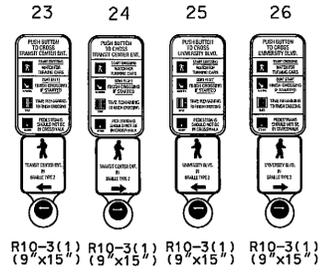


MD 193 IS ASSUMED TO RUN IN AN EASTWEST DIRECTION

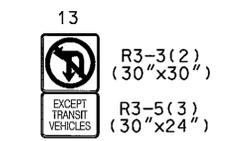
EXISTING SIGNS TO BE REMOVED



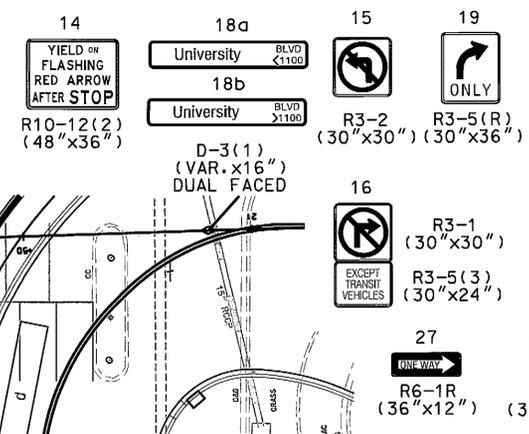
PROPOSED ACCESSIBLE PUSHBUTTON AND SIGN



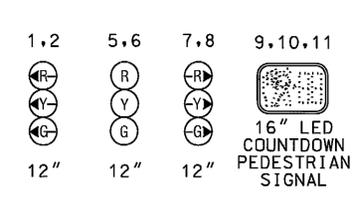
EXISTING SIGNS TO REMAIN



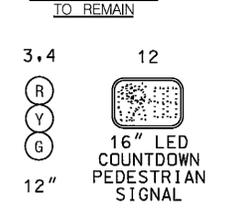
PROPOSED SIGNS



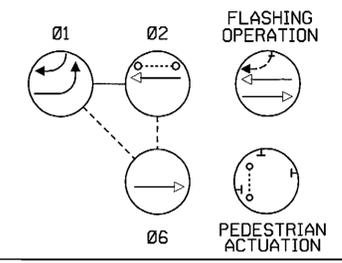
PROPOSED SIGNALS



EXISTING SIGNALS TO REMAIN

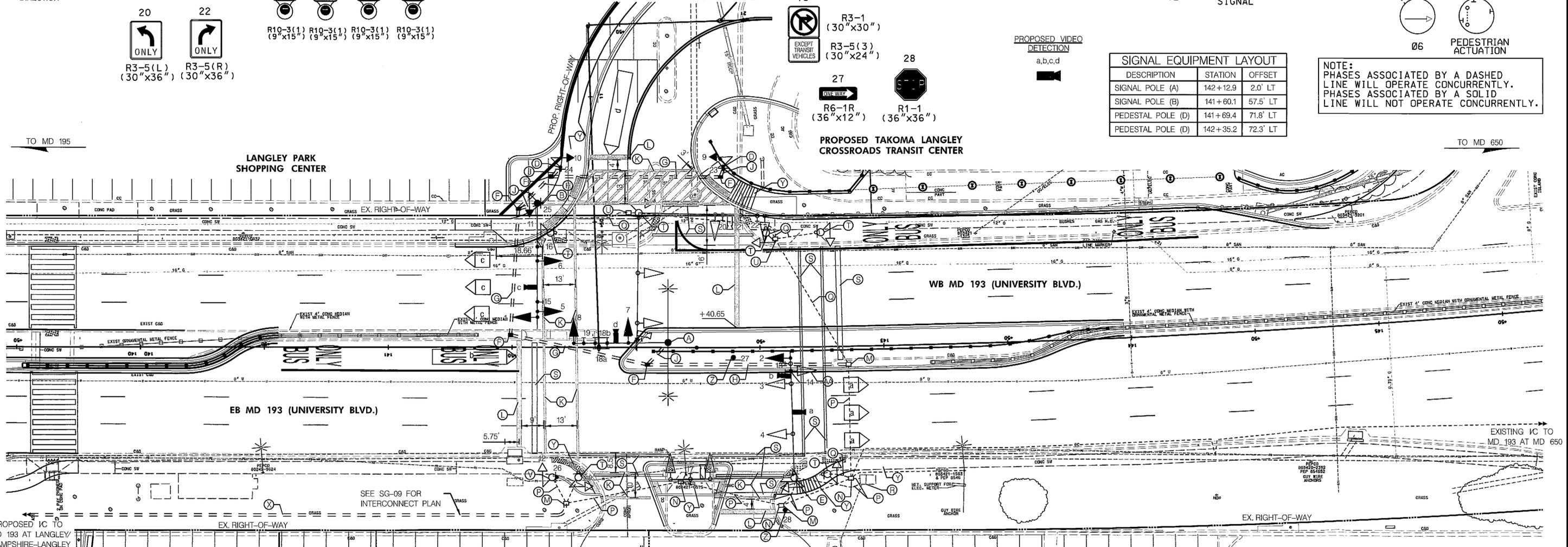


NEMA PHASING



SIGNAL EQUIPMENT LAYOUT		
DESCRIPTION	STATION	OFFSET
SIGNAL POLE (A)	142+12.9	2.0' LT
SIGNAL POLE (B)	141+60.1	57.5' LT
PEDESTAL POLE (D)	141+69.4	71.8' LT
PEDESTAL POLE (D)	142+35.2	72.3' LT

NOTE:
 PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
 PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



CONSTRUCTION NOTES:

- INSTALL 27 FT. STEEL POLE, 36 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA AND TWO 15 FT. LIGHTING ARMS WITH 250 WATT H.P.S. LUMINAIRES AND PHOTOCELLS. (NOTE: 1-3 IN. SCHEDULE 80-90 DEGREE PVC BEND).
- INSTALL 16.5 FT. (15'-0" T) STEEL POLE WITH 50 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS UNIVERSITY BLVD.". (NOTE: 1-3 IN. SCHEDULE 80-90 DEGREE PVC BEND).
- INSTALL 10 FT. BREAKAWAY PEDESTAL POLE, FOUNDATION (SHA STD. 801.01-01), LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS TRANSIT CENTER ENTRANCE/EXIT" (NOTE: 1-3 IN. SCHEDULE 80-90 DEGREE PVC BEND).
- INSTALL LED TRAFFIC SIGNAL HEAD, SIGNS AND REMOVE EXISTING SIGNAL HEAD ON EAST LEG MAST ARM. REMOVE EXISTING SIGN, TRAFFIC SIGNAL HEADS, PUSHBUTTON, VIDEO DETECTION CAMERA AND 50 FT. MAST ARM ON SOUTH LEG OF INTERSECTION (SEAL FLANGE).
- INSTALL ELECTRICAL HANDHOLE.
- INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (SLOTTED).
- INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING.
- INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING (2- 12 IN.).
- INSTALL CONCRETE COLLAR AND USE EXISTING HANDHOLE.
- INSTALL GROUND ROD, CONCRETE COLLAR & ADJUST EXISTING HANDHOLE TO GRADE.
- USE EXISTING CONDUIT.
- CAP & ABANDON EXISTING CONDUIT.
- USE EXISTING CABINET & CONTROLLER.
- REMOVE EXISTING PAVEMENT MARKINGS.
- REMOVE AND DISPOSE OF EXISTING TRAFFIC SIGNAL EQUIPMENT, POLE AND FOUNDATION 12 IN. BELOW GRADE.
- REMOVE EXISTING HANDHOLE; CAP & ABANDON EXISTING CONDUIT.
- REMOVE EXISTING PUSHBUTTON AND INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS UNIVERSITY BLVD."
- SEE INTERCONNECT PLANS SG-09 THRU SG-11 FOR CONSTRUCTION DETAILS.
- SEE ROADWAY PLANS (SHEET CV-16) FOR RAMP CONSTRUCTION DETAILS.
- SEE SIGNING PLANS (SHEET SN-2.2) FOR SIGN INSTALLATION DETAILS.
- REMOVE EXISTING SIGNAL HEAD.

GENERAL NOTES:

- MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSHA STANDARD TYPICALS FOR TRAFFIC CONTROL.
- THE CONTRACTOR SHALL VERIFY ALL RAMP AND PUSHBUTTON LOCATIONS PRIOR TO INSTALLATION.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES. SHAW FORCES WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING.
- THE CONTRACTOR IS TO REMOVE AND REPLACE THE CONCRETE SIDEWALK AT THE NEAREST JOINT.
- THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- ALL SIGNAL POLE FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.

GENERAL NOTES: (CONT.)

- WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
- IF THE LOCATION OF THE ACCESSIBLE PEDESTRIAN SIGNAL (APS) PUSHBUTTONS MUST BE CHANGED, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER TO OBTAIN APPROVAL FOR THE NEW LOCATION TO ENSURE MUTCD SEC 4E.09, FIG. 4E-2 AND ALL NCHRP REQUIREMENTS ARE MET. ALL WORK MUST BE HALTED UNTIL THE PROJECT ENGINEER HAS OBTAINED AN APPROVED LOCATION OR A DESIGN WAIVER IS OBTAINED.
- 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%.
- THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
- THE CONTRACTOR SHALL INSTALL ALL CONDUIT PRIOR TO NEW SIDEWALK AND RAMP CONSTRUCTION.
- THE CONTRACTOR SHALL INTEGRATE PROPOSED EXISTING CONCRETE FOUNDATIONS WITH NEW CURBSIDEWALK RAMPS WHERE NECESSARY.

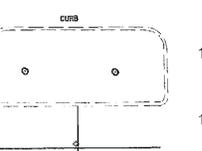
GENERAL NOTES: (CONT.)

- THE CONTRACTOR SHALL ENSURE THE EXISTING TRAFFIC SIGNAL EQUIPMENT REMAINS OPERATIONAL UNTIL PROPOSED EQUIPMENT IS OPERATIONAL.
- PLACE 24 IN. WIDE DETECTABLE WARNING SURFACE ALONG THE FULLY DEPRESSED PORTION OF THE PROPOSED RAMPS. THE MAT SHALL NOT EXTEND ONTO THE SIDE FLARES.
- VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- CONTRACTOR IS TO MAINTAIN PEDESTRIAN ACCESS DURING CONSTRUCTION STAGES.
- CONTRACTOR TO INSTALL CROSSWALK PAVEMENT MARKINGS IN ACCORDANCE WITH THE MOST RECENT MARYLAND MUTCD.
- ALL CROSSWALK DIMENSIONS ARE GIVEN AS CENTER TO CENTER MEASUREMENTS.

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

HAMPSHIRE-LANGLEY SHOPPING CENTER



PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland

11019
 License No. 7/19/2012
 Expiration Date



APPROVALS		REVISIONS	
TEAM LEADER		B	SIGNAL MODIFICATION FOR NEW GEOMETRICS T-1164-0140 TIMES K977 04-2012
ASST. DIR. CHIEF		PEW	REBUILD TRAFFIC SIGNAL SHA NO. M03335184 04-18-06
DIVISION CHIEF		SRB	NML
OFFICE DIRECTOR			

RJM ENGINEERING, INC.
 CONSULTING ENGINEERS
 ELLICOTT CITY, MARYLAND

SHA STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF TRAFFIC & SAFETY
 TRAFFIC ENGINEERING DESIGN DIVISION
 LANGLEY PARK TRANSIT CENTER
 MD 193 AT TAKOMA LANGLEY CROSSROADS TRANSIT CENTER

TRAFFIC SIGNALIZATION PLAN

SCALE: 1" = 20'	ADVERTISED DATE	CONTRACT NO. P-731-501-376
DESIGNED BY	COUNTY	PRINCE GEORGE'S
DRAWN BY J. GORDON	LOGMILE	16019300.25
CHECKED BY	TIMS NO.	
F.A.P. NO. SEE TITLE SHEET	TOD NO.	
TS NO. 615B	DRAWING SG-03 OF 11	SHEET NO. 101 OF

PLOTTED: \$DATETIMES\$ FILE: \$FILES\$