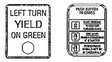
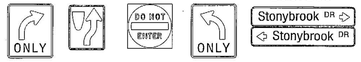
EXISTING SIGNS TO BE REMOVED

90,91 90,92

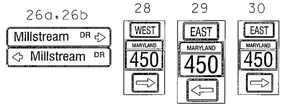


EXISTING SIGNS TO REMAIN

21 22,24 23,27 25,31 20a,20b

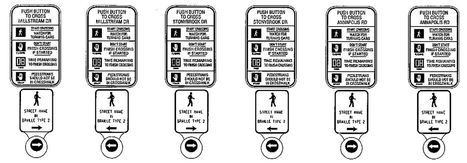


26a,26b 28 29 30



PROPOSED AUDIBLE SIGNS

32 33 34 35 36 37



R10-3(1) 9" x 15" R10-3(1) 9" x 15" R10-3(1) 9" x 15" R10-3(1) 9" x 15" R10-3(1) 9" x 15" R10-3(1) 9" x 15"

EXISTING SIGNALS TO BE REMOVED

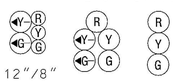
EXISTING SIGNALS TO REMAIN

13 — OPTICOM DETECTOR EYE

a,b,c,d — PROPOSED VIDEO DETECTION

PROPOSED L.E.D. SIGNALS (MODULES ONLY)

1,4 2,5 3,6,7,9, 10,11,12

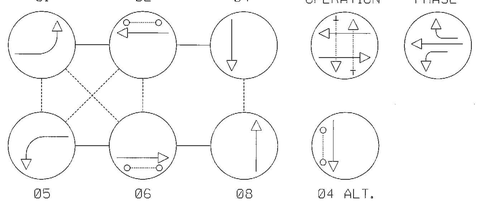


PROPOSED L.E.D. SIGNALS

14,15,16 17,18,19

16" LED COUNTDOWN PEDESTRIAN SIGNAL

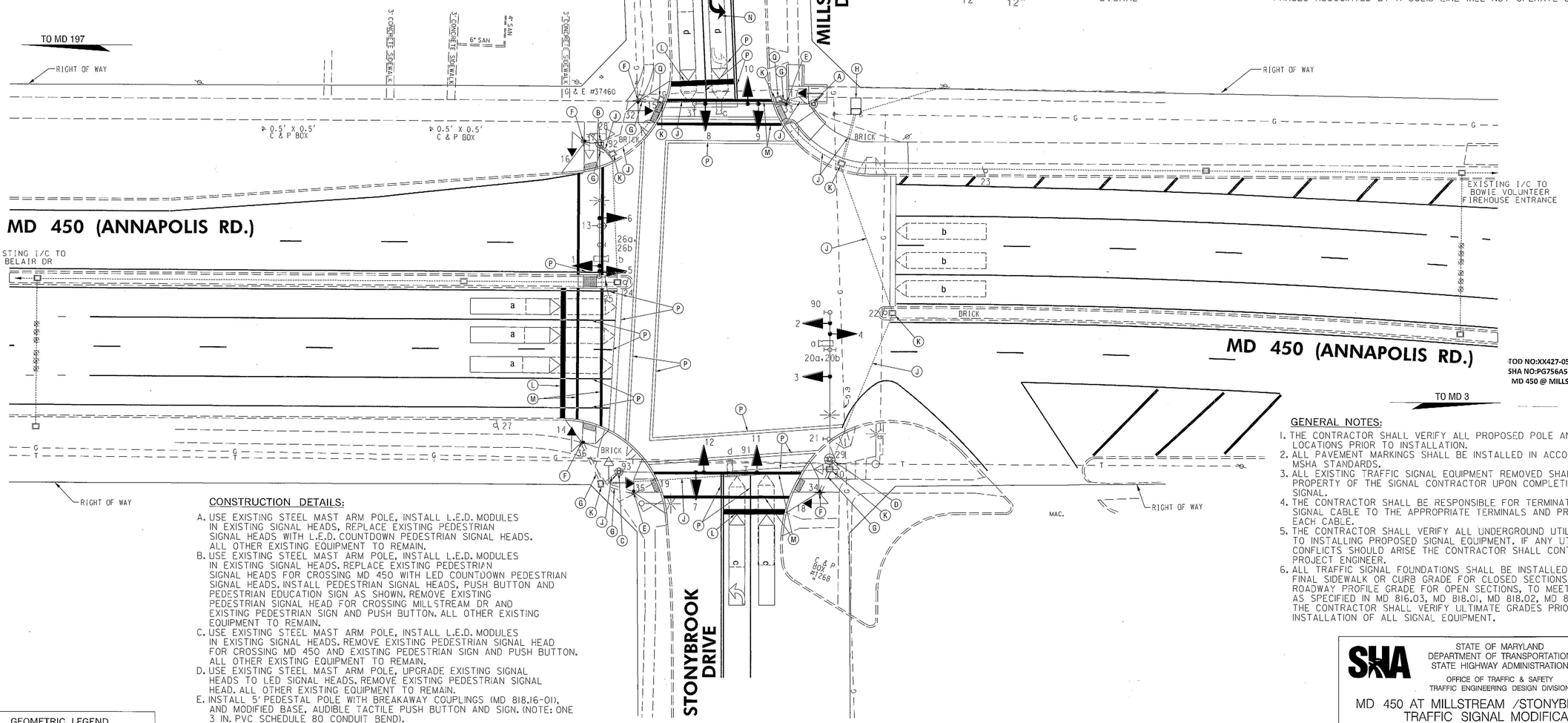
NEMA PHASING



NOTES:

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

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



TOD NO:XX427-05
SHA NO:PG756A51/B51
MD 450 @ MILLSTREAM DR

CONSTRUCTION DETAILS:

A. USE EXISTING STEEL MAST ARM POLE, INSTALL L.E.D. MODULES IN EXISTING SIGNAL HEADS, REPLACE EXISTING PEDESTRIAN SIGNAL HEADS WITH L.E.D. COUNTDOWN PEDESTRIAN SIGNAL HEADS. ALL OTHER EXISTING EQUIPMENT TO REMAIN.
B. USE EXISTING STEEL MAST ARM POLE, INSTALL L.E.D. MODULES IN EXISTING SIGNAL HEADS. REPLACE EXISTING PEDESTRIAN SIGNAL HEADS FOR CROSSING MD 450 WITH LED COUNTDOWN PEDESTRIAN SIGNAL HEADS. INSTALL PEDESTRIAN SIGNAL HEADS, PUSH BUTTON AND PEDESTRIAN EDUCATION SIGN AS SHOWN. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD FOR CROSSING MILLSTREAM DR AND EXISTING PEDESTRIAN SIGN AND PUSH BUTTON. ALL OTHER EXISTING EQUIPMENT TO REMAIN.
C. USE EXISTING STEEL MAST ARM POLE, INSTALL L.E.D. MODULES IN EXISTING SIGNAL HEADS. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD FOR CROSSING MD 450 AND EXISTING PEDESTRIAN SIGN AND PUSH BUTTON. ALL OTHER EXISTING EQUIPMENT TO REMAIN.
D. USE EXISTING STEEL MAST ARM POLE, UPGRADE EXISTING SIGNAL HEADS TO LED SIGNAL HEADS. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD. ALL OTHER EXISTING EQUIPMENT TO REMAIN.
E. INSTALL 5' PEDESTAL POLE WITH BREAKAWAY COUPLINGS (MD 818.16-01), AND MODIFIED BASE, AUDIBLE TACTILE PUSH BUTTON AND SIGN. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
F. INSTALL 10' PEDESTAL POLE WITH BREAKAWAY COUPLINGS (MD 818.16-01), AND MODIFIED BASE, COUNTDOWN PEDESTRIAN SIGNALS, AUDIBLE TACTILE PUSH BUTTON AND SIGN. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
G. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
H. USE EXISTING BASE MOUNTED CABINET. RECONFIGURE THE IMAGE DETECTION CONTROLLER TO ADJUST DETECTION ZONE TO THE NEW LOCATIONS AS SHOWN.
J. USE EXISTING CONDUIT.
K. USE EXISTING HANDHOLE.
L. INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.

CONSTRUCTION DETAILS (CONT'D):

M. INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSS WALK.
N. INSTALL "LEFT TURN" PAVEMENT MARKING ARROW, HEAT APPLIED AND WHITE PERMANENT PREFORMED THERMOPLASTIC.
P. REMOVE EXISTING PAVEMENT MARKING.
Q. ADJUST HANDHOLE TO GRADE.
R. CAP AND ABANDON EXISTING CONDUIT.

GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
2. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
3. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
5. 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.
6. 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.

GEOMETRIC LEGEND

EXISTING
PROPOSED

UTILITY LEGEND

STORM DRAIN
G GAS MAIN
W WATER MAIN
SAN SEWER MAIN
E ELECTRIC CABLES
AERIAL CABLES
T TELEPHONE CABLES
FO FIBER-OPTIC

BY: xiaoyu

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www.brudis.com

APPROVALS

TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR

ORIGINAL ON FILE

REVISIONS

6/2009 TIMS NO. J542 SHA NO.XX4275185
UPGRADE TO APS/CPS. INSTALL LED MODULES.
XM TSB/RDB/BJH
10/2001 TIMS NO. 0538 SHA NO. PG0605B51
MODIFICATION DUE TO RECONSTRUCTION ON MD 450
MAR DAZ BRK TH
3/1994
INSTALL E/P LEFT TURNS FOR MD 450
TNW MAR DAZ ETP TH

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

MD 450 AT MILLSTREAM /STONYBROOK DRIVE
TRAFFIC SIGNAL MODIFICATION
BOWIE, MD

SIGNALIZATION PLAN

SCALE 1" = 20' ADVERTISED DATE 1/11/1974 CONTRACT NO. P-328-001-385

DESIGNED BY
DRAWN BY KID
CHECKED BY
F.A.P. NO. U-931-1(1)
COUNTY PRINCE GEORGES
LOGMILE 16045012.42
TIMS NO. N/A
TOD NO. N/A

TS NO. 670E | DRAWING – OF | SHEET NO. 1 OF 3

PLOTTED: Tuesday, June 30, 2009 AT 03:21 PM
FILE: p:\04-005 signals\pro 450\Millstream\Drawings\CADD\Working\pSG-P001_MD450@MillstreamDr.dgn