MD 201 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

N

PROPOSED LED SIGNAL MODULES

1,2,5,6, 10,11,15 — 12"

3,4,7,8,12, 13,16,17 — 12"

PROPOSED LED SIGNALS

9,14 — 12"

18,19,20,21, 22,23,24,25 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

EXISTING SIGNALS TO BE REMOVED

9a,14a

9b

18a,19a,20a,21a, 22a,23a,24a,25a

PROPOSED SIGNS

26,33, 39,46 — ACROSS RAMP — W11-2 (30"x30") W13-4(1) (24"x36")

27,34, 40,47 — W11-2 (30"x30") M6-2 FY (21"x15")

32 — East-West HWY — D-3(1) (VAR.X16") DUAL FACED

50 — Kenilworth AVE — D-3(1) (VAR.X16") DUAL FACED

35,41 — R1-2 (36"x36")

59,60, 61,62 — W11-2 (30"x30") M6-2 FY (21"x15")

EXISTING SIGNS TO BE REMOVED

26a,33a, 39a,46a — AHEAD — FYG

27a,34a, 40a,47a — FYG

28b,35a

37,49 — ONLY

28,35b

EXISTING SIGNS TO REMAIN

29 — WEST MARYLAND 410 — SHIELD ASSEMBLY

30,31, 43,44 — ONLY

36 — EAST MARYLAND 410 — SHIELD ASSEMBLY

38 — East-West HWY — DUAL FACED

42 — NORTH MARYLAND 201 — SHIELD ASSEMBLY

45 — Kenilworth AVE — DUAL FACED

48 — SOUTH MARYLAND 201 — SHIELD ASSEMBLY

PROPOSED ACCESSIBLE PUSHBUTTON AND SIGN

51,53 — PUSH BUTTON TO CROSS KENILWORTH AVENUE — STATIC CROSSING WATCH FOR TURNING CARS — DIRECTIONAL PEDESTRIANS IF STATIC — TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME SMALLE TYPE 2 — R10-3(1) (9"x15")

52,54 — PUSH BUTTON TO CROSS KENILWORTH AVENUE — STATIC CROSSING WATCH FOR TURNING CARS — DIRECTIONAL PEDESTRIANS IF STATIC — TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME SMALLE TYPE 2 — R10-3(1) (9"x15")

55,57 — PUSH BUTTON TO CROSS EAST-WEST HIGHWAY — STATIC CROSSING WATCH FOR TURNING CARS — DIRECTIONAL PEDESTRIANS IF STATIC — TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME SMALLE TYPE 2 — R10-3(1) (9"x15")

56,58 — PUSH BUTTON TO CROSS EAST-WEST HIGHWAY — STATIC CROSSING WATCH FOR TURNING CARS — DIRECTIONAL PEDESTRIANS IF STATIC — TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME SMALLE TYPE 2 — R10-3(1) (9"x15")

PROPOSED VIDEO DETECTION

a,b,c,d

EXISTING OPTICOM

e,f

NEMA PHASING

Ø1 Ø2 Ø3 Ø4 Ø5 Ø6 Ø7 Ø8

PRE-EMPTION 1

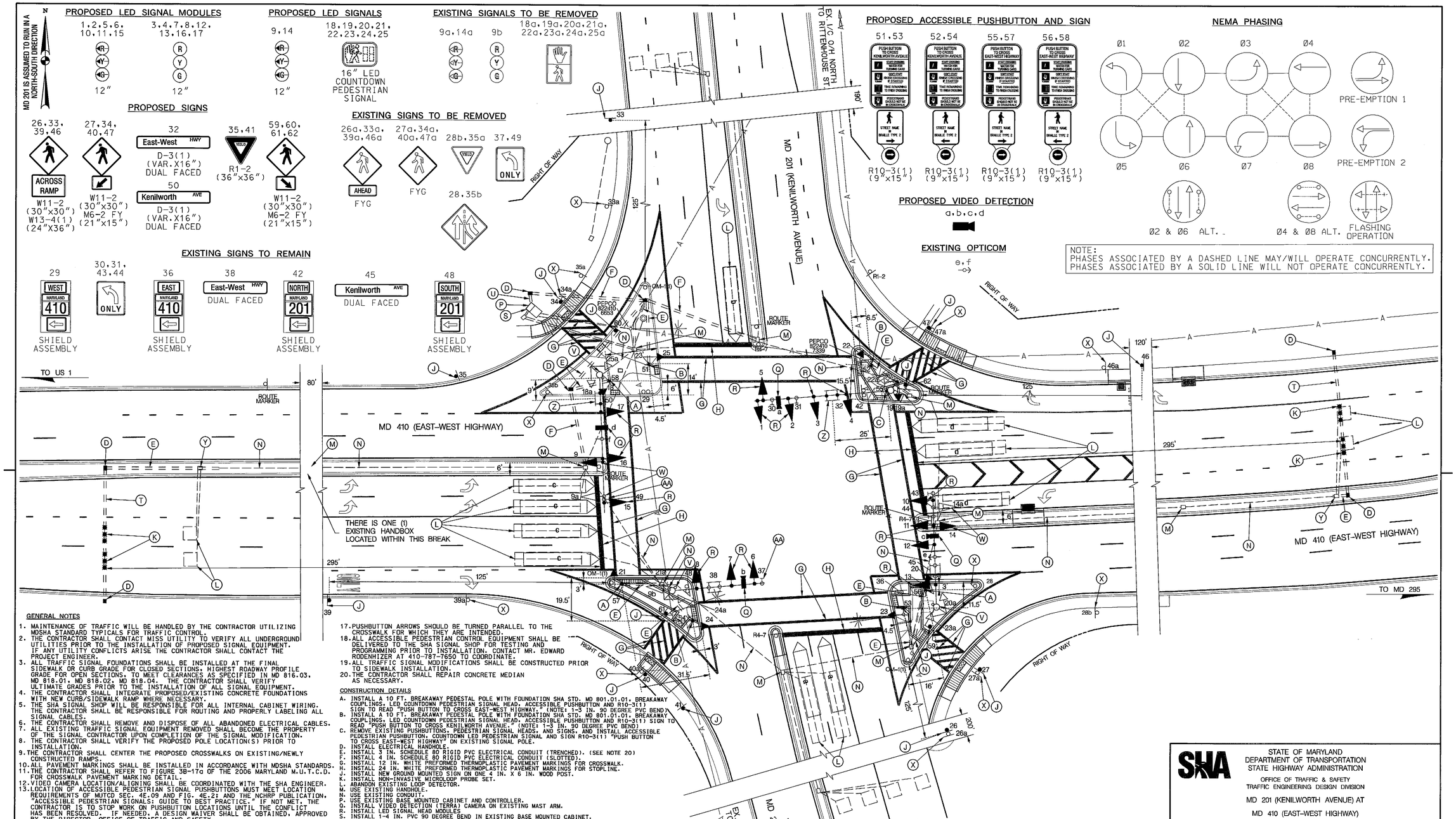
PRE-EMPTION 2

Ø2 & Ø6 ALT.

Ø4 & Ø8 ALT.

FLASHING OPERATION

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



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/EXISTING CONCRETE FOUNDATIONS WITH NEW CURB/SIDEWALK RAMP WHERE NECESSARY.
5. THE SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES.
6. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
7. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATION.
8. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE LOCATION(S) PRIOR TO INSTALLATION.
9. THE CONTRACTOR SHALL CENTER THE PROPOSED CROSSWALKS ON EXISTING/NEWLY CONSTRUCTED RAMPS.
10. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSHA STANDARDS.
11. THE CONTRACTOR SHALL REFER TO FIGURE 3B-17a OF THE 2006 MARYLAND M.U.T.C.D. FOR CROSSWALK PAVEMENT MARKING DETAIL.
12. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
13. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.21 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.
14. 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.
15. 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%.
16. 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.
17. PUSHBUTTON ARROWS SHOULD BE TURNED PARALLEL TO THE CROSSWALK FOR WHICH THEY ARE INTENDED.
18. ALL ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7650 TO COORDINATE.
19. ALL TRAFFIC SIGNAL MODIFICATIONS SHALL BE CONSTRUCTED PRIOR TO SIDEWALK INSTALLATION.
20. THE CONTRACTOR SHALL REPAIR CONCRETE MEDIAN AS NECESSARY.

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 AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS EAST-WEST HIGHWAY." (NOTE: 1-3 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 AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS KENILWORTH AVENUE." (NOTE: 1-3 IN. 90 DEGREE PVC BEND)
C. REMOVE EXISTING PUSHBUTTONS, PEDESTRIAN SIGNAL HEADS, AND SIGNS. AND INSTALL ACCESSIBLE PEDESTRIAN PUSHBUTTON, COUNTDOWN LED PEDESTRIAN SIGNAL AND SIGN R10-3(1) "PUSH BUTTON TO CROSS EAST-WEST HIGHWAY" ON EXISTING SIGNAL POLE.
D. INSTALL ELECTRICAL HANDHOLE.
E. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED). (SEE NOTE 20)
F. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (SLOTTED).
G. INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR CROSSWALK.
H. INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR STOPLINE.
J. INSTALL NEW GROUND MOUNTED SIGN ON ONE 4 IN. X 6 IN. WOOD POST.
K. INSTALL NON-INVASIVE MICROLOOP PROBE SET.
L. ABANDON EXISTING LOOP DETECTOR.
M. USE EXISTING HANDHOLE.
N. USE EXISTING CONDUIT.
P. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER.
Q. INSTALL VIDEO DETECTION (TERRA) CAMERA ON EXISTING MAST ARM.
R. INSTALL LED SIGNAL HEAD MODULES
S. INSTALL 1-4 IN. PVC 90 DEGREE BEND IN EXISTING BASE MOUNTED CABINET.
T. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (BORED).
U. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
V. REMOVE EXISTING PUSHBUTTONS, PEDESTRIAN SIGNAL HEADS, VEHICULAR TRAFFIC SIGNAL HEAD AND SIGNS FROM EXISTING SIGNAL POLE.
W. REMOVE EXISTING SIGNAL HEAD AND INSTALL NEW LED VEHICULAR TRAFFIC SIGNAL HEAD.
X. REMOVE EXISTING GROUND MOUNTED SIGN AND SUPPORT.
Y. REMOVE EXISTING HANDHOLE. CONTRACTOR SHALL CONNECT PROPOSED CONDUIT TO THE EXISTING CONDUIT. (SEE NOTE 20)
Z. INSTALL OVERHEAD SIGN ON EXISTING MAST ARM.
AA. REMOVE EXISTING OVERHEAD SIGN.

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

GEOMETRIC LEGEND

EXISTING

PROPOSED

STV Incorporated
engineers /architects /planners /construction managers
7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-9112

BY: drbanon

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

REVISIONS				
F	ADD APS, CPS, VIDEO DETECTION & LED SIGNALS			
	SHA NO. PG7415168		02009	
BY	CJW	TMB	RJB	02/05/09
GND	CJW	TMB	RJB	02/05/09
E	INSTALL NEW LOOPS DUE TO RESURFACING			
			02005	
RRZ				
D	INSTALL OPTICOM DETECTOR EYE EB AND WB MD 410			
			02000	
CJ	DD	TH		

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 201 (KENILWORTH AVENUE) AT

MD 410 (EAST-WEST HIGHWAY)

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' ADVERTISED DATE 2/1993 CONTRACT NO. P-386-001-385

DESIGNED BY STEVE RENZI
DRAWN BY BRUCE THOMPSON
CHECKED BY
F.A.P. NO.

COUNTY PRINCE GEORGE'S
LOGMILE 16020103.90
TIMS NO. J-771
TOD NO.

TS NO. 1159 F | DRAWING SG-01 OF 06 | SHEET NO. OF

PLOTTED: Tuesday, April 21, 2009 AT 11:23 AM
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