PROPOSED SIGNS

19,23,25,27 — Rossville BLVD — D-3(1) (VAR.x16") (DUAL FACED)

29,32,33,36 — Belair RD — D-3(1) (VAR.x16") (DUAL FACED)

21,22 — ONLY — R3-5(L) (30"x36")

24,28 — ONLY — R3-5(R) (30"x36")

US 1 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

30 — SOUTH 1 — SHIELD ASSEMBLY M1-5(6) (24"x48")

31 — NORTH 1 — SHIELD ASSEMBLY M1-5(6) (36"x72")

34 — NORTH 1 — SHIELD ASSEMBLY M1-5(6) (24"x48")

35 — SOUTH 1 — SHIELD ASSEMBLY M1-5(6) (36"x72")

37, 38, 39, 40 — PUSH BUTTON FOR SOUTH ROSSVILLE BLVD / PUSH BUTTON FOR NORTH BELAIR ROAD — R10-3(1) 9" x 15"

EXISTING SIGNS TO BE RELOACATED (SHOWN AT FINAL LOCATION)

20 — Fitch Ave

26

EXISTING SIGNS TO BE REMOVED

34A — ONE WAY

35A — ONE WAY

PROPOSED SIGNALS

1,2,5,6 — 12"

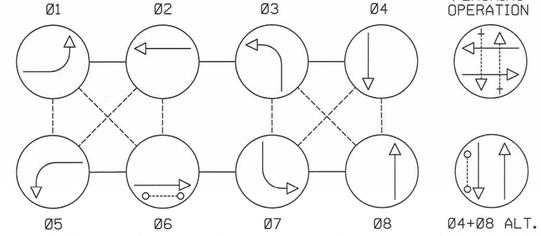
3,4,7,8, 11,14 — 12"

9,12 — 12"/8"

10,13 — 12"

15-18 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

NEMA PHASING



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

PROPOSED VIDEO DETECTION CAMERA

a,b,c,d,e,f,g

VIDEO ZONE DETECTION

a

CONSTRUCTION DETAILS

A. INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 70 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).

B. INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 60 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM AND 20 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).

C. INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 70 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM AND 20 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).

[1] D. INSTALL CONCRETE FOUNDATION (3 FT x 15 FT) WITH A 27 FT. (CUT TO 21 FT.) STEEL POLE WITH A ~~70 FT.~~ 60 FT. (CUT TO 55 FT.) MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING ~~RIGHT~~ LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS ~~BELAIR ROAD~~ ROSSVILLE BLVD."). VIDEO DETECTION CAMERA MOUNTED ON MAST ARM AND RELOCATED SIGNS BANDED TO SIGNAL POLE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).

[1] E. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING ~~LEFT~~ RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS ~~ROSSVILLE BLVD~~ BELAIR ROAD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).

F. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS ROSSVILLE BLVD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).

G. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS BELAIR ROAD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).

H. INSTALL EMBEDDED METERED SERVICE PEDESTAL WITH 2-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS IN PEDESTAL BASE.
J. INSTALL HANDHOLE.
K. INSTALL MICROLOOP PROBE SET WITH 1,000 FT. LEAD-IN (TO BE PLACED IN THRU LANE ONLY).
L. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 500 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT.
M. INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
N. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
O. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
P. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
Q. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
R. REMOVE EXISTING SIDEWALK AND INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. REPLACE 5 INCH SIDEWALK.
S. INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT UTILITY POLE FOR USE BY OTHERS.
T. INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
U. INSTALL NEMA SIZE "S" BASE MOUNTED CABINET AND CONTROLLER WITH SIZE "S" FOUNDATION STANDARD NO. MD 816.07 AND CONTROLLER. MASTER WITH TELEMETRY. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN CABINET BASE.) (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN CABINET BASE.)
V. EXISTING OVERHEAD ELECTRICAL SERVICE TO BE REMOVED BY OTHERS.
W. INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
X. INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
Y. USE EXISTING HANDHOLE.
Z. USE EXISTING HANDHOLE AND ADJUST TO FINAL GRADE.
AA. USE EXISTING CONDUIT.
BB. INSTALL 5 IN. CONCRETE SIDEWALK AND COMBINATION CONCRETE CURB AND GUTTER (STANDARD NO. MD 620.02 TYPE 'A').
CC. INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.12) AND DETECTABLE WARNING SURFACE CLAY BRICK PAVERS WITH THE PLACEMENT IN ACCORDANCE WITH STANDARD NO. MD 655.40.
DD. INSTALL STANDARD TYPE A COMBINATION CURB.
EE. REMOVE EXISTING SIDEWALK AND INSTALL 5 INCH CONCRETE SIDEWALK.
FF. REMOVE EXISTING STRAIN POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
GG. REMOVE EXISTING STRAIN POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. RELOCATE EXISTING SIGNS (#20 & #26) TO NEW SIGNAL POLE AS SHOWN.
HH. REMOVE EXISTING HANDHOLE.
JJ. REMOVE EXISTING BASE MOUNTED CABINET FOUNDATION. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
KK. CAP AND ABANDON EXISTING CONDUIT.
LL. ABANDON EXISTING LOOP DETECTOR. DISCONNECT AND REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
MM. REMOVE EXISTING SPAN WIRE AND ALL ASSOCIATED EQUIPMENT.
NN. REMOVE EXISTING PEDESTAL POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
OO. REMOVE EXISTING R6-1(L,R) SIGN AND SUPPORT.
PP. REMOVE EXISTING PAVEMENT MARKINGS.
QQ. USE EXISTING HANDHOLE AND ADJUST TO FINAL GRADE. DISCONNECT AND PULL BACK EXISTING INTERCONNECT CABLE HEADING SOUTH AND RE-FEED IN NEW CONDUIT TO PROPOSED BASE MOUNTED CABINET. (SEE WIRING DIAGRAM FOR ADDITIONAL DETAILS)
RR. USE EXISTING HANDHOLE. DISCONNECT AND PULL BACK EXISTING INTERCONNECT CABLE HEADING NORTH AND RE-FEED IN NEW CONDUIT TO PROPOSED BASE MOUNTED CABINET. (SEE WIRING DIAGRAM FOR ADDITIONAL DETAILS)
SS. INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND TELEPHONE SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT UTILITY POLE FOR USE BY OTHERS.
TT. REMOVE EXISTING BASE MOUNTED CABINET AND CONTROLLER. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. SHA SIGNAL SHOP SHALL BE NOTIFIED TO REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CABINET.
UU. CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.

GENERAL NOTES

1. 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.
2. 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.
3. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
4. THE CONTRACTOR SHALL CONTACT SHA TO SCHEDULE RETROFITTING OF THE CONTROLLER EQUIPMENT IN ORDER TO OPERATE VIDEO DETECTION EQUIPMENT.
5. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
6. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
7. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
9. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
10. THE CONTRACTOR SHALL NOT CUT MAST ARM AS INDICATED ON PLANS UNTIL MAST ARM POLE LOCATION IS FINALIZED.

SPECIAL NOTES:

1. THE CONTRACTOR SHALL NOT BLOCK VIEW OF EXISTING SIGNAL INDICATIONS DURING INSTALLATION OF MAST ARM. IF NEW MAST ARM CANNOT BE INSTALLED DUE TO CONFLICT WITH EXISTING SIGNAL INDICATIONS OR SPAN WIRES, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
2. INSTALL 3'-0" FT. DIAMETER x 15'-0" DEEP FOUNDATION FOR SIGNAL POLE BASE IN LEIU OF 4'-0" FT. DIAMETER x 10'-0" DEEP FOUNDATION.
3. CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.
4. INSTALL HANDHOLE WITH LONG DIMENSION PERPENDICULAR TO TRAVEL WAY FOR INSTALLATION OF NON-INVASIVE PROBES. EXTEND CONDUIT A MINIMUM OF 2 IN. AND MAXIMUM OF 3 IN. INTO HANDHOLE.
5. SEE SHEET TSP-2 FOR AERIAL HEIGHTS.

GENERAL NOTES CONT.

11. 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%.
12. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
13. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
14. 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 PRACTICES". 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.
15. ALL SIDEWALK RAMPS SHALL BE INSTALLED AS PER STANDARDS MD 655.12.
16. INSTALL CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
17. VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
18. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
19. REFER TO SHEET 2 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

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

SCALE: 1" = 20'

WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21231

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

US 1 and Rossville Boulevard
Parkville, Maryland

TRAFFIC SIGNALIZATION PLAN

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

REVISIONS
1 REDLINE 1 7/02/2012 — RELOCATE SIGNAL/PED POLES AND REVISED RAMP. TIMS NO. K691 SHA CONTRACT NO. XX6455185 — SRB NML
REBUILD TRAFFIC SIGNAL. INSTALLED APS/CPS. TIMS NO. K691 SHA CONTRACT NO. XX6455185 10/10/2011 — SRB NML
INSTALL VIDEO DETECTION. SHA. CONTRACT NO. AT3085185 8/20/2004

SCALE 1" = 20' ADVERTISED DATE 5/15/1987 CONTRACT NO. BA461A53B53

DESIGNED BY R.R. Zacherl
DRAWN BY S. Thacker
CHECKED BY D. Doda
F.A.P. NO.

COUNTY Baltimore
LOGMILE 03000117.41
TIMS NO.
TOD NO. AT308-22

TS NO. 2325 | DRAWING TSP-1 OF 3 | SHEET NO. 1 OF 3

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