MD 28 IS CONSIDERED TO RUN IN AN EAST-WEST DIRECTION

EXISTING SIGNS

31,36 — R3-5(L) (30"X30")
32,37 — R3-6(R) (30"X30")
22,26 — R4-7 (24"X30")

30a,30b,34a,34b — D-3(2) (VAR.x16")
38 — R10-11b (30"X30")
28 — R6-2L (24"X30")

EXISTING SIGNS TO BE REMOVED

29,33,35 — R10-12 (36"X42")
24,25,27 — R10-3d (9"x12")
21,23 — R10-3d (9"x12")

PROPOSED SIGNS

52, 48,49,53, 54 — R10-3(1) 9" x 15" (NORBECK RD)
47,50,51 — R10-3(1) 9" x 15" (BALTIMORE RD)
55 — W11-1(1) (36"X36") FY; W16-7p(R) (24"X12") FY
56 — W11-1(1) (36"X36") FY; W16-7p(L) (24"X12") FY

EXISTING SIGNALS TO BE REMOVED

1A,4A — 12"/8"
2A,5A — 12"
3A,6A-9A — 12"
13A-20A — 12"

EXISTING SIGNAL HEAD MODULES TO BE REPLACED

10,11 — 12"
12 — 12"

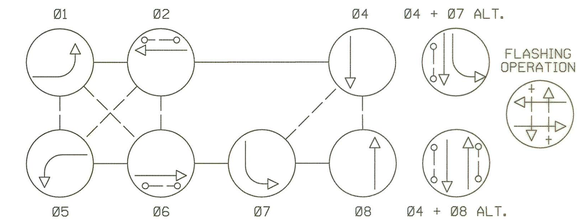
PROPOSED LED SIGNALS

1,2,4,5 — 12"
3,6-9 — 12"
13-20 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

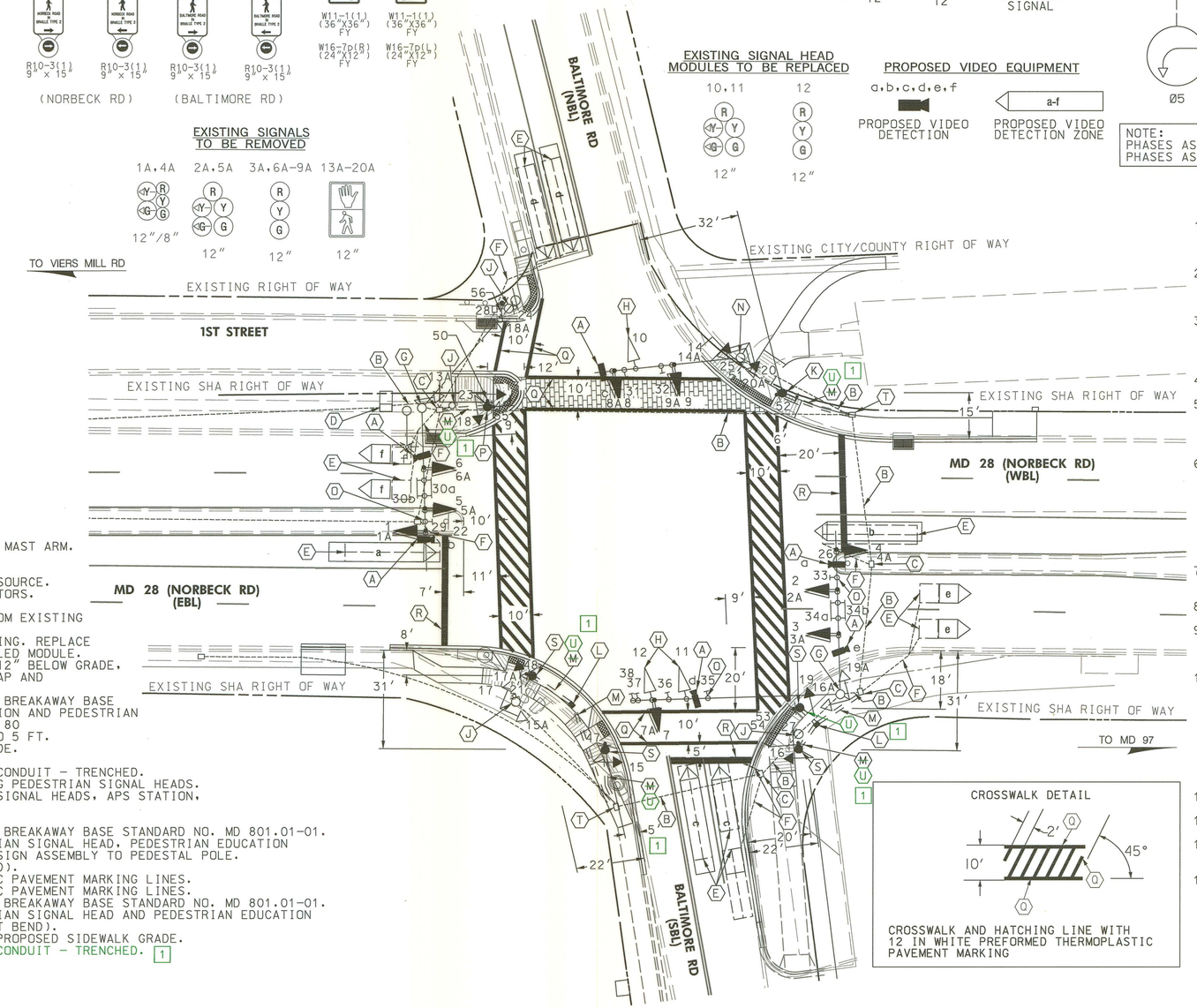
PROPOSED VIDEO EQUIPMENT

a,b,c,d,e,f — PROPOSED VIDEO DETECTION
a-f — PROPOSED VIDEO DETECTION ZONE

NEMA PHASING



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



CROSSWALK DETAIL

CROSSWALK AND HATCHING LINE WITH 12 IN WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING

CONSTRUCTION DETAILS

A. INSTALL VIDEO DETECTION CAMERA ON EXISTING MAST ARM.
B. USE EXISTING CONDUIT.
C. USE EXISTING HANDHOLE.
D. USE EXISTING CONTROLLER CABINET AND POWER SOURCE.
E. DISCONNECT AND ABANDON EXISTING LOOP DETECTORS.
F. CAP AND ABANDON EXISTING CONDUIT.
G. REMOVE EXISTING PEDESTRIAN SIGNAL HEADS FROM EXISTING SIGNAL POLE.
H. USE EXISTING MAST ARM AND SIGNAL HEAD HOUSING. REPLACE EXISTING SIGNAL HEAD MODULE WITH PROPOSED LED MODULE.
J. REMOVE EXISTING PEDESTAL POLE, FOUNDATION 12" BELOW GRADE, AND ALL ASSOCIATED PEDESTRIAN EQUIPMENT. CAP AND ABANDON EXISTING CONDUIT.
K. INSTALL 10 FT. PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01.INSTALL APS STATION AND PEDESTRIAN EDUCATION SIGN (NOTE: 1-2 IN. PVC SCHEDULE 80 CONDUIT BEND). CUT AND CAP PEDESTAL POLE TO 5 FT. ADJUST FOUNDATION TO PROPOSED SIDEWALK GRADE.
L. INSTALL ELECTRICAL HANDHOLE.
M. INSTALL 3 INCH PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
N. USE EXISTING PEDESTAL POLE. REMOVE EXISTING PEDESTRIAN SIGNAL HEADS. INSTALL PROPOSED LED COUNTDOWN PEDESTRIAN SIGNAL HEADS, APS STATION, AND PEDESTRIAN EDUCATION SIGN.
O. REMOVE EXISTING SIGN FROM MAST ARM.
P. INSTALL 14 FT. PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01. INSTALL APS STATION, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, PEDESTRIAN EDUCATION SIGN, AND BAND PEDESTRAIN CROSSING WARING SIGN ASSEMBLY TO PEDESTAL POLE. (NOTE: 1-2 IN. PVC SCHEDULE 80 CONDUIT BEND).
Q. INSTALL 12 IN WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES.
R. INSTALL 24 IN WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES.
S. INSTALL 10 FT. PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01. INSTALL APS STATION, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN EDUCATION SIGN (NOTE: 1-2 IN. PVC SCHEDULE 80 CONDUIT BEND).
T. USE EXISTING HANDHOLE. ADJUST HANDHOLE TO PROPOSED SIDEWALK GRADE.
U. INSTALL 2 INCH PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. [1]

GENERAL NOTES

1. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE MODIFICATION PROJECT.
2. AS A PART OF THIS PROJECT, MD 28 IS BEING RESURURFACED. ALL MARKINGS ARE TO BE RE-INSTALLED AS EXISTING, EXCEPT PROPOSED STOP LINE AND CROSSWALK MARKINGS SHOWN.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE. ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES.
4. ALL UNUSED SIGNAL CABLES SHALL BE REMOVED AND DISPOSED.
5. 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 ANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
6. 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.
7. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
8. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
9. PROPOSED SIGNAL EQUIPMENT SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF THE SIDEWALK AND PEDESTRIAN RAMPS, AND THE INSTALLATION OF THE DETECTABLE WARNING SURFACE.
10. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SHOWN AS PER SIGNAL PLAN REVISON F, DATED 12-03-2003. THEY ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THE CONFLICT MAY BE RESOLVED.
11. GROUNDING OF THE PROPOSED EQUIPMENT MUST BE DONE IN ACCORDANCE WITH SHA REQUIREMENTS.
12. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHE ENGINEER.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SIGNAL OPERATION DURING THE COMPLETE CONSTRUCTION PERIOD.
14. PROPOSED SIDEWALKS RAMPS TO BE INSTALLED AS PER ROADWAY PLANS.

[1] GREEN LINE NO. 1
UPDATED CONDUITS RUNNING FROM PEDESTAL POLES TO 2".
DATE: 9/27/13
10/31/2013

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

APPROVALS

TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR

ORIGINAL ON FILE

REVISIONS

G TIMS NO. L687 SHA NO. MO1315277 APS, UPGRADE LED SIGNAL HEADS AND INSTALL VIDEO DETECTION 01-07-12
AJM
F 12-3-03 PROVIDE E/P PHASING FROM SB TO EB SHA# AT2885185
JWA
E 5/97 – AS BUILT:REBUILT SIGNAL & ADDED L.T.'S FOR E/B & WB MD 28 SHA #
WM DJD DAL BAK GRS

PLOTTED: Friday, October 04, 2013 AT 11:56 AM
FILE: Y:\13-0294-I07 MD 28 Signal Mods\CADD\pSG-P001_MD28_Baltimore.dgn

T3 design
T3 DESIGN CORP.
3927 OLD LEE HWY
SUITE 101-C
FAIRFAX, VA 22030
PHONE: 703-359-5861
www.t3design.us

BY: swilkening

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

MD 28 (NORBECK RD)
AT BALTIMORE RD
ROCKVILLE, MARYLAND

TRAFFIC SIGNALIZATION PLAN

SCALE 1" =20' DATE 8 /17 /1982 CONTRACT NO. MO1315277

DESIGNED BY K.MASEK
DRAWN BY K.MASEK
CHECKED BY WF
FAP NO.
COUNTY MONTGOMERY
LOGMILE 150028023.15
TIMS NO. F933
TOD NO.

TS NO. TS-66G | DRAWING SG-03 OF 06 | SHEET NO. 3 OF 6