MD 704 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

EXISTING SIGNS TO BE REMOVED

14A CARRINGTON AVE.

21A,22A,29A STOP

25A ONE WAY / STOP

14,18 NEW — W3-3 (36" x 36") W/"NEW" PANEL (30" x 30")

PROPOSED SIGNS

16,17,20,21 Carrington AVE — D-3(1) (VAR.x16") DUAL FACE

23 SOUTH MARYLAND 704 NORTH — M95-1 (78" x 24")

27 PUSH BUTTON TO CROSS M.L. KING HWY — R10-3(1) 9" x 15"

28 PUSH BUTTON TO CROSS M.L. KING HWY — R10-3(1) 9" x 15"

15,19 Carrington Ave. NEXT SIGNAL — D-3(3) (72" x 24")

28 NORTH MARYLAND 704 SOUTH — M95-1 (78" x 24")

22 STOP — R1-1 (30"x30") — R3-3(4) (24"x30") RIGHT TURN ONLY

25 ONE WAY — STOP HERE ON RED — R6-1R (36"x12") — R10-6 (24"x36")

29 NO TURN ON RED — R10-11b (24"x24")

SPECIAL NOTES:

1. THE TACTILE ARROWS FOR THE AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS SHALL BE LOCATED PARALLEL TO THE CROSSWALK FOR WHICH THEY APPLY.
2. CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR SHALL HAND DIG IN THE VICINITY OF UNDERGROUND UTILITIES.

PROPOSED VIDEO DETECTION CAMERA

a,b,c,d

PROPOSED SIGNALS (LED)

1,4 — 12"/8"

2,5 — 12"

3,6,7-11 — 12"

12,13 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD

PROPOSED SIGNS CONT.

24 ONE WAY — R6-1(L) (36"x12")

26 DO NOT ENTER — R5-1 (30"x30")

27 ONE WAY — R6-1(R) (36"x12")

VIDEO ZONE DETECTION

a-d

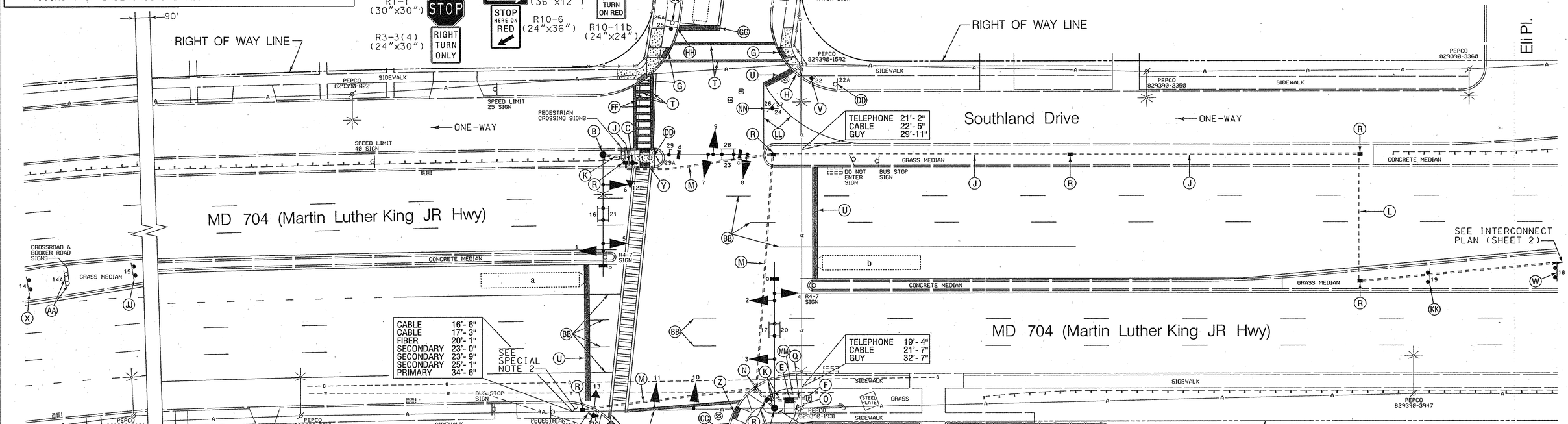
NEMA PHASING

Ø1 Ø2 Ø4 Ø5 Ø6 Ø8

FLASHING OPERATION

Ø4+Ø8 ALT.

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



CONSTRUCTION DETAILS

A. INSTALL CONCRETE FOUNDATION WITH A 16.5 FT. (15'-0" T) WITH A TWIN 50 FT./60 FT. MAST ARMS, TRAFFIC SIGNAL HEADS, SIGNS AND VIDEO DETECTION CAMERA MOUNTED ON MAST ARM. (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 TWIN 50 FT./60 FT. MAST ARMS, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERAS 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).
C. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT, R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS M L KING HWY"). INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
D. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED SIGNAL STRUCTURE FOUNDATION IN ACCORDANCE WITH STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT, R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS M L KING HWY"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
E. INSTALL NEMA SIZE 5 BASE MOUNTED CONTROLLER AND CABINET WITH CONCRETE PAD. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN CABINET BASE.)
F. INSTALL BASE MOUNTED METERED SERVICE PEDESTAL WITH 2-2 IN. AND 1-3 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS IN PEDESTAL BASE.
G. INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.12) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40).
H. REMOVE EXISTING SIDEWALK RAMP AND INSTALL 4 IN. CONCRETE SIDEWALK AND COMBINATION CONCRETE CURB AND GUTTER (STANDARD NO. MD 620.02 TYPE A).
J. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
K. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
L. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
M. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
N. REMOVE EXISTING SIDEWALK AND INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED. REPLACE 4 IN. CONCRETE SIDEWALK.
O. INSTALL 4 IN. SCHEDULE 80A 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.
P. INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND TELEPHONE SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT UTILITY POLE FOR USE BY OTHERS.
Q. INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
R. INSTALL HANDHOLE.
S. INSTALL 5 IN. HEAT APPLIED, YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR 50 FT. ALONG CARRINGTON AVENUE.
T. INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
U. INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
V. INSTALL R1-1 (30 IN. x 30 IN.) AND R3-3(4) (24 IN. x 30 IN.) SIGNS ON ONE 4 IN. x 4 IN. TREATED WOOD SUPPORT (L=16.5 FT.).
W. INSTALL W3-3 "SIGNAL AHEAD" SIGN (36 IN. x 36 IN.) WITH "NEW" PANEL AND FLAGS AND D3-2 (CARRINGTON AVE.) SIGN (VAR. x 16 IN.) ON TWO 4 IN. x 6 IN. TREATED WOOD POSTS APPROXIMATELY 700 FT. IN ADVANCE OF THE INTERSECTION ON SOUTHBOUND MD 704.
X. INSTALL W3-3 "SIGNAL AHEAD" SIGN (36 IN. x 36 IN.) WITH "NEW" PANEL AND FLAGS AND D3-2 (CARRINGTON AVE.) SIGN (72 IN. x 12 IN.) ON TWO 4 IN. x 6 IN. TREATED WOOD POSTS APPROXIMATELY 375 FT. IN ADVANCE OF THE INTERSECTION ON NORTHBOUND MD 704.
Y. INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.21) AND DETECTABLE WARNING SURFACES (STANDARD NO. MD 655.40).
Z. INSTALL DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40).
AA. REMOVE EXISTING D3-2 "CARRINGTON AVE" SIGN AND RIGHT SUPPORT.
BB. REMOVE EXISTING PAVEMENT MARKINGS BEYOND STOP LINE.
CC. REMOVE EXISTING R1-1 SIGN FROM SUPPORT.
DD. REMOVE EXISTING R1-1 SIGN AND SUPPORT.
EE. REMOVE EXISTING R1-1 AND R6-1(R) SIGNS AND SUPPORT.
FF. REMOVE EXISTING PAVEMENT MARKINGS.
GG. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
HH. INSTALL R10-6 (24 IN. x 36 IN.) AND R6-1(R) (36 IN. x 12 IN) SIGNS ON ONE 4 IN. x 4 IN. TREATED WOOD SUPPORT (L=17.5 FT.).
JJ. INSTALL D-3(3) (72 IN. x 24 IN.) SIGN ON TWO 4 IN. x 6 IN. TREATED WOOD SUPPORTS (L=14.5 FT.) APPROXIMATELY 250 FT. IN ADVANCE OF THE INTERSECTION ON NORTHBOUND MD 704.
KK. INSTALL D-3(3) (72 IN. x 24 IN.) SIGN ON TWO 4 IN. x 6 IN. TREATED WOOD SUPPORTS (L=14.5 FT.) APPROXIMATELY 500 FT. IN ADVANCE OF THE INTERSECTION ON SOUTHBOUND MD 704.
LL. INSTALL 10 IN. (TWO 5 IN. PAVEMENT MARKINGS) HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING.
MM. INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT - TRENCHED FOR ROADWAY LIGHTING.
NN. INSTALL R6-1(R) AND R6-1(L) (36 IN. x 12 IN.) AND R5-1 (30 IN. x 30 IN.) SIGNS ON ONE TUBULAR STEEL SUPPORT.

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 UTILITIY 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 VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
5. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
7. THE CONTRACTOR SHALL NOT CUT MAST ARM AS INDICATED ON PLANS UNTIL MAST ARM POLE LOCATION IS FINALIZED.
8. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
9. REFER TO SHEET 3 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.
10. PUSHBUTTONS ARE TO BE LOCATED ADJACENT TO A LEVEL (1:48) LANDING (32" x 54") ALONG THE PEDESTRIAN ACCESS ROUTE LEADING TO THE CROSSWALK.
11. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E-2 AND THE LATEST EDITION OF THE NCHRP PUBLICATION, 'ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE.'

GEOMETRIC LEGEND
EXISTING
PROPOSED

UTILITY LEGEND
SD SD STORM DRAIN
G G GAS MAIN
W W WATER MAIN
S S SEWER MAIN
E E ELECTRIC CABLES
A A AERIAL CABLES
T T TELEPHONE CABLES
F F FIBER-OPTIC

TOD NO: AT910-08
SHA No.: PG573A53/C53
MD 704 @ Carrington Avenue

SHA
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 704 (Martin Luther King Highway)
and Carrington Avenue

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Baltimore, Maryland 21231
(410) 235-3450

APPROVALS
TRAFFIC ENGINEER — 12/18/2006
ASST. DIV. CHIEF — 12/18/06
DIVISION CHIEF
OFFICE DIRECTOR — 12/19

REVISIONS

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' DATE 12/15/2006 CONTRACT NO. AT9105185

DESIGNED BY S. Bloss
DRAWN BY S. Bloss
CHECKED BY N. Leary
FAP NO.

COUNTY Prince George's
LOGMILE 16070401.08
TIMS NO. 124B
TOD NO.

TS NO. 4540 DRAWING – OF SHEET NO. 1 OF 3

PLOTTED: Friday, December 15, 2006 AT 12:00 PM
FILE: n:\31556-075\CADD\pSG-P001_md704.dgn

BY: sbloss