CONSTRUCTION DETAILS

A. Use existing structure. remove existing traffic and pedestrian signal heads.and equipment. Install new traffic signal heads. pedestrian signal heads and pedestrian pushbutton and education sign in their present location or as shown.(Note: Install 1-3" 90° PVC bend into the existing foundation.

B. Remove existing base-mounted cabinet and controller. Cut back concrete foundation approximately 1" and replace cabinet and controller as close to the back of the existing concrete pad as possible. (See typical)

C. Install handhole (frame and cover) for traffic signal equipment.

D. Use exisiting handhole.

E. Install 6' x 30' loop detector encased in 1/4" flexible tubing quadrupole type (3-6-3).

F. Install 6' x 20' loop detector encased in 1/4" flexible tubing quadrupole type (3-6-3).

G. Install 1" liquid tight flexible non-metallic electrical conduit (detector wire sleeve).

H. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (Slotted).

J. Use existing conduit.

K. Install pavement markings as shown.

L Existing overhead electrical service to remain.

M. Use new handhole installed by lighting contractor.

N. Existing overhead interconnect to be removed and replaced. (See wiring diagram).

O. Install 3" polyvinyl chloride electrical conduit (Schedule 80) trenched.

P. Install 4" polyvinyl chloride electrical conduit (Schedule 80) trenched.

NOTE:
MD 528 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

EXISTING SIGNS

16.19
RIGHT LANE
BUSES AND RIGHT TURNS ONLY
R5-14(MOD)
30"X36"

15a.18a — 23RD ST
15b.18b — 23RD ST
D3-2
(VARIABLE X 16")
DUAL FACED

20
Coastal HWY
D3-2
(VARIABLE X 16")
DUAL FACED

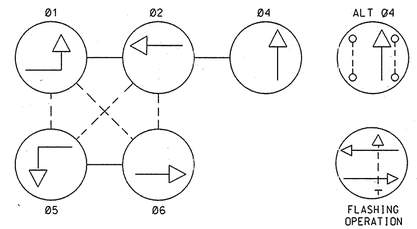
PROPOSED SIGNS

16A. 19A
BUSES
BIKES
RIGHT TURNS
ONLY
36"x 42"

PROPOSED SIGNALS
(black-faced)

1.4 — 12" 8" 12" 8" 12" 8"
2.5 — 12"
3.6.7-9 — 12"
10-13 — 12"

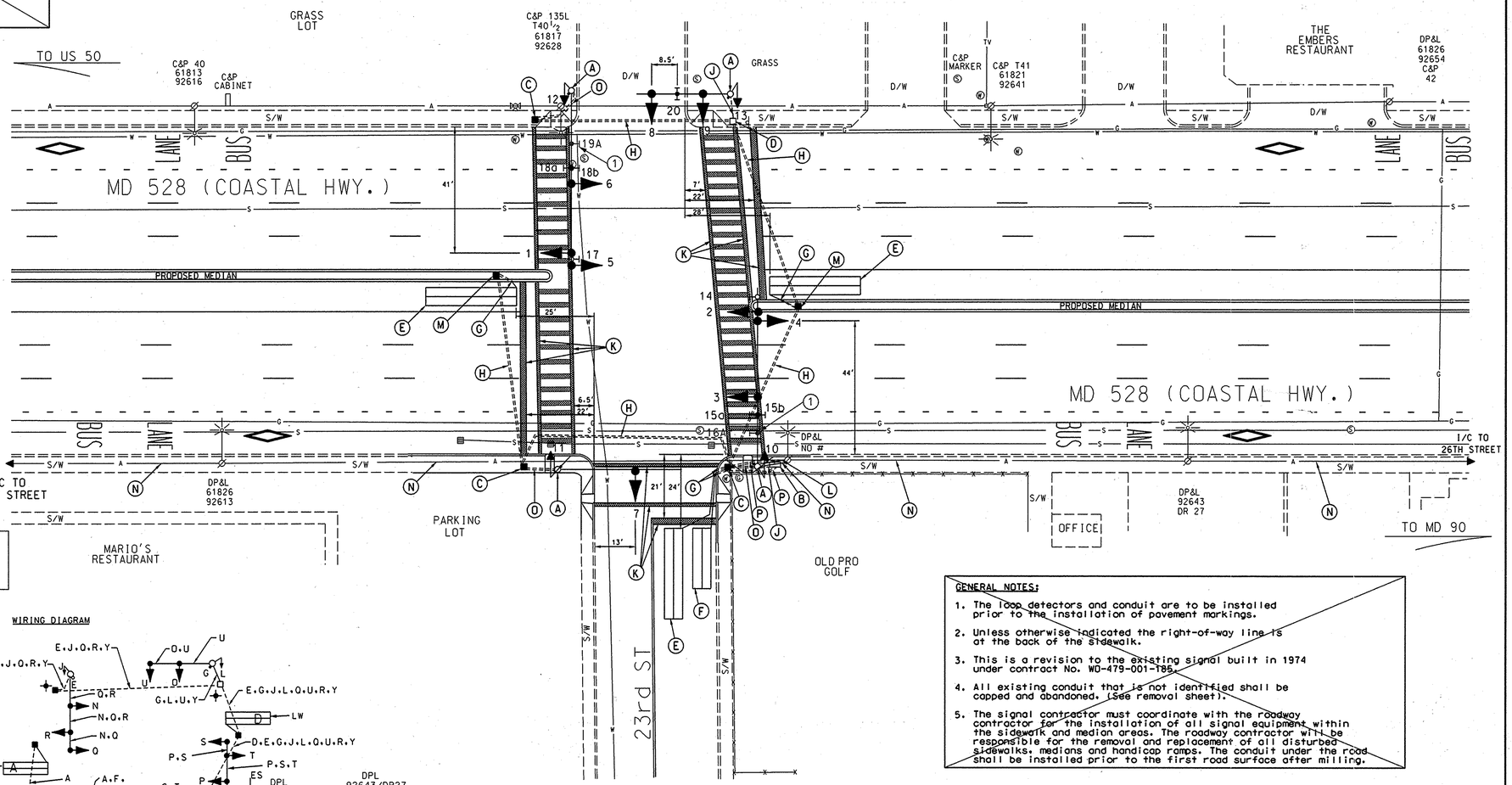
NEMA PHASING



PHASING NOTES:
1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

PHASING CHART

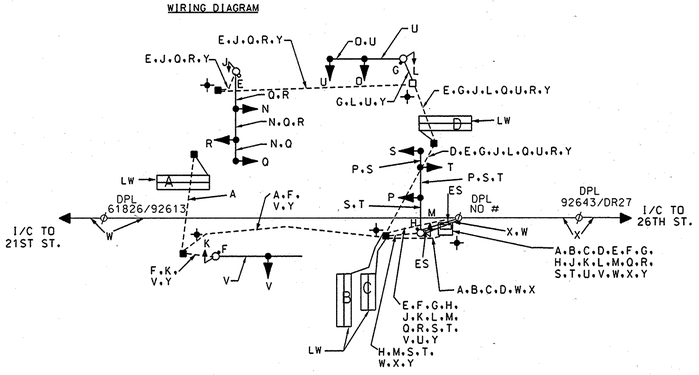
	1	2	3	4	5	6	7	8	9	10	11	12	13
PHASE 1 & 5	R G	R G	R	R G	R G	R	R	R	R	DW	DW	DW	DW
1 & 5 CHANGE	TO PHASE 1 & 6 OR PHASE 2 & 5									DW	DW	DW	DW
PHASE 1 & 6	G G	G G	G	R	R	R	R	R	R	DW	DW	DW	DW
1 CHANGE	G Y	G Y	G	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 5	R	R	R	G G	G G	G	R	R	R	DW	DW	DW	DW
5 CHANGE	R	R	R	G Y	G Y	G	R	R	R	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	DW	DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	G	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	G	G	G	WK	WK	WK	WK
PED CLEARANCE	R	R	R	R	R	R	G	G	G	FL/DW	FL/DW	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK



CONSTRUCTION DETAILS

① REMOVE EXISTING LANE RESTRICTION SIGN AND INSTALL NEW SIGN AT SAME LOCATION ON MAST ARM AS SHOWN.

WIRING DIAGRAM



WIRING KEY

A, B, C, D — 2- CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) (ALUMINIUM SHIELDED)
E, F, G, H — 2- CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
J, K, L, M — 3- CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
N, O, P — 5- CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
Q, R, S, T, U, V — 7- CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
W, X — 12-PAIR, VOICE GRADE INTERCONNECT CABLE (NO. 19 AWG) (SELF-SUPPORTING)
Y - STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
LW - LOOP WIRE (NO. 14 AWG)
ES - EXISTING OVERHEAD SERVICE BY CONNECTIV
GROUND WIRE

GEOMETRIC LEGEND

PROPOSED
EXISTING

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE — A — A —
ELECTRIC — E — E —
TELEPHONE — T — T —
GAS — G — G —
SEWER — S — S —
WATER — W — W —
CABLE TV — TV — TV —

GENERAL NOTES:

1. The loop detectors and conduit are to be installed prior to the installation of pavement markings.
2. Unless otherwise indicated the right-of-way line is at the back of the sidewalk.
3. This is a revision to the existing signal built in 1974 under contract No. WO-479-001-185.
4. All existing conduit that is not identified shall be capped and abandoned. (See removal sheet).
5. The signal contractor must coordinate with the roadway contractor for the installation of all signal equipment within the sidewalk and median areas. The roadway contractor will be responsible for the removal and replacement of all disturbed sidewalks, medians and handicap ramps. The conduit under the road shall be installed prior to the first road surface after milling.

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REVISIONS

8	INSTALL RESTRICED RIGHT LANE SIGNS S.H.A. NO.: AT9095185	7-14-08
MR		
7	REPLACE EXISTING HEADS AND ADD NEARSIDE E/P S.H.A. NO.: WO7805184	4-28-88
R.R.Z.		

APPROVALS

ASST. CHIEF TEDD SECTION
ASST. DISTRICT ENGINEER, TRAFFIC
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, TRAFFIC & SAFETY

ORIGINAL FILE

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 528 (COASTAL HWY.) AND 23rd ST

DRAWN BY: R. R. ZACHERL	COUNTY: WORCESTER	TS NO. 2313A	SHEET NO.
CHECK BY: R. R. ZACHERL	LOG MILE: 23052807.04		
DATE: 1-29-87	F.A.P. NO.	T.J.M.S. NO. I 673	6 OF 46
SCALE: 1"= 20'	S.H.A. NO. WO-653-451-185		

TOD No. AT909-32
SHA No. WO442A55/C55