F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD	SEE TITLE SHEET	145	156

INTERSECTION OPERATION

MD 26 at MD 194

1.) During Phase 3 Construction Activities, the existing intersection operations will be modified.

A NEMA four phase operation with an exclusive/ permissive southbound MD 194 left turn will be provided. MD 26 will approach the new intersecion in two (2) lanes.

2.) Five (5) two-channel, time delay output loop detector amplifiers shall be installed into the proposed base-mounted cabinet at the intersection.

CONSTRUCTION DETAILS

A. Install 12"x32' steel strain pole (2-ply). (Note 1-3" 90 degree polyvinyl chloride schedule 40, conduit bend)

C. Install handhole.

D. Install 1" liquid tight flexible non-metallic conduit sleeve for loop detector lead-in.

E. Install 2" polyvinyl chloride schedule 40 electrical conduit - trenched/buried.

G. Install 6' x 6' loop detector (3 turns).

H. Install 6' x 30' quadrupole loop detector. (2-4-2 turns)

K. Install 3/8" steel span wire, signal head, signs, and 1/4" tether wire for signs as shown.

L. Remove span wire, signals, signs and associated wiring as shown.

M. Install 4" polyvinyl chloride schedule 40 electrical conduit - trenched/buried.

R. Remove existing strain pole.

S. Remove existing strain pole, and 15' lighting are with 250 Watt HPS lamp and luminaire.

V. Use existing conduit.

W. Use existing span wire, install, relocate, or remove signal heads and/or signs as shown.

X. Use existing handhole.

BB. Cap and abandon existing conduit.

CC. Remove handhole, abandon existing lead-in conduits.

DD. Abandon existing loop detector.

EE. Remove (grind) existing stop line.

HH. Remove and return pole mounted cabinet and controller. Remove existing strain pole, and 15' lighting arm with 250 Watt HPS lamp and luminaire.

KK. Install 12"x32' steel strain pole (2-ply), 20' lighting arm with 250 Watt HPS lamp and luminaire. Install control and distribution equipment (Note: 1-2" 90 degree polyvinyl chloride conduit bend (schedule 80) for service cable feed, and 2-3" 90 degree polyvinyl chloride conduit bends).

LL. Install alternative brick handhole.

MM. Install 2" polyvinyl chloride electrical conduit (schedule 80) for power feed-trenched/buried.

NN. Install base mounted cabinet, and controller with all necessary equipment (Note: 2-2" and 2-4" 90 degree polyvinyl chloride conduit bends, 1-2" 90 degree polyvinyl chloride conduit bend (schedule 80) for service cable entrance).

OO. Install 3" polyvinyl chloride electrical conduit- trenched/buried.

YY. Install 24 inch white preformed pavement marking for stop line.

ZZ. Remove existing signal head.

EQUIPMENT LISTS

A. Equipment to be furnished by S.H.A.

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
6	EA	806	12 inch 1 way 3 section (R,Y,G) having proper span wire mounting brackets and tunnel visors.
2	EA	806	12 inch 1 way 5 section (R,Y,G,YA,GA) polycarbonate signal head having proper span wire mounting bracket and tunnel visors
62	SF	813	Sheet aluminum signs consisting of:
1	EA		R10-12,(36" x 42"), "Left turn yield on green"
1	EA		R3-5(L),(30" x 36"), "Left turn only" - span mount
1	EA		R3-5(R),(30" x 36"), "Right turn only" - span mount
1	EA		R3-6a (30" x 36"), "Right & left turn" - span mount
1	EA		RIGHT LANE ENDS, MERGE LEFT (30" x 48") 5" letters
1	EA		MD 26/ MD 194 (36" x 75") route marker assembly - pole mount

A. Equipment to be furnished by S.H.A.

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
1	EA	816	Eight-phase (fully actuated) controller and cabinet (type 6)- base mount
6	EA	817	Two channel loop detector amplifier (delay output)

B. Equipment to be furnished and/or installed by the Contractor.

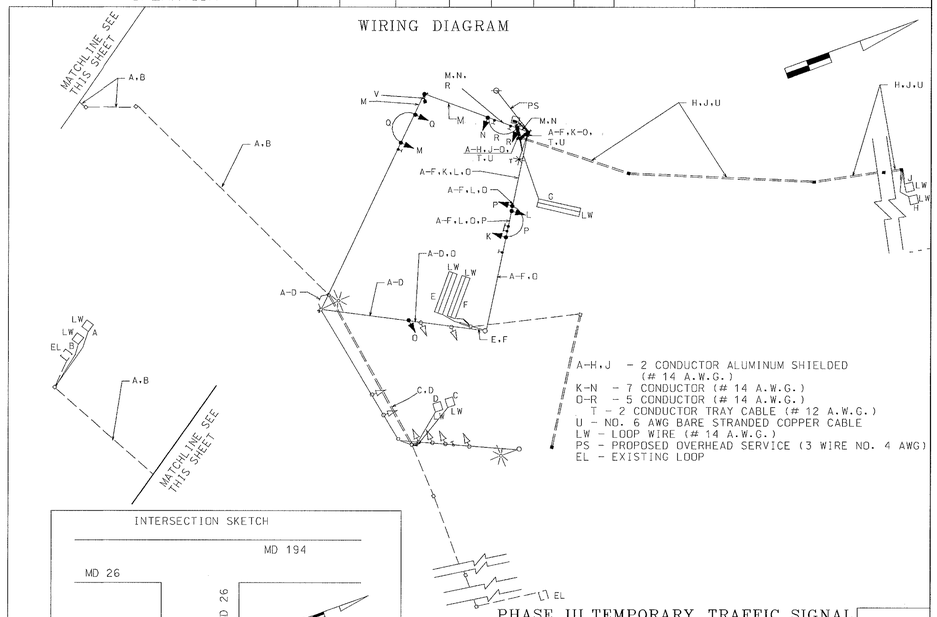
QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
105	LF	555	24 inch white preformed pavement marking tape
1	LS	XXX	Remove and salvage existing equipment
4	EA	555	Permanent preformed marking letter
4	EA	555	Permanent preformed marking arrow
11.3	CY	801	Concrete for signal foundation
4	EA	804	Ground rod 3/4 inch diameter x 10 foot length
15	LF	805	2" schedule 80 rigid PVC conduit for power feed- trenched
90	LF	805	1" liquid tight flexible non-metallic conduit for detector sleeve
505	LF	805	2" schedule 40 rigid PVC conduit-trenched
30	LF	805	3" schedule 40 rigid PVC conduit-trenched
30	LF	805	4" schedule 40 rigid PVC conduit-trenched
1	EA	806	250 Watt High Pressure Sodium lamp and luminaire
1	EA	807	Control and distribution equipment
1	EA	808	20 foot lighting arm on signal structure
55	LF	810	3 wire (No. 4 AWG)
3610	LF	810	Electrical cable- 2 conductor (aluminum shielded)
75	LF	810	Electrical cable- 2-conductor copper type tray cable No. 12 AWG
335	LF	810	Electrical cable- 5 conductor (No. 14 AWG)
510	LF	810	Electrical cable- 7 conductor (No. 14 AWG)
1334	LF	810	Loop wire encased in flexible tubing (No. 14 AWG)
4	EA	811	Handhole
62.5	SF	813	Install ovehead sign
8	EA	814	Install signal heads - span mount
910	LF	815	Sawcut for signal (loop detector)
1	EA	816	Eight-phase (fully actuated) controller and cabinet- base mount
550	LF	819	Span wire- 3/8 inch diameter
140	LF	819	Span wire- 1/4 inch diameter
5140	LB	828	12 inch x 32 foot strain pole (2-ply), (Note: install 4 - 2 1/4" x 96" anchor bolts)

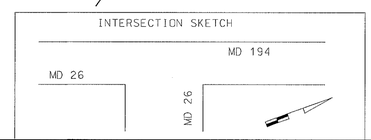
PHASE CHART

	1	2	3	4	5	6	7	8
	R Y G	R Y G	R ~~Y~~ ~~G~~	R Y ~~G~~	R Y G	R Y G	R Y G	R Y G
PHASES 2 & 5	R	R	~~G~~,G	~~G~~,G	G	R	R	R
PHASES 2 & 5 CHANGE	R	R	~~Y~~,G	~~Y~~,G	G	R	R	R
PHASES 2 & 6	G	G	G	G	G	R	R	R
PHASES 2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R
PHASE 4	R	R	R	R	R	G	G	G
PH 4 CHANGE	R	R	R	R	R	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R

NOTE:
FL = FLASHING INDICATION
R = RED INDICATION
Y = YELLOW INDICATION
G = GREEN INDICATION
~~Y~~ = YELLOW ARROW INDICATION
~~G~~ = GREEN ARROW INDICATION

WIRING DIAGRAM





PHASE III TEMPORARY TRAFFIC SIGNAL GENERAL INFORMATION

SG-12

REVISIONS	APPROVALS
	CHIEF, SIGNAL DESIGN SECTION
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY

DCL
CONSULTING ENGINEERS
COLUMBIA, MARYLAND

MDOT - STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

ORIGINAL DRAWN BY: RJM
DES. BY: RJM
CHK. BY: [signature]
DATE: 4/95
SCALE: NTS
F.A.P. NO.
S.H.A. NO. F 174-501-771

MD 26 @ MD 194

LOG MILE 10002602.26

COUNTY: FREDERICK

TS/FILE NO. 1837C-X3

SHEET NO. 145 OF 156

f:\projects\9216802\dgn\sw07md26.d Jun. 13, 1995 06:58:00