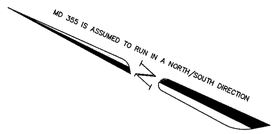
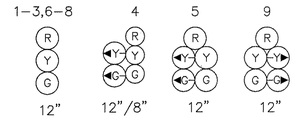
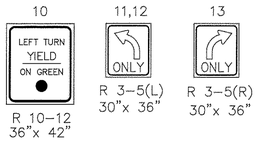
FHWA REGION NO	STATE	FED. AID PROJ. NO	SHEET NO.	TOTAL SHEETS
3	MD.	SEE TITLE SHEET		



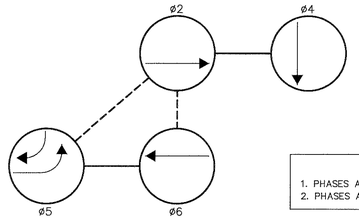
SIGNALS



SIGNS



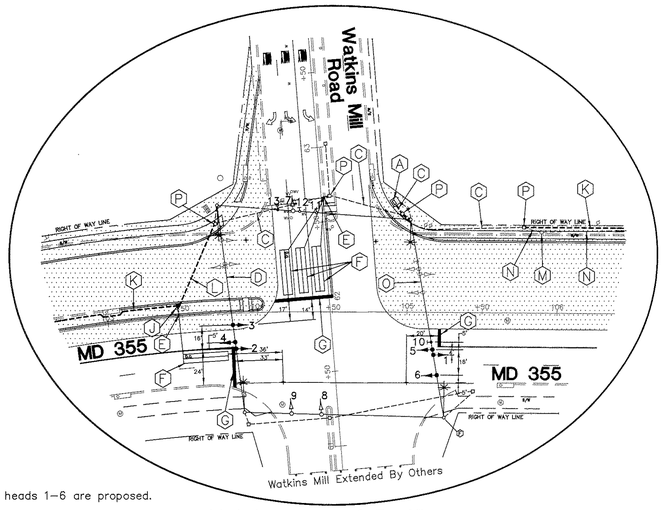
NEMA PHASING



FLASHING OPERATION

PHASING NOTES:

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

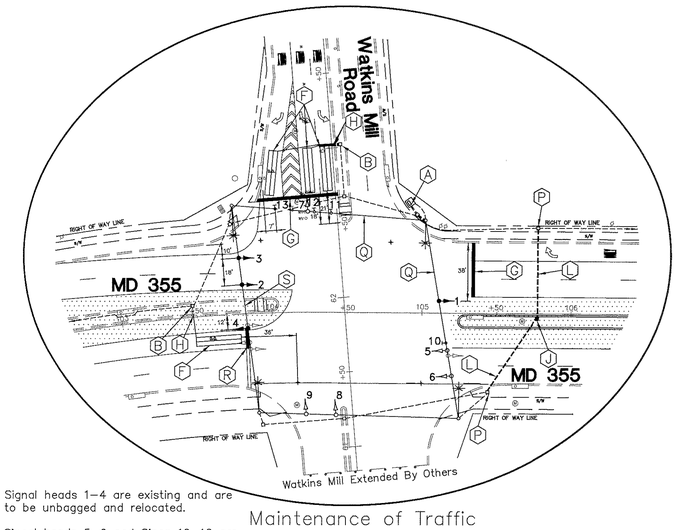


NOTE: Signal heads 1–6 are proposed.

Signal heads 7–9 and Signs 11–13 are existing and are to remain.

Sign 10 is existing and is to be relocated.

Maintenance of Traffic
Phase 2, Stage 2



NOTE: Signal heads 1–4 are existing and are to be unbagged and relocated.

Signal heads 5–9 and Signs 10–12 are existing and are to remain.

Sign 13 is existing and is to be relocated.

Maintenance of Traffic
Phase 2, Stage 3

NOTES

1. "D.O." indicates delay output loop detector.
2. Proposed geometrics shall be confirmed prior to the installation of signal equipment.
3. Loop detectors and conduit shall be installed prior to the installation of pavement markings.
4. Pavement markings detailed are proposed and are to be installed by the contractor in accordance with S.H.A. standards. All other pavement markings not detailed will be installed as part of the highway contract.
5. Revision 'A' is a revision to the traffic signal built in March, 1985 under Contract S.H.A. No.: 855–25006.
6. All utilities are shown in their approximate location and are not to be considered as complete. The Contractor shall be responsible for contacting Miss Utility to verify the the locations of all utilities. The Contractor shall contact the appropriate personel prior to construction to avoid potential conflicts so that field adjustments can be made.
7. Interconnect shall be maintained at all times.

GEOMETRIC LEGEND

EXISTING GEOMETRICS
PROPOSED GEOMETRICS

UTILITY LEGEND

G — G	GAS MAIN
W — W	WATER MAIN
S — S	SEWER MAIN
D — D	STORM DRAIN
E — E	ELECTRIC CABLES
A — A	AERIAL CABLES
T — T	TELEPHONE CABLES
C — C	CABLE TELEVISION

LEGEND

— CONSTRUCTION AREA

Intersection Operation

The existing phasing, cabinet, and controller are to be utilized.

Construction Details

A. Existing cabinet/controller are to be utilized.
B. Use existing handhole and splice new loopwire to existing 2–conductor aluminum shielded cable.
C. Use existing conduit.
D. Use existing span wire and temporarily bag existing traffic signal heads. Install polycarbonate traffic signal heads as shown.
E. Install 1 in. liquid tight, non–metallic conduit for loop detector sleeve.
F. Install 6 ft. x 30 ft. quadrupole type vehicle loop detector (2–4–2 turns).
G. Install 24 in. preformed white pavement marking for stop line.
H. Use existing loop detector sleeve.
J. Install handhole.
K. Conduit for interconnect . Refer to interconnect plan.
L. Install 4 in. polyvinyl chloride (Schedule 80) electrical conduit – slotted.
M. Remove existing handhole.
N. Cap and abandon existing conduit.
O. Use existing span wire. Remove existing polycarbonate traffic signal heads. Relocate existing sign as shown. Install traffic signal heads.
P. Use handhole.
Q. Use existing span wire, traffic signal head and signs. Relocate as shown.
R. Extend existing stop line with 24 in. preformed white pavement marking.
S. Use existing span wire. Remove existing polycarbonate traffic signal heads. Unbag and relocate existng traffic signal heads.

Equipment List "A"

Equipment to be supplied by the SHA.

Quantity	Unit	Description
3	EA	12 in., one–way, three section (R,Y,G) polycarbonate adjustable traffic signal head – span wire mount.
1	EA	12 in., one–way, three section (R,Y,G) adjustable traffic signal head – span wire mount.
1	EA	8 in./12 in., one–way, five section (8 in. R,Y,G/12 in. YA,GA) polycarbonate adjustable traffic signal head – span wire mount.
1	EA	12 in., one–way, five section (R,Y,YA,G,GA) adjustable traffic signal head – span wire mount.

Equipment List "C"

Equipment to be removed by the contractor and delivered to the MCDOT Systems Technical Center, 1283 Seven Locks Road, Building "C", Rockville, MD 20852. A twenty–four (24) hour notice is required prior to delivery. Contact Mr. Emil Wolanin at (301) 217–2208.

Quantity	Unit	Description
6	EA	Traffic signal head

Equipment List "B"

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

Quantity	Unit	Description
200	LF	24 in. preformed white pavement marking for stop line.
2	EA	Handhole.
1250	LF	Sawcut for signal loop detector.
3000	LF	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
30	LF	1 in. liquid tight, flexible, non–metallic conduit for loop detector sleeve.
400	LF	2–conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
200	LF	4 in. polyvinyl chloride (Schedule 80) electrical conduit – slotted.
2	EA	Ground rod – 3/4 in. diameter x 10 ft. length.
6	EA	Install traffic signal head – span wire mount.
4	EA	Relocate existing traffic signal head – span wire mount.
4	EA	Temporarily bag existing signal head.
4	EA	Loop detector splice.
LS	LS	Removal of existing traffic signal equipment.
18	SF	Relocate existing sheet aluminum signing – overhead mount.

Sheet 30 of 52

Revision 'A'

A/E GROUP, INC.
CONSULTING ENGINEERS • PLANNERS
11409 CRONHILL DRIVE
OWINGS MILLS, MD. 21117
(410) 363–1908
A/E JOB NO: 94–264

REVISIONS

A November 6, 1995
Rebuild to new geometrics.
S.H.A. No.:M 811–501–371

APPROVALS

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

ORIGINAL ON FILE

MDOT – STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

SIGNAL # 15035516.16

DRAWN BY: W. Richardson
DES. BY: W. Richardson
CHK. BY: S. Renzi

MD 355 at Watkins Mill Road

COUNTY: MONTGOMERY

DATE: March, 1985
SCALE: 1" = 50'
F.A.P. NO. N/A
S.H.A. NO. 855–25006
TS/STD. NO. 2083A-X2-P
SHEET NO. ____ OF ____