U.S. 40 AND McCAIN DRIVE

SITE 5

U.S. 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

EXISTING SIGNALS TO BE RELOCATED

13,14

EXISTING SIGNS TO REMAIN

16,22 — R3-5R (30" X 36")

18 — R3-8(7) (36" X 60")

21 — R3-6L (30" X 36")

23 — R3-8 MOD. (36" X 60")

EXISTING SIGNALS TO REMAIN

1,2,5,6 — 12"

3,4,7,8, 10,12 — 12"

9,11 — 12"

15,17 — D-3(1) (VARIABLE x 16")

McCain Dr

20,24 — R10-4(1) (9" X 12")

PUSH BUTTON TO CROSS WEST PATRICK ST.
START CROSSING WATCH FOR TURNING CARS
DONT START FINISH CROSSING IF STARTED
PEDESTRIANS SHOULD NOT BE IN CROSSWALK

PROPOSED SIGNS

19,20 — R4-7 (24" X 30")

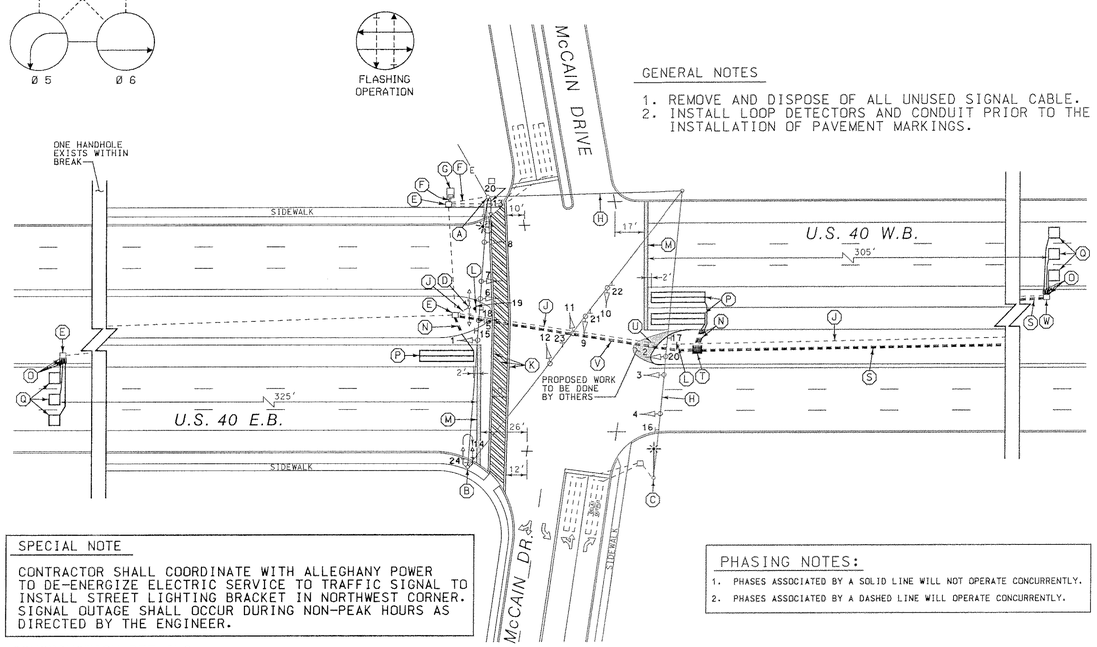
NEMA PHASING

Ø 1, Ø 2, Ø 3, Ø 4, Ø 4 ALT, Ø 5, Ø 6

FLASHING OPERATION

GENERAL NOTES

1. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
2. INSTALL LOOP DETECTORS AND CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.



SPECIAL NOTE

CONTRACTOR SHALL COORDINATE WITH ALLEGHANY POWER TO DE-ENERGIZE ELECTRIC SERVICE TO TRAFFIC SIGNAL TO INSTALL STREET LIGHTING BRACKET IN NORTHWEST CORNER. SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.

PHASING NOTES:

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

CONSTRUCTION DETAILS

A. USE EXISTING STRAIN POLE AND INSTALL 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINIARE, RELOCATE PEDESTRIAN SIGNAL HEAD AS SHOWN.
B. USE EXISTING STRAIN POLE AND RELOCATE PEDESTRIAN SIGNAL HEAD AS SHOWN.
C. USE EXISTING STRAIN POLE AND INSTALL 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINIARE.
D. REMOVE EXISTING PEDESTAL POLE, PEDESTRIAN SIGNAL HEADS AND R4-7 SIGN. REMOVE FOUNDATION 12 IN. BELOW GRADE.
E. USE EXISTING HANDHOLE.
F. USE EXISTING CONDUIT.
G. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER.
H. USE EXISTING SPAN WIRE.
J. ABANDON EXISTING CONDUIT.
K. INSTALL 12 IN. WHITE THERMOPLASTIC PAVEMENT MARKINGS (CROSSWALK).
L. INSTALL R4-7 (24 IN. X 30 IN.) SIGN ON ONE 4 IN. X 4 IN. TREATED WOOD POST.
M. INSTALL 24 IN. WHITE THERMOPLASTIC PAVEMENT MARKINGS (STOP LINE).
N. INSTALL 1 IN. GALVANIZED ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
O. INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
P. INSTALL 6 FT. X 30 FT. (3-6-3 WINDING) QUADRUPOLE TYPE LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
Q. INSTALL 6 FT. X 6 FT. (4-TURNS) LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
R. ABANDON EXISTING LOOP DETECTOR.

CONSTRUCTION DETAILS CONT.

S. INSTALL 2 IN. SCHEDULE 80, RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
T. INSTALL HANDHOLE.
U. REMOVE EXISTING HANDHOLE.
V. INSTALL 4 IN. SCHEDULE 80, RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).
W. USE EXISTING HANDHOLE, DISCONNECT AND PULL BACK INTERCONNECT CABLE FROM EAST AND RE-FEED IN CONDUIT TO EXISTING CONTROLLER.

U.S. 40 AND GROVE HILL ROAD

SITE 6

U.S. 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

PROPOSED SIGNS

22,25 — R10-4(1) (9" X 12")

PUSH BUTTON TO CROSS WEST PATRICK ST.
START CROSSING WATCH FOR TURNING CARS
DONT START FINISH CROSSING IF STARTED
PEDESTRIANS SHOULD NOT BE IN CROSSWALK

NEMA PHASING

Ø 1, Ø 2, Ø 4, Ø 4 ALT, Ø 5, Ø 6, Ø 8, 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.

SPECIAL NOTE

CONTRACTOR SHALL COORDINATE WITH ALLEGHANY POWER TO DE-ENERGIZE ELECTRIC SERVICE TO TRAFFIC SIGNAL TO INSTALL STREET LIGHTING BRACKET IN NORTHWEST CORNER. SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.

CONSTRUCTION DETAILS

A. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEADS AND PUSHBUTTON AND R10-4(1) SIGN (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
B. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON AND R10-4(1) SIGN (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
C. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEAD (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
D. USE EXISTING STRAIN POLE AND INSTALL 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE.
E. INSTALL 2 IN. SCHEDULE 80, RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
F. INSTALL 4 IN. SCHEDULE 80, RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).
G. INSTALL 4 IN. SCHEDULE 80, RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
H. INSTALL HANDHOLE.
J. INSTALL 1 IN. GALVANIZED ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
K. INSTALL 6 FT. X 30 FT. (3-6-3 WINDING) QUADRUPOLE TYPE LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
L. USE EXISTING HANDHOLE.
M. USE EXISTING CONDUIT.
N. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER AND INSTALL 4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BEND IN CABINET BASE.
O. USE EXISTING STRAIN POLE.
P. USE EXISTING SPAN WIRE.
Q. INSTALL 24 IN. WHITE THERMOPLASTIC PAVEMENT MARKINGS (STOP LINE).
R. INSTALL 12 IN. WHITE THERMOPLASTIC PAVEMENT MARKINGS (CROSSWALK).
S. INSTALL PERMANENT PREFORMED PAVEMENT MARKING ARROW.
T. REMOVE EXISTING PAVEMENT MARKINGS.
U. REMOVE EXISTING PAVEMENT MARKING ARROW.
V. INSTALL MEDIAN OPENING (STANDARD NO. 655.21).
W. INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
X. INSTALL 6 FT. X 6 FT. (4-TURNS) LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
Y. ABANDON EXISTING LOOP DETECTOR.

PROPOSED SIGNALS

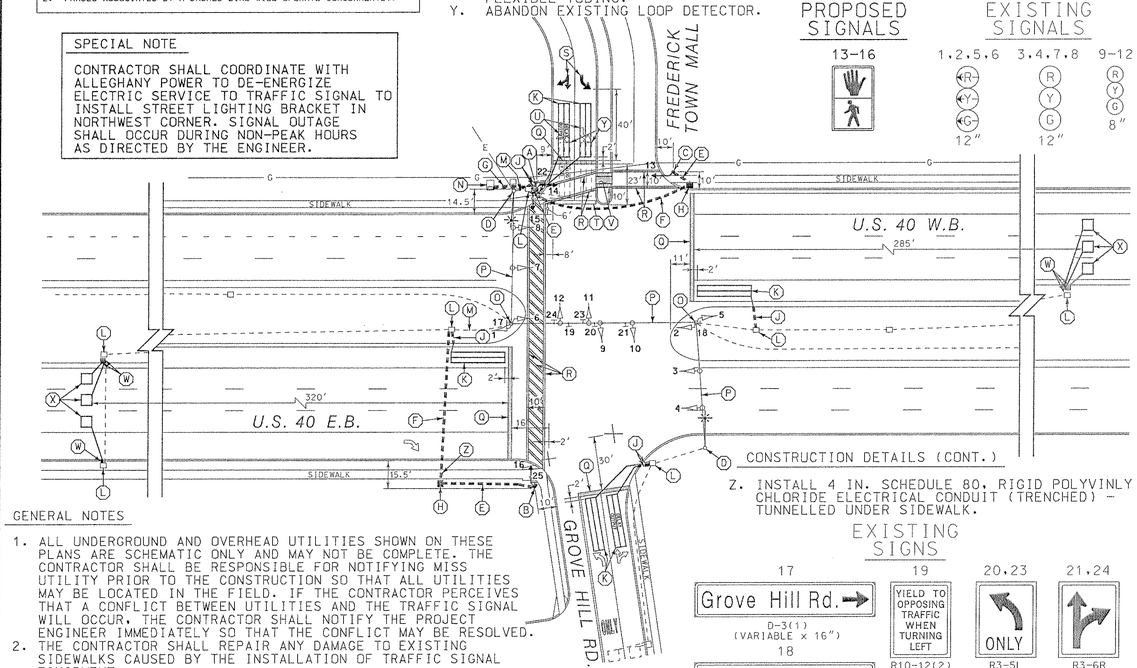
13-16

EXISTING SIGNALS

1,2,5,6 — 12"

3,4,7,8 — 12"

9-12 — 8"



GENERAL NOTES

1. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
2. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF TRAFFIC SIGNAL EQUIPMENT.
3. INSTALL LOOP DETECTORS AND CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.

CONSTRUCTION DETAILS (CONT.)

Z. INSTALL 4 IN. SCHEDULE 80, RIGID POLYVINLY CHLORIDE ELECTRICAL CONDUIT (TRENCHED) - TUNNELLED UNDER SIDEWALK.

EXISTING SIGNS

17 — D-3(1) (VARIABLE x 16")

Grove Hill Rd.

18 — D-3(1) (VARIABLE x 16")

Grove Hill Rd.

19 — R10-12(2) (30" X 36")

YIELD TO OPPOSING TRAFFIC WHEN TURNING LEFT

20,23 — R3-5L (30" X 36")

21,24 — R3-6R (30" X 36")

REVISIONS	APPROVALS
	ASST. TRAFFIC ENGINEERING DESIGN DIVISION
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION 9/9/99
	DIRECTOR, TRAFFIC & SAFETY 9/9/99

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Baltimore, Maryland 21218
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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNALIZATION PLAN
U.S. 40 FROM WAVERLY DRIVE TO THE EAST OF U.S. 15

DRAWN BY:	S.BLOSS	F.A.P. NO.		TS NO. TS-3937X2	SHEET NO.
CHECKED BY:	N.LEARY	S.H.A. NO.	FR3315171		
SCALE:	NONE	COUNTY:	FREDERICK	T.I.M.S. NO. T459	4 OF 7
DATE:	9-10-99	LOG MILE:			

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