F H WA REGION NO	STATE	FED. AID PROJ. NO	SHEET NO.	TOTAL SHEETS
3	MD.			

WIRING DIAGRAM

WIRING KEY

A, B } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

C - CONTROL CABLE UP TO 250'

✱ - USE EXISTING CABLE

EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING

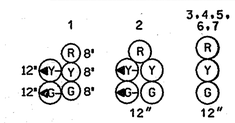
EXISTING SIGN

8,9

Timonium Rd

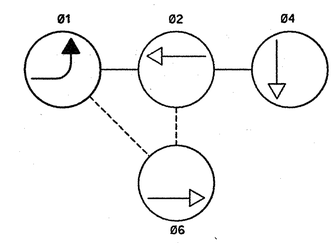
D3-2
VARIABLE X 16"

PROPOSED LED SIGNALS

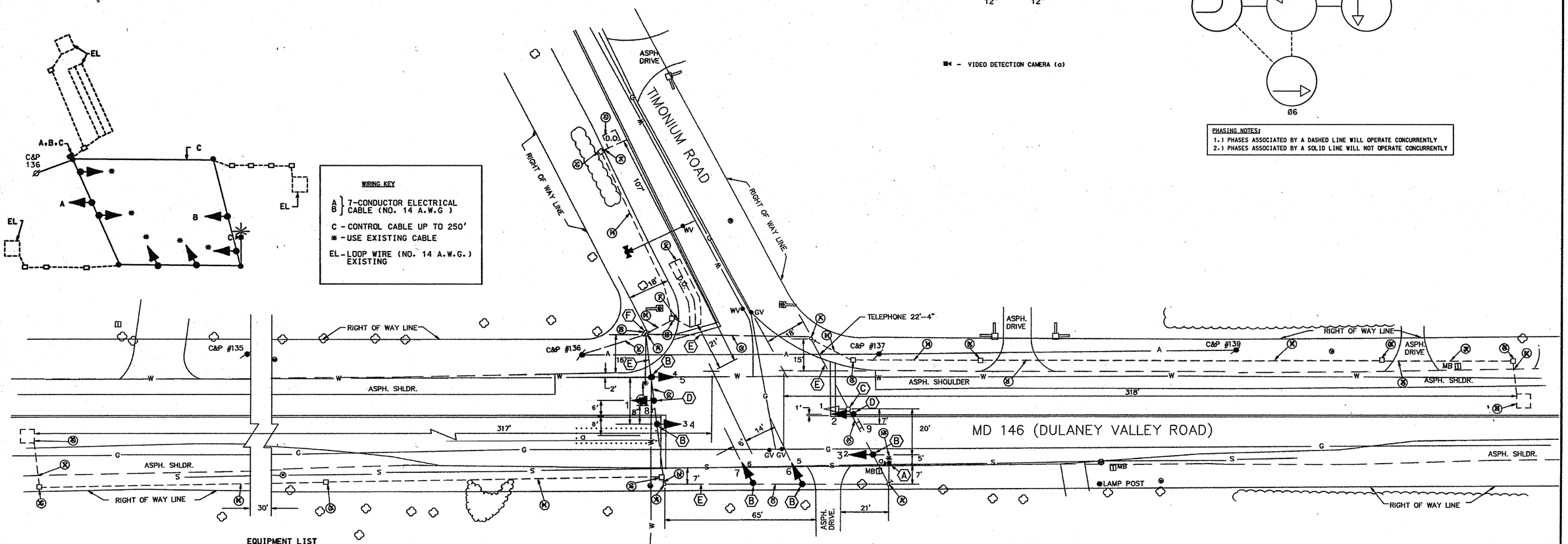


◄ - VIDEO DETECTION CAMERA (a)

NEMA PHASING



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



EQUIPMENT LIST

EQUIPMENT TO BE FURNISHED AND INSTALLED BY SHA FORCES

DESCRIPTION	QUANTITY
Video detection interface equipment: 1-4 cameras	1 EA
Detector rack power supply	1 EA
Detector rack retrofit.	1 EA
Detector amplifier 4-chanhel rack mount	1 EA
Video detection camera	1 EA
Electrical cable - 7 conductor (No. 14 AWG).	210 LF
12" LED signal head section.	22 EA
8" LED signal head section.	3 EA
Control Cable up to 250'.	1 EA
Remove and dispose of existing material and equipment per assignment.	1 EA
Hardware for span mount 12", 5 section signal head.	1 EA
Hardware for span mount combination 8"/12", 5 section signal head.	1 EA
Hardware for span mount 12", 3 section signal head.	5 EA
Labor to install above items (8 hour project).	1 EA

CONSTRUCTION DETAILS

A. Install video detection camera onto lighting arm as shown.

B. Remove existing signal head and install LED signal head in same location.

C. Remove existing signal head.

D. Install LED signal head as shown.

E. Use existing span wire.

F. Use existing cabinet and controller. (Note: SHA Forces shall retro fit cabinet with 4 channel rack, rack power supply, 4 channel amplifier and video interface. Existing 2 channel amplifier shall be removed).

GENERAL NOTES

1.) ALL PAVEMENT MARKINGS SHOWN ARE PROPOSED AND UNLESS OTHERWISE NOTED ARE TO BE INSTALLED BY OTHERS, IN ACCORDANCE WITH SHA STANDARDS.

2.) "D.O." INDICATES DELAY OUTPUT LOOP DETECTOR.

3.) SEPERATE DISCONNECT SWITCHES ARE REQUIRED FOR STREET LIGHTING AND SIGNALS.

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—

REVISION "A"

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy. NW.
Glen Burnie, MD 21061
Ph (410) 590-5500
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5540.dgn

REVISIONS	APPROVALS
	CHIEF, SIGNAL DESIGN SECTION
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHIEF, BUREAU OF TRAFFIC ENGINEERING
A 3/25/08 INSTALL EXCL/PERM NBLT PHASE. LED SIGNALS & VID. CAMERA JWA	DEPUTY CHIEF ENGINEER, OFFICE OF TRAFFIC

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION – OFFICE OF TRAFFIC
BUREAU OF TRAFFIC ENGINEERING

DRAWN BY C.L.D. OF G.P.I.
DES. BY: P.A.H. OF G.P.I.
CHK. BY: 6-15-87

MD. 146 (DULANEY VALLEY ROAD) & TIMONIUM ROAD

COUNTY: BALTIMORE

DATE: 6-7-87
SCALE: NONE
F.A.P. NO.
S.H.A. NO. B 862-459-485

TS/FILE NO. 2294 A

SHEET NO. 1 OF 1

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