MD 41 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

## EXISTING SIGNS

27 ← Hillsway AVE

30 Hillsway AVE →
D-3(1) (DUAL FACED) (VARIABLE x 16")

28 McClean BLVD →

29 ← McClean BLVD
D-3(1) (DUAL FACED) (VARIABLE x 16")

31–34 Perring Pkwy
D-3(1) (DUAL FACED) (VARIABLE x 16")

35 SOUTH MARYLAND 41 →
ASSOCIATED SHIELD ASSEMBLY (24" X 51")

36 NORTH MARYLAND 41 ←
ASSOCIATED SHIELD ASSEMBLY (36" X 75")

37 NORTH MARYLAND 41 →
ASSOCIATED SHIELD ASSEMBLY (24" X 51")

38 SOUTH MARYLAND 41 ←
ASSOCIATED SHIELD ASSEMBLY (36" X 75")

39 W3-3 (48" x 48")

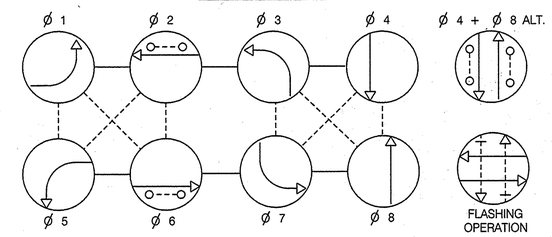
## PROPOSED L.E.D. SIGNALS

1,2: Y 12"
13,16: R Y G 12"x8"
14,17: R Y G 12"
3,4,8,9: R Y G 12"
5–7,10–12,15,18: R Y G 12"
19–26: 16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD

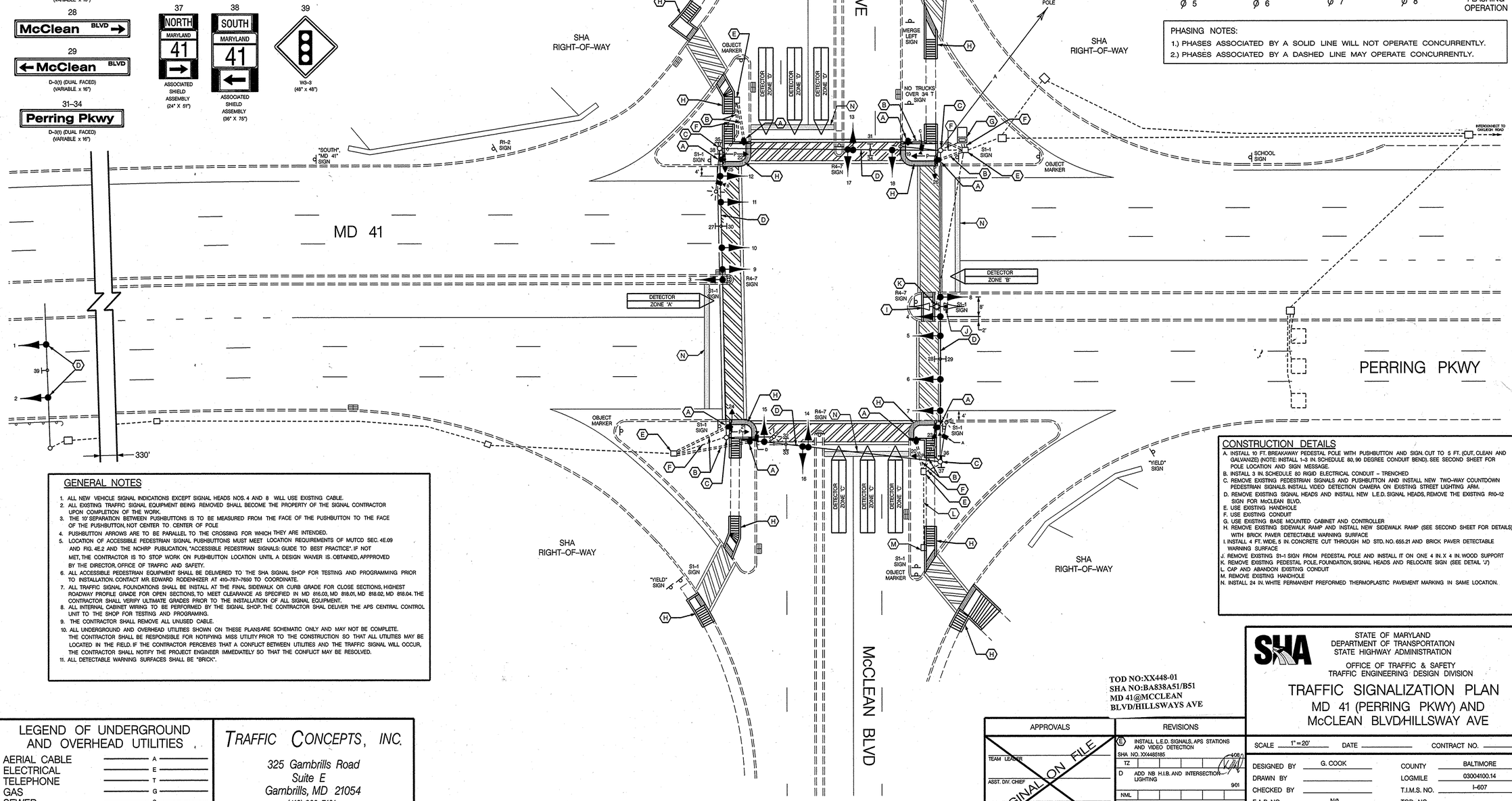
## PROPOSED VIDEO DETECTION CAMERA

A–D

## NEMA PHASING




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




## GENERAL NOTES

1. ALL NEW VEHICLE SIGNAL INDICATIONS EXCEPT SIGNAL HEADS NOS. 4 AND 8 WILL USE EXISTING CABLE.
2. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT BEING REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE WORK.
3. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM THE FACE OF THE PUSHBUTTON TO THE FACE OF THE PUSHBUTTON, NOT CENTER TO CENTER OF POLE
4. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
5. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATION UNTIL A DESIGN WAIVER IS OBTAINED, APPPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
6. ALL ACCESSIBLE PEDESTRIAN EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7650 TO COORDINATE.
7. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALL AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSE SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCE AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
8. ALL INTERNAL CABINET WIRING TO BE PERFORMED BY THE SIGNAL SHOP. THE CONTRACTOR SHAL DELIVER THE APS CENTRAL CONTROL UNIT TO THE SHOP FOR TESTING AND PROGRAMING.
9. THE CONTRACTOR SHALL REMOVE ALL UNUSED CABLE.
10. 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.
11. ALL DETECTABLE WARNING SURFACES SHALL BE "BRICK".

## CONSTRUCTION DETAILS

A. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PUSHBUTTON AND SIGN. CUT TO 5 FT. (CUT, CLEAN AND GALVANIZE) (NOTE: INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BEND). SEE SECOND SHEET FOR POLE LOCATION AND SIGN MESSAGE.
B. INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL CONDUIT – TRENCHED
C. REMOVE EXISTING PEDESTRIAN SIGNALS AND PUSHBUTTON AND INSTALL NEW TWO-WAY COUNTDOWN PEDESTRIAN SIGNALS. INSTALL VIDEO DETECTION CAMERA ON EXISTING STREET LIGHTING ARM.
D. REMOVE EXISTING SIGNAL HEADS AND INSTALL NEW L.E.D. SIGNAL HEADS, REMOVE THE EXISTING R10-12 SIGN FOR McCLEAN BLVD.
E. USE EXISTING HANDHOLE
F. USE EXISTING CONDUIT
G. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER
H. REMOVE EXISTING SIDEWALK RAMP AND INSTALL NEW SIDEWALK RAMP (SEE SECOND SHEET FOR DETAILS) WITH BRICK PAVER DETECTABLE WARNING SURFACE
I. INSTALL 4 FT. WIDE, 5 IN. CONCRETE CUT THROUGH MD STD: NO. 655.21 AND BRICK PAVER DETECTABLE WARNING SURFACE
J. REMOVE EXISTING S1-1 SIGN FROM PEDESTAL POLE AND INSTALL IT ON ONE 4 IN.X 4 IN.WOOD SUPPORT
K. REMOVE EXISTING PEDESTAL POLE, FOUNDATION, SIGNAL HEADS AND RELOCATE SIGN (SEE DETAIL 'J')
L. CAP AND ABANDON EXISTING CONDUIT
M. REMOVE EXISTING HANDHOLE
N. INSTALL 24 IN. WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING IN SAME LOCATION.

## LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

| | |
|---|---|
| AERIAL CABLE | A |
| ELECTRICAL | E |
| TELEPHONE | T |
| GAS | G |
| SEWER | S |
| WATER | W |
| CABLE TV | TV |


TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
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(410) 923-7101
FAX: (410) 923-6473
EMAIL: TRAFFIC@TRAFFIC-CONCEPTS.COM


TOD NO:XX448-01
SHA NO:BA838A51/B51
MD 41@MCCLEAN BLVD/HILLSWAYS AVE

APPROVALS

TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR

ORIGINAL ON FILE

REVISIONS

| | | |
|---|---|---|
| E | INSTALL L.E.D. SIGNALS, APS STATIONS AND VIDEO DETECTION SHA NO. XX4485185 | 408 |
| TZ | | |
| D | ADD NB H.I.B. AND INTERSECTION LIGHTING | 901 |
| NML | | |
| C | REVISED ELECTRICAL SERVICE | 590 |

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

# TRAFFIC SIGNALIZATION PLAN
## MD 41 (PERRING PKWY) AND McCLEAN BLVD/HILLSWAY AVE

SCALE 1" = 20' DATE CONTRACT NO.

| | | | |
|---|---|---|---|
| DESIGNED BY | G. COOK | COUNTY | BALTIMORE |
| DRAWN BY | | LOGMILE | 03004100.14 |
| CHECKED BY | | T.I.M.S. NO. | I-607 |
| F.A.P. NO. | N/A | TOD NO. | |

DRAWING NO. TS-849E SHEET NO. 1 OF 3

FILE PATH: L:\1000\1039\Task 115 – MD 41\DNG\signal\8.dgn
DATE: Wednesday, April 16, 2008 AT 09:57 AM

DRILL HOLES
DRILL HOLES
DRILL HOLES