N

MD 28 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

EXISTING SIGNALS TO REMAIN

1,2,3,4,5,6,7,8,9

R Y G

12"

EXISTING SIGNALS TO BE REMOVED

10a,11a,12a, 13a,14a,15a

12"

PROPOSED LED SIGNALS

10,11,12,13,14,15

16" LED COUNTDOWN PEDESTRIAN SIGNAL

PROPOSED SIGNS

16,27,28, 33,34

S1-1 FYG (30"x30") W16-7pR FYG (24"x12")

17,26,31, 32,38,39

S1-1 FYG (30"x30") W16-7pL FYG (24"x12")

19

OM1-3 (18"x18")

PROPOSED ACCESSIBLE PUSHBUTTON AND SIGN

40 — PUSH BUTTON TO CROSS DARNESTOWN ROAD — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING IF STARTED — TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — DARNESTOWN ROAD IN BRAILLE TYPE 2

41 — PUSH BUTTON TO CROSS DARNESTOWN ROAD — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING IF STARTED — TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — DARNESTOWN ROAD IN BRAILLE TYPE 2

42 — PUSH BUTTON TO CROSS SHOPPING CENTER ENTRANCE — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING IF STARTED — TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — SHOPPING CENTER ENTRANCE IN BRAILLE TYPE 2

43 — PUSH BUTTON TO CROSS SHOPPING CENTER ENTRANCE — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING IF STARTED — TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — SHOPPING CENTER ENTRANCE IN BRAILLE TYPE 2

44 — PUSH BUTTON TO CROSS HIGH SCHOOL ENTRANCE — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING IF STARTED — TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — HIGH SCHOOL ENTRANCE IN BRAILLE TYPE 2

45 — PUSH BUTTON TO CROSS HIGH SCHOOL ENTRANCE — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING IF STARTED — TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — HIGH SCHOOL ENTRANCE IN BRAILLE TYPE 2

R10-3(1) (9"x15") R10-3(1) (9"x15") R10-3(1) (9"x15") R10-3(1) (9"x15") R10-3(1) (9"x15") R10-3(1) (9"x15")

NEMA PHASING

Ø2 Ø4 Ø6 Ø8

Ø4 & Ø8 ALT.

FLASHING OPERATION

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

EXISTING SIGNS TO BE REMOVED

18,25 19a 35

LEFT TURN YIELD ON GREEN

NORTHWEST CORNER NUMBERING DETAIL

(1" =20')

NORTHWEST RAMP DETAIL

(1" =20')

MATCH TO EX. SW — STD. TYPE A CURB AND GUTTER — DETECTABLE WARNING SURFACE MD 655.40 — 3 IN. CURB HEIGHT — DETECTABLE WARNING SURFACE MD 655.40 — MATCH TO EX. SW

SOUTHEAST RAMP DETAIL

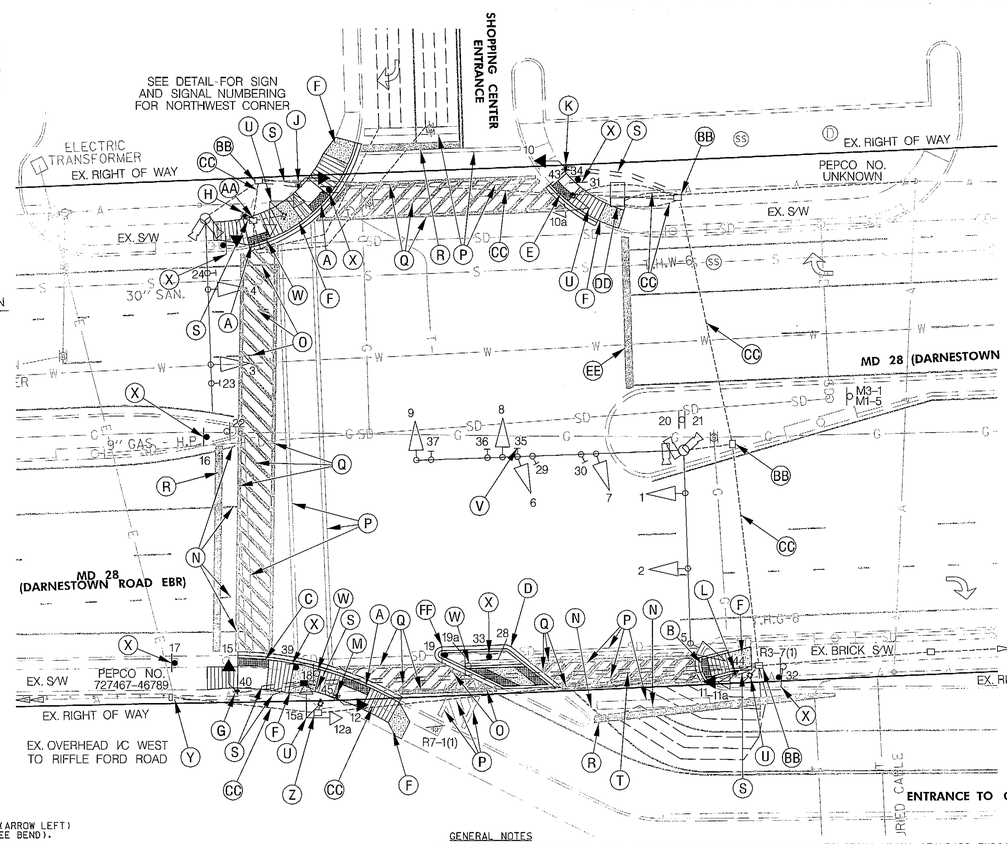
(1" =20')

8 IN. CURB — STD. TYPE A CURB AND GUTTER — MATCH TO EX. BRICK SW — DETECTABLE WARNING SURFACE MD 655.40 — 8 IN. CURB

NORTHEAST RAMP DETAIL

(1" =20')

8 IN. BACKER CURB — STD. TYPE A CURB AND GUTTER — DETECTABLE WARNING SURFACE MD 655.40 — MATCH TO EX. SW



EXISTING SIGNS TO REMAIN

20,22 21,23

24,30,37 29,36

ONLY ONLY

PROPOSED ISLAND DETAIL

(1" =10')

R=2' R=4' 19' 4' 12' 5'

STD. TYPE A CURB — DETECTABLE WARNING SURFACE MD 655.40 — STD. TYPE A CURB AND GUTTER — DETECTABLE WARNING SURFACE MD 655.40 — STD. TYPE A CURB

SOUTHWEST RAMP DETAIL

(1" =20')

STD. TYPE A CURB AND GUTTER — 6 IN. CURB HEIGHT — DETECTABLE WARNING SURFACE MD 655.40 — MATCH TO EX. BRICK S/W — DETECTABLE WARNING SURFACE MD 655.40 — MATCH TO EX. BRICK S/W

TOD NO: XX655-07
SHA NO: MO972B55
MD 28 @ Quince Orchard HS, Potomac
Valley Shopping Ctr, Tschiffely Square

CONSTRUCTION DETAILS

A. REMOVE EXISTING SIDEWALK AND RAMP. CONSTRUCT NEW SIDEWALK AND RAMP PER SHA STD. MD 655.12 WITH DETECTABLE WARNING SURFACE PER SHA STD. MD 655.40. (SEE DETAIL THIS SHEET)
B. REMOVE EXISTING BRICK SIDEWALK AND RAMP. CONSTRUCT NEW SIDEWALK AND RAMP PER SHA STD. MD 655.11 MODIFIED WITH TYPE A CURB IN LIEU OF SIDE FLARES AS SHOWN AND DETECTABLE WARNING SURFACE PER SHA STD. MD 655.40. (SEE DETAIL THIS SHEET)
C. REMOVE EXISTING SIDEWALK AND RAMP. CONSTRUCT NEW SIDEWALK AND RAMP PER SHA STD. MD 655.12 MODIFIED DUE TO THE EXISTING DRAINAGE STRUCTURE WITH DETECTABLE WARNING SURFACE PER SHA STD. MD 655.40. (SEE DETAIL THIS SHEET)
D. RECONSTRUCT ISLAND WITH CUT-THROUGH AND DETECTABLE WARNING SURFACE PER MD STD. 655.40. (SEE DETAIL THIS SHEET)
E. REMOVE EXISTING SIDEWALK AND RAMP. CONSTRUCT NEW SIDEWALK AND RAMP PER SHA STD. MD 655.12 MODIFIED WITH TYPE A CURB IN LIEU OF SIDE FLARES AS SHOWN AND DETECTABLE WARNING SURFACE PER SHA STD. MD 655.40. (SEE DETAIL THIS SHEET)
F. CONSTRUCT 5 IN. CONCRETE SIDEWALK.
G. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION PER SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PEDESTRIAN PUSHBUTTON (ARROW RIGHT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS DARNESTOWN ROAD" (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
H. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION PER SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PEDESTRIAN PUSHBUTTON (ARROW LEFT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS DARNESTOWN ROAD" (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
J. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION PER SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PEDESTRIAN PUSHBUTTON (ARROW RIGHT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS SHOPPING CENTER ENTRANCE" (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
K. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION PER SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PEDESTRIAN PUSHBUTTON (ARROW LEFT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS SHOPPING CENTER ENTRANCE" (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
L. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION PER SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PEDESTRIAN PUSHBUTTON (ARROW RIGHT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS HIGH SCHOOL ENTRANCE" (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
M. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION PER SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PEDESTRIAN PUSHBUTTON (ARROW LEFT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS HIGH SCHOOL ENTRANCE" (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
N. REMOVE EXISTING PAVEMENT MARKINGS THAT EXTEND BEYOND PROPOSED STOPLINE.
O. REMOVE EXISTING PAVEMENT MARKINGS THAT EXTEND BEYOND PROPOSED CROSSWALK.
P. REMOVE EXISTING PAVEMENT MARKINGS.
Q. INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE FOR CROSSWALK.
R. INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE FOR STOPLINE.
S. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED).
T. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT (BORED).
U. REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
V. REMOVE EXISTING OVERHEAD SIGN.
W. REMOVE EXISTING GROUND MOUNTED SIGN AND SUPPORT.
X. INSTALL GROUND MOUNTED SIGNS ON ONE 4 IN. X 6 IN. WOOD POST.
Y. INTERCEPT EXISTING RISER. PULL AND REROUTE EXISTING INTERCONNECT. (SEE WIRING DIAGRAM FOR DETAILS).
Z. USE EXISTING HANDHOLE TO PULL BACK EXISTING INTERCONNECT THEN REMOVE EXISTING HANDHOLE AND BACKFILL. CAP AND ABANDON EXISTING CONDUIT.
AA. ADJUST EXISTING HANDHOLE TO GRADE.
BB. USE EXISTING HANDHOLE.
CC. USE EXISTING CONDUIT.
DD. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER.
EE. REMOVE EXISTING STOPLINE AND INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE.
FF. INSTALL GROUND MOUNTED SIGN ON ONE 4 IN. X 4 IN. WOOD POST.

GENERAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSHA STANDARD TYPICALS FOR TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES 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.
4. THE CONTRACTOR SHALL INTEGRATE PROPOSED CONCRETE FOUNDATIONS WITH NEW SIDEWALK RAMPS WHERE NECESSARY. THE FOUNDATIONS SHALL BE FLUSH WITH AND PART OF THE FINAL CURB OR SIDEWALK GRADE TO INCREASE ACCESSIBILITY FOR PEDESTRIANS.
5. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATION.
6. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE LOCATION(S) PRIOR TO INSTALLATION.
7. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSHA STANDARDS.
8. 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 LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
9. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18 IN.
10. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60 IN. x 60 IN. LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
11. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSWALK FOR WHICH THEY ARE INTENDED.
12. ALL TRAFFIC SIGNAL MODIFICATIONS SHALL BE CONSTRUCTED PRIOR TO SIDEWALK INSTALLATION.
13. THE CONTRACTOR SHALL REMOVE AND REPLACE CONCRETE SIDEWALK AT THE NEAREST JOINT.
14. THE CONTRACTOR SHALL REFER TO FIGURE 3B-17a OF THE 2006 MARYLAND M.U.T.C.D. FOR CROSSWALK PAVEMENT MARKING DETAIL.
15. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
16. WOOD SUPPORTS INSTALLED IN CONCRETE SHALL BE INSTALLED WITH SLEEVED FOUNDATIONS AS PER STANDARDS MD 812.05-01 AND MD 812.05-02.
17. THE CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD AT 240-777-8761 OF THE MONTGOMERY COUNTY DOT SEVENTY TWO (72) HOURS PRIOR TO BEGINNING CONSTRUCTION.
18. THE DETECTABLE WARNING SURFACES SHALL BE STANDARD YELLOW COLOR.
19. THE CONTRACTOR SHALL CENTER THE PROPOSED CROSSWALKS ON THE NEWLY CONSTRUCTED RAMPS.

STV
STV Incorporated
7125 Ambassador Road, Suite 200
Baltimore, MD 21244
www.stvinc.com

BY: youngsd

UTILITY LEGEND

E E	ELECTRIC CABLES	SD SD	STORM DRAIN
A A	AERIAL CABLES	G G	GAS MAIN
T T	TELEPHONE CABLES	W W	WATER MAIN
F F	FIBER-OPTIC	S S	SEWER MAIN

GEOMETRIC LEGEND

EXISTING
PROPOSED

APPROVALS — ORIGINAL ON FILE
TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR

REVISIONS
(B) INSTALL APS, CPS AND ADA RAMPS — SHA NO. XX655185 TIMS #: K542 05/2011 — STV — A5 REDLINE NO. 5 REPLACEMENT SHEET — 10/2001 — M.P.
A3 REDLINE NO. 3 REPLACEMENT SHEET — 07/2001 — M.P.

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 28 (DARNESTOWN ROAD) AT
QUINCE ORCHARD HIGH SCHOOL/SHOPPING CENTER ENTRANCE
GAITHERSBURG, MD

TRAFFIC SIGNALIZATION SHEET

SCALE 1" = 20' ADVERTISED DATE 7/19/1993 CONTRACT NO. BW-580-802-312

DESIGNED BY
DRAWN BY R.R. ZACHERL
CHECKED BY STEVE RENZI
F.A.P. NO.
COUNTY MONTGOMERY
LOGMILE 15002815.57
TIMS NO. D107
TOD NO.

TS NO. 3351B | DRAWING SG-1 OF 6 | SHEET NO. 1 OF 6

PLOTTED: Monday, May 09, 2011 AT 11:03 AM
FILE: I:\PROJECTS\4014255\4014255_0121\Drawings\TRA\Quince Orchard High School\pSG-P000_MD28.dgn