DRILL HOLES

BORDER REV: DATE: June 1, 2004

NOTE: MD 185 IS CONSIDERED TO RUN IN A NORTH-SOUTH DIRECTION.

PROPOSED SIGNS

19,20 Knowles Ave — D-3(1) (DUAL-FACED) VARIABLE X 16"

27,32 Connecticut Ave — D-3(1) (DUAL-FACED) VARIABLE X 16"

28 NORTH MARYLAND 185 — M3-1 24"x 12", M1-5 30"x 24", M6-1 21"x 15" — ASSOCIATED SHIELD ASSEMBLY 30" x 51"

23 NORTH MARYLAND 185 — M3-1 30"x 15", M1-5 48"x 36", M6-1 30"x 24" — ASSOCIATED SHIELD ASSEMBLY 48" x 75"

22 SOUTH MARYLAND 185 — M3-3 24"x 12", M1-5 30"x 24", M6-1 21"x 15" — ASSOCIATED SHIELD ASSEMBLY 30" x 51"

29 SOUTH MARYLAND 185 — M3-3 30"x 15", M1-5 48"x 36", M6-1 30"x 24" — ASSOCIATED SHIELD ASSEMBLY 48" x 75"

R10-3(1) 9" x 15" — PUSH BUTTON TO CROSS CONNECTICUT AVE — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING — IF STARTED TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME IN BRAILLE TYPE 2 — 37 CONNECTICUT AVE

R10-3(1) 9" x 15" — PUSH BUTTON TO CROSS CONNECTICUT AVE — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING — IF STARTED TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME IN BRAILLE TYPE 2 — 38 CONNECTICUT AVE

R10-3(1) 9" x 15" — PUSH BUTTON TO CROSS KNOWLES AVE — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING — IF STARTED TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME IN BRAILLE TYPE 2 — 34,36 KNOWLES AVE

R10-3(1) 9" x 15" — PUSH BUTTON TO CROSS KNOWLES AVE — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING — IF STARTED TIME REMAINING TO FINISH CROSSING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — STREET NAME IN BRAILLE TYPE 2 — 33,35 KNOWLES AVE

24,25,30 — ONLY — R 3-5(L) 30" x 36"

26 — R 3-6(Mod) 36" x 36"

31 — NO TURN ON RED — R10-11A 24" x 30"

PROPOSED SIGNALS

1,2,4,5 — R, Y, G, ◁Y–, ◁G– — 12"

3,6, 9,12 — R, Y, G — 12"

7,8, 10,11 — R, Y, G, ◁G– — 12"

13-18 — LED 16" COUNTDOWN PEDESTRIAN SIGNAL HEAD

EXISTING SIGNALS

– RED LIGHT CAMERA OR FLASH

– VIDEO DETECTION CAMERA, a-d

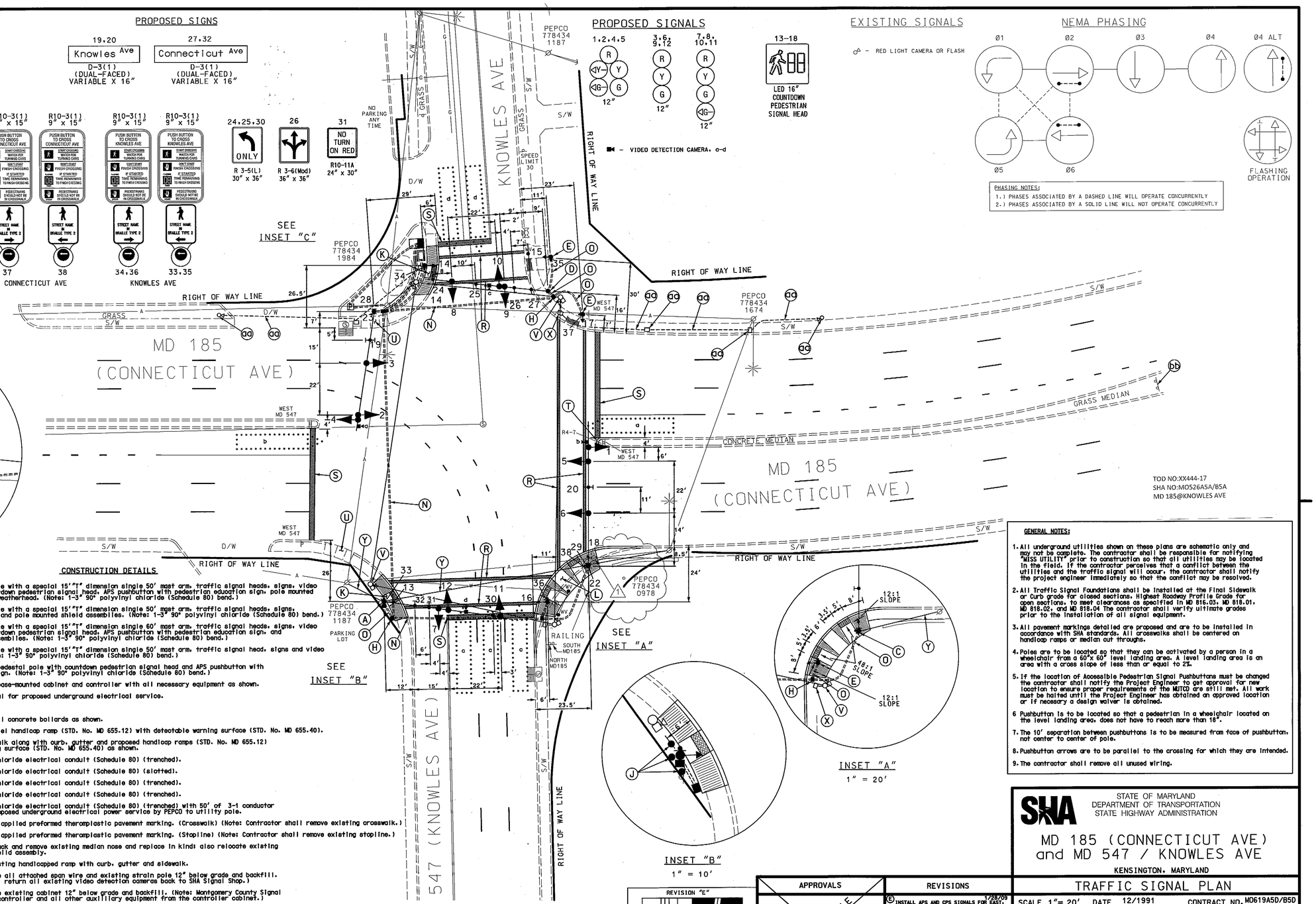
NEMA PHASING

Ø1 Ø2 Ø3 Ø4 Ø4 ALT

Ø5 Ø6

FLASHING OPERATION

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



INSET "C"
1" = 20'

INSET "A"
1" = 20'

INSET "B"
1" = 10'

CONSTRUCTION DETAILS

A. Install 16.5' steel pole with a special 15'"T" dimension single 50' mast arm, traffic signal heads, signs, video detection camera, countdown pedestrian signal head, APS pushbutton with pedestrian education sign, pole mounted splice cabinet and 4" weatherhead. (Note: 1-3" 90° polyvinyl chloride (Schedule 80) bend.)

B. Install 16.5' steel pole with a special 15'"T" dimension single 50' mast arm, traffic signal heads, signs, video detection camera and pole mounted shield assemblies. (Note: 1-3" 90° polyvinyl chloride (Schedule 80) bend.)

C. Install 16.5' steel pole with a special 15'"T" dimension single 60' mast arm, traffic signal heads, signs, video detection camera, countdown pedestrian signal head, APS pushbutton with pedestrian education sign, and pole mounted shield assemblies. (Note: 1-3" 90° polyvinyl chloride (Schedule 80) bend.)

D. Install 16.5' steel pole with a special 15'"T" dimension single 50' mast arm, traffic signal head, signs and video detection camera. (Note: 1-3" 90° polyvinyl chloride (Schedule 80) bend.)

E. Install 10' breakaway pedestal pole with countdown pedestrian signal head and APS pushbutton with pedestrian education sign. (Note: 1-3" 90° polyvinyl chloride (Schedule 80) bend.)

F. Install NEMA size "6" base-mounted cabinet and controller with all necessary equipment as shown.

G. Install metered pedestal for proposed underground electrical service.

H. Install handhole.

J. Contractor shall install concrete bollards as shown.

K. Install proposed parallel handicap ramp (STD. No. MD 655.12) with detectable warning surface (STD. No. MD 655.40).

L. Install proposed sidewalk along with curb, gutter and proposed handicap ramps (STD. No. MD 655.12) with detectable warning surface (STD. No. MD 655.40) as shown.

M. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (trenched).

N. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (slotted).

O. Install 3" polyvinyl chloride electrical conduit (Schedule 80) (trenched).

P. Install 2" polyvinyl chloride electrical conduit (Schedule 80) (trenched).

Q. Install 3" polyvinyl chloride electrical conduit (Schedule 80) (trenched) with 50' of 3-1 conductor (No. 250 KCMIL) for proposed underground electrical power service by PEPCO to utility pole.

R. Install 12" white heat applied preformed thermoplastic pavement marking. (Crosswalk) (Note: Contractor shall remove existing crosswalk.)

S. Install 24" white heat applied preformed thermoplastic pavement marking. (Stopline) (Note: Contractor shall remove existing stopline.)

T. Contractor shall cut back and remove existing median nose and replace in kind; also relocate existing R4-7 and associated shield assembly.

U. Remove and replace existing handicapped ramp with curb, gutter and sidewalk.

V. Contractor shall remove all attached span wire and existing strain pole 12" below grade and backfill. (Note: Contractor shall return all existing video detection cameras back to SHA Signal Shop.)

W. Contractor shall remove existing cabinet 12" below grade and backfill. (Note: Montgomery County Signal Shop shall remove the controller and all other auxiliary equipment from the controller cabinet.)

X. Remove existing handhole, cap and abandon existing conduit.

Y. Disconnect, pullback and reroute existing overhead interconnect cable to proposed mast arm pole.

Z. PEPCO shall disconnect existing overhead service.

aa. Contractor shall contact Mike Kinney at (240) 777-8760 for disconnecting and rerouting of red light camera cable to proposed cabnet.

bb. Remove existing ground mounted D3-2 sign with post from median.

GENERAL NOTES:

1. All underground utilities shown on these plans are schematic only and may not be complete. The contractor shall be responsible for notifying "MISS UTILITY" prior to construction so that all utilities may be located in the field. If the contractor perceives that a conflict between the utilities and the traffic signal will occur, the contractor shall notify the project engineer immediately so that the conflict may be resolved.
2. 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, and MD 818.04 The contractor shall verify ultimate grades prior to the installation of all signal equipment.
3. All pavement markings detailed are proposed and are to be installed in accordance with SHA standards. All crosswalks shall be centered on handicap ramps or median cut throughs.
4. Poles are to be located so that they can be activated by a person in a wheelchair from a 60"x 60" level landing area. A level landing area is an area with a cross slope of less than or equal to 2%.
5. If the location of Accessible Pedestrian Signal Pushbuttons must be changed the contractor shall notify the Project Engineer to get approval for new location to ensure proper requirements of the MUTCD are still met. All work must be halted until the Project Engineer has obtained an approved location or if necessary a design waiver is obtained.
6. 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".
7. The 10' separation between pushbuttons is to be measured from face of pushbutton, not center to center of pole.
8. Pushbutton arrows are to be parallel to the crossing for which they are intended.
9. The contractor shall remove all unused wiring.

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 —

OVERHEAD HEIGHTS

18'-0" FIBER
18'-9" INTERCONNECT AND GUY WIRE
20'-2" INTERCONNECT
21'-4" CATV (BACKSIDE OF POLE)
22'-2" GUY WIRE
28'-0" SEC [3@ 6"-8" APART]
34'-0" PRIMARY

REVISION "E"

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy.NW.
Glen Burnie,MD 21061
Ph (410) 590-5500
Fax (410) 590-6637

5044.dgn T-39

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

REVISIONS	
E INSTALL APS AND CPS SIGNALS FOR EAST, WEST AND SOUTH LEGS OF INTERSECTION SHA NO.: XX4445185 JWA	1/28/09
D GEOMETRIC CHANGE, RELOCATED SIGNAL HEADS S.H.A. No.:BW996M82 FDB	07/12/05
C REPLACE LOOP DETECTION WITH VIDEO CAMERAS S.H.A. No.:M07175185 JA	11/01/04

PLOTTED: $DATETIME$
FILE: $FILE$

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 185 (CONNECTICUT AVE) and MD 547 / KNOWLES AVE

KENSINGTON, MARYLAND

TRAFFIC SIGNAL PLAN

SCALE 1"= 20' DATE 12/1991 CONTRACT NO. M0619A5D/B5D

DESIGNED BY
DRAWN BY T.E.J.
CHECKED BY DENNIS DODA
F.A.P. NO. N/A

COUNTY MONTGOMERY
LOGMILE 15018504.24
TIMS NO. 1842
TOD NO.

TS NO. 2665E | DRAWING NO. 1 OF 2 | SHEET NO. OF

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