DRILL HOLES

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BENDER REV: DATE: June 1, 2004

NOTE: MD 190 IS CONSIDERED TO RUN IN AN EAST-WEST DIRECTION.

PROPOSED SIGNS

18b,24a: Royal Dominion <7400 DR | 18a,24b: Royal Dominion 7400> DR
D-3(1) VARIABLE X 16" DUAL-FACED

31a,36b: River <7300 RD | 31b,36a: River 7300> RD
D-3(1) VARIABLE X 16" DUAL-FACED

20,22: S1-1 36"x 36" FY/G; W16-7p(R) 24" x 12" FY/G; GROUND MOUNTED

23,28,40: S1-1 36"x 36" FY/G; W16-7p(L) 24" x 12" FY/G; GROUND MOUNTED

19: R4-7 24" x 30"

37: R3-5 30"x 36"

38: R3-6 30"x 36"

39: R3-5R 30"x 36"

29: M1-5(6) 30" x 48"

30: M1-5(6) 48" x 72"

34: M1-5(6) 30" x 48"

35: M1-5(6) 48" x 72"

R10-3(1) 9" x 15"

43, 44: ROYAL DOMINION DRIVE

41, 42: MD 190 RIVER ROAD

EXISTING SIGNS

21

25

26: OMI-3

27: OM-3(I)

32: DO NOT BLOCK INTERSECTION

33: STOP; ONE WAY

PROPOSED LED SIGNALS

1,2, 4,5 — 12"

3,6,9, 11,13 — 12"

7,8, 10,12 — 12"

14-17: LED 16" COUNTDOWN PEDESTRIAN SIGNAL HEAD

NEMA PHASING

Ø1, Ø2, Ø3, Ø4, Ø3 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

CONSTRUCTION DETAILS

A. Install 27' steel pole with twin 50'-60' mast arms, traffic signal heads, signs, 15' lighting arm with a 250W-HPS luminaire and video detection cameras as shown. (Note: 1-3", 90°polyvinyl chloride (Schedule 80) bend.)

B. Install 27' steel pole with a 70' mast arm, traffic signal heads, signs, 20' lighting arm with a 250W-HPS luminaire and video detection camera as shown. (Note: 1-3", 90°polyvinyl (Schedule 80) bend.)

C. Install 27' steel pole with a 38' mast arm, traffic signal heads, sign and video detection camera as shown. (Note: 1-3", 90°polyvinyl (Schedule 80) bend.)

D. Install 10' breakaway pedestal pole. (with breakaway coupling system, modified foundation STD No. 801.01-01). Countdown pedestrian signal head and audible pushbutton with pedestrian education sign as shown. (Note: 1-2", 90°polyvinyl chloride (Schedule 80) bend.)

E. Install proposed S1-1 and W16-7 signs back to back on proposed 4"x6" wood post.

F. Install NEMA Type "S" base-mounted cabinet and controller with video interface, 2-wire Control Unit, UPS battery backup, Uninteruptable Power Supply, UPS Bypass Switch L.A.U. and L.A.U. Panel and all necessary equipment as shown. (Note: 2-2" and 2-4" 90° polyvinyl chloride (Schedule 80) bends)

G. Install handhole.

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

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

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

L. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (bored).

M. Install proposed sidewalk ramp (Note: See Sheet 2 of 3 "ADA Ramp Detail Plan").

N. Disconnect and pull back existing interconnect cable from existing cabinet east to PEPCO pole 757420-4086. Install 3" polyvinyl chloride riser, 3" bend and 3" weatherhead. Route interconnect cable thru new riser and conduit into proposed base mounted cabinet.

O. Backfill behind existing sidewalk after removal of signal equipment to eliminate the drop off at the back of the sidewalk.

P. Install ground mounted sign on 4" x 6" wood post as shown.

Q. Install 12-pair interconnect cable (self supporting).

R. Remove existing strain pole all attached equipment and foundation 12" below grade. Cap & abandon existing conduit.

S. Remove existing span wire and all attached equipment.

T. Remove existing span wire, tether wire and all attached equipment.

U. Remove existing pedestal pole all attached equipment and foundation. Cap & abandon existing conduit.

V. Use existing pole mounted Montgomery County splice cabinet. Disconnect existing overhead interconnect cable and remove east to cabinet at Royal Dominion. Install new 12-pair interconnect cable using the existing through bolts on wood poles and route east to the proposed base mounted cabinet at Royal Dominion.

W. Remove existing cabinet and controller and foundation. Controller shall be delivered to Montgomery County Signal Shop. See Details "N" and "V" for interconnect instructions.

X. Existing overhead interconnect cable to be removed.

Y. Remove existing handhole. Cap and abandon existing conduit.

Z. Remove existing overhead electrical service and service equipment on strain pole.

aa. Install Meter Service Pedestal.

bb. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (trenched) and 4" bend at pole base with 1 conductor No. 2 AWG/THHN and pull string for power service to base of utility pole for proposed underground electrical service by PEPCO.

cc. Remove existing ground mounted "S1-1", W16-7p and R4-7 signs and post. Install proposed R4-7 sign , angled 15°, on 4"x 4" wood post at same location.

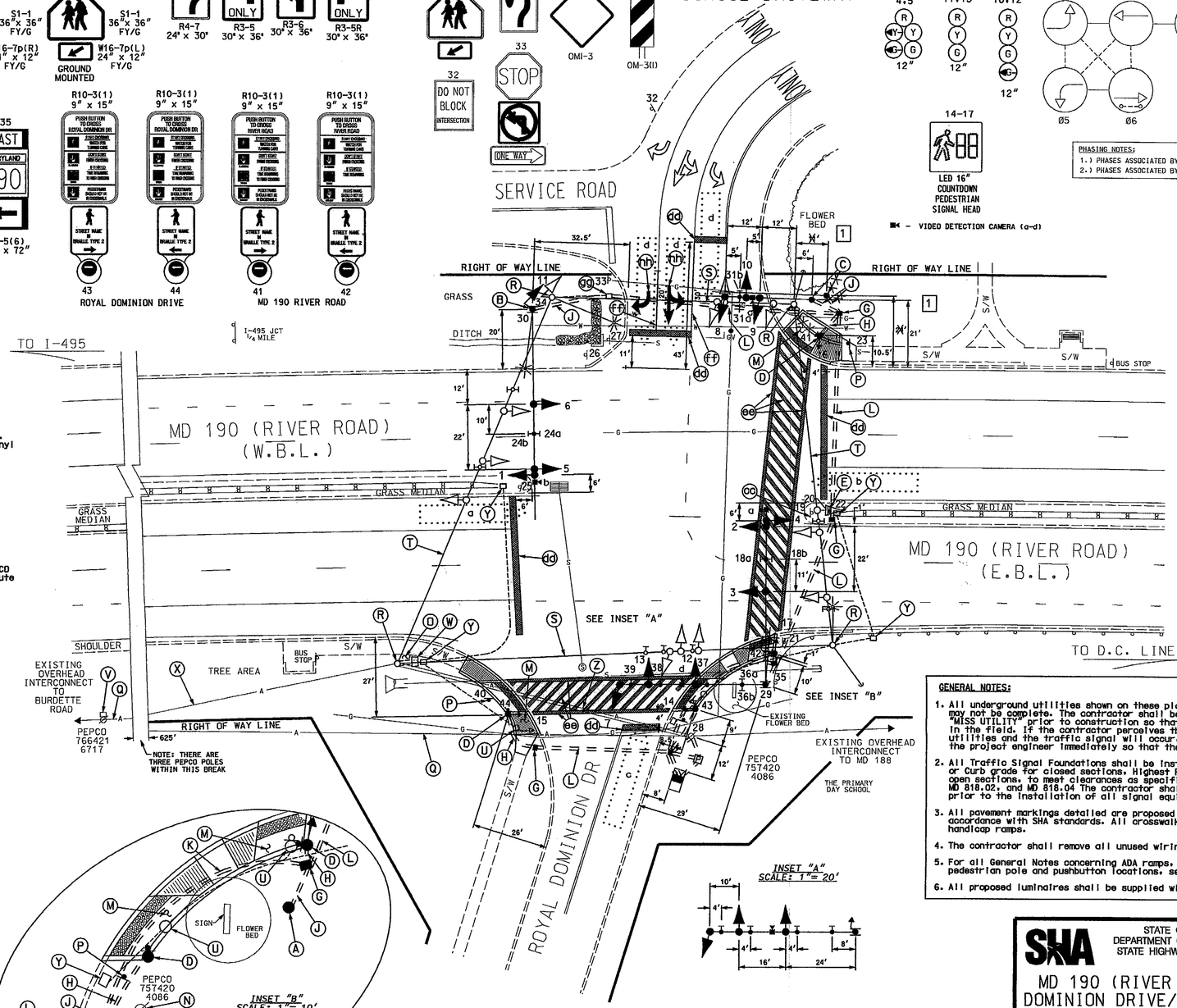
dd. Remove existing stopline and install 24" white, heat applied permanent preformed thermoplastic pavement marking (stopline).

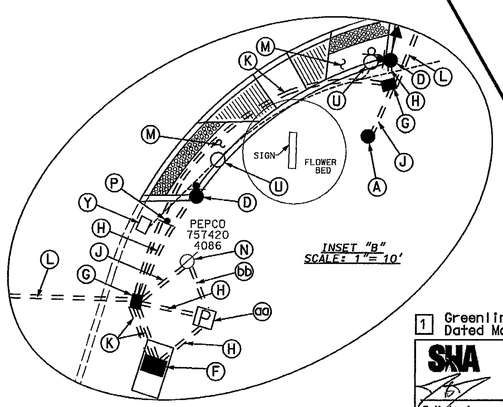
ee. Remove existing crosswalk and install 12" white, heat applied permanent preformed thermoplastic pavement marking (crosswalk).

ff. Install 5" white, heat applied permanent preformed thermoplastic pavement marking (laneline).

gg. Use existing handhole.

hh. Remove existing pavement marking symbol and install proposed in same location.





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.
4. The contractor shall remove all unused wiring.
5. For all General Notes concerning ADA ramps, crosswalk locations and pedestrian pole and pushbutton locations, see Sheet 2 of 3.
6. All proposed luminaires shall be supplied with a photocell.

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 —

1 Greenline Revision Dated March 28, 2012

SHA MDOT - SHA O.O.T.S. 4/3/2012
S.H.A. Approval Date
T.S. # 1773D T.I.M.S. # K536

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

REVISIONS
D 11/23/11 REBUILD SIGNAL W/ MAST ARMS,ADA, APS, CPS & VIDEO DETECTION TIMS# K536 SHA NO.XX3515169 RRZ
C 10/1/82 MODIFY SIGNAL & DETECTOR DUE TO WIDENING TIMS: F386 SHA NO.BW99GM82
B 1-27-93 ADD PED PHASES AND STREET LIGHTING, ASBUILT SHA NO.: RRZ

PLOTTED: @DATETIME@
FILE: $FILE@

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 190 (RIVER ROAD) AND ROYAL DOMINION DRIVE/HOLTON ARMS SCHOOL

BETHESDA, MD

TRAFFIC SIGNAL PLAN

SCALE 1"= 20' DATE 5-14-80 CONTRACT NO. BW-504-801-312

DESIGNED BY
DRAWN BY J.W.G.
CHECKED BY
F.A.P. NO.
COUNTY MONTGOMERY
LOGMILE 15019011.96
TIMS NO.
TOD NO.

TS NO. 1773D | DRAWING NO. 1 OF 3 | SHEET NO. OF

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