MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS
AND TRANSPORTATION
PRIMROSE STREET STORM DRAIN
C.I.P. PROJECT NO. 500001

IT IS THE RESPONSIBILITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF APPROVED SEDIMENT CONTROL PERMIT;					
TYPE OF PERMIT	REQ'D	NOT REQD	PERMIT NO.	EXPIRATION DATE	WORK RESTRICTION DATES
W.R.A. WATERWAY		X			
W.R.A. DAM SAFETY		X			
M.C.D.P.S. FLOODPLAIN DISTRICT	X		208616	2/20/2004	MARCH 1 - JUNE 15
WETLAND(S)		X			
A. CORPS OF ENGINEERS		X			
B. D.N.R.		X			
C. M.D.E. WATER QUALITY CERTIFICATION		X			
OTHER (LIST) JOINT FEDERAL/STATE	X		00-NT-0550/ 200161232	4/09/2004	MARCH 1 - JUNE 15
NPDES N.O.I.		X			

INDEX OF SHEETS

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CERTIFICATION OF THE QUANTITIES

I HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO 520 CUBIC YARDS OF EXCAVATION, 484 CUBIC YARDS OF FILL AND THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE 29322 SQUARE FEET.

Paul F. Clement — 11/26/03
SIGNATURE — DATE

PAUL F. CLEMENT — 15466
PRINTED NAME — REGISTRATION NUMBER

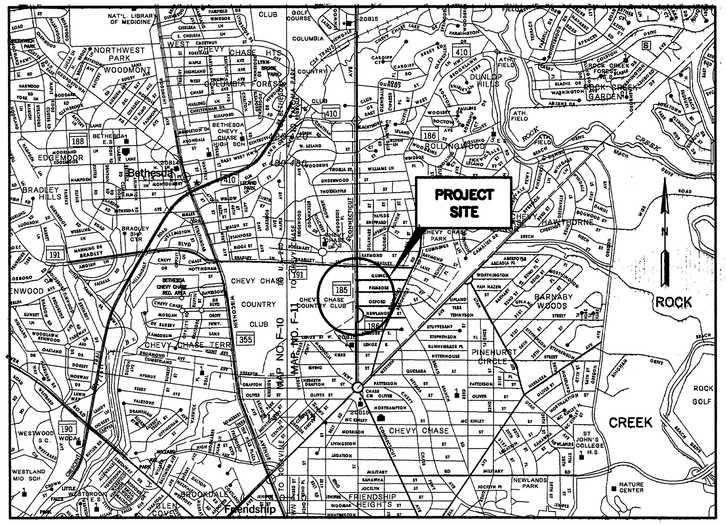
MISS UTILITY

CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

MAINTENANCE CERTIFICATION

I HEREBY CERTIFY THAT THE DEPARTMENT OF TRANSPORTATION WILL ASSUME MAINTENANCE RESPONSIBILITIES FOR ALL STORMWATER MANAGEMENT FACILITIES AS LISTED AND SHOWN, HEREON, IN ACCORDANCE WITH THE "MEMORANDUM OF UNDERSTANDING" BETWEEN THIS DEPARTMENT AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DATED SEPTEMBER 1, 1986. IF, FOR ANY REASON, FUTURE IMPROVEMENT TO THE ROADWAY ARE PLANNED THAT WOULD IMPACT ANY OF THE STORMWATER MANAGEMENT FACILITIES INCLUDED HEREIN, THIS DEPARTMENT WILL NOTIFY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DURING THE PLANNING OR EARLY DESIGN STAGE FOR SUCH IMPROVEMENTS.

Bruce E. Johnston — 5/19/09
CHIEF, DIVISION OF CAPITAL DEVELOPMENT — DATE



VICINITY MAP
SCALE: 1" = 2000'

OWNER'S / DEVELOPER'S CERTIFICATION

I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A M.D.E. APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

Bruce E. Johnston — 5/19/09
SIGNATURE — DATE

BRUCE E. JOHNSTON, CHIEF, DIVISION OF ENGINEERING SERVICES

This set contains the correct pipe inverts.

BENCHMARK INFORMATION:

NOTE:
DESIGN AND DRAWING BASED ON MARYLAND COORDINATE SYSTEM
VERTICAL - NGVD/29
HORIZONTAL - NAD 83/91

WSSC B.M. #61788		BOX CUT NORTHEAST CORNER CONCRETE CURB, SOUTH SIDE QUINCY STREET, 100 FEET EAST ℄ CONNECTICUT AVENUE ELEV. 357.77	
AMT-1	R&C	N 475374.28	E 1290365.23
AMT-2	PK NAIL	N 475785.12	E 1290363.72
AMT-4	R&C	N 476422.34	E 1290361.37
AMT-5	R&C	N 476784.31	E 1290438.45
AMT-6	PK NAIL	N 475731.66	E 1290230.19
AMT-7	PK NAIL	N 476603.05	E 1290308.51

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS OF THE MARYLAND STATE HIGHWAY ADMINISTRATION, MONTGOMERY COUNTY, AND THE WASHINGTON SUBURBAN SANITARY COMMISSION.
2. TYPES OF STORM DRAIN STRUCTURES REFER TO THE "DESIGN STANDARDS" OF MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION, UNLESS OTHERWISE NOTED.
3. WHEN THE DROP ON THE MAIN LINE THROUGH A STORM DRAIN STRUCTURE CAN BE ACCOMMODATED BY AN INVERT SLOPE OF 1.5% OR FLATTER, A ROUNDED CHANNEL LINED WITH SEWER BRICK ON EDGE SHALL BE BUILT TO THE CROWN OF THE PIPES. WHEN THE INVERT SLOPES WOULD BE GREATER THAN 1.5%, A SPECIAL INVERT SHALL BE CONSTRUCTED AS NOTED.
4. ALL STORM DRAIN PIPE SHALL BE INSTALLED WITH CLASS 'C' BEDDING UNLESS OTHERWISE SPECIFIED.
5. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS TO STORM DRAIN STRUCTURES, WHEN NECESSARY, TO MEET EXISTING CONDITIONS, AS APPROVED BY MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION'S PROJECT INSPECTOR.
6. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATIONS AND ELEVATIONS OF THE LINES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SHOWN OR SIX (6) INCHES, WHICHEVER IS LESS, CONTACT MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION'S PROJECT INSPECTOR AND THE APPROPRIATE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION.
7. REPAIRS TO UTILITES OR PROPERTY DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION MUST BE MADE AT THE CONTRACTOR'S EXPENSE BEFORE PROCEEDING WITH CONSTRUCTION.
8. CLEARING IS TO BE LIMITED TO THE "LIMIT OF GRADING" AS SHOWN ON THE PLANS.
9. ALL GRADING SHALL BE DONE IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE.
10. DISTURBED AREAS ADJACENT TO ESTABLISHED LAWNS SHALL BE SODDED. OTHER DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
11. THE CONTRACTOR SHALL OBTAIN A ROADSIDE TREE PERMIT FOR ANY MAINTENANCE, TREATMENT, PLANTING, REMOVAL, OR ROOT CUTTING ON TREES WITHIN THE PUBLIC RIGHT OF WAY. PERMIT REQUIREMENTS MAY BE OBTAINED FROM THE DEPARTMENT OF NATURAL RESOURCES, MARYLAND FOREST, PARK AND WILDLIFE SERVICE, TELEPHONE 301-854-6060
12. CALL "MISS UTILITY" AT 1-800-257-7777 FORTY-EIGHT (48) HOURS PRIOR TO BEGINNING EXCAVATION TO DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES.
13. PEPCO WILL BRACE ALL PEPCO POLES WITHIN THE WORK LIMITS DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT PEPCO AT THE ROCKVILLE SERVICE CENTER AT 301-670-8850 TWO (2) WEEKS PRIOR TO START OF CONSTRUCTION. REFERENCE WORK ORDER #11131509.
14. THE CONTRACTOR SHALL CONTACT WASHINGTON GAS FORTY-EIGHT (48) HOURS PRIOR TO STARTING CONSTRUCTION AT 703-750-4215 REGARDING RELOCATIONS AND MONITORING OF EXISTING FACILITIES.
15. THE CONTRACTOR SHALL CONTACT VERIZON AT 301-595-6151 TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION REGARDING RELOCATIONS OF EXISTING FACILITIES.
16. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AS PER THE MDE PERMIT (CONDITION 8, PAGE 2)

STATE OF MARYLAND — PAUL FRANKLIN CLEMENT — No. 15466 — PROFESSIONAL ENGINEER
11/26/03

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

MONTGOMERY CO. DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT:	SEDIMENT CONTROL TECHNICAL REQUIREMENTS:	ADMINISTRATIVE REQUIREMENTS:
REVIEWED DATE	REVIEWED 5/20/04 DATE	REVIEWED 5/20/04 DATE
APPROVED DATE	APPROVED 5/20/04 DATE	Refer to approval date on following sheets.
SM FILE #		MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT.

CE289-2-1

FILE: m:\PRIM_SU\110\prim.dgn
DATE: 12/01/03

NOTE:
CONTRACTOR SHALL CLEAN OUT AND REPAIR TOP SLAB (BEHIND CURB) FOR EXISTING SHA INLET I-11 - STA. 0+29, 27' LT.

NOTE:
CONTRACTOR SHALL EXTEND EXISTING 12" AND 4" PLASTIC PIPES FROM #6100 CONNECTICUT AVENUE TO PROPOSED HEADWALL HW-21

LIMIT OF 100 YEAR FLOODPLAIN

CL. IRIPRAP
D_{50} = 9.5'
D_{100} = 15'

100-YEAR FLOODPLAIN

10' TEMP. CONSTRUCTION EASEMENT

20' PERPETUAL DRAINAGE EASEMENT

N 475698.8760
E 1290200.1700

HW 21

PROP. 42" RCCP OUTFALL
Q_{10} = 21.12 cfs
V_{10} = 6.4 fps

4' HDPEP

12" HDPEP

#6100 CONNECTICUT AVENUE

10' TEMP. CONSTRUCTION EASEMENT

N 475710.3756
E 1290264.8220

REPLACE EXISTING ROADWAY PAVEMENT DISTURBED BY STORM DRAIN CONSTRUCTION. SEE MONTGOMERY COUNTY STD. DETAIL MC-801.02, SEE SHEET 11

NOSE-DOWN CURB

EX. R/W

MH 18A

NOTE:
NO WORK WILL BE ALLOWED OUTSIDE THE LIMITS OF DISTURBANCE IN THE "DELL NATURE AREA" (CHEVY CHASE COUNTRY CLUB). ALL TREES, SHRUBS AND FLOWERS OUTSIDE THE LIMITS OF DISTURBANCE ARE TO BE PRESERVED.

NOTE:
ALL EXISTING PEPCO POLES WITHIN THE AREA DISTURBED BY STORM DRAIN CONSTRUCTION SHALL BE BRACED BY PEPCO.

MOUNTABLE CONCRETE CURB AND GUTTER TYPE 'F' - 84 L.F. SEE MONTGOMERY COUNTY STD. DETAIL MC 104.01 REPAIR GRASSED AREA BEHIND PROPOSED CURB WITH SOD

"DELL" NATURE AREA

MELANUS STREET

EX. I-11

15' PERPETUAL DRAINAGE EASEMENT

TEMPORARY CONSTRUCTION EASEMENT

42" RCCP

10' TEMP. CONSTRUCTION EASEMENT

EX. R/W

CONNECTICUT AVENUE (MD 185)

PROP. CONC. HANDICAPPED ACCESS RAMP SEE DETAIL (SHEET 11 OF 17)

EX. I-8

MH 17B

EX. I-7

I/5

I/3A

℄ CONSTRUCTION

NOTE:
CONTRACTOR TO EXERCISE CAUTION WHILE EXCAVATING AROUND PEPCO POLE NUMBER 778415-0246, AS THIS POLE SUPPLIES DIRECT BURIED UNDERGROUND SERVICE TO 6403 CONNECTICUT AVENUE STA. 6+90, RT.

NOTE:
REFER TO LANDSCAPE PLAN (SHEET 10 OF 17) FOR LAYOUT OF SIDEWALK CONCRETE PAVERS.

NOTE:
SEE SHEET 9 FOR DETAILS OF RIPRAP OUTFALL AT HW-21.

PROPOSED CONC. HANDICAPPED ACCESS RAMP - SEE DETAIL (SHEET 11 OF 17)

N 476538.6900
E 1290397.6713

Baseline based on Coordinates shown (N476538.6900, E1290397.6713)

Baseline based on Coordinate of line and point (N476539.6900, E1290399.6713)

COMBINATION CONCRETE CURB AND GUTTER TYPE A 60 L.F. SEE MONTGOMERY COUNTY STD. DETAIL MC 100-01.

MH 3

N 476538.6896
E 1290399.7710

12" WV

PAVEMENT REPAIR 5 FT. WIDTH 84 L.F. SEE MONTGOMERY COUNTY STD. DETAIL MC-210.01

MH 18

MH 18B

TEMPORARY CONSTRUCTION EASEMENT

NEWLANDS STREET

MH 17

MH 17A

REPLACE EXISTING ROADWAY PAVEMENT DISTURBED BY STORM DRAIN CONSTRUCTION SEE MONTGOMERY COUNTY STD. DETAIL MC 801.02, SEE SHEET 11

REPLACE EXISTING ROADWAY PAVEMENT DISTURBED BY STORM DRAIN CONSTRUCTION SEE MONTGOMERY COUNTY STD. DETAIL MC 801.02, SEE SHEET 11

OXFORD STREET

PRIMROSE STREET

NOTE:
CONSTRUCT MSHA TYPE 'A' CURB ON EITHER SIDE (NORTH AND SOUTH) OF INLETS I-3A, I-5 AND I-11 TO NEXT EXISTING JOINT (5 LINEAR FEET MINIMUM).

REMOVE TOTAL OF 24 L.F. OF EXISTING TWIN 21" TERRA COTTA PIPE (12 L.F. OF EACH PIPE) ~~AND REPLACE WITH PROPOSED 21" HDPEP~~. REMOVE EXISTING HEADWALL ~~AND REPLACE WITH 2 HDPE ELBOWS~~ (SEE ENLARGEMENT, SHEET 9 OF 17).

NOTE:
REFER TO SHEETS 4 & 9 OF 17 FOR EXACT LIMITS OF JACKED 42" PIPE BETWEEN PROPOSED MANHOLES MH-18 & MH-18A

NOTE:
CONTRACTOR SHALL TIE INTO EXISTING INLET I-8 AT EXISTING INVERT ELEVATION.

• HIGH DENSITY POLYETHYLENE PIPE, USE TYPE 'S' SPLIT COUPLINGS (WITH TEE CONNECTIONS AS SHOWN ON STORM DRAIN PROFILE - SHEET 4 OF 17)

GRAPHIC SCALE
30 0 15 30 60 120
SCALE: 1" = 30'

DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NO.	TYPE	STATION UP STATION••	OFFSET UP STATION••	BC U/S•• UP STATION••	STATION DOWN STATION	OFFSET DOWN STATION	BC DOWN STATION	INVERT ELEV.	STANDARD REFERENCE
I-2	STANDARD 'WR' INLET	8+76	103.3' RT.	350.00•	8+76	96.3' RT.	349.96•	340.41	SHA MD-374.04
MH-3	STANDARD 48" DIAMETER PRECAST MANHOLE	8+77	37.1' RT.	350.63•	N/A	N/A	N/A	339.91	SHA MD-384.01
I-3A	STANDARD PRECAST SQUARE COG INLET (10' OPENING)	7+05	29.7' RT.	347.12	6+94	29.6' RT.	347.29	~~342.94~~	SHA MD-374.51
MH-3B	STANDARD 48" DIAMETER PRECAST MANHOLE	6+97	37.4' RT.	347.20•	N/A	N/A	N/A	~~338.82~~ ~~339.55~~	SHA MD-384.01
I-5	STANDARD PRECAST SHALLOW COG INLET (10' OPENING)	5+68	28.7' RT.	345.47	5+57	29.0' RT.	345.56	340.95	SHA MD-374.66
MH-5A	STANDARD 48" DIAMETER PRECAST MANHOLE	5+60	37.4' RT.	344.82•	N/A	N/A	N/A	335.28	SHA MD-384.01
I-4	STANDARD TYPE 'A' INLET (10' OPENING)	5+41	54.9' RT.	345.10•	5+41	44.9' RT.	344.91•	334.70	MONT. CO. MC-501.01
I-6	STANDARD TYPE 'B' INLET (10' OPENING)	5+15	58.5' RT.	345.20	5+15	48.5' RT.	345.33	334.36	MONT. CO. MC-502.01
EX. I-8	EXIST. COG INLET (5' OPENING) MASONRY	4+36	28.9', RT.	344.25	4+30	28.8', RT.	344.14	340.66	SHA MD-374.51
MH-17	STANDARD 60" DIAMETER PRECAST MANHOLE	4+32	58.0' RT.	341.75•	N/A	N/A	N/A	333.60	SHA MD-384.03
MH-17A	STANDARD 60" DIAMETER PRECAST MANHOLE	4+88	58.0' RT.	345.50•	N/A	N/A	N/A	334.06	SHA MD-384.03
MH-17B	STANDARD 48" DIAMETER PRECAST MANHOLE	4+50	46.0' RT.	344.00•	N/A	N/A	N/A	338.50	SHA MD-384.01
MH-18	STANDARD 72" DIAMETER PRECAST MANHOLE	1+71	58.0' RT.	340.80•	N/A	N/A	N/A	328.30	SHA MD-384.05
MH-18A	STANDARD 72" DIAMETER PRECAST MANHOLE	1+71	134.9' LT.	338.50•	N/A	N/A	N/A	322.51	SHA MD-384.05
MH-18B	'72" STANDARD ~~48"~~ DIAMETER PRECAST MANHOLE	2+~~42~~ 22	63.2' RT.	338.50•	N/A	N/A	N/A	329.12 ~~328.58~~	SHA MD-384.01 ~~05~~
HW-21	STANDARD B-48 HEADWALL •••	1+60	198.6' LT.	N/A	N/A	N/A	N/A	322.20	SHA MD-352.01
ID-1	INLINE DRAIN - 24"	7+46	42.4' RT.	347.60	N/A	N/A	N/A	-	SEE DETAIL SHEET 4 OF 17
ID-2	INLINE DRAIN - 24"	5+66	40.8' RT.	346.00	N/A	N/A	N/A	-	SEE DETAIL SHEET 4 OF 17
TD-1	PRECAST NON-SLOPED TRENCH DRAIN	7+37	41' RT.	347.51	7+25	41' RT.	347.41	-	'POLYCAST' OR APPROVED EQUAL

• TOP OF GRATE ELEVATION FOR WR INLETS, INLINE DRAINS AND TRENCH DRAIN; TOP OF RIM ELEVATION FOR MANHOLES
•• FOR MANHOLES AND INLINE DRAINS, STATION AND OFFSET IS AT CENTER OF STRUCTURE
••• MODIFY OPENING (DIMENSION 'D') FOR 42" DIAMETER PIPE HOLD ALL OTHER DIMENSIONS THE SAME AS 48"

NOTE:
B.C. DENOTES BASE OF CURB

PIPE SCHEDULE

FROM	TO	SIZE (IN.)	TYPE	LENGTH (FT.)
I-2	MH-3	24	RCCP, CLASS IV	59
MH-3	MH-3B	24	HDPEP, TYPE 'S'•	177
I-3A	MH-3B	15	RCCP, CLASS IV	2
MH-3B	MH-5A	24	HDPEP, TYPE 'S'•	132
I-5	MH-5A	15	RCCP, CLASS IV	2
MH-5A	I-4	24	RCCP, CLASS IV	15
I-4	I-6	30	RCCP, CLASS IV	27
I-6	MH-17A	30	RCCP, CLASS IV	19
MH-17A	MH-17	30	RCCP, CLASS IV	51
I-8	MH-17	15	RCCP, CLASS IV	23.5
MH-17B	MH-17	18	RCCP, CLASS IV	13
MH-17	MH-18B	30	RCCP, CLASS IV	215 ~~198~~
MH-18 3	MH-18	30	RCCP, CLASS IV	36.5 ~~56.5~~
MH-18	MH-18A	42	RCCP, CLASS V	188
MH-18A	HW-21	42	RCCP, CLASS V	62
~~STA. 2+15, 58' RT.~~	~~21~~	~~HDPEP, TYPE S•~~	~~24~~	~~△~~
AT HW-21	12	HDPEP, TYPE S•	20	
AT HW-21	4	HDPEP, TYPE S•	20	
AT ID-1	15	HDPEP, TYPE S•	8	
AT ID-2	15	HDPEP, TYPE S•	8	
AT TD-1	6	HDPEP, TYPE S•	10	
EX STR to MH18B	30	RCCP, CLASS IV	12	△

LEGEND

- RCCP — PROPOSED STORM DRAIN
- PROPOSED RIPRAP
- REPLACE EXISTING BRICK SIDEWALK WITH CONCRETE PAVERS
- REPLACE EXISTING PAVEMENT WITH PROPOSED BITUMINOUS PAVEMENT
- PROPOSED CONCRETE HANDICAPPED ACCESS RAMP
- PROPOSED CONCRETE CURB AND GUTTER
- EXISTING STORM DRAIN
- EXISTING STORM DRAIN (TO BE ABANDONED)
- EXISTING SANITARY SEWER
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND ELECTRIC
- EXISTING WATER
- EXISTING GAS
- EXISTING CONTOUR
- 347 — PROPOSED CONTOUR
- LIMITS OF 100-YEAR FLOODPLAIN (FROM PREVIOUS STUDY - W.S. EL. = 324.05)
- LIMITS OF DISTURBANCE
- RIGHT-OF-WAY LINE
- EASEMENT LINE
- PROPERTY LINE

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

NO.	REVISION	DATE	BY
△	INVERT 02/08/05	11/05	JRH
△	Move Inl I-8B & Adjust P-line profiles & structures	5/05	JSM
	Schedule. Add 12" cl 50 RCP to connect ex Str and end Riprap within Easement		

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — Date 2-9-05
APPROVED
Chief, Division of Capital Development — Date 2/9/05

Designed by : ____ Drawn by : ____ Checked by : ____

STORM DRAIN PLAN
PRIMROSE STREET STORM DRAIN

Project No. : 500510 SHEET 2 of 17

CE289-2-2

FILE: m:\PRIM_SU\dr01prfm.dgn
DATE: 2/8/2005

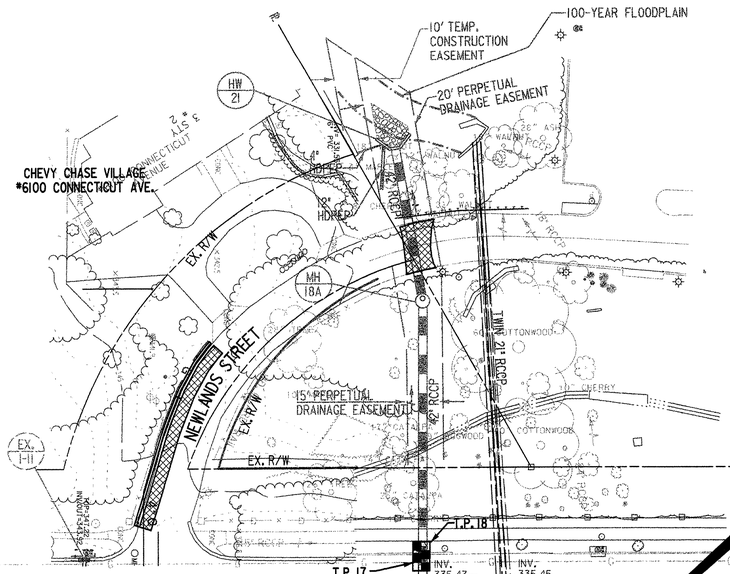
Maryland State Archives

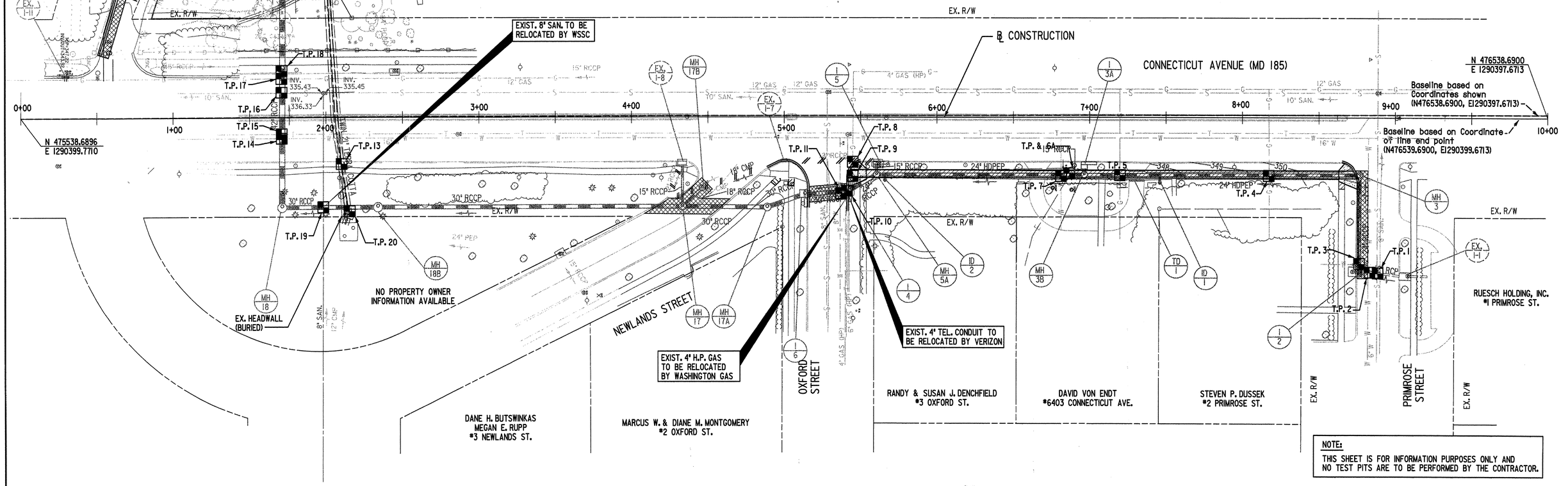
TEST PIT NO.	LOCATION	EXISTING UTILITY	SIZE	EX. GROUND ELEV.	TOP ELEV. OF UTILITY	BOTTOM ELEV. OF UTILITY
T.P 1	STA. 8+88.5, 101' RT.	SANITARY	10"	350.78	343.99	-
T.P. 2	STA. 8+84.0, 100' RT.	WATER	6"	350.11	345.93	-
T.P. 3	STA. 8+76.5, 95' RT.	WATER SERVICE	3/4"	350.24	346.98	-
T.P. 4	STA. 8+17.5, 37' RT.	GAS SERVICE	1"	349.44	346.84	-
T.P. 5	STA. 7+19.5, 37' RT.	GAS SERVICE	1 1/4"	347.39	343.04	-
T.P. 6	STA. 6+90.0, 33' RT.	ELECTRIC	3/4" (3)	347.31	344.97	-
T.P. 6A	STA. 6+87.0, 35' RT.	ELECTRIC	3 1/2"	347.39	346.31	-
T.P. 7	STA. 6+82.0, 38' RT.	WATER SERVICE	3/4"	347.05	343.11	-
T.P. 8	STA. 5+48.0, 27.5' RT.	GAS (H.P.)	4"	345.39	339.05	-
T.P. 9	STA. 5+48.0, 39.5' RT.	GAS (H.P.)	4"	345.83	339.07	-
T.P. 10	STA. 5+41.5, 48' RT.	TELEPHONE	4"	345.67	343.45	-
T.P. 11	STA. 5+36.5' 48' RT.	WATER	8"	345.59	341.07	-
T.P. 13	STA. 2+11.0, 30' RT.	STORM DRAIN	TWIN 21"	346.07	330.91	-
T.P. 14	STA. 1+71.0, 13.5' RT.	WATER	16"	346.19	341.91	-
T.P. 15	STA. 1+71.0, 11' RT.	TELEPHONE	12" WIDE DUCT	346.37	343.29	341.78
T.P. 16	STA. 1+71.0, 16' LT.	SANITARY	10"	346.20	336.80	-
T.P. 17	STA. 1+72.0, 25.5' LT.	GAS	12"	345.86	342.78	-
T.P. 18	STA. 1+71.0, 31' LT.	STORM DRAIN	15"	346.41	339.70	-
T.P. 19	STA. 1+96.5, 57.5' RT.	SANITARY	8"	339.69	336.84	-
T.P. 20	STA. 2+15.5, 61.0' RT.	STORM DRAIN	TWIN 21"	338.25	333.76 (SOUTH PIPE) 333.74 (NORTH PIPE)	-

NOTE: FOR SOIL BORING LOCATIONS SEE SHEET 9 OF 17.

LEGEND

- PROPSED STORM DRAIN (RCCP)
- PROPOSED RIPRAP
- REPLACE EXISTING BRICK SIDEWALK WITH CONCRETE PAVERS
- REPLACE EXISTING PAVEMENT WITH PROPOSED BITUMINOUS PAVEMENT
- PROPOSED CONCRETE HANDICAPPED ACCESS RAMP
- PROPOSED CONCRETE CURB AND GUTTER
- EXISTING STORM DRAIN
- EXISTING STORM DRAIN (TO BE ABANDONED)
- S — EXISTING SANITARY SEWER
- T — EXISTING UNDERGROUND TELEPHONE
- E — EXISTING UNDERGROUND ELECTRIC
- W — EXISTING WATER
- G — EXISTING GAS
- 347 — EXISTING CONTOUR
- 347 — PROPOSED CONTOUR
- LIMITS OF 100-YEAR FLOODPLAIN (FROM PREVIOUS STUDY)
- T.P. TEST PIT





NOTE:
THIS SHEET IS FOR INFORMATION PURPOSES ONLY AND NO TEST PITS ARE TO BE PERFORMED BY THE CONTRACTOR.

GRAPHIC SCALE
30 0 15 30 60 120
SCALE: 1" = 30'

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

02/08/05

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — Date 2-9-05

APPROVED
Chief, Division of Capital Development — Date 2/9/05

Designed by : Drawn by : Checked by :

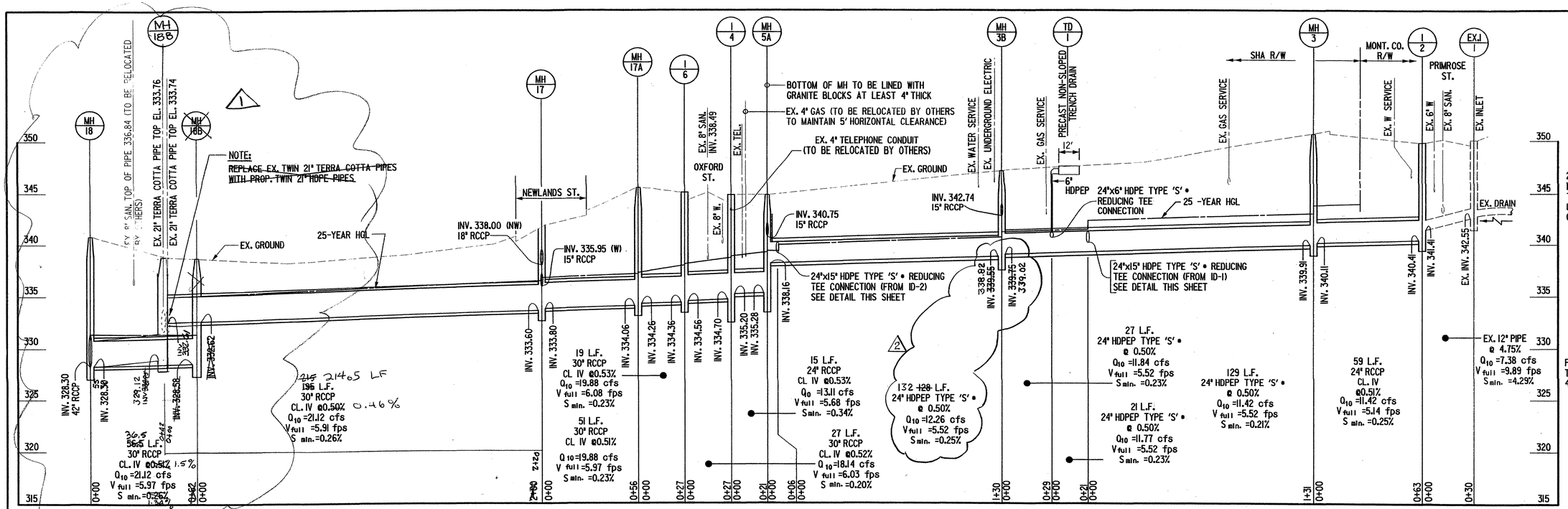
TEST PIT PLAN
PRIMROSE STREET STORM DRAIN

Project No. : 500510 SHEET 3 of 17

CE289-2-3

FILE: m:\PRIM_SU\primcomp.dgn
DATE: 2/7/2005

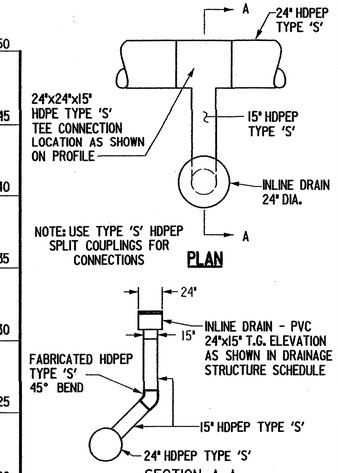
Maryland State Archives



• USE TYPE 'S' HDPEP SPLIT COUPLINGS FOR CONNECTIONS

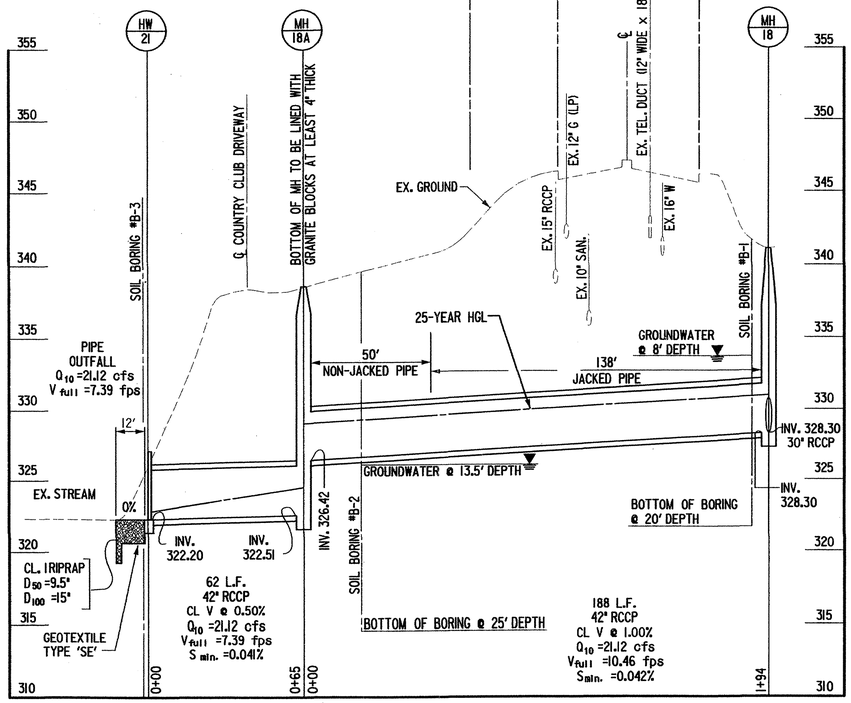
STORM DRAIN PROFILE

SCALE: HORZ. 1" = 30'
VERT. 1" = 5'



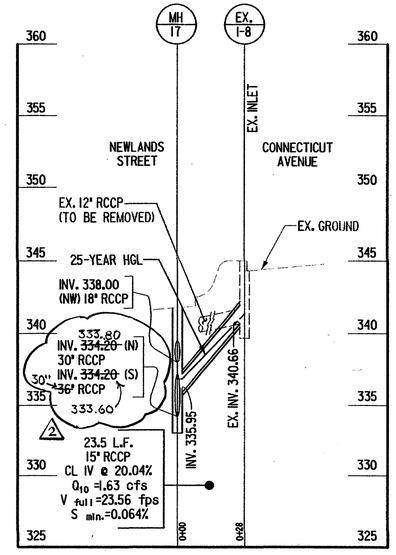
HDPEP "TEE" CONNECTION DETAIL

NOT TO SCALE



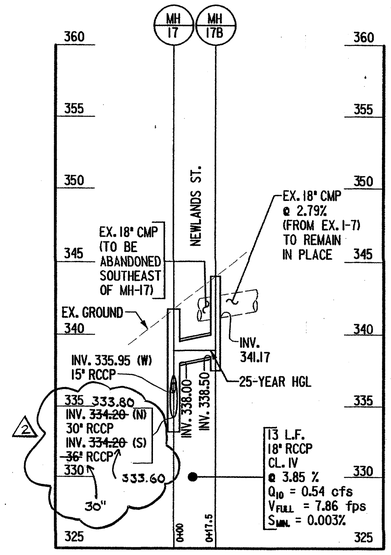
STORM DRAIN PROFILE

SCALE: HORZ. 1" = 30'
VERT. 1" = 5'



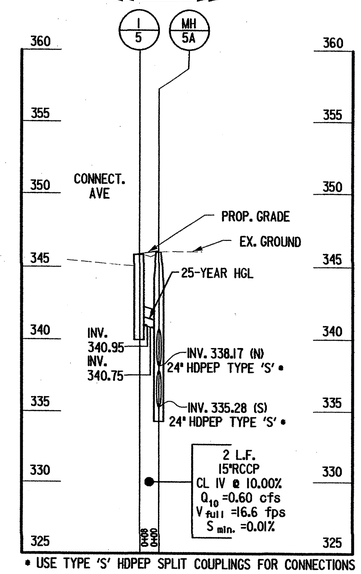
STORM DRAIN PROFILE

SCALE: HORZ. 1" = 30'
VERT. 1" = 5'



STORM DRAIN PROFILE

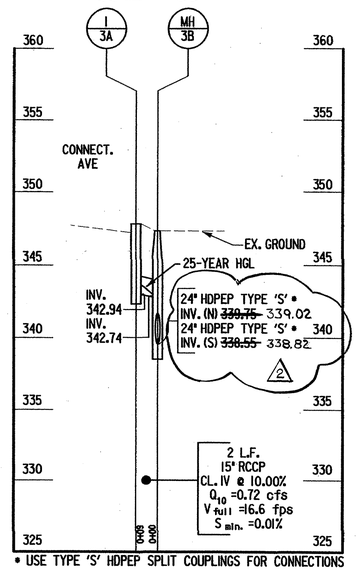
SCALE: HORZ. 1" = 30'
VERT. 1" = 5'



• USE TYPE 'S' HDPEP SPLIT COUPLINGS FOR CONNECTIONS

STORM DRAIN PROFILE

SCALE: HORZ. 1" = 30'
VERT. 1" = 5'



• USE TYPE 'S' HDPEP SPLIT COUPLINGS FOR CONNECTIONS

STORM DRAIN PROFILE

SCALE: HORZ. 1" = 30'
VERT. 1" = 5'

GRAPHIC SCALE
30 0 15 30 60 120
HORIZ. 1" = 30'
VERT. 1" = 5'

02108105

NOTE:
SEE TITLE SHEET GENERAL NOTES WITH REGARD TO GAS LINE AND TELEPHONE LINE RELOCATIONS.

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

NO.	REVISION	DATE	BY
1	Revised Pipe Profile MH 18 to MH 18B & 18B-17	5/05	JSM
2	INVERTS	11/05	JRH

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — Date 2-9-05
APPROVED
Chief, Division of Capital Development — Date 2/9/05

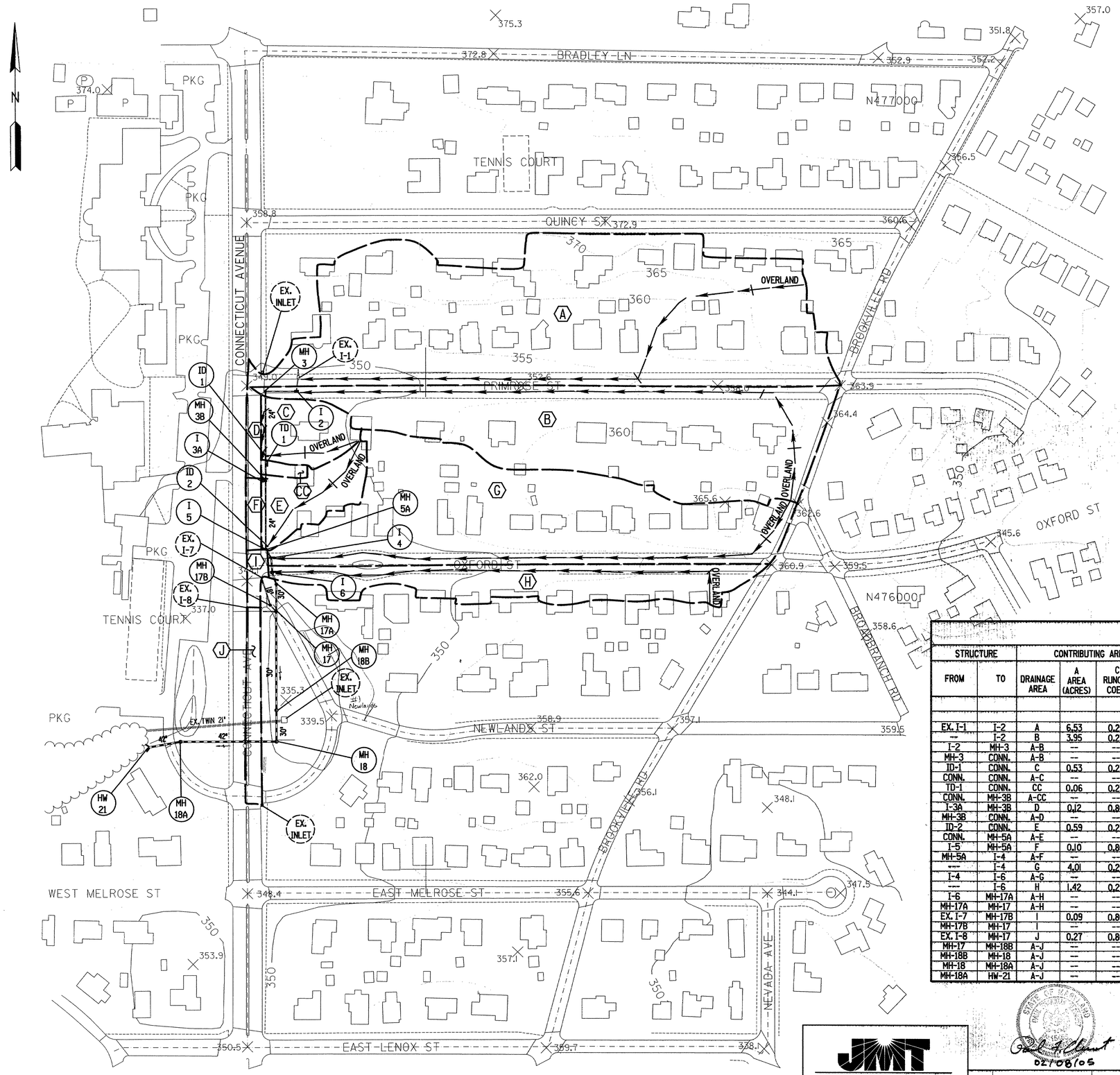
Designed by : Drawn by : Checked by :

STORM DRAIN PROFILES
PRIMROSE STREET STORM DRAIN

Project No. : 500510 SHEET 4 of 17

FILE: m:\PRIM_SU\ppo1pr1m.dgn
DATE: 2/8/2005

CE289-2-4



LEGEND

- DRAINAGE AREA BOUNDARY
- Tc PATH
- (C) DRAINAGE AREA DESIGNATION

STORM SEWER DESIGN COMPUTATIONS

STRUCTURE		CONTRIBUTING AREA				10 YEAR RUNOFF					PIPE							
FROM	TO	DRAINAGE AREA	A AREA (ACRES)	C RUNOFF COEF.	CA	TOTAL A (ACRES)	TOTAL CA	Tc TIME CONC. (MIN)	RAINFALL INTENS. (IN/HR)	Q (CFS)	SIZE (IN)	TYPE	n MANNING COEF.	So SLOPE %	L LENGTH (FT)	VO VEL. (FT/SEC)	TIME IN PIPE (MIN)	CAPACITY FULL (CFS)
EX. I-1	I-2	A	6.53	0.25	1.6579	--	--	19.60	4.45	7.38	EX.12	RCCP	0.013	4.75	24	11.25	0.04	7.76
--	I-2	B	3.95	0.23	0.9085	--	--	19.20	4.50	4.09	--	--	--	--	--	--	--	--
I-2	MH-3	A-B	--	--	--	10.48	2.5664	19.64	4.45	11.42	24	RCCP	0.013	0.51	59	5.58	0.18	16.15
MH-3	CONN.	A-B	--	--	--	10.48	2.5664	19.82	4.43	11.42	24	HDPEP	0.012	0.50	129	5.89	0.36	17.33
ID-1	CONN.	C	0.53	0.23	0.1219	--	--	14.30	5.16	0.63	15	HDPEP	0.012	--	--	--	--	--
CONN.	CONN.	A-C	--	--	--	11.01	2.6883	20.18	4.38	11.77	24	HDPEP	0.012	0.50	21	5.93	0.06	17.33
TD-1	CONN.	CC	0.06	0.23	0.0138	--	--	5.00	7.00	0.10	6	PVC	0.013	--	--	--	--	--
CONN.	MH-3B	A-CC	--	--	--	11.07	2.7021	20.24	4.38	11.84	24	HDPEP	0.012	0.50	27	5.94	0.07	17.332
I-3A	MH-3B	D	0.12	0.86	0.1032	--	--	5.00	7.00	0.72	15	RCCP	0.013	10.00	2	--	--	20.50
MH-3B	CONN.	A-D	--	--	--	11.19	2.8053	20.31	4.37	12.26	24	HDPEP	0.012	0.50	128	5.98	0.36	17.33
ID-2	CONN.	E	0.59	0.23	0.1357	--	--	17.10	4.78	0.65	15	HDPEP	0.012	--	--	--	--	--
CONN.	MH-5A	A-E	--	--	--	11.78	2.9410	20.67	4.33	12.73	24	HDPEP	0.012	0.50	4	6.03	0.01	17.33
I-5	MH-5A	F	0.10	0.86	0.0860	--	--	5.00	7.00	0.60	15	RCCP	0.013	10.00	2	--	--	20.50
MH-5A	I-4	A-F	--	--	--	11.88	3.0270	20.68	4.33	13.11	24	RCCP	0.013	0.53	15	5.82	0.04	16.47
--	I-4	G	4.01	0.29	1.1629	--	--	17.70	4.70	5.47	--	--	--	--	--	--	--	--
I-4	I-6	A-G	--	--	--	15.89	4.1899	20.72	4.32	18.14	30	RCCP	0.013	0.52	27	6.33	0.07	29.58
--	I-6	H	1.42	0.29	0.4118	--	--	16.00	4.92	2.03	--	--	--	--	--	--	--	--
I-6	MH-17A	A-H	--	--	--	17.31	4.6017	20.79	4.33	19.88	30	RCCP	0.013	0.53	19	6.51	0.05	29.86
MH-17A	MH-17	A-H	--	--	--	17.31	4.6017	20.84	4.31	19.88	30	RCCP	0.013	0.51	51	6.41	0.13	29.29
EX. I-7	MH-17B	I	0.09	0.86	0.0774	--	--	5.00	7.00	0.54	EX.18	CMP	0.024	2.79	37	2.91	0.21	9.50
MH-17B	MH-17	I	--	--	--	0.09	0.0774	5.21	6.95	0.54	18	RCCP	0.013	1.75	28.5	3.80	0.12	13.90
EX. I-8	MH-17	J	0.27	0.86	0.2322	--	--	5.00	7.00	1.63	15	RCCP	0.013	20.04	23.5	12.73	0.03	28.92
MH-17	MH-18B	A-J	--	--	--	17.67	4.9113	20.97	4.30	21.12	30	RCCP	0.013	0.50	195	6.45	0.50	29.00
MH-18B	MH-18	A-J	--	--	--	17.67	4.9113	21.47	4.25	21.12	30	RCCP	0.013	0.51	56.5	6.50	0.14	29.29
MH-18	MH-18A	A-J	--	--	--	17.67	4.9113	21.61	4.24	21.12	42	RCCP	0.013	1.00	188	8.28	0.38	100.60
MH-18A	HW-21	A-J	--	--	--	17.67	4.9113	21.99	4.20	21.12	42	RCCP	0.013	0.50	62	6.44	0.16	71.14

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

02/08/05

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — Date 2-9-05

APPROVED
Chief, Division of Capital Development — Date 2/9/05

Designed by : Drawn by : Checked by :

DRAINAGE AREA MAP AND COMPUTATIONS

PRIMROSE STREET STORM DRAIN

Project No. : 500510 SHEET 5 of 17

CE289-2-5

FILE: m:\PRIM_SU\drmap01prim.dgn
DATE: 2/8/2005

Maryland State Archives

NOTE: PORTABLE SEDIMENT TANKS TO BE USED FOR DEWATERING OF JACKING PITS. SEE SHEET 3 FOR LOCATION OF JACKING PITS.

DEWATERING BASIN

CHEVY CHASE VILLAGE *6100 CONNECTICUT AVE.

LIMIT OF 100 YEAR FLOODPLAIN

STORMDRAIN OUTFALL:
CLASS I RIPRAP
d_{50} = 9.5"
Q_{10} = 21.0 cfs
V_{10} = 7.39 fps

SANDBAG / STONE DIVERSION

STABILIZE DISTURBED SLOPE AREAS WITH LOW MAINTENANCE GROUND COVERS "CROWNVETCH" OR "BIRDSFOOT TREFOIL".

20' PERPETUAL DRAINAGE EASEMENT

FLOW LINES

LIMIT OF 25 FOOT FLOODPLAIN BUFFER

NOTE:
NO WORK SHALL BE ALLOWED OUTSIDE THE LIMITS OF DISTURBANCE IN THE "DELL NATURE AREA" (CHEVY CHASE COUNTRY CLUB). ALL TREES, SHRUBS AND FLOWERS OUTSIDE THE LIMITS OF DISTURBANCE ARE TO BE PRESERVED.

HW 21

MH 18A

EX. R/W

NEWLANDS STREET

DIR. ONLY

15' PERPETUAL DRAINAGE EASEMENT

10' TEMP. CONSTRUCTION EASEMENT

LOCATION OF SCE MAY BE DETERMINED IN THE FIELD BY THE INSPECTOR IN ORDER TO MINIMIZE IMPACT TO VEGETATION IN THE DELL NATURE AREA.

NOTE: 30"ELM MUST BE PROTECTED AT ALL TIMES DURING CONSTRUCTION. SURROUND TREE WITH ORANGE TREE PROTECTION FENCE.

CHEVY CHASE CLUB, INC. *6100 CONNECTICUT AVE.

PARCEL "C" CHEVY CHASE VILLAGE PLAT BOOK 2 AT PLAT 108

TEMPORARY CONSTRUCTION EASEMENT

STOCKPILE AREA

MH 18

MH 17

MH 17A

MH 17B

EX. I-8

EX. I-7

I 5

I 3A

I 4

I 6

MH 5A

ID 2

MH 3B

TD 1

ID 1

I 2

EX. I-1

RANDY & SUSAN J. DENCHFIELD *3 OXFORD ST.

DAVID VON ENDT *6403 CONNECTICUT AVE.

STEVEN P. DUSSEK *2 PRIMROSE ST.

RUESCH HOLDING, INC. *1 PRIMROSE ST.

OFFSITE DRAINAGE AREA A: 6.36 ac.

OFFSITE DRAINAGE AREA B: 4.03 ac.

OFFSITE DRAINAGE AREA C: 0.46 ac.

OFFSITE DRAINAGE AREA E: 0.60 ac.

OFFSITE DRAINAGE AREA G: 3.38 ac.

OFFSITE DRAINAGE AREA H: 1.25 ac.

DANE H. BUTSWINKAS
MEGAN E. RUPP
*5 NEWLANDS ST.

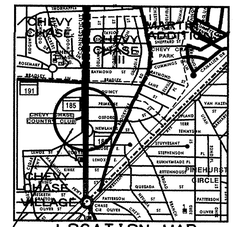
MARCUS W. & DIANE M. MONTGOMERY
*2 OXFORD ST.

LEGEND

- STABILIZED CONSTRUCTION ENTRANCE — SCE
- SILT FENCE — SF
- SUPER SILT FENCE — SSF
- CURB INLET PROTECTION — CIP
- AT GRADE INLET PROTECTION — AGIP
- SANDBAG/STONE DIVERSION
- DEWATERING BASIN
- LIMIT OF DISTURBANCE
- DRAINAGE DIVIDE

SEQUENCE OF CONSTRUCTION

1. PRIOR TO CLEARING TREES, INSTALLING SEDIMENT CONTROL MEASURES, OR GRADING, A PRECONSTRUCTION MEETING MUST BE CONDUCTED ON-SITE WITH THE MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES (MCDPS) SEDIMENT CONTROL INSPECTOR (301) 217-6301 (48 HOURS NOTICE).
2. THE LIMITS OF DISTURBANCE MUST BE FIELD MARKED PRIOR TO CLEARING OF TREES, INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.
3. CLEAR AND GRADE FOR INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCES, SANDBAG/STONE DIVERSION, DEWATERING BASIN AND SILT FENCE.
4. INSTALL THE AFOREMENTIONED SEDIMENT CONTROL DEVICES.
5. ONCE THESE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING OR GRADING.
6. PROCEED WITH CONSTRUCTION OF THE STORMDRAIN SYSTEM AS SPECIFIED ON SHEET 2. BEGIN AT DOWN-STREAM END, PROTECTED BY SANDBAG/STONE DIVERSION. DEWATER 'JACKING' PITS WITH PORTABLE SEDIMENT TANKS. ALL OTHER AREAS DISTURBED FROM CONSTRUCTION MUST BE STABILIZED AT THE END OF EACH WORKING DAY. INSTALL INLET PROTECTION (WHERE SHOWN ON PLAN) AS STORM DRAIN INSTALLATION PROGRESSES.
7. PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDEP INSPECTOR PRIOR TO REMOVAL OF ANY SEDIMENT CONTROL DEVICE.



STATE OF MARYLAND
RACHEL LANGDON WILLIS
No. 24108
REGISTERED
PROFESSIONAL ENGINEER
1-31-02

RELATED REQUIRED PERMITS

IT IS THE RESPONSIBLITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL THE REQUIRED PERMITS PRIOR TO ISSUANCE OF THE APPROVED SEDIMENT CONTROL PERMIT

TYPE OF PERMIT	REQ'D	NOT REQ'D	PERMIT #	EXPIRATION DATE	WORK RESTRICTION DATES
WRA Waterway		X			
WRA Dam Safety		X			
MCDPS Floodplain District	X				
WETLAND(S):					
a. Corps of Engineers		X			
B. DNR		X			
c. MDE Water Quality Certification		X			
OTHERS (Please List):		X			

STOCKPILE NOTE:

STOCKPILE AREA SHALL BE LOCATED SUCH THAT EXISTING TREES ARE NOT DISTURBED. ANY TREES DISTURBED BY PLACEMENT OF STOCKPILE MATERIAL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

GRAPHIC SCALE
30 0 15 30 60 120
1 inch = 30 ft.

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

Stormwater Management:
Reviewed Date
Approved Date
2015-41
SM FILE #

Sediment Control Technical Requirements:
Reviewed Date
Approved 2/19/02 Date

Administrative Requirements:
Reviewed 2/19/02 Date
782740
SEDIMENT CONTROL PERMIT NO.

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED.

CONTACT PERSON:
JOEL MANGRAM
MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
101 MONROE STREET, 9TH FLOOR
ROCKVILLE, MD 20850-2540
TEL: 240-777-7225

Engineers, Architects Development Consultants
SHELADIA ASSOCIATES
15825 Shady Grove Road, Rockville, MD. 20855
Phone: 301/590-0500 Fax: 301/948-7174
www.sheladia.com

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Robert W. Stout 2/1/02
Chief, Design Section Date

APPROVED
02/6/02
Chief, Division of Engineering Services Date

Designed by : Drawn by : Checked by :

GRADING ONLY

Sheet SC-1 of 4

EROSION AND SEDIMENT CONTROL PLAN

PRIMROSE STREET STORM DRAIN

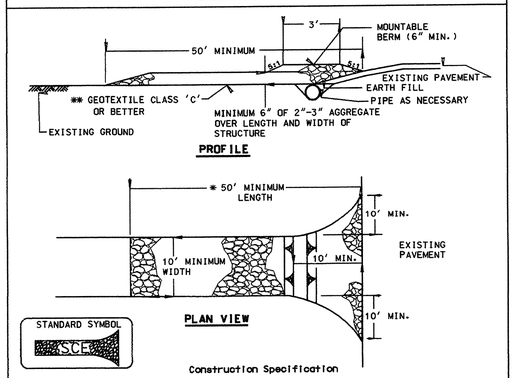
Project No. : 500001 SHEET 6 of 21

CE289-2-6

FILE: $FILE$
DATE: $DATE$

Maryland State Archives

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



Construction Specifications

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

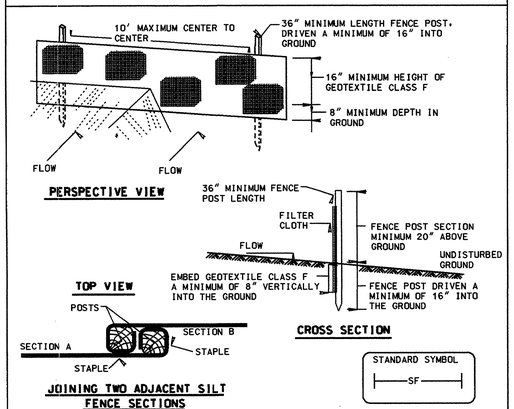
4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - [illegible]	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 22 - SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1½" x 1½" square (minimum) cut, or 1¾" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SILT FENCE

Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. THE PERMITTEE SHALL NOTIFY THE DEPARTMENT OF PERMITTING SERVICES (DPS) FOURTY-EIGHT (48) HOURS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, UNLESS WAIVED BY THE DEPARTMENT, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN THEM OR THEIR REPRESENTATIVE AND AN AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT.

2. THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE FOLLOWING POINTS:

A. AT THE REQUIRED PRE-CONSTRUCTION MEETING.

B. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRIOR TO ANY OTHER LAND DISTURBING ACTIVITY.

C. DURING THE INSTALLATION OF A SEDIMENT BASIN OR STORMWATER MANAGEMENT STRUCTURE AT THE REQUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION IS MANDATORY.

D. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).

E. PRIOR TO FINAL ACCEPTANCE.

3. THE PERMITTEE SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE, SHALL HAVE THEM INSPECTED AND APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES, SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE DEPARTMENT.

4. THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC THOROUGHFARE(S). ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY.

5. THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINOUSLY IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE DEPARTMENT.

6. ALL SEDIMENT BASINS, TRAP EMBANKMENTS, PERIMETER DIKES, AND ALL DISTURBED SLOPES STEEPER OR EQUAL TO 3:1 SHALL BE STABILIZED WITH SOD, SEED, AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES, WITHIN SEVEN (7) DAYS OF ESTABLISHMENT. ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATELY. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.

7. THE PERMITTEE SHALL APPLY SOD, SEED, AND ANCHORED STRAW MULCH , OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS WITHIN FOURTEEN (14) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED ON THAT AREA. MAINTENANCE SHALL BE PERFOMRED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. ACTIVE CONSTRUCTION AREAS, SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS, AND AREAS WITHIN FIFTY (50) FEET OF A BUILDING UNDER CONSTRUCTION MAY BE EXEMPT FROM THIS REQUIREMENT, PROVIDED THAT EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND MAINTAINED TO PROTECT THOSE AREAS.

8. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE PERMITTEE SHALL SHALL STABILIZE ALL CONTRIBUTORY DISTRURBED AREAS USING SOD OR AN APPROVED PERMANENT SEED MIXTURE WITH REQUIRED SOIL AMENDMENTS AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE BE USED IN SEEDING SEASON WHEN THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED WITHIN FOURTEEN (14) CALENDAR DAYS OF ESTABLISHEMENT. WHEN PROPERTY IS BROUGHT TO FNISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY AND PERMANENT STABILZATION IS FOUND TO BE IMPRACTICAL, AN APPROVED TEMPORARY SEED AND STRAW ANCHORED MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIATION OF SUCH PROPERTY SHALL BE COMPLETED PRIOR TO THE FOLLOWING APRIL 15.

9. THE SITE PERMIT,WORK, MATERIALS, APPROVED SC/SM PLANS, AND TEST REPORT SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF MONTGOMERY COUNTY.

10. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO LOWER THE WATER DOWNSLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. MECHANICAL DEVICES MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.

STANDARD EROSION AND SEDIMENT CONTROL NOTES (CONTINUED)

11. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILZED WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILZATION MEASURES.

12. TEMPORARY SEDIMENT CONTROL DEVICES SHALL BE REMOVED, WITH PERMISSION OF THE DEPARTMENT, WITH-IN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.

13. NO PERMANENT CUT OR FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS. A SLOPE GRADIENT OF UP TO 2:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.

14. THE PERMITTEE SHALL INSTALL A SPLASHBLOCK AT THE BOTTOM OF EACH DOWNSPOUT UNLESS THE DOWNSPOUT IS CONNECTED BY A DRAIN LINE TO AN ACCEPTABLE OUTLET.

15. FOR FINISHED GRADING, THE PERMITTEE SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO: (1) PREVENT WATER FROM STANDING ON THE SURFACE OF LAWNS MORE THAN TWENTY-FOUR (24) HOURS AFTER THE END OF A RAINALL, EXCEPT IN DESIGNATED DRAINAGE COURSES AND SWALE FLOW AREAS, WHICH MAY DRAIN AS LONG AS FOURTY EIGHT (48) HOURS AFTER THE END OF A RAINFALL, AND (2) PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS OR OPENINGS.

16. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A BUILDING WHICH IS EXISTING OR UNDER CONSTRUCTION. NO BUILDING MAY BE CONSTRUCTED WITHIN 20 FEET OF A SEDIMENT TRAP OR BASIN.

17. ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHEMENT.

18. THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, IF DEEMED NECESSARY.

19. ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND.

20. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

21. TEMPORARY SEDIMENT TRAP(S) SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO THE POINT OF ONE-HALF (1/2) THE WET VOLUME OF THE TRAP.

22. SEDIMENT REMOVED FROM TRAPS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN.

23. ALL SEDIMENT BASINS AND TRAPS MUST BE SURROUNDED WITH A WELDED WIRE SAFTEY FENCE. THE FENCE MUST BE AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN TWO INCHES IN WIDTH AND FOUR INCHES IN HEIGHT, WITH A MINIMUM OF 14 GUAGE WIRE. SAFETY FENCE MUST BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.

24. NO EXCAVATION IN THE AREAS OF EXISTING UTILITIES IS PERMITTED UNLESS THEIR LOCATION HAS BEEN DETERMINED. CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK.

25. OFF-SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.

26. THE GRADE AWAY FROM FOUNDATION WALLS SHALL FALL A MINIMUM OF SIX INCHES WITHIN THE FIRST10 FEET, EXCEPT AS RESTRICTED BY LOT LINES WHERE THE FALL WILL BE A MINIMUM OF SIX INCHES, REGARDLESS OF THE HORIZONTAL DISTANCE AVAILABLE.

27. SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT OR REPAIR MAY ONLY BE DONE WITH THE DPS INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DEWATERING METHOD FOR EACH APPLICATION. THE FOLLOWING METHODS MAY BE CONSIDERED:

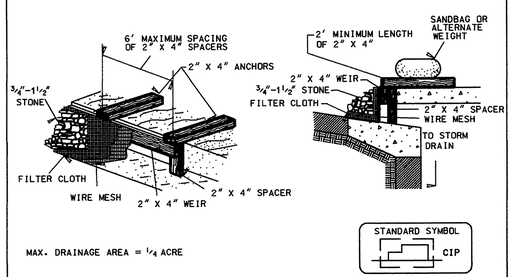
A. PUMP DISCHARGE MAY BE DIRECTED TO ANOTHER ON-SITE SEDIMENT TRAP OR BASIN,PROVIDED IT IS OF SUFFICIENT VOLUME AND THE PUMP INTAKE IS FLOATED TO PREVENT AGITATION OR SUCTION OF DEPOSITED SEDIMENTS; OR

B. THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR

C. THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ. NON-WOVEN FABRIC), OR APPROVED EQUIVALENT, LOCATED IN AN UNDISTRUBED BUFFER AREA.

REMEMBER: DEWATERING OPERATION AND METHOD MUST HAVE PRIOR APPROVAL BY THE DPS INSPECTOR.

DETAIL 23C - CURB INLET PROTECTION (COG OR COS INLETS)



MAX. DRAINAGE AREA = ¼ ACRE

Construction Specifications

1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.

2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.

3. Securely nail the 2" X 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4' apart).

4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.

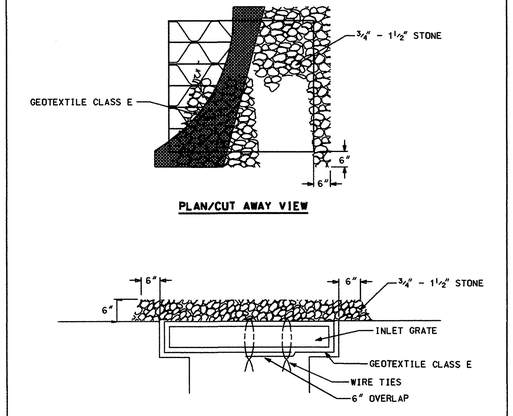
6. Form the ½" x ½" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean ¾" x 1½" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.

7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 6B	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23B - AT GRADE INLET PROTECTION



MAX. DRAINAGE AREA = ¼ ACRE

Construction Specifications

1. Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.

2. Place ¾ to 1½" stone, 4"-6" thick on the grate to secure the fabric and provide additional filtration.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - [illegible]	MARYLAND DEPARTMENT OF ENVIRONMENT - WATER MANAGEMENT ADMINISTRATION

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

Stormwater Management:

Reviewed Date

Approved Date

201541
SM FILE #

Sediment Control Technical Requirements:

William Campbell 2/9/02
Reviewed Date

Approved 2/9/02 Date

Administrative Requirements:

Reviewed 2/9/02 Date

202740
SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED.

Sheet SC-2 of 4

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Robert W. Stout 2/1/02
Chief, Design Section Date

APPROVED
[signature] 02/01/02
Chief, Division of Engineering Services Date

Designed by : _____ Drawn by : _____ Checked by : _____

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

PRIMROSE STREET STORM DRAIN

Project No. : 500001 SHEET 7 of 19

Engineers, Architects Development Consultants
SHELADIA ASSOCIATES, INC.
15825 Shady Grove Road, Rockville, MD. 20850
Phone: 301-590-2930 Fax:301-948-7174
www.sheladia.com

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

NO.	REVISION	DATE	BY

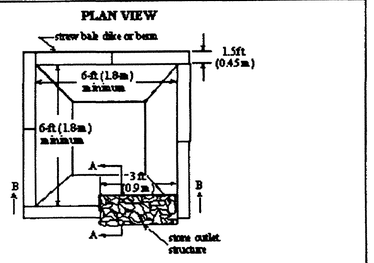
FILE: $FILE$
DATE: $DATE$

Maryland State Archives

CE289-2-7

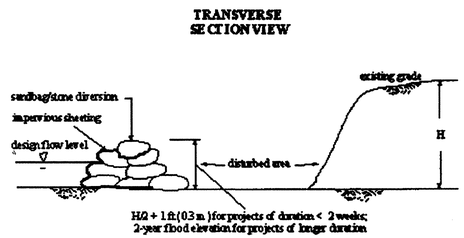
Maryland State Archives

DETAIL 1.1: DEWATERING BASINS



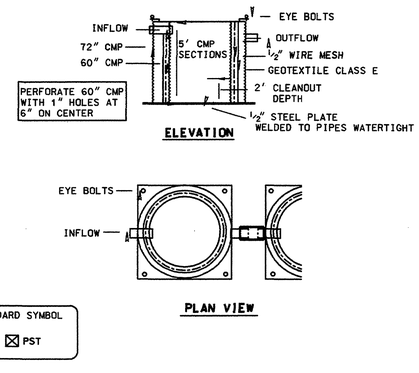
SEDIMENT CONTROL MEASURE	PAGE 3	MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 2.4: SANDBAG/STONE DIVERSION



TEMPORARY STREAM DIVERSION	PAGE 15	MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 21 – PORTABLE SEDIMENT TANK



STANDARD SYMBOL

☒ PST

Construction Specifications

1. The following formula should be used in determining the storage volume of the sediment tank: 1 cubic foot of storage for each gallon per minute of pump discharge capacity.

2. An example of a typical sediment tank is shown above. Other container designs can be used if the storage volume is adequate and approval is obtained from the local approving agency.

3. Tanks may be connected in series.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE D – 14 – 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

MONTGOMERY COUNTY MARYLAND

DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan, *County Executive* — Robert C. Hubbard, *Director*

August 10, 2000

Rick Schmuff
Johnson, Mirmiran & Thompson
72 Loveton Circle
Baltimore MD 21152-0949

Re: Stormwater Management ***CONCEPT*** Request
for Primrose Street Storm Drain
SM File #: 201541
Tract Size/Zone: .3 Ac/R/W
Total Concept Area: .14 Ac
Tax Plate: 127
Montg. Co. Grid: 36 D13
Watershed: Potomac

Dear Mr. Schmuff;

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above mentioned site is **acceptable**. The stormwater management concept consists of a waiver request for water quantity and water quality control.

Based upon Section 2.A.2.c. of Executive Regulation 5-90, a **conditional** waiver of on-site water quantity and water quality control is hereby granted.

An Engineered Plan Sediment Control Permit will need to be obtained prior to the detailed sediment control/stormwater management plan stage. This item(s) may not be all-inclusive and may change based on available information at the time. Payment of a stormwater management contribution is not required.

If you have any questions regarding these actions, please feel free to contact William Campbell at 240-777-6345.

Sincerely,

Richard R. Brush, Manager
Water Resources Section
Division of Land Development Services

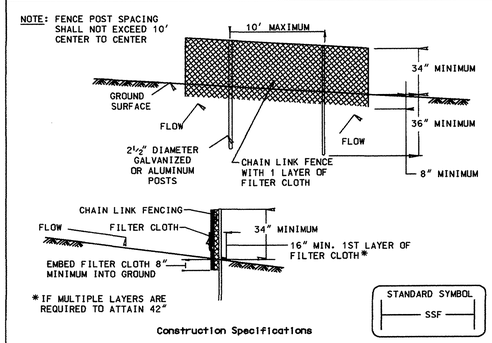
RRB:enm:CN201541

cc: M. Shaneman
S. Federline
SM File # 201541

ON - waived Acres: 30
QL - waived Acres: 30

255 Rockville Pike, 2nd Floor • Rockville, Maryland 20850-4166

DETAIL 33 – SUPER SILT FENCE



STANDARD SYMBOL

SSF

Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.

2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

4. Filter cloth shall be embedded a minimum of 8" into the ground.

5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height

7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft²/minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H – 26 – 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SUPER SILT FENCE

Design Criteria

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 – 10%	0 – 10:1	Unlimited	Unlimited
10 – 20%	10:1 – 5:1	200 feet	1,500 feet
20 – 33%	5:1 – 3:1	100 feet	1,000 feet
33 – 50%	3:1 – 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H – 26 – 3A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

OWNER'S/DEVELOPER'S CERTIFICATE

I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

SIGNATURE — DATE: 02/01/02

BRUCE E. JOHNSTON, P.E. CHIEF, DIVISION OF ENGINEERING SERVICES
PRINTED NAME AND TITLE

DESIGN CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE '1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL,' MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES EXECUTIVE REGULATIONS 50-90 AND 36-90, AND MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORATATION 'STORM DRAIN DESIGN CRITERIA' DATED AUGUST 1988.

Rachel Wiley — 1-25-02
DESIGN ENGINEER SIGNATURE — DATE

RACHEL L. WILES — 24103
PRINTED NAME — REGISTRATION NUMBER

MISS UTILITY

CALL 'MISS UTILITY' AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTLITY COMPANIES PRIOR TO COMMENCMING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A 36A OF THE MONTGOMERY COUNTY CODE.

CERTIFICATION OF THE QUANTITIES

I HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO BE 599 CUBIC YAROS OF EXCAVATION, 599 CUBIC YAROS OF FILL AND THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THESE PLANS HAS BEEN OETERMINED TO BE 28,100 SQUARE FEET.

Rachel Wiley — 1-25-02
OESIGN ENGINEER SIGNATURE — DATE

RACHEL L. WILES — 24103
PRINTED NAME — REGISTRATION NUMBER

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
Reviewed — Date	William Campbell 2/1/02 Reviewed — Date	2/1/02 Reviewed — Date
Approved — Date	2/1/02 Approved — Date	202740 SEDIMENT CONTROL PERMIT NO.
201541 SM FILE #		

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED.

Sheet SC-3 of 4

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Robert W. Stout — 2/1/02
Chief, Design Section — Date

APPROVED
02/01/02
Chief, Division of Engineering Services — Date

Designed by : — Drawn by : — Checked by :

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
PRIMROSE STREET STORM DRAIN

Project No. : 500001 — SHEET 8 of 19

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

Engineers, Architects
Development Consultants
SHELADIA ASSOCIATES, INC.
18525 Shady Grove Road, Rockville, MD. 20850
Phone: 301-590-0959 Fax:301-948-7174
www.sheladia.com

NO.	REVISION	DATE	BY

FILE: $FILE$
DATE: $DATE$

CE289-2-8

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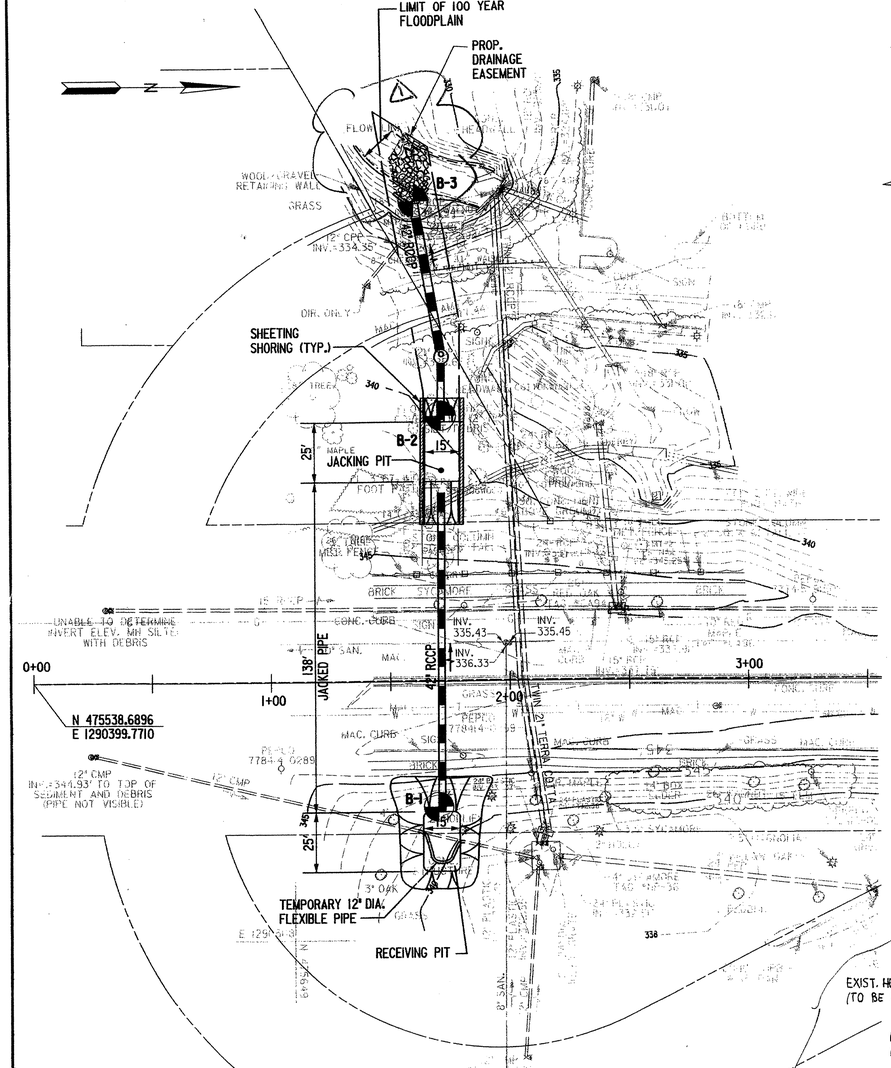
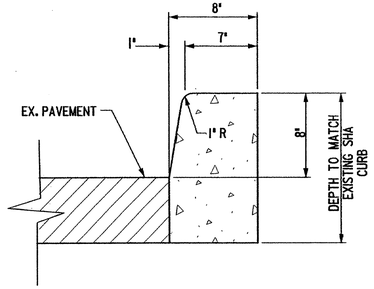


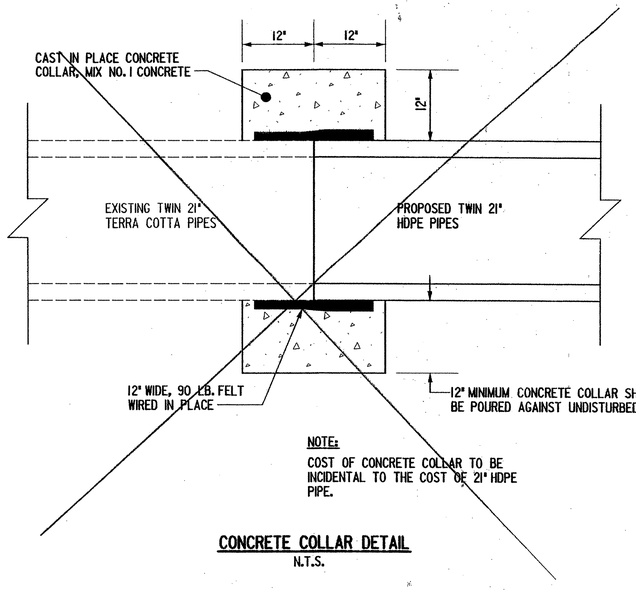
JACKING/RECEIVING PIT PLAN

SCALE: 1" = 30'



DETAIL - SHA CURB

NOT TO SCALE

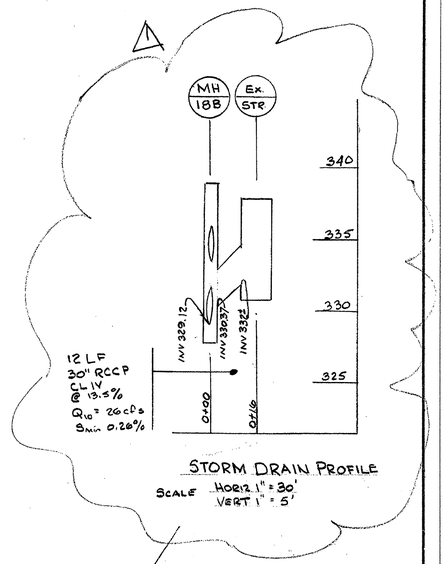


NOTE:

COST OF CONCRETE COLLAR TO BE INCIDENTAL TO THE COST OF 21" HDPE PIPE.

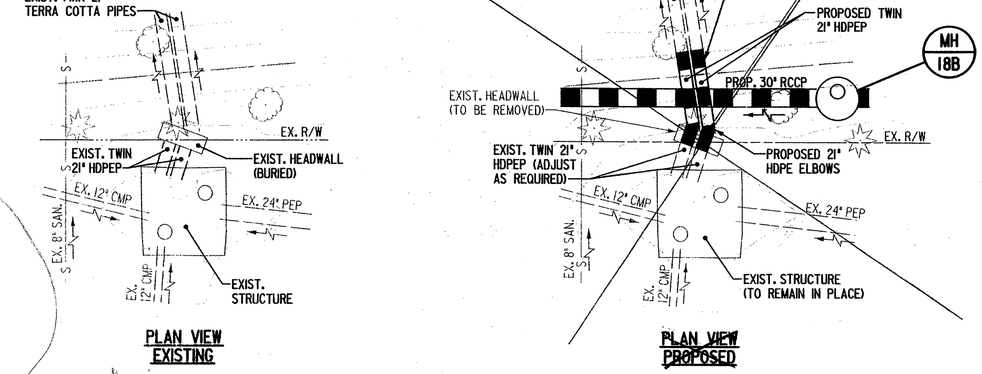
CONCRETE COLLAR DETAIL

N.T.S.



STORM DRAIN PROFILE

SCALE HORIZ 1" = 30'
VERT 1" = 5'

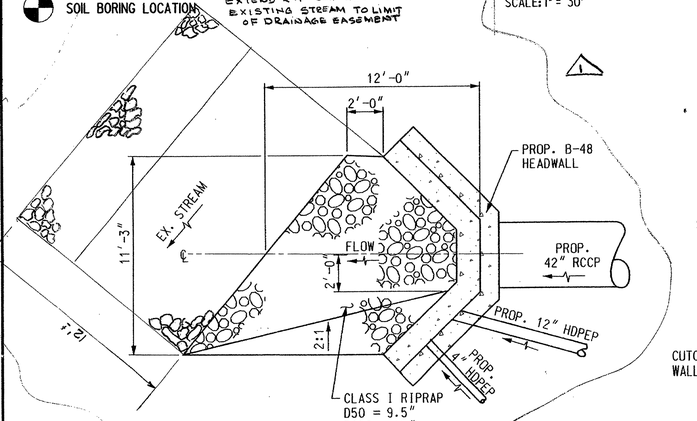


PLAN VIEW EXISTING

PLAN VIEW PROPOSED

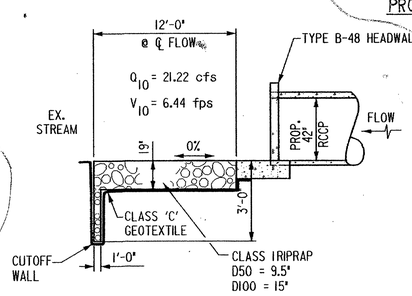
ENLARGEMENT - TWIN 21" STORM DRAIN CROSSING

SCALE: 1" = 10'



DETAIL - RIPRAP OUTFALL

NOT TO SCALE



GRAPHIC SCALE

30 0 15 30 60 120

1 inch = 30 ft.

MONTGOMERY COUNTY
DEPARTMENT OF PERMITTING SERVICES
ACCEPTED AS MEETING SEDIMENT CONTROL ADMINISTRATIVE REQUIREMENTS
Reviewed 2/9/05
Date
202740
SC Permit Number
SWM Code 241 541
Minor Rev. to Title Sheet only

MONTGOMERY COUNTY
DEPARTMENT OF PERMITTING SERVICES
APPROVED
FOR SEDIMENT CONTROL
Approved 2/9/05

02/08/05

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

NO.	REVISION	DATE	BY
1	Revise Enlargement Plan Extend Riprap Add S/D Profile MH18B box str	6/05	JSM

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — 2-9-05 Date

APPROVED
Chief, Division of Capital Development — 2/9/05 Date

Designed by : Drawn by : Checked by :

SC-4 OF 4

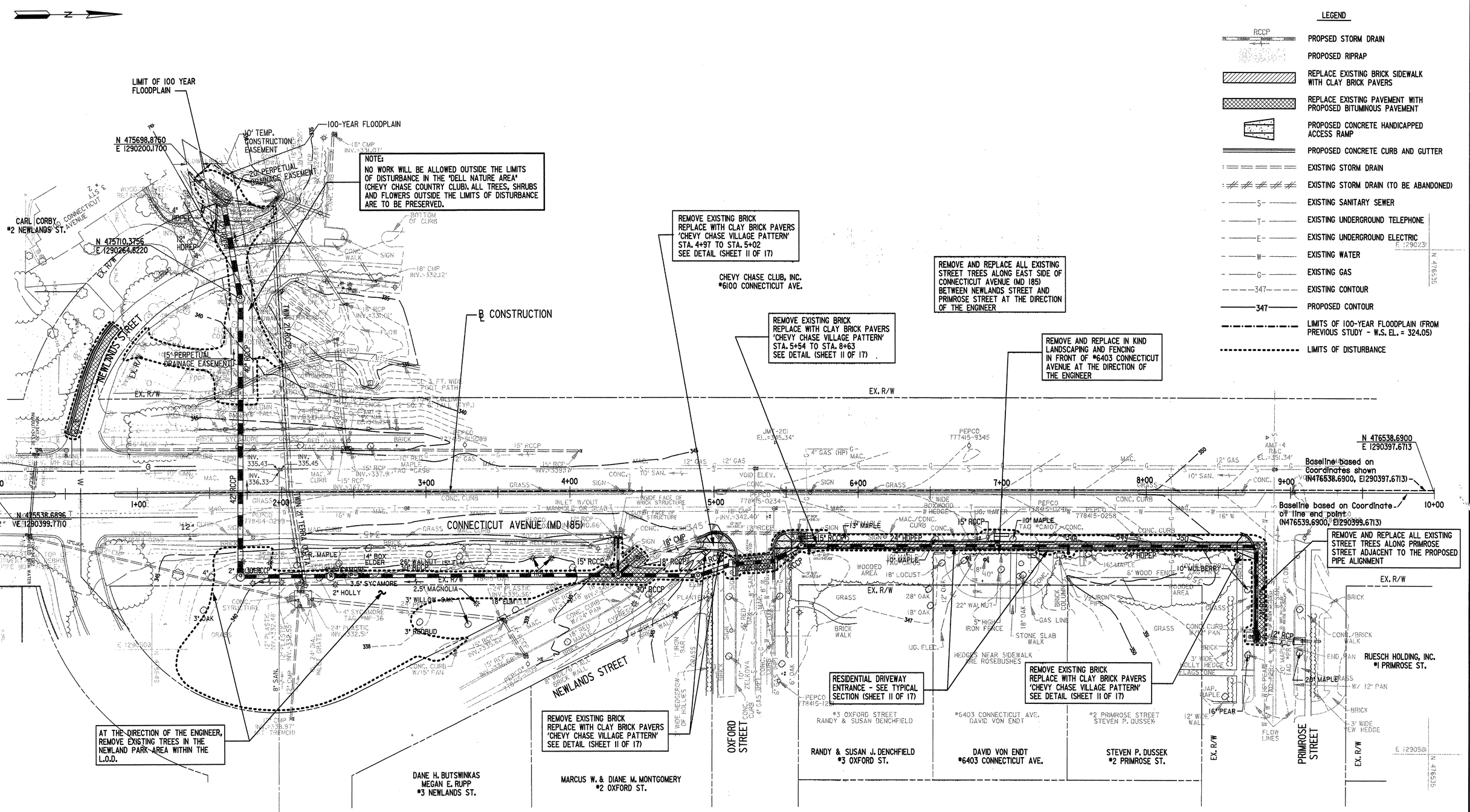
DETAILS
PRIMROSE STREET STORM DRAIN

Project No. : 500510 SHEET 9 of 17

FILE: m:\FHM...\SEP602prim.dgn
DATE: 2/8/2005

CE289-2-9

Maryland State Archives



LEGEND

- PROPSED STORM DRAIN
- PROPOSED RIPRAP
- REPLACE EXISTING BRICK SIDEWALK WITH CLAY BRICK PAVERS
- REPLACE EXISTING PAVEMENT WITH PROPOSED BITUMINOUS PAVEMENT
- PROPOSED CONCRETE HANDICAPPED ACCESS RAMP
- PROPOSED CONCRETE CURB AND GUTTER
- EXISTING STORM DRAIN
- EXISTING STORM DRAIN (TO BE ABANDONED)
- EXISTING SANITARY SEWER
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND ELECTRIC
- EXISTING WATER
- EXISTING GAS
- EXISTING CONTOUR
- PROPOSED CONTOUR
- LIMITS OF 100-YEAR FLOODPLAIN (FROM PREVIOUS STUDY - W.S. EL. = 324.05)
- LIMITS OF DISTURBANCE

GRAPHIC SCALE
30 0 15 30 60 120
SCALE: 1" = 30'

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

STATE OF MARYLAND
02/08/05

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — 2-9-05 Date
APPROVED
Chief, Division of Capital Development — 2/9/05 Date

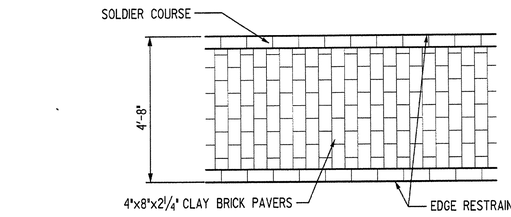
Designed by : ____ Drawn by : ____ Checked by : ____

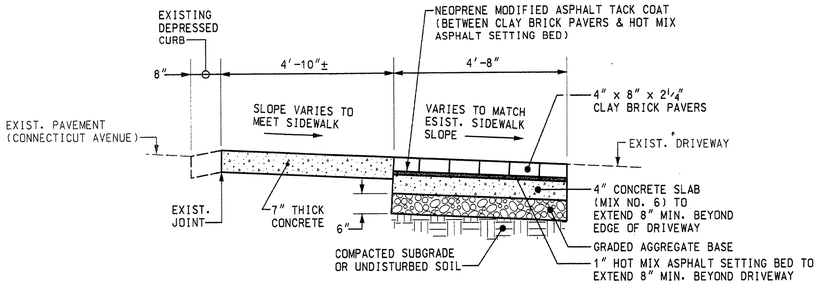
LANDSCAPE PLAN
PRIMROSE STREET STORM DRAIN

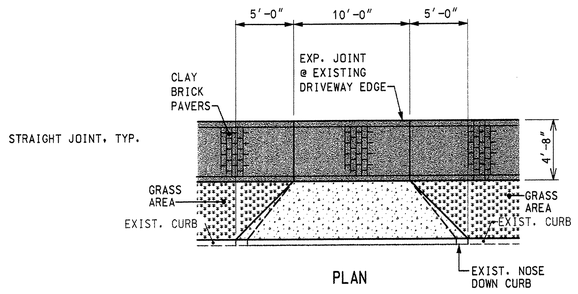
Project No. : 500510 SHEET 10 of 17

FILE: m:\PRIM_SUN\LDG\PRIMLDGN
DATE: 2/7/2005

CE289-2-10

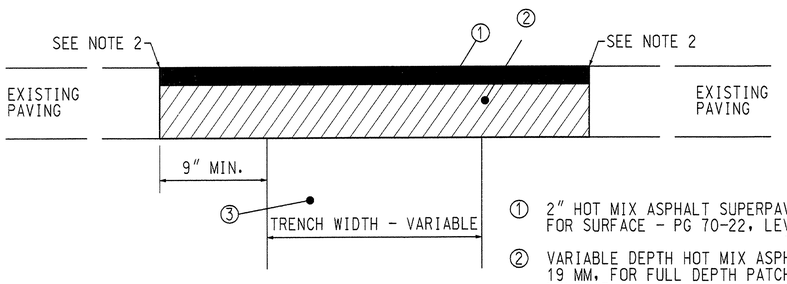






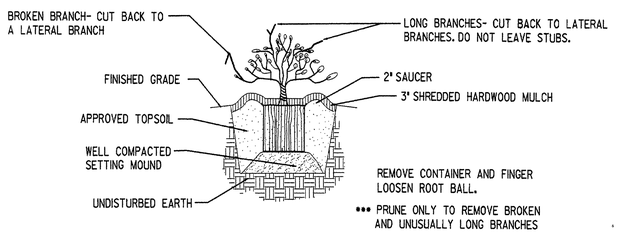
DETAIL - DRIVEWAY ENTRANCES

NOT TO SCALE



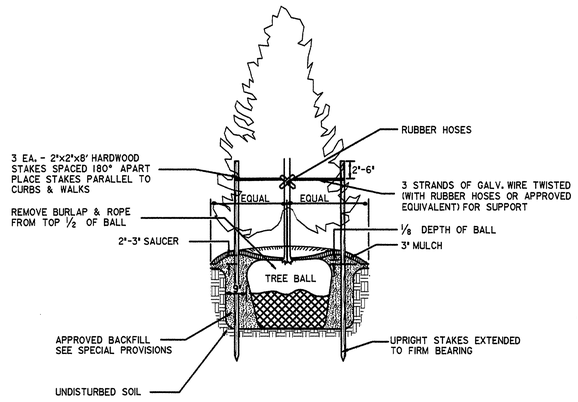
PAVEMENT PATCH DETAIL

NOT TO SCALE



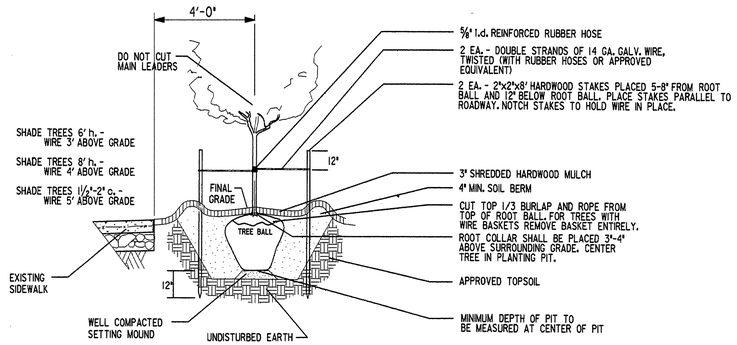
CONTAINER SHRUB PLANTING DETAIL (NOT IN CONTRACT)

NOT TO SCALE



BALL & BURLAP EVERGREEN PLANTING DETAIL (NOT IN CONTRACT)

NOT TO SCALE



BALL & BURLAP TREE PLANTING DETAIL (NOT IN CONTRACT)

NOT TO SCALE

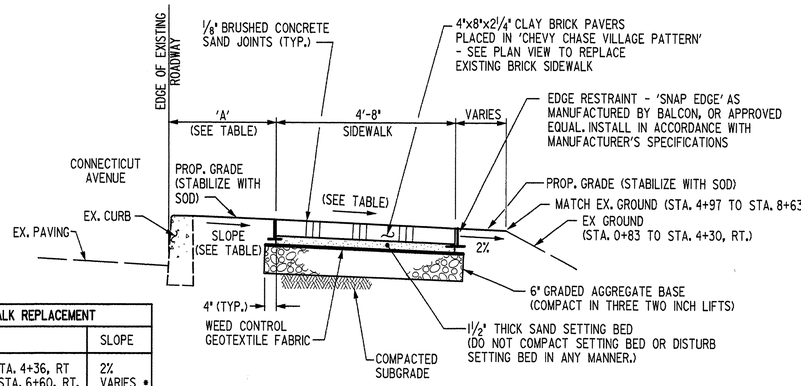
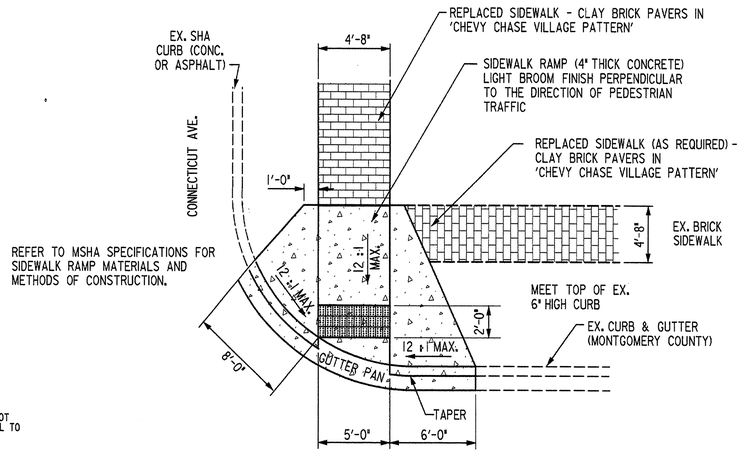


TABLE - SIDEWALK REPLACEMENT		
'A'	LOCATION	SLOPE
3'-6"	STA. 4+31 TO STA. 4+36, RT	2%
5'-6"	STA. 5+54 TO STA. 6+60, RT.	VARIES *
5'-6"	STA. 6+70 TO STA. 7+26, RT.	VARIES *
5'-6"	STA. 7+36 TO STA. 8+63, RT.	VARIES *

* MATCH EXISTING SIDEWALK SLOPE

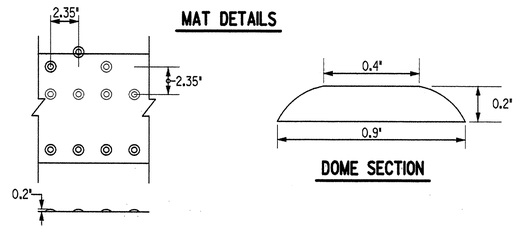
TYPICAL SECTION - SIDEWALK REPLACEMENT NORTHBOUND CONNECTICUT AVENUE

NOT TO SCALE



REFER TO MSHA SPECIFICATIONS FOR SIDEWALK RAMP MATERIALS AND METHODS OF CONSTRUCTION.

MAT DETAILS



DETAIL - HANDICAPPED ACCESS RAMP

NOT TO SCALE

GENERAL NOTES:

1. REFER TO SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. EXISTING PAVEMENT MUST BE SAW CUT FULL DEPTH PRIOR TO EXCAVATION.
3. EXISTING ASPHALT PAVEMENT HAS VARIABLE DEPTH, BUT IS ESTIMATED TO BE 6".

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
72 Loveton Circle Baltimore, Maryland 21152-0949

STATE OF MARYLAND — PAUL R. THOMPSON — 21587
02/08/05

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — Date 2-9-05
APPROVED
Chief, Division of Capital Development — Date 2/9/05

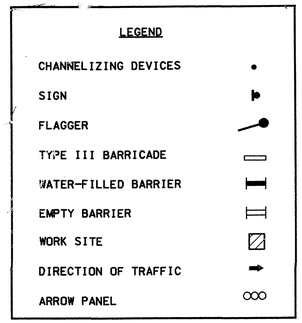
Designed by : ____ Drawn by : ____ Checked by : ____

LANDSCAPE DETAILS
PRIMROSE STREET STORM DRAIN

Project No. : 500510 SHEET 11 of 17

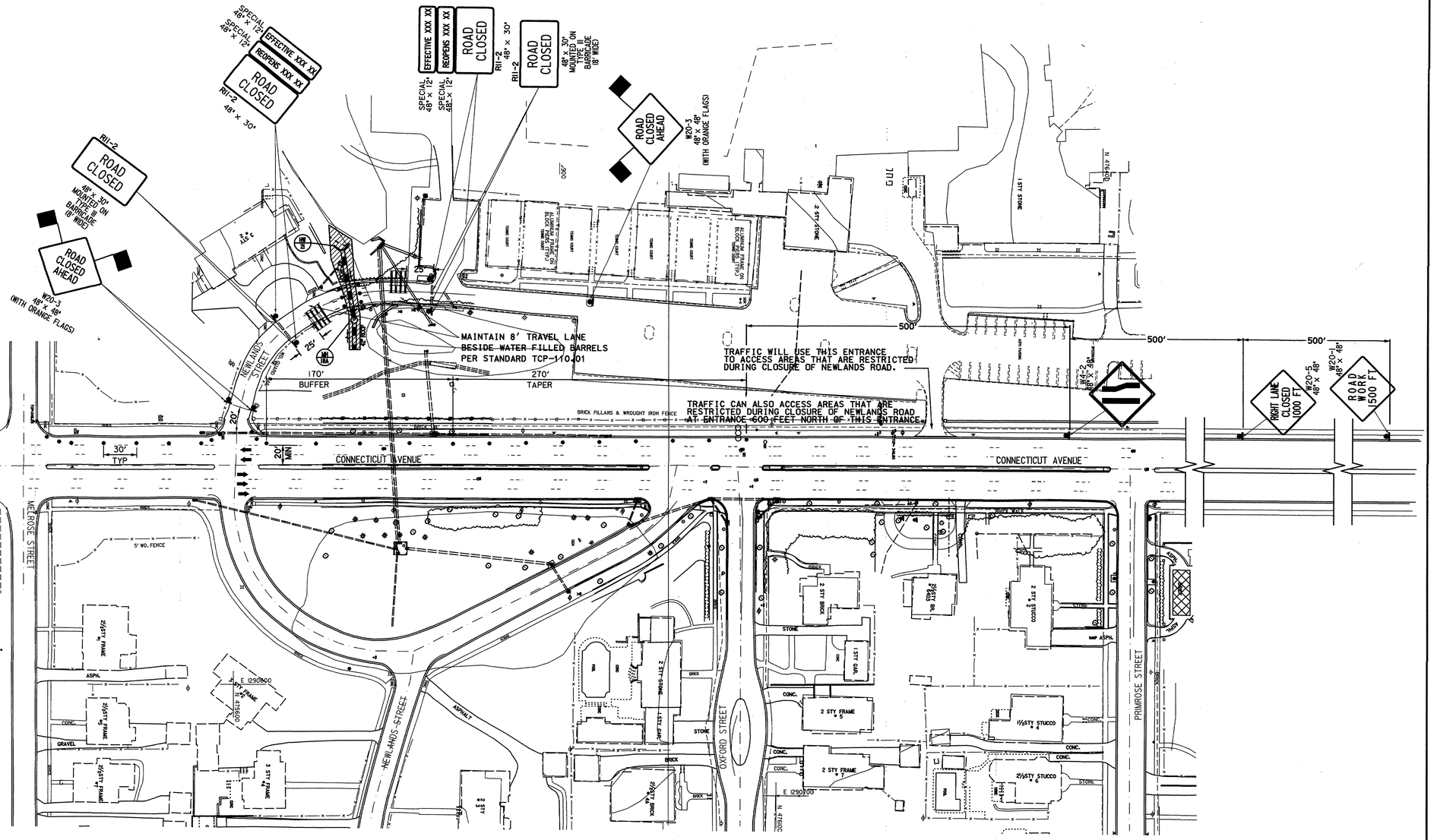
FILE: m:\PRIM_SUN\d_detprim.dgn
DATE: 2/1/2005

CE289-2-11



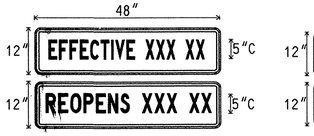
NOTES:

1. PROVIDE ACCESS TO DRIVEWAYS AT ALL TIMES. PROVIDE STEEL PLATES IF NECESSARY.



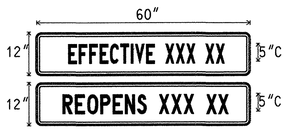
SEQUENCE OF CONSTRUCTION – PHASE 1A

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THIS PLAN. SEE SPECIAL PROVISIONS FOR THE CLOSURE OF NEWLANDS STREET. THIS CLOSURE SHALL OCCUR FOR A MAXIMUM OF THREE DAYS, MONDAY THROUGH FRIDAY.
2. INSTALL TEMPORARY RIGHT LANE CLOSURE DEVICES FOR CONNECTICUT AVENUE ONLY WHEN NECESSARY FOR CONSTRUCTION OPERATIONS, SUCH AS, HAULING EXCAVATED SOIL OR DELIVERY OF MATERIALS.
3. REMOVE PAVEMENT ON NEWLANDS STREET.
4. INSTALL ENDWALL (HW-21), 60 FEET OF 42"RCCP, MANHOLE (MH-18A) AND 25 FEET OF 42" RCCP AS SHOWN ON THIS PLAN.
5. REPLACE PAVEMENT NEWLANDS STREET.
6. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES IN REVERSE ORDER OF INSTALLATION AND OPEN NEWLANDS STREET TO TRAFFIC.



BLACK LEGEND ON ORANGE BACKGROUND

48" X 12" SHALL BE MOUNTED ATOP R11-2 ROAD CLOSED SIGNS



BLACK LEGEND ON ORANGE BACKGROUND

60" X 12" SHALL BE MOUNTED ATOP R11-3 & R11-4 ROAD CLOSED SIGNS

BLACK LEGEND ON WHITE BACKGROUND

FOR EXTENDED CLOSURES A "STREET NAME" SIGN SHALL BE MOUNTED ATOP ALL M4-9 (DETOUR) SIGNS ALONG ROADWAYS USED FOR THE DETOUR

IF ADDITIONAL LINES OF TEXT ARE NECESSARY, INCREASE HEIGHT IN INCREMENTS OF 12"

ROAD CLOSED AND EFFECTIVE SIGNS SHALL BE PLACED TWO (2) WEEKS PRIOR TO THE ROAD CLOSURE. THE EFFECTIVE SIGN SHALL BE REMOVED AND REPLACED WITH THE REOPENS SIGN THREE DAYS AFTER THE ACTUAL DATE OF THE ROAD CLOSURE.

SIGN DETAILS FOR TEMPORARY DETOUR

GRAPHIC SCALE

50 0 25 50 100 200

1 inch = 50 ft.

Montgomery County, Maryland
Traffic Engineering and Operations Section
APPROVED
FOR TCP
BY [signature] Date 1.28.03

STATE OF MARYLAND
ADAM J. ZIMMERMAN
No. 21983
REGISTERED
PROFESSIONAL ENGINEER
11/24/03

Engineers, Architects
Development Consultants
SHELADIA ASSOCIATES, INC.
15825 Shady Grove Road, Rockville, MD 20850
Phone: 301-590-2830 Fax: 301-948-7174
www.sheladia.com

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL [signature] 4-28-04
Chief, Design Section Date

APPROVED [signature] 5/19/04
Chief, Division of Capital Development Date

Designed by : _____ Drawn by : _____ Checked by : _____

TRAFFIC CONTROL PLAN--PHASE 1A

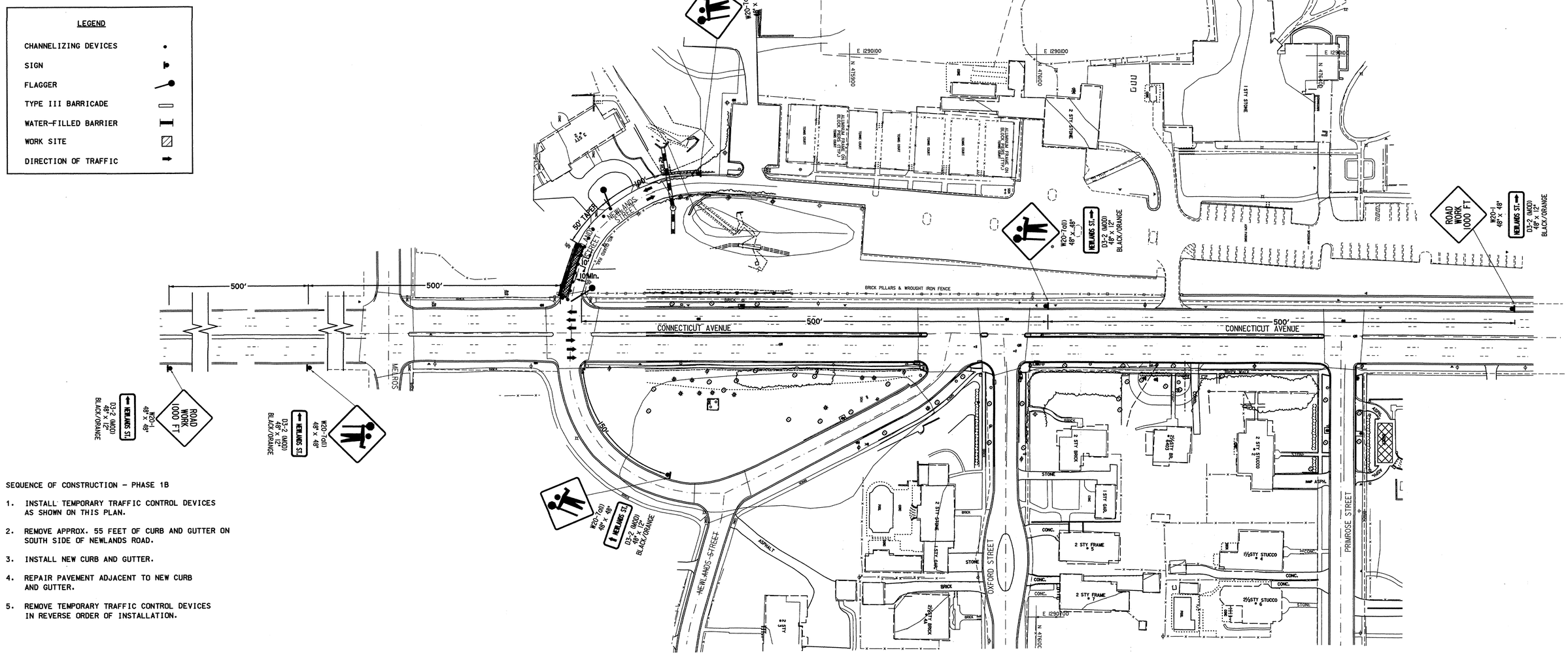
PRIMROSE STREET STORM DRAIN

Project No. : 500001 SHEET 12 of 17

CE289-2-12

DATE: 11/25/2003 FILE: K:\5272-100\100XSUB\DWG\TCI2903\TP01APRL.DGN

Maryland State Archives



SEQUENCE OF CONSTRUCTION – PHASE 1B

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THIS PLAN.
2. REMOVE APPROX. 55 FEET OF CURB AND GUTTER ON SOUTH SIDE OF NEWLANDS ROAD.
3. INSTALL NEW CURB AND GUTTER.
4. REPAIR PAVEMENT ADJACENT TO NEW CURB AND GUTTER.
5. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES IN REVERSE ORDER OF INSTALLATION.

NOTES:

1. PROVIDE ACCESS TO DRIVEWAYS AT ALL TIMES. PROVIDE STEEL PLATES IF NECESSARY.
2. THIS PHASE IS TO BE CONSTRUCTED CONCURRENTLY WITH PHASE 1A.
3. PROVIDE TEMPORARY GRAVEL, IF REQUIRED, TO MAINTAIN 10' LANES. REMOVE UPON COMPLETION AND RESTORE AREA TO ORIGINAL CONDITION.
4. AT NO TIME SHALL FLAGGERS DIRECT THROUGH TRAFFIC ALONG CONNECTICUT AVENUE.

GRAPHIC SCALE

50 0 25 50 100 200

1 inch = 50 ft.

Montgomery County, Maryland
Traffic Engineering and Operations Section
APPROVED
FOR TCP
BY 11.25.03 Date

STATE OF MARYLAND · ADAM I. ZIMMERMAN · No. 22693 · REGISTERED PROFESSIONAL ENGINEER
11/24/03

SHELADIA ASSOCIATES, INC. Engineers, Architects Development Consultants
15825 Shady Grove Road, Rockville, MD. 20855
Phone: 301-590-2830 Fax: 301-948-7174
www.sheladia.com

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL _____ 4-28-04
Chief, Design Section — Date

APPROVED _____ 5/19/04
Chief, Division of Capital Development — Date

Designed by : _____ Drawn by : _____ Checked by : _____

TRAFFIC CONTROL PLAN--PHASE 1B

PRIMROSE STREET STORM DRAIN

Project No. : 500001 SHEET 13 of 17

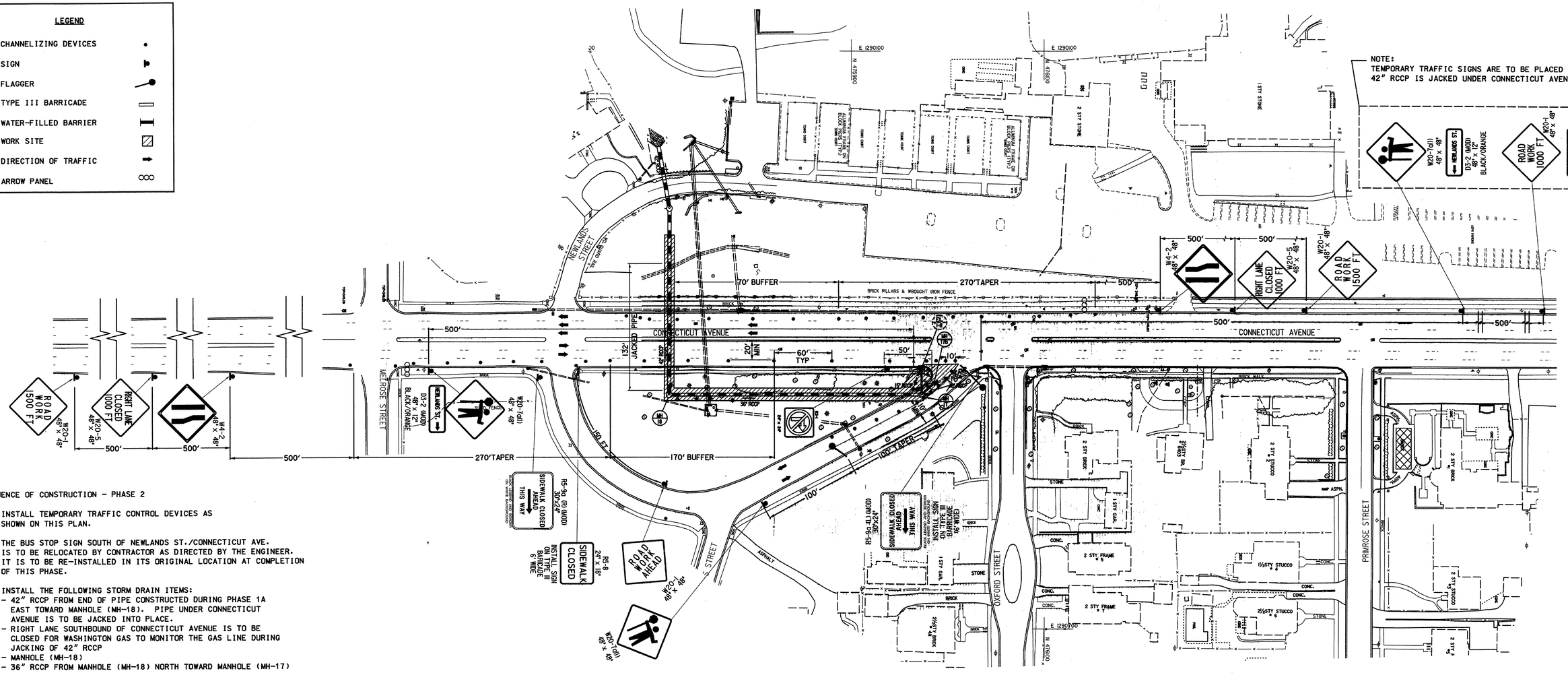
CE289-2-13

DATE: 11/25/2003 FILE: k:\5272-100\100SUB\DWG\TC\2903\TP01BPRL.DGN

Maryland State Archives

LEGEND

- CHANNELIZING DEVICES
- SIGN
- FLAGGER
- TYPE III BARRICADE
- WATER-FILLED BARRIER
- WORK SITE
- DIRECTION OF TRAFFIC
- ARROW PANEL



SEQUENCE OF CONSTRUCTION - PHASE 2

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THIS PLAN.
2. THE BUS STOP SIGN SOUTH OF NEWLANDS ST./CONNECTICUT AVE. IS TO BE RELOCATED BY CONTRACTOR AS DIRECTED BY THE ENGINEER. IT IS TO BE RE-INSTALLED IN ITS ORIGINAL LOCATION AT COMPLETION OF THIS PHASE.
3. INSTALL THE FOLLOWING STORM DRAIN ITEMS:
   - 42" RCCP FROM END OF PIPE CONSTRUCTED DURING PHASE 1A EAST TOWARD MANHOLE (MH-18). PIPE UNDER CONNECTICUT AVENUE IS TO BE JACKED INTO PLACE.
   - RIGHT LANE SOUTHBOUND OF CONNECTICUT AVENUE IS TO BE CLOSED FOR WASHINGTON GAS TO MONITOR THE GAS LINE DURING JACKING OF 42" RCCP
   - MANHOLE (MH-18)
   - 36" RCCP FROM MANHOLE (MH-18) NORTH TOWARD MANHOLE (MH-17)
   - MANHOLE (MH-17)
4. REMOVE EXISTING PIPES UNDER AND ALONG SOUTH SIDE OF NEWLANDS STREET TO EXISTING INLET (I-8). INSTALL 15" RCCP FROM MANHOLE (MH-17) TO EXISTING INLET (I-8). INSTALL 30" RCCP FROM MANHOLE (MH-17) TO CENTER OF NEWLANDS STREET.
5. CONSTRUCT HANDICAP RAMP ON SOUTH SIDE OF NEWLANDS STREET.
6. REPLACE ANY PAVEMENT, SIDEWALK OR CURB AND GUTTER DISTURBED DURING CONSTRUCTION. REINSTALL BUS STOP SIGN.
7. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES IN REVERSE ORDER OF INSTALLATION.

NOTES:

1. PROVIDE ACCESS TO DRIVEWAYS AT ALL TIMES. PROVIDE STEEL PLATES IF NECESSARY.
2. PROVIDE TEMPORARY GRAVEL, IF REQUIRED, TO MAINTAIN 10' LANES. REMOVE UPON COMPLETION AND RESTORE AREA TO ORIGINAL CONDITION.
3. AT NO TIME SHALL FLAGGERS DIRECT THROUGH TRAFFIC ALONG CONNECTICUT AVENUE.

GRAPHIC SCALE

50 0 25 50 100 200

1 inch = 50 ft.

Montgomery County, Maryland
Traffic Engineering and Operations Section
APPROVED
FOR TCP
BY [signature] 11.28.03 Date

STATE OF MARYLAND
ADAM J. ZIMMERMAN
No. 22663
REGISTERED
PROFESSIONAL ENGINEER
11/24/03

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL [signature] 4-28-04
Chief, Design Section — Date

APPROVED [signature] 5/19/04
Chief, Division of Capital Development — Date

Designed by : Drawn by : Checked by :

TRAFFIC CONTROL PLAN--PHASE 2

PRIMROSE STREET STORM DRAIN

Project No. : 500001 SHEET 14 of 17

Engineers, Architects
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15825 Shady Grove Road, Rockville, MD. 20850
Phone: 301-590-3939 Fax: 301-948-7174
www.sheladia.com

NO.	REVISION	DATE	BY

DATE: 11/25/2003 FILE: k:\5272-100\100%SUB\DWG\TC12903\TP02PRI.DGN

CE289-2-14

Maryland State Archives

LEGEND

- CHANNELIZING DEVICES
- SIGN
- FLAGGER
- TYPE III BARRICADE
- WATER-FILLED BARRIER
- WORK SITE
- DIRECTION OF TRAFFIC
- ARROW PANEL

SEQUENCE OF CONSTRUCTION – PHASE 3A

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THIS PLAN.
2. REMOVE EXISTING INLET ON SOUTH SIDE OF OXFORD STREET. ABANDON PIPE FROM I-6 TO EX. I-7.
3. INSTALL THE FOLLOWING STORM DRAIN ITEMS:
   - 36" RCCP UNDER NORTH SIDE OF NEWLANDS STREET FROM END OF PIPE INSTALLED IN PHASE 2 TO MANHOLE (MH-17A)
   - INLET (I-6) ON SOUTH SIDE OF OXFORD STREET
   - 30" RCCP FROM MANHOLE (MH-17A) TO INLET (I-6) AND 30" RCCP UNDER SOUTH SIDE OF OXFORD STREET TO CENTER OF ROADWAY.
4. REPLACE ANY PAVEMENT, SIDEWALK, BRICK PAVERS OR CURB AND GUTTER DISTURBED DURING CONSTRUCTION.
5. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES IN REVERSE ORDER OF INSTALLATION.

NOTES:

1. PROVIDE ACCESS TO DRIVEWAYS AT ALL TIMES. PROVIDE STEEL PLATES IF NECESSARY.
2. PROVIDE TEMPORARY GRAVEL, IF REQUIRED, TO MAINTAIN 10' LANES. REMOVE UPON COMPLETION AND RESTORE AREA TO ORIGINAL CONDITION.
3. AT NO TIME SHALL FLAGGERS DIRECT THROUGH TRAFFIC ALONG CONNECTICUT AVENUE.

GRAPHIC SCALE

50 0 25 50 100 200

1 inch = 50 ft.

STATE OF MARYLAND ADAM J. ZIMMERMAN No. 22685 REGISTERED PROFESSIONAL ENGINEER 11/24/03

Montgomery County, Maryland Traffic Engineering and Operations Section
APPROVED
FOR TCP
BY [signature] 11.25.03 Date

SHELADIA ASSOCIATES, INC. Engineers, Architects Development Consultants
15825 Shady Grove Road, Rockville, MD. 20850
Phone: 301-590-2828 Fax:301-948-7774
www.sheladia.com

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL [signature] 4-28-04
Chief, Design Section Date

APPROVED [signature] 5/19/04
Chief, Division of Capital Development Date

Designed by : Drawn by : Checked by :

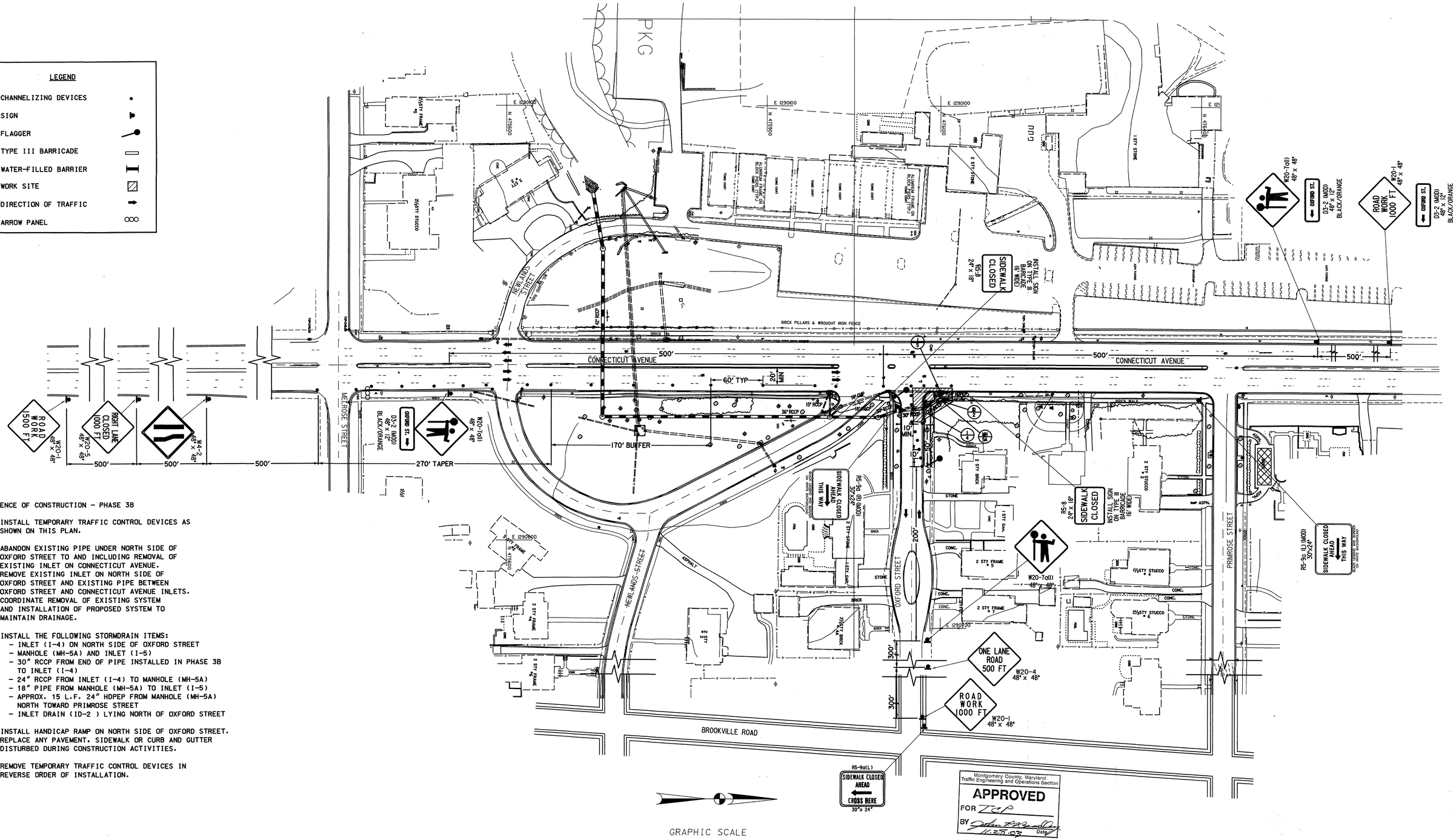
TRAFFIC CONTROL PLAN--PHASE 3A

PRIMROSE STREET STORM DRAIN

Project No. : 500001 SHEET 15 of 17

CE289-2-15

FILE: k:\5272-100\100%SUB\DWG\TC12903\TP03APRL.DGN
DATE: 11/25/2003



SEQUENCE OF CONSTRUCTION - PHASE 3B

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THIS PLAN.

2. ABANDON EXISTING PIPE UNDER NORTH SIDE OF OXFORD STREET TO AND INCLUDING REMOVAL OF EXISTING INLET ON CONNECTICUT AVENUE. REMOVE EXISTING INLET ON NORTH SIDE OF OXFORD STREET AND EXISTING PIPE BETWEEN OXFORD STREET AND CONNECTICUT AVENUE INLETS. COORDINATE REMOVAL OF EXISTING SYSTEM AND INSTALLATION OF PROPOSED SYSTEM TO MAINTAIN DRAINAGE.

3. INSTALL THE FOLLOWING STORMDRAIN ITEMS:
   - INLET (I-4) ON NORTH SIDE OF OXFORD STREET
   - MANHOLE (MH-5A) AND INLET (I-5)
   - 30" RCCP FROM END OF PIPE INSTALLED IN PHASE 3B TO INLET (I-4)
   - 24" RCCP FROM INLET (I-4) TO MANHOLE (MH-5A)
   - 18" PIPE FROM MANHOLE (MH-5A) TO INLET (I-5)
   - APPROX. 15 L.F. 24" HDPEP FROM MANHOLE (MH-5A) NORTH TOWARD PRIMROSE STREET
   - INLET DRAIN (ID-2) LYING NORTH OF OXFORD STREET

4. INSTALL HANDICAP RAMP ON NORTH SIDE OF OXFORD STREET. REPLACE ANY PAVEMENT, SIDEWALK OR CURB AND GUTTER DISTURBED DURING CONSTRUCTION ACTIVITIES.

5. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES IN REVERSE ORDER OF INSTALLATION.

NOTES:

1. PROVIDE ACCESS TO DRIVEWAYS AT ALL TIMES. PROVIDE STEEL PLATES IF NECESSARY.

2. PROVIDE TEMPORARY GRAVEL, IF REQUIRED, TO MAINTAIN 10' LANES. REMOVE UPON COMPLETION AND RESTORE AREA TO ORIGINAL CONDITION.

3. AT NO TIME SHALL FLAGGERS DIRECT THROUGH TRAFFIC ALONG CONNECTICUT AVENUE.

SHELADIA Engineers, Architects Development Consultants
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NO.	REVISION	DATE	BY

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL: Chief, Design Section — 4-28-04 Date
APPROVED: Chief, Division of Capital Development — 5/19/04 Date

Designed by : Drawn by : Checked by :

TRAFFIC CONTROL PLAN--PHASE 3B

PRIMROSE STREET STORM DRAIN

Project No. : 500001 SHEET 16 of 17

CE299-2-16

DATE: 11/25/2003 FILE: k:\5272-100\100%SUB\DWG\TC12903\TP03BPRI.DGN

Maryland State Archives

LEGEND

- CHANNELIZING DEVICES
- SIGN
- FLAGGER
- TYPE III BARRICADE
- WATER-FILLED BARRIER
- WORK SITE
- DIRECTION OF TRAFFIC
- ARROW PANEL

GRAPHIC SCALE

50 0 25 50 100 200

1 inch = 50 ft.

SEQUENCE OF CONSTRUCTION - PHASE 4

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THIS PLAN.

2. REMOVE EXISTING INLET ON CONNECTICUT AVENUE NORTH OF OXFORD STREET AND EXISTING INLET ON SOUTH SIDE OF PRIMROSE STREET.

3. INSTALL THE FOLOWING STORMDRAIN ITEMS.
   - INLET (I-3A) AND MANHOLE (MH-3B) LYING HALFWAY BETWEEN OXFORD STREET AND PRIMROSE STREET
   - 24" HDPEP BETWEEN MANHOLE (MH-5A) INSTALLED IN PHASE 3B AND MANHOLE (MH-3B)
   - 24" PIPE FROM MANHOLE (MH-3B) TO INLET (I-3A)
   - INLET DRAIN (ID-1)
   - MANHOLE (MH-3)
   - 24" HDPEP BETWEEN TWO MANHOLES (MH-3B & MH-3)
   - TRENCH DRAIN(TD-1), INLET DRAIN (ID-1) AND ASSOCIATED PIPES
   - INLET (I-2)
   - 24" RCCP FROM MANHOLE (MH-2) TO INLET (I-2)
   - 12" RCP TO CONNECT INLET (I-2) TO EXISTING PIPE IN PRIMROSE ST.

4. INSTALL CURB AND GUTTER AND HANDICAP RAMP ON SOUTH SIDE OF PRIMROSE STREET. INSTALL SIDEWALK FROM OXFORD STREET TO PRIMROSE STREET. REPLACE PAVEMENT AND ANY CURB AND GUTTER DISTURBED DURING CONSTRUCTION.

5. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES IN REVERSE ORDER OF INSTALLATION.

NOTES:

1. PROVIDE ACCESS TO DRIVEWAYS AT ALL TIMES. PROVIDE STEEL PLATES IF NECESSARY.

2. PROVIDE TEMPORARY GRAVEL, IF REQUIRED, TO MAINTAIN 10' LANE. REMOVE UPON COMPLETION AND RESTORE AREA TO ORIGINAL CONDITION.

3. AT NO TIME SHALL FLAGGERS DIRECT THROUGH TRAFFIC ALONG CONNECTICUT AVENUE.

Montgomery County, Maryland
Traffic Engineering and Operations Section
APPROVED
FOR TCP
BY John P. Bradley 11.28.03 Date

STATE OF MARYLAND · ADAM J. ZIMMERMAN · No. 22683 REGISTERED · PROFESSIONAL ENGINEER
Adam J. Zimmerman 11/24/03

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MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL [signature] 4-28-04
Chief, Design Section — Date

APPROVED [signature] 5/19/04
Chief, Division of Capital Development — Date

Designed by : ______ Drawn by : ______ Checked by : ______

TRAFFIC CONTROL PLAN--PHASE 4

PRIMROSE STREET STORM DRAIN

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