APPENDIX I

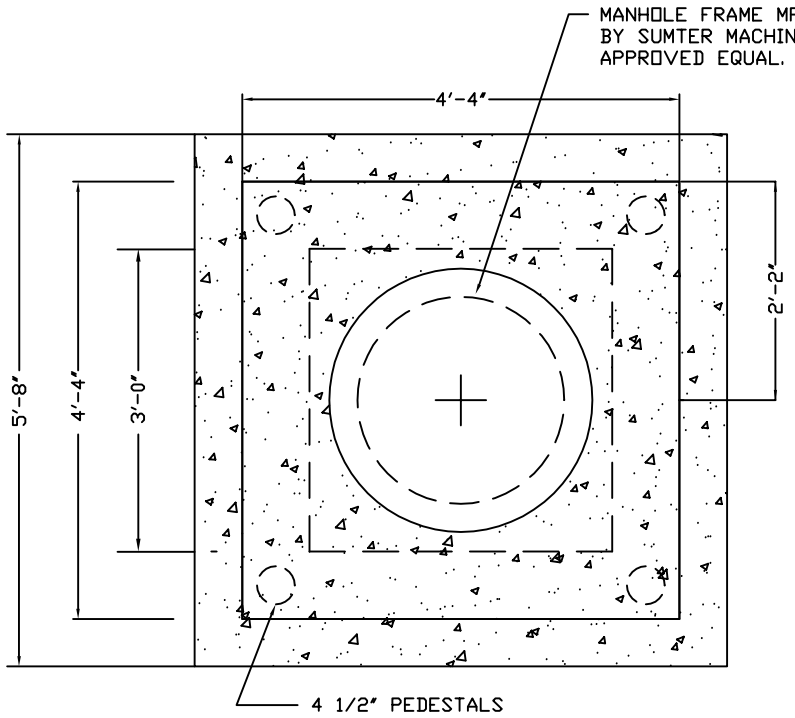
STANDARD DETAILS

Land Development Manual
Appendix I
Standard Details
PDF Files

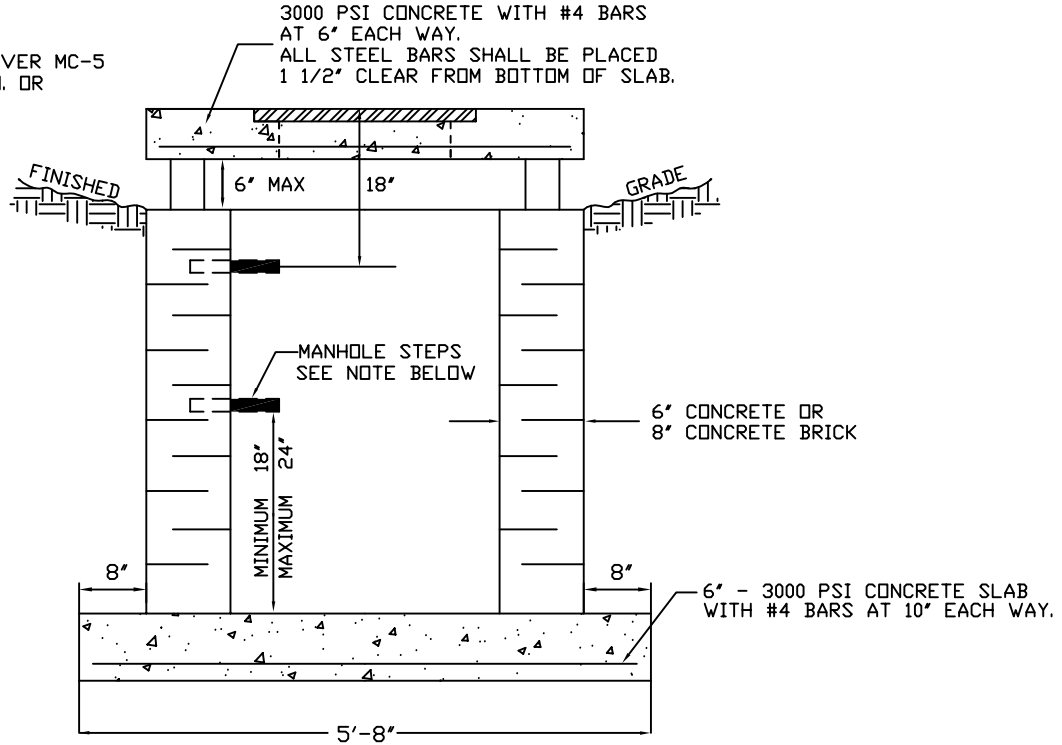
1.	Alternatives for RL or RC Streets Model	PDF file
2.	Beaver Dam Detail (or Engineer Approved Equal)	PDF file
3.	Block & Gravel Inlet Protection (Sheet 1 of 2)	PDF file
4.	Block & Gravel Inlet Protection (Sheet 2 of 2)	PDF file
5.	CB2 Model	PDF file
6.	CB Model	PDF file
7.	CB Front Model	PDF file
8.	CB Side Model	PDF file
9.	Commercial-Industrial Road Section with Ditch (66'RW)	PDF file
10.	Concrete Islands	PDF file
11.	Concrete Key Model	PDF file
12.	Curb Types	PDF file
13.	D-10	PDF file
14.	Divided Private Street (8' Lanes with Barrier Curb) Model	PDF file
15.	Divided Residential Street (18 Inch Rolled Curb and Barrier Curb) Model	PDF file
16.	Filter Fabric Inlet Protection	PDF file
17.	Gravel Construction Entrance, Exit	PDF file
18.	Inlet Protection	PDF file
19.	Junction Box	PDF file
20.	Length of Need and Placement of Guardrail	PDF file
21.	Level Spreader	PDF file
22.	Level Spreader Detail	PDF file
23.	Manhole Lid 2	PDF file
24.	Manhole Lid Model	PDF file
25.	Matting Detail Channel Installation Model	PDF file
26.	Matting Detail Channel Installation Model 2	PDF file

27.	Matting Orientation	PDF file
28.	Matting Orientation 2	PDF file
29.	Open Cut Repair for Light Commercial Industrial, and Residential	PDF file
30.	Open Cut Repair for Local Asphalt Pavement	PDF file
31.	Outlet Structure (Other Options) Model	PDF file
32.	Outlet Structure	PDF file
33.	Permanent Vegetation Notes and Schedule (Sheet 1 of 2)	PDF file
34.	Permanent Vegetation Notes and Schedule (Sheet 2 of 2)	PDF file
35.	Private Commercial Street Model	PDF file
36.	Private Residential Street Model	PDF file
37.	Residential Collector 18’ Barrier Curb, 4’ Sidewalk (50 RW)	PDF file
38.	Residential Collector and Light Commercial Industrial with 18’	PDF file
39.	Residential Collector Road Section with Barrier Curbing Model	PDF file
40.	Residential Local 18’Rolled Curb, 4’ Sidewalk (50 RW)	PDF file
41.	Residential Local Cul-de-Sac (with and without island)	PDF file
42.	Residential Local Offset Cul-de-Sac (with or without island)	PDF file
43.	Residential Local Road Section Ditch 50’ RW Model	PDF file
44.	Residential Local Road Section Valley Gutter Curbing Model	PDF file
45.	Residential Local ‘T’ Road Termination	PDF file
46.	Residential Local ‘Y’ Road Termination	PDF file
47.	Residential Local, Residential Collector Turnaround	PDF file
48.	Riprap Apron	PDF file
49.	Riprap Channel Plan and Section	PDF file
50.	Riprap Channel Plan and Section-Recover	no PDF file
51.	Riprap Headwall	PDF file
52.	Security Fence	PDF file
53.	Sediment Basin Sheet 2 of 2 Model	PDF file
54.	Sediment Basin with Optional Skimmer Sheet 1 of 2	PDF file
55.	Sediment Tube Inlet Protection	PDF file
56.	SFR Details	PDF file

57. Sight Distance PDF file
58. Steel Beam Guardrail PDF file
59. Steel Beam Guardrail (Adjustable) PDF file
60. Steel Beam Guardrail (Standard) PDF file
61. Steel Beam Guardrail End Treatment Type B PDF file
62. Steel Beam Guardrail End Treatment Type T PDF file
63. Stilling Basin PDF file
64. Stone Check Dam PDF file
65. Straight Headwall (for 24 in. diameter pipe or less) PDF file
66. Temporary Catch Basin Sediment Trap PDF file
67. Temporary Silt Fence PDF file
68. Temporary Slope Drain PDF file
69. Temporary Vegetation Notes and Schedule (Sheet 1 of 2) PDF file
70. Temporary Vegetation Notes and Schedule (Sheet 2 of 2) PDF file
71. Trash Rack PDF file
72. Trash Rack 2 PDF file
73. Tree Protection Detail PDF file
74. Trench Drain PDF file
75. Type ‘A’ Lot Grading (All Drainage to Road) PDF file
76. Type ‘B’ Lot Grading (All Drainage to Road and Alley) PDF file
77. Type ‘C’ Lot Grading (All Drainage to Alley) PDF file
78. Typical Swale Section PDF file
79. Wet Extended Detention Pond Model PDF file
80. Wingwall Headwall (For 30 inch Diam Pipe or Larger) PDF file
81. Yard Inlet Model PDF file
82. YI Model PDF file



PLAN VIEW

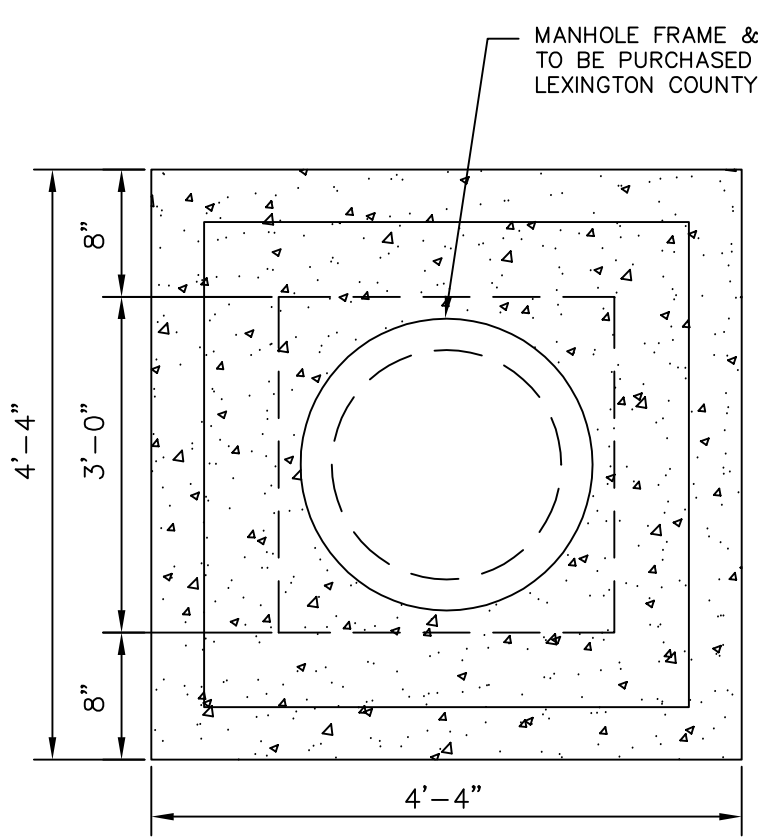


SECTION

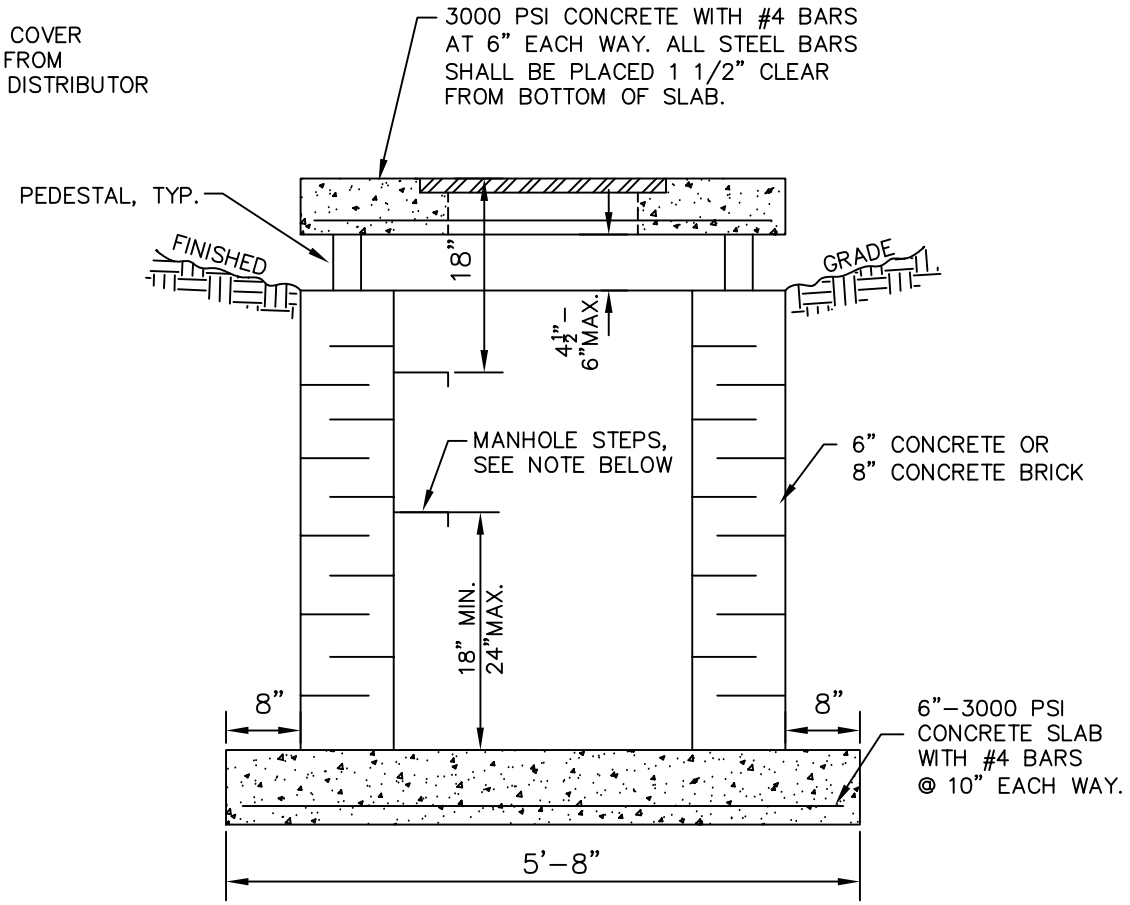
NOTE: MANHOLE STEPS SHALL BE 18" OC ON BOXES 4' DEEP OR DEEPER. (STEPS MUST CONFORM TO ASTM-C-478 OR EQUIVALENT)

YARD INLET

LEXINGTON COUNTY PLANNING & DEVELOPMENT	
YARD INLET	
SCALE: NTS	DWG: YI.DWG
DATE: 4/9/99	L.R. NONE



PLAN VIEW



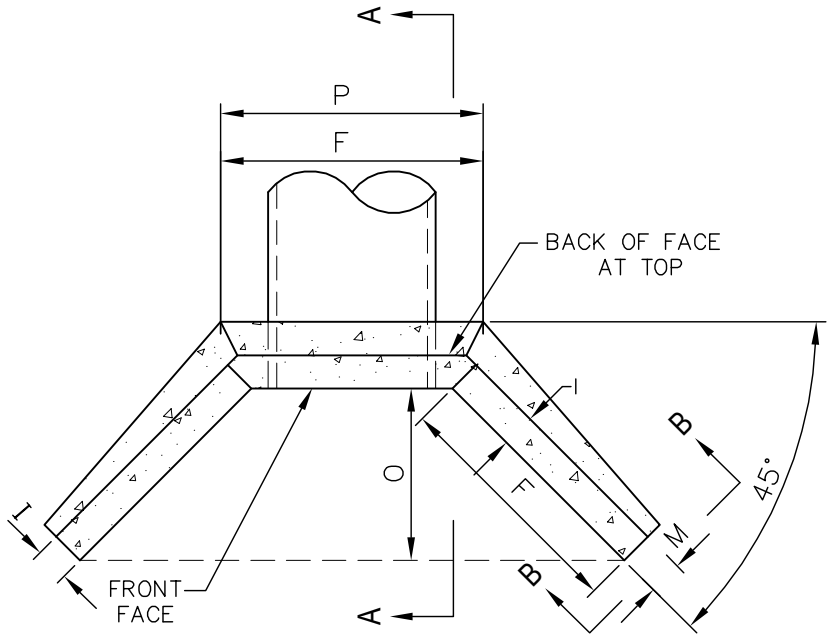
SECTION

NOTE:

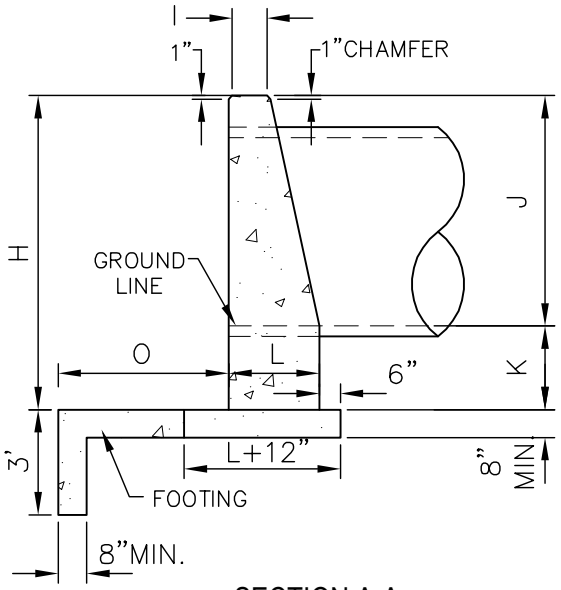
MANHOLE STEPS SHALL BE 18" OR 12" OC ON BOXES 4' DEEP OR DEEPER. (STEPS MUST CONFORM TO ASTM-C-478 OR EQUIVALENT)

PROVIDE 95% COMPACTION DURING BACKFILLING.

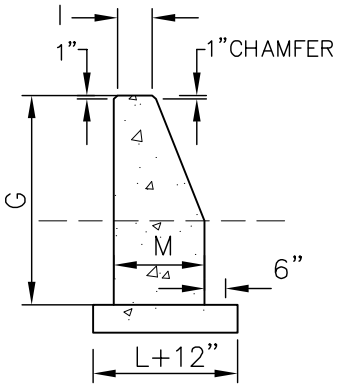
LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
YARD INLET	
DRAWING NO: D-2	
DATE: October, 2007	



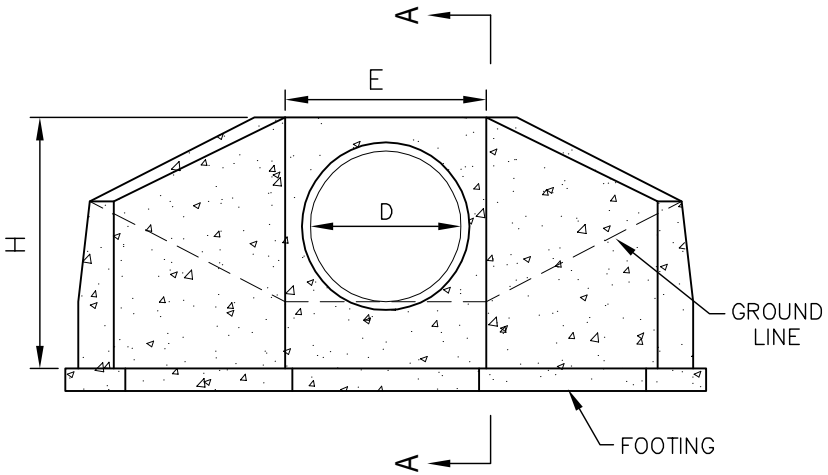
PLAN



SECTION A-A



SECTION B-B



FRONT ELEVATION

2 : 1 SLOPE												
D	E	F	G	H	I	J	K	L	M	N	O	P
30"	4'–0"	4'–3"	4'–0"	5'–6"	12"	3'–6"	24"	1'–6"	18"	2'–0"	3'–0"	5'–4"
36"	4'–6"	5'–0"	4'–3"	6'–0"	12"	4'–0"	24"	1'–8"	18"	2'–3"	3'–6"	5'–11"
42"	5'–0"	5'–9"	4'–6"	6'–6"	12"	4'–6"	24"	1'–10"	18"	2'–6"	4'–0"	6'–6"
48"	5'–6"	6'–6"	4'–9"	7'–0"	12"	5'–0"	24"	2'–0"	18"	2'–9"	4'–6"	7'–2"
54"	6'–0"	7'–3"	5'–0"	7'–6"	12"	5'–6"	24"	2'–2"	18"	3'–0"	5'–0"	7'–10"
60"	6'–6"	8'–0"	5'–3"	8'–0"	12"	6'–0"	24"	2'–4"	18"	3'–3"	5'–8"	8'–5"
72"	7'–6"	9'–6"	5'–9"	9'–10"	12"	7'–0"	24"	2'–8"	18"	3'–9"	6'–9"	9'–9"
84"	8'–6"	11'–0"	6'–3"	10'–0"	12"	8'–0"	24"	3'–0"	18"	4'–3"	7'–9"	11'–0"

NOTES:

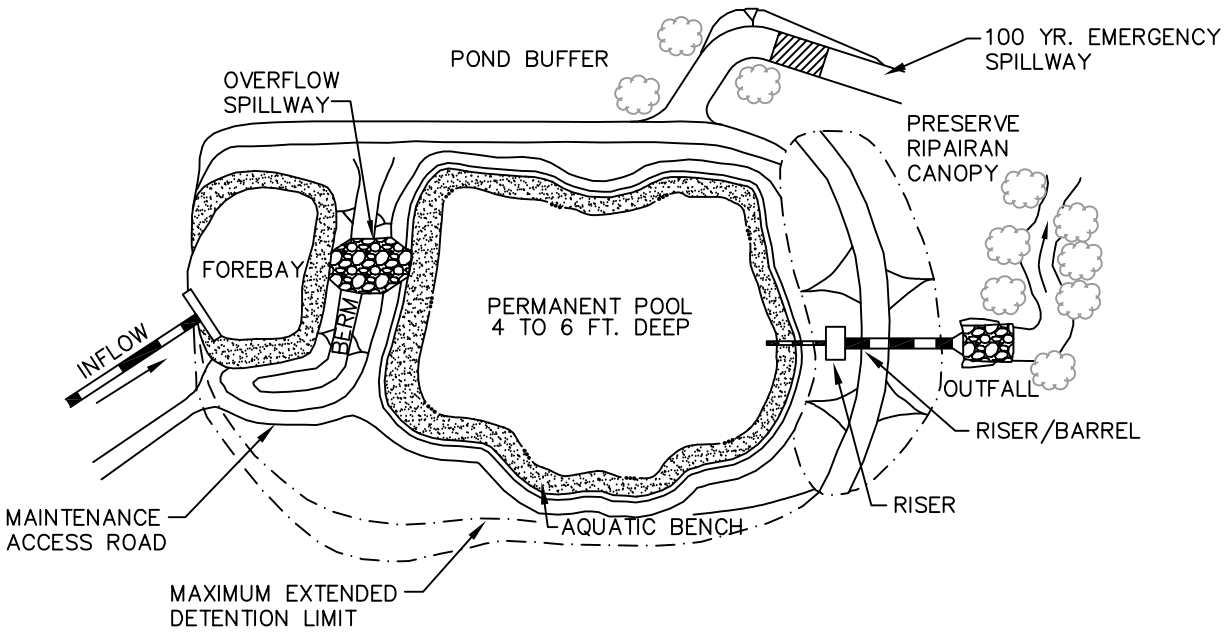
1. FOR EACH ADDITIONAL PIPE LINE, ADD 2'–0" (OR ONE–HALF DIAMETER OF PIPE. WHICHEVER IS GREATER) + O.D.

2. ALL CONCRETE SHALL BE 3000 PSI

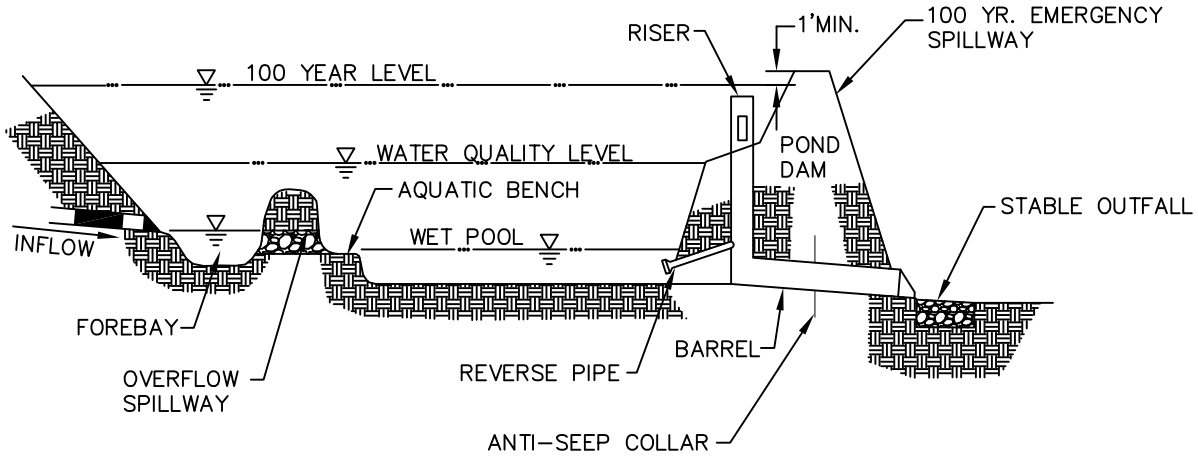
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

WINGWALL HEADWALL
(for 30" Ø pipe or larger)

DRAWING NO: D–3
DATE: October, 2007



PLAN VIEW



PROFILE

WET EXTENDED DETENTION POND

A wet extended pond is a wet pond where the water quality volume is split evenly between the permanent pool and extended detention storage provided above the permanent pool. During storm events, water is stored above permanent pool and released over 24-hours. The design has similar pollutant removal efficiencies as traditional wet ponds, but consumes less space.

Installation:

A forebay shall be provided for all inlets to a wet extended water quality pond and shall be placed upstream of the main wet pond area. The forebay is separated from the larger wet detention pond area by a spillway that may be constructed of earth, stones, riprap, gabions, or geotextiles. The spillway into the main pool should be sized to pass the 100-year event. The top of the forebay spillway shall be equal or above to the normal pool elevation. The volume of the forebay shall be a minimum of 0.1" * contributing area.

The permanent pool shall be four (4) to six (6) feet in depth.

A low flow orifice shall be installed to slowly release the water quality volume. The low flow orifice shall be protected from clogging by designing appropriate trash guards. Acceptable trash guards include:

Hoods that extend at least 6-inches below the permanent pool water surface elevation.

Reverse flow pipes where the outlet structure inlet is located at least 6-inches below the permanent pool water surface elevation.

Trash boxes made of sturdy wire mesh.

Emergency spillways shall be installed to safely pass the post-development 100-year 24-hour storm event without overtopping any dam structures.

Inspection and Maintenance:

The side slopes of the pond shall be mowed monthly. Debris shall be cleared from all inlet and outlet structures monthly. All eroded or undercut areas shall be repaired as needed.

Since decomposing vegetation captured in the wetpond can release pollutants, especially nutrients, it may be necessary to harvest dead vegetation annually. Otherwise the decaying vegetation can export pollutants out of the pond and also can cause nuisance conditions to occur.

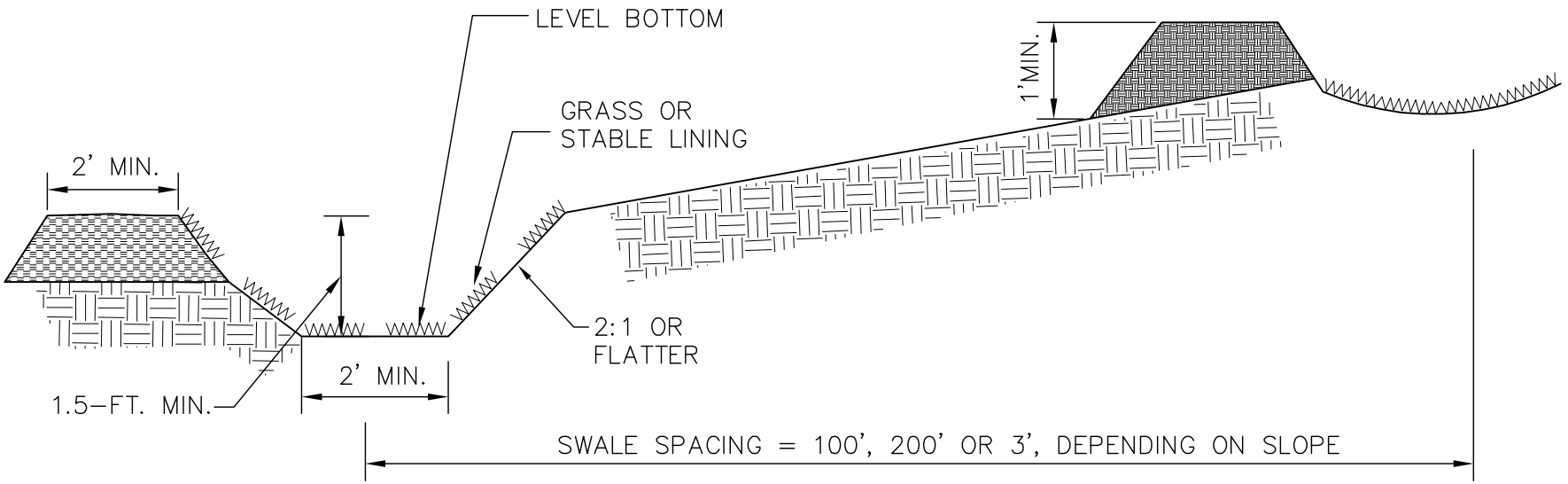
A sediment marker shall be placed in the forebay to determine when sediment removal is required.

Sediment accumulations in the main pond area and forebay shall be monitored and sediment shall be removed when the permanent pool volume has been significantly filled and/or the pond becomes eutrophic.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

WET EXTENDED
DETENTION POND

DRAWING NO: C-22
DATE: October 2007



DIVERSION SWALE

INSTALLATION

THE BOTTOM WIDTH SHOULD BE A MINIMUM OF 2', AND THE BOTTOM SHOULD BE LEVEL.

THE DEPTH SHOULD BE A MINIMUM OF 1.5' AND THE SIDE SLOPES SHOULD BE 2H:1V OR FLATTER.

THE MAXIMUM GRADE SHALL BE 5%, WITH POSITIVE DRAINAGE TO A SUITABLE OUTLET.

SLOPES SHALL BE STABILIZED IMMEDIATELY USING VEGETATION, SOD, AND EROSION CONTROL BLANKETS OR TURF REINFORCEMENT MATS TO PREVENT EROSION.

THE UPSLOPE SIDE OF THE SWALE SHOULD PROVIDE POSITIVE DRAINAGE SO NO EROSION OCCURS AT THE OUTLET. PROVIDE ENERGY DISSIPATION MEASURES AS NECESSARY.

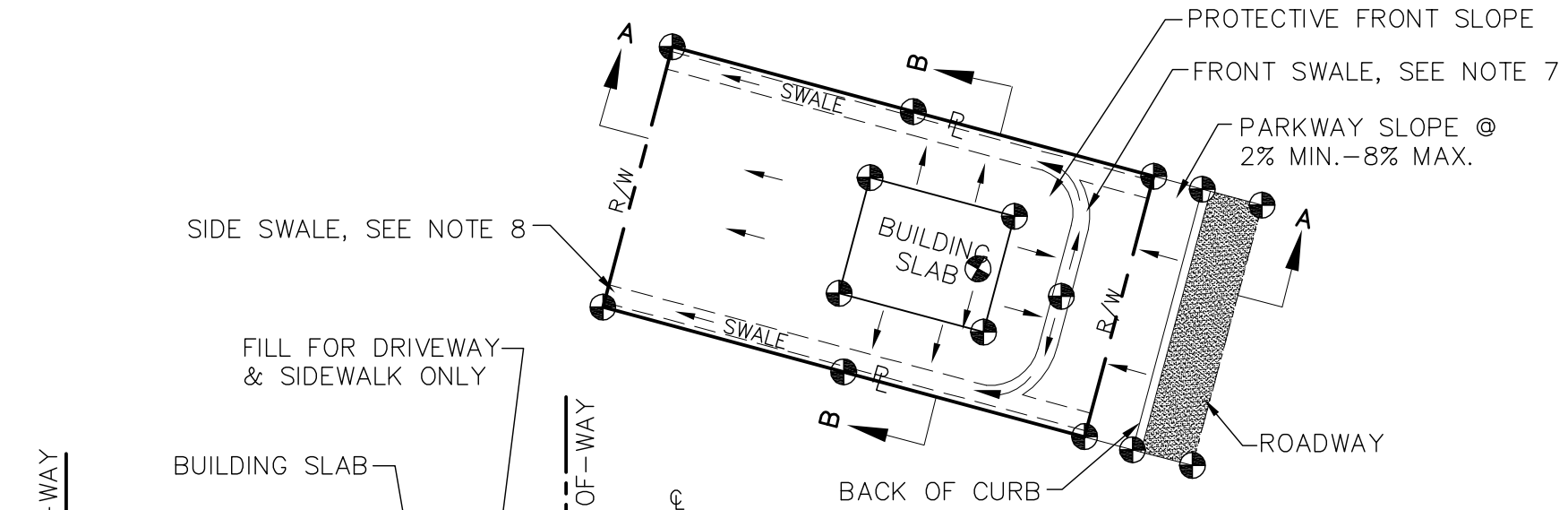
SEDIMENT–LADEN RUNOFF SHALL BE DIRECTED TO A SEDIMENT TRAPPING FACILITY.

INSPECTION AND MAINTENANCE:

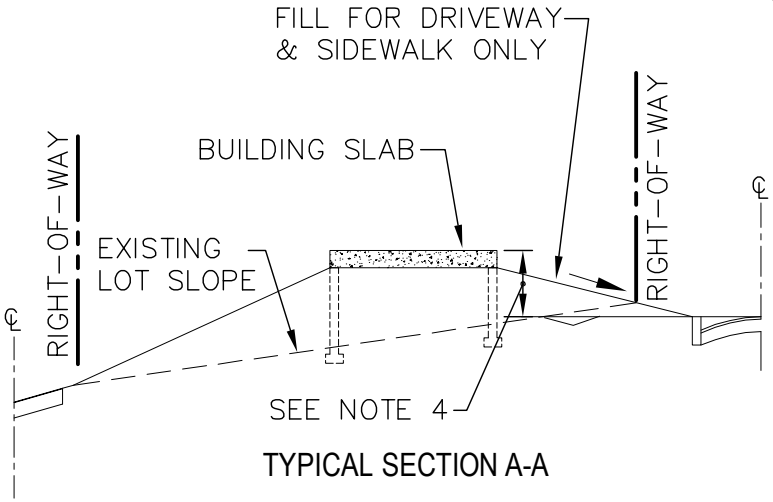
SWALES SHOULD BE INSPECTED, EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24–HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ½–INCHES OR MORE OF PRECIPITATION AND REPAIRS MADE AS NECESSARY.

DAMAGE CAUSED BY CONSTRUCTION TRAFFIC OR OTHER ACTIVITY MUST BE REPAIRED BEFORE THE END OF EACH WORKING DAY.

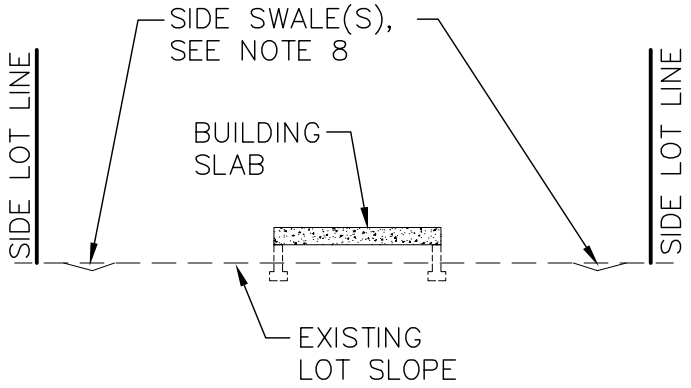
LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
TYPICAL SWALE SECTION	
DRAWING NO: D–13	
DATE: October 2007	



PLAN VIEW
TYPICAL GRADING



TYPICAL SECTION A-A



TYPICAL SECTION B-B
(DOUBLE SCALE)

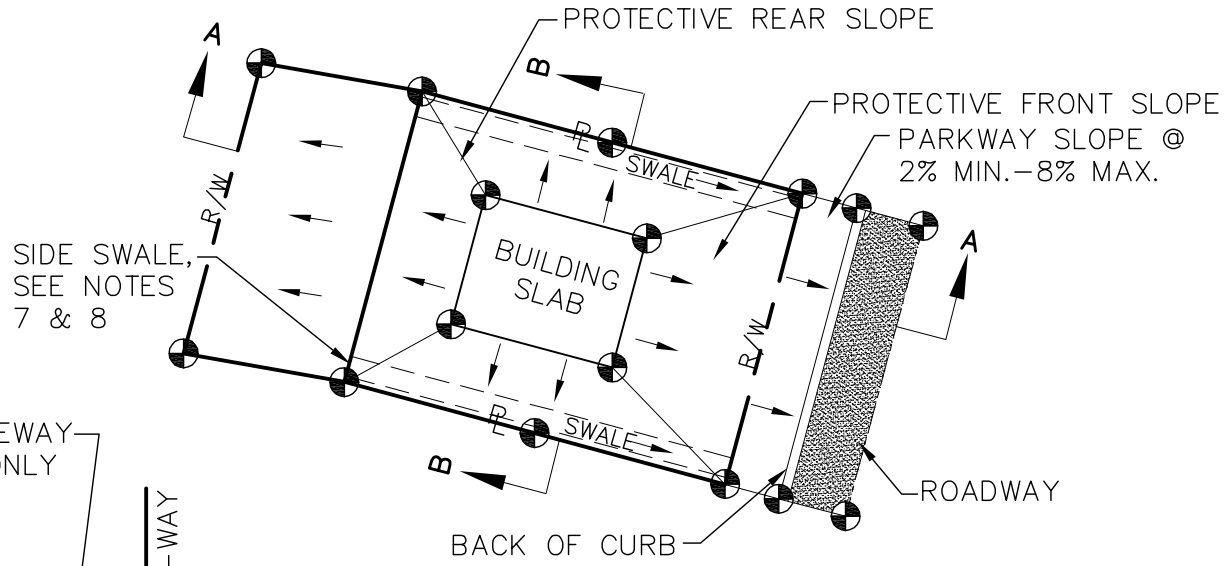
NOTES:

1. FILL IN FEMA FLOOD ZONES A AND AE IS LIMITED PER COUNTY CODE. A SEPARATE SITE PLAN SHOWING EXISTING AND PROPOSED ELEVATIONS AND DRAINAGE PLAN IS REQUIRED IN FEMA FLOOD AREAS. THESE PLANS SHALL BE SIGNED AND SEALED BY A SOUTH CAROLINA REGISTERED ENGINEER.
2. EXISTING AND DESIGN ELEVATIONS ARE REQUIRED FOR POINTS IDENTIFIED BY THIS SYMBOL: ⊕
3. BUILDING SLAB SHALL BE 1' MINIMUM ABOVE THE CENTERLINE OF THE ROADWAY OR AS DICTATED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).
4. LOT GRADING SHALL MAINTAIN HISTORICAL FLOW PATHS AND PREVENT THE ACCUMULATION OF WATER OR EXCESSIVE RUNOFF ONTO ADJACVENT PROPERTIES.
5. LOTS IN EXISTING SUBDIVISIONS REQUIRE EXISTING ELEVATIONS 5' INTO ADJOINING PROPERTIES OR EXISTING SWALE(S).
6. FRONT SWALE SHALL DRAIN TO SIDE SWALES AND TO ROADWAY ON EACH LOT SIDE AND SHALL FUNCTION INDEPENDENTLY FROM ALL ADJOINING LOTS.
7. SIDE SWALES SHALL BE SIZED TO ACCOMMODATE A MINIMUM OF A 10 YEAR, 1 HOUR RAIN EVENT, MINIMUM SWALE SIZE SHALL BE 6" DEEP WITH 4:1 SIDE SLOPES.
8. ROOF GUTTERS AND LEADERS IN CONJUNCTION WITH YARD DRAINS AND INLETS ARE REQUIRED WHERE NECESSARY FOR ADEQUATE DRAINAGE.
9. WHEN SILT FENCING IS REQUIRED, SEE DETAIL "TEMPORARY SILT FENCE", DWG NO. C–11
10. FINAL AS–BUILT ELEVATIONS SHALL BE CERTIFIED BY A REGISTERED SOUTH CAROLINA LAND SURVEYOR TO CONFIRM COMPLIANCE WITH THE PROPOSED DESIGN ELEVATIONS.

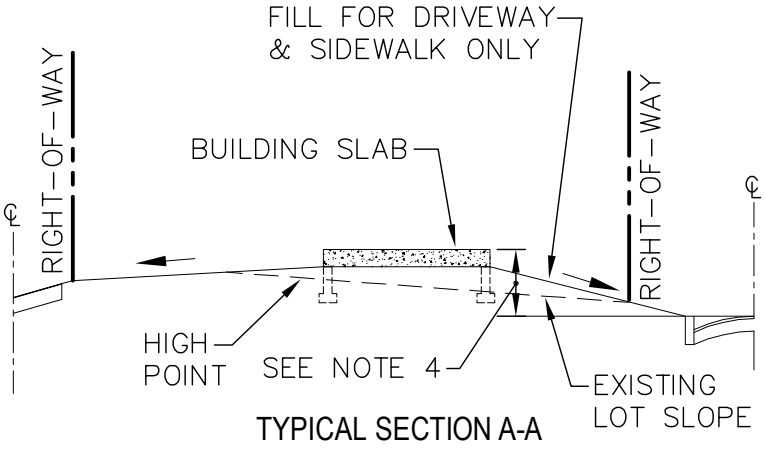
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

TYPE 'C' LOT GRADING
(all drainage to alley)

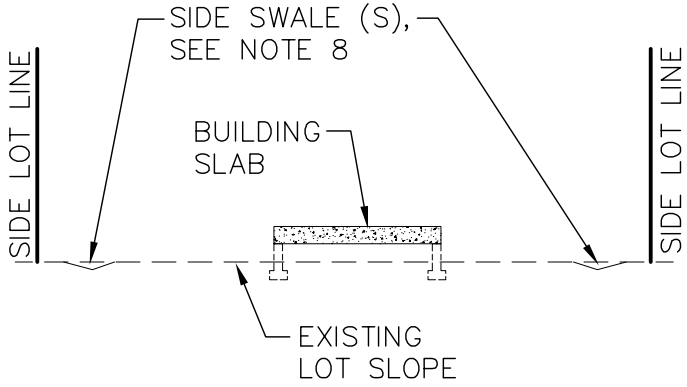
DRAWING NO: C–16
DATE: October, 2007



PLAN VIEW
TYPICAL GRADING



TYPICAL SECTION A-A



TYPICAL SECTION B-B
(DOUBLE SCALE)

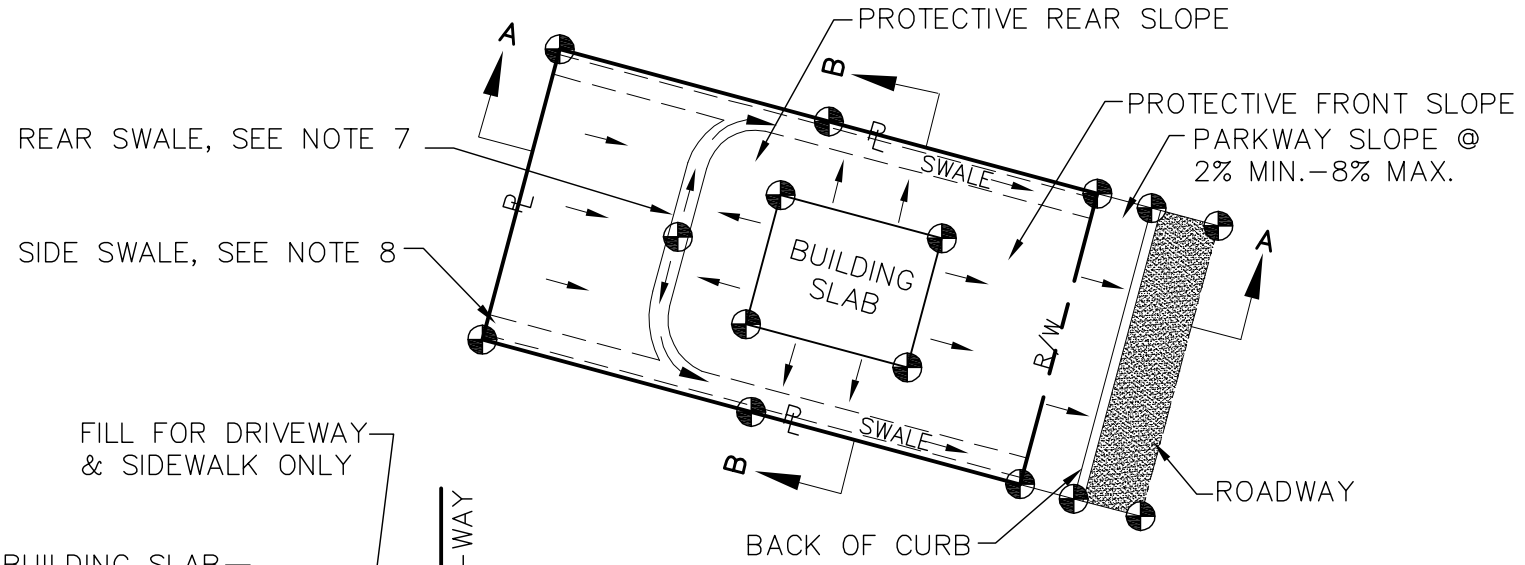
NOTES:

1. FILL IN FEMA FLOOD ZONES A AND AE IS LIMITED PER COUNTY CODE. A SEPARATE SITE PLAN SHOWING EXISTING AND PROPOSED ELEVATIONS AND DRAINAGE PLAN IS REQUIRED IN FEMA FLOOD AREAS. THESE PLANS SHALL BE SIGNED AND SEALED BY A SOUTH CAROLINA REGISTERED ENGINEER.
2. EXISTING AND DESIGN ELEVATIONS ARE REQUIRED FOR POINTS IDENTIFIED BY THIS SYMBOL: ⊕
3. BUILDING SLAB SHALL BE 1' MINIMUM ABOVE THE CENTERLINE OF THE ROADWAY OR AS DICTATED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).
4. LOT GRADING SHALL MAINTAIN HISTORICAL FLOW PATHS AND PREVENT THE ACCUMULATION OF WATER OR EXCESSIVE RUNOFF ONTO ADJACVENT PROPERTIES.
5. LOTS IN EXISTING SUBDIVISIONS REQUIRE EXISTING ELEVATIONS 5' INTO ADJOINING PROPERTIES OR EXISTING SWALE(S).
6. SIDE SWALES SHALL DRAIN TO ROADWAY ON EACH LOT SIDE AND SHALL FUNCTION INDEPENDENTLY FROM ALL ADJOINING LOTS.
7. SIDE SWALES SHALL BE SIZED TO ACCOMMODATE A MINIMUM OF A 10 YEAR, 1 HOUR RAIN EVENT, MINIMUM SWALE SIZE SHALL BE 6" DEEP WITH 4:1 SIDE SLOPES.
8. ROOF GUTTERS AND LEADERS IN CONJUNCTION WITH YARD DRAINS AND INLETS ARE REQUIRED WHERE NECESSARY FOR ADEQUATE DRAINAGE.
9. WHEN SILT FENCING IS REQUIRED, SEE DETAIL "TEMPORARY SILT FENCE", DWG NO. C–11.
10. FINAL AS–BUILT ELEVATIONS SHALL BE CERTIFIED BY A REGISTERED SOUTH CAROLINA LAND SURVEYOR TO CONFIRM COMPLIANCE WITH THE PROPOSED DESIGN ELEVATIONS.

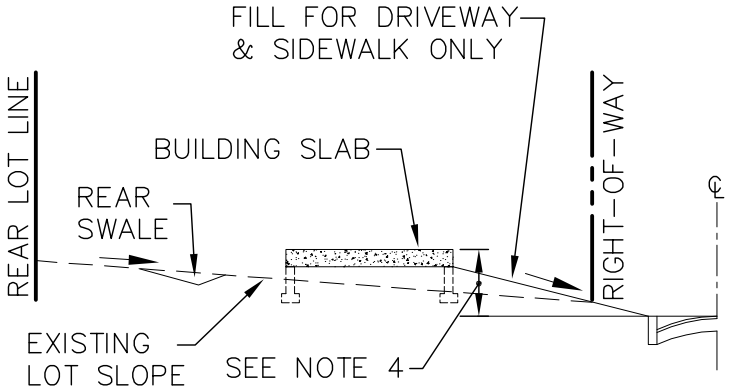
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

TYPE 'B' LOT GRADING
(all drainage to road & alley)

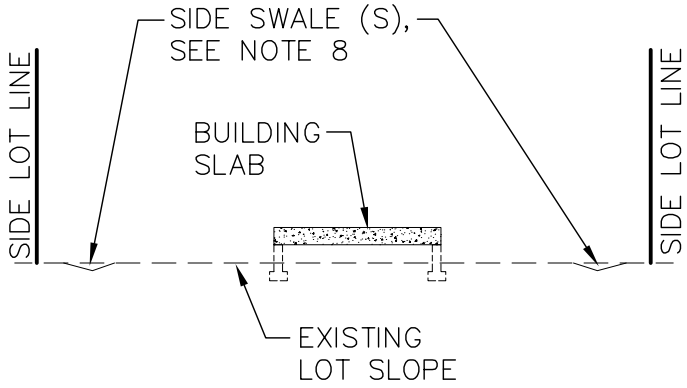
DRAWING NO: C–15
DATE: October, 2007



PLAN VIEW
TYPICAL GRADING



TYPICAL SECTION A-A



TYPICAL SECTION B-B
(DOUBLE SCALE)

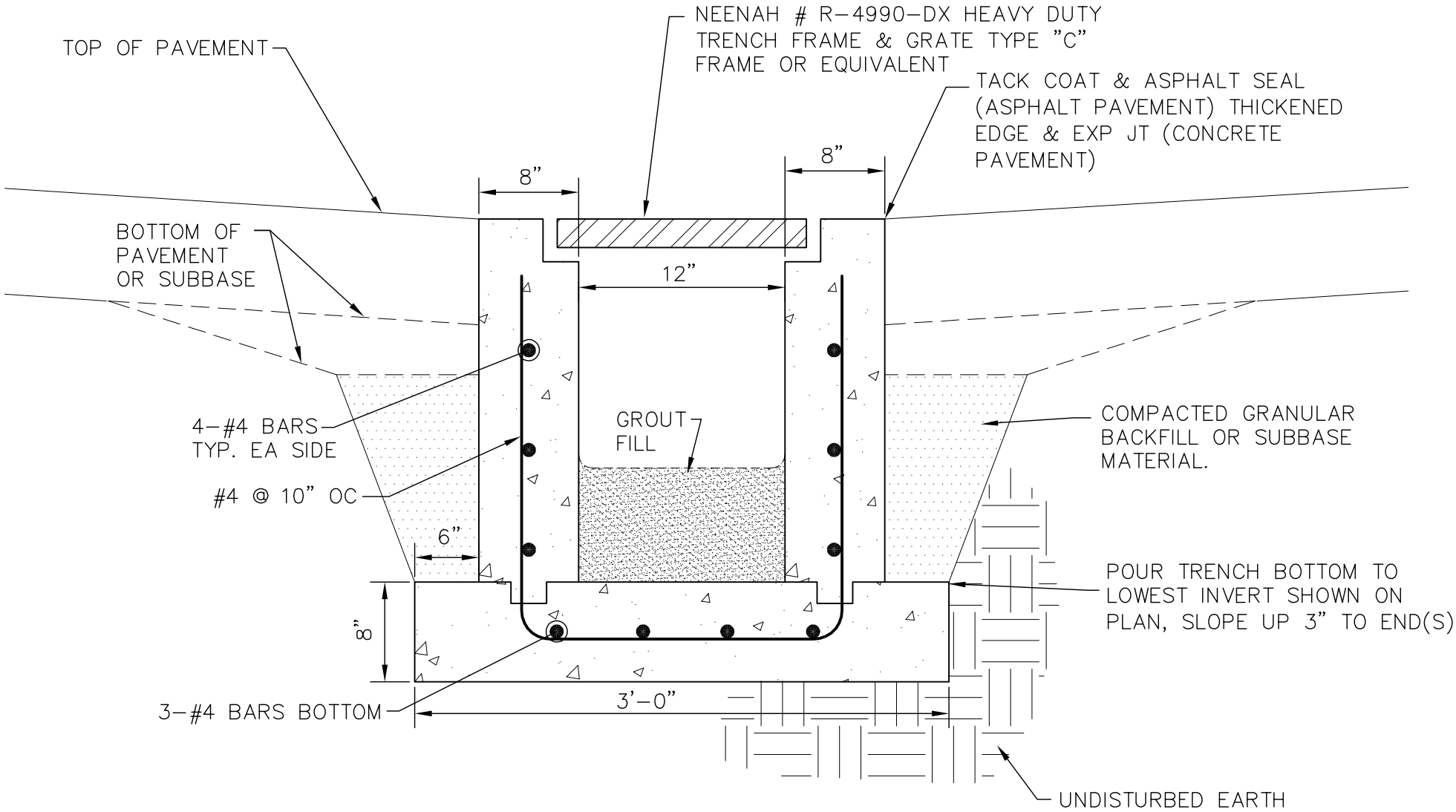
NOTES:

1. FILL IN FEMA FLOOD ZONES A AND AE IS LIMITED PER COUNTY CODE. A SEPARATE SITE PLAN SHOWING EXISTING AND PROPOSED ELEVATIONS AND DRAINAGE PLAN IS REQUIRED IN FEMA FLOOD AREAS. THESE PLANS SHALL BE SIGNED AND SEALED BY A SOUTH CAROLINA REGISTERED ENGINEER.
2. EXISTING AND DESIGN ELEVATIONS ARE REQUIRED FOR POINTS IDENTIFIED BY THIS SYMBOL: ⊕
3. BUILDING SLAB SHALL BE 1' MINIMUM ABOVE THE CENTERLINE OF THE ROADWAY AS DICTATED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).
4. LOT GRADING SHALL MAINTAIN HISTORICAL FLOW PATHS AND PREVENT THE ACCUMULATION OF WATER OR EXCESSIVE RUNOFF ONTO ADJACVENT PROPERTIES.
5. LOTS IN EXISTING SUBDIVISIONS REQUIRE EXISTING ELEVATIONS 5' INTO ADJOINING PROPERTIES OR EXISTING SWALE (S).
6. REAR SWALE SHALL DRAIN TO SIDE SWALES AND TO ROADWAY ON EACH LOT SIDE AND SHALL FUNCTION INDEPENDENTLY FROM ALL ADJOINING LOTS.
7. SIDE SWALES SHALL BE SIZED TO ACCOMMODATE A MINIMUM OF A 10 YEAR, 1 HOUR RAIN EVENT, MINIMUM SWALE SIZE SHALL BE 6" DEEP WITH 4:1 SIDE SLOPES.
8. ROOF GUTTERS AND LEADERS IN CONJUNCTION WITH YARD DRAINS AND INLETS ARE REQUIRED WHERE NECESSARY FOR ADEQUATE DRAINAGE.
9. WHEN SILT FENCING IS REQUIRED, SEE DETAIL "TEMPORARY SILT FENCE", DWG NO. C–11.
10. FINAL AS–BUILT ELEVATIONS SHALL BE CERTIFIED BY A REGISTERED SOUTH CAROLINA LAND SURVEYOR TO CONFIRM COMPLIANCE WITH THE PROPOSED DESIGN ELEVATIONS.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

TYPE 'A' LOT GRADING
(all drainage to road)

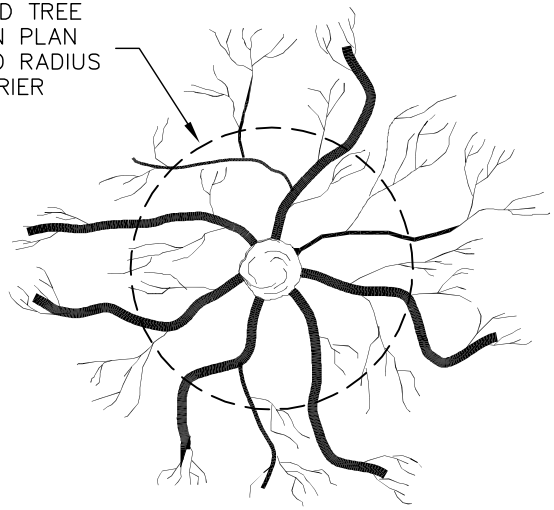
DRAWING NO: C–14
DATE: October, 2007



NOTE: TIE TO DRAINAGE SYSTEM

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
TRENCH DRAIN	
DRAWING NO: D-6	
DATE: October, 2007	

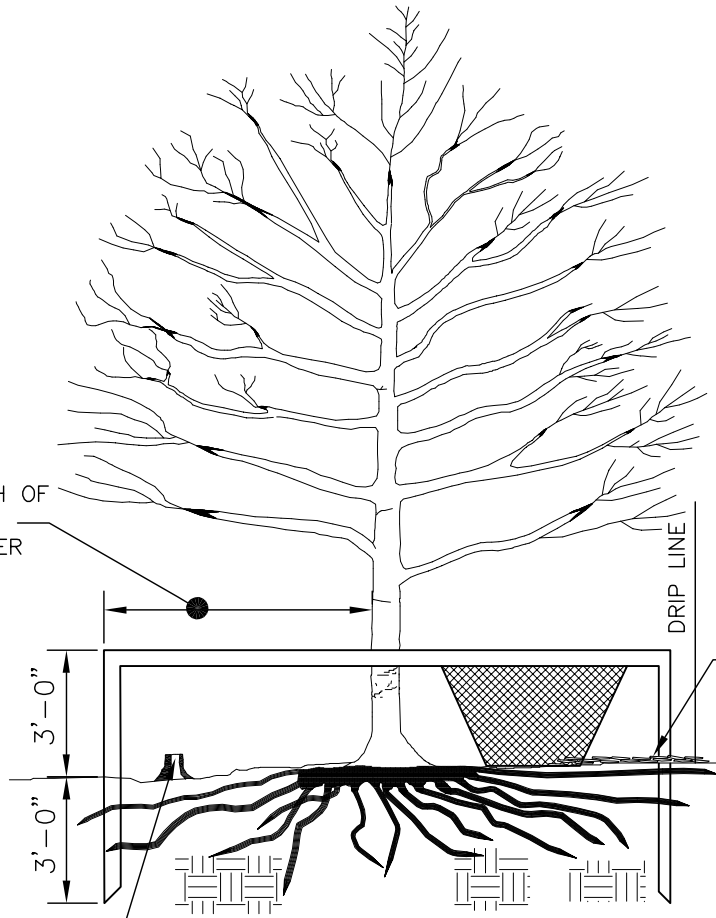
SEE APPROVED TREE PRESERVATION PLAN FOR REQUIRED RADIUS OF TREE BARRIER

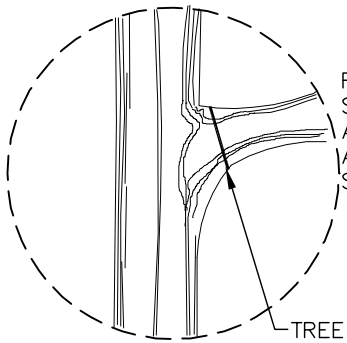


PLAN VIEW OF ROOT ZONE

NOTES:

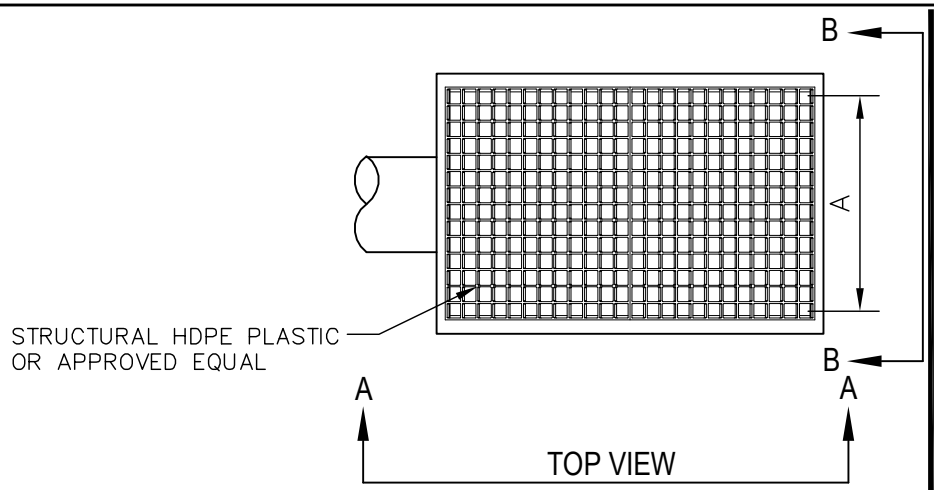
1. REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.
2. SEE PLANS FOR LOCATION OF ALL TREE PROTECTION FENCES.

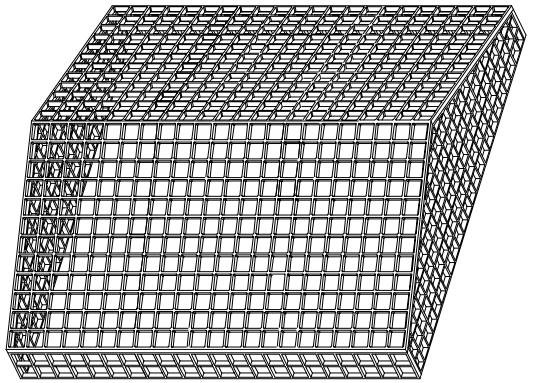




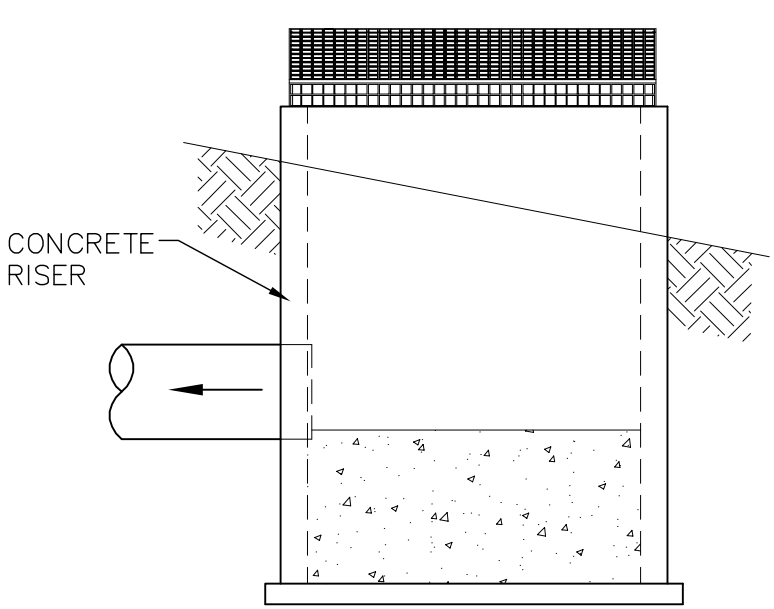
2x4" STANDARDS + 1x4" RAILS OR ORANGE SAFETY FENCING MAY BE USED.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
TREE PROTECTION DETAIL	
DRAWING NO: E-6	
DATE: October, 2007	

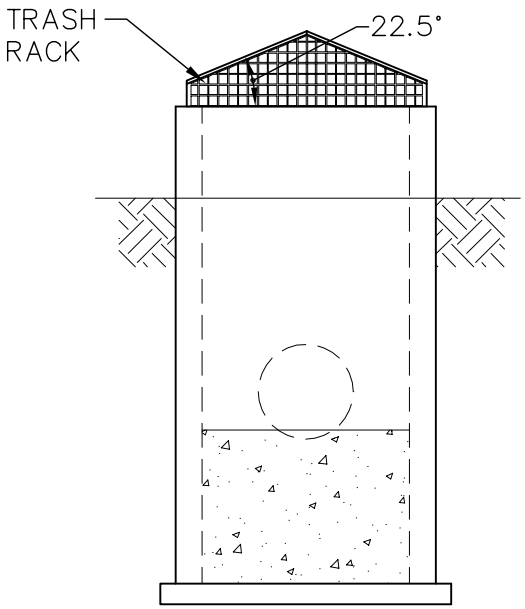




TRASH RACK ASSEMBLY



ELEV. A-A



ELEV. B-B

A	49 3/4	59 3/4	69 1/2	79 1/2	89 1/2	99 1/2	109 1/4	120 1/2
WIDTH CODE	10	12	14	16	18	20	22	24
C	18	20	22	24	26	28	30	32

B	49	54 1/2	59 3/4	65 1/4	70 1/2	76	82	87 1/4
LENGTH CODE	09	10	11	12	13	14	15	16

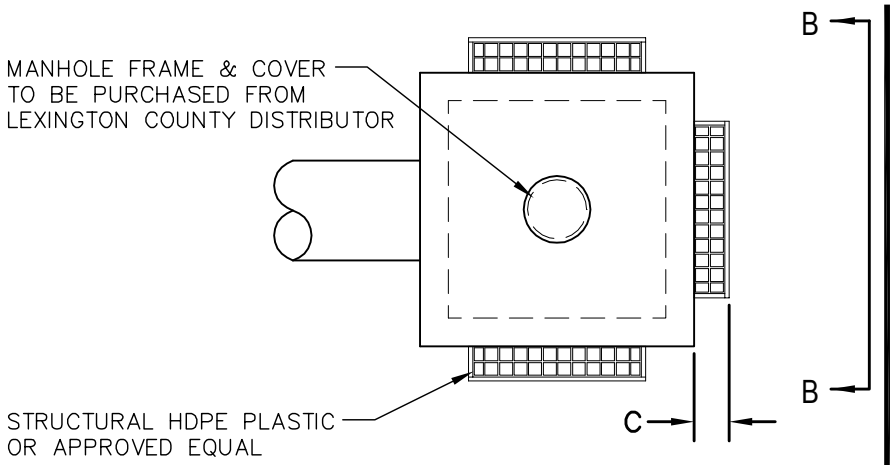
NUMBERS ROUNDED TO 1/4"

PART CODE= PR + WIDTH CODE +LENGTH CODE
(EX. PR1213)

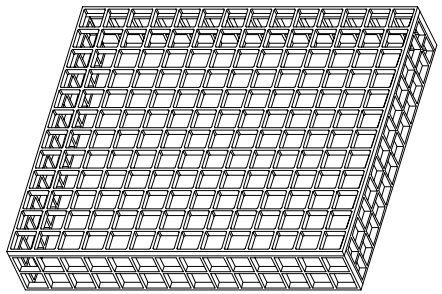
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

TRASH RACK

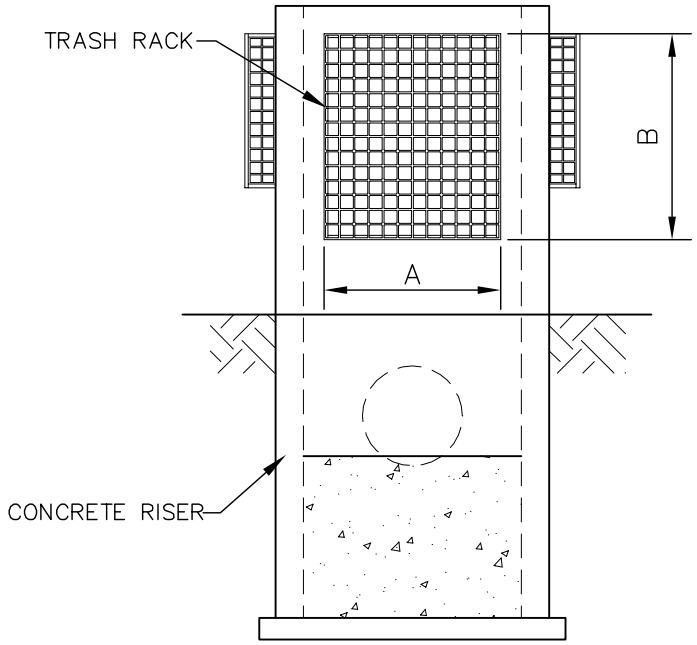
DRAWING NO: D-15A
DATE: October 2007



Top View



Trash Rack Assembly



ELEV. B–B

A	11 3/8	16 3/4	22 1/8	27 1/2	32 7/8	38 1/4	43 5/8	49	54 3/8	59 3/4	65 1/8	71 1/8	76 1/2	81 7/8	87 1/4
WIDTH CODE	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
B	11 3/8	16 3/4	22 1/8	27 1/2	32 7/8	38 1/4	43 5/8	49	54 3/8	59 3/4	65 1/8	70 1/2	75 7/8	81 7/8	87 1/4
LENGTH CODE	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16

C	7 1/2	12 7/8
HEIGHT CODE	01	02

PART CODE= FR + WIDTH CODE +LENGTH CODE + HEIGHT CODE
(EX. FR080802)

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

TRASH RACK

DRAWING NO: D–15
DATE: October 2007

TABLE 3.12 TEMPORARY VEGETATION SCHEDULE			
Species	Rates (lbs/acr)	Optimum Dates to Plant	Remarks
Browntop Millet (Alone)	40	April 20 – August 15	Quick, Dense Cover
Browntop Millet (Mix)*	10	April 20 – August 15	Quick, Dense Cover
Rye Grain (Alone)	56	February – March, August 15 – November 20	Quick Cover
Rye Grain (Mix)*	10	February – March, August 15 – November 20	Quick Cover
Rye Grass (Alone)	50	August 10 – October 10	Competitive, Dense
Rye Grass (Mix)*	8	August 10 – October 10	Competitive, Dense

TABLE 3.13 TEMPORARY VEGETATION FOR STEEP SLOPES/CUT SLOPES			
Species	Rates (lbs/acr)	Optimum Dates to Plant	Remarks
Weeping Lovegrass (Alone)	4	April – July 20	Quick cover, deep roots, likes dry sites, seldom used alone, clumps
Weeping Lovegrass (Mix)*	2	April – July 20	Quick cover, deep roots, likes dry sites, seldom used alone, clumps

* For details on mixes consult the Lexington Soil and Water Conservation District, (803) 359–3165 ext. 3.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

TEMPORARY VEGETATION
NOTES & SCHEDULE
(Sheet 2 of 2)

DRAWING NO: D–14A

DATE: October 2007

Plant Selection
Plant seed selection should be based on the type of soil and the season of the year in which the planting is to be done. Tables 3.12 and 3.13 should be used if you plan to use conventional tillage methods (plowing, seedbed preparation, hydroseeding, etc). If you need a fast growing crop to nurse your permanent specie or species, then use the mix rate. Failure to carefully follow agronomic recommendations often result in an inadequate stand of temporary vegetation that provides little or no erosion control.

Tillage
If the area has been recently plowed, no tillage is required other than raking or surface roughening to break any crust that has formed and to leave a textured surface. If the soil is compacted less than 6–inches, it should be disked for optimal germination.

Soil Testing
Information and test provider is available from the PW/SWD and the Soil and Water Conservation District Office.

Lime
Lime is not required for temporary seeding unless a soil test shows that the soil pH is below 5.0. It may be desirable to apply lime during the temporary seeding operation to benefit the long–term permanent seeding. Apply a minimum of 1.5 tons of Lime/acre (70 pounds per 1000 square feet) if it is to be used.

Fertilizer
A minimum of 500 pounds per acre of 10–10–10 fertilizer (11.5 pounds per 1000 square feet) or equivalent should be applied during temporary seeding unless a soil test indicates a different requirement. Fertilizer and lime (if used) should be incorporated into the top 4–6 inches of the soil by disking or other means where conditions allow.

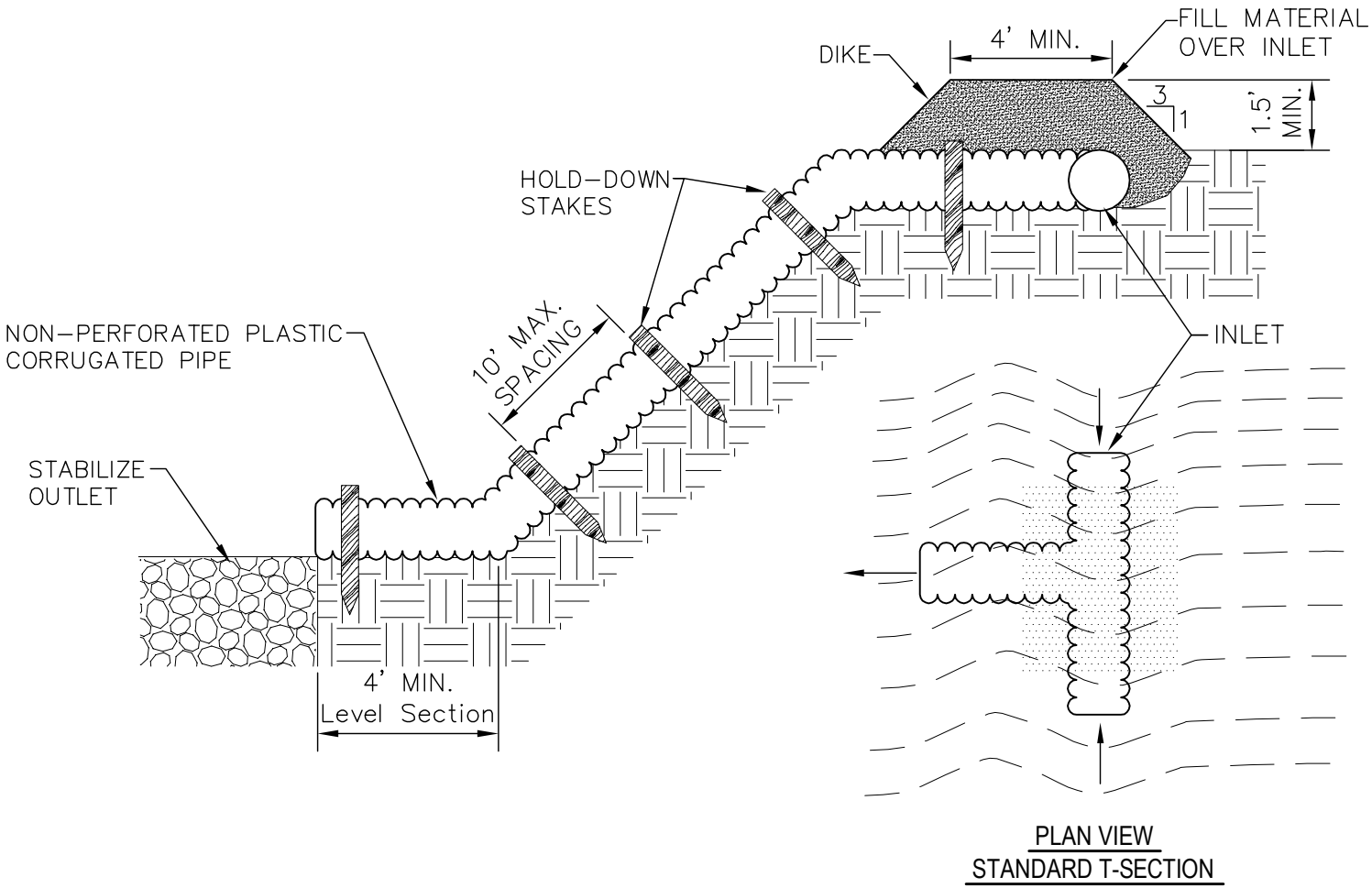
Seeding
The surface of the soil should be loosened just before broadcasting the seed. Seed should be applied evenly by the most convenient method available for the type of seed to be used and the location of the temporary seeding. Typical application methods include but are not limited to cyclone seeders, rotary spreaders, drop spreaders, broadcast spreaders, hand spreaders, cultipacker seeder, and hydro–seeders. Cover applied seed by raking or dragging a chain, and then lightly firm the area with a roller or cultipacker.

Mulching
Mulch should be used in all permanently seeded areas to retain soil moisture and reduce erosion during establishment of vegetation. The mulch should be applied evenly in such a manner that it provides a minimum of 75% coverage. Typical mulch applications include straw, wood chips, bark, wood fibers, compost much or hydro–mulches. The most commonly accepted mulch used in conjunction with temporary seeding is small grain straw. This straw should be dry and free from mold damage and noxious weeds. The straw may need to be anchored with netting or emulsions to prevent it from being blown or washed away. The straw mulch may be applied by hand or machine at the rate 1.5 – 2 tons per acre (90 pounds per 1000 square feet). Frequent inspections are necessary to check that conditions for growth are good.

Irrigation
Seeded areas should be kept adequately moist. Irrigate the seeded area if normal rainfall is not adequate for the germination and growth of seedlings. Water seeded areas at controlled rates that are less than the rate at which the soil can absorb water to prevent runoff. Runoff of irrigation water wastes water and can cause erosion.

Re–seeding
Areas where the plants do not grow quickly, thick enough, or adequately to prevent erosion should be re–seeded with temporary grasses as soon as such areas are identified.

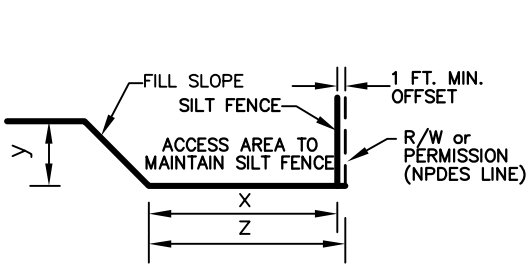
LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
TEMPORARY VEGETATION NOTES & SCHEDULE (Sheet 1 of 2)	
DRAWING NO: D–14	
DATE: October 2007	

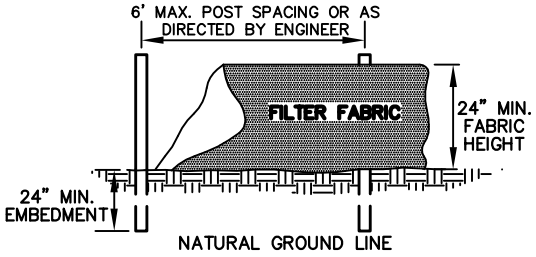


PLAN VIEW
STANDARD T-SECTION

NOTE:
SEE EROSION CONTROL PLAN FOR PIPE SIZE

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
TEMPORARY SLOPE DRAIN	
DRAWING NO: D-8	
DATE: October, 2007	





NOTES:

1. SILT FENCE CHECKS MUST BE LOCATED EVERY 100 FT. MAXIMUM AND AT LOW POINTS. FILTER FABRICS SHALL CONFORM TO SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).

2. STEEL POST MAY BE USED. POSTS SHALL BE A MINIMUM OF 5 FEET LONG AND INSTALLED TO A MINIMUM DEPTH OF 24 INCHES WITH NO MORE THAN 3 FEET OF THE POST ABOVE GROUND. AT LEAST 1 TO 2 INCHES OF THE POSTS SHALL EXTEND ABOVE THE TOP OF THE FABRIC. POST SPACING WILL BE A MAXIMUM OF 6 FEET ON CENTER WHICH DOES NOT REQUIRE WIRE BACKING UNLESS DIRECTED BY ENGINEER.

3. STEEL POSTS SHALL BE 5 FEET AND WEIGH A MINIMUM OF 1.25 POUNDS PER FOOT AND HAVE PROJECTIONS FOR FASTENING THE FABRIC TO THE POST. STEEL POSTS SHALL ALSO HAVE A SOIL PLATE WELDED NEAR THE BOTTOM OF THE POST.

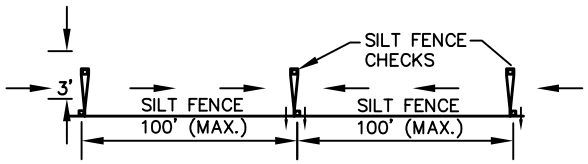
4. SILT SHALL BE REMOVED AND DISPOSED OF WHEN SILT ACCUMULATES TO 1/3 THE HEIGHT OF THE FENCE. MAINTENANCE OF SILT FENCE WILL BE MEASURED AND PAID FOR BY THE ITEM OF SILT BASIN.

5. THE PAY ITEMS SHALL BE: SILT FENCE_____L.F.
SILT BASIN_____C.Y.

HEIGHT OF FILL (y) IN FEET	FILL SLOPE	MINIMUM SILT FENCE OFFSET FROM TOE OF SLOPE (x) IN FEET	MINIMUM RIGHT OF WAY OFFSET FROM TOE OF SLOPE (NPDES LINE) (z) IN FEET	CHECK LENGTH IN FEET**
<6	2:1 4:1 6:1	2	3	2
6–10	2:1	12*	13*	5
	4:1 6:1	3	4	3
>10	2:1	12*	13*	5
	4:1 6:1	4	5	4

* THESE MINIMUM OFFSETS MAY BE REDUCED WHEN CURB AND GUTTER OR SOME OTHER FEATURE REDUCES THE FLOW OF WATER DOWN THE SLOPE. THE SMALL OFFSETS OF EACH GROUP OF HEIGHT OF FILL CANNOT BE REDUCED.

** SILT FENCE CHECKS WILL HAVE A MAXIMUM LENGTH OF FIVE (5) FEET OR UNTIL THEY TIE BACK INTO THE SLOPE.

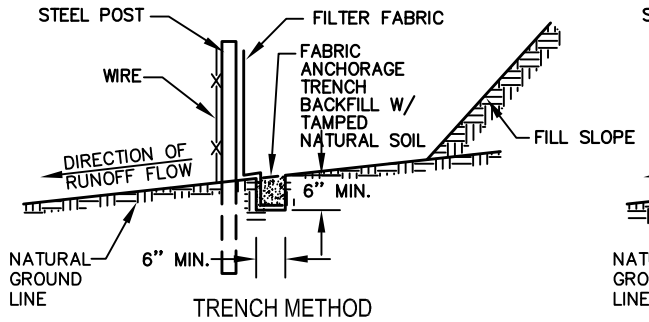


SILT FENCE CHECKS

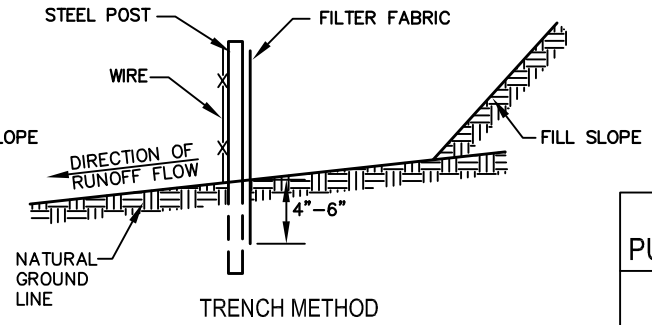
NOTES:

1. TYPICAL SILT FENCE APPLICATIONS REQUIRE 24 INCHES OF THE FABRIC TO BE ABOVE GROUND .WHEN NEEDED, THE HEIGHT OF SILT FENCE FABRIC ABOVE THE GROUND MAY BE GREATER THAN 24". SEE PLANS FOR APPLICATION OF HIGHER SILT FENCE, PAY ITEMS AND INSTALLATION METHODS.

2. IN TIDAL AREAS, SILT FENCE EXTRA HEIGHT MAY BE REQUIRED.THE LENGTH OF POST WILL BE TWICE THE EXPOSED POST HEIGHT. POST SPACING AND BURIED DEPTHS WILL REMAIN AS SHOWN HEREON. EXTRA HEIGHT FABRIC WILL BE 4, 5 OR 6 FEET TOTAL WIDTH.



TRENCH METHOD



TRENCH METHOD

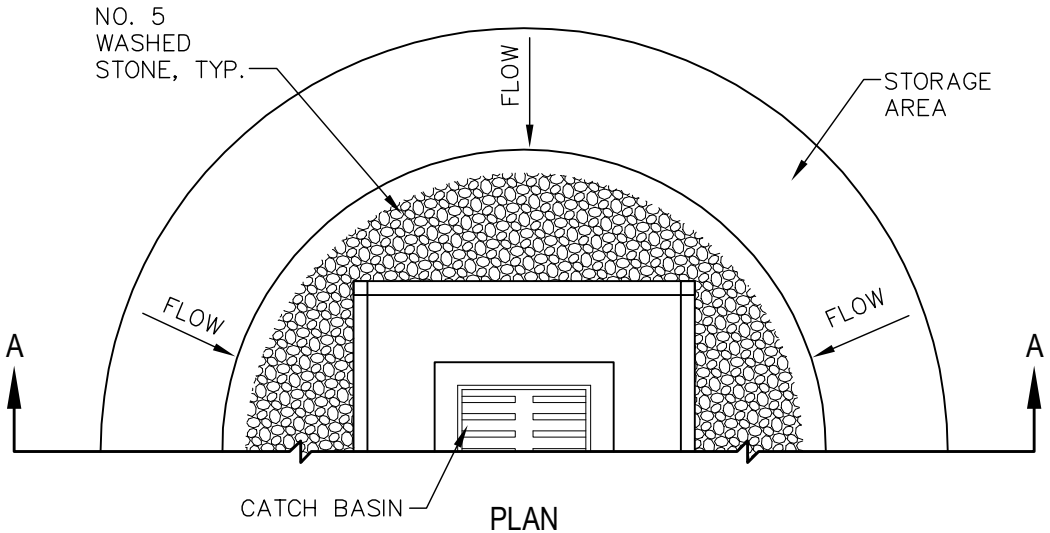
NOTE:
THE FABRIC SHALL BE BURIED REGARDLESS, IF PLACED PNEUMATICALLY OR BY HAND WITH A TRENCHER. BOTH METHODS SHOWN HERE ON.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

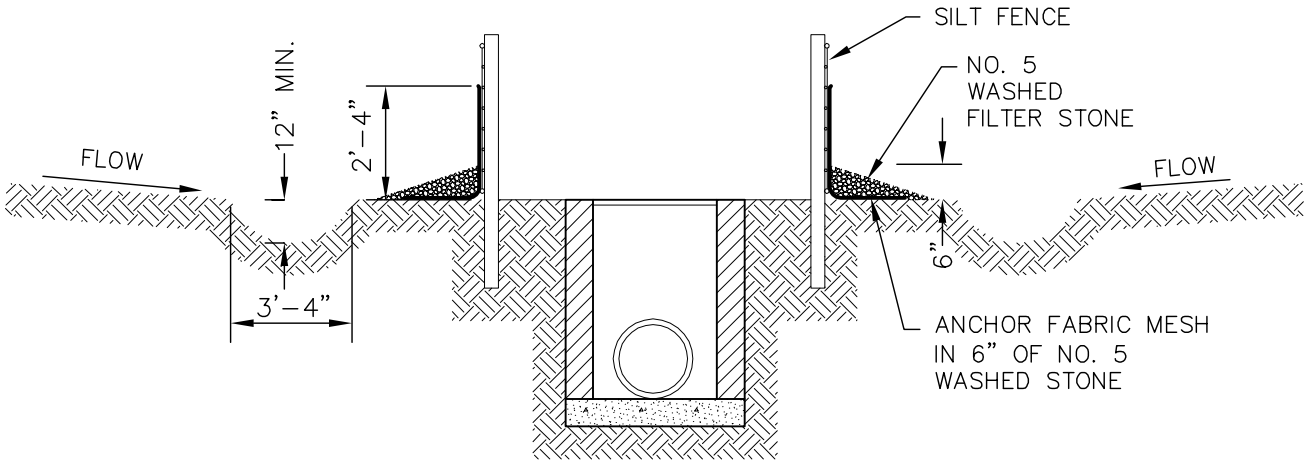
TEMPORARY SILT FENCE

DRAWING NO: C–11

DATE: October, 2007



PLAN



SECTION A-A

NOTES:

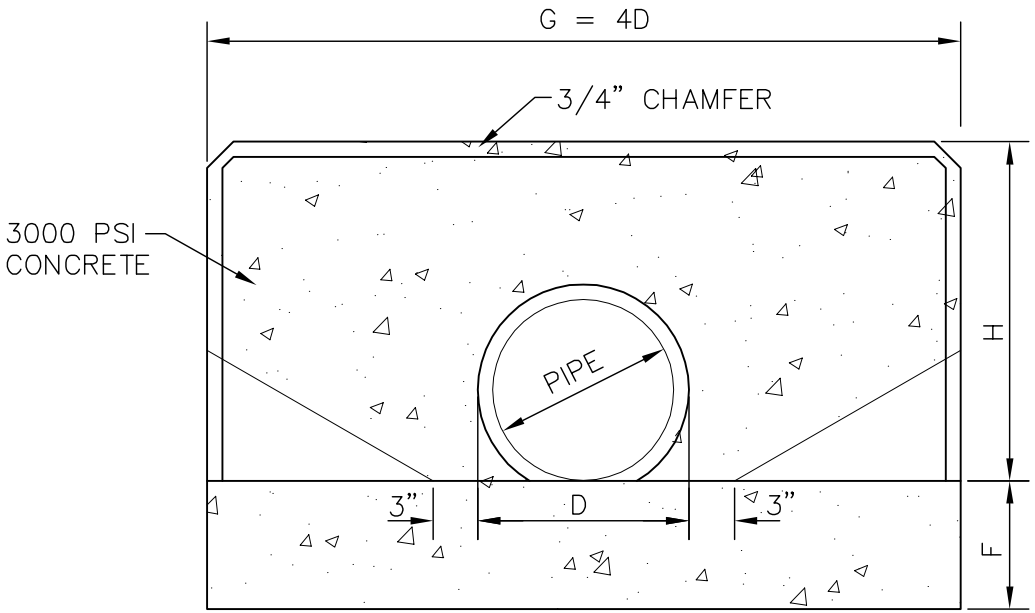
1. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
2. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
3. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
4. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

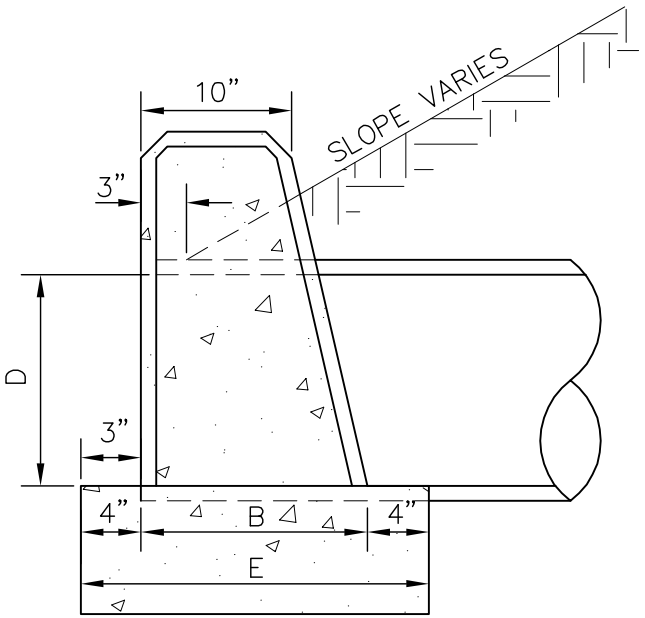
TEMPORARY CATCH BASIN
SEDIMENT TRAP

DRAWING NO: C-3

DATE: October, 2007



FRONT ELEVATION



SIDE ELEVATION

DIMENSIONS							QUANTITIES FOR ONE CONCRETE PIPE			
OPENING		WALL			FOOTING		CLASS "B" CONCRETE			
D	AREA SQ. FT.	* G	H	B	E	F	CUBIC FEET		TOTAL	
							WALL	FOOT	CU. FT.	CU. YD.
15"	1.2	5'–0"	2'–3"	1'–2"	1'–10"	1'–2"	9.0	10.7	19.7	0.73
18"	1.8	6'–0"	2'–6"	1'–3"	1'–11"	1'–3"	12.5	14.4	26.9	0.99
24"	3.1	8'–0"	3'–0"	1'–4"	2'–0"	1'–4"	20.2	21.3	41.5	1.54

* FOR EACH ADDITIONAL PIPE (15" TO 24") ADD 2'–0" + O.D. OF PIPE

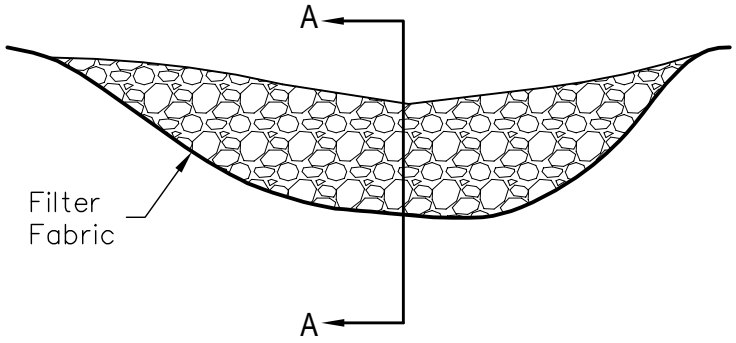
NOTES:

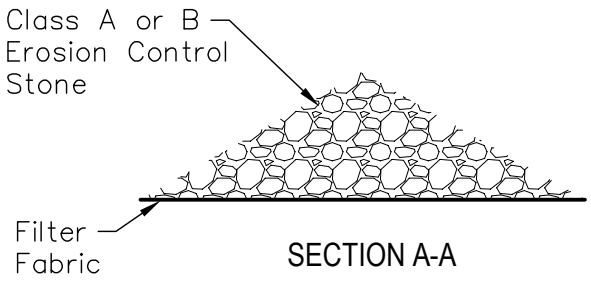
1. 8" MASONARY CONSTRUCTION MAY BE USED.
2. WHEN DITCH PAVING IS SPECIFIED RECESS SURFACE OF FOOTING TO ACCOMODATE THICKNESS OF DITCH PAVING.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

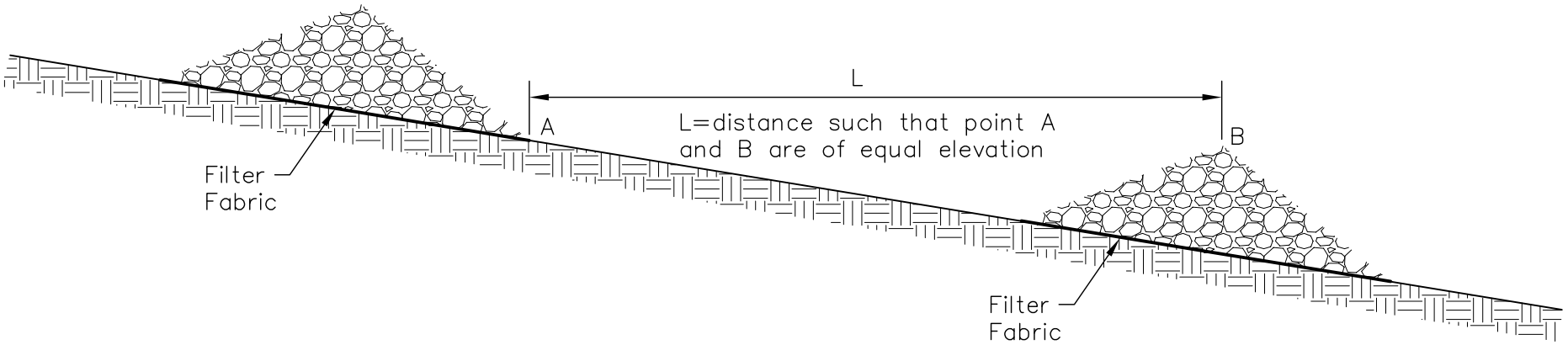
STRAIGHT HEADWALL
(for 24" Ø pipe or less)

DRAWING NO: D–4
DATE: October, 2007

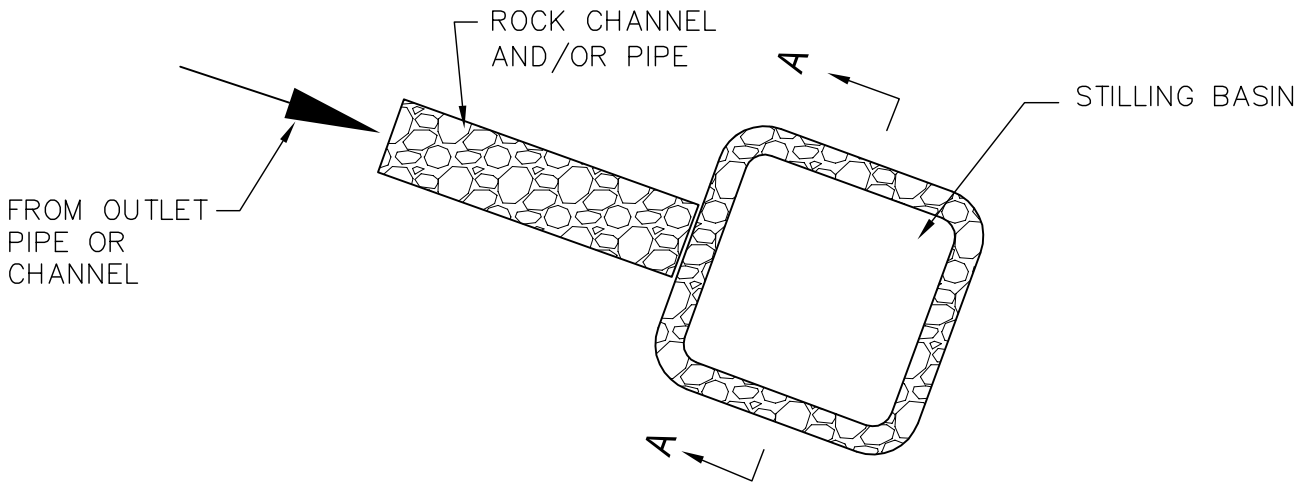


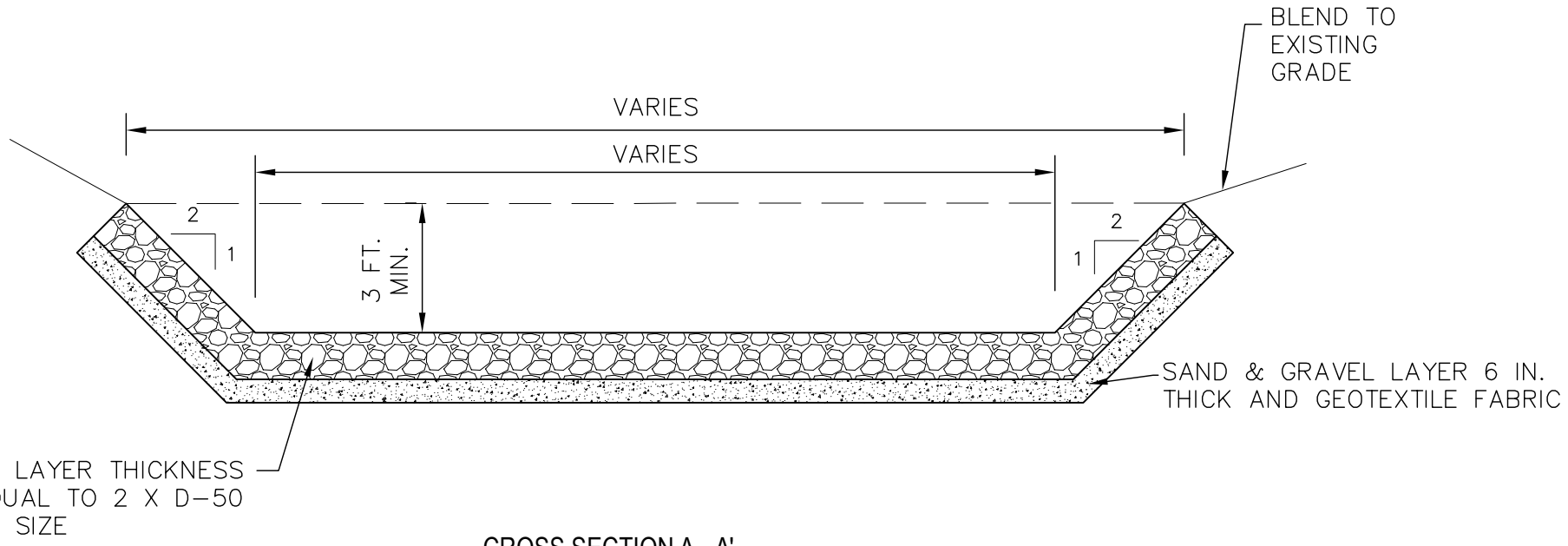


SECTION A-A



LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
STONE CHECK DAM	
DRAWING NO: C-9	
DATE: October, 2007	

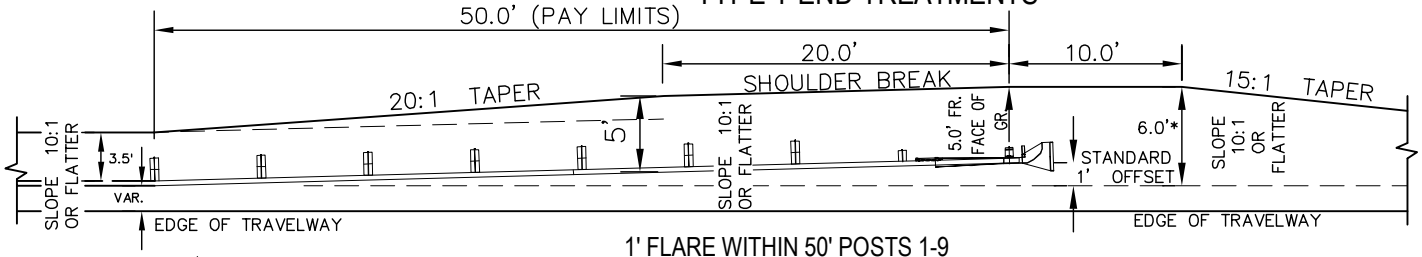


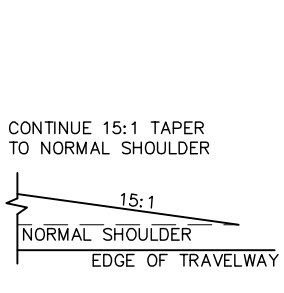


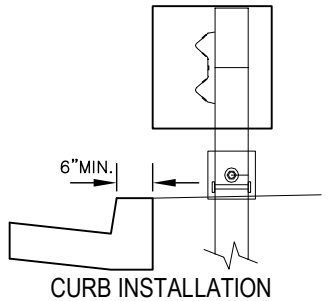
CROSS SECTION A - A'

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
STILLING BASIN	
DRAWING NO: D-12	
DATE: October 2007	

STANDARD PLACEMENT AND GRADING SCHEME FOR TYPE T END TREATMENTS







CURB INSTALLATION

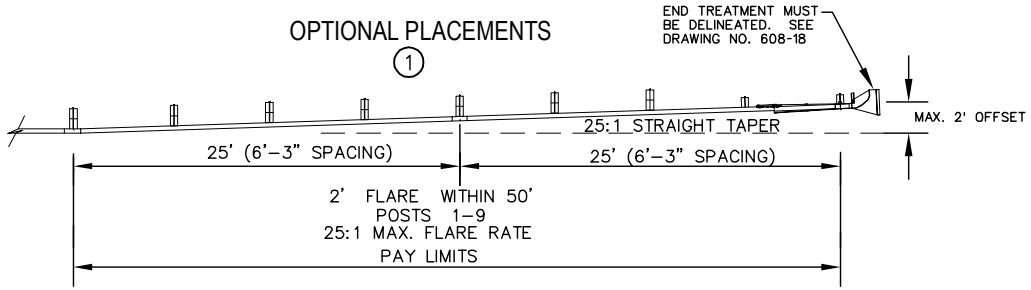
1' FLARE WITHIN 50' POSTS 1-9
50:1 MAX. FLARE RATE

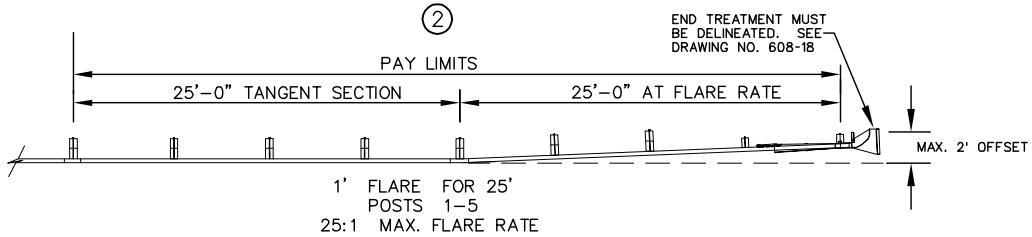
* WHEN USING OPTIONAL PLACEMENT 1, THE GRADING SCHEME WILL EXTEND FOR 7.0'.

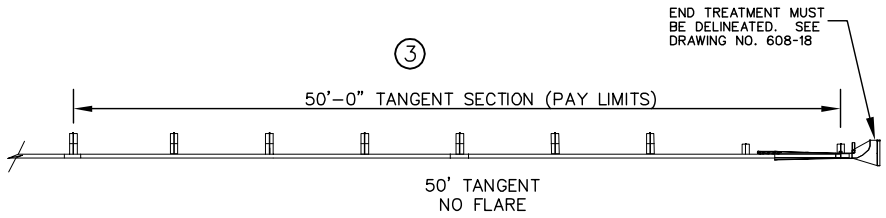
WHEN USING OPTIONAL PLACEMENT 2, THE GRADING SCHEME WILL EXTEND FOR 6.0'

WHEN USING OPTIONAL PLACEMENT 3, THE GRADING SCHEME WILL EXTEND FOR 5.0'

OPTIONAL PLACEMENTS







NOTES:

1. THIS SHEET SHOWS FOUR ACCEPTABLE PLACEMENTS FOR THE TYPE T END TREATMENT, THE APPROPRIATE GRADING SCHEME, AND CURB INSTALLATION.

2. WHEN END TREATMENT TYPE T IS STATED ON THE PLANS, CONTRACTORS MUST USE AN END TREATMENT PROVIDED BY A SUPPLIER LISTED ON APPROVAL SHEET NO. 46 MAINTAINED BY THE RESEARCH AND MATERIALS ENGINEER. THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS. THE MANUFACTURER SHALL PROVIDE ALL MATERIALS FOR ENTIRE 50 FEET OF THE END TREATMENT, INCLUDING ALL HARDWARE AND RAIL.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CERTIFY THAT THE END TREATMENT PROVIDED MEETS ALL REQUIREMENTS OF THE SCDOT APPROVAL SHEET, THE MANUFACTURERS' SPECIFICATIONS, AND ANY DETAILS SET FORTH IN THE SCDOT STANDARD DRAWINGS FOR ROAD CONSTRUCTION (LATEST EDITION).

4. FOR SIGNING DETAIL OR INFORMATION, SEE SCDOT STANDARD DRAWING 608-18.

5. FOR WOOD POST SYSTEMS, POSTS 1 THROUGH 4 SHALL BE IN FOUNDATION (SOIL) TUBES. IF FOUNDATION TUBES FOR POSTS 1 AND 2 ARE SUPPLIED IN LENGTHS OF 4'-6" OR 5'-0", SOIL PLATES MUST BE USED. SOIL PLATES ARE NOT REQUIRED AT POSTS 1 AND 2 IF FOUNDATION TUBES ARE 6'-0". POSTS 3 AND 4 MAY BE OF EITHER LENGTH WITHOUT SOIL PLATES. SOIL PLATES, IF USED, SHOULD BE PLACED ON THE DOWNSTREAM SIDE OF THE POSTS.

6. THE RECOMMENDED STANDARD INSTALLATION FLARE RATE IS 50:1 OVER THE ENTIRE SYSTEM TO PREVENT THE IMPACT HEAD FROM ENCROACHING ON THE SHOULDER, BUT END TERMINALS MAY BE INSTALLED TANGENT TO THE ROADWAY WHEN NECESSARY. IN CURB SECTIONS, THE IMPACT HEAD MUST BE PLACED SO THAT IT DOES NOT EXTEND OVER THE CURB.

7. A SPECIAL SITE EVALUATION SHOULD BE CONSIDERED PRIOR TO INSTALLING END TREATMENTS. END TREATMENTS SHOULD HAVE 25 FEET BETWEEN THE OUTLET SIDE OF THE TERMINAL AND ANY TRAFFIC AREA.

8. WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12" DIAMETER POST HOLE 20" DEEP MAY BE USED. SEE MANUFACTURERS' RECOMMENDATIONS FOR DETAILS.

9. THE CONTRACT UNIT PRICE FOR END TREATMENTS SHALL INCLUDE THE COST OF ALL MATERIALS, ERECTION, AND WORK INCIDENTAL TO THE CONSTRUCTION WITHIN THE PAY LIMITS OF THE TERMINAL, COMPLETE AND IN PLACE.

10. THE PAY ITEM SHALL BE:
END TREATMENT TYPE T _____ EA

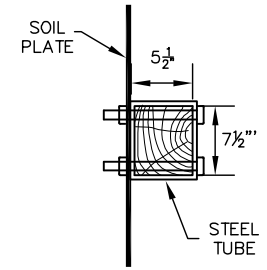
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

STEEL BEAM GUARDRAIL
END TREATMENT - TYPE T
(SCDOT DWG NO. 805-3
revised Dec. 2006)

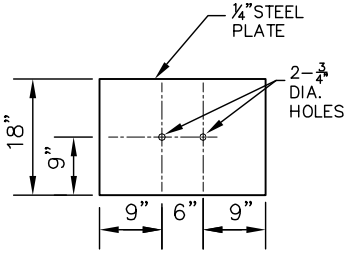
DRAWING NO: E-5

DATE: October 2007

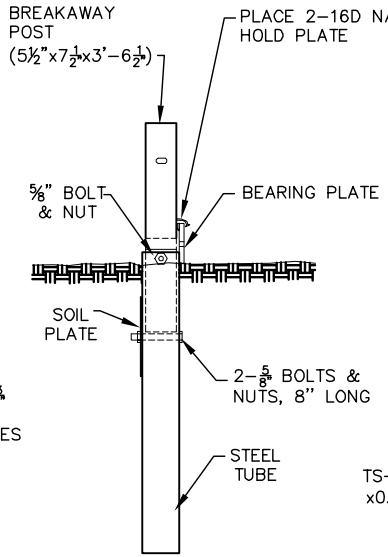
ALTERNATE NO. 2
STEEL TUBE FOOTING



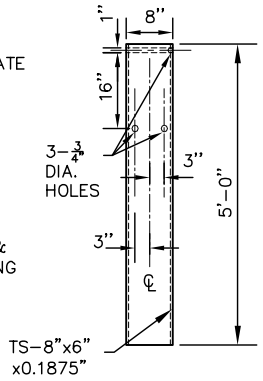
PLAN VIEW OF STEEL TUBE FOOTING



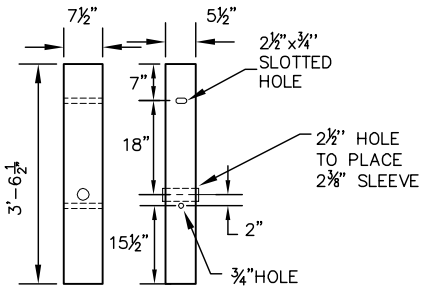
SOIL PLATE
(FOR STEEL TUBE FOOTING)



STEEL TUBE FOOTING AND BREAKAWAY POST



STEEL TUBE FOOTING DETAIL

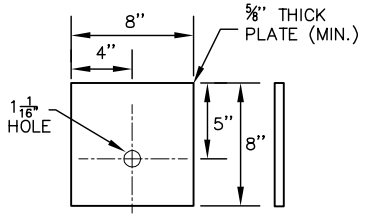


WOOD BREAKAWAY POST DETAIL
(FOR STEEL TUBE FOOTING)

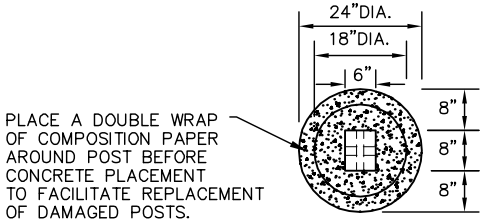
NOTES:

1. THIS TERMINAL IS USED WITH GUARDRAIL SGR04a–b & SGM04a–b AS SHOWN IN THE AASHTO ROADSIDE DESIGN GUIDE (LATEST EDITION).
2. ALL STEEL HARDWARE, TUBES, AND PLATES SHALL BE GALVANIZED.
3. END POST SHALL BE A WOOD POST. ALL TIMBER SHALL RECEIVE A PRESERVATION TREATMENT IN ACCORDANCE WITH SECTION 707 IN THE SC DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).
4. ALTERNATE FOOTINGS SHALL BE ALLOWED FOR END ANCHORS TYPE B.
5. ALT. 1 (CONCRETE FOOTING) SHALL INCLUDE THE ROUNDED OR FLARED END SECTION, POSTS, CONCRETE, CONCRETE ANCHORS FOR POSTS, END PLATE, ¾" CABLE WITH SWAGED FITTING AND STUD, ANCHOR PLATE, BEARING PLATE AND NECESSARY HARDWARE AND LABOR TO COMPLETE END ANCHOR. CONCRETE SHALL BE CLASS 2500 OR BETTER.
6. ALT. 2(STEEL TUBE FOOTING) SHALL INCLUDE THE ROUNDED OR FLARED END SECTION, POSTS, STEEL TUBE, SOIL PLATE, END PLATE, ¾"CABLE WITH SWAGED FITTING AND STUD, ANCHOR PLATE, BEARING PLATE AND NECESSARY HARDWARE AND LABOR TO COMPLETE END ANCHOR.
7. THE LENGTH OF STEEL "W" BEAM GUARDRAIL USED, WILL NOT BE MEASURED OR PAID FOR AS END ANCHOR TYPE B, BUT WILL BE INCLUDED AND MEASURED IN THE COST FOR GUARDRAIL.
8. THE PAY ITEM SHALL BE:

END ANCHOR – TYPE B..... EA.

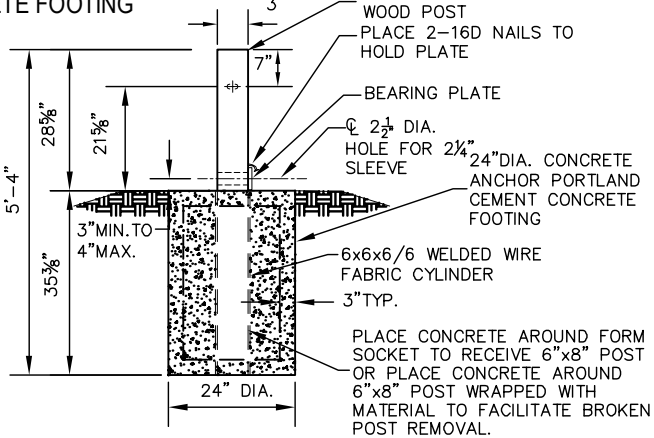


BEARING PLATE

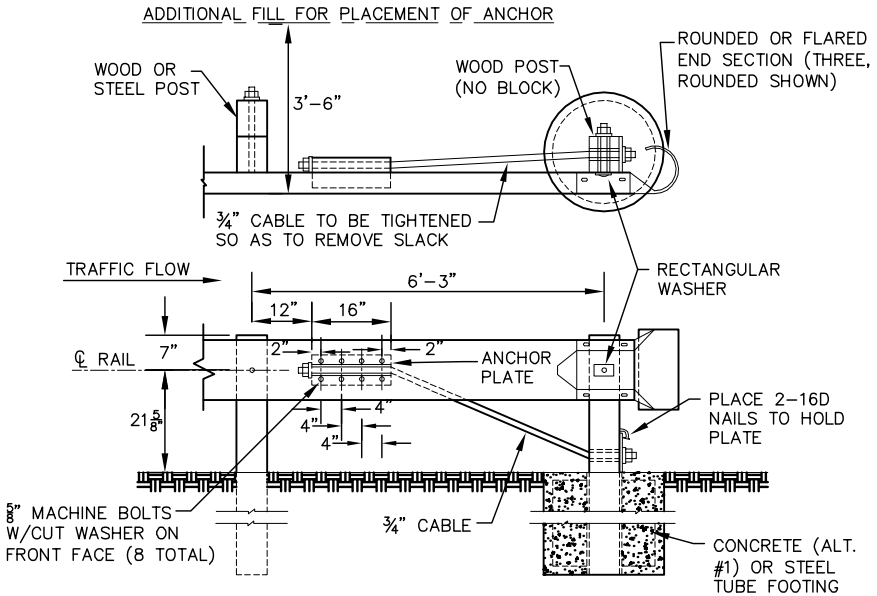


PLAN VIEW

ALTERNATE NO. 1
CONCRETE FOOTING

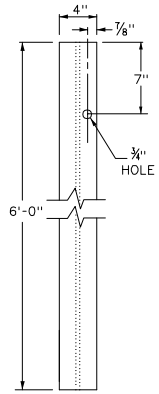


CONCRETE FOOTING AND BREAKAWAY POST DETAIL



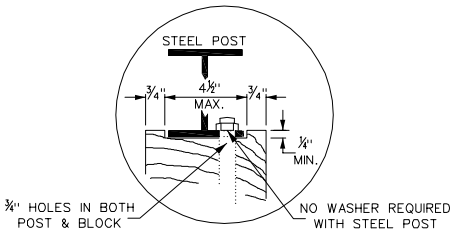
END ANCHOR (TYPE B)

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
STEEL BEAM GUARDRAIL END TREATMENT TYPE B (SCDOT DWG. NO. 805-3C)
DRAWING NO: E–5A
DATE: October 2007



FRONT
(TRAFFIC SIDE)

STANDARD
STEEL POST
(SEE NOTE 6)



ROUTING DETAIL

NOTES:

1. STEEL BEAM GUARDRAIL SHALL COMPLY WITH THE REQUIREMENTS GIVEN ON STANDARD DRAWING NO. 805-1.
2. ALL HARDWARE SHALL COMPLY WITH THE REQUIREMENTS GIVEN ON STANDARD DRAWINGS NO. 805-2 & 805-2A.
3. BACKUP PLATES ARE NOT REQUIRED WITH WOOD, COMPOSITE, OR PLASTIC BLOCKOUTS.
4. NO STEEL BLOCKOUTS ARE ALLOWED. ONLY APPROVED COMPOSITE, OR PLASTIC BLOCKOUTS MAY BE USED WITH STEEL POSTS. SEE APPROVAL SHEET 49 FOR A LIST OF APPROVED MANUFACTURERS OF PLASTIC/COMPOSITE BLOCKOUTS. BLOCKOUTS ARE TO BE INSTALLED ON THE TRAFFIC SIDE OF THE POSTS. ONLY ONE COMBINATION OF POST AND BLOCKOUT FINISH SHALL BE USED FOR ANY ONE CONTINUOUS USE OF GUARDRAIL.
5. HOLES IN COMPOSITE/PLASTIC BLOCKOUTS USED WITH STEEL POST MAY BE MANUFACTURED ON BOTH THE LEFT AND/OR RIGHT SIDE. HOLES IN WOODEN BLOCKOUTS USED WITH STEEL POSTS SHOULD BE LIMITED TO EITHER THE LEFT OR RIGHT SIDE OF THE BLOCKOUT. HOLES IN ALL BLOCKOUTS USED WITH WOODEN POSTS MUST HAVE HOLES DRILLED IN CENTER OF BLOCKOUT.
6. STEEL POSTS SHALL CONFORM TO AASHTO M 270 (ASTM A709), GRADE 36, AND DIMENSIONS CONFORM TO AASHTO M 160 (ASTM 6A). STEEL POSTS SHALL BE GALVANIZED (ZINC-COATED) ACCORDING TO AASHTO M 111 (ASTM A123). HOLES IN STEEL POSTS MAY BE DRILLED ON BOTH LEFT AND RIGHT SIDE AND/OR FRONT AND BACK OF POST. HOLES IN WOODEN POSTS MUST BE DRILLED IN CENTER OF POST.
7. DIMENSIONAL TOLERANCES NOT SHOWN OR IMPLIED ARE INTENDED TO BE THOSE CONSISTENT WITH THE PROPER FUNCTIONING OF THE PART, INCLUDING ITS APPEARANCE AND ACCEPTED MANUFACTURING PRACTICES. THE SIZE TOLERANCE OF ROUGH SAWN BLOCKOUTS IN THE DIRECTION OF THE BOLT HOLES SHALL NOT BE MORE THAN ¼". THE DEPARTMENT RESERVES THE RIGHT TO REVISE THE BLOCKOUT DIMENSIONS AS IT DEEMS NECESSARY.
8. THE UNIT PRICE BID FOR GUARDRAIL SHALL INCLUDE ALL COSTS OF FURNISHING AND PLACING POST, BLOCKOUTS, AND ALSO OF FURNISHING, GALVANIZING, AND PLACING THE STEEL GUARDRAIL (INCLUDING POST BOLTS, NUTS, AND WASHERS NECESSARY FOR SPLICES AND FOR FASTENING RAIL TO POSTS) AS CALLED FOR ON PLANS.
9. WHERE GEOSYNTHETIC REINFORCEMENT IN AN EMBANKMENT IS LESS THAN 4.0 FEET FROM THE TOP OF THE FINISHED GRADE, DIG THE POST HOLE DOWN TO THE GEOSYNTHETIC REINFORCEMENT. THEN CUT OR PUNCH THE GEOSYNTHETIC MATERIAL IN ORDER TO ERECT THE GUARDRAIL POST. THIS WORK IS INCLUDED IN THE BID PRICE OF THE ITEM OF WORK FOR WHICH THE POSTS ARE BEING INSTALLED. THE POST SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE GUARDRAIL.
10. THE PAY ITEM SHALL BE:

STEEL BEAM GUARDRAIL ..... L.F.

ADDITIONAL LENGTH GUARDRAIL POST

WHEN THE PROPER SHOULDER DISTANCE BEHIND THE GUARDRAIL CANNOT BE OBTAINED, ADDITIONAL LENGTH POSTS ARE REQUIRED.

FILL SLOPE	TOTAL LENGTH W-BEAM	TOTAL LENGTH THRIE BEAM
1.0 : 1.0	9'-0"	9'-6"
1.5 : 1.0	8'-0"	8'-6"
2.0 : 1.0	7'-6"	8'-0"
2.5 : 1.0	7'-6"	8'-0"
3.0 : 1.0	7'-0"	7'-6"
*3.5 : 1.0	7'-0"	7'-6"
4.0 : 1.0	A 4:1 SLOPE OR FLATTER DOES NOT REQUIRED GUARDRAIL	

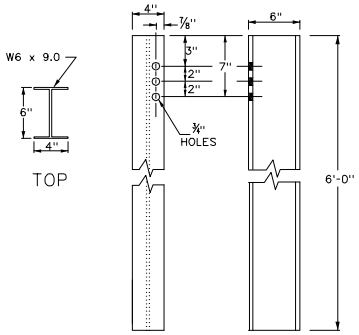
*SLOPES BETWEEN 3:1 AND 4:1 ARE NON-RECOVERABLE, BUT ARE CONSIDERED TRAVERSABLE.
IF THE FOLLOWING CONDITIONS ARE MET, GUARDRAIL MAY BE OMITTED: NO FIXED OBSTACLES ARE ON THE SLOPE AND THERE IS A FLAT CLEAR RUNOUT AREA AT THE BOTTOM OF THE SLOPE, AS REQUIRED BY THE ROADSIDE DESIGN GUIDE.

NOTE: NO WOOD POSTS ALLOWED

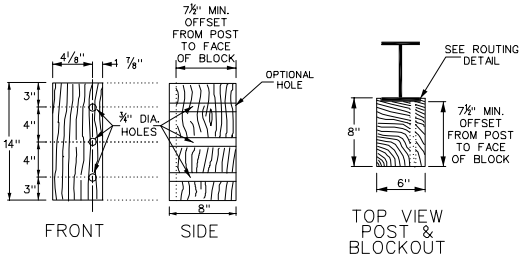
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

STEEL BEAM GUARDRAIL
(STANDARD)
(SCDOT DWG NO. 805-1A
revised May 2004)

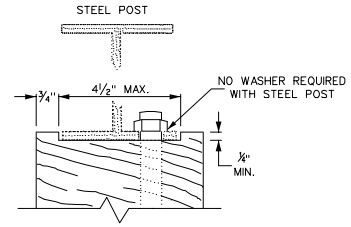
DRAWING NO: E-4A
DATE: October 2007



ADJUSTABLE STEEL POST



ADJUSTABLE COMPOSITE BLOCKOUT FOR STEEL POST



BLOCKOUT ROUTING DETAIL FOR STEEL POST

NOTES:

1. STEEL BEAM GUARDRAIL SHALL COMPLY WITH THE REQUIREMENTS GIVEN ON STANDARD DRAWING NO. 805-1.

2. ALL HARDWARE SHALL COMPLY WITH THE REQUIREMENTS GIVEN ON STANDARD DRAWINGS NO. 805-2 & 805-2A.

3. BACKUP PLATES ARE NOT REQUIRED WITH WOOD, COMPOSITE, OR PLASTIC BLOCKOUTS.

4. NO STEEL BLOCKOUTS ARE ALLOWED. ONLY APPROVED WOOD, COMPOSITE, OR PLASTIC BLOCKOUTS MAY BE USED WITH STEEL OR WOOD POSTS. SEE APPROVAL SHEET 49 FOR A LIST OF APPROVED MANUFACTURERS OF PLASTIC/COMPOSITE BLOCKOUTS. BLOCKOUTS ARE TO BE INSTALLED ON THE TRAFFIC SIDE OF THE POSTS. ONLY ONE COMBINATION OF POST AND BLOCKOUT FINISH SHALL BE USED FOR ANY ONE CONTINUOUS USE OF GUARDRAIL.

5. ALL TIMBER SHALL RECEIVE A PRESERVATION TREATMENT IN ACCORDANCE WITH SECTION 707 OF THE SCDOT STANDARD SPECIFICATIONS. BOTH WOODEN POSTS AND BLOCKOUTS SHALL MEET THE REQUIREMENTS OF SECTIONS 706 AND 805 AND SHALL BE EITHER ROUGH SAWN (UN-PLANED) OR S4S WITH NOMINAL DIMENSIONS INDICATED AND MEET THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).

6. HOLES IN COMPOSITE/PLASTIC BLOCKOUTS USED WITH STEEL POST MAY BE MANUFACTURED ON BOTH THE LEFT AND/OR RIGHT SIDE. HOLES IN WOODEN BLOCKOUTS USED WITH STEEL POSTS SHOULD BE LIMITED TO EITHER THE LEFT OR RIGHT SIDE OF THE BLOCKOUT. HOLES IN ALL BLOCKOUTS USED WITH WOODEN POSTS MUST HAVE HOLES DRILLED IN CENTER OF BLOCKOUT.

7. FOR LOCATIONS REQUIRING LESS THAN 1,000 LINEAR FEET OF GUARDRAIL, ADJUSTABLE GUARDRAIL IS NOT REQUIRED, BUT MAY BE USED. GENERALLY, ADJUSTABLE GUARDRAIL SHOULD BE PLACED IN RUNS OF 1,000 LINEAR FEET OR MORE IN ORDER TO BE COST EFFECTIVE. WHEN ADJUSTABLE GUARDRAIL IS ADJUSTED, END TREATMENTS AND BRIDGE CONNECTIONS MUST BE REPLACED.

8. STEEL POSTS SHALL CONFORM TO AASHTO M 270 (ASTM A709), GRADE 36, AND DIMENSIONS CONFORM TO AASHTO M 160 (ASTM 6A). STEEL POSTS SHALL BE GALVANIZED (ZINC-COATED) ACCORDING TO AASHTO M 111 (ASTM A123). HOLES IN STEEL POSTS MAY BE DRILLED ON BOTH LEFT AND RIGHT SIDE AND/OR FRONT AND BACK OF POST. HOLES IN WOODEN POSTS MUST BE DRILLED IN CENTER OF POST.

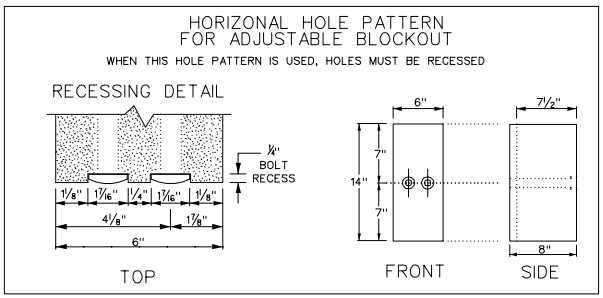
9. DIMENSIONAL TOLERANCES NOT SHOWN OR IMPLIED ARE INTENDED TO BE THOSE CONSISTENT WITH THE PROPER FUNCTIONING OF THE PART, INCLUDING ITS APPEARANCE AND ACCEPTED MANUFACTURING PRACTICES. THE SIZE TOLERANCE OF ROUGH SAWN BLOCKOUTS IN THE DIRECTION OF THE BOLT HOLES SHALL NOT BE MORE THAN ¼". THE DEPARTMENT RESERVES THE RIGHT TO REVISE THE BLOCKOUT DIMENSIONS AS IT DEEMS NECESSARY.

10. THE UNIT PRICE BID FOR GUARDRAIL SHALL INCLUDE ALL COST OF FURNISHING AND PLACING POST, BLOCKOUTS, AND ALSO OF FURNISHING, GALVANIZING, AND PLACING THE STEEL GUARDRAIL (INCLUDING POST BOLTS, NUTS, AND WASHERS NECESSARY FOR SPLICES AND FOR FASTENING RAIL TO POSTS) AS CALLED FOR ON PLANS.

11. WHERE GEOSYNTHETIC REINFORCEMENT IN AN EMBANKMENT IS LESS THAN 4.0 FEET FROM THE TOP OF THE FINISHED GRADE, DIG THE POST HOLE DOWN TO THE GEOSYNTHETIC REINFORCEMENT. THEN CUT OR PUNCH THE GEOSYNTHETIC MATERIAL IN ORDER TO ERECT THE GUARDRAIL POST. THIS WORK IS INCLUDED IN THE BID PRICE OF THE ITEM OF WORK FOR WHICH THE POSTS ARE BEING INSTALLED. THE POST SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE GUARDRAIL.

12. THE PAY ITEMS SHALL BE:

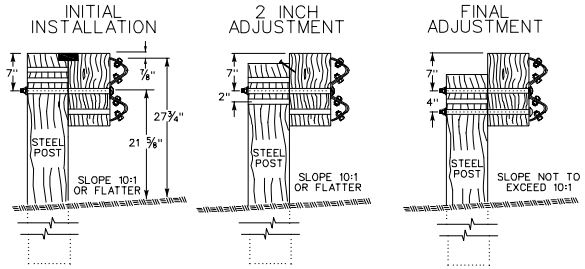
ADJUSTABLE HEIGHT S.B. GUARDRAIL (INITIAL INSTAL.)..... L.F.
ADJUSTABLE HEIGHT S.B. GUARDRAIL (2" ADJUST.)..... L.F.
ADJUSTABLE HEIGHT S.B. GUARDRAIL (FINAL ADJUST.)..... L.F.



NOTE: NO WOOD POSTS ALLOWED

BLOCKOUT NOTE:

ONLY TWO HOLES IN THE BLOCKOUT ARE NECESSARY FOR STANDARD ADJUSTMENTS, AS SHOWN IN THE INSTALLATION PROCEDURE BELOW. HOWEVER, A THIRD HOLE MAY BE PLACED 3" FROM THE TOP OF THE BLOCKOUT IN ORDER TO ALLOW BLOCKOUTS TO ROTATE FOR PROPER INSTALLATION. ALSO, WITH COMPOSITE/PLASTIC BLOCKOUTS, HOLES MAY BE MANUFACTURED ON BOTH, OR EITHER THE LEFT OR RIGHT SIDE OF THE BLOCKOUT. IF THE TWO HOLES REQUIRED ARE PLACED SIDE BY SIDE IN THE CENTER OF THE BLOCKOUT, THEN THE HOLES MUST BE RECESSED ⅛" TO ALLOW BOLT HEAD TO BE FLUSH WITH BLOCKOUT. NO MORE THAN THREE HOLES SHOULD BE MADE IN THE WOODEN BLOCKOUTS.



SHOWN WITH VERTICAL HOLE ADJUSTMENTS

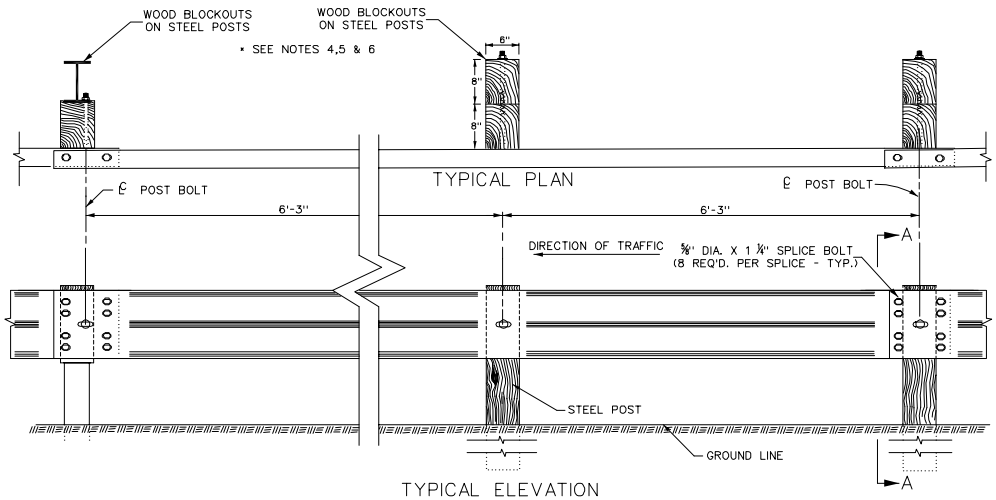
ADJUSTABLE GUARDRAIL INSTALLATIONS

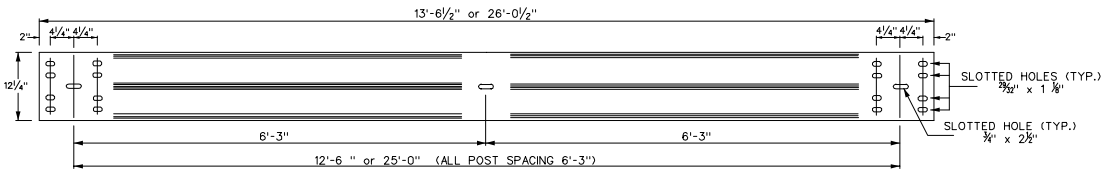
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

STEEL BEAM GUARDRAIL
(ADJUSTABLE)
(SCDOT DWG NO. 805-1B
revised Nov. 2003)

DRAWING NO: E-4B

DATE: October 2007





FRONT VIEW OF STEEL BEAM RAIL

NOTES:

1. STEEL BEAM GUARDRAIL SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 805 OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION) AND CONFORM TO AASHTO M 180 FOR CLASS A, TYPE 2.

2. WHERE LAPS IN RAIL ARE NECESSARY, THEY SHALL BE PLACED IN THE SAME DIRECTION AS THE FLOW OF TRAFFIC. GUARDRAIL SECTIONS MAY BE FURNISHED AND INSTALLED IN STANDARD LENGTHS OF 12'-6" AND 25'-0" SECTIONS.

3. WHERE GUARDRAIL IS ERECTED ON CURVES OF 150 FT. RADIUS OR LESS, THE RAIL SHALL BE PRE-CURVED IN THE SHOP TO FIT THE REQUIRED RADIUS.

4. FOR HARDWARE SEE DRAWINGS 805-2 AND 805-2A.

5. STEEL POSTS SHALL CONFORM TO AASHTO M 270 (ASTM A709), GRADE 36, AND DIMENSIONS CONFORM TO AASHTO M 160 (ASTM 6A). STEEL POSTS SHALL BE GALVANIZED (ZINC-COATED) ACCORDING TO AASHTO M 111 (ASTM A123). WOOD POSTS SHALL BE 6"x8"x6'-0" NOMINAL DIMENSIONS.

6. NO STEEL BLOCKOUTS ARE ALLOWED. ONLY APPROVED WOOD, COMPOSITE, OR PLASTIC BLOCKOUTS MAY BE USED WITH STEEL POSTS. SEE APPROVAL SHEET 49 FOR A LIST OF APPROVED MANUFACTURERS OF PLASTIC/COMPOSITE BLOCKOUTS. BLOCKOUTS ARE TO BE INSTALLED ON THE TRAFFIC SIDE OF THE POSTS. ONLY ONE COMBINATION OF POST AND BLOCKOUT FINISH SHALL BE USED FOR ANY ONE CONTINUOUS LENGTH OF GUARDRAIL.

7. BLOCKOUTS SHALL MEET THE REQUIREMENTS OF SECTIONS 706 AND 805 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION). ALL TIMBER SHALL RECEIVE A PRESERVATION TREATMENT IN ACCORDANCE WITH SECTION 707 OF THE SCDOT STANDARD SPECIFICATIONS. BOTH POSTS AND BLOCKOUTS SHALL BE EITHER ROUGH SAWN (UN-PLANED) OR S4S WITH NOMINAL DIMENSIONS INDICATED.

8. DIMENSIONAL TOLERANCES NOT SHOWN OR IMPLIED ARE INTENDED TO BE THOSE CONSISTENT WITH THE PROPER FUNCTIONING OF THE PART, INCLUDING ITS APPEARANCE AND ACCEPTED MANUFACTURING PRACTICES. THE SIZE TOLERANCE OF ROUGH SAWN BLOCKOUTS IN THE DIRECTION OF THE BOLT HOLES SHALL NOT BE MORE THAN ¼". THE DEPARTMENT RESERVES THE RIGHT TO REVISE THE BLOCKOUT DIMENSIONS AS IT DEEMS NECESSARY.

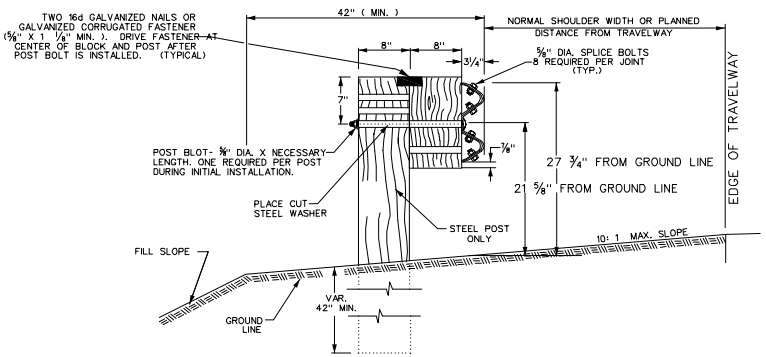
9. BACKUP PLATES ARE NOT REQUIRED WITH COMPOSITE, OR PLASTIC BLOCKOUTS.

10. THE UNIT PRICE BID FOR GUARDRAIL SHALL INCLUDE ALL COST OF FURNISHING AND PLACING POST, BLOCKS, AND ALSO OF FURNISHING, GALVANIZING, AND PLACING THE STEEL GUARDRAIL (INCLUDING POST BOLTS, NUTS, AND WASHERS NECESSARY FOR SPLICES AND FOR FASTENING RAIL TO POSTS) AS CALLED FOR ON PLANS.

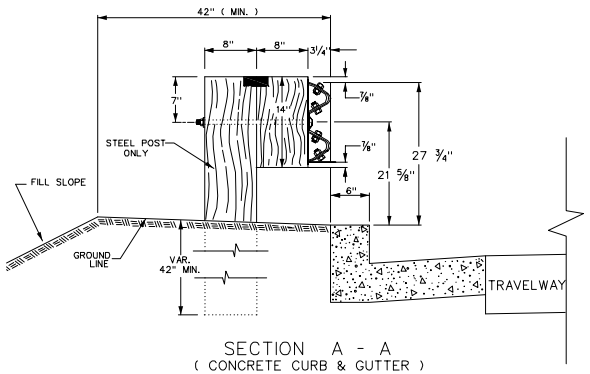
11. WHERE GEOSYNTHETIC REINFORCEMENT IN AN EMBANKMENT IS LESS THAN 4.0 FEET FROM THE TOP OF THE FINISHED GRADE, DIG THE POST HOLE DOWN TO THE GEOSYNTHETIC REINFORCEMENT. THEN CUT OR PUNCH THE GEOSYNTHETIC MATERIAL IN ORDER TO ERECT THE GUARDRAIL POST. THIS WORK IS INCLUDED IN THE BID PRICE OF THE ITEM OF WORK FOR WHICH THE POSTS ARE BEING INSTALLED. THE POST SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE GUARDRAIL.

12. WHEN MOUNTING GUARDAIL, A TOLERANCE OF 3 INCHES ABOVE AND 1 INCH BELOW THE STANDARD MOUNTING HEIGHT IS PERMISSIBLE OVER NECESSARY SURFACE IRREGULARITIES.

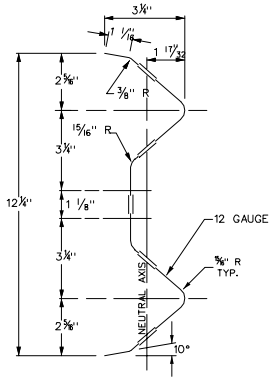
13. THE PAY ITEM SHALL BE:
STEEL BEAM GUARDRAIL ..... L.F.



SECTION A - A
(ADJUSTABLE GUARDRAIL SHOWN AT INITIAL INSTALLATION)



SECTION A - A
(CONCRETE CURB & GUTTER)
(STANDARD GUARDRAIL SHOWN)



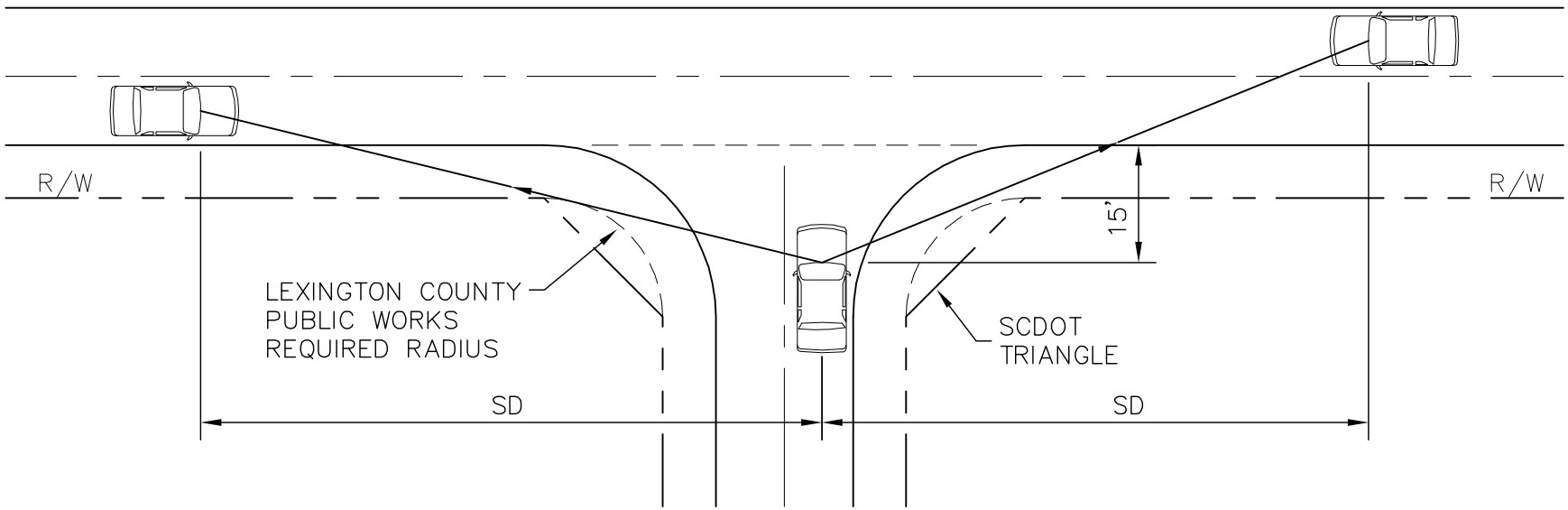
SECTION THROUGH
STEEL "W" BEAM GUARDRAIL

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

STEEL BEAM GUARDRAIL
(SCDOT DWG NO. 805-1
revised May 2007)

DRAWING NO: E-4

DATE: October 2007



VEHICLE TYPE	SIGHT DISTANCE (SD)* PER 10 MPH OF ARTERIAL SPEED FOR ARTERIAL WIDTH OF:		
	2 LANES	4 LANES	6 LANES
PASSENGER CAR	100 ft	120 ft	130 ft
SINGLE UNIT TRUCK	130 ft	150 ft	170 ft
TRACTOR TRAILER (WB–50)	170 ft	200 ft	210 ft

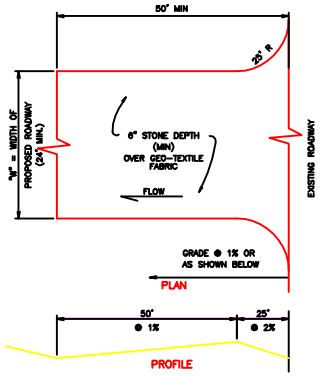
* Distances given are for flat grades; no vertical curves involved

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

SIGHT DISTANCE

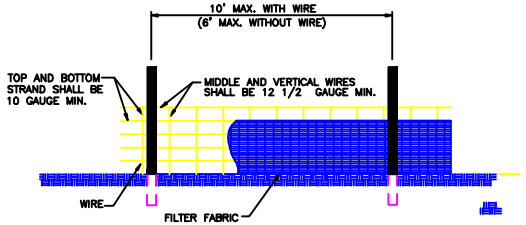
DRAWING NO: E–1

DATE: October 2007

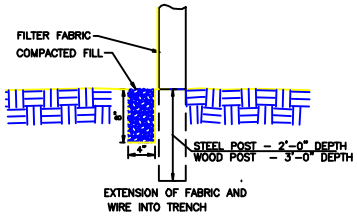


NOTES:
1. STONE SIZE SHALL CONFORM TO ASTM D48 SIZE #1 (1 1/2" TO 3 1/2" DIA.).
2. PERIODIC 2" STONE TOP DRESSING & WASHING AS REQUESTED BY COUNTY/CITY.
3. GEO-TEXTILE FABRIC TO BE USED UNDER ENTIRE STONE AREA.

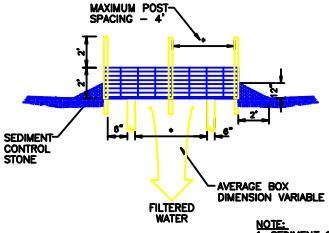
TEMPORARY CONSTRUCTION ENTRANCE



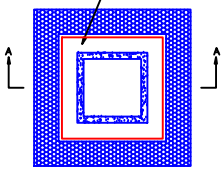
NOTES:
1. WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. FILTER FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE FASTENED ADEQUATELY TO THE WIRE.
3. STEEL POST SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
4. WOOD POST SHALL BE 6'-0" IN HEIGHT AND 3" IN DIAMETER.
5. A DOUBLE ROW OF SILT FENCE (5' MAX SPACING) SHALL BE USED ALONG ALL WATERBODY'S, WETLANDS, OR OTHER AREAS AS DIRECTED BY LEXINGTON COUNTY.



SILT FENCE DETAIL

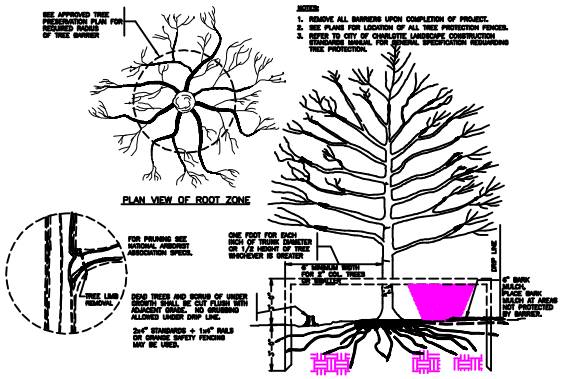


SECTION A-A
MULTI-DIRECTIONAL FLOW



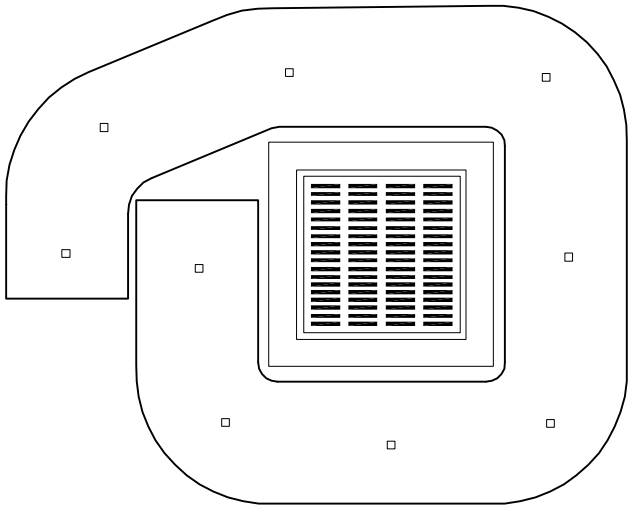
NOTE:
1. SEDIMENT CONTROL STONE SHALL BE NO. 5 OR NO. 57.
2. WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4 INCH MESH OPENINGS.
3. TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT. 4. STEEL POST SHALL BE 5 FT. IN HEIGHT, BE INSTALLED 1.5 FT. DEEP MINIMUM, AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
5. WOOD POST SHALL BE 6 FT. IN HEIGHT, BE INSTALLED TO 1.5 FT. DEEP MINIMUM, AND BE 3 INCHES IN DIAMETER.
6. POST SPACING SHALL BE A MAXIMUM OF 4 FT.

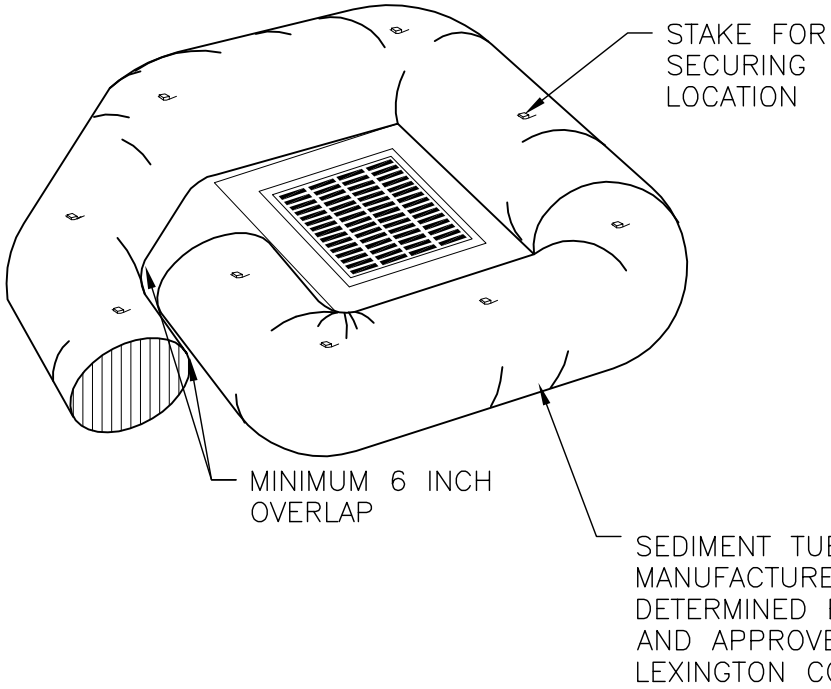
INLET PROTECTION



TREE PROTECTION DETAIL

LEXINGTON COUNTY PLANNING & DEVELOPMENT	
Single Family Residential Erosion Control Measures	
SCALE: NTS	DRAWN BY: SSS
DATE: 3/07	SHEET 1 OF 1





INSTALLATION:

1. INSTALL SEDIMENT TUBES BY LAYING THEM FLAT ON THE GROUND. CONSTRUCT A SMALL TRENCH TO A DEPTH THAT IS 20% OF THE SEDIMENT TUBE DIAMETER. LAY THE SEDIMENT TUBE IN THE TRENCH AND COMPACT THE UPSTREAM SEDIMENT TUBE SOIL INTERFACE. INSTALL ALL SEDIMENT TUBES SO NO GAPS EXIST BETWEEN THE SOIL AND THE BOTTOM OF THE SEDIMENT TUBE. LAP THE ENDS OF ADJACENT SEDIMENT TUBES A MINIMUM OF 6 INCHES TO PREVENT FLOW AND SEDIMENT FROM PASSING THROUGH THE FIELD JOINT. NEVER STACK SEDIMENT TUBES ON TOP OF ONE ANOTHER.

2. SHOULD SEDIMENT TUBE BECOME DAMAGED DURING INSTALLATION, PLACE A STAKE ON BOTH SIDES OF THE DAMAGED AREA TERMINATING THE TUBE SEGMENT AND INSTALL A NEW TUBE SEGMENT.

3. INSTALL SEDIMENT TUBES USING WOODEN STAKES (1 INCH X 1 INCH) OR STEEL POSTS (STANDARD "U" OR "T" SECTIONS WITH A MINIMUM WEIGHT OF 1.25 POUNDS PER FOOT) A MINIMUM OF 4 FEET IN LENGTH PLACED ON 2 FOOT CENTERS. INTERTWINE THE STAKES WITH THE OUTER MESH ON THE DOWNSTREAM SIDE, AND DRIVE THE STAKES INTO THE GROUND TO A MINIMUM DEPTH OF 2.0 FEET LEAVING LESS THAN 1 FOOT OF STAKE ABOVE THE EXPOSED SEDIMENT TUBE.

INSPECTION AND MAINTENANCE:

1. INSPECT SEDIMENT TUBES AFTER INSTALLATION FOR GAPS UNDER THE SEDIMENT TUBES AND FOR GAPS BETWEEN THE JOINTS OF ADJACENT ENDS OF SEDIMENT TUBES. REPAIR RILLS, GULLIES, AND ALL UNDERCUTTING NEAR SEDIMENT TUBES.

2. REMOVE AND/OR REPLACE INSTALLED SEDIMENT TUBES AS REQUIRED TO ADAPT TO CHANGING CONSTRUCTION SITE CONDITIONS.

3. REMOVE ALL SEDIMENT TUBES FROM THE SITE WHEN THE FUNCTIONAL LONGEVITY IS EXCEEDED AS DETERMINED BY THE ENGINEER, INSPECTOR, OR MANUFACTURER'S REPRESENTATIVE.

4. DISPOSE OF SEDIMENT TUBES IN REGULAR MEANS AS NON-HAZARDOUS, INERT MATERIAL.

5. THE PAY ITEMS SHALL BE:

INLET STRUCTURE FILTER TYPE A_____LF

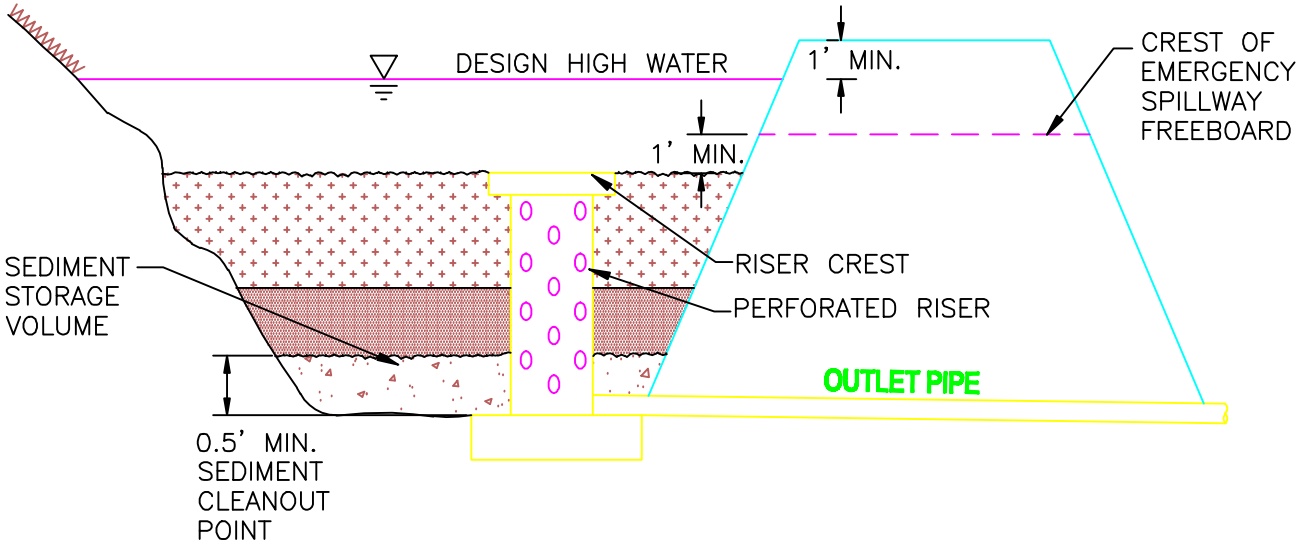
SILT BASINS_____CY

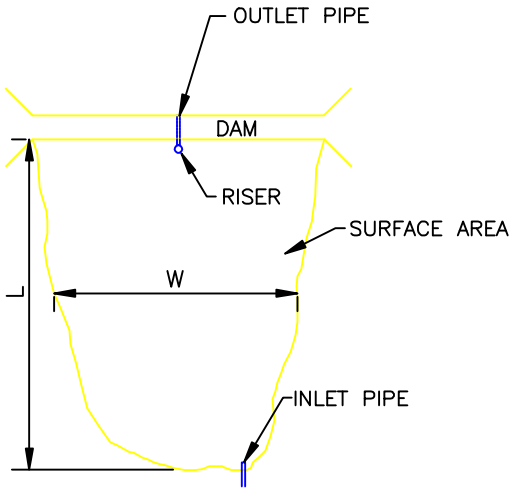
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

SEDIMENT TUBE
INLET PROTECTION

DRAWING NO: C-1A

DATE: October, 2007





L=(2*W) MIN.

PLAN VIEW

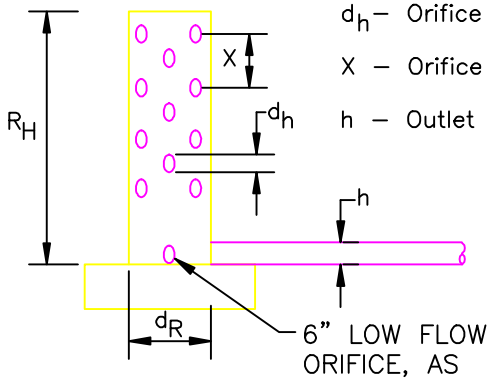
R_H– Riser Height

d_R– Riser Diameter

d_h– Orifice Diameter

X – Orifice Spacing

h – Outlet Pipe Diameter



RISER PIPE DETAIL

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT

SEDIMENT BASIN W/ OPTIONAL SKIMMER

Sheet 1 of 2

DRAWING NO: D–7

DATE: October, 2007

SEDIMENT BASIN

WHEN AND WHERE TO USE IT

SEDIMENT BASINS SHOULD NOT BE PLACED IN WATERS OF THE COMMONWEALTH OR USGS BLUE–LINE STREAMS (UNLESS APPROVED BY LEXINGTON COUNTY, STATE, OR FEDERAL AUTHORITIES).
MINIMUM DRAINAGE AREA=5 ACRES, MAXIMUM DRAINAGE AREA=150 ACRES
TRASH RACK IS REQUIRED

INSPECTION AND MAINTENANCE:

THE KEY TO A FUNCTIONAL SEDIMENT BASIN IS CONTINUAL MONITORING, REGULAR MAINTENANCE AND REGULAR SEDIMENT REMOVAL.

ATTENTION TO SEDIMENT ACCUMULATIONS WITHIN THE POND IS EXTREMELY IMPORTANT. SEDIMENT DEPOSITION SHOULD BE CONTINUALLY MONITORED IN THE BASIN. OWNERS AND MAINTENANCE AUTHORITIES SHOULD BE AWARE THAT SIGNIFICANT CONCENTRATIONS OF HEAVY METALS (E.G., LEAD, ZINC, AND CADMIUM) AS WELL AS SOME ORGANICS SUCH AS PESTICIDES, MAY BE EXPECTED TO ACCUMULATE AT THE BOTTOM OF THESE TREATMENT FACILITIES.

REMOVE SEDIMENT WHEN IT REACHES 1/3 OF THE STORAGE VOLUME OR TOP OF THE CLEANOUT STAKE.

SINCE DECOMPOSING VEGETATION CAN RELEASE POLLUTANTS, ESPECIALLY NUTRIENTS, CAPTURED IN THE WETPOND, IT MAY BE NECESSARY TO HARVEST DEAD VEGETATION ANNUALLY. OTHERWISE THE DECAYING VEGETATION CAN EXPORT POLLUTANTS OUT OF THE POND AND CAN CAUSE NUISANCE CONDITIONS TO OCCUR.

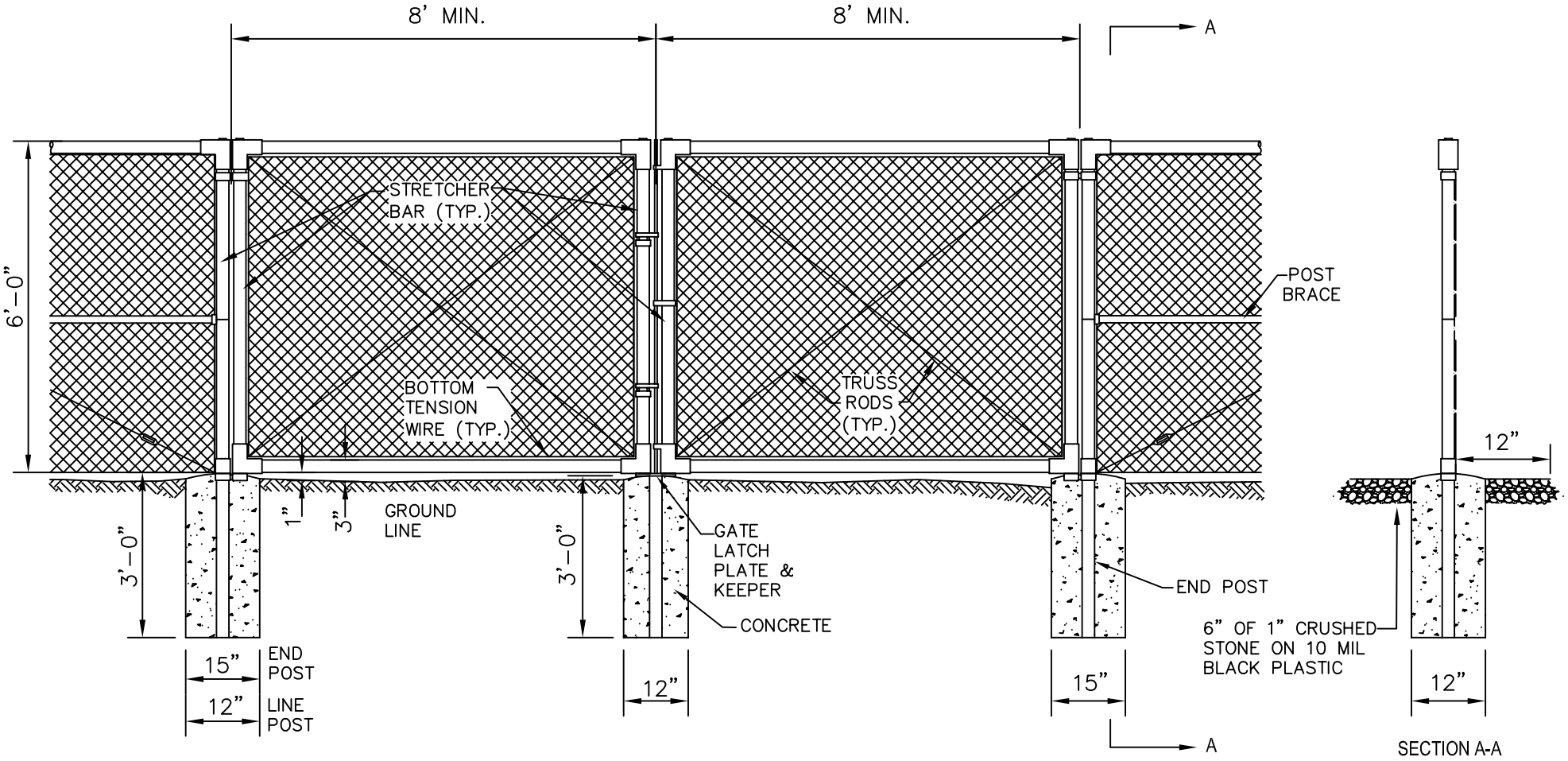
REGULAR INSPECTIONS SHOULD BE DONE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24–HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ½–INCHES OR MORE OF PRECIPITATION.

ALL TEMPORARY SEDIMENT BASINS SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER IT IS NO LONGER NEEDED.

TRAPPED SEDIMENT SHOULD BE REMOVED FROM, OR STABILIZED ON SITE.

DISTURBED AREAS RESULTING FROM THE REMOVAL OF THE SEDIMENT BASIN SHOULD BE PERMANENTLY STABILIZED.

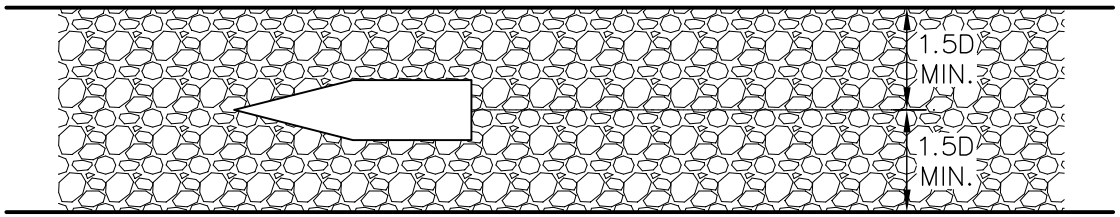
LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
SEDIMENT BASIN Sheet 2 of 2	
DRAWING NO: D–7A	
DATE: October 2007	



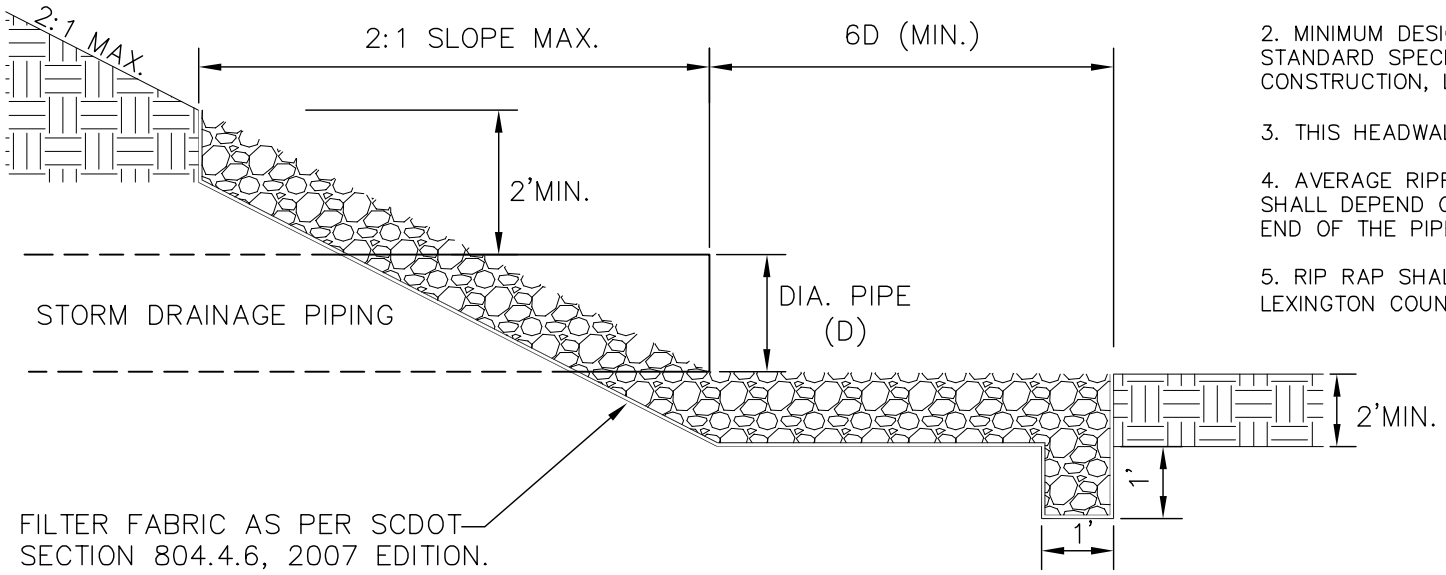
CHAIN LINK FENCE TO BE AS FOLLOWS:

A) SIX FOOT HIGH, NO. 9 FABRIC, 2" DIAMOND MESH– HOT DIP GALVANIZED
B) LINE POSTS TO BE 2 1/2" O.D., 3.65 LB/FT., GALVANIZED.
C) CORNER, PULL AND END POSTS TO BE 3" O.D.. 4 LB/FT., GALVANIZED.
D) GATE POSTS TO BE 4" O.D. 5.79 LF/FT. – GALVANIZED.
E) TOP RAIL TO BE 1 5/8" O.D., 2.27 LB/FT. – GALVANIZED.
F) POSTS TO BE 10' ON CENTER MAX. SET IN 36" DEEP CONCRETE BASES.
G) GATES TO AS SHOWN ON SITE PLAN AND FABRICATED FROM 2" OR GREATER TUBES, 2.72 LB/FT. – GALVANIZED – INCLUDING PIVOT HINGES, CATCHES, STOPS, CENTER VESTS AND LOCKING FACILITIES.
H) BOTTOM TENSION WIRE REQUIRED ON FENCE.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
SECURITY FENCE	
DRAWING NO: E–3	
DATE: December 2008	



PLAN



SECTION

NOTES:

1. WHEN PIPE EMPTIES INTO A DITCH OR SWALE THE RIPRAP WILL TAKE THE SHAPE OF THE DITCH OR SWALE.

2. MINIMUM DESIGN SHOULD EQUAL SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION, SECTION 804.

3. THIS HEADWALL FOR 24" PIPES OR LESS.

4. AVERAGE RIPRAP SIZE AND APRON LENGTH SHALL DEPEND ON THE VELOCITIES AT THE END OF THE PIPE.

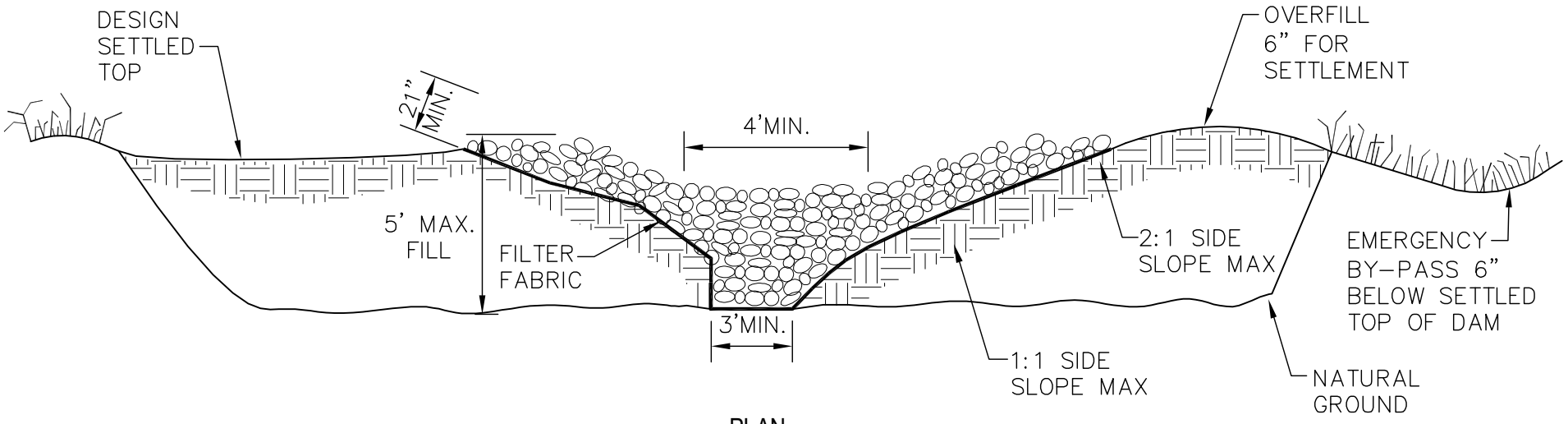
5. RIP RAP SHALL BE GROUTED IN PLACE AT LEXINGTON COUNTY'S REQUEST.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

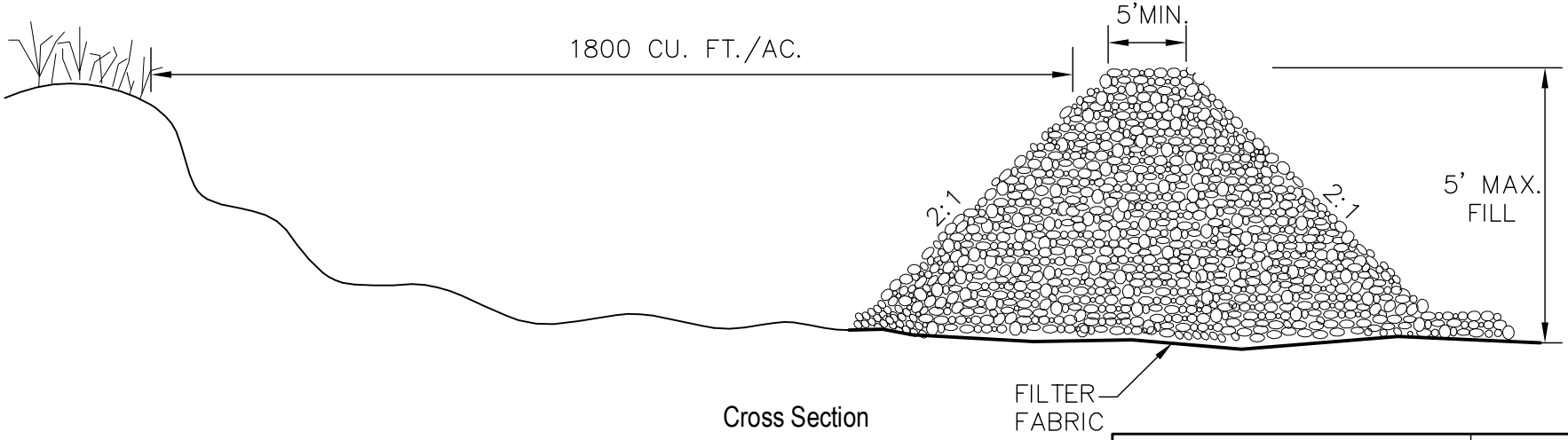
RIPRAP HEADWALL

DRAWING NO: C-7

DATE: October, 2007

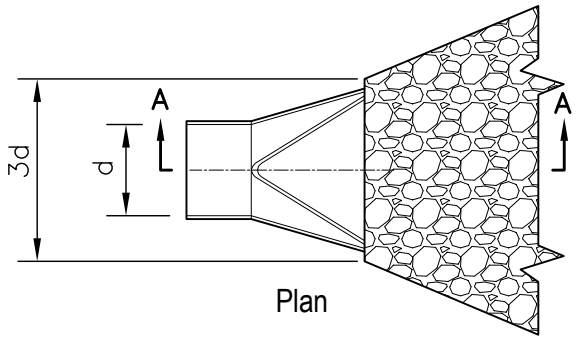


PLAN

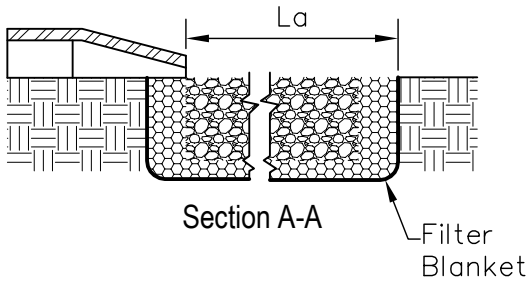


Cross Section

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
RIPRAP CHANNEL PLAN & SECTION	
DRAWING NO: C-8	
DATE: October, 2007	



Plan



Section A-A

Pipe Outlet to Flat Area - No Well-Defined Channel

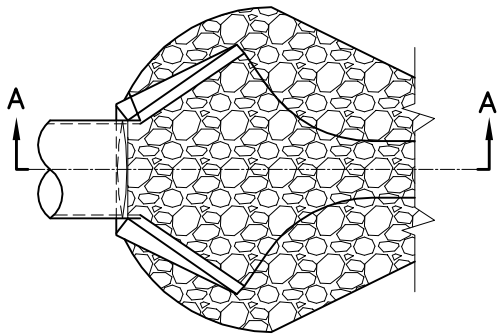
NOTES:

1. La IS THE LENGTH OF THE RIPRAP APRON.

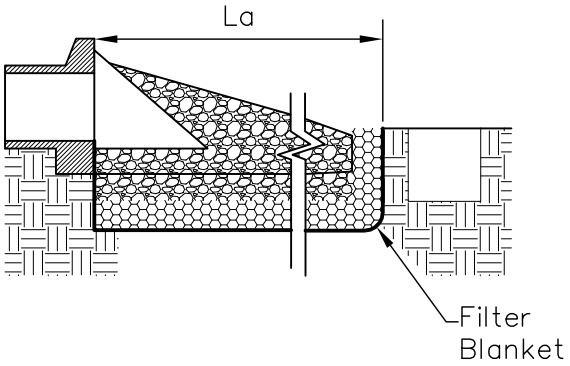
2. d = 1.5 TIMES THE MAXIUM STONE DIAMETER BUT NOT LESS THAN 6".

3. IN A WELL–DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.

4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.



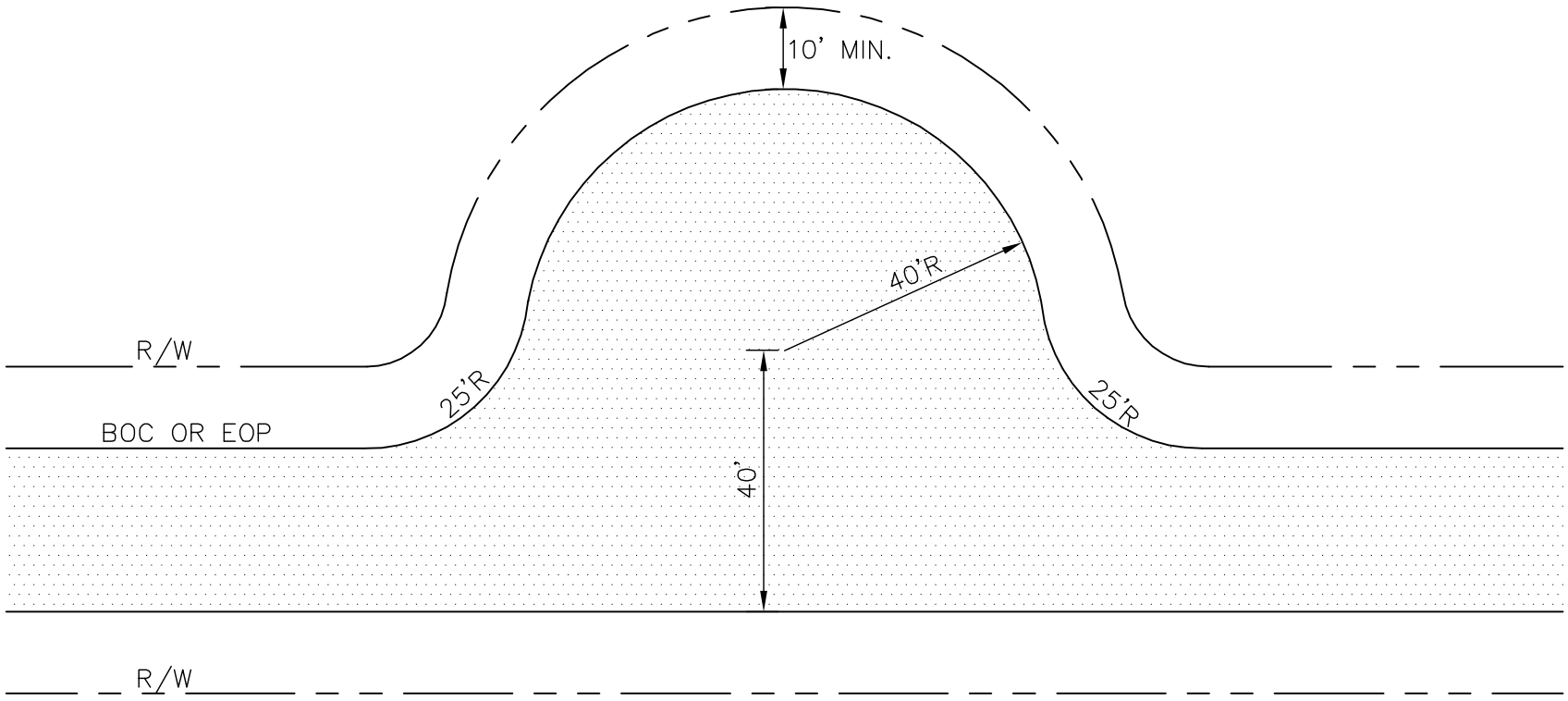
Plan



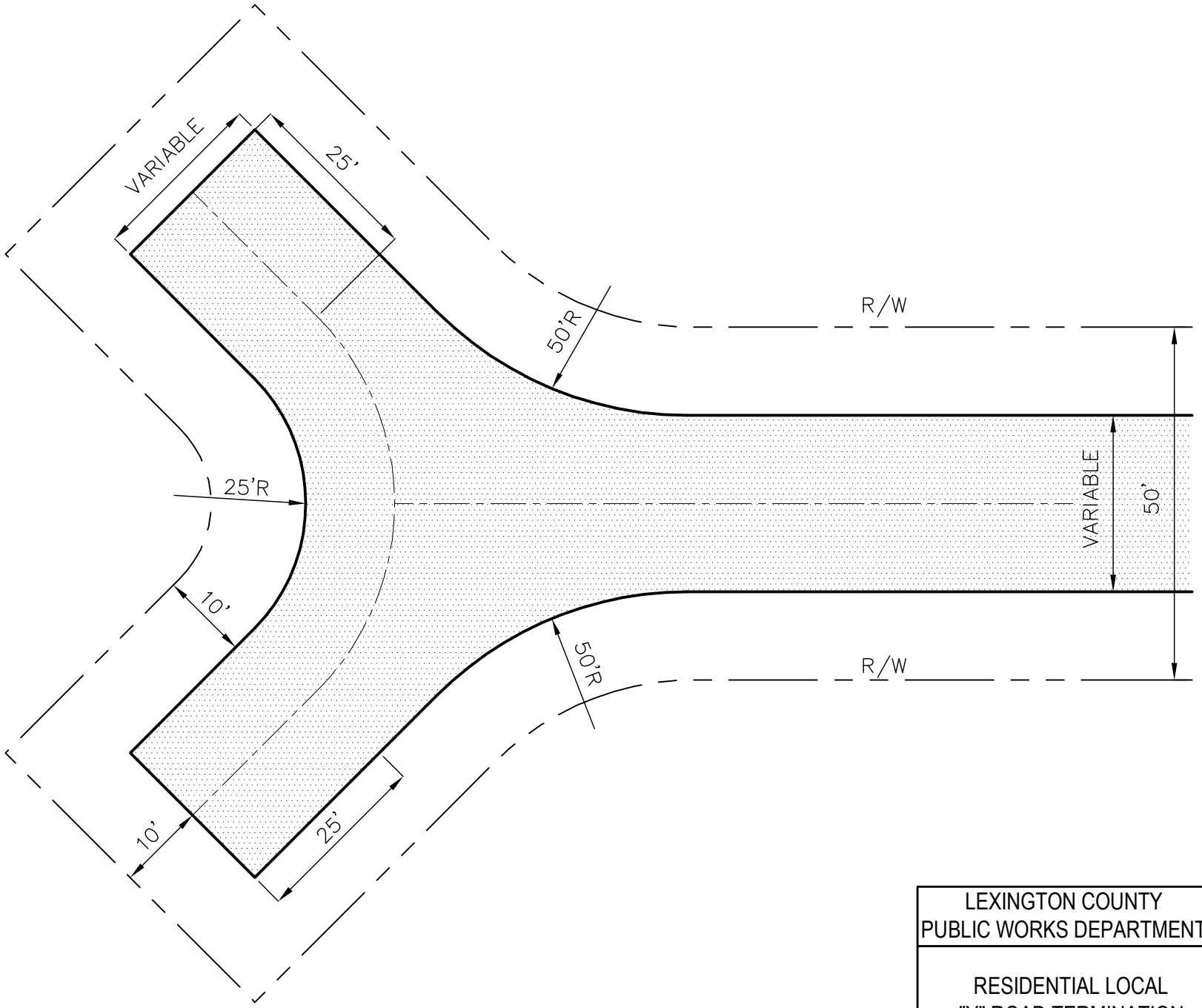
Section A-A

Pipe Outlet to Well-Defined Channel

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
RIPRAP APRON	
DRAWING NO: C–6	
DATE: October, 2007	



LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
RESIDENTIAL LOCAL / RESIDENTIAL COLLECTOR TURNAROUND	
DRAWING NO: A–14	
DATE: October, 2007	

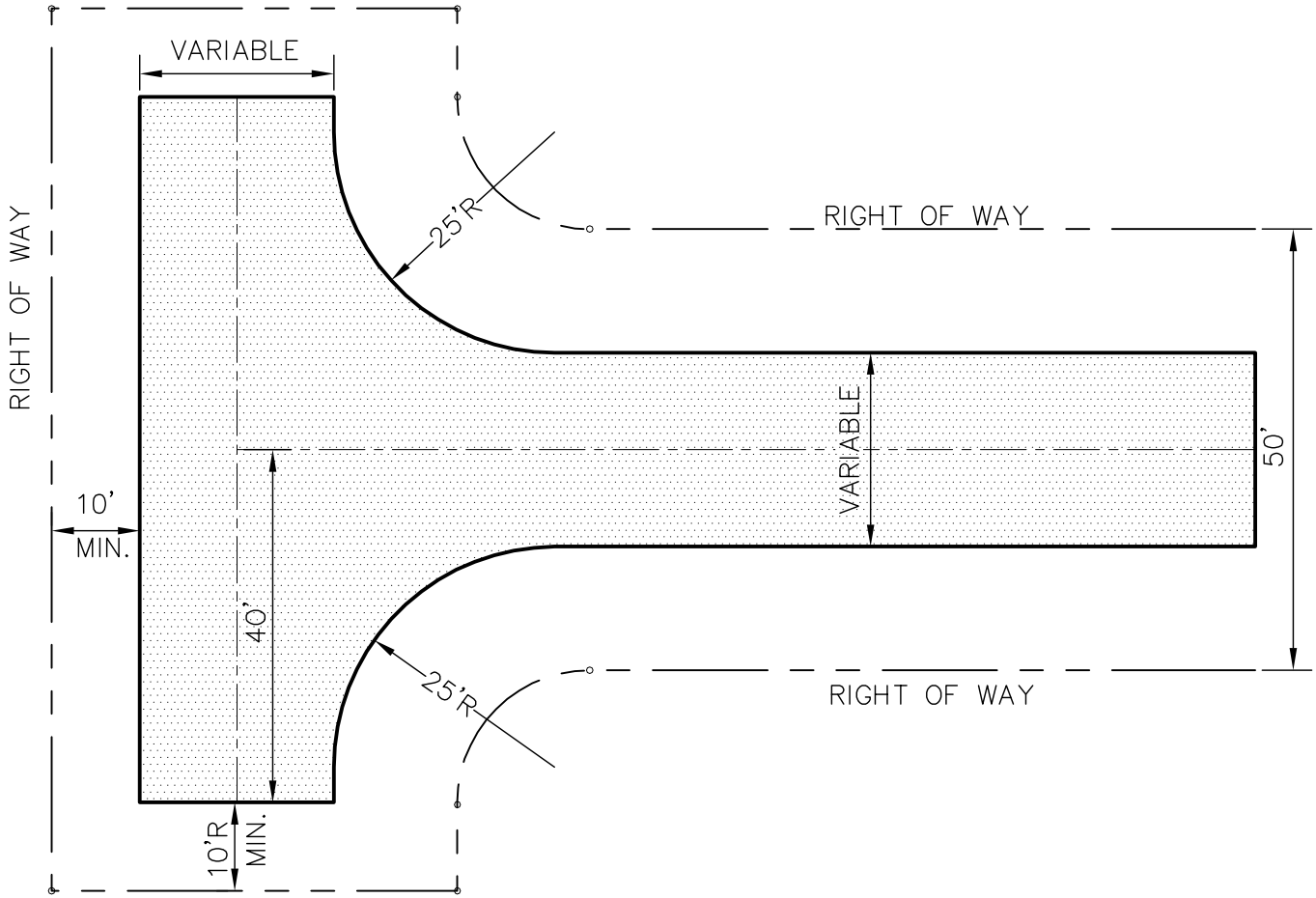


LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

RESIDENTIAL LOCAL
"Y" ROAD TERMINATION

DRAWING NO: A-16

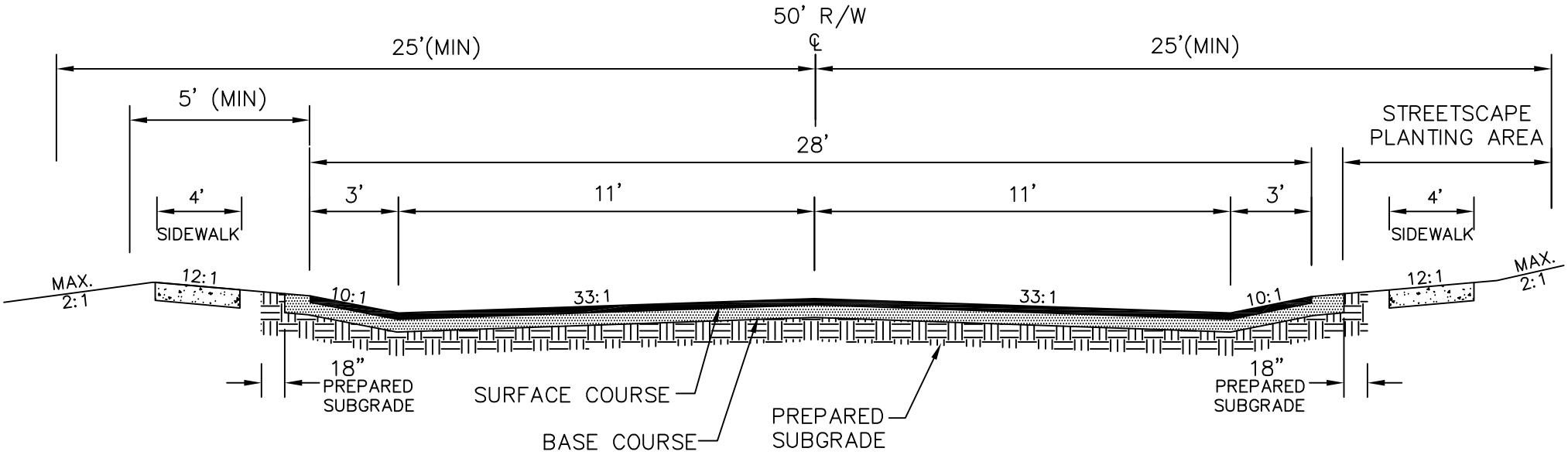
DATE: October, 2007



LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

RESIDENTIAL LOCAL
"T" ROAD TERMINATION

DRAWING NO: A–15
DATE: October, 2007

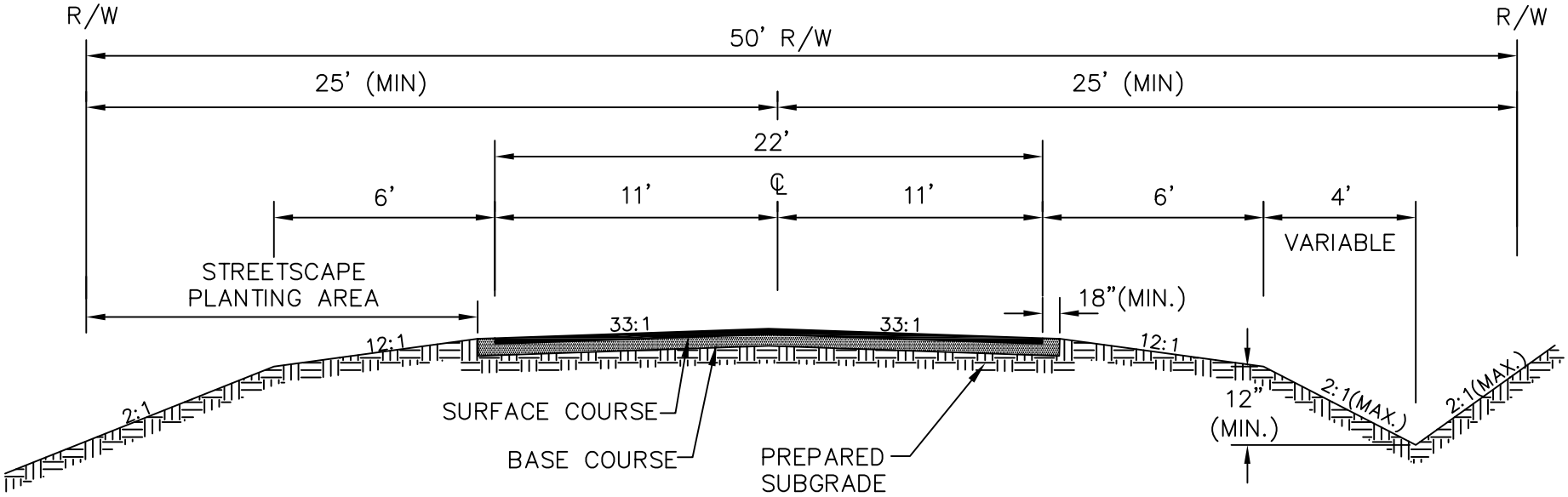


NOTES:

1. PREPARED SUBGRADE SHALL BE 31' WIDE.
2. PRIME BASE COURSE .25–.30 GALLONS PER SQUARE YARD, WHEN REQUIRED.
3. STREETSCAPE PLANTING AREA MAY BE SLOPED AWAY FROM ROAD.

1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
RESIDENTIAL LOCAL ROAD SECTION W/ VALLEY GUTTER CURBING
DRAWING NO: A–1
DATE: October 2007

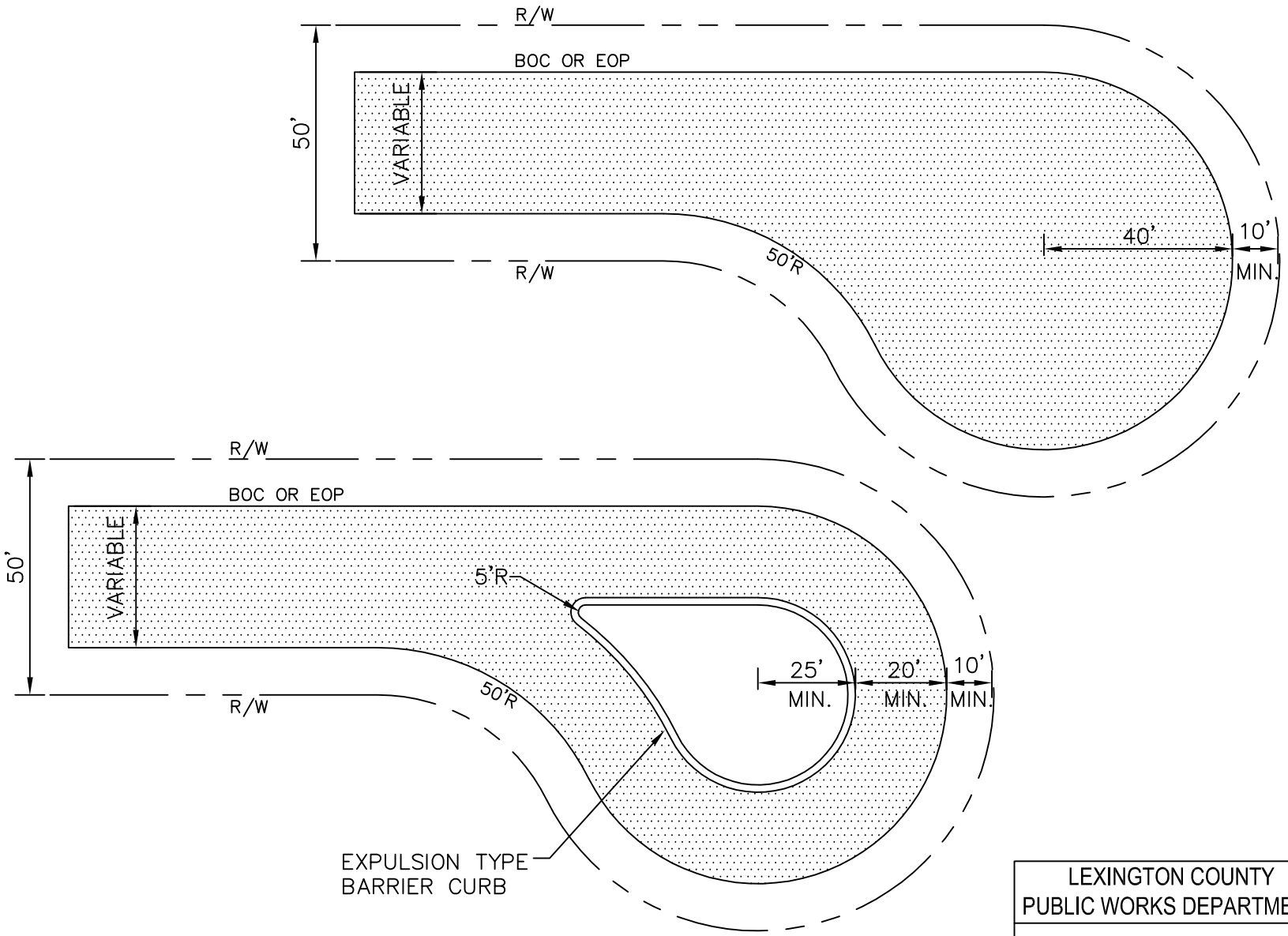


NOTES:

1. PREPARED SUBGRADE SHALL BE 25' WIDE.
2. PRIME BASE COURSE .25–.30 GALLONS PER SQUARE YARD, WHEN REQUIRED.
3. STREETSCAPE PLANTING ARE MAY BE SLOPED AWAY FROM ROAD.
4. USE THIS CROSS–SECTION ON A CASE–BY–CASE BASIS.

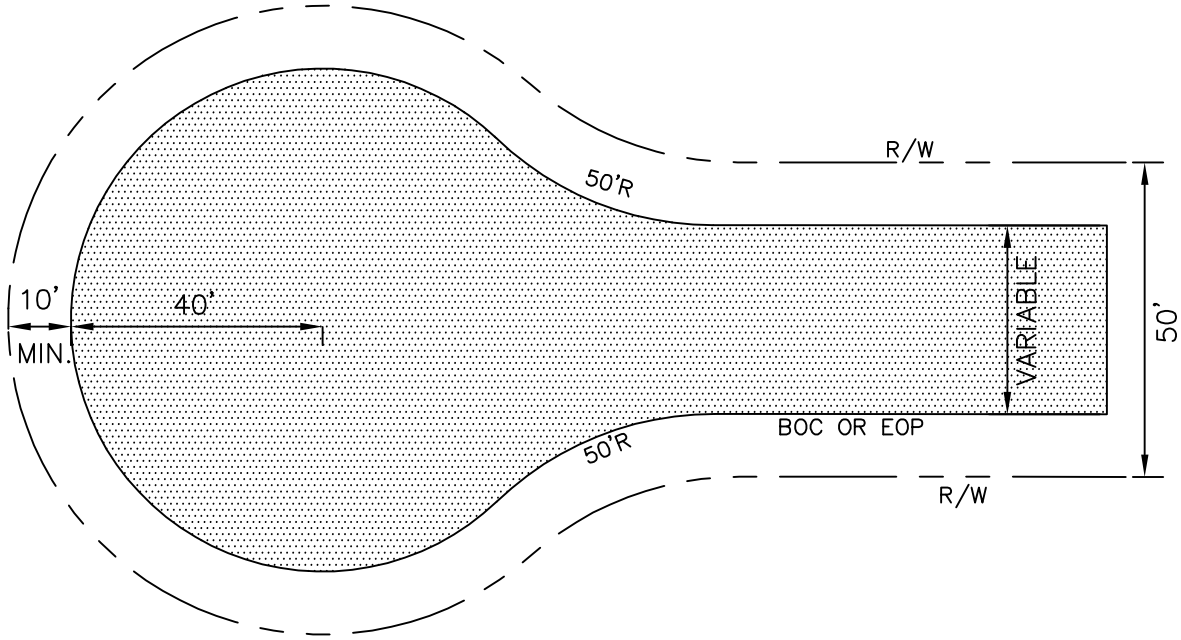
1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

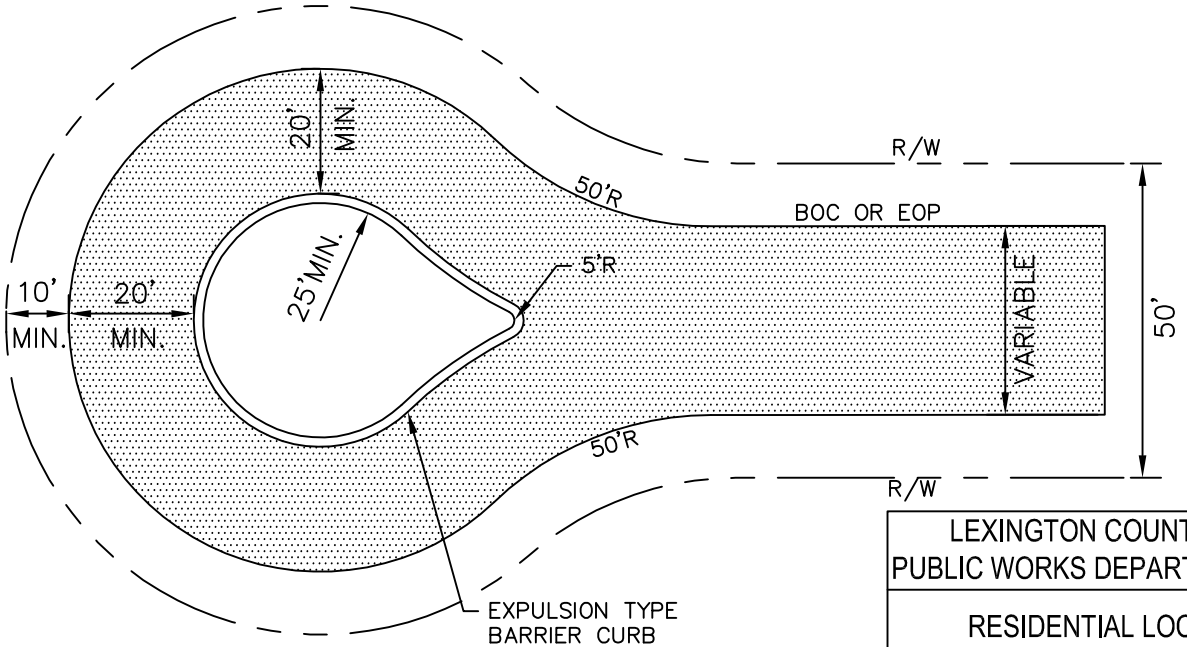
LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
RESIDENTIAL LOCAL ROAD SECTION w/ DITCH (50' R/W)
DRAWING NO: A–2
DATE: October, 2007



UNDERDRAIN TO BE PLACED B.O.C. IF ISLAND IS IRRIGATED.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
RESIDENTIAL LOCAL OFFSET CUL-DE-SAC (with or w/o Island)	
DRAWING NO: A–13	
DATE: October, 2007	



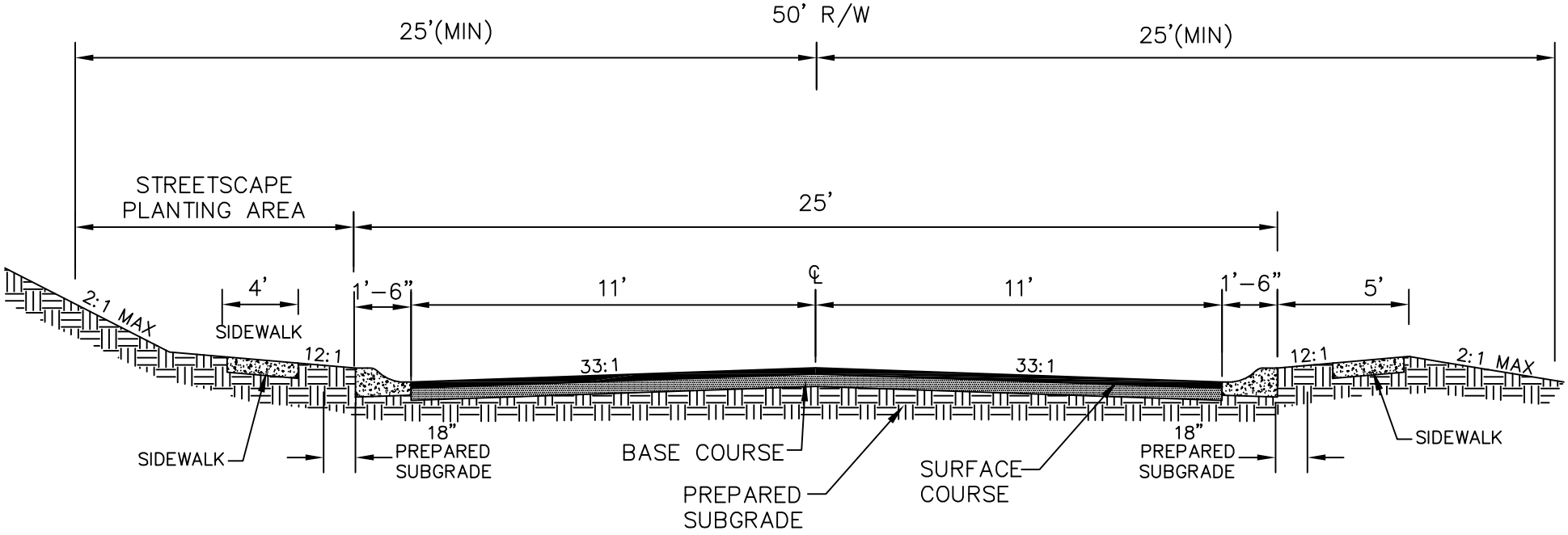


UNDERDRAIN TO BE PLACED B.O.C. IF ISLAND IS IRRIGATED.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

RESIDENTIAL LOCAL
CUL-DE-SAC
(with and w/o island)

DRAWING NO: A–12
DATE: October, 2007

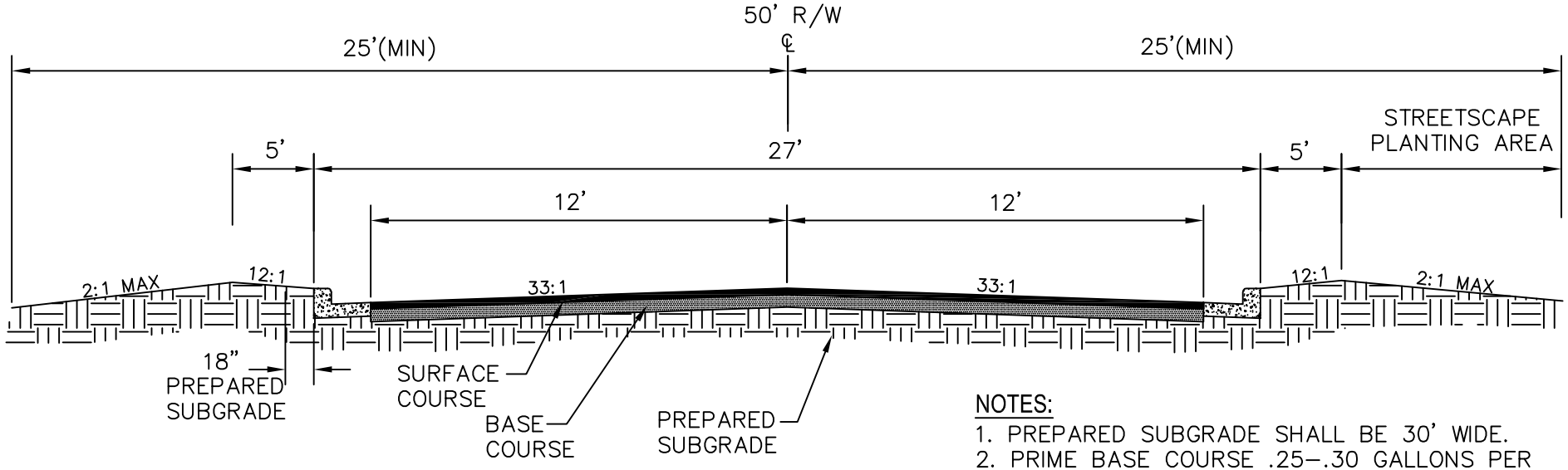


1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

NOTES:

1. PREPARED SUBGRADE SHALL BE 28' WIDE.
2. PRIME BASE COURSE .25–.30 GALLONS PER SQUARE YARD, WHEN REQUIRED.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
RESIDENTIAL LOCAL 18" Rolled Curb, 4' Sidewalk (50' r/w)	
DRAWING NO: A–5	
DATE: October, 2007	

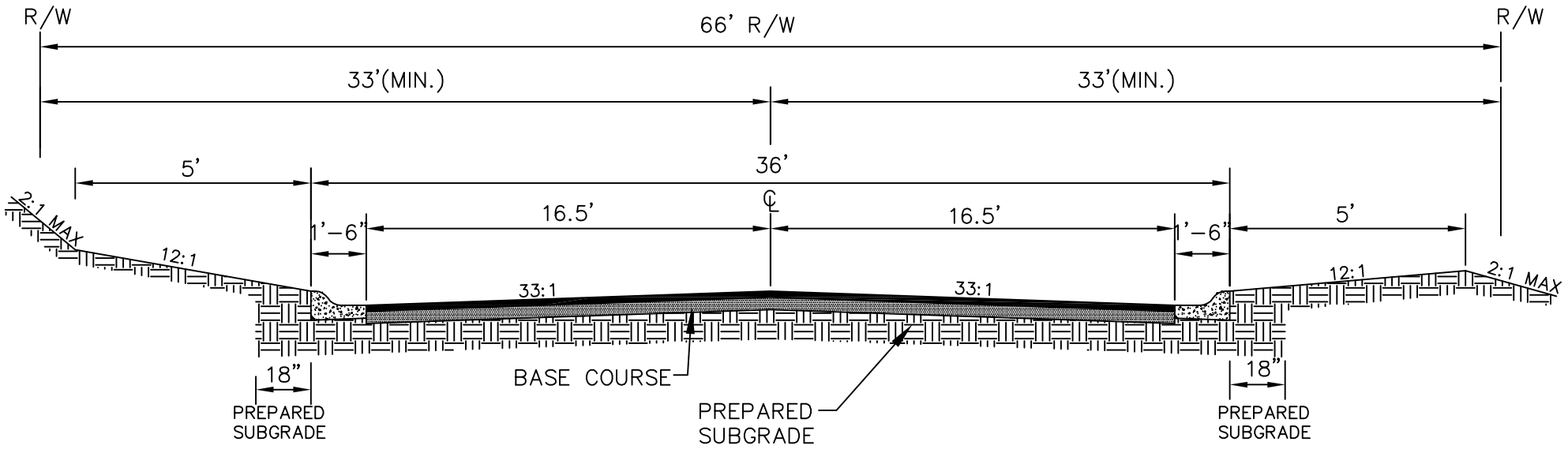


NOTES:

1. PREPARED SUBGRADE SHALL BE 30' WIDE.
2. PRIME BASE COURSE .25–.30 GALLONS PER SQUARE YARD, WHEN REQUIRED.
3. STREETSCAPE PLANTING AREA MAY BE SLOPED AWAY FROM ROAD.
4. NO DRIVEWAYS ACCESSING COLLECTOR ROADWAY.

1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
RESIDENTIAL COLLECTOR ROAD SECTION W/ BARRIER CURBING
DRAWING NO: A–4
DATE: October, 2007

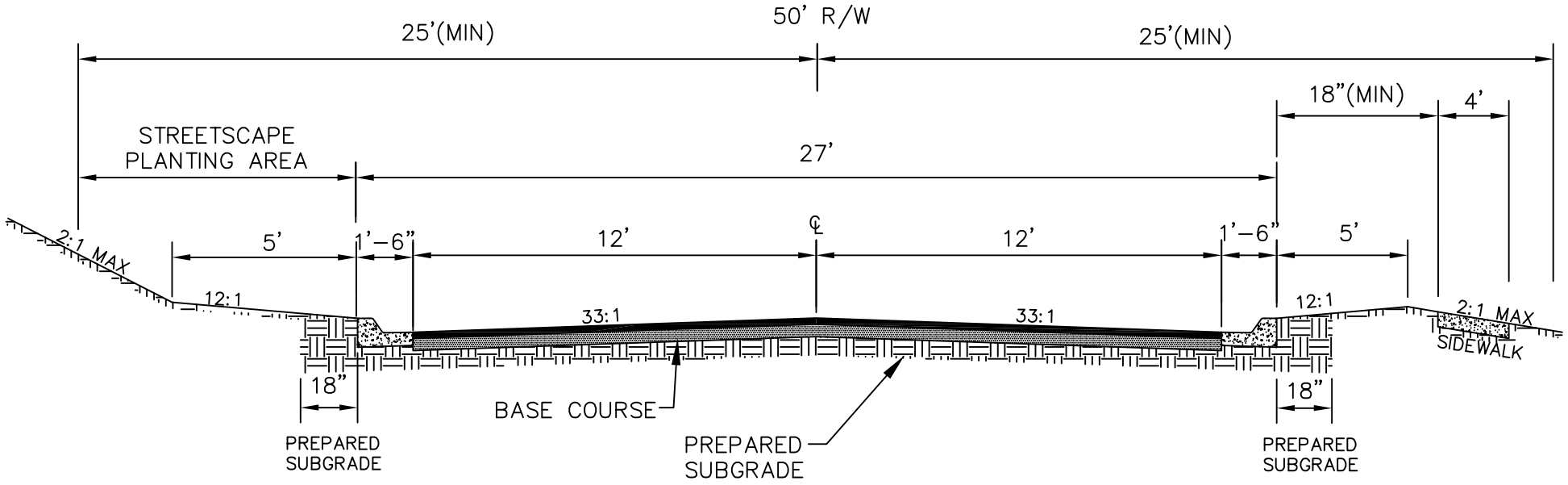


1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

NOTES:

1. PREPARED SUBGRADE SHALL BE 39' WIDE.
2. PRIME BASE COURSE .25–.30 GALLONS PER SQUARE YARD, WHEN REQUIRED.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
RESIDENTIAL COLLECTOR & LIGHT COMMERCIAL/ INDUSTRIAL w/18" Rolled Curb
DRAWING NO: A–6
DATE: October, 2007



1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

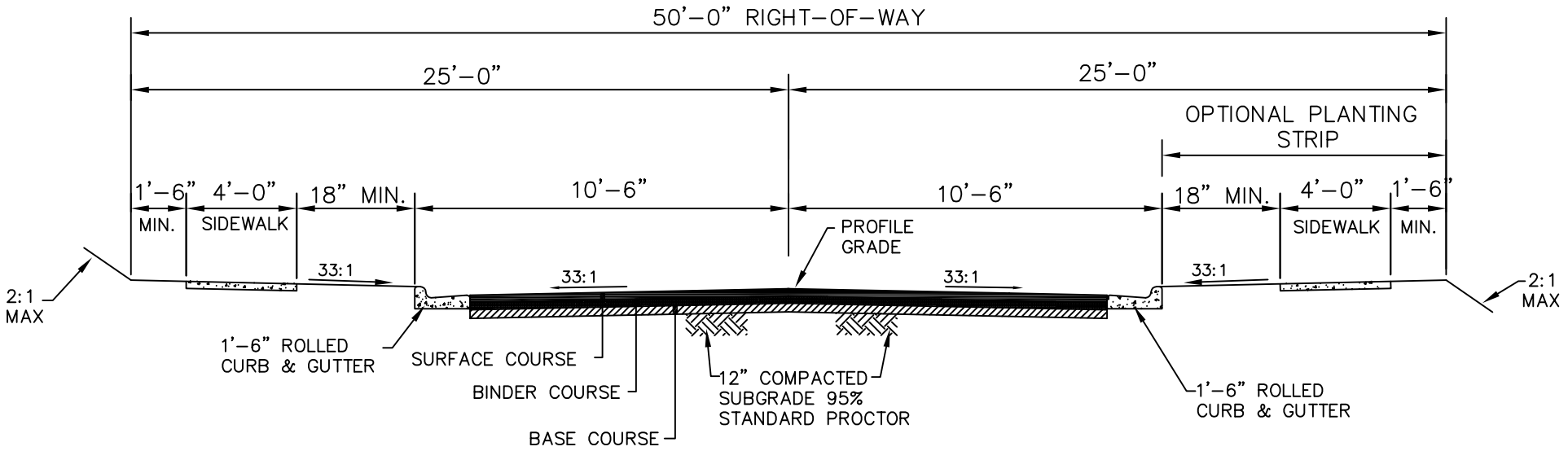
NOTES:

1. PREPARED SUBGRADE SHALL BE 30' WIDE.
2. PRIME BASE COURSE .25–.30 GALLONS PER SQUARE YARD, WHEN REQUIRED.
3. NO DRIVEWAYS ACCESSING COLLECTOR ROADWAY.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

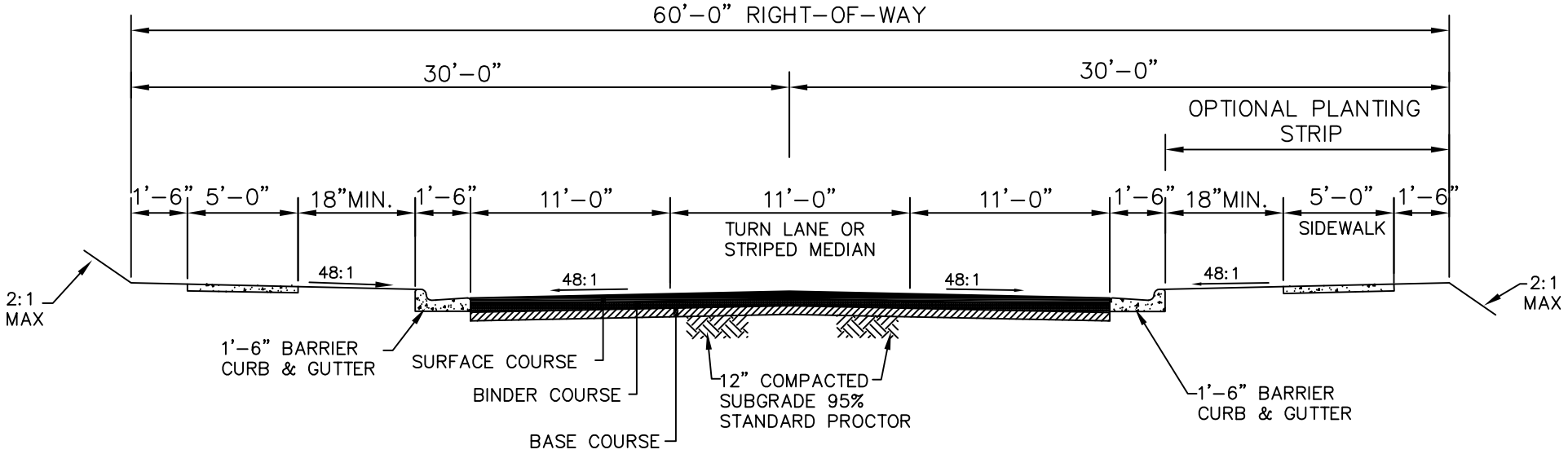
RESIDENTIAL COLLECTOR
18" Barrier Curb, 4' Sidewalk
(50' r/w)

DRAWING NO: A–7
DATE: October, 2007



1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
PRIVATE RESIDENTIAL STREET	
DRAWING NO: A–10	
DATE: October 2007	



1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

PRIVATE COMMERCIAL STREET

DRAWING NO: A–11
DATE: October, 2007

TABLE 3.14 PERMANENT VEGETATION SCHEDULE			
Species	Rates (lbs/acr)	Optimum Dates to Plant	Remarks
Bahia Grass (Alone)	40	March 20 – June 15	Slow to become established
Bahia Grass (Mix)*	30	March 20 – June 15	Slow to become established
Bermuda Grass (Hulled) (Alone)	8–12	April – July 15	Quick cover, Sod forming, partial winter kill
Bermuda Grass (Hulled) (Mix)*	4–6	April – July 15	Quick cover, Sod forming, partial winter kill
Fescue, Tall (KY31) Alone	40	August 15 – October	Seldom seeded alone, not for dry or wet sites
Fescue, Tall (KY31) Mix*	20	August 15 – October	Seldom seeded alone, not for dry or wet sites
Sericea Lespedeza (Scarified) Alone or Mix*, (Innoculate with EL Innoculant)	40	April –June	Good for slopes, cuts, and fills that require low maintenance
Ladino Clover (Mix* only), (Innoculate with AB Innoculant)	2	August 20 – October	Naturally adds nitrogen

* For details on mixes consult the Lexington Soil and Water Conservation District, (803) 359–3165 ext. 3.

TABLE 3.15 PERMANENT VEGETATION SCHEDULE FOR STEEP SLOPES/CUT SLOPES			
Species	Rates (lbs/acr)	Optimum Dates to Plant	Remarks
Weeping Lovegrass (Alone)	4	April – July 20	Quick cover, deep roots, likes dry sites, seldom used alone, clumps
Weeping Lovegrass (Mix)*	2	April – July 20	Quick cover, deep roots, likes dry sites, seldom used alone, clumps

TABLE 3.16 NATIVE SPECIES THAT CAN BE USED ON NON-CRITICAL, LEVEL SITES IN LEXINGTON COUNTY, SC			
Species	Rates (lbs/acr)	Optimum Dates to Plant	Remarks
Switchgrass (Mix* with Legumes)	10, PLS**	February 10 – April 20	Mix with Serecia at 30 lbs/acre
Indian Grass (Mix)*	8, PLS**	February – April 20	Mix with Serecia at 30 lbs/acre
Little Bluestem, (Mix*)	8, PLS**	February 10 – April	

* Pure Live Seed

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

PERMANENT VEGETATION
NOTES & SCHEDULE
(Sheet 2 of 2)

DRAWING NO: D–11A

DATE: October 2007

Plant Selection
Plant seed selection should be based on the type of soil, the season of the year in which the planting is to be done, and the needs and desires of the permanent land user. Tables 3.14 and 3.15 should be used to select the desired species to be planted. Failure to carefully follow agronomic recommendations often result in an inadequate stand of permanent vegetation that provides little or no erosion control. The rates in Tables 3.14 and 3.15 are based on purity and germination standards required for certification.

The following notes apply to Tables 3.14 and 3.15.

1. In mixtures with temporary cover, the full seeding rate of permanent cover shall be used.
2. Mix means 2 or more long term species plus short term species. For dates other than optimum, call the Lexington Soil and Water Conservation District, (803) 359–3165 ext. 3.
3. A legume, such as a clover, crown vetch, and serecia should be used where it is possible.
4. The appropriate inoculants should be used.

Topsoil
If the surface soil of the seedbed is not adequate for plant growth, topsoil should be applied.

Tillage
If the area has been recently plowed, no tillage is required other than raking or Surface Roughening to break any crust that has formed and to leave a textured surface. If the soil is compacted less than 6–inches, it should be disked for optimal germination. If the soil is compacted more than 6–inches, it should be sub–soiled and disked.

Soil Testing
Information and test provider is available from the PW/SWD and the Soil and Water Conservation District Office.

Lime
Unless a specific soil test indicates otherwise, apply 1« tons of ground course textured agricultural limestone per acre (70 pounds per 1000 square feet).

Fertilizer
A minimum of 1000 pounds per acre of a complete 10–10–10 fertilizer (23 pounds per 1000 square feet) or equivalent should be applied during permanent seeding of grasses unless a soil test indicates a different requirement. Fertilizer and lime (if used) should be incorporated into the top 4–6 inches of the soil by disking or other means where conditions allow. Do not mix the lime and the fertilizer prior to the field application.

Seeding
The surface of the soil should be loosened just before broadcasting the seed. Seed should be evenly applied by the most convenient method available for the type of seed to be applied. Typical application methods include but are not limited to cyclone seeders, rotary spreaders, drop spreaders, broadcast spreaders, hand spreaders, cultipacker seeder, and hydro–seeders. Cover applied seed by raking or dragging a chain or brush mat, and then lightly firm the area with a roller or cultipacker. Do not roll seed that is applied with a hydro–seeder and hydro–mulch.

Mulching
All permanent seeded areas should be covered with mulch immediately upon completion of the seeding application to retain soil moisture and reduce erosion during establishment of vegetation. The mulch should be applied evenly in such a manner that it provides a minimum of 75% coverage. Typical mulch applications include straw, wood chips, bark, wood fiber, and compost mulch. The most commonly accepted mulch used in conjunction with permanent seeding is small grain straw. This straw should be dry and free from mold damage and noxious weeds. The straw may need to be anchored with netting or asphalt emulsions to prevent it from being blown or washed away. The straw mulch may be applied by hand or machine at the rate 2 tons per acre (90 pounds per 1000 square feet). Frequent inspections are necessary to check that conditions for growth are good.

Irrigation
Permanent seeded areas should be kept adequately moist, especially late in the specific growing season. Irrigate the seeded area if normal rainfall is not adequate for the germination and growth of seedlings. Water seeded areas at controlled rates that are less than the rate at which the soil can absorb water to prevent runoff. Runoff of irrigation water wastes water and can cause erosion.

Re–seeding
Inspect permanently seeded areas for failure, make necessary repairs and re–seed or overseed within the same growing season if possible. If the grass cover is sparse or patchy, re–evaluate the choice of grass and quantities of lime and fertilizer applied. If the permanent seeding has less than 40% cover, have the soil tested to determine any acidity or nutrient deficiency problems. Final stabilization by permanent seeding of the site requires that it be covered by a 70% coverage rate.

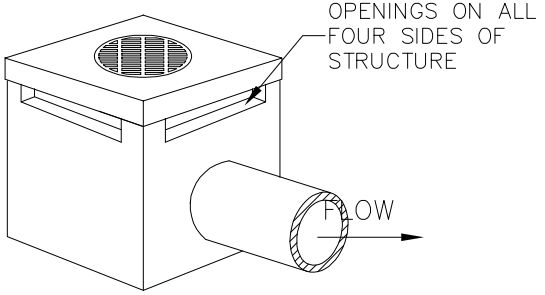
Post–Stabilization
Once areas are stabilized they can be converted to native species or for establishing on non–critical, level sites. Table 3.16 lists some native species of Lexington County that can be used.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

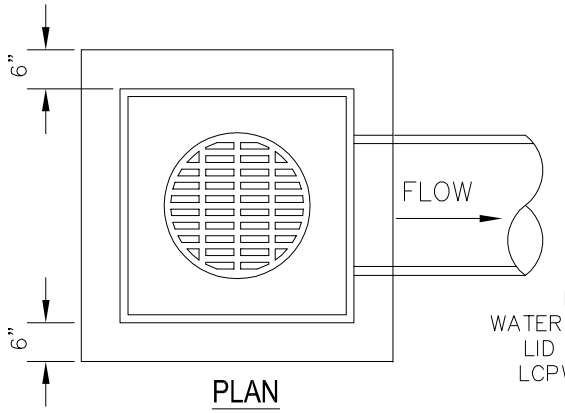
PERMANENT VEGETATION
NOTES & SCHEDULE
(Sheet 1 of 2)

DRAWING NO: D–11

DATE: October 2007



ISOMETRIC VIEW

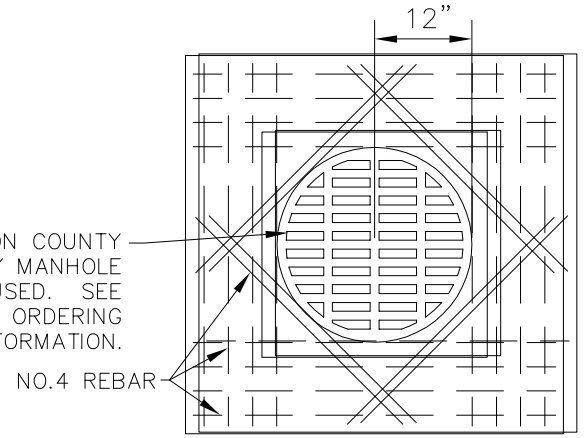


PLAN

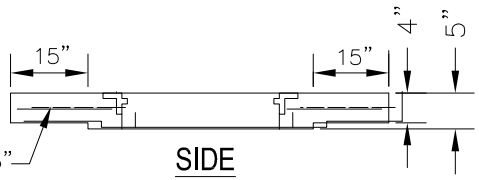
NOTES:

1. CONCRETE SHALL BE 3,000 PSI MIN. 28–DAY COMPRESSIVE STRENGTH.
2. STEEL SHALL BE ASTM A–706, LOW–ALLOY DEFORMED BARS FOR CONCRETE REINFORCEMENT, GRADE 60.
3. ALL LIFT HOLES SHALL BE GROUTED WATER TIGHT PRIOR TO COMPLETION OF INSTALLATION.
4. METAL STEPS AS SUPPLIED BY NEENA R1900–C OR APPROVED EQUAL SHALL BE INSTALLED AT 16" O.C.

DETAIL OF COVER



PLAN



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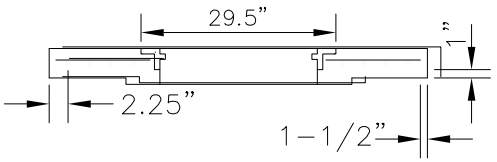

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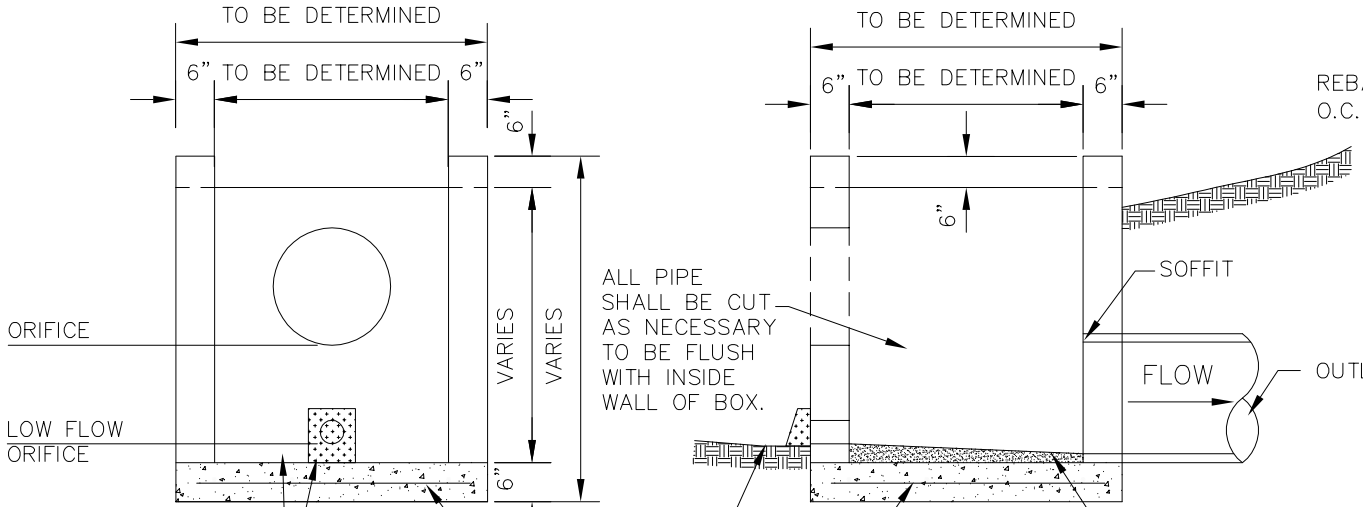


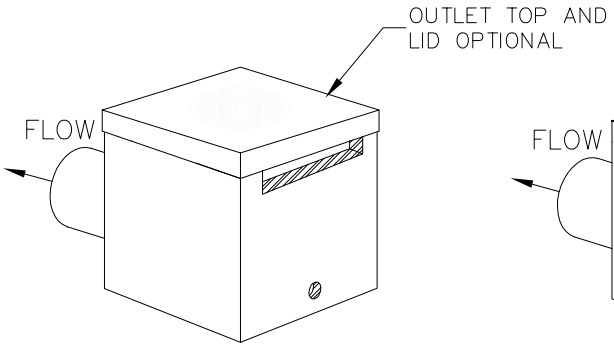
FRONT

SIDE

LOW FLOW ORIFICE TO HAVE DEBRIS PLATE, STONE COVER, OR APPROVED EQUAL. SEE NEXT PAGE FOR OTHER OPTIONS

NO. 4 REBAR 12"OC WITH 1–1/2"MIN.COVER ALL DIRECTIONS MIN. 0.20 SQ. IN. STEEL AREA PER FT.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
OUTLET STRUCTURE	
DRAWING NO: D–10	
DATE: October 2007	



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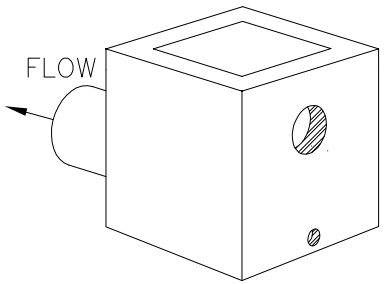

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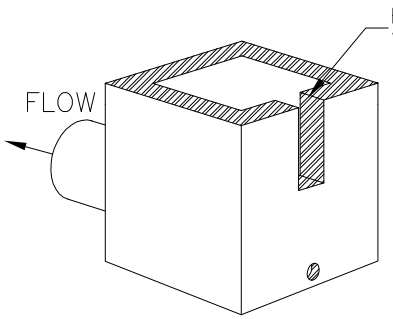

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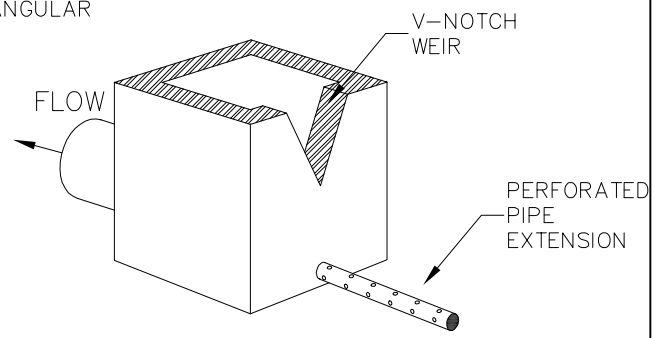

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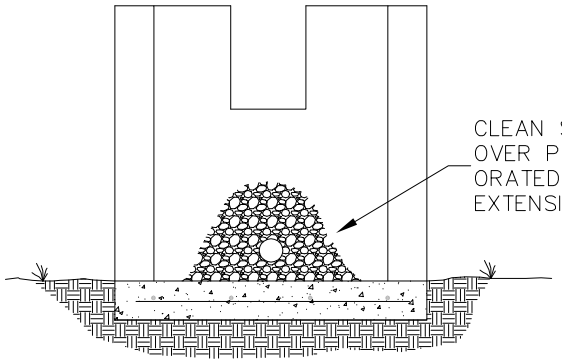

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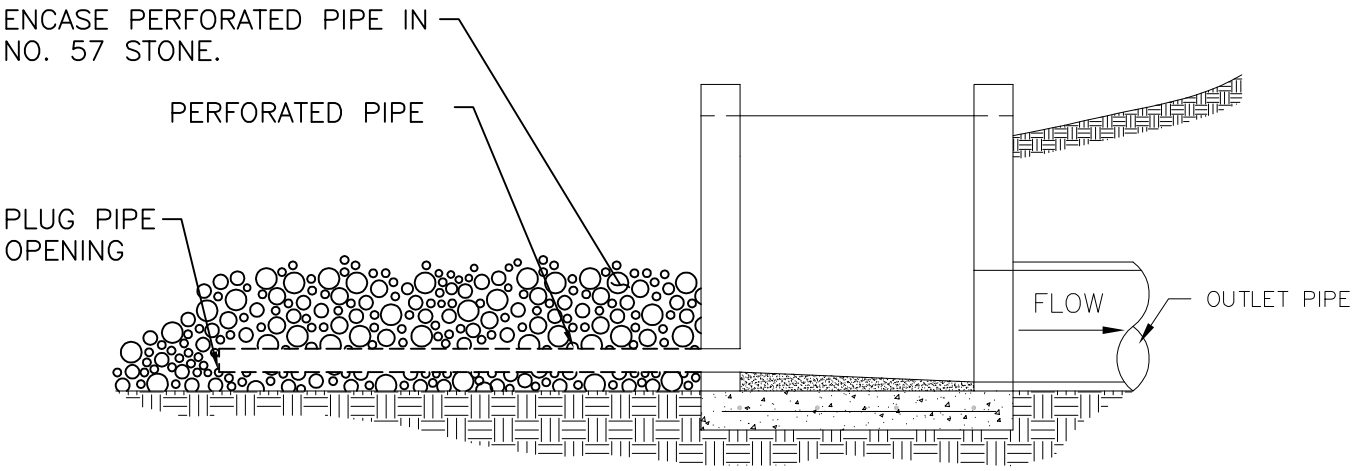

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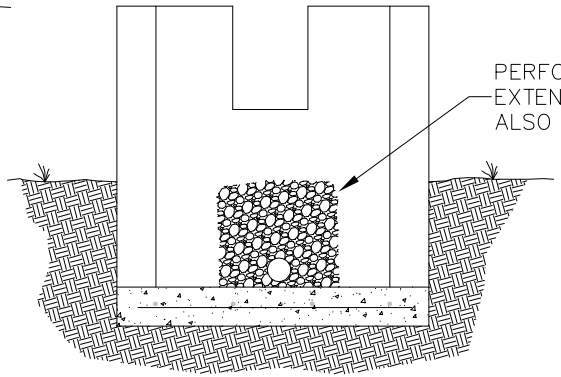


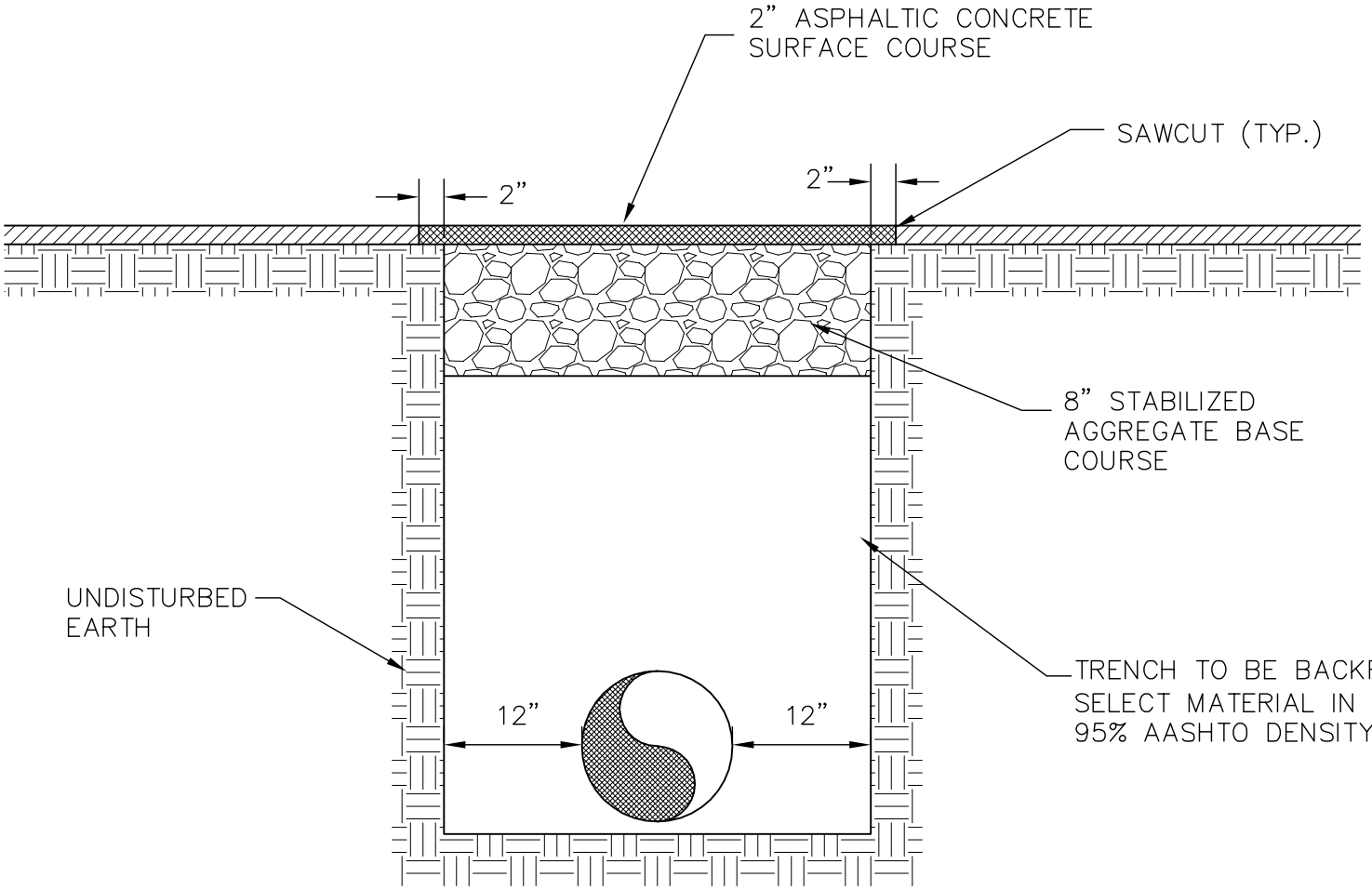
FRONT

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

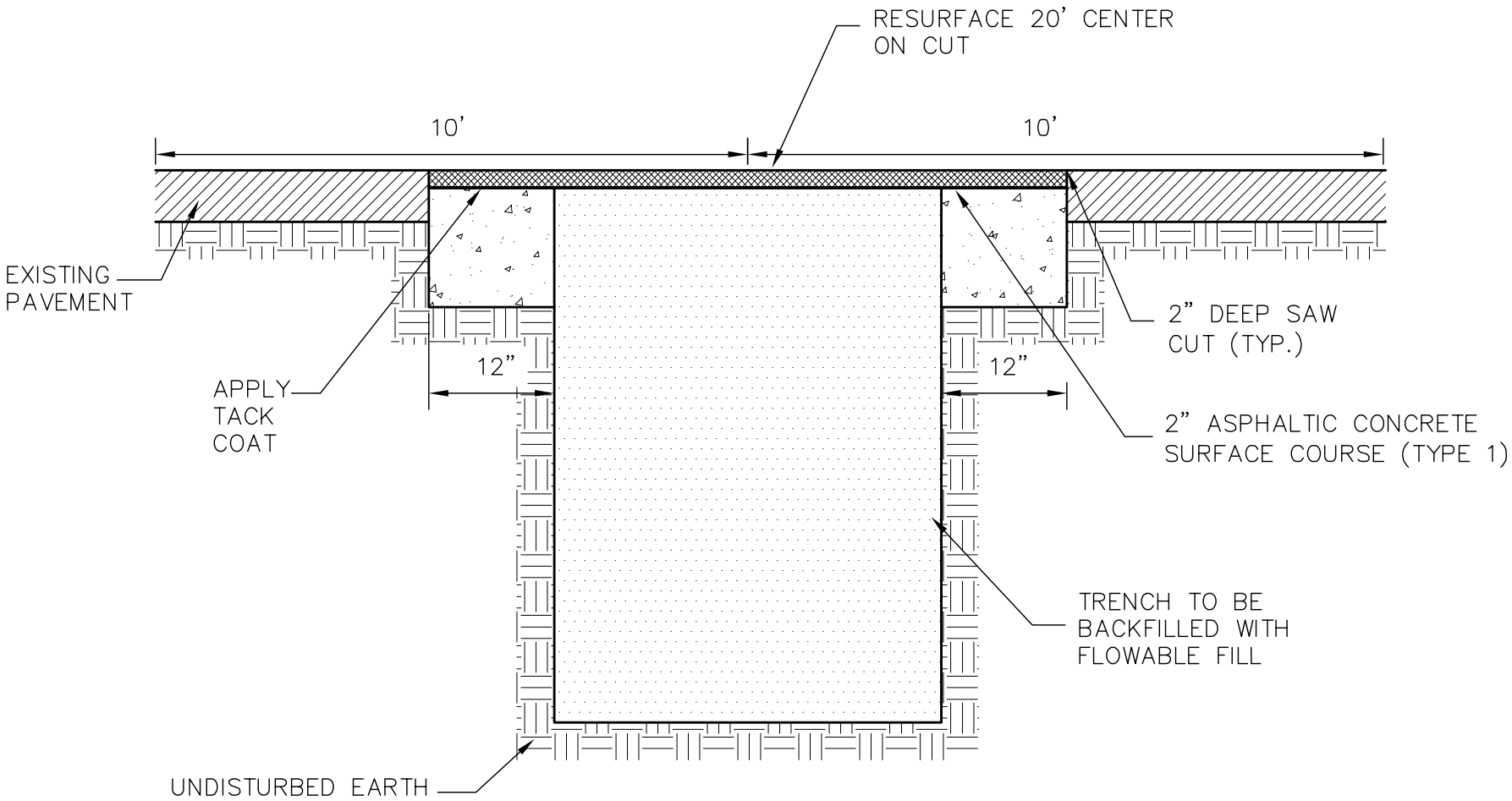
OUTLET STRUCTURE
(OTHER OPTIONS)

DRAWING NO: D–10A

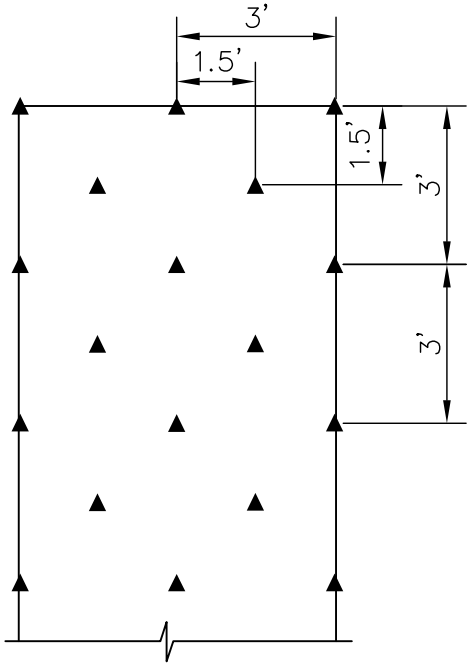
DATE: MAY 2008



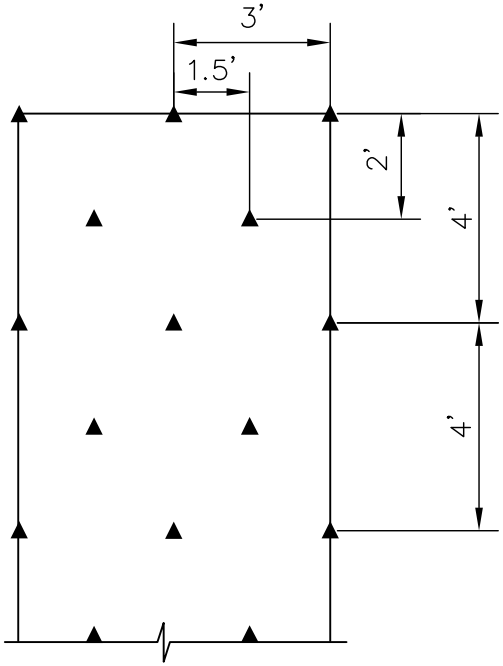
LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
OPEN CUT REPAIR FOR RESIDENTIAL LOCAL ASPHALT PAVEMENT	
DRAWING NO: B-2	
DATE: October, 2007	



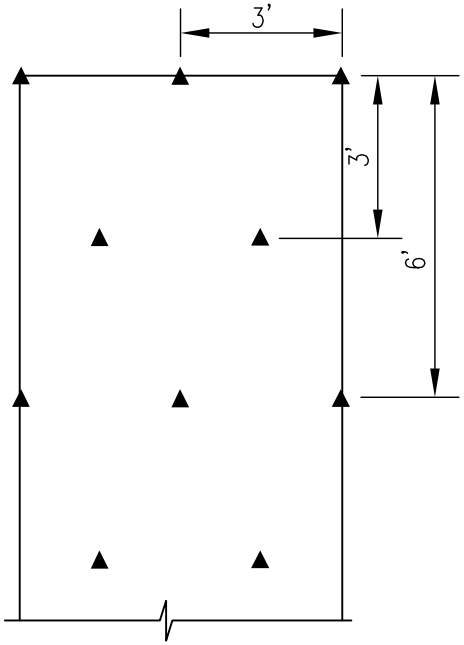
LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
OPEN CUT REPAIR FOR LIGHT COMMERCIAL / INDUSTRIAL & RESIDENTIAL COLLECTOR ASPHALT PAVEMENT
DRAWING NO: B-3
DATE: October, 2007



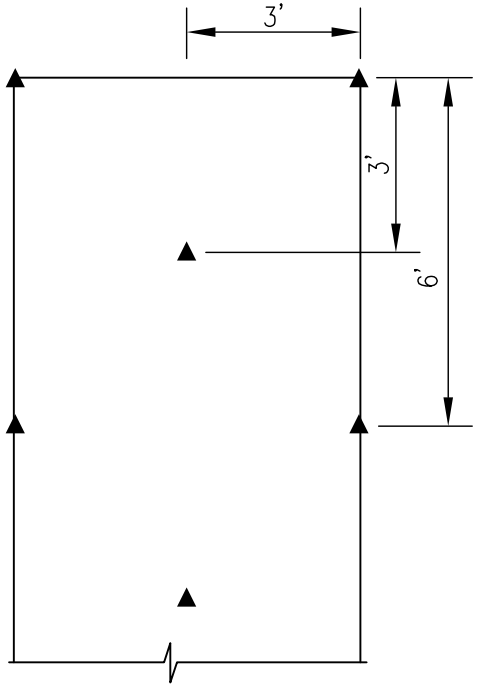
ANCHOR PATTERN FOR SLOPES GREATER THAN 1:1



ANCHOR PATTERN FOR SLOPES BETWEEN 2:1 AND 1:1



ANCHOR PATTERN FOR
SLOPES BETWEEN 3:1AND 2:1

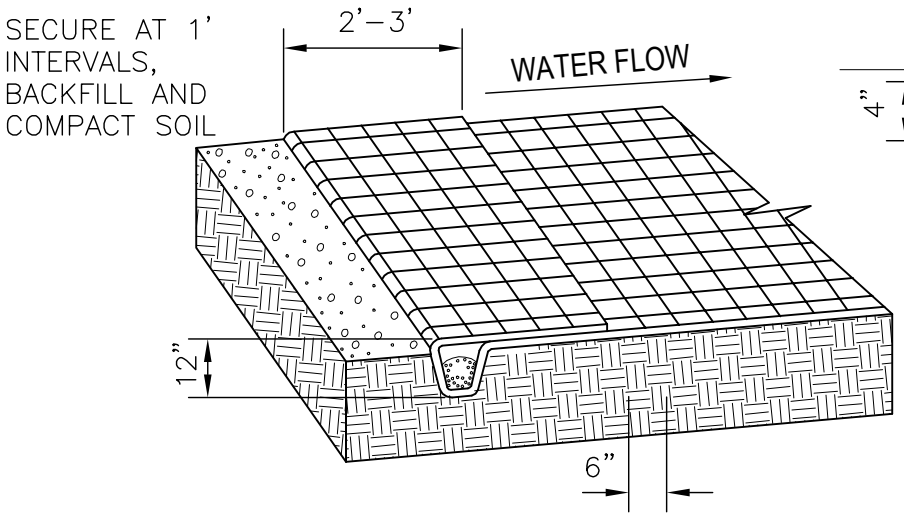


ANCHOR PATTERN FOR
SLOPES FLATTER THAN 3:1

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

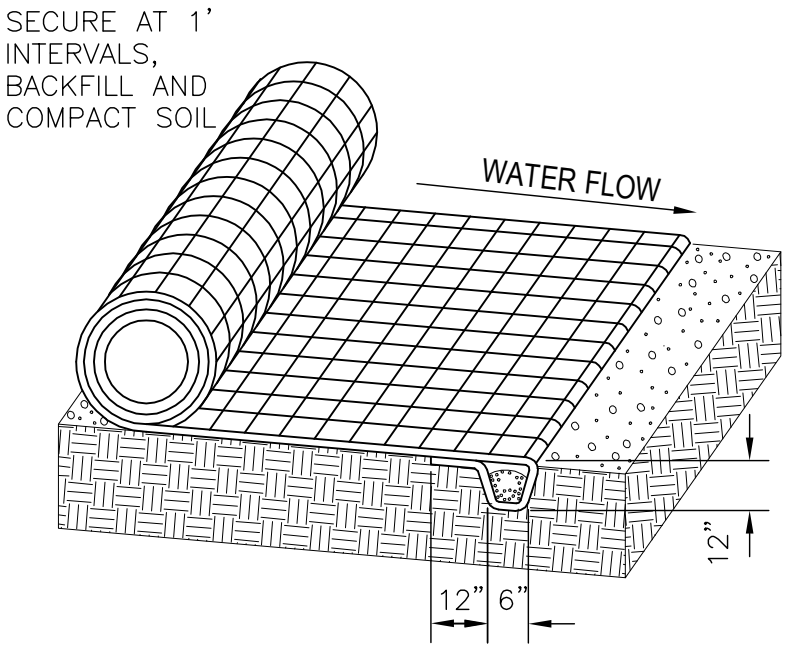
MATTING ORIENTATION

DRAWING NO: C–20
DATE: October 2007

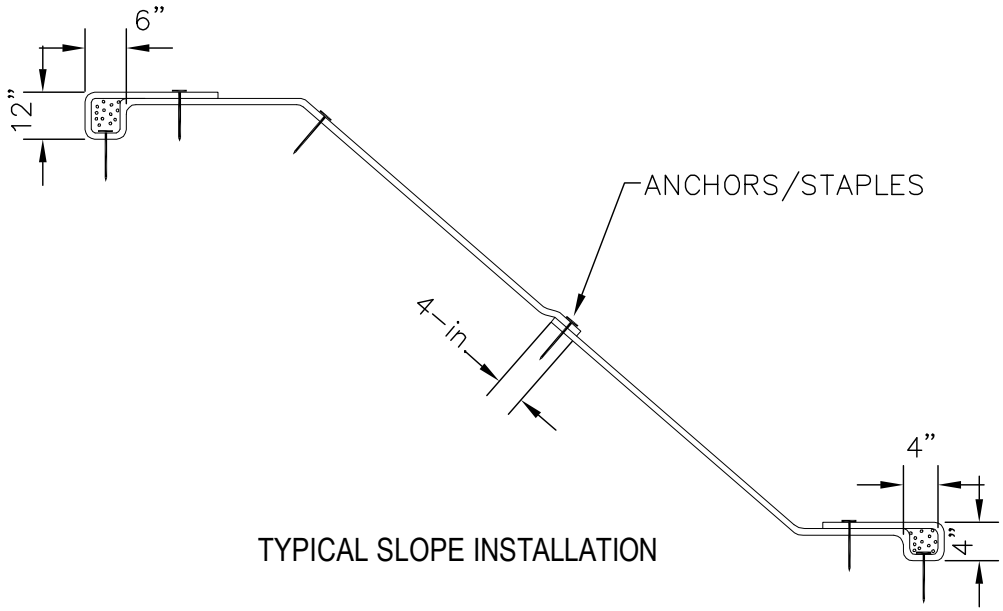


TERMINAL ANCHOR TRENCH APPLICATION

TYPICAL CHANNEL INSTALLATION



INITIAL ANCHOR TRENCH APPLICATION



TYPICAL SLOPE INSTALLATION

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
MATTING ORIENTATION	
DRAWING NO: C-21	
DATE: October 2007	

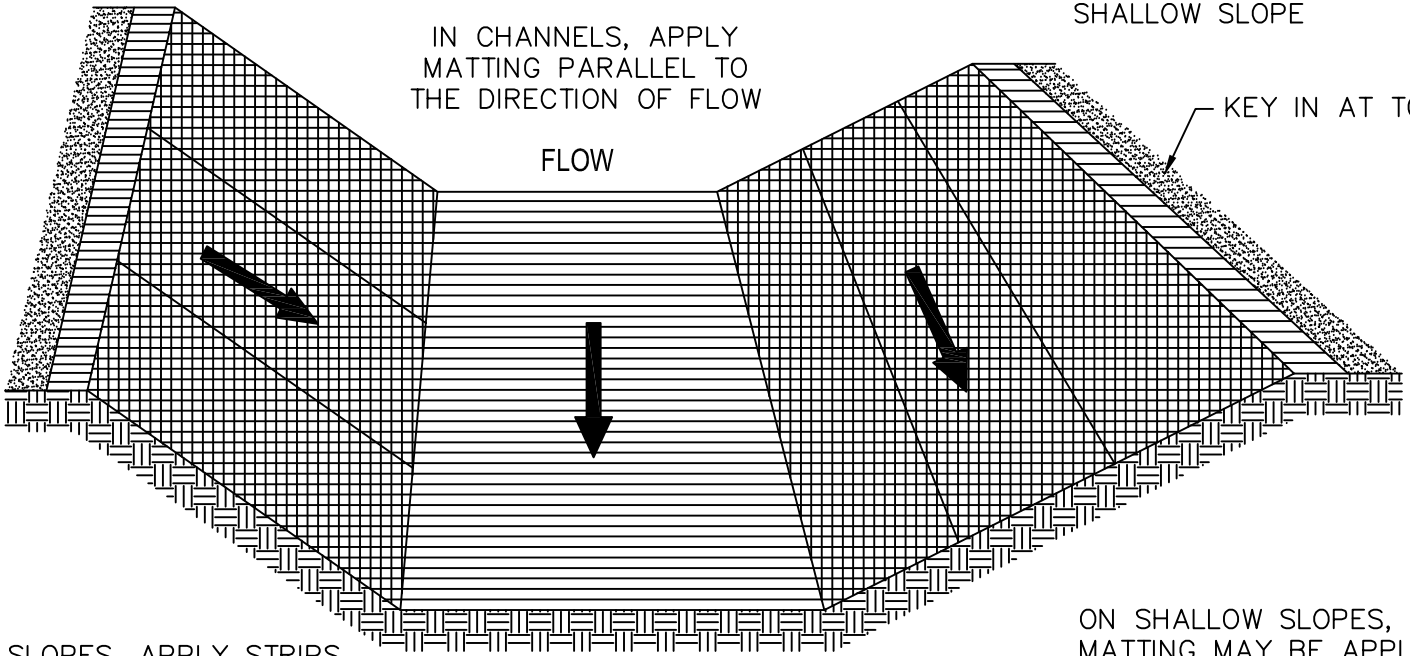
STEEP SLOPE

IN CHANNELS, APPLY MATTING PARALLEL TO THE DIRECTION OF FLOW

SHALLOW SLOPE

KEY IN AT TOP OF SLOPE

FLOW



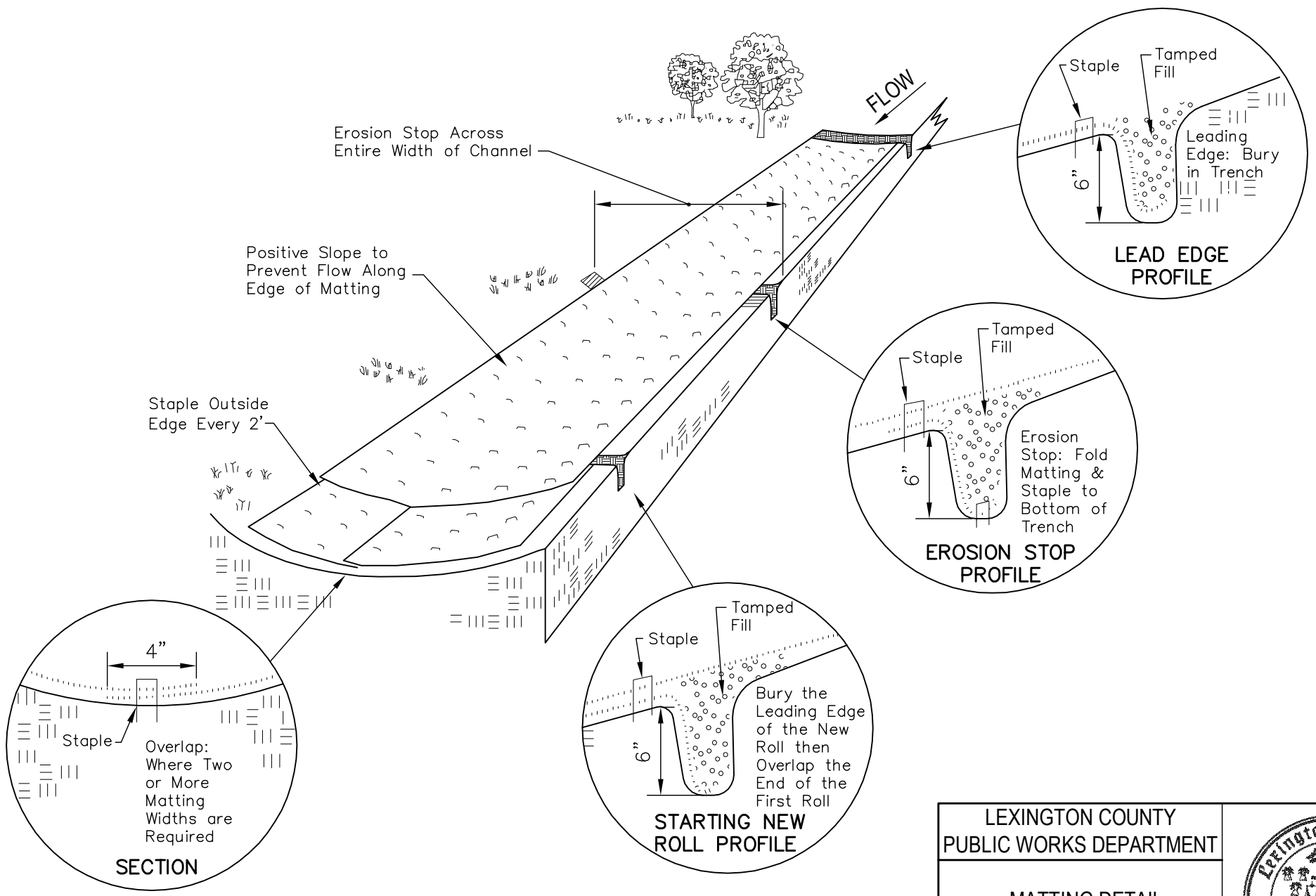
ON STEEP SLOPES, APPLY STRIPS OF MATTING PARALLEL TO THE DIRECTION OF FLOW, AS SHOWN ON DETAIL AND ANCHOR AS PER MANUFACTURER'S SPECIFICATIONS. (SLOPES GREATER THAN 2:1)

CHANNEL

ON SHALLOW SLOPES, STRIPS OF MATTING MAY BE APPLIED ACROSS THE SLOPE. (SLOPES UP TO 2:1)

MATTING SHOULD BE LAPPED TOP OVER BOTTOM IN FLOW DIRECTION.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
MATTING DETAIL CHANNEL INSTALLATION
DRAWING NO: C–18
DATE: October 2007

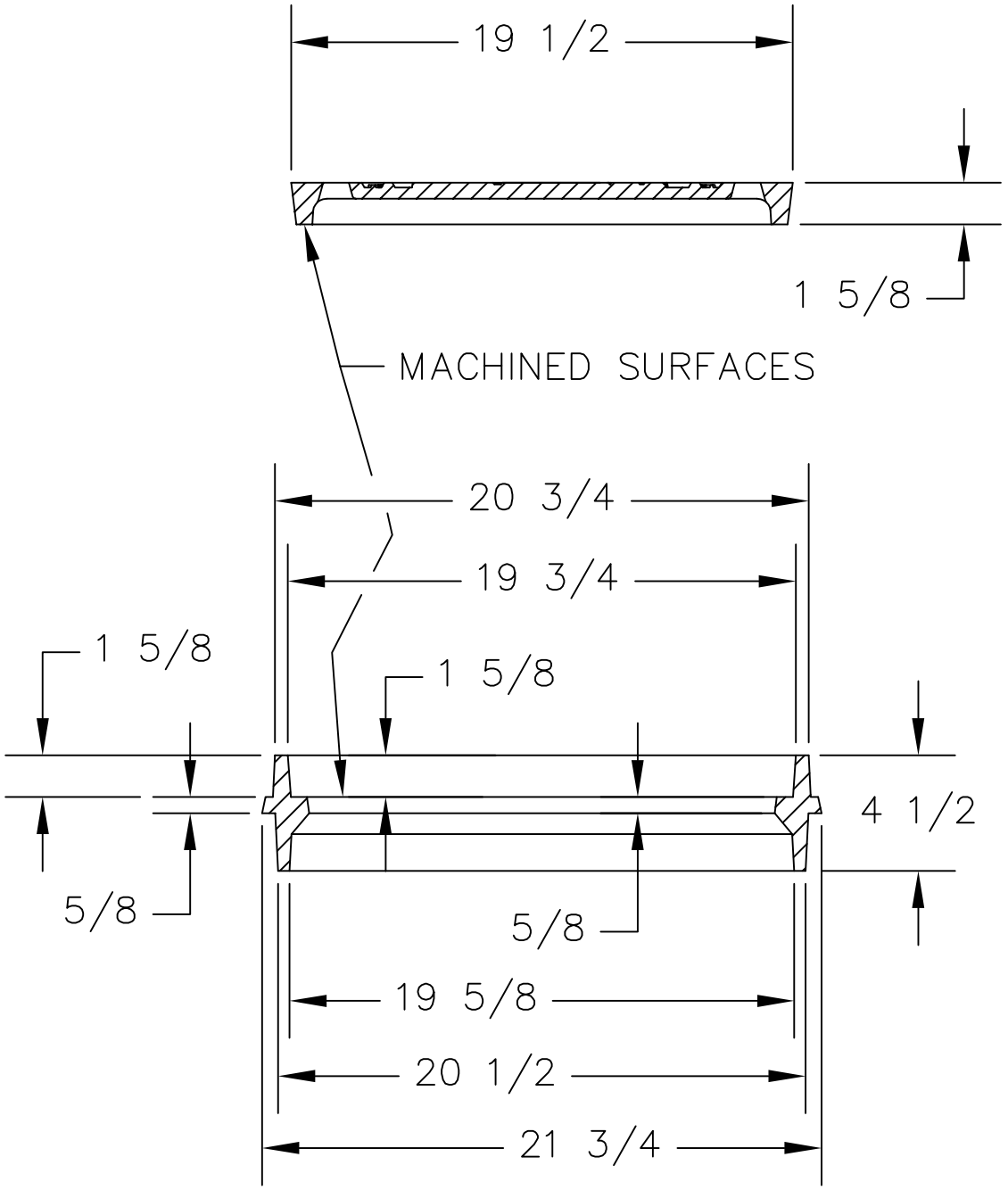


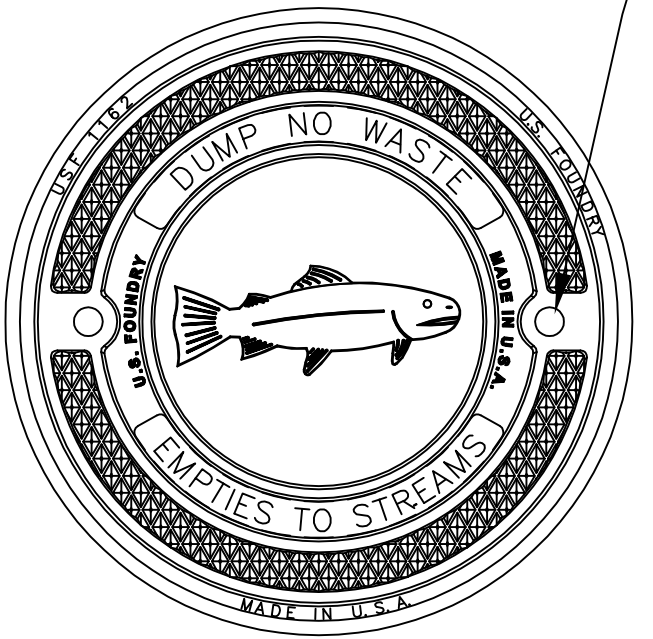
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

MATTING DETAIL
CHANNEL INSTALLATION

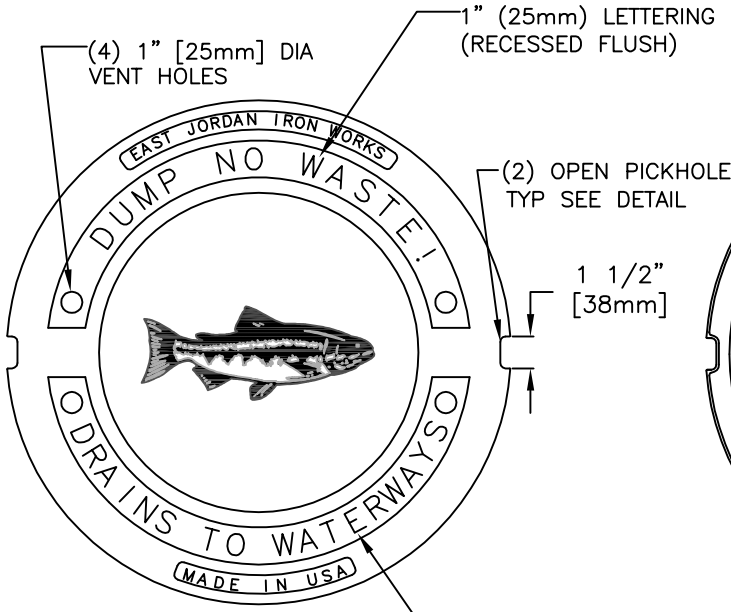
DRAWING NO: C–19

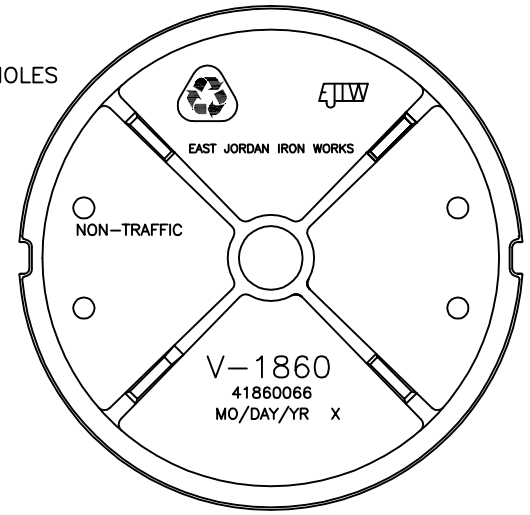
DATE: October 2007



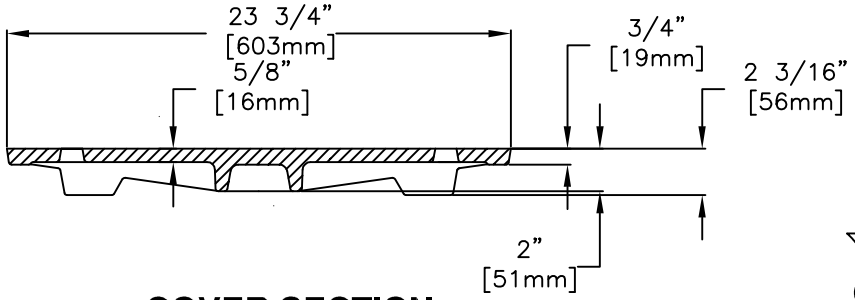


LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
MANHOLE LID	
DATE: October 2008	

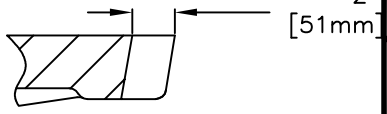




BOTTOM VIEW



COVER SECTION



OPEN PICKHOLE DETAIL

EAST JORDAN IRON WORKS, INC.
P.O. BOX 439
EAST JORDAN, MI. 49727
1-800-874-4100
FAX 231-536-4458

DRAWN	DATE
SMH	06/05/03
APPROVED	DATE

COVER

PRODUCT NO.
41860066

CATALOG NO.
V-1860

REF. PRODUCT DRAWING
41860048

EST. WT.
COVER: 70 LBS 32kg

OPEN AREA
N/A

MAT'L SPEC.
COVER – GRAY IRON
ASTM A48 CL35B

LOAD RATING
NON TRAFFIC

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

MANHOLE LID

DATE: October, 2008

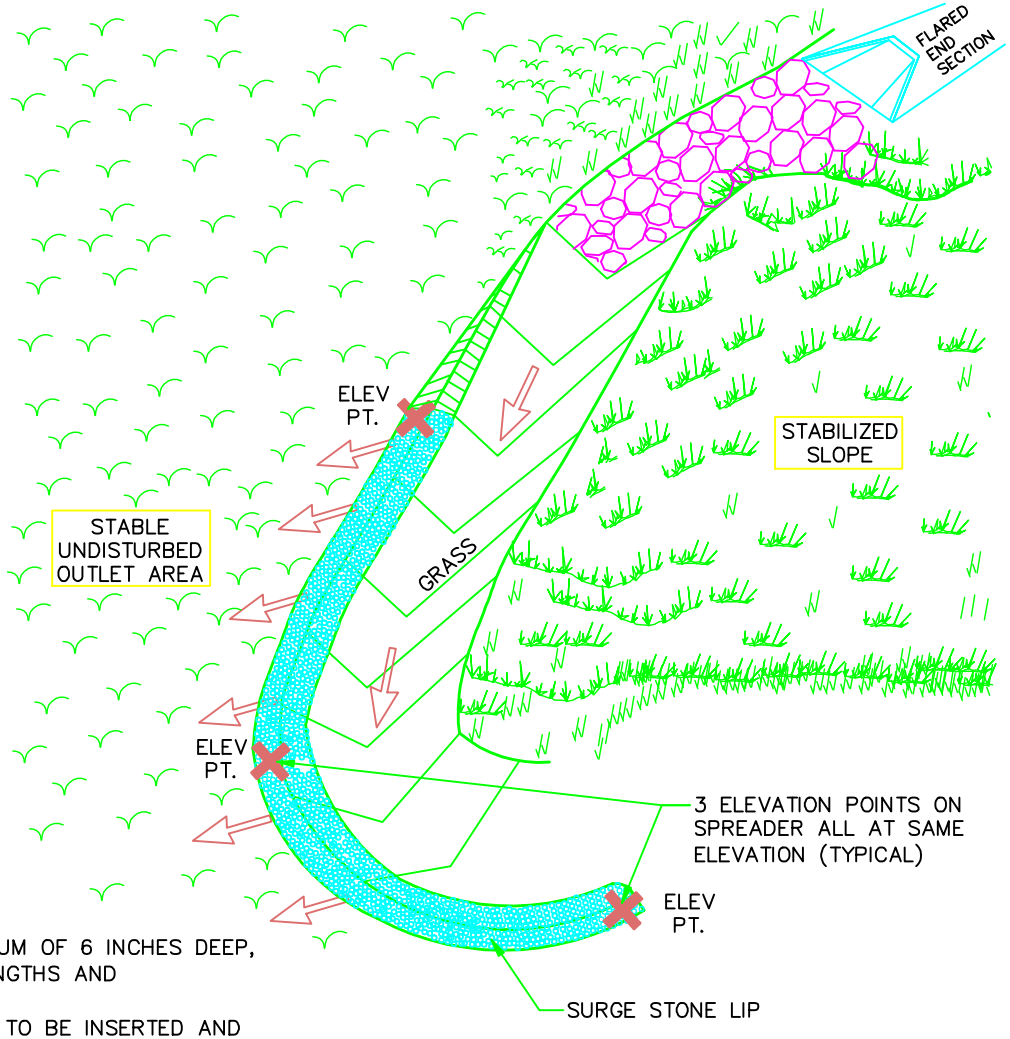
SPREADER LIP– CONSTRUCT THE LEVEL LIP ON UNDISTURBED SOIL TO UNIFORM HEIGHT AND ZERO GRADE OVER THE LENGTH OF THE SPREADER. PROTECT IT WITH AN EROSION RESISTANT MATERIAL SUCH AS SURGE STONE TO PREVENT EROSION, TO BECOME ESTABLISHED.

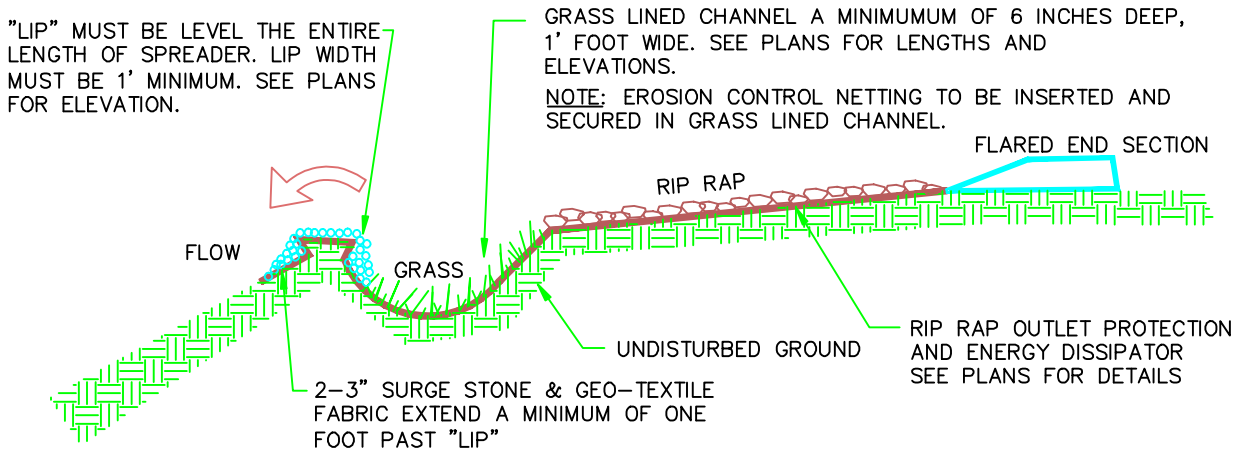
OUTLET AREA– THE OUTLET DISPOSAL AREA MUST BE GENERALLY SMOOTH AND WELL VEGETATED WITH A MAXIMUM SLOPE OF 10%.

VEGETATE ALL DISTURBED AREAS

CONSTRUCTION SPECIFICATIONS

1. THE MATTING SHOULD BE A MINIMUM OF 4 FEET WIDE EXTENDING 6 INCHES OVER THE LIP AND BURIED 6 INCHES DEEP IN A VERTICAL TRENCH ON THE LOWER EDGE. THE UPPER EDGE SHOULD BUTT AGAINST SMOOTHLY CUT SOD AND BE SECURELY HELD IN PLACE WITH CLOSELY SPACED HEAVY DUTY WIRE STAPLES AT LEAST 12 INCHES LONG.
2. ENSURE THAT THE SPREADER IS LEVEL, FOR UNIFORM SPREADING OF STORM RUNOFF.
3. CONSTRUCT THE LEVEL SPREADER ON UNDISTURBED SOIL. (NOT ON FILL)
4. CONSTRUCT A 20 FOOT TRANSITION SECTION FROM THE DIVERSION CHANNEL TO BLEND SMOOTHLY WITH THE WIDTH AND DEPTH OF THE LEVEL SPREADER.
5. DISPERSE RUNOFF FROM THE SPREADER ACROSS A PROPERLY STABILIZED SLOPE, NOT TO EXCEED 10%, MAKE SURE THAT THE SLOPE IS SUFFICIENTLY SMOOTH TO KEEP THE FLOW FROM CONCENTRATING.
6. IMMEDIATELY AFTER IT'S CONSTRUCTION, APPROPRIATELY SEED AND MULCH THE ENTIRE DISTURBED AREA OF THE LEVEL SPREADER.

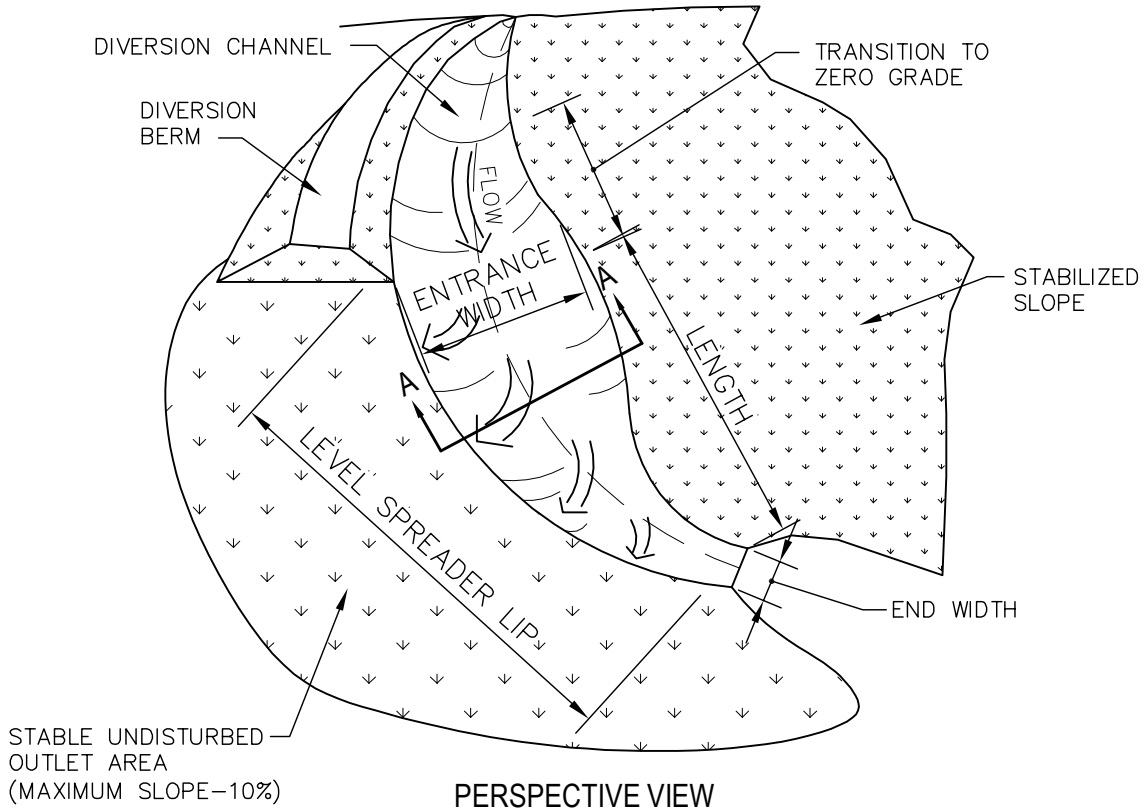




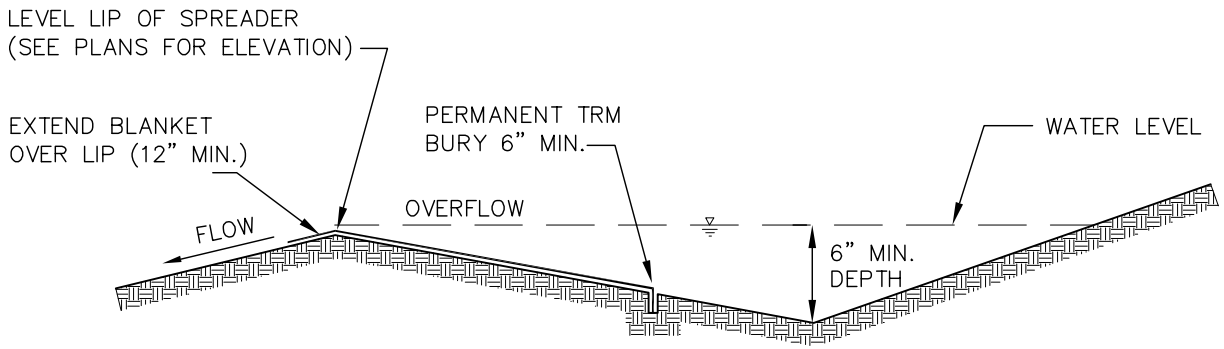
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

LEVEL SPREADER DETAIL

DRAWING NO: C–24
DATE: May 2008



PERSPECTIVE VIEW



SECTION A-A

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
LEVEL SPREADER	
DRAWING NO: C–17	
DATE: October 2007	

CLEAR ZONE DISTANCES
(IN FEET FROM EDGE OF DRIVING LANE)

Design Speed	Design ADT	FILL SLOPES			CUT SLOPES		
		[illegible]	5:1 to 4:1	3:1	3:1	4:1 to 5:1	[illegible]
40 MPH or less	Under 750	7-10	7-10	**	7-10	7-10	7-10
	750-1500	10-12	12-14	**	10-12	10-12	10-12
	1500-6000	12-14	14-16	**	12-14	12-14	12-14
	Over 6000	14-16	16-18	**	14-16	14-16	14-16
45-50 MPH	Under 750	10-12	12-14	**	8-10	8-10	10-12
	750-1500	14-16	16-20	**	10-12	12-14	14-16
	1500-6000	16-18	20-26	**	12-14	14-16	16-18
	Over 6000	20-22	24-28	**	14-16	18-20	20-22
55 MPH	Under 750	12-14	14-18	**	8-10	10-12	10-12
	750-1500	16-18	20-24	**	10-12	14-16	16-18
	1500-6000	20-22	24-30	**	14-16	16-18	20-22
	Over 6000	22-24	26-32*	**	16-18	20-22	22-24

* CLEAR ZONES ARE LIMITED TO 30 FEET FOR PRACTICALITY AND TO PROVIDE A CONSISTENT ROADWAY TEMPLATE AS LONG AS PREVIOUS EXPERIENCE WITH SIMILAR PROJECTS OR DESIGNS INDICATES SATISFACTORY PERFORMANCE. WHERE A SITE SPECIFIC INVESTIGATION INDICATES A HIGH PROBABILITY OF CONTINUING ACCIDENTS, OR SUCH OCCURRENCES ARE INDICATED BY ACCIDENT HISTORY, THE DESIGNER MAY PROVIDE CLEAR ZONE DISTANCES GREATER THAN 30 FEET, AS INDICATED.

** SINCE RECOVERY IS LESS LIKELY ON THE UNSHIELDED, TRAVERSABLE 3:1 SLOPES, FIXED OBJECTS SHOULD NOT BE PRESENT IN THE VICINITY OF THE TOE OF THESE SLOPES. RECOVERY OF HIGH SPEED VEHICLES THAT ENCROACH BEYOND THE EDGE OF SHOULDER MAY BE EXPECTED TO OCCUR BEYOND THE TOE OF SLOPE. DETERMINATION OF THE WIDTH OF THE RECOVERY AREA AT THE TOE OF SLOPE SHOULD TAKE INTO CONSIDERATION RIGHT OF WAY AVAILABILITY, ENVIRONMENTAL CONCERNS, ECONOMIC FACTORS, SAFETY NEEDS, AND ACCIDENT HISTORIES. ALSO, THE DISTANCE BETWEEN THE EDGE OF THE TRAVEL LANE AND THE BEGINNING OF THE 3:1 SLOPE SHOULD INFLUENCE THE RECOVERY AREA PROVIDED AT THE TOE OF SLOPE.

RUNOUT LENGTHS L_R

DESIGN SPEED (mph)	TRAFFIC VOLUME (ADT)			
	OVER 6000	2000-6000	800-2000	UNDER 800
70	475	445	395	360
65	450	425	370	345
60	425	400	345	330
55	360	345	315	280
50	330	300	260	245
45	260	245	215	200
40	230	200	180	165
35	200	185	165	150
30	165	165	150	130

⊗MAXIMUM FLARE RATE TABLE

DESIGN SPEED MPH	FLARE RATE BEYOND SHY LINE		FLARE RATE INSIDE SHY LINE	▲SHY LINE OFFSET
	RIGID	SEMI-RIGID		
70	20:1	15:1	30:1	9.2'
60	18:1	14:1	26:1	7.9'
55	16:1	12:1	24:1	7.2'
50	14:1	11:1	21:1	6.6'
45	12:1	10:1	18:1	5.6'
40	10:1	8:1	16:1	4.6'
30	8:1	7:1	13:1	3.6'

▲SHY LINE IS AS DEFINED IN THE AASHTO ROADSIDE DESIGN GUIDE.

⊗INTERPOLATE AS NECESSARY

NOTE: SEMI-RIGID BARRIERS INCLUDE ALL STEEL BEAM AND THRIE BEAM GUARDRAIL; RIGID BARRIERS INCLUDE ALL CONCRETE BARRIERS.

⊗SUGGESTED SHY LINE OFFSET VALUES

DESIGN SPEED (mph)	SHY LINE OFFSET (feet)
80	12.1
75	10.5
70	9.2
60	7.9
55	7.2
50	6.6
45	5.6
40	4.6
30	3.6

⊗INTERPOLATE AS NECESSARY

NOTES:

1. SHY LINE OFFSET VALUES ARE MEASURED FROM EDGE OF TRAVELWAY TO THE FACE OF OBJECT (GUARDRAIL, BRIDGE PARAPET, ETC.). THIS IS THE DISTANCE THAT A DRIVER WILL NOT TEND TO SHY FROM AN OBJECT.

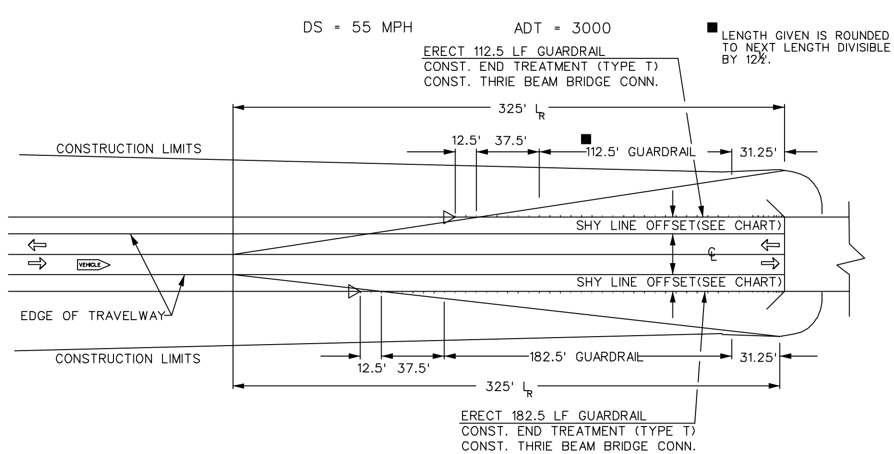
2. CLEAR ZONE IS THE AREA FROM THE EDGE OF TRAVELWAY TO AN OBJECT THAT IS NOT PROTECTED. THIS IS ALSO THE RECOVERY AREA FOR ERRANT VEHICLES. WHEN THE CLEAR ZONE CAN BE OBTAINED BETWEEN THE EDGE OF TRAVELWAY AND OBSTACLES, NO GUARDRAIL IS REQUIRED.

3. RUNOUT LENGTH IS THE DISTANCE FROM WHERE A VEHICLE LEAVES THE PAVEMENT TO THE BACK OF AN OBJECT THAT MAY BE HIT BY SAID VEHICLE. THIS LINE SHOULD GO THROUGH THE THIRD POST OF END TREATMENT AND ALL SLOPES BEFORE THIS LINE SHOULD BE TRAVERSABLE.

4. TO CALCULATE LENGTH OF GUARDRAIL, FIND APPROPRIATE RUNOUT LENGTH FROM TABLE. PLOT THIS LENGTH FROM BACK OF OBSTACLE TO TRAVELWAY EDGE. PLOT GUARDRAIL AT PROPER SHY LINE DISTANCE. THE RUNOUT LENGTH LINE SHOULD GO THROUGH THE THIRD POST OF THE END TREATMENT. SHOW GUARDRAIL TO COVER OBSTACLE. MEASURE THIS LENGTH, DIVISIBLE BY 12½ FEET. ALWAYS ROUND UP THEN SUBTRACT 37½ FEET FROM THE AMOUNT FOR THE END TREATMENT. REMAINDER WILL BE LENGTH OF GUARDRAIL NEEDED TO PROTECT OBSTACLE.

LOCATION OF GUARDRAIL AT OBSTACLES

LATERAL CLEARANCE FROM BACK OF POSTS	TYPE OF PROTECTION
36" OR GREATER	STEEL BEAM GUARDRAIL
24" TO 35"	THRIE BEAM GUARDRAIL
LESS THAN 24"	CONCRETE BARRIER OR SPECIAL DESIGN GUARDRAIL

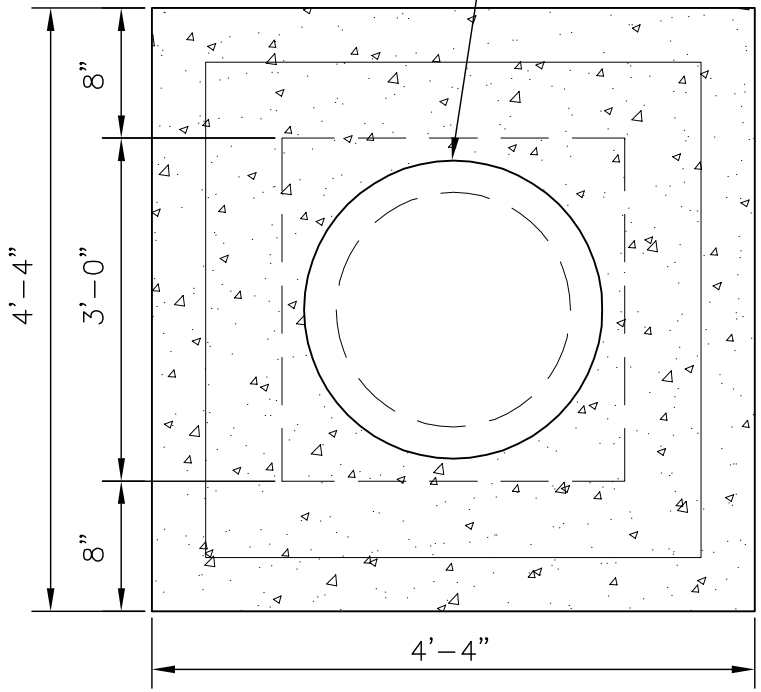


EXAMPLE OF GUARDRAIL LENGTH OF NEED

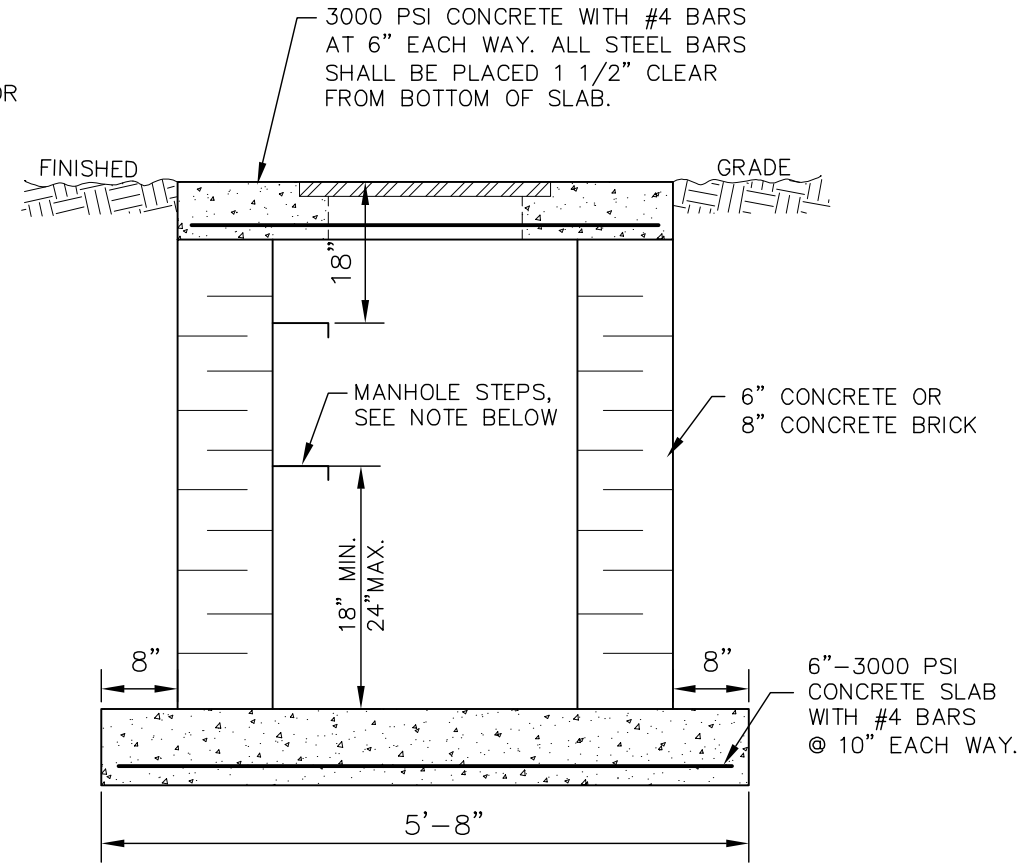
CHOSEN 2 LANE, 2 WAY ROADWAY.
LENGTH OF NEED DETERMINED FOR VEHICLE TRAVELING IN DIRECTION SHOWN.

NO SCALE

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
LENGTH OF NEED & PLACEMENT OF GUARDRAIL (SCDOT DWG NO. 805-1C revised Feb 2007)	
DRAWING NO: E-4C	
DATE: October 2007	



PLAN VIEW

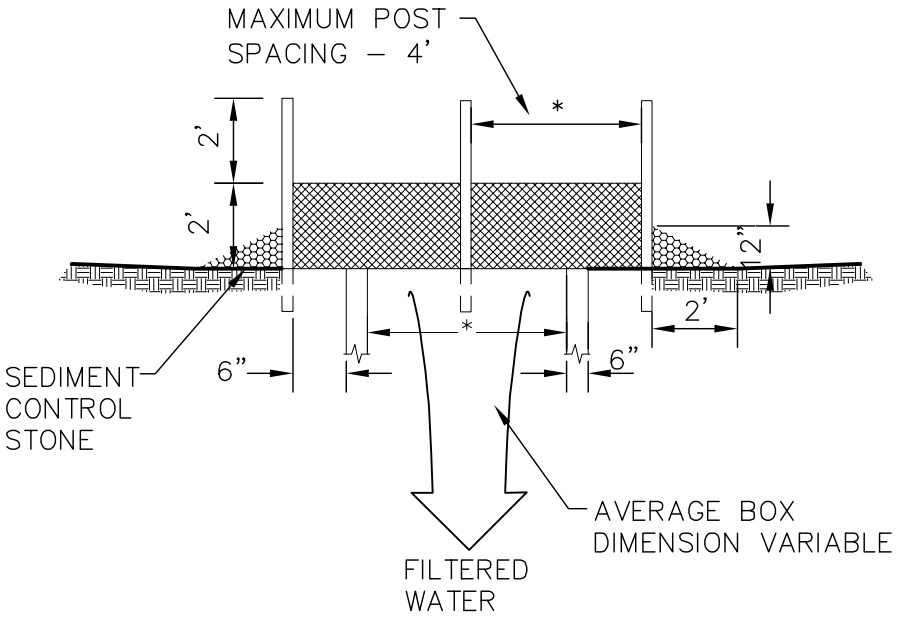


SECTION

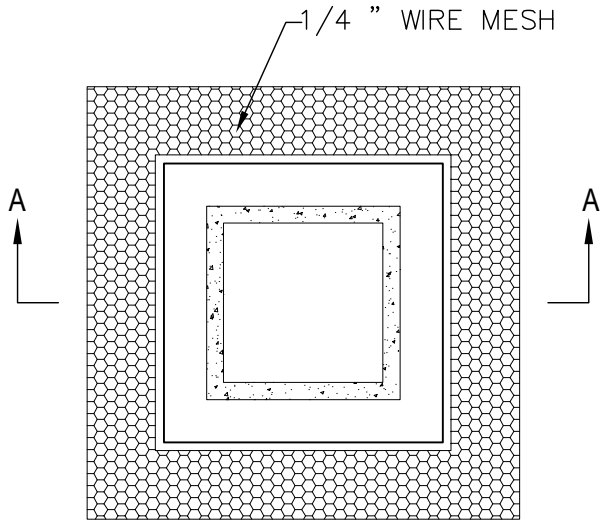
NOTE:

MANHOLE STEPS SHALL BE 18" OR 12" OC ON BOXES 4' DEEP OR DEEPER. (STEPS MUST CONFORM TO ASTM-C-478 OR EQUIVALENT)

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
JUNCTION BOX	
DRAWING NO: D-1	
DATE: October, 2007	



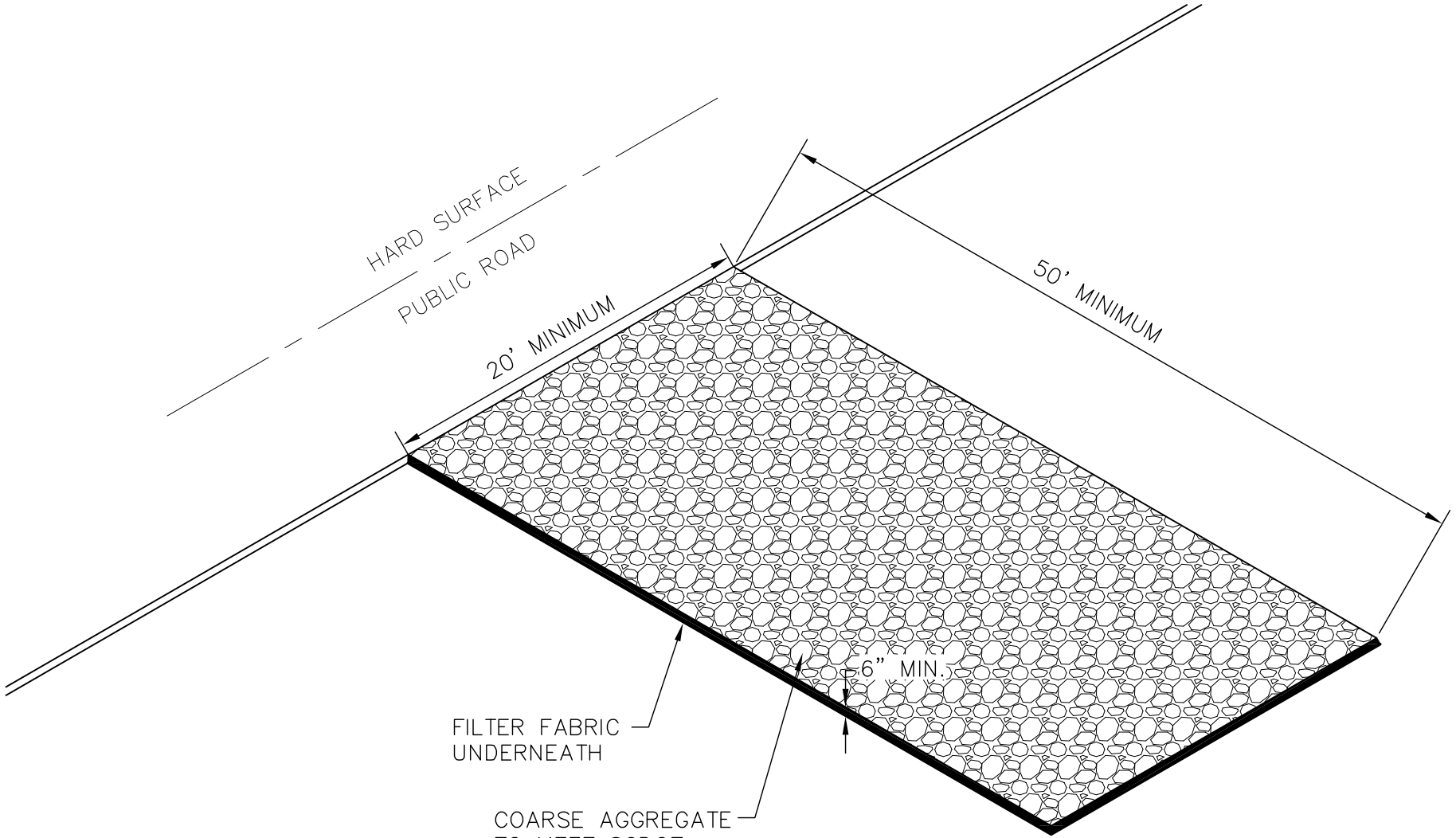
SECTION A-A
MULTI–DIRECTIONAL FLOW



NOTES

1. SEDIMENT CONTROL STONE SHALL BE NO. 5 OR NO. 57.
2. WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4" MESH OPENINGS.
3. TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
4. STEEL POST SHALL BE 5'. IN HEIGHT, BE INSTALLED 1.5' DEEP MINIMUM, AND BE OF THE SELF–FASTENER ANGLE STEEL TYPE.
5. WOOD POST SHALL BE 6' IN HEIGHT, BE INSTALLED TO 1.5' DEEP MINIMUM, AND BE 3" IN DIAMETER.
6. POST SPACING SHALL BE A MAXIMUM OF 4'.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
INLET PROTECTION	
DRAWING NO: C–2	
DATE: October, 2007	

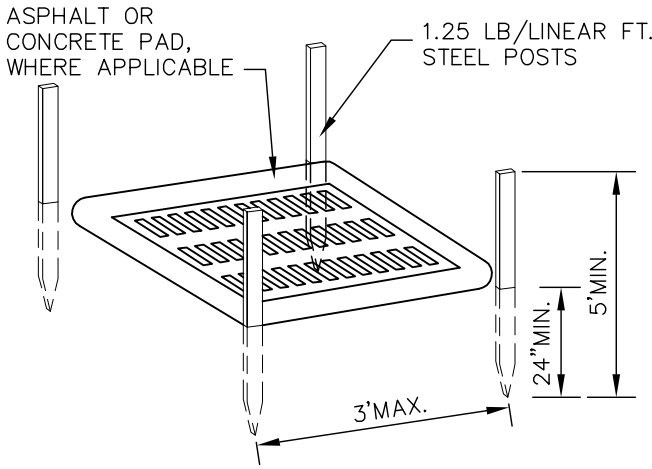


LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

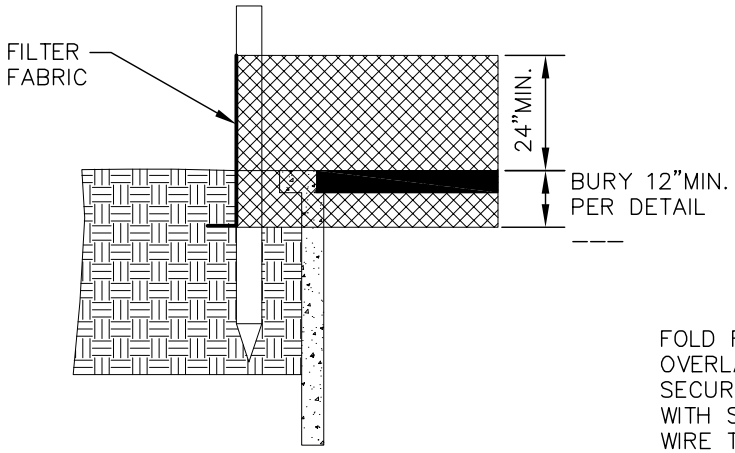
GRAVEL CONSTRUCTION ENTRANCE/EXIT

DRAWING NO: C-10

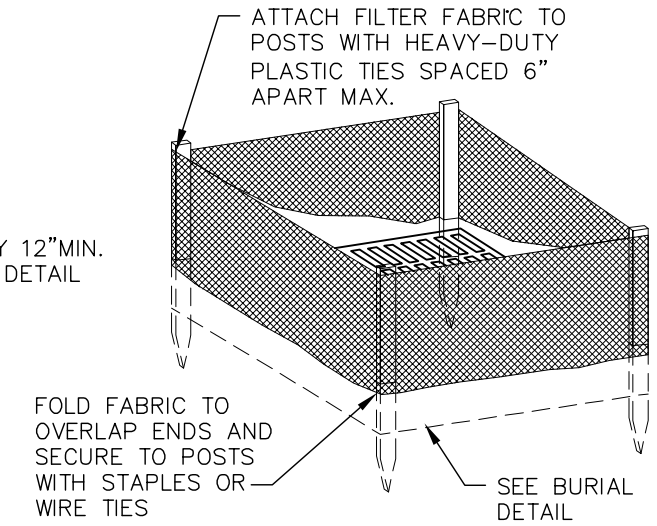
DATE: October, 2007



POST INSTALLATION DETAIL



FILTER FABRIC BURIAL DETAIL



FILTER FABRIC INSTALLATION DETAIL

INSTALLATION:

1. FILTER FABRIC IS USED FOR INLET PROTECTION WHEN STORM WATER FLOWS ARE RELATIVELY SMALL (1.0 CFS OR LESS) WITH LOW VELOCITIES, AND WHERE THE INLET DRAINS AREA HAS GRADES NO GREATER THAN 5% AND THE IMMEDIATE DRAINAGE AREA AROUND THE INLET (5 FOOT RADIUS) HAS GRADES LESS THAN 1%. AREAS RECIEVING CONCENTRATED FLOW ARE NOT ACCEPTABLE. THIS PRACTICE CANNOT BE USED WHERE DITCHES ARE PAVED. A TRENCH SHALL BE EXCAVATED 6 INCHES WIDE AND 6 INCHES DEEP AROUND THE OUTER PERIMETER OF THE STAKES UNLESS FABRIC IS PNEUMATICALLY INSTALLED.

2. FILTER FABRIC SHALL CONFORM TO SOUTH CAROLINA STANDARD SPECIFICATIONS (LATEST EDITION). FILTER FABRIC SHALL EXTEND A MINIMUM OF 12 INCHES INTO THE TRENCH. THE TRENCH SHALL BE BACKFILLED WITH SOIL OR CRUSHED STONE AND COMPACTED OVER THE FILTER FABRIC UNLESS FABRIC IS PNEUMATICALLY INSTALLED.

3. USE STEEL POSTS WITH A MINIMUM POST LENGTH OF 5 FEET CONSISTING OF STANDARD "T" SECTIONS WITH A WEIGHT OF 1.25 POUNDS PER FOOT (+ 8%). THE HEIGHT OF THE FILTER BARRIER ABOVE GROUND SHALL BE A MINIMUM OF 24 INCHES. POSTS SHALL BE SPACED AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET APART AND DRIVEN INTO THE GROUND A MINIMUM OF 24 INCHES. ATTACH FABRIC TO POSTS USING ONLY HEAVY DUTY PLASTIC TIES.

4. FILTER FABRIC SHOULD BE IN A CONTINUOUS ROLL AND CUT TO THE LENGTH OF THE PROTECTED AREA TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER FABRIC SHOULD BE WRAPPED TOGETHER ONLY AT A SUPPORT POST WITH BOTH ENDS SECURELY FASTENED TO THE POST WITH A MINIMUM 6 INCH OVERLAP.

5. STEEL POSTS SHALL HAVE A METAL PLATE SECURELY ATTACHED SUCH THAT WHEN THE POST IS DRIVEN TO THE PROPER DEPTH, THE PLATE WILL BE BELOW GROUND LEVEL FOR ADDITIONAL STABILITY.

INSPECTION AND MAINTENANCE:

1. INSPECTIONS SHOULD BE MADE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF RECEIVING ½" OR MORE OF RAINFALL. ANY NEEDED REPAIRS SHOULD BE HANDLED IMMEDIATELY.

2. IF THE FABRIC BECOMES CLOGGED, IT SHOULD BE REPLACED.

3. SEDIMENT SHOULD BE REMOVED WHEN IT REACHES APPROXIMATELY 1/3 THE HEIGHT OF THE FILTER FABRIC. IF A SUMP IS USED, SEDIMENT SHOULD BE REMOVED WHEN IT FILLS APPROXIMATELY 1/3 THE DEPTH OF THE HOLE. MAINTAIN THE POOL AREA, ALWAYS PROVIDING ADEQUATE SEDIMENT STORAGE VOLUME FOR THE NEXT STORM. TAKE CARE NOT TO DAMAGE OR UNDERCUT FABRIC WHEN REMOVING SEDIMENT. SEDIMENT REMOVAL WILL BE PAID FOR AS SILT BASINS.

4. STORM DRAIN INLET PROTECTION STRUCTURES SHOULD BE REMOVED ONLY AFTER THE DISTURBED AREAS ARE PERMANENTLY STABILIZED. REMOVE ALL CONSTRUCTION MATERIAL AND SEDIMENT, AND DISPOSE OF THEM PROPERLY. GRADE THE DISTURBED AREA TO THE ELEVATION OF THE INLET STRUCTURE CREST. USE APPROPRIATE PERMANENT STABILIZATION METHODS TO STABILIZE BARE AREAS AROUND THE INLET.

5. THE PAY ITEMS SHALL BE:

INLET STRUCTURE FILTER TYPE A_____LF

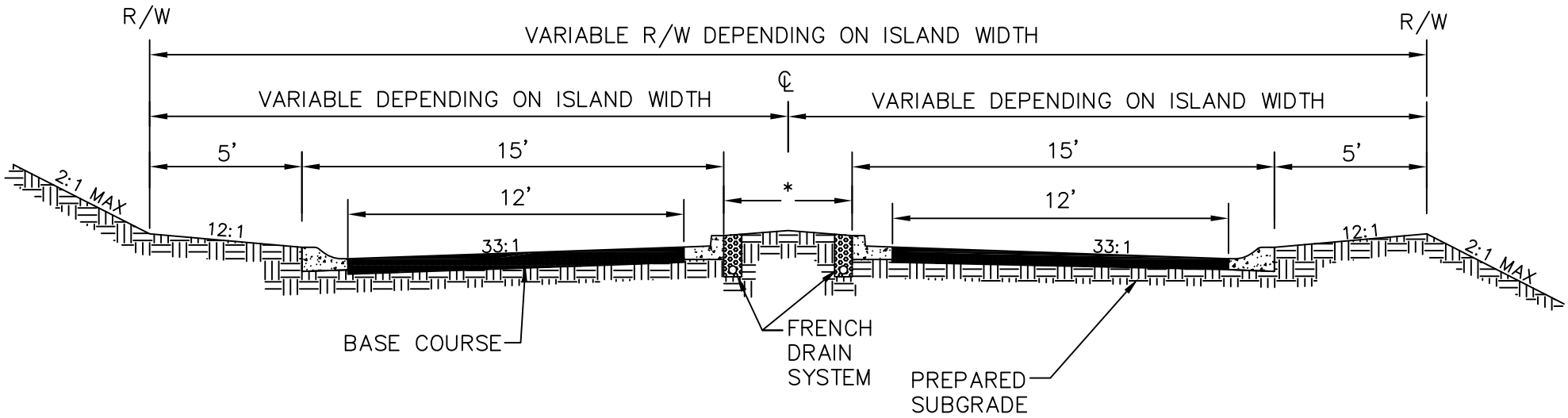
SILT BASINS_____CY

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

FILTER FABRIC
INLET PROTECTION

DRAWING NO: C-1

DATE: October, 2007

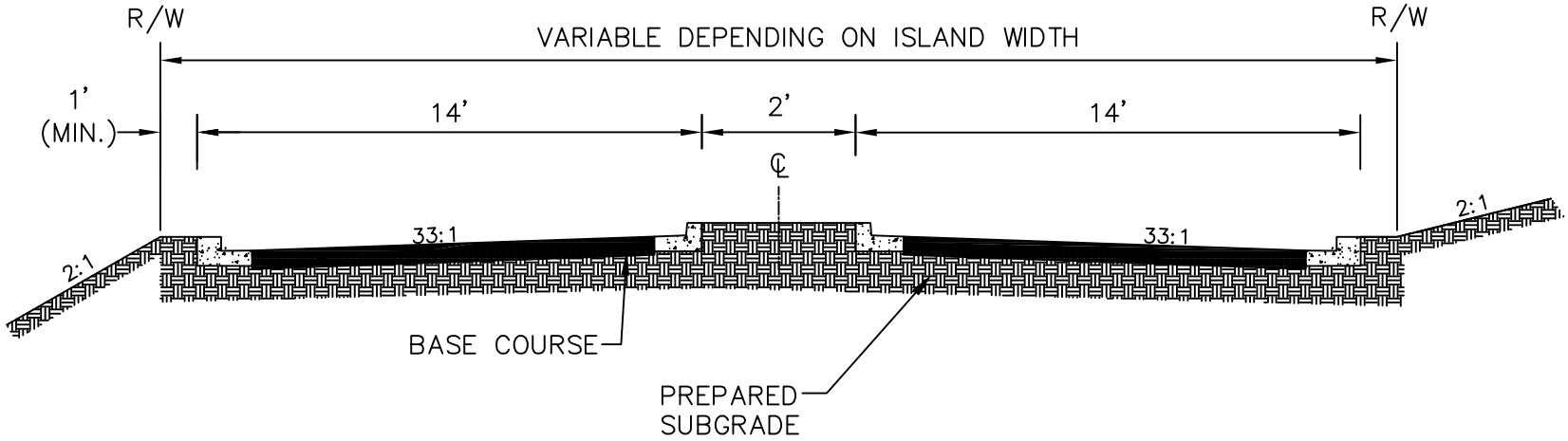


1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

NOTES:
*VARIABLE DEPENDING ON ISLAND WIDTH.

NO STRUCTURES ABOVE GROUND ALLOWED IN ISLAND.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
DIVIDED RESIDENTIAL (18" rolled curb & barrier curb)
DRAWING NO: A–8
DATE: October, 2007

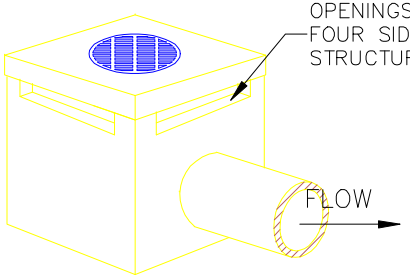


1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

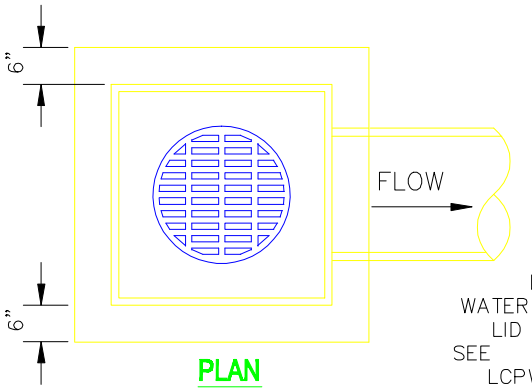
*VARIABLE DEPENDING ON ISLAND WIDTH.

NO STRUCTURES ABOVE GROUND ALLOWED IN ISLAND.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
DIVIDED PRIVATE STREET (8' lanes w/ barrier curb)
DRAWING NO: A–9
DATE: October, 2007

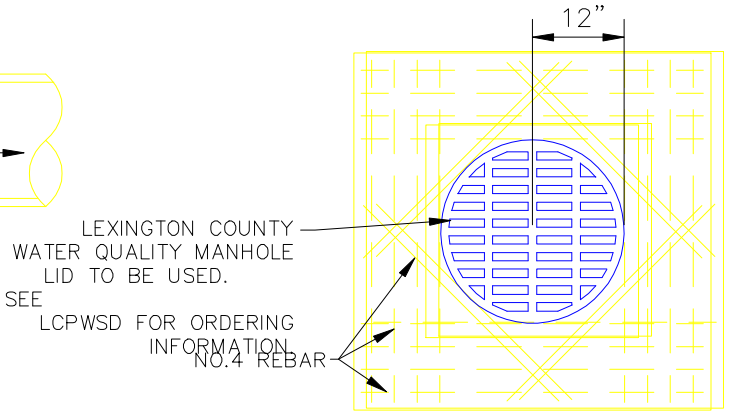


ISOMETRIC VIEW



PLAN

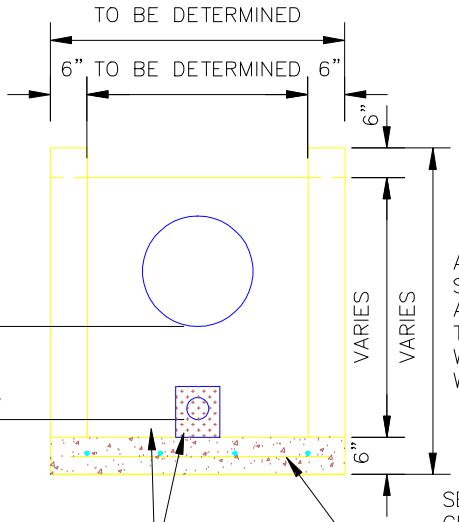
DETAIL OF COVER



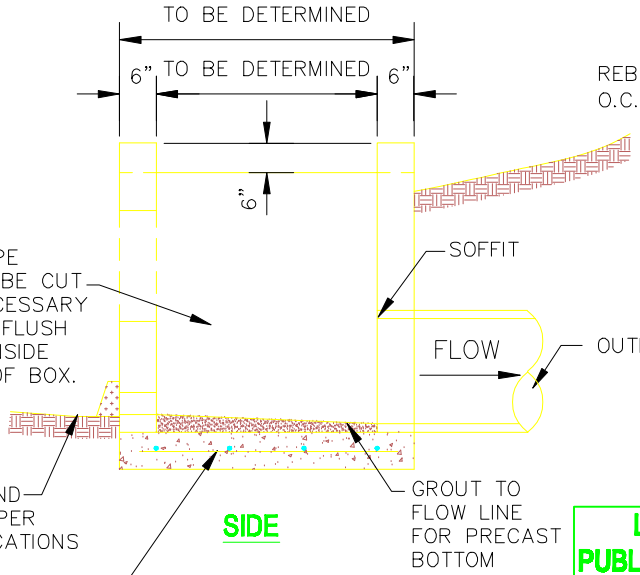
PLAN

NOTES:

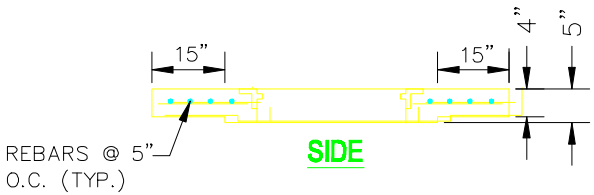
1. CONCRETE SHALL BE 3,000 PSI MIN. 28-DAY COMPRESSIVE STRENGTH.
2. STEEL SHALL BE ASTM A-706, LOW-ALLOY DEFORMED BARS FOR CONCRETE REINFORCEMENT, GRADE 60.
3. ALL LIFT HOLES SHALL BE GROUTED WATER TIGHT PRIOR TO COMPLETION OF INSTALLATION.
4. METAL STEPS AS SUPPLIED BY NEENA R1900-C OR APPROVED EQUAL SHALL BE INSTALLED AT 16" O.C.



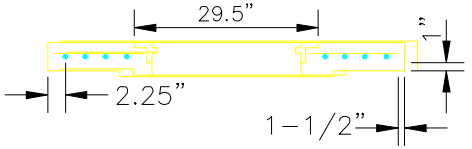
FRONT



SIDE



SIDE

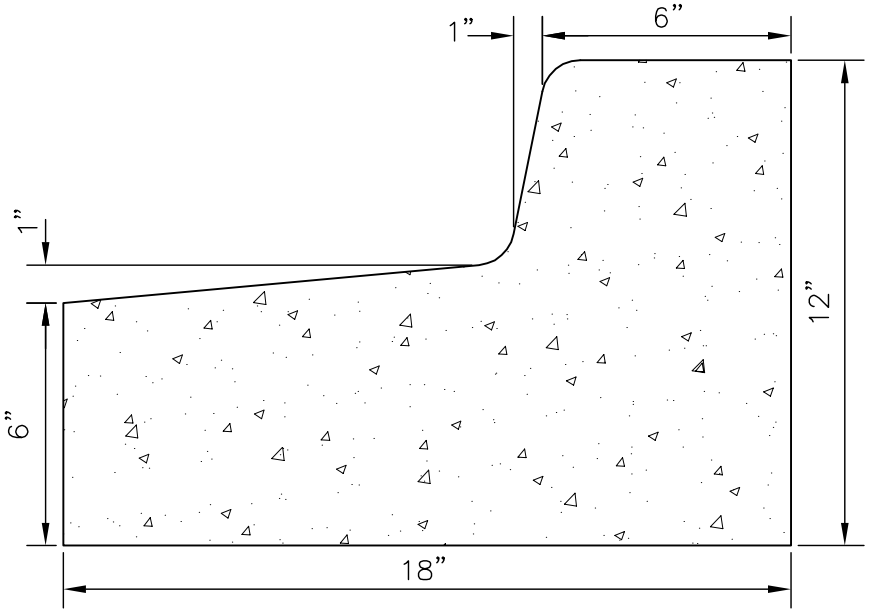


FRONT

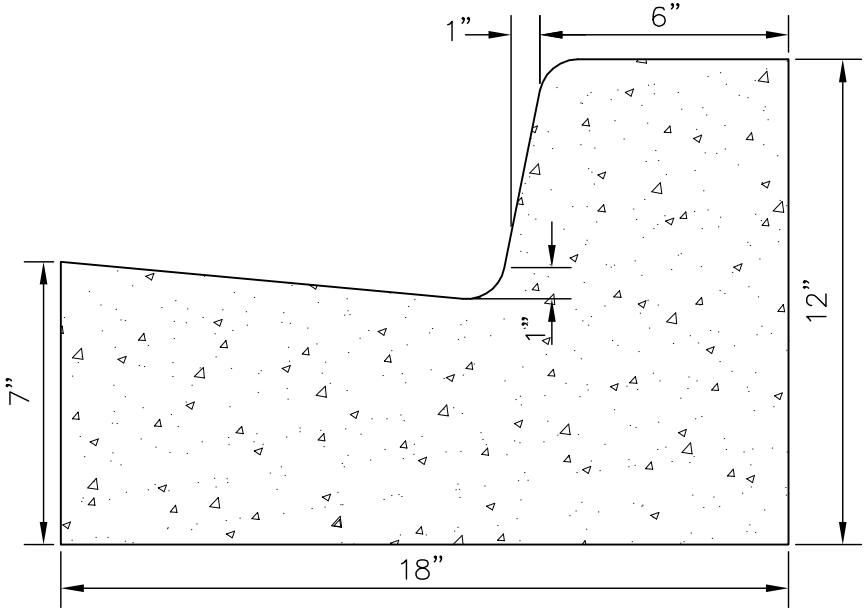
LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

OUTLET STRUCTURE

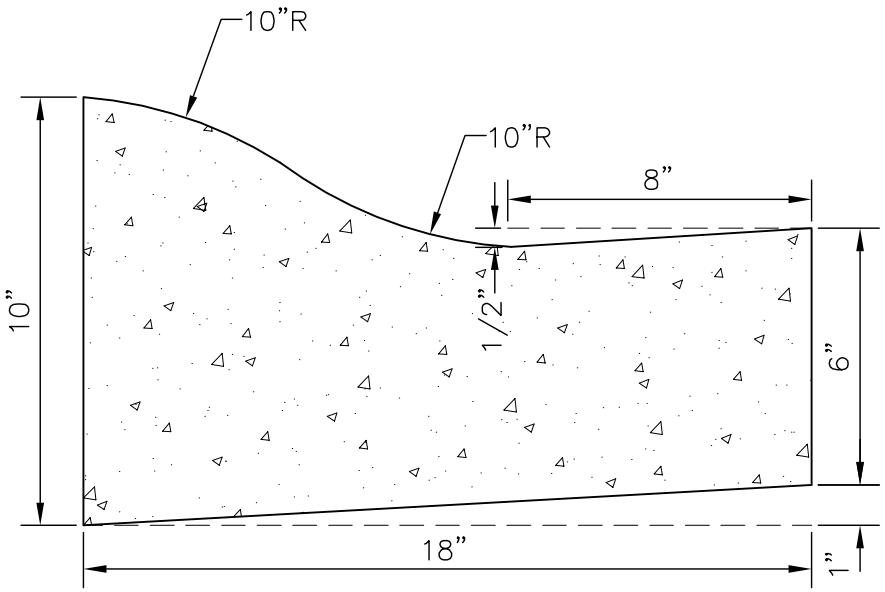
DRAWING NO: D-10A
DATE: October 2007



EXPULSION



COLLECTION

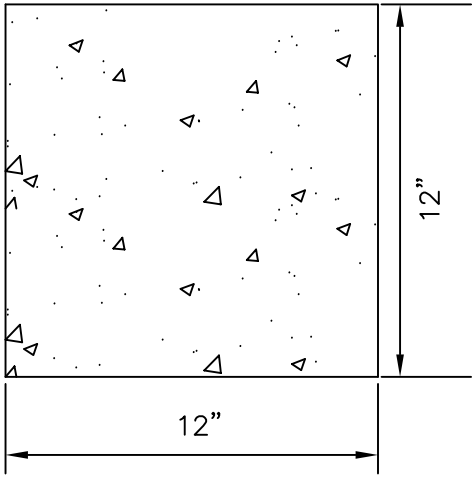


ROLLED

NOTES:

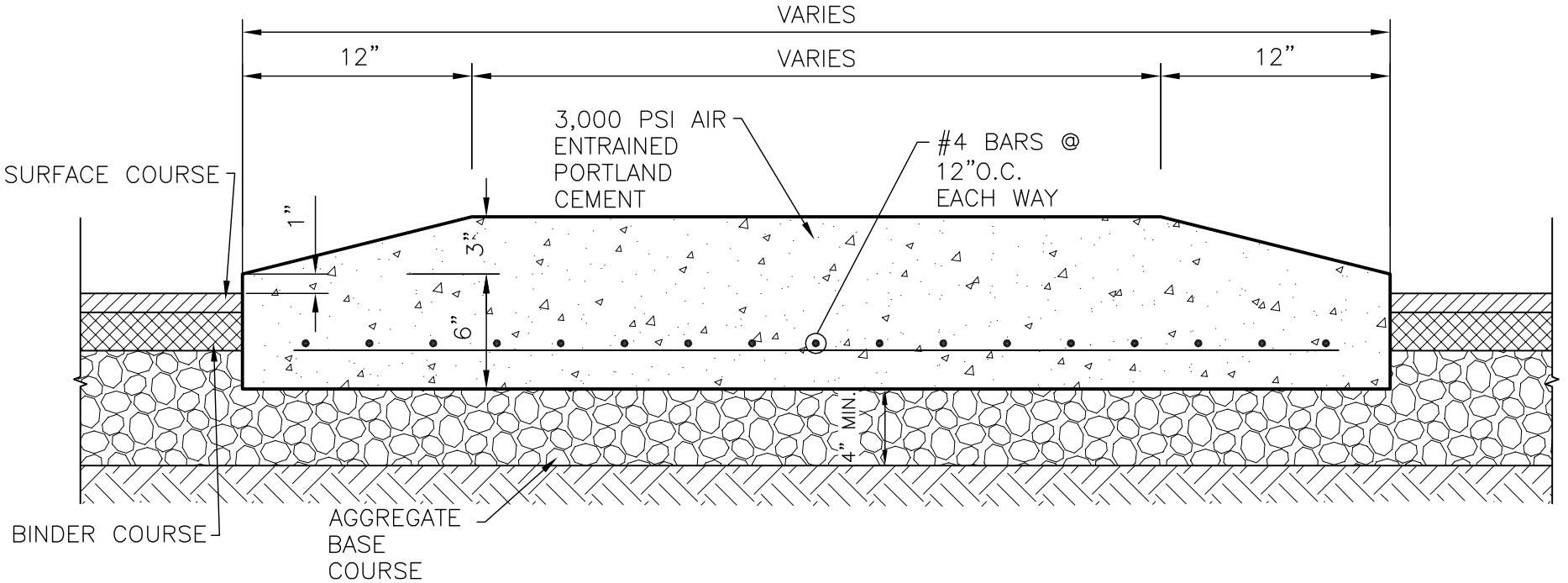
1. CONCRETE STRENGTH SHALL BE 3000 PSI.
2. CONSTRUCTION JOINTS SHALL BE SPACED EVERY 8 TO 10 FEET.

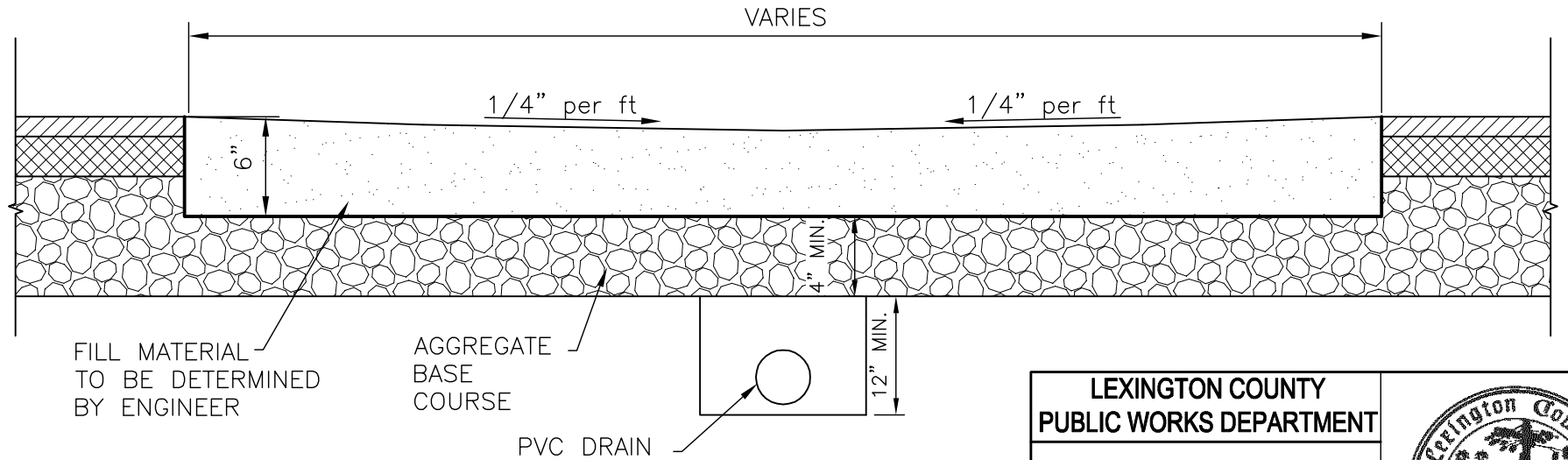
LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
CURB TYPES	
DRAWING NO: B–1	
DATE: October, 2007	



KEY SHOULD EXTEND FROM B.O.C. TO B.O.C. ACROSS ROADWAY.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
CONCRETE KEY	
DRAWING NO: E–2	
DATE: October, 2007	



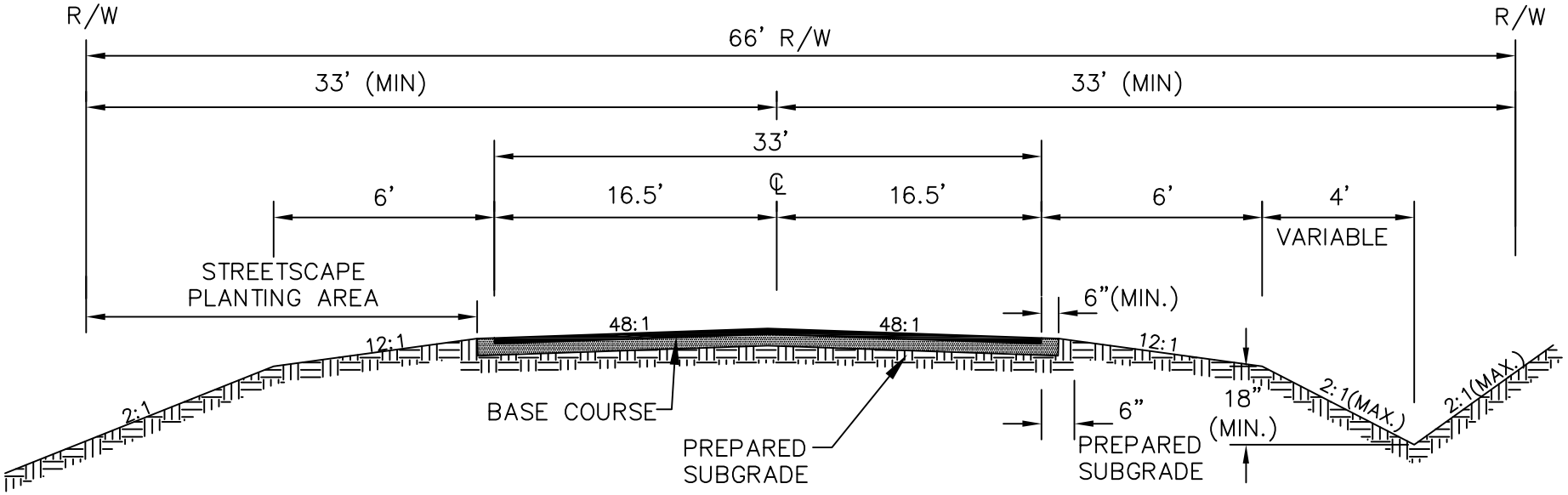


LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT

CONCRETE ISLANDS

DRAWING NO:B-7

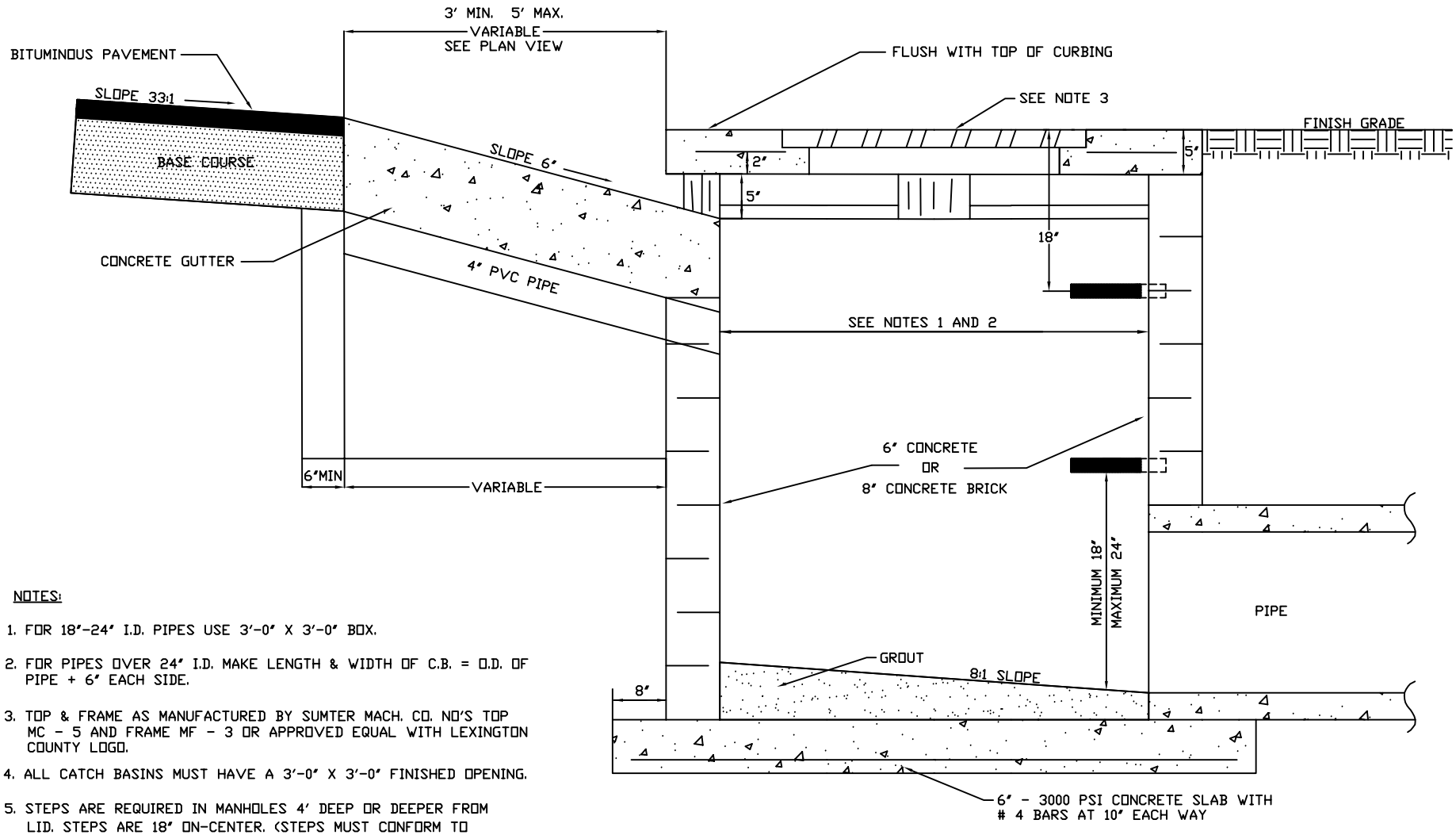
DATE:October, 2007



NOTES:

1. PREPARED SUBGRADE SHALL BE 36' WIDE.
2. PRIME BASE COURSE .25–.30 GALLONS PER SQUARE YARD, WHEN REQUIRED.
3. STREETSCAPE PLANTING AREA MAY BE SLOPED AWAY FROM ROAD.
4. MINIMUM OF 95% COMPACTION WITHIN R.O.W.

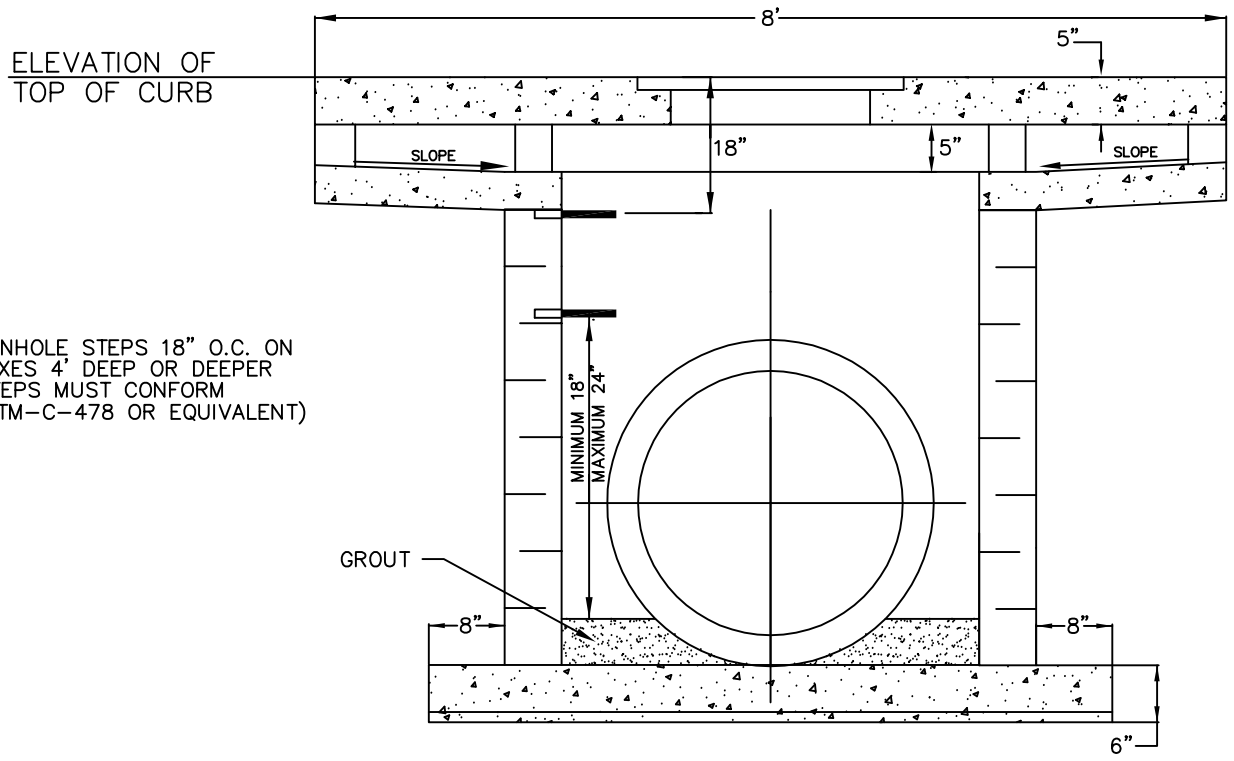
LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
COMMERCIAL / INDUSTRIAL ROAD SECTION w/ DITCH (66' R/W)
DRAWING NO: A–2A
DATE: October, 2007



NOTES:

1. FOR 18"-24" I.D. PIPES USE 3'-0" X 3'-0" BOX.
2. FOR PIPES OVER 24" I.D. MAKE LENGTH & WIDTH OF C.B. = O.D. OF PIPE + 6" EACH SIDE.
3. TOP & FRAME AS MANUFACTURED BY SUMTER MACH. CO. NO'S TOP MC - 5 AND FRAME MF - 3 OR APPROVED EQUAL WITH LEXINGTON COUNTY LOGO.
4. ALL CATCH BASINS MUST HAVE A 3'-0" X 3'-0" FINISHED OPENING.
5. STEPS ARE REQUIRED IN MANHOLES 4' DEEP OR DEEPER FROM LID. STEPS ARE 18" ON-CENTER. (STEPS MUST CONFORM TO ASTM-C-478 OR EQUIVALENT.)
6. 95% COMPACTION BACKFILLING OF BOX.
7. 4" PVC PIPE SHALL BE INSTALLED AT SUBGRADE UNDER THROAT.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
CATCH BASIN SIDE VIEW	
SCALE: NTS	DWG: CBSIDE.DWG
DATE: 8/29/08	L.R. NONE



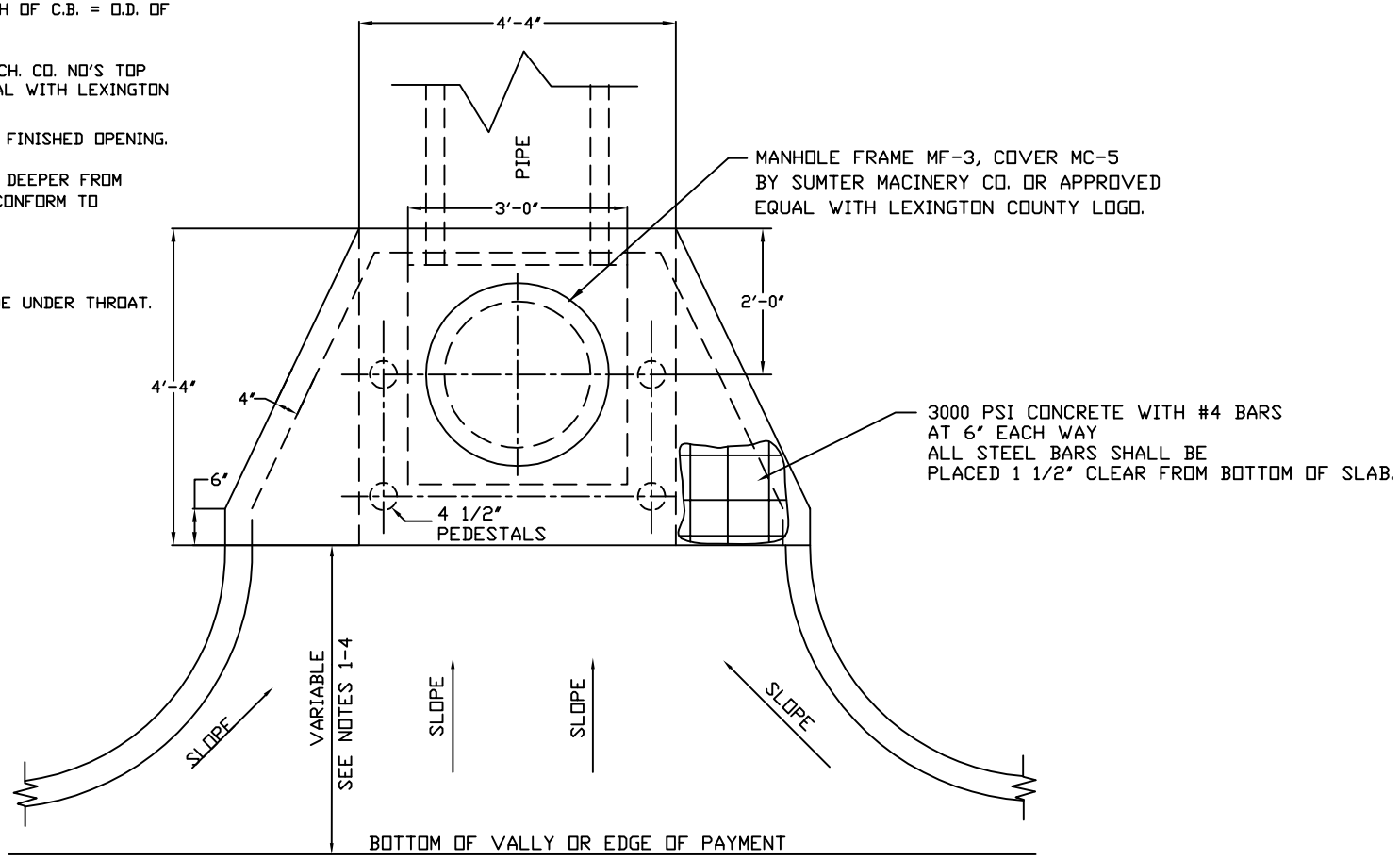
NOTES:

1. FOR 18"-24" I.D. PIPES USE 3'-0" X 3'-0" BOX.
2. FOR PIPES OVER 24" I.D. MAKE LENGTH & WIDTH OF C.B. = O.D. OF PIPE + 6" EACH SIDE.
3. TOP & FRAME AS MANUFACTURED BY SUMTER MACH. CO. NO'S TOP MC - 5 AND FRAME MF - 3 OR APPROVED EQUAL WITH LEXINGTON COUNTY LOGO.
4. ALL CATCH BASINS MUST HAVE A 3'-0" X 3'-0" FINISHED OPENING.
5. STEPS ARE REQUIRED IN MANHOLES 4' DEEP OR DEEPER FROM LID. STEPS ARE 18" ON-CENTER. (STEPS MUST CONFORM TO ASTM-C-478 OR EQUIVALENT.)
6. 95% COMPACTION BACKFILLING OF BOX.
7. 4" PVC PIPE SHALL BE INSTALLED AT SUBGRADE UNDER THROAT.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
CATCH BASIN FRONT VIEW	
SCALE: NTS	DWG: CBFRONT.DWG
DATE: 8/29/08	L.R. NONE

NOTES:

1. FOR 18"-24" I.D. PIPES USE 3'-0" X 3'-0" BOX.
2. FOR PIPES OVER 24" I.D. MAKE LENGTH & WIDTH OF C.B. = O.D. OF PIPE + 6" EACH SIDE.
3. TOP & FRAME AS MANUFACTURED BY SUMTER MACH. CO. NO'S TOP MC - 5 AND FRAME MF - 3 OR APPROVED EQUAL WITH LEXINGTON COUNTY LOGO.
4. ALL CATCH BASINS MUST HAVE A 3'-0" X 3'-0" FINISHED OPENING.
5. STEPS ARE REQUIRED IN MANHOLES 4' DEEP OR DEEPER FROM LID. STEPS ARE 18" ON-CENTER. (STEPS MUST CONFORM TO ASTM-C-478 OR EQUIVALENT.)
6. 95% COMPACTION BACKFILLING OF BOX.
7. 4" PVC PIPE SHALL BE INSTALLED AT SUBGRADE UNDER THROAT.



NOTES

① 1' MINIMUM AND 3' MAXIMUM OFFSET FROM EDGE OF PAVEMENT (FLUSH WITH BARRIER CURB ROAD SECTION.)

② 3' MINIMUM AND 5' MAXIMUM OFFSET FROM EDGE OF PAVEMENT ON ROLLED CURB ROAD SECTION.

③ 3' MINIMUM AND 5' MAXIMUM OFFSET FROM VALLEY GUTTER ROAD SECTION.

PLAN VIEW

CATCH BASIN

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

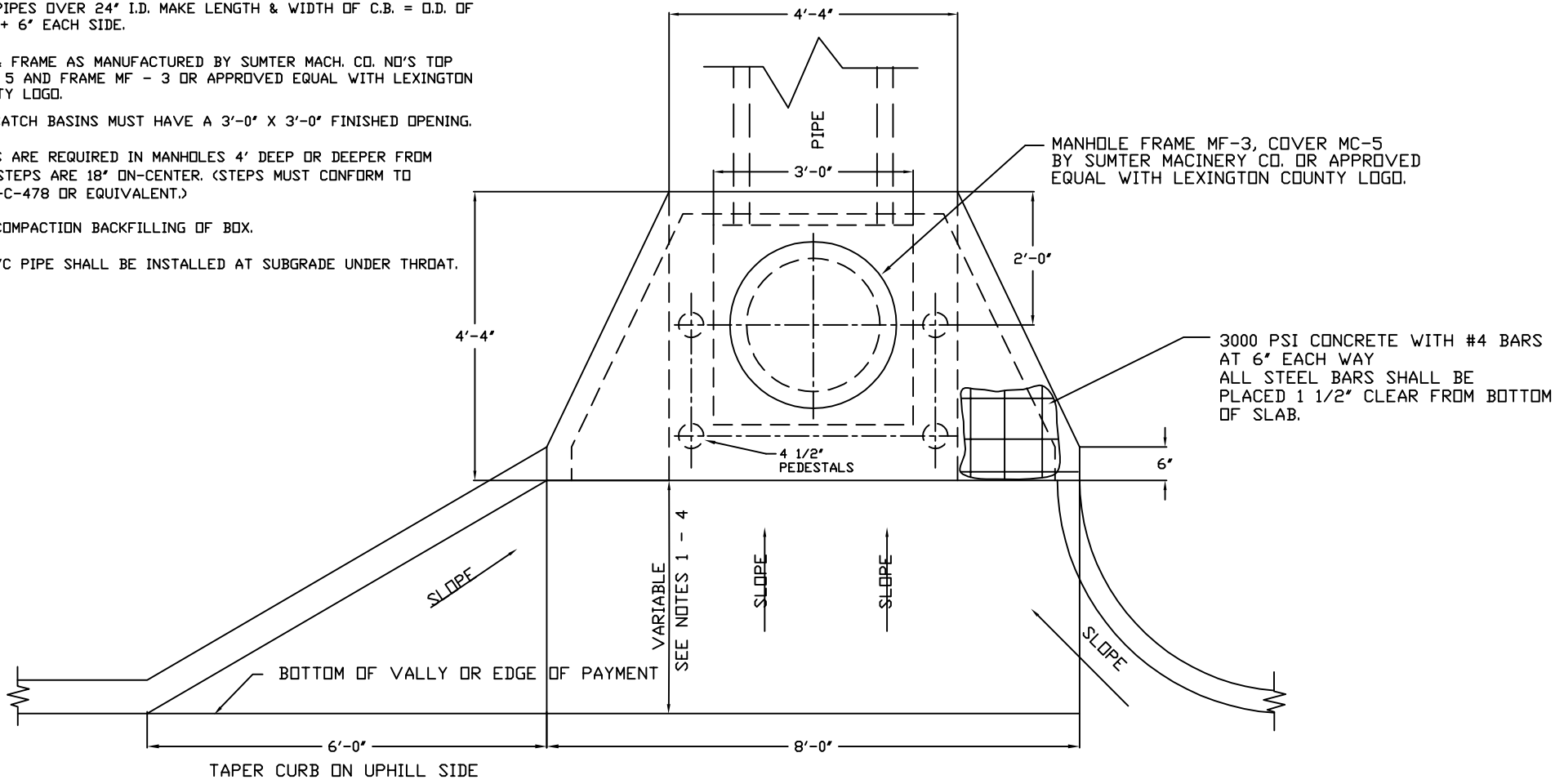
CATCH BASIN
TOP VIEW

SCALE: NTS | DWG: CB.DWG

DATE: 8/29/08 | L.R. NONE

NOTES:

1. FOR 18"-24" I.D. PIPES USE 3'-0" X 3'-0" BOX.
2. FOR PIPES OVER 24" I.D. MAKE LENGTH & WIDTH OF C.B. = O.D. OF PIPE + 6" EACH SIDE.
3. TOP & FRAME AS MANUFACTURED BY SUMTER MACH. CO. NO'S TOP MC - 5 AND FRAME MF - 3 OR APPROVED EQUAL WITH LEXINGTON COUNTY LOGO.
4. ALL CATCH BASINS MUST HAVE A 3'-0" X 3'-0" FINISHED OPENING.
5. STEPS ARE REQUIRED IN MANHOLES 4' DEEP OR DEEPER FROM LID. STEPS ARE 18" ON-CENTER. (STEPS MUST CONFORM TO ASTM-C-478 OR EQUIVALENT.)
6. 95% COMPACTION BACKFILLING OF BOX.
7. 4" PVC PIPE SHALL BE INSTALLED AT SUBGRADE UNDER THROAT.



NOTES

① 1' MINIMUM AND 3' MAXIMUM OFFSET FROM EDGE OF PAVEMENT (FLUSH WITH BARRIER CURB ROAD SECTION.)

② 3' MINIMUM AND 5' MAXIMUM OFFSET FROM EDGE OF PAVEMENT ON ROLLED CURB ROAD SECTION.

③ 3' MINIMUM AND 5' MAXIMUM OFFSET FROM VALLEY GUTTER ROAD SECTION.

④ TYPE 2 CB TO BE USED WHERE GUTTER SLOPE IS 5% OR GREATER

PLAN VIEW

TYPE 2 CATCH BASIN

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
TYPE 2 CATCH BASIN TOP VIEW	
SCALE: NTS	DWG: CB2.DWG
DATE: 8/29/08	L.R. NONE

BLOCK AND GRAVEL DROP INLET PROTECTION

Installation:

Block and gravel filters can be used where heavy flows and higher velocities are expected and where an overflow capacity is necessary to prevent excessive ponding around the structure.

Gravel shall consist of 1–inch D50 Washed Stone and should extend to height equal to the elevation of the top of the blocks.

Place the bottom row of the concrete blocks lengthwise on their side so that the open end faces outward, not upward.

The height of the barrier can be varied, depending upon design needs by stacking a combination of blocks that are 8– and 12–inches wide.

Wire mesh should be placed over the outside vertical face of the concrete blocks to prevent stones from being washed through the holes in the blocks. Hardware cloth or comparable wire mesh with ½–inch x ½–inch openings should be used.

Inspection and Maintenance:

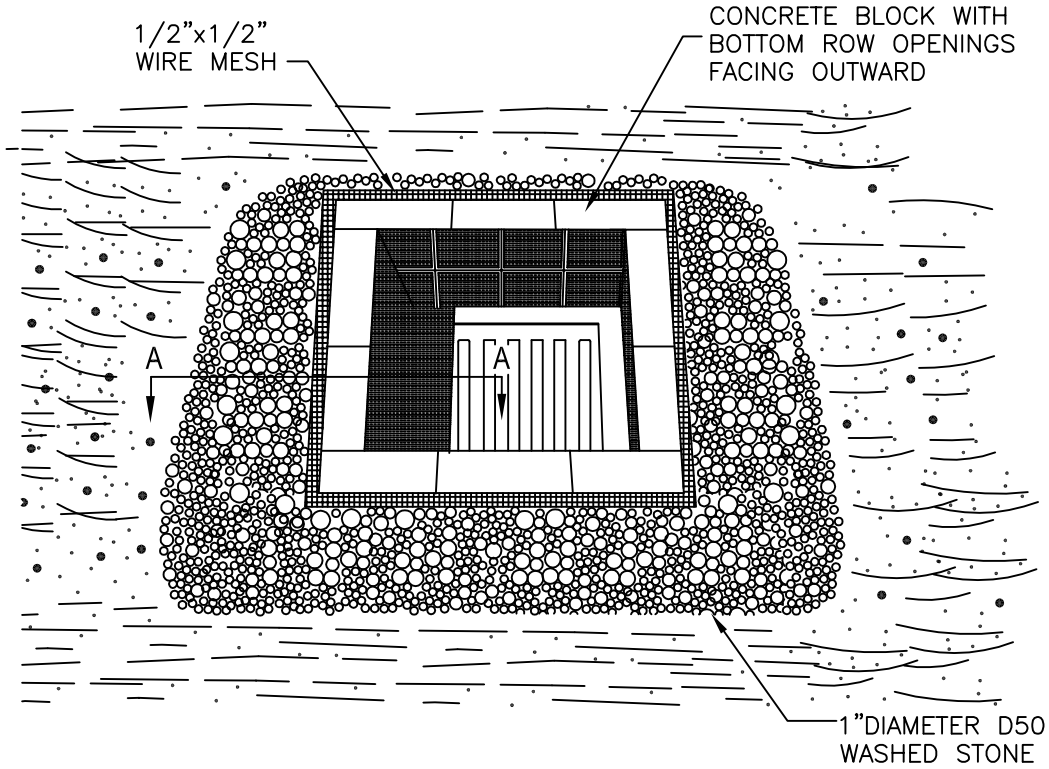
Inspections should be made every seven (7) calendar days or every 14 days and within 24–hours after each rainfall event that produces ½–inches or more of precipitation. Any needed repairs should be handled immediately.

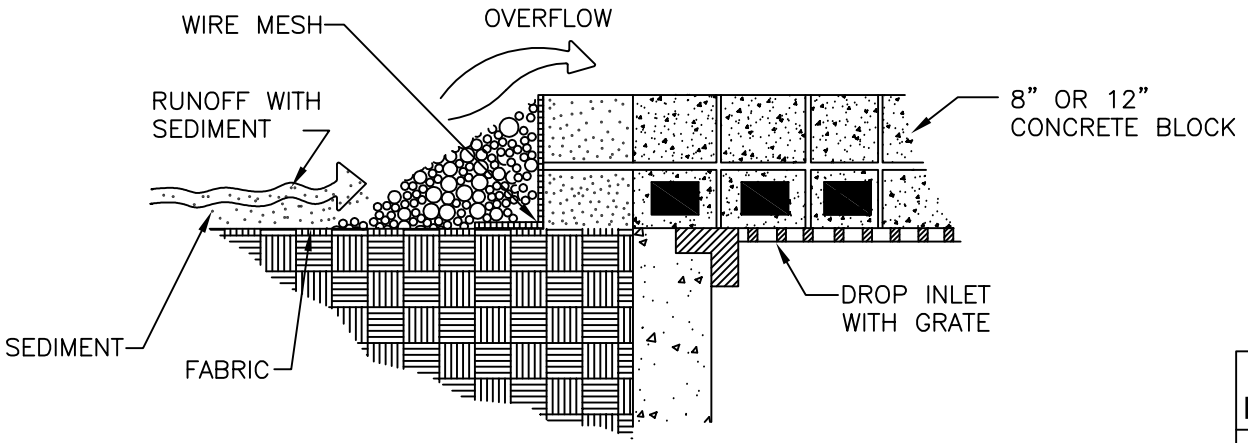
Sediment should be removed when it reaches approximately 1/3 the height of the blocks. If a sump is used, sediment should be removed when it fills approximately 1/3 the depth of the hole.

If the stone filter becomes clogged with sediment, the stones must be pulled away from the inlet and cleaned or replaced. Since cleaning of gravel at a construction site may be difficult, an alternative approach would be to use the clogged stone as fill and put fresh stone around the inlet.

Storm drain inlet protection structures should be removed only after the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare areas immediately.

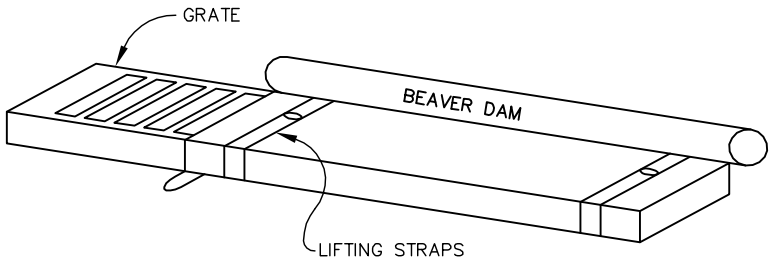
LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
BLOCK & GRAVEL INLET PROTECTION (Sheet 2 of 2)	
DRAWING NO: C–12A	
DATE: October 2007	

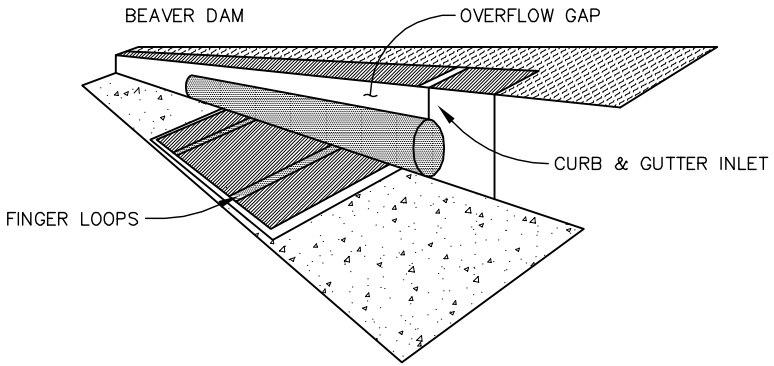




CROSS SECTION A-A

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT
BLOCK & GRAVEL INLET PROTECTION (Sheet 1 of 2)
DRAWING NO: C–12
DATE: October 2007





MANUFACTURER:
DANDY PRODUCTS, INC.
2011-R HARRISBURG PIKE
GROVE CITY, OH 43123
(800) 591-2284

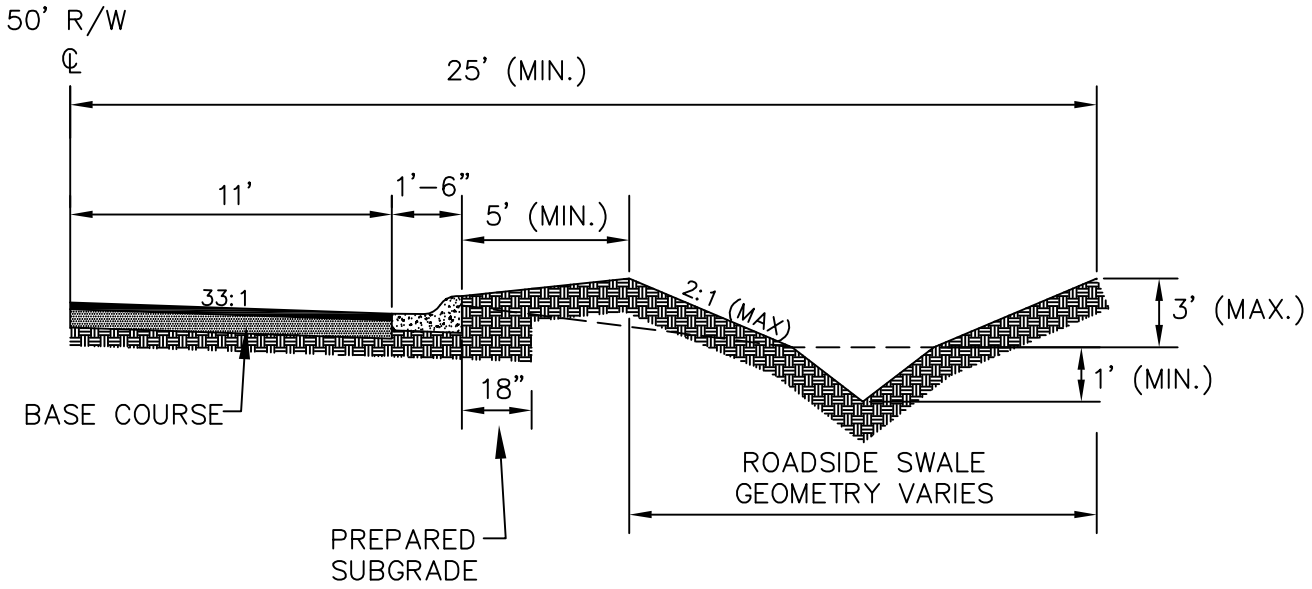
MAINTENANCE : WITH A STIFF BRISTLE BROOM SWEEP SILT & OTHER DEBRIS OFF SURFACE AFTER EACH EVENT.

INSTALLATION : STAND GRATE ON END. SLIDE THE BEAVER DAM BAG ON W/DAM ON TOP OF THE GRATE. PULL ALL EXCESS DOWN. LAY UNIT ON ITS SIDE. CAREFULLY TUCK FLAP IN. PRESS VELCRO STRIPS TOGETHER. INSTALL THE UNIT MAKING SURE FRONT EDGE OF GRATE IS INSERTED IN FRAME FIRST THEN LOWER BACK INTO PLACE. PRESS VELCRO DOTS TOGETHER WHICH ARE LOCATED UNDER LIFTING STRAPS. THIS INSURES STRAPS REMAIN FLUSH WITH GUTTER.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

BEAVER DAM DETAIL
(or Engineer approved equal)

DRAWING NO: C-4
DATE: October, 2007



1. COMPACTION OF PREPARED SUBGRADE TO EXTEND 18" FROM B.O.C.
2. A MINIMUM OF 95% COMPACTION REQUIRED WITHIN R.O.W.

NOTES:

1. USE CURB CUTS TO DRAIN ROADWAY. SPACING BASED ON MAX SPREAD.
2. UNDERDRAIN SYSTEM TO BE USED AS NECESSARY/DESIGNED.

LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT	
ALTERNATIVES FOR RL or RC STREETS	
DRAWING NO: A–3	
DATE: October, 2007	