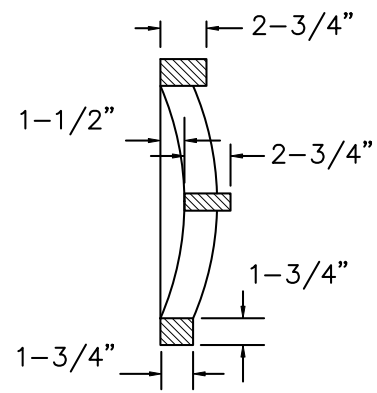
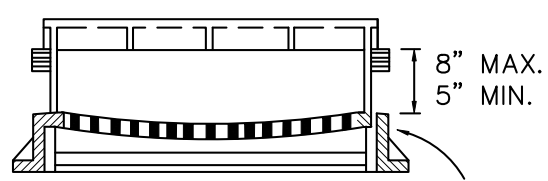


SECTION - DD

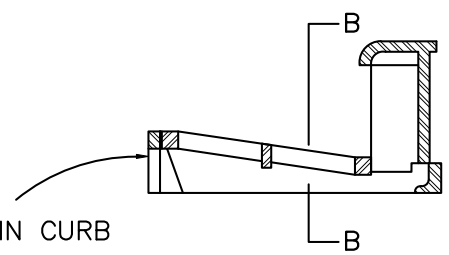


SECTION - CC

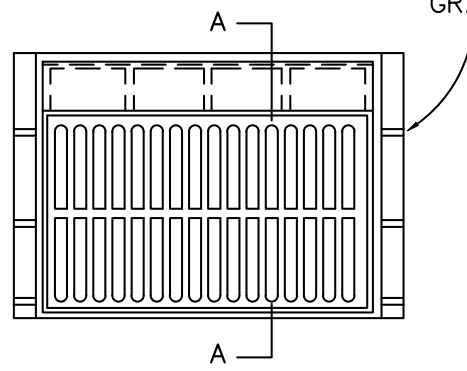


SECTION - BB

CATCH BASIN CURB
INLET FRAME AND
GRATE ASSEMBLY



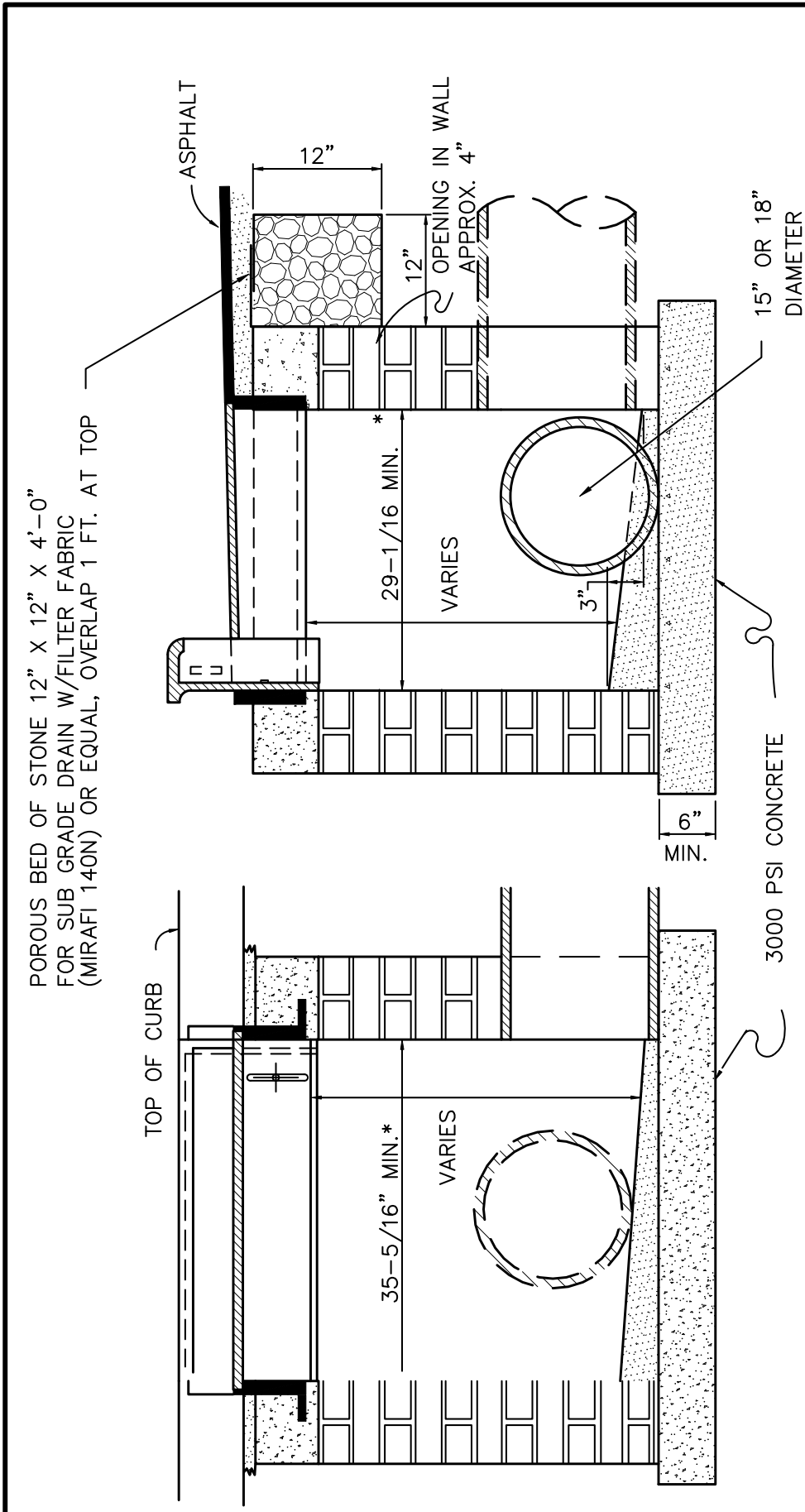
SECTION - AA



NOTE:

1. MATERIAL: GRAY CAST IRON, ASTM CLASS A48-60CL-30
2. CODE NO. CH-BN-2001, TYPE "C" (DEWEY BROS., INC.; GOLDSBORO, NC)
3. CODE NO. CH-S-6 (SUMPTER MACHINERY CO., INC.; SUMPTER, SC)
4. USE DIRECTIONAL GRATES WHERE INDICATED

DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE	CATCH BASIN CURB INLET FRAME AND GRATE	FILE NO. SD-1



POROUS BED OF STONE 12" X 12" X 4'-0"
 FOR SUB GRADE DRAIN W/FILTER FABRIC
 (MIRAFI 140N) OR EQUAL, OVERLAP 1 FT. AT TOP

SECTION A-A

FRONT VIEW SECTION

Either brick masonry, Class "A" concrete, or pre cast concrete may be used to construct catch basins.

Concrete walls are to be 6" thick & the floor 6" of 3000 PSI concrete.

Brick walls are to be 8" thick & the floor 6" of 3000 PSI concrete.

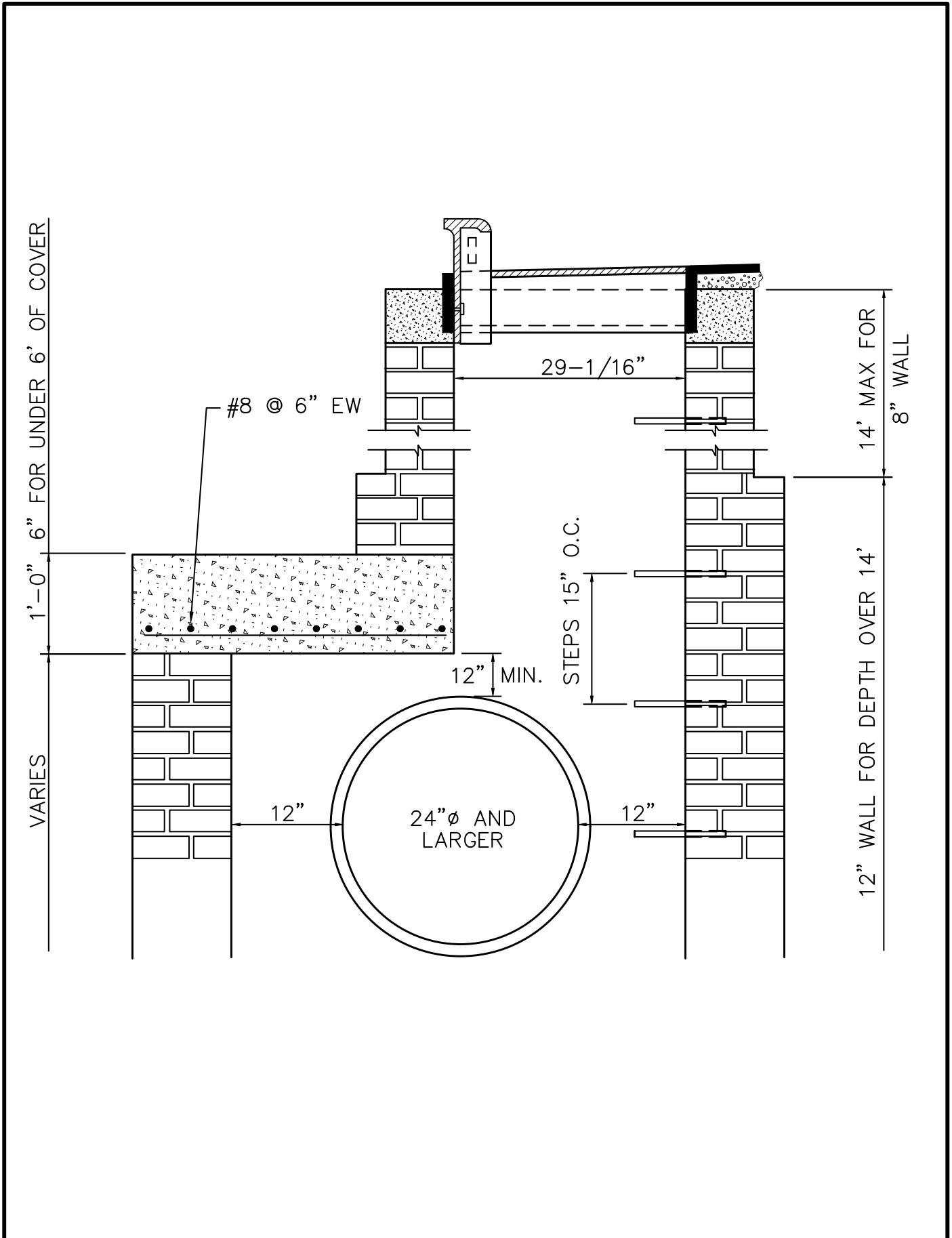
Steps required where depth exceeds 4'-0".

NOTE:
 *24" R.C.P. AND UP USE
 PIPE DIAMETER
 PLUS 10"

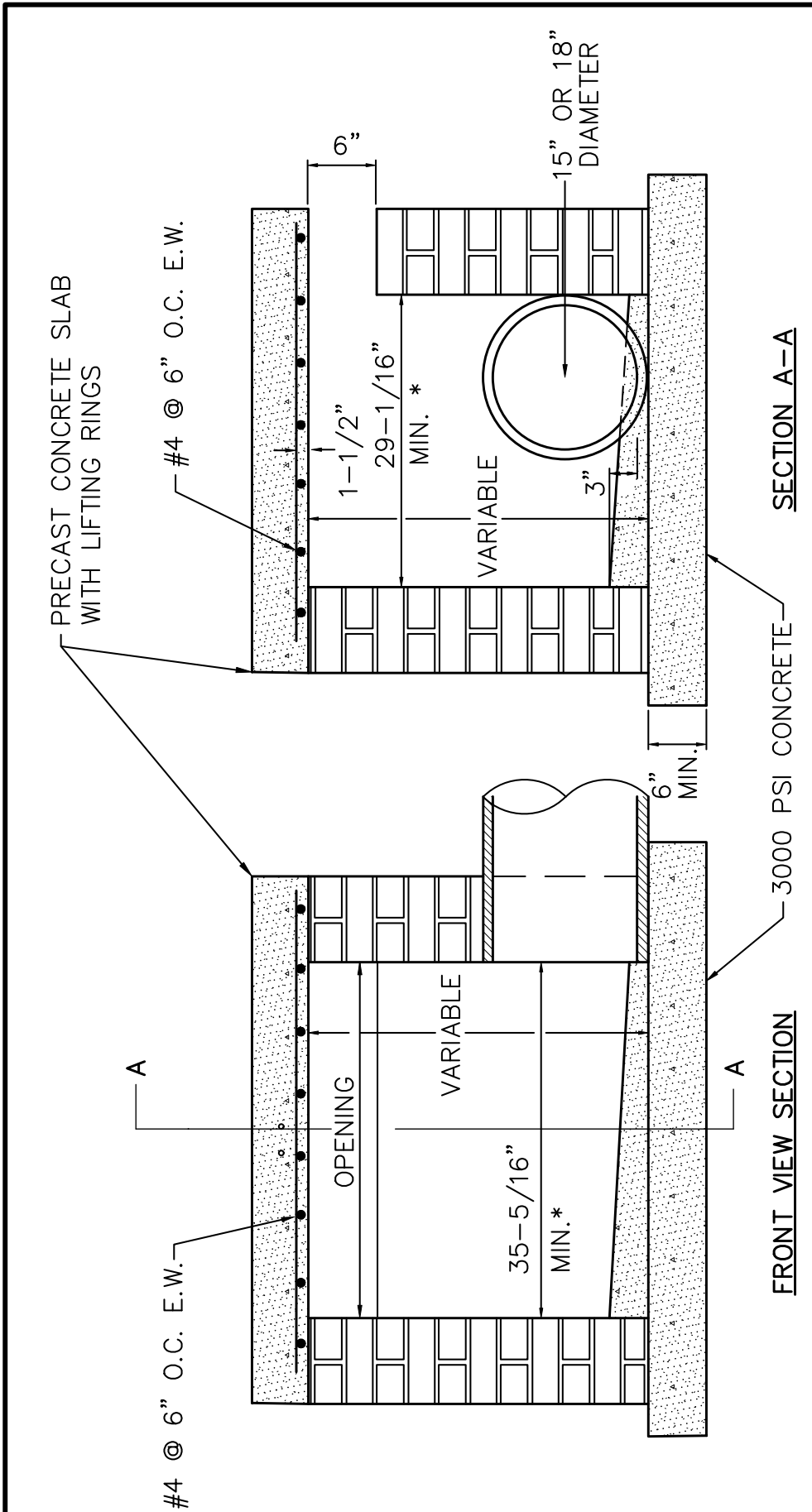
DATE: JANUARY 2008
DRAWN BY: WKD
SCALE: NONE

STANDARD DETAIL
 CATCH BASIN DETAILS

CITY OF LANCASTER LANCASTER COUNTY, S.C.	
FILE NO.	SD-2



DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE	CATCH BASIN DETAILS 24" PIPE AND LARGER FOR EXTRA DEPTH CATCH BASIN	FILE NO. SD-3

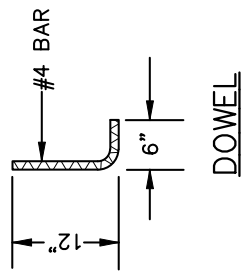


Either brick masonry, Class "A" concrete, or pre cast concrete may be used to construct catch basins. Concrete walls are to be 6" thick & the floor 6" of 3000 PSI concrete. Brick walls are to be 8" thick & the floor 6" of 3000 PSI concrete. Steps required where depth exceeds 4'-0".

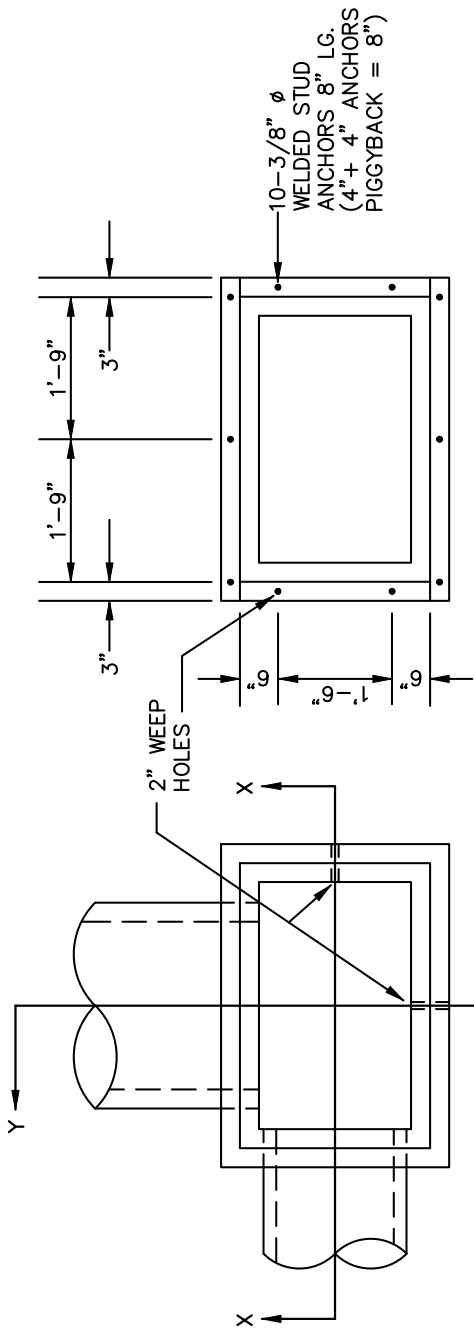
*NOTE:
 24" R.C.P. AND UP
 USE PIPE DIAMETER
 PLUS 10"

DATE: JANUARY 2008	STANDARD DETAIL OPEN THROAT CATCH BASIN DETAILS	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE		FILE NO. SD-4

DIMENSIONS AND QUANTITIES FOR DROP INLET			
DIMENSIONS OF BOX & PIPE		PIPE	
SPAN	WIDTH	HEIGHT	H
A	B	D	H
3'-0"	2'-0"	12"	2'-8"
/	/	15"	3'-0"
/	/	18"	3'-5"
3'-0"	2'-0"	24"	4'-0"
3'-0"	2'-0"	30"	4'-3"

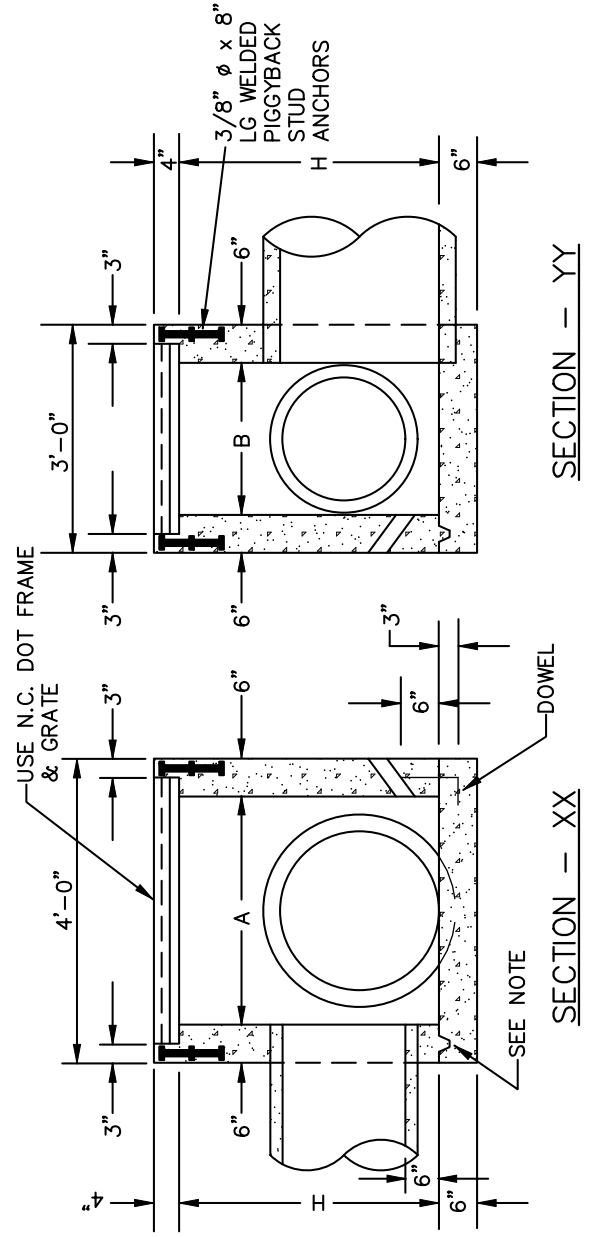


- NOTES:**
1. CLASS "B" CONCRETE TO BE USED THROUGHOUT.
 2. OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR 4 BAR DOWELS AT 12" CENTER, AS DIRECTED BY ENGINEER.
 3. FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
 4. A STONE DRAIN CONSISTING OF 1 CUBIC FOOT OF NO. 78M STONE CONTAINED IN A BAG OF POROUS FABRIC SHALL BE PLACED AT EACH WEEP HOLE.
 5. ALL DROP INLETS OVER 3'-6" IN DEPTH TO BE PROVIDED WITH STEPS 1'-2" ON CENTERS.

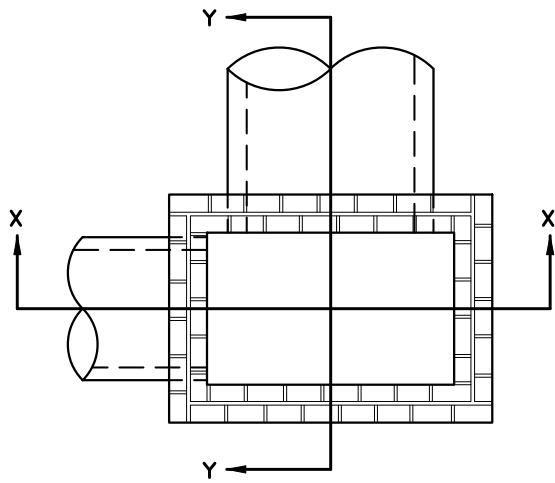


PLAN
SHOWING POSITION OF BOLTS

PLAN
WITH GRATE & FRAME REMOVED



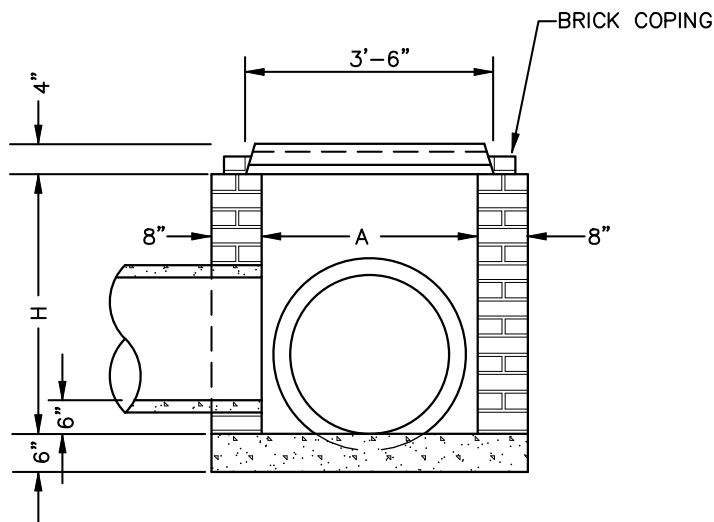
DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE		
STANDARD CONCRETE DROP INLET		FILE NO. SD-5



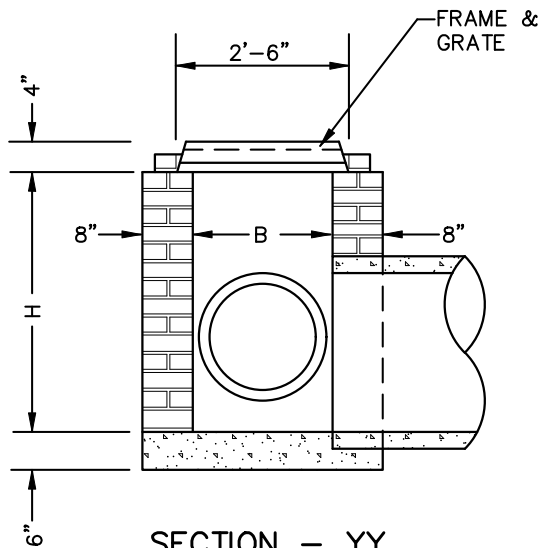
PLAN

WITH COPING REMOVED

DIMENSIONS AND QUANTITIES FOR DROP INLET			
DIMENSIONS OF BOX & PIPE			
PIPE	SPAN	WIDTH	HEIGHT
D	A	B	H
12"	3'-0"	2'-0"	2'-8"
15"	↗	↗	3'-0"
18"	↗	↗	3'-5"
24"	↗	↗	4'-0"
30"	3'-0"	2'-0"	4'-3"



SECTION - XX

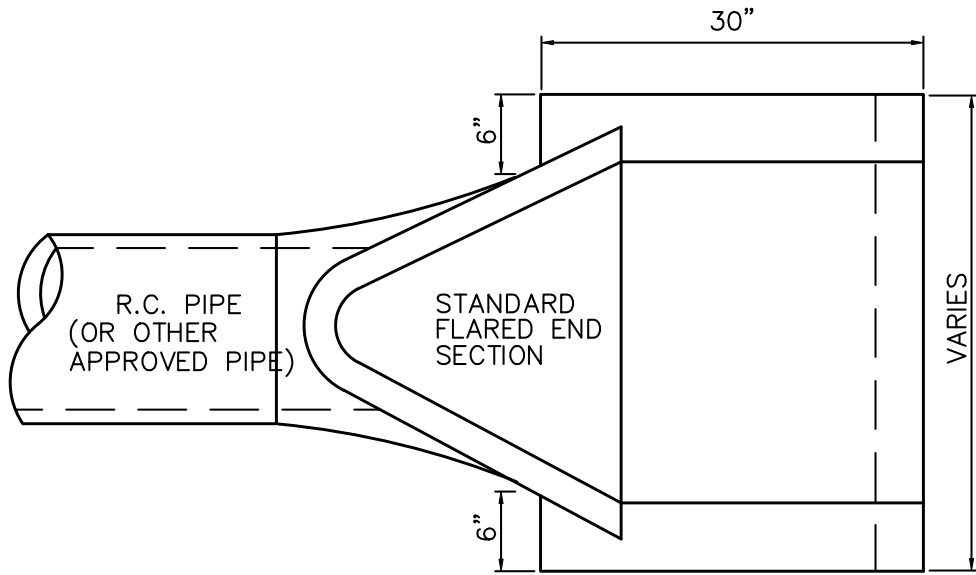


SECTION - YY

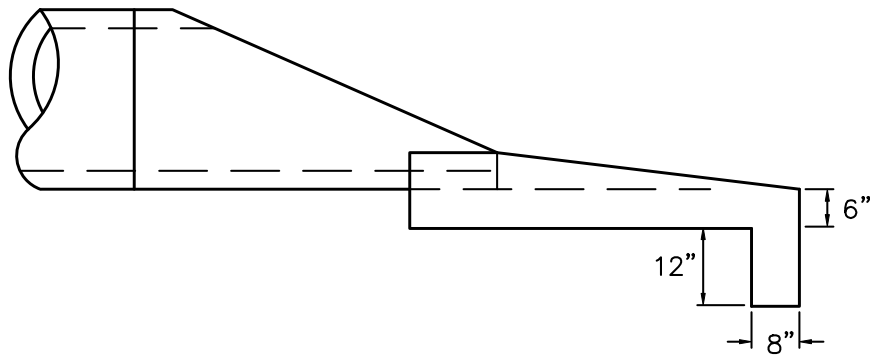
NOTES:

1. ALL DROP INLETS OVER 3'-6" IN DEPTH TO BE PROVIDED WITH STEPS 1'-2" ON CENTERS.
2. CLASS "B" CONCRETE TO BE USED.
3. ALL MORTAR JOINTS ARE TO BE 1/2" ± 1/8".
4. FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
5. BRICK MASONRY DROP INLET NOT TO BE USED IN LOCATIONS SUBJECT TO TRAFFIC.
6. JUMBO BRICK WILL BE PERMITTED. CONCRETE BRICK OR 4" SOLID CONCRETE BLOCKS MAY BE USED IN LIEU OF CLAY BRICK.
7. FOR 8'-0" IN HEIGHT OR LESS USE 8" WALL. OVER 8'-0" IN HEIGHT USE 12" WALL TO 6'-0" FROM TOP OF WALL AND 8" WALL FOR THE REMAINING 6'-0".

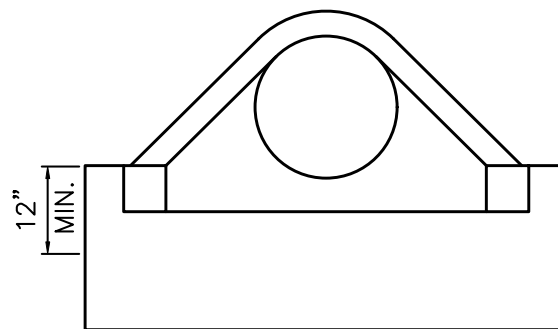
DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE	STANDARD BRICK DROP INLET	FILE NO. SD-6



PLAN



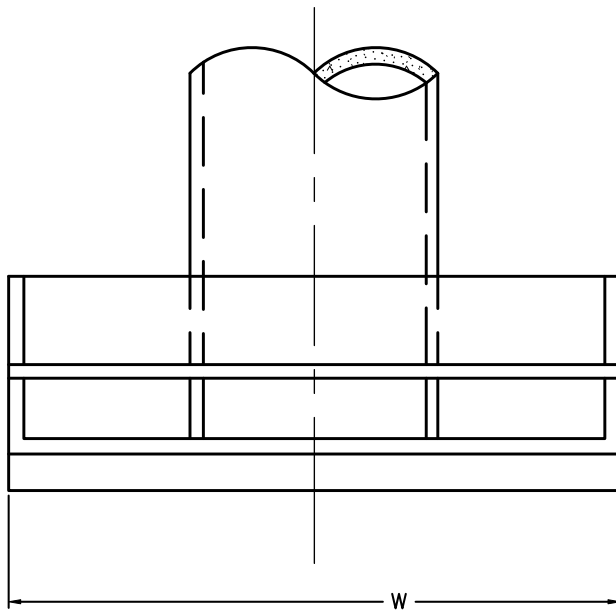
SIDE VIEW



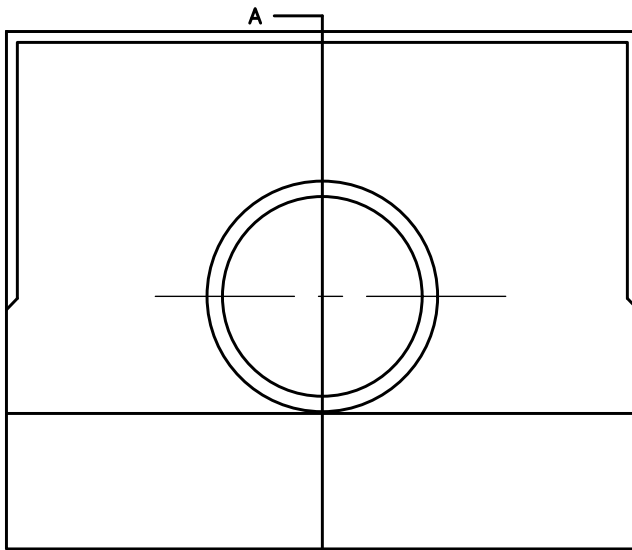
END VIEW

NOTE:
TO BE USED ONLY FOR
PIPES 36" OR LESS IN DIAMETER

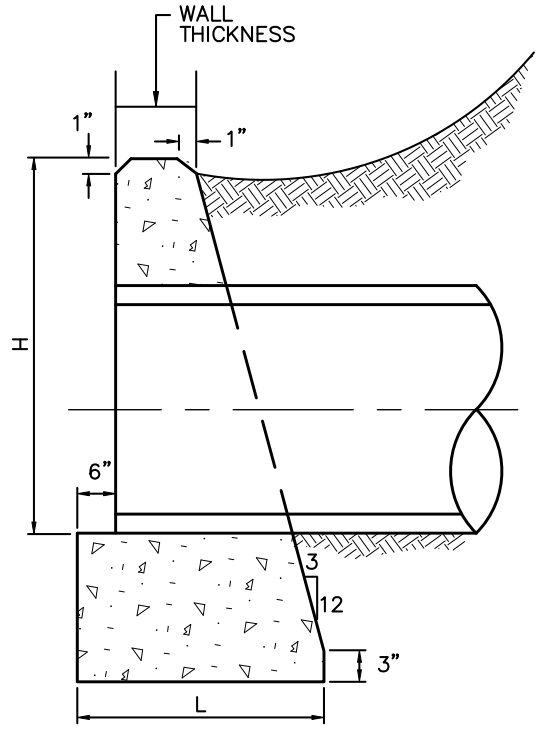
DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE	SPLASH PAD FOR FLARED END PIPE	FILE NO. SD-7



PLAN



ELEVATION



SECTION A-A

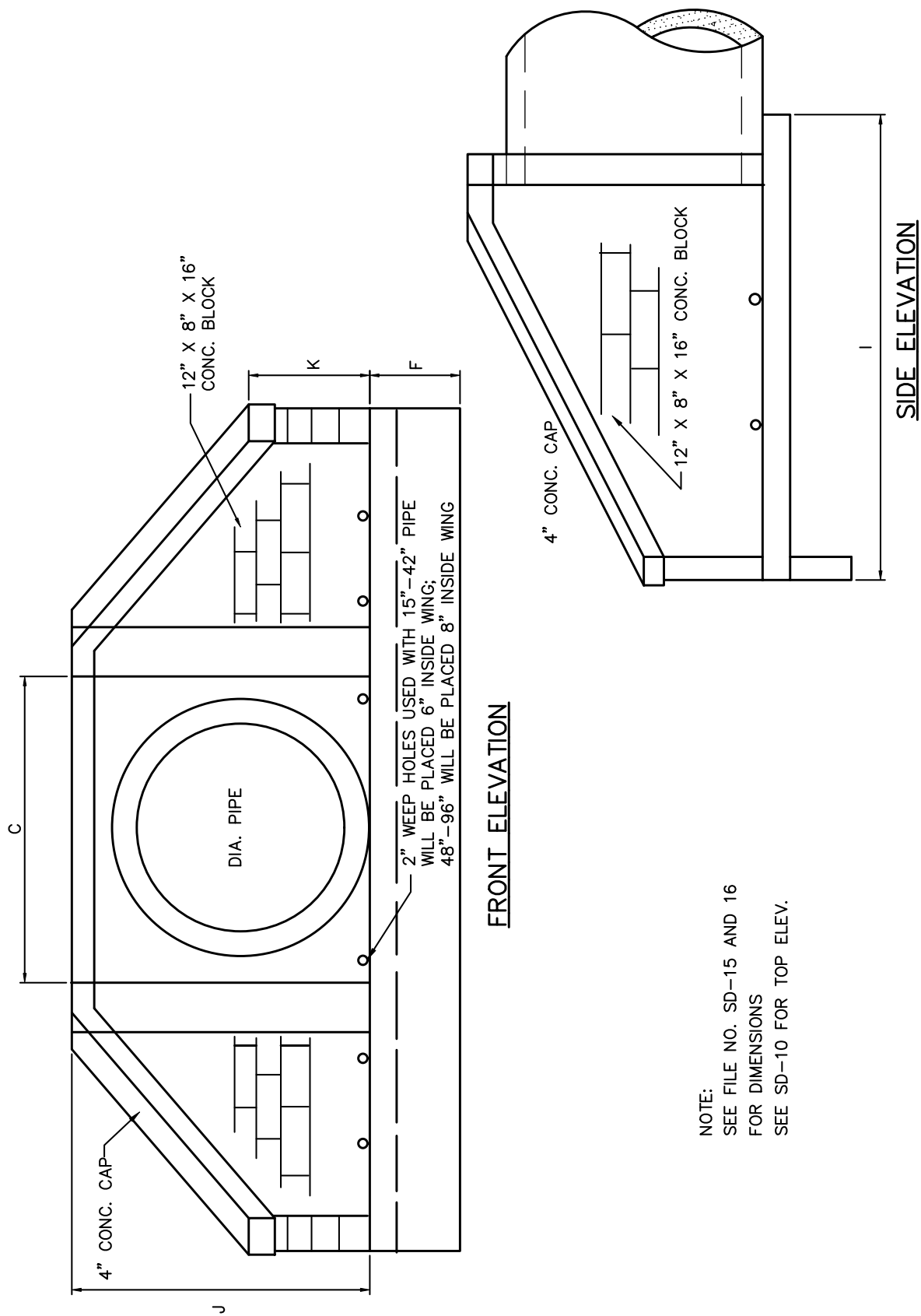
DIMENSIONS FOR PLAIN HEADWALLS

PIPE SIZE	WALL THICKNESS	SLAB THICKNESS	H	L	W	WEEP HOLES
15"	1'-0"	1'-0"	2'-3"	2'-3"	5'-9"	2 @ 3'-3"
18"	1'-0"	1'-6"	2'-6"	2'-6"	6'-6"	2 @ 3'-6"
24"	1'-0"	2'-0"	3'-0"	2'-8"	8'-0"	2 @ 5'-6"
30"	1'-0"	2'-0"	3'-6"	2'-10"	9'-6"	2 @ 5'-6"
36"	1'-0"	2'-0"	4'-0"	3'-0"	11'-0"	2 @ 6'-0"

DATE: JANUARY 2008
 DRAWN BY: WKD
 SCALE: NONE

STANDARD DETAIL
STRAIGHT CONCRETE HEADWALL
AND DIMENSIONS

CITY OF LANCASTER
 LANCASTER COUNTY, S.C.
 FILE NO. SD-8

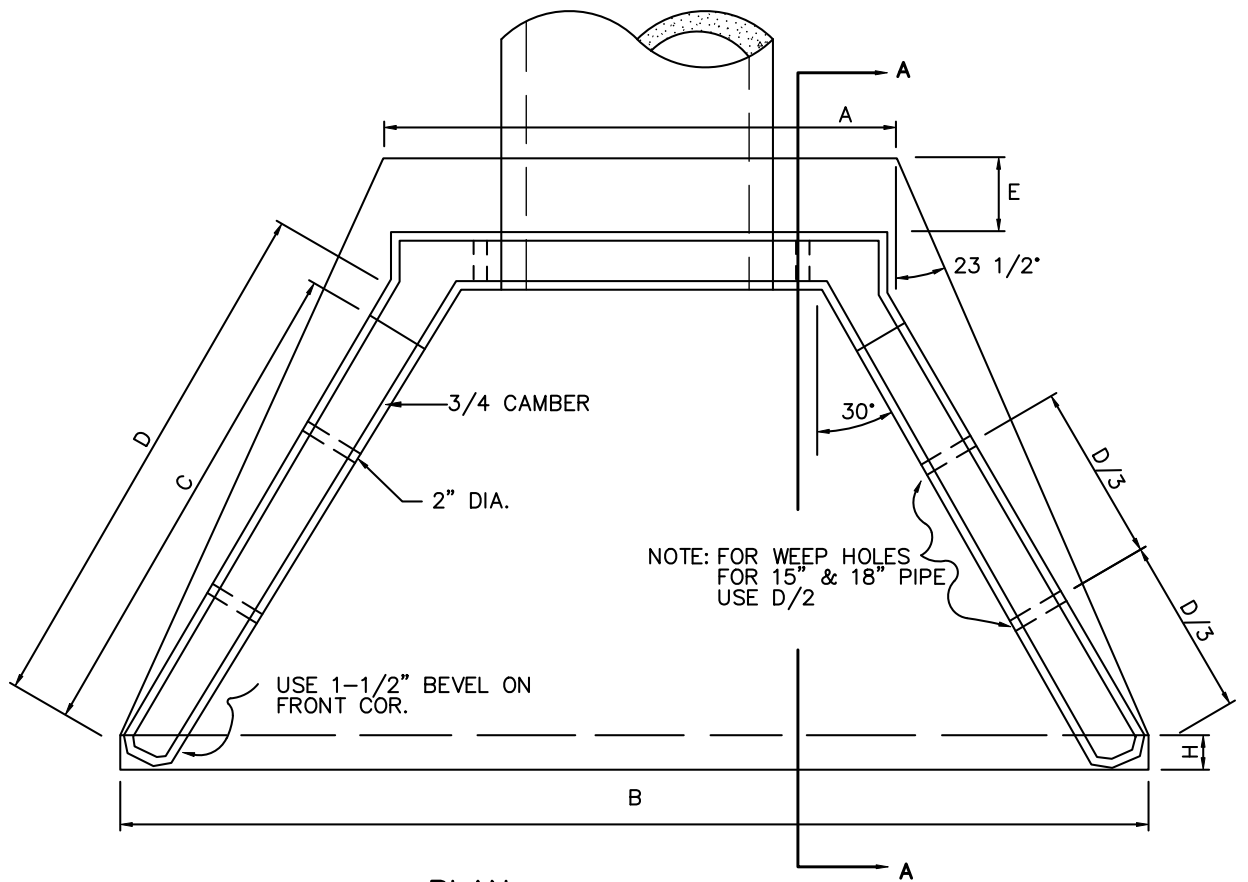


FRONT ELEVATION

SIDE ELEVATION

NOTE:
 SEE FILE NO. SD-15 AND 16
 FOR DIMENSIONS
 SEE SD-10 FOR TOP ELEV.

DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE	CONCRETE BLOCK HEADWALL WITH WING WALLS FOR ALL SIZES OF REINFORCED CONCRETE PIPE	FILE NO. SD-9



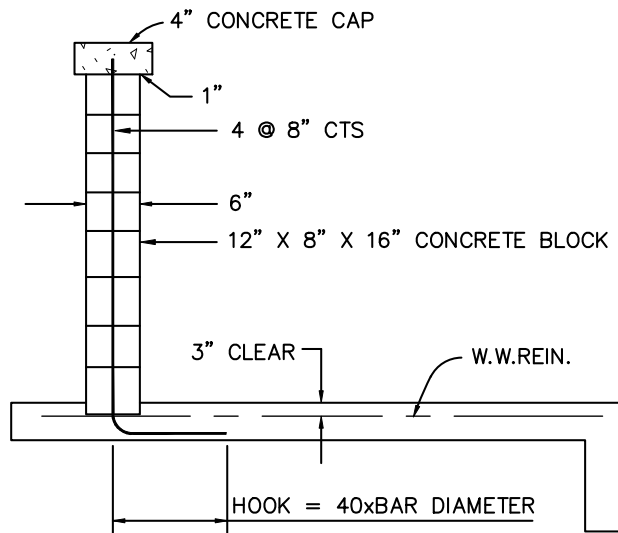
PLAN

NOTE: FOR WEEP HOLES FOR 15" & 18" PIPE USE D/2

USE 1-1/2" BEVEL ON FRONT COR.

NOTE

SEE FILE NO. SD-15 AND 16 FOR DIMENSIONS
SEE SD-9 FOR FRONT ELEV. VIEW



TYPICAL SECTION A-A

NOTE:

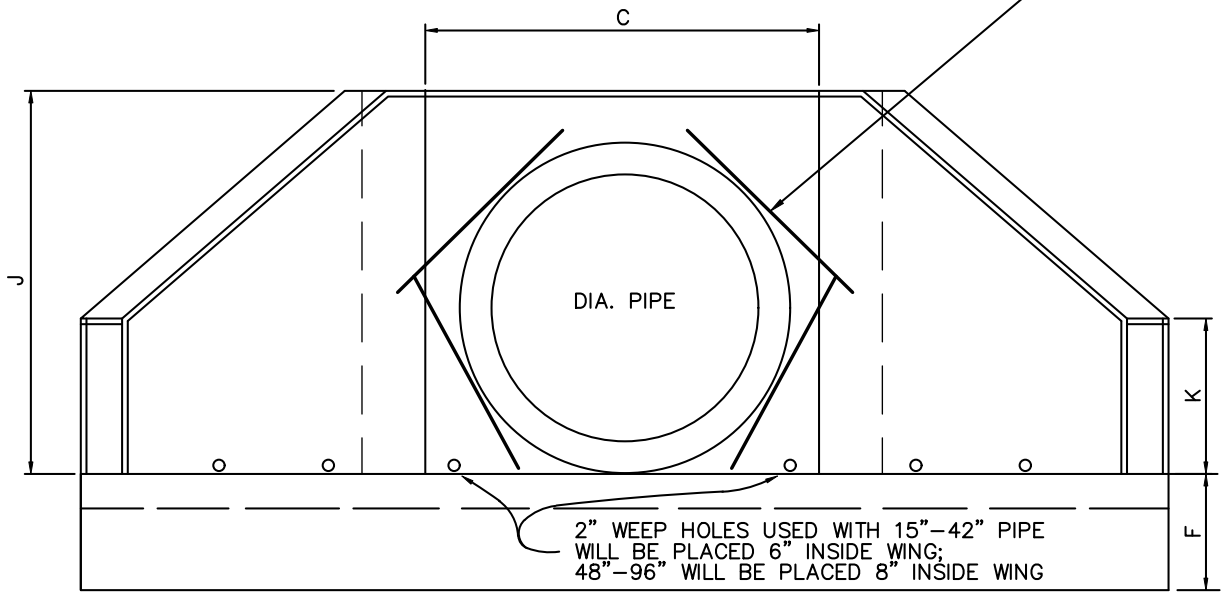
FILL EVERY CAVITY COMPLETELY WITH 3000 PSI CONCRETE.

CONCRETE SHALL NOT FALL MORE THAN THE HEIGHT OF 5 LAYERS OF BLOCK.

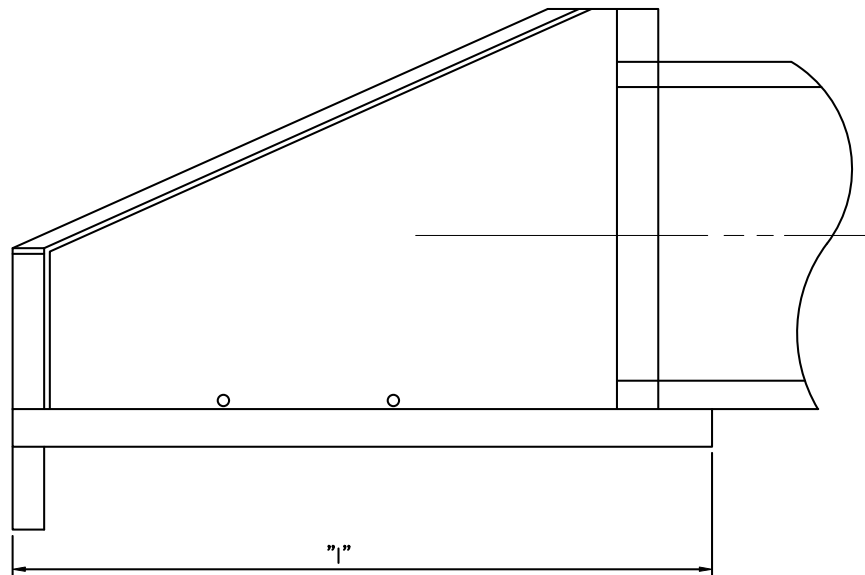
DUR-A-WALLS TO BE PLACED EVERY COURSE.

DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE		
	CONCRETE BLOCK HEADWALL WITH WING WALLS	FILE NO. SD-10

PLACE 4-#5 AROUND PIPE IN BOTH FACES
TO PROTECT AGAINST DIAGONAL TENSION



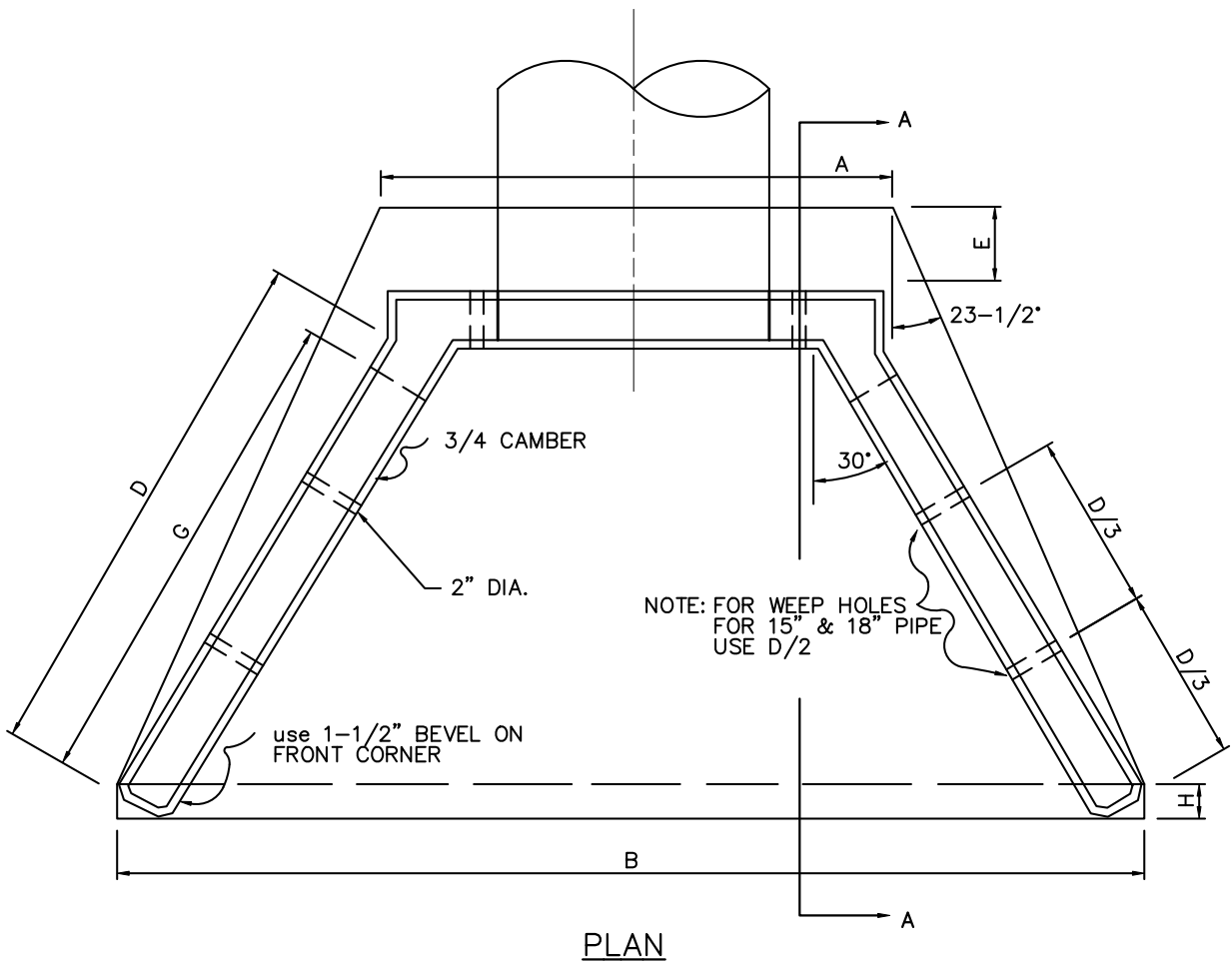
FRONT VIEW



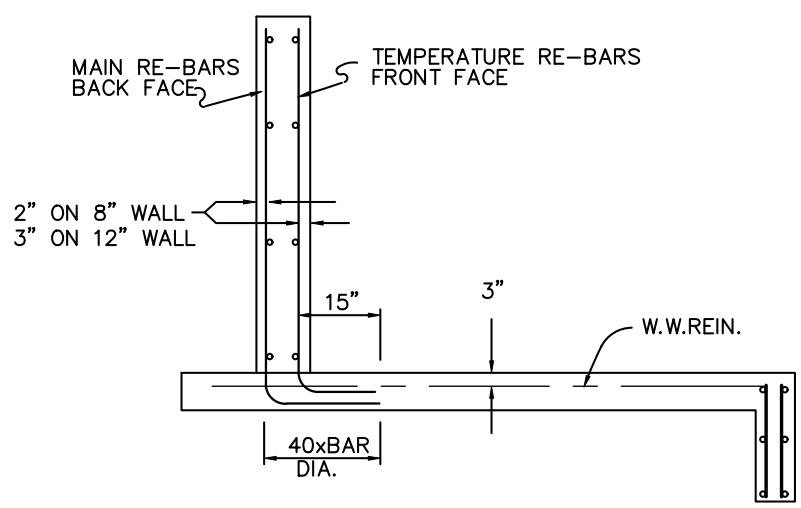
SIDE VIEW

NOTE: SEE FILE NO. SD-15 AND 16
FOR DIMENSIONS
SEE SD-12 FOR TOP VIEW

DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE	REINFORCED CONCRETE HEADWALL WITH WING WALLS	FILE NO. SD-11



PLAN



#4 @ 12" O.C. BOTH FACES
HORIZONTAL & VERTICAL

SECTION A-A

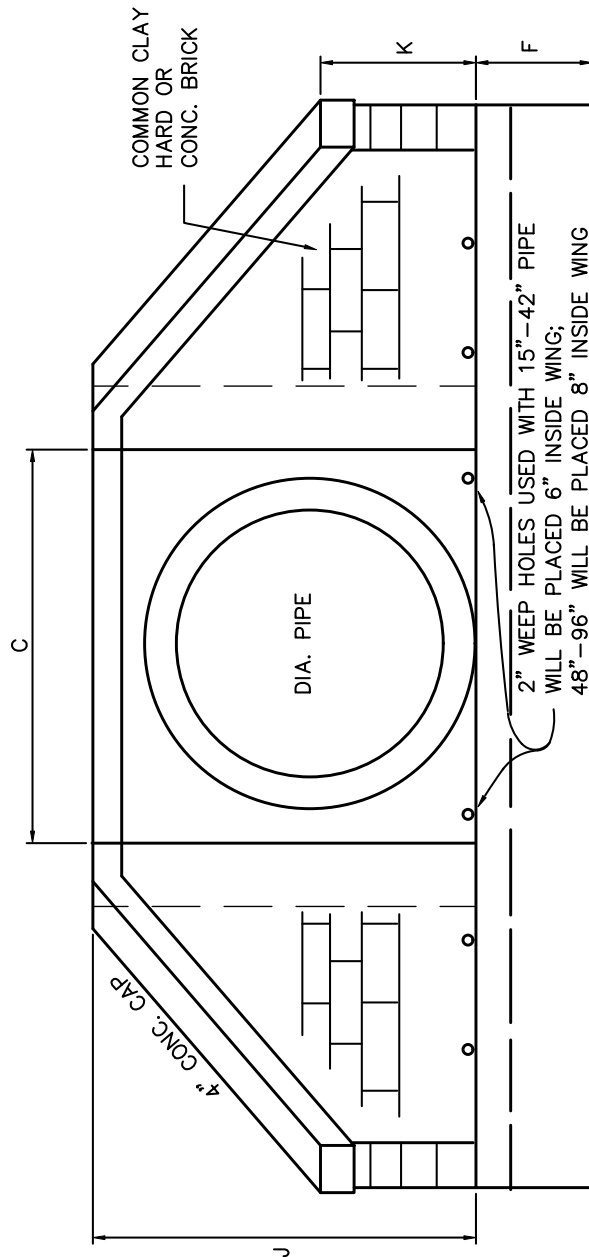
NOTE: SEE FILE NO. SD-15 AND 16
FOR DIMENSIONS
SEE SD-11 FOR FRONT ELEV. VIEW

DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE	STANDARD REINFORCED CONCRETE HEADWALL WITH WING WALLS	FILE NO. SD-12

NOTE: ADD THESE DIMENSIONS TO OVERALL DIMENSIONS ON FILE NO. SD-15 AND 16 FOR BRICK HEADWALLS

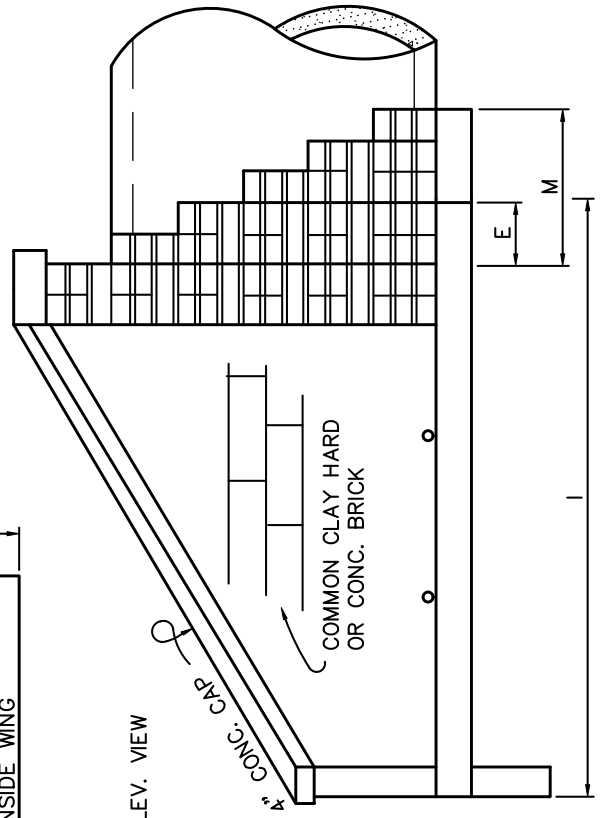
COMMON DIM.			
D	L	M	N
15"	2'-5"	1'-8"	1-7/8"
18"	2'-8"	1'-8"	2"
24"	3'-4"	2'-0"	2-1/2"
30"	3'-9"	2'-4"	2-3/4"
36"	4'-3"	2'-4"	3"
42"	4'-11"	2'-8"	3-1/2"
48"	5'-7"	3'-0"	4"

THESE DIMENSIONS ARE FOR END ELEV. FOR BRICK HW. FOR 48" RCP & UNDER

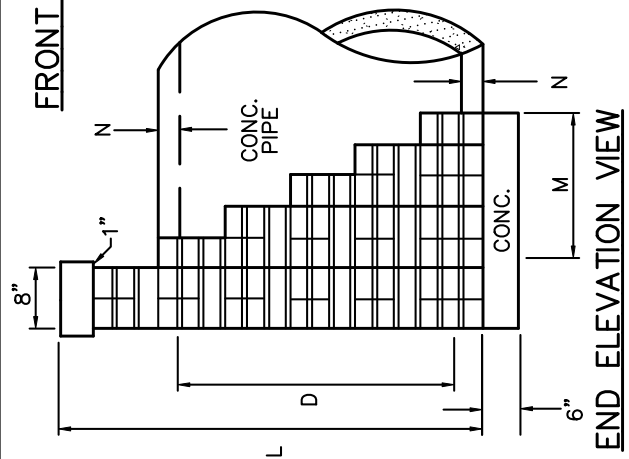


FRONT ELEVATION VIEW

NOTE: SEE SD-14 FOR TOPELEV. VIEW



SIDE ELEVATION VIEW



END ELEVATION VIEW

DATE: JANUARY 2008

DRAWN BY: WKD

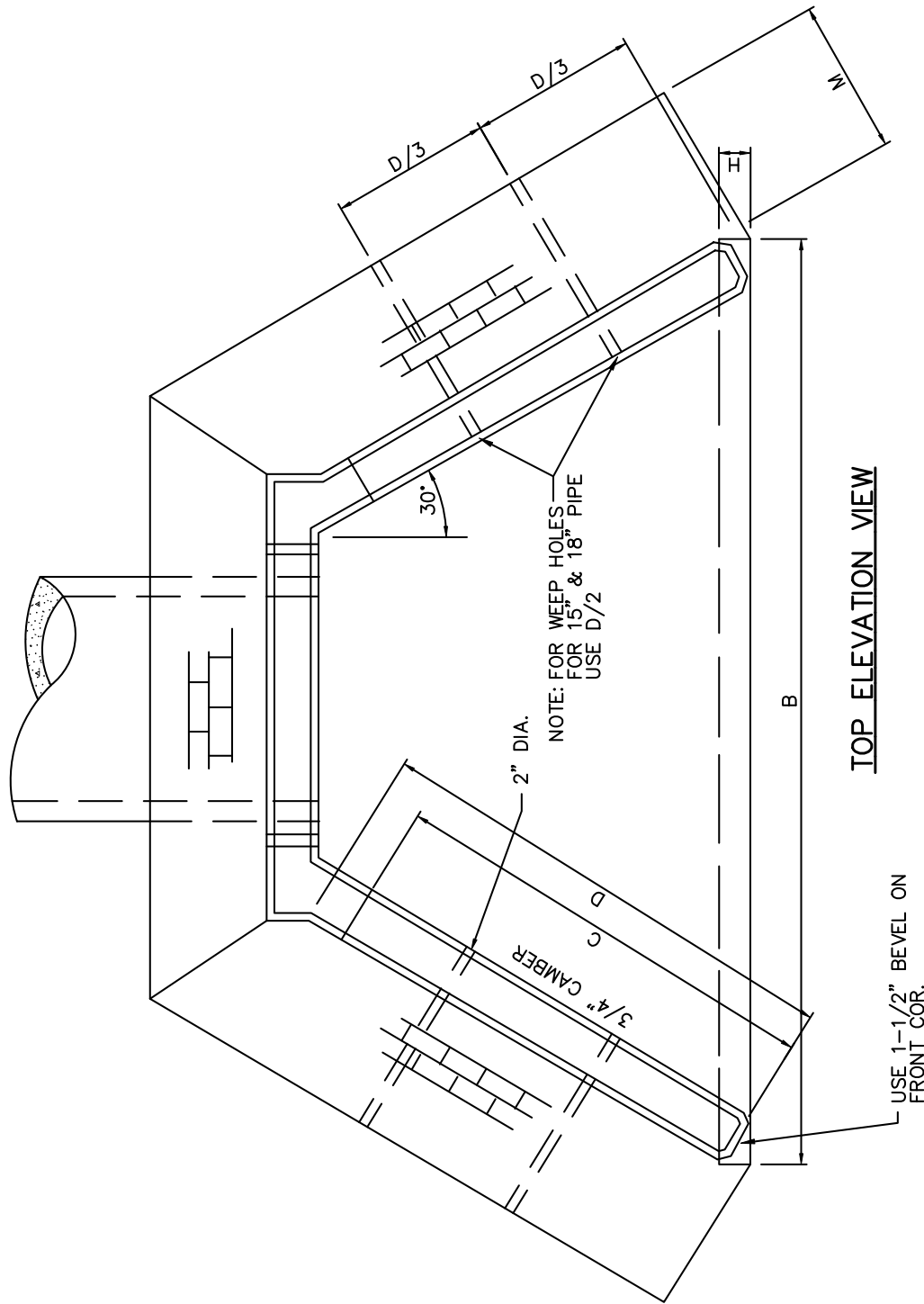
SCALE: NONE

STANDARD DETAIL

BRICK HEADWALL WITH WINGS FOR 48" RCP AND UNDER (WITHOUT REINFORCING STEEL)

CITY OF LANCASTER
LANCASTER COUNTY, S.C.

FILE NO. SD-13



TOP ELEVATION VIEW

NOTE: SEE FILE NO. SD-15 AND 16 FOR DIMENSIONS AND SD-13 FOR FRONT ELEV. VIEW

USE 1-1/2" BEVEL ON FRONT COR.

DATE: JANUARY 2008	STANDARD DETAIL BRICK HEADWALL WITH WING WALLS FOR UP TO 48" DIAMETER R.C.P. (WITHOUT REINFORCING STEEL)	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE		

PIPE SIZE	SHELL THICKNESS	WALL THICKNESS	SLAB THICKNESS	A	B	C	D	E	F	G	H	I	J	K	L
15"	2 1/4"	8"	6"	4'-10"	9'-4"	3'-7"	4'-2"	1'-0"	1'-6"	3'-8"	6"	5'-8"	2'-7"	1'-0"	5'-2"
18"	2 1/2"	8"	6"	5'-5"	10'-5"	3'-11"	4'-11"	1'-0"	1'-6"	4'-5"	6"	6'-3"	2'-11"	1'-0"	5'-6"
24"	3"	8"	6"	6'-4"	12'-4"	4'-6"	6'-3"	1'-0"	1'-6"	5'-9"	6"	7'-5"	3'-6"	1'-0"	6'-1"
30"	3 1/2"	8"	6"	7'-3"	14'-3"	5'-1"	7'-7"	1'-0"	1'-6"	7'-1"	6"	8'-7"	4'-1"	1'-0"	6'-8"
36"	4"	8"	6"	7'-5"	15'-1"	5'-8"	7'-10"	1'-6"	2'-0"	7'-4"	6"	9'-4"	4'-8"	1'-6"	7'-3"
42"	4 1/2"	8"	6"	8'-4"	17'-0"	6'-3"	9'-2"	1'-6"	2'-0"	8'-8"	6"	10'-6"	5'-3"	1'-6"	7'-10"
48"	5"	8"	6"	9'-4"	18'-11"	6'-10"	10'-6"	1'-6"	2'-0"	10'-0"	6"	11'-7"	5'-10"	1'-6"	8'-5"

DATE: JANUARY 2008	<h2 style="margin: 0;">STANDARD DETAIL</h2> <h3 style="margin: 0;">DIMENSIONS FOR A SINGLE PIPE HEADWALL WITH WING WALLS</h3>	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE		FILE NO. SD-15

DATE: JANUARY 2008
 DRAWN BY: WKD
 SCALE: NONE

STANDARD DETAIL
DIMENSIONS FOR SINGLE AND DOUBLE PIPE HEADWALLS WITH WING WALLS

CITY OF LANCASTER
 LANCASTER COUNTY, S.C.
 FILE NO. SD-16

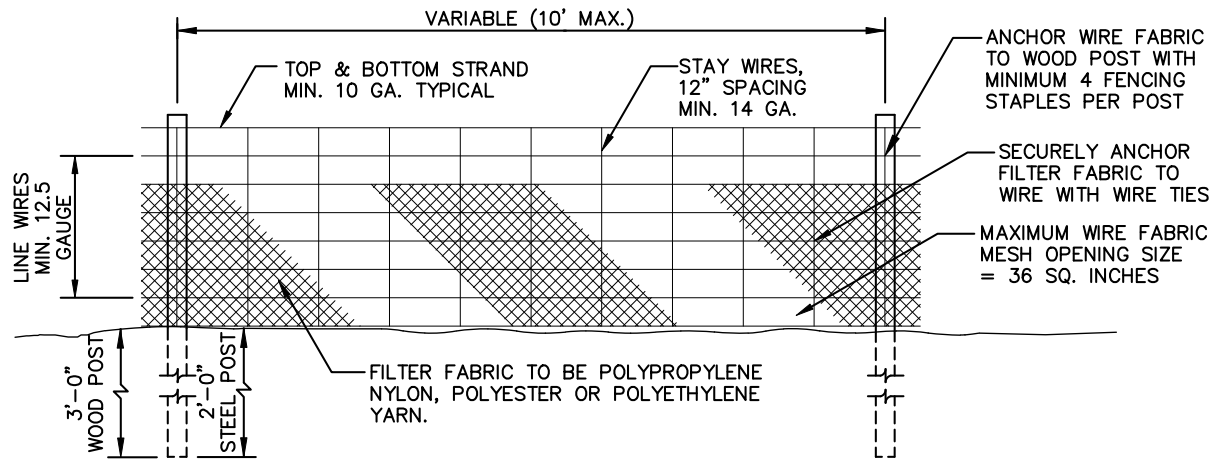
SINGLE PIPE HEADWALL

THICKNESS OF WALL	BACK FACE		SLAB REINFORCEMENT	FRONT FACE	CUBIC YARDS OF CONCRETE
	HOR.	VERT.			
15"	#3 @ 12" O.C.	#3 @ 12" O.C.	6-6 X 10-10 WIRE MESH REINF.	#4 @ 18" HOR. AND VERT.	1.61
18"	"	"	"	"	1.96
24"	"	"	"	"	2.67
30"	"	"	"	"	3.49
36"	"	"	"	"	4.21
42"	"	"	"	"	4.90
48"	"	"	"	"	6.33

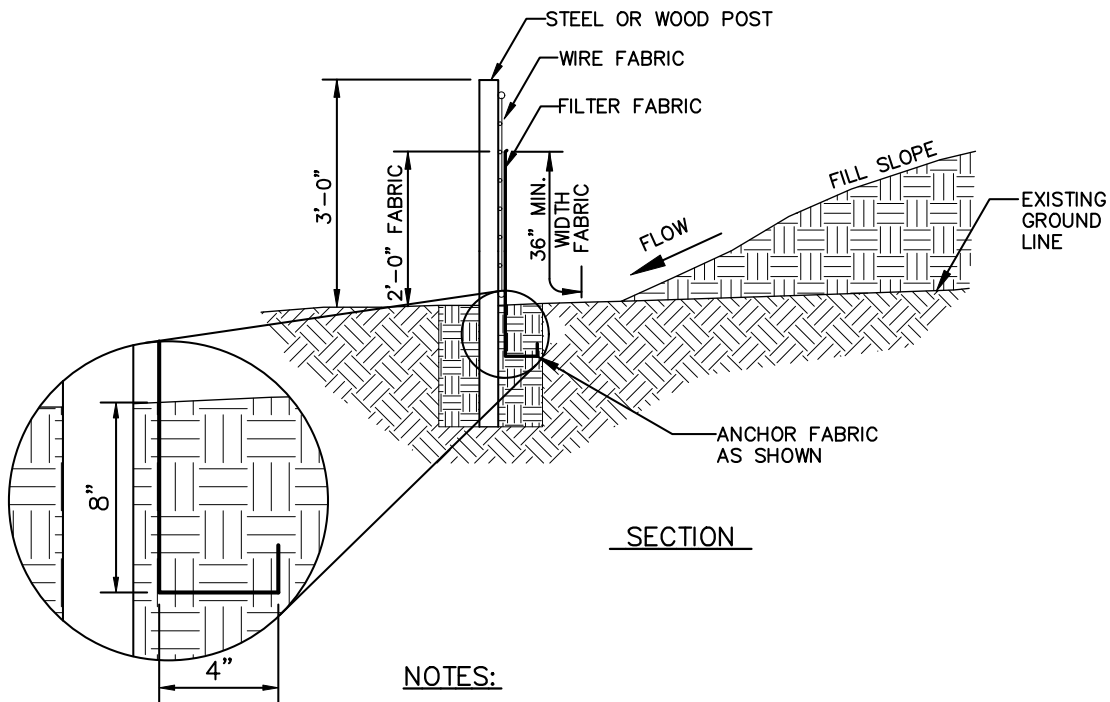
DOUBLE PIPE HEADWALL

A	B	C	L	CUBIC YARDS OF CONCRETE
8'-6"	13'-0"	7'-3"	8'-9"	2.24
9'-4"	14'-4"	7'-10"	9'-5"	2.70
10'-10"	16'-10"	9'-0"	10'-7"	3.64
12'-4"	19'-4"	9'-2"	11'-9"	4.72
13'-1"	20'-9"	11'-4"	12'-11"	5.75
14'-7"	23'-3"	12'-6"	14'-1"	7.05
16'-2"	25'-9"	13'-8"	15'-3"	8.52

NOTE: (1) ALL DIMENSIONS FOR A DOUBLE PIPE H.W. ARE SAME AS SINGLE PIPE H.W. EXCEPT AS SHOWN ABOVE.
 (2) THE DISTANCE BETWEEN PIPES IN A DOUBLE PIPE H.W. IS 2 FT.



ELEVATION

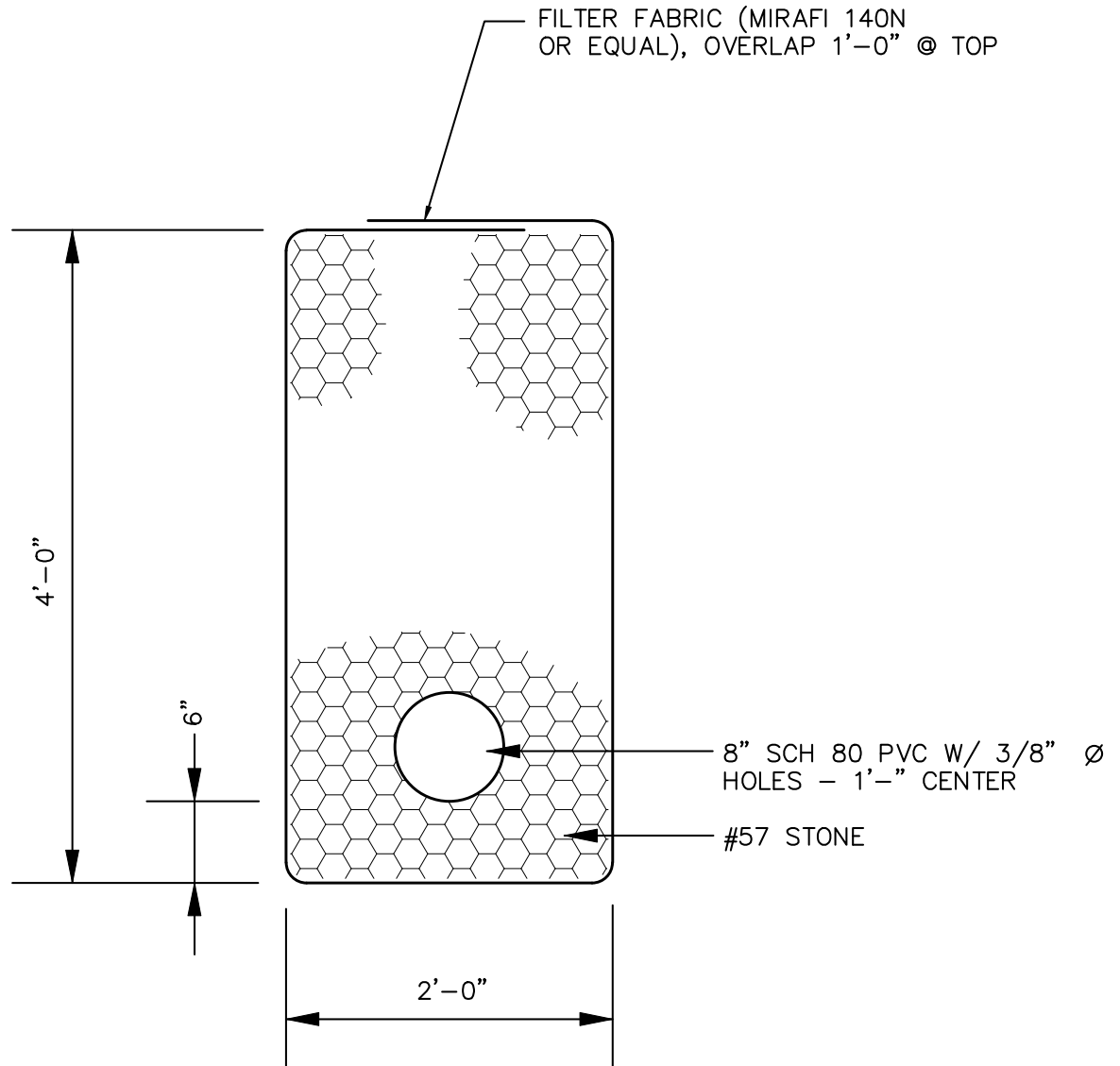


SECTION

NOTES:

1. THE CONTRACTOR SHALL MAINTAIN ALL SILT FENCING BY REMOVING AND DISPOSING OF SILT ACCUMULATIONS. FILTER FABRIC SHALL BE REPLACED WHEN IT HAS DETERIORATED TO SUCH EXTENT THAT IT REDUCES THE EFFECTIVENESS OF THE SILT FENCE.
2. FILTER FABRIC SHALL HAVE A MINIMUM TENSILE STRENGTH (@ 20% MAX. ELONGATION) OF 30lbs/LIN. IN., WIRE FABRIC REQUIRED.
3. IF EXTRA STRENGTH FABRIC IS UTILIZED (MIN. TENSILE STRENGTH = 50 lbs/LIN. IN. @ MAX. 20% ELONGATION), WIRE FABRIC IS OPTIONAL, MAXIMUM POST SPACING = 6 FEET.
4. POSTS SHALL BE 4" DIA. PINE, 2" DIA. OAK OR 1.33 lb/LF STEEL.

DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE		
	TYPICAL SILT FENCE	FILE NO. SD-17



NOTE:
 CONTRACTOR TO DETERMINE THE SIZE OF TRENCH AND
 QUANTITY OF STONE FOR DIFFERENT DRAIN FIELDS,
 WITH FINAL APPROVAL OF THE ENGINEER.

DATE: JANUARY 2008	STANDARD DETAIL	CITY OF LANCASTER LANCASTER COUNTY, S.C.
DRAWN BY: WKD		
SCALE: NONE	FRENCH DRAIN DETAIL	FILE NO. SD-18