



# CONSTRUCTION STANDARDS CITY OF ALBANY ENGINEERING DEPARTMENT

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# **CITY STANDARD MISCELLANEOUS INDEX**

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## **CITY STANDARD PAVING INDEX**

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# CITY STANDARD STORM SEWER INDEX

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NOTE: ADDITIONAL BEST MANAGEMENT PRACTICES AND CONSTRUCTION DETAILS FOR EROSION, SEDIMENT, AND POLLUTION CONTROL ARE AVAILABLE IN THE CURRENT EDITION OF THE "MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA" AND FROM THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION.

#### **CITY STANDARD EROSION CONTROL INDEX**

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NOTE: ADDITIONAL BEST MANAGEMENT PRACTICES AND CONSTRUCTION DETAILS FOR EROSION, SEDIMENT, AND POLLUTION CONTROL ARE AVAILABLE IN THE CURRENT EDITION OF THE "MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA" AND FROM THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION.

# **CITY STANDARD TRAFFIC INDEX**

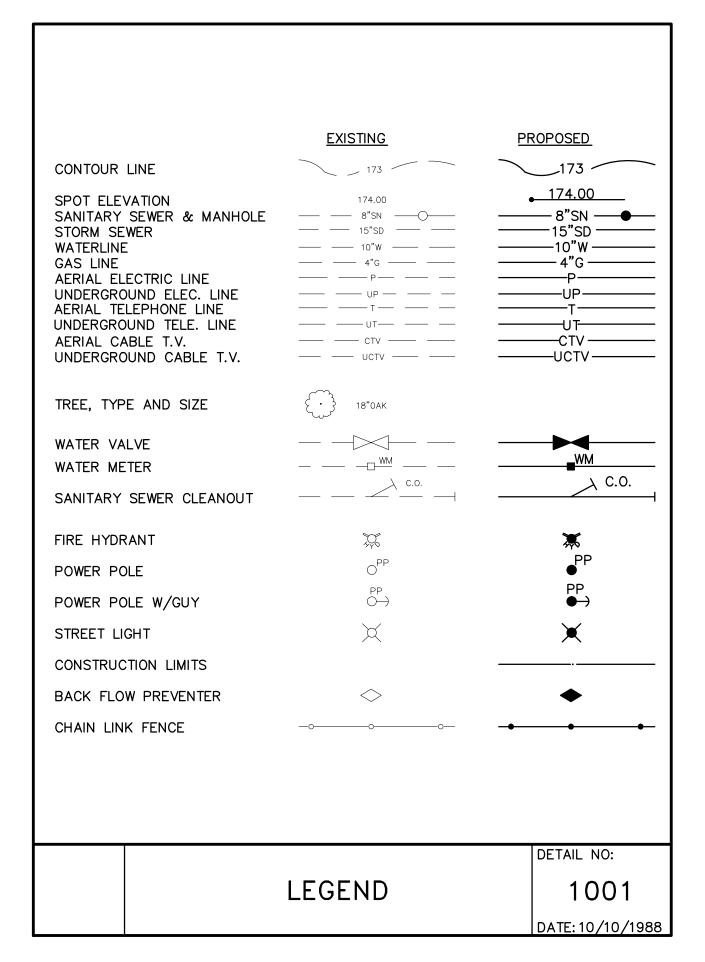
TOPIC / DESCRIPTION	DE I AIL NO
BARRICADES (TYPES I & II) AND TRAFFIC CONE	7001
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# **CITY STANDARD TRAFFIC INDEX**

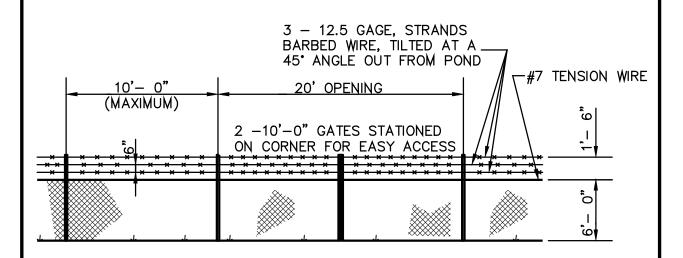
TOPIC / DESCRIPTION	DETAIL NO.
INDUCTIVE LOOP VEHICLE DETECTOR -TYPICAL CURB DETAILS (REF: GDOT TS-01)	7025
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# CITY STANDARD MISCELLANEOUS INDEX

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8'0" POSTS ARE USED WITH 2'-0" IN GROUND SET IN CONCRETE.



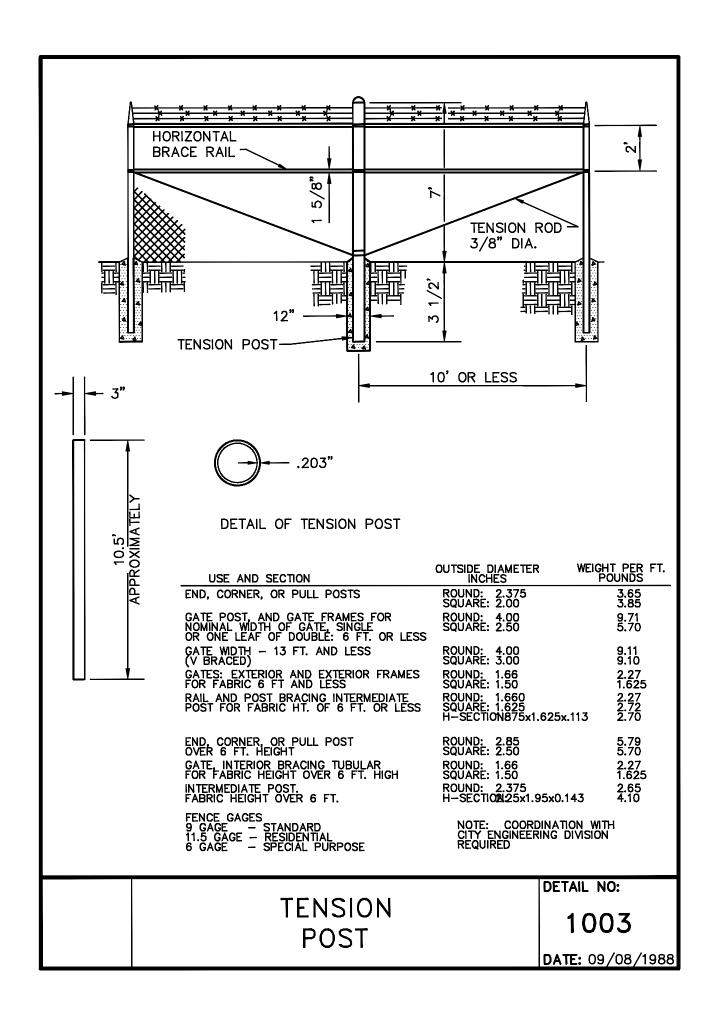
use and section	OUTSIDE DIAMETER INCHES		WEIGHT PER FT. POUNDS
GATE POST	ROUND:	4.00	9.11
END, CORNER, OR PULL POST OVER 6 FT. HEIGHT	ROUND:	2.875, 3.00	5.79
GATE, INTERIOR BRACING TUBULAR FOR FABRIC HEIGHT OVER 6 FT. HIGH	ROUND:	1.625	2.27
INTERMEDIATE POST	ROUND:	2.50	3.65
FENCE GAGES 9 GAGE — STANDARD 11.5 GAGE — RESIDENTIAL 6 GAGE — SPECIAL PURPOSE	NOTE: COORDINATION WITH CITY ENGINEERING DIVISION REQUIRED		

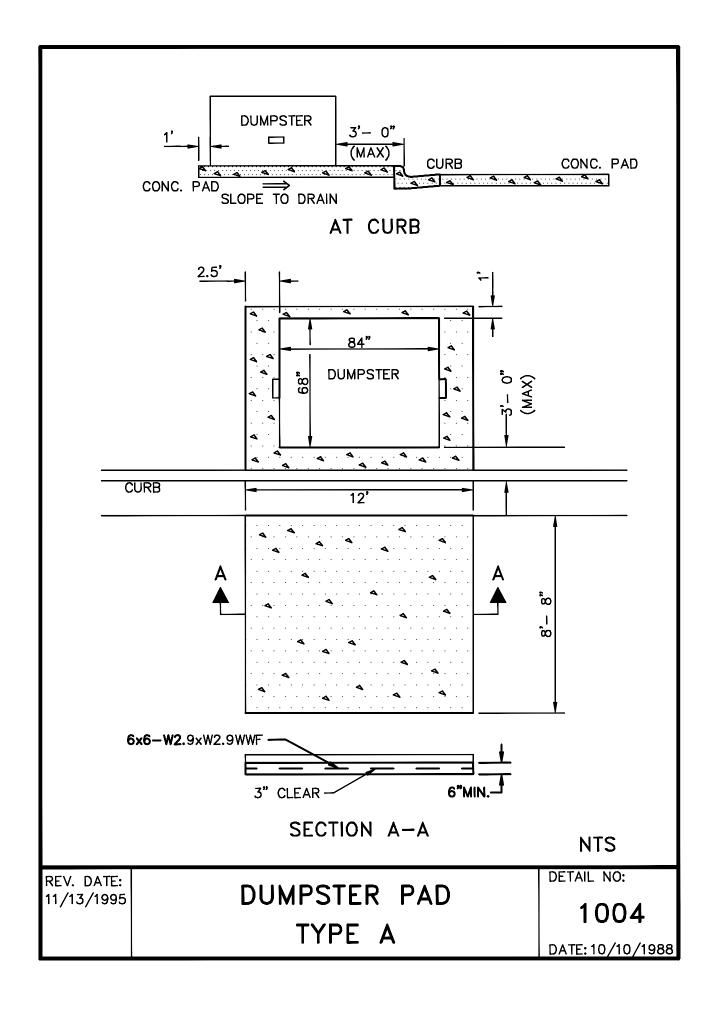
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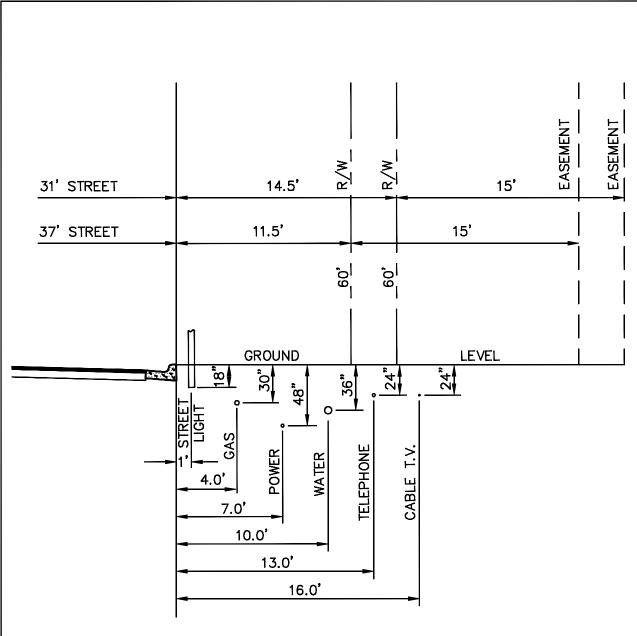
CHAIN LINK FENCE TYPE A DETAIL NO:

1002

DATE: 10/03/1988







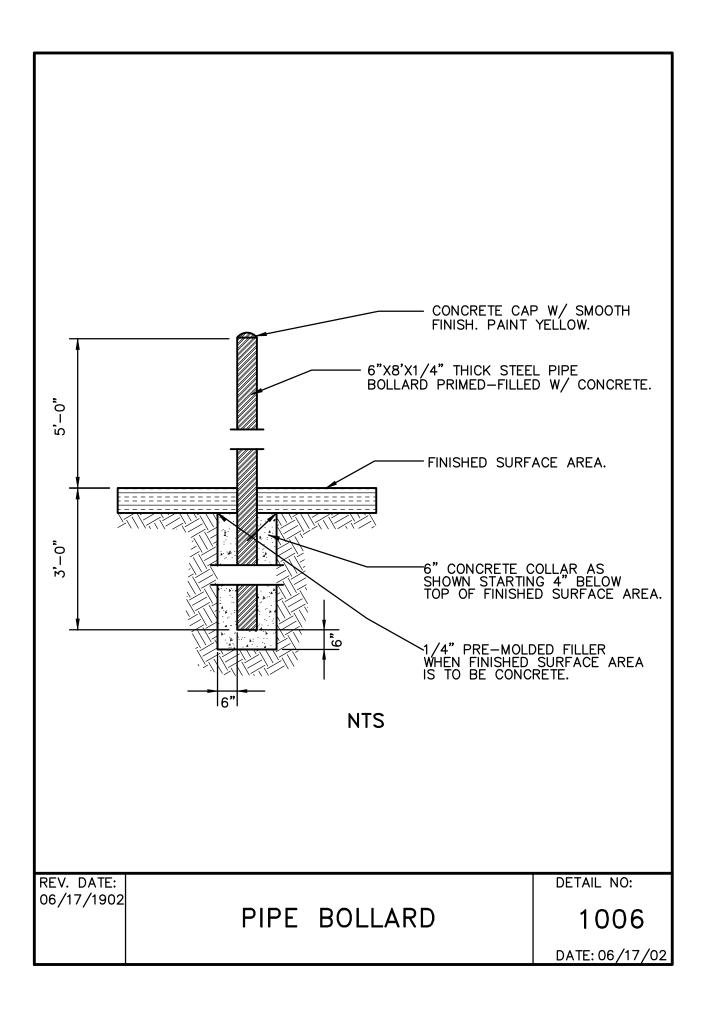
LOCATION OF UTILITIES MAY VARY AT LOCATIONS WHERE SANITARY OR STORM SEWER REQUIRES THAT POSITION.
OTHER LOCATIONS WILL BE CONSIDERED BY REVIEWING AUTHORITY WHERE THIS STANDARD IS NOT FEASIBLE.

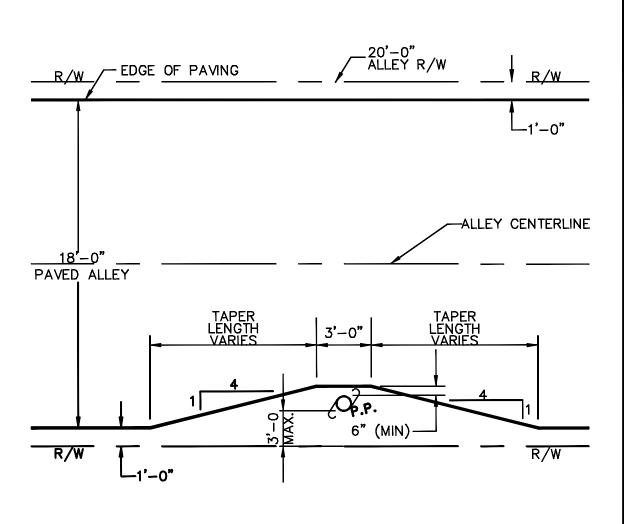
# STANDARD UTILITY LOCATIONS

DETAIL NO:

1005

**DATE:** 09/08/1988





TAPER FOR POWER POLES

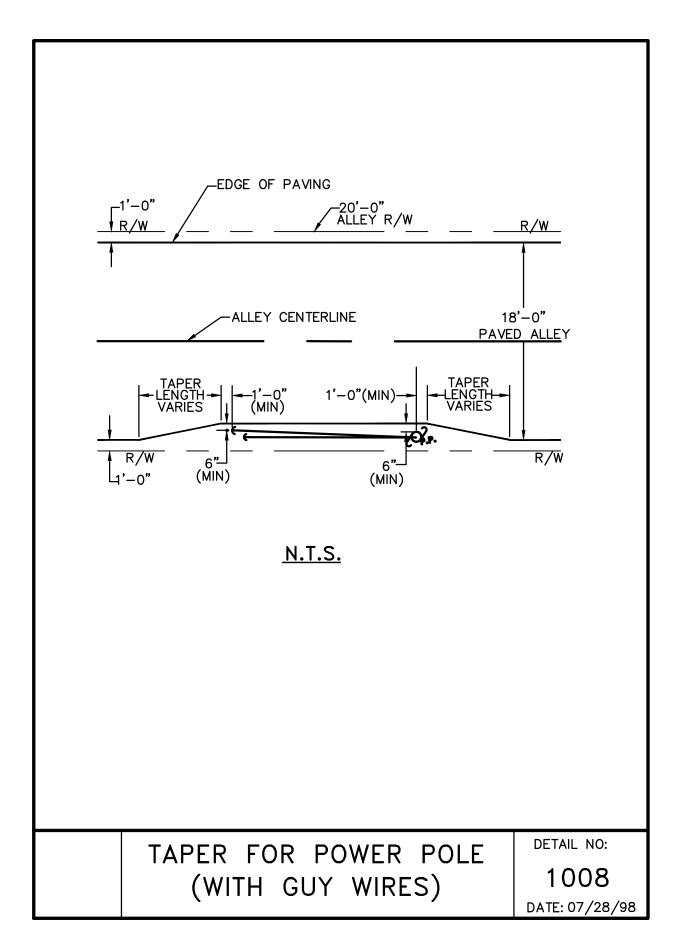
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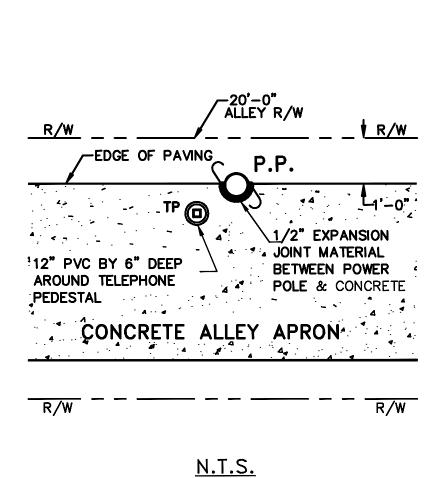
TAPER FOR POWER POLES

DETAIL NO:

1007

DATE: 07/28/98



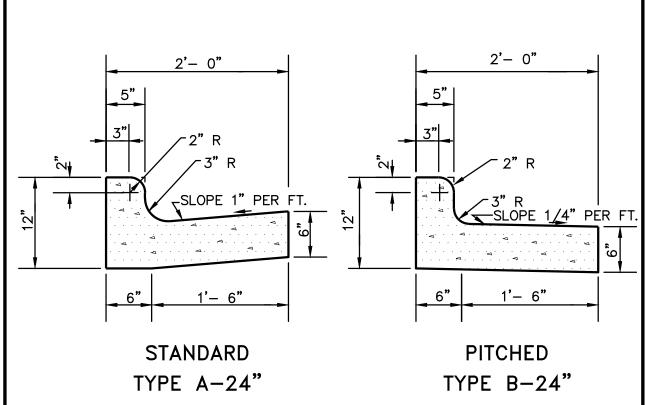


POWER POLE & TELEPHONE PEDESTAL IN CONCRETE ALLEY APRON

DETAIL NO:

1009

DATE: 07/28/98



- 1. PITCHED GUTTER TO BE USED IN ALL CASES WHERE PAVEMENT IS SLOPED AWAY FROM CURB.
- 2. ALL CURB AND GUTTER TO BE 3000 PSI CONCRETE.
- 3. CURB AND GUTTER TO BE CONSTRUCTED IN 10 FOOT LENGTHS.
- 4. 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 50 FEET AT THE ENDS AND MID-POINTS OF RETURNS, AND AT ANY POINT WHERE THE NEW CURB AND GUTTER ABUT OTHER CONCRETE STRUCTURES.
- 5. 5' LONG TRANSITIONS SHALL BE PROVIDED BETWEEN NORMAL GUTTER AND PITCHED GUTTER UNLESS OTHERWISE NOTED ON THE PAVING PLANS.

CURB & GUTTER

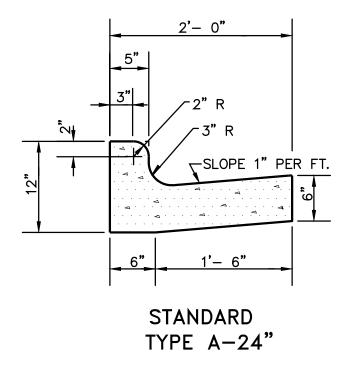
02/08/2013

TYPES A & B

DETAIL NO:

2001

DATE:09/28/1988



- 1. CURB AND GUTTER TO BE CONSTRUCTED IN 10 FOOT LENGTHS.
- 2. ALL CURB AND GUTTER TO BE 3000 PSI CONCRETE.
- 3. 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 100 FEET AT THE ENDS AND MID-POINTS OF RETURNS, AND AT ANY POINT WHERE THE NEW CURB AND GUTTER ABUT OTHER CONCRETE STRUCTURES.

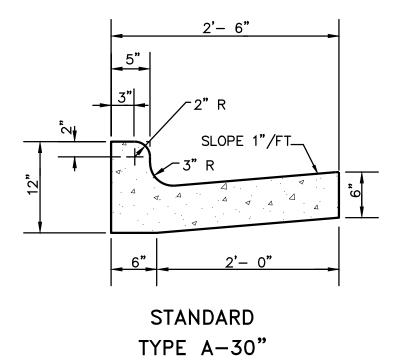
REVISED: 02/08/2013

CURB & GUTTER
TYPE A

DETAIL NO:

2001A

DATE: 09/28/1988



- 1. CURB AND GUTTER TO BE CONSTRUCTED IN 10 FOOT LENGTHS.
- 2. ALL CURB AND GUTTER TO BE 3000 PSI CONCRETE.
- 3. 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 100 FEET AT THE ENDS AND MID-POINTS OF RETURNS, AND AT ANY POINT WHERE THE NEW CURB AND GUTTER ABUT OTHER CONCRETE STRUCTURES.

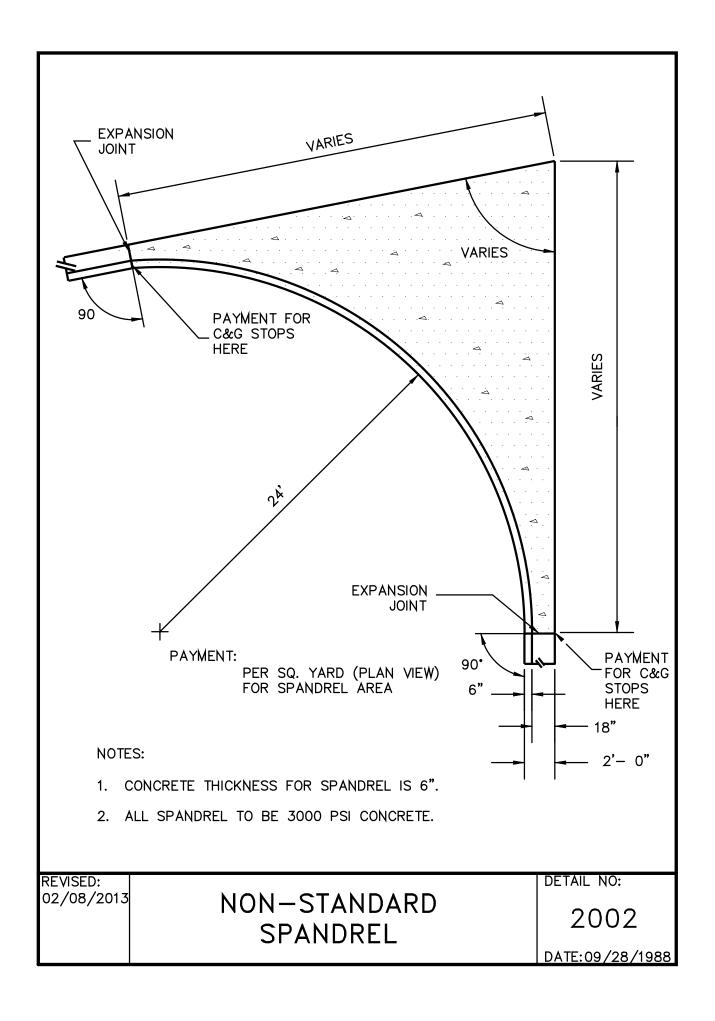
REVISED: 02/08/2013

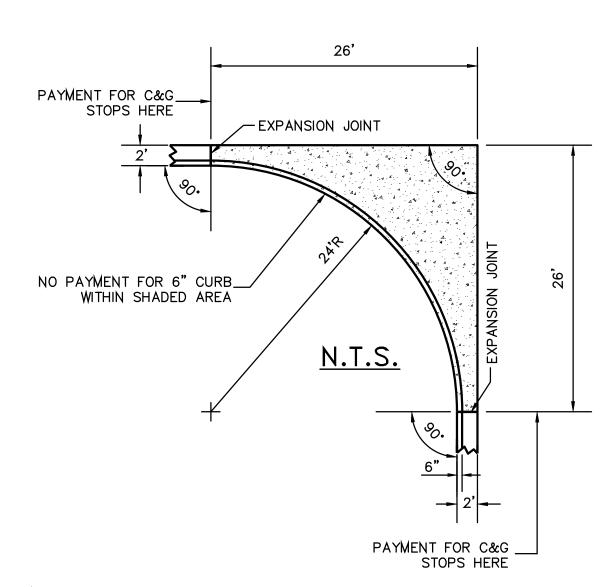
CURB & GUTTER TYPE A - 30"

DETAIL NO:

2001B

DATE: 07/18/2005





- 1. CONCRETE THICKNESS FOR SPANDREL IS 6".
- 2. ALL SPANDREL TO BE 3000 PSI.
- 3. PAYMENT FOR SPANDREL AREA IS PER SQ. YARD.

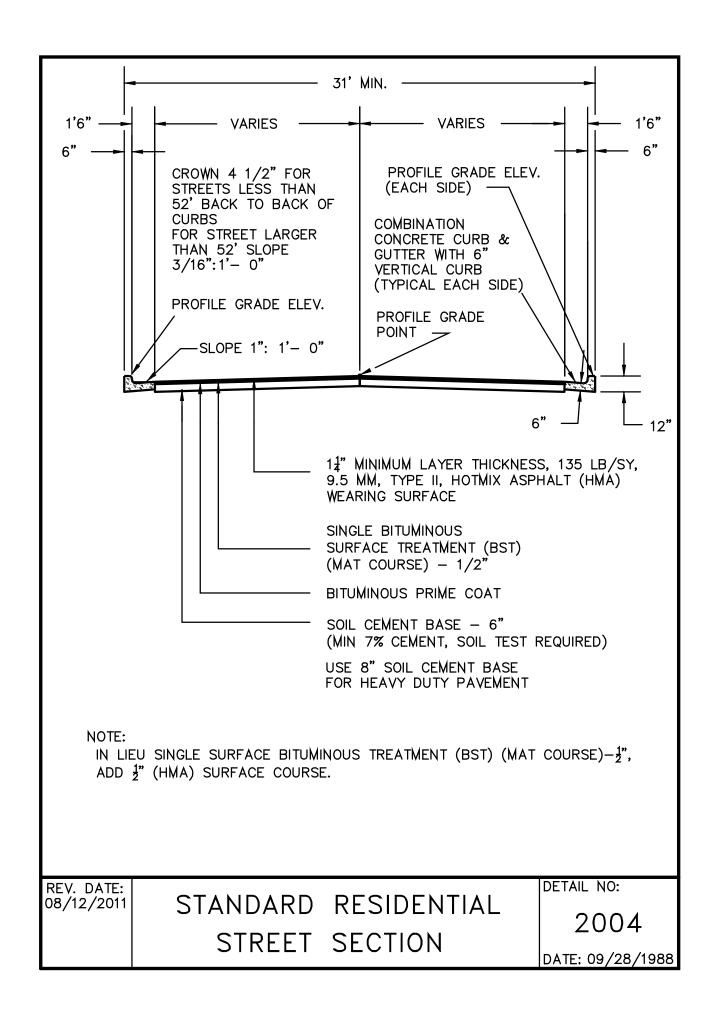
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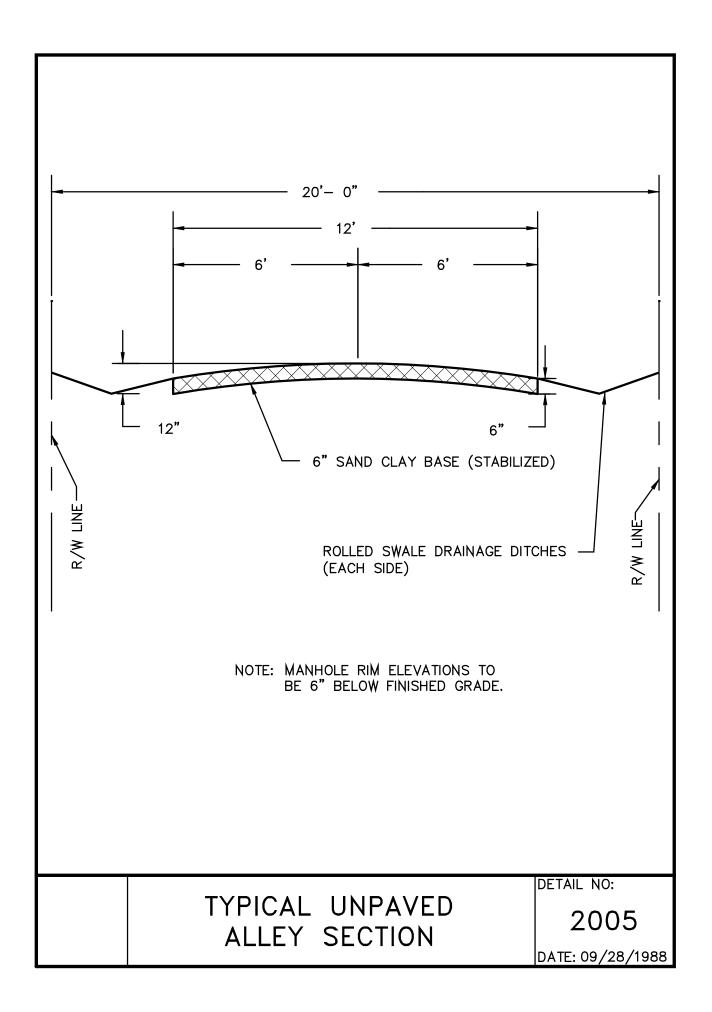
STANDARD SPANDREL

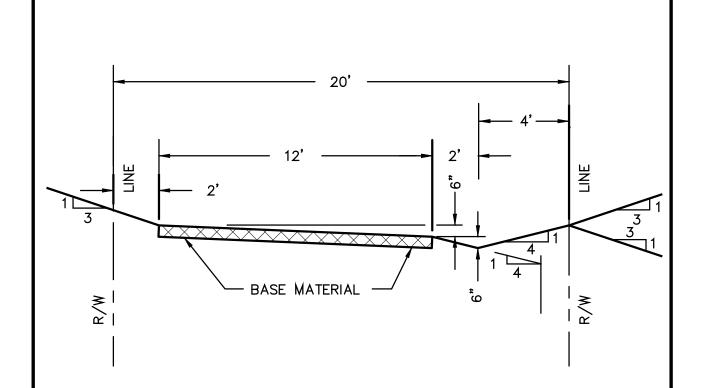
DETAIL NO:

2002A

DATE: 10/27/2008







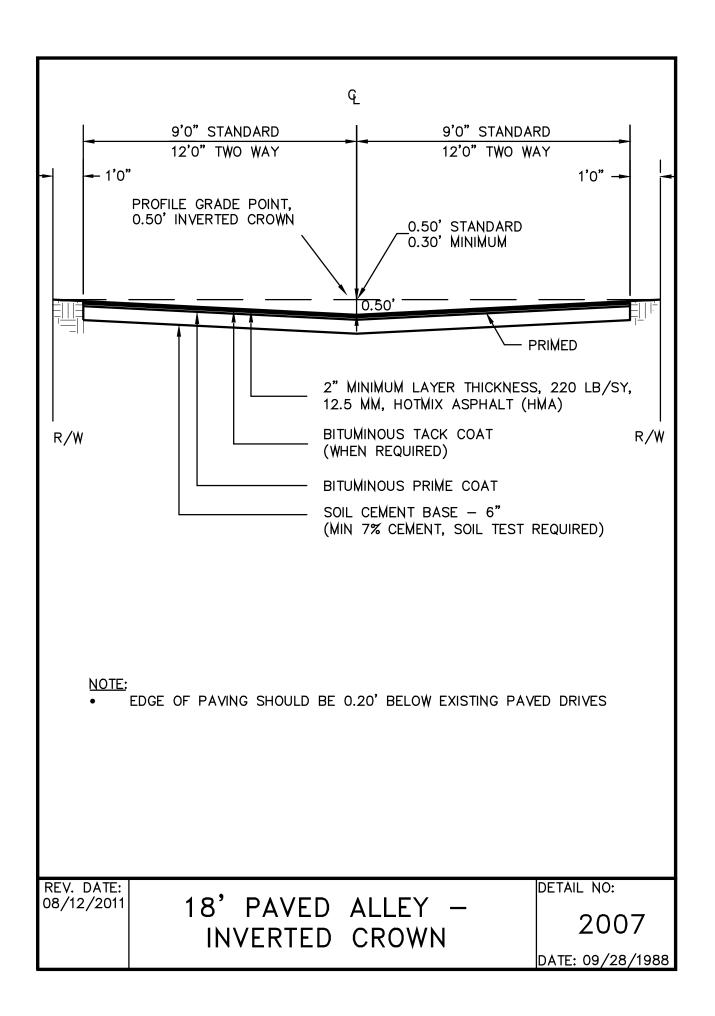
- 1. SPECIAL APPROVAL REQUIRED MANHOLE.
- 2. RIM ELEVATIONS TO BE 6" BELOW FINISHED ALLEY GRADE.

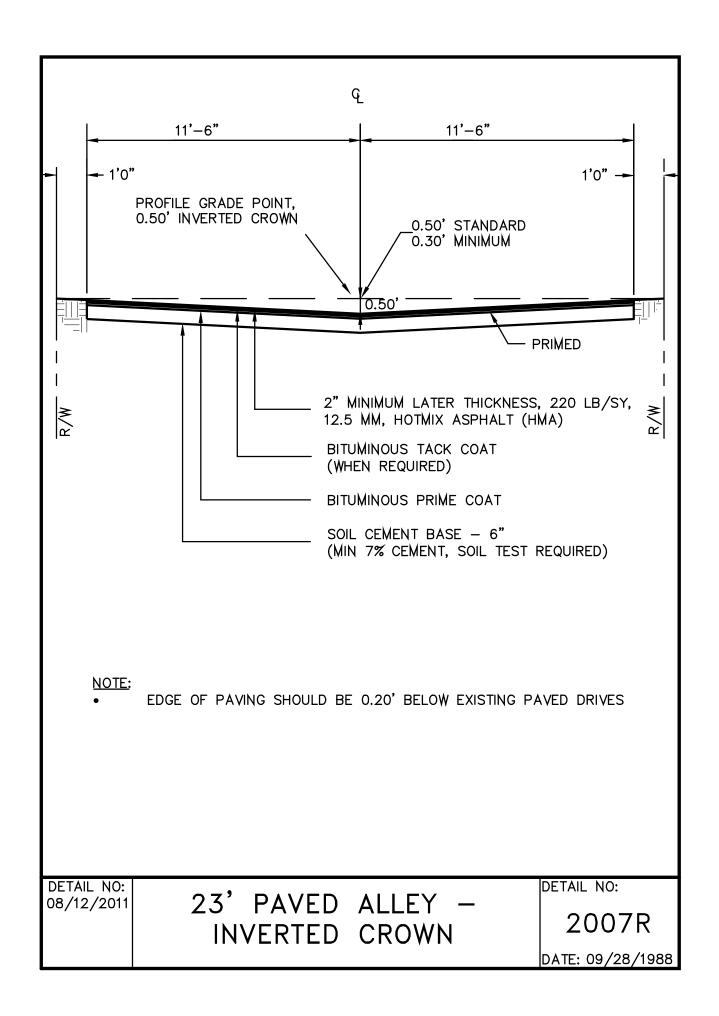
SLOPED UNPAVED ALLEY SECTION

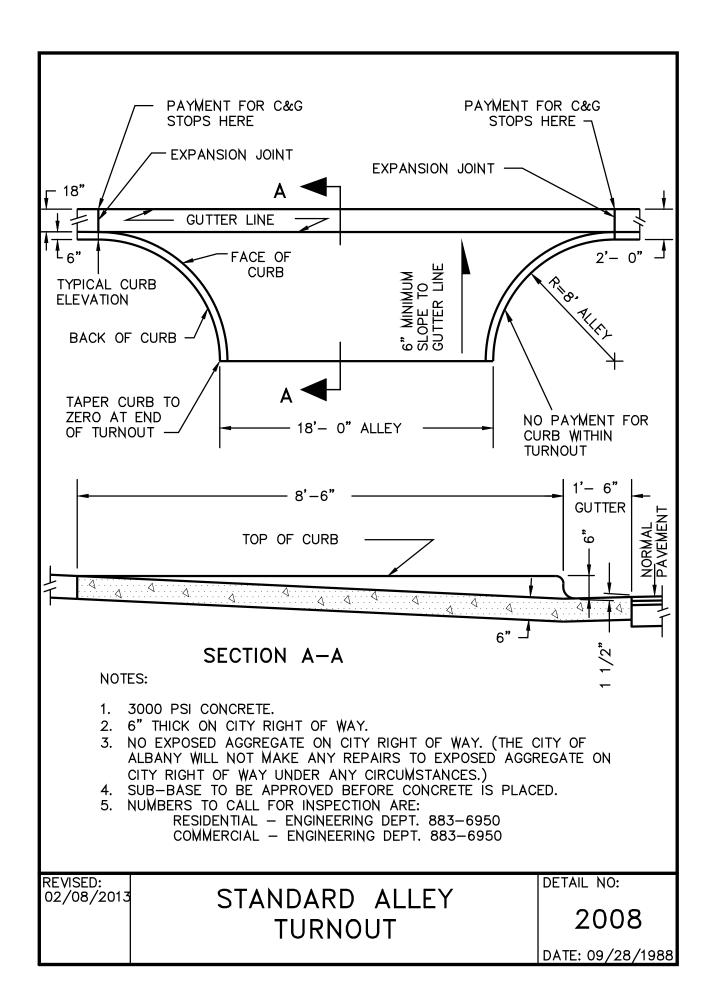
DETAIL NO:

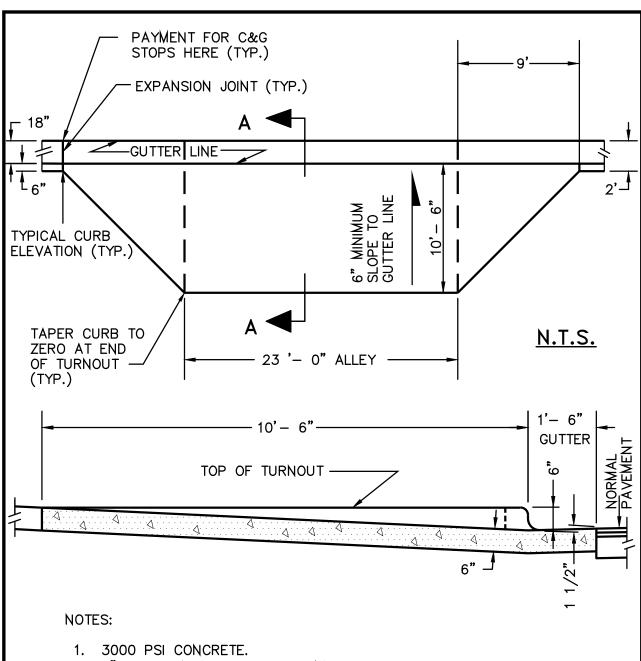
2006

DATE: 09/28/1988









- 2. 6" THICK ON CITY RIGHT OF WAY.
- 3. NO EXPOSED AGGREGATE ON CITY RIGHT OF WAY. (THE CITY OF ALBANY WILL NOT MAKE ANY REPAIRS TO EXPOSED AGGREGATE ON CITY RIGHT OF WAY UNDER ANY CIRCUMSTANCES.)
- 4. SUB-BASE TO BE APPROVED BEFORE CONCRETE IS PLACED.
- 5. NUMBERS TO CALL FOR INSPECTION ARE:

RESIDENTIAL - ENGINEERING DEPT. 883-6955 COMMERCIAL - ENGINEERING DEPT. 883-6955

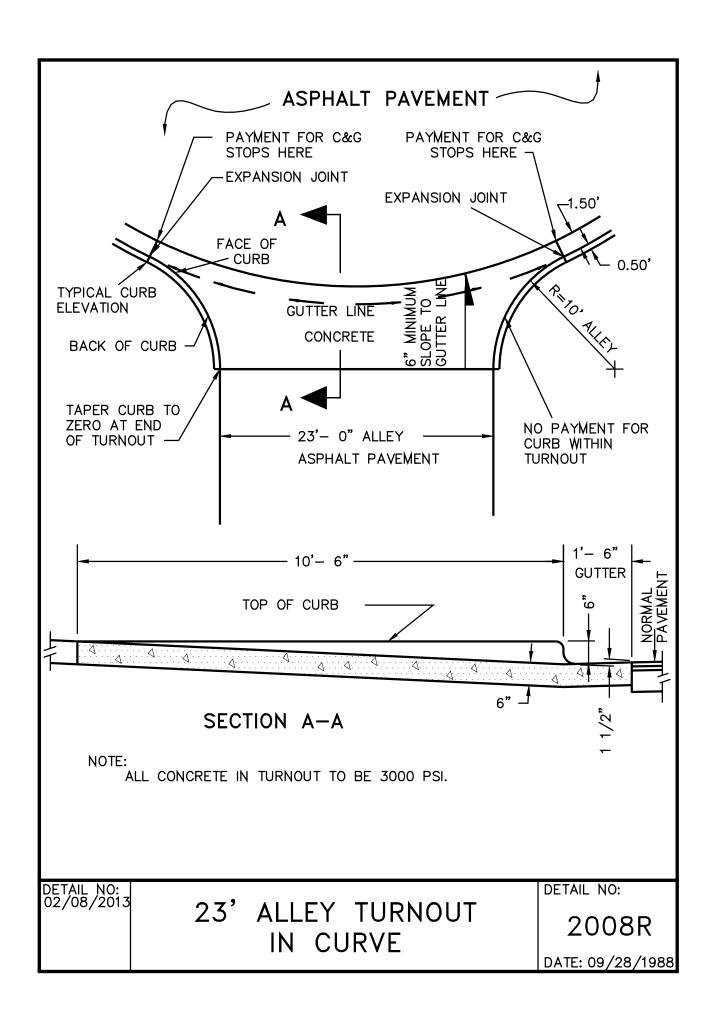
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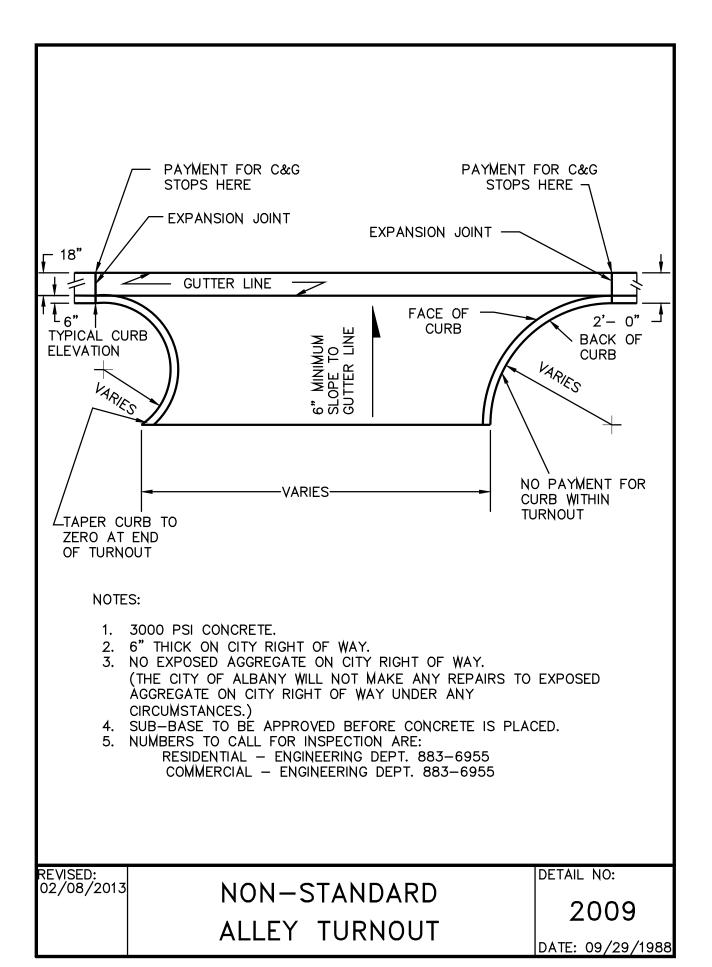
FLARED 23' ALLEY TURNOUT

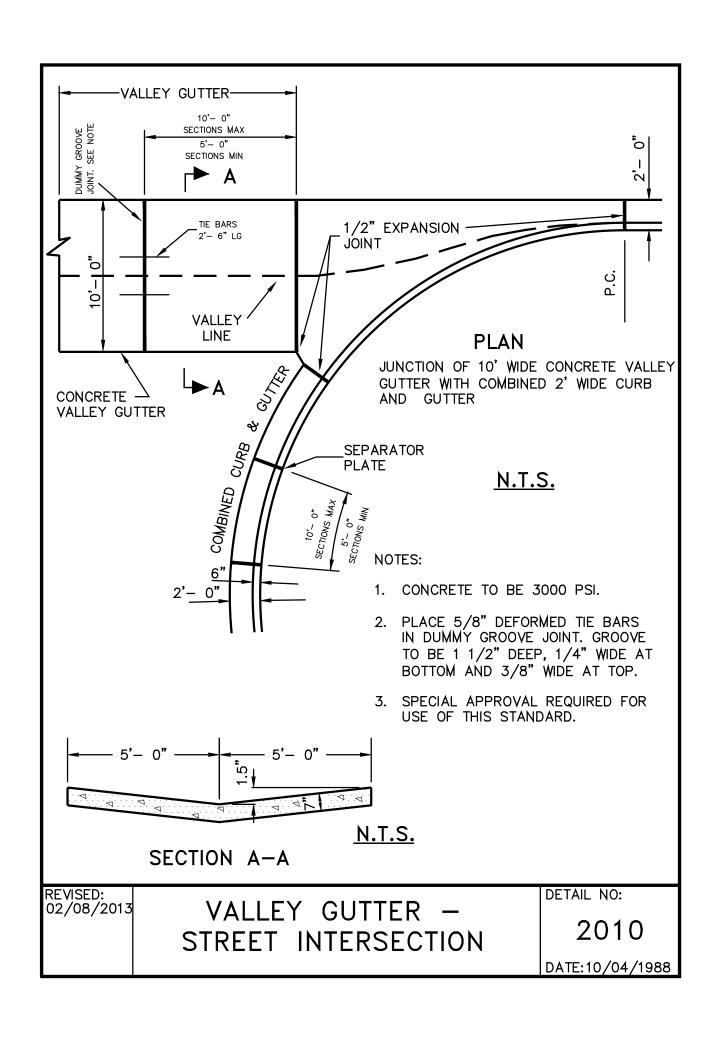
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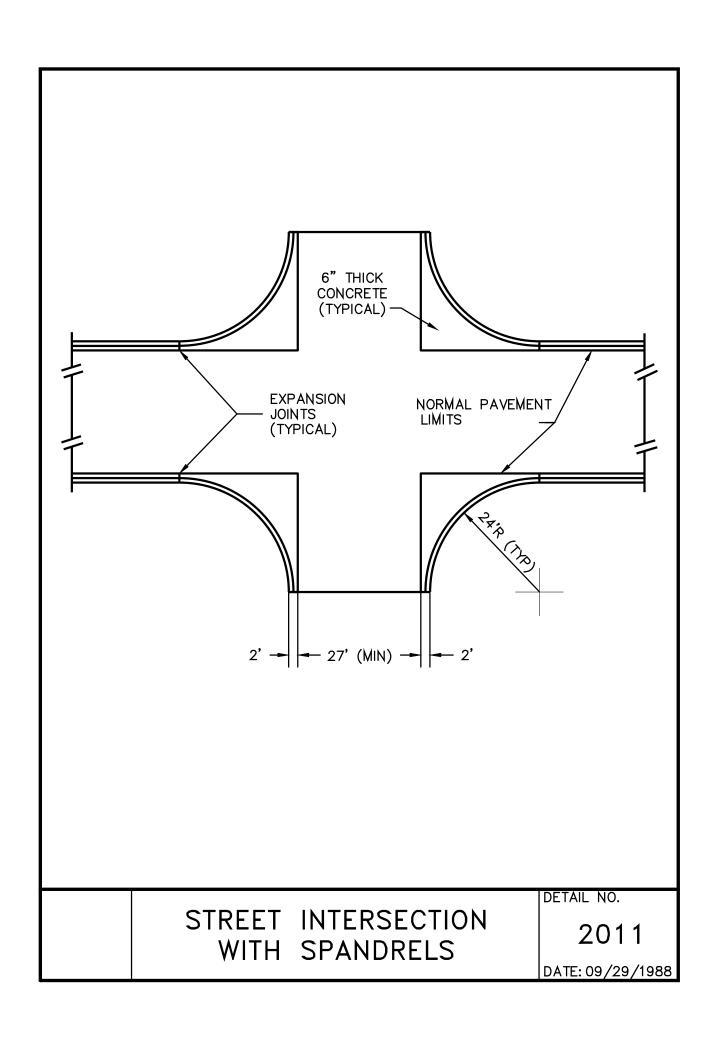
2008A

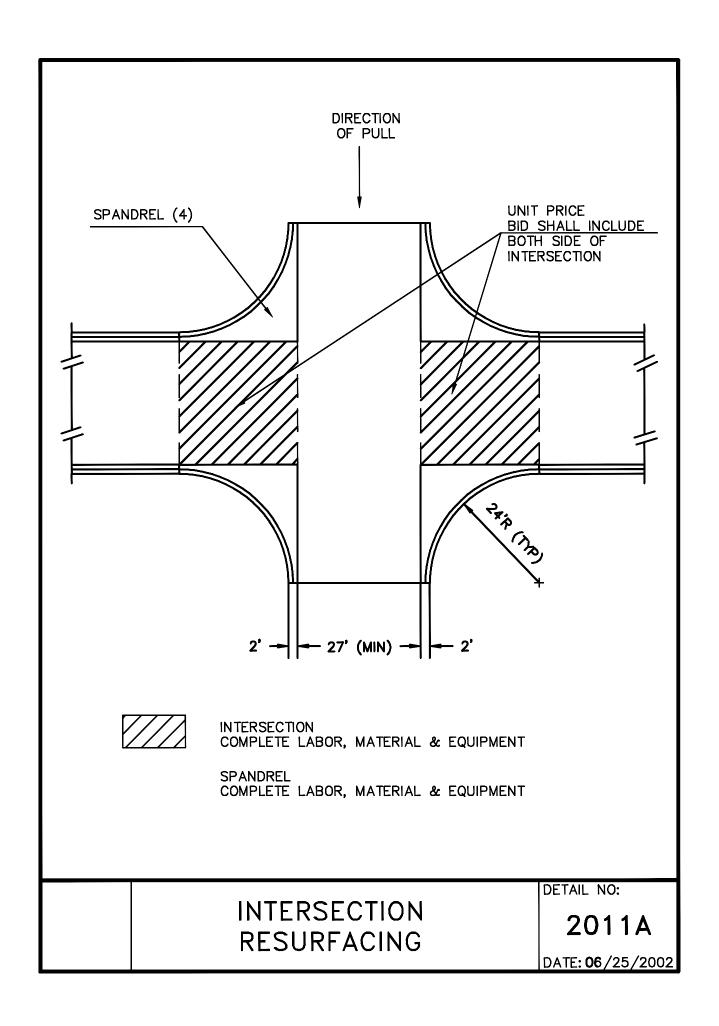
DATE: 02/17/2003

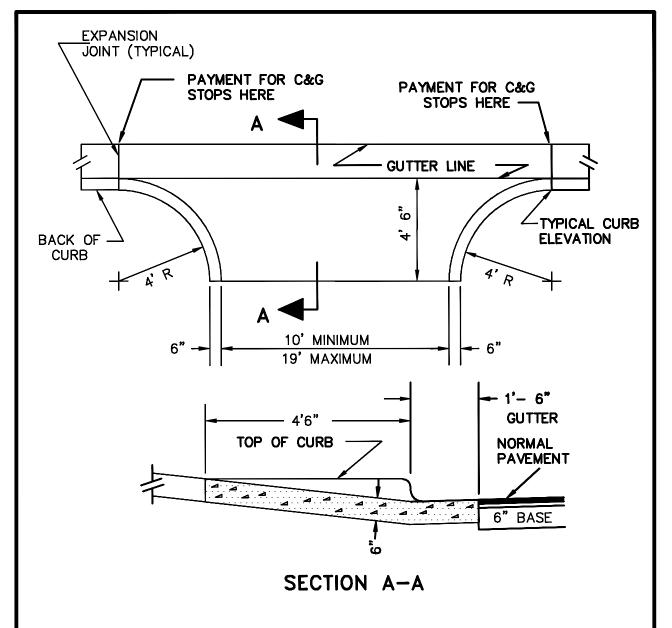












## NOTES:

- 1. 3000 PSI CONCRETE.
- 2. 6" THICK ON CITY RIGHT OF WAY.
- 3. NO EXPOSED AGGREGATE ON CITY RIGHT OF WAY. (THE CITY OF ALBANY WILL NOT MAKE ANY REPAIRS TO EXPOSED AGGREGATE ON CITY RIGHT OF WAY UNDER ANY CIRCUMSTANCES.)
- 4. SUB-BASE TO BE APPROVED BEFORE CONCRETE IS PLACED.
- 5. NUMBERS TO CALL FOR INSPECTION ARE:

RESIDENTIAL - ENGINEERING DEPT. 883-6955 COMMERCIAL - ENGINEERING DEPT. 883-6955

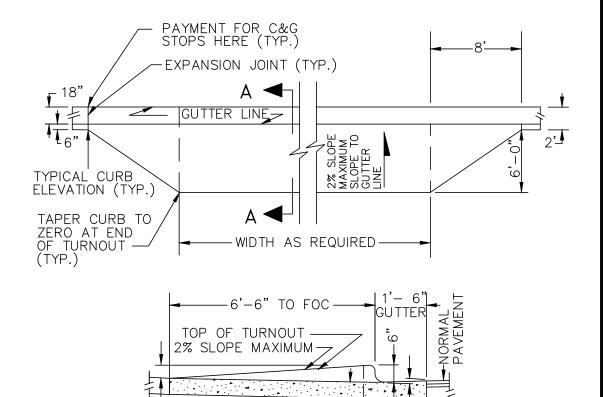
REV. DATE: 07/26/1996 02/08/2013

STANDARD RESIDENTIAL DRIVEWAY

DETAIL NO:

2012

DATE: 09/29/1988



SECTION A-A

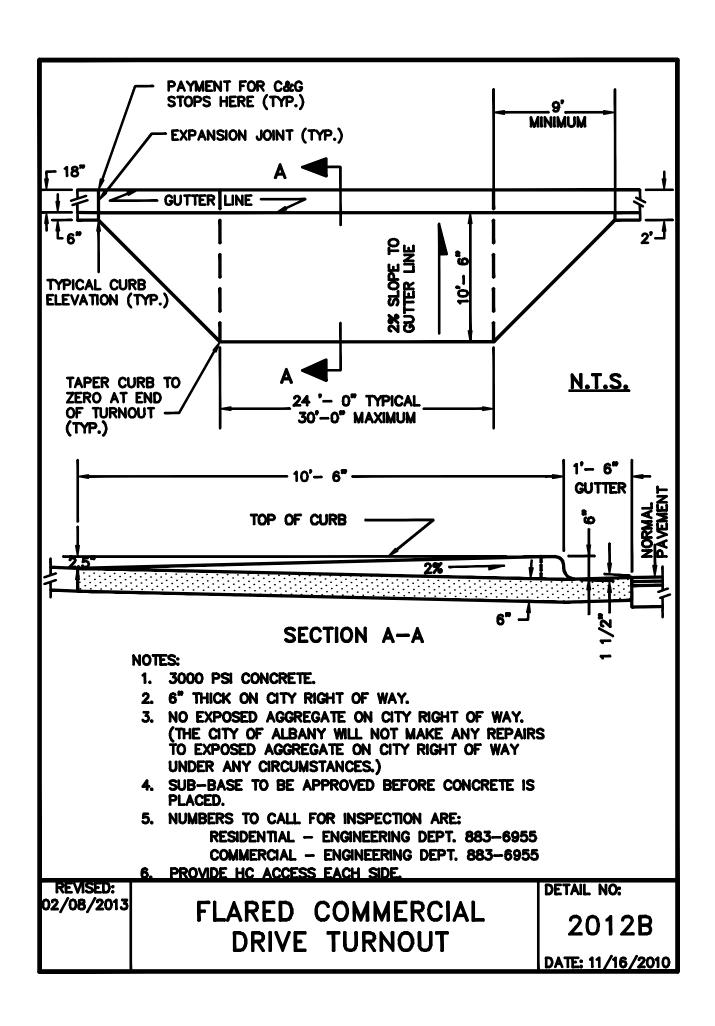
## NOTES:

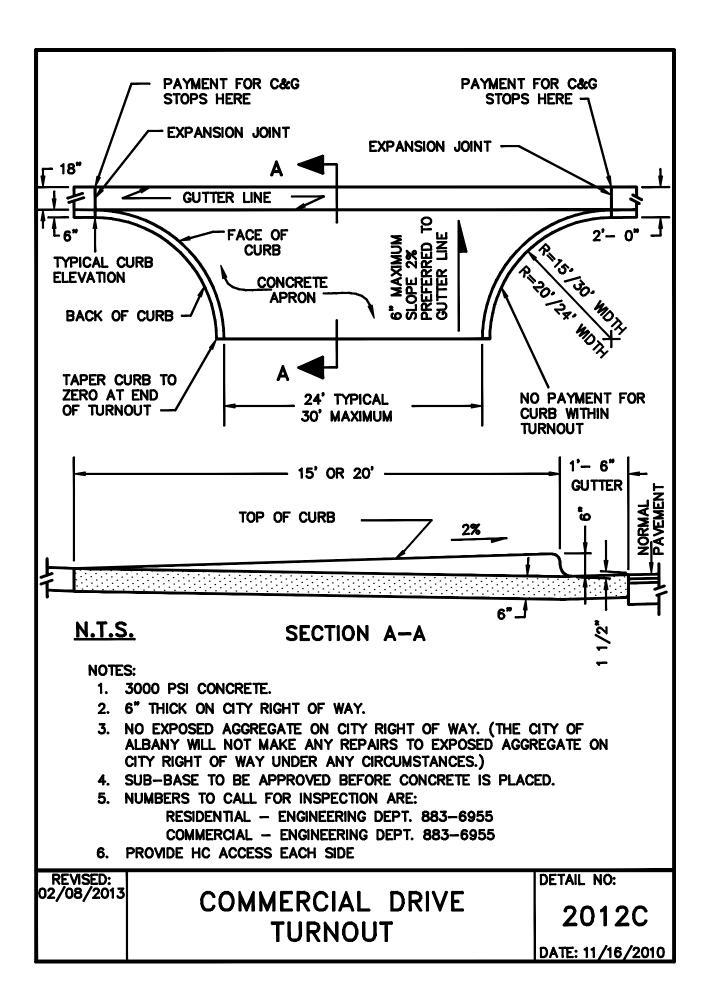
- 1. 3000 PSI CONCRETE.
- 2. 6" THICK ON CITY RIGHT OF WAY.
- 3. NO EXPOSED AGGREGATE ON CITY RIGHT OF WAY.

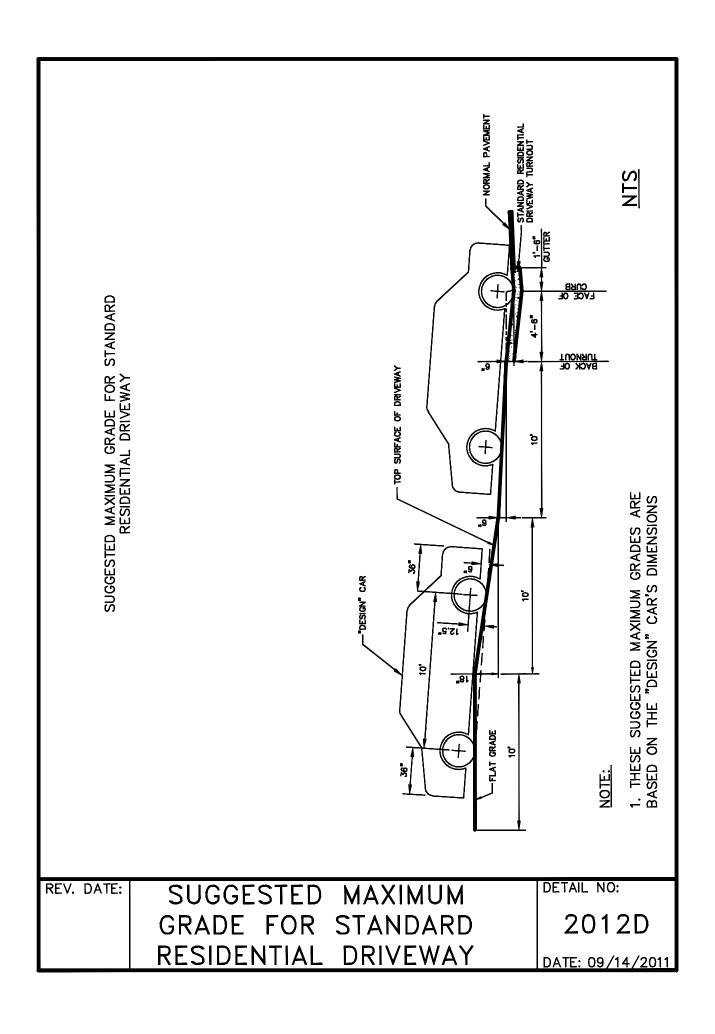
  (THE CITY OF ALBANY WILL NOT MAKE ANY REPAIRS TO EXPOSED AGGREGATE ON CITY RIGHT OF WAY UNDER ANY CIRCUMSTANCES.)
- 4. SUB-BASE TO BE APPROVED BEFORE CONCRETE IS PLACED.
- 5. NUMBERS TO CALL FOR INSPECTION ARE:

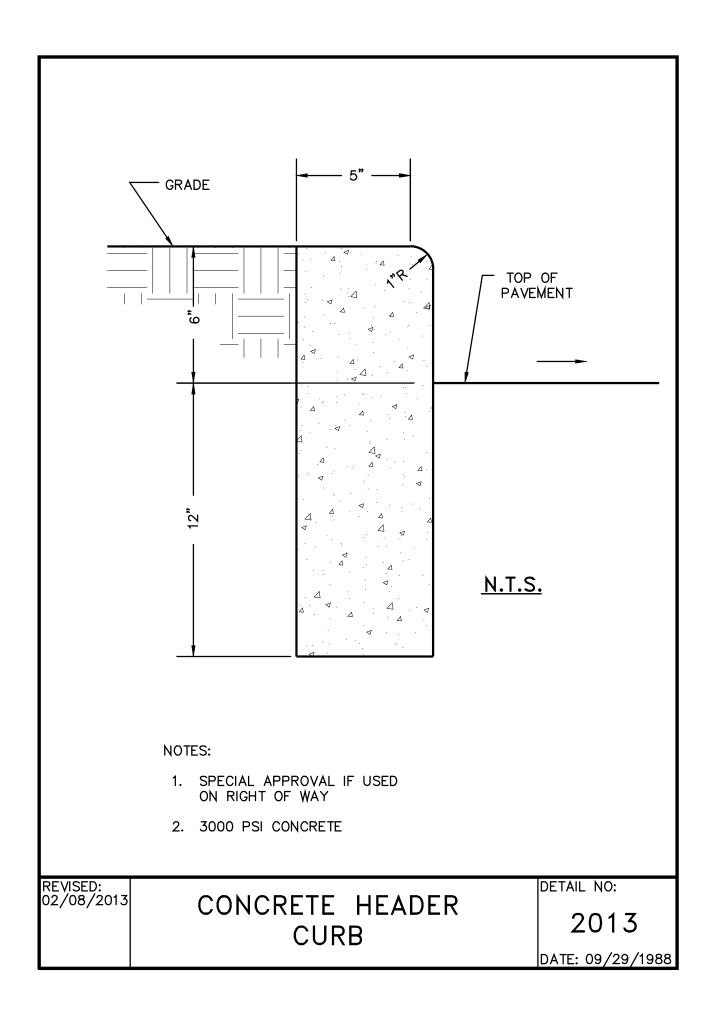
RESIDENTIAL - ENGINEERING DEPT. 883-6955 COMMERCIAL - ENGINEERING DEPT. 883-6955

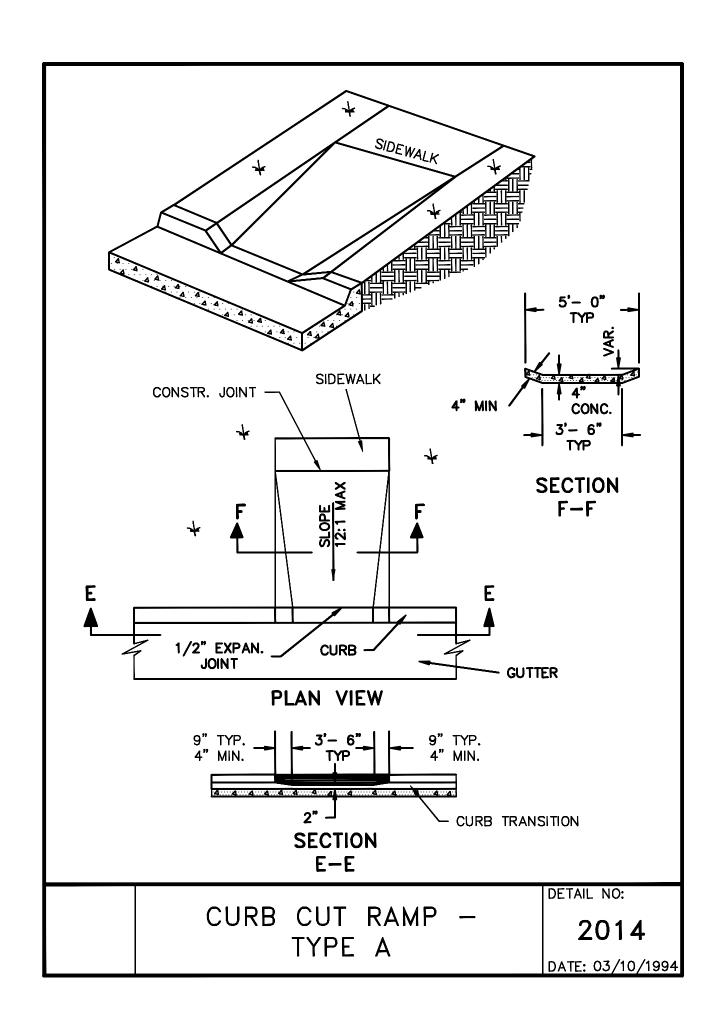
SPECIAL APPROVAL
RESIDENTIAL
DRIVEWAY
DATE: 05/10/2010

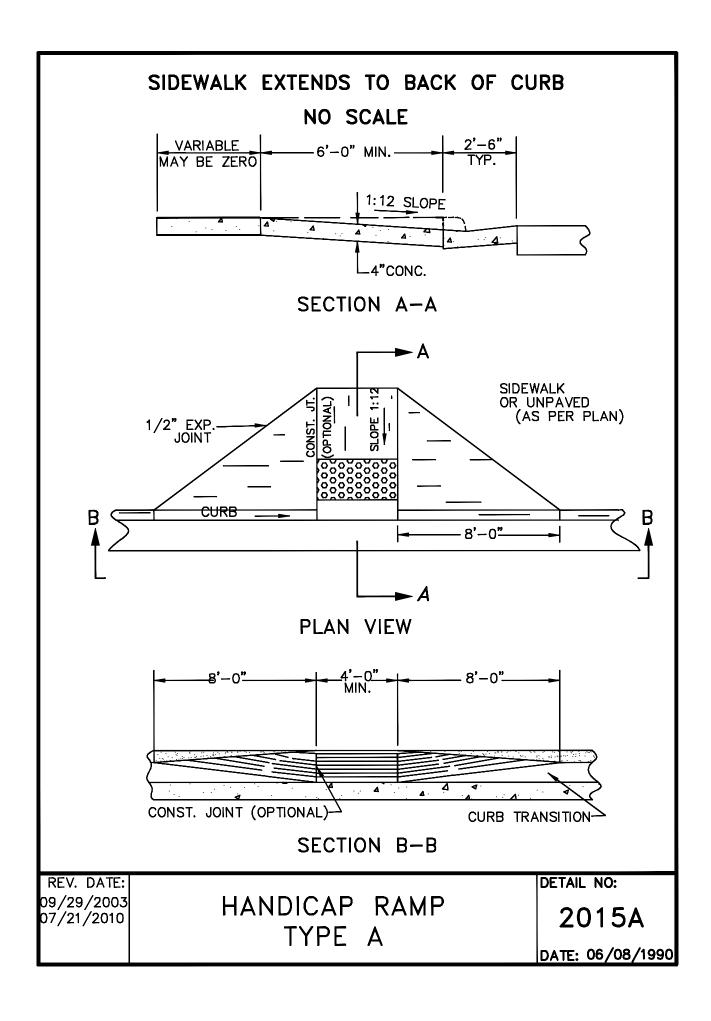


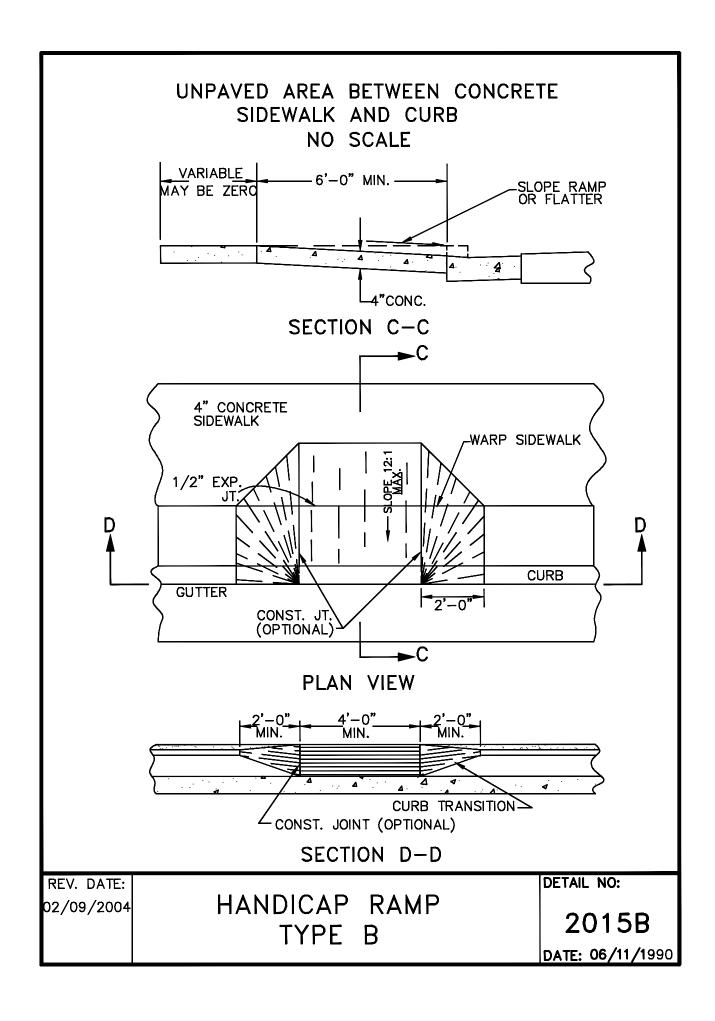


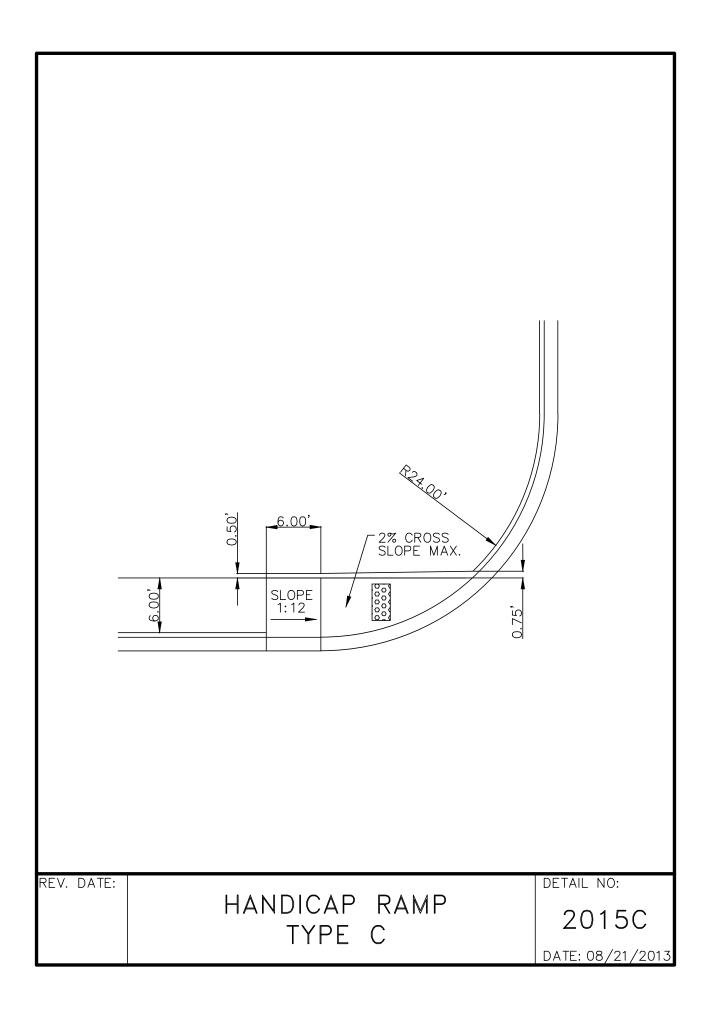


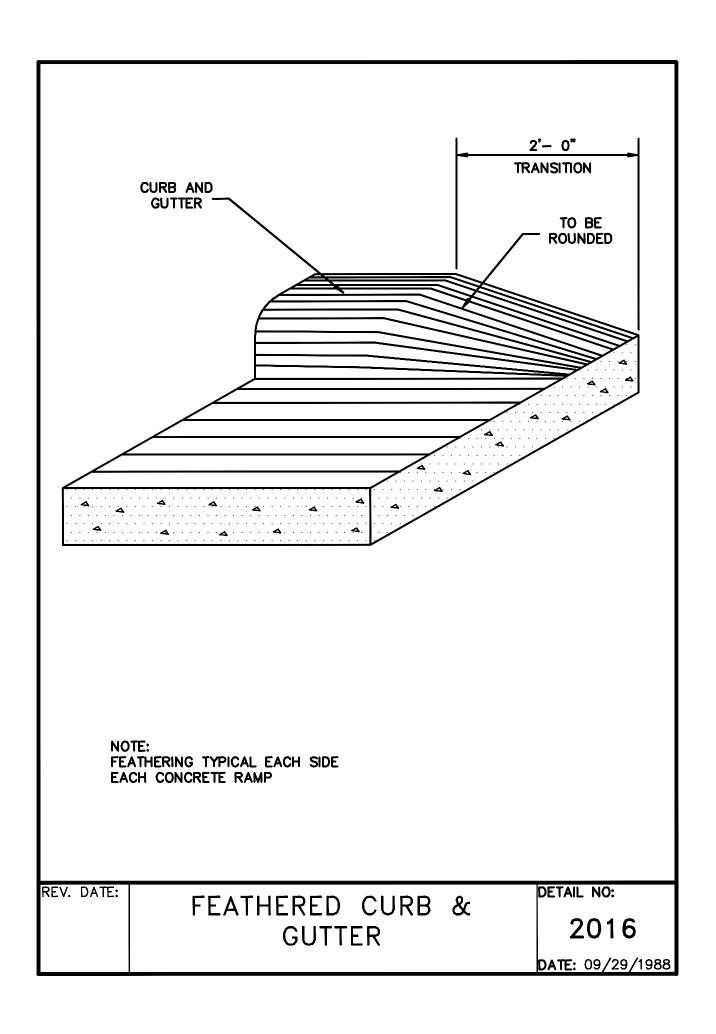


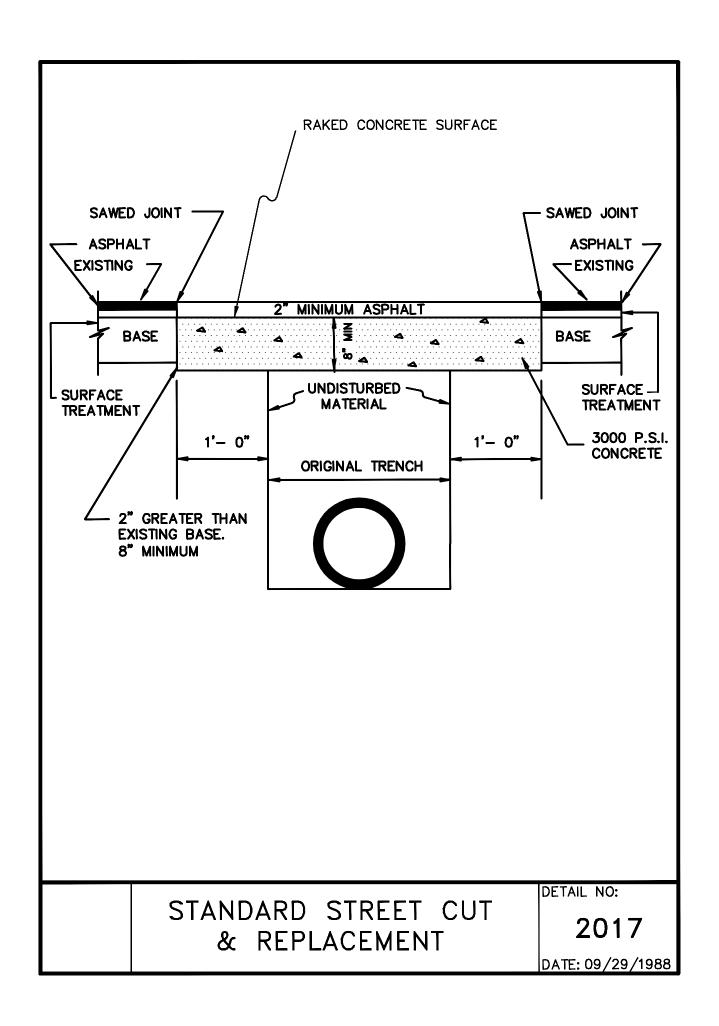


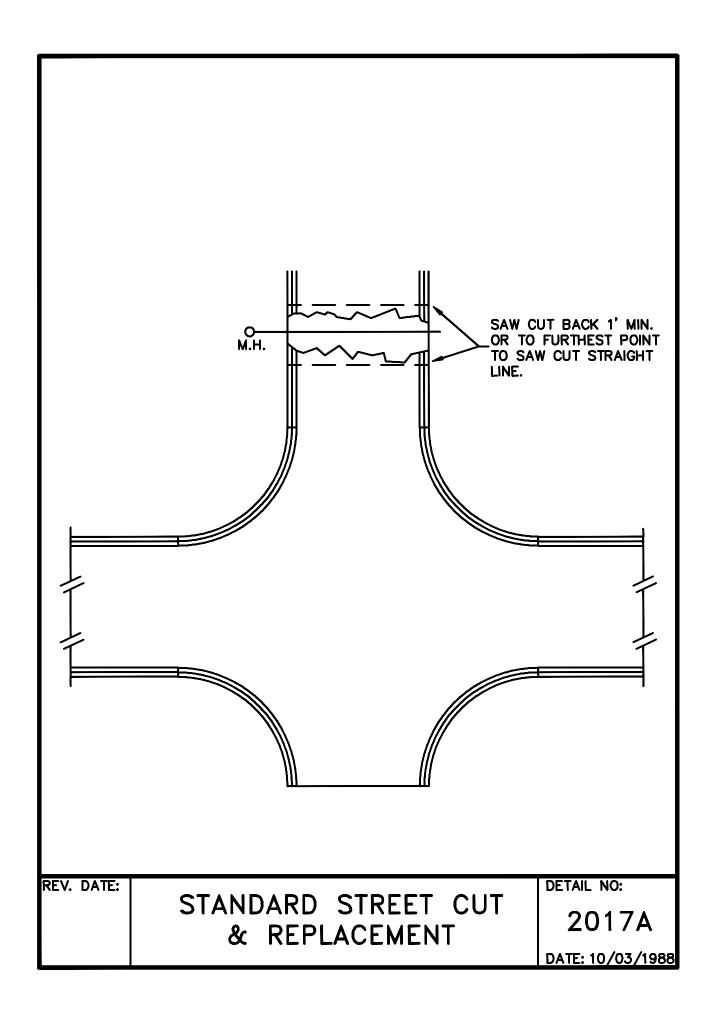


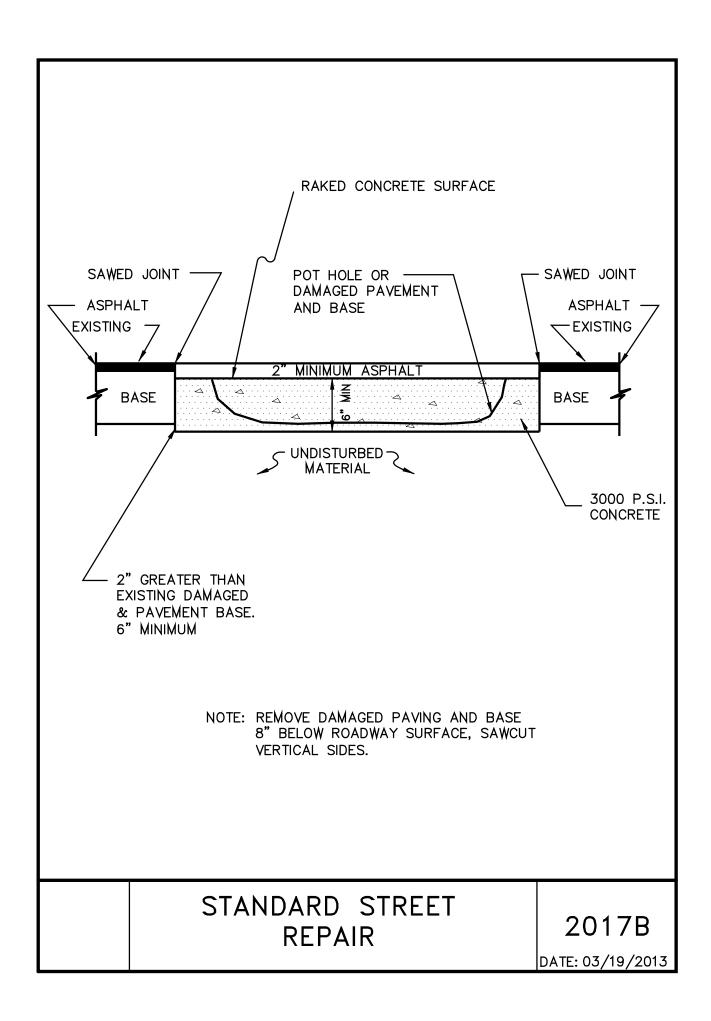


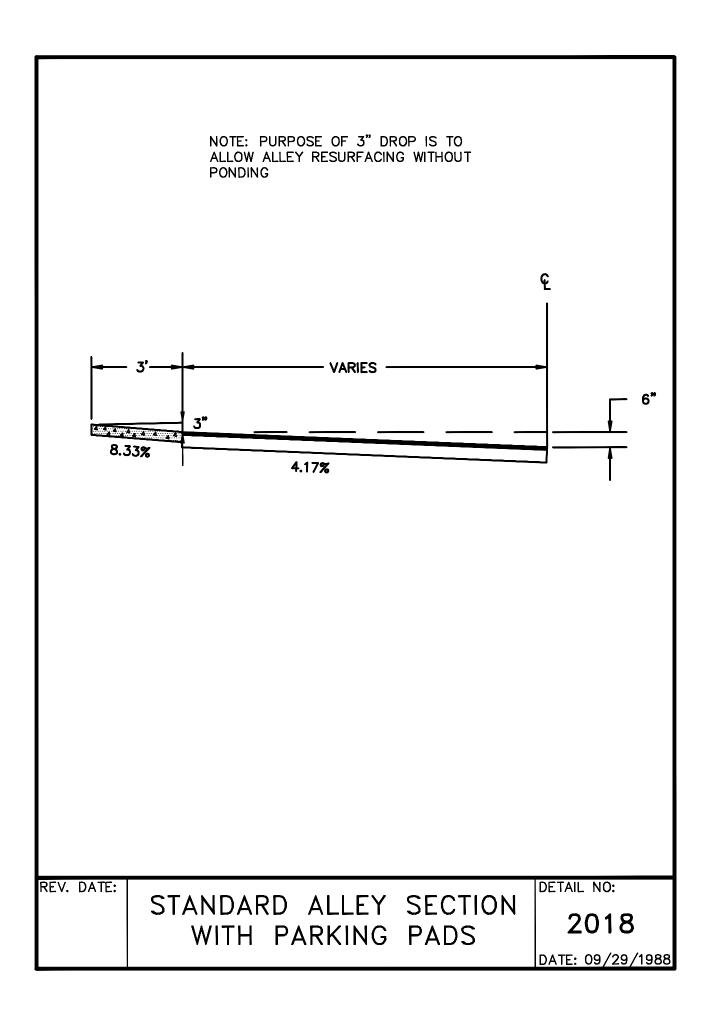


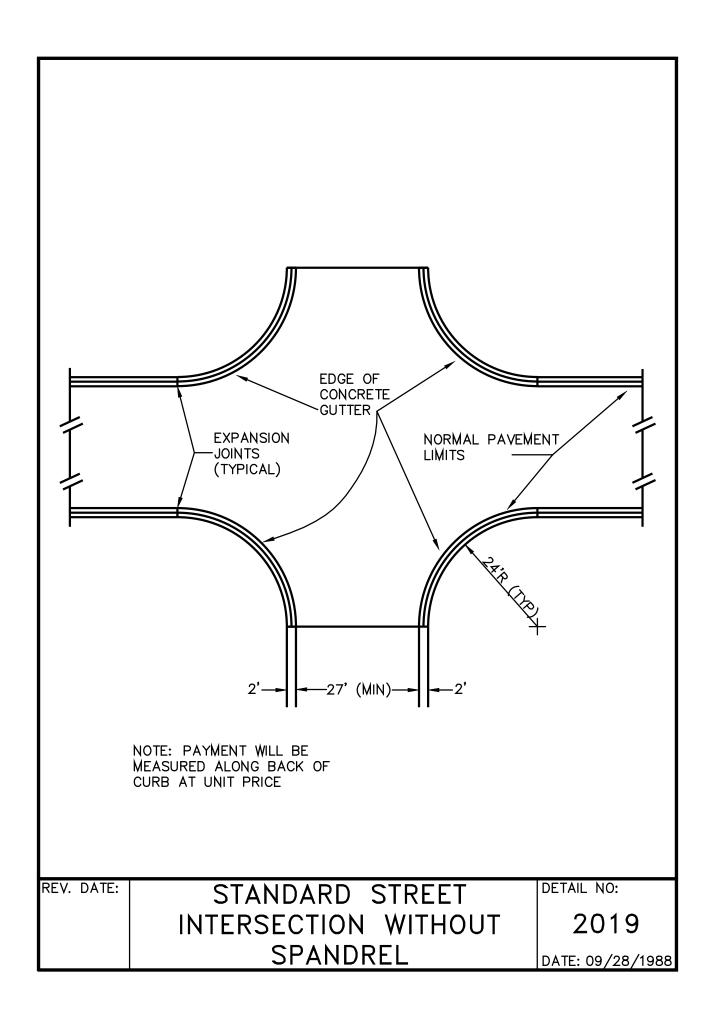


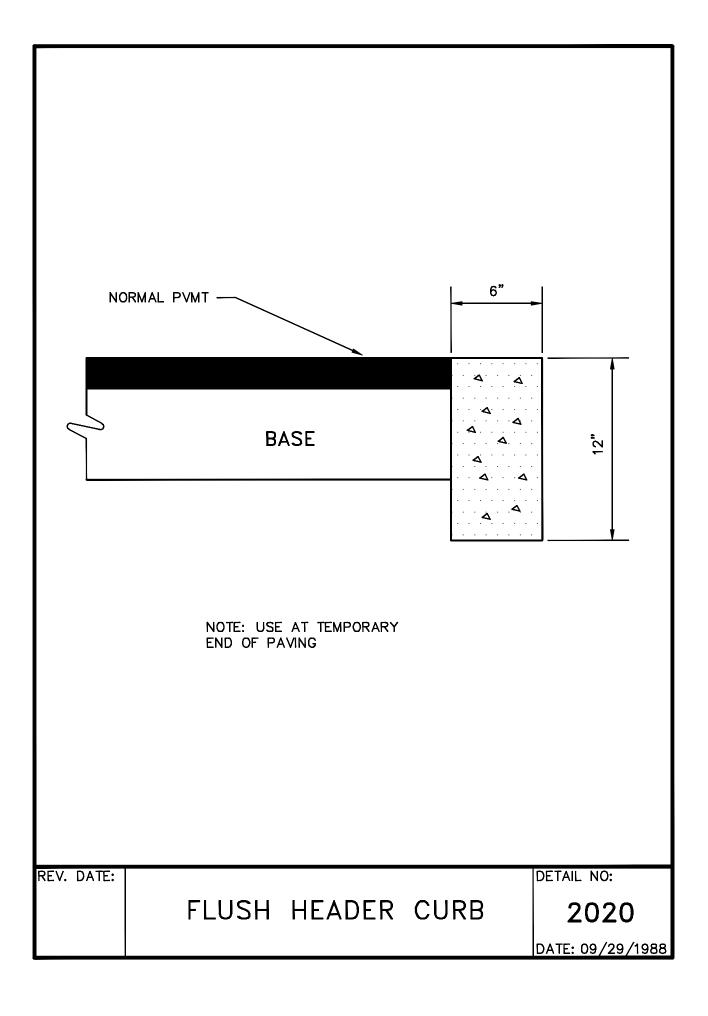


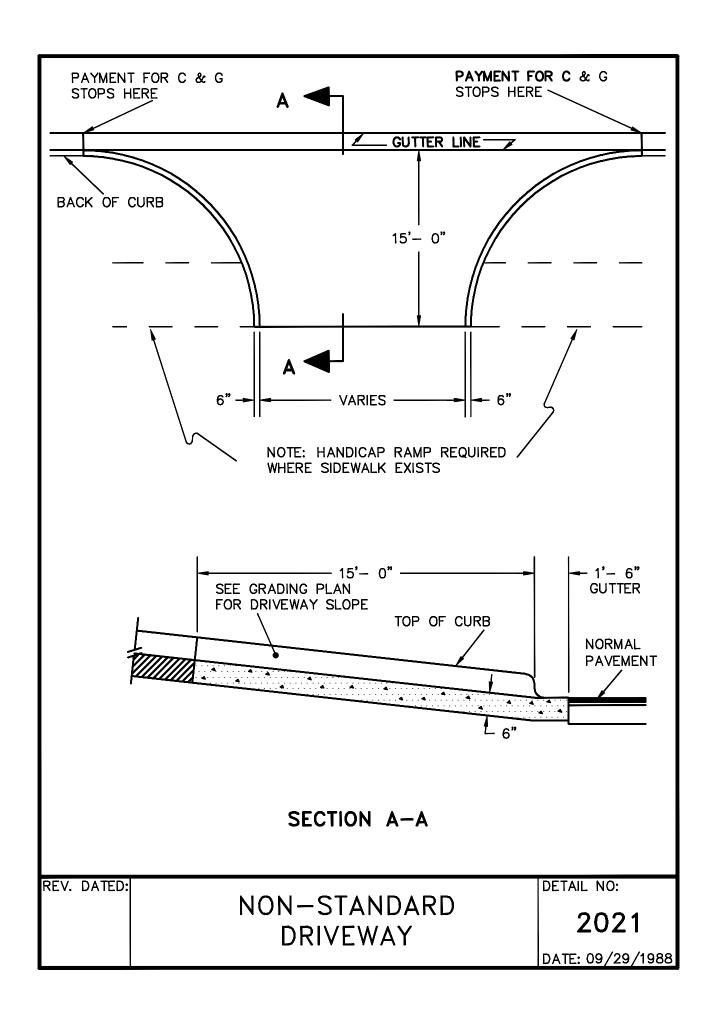


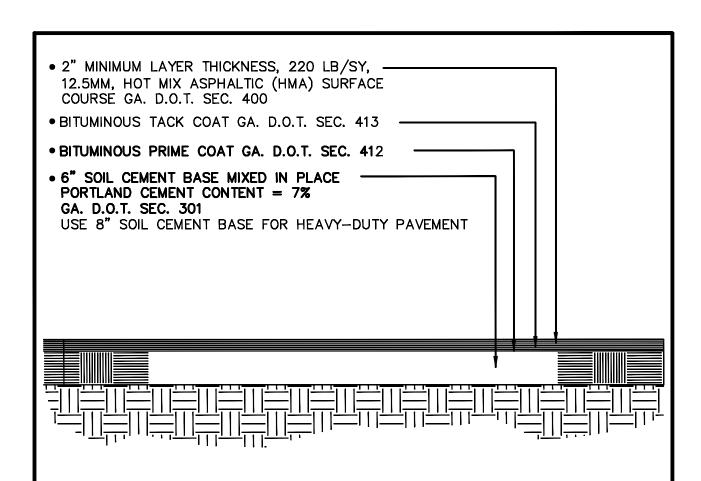












## TYPICAL PAVEMENT SECTION N.T.S.

NOTE: THIS DETAIL TO BE USED WHEN SINGLE BITUMINOUS SURFACE TREATMENT (BST) OMITTED

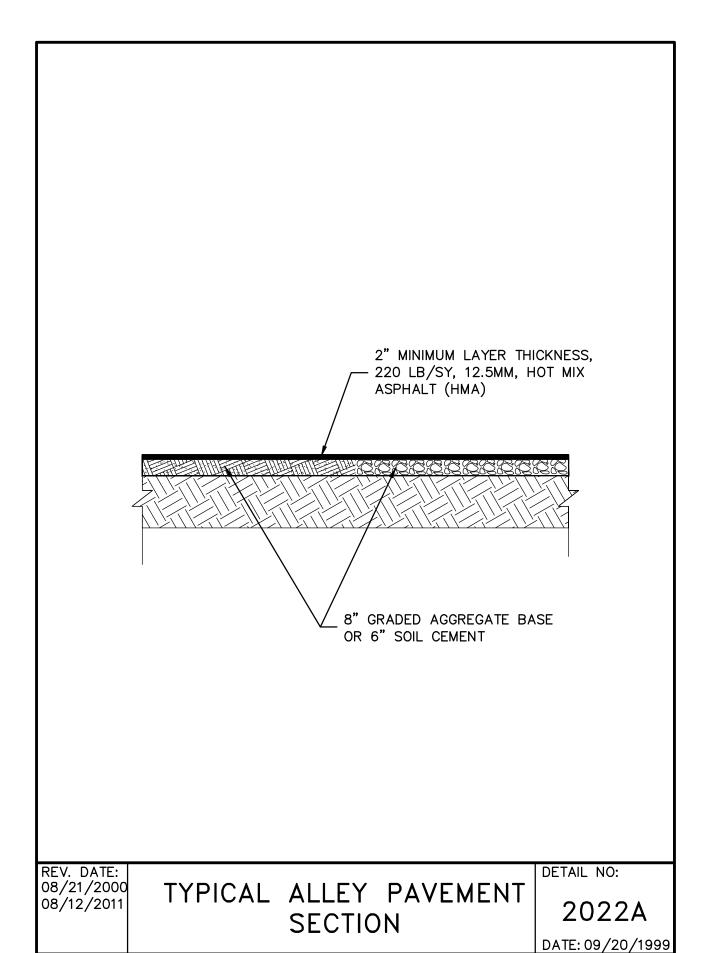
REV. DATE: 03/15/2004 8/12/2011

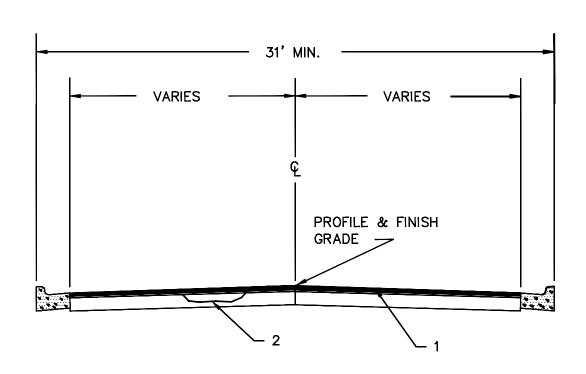
TYPICAL PAVEMENT SECTION

DETAIL NO.

2022

DATE: 10/10/1988





- 1.  $1\frac{1}{8}$  MINIMUM LAY THICKNESS, 125 LB/SY, 9.5 MM TYPE II, HOT MIX ASPHALT (HMA)
- 2. (HMA) HOT MIX ASPHALT LEVELING MIX TO BE PLACED AS DIRECTED BY THE STREET SUPERINTENDENT, THE CITY ENGINEER, OR THE CITY ENGINEER'S REPRESENTATIVE, SEE TABLE.

LEVELING AND PATCHING-ALL MIX TYPES			
THICKNESS (in.)	RATE OF SPREAD (lbs/yd²)	MIX TYPE	
UP TO 3/4	UP TO 85	4.75 OR 9.5-TYPE I	
¾ TO 1½	85 TO 165	9.D-TYPE II	
1½ TO 2	165 TO 220	12.5	

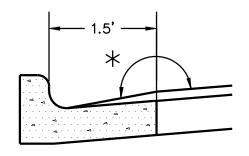
REV. DATE: 06/25/2002 08/12/2011

TYPICAL RESURFACING SECTION

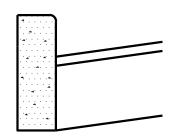
DETAIL NO:

2022B

DATE: 03/09/2001



**TYPICAL** 



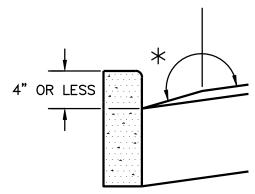
ALTERNATE "A"

DETAIL FOR FEATHERING SURFACING

\_AT CURB AND GUTTER

(RESURFACING PROJECTS ONLY)

NTS



ALTERNATE "B"

NOTE: METHOD OF FEATHERING AT PAVEMENT EDGE (ALTERNATE "A" OR ALTERNATE "B") SHALL BE DETERMINED BY THE STREET SUPERINTENDENT THE CITY ENGINEER, OR THE CITY ENGINEER'S REPRESENTATIVE. UNDER NORMAL CONDITIONS, ALTERNATE "A" SHALL BE USED FOR FEATHERING UNLESS RESURFACING HAS REDUCED THE "EFFECTIVE HEIGHT" OF THE EXISTING CURB TYPE FACILITY. IN THIS EVENT, ALTERNATE "B" SHALL BE USED.

\* NOTE: THE ALGEBRAIC DIFFERENCE BETWEEN THE NEW RIDING SURFACE AND THE FEATHERING IN THE CURB AND GUTTER SHALL NOT EXCEED 0.07 FT/FT

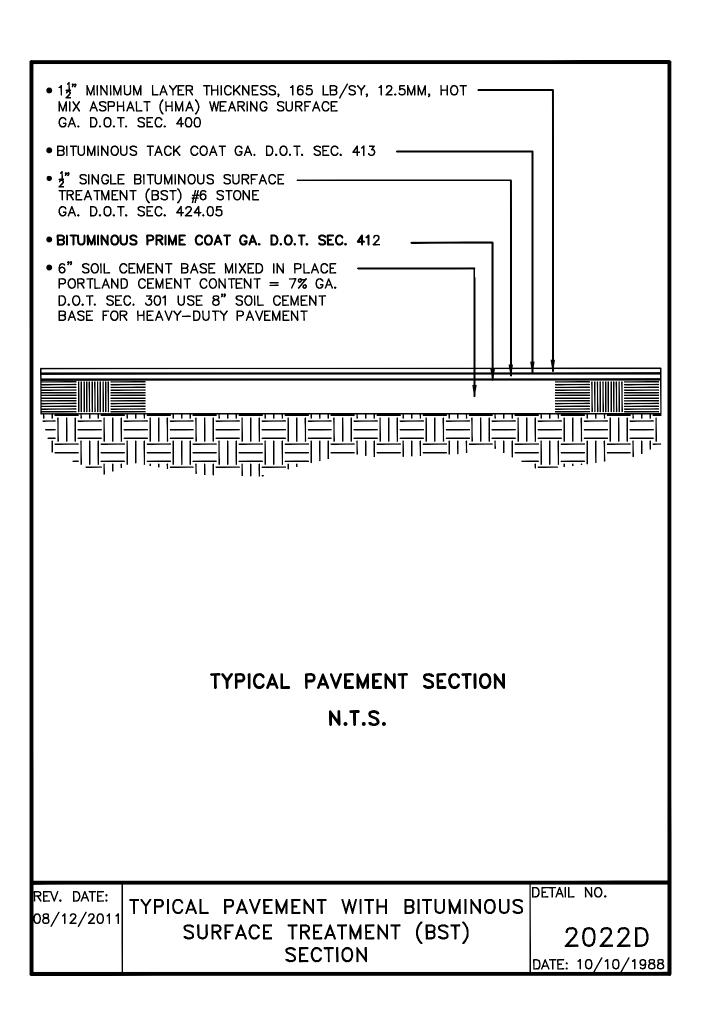
REV. DATE:

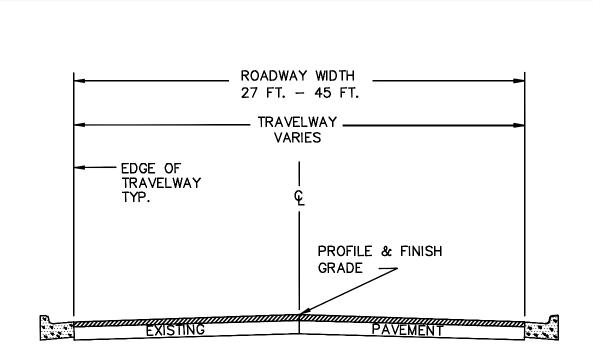
DETAIL FOR FEATHERING SURFACING AT CURB AND GUTTER (RESURFACING PROJECTS ONLY)

DETAIL NO:

2022C

DATE: 03/09/2001







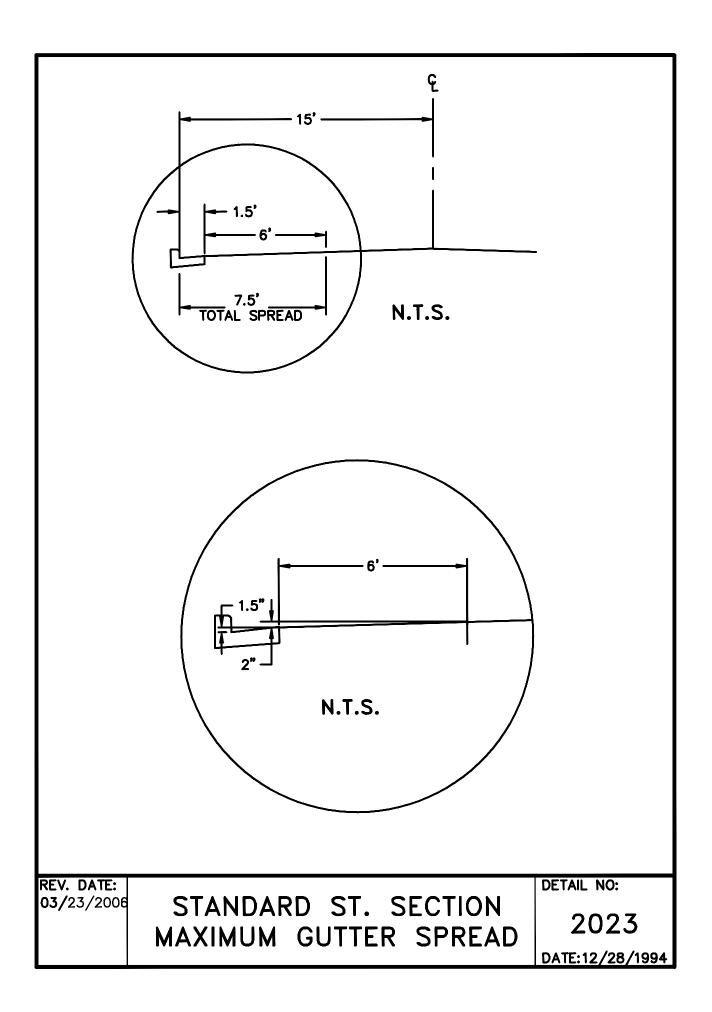
MAINTAIN EXISTING CROSS SLOPE, MILL ROADWAY FULL WIDTH VARIABLE DEPTH (1%" INCHES TYPICAL) AND AS DIRECTED BY THE ENGINEER PROVIDING A SMOOTH TRANSITION AND TIE-IN AT PROJECT START. INLAY ROADWAY BACK FULL WIDTH WITH 125 LBS PER SQUARE YARD RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE, TYPE I. DO NOT ALLOW FINISHED ASPHALT TO DROP BELOW LIP OF GUTTERS.

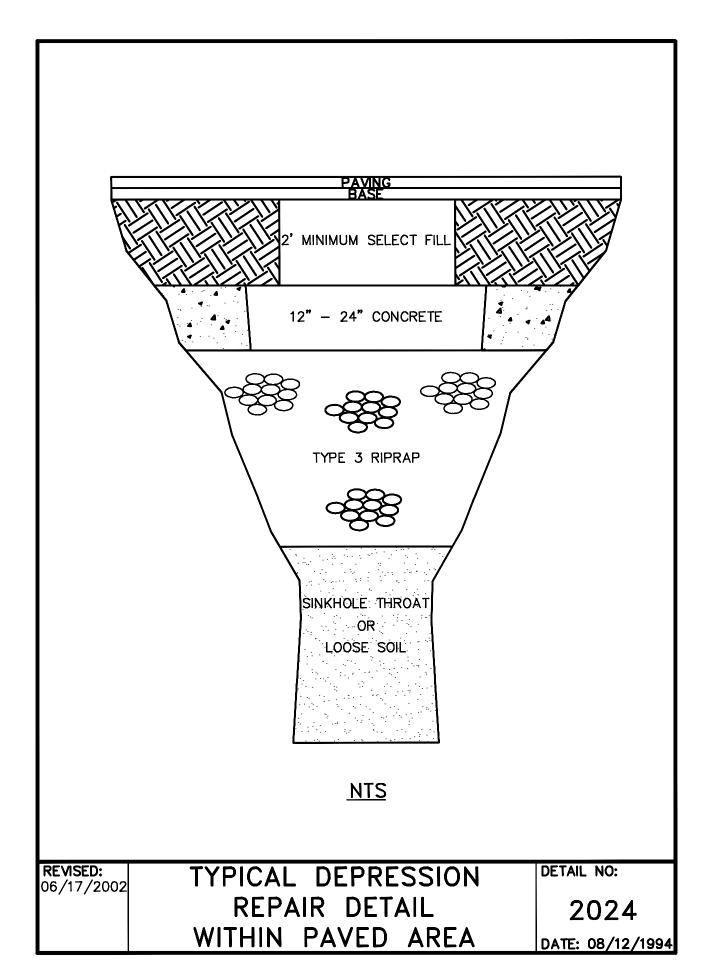
MILLING SECTION

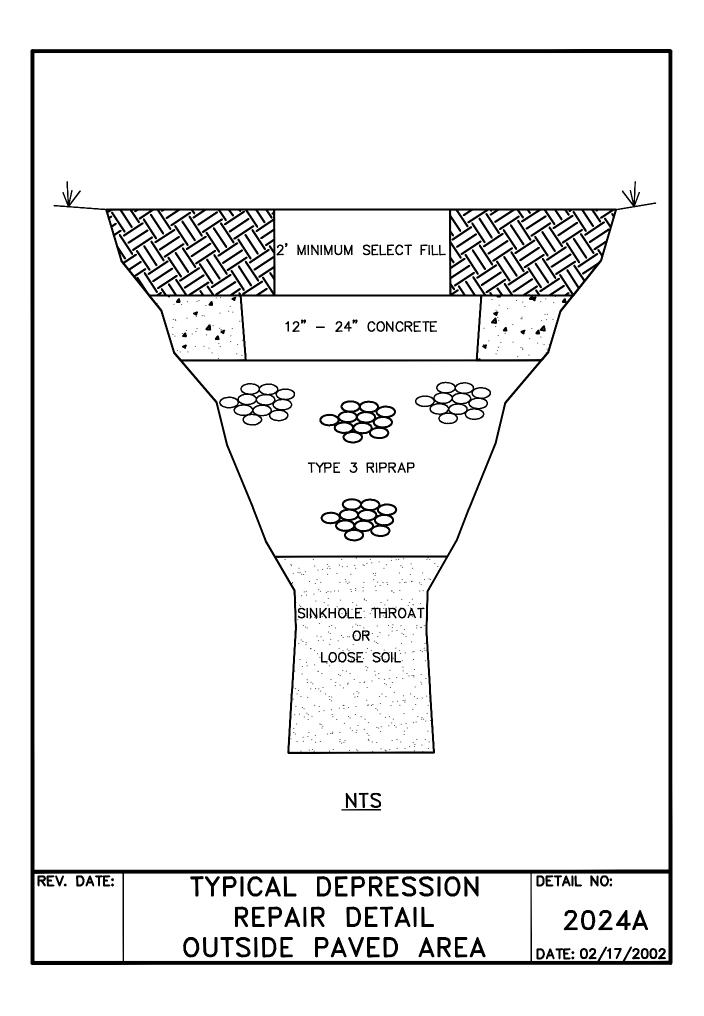
DETAIL NO:

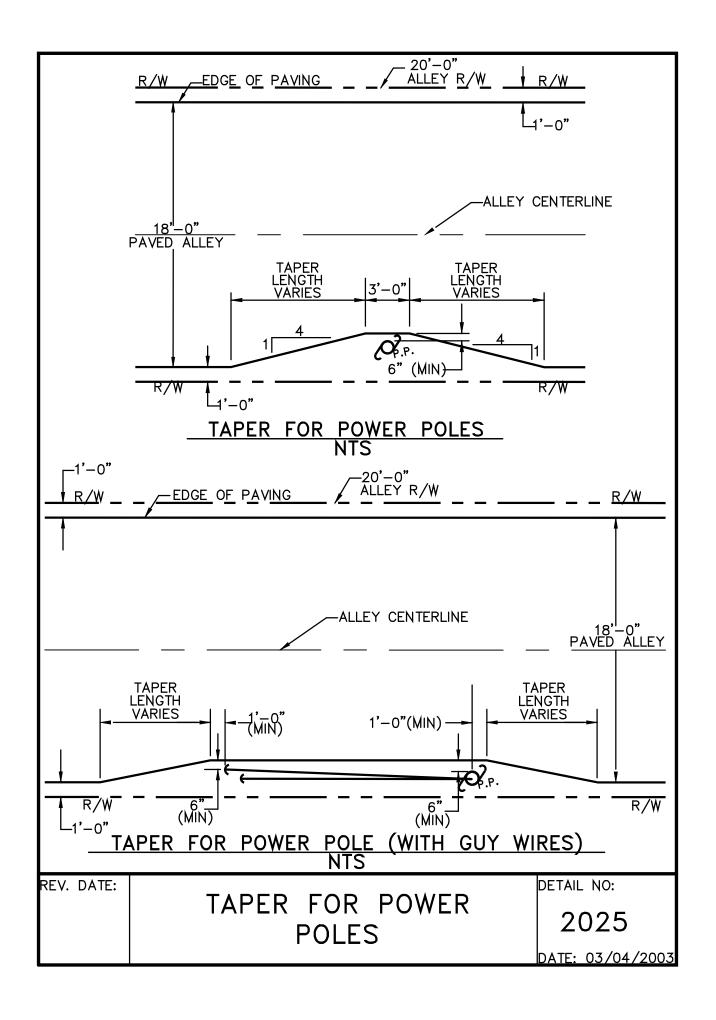
2022E

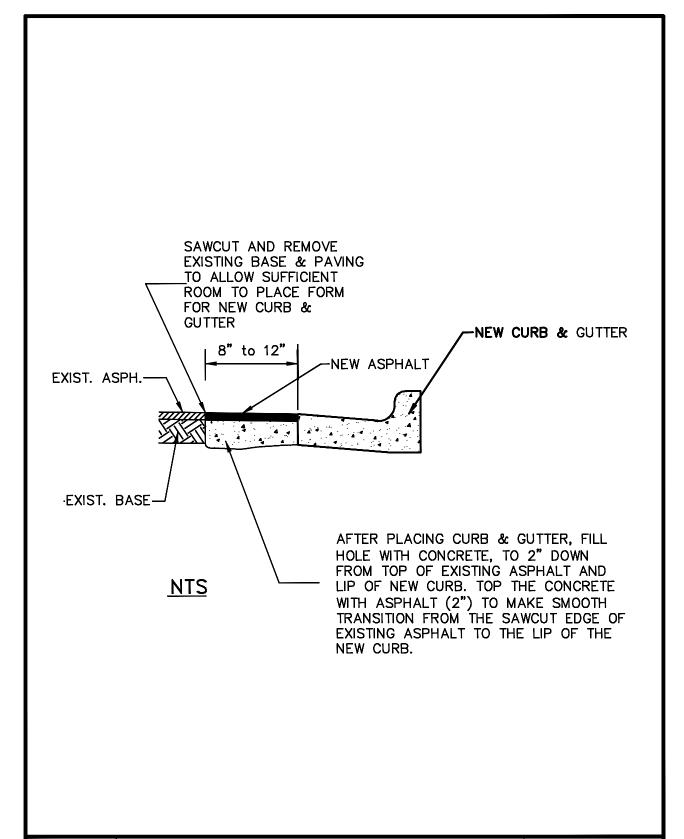
DATE: 03/01/2013











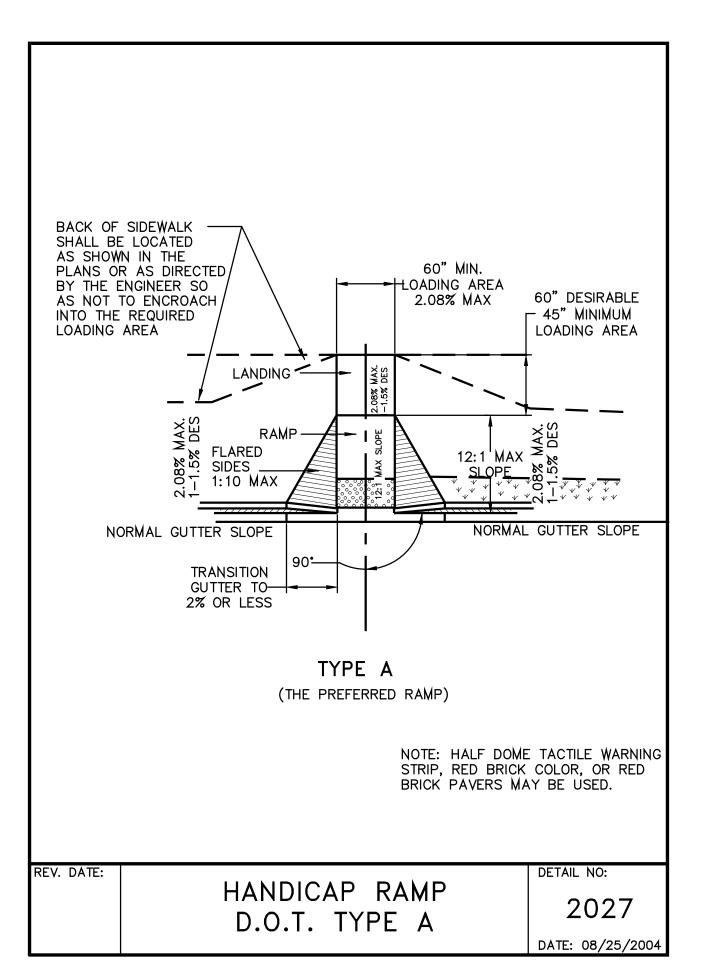
REV. DATE:

INSTALLATION OF CURB & GUTTER ON EXISTING PAVEMENT

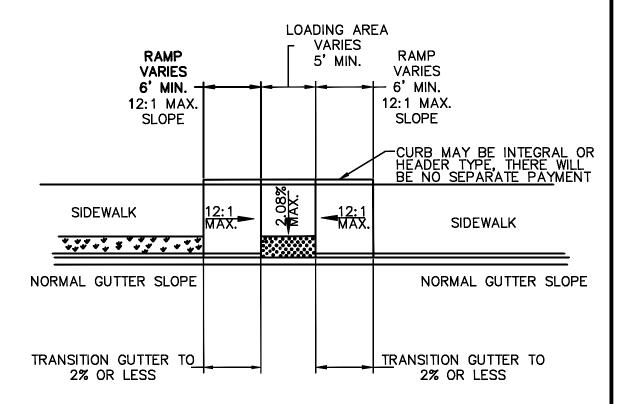
DETAIL NO:

2026

DATE: 11/04/2003



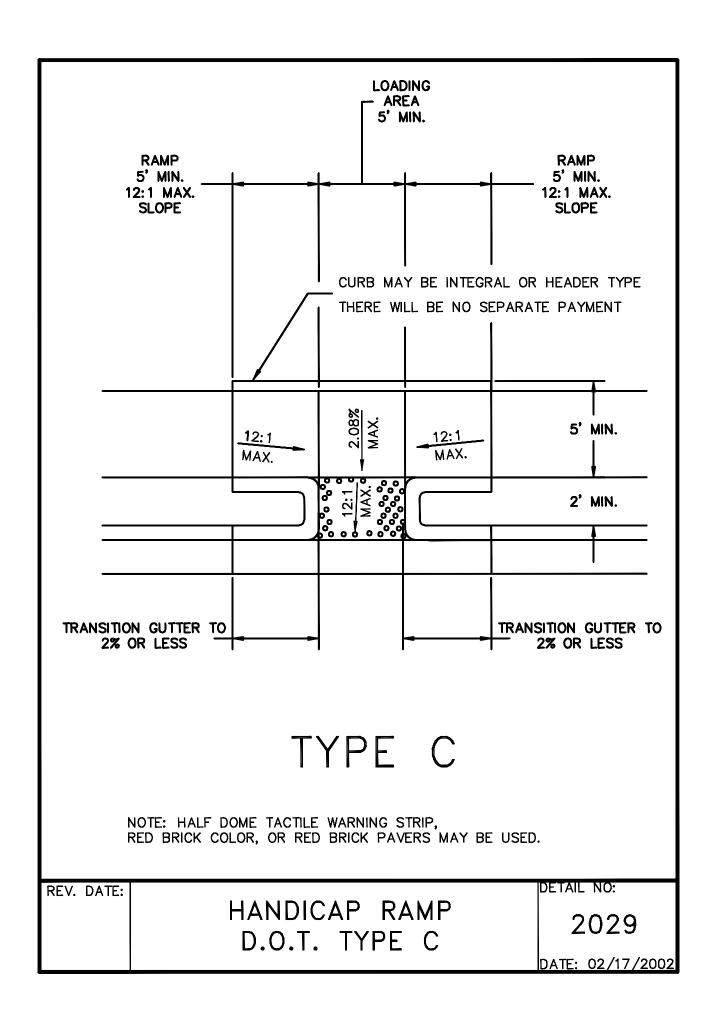
(NORMALLY USED WHEN SPACE IS NOT AVAILABLE FOR A LANDING AT THE TOP OF A TYPE A RAMP)

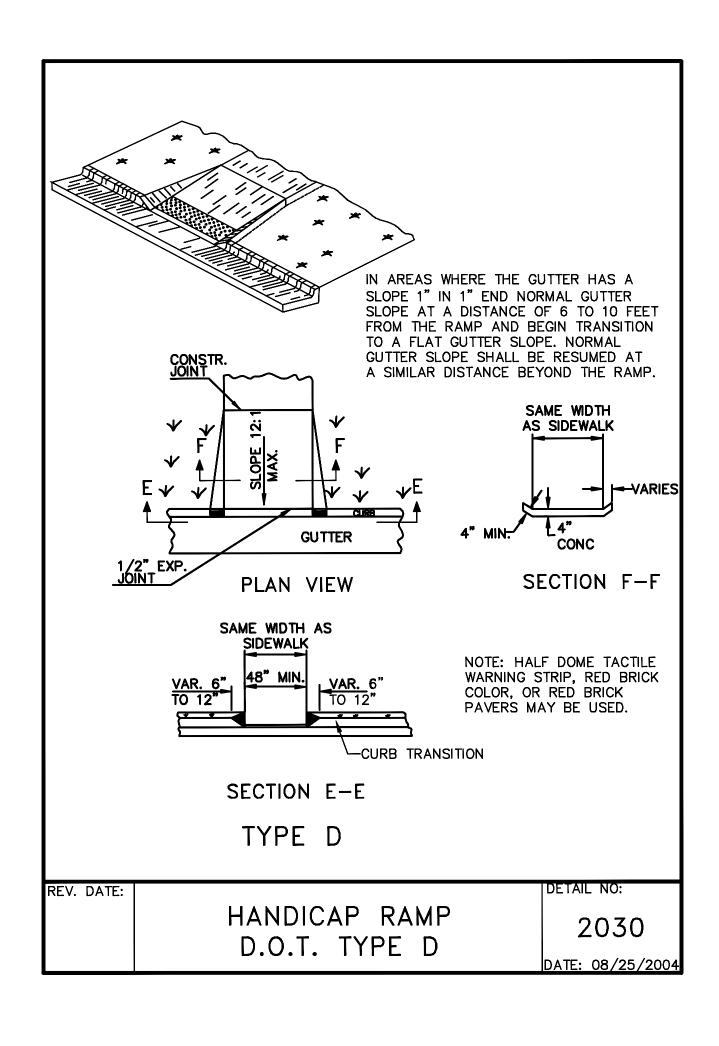


TYPE B

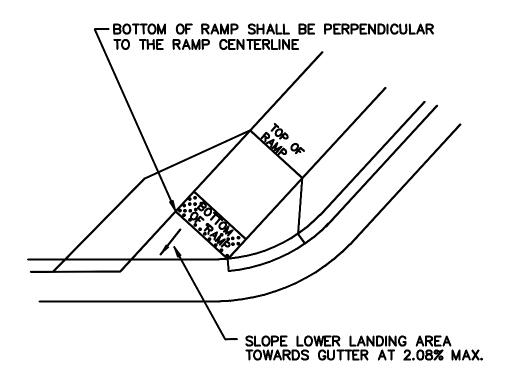
NOTE: HALF DOME TACTILE WARNING STRIP, RED BRICK COLOR, OR RED BRICK PAVERS MAY BE USED.

REV. DATE:		DETAIL NO:
	HANDICAP RAMP D.O.T. TYPE B	2028
		DATE:08/25/2004





WHEN THE RAMP CENTERLINE IS NOT PERPENDICULAR TO THE CURB A LEVEL LANDING AREA WITH SLOPES LESS THAN 2.08% MUST BE PROVIDED AT THE BOTTOM OF THE RAMP.



## SKEWED RAMP DETAILS

(APPLIES TO TYPE A & TYPE D RAMPS ONLY)

NOTE: HALF DOME TACTILE WARNING STRIP, RED BRICK COLOR, OR RED BRICK PAVERS MAY BE USED.

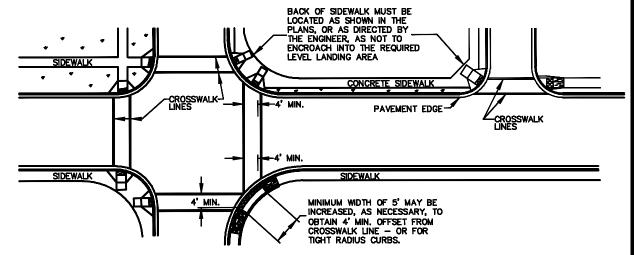
REV. DATE:

HANDICAP RAMP D.O.T. SKEWED DETAIL NO:

2031

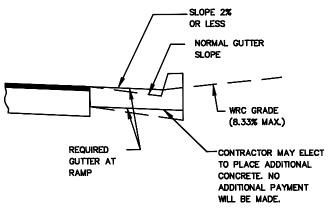
DATE:08/25/2004

NOTE: HALF DOME TACTILE WARNING STRIP, RED BRICK COLOR, OR RED BRICK PAVERS MAY BE USED.



NOTE: THE RAMP LENGTH IS NOT REQUIRED TO EXCEED 15 FEET. THE RAMP SLOPE MAY EXCEED 12:1 IF THE SITE CONDITIONS PREVENT THE USE OF A RAMP 15 FEET LONG.

TYPICAL LOCATIONS FOR CURB CUT RAMPS - PLAN VIEW



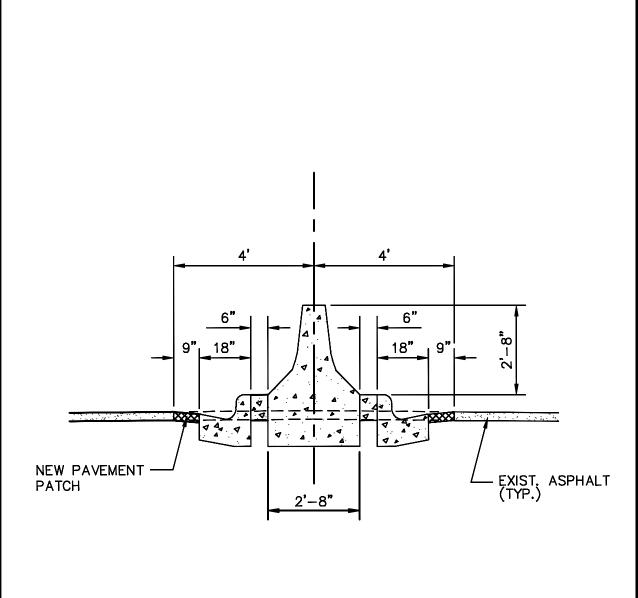
GUTTER TRANSITION DETAIL N.T.S.

REV. DATE:

HANDICAP RAMP D.O.T. PLAN VIEW DETAIL NO:

2032

DATE: 08/25/2004



CONCRETE BARRIER
DETAIL
N.T.S.

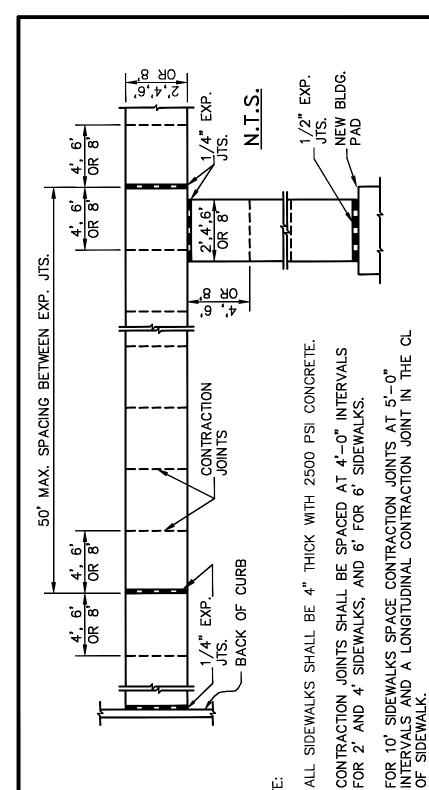
REVISED: 07/02/2015

CONCRETE BARRIER
DETAIL

DETAIL NO:

2033

DATE: 03/13/03



SEE NOTE NO. 5. + 36" | A.T.S.

4. CONTRACTION JOINTS SHALL BE 1" DEEP AND EDGED WITH 1/8" RADIUS.

5. WHEN SIDEWALKS ABUT ROADWAY, WHERE THERE IS NO CURB, THICKEN WALK TO 6" IN 3'-0".

THICKEN WALK TO 6" IN 3'-0".

6. 1/2" EXP. MATERIAL REQUIRED WHERE CONCRETE SIDEWALK ABUT CONCRETE STRUCTURE.

7. A LAYER OF 15# FELT IS REQUIRED BETWEEN WALK AND ADJACENT PARALLELING CONCRETE CURB.

DETAIL NO:

2034

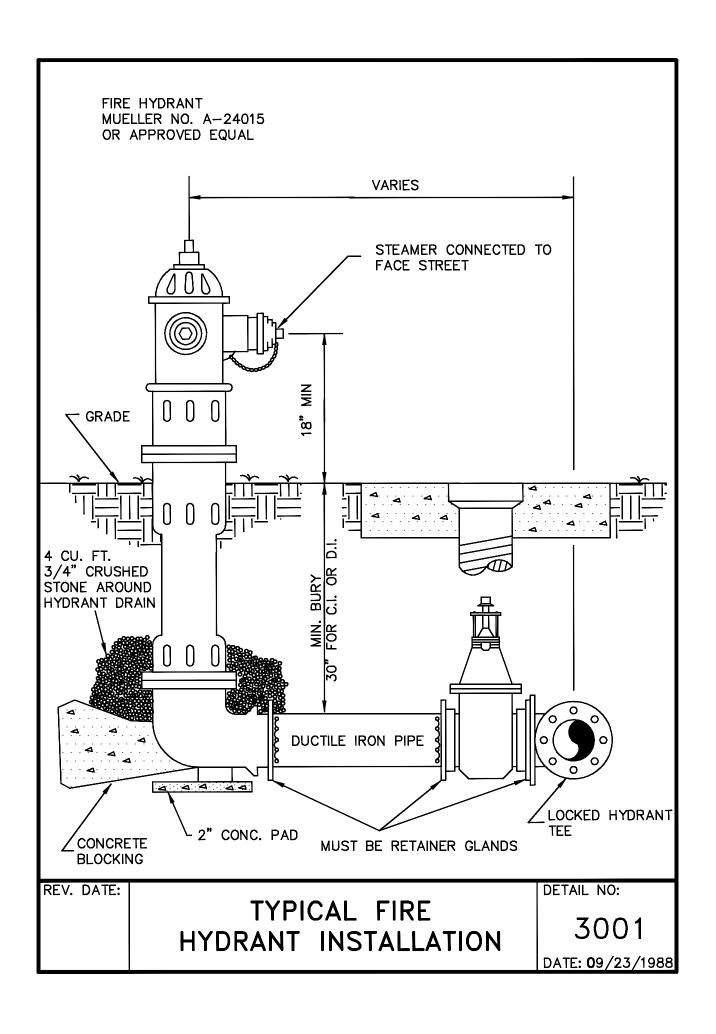
DATE: 02/09/13

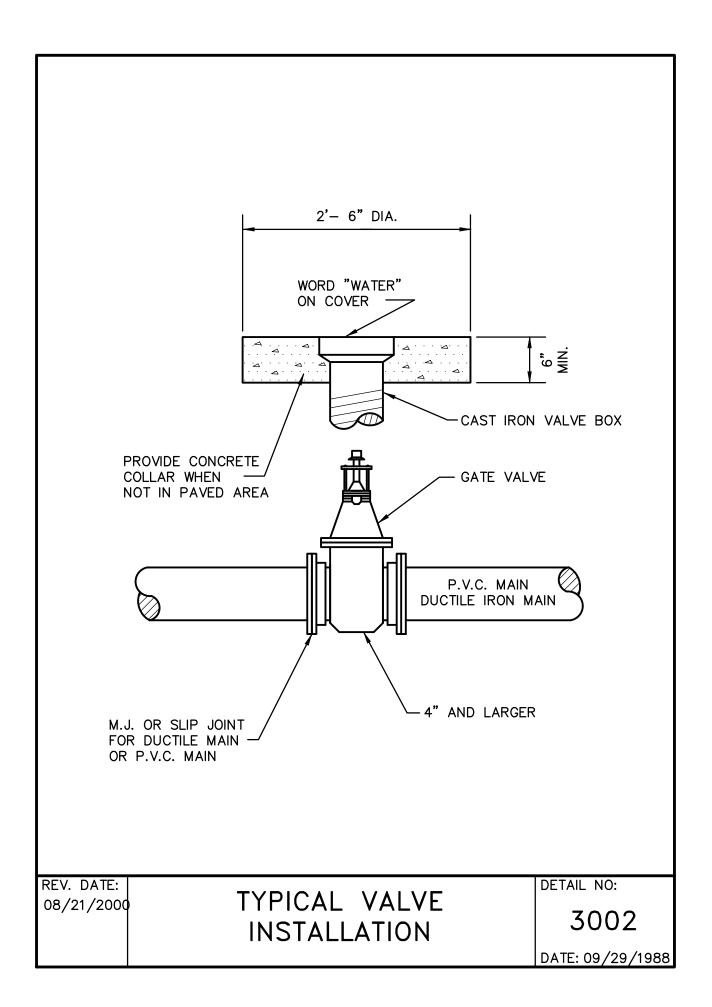
STANDARD JOINT LAYOUT FOR CONCRETE SIDEWALKS

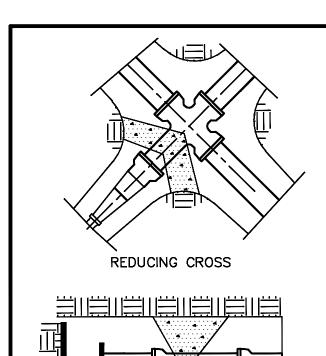
ri

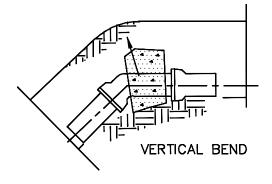
3

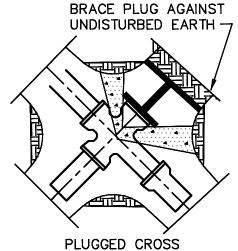
NOTE:





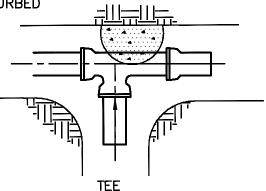




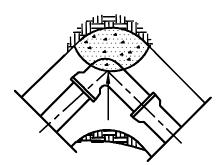




BRACE -



PLUGGED TEE



90 DEG ELBOW

- 1. ALL BLOCKS MUST BEAR AGAINST UNDISTURBED EARTH.
- 2. ARROWS INDICATE DIRECTION OF THRUST.
- 3. ALL FITTINGS SHOWN IN PLAN EXCEPT VERTICAL BEND.
- 4. PROVIDE MINIMUM BEARING AREA IN S.F. AS FOLLOWS BASED ON 150 PSI TEST PRESSURE AND 2000 PSF SOIL BEARING.

PIPE	TEE	11_1/4°	22 1/2	45'	<del>8</del> 0.
SIZE	DEADENDS	BEND	BEND	BEND	BEND
4"	1.0	0.5	0.5	0.8	1.3
6"	2.2	0.5	0.9	1.6	3.0
8"	3.8	8.0	1.5	2.9	5.3
10"	6.0	1.2	2.3	4.5	8.4
12"	8.5	1.7	3.3	6.5	12.1
14"	11.6	2.3	4.5	8.9	16.4
16"	15.2	3.0	5.9	11.6	21.4

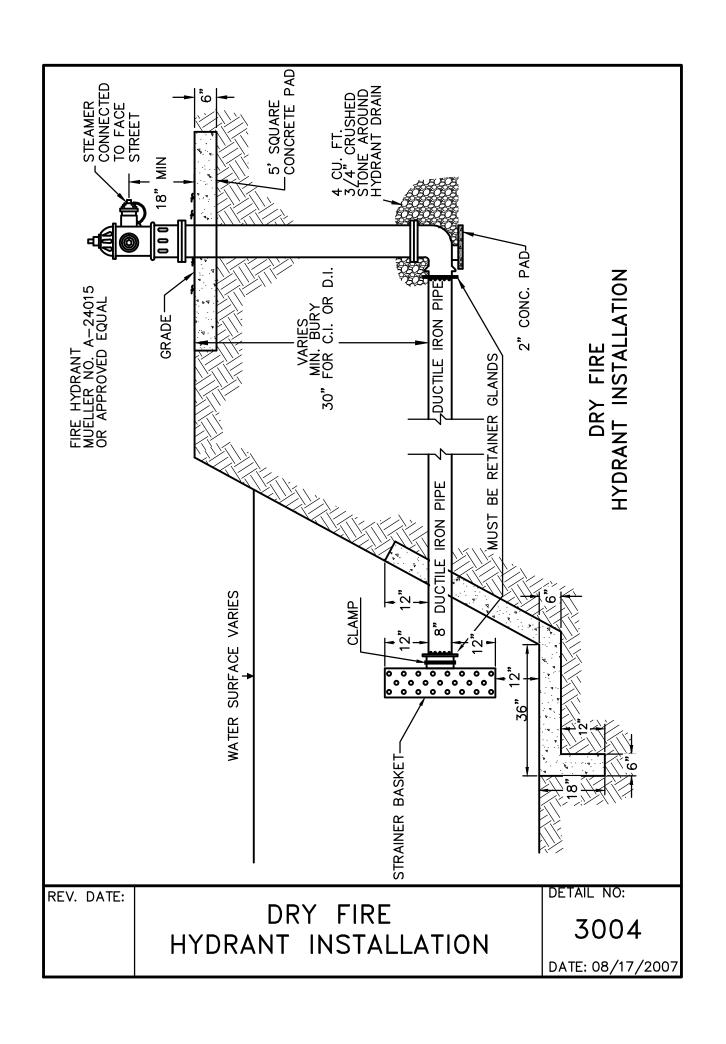
REV. DATE: 03/24/2006

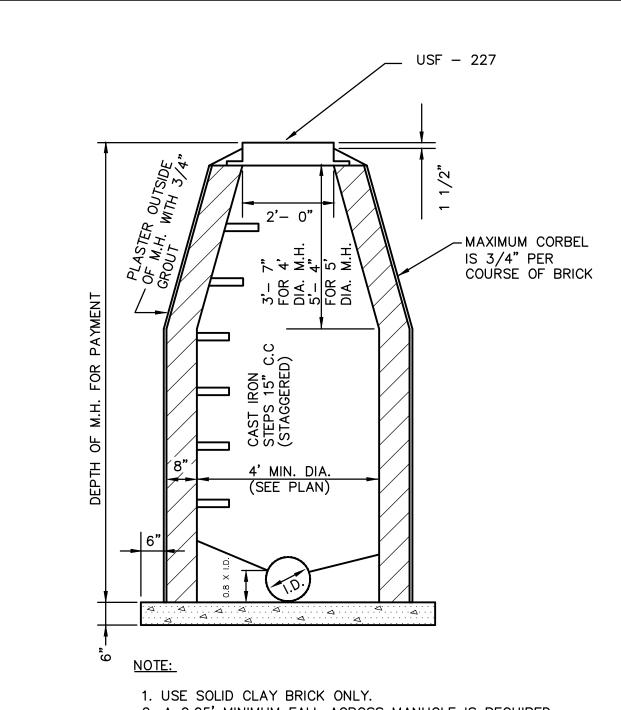
THRUST BLOCK

DETAIL NO:

3003

DATE: 09/29/1988





- 2. A 0.05' MINIMUM FALL ACROSS MANHOLE IS REQUIRED UNLESS OTHERWISE APPROVED BY REVIEWING AUTHORITY.
- 3. WHERE TAPS ENTER MANHOLE, NEOPRENE BOOT OR OTHER APPROVED SEALING METHOD REQUIRED. NEOPRENE BOOT OR OTHER APPROVED SEALING METHOD REQUIRED AT PIPE ENTRY.

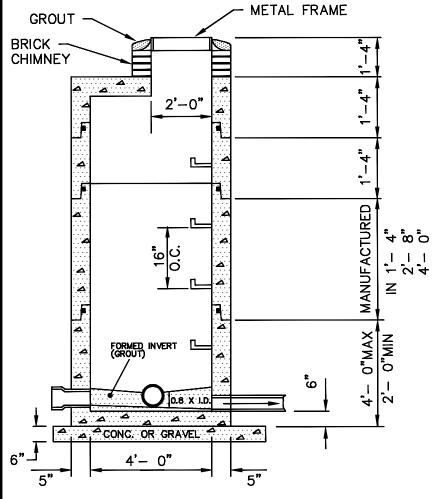
REV. DATE: 08/21/2000

STANDARD BRICK MANHOLE SANITARY SEWER SYSTEM

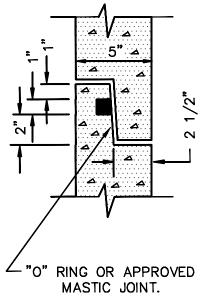
**DETAIL NO:** 

4001

DATE: 09/23/1988



- 1. PRECAST MANHOLE SECTIONS ARE MANUFACTURED IN LENGTHS OF 1'- 4", 2'- 8" & 4'- 0".
- 2. THE FIRST TWO SECTIONS BELOW THE TOP SECTION MUST BE 1'- 4" LONG ON ALL PROJECTS WITHIN THE CITY OF ALBANY.
- A 0.05' MINIMUM FALL ACROSS MANHOLE IS REQUIRED UNLESS OTHERWISE APPROVED BY REVIEWING AUTHORITY.
- ALIGN THE ACCESS OPENING ON NONCONCENTRIC TOPS DIRECTLY OVER THE EXIT PIPE OF MANHOLE.
- 5. THE PREFERRED HEIGHT OF 1'- 4" FOR THE BRICK CHIMNEY AND METAL FRAME MAY BE VARIED SLIGHTLY WITH PRIOR APPROVAL OF THE ENGINEER.
- 6. TOP MUST BE DESIGNED & CONSTRUCTED TO MEET HIGHWAY LOADING FOR TRUCK TRAFFIC.
- CONCRETE REQUIRED WHERE CLAY PIPE IS INVOLVED. GRAVEL MAY BE USED WITH PVC, CONCRETE, CAST IRON OR DUCTILE IRON PIPE.
- 8. WHERE TAPS ENTER MANHOLE, NEOPRENE BOOT OR OTHER APPROVED SEALING METHOD REQUIRED. NEOPRENE BOOT OR OTHER APPROVE SEALING METHOD REQUIRED AT PIPE ENTRY.



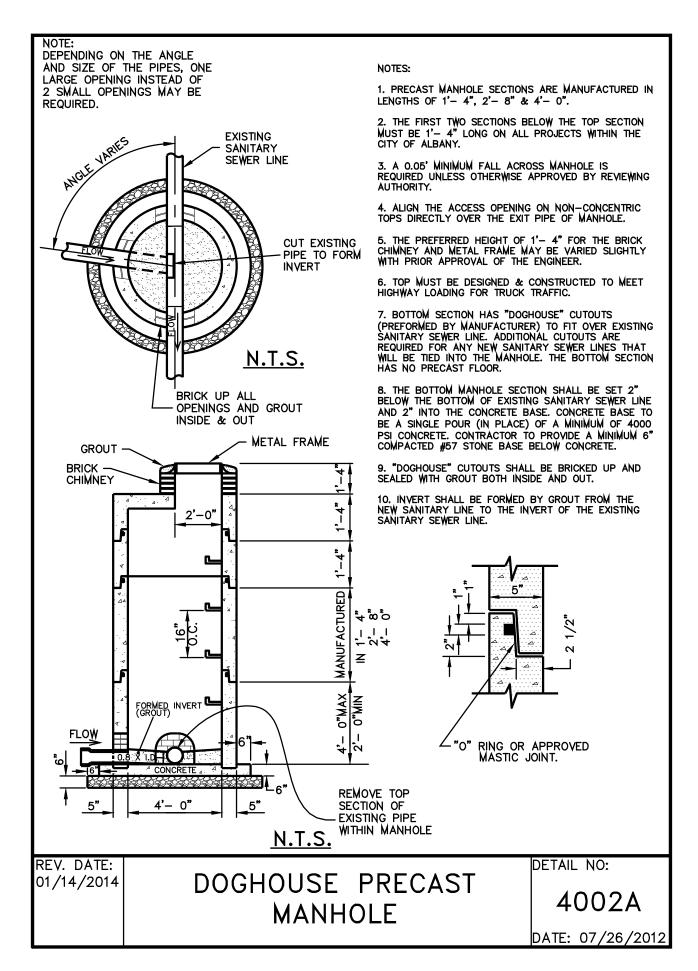
REV. DATE: 01/14/2014

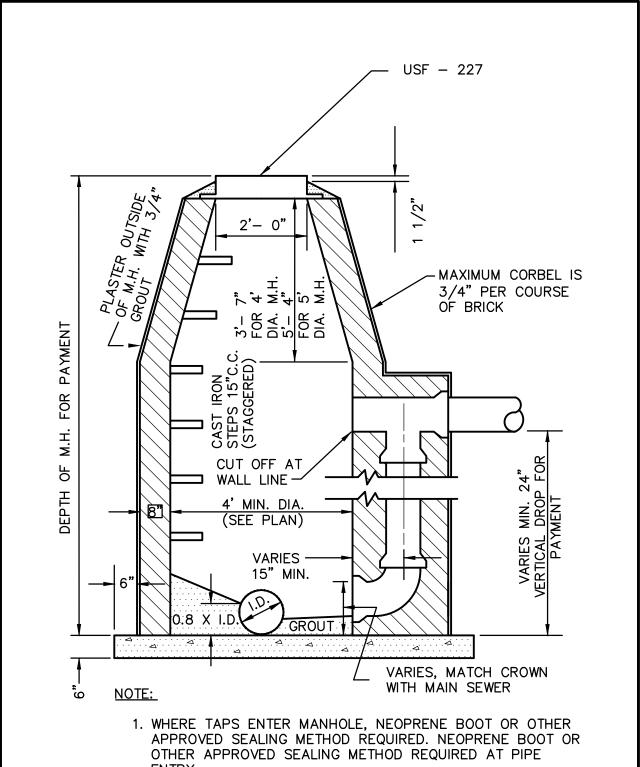
SANITARY STANDARD PRECAST MANHOLE

DETAIL NO:

4002

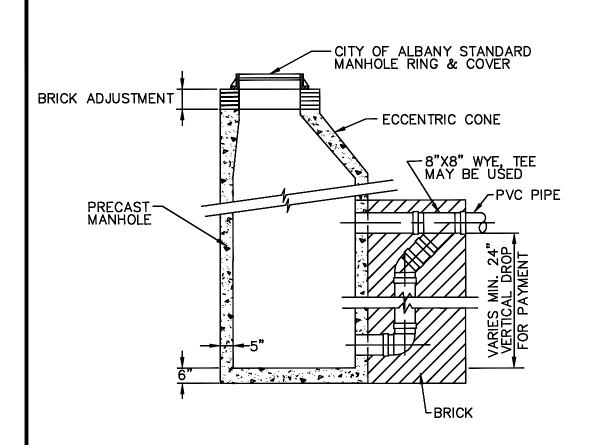
DATE: 09/23/1988





- ENTRY.
- 2. . A 0.05' MINIMUM FALL ACROSS MANHOLE IS REQUIRED UNLESS OTHERWISE APPROVED BY REVIEWING AUTHORITY.

REV. DATE: DETAIL NO: 10/11/2002 4003 DROP MANHOLE DATE: 09/23/1988



1. A 0.05' MINIMUM FALL ACROSS MANHOLE IS REQUIRED UNLESS OTHERWISE APPROVED BY REVIEWING AUTHORITY.

REV. DATE: 01/14/2014 PRECAST CONCRETE

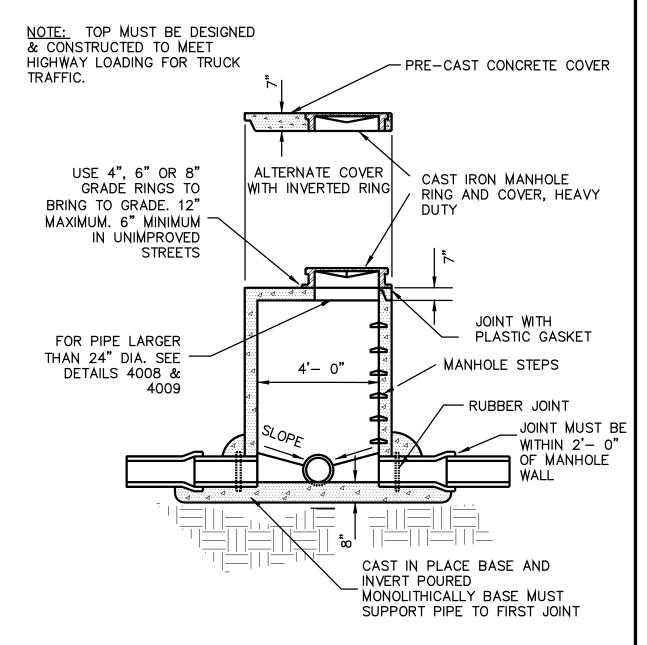
MANHOLE

OUTSIDE DROP

DETAIL NO:

4003A

DATE: 01/03/2012



- 1. WHERE TAPS ENTER MANHOLE, NEOPRENE BOOT OR OTHER APPROVED SEALING METHOD REQUIRED. NEOPRENE BOOT OR OTHER APPROVED SEALING METHOD REQUIRED AT PIPE ENTRY.
- 2. A 0.05' MINIMUM FALL ACROSS MANHOLE IS REQUIRED UNLESS OTHERWISE APPROVED BY REVIEWING AUTHORITY.

REV. DATE: 01/14/2014

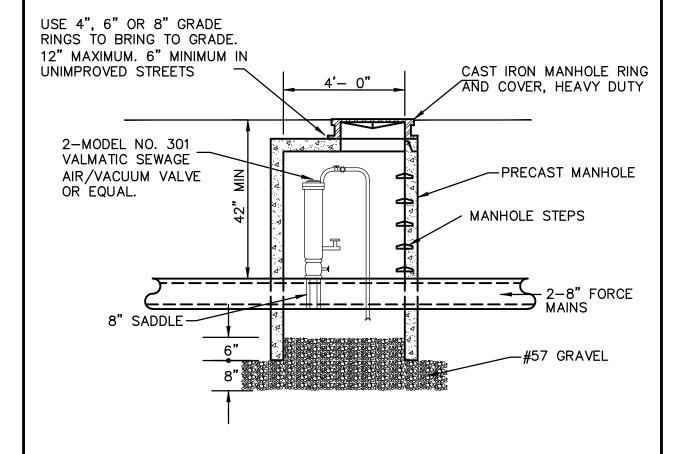
SHALLOW MANHOLE

DETAIL NO:

4004

DATE: 10/04/1988

## DT12999



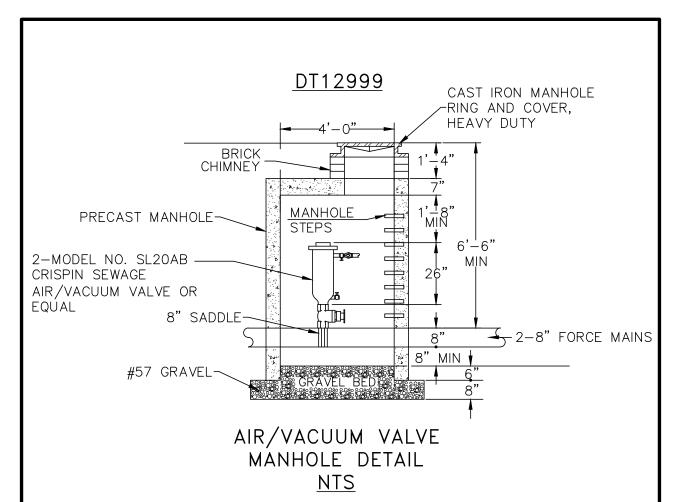
REV. DATE:

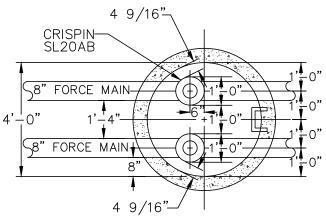
AIR/VACUUM VALVE MANHOLE

DETAIL NO:

4004A

DATE: 01/13/1998





AIR/VACUUM VALVE MANHOLE PLAN VIEW <u>NTS</u>

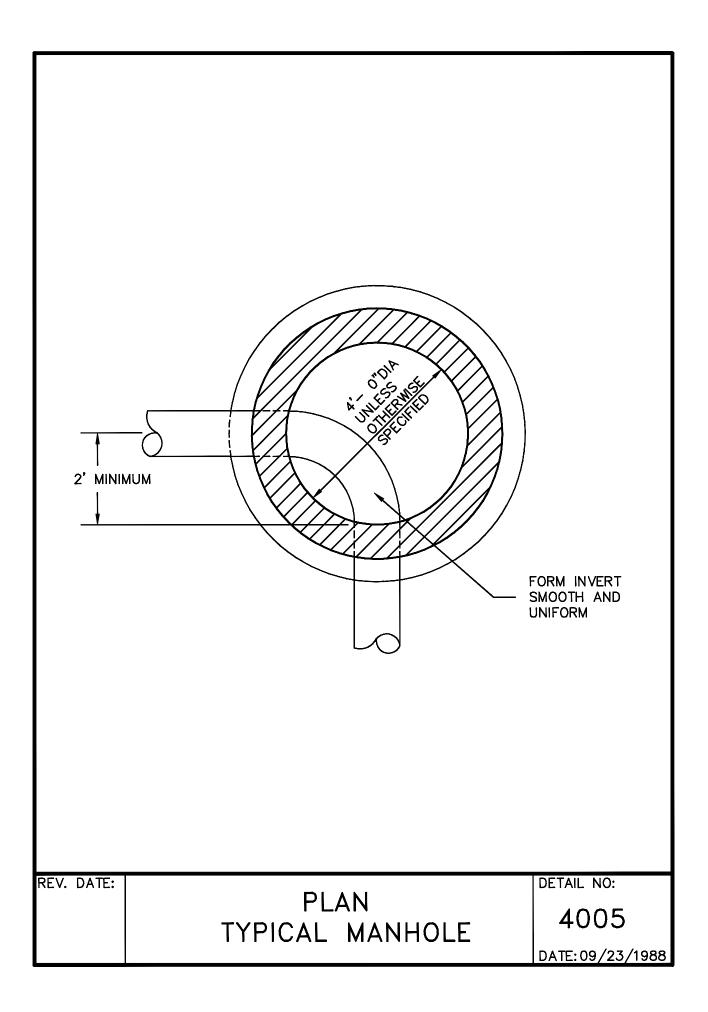
REV. DATE:

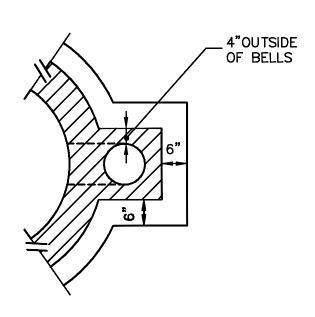
AIR/VACUUM VALVE MANHOLE

DETAIL NO:

4004B

DATE: 01/13/1998





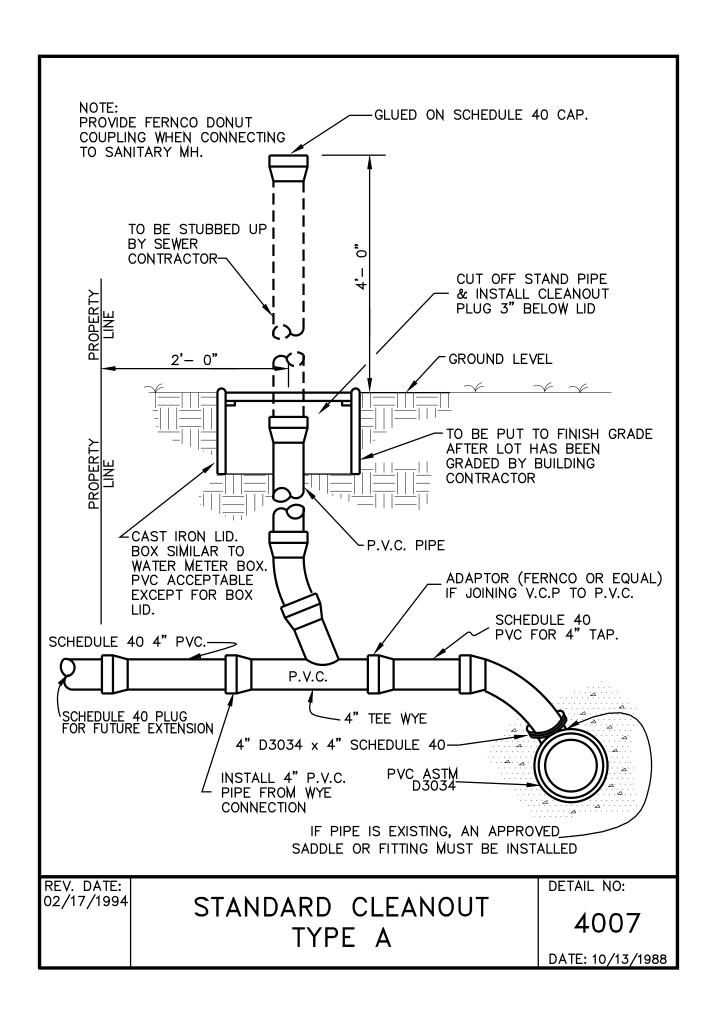
TEE BRANCH MAY BE ONE SIZE SMALLER THAN SEWER. MINIMUM SIZE IS 8".

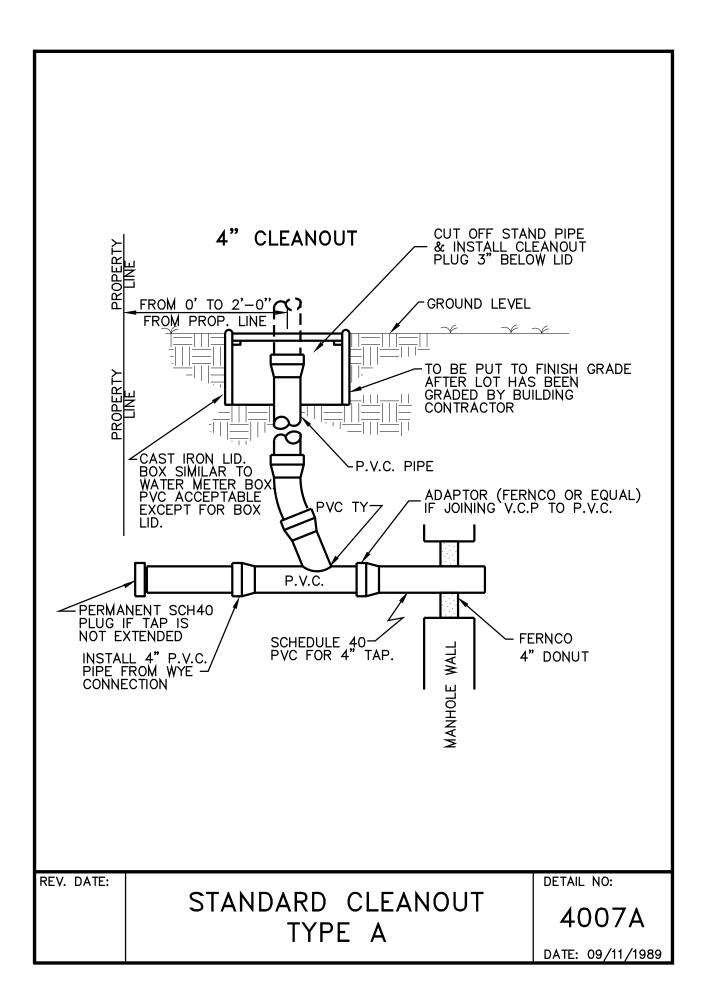
REV. DATE:

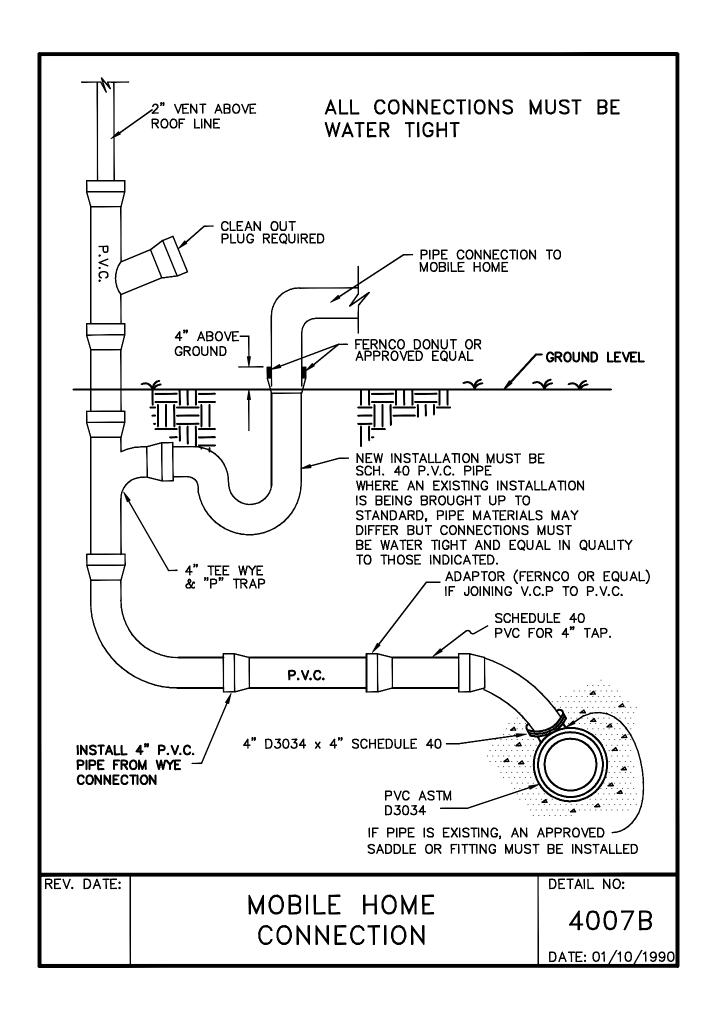
PLAN DROP CONNECTION DETAIL NO:

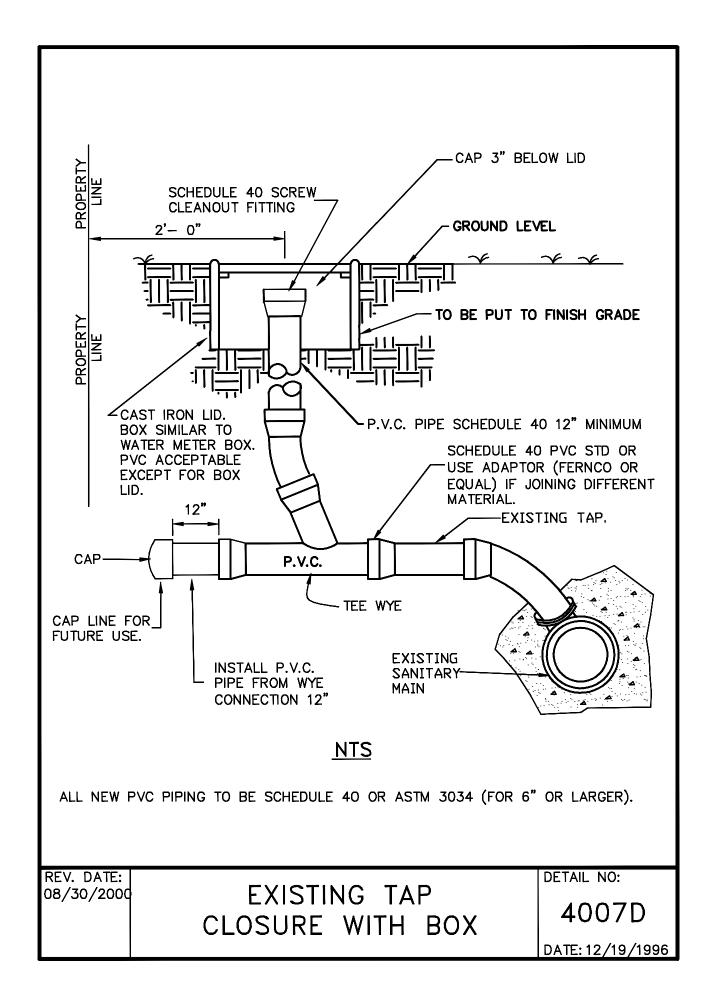
4006

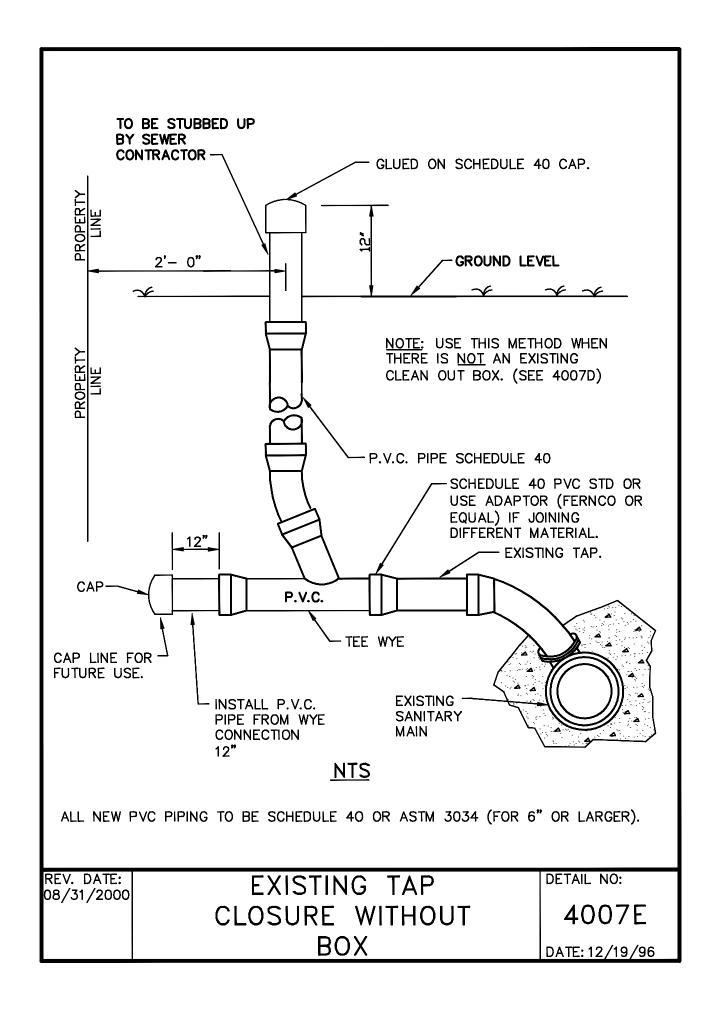
DATE: 09/23/1988

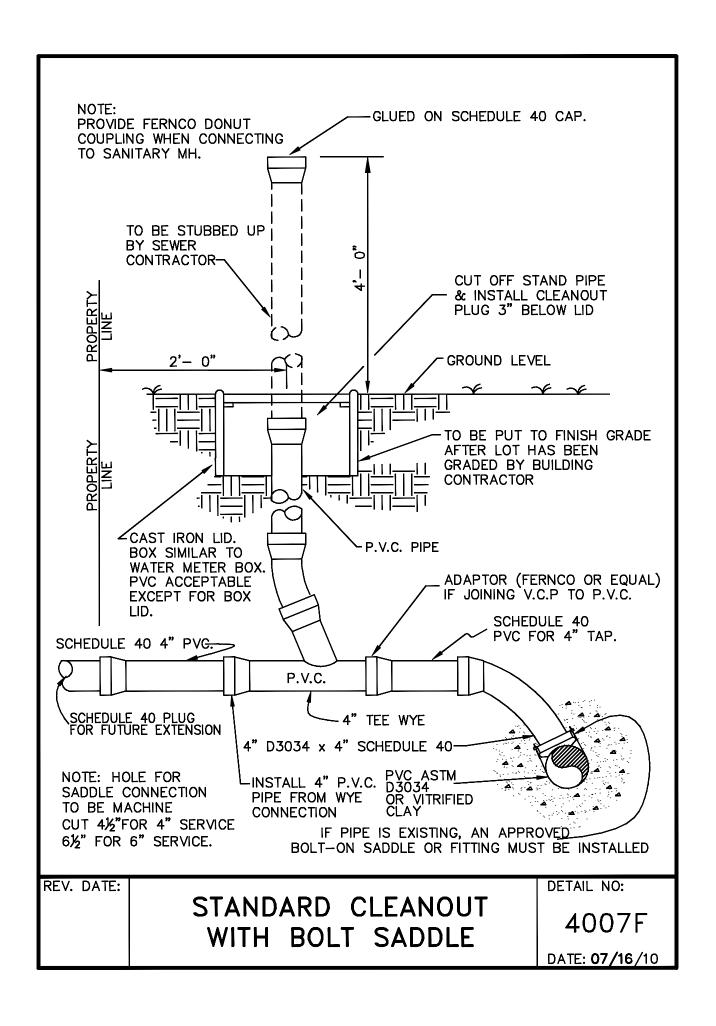


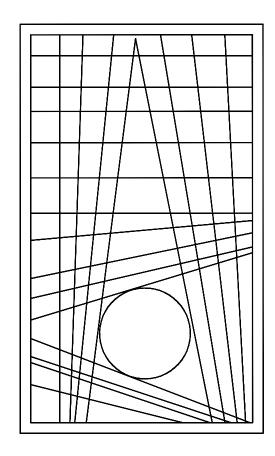










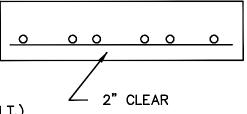


WORKING LOAD =  $16^{K}$  ( $\frac{Py}{WDTH}$  =  $16^{K}$ )

LOAD FACTOR = 2.0 (FOR IMPACT)

Py =  $32^{K'}$  (CONCENTRATED WHEEL LOAD)

My =  $\frac{PL}{4}$  (FORMULA FOR BENDING MOMENT ULT.)



### NOTE:

- 1. USE SHORT SPAN TO SELECT STEEL FOR ONE WAY SLAB.
- 2. THE STEEL IN SHORT DIRECTION TO BE PLACED 2" CLEAR FROM BOTTOM.
- 3. IF SLAB THICKNESS IS: 8" USE #4@12" LONG WAY 10" USE #4@9" LONG WAY 12" USE #4@6" LONG WAY
- 4. SHIFT STEEL AT MANHOLE DO NOT CUT.
- 5. THREE (3) INCHES CLEAR ON ALL SIDES.
- 6. ADD EIGHT (8) BARS AROUND MANHOLE

### ONE WAY SLAB (L > $\underline{2}$ W)

			<b>6</b> "	8"	10"	12"
4', 5', 6', 7', 8', 9', 10'	WIDTH WIDTH WIDTH WIDTH WIDTH WIDTH WIDTH	My =16 K' My =20 K' My =24 K' My =32 K' My =36 K' My =40 K'		#5 <b>@</b> 4" #6 <b>@</b> 4"	#5@4" #5@3" #6@3" #6@3" #6@3" #7@3"	#5@4" #6@4" #6@4" #6@4" #6@3"

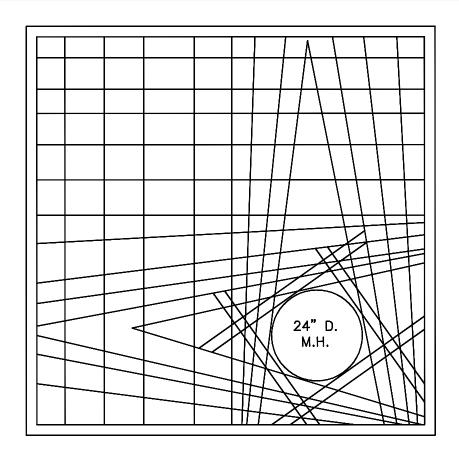
DETAIL NO:

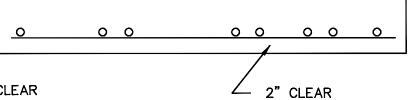
ONE WAY SLAB  $(L \ge 2W)$ 

DETAIL NO:

4008

DATE: 10/04/1988





- 1. THREE (3) INCHES CLEAR ON ALL SIDES.
- 2. SHIFT STEEL AT MANHOLE DO NOT CUT.
- 3. ADD EIGHT (8) BARS AROUND MANHOLE.
- 4. MANHOLE IS 24" DIA.

## TWO WAY SLAB (SQUARE)

	6"	8"	10"	12"
4' WIDTH My = 8 K-ft #5 5' WIDTH My = 10 K-ft 6' WIDTH My = 12 K-ft 7' WIDTH My = 14 K-ft 8' WIDTH My = 16 K-ft 9' WIDTH My = 18 K-ft 10' WIDTH My = 20 d=	<b>@</b> 4"	#5@5" #5@3" #5@3"	#5@6" #5@6" #6@6" #6@6"	#6 <b>@</b> 6" d=9"

MOMENT EACH WAY = STEEL USED EACH WAY

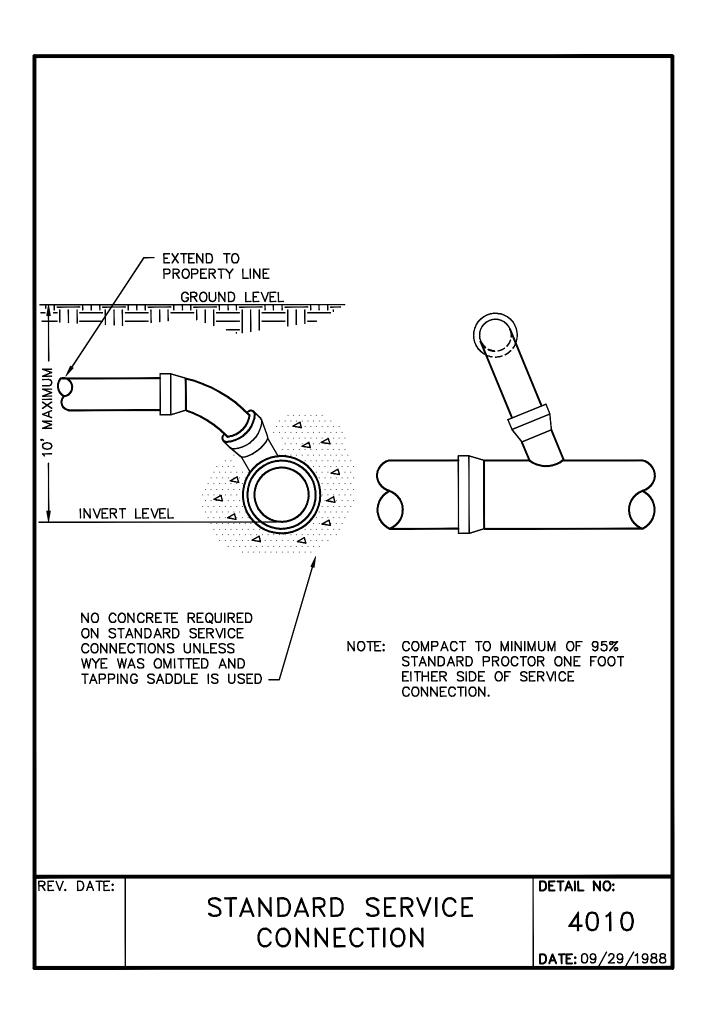
REV. DATE:

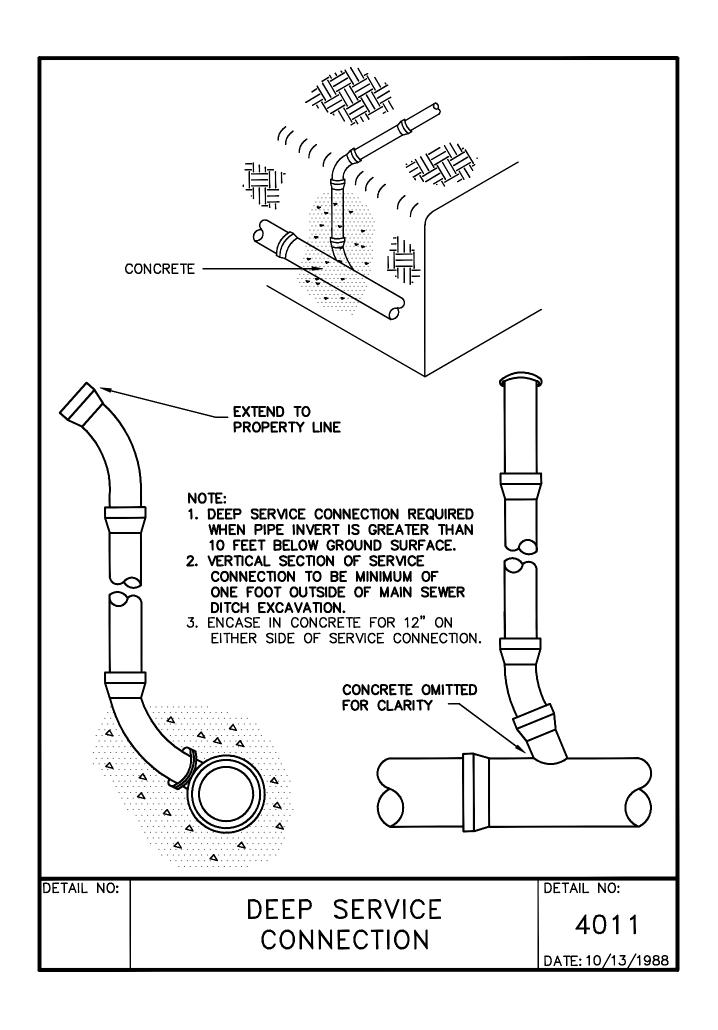
TWO WAY SLAB (SQUARE)

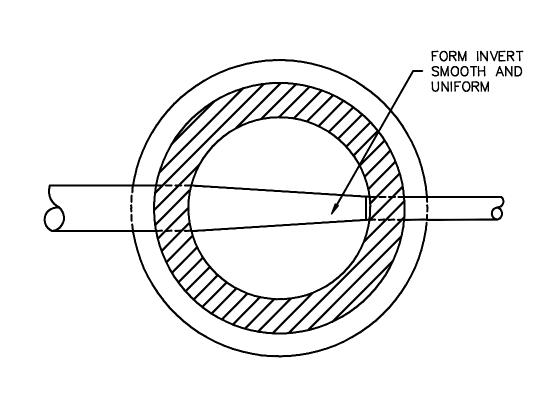
DETAIL NO:

4009

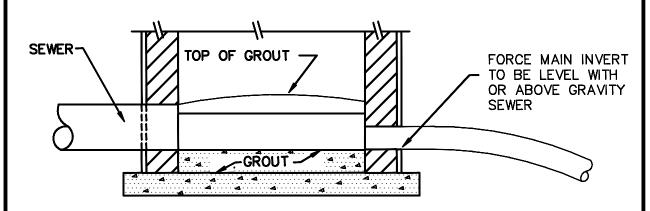
DATE: 10/04/1988







## **PLAN**



# **SECTION**

NOTE:

FORCE MAIN SHALL BE INSTALLED LEVEL OR RISING FROM PUMP UNLESS OTHERWISE APPROVED BY REVIEWING AUTHORITY.

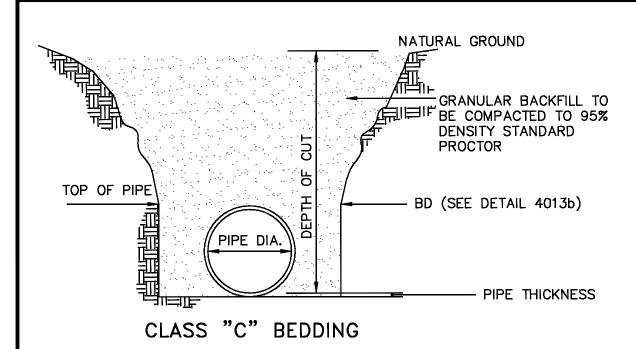
REV. DATE:

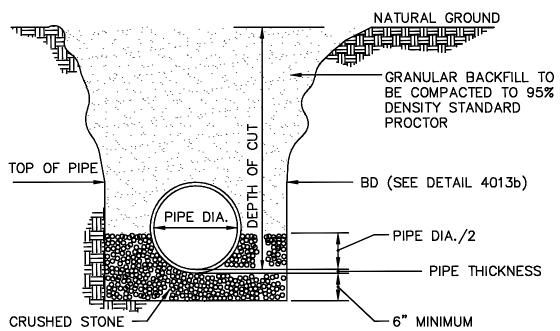
FORCE MAIN CONNECTION TO STANDARD MANHOLE

DETAIL NO:

4012

DATE: 09/29/1988





# CLASS "B" BEDDING

NOTES: 1. CLASS "B" BEDDING REQ'D FOR PVC PIPE 2. SANITARY SEWER AND STORM SEWER BEDDING REQUIREMENTS ARE THE SAME.

BEDDING FOR PIPE

DETAIL NO:

4013

DATE: 06/23/1999

PIPE DIAMETER	CLASS OF PIPE	BD MAXIMUM	DEPTH OF CL	JT-INCHES
INCHES		(SEE DETAIL 4013)	CL"B"	CL"C"
8	PVC	2'-2"	20	
10	PVC	2'-4"	20	
12	PVC	2'-6"	20	
15	 	2'-10"		18 40+
18	 	3'-2"		23 40+
24	<b> </b> <b> </b>	4'-6"	18 40+	40+ 12 22 13 22
30	II III	5'-1"	19 40+	13 22
36	III IV	6'-8"	25 40+	18 34
42	III IV	7'-3"	24 40+	19 32
48	III IV	7'-10"	26 40+	19 34
54	III IV	8'-5"	27 40+	20 34
60	III IV	9'-0"	29 40+	20 34
66	III IV	9'-7"	27 40+	21 36
72	III IV	10'-2"	29 40+	23 34
78	III IV	10'-9"	30 40+	23 37
84	   <b> </b>	11'-4"	32 40+	23 37
90	III IV	11'–11"	29 40+	24 40
96	III IV	12'-6"	32 40+	19 34 20 34 21 36 23 34 23 37 23 37 24 40 25 37
102	₩	13'-2"	31 40+	25 39

NOTE:
THE TRENCH WIDTH SHOWN IN THE TABLE AS "BD MAXIMUM" IS CRITICAL AND IS THE
MAXIMUM WIDTH ALLOWABLE FOR THE DEPTH OF CUT SHOWN. SHOULD THE CONTRACTOR
EXCEED THE "BD MAXIMUM", THE CONTRACTOR SHALL BEAR ANY AND ALL ADDITIONAL COST.
IF THE INCREASED "BD" REQUIRES THE INSTALLATION OF A HIGHER CLASS OF PIPE AND/OR
BEDDING, THE CONTRACTOR SHALL INSTALL THE NECESSARY CLASS OF PIPE AND BEDDING
AT NO ADDITIONAL COST TO THE CITY OF ALBANY.

CRUSHED STONE GRADATION SHALL BE 95 % PASSING 3/4" SIEVE AND 95 % RETAINED ON NUMBER 4 SIEVE.

DESIGN BASED ON COHESIONLESS SANDY SOIL WITH UNIT WEIGHT OF 120 POUNDS PER CUBIC FOOT.

REV. DATE: 08/21/2000	MAXIMUM BEDDING	DETAIL NO:
	WIDTH FOR CONCRETE	4013B
	PIPE & PVC	DATE: 06/23/1999

# MINIMUM GRADE

PIPE SIZE I.D.	% SLOPE
6"	.50
8"	.40
10"	.28
12"	.22
15"	.15
18"	.12
21"	.10
24"	.08

# P.V.C. EXTRA STRENGTH SDR-35, ASTM D 3034 P.V.C MINIMUM WALL THICKNESS

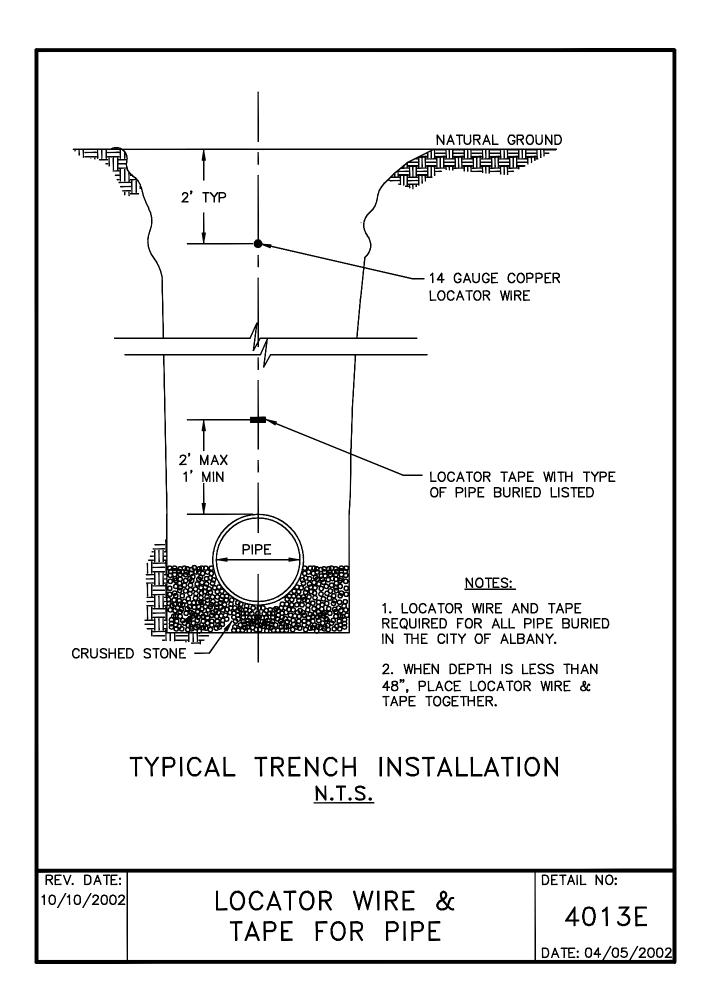
PIPE SIZE I.D.	MIN. WALL THICKNESS
6"	.180
8"	.240
10"	.300
12"	.360

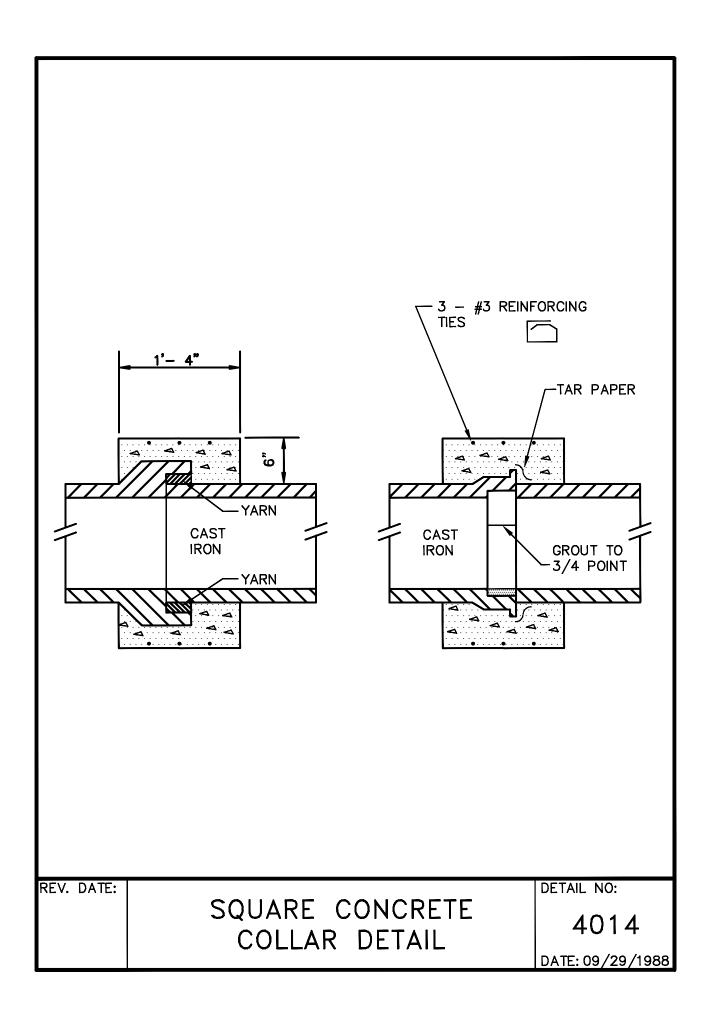
REV. DATE: 08/21/2000 MINIMUM PIPE GRADES & WALL THICKNESS
FOR PVC PIPE

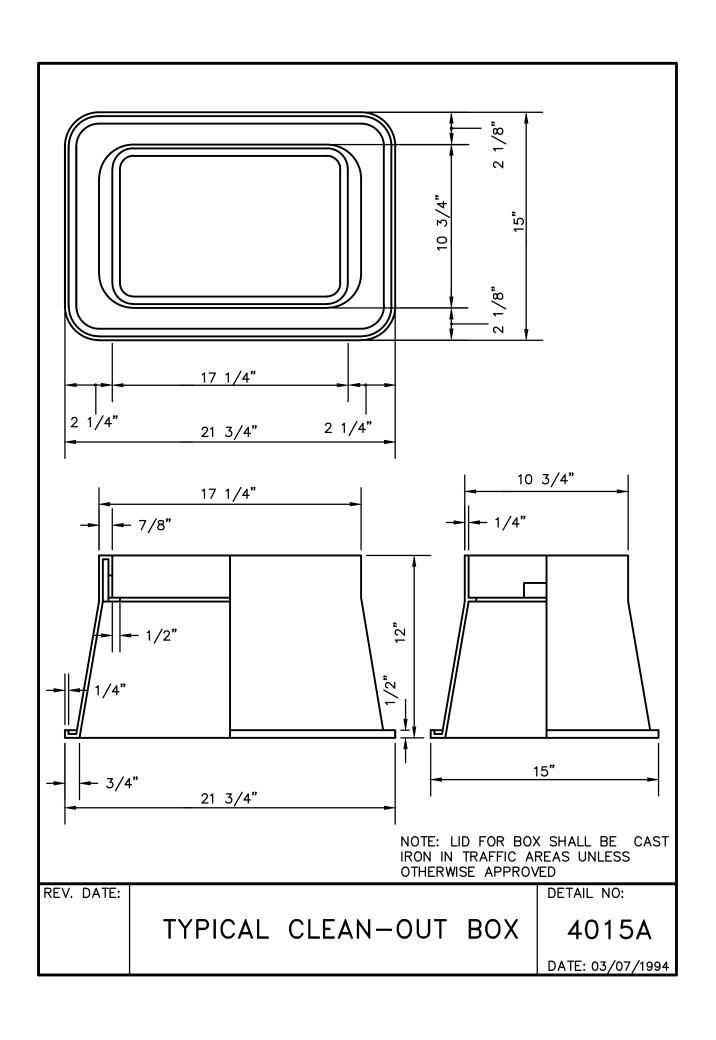
DETAIL NO:

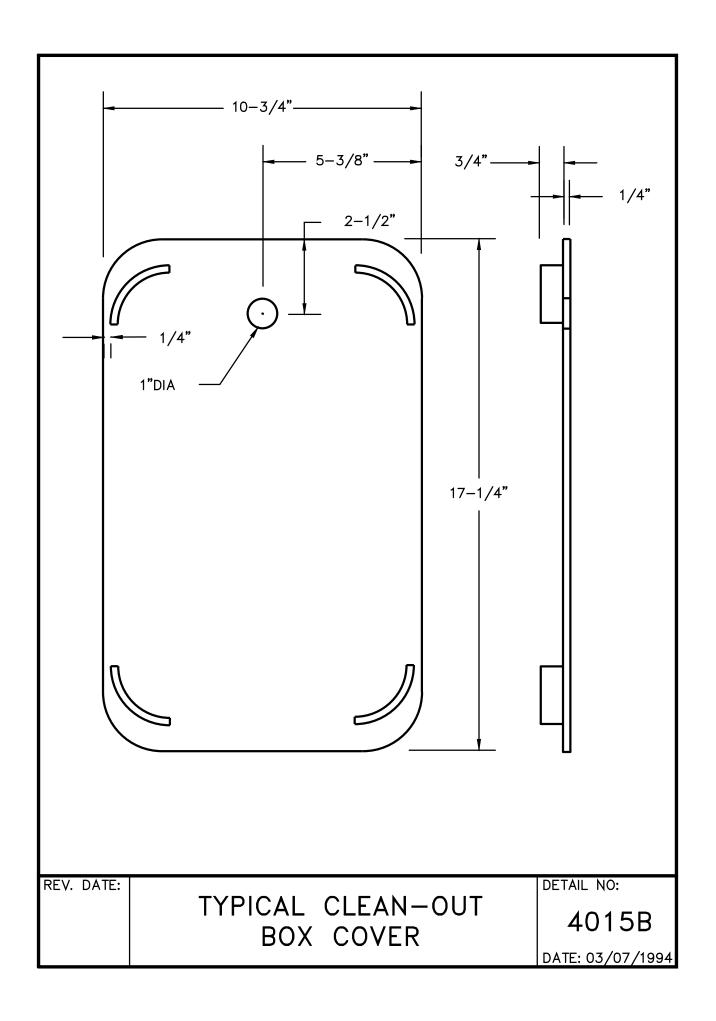
4013C

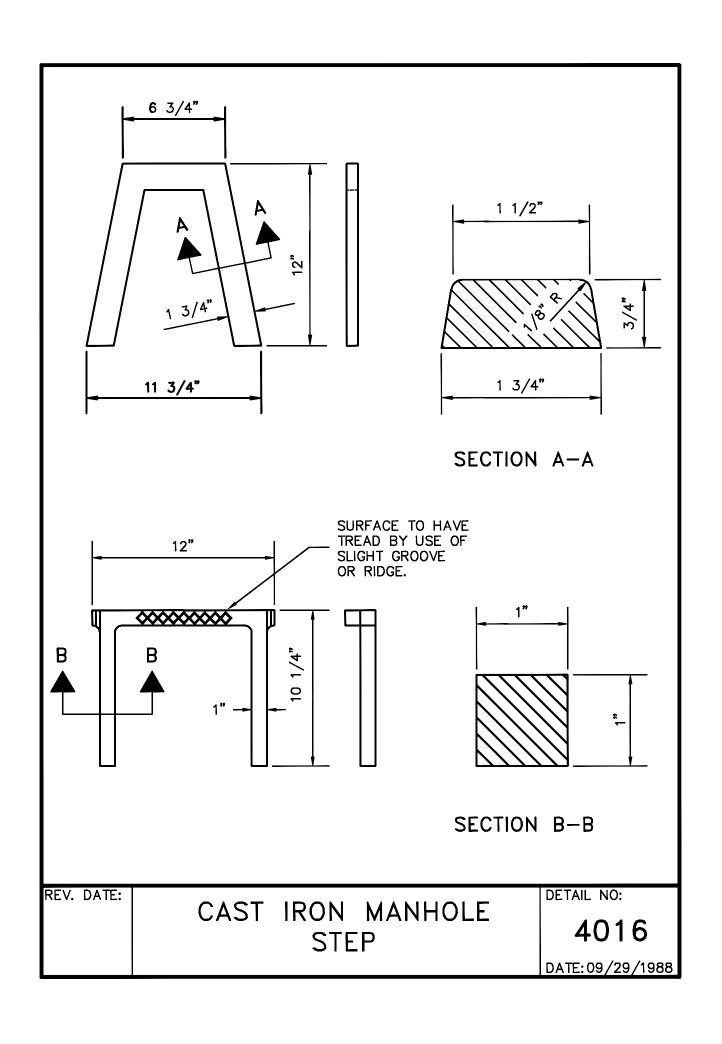
DATE: **06/23/1**999

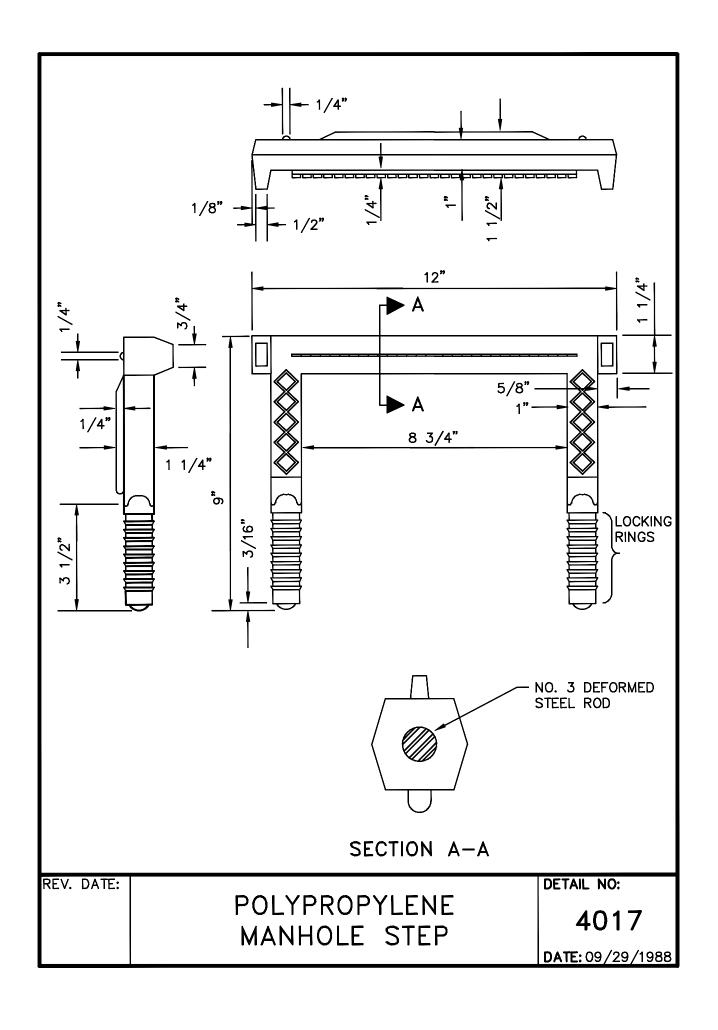


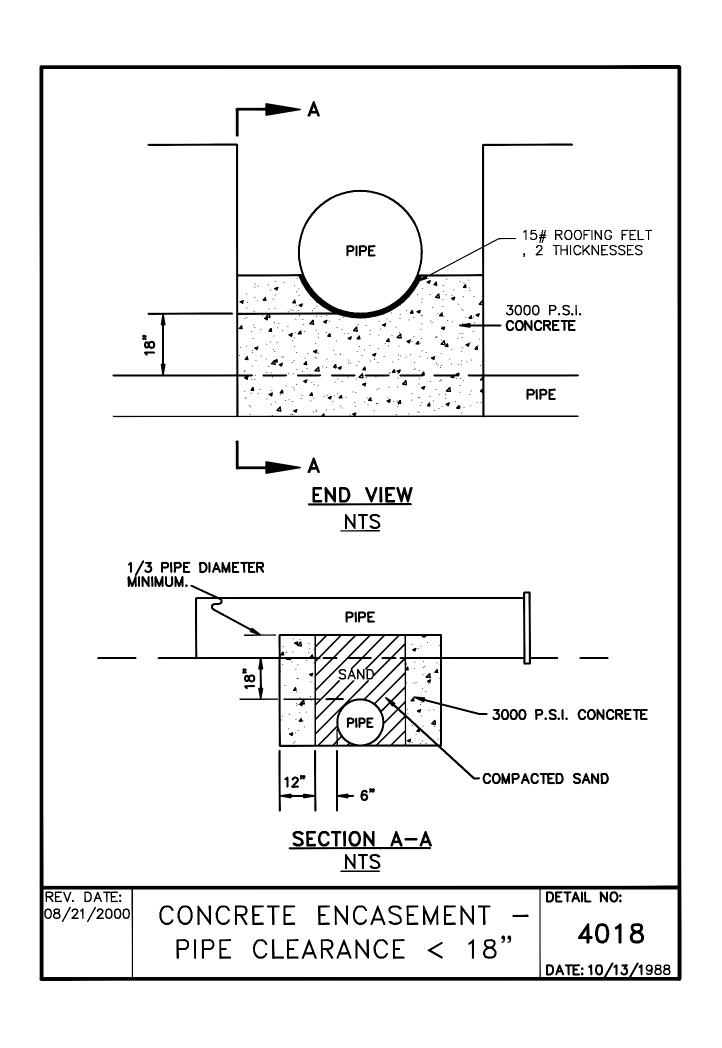


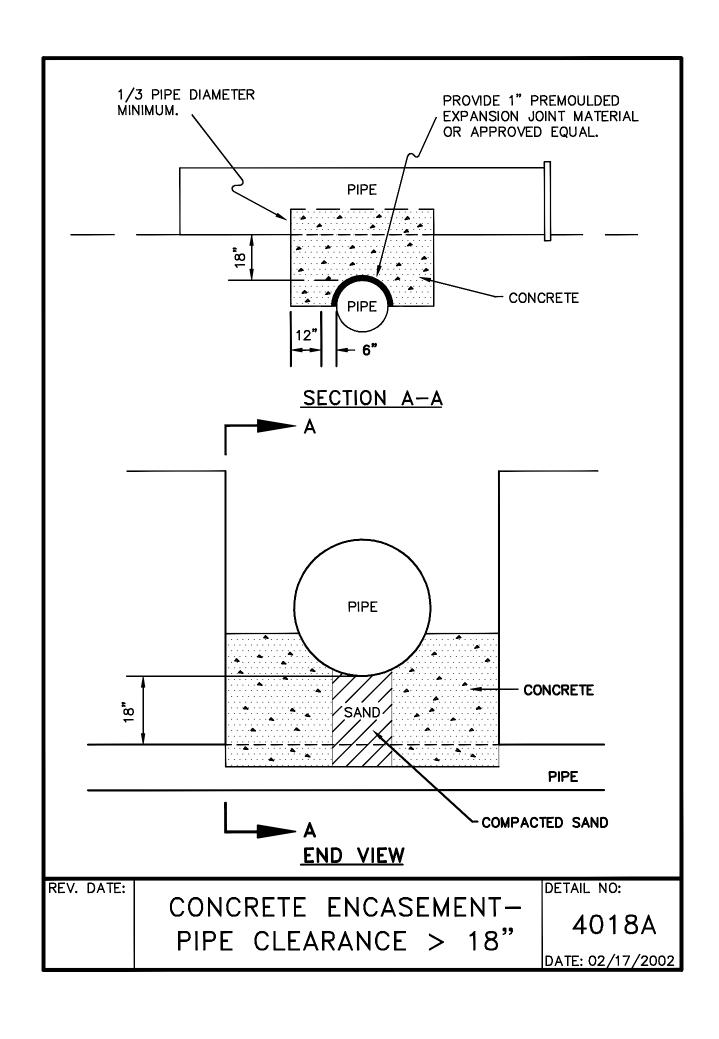




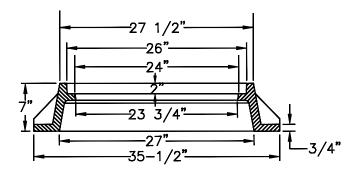




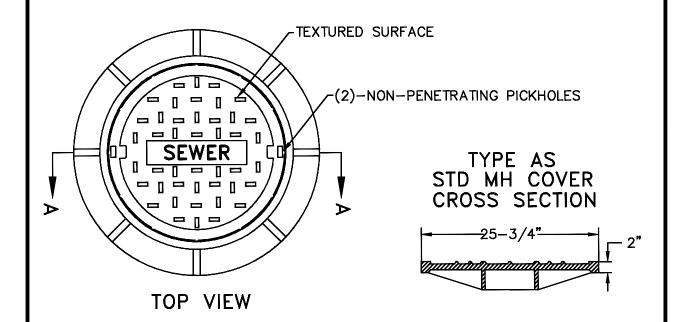




# STANDARD MANHOLE RING AND COVER



SECTION A-A



NOTE: REFER TO U.S.F. STANDARD 227

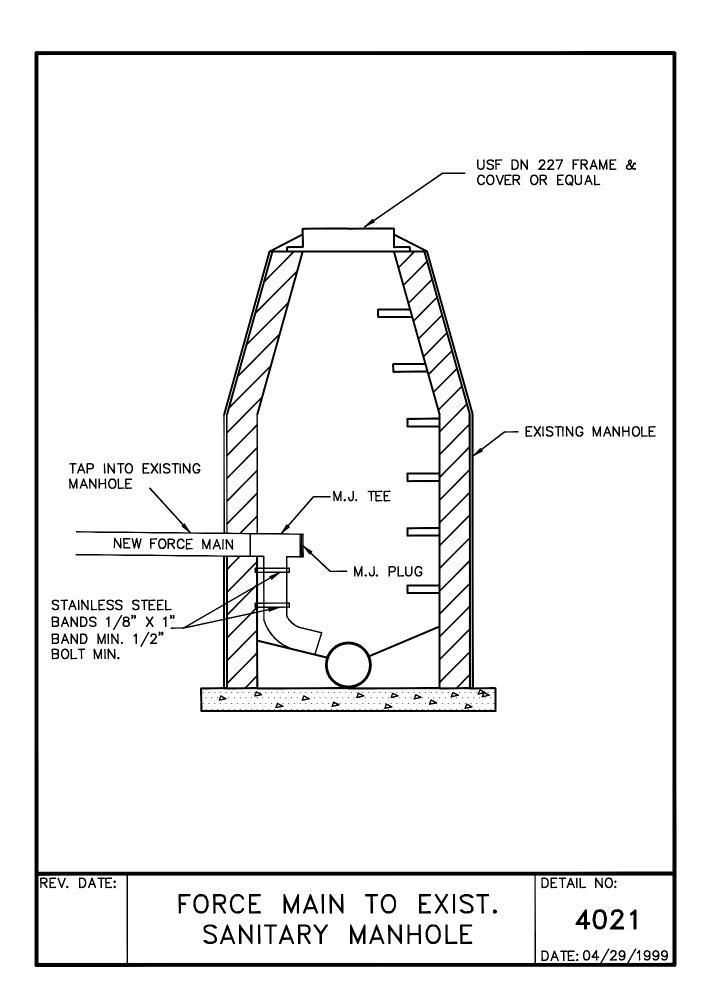
REV. DATE: 06/10/2009

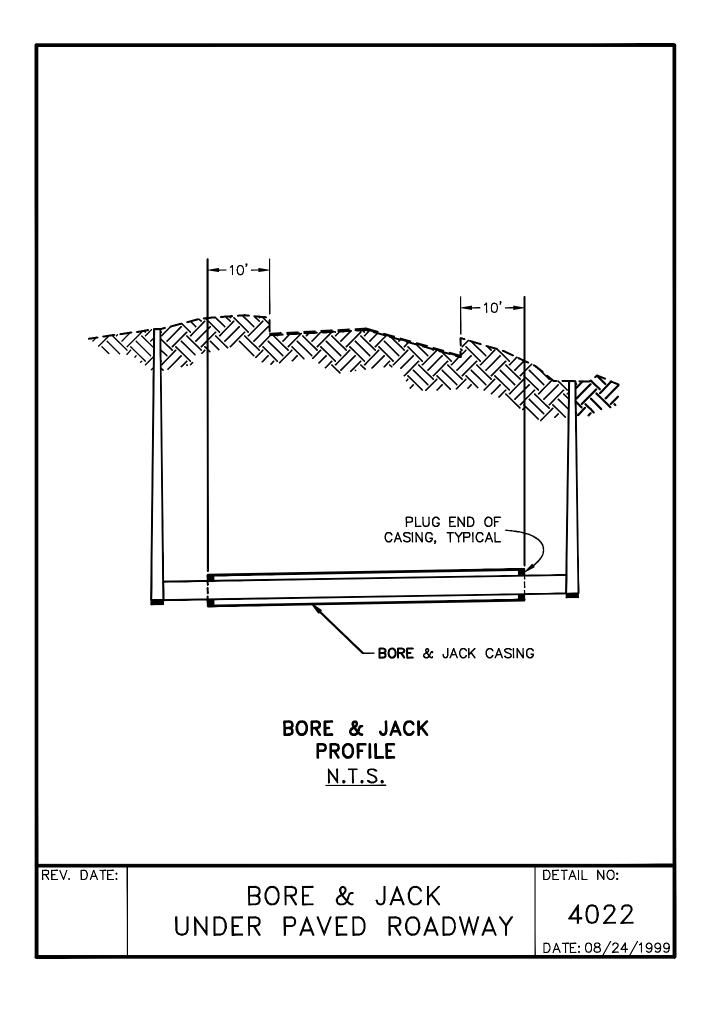
STANDARD MANHOLE FRAME & COVER

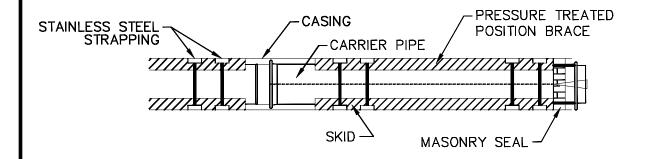
DETAIL NO:

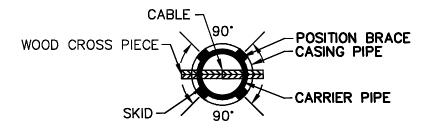
4020B

DATE: 06/02/98









12" AND UNDER - 4 SKIDS/BRACES

ALTERNATE: STAINLESS STEEL CASING SPACERS AS MANUFACTURED BY CASCADE OR EQUAL MAY BE USED IN LIEU OF WOODEN SKIDS.

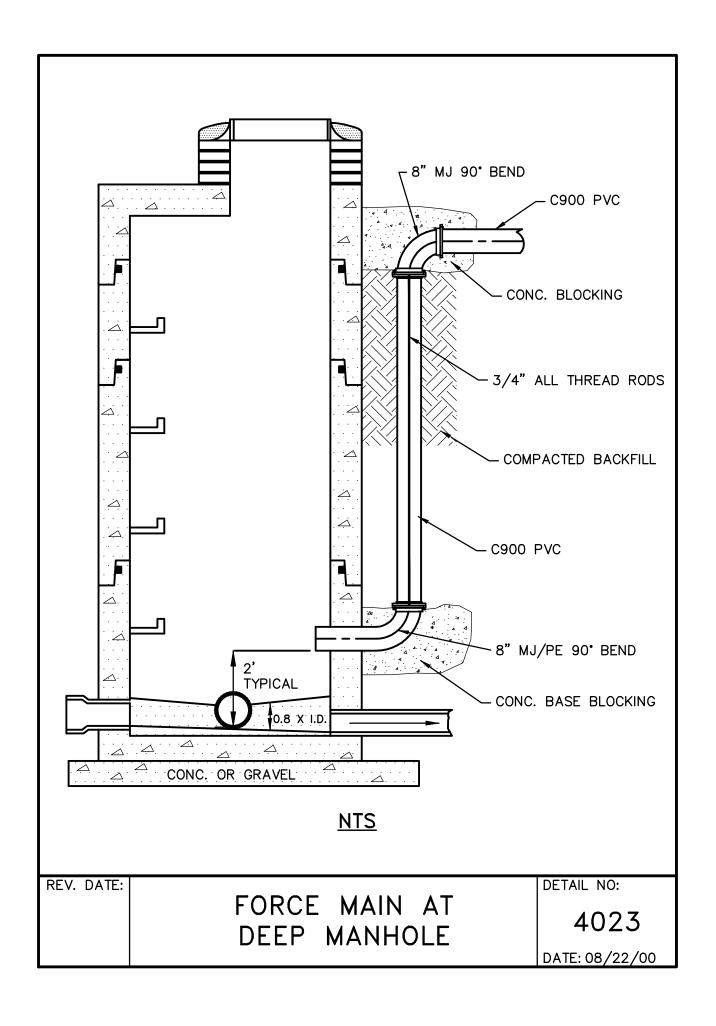
REV. DATE:

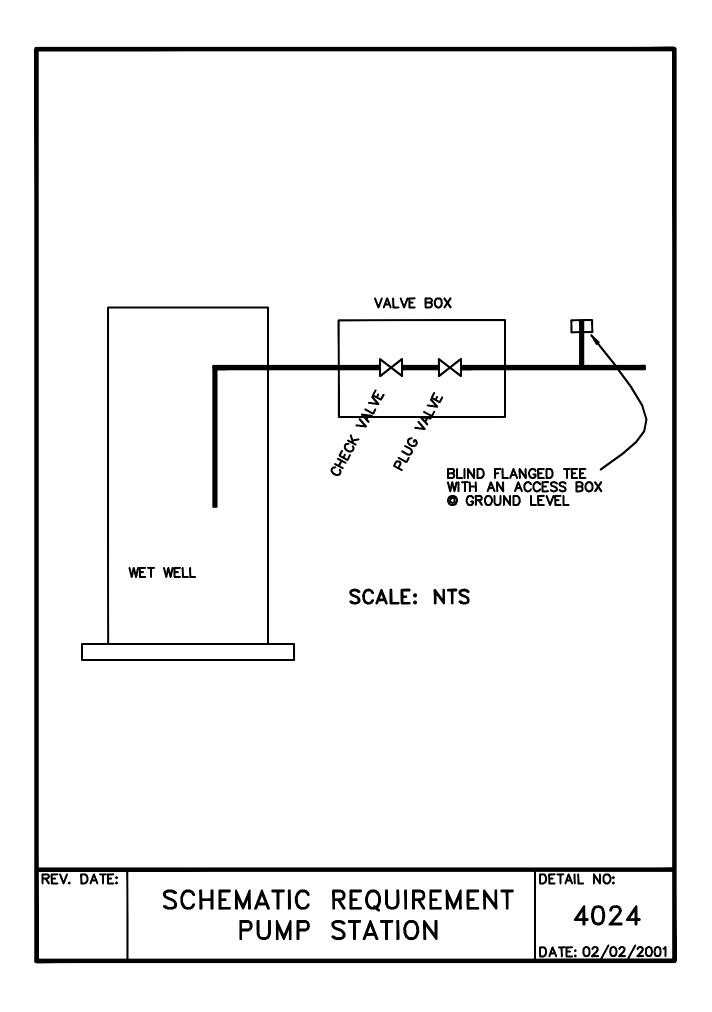
BORE CASING DETAIL

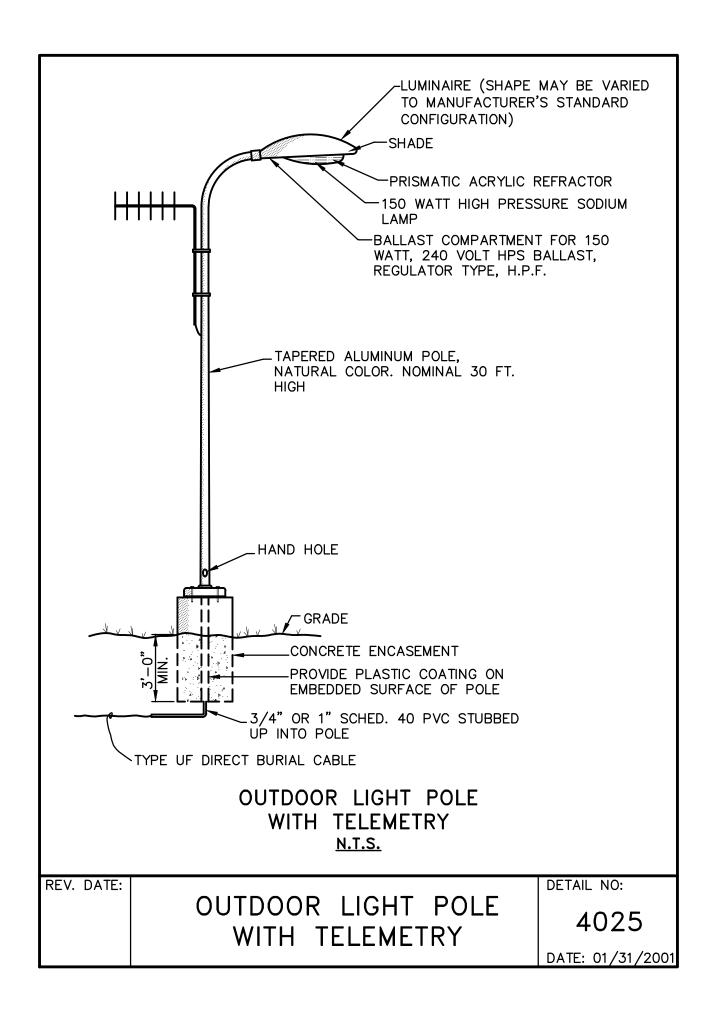
DETAIL NO:

4022A

DATE: 03/20/2001

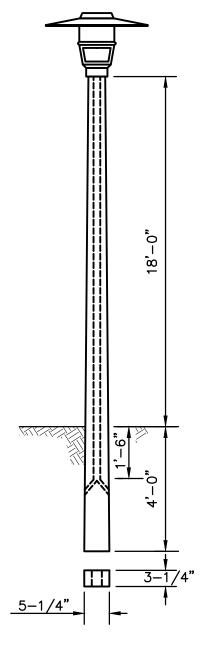






### NOTE:

LUMINARIES ARE TO BE 150 WATT HIGH PRESSURE SODIUM, DUSK TO DAWN OPERATED WITH A PHOTO ELECTRIC CELL, PROVIDE TWO.



#### NOTE:

METAL POLES TO BE ROUND TAPERED ONE—PIECE SEAMLESS ALUMINUM SHAFTS. TOP DIAMETER OF 3"; BOTTOM DIAMETER OF 4" MINIMUM MINIMUM WALL THICKNESS: 0.125". BOTTOM 4'-0" SECTION PAINTED INSIDE AND OUTSIDE WITH ONE COAT OF BITUMINOUS PRIME.

23' OUTDOOR LIGHT POLE N.T.S.

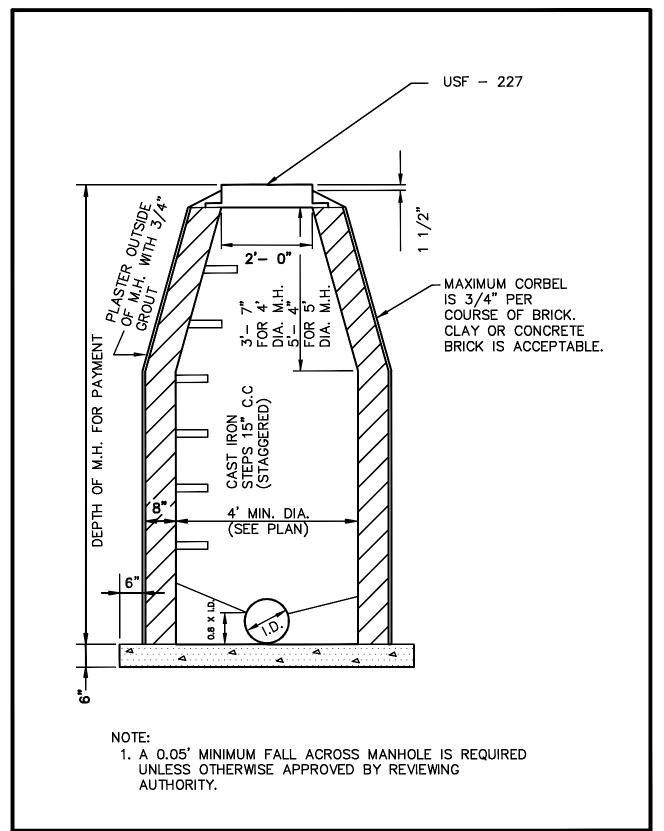
REV. DATE:

23' OUTDOOR LIGHT POLE

DETAIL NO:

4025A

DATE: 03/06/2007



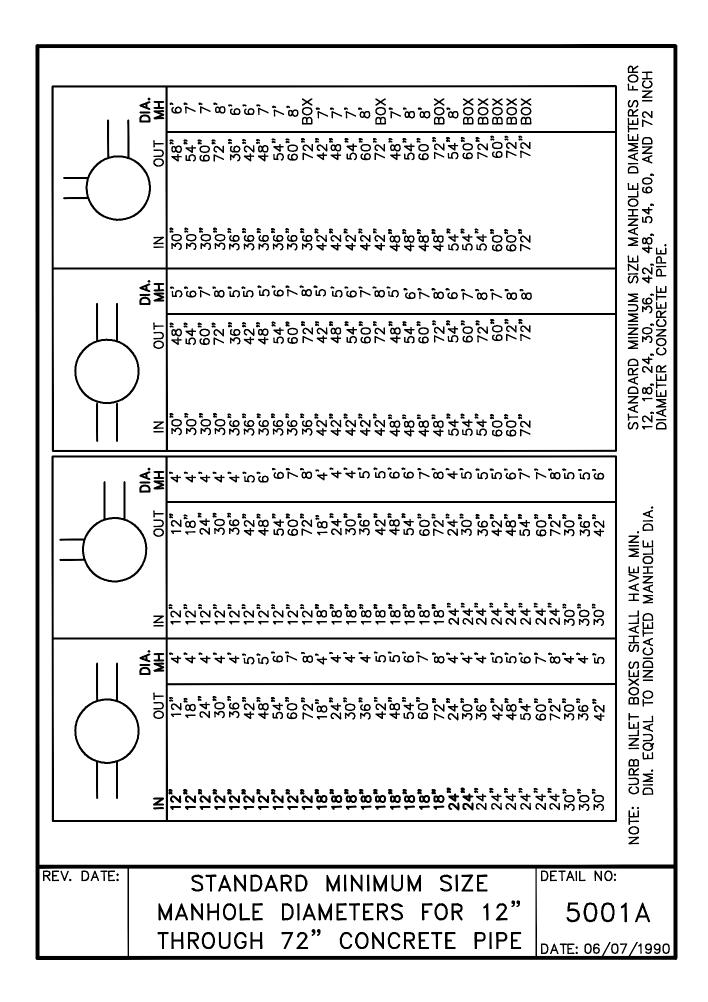
REV. DATE: 09/16/2008 01/14/2014

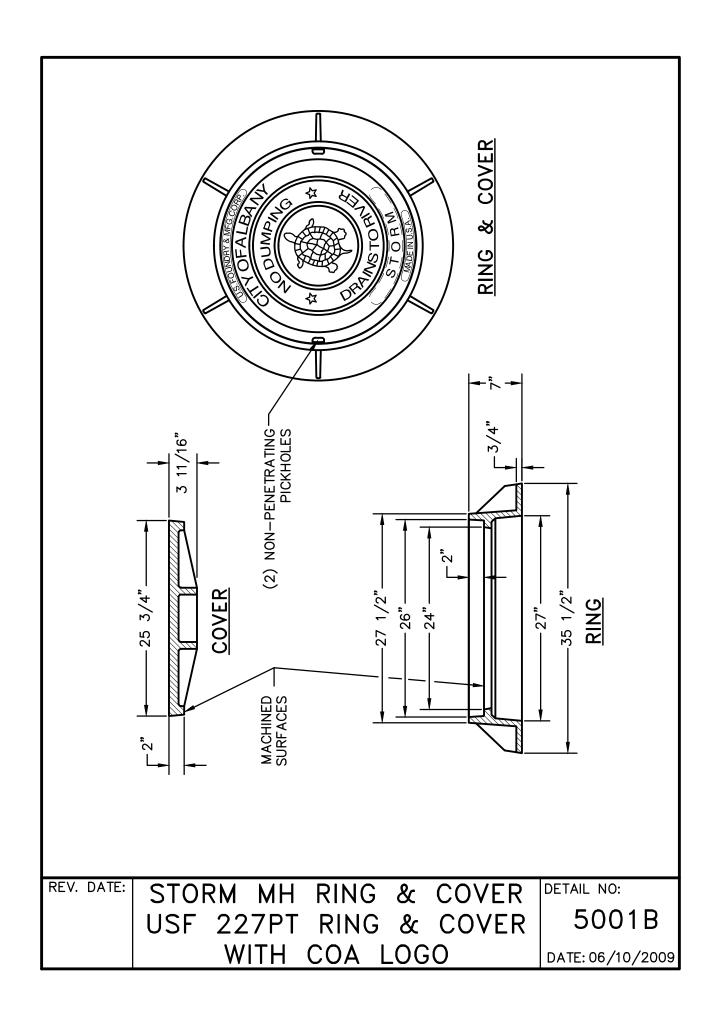
STANDARD BRICK MANHOLE STORM SEWER SYSTEM

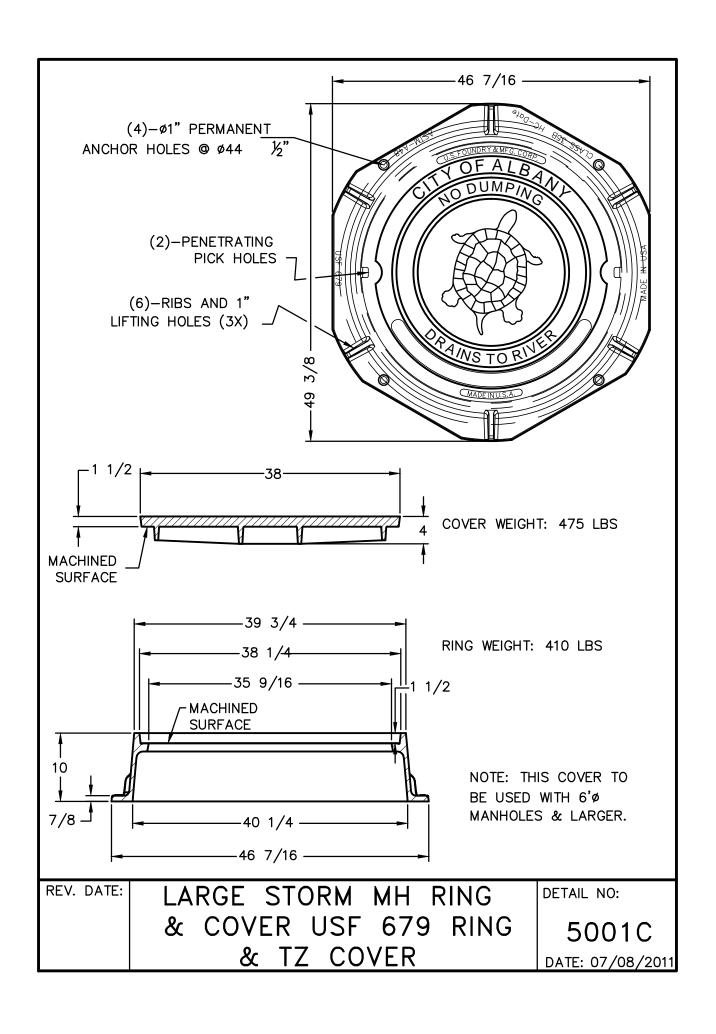
DETAIL NO:

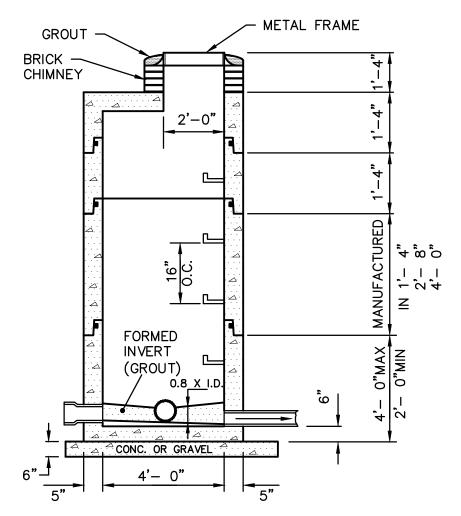
5001

DATE: 09/30/1988









### NOTES:

- 1. PRECAST MANHOLE SECTIONS ARE MANUFACTURED IN LENGTHS OF 1'- 4", 2'- 8" & 4'- 0".
- THE FIRST TWO SÉCTIONS BELOW THE TOP SECTION MUST BE 1'- 4" LONG ON ALL PROJECTS WITHIN THE CITY OF ALBANY.
- A 0.05' MINIMUM FALL ACROSS MANHOLE IS REQUIRED UNLESS OTHERWISE APPROVED BY REVIEWING AUTHORITY.
- 4. ALIGN THE ACCESS OPENING ON NONCONCENTRIC TOPS DIRECTLY OVER THE EXIT PIPE OF MANHOLE.
- THE PREFERRED HEIGHT OF 1'- 4" FOR THE BRICK CHIMNEY AND METAL FRAME MAY BE VARIED SLIGHTLY WITH PRIOR APPROVAL OF THE ENGINEER.
- 6. TOP MUST BE DESIGNED & CONSTRUCTED TO MEET HIGHWAY LOADING FOR TRUCK TRAFFIC.
- 7. CONCRETE REQUIRED WHERE CLAY PIPE IS INVOLVED. GRAVEL MAY BE USED WITH PVC, CONCRETE, CAST IRON OR DUCTILE IRON PIPE.

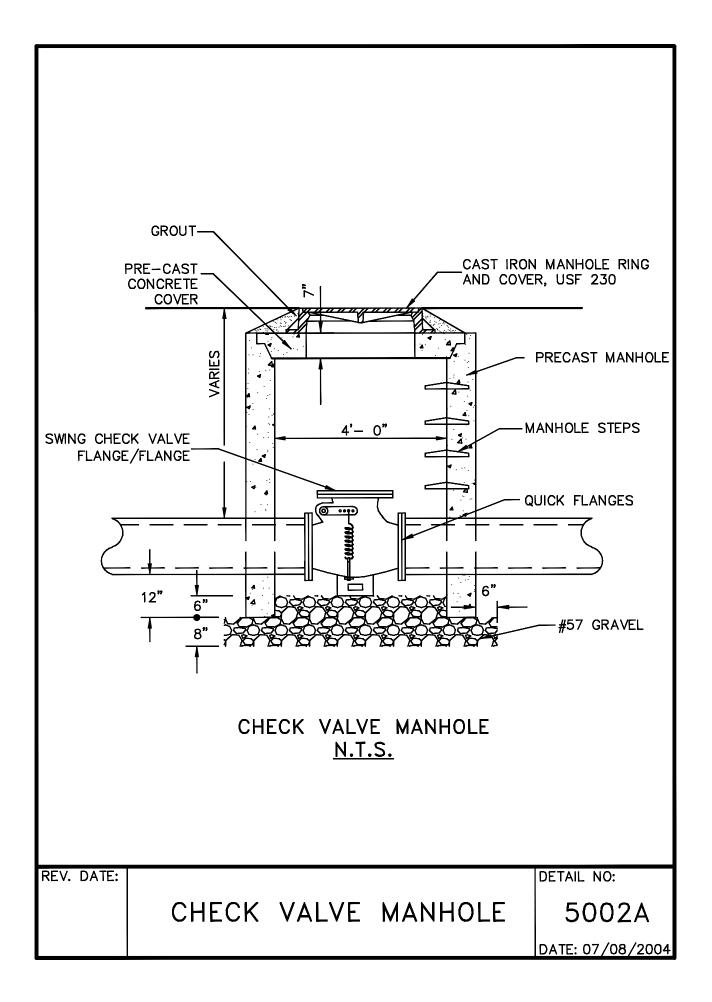
REV. DATE: 01/14/2014

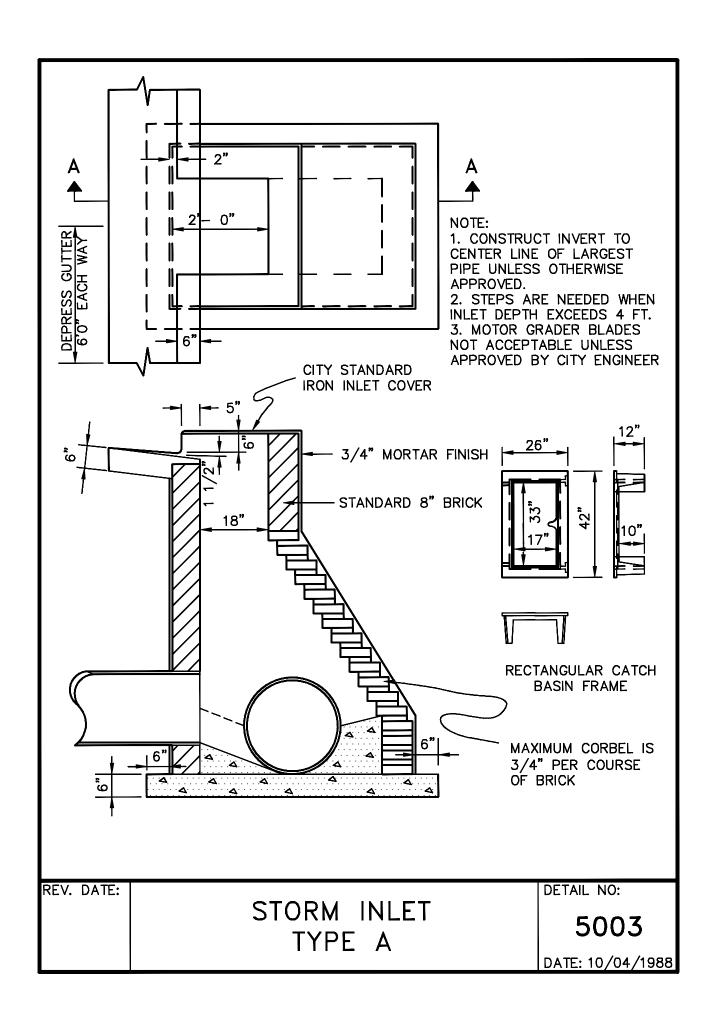
STORM STANDARD PRECAST MANHOLE

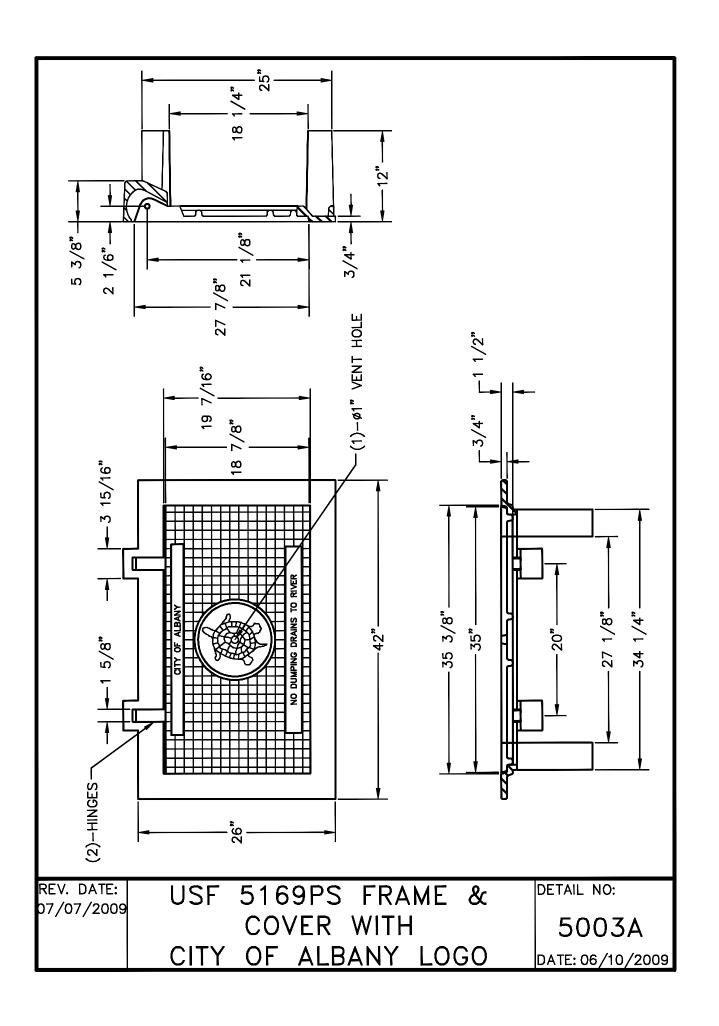
**DETAIL NO:** 

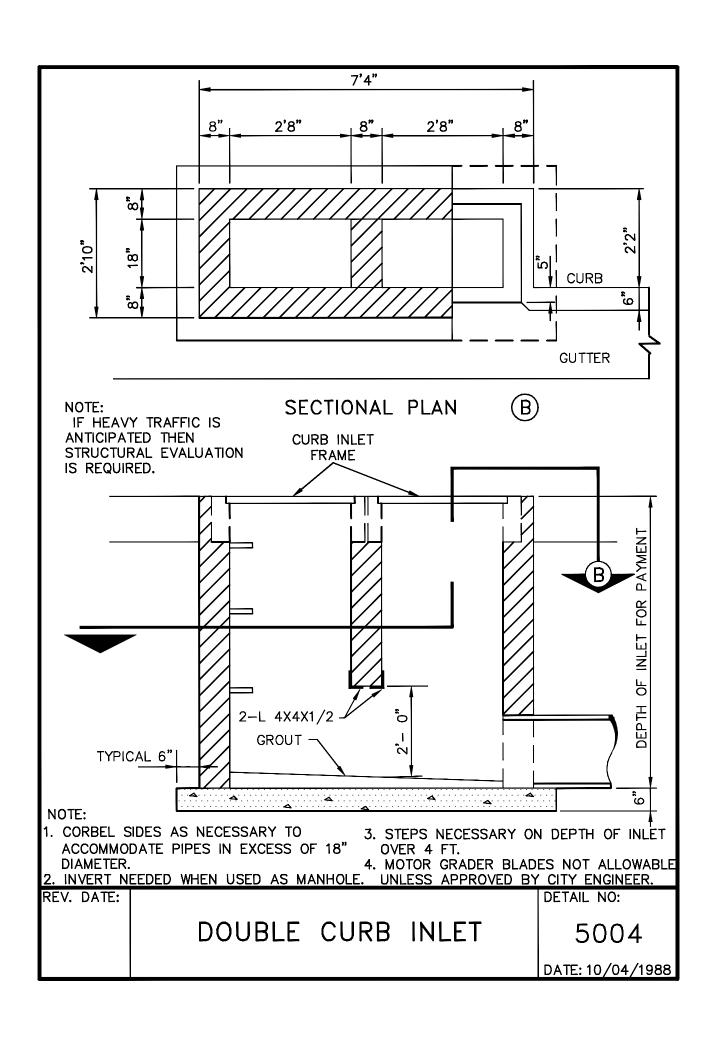
5002

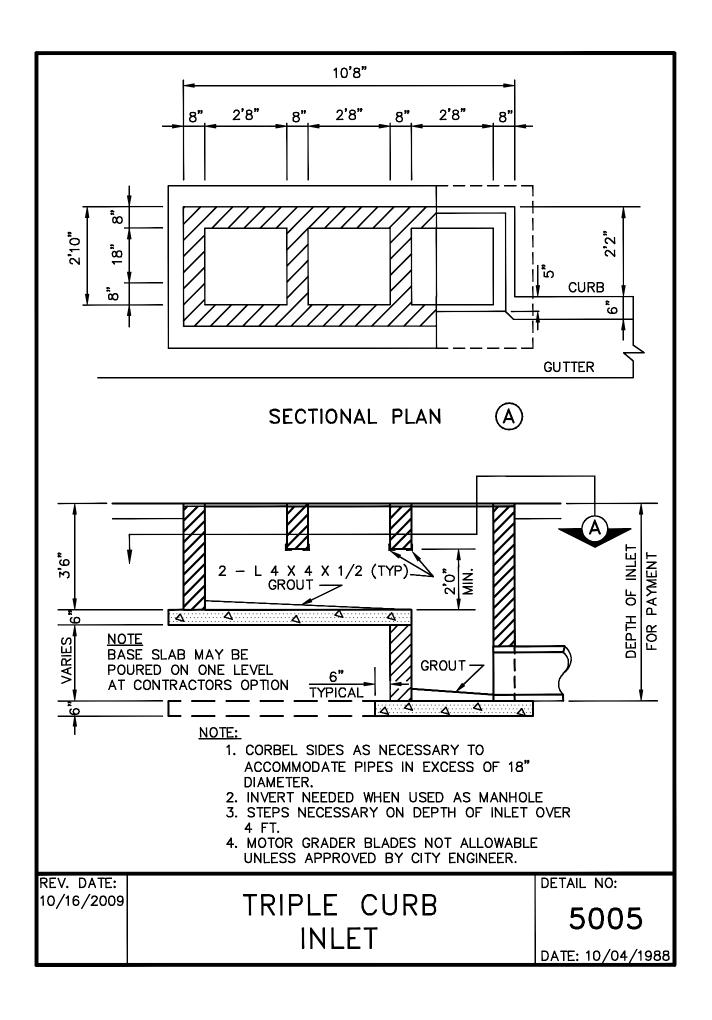
DATE: 09/30/1988

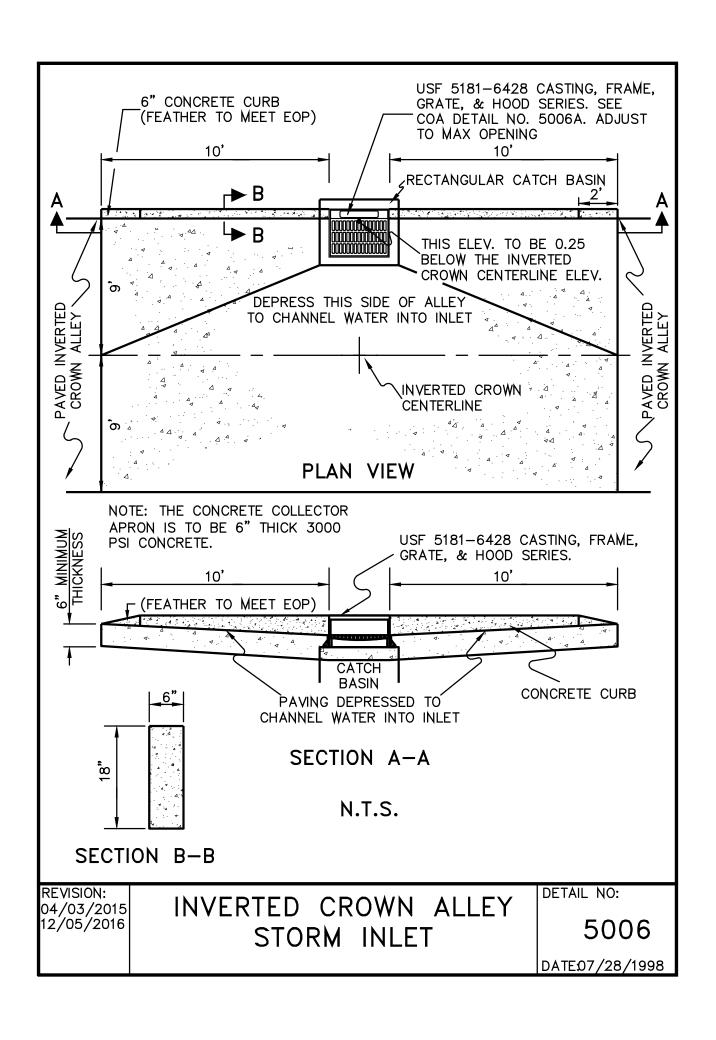


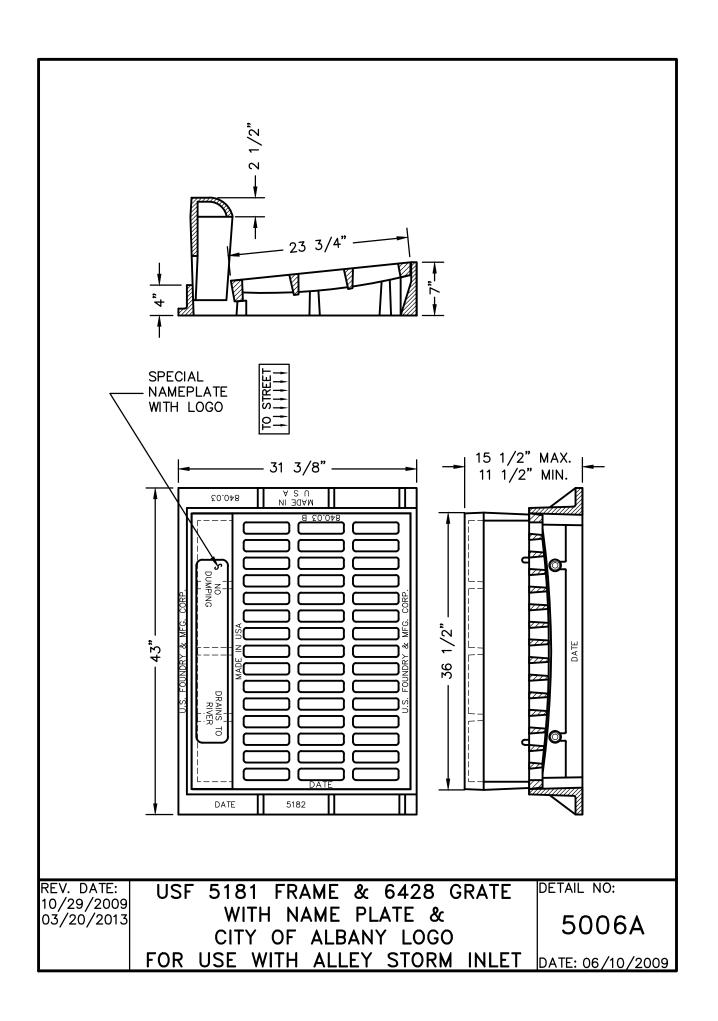


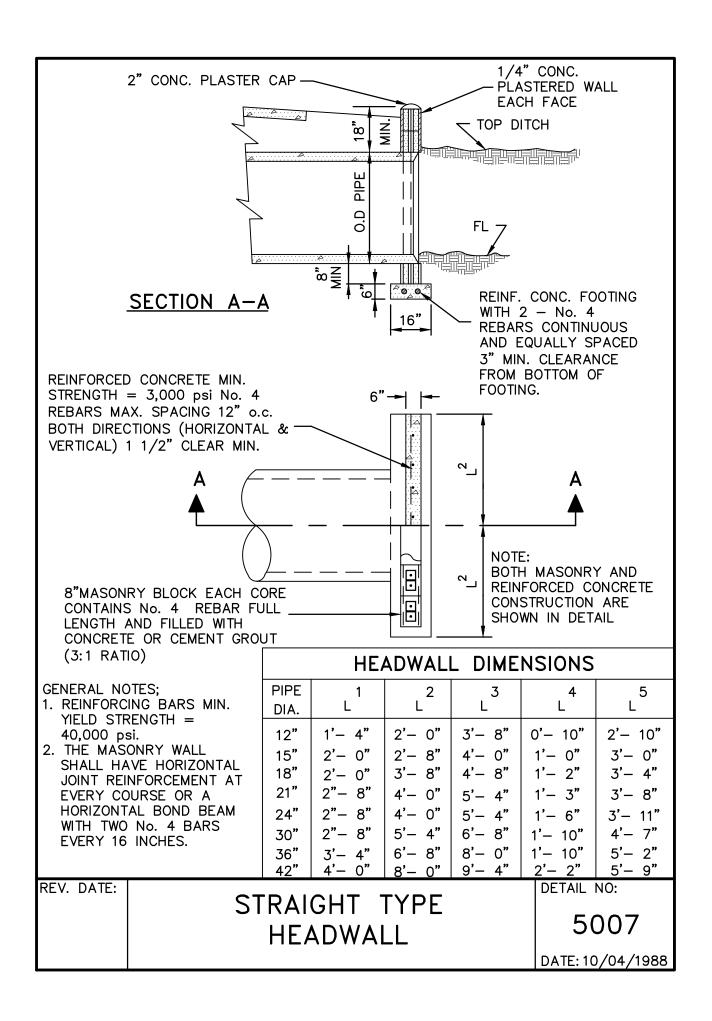


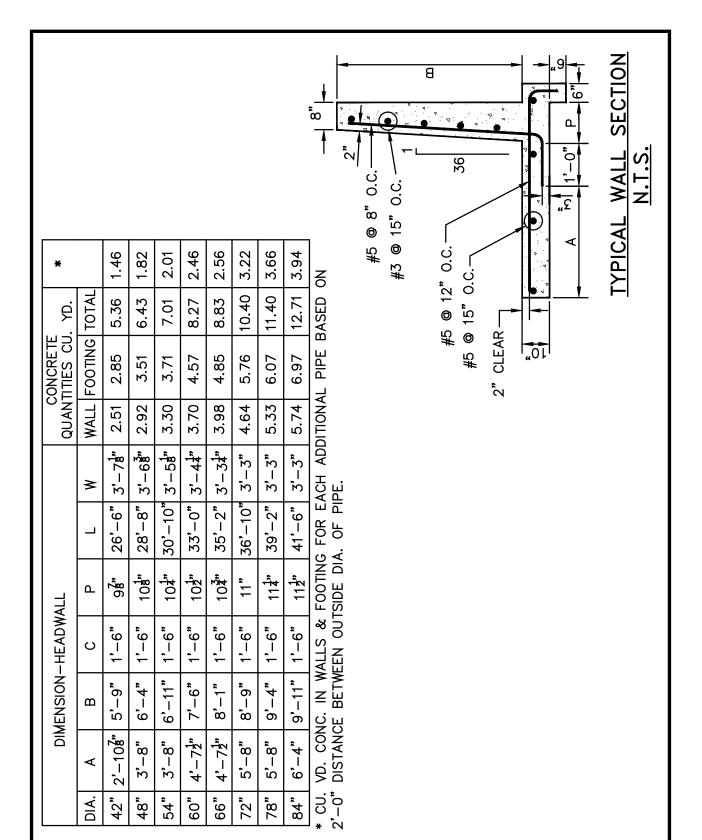












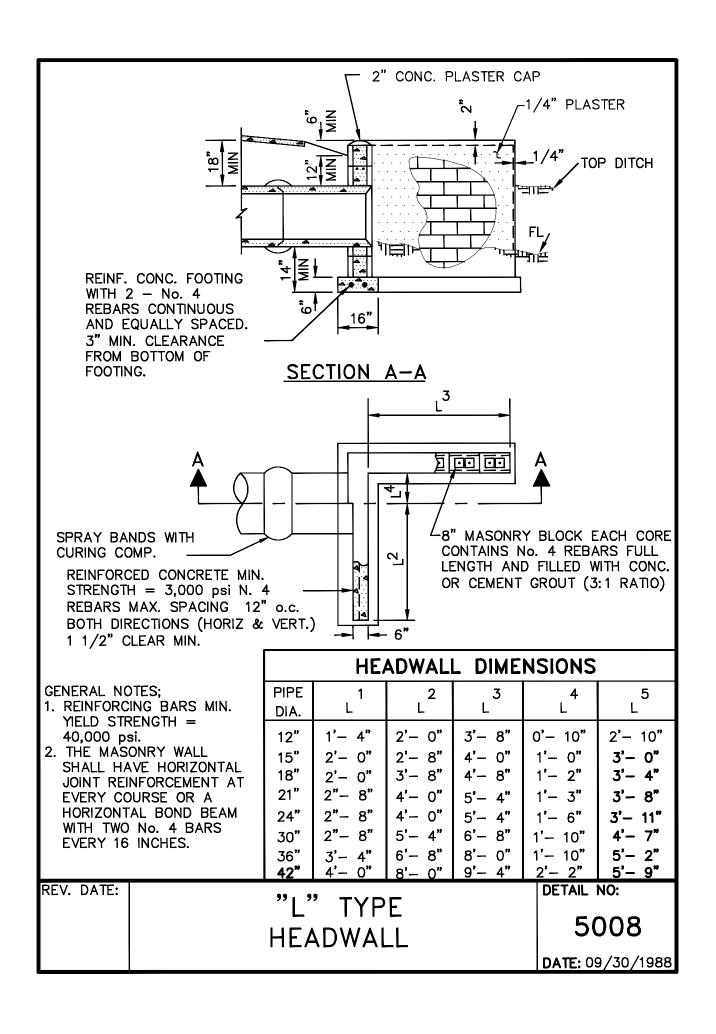
REV. DATE:

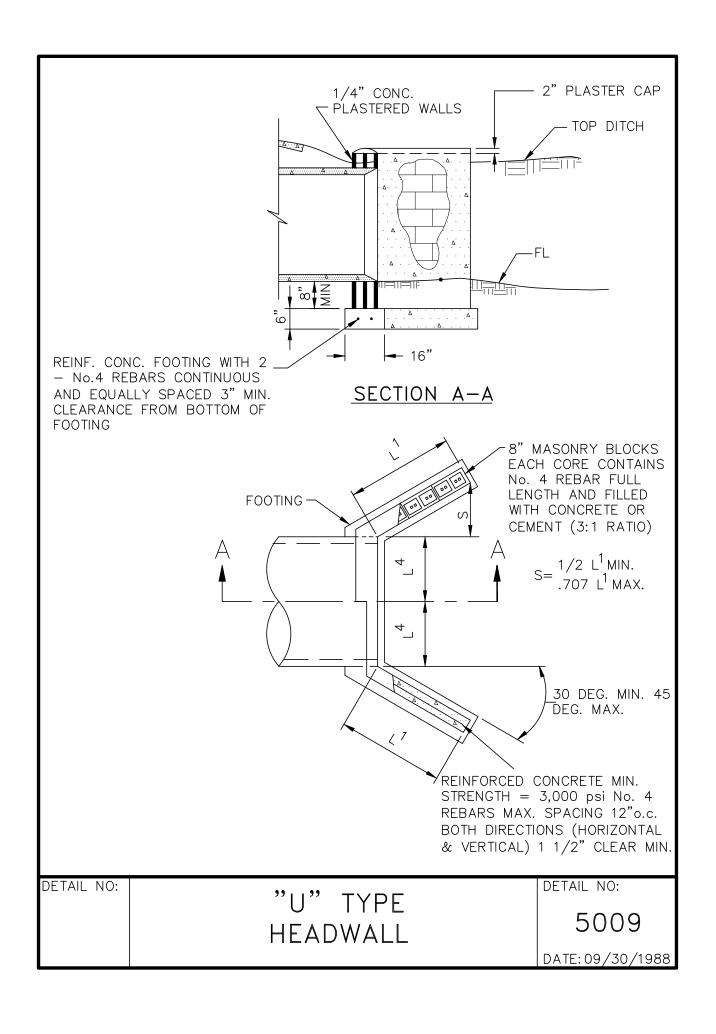
STRAIGHT HEAD-WALL FOR 42" TO 84" PIPE CULVERTS

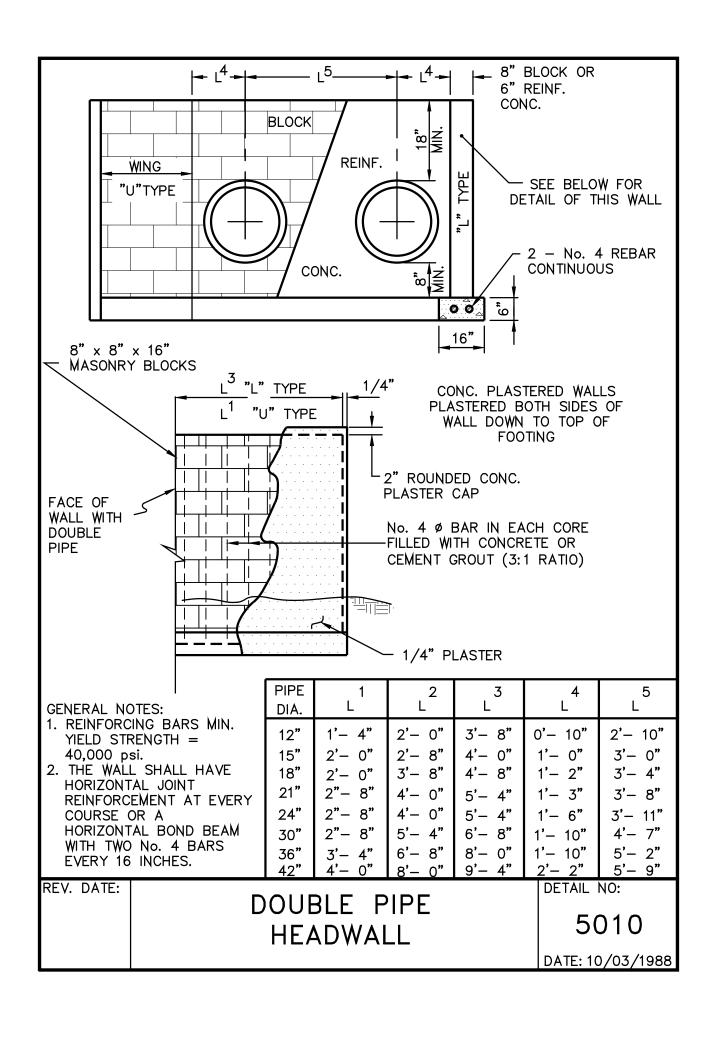
DETAIL NO:

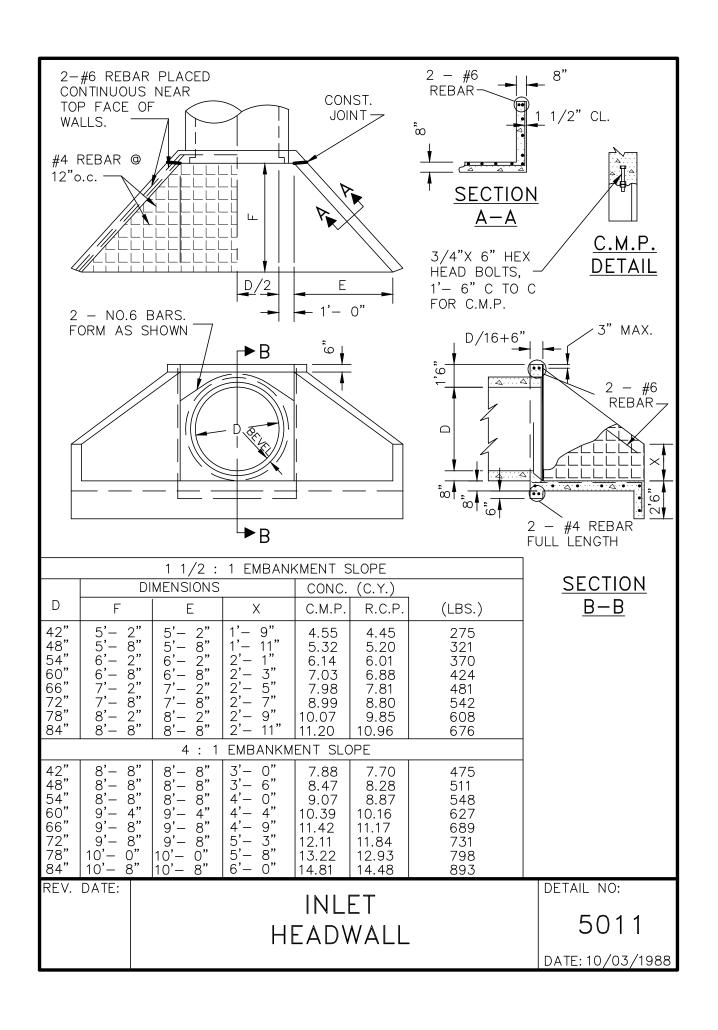
5007A

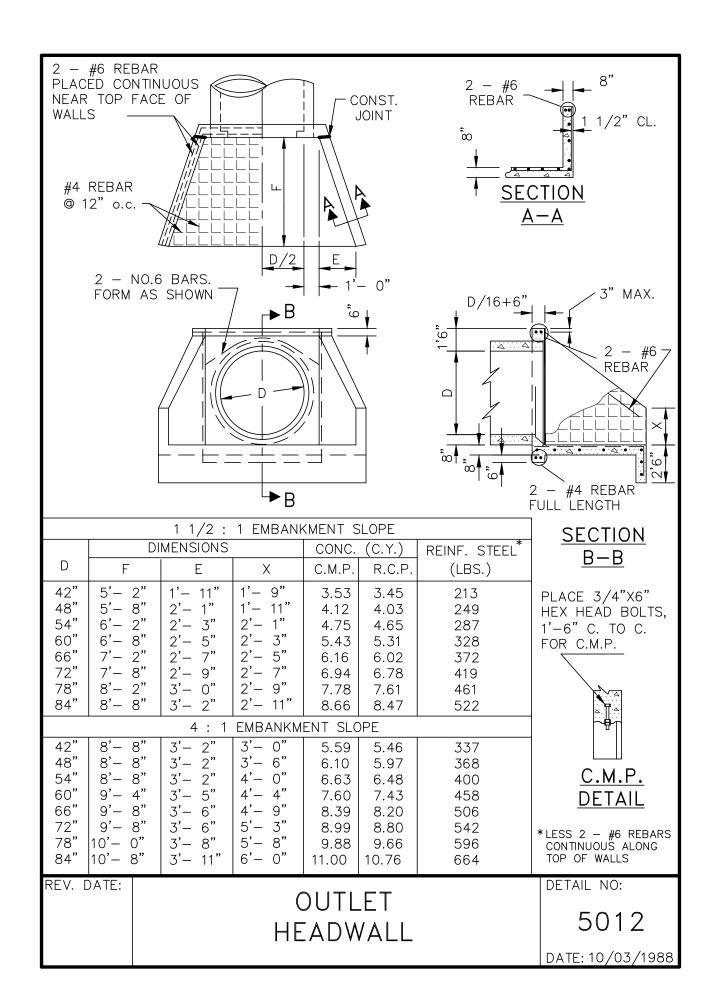
DATE: 03/21/2006

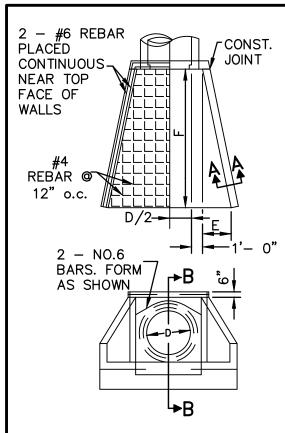










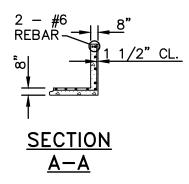


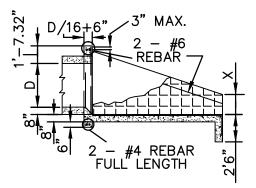
PLACE 3/4"X6" HEX HEAD BOLTS, 1'-6" C. TO C. FOR C.M.P.



## C.M.P. DETAIL

\*LESS 2 - #6 REBARS CONTINUOUS ALONG TOP OF WALLS





SECTION B-B

3: 1 EMBANKMENT SLOPE											
	DI	MENSIONS		CONC. (C.Y.)		REINF. STEEL*					
D	F	Е	X	C.M.P. R.C.P.		(LBS.)					
42"	11'- 11"	2'- 6" 2'- 8"	1'- 3.8" 1'- 9.8"	18.17 19.96	17.76 19.51	1,096					
48" 54"	12'- 6"	2 – 8 2'– 8"	2'- 1.6"	21.78	21.29	1,204 1,314					
60"	14'- 0"	3'- 0"	2'- 1.6"	24.39	23.84	1,471					

REV. DATE:

OUTLET HEADWALL

DETAIL NO:

5012A

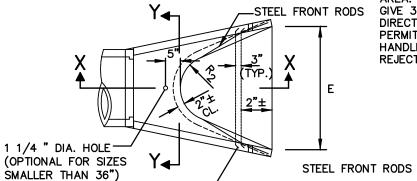
DATE: 04/14/1999

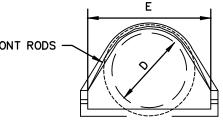
END SECTION TO PIPE JOINT SHOWN AS TYPICAL: HUB END ON OUTLET END SECTIONS; SOCKET END ON INLET END SECTIONS. SEE NOTE "A".

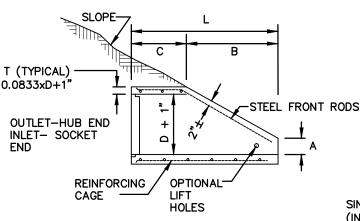
DO NOT CUT CONCRETE PIPE. USE FULL LENGTH SECTIONS ONLY. WARP SLOPE TO CONFORM WITH PIPE LENGTH AND END SECTION

#### **INSTALLATION:**

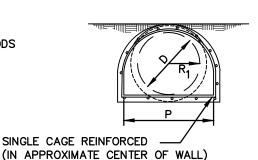
"D" OVER 30" — CABLE, CHAIN, OR LIFTING PIN WILL EXTEND THROUGH 1 1/4" HOLE WITH A PLATE OR REBAR CONNECTED INSIDE THE CONCRETE SECTION TO PROVIDE ADEQUATE BEARING AREA. A LIFTING DEVISE MAY BE USED TO GIVE 3 LIFT POINTS. HOOKS CONNECTED DIRECTLY TO THE CONCRETE ARE NOT PERMITTED. DAMAGE FROM IMPROPER HANDLING SHALL BE CAUSE FOR REJECTION.







STEEL BACK RODS FOR "D" OVER 30" PLAN



SECTION X-X

### SECTION Y-Y

**FRONT** 

### REINFORCING CAGE:

- (1) WRE FABRIC HAVING SAME STEEL AREA AS INNER CAGE FOR CL.III PIPE, AASHTO M-170, BUT PLACED IN CENTER OF WALL.
- (2) ALTERNATE #3 BARS SPACED 12"+—
  LONGITUDINALLY WITH #2 BARS TRANSVERSELY
  AT 6" O.C. MAXIMUM SPACING SPOT WELDING
  OR TIED TO FORM CAGE. (BACK RODS MAY BE
  OMITTED).

### NOTE A:

CONTRACTOR WILL INFORM PRODUCER IF CONCRETE FLARED END SECTION IS FOR INLET OR OUTLET END. SOCKET (TONGUE OR SPIGOT) END IS REQUIRED FOR INLETS. HUB (GROOVE OR BELL) END IS FOR OUTLETS. SOCKET TO SOCKET OR HUB TO HUB JOINT WILL NOT BE ACCEPTED UNLESS A REINFORCED CONCRETE COLLAR IS BUILT AROUND THE JOINT WITH NO PAYMENT BEING MADE FOR THE COLLAR.

### NOTE B:

WALL THICKNESS (T) IS SHOWN AS NOMINAL AND MAY BE INCREASED AT PRODUCER'S OPTION FOR DESIRED JOINT DESIGN OR TO ALLOW FLAT OUTSIDE BOTTOM ON THE FLARE. INSIDE DIMENSIONS AS SHOWN.

	DIMENSIONS AND REINFORCING												
	FRONT	BACK								R	R		
D	BAR	RODS	SLOPE	A	В	С	L	E	P	1 1	<sup>1</sup> 2		
18'		2'- 6"	2.2 : 1	9"	2'3"	3'10"	6'1"	3'0"	2'5"	1'4"	1'0"		
24		2'- 8"	2.4 : 1	10"	3'8"	2'6"	6'2"	4'0"	2'9"	1'5"	1'2"		
30		2'- 8"	2.4 : 1	12"	4'6"	1'8"	6'2"	5'0"	3'1"	1'6"	1'3"		
36			2.4 : 1	15"	5'3"	2'11"	8'2"	6'0"	4'0"	2'0"	1'8"		
42	' 1-#4×13'10"	3'- 0"	2.4 : 1	21"	5'3"	2'11"	8'2"	6'6"	4'6"	2'4"	1'10"		

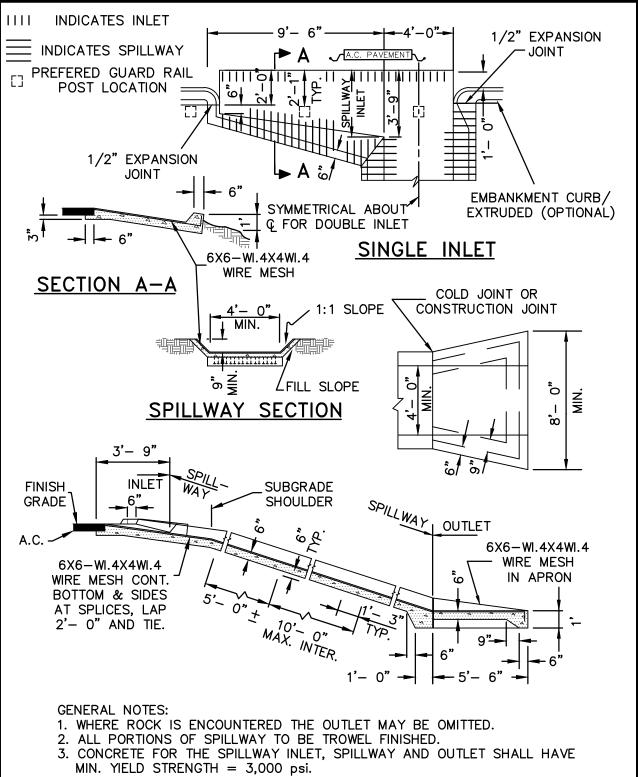
REV. DATE:

### FLARED END SECTION

DETAIL NO:

5012B

DATE: 06/30/1999



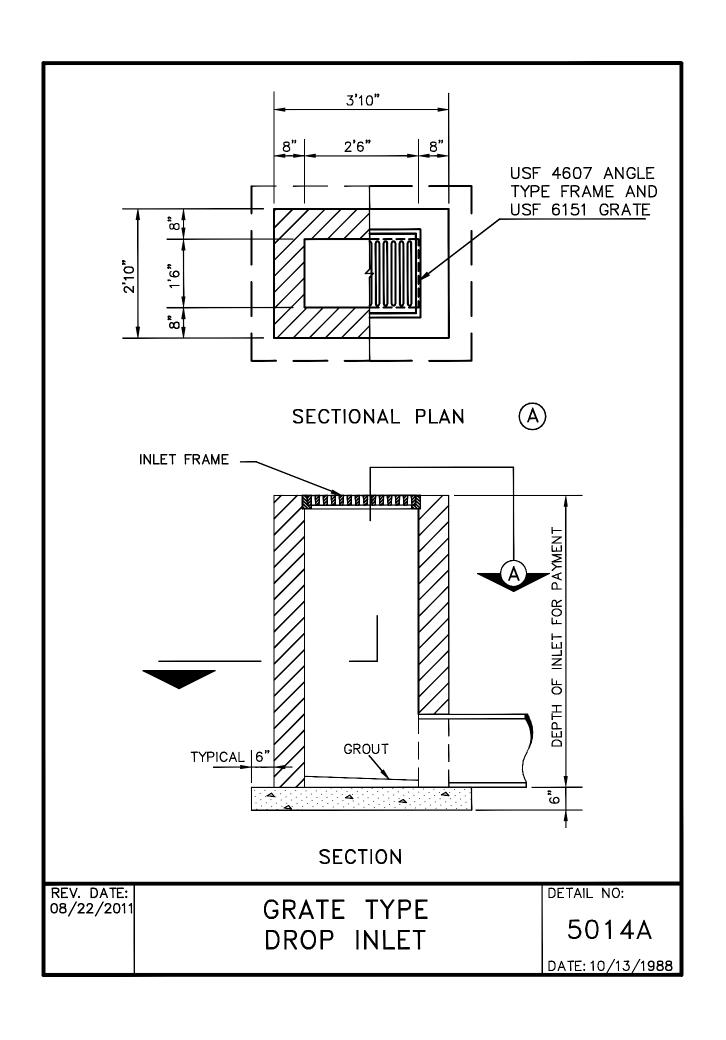
4. WHEN THE OUTLET IS USED, THE WIRE MESH SHALL EXTEND THROUGH THE JOINT INTO THE OUTLET IN LIEU OF BENDING INTO THE KEY.

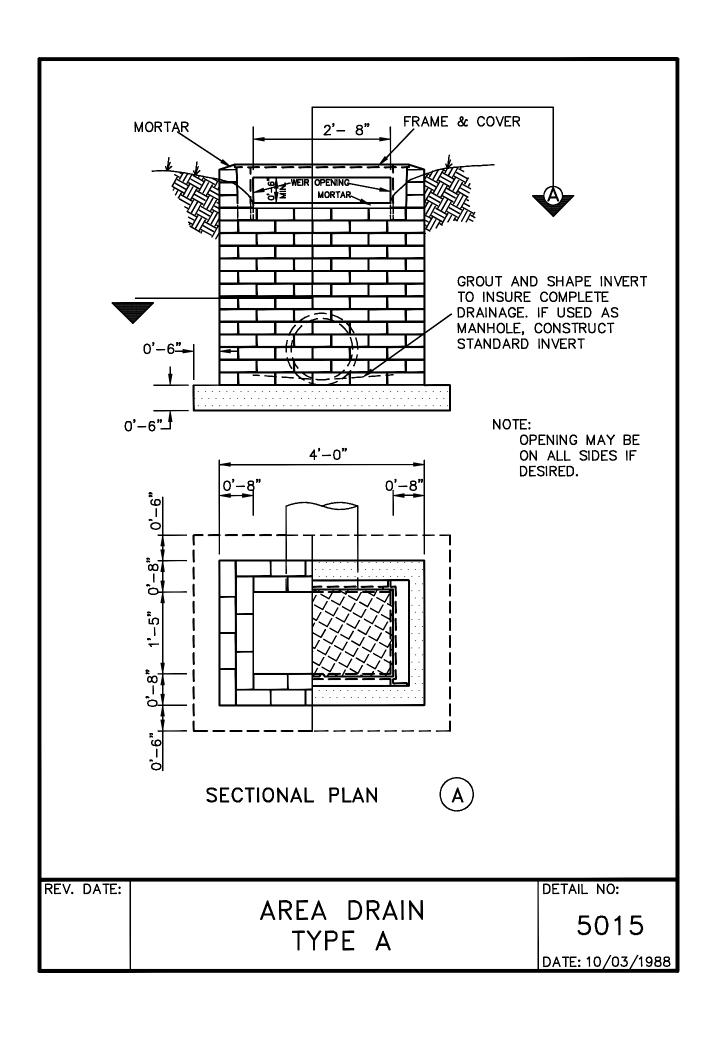
SPILLWAY
TYPE A

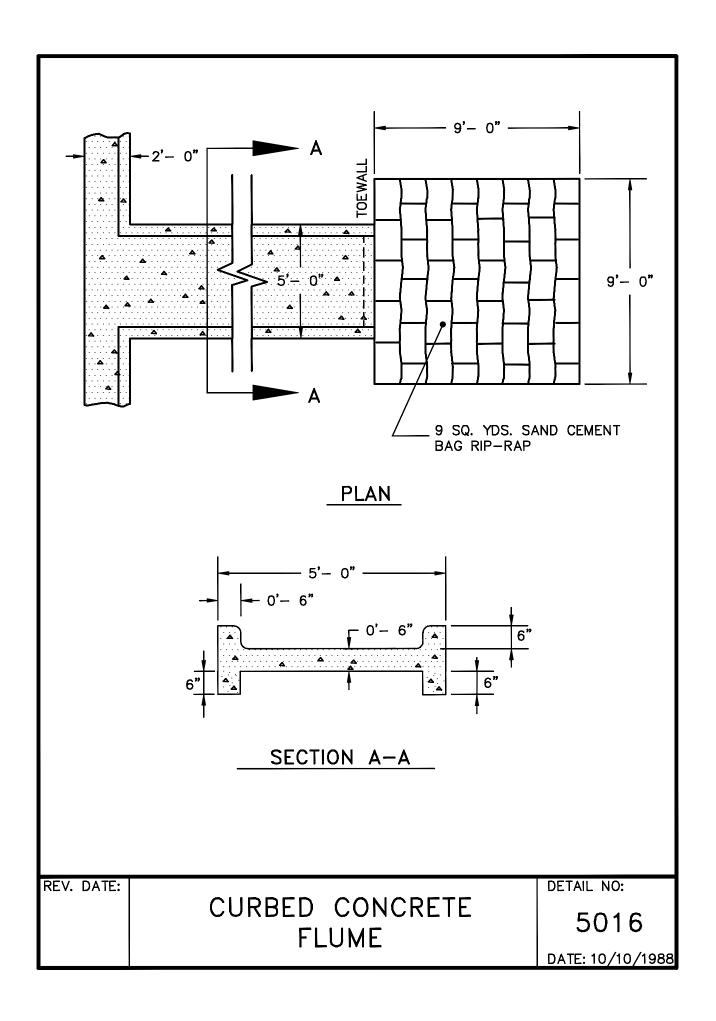
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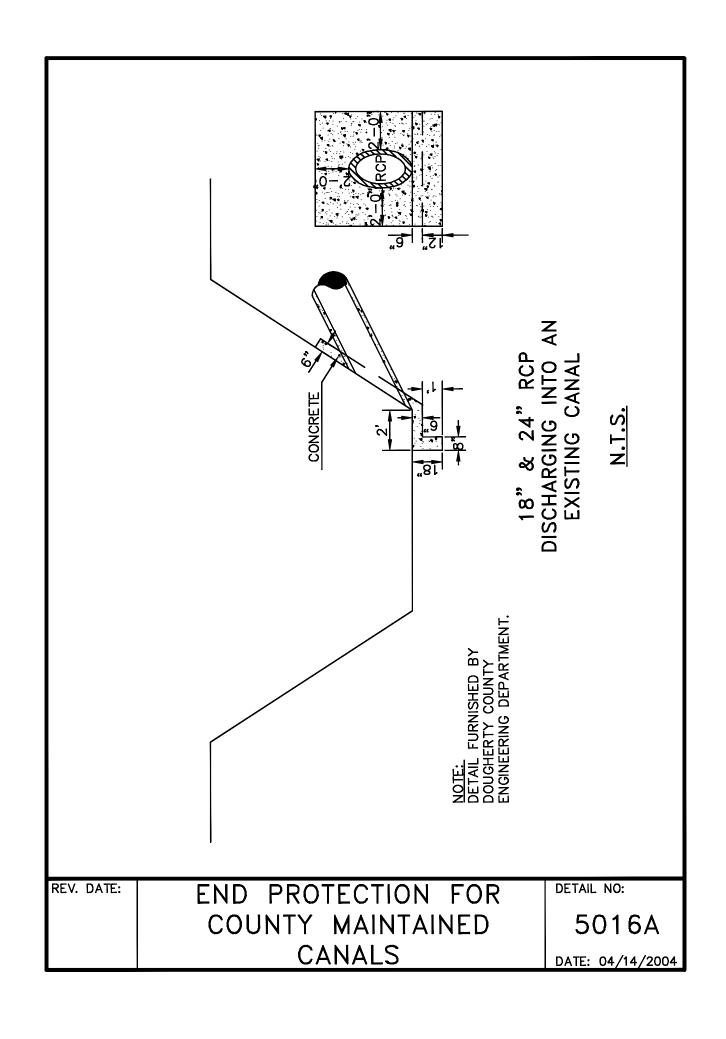
5013

DATE: 10/03/1988

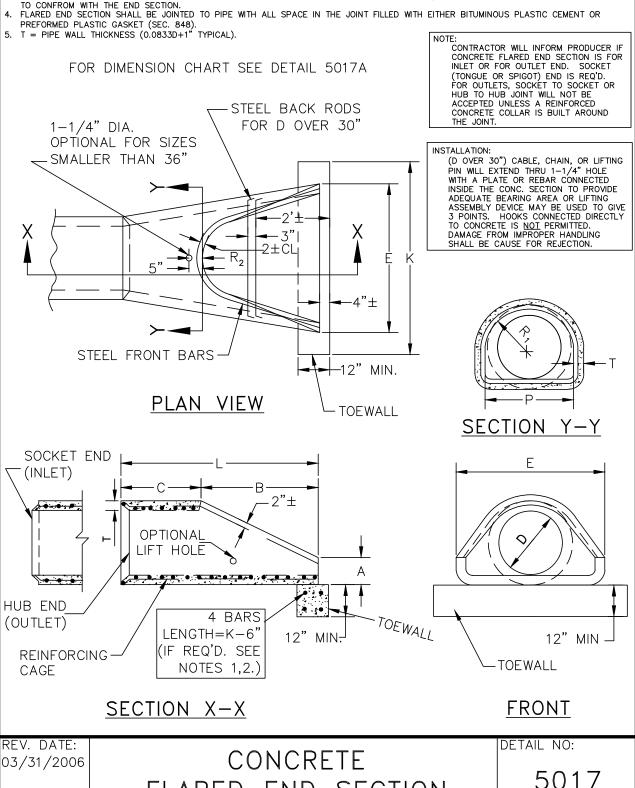








#### GENERAL NOTES: TOEWALLS ARE REQ'D FOR OUTLETS OF CONC. STORM DRAINS, EXCEPT WHERE DITCH PAVING OR OTHER EROSION PROTECTION IS PROVIDED OR WHERE THE OUTLET VELOCITY IS LESS THAN 8 FT/SEC. TOEWALLS ARE NOT REQUIRED FOR SIDE DRAINS, SLOPE DRAINS OR INLETS OF STORM DRAINS. THIS CRITERIA MAY BE VARIED WHERE SPECIFIED BY THE DESIGNER OR ENGINEER. PRECAST TOEWALLS SHALL BE CL 'A' CONCRETE; CAST IN PLACE TOEWALLS MAY BE CL 'A' OR 'B' CONCRETE AND MAY BE TRENCH FORMED. CLASSES OF CONCRETE SHALL COMPLY WITH THE LATEST EDITION OF THE GA DOT SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES. TO CONFROM WITH THE END SECTION WILL ALIGN WITH CENTERLINE OF PIPE. IF PIPE IS SKEWED, THE EMBANKMENT SLOPE WILL BE WARPED TO CONFROM WITH THE END SECTION. FLARED END SECTION SHALL BE JOINTED TO PIPE WITH ALL SPACE IN THE JOINT FILLED WITH EITHER BITUMINOUS PLASTIC CEMENT OR PREFORMED PLASTIC GASKET (SEC. 848). T = PIPE WALL THICKNESS (0.0833D+1" TYPICAL).CONTRACTOR WILL INFORM PRODUCER IF



FLARED FND SECTION

5017

DATE: 10/19/1995

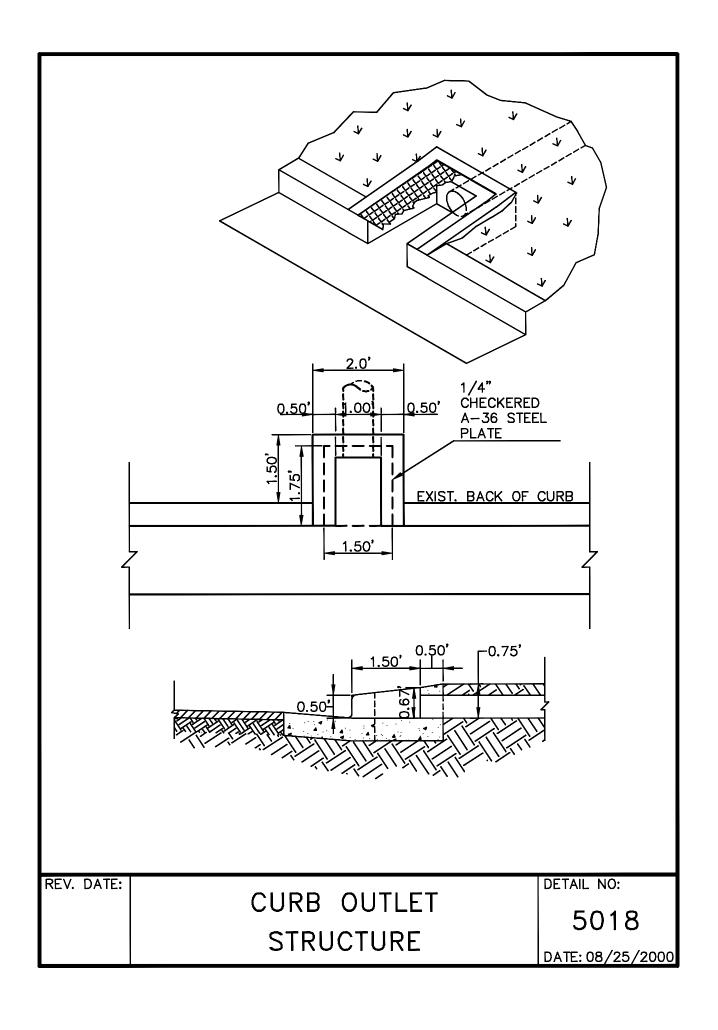
DIMENSION AND REINFORCING FOR CONCRETE FLARED END SECTION													
(± 1" TOLERANCE)												OUTLET TOEWALL (IF REQ'D.	
PIPE DIA.	FRONT BARS	BACK BARS	SLOPE	A	В	С	L	E	Р	R <sub>1</sub>	R <sub>2</sub>	K= E + 2'	CU. YDS.
12"	1-#3x5'4"	NOT REQ'D.	2.2:1	4"	2'0"	4'1"	6'1"	2'0"	1'8"	10"	9"	4'0"	.148
15"	1-#3X6'0"	NOT REQ'D.	2.2:1	6"	2'3"	3'10"	6'1"	2'6"	2'0"	1'0"	11"	4'6"	.167
18"	1-#3X7 <b>*2</b> *	NOT REQ'D.	2.2;1	9"	2'3"	<b>3'10"</b>	6'1"	3'0"	2'5"	1'4"	1'0"	5 <b>'</b> 0"	.185
24"	1-#3X9 <b>'</b> 10"	NOT REQ'D.	2.4:1	10"	3'8"	2'6"	6'2"	4'0"	2'9"	1'5"	1'2"	6'0"	.222
30"	1-#3X11'8"	NOT REQ'D.	2.4:1	12"	4'6"	1'8"	6'2"	5'0"	3'1"	1'6"	1'3"	7'0"	.259
36"	1-#3X13 <b>'</b> 10"	2-#4x6'4"	2.4:1	15"	5 <b>'3"</b>	2'11"	8'2"	6'0"	4'0"	2'0"	1'8"	8'0"	.296
42"	1-#3X13 <b>'</b> 10"	2-#4x7'4"	2.4:1	21"	5'3"	2'11"	8'2"	6'6"	4'6"	2'4"	1'10"	8'6"	.315

CONCRETE FLARED END
SECTION DIMENSION
CHART

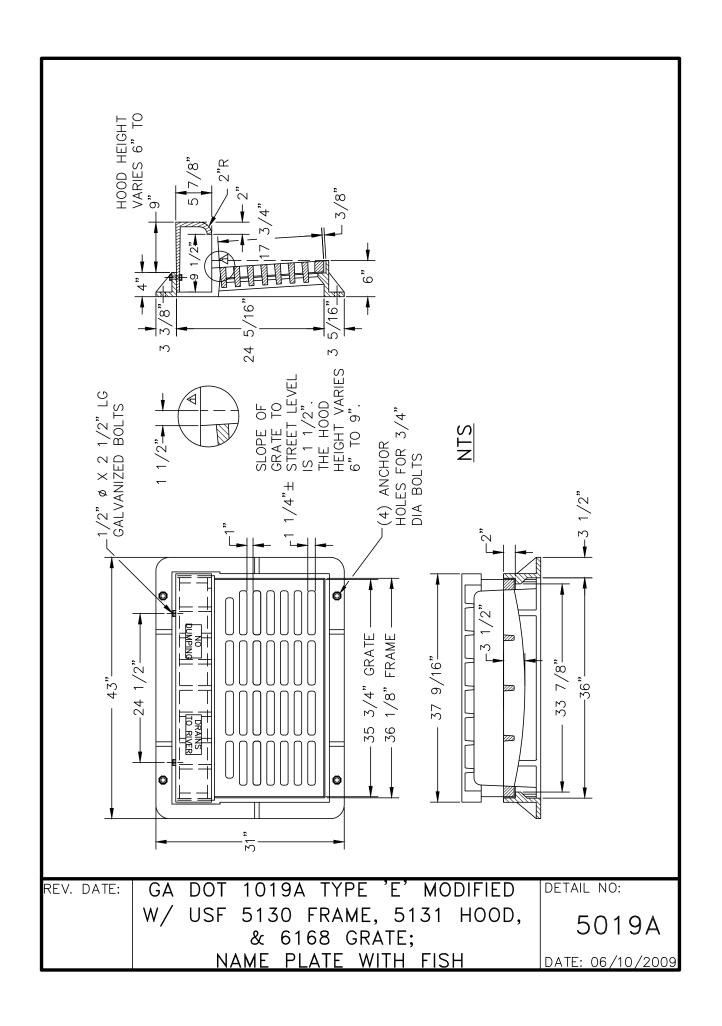
DETAIL NO:

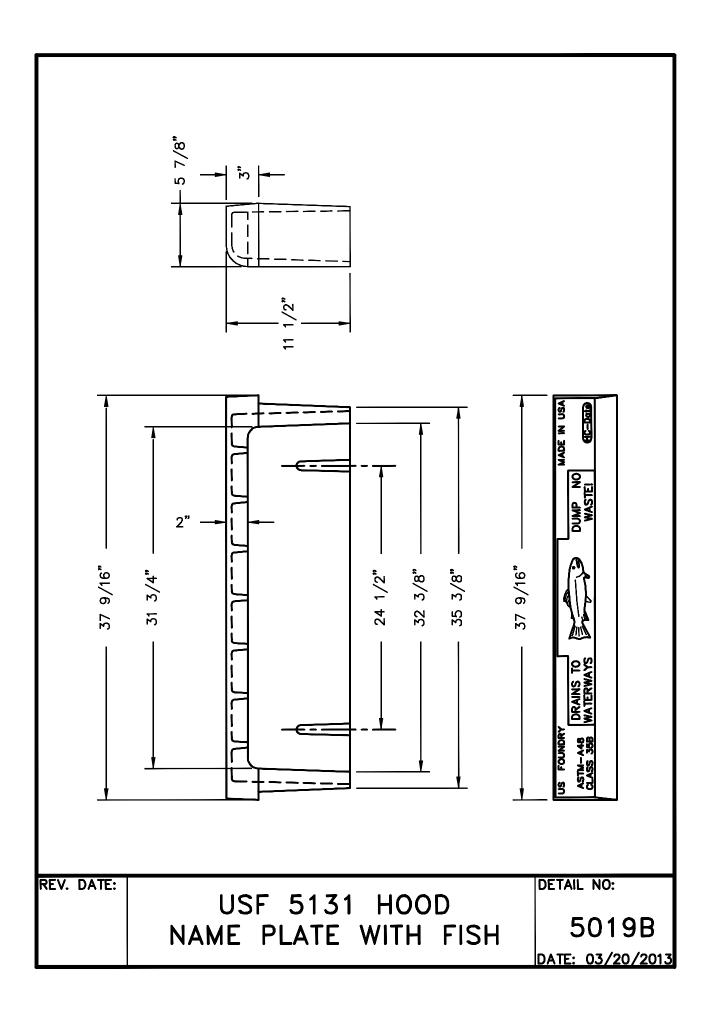
5017A

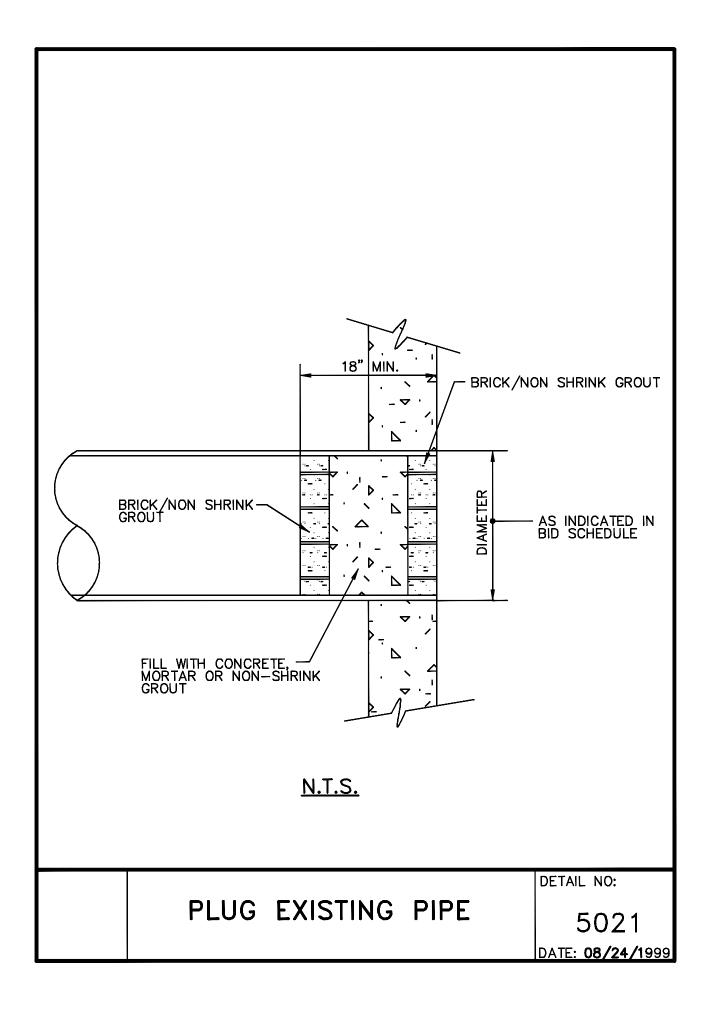
DATE: 10/19/1995



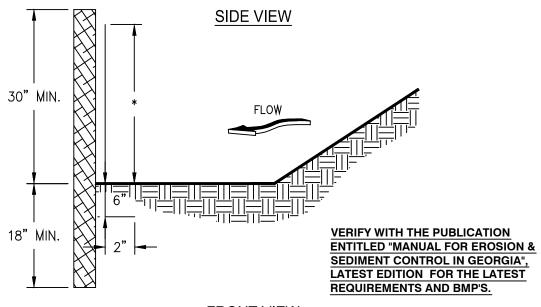
NOTE: WHEN USING GA DOT STD 1019A TYPE 'E'; USF 5130 FRAME, 6168 GRATE, & 5131 HOOD, OR EQUAL MUST BE USED. ASPHALT PAVEMENT BRICK CHIMNEY **1**2" 6" SOIL CEMENT Τ̈́P. COMPACTED SUBGRADE-2'-3 1/4" 1 C.F. GRAVEL CLEAR PRECAST STRUCTURE ASTM C-890 & ASTM C-913 1/4" HARDWARE CLOTH -**OPENING** 4" P.V.C. PIPE FOR DRAINAGE DIMENSION VARIES W/ PIPE DIAMETER **GROUT** TYP. DIMENSION VARIES \* W/ PIPE DIAMETER 6" TYP. \* SEE D.O.T. 1019-A TYPE "E" **-**B SCHEDULE FOR STRUCTURE MINIMUM DIMENSIONS. SECTION OF GA DOT 1019A TYPE 'E' MODIFIED NTS REV. DATE: DETAIL NO: GA DOT 1019A TYPE 'E' MODIFIED 03/20/2013 W/ USF 5130 FRAME, 6168 5019 GRATE, & 5131 HOOD DATE: 02/02/2001



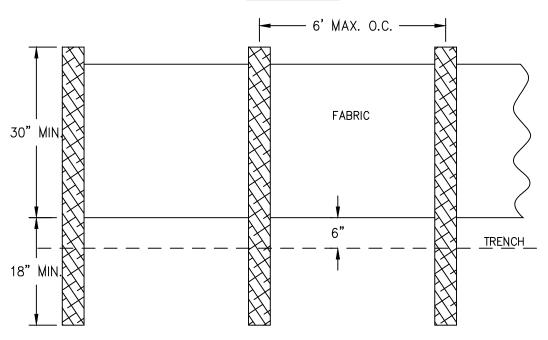




# SILT FENCE - TYPE NON-SENSITIVE



#### **FRONT VIEW**



#### NOTES:

- 1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
- 2. HEIGHT (\*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

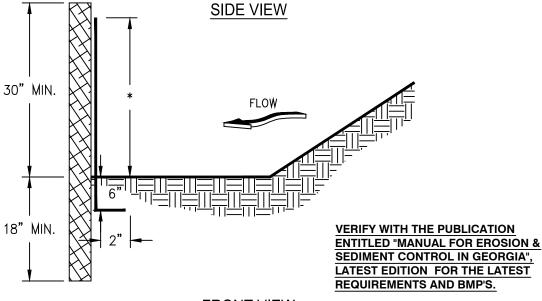
REV. DATE: 10/14/2008 07/07/2015 05/15/2016

Sd1-NS TEMPORARY SILT FENCE NON-SENSITIVE DETAIL NO:

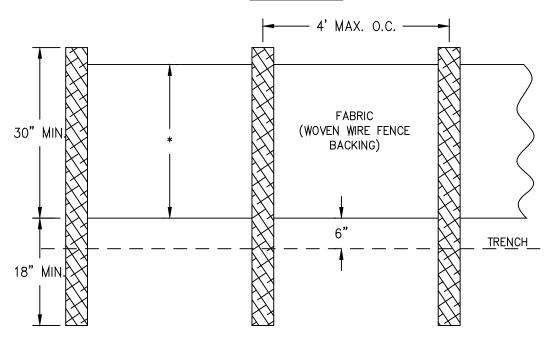
6002A

DATE: 03/03/1993

# SILT FENCE - TYPE SENSITIVE



#### FRONT VIEW



#### NOTES:

- 1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
- 2. HEIGHT (\*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

REV. DATE: 07/07/2015 05/15/2016

Sd1-S TEMPORARY SILT FENCE SENSITIVE DETAIL NO:

6002B

DATE: 03/03/1994

# CRUSHED STONE CONSTRUCTION EXIT **EXIT DIAGRAM** FLOW 50, FLOW -(IF NEEDED) COARSE GRAVEL AGGREGATE 20' MIM. GEOTEXTILE FABRIC 6**"** MIN **VERIFY WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION &** SEDIMENT CONTROL IN GEORGIA", LATEST EDITION FOR THE LATEST ENTRANCE ELEVATION REQUIREMENTS AND BMP'S. GEOTEXTILE FABRIC -

- 1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
- 2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
- 3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
- 4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
- 5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
  6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
  7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.

- 8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
- 9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
- 10.MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

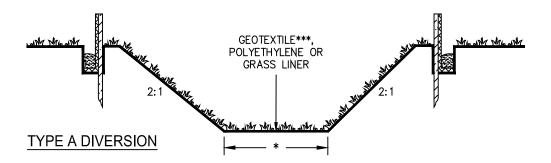
REV. DATE: 10/02/2008 07/08/2015 05/15/2016 09/09/2016

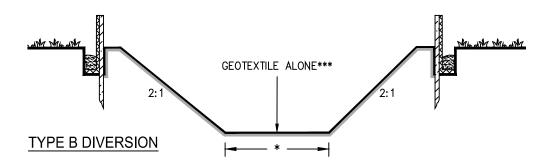
Co CONSTRUCTION EXIT DETAIL NO:

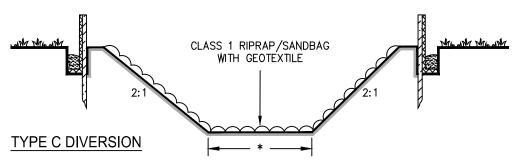
6004

DATE: 01/07/1999

# TO BE SHOWN ON EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN







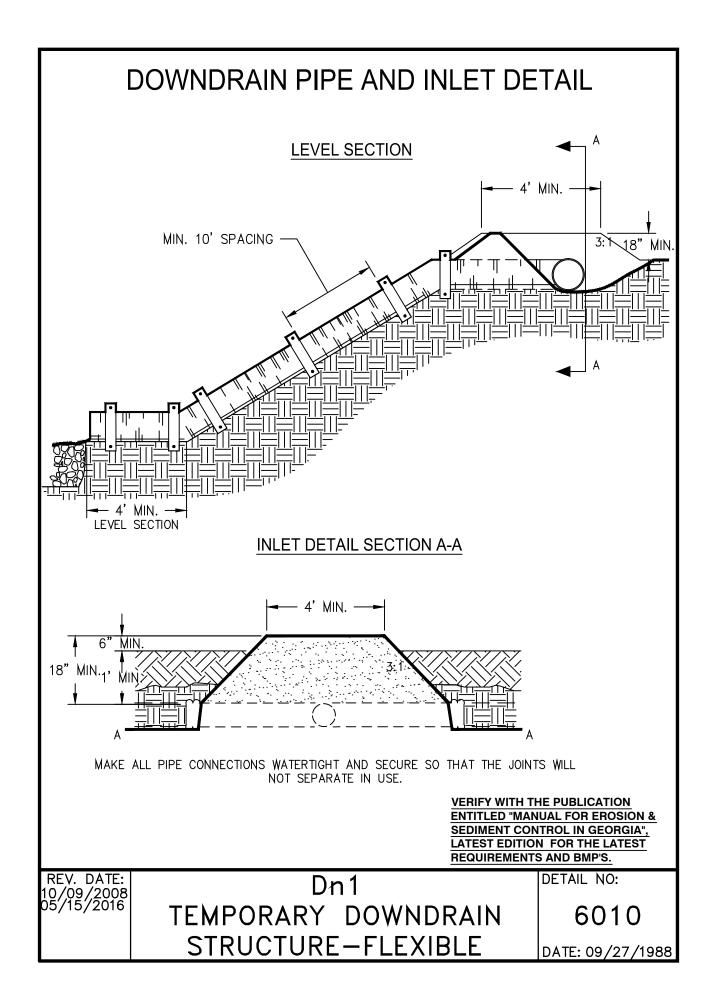
- \* 6' MINIMUM OR WIDTH OF EXISTING STREAM (WHICHEVER IS GREATER)
- \*\* SEDIMENT BARRIER AND FILTER CLOTH SHOULD BE ENTRENCHED IN THE SAME TRENCH. \*\*\*GEOTEXTILE SHALL BE SPECIFIED IN ACCORDANCE WITH AASHTO M288-96 SECTION 7.5

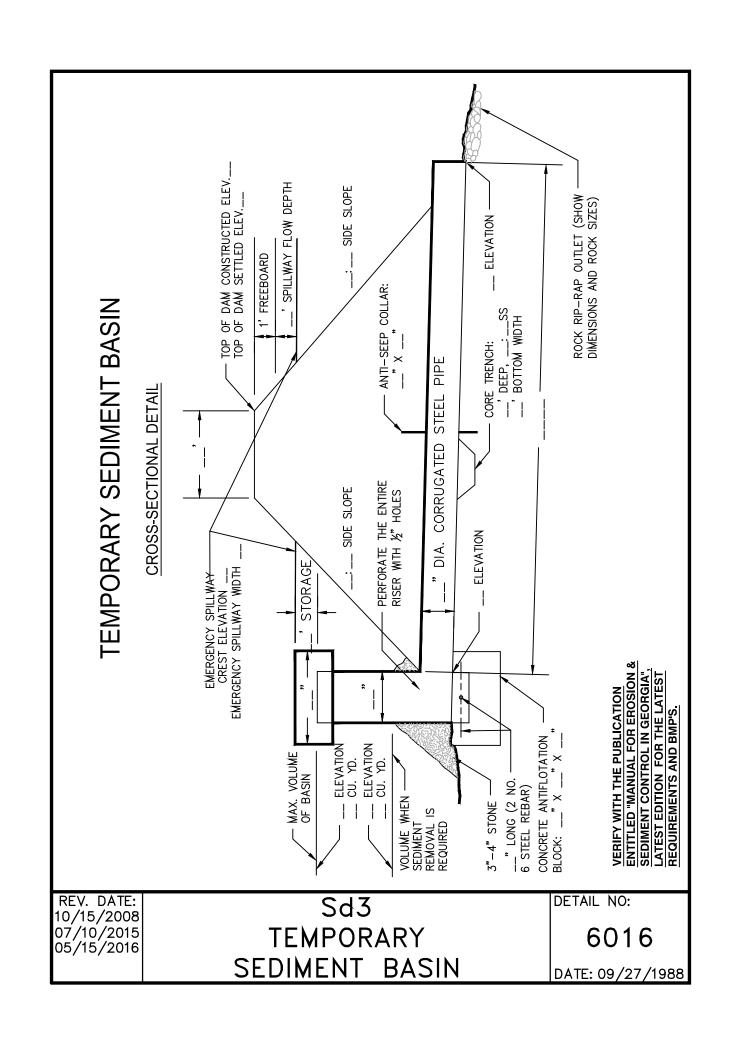
**VERIFY WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION &** SEDIMENT CONTROL IN GEORGIA", LATEST EDITION FOR THE LATEST REQUIREMENTS AND BMP'S.

REVISED: 10/07/2008 05/15/2016

Di **DIVERSION** 

6008

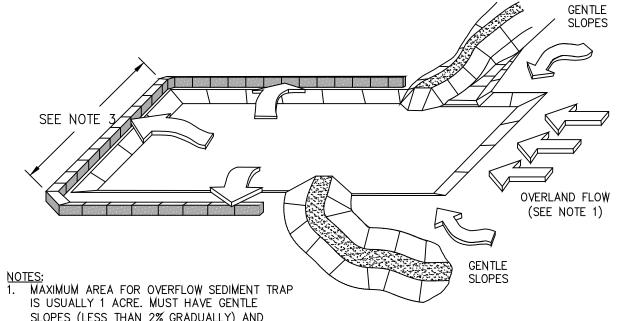






COURTESY OF CITY OF KNOXVILLE BMP EROSION AND SEDIMENT

#### **OVERFLOW**

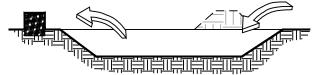


- SLOPES (LESS THAN 2% GRADUALLY) AND PREDOMINATELY OVERLAND SHEET FLOW.

  2. MAXIMUM PERMANENT WET DEPTH IS 2 FEET. OVERFLOW SEDIMENT TRAPS MAY NOT BE
- 2. MAXIMUM PERMANENT WET DEPTH IS 2 FEET.

  OVERFLOW SEDIMENT TRAPS MAY NOT BE

  EFFECTIVE FOR HIGH GROUNDWATER TABLE AND
  INFLOWS.
- 3. USE THE MOST PERMEABLE SEDIMENT CONTROL IN LABELED AREA SO AS TO MAXIMIZE TRAVEL TIME AND SETTLING OF SEDIMENT.



VERIFY WITH THE PUBLICATION
ENTITLED "MANUAL FOR EROSION &
SEDIMENT CONTROL IN GEORGIA",
LATEST EDITION FOR THE LATEST
REQUIREMENTS AND BMP'S.

REV. DATE: 10/16/2008 07/10/2015 05/15/2016

Sd4-1 TEMPORARY SEDIMENT TRAP OVERFLOW

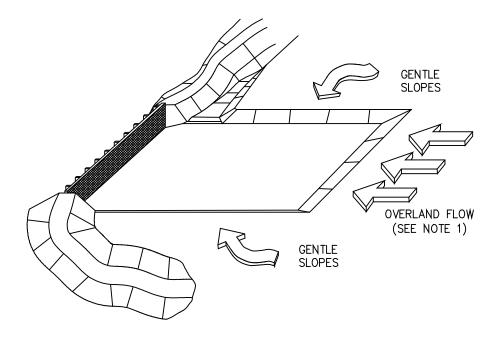
DETAIL NO:

6016A

# TEMPORARY SEDIMENT TRAP

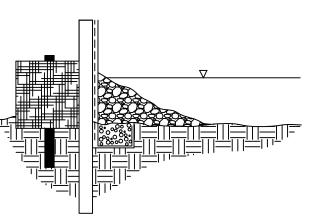
COURTESY OF CITY OF KNOXVILLE BMP EROSION AND SEDIMENT

#### **COMBINATION OUTLET**



#### NOTES:

- 1. MAXIMUM AREA FOR SEDIMENT TRAP
  WITH A SILT FENCE/STRAW BALE
  COMBINATION OUTLET IS USUALLY 1
  ACRE WITH GENTLE SLOPES AND
  PREDOMINANTLY OVERLAND SHEET
  FLOW.
- MAXIMUM DEPTH OF PONDED WATER IS USUALLY 12" OR LESS. PROVIDE EMERGENCY SPILLWAY BY CONSTRUCTING RIPRAP CHANNEL AS NECESSARY.



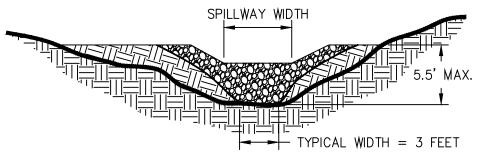
VERIFY WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA", LATEST EDITION FOR THE LATEST REQUIREMENTS AND BMP'S.

REV. DATE: 10/16/2008 07/10/2015 05/15/2016 Sd4-2
TEMPORARY SEDIMENT TRAP
COMBINATION OUTLET

DETAIL NO:

6016B

# TEMPORARY SEDIMENT TRAP COURTESY OF CITY OF KNOXVILLE BMP EROSION AND SEDIMENT **ROCK OUTLET** RECOMMENDED MINIMUM RATIO OF LENGTH-TO-WIDTH (L: W) IS 2:1 CROSS-SECTION MINIMUM TOP WIDTH = EMBANKMENT MINIMUM DISTANCE 1.5' TO HEIGHT (3 FOOT MINIMUM) SPILLWAY INVERT MAXIMUM DEPTH -PROFILE THROUGH EMBANKMENT SPILLWAY WIDTH



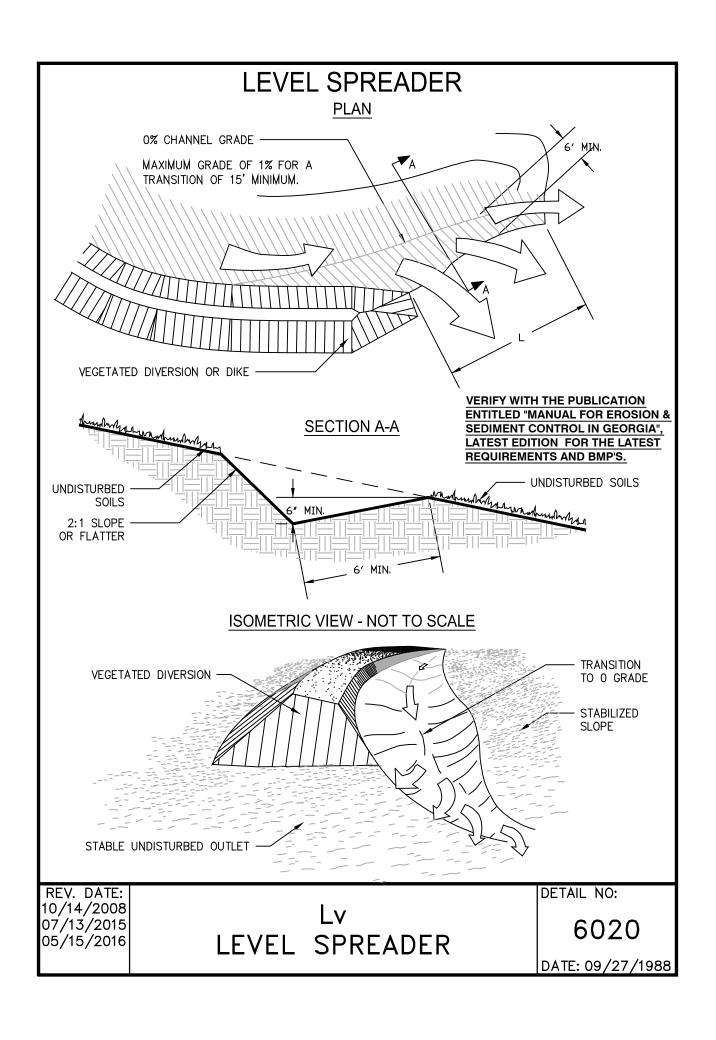
**VERIFY WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION &** SEDIMENT CONTROL IN GEORGIA", LATEST EDITION FOR THE LATEST REQUIREMENTS AND BMP'S.

REV. DATE: 10/16/2008 07/10/2015 05/15/2016

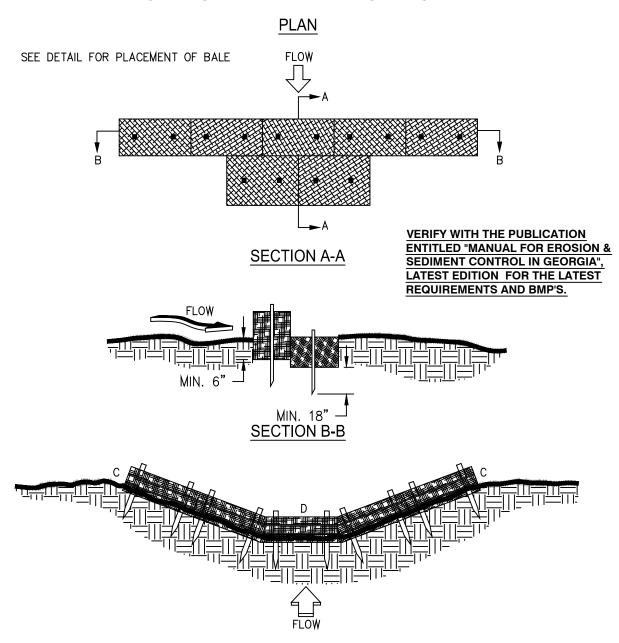
Sd4-3 TEMPORARY SEDIMENT TRAP ROCK OUTLET

DETAIL NO:

6016C



# TYPICAL STRAW BALE CHECK DAM



#### NOTES

- 1. BALES SHOULD BE BOUND WITH WIRE OR NYLON STRING AND SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- 2. REMOVE #4 REBAR AFTER STRAW BALES ARE NO LONGER IN PLACE.
- 3. POINT C OF SECTION B-B SHOULD ALWAYS BE HIGHER THAN POINT D.

REV. DATE: 07/14/2015 05/15/2016

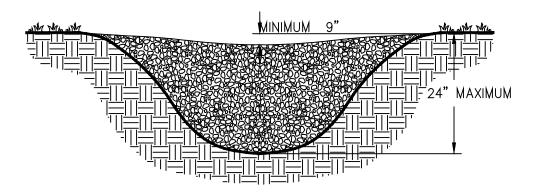
Cd-Hb CHECK DAM-HAY BALE DETAIL NO:

6023

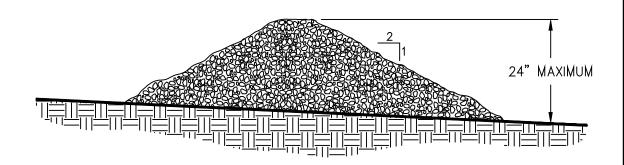
DATE: 10/01/2008

# STONE CHECK DAM

#### **CROSS SECTION**



#### **PROFILE VIEW**



#### NOTES:

- 1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS).
- 2. THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.
  3. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
- 4. THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.
- 5. THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.
- 6. GEOTEXTILE SHALL BE USED TO PREVENT THE MITIGATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).

**VERIFY WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION &** SEDIMENT CONTROL IN GEORGIA", LATEST EDITION FOR THE LATEST REQUIREMENTS AND BMP'S.

REV. DATE: 07/14/2015 05/15/2016

Cd-SSTONE CHECK DAM DETAIL NO:

6023A

DATE: 10/01/2008

# STONE CHECK DAM

SPACING BETWEEN CHECK DAMS



A = THE TOE OF THE UPSTREAM CHECK DAM.

B = TOP OF THE DOWNSTREAM CHECK DAM.

L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION.

VERIFY WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA", LATEST EDITION FOR THE LATEST REQUIREMENTS AND BMP'S.

REV. DATE: 07/14/2015 05/15/2016

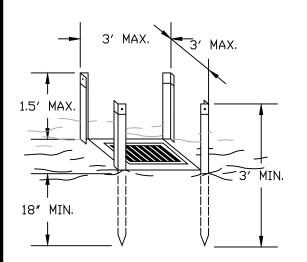
Cd-S STONE CHECK DAM SPACING DETAIL NO:

6023B

DATE: 10/01/2008

# FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION

#### STEEL FRAME AND SILT FENCE INSTALLATION



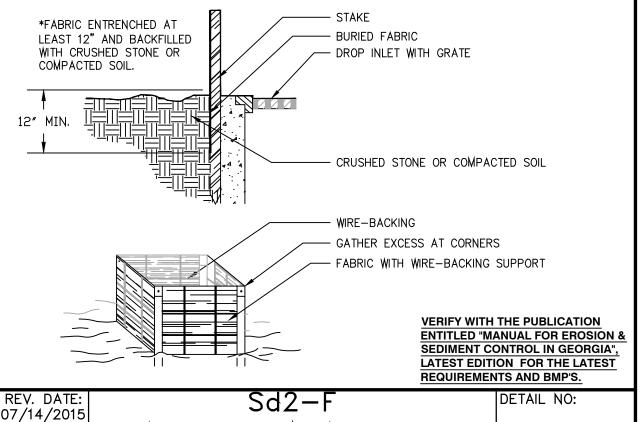
05/15/2016

#### NOTES

- 1. DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS).
- THE STEEL POSTS SUPPORTING THE SILT FÉNCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAXIMUM OF 3' APART).
- THE STEEL POSTS SHOULD BE SECURELY DRIVEN AT LEAST 18" DEEP.
- 4. THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.

6024A

DATE: 01/05/1999

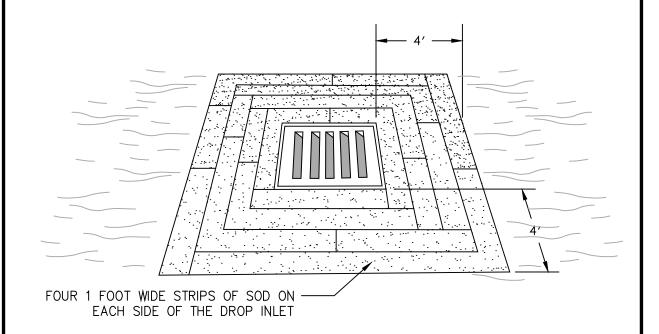


INLET SEDIMENT TRAP

(FABRIC AND FRAME)

# **INLET SEDIMENT TRAP**

SOD STRIPS PROTECT INLET AREA FROM EROSION (SOURCE: VA SWCC)



**VERIFY WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION &** SEDIMENT CONTROL IN GEORGIA", LATEST EDITION FOR THE LATEST REQUIREMENTS AND BMP'S.

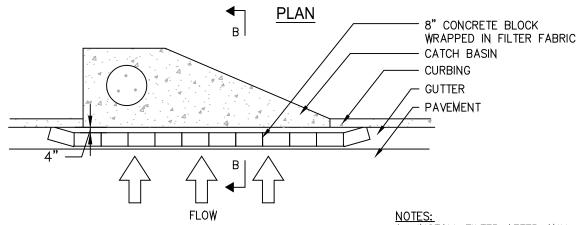
REV. DATE: 07/14/2015 05/15/2016

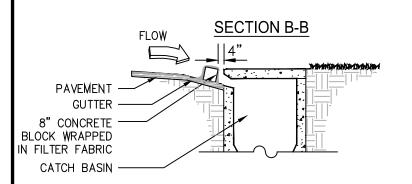
Sd2-SINLET SEDIMENT TRAP SOD STRIPS PROTECT INLET AREA FROM EROSION DATE: 01/05/1999

DETAIL NO:

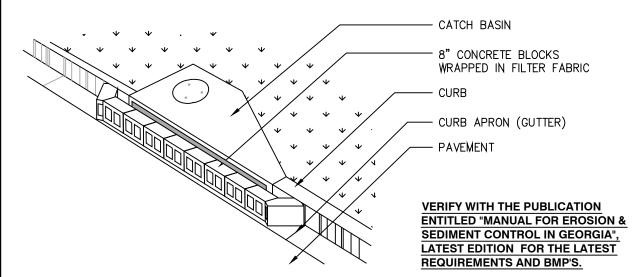
6024B







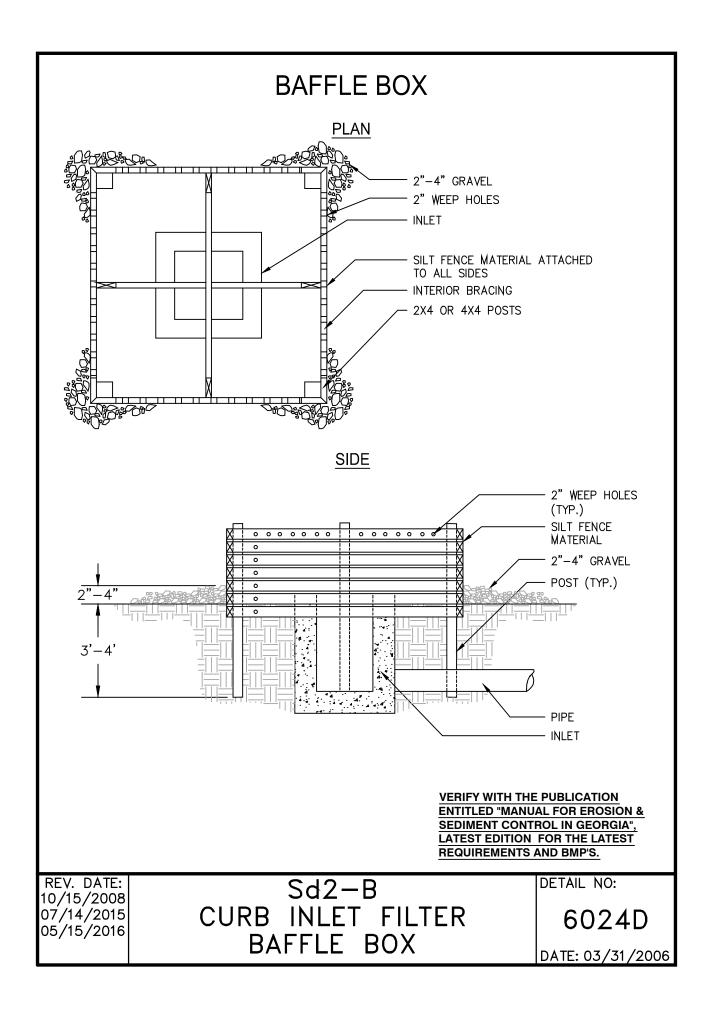
- INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.
- 2. WRAP 8" CONCRETE BLOCKS IN FILTER FABRIC AND SPAN ACROSS CATCH BASIN INLET.
- 3. FACE OPENINGS IN BLOCKS OUTWARD.
- 4. LEAVE A GAP OF APPROXIMATELY
  4 INCHES BETWEEN THE CURB
  AND THE FILTERS TO ALLOW FOR
  OVERFLOW TO PREVENT
  HAZARDOUS PONDING.
- 5. INSTALL OUTLET PROTECTION BELOW STORM DRAIN OUTLETS.



REV. DATE: 10/15/2008 07/14/2015 05/15/2016 Sd2-P CURB INLET FILTER PIGS IN A BLANKET DETAIL NO:

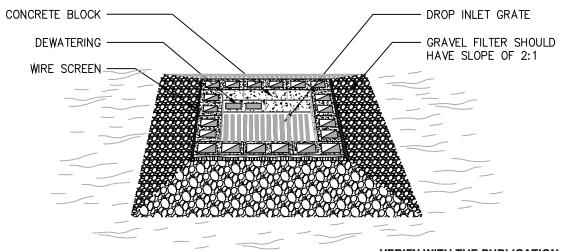
6024C

DATE: 03/31/2006



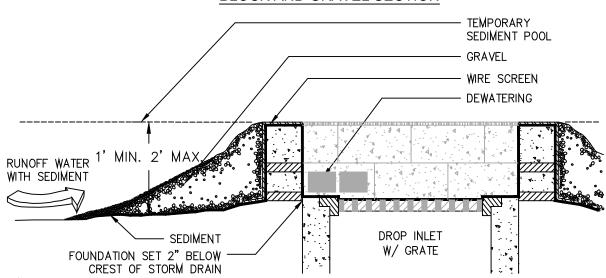
# BLOCK AND GRAVEL DROP INLET PROTECTION

#### **BLOCK AND GRAVEL PERSPECTIVE**



VERIFY WITH THE PUBLICATION
ENTITLED "MANUAL FOR EROSION &
SEDIMENT CONTROL IN GEORGIA",
LATEST EDITION FOR THE LATEST
REQUIREMENTS AND BMP'S.

#### **BLOCK AND GRAVEL SECTION**



#### NOTE:

- 1. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH ½ INCH OPENINGS SHALL BE FITTED OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
- THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. THE FIRST ROW OF BLOCKS WILL BE PLACED HERE FOR LATERAL SUPPORT.
- 3. ONE BLOCK (AS SHOWN) IS TO BE PLACED ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW FOR POOL DRAINAGE.

REV. DATE: 10/15/2008 07/14/2015 05/15/2016

Sd2-Bg BLOCK GRAVEL DROP INLET PROTECTION DETAIL NO:

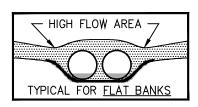
6024E

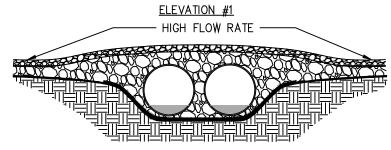
DATE: 03/31/2006

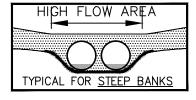
## TEMPORARY STREAM CROSSING

#### CONFIGURATION OF TEMPORARY CULVERT CROSSINGS

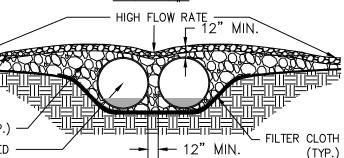
(SECTIONS - NOT TO SCALE)







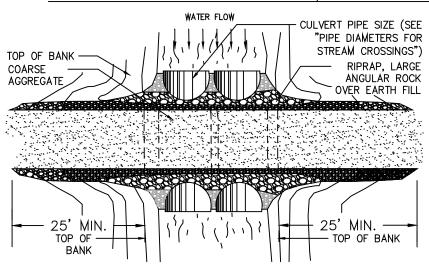




6" COARSE AGGREGATE (TYP.)

APPROPRIATELY LARGE ANGULAR ROCK (TYP.)
MINIMUM PIPE DIAMETERS SIZED AS SPECIFIED
IN "PIPE DIAMETERS FOR STREAM CROSSINGS"

#### TYPICAL CULVERT CROSSING PLAN (NOT TO SCALE)



#### NOTES:

- THIS TYPE OF CROSSING CAN BE INSTALLED IN BOTH A WET OR DRY WEATHER STREAM CONDITION WHERE THE DRAINAGE AREA EXCEEDS 10 ACRES.
- 2. REMOVE DURING CLEANUP.

VERIFY WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA", LATEST EDITION FOR THE LATEST REQUIREMENTS AND BMP'S.

REV. DATE: 10/15/2008 07/15/2015 05/15/2016

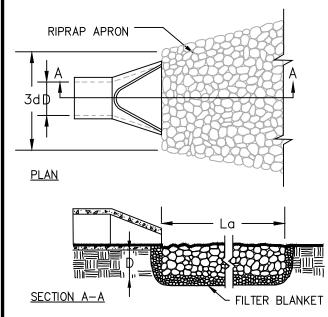
Sr TEMPORARY STREAM CROSSING DETAIL NO:

6026

DATE: 03/31/2006

# RIPRAP OUTLET PROTECTION

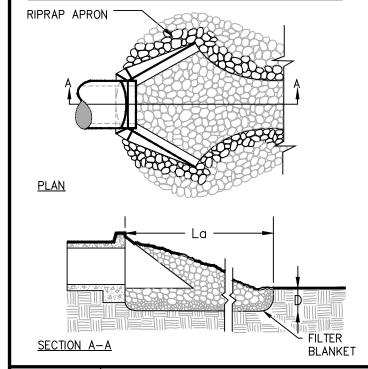
#### PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL



#### NOTES:

- La IS THE LENGTH OF THE RIPRAP APRON.
- D = 1.5 TIMES THE MAXIMUM 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).
- A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

#### PIPE OUTLET TO WELL DEFINED CHANNEL



VERIFY WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA", LATEST EDITION FOR THE LATEST REQUIREMENTS AND BMP'S.

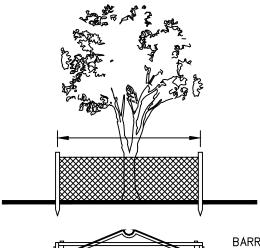
REV. DATE: 10/17/2008 07/15/2015 05/15/2016

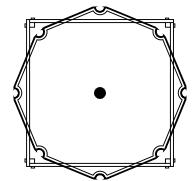
St STORM DRAIN OUTLET PROTECTION DETAIL NO:

6027

# TREE PROTECTION

CHAIN LINK FENCE DETAIL





BARRIER CONSTRUCTED TO PROTECT TREE TRUNK, CROWN, AND ROOT SYSTEM FROM INJURY. BARRIERS SHALL BE LOCATED AT THE LIMITS OF THE TREE'S CRITICAL ROOT ZONE (A RADIUS OF ONE AND A HALF FEET PER INCH OF THE TREE'S DIAMETER AT BREAST HEIGHT). BARRIER SHALL BE KEPT IN GOOD CONDITION FOR THE DURATION OF THE PROJECT AND IS TO REMAIN IN PLACE UNTIL THE NOTICE OF TERMINATION.

#### FOR ADDED PROTECTION

-PROVIDE 4" DEEP ORGANIC MULCH OVER ANY UNPROTECTED ROOT ZONE. -PROVIDE TEMPORARY IRRIGATION WHERE PRACTICAL AND FEASIBLE.

VERIFY WITH THE PUBLICATION
ENTITLED "MANUAL FOR EROSION &
SEDIMENT CONTROL IN GEORGIA",
LATEST EDITION FOR THE LATEST
REQUIREMENTS AND BMP'S.

REVISED: 05/15/2016

TR-1
TREE PROTECTION

DETAIL NO:

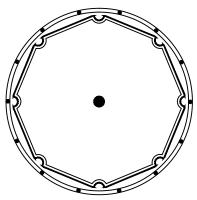
6038A

DATE: 04/14/99

# TREE PROTECTION

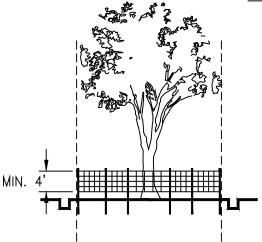
"SNOW" FENCE

<u>PLAN</u>



CROSS-SECTION

VERIFY WITH THE PUBLICATION
ENTITLED "MANUAL FOR EROSION &
SEDIMENT CONTROL IN GEORGIA",
LATEST EDITION FOR THE LATEST
REQUIREMENTS AND BMP'S.



#### NOTES:

- 1. USE TRENCHER (I.E. DITCH WHICH) TO CUT A 4"-5" W X 18" D TRENCH ALONG DRIP LINE (LIMIT OF CLEARING) AND BACKFILL WITH SAND AND LIGHTLY COMPACT.
- 2. SPACE STAKES AT INTERVALS SUFFICIENT TO MAINTAIN ALL FENCING OUT OF DRIP LINE OR AS SHOWN BY ENGINEER (SET STAKES NO GREATER THAN 6 FEET ON CENTER-REBAR IS NOT TO BE USED FOR STAKES).
- 3. MAINTAIN FENCE BY REPAIRING AND/OR REPLACING DAMAGED FENCE. DO NOT REMOVE FENCING PRIOR TO LANDSCAPING OPERATIONS.
- 4. DO NOT STORE OR STACK MATERIALS, EQUIPMENT, OR VEHICLES WITHIN FENCED AREA.
- 5. FENCE SHALL BE ORANGE VINYL "SNOW FENCE" 4' HIGH MINIMUM.

REVISED: 05/15/2016

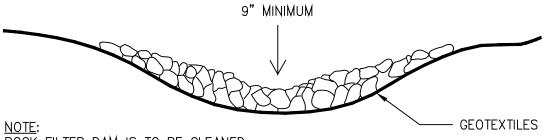
TR-2
TREE PROTECTION

DETAIL NO:

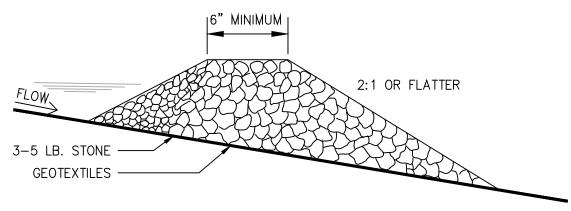
6038B

DATE: 04/14/99

# **ROCK FILTER DAM**



ROCK FILTER DAM IS TO BE CLEANED OUT WHEN VOLUME BECOMES HALF FULL.



#### NOTE:

ROCK SIZE DETERMINED ACCORDING TO SPECIFICATIONS SET FORTH IN APPENDIX C. OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", CURRENT EDITION.

VERIFY WITH THE PUBLICATION
ENTITLED "MANUAL FOR EROSION &
SEDIMENT CONTROL IN GEORGIA",
LATEST EDITION FOR THE LATEST
REQUIREMENTS AND BMP'S.

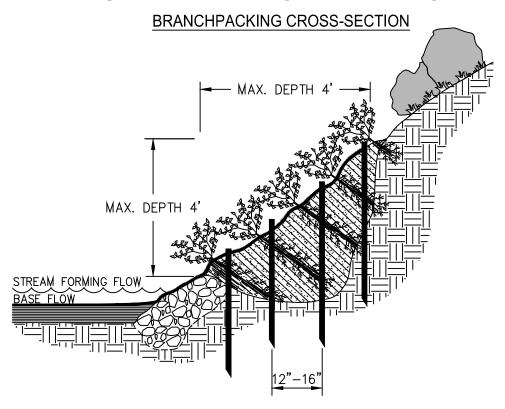
REVISED: 05/15/2016

Rd ROCK FILTER DAM DETAIL NO:

6039

DATE:10/07/2008

### STREAMBANK STABILIZATION



#### NOTES:

- ROOT/LEAFED CONDITION OF THE LIVING PLANT MATERIAL IS NOT REPRESENTATIVE OF THE TIME OF INSTALLATION.
- 2. STARTING AT THE LOWEST POINT, DRIVE THE WOODEN POSTS VERTICALLY 3' TO 4' INTO THE GROUND AND SET THEM 12"-16" APART.
- 3. A LAYER OF LIVING BRANCHES (4"-6" THICK) IS PLACED IN THE BOTTOM OF THE HOLE, BETWEEN THE VERTICAL POSTS. THEY SHALL BE PLACED IN A CRISSCROSS CONFIGURATION.
- 4. THE FINAL INSTALLATION SHALL MATCH THE EXISTING SLOPE. BRANCHES SHOULD PROTRUDE ONLY SLIGHTLY FROM THE FILLED FACE.
- 5. EACH LAYER OF BRANCHES SHALL BE FOLLOWED BY A 12" LAYER OF SOIL HAND TAMPED TO ENSURE CONTACT WITH THE BRANCH CUTTINGS.
- 6. THE SOIL SHALL BE MOIST OR MOISTENED TO ENSURE THAT LIVE BRANCHES DO NOT DRY OUT.
- 7. WHERE SPECIFIED, LIVE STAKES SHALL BE USED IN PLACE OF POSTS.

VERIFY WITH THE PUBLICATION
ENTITLED "MANUAL FOR EROSION &
SEDIMENT CONTROL IN GEORGIA",
LATEST EDITION FOR THE LATEST
REQUIREMENTS AND BMP'S.

REVISED: 05/15/2016

(Sb) STREAMBANK
STABILIZATION
(BRANCHPACKING CROSS-SECTION)

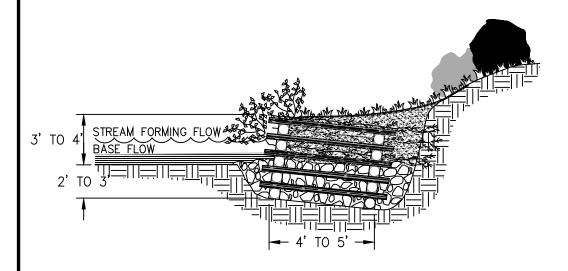
DETAIL NO:

6043A

DATE: 09-30-08

# STREAMBANK STABILIZATION

LIVE CRIBWALL CROSS-SECTION



#### NOTES:

- ROOTED/LEAFED CONDITION OF THE LIVING PLANT MATERIAL IS NOT REPRESENTATIVE OF THE TIME OF INSTALLATION.
- 2. EACH COURSE SHALL BE SECURED TO THE PRECEDING COURSE WITH SPIKES OR REBARS (SIZE VARIES ACCORDING TO PROJECT).
- 3. BACKFILL IN AND AROUND TIMBER CRIB WITH RIPRAP FROM BOTTOM OF EXCAVATION TO THE LOWER GROUND LEVEL (OR WHEN IN STREAM CHANNEL UP TO BASEFLOW).
- 4. EACH TRANSVERSE LOG COURSE CONTAINS LIVE CUTTINGS FOLLOWED BY A LAYER OF TAMPED BACKFILL.
- 5. EACH FACE LOG COURSE (FRONT AND REAR), AND THE AREA BEHIND THE STRUCTURE SHALL BE BACKFILLED AND HAND TAMPED.

VERIFY WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA", LATEST EDITION FOR THE LATEST REQUIREMENTS AND BMP'S.

REVISED: 05/15/2016

(Sb) STREAMBANK
STABILIZATION
(LIVE CRIBWALL CROSS-SECTION)

DETAIL NO:

6043B

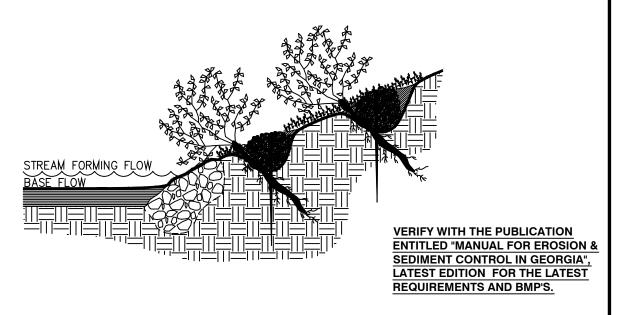
DATE: 09-30-08

### STREAMBANK STABILIZATION

FASCINE BUNDLE DETAIL



LIVE FASCINE CROSS-SECTION DETAIL



#### NOTES:

- ROOTED/LEAFED CONDITION OF THE LIVING PLANT MATERIAL IS NOT REPRESENTATIVE OF THE TIME OF INSTALLATION.
- 2. LIVE FASCINES SHALL BE PREPARED FROM FRESHLY CUT DORMANT PLANTS AND INSTALLED WITHIN 8 HOURS OF THE TIME THE MATERIAL IS HARVESTED, UNLESS PROPERLY STORED.
- 3. LIVE FASCINE SHALL BE OBTAINED FROM SOURCES APPROVED BY ENGINEER.
- 4. LIVE FASCINES SHALL BE 4"-8" IN DIAMETER WITH MINIMUM 8' LENGTH.
- 5. BEGINNING AT THE BASE OF THE SLOPE, A TRENCH SHALL BE DUG LARGE ENOUGH TO CONTAIN THE LIVE FASCINES. THE LIVE FASCINES SHALL BE PLACED IN THE TRENCH. WHERE ENDS MEET IN THE TRENCH. THE FASCINES SHALL OVERLAP BY 18".
- WHERE ENDS MEET IN THE TRENCH, THE FASCINES SHALL OVERLAP BY 18".

  6. THE TRENCH SHALL BE BACKFILLED WITH MOIST SOIL AND HAND TAMPED. THE TOP OF THE FASCINE SHALL BE SLIGHTLY EXPOSED WHEN THE INSTALLATION IS COMPLETE AS SHOWN ON CROSS SECTION.
- 7. SEED OR OTHER EROSION CONTROL MATERIAL SHALL BE USED BETWEEN THE FASCINE ROWS, AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- 8. LIVE FASCINE TRENCHES SHALL BE FROM 3' TO 8' APART, ACCORDING TO SLOPE AND/OR CONTRACT DOCUMENTS.

REVISED: 05/15/2016

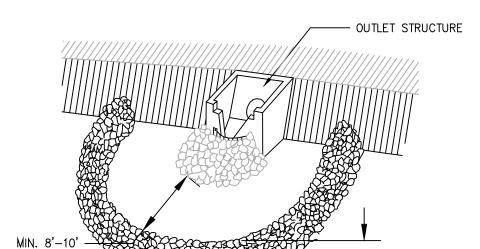
(Sb) STREAMBANK
STABILIZATION
(LIVE FASCINE CROSS-SECTION DETAIL)

DETAIL NO:

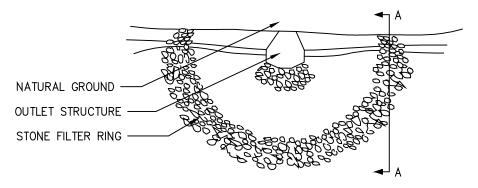
6043C

DATE: 09-30-08

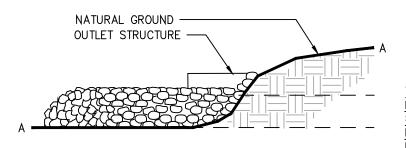
## STONE FILTER RING PERSPECTIVE VIEW



#### PLAN VIEW (NOT TO SCALE)



#### CROSS SECTION (NOT TO SCALE)



50# - 150# STONE RIP-RAP

VERIFY WITH THE PUBLICATION
ENTITLED "MANUAL FOR EROSION &
SEDIMENT CONTROL IN GEORGIA",
LATEST EDITION FOR THE LATEST
REQUIREMENTS AND BMP'S.

2' MIN.

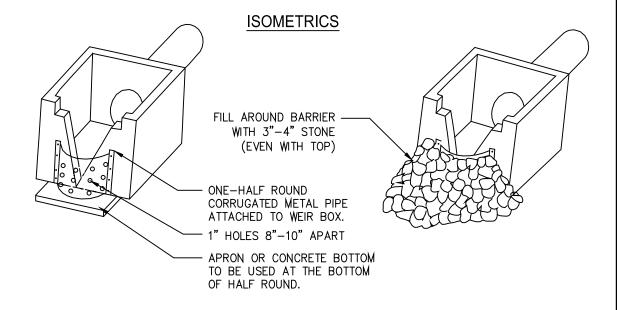
REVISED: 05/15/2016

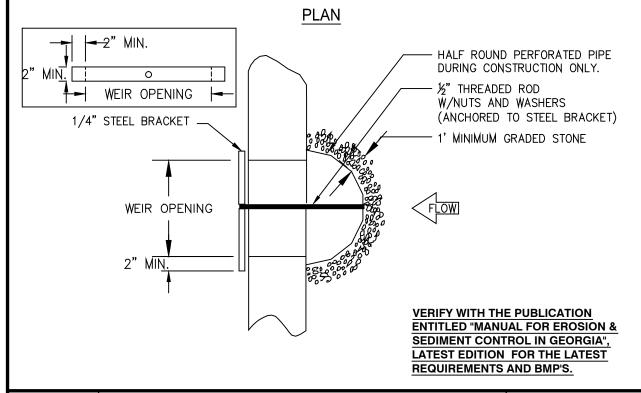
Fr FILTER RING DETAIL NO:

6046

DATE: 10/06/2008

## PERFORATED HALF-ROUND PIPE WITH STONE FILTER





REVISED: 05/15/2016

Rt-P RETROFITTING
PERFORATED HALF-ROUND PIPE
WITH STONE FILTER

DETAIL NO:

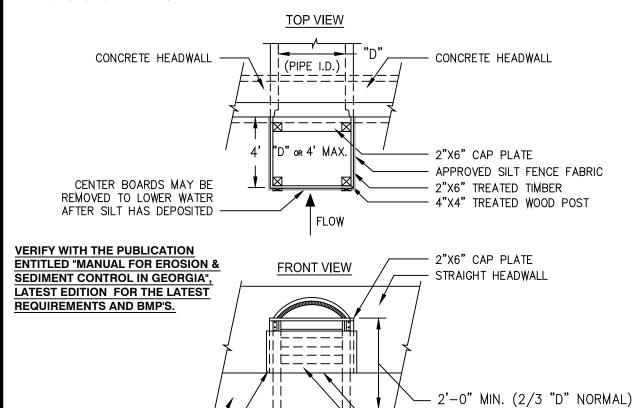
6047A

DATE:10/06/2008

#### TYPE 2: FOR STRAIGHT HEADWALLS

#### NOTES:

- 1. SLOTTED BOARD DAM SHALL BE INSTALLED WITH MINIMUM SIZE 4" X 4" POSTS.
- 2. BOARDS SHOULD HAVE A 0.5" TO 1"SPACE BETWEEN THEM AND MUST HAVE GROUND OR BOTTOM OF CONCRETE CONTACT.
- 3. MINIMUM SIZE 3-4" STONE FILTER SHALL BE INSTALLED AROUND THE UPSTREAM SIDE OF THE BOARD DAM.
- 4. POSTS FOR THE SILT CONTROL GATE SHALL BE 4: X 4" TREATED LUMBER AND FACE BOARDS SHALL BE 2" X 6" TREATED LUMBER WITH NO SPACING ALLOWED BETWEEN BOARDS.
- 5. AN APPROVED SILT FENCE FABRIC SHALL BE SECURELY FASTENED TO THE FRONT OF THE STRUCTURE USING STABLES (BE SURE TO HAVE SILT FENCE ON UPSTREAM SIDE OF STRUCTURE).
- 6. SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN IT REACHES ONE—THIRD THE HEIGHT OF THE SILT GATE. FILTER FABRIC SHALL BE REPLACED WHEN DAMAGED AND/OR DETERIORATED.
- 7. ALL DISTURBED AREAS SHALL BE VEGETATED IMMEDIATELY AFTER CONSTRUCTION WITH PERMANENT VEGETATION.



USES: A SILT CONTROL GATE IS A STRUCTURE PLACED ON A PIPE, SINGLE BARREL BOX CULVERT, OR DROP INLET TO FORM A BASIN TO TRAP SILT.

4" CONCRETE BOTTOM

2"X6" TREATED TIMBER

NOTE: SILT CONTROL GATES SHALL NOT BE USED ON STRUCTURES THAT CONVEY STATE WATERS.

FOOTING

APPROVED SILT FENCE FABRIC

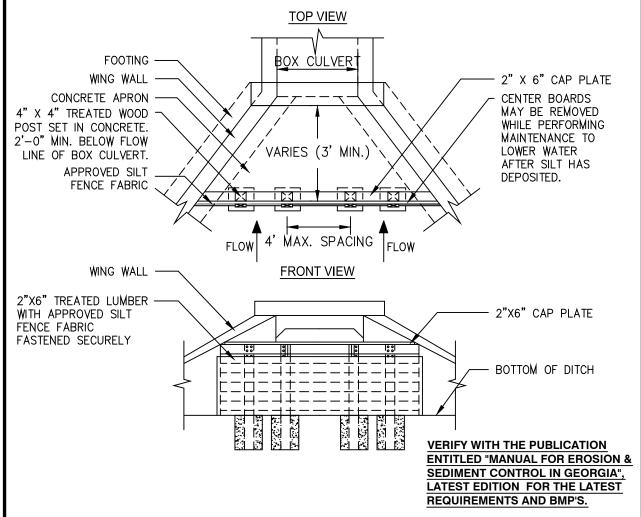
REVISED: 05/15/2016 Rt-B

RETROFITTING SLOTTED BOARD DAM 6047B
WITH STONE OR FILTER FABRIC DATE:10/14/2008

#### TYPE 1: FOR BOX CULVERTS

#### NOTES:

- 1. REFER TO APPROPRIATE CONSTRUCTION DETAIL FOR CONCRETE APRONS.
- 2. SLOTTED BOARD DAM SHALL BE INSTALLED WITH MINIMUM SIZE 4" X 4" POSTS.
- 3. BOARDS SHOULD HAVE A 0.5" TO 1"SPACE BETWEEN THEM AND MUST HAVE GROUND OR BOTTOM OF CONCRETE CONTACT.
- 4. MINIMUM SIZE 3-4" STONE FILTER SHALL BE INSTALLED AROUND THE UPSTREAM SIDE OF THE BOARD DAM.
- 5. POSTS FOR THE SILT CONTROL GATE SHALL BE 4: X 4" TREATED LUMBER AND FACE BOARDS SHALL BE 2" X 6" TREATED LUMBER WITH NO SPACING ALLOWED BETWEEN BOARDS.
- 6. AN APPROVED SILT FENCE FABRIC SHALL BE SECURELY FASTENED TO THE FRONT OF THE STRUCTURE USING STABLES (BE SURE TO HAVE SILT FENCE ON UPSTREAM SIDE OF STRUCTURE).
- 7. SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN IT REACHES ONE—THIRD THE HEIGHT OF THE SILT GATE. FILTER FABRIC SHALL BE REPLACED WHEN DAMAGED AND/OR DETERIORATED.
- 8. ALL DISTURBED AREAS SHALL BE VEGETATED IMMEDIATELY AFTER CONSTRUCTION WITH PERMANENT VEGETATION.



USES: A SILT CONTROL GATE IS A STRUCTURE PLACED ON A PIPE, SINGLE BARREL BOX CULVERT, OR DROP INLET TO FORM A BASIN TO TRAP SILT.

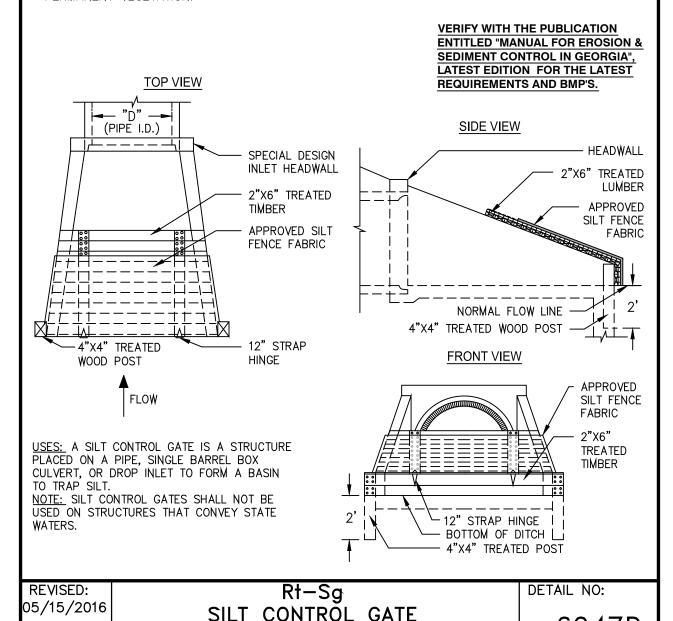
NOTE: SILT CONTROL GATES SHALL NOT BE USED ON STRUCTURES THAT CONVEY STATE WATERS.

REVISED: 05/15/2016	Rt-Sg	DETAIL NO:
007 107 2010	SILT CONTROL GATE	6047C
	FOR BOX CULVERTS	DATE:10/14/2008

#### TYPE 3: FOR FLARED END SECTIONS AND TAPERED HEADWALLS

#### NOTES:

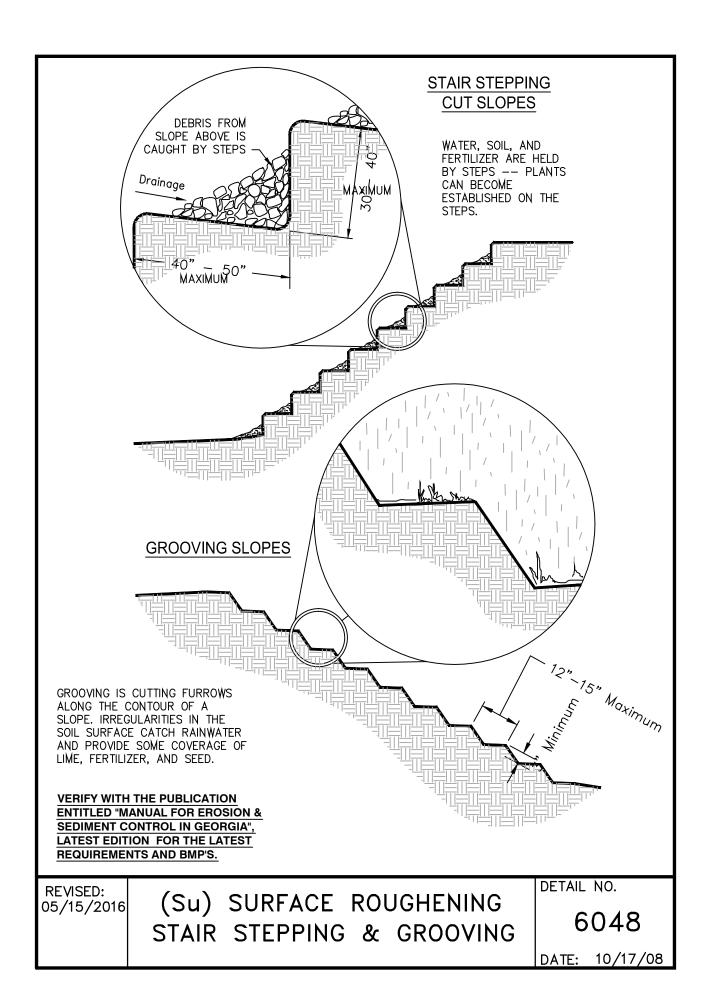
- 1. SLOTTED BOARD DAM SHALL BE INSTALLED WITH MINIMUM SIZE 4" X 4" POSTS.
- 2. BOARDS SHOULD HAVE A 0.5" TO 1"SPACE BETWEEN THEM AND MUST HAVE GROUND OR BOTTOM OF CONCRETE CONTACT.
- 3. MINIMUM SIZE 3-4" STONE FILTER SHALL BE INSTALLED AROUND THE UPSTREAM SIDE OF THE BOARD DAM.
- 4. POSTS FOR THE SILT CONTROL GATE SHALL BE 4: X 4" TREATED LUMBER AND FACE BOARDS SHALL BE 2" X 6" TREATED LUMBER WITH NO SPACING ALLOWED BETWEEN BOARDS.
- 5. AN APPROVED SILT FENCE FABRIC SHALL BE SECURELY FASTENED TO THE FRONT OF THE
- STRUCTURE USING STABLES (BE SURE TO HAVE SILT FENCE ON UPSTREAM SIDE OF STRUCTURE). 6. SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN IT REACHES ONE—THIRD THE HEIGHT OF THE SILT GATE. FILTER FABRIC SHALL BE REPLACED WHEN DAMAGED AND/OR DETERIORATED.
- 7. ALL DISTURBED AREAS SHALL BE VEGETATED IMMEDIATELY AFTER CONSTRUCTION WITH PERMANENT VEGETATION.

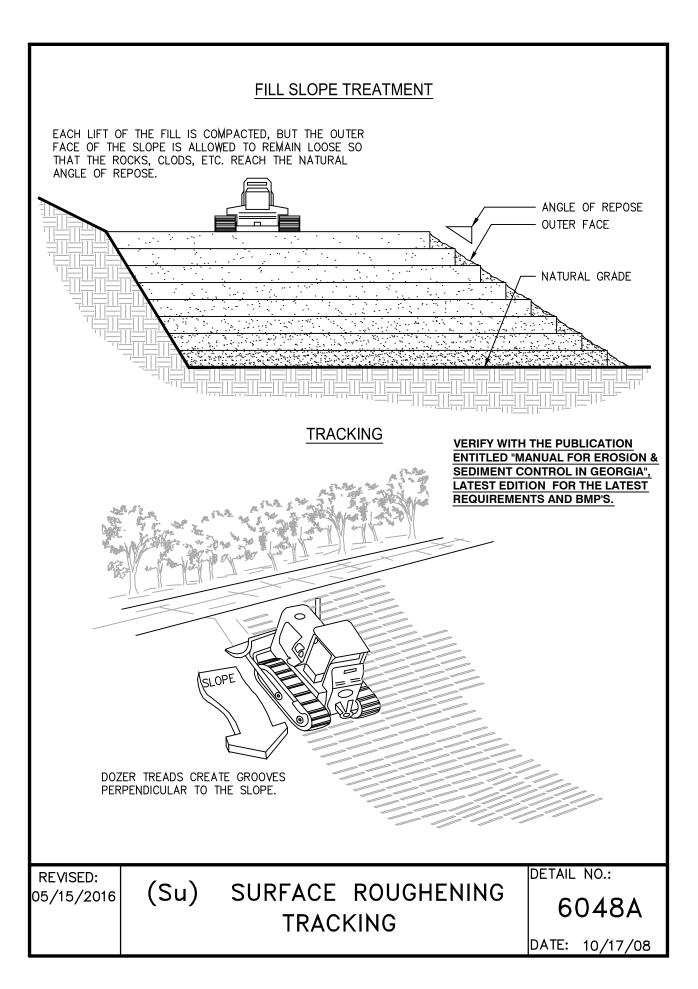


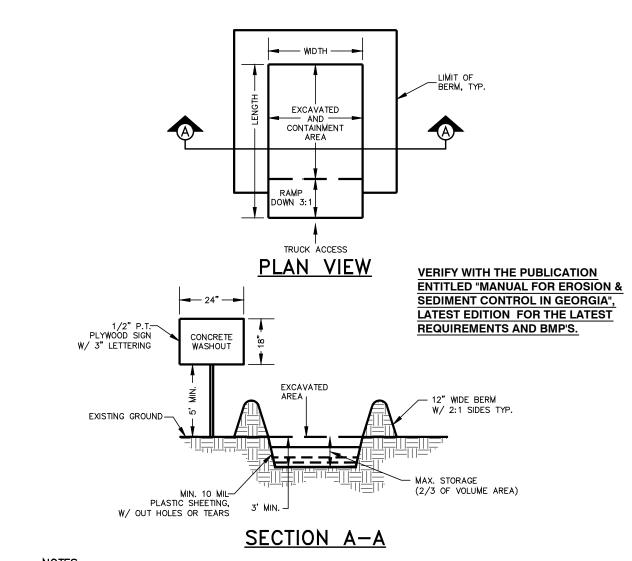
FOR FLARED END SECTIONS & TAPERED HEADWALLS

6047D

DATE:10/14/2008







#### NOTES:

- SEE PLAN VIEW FOR LOCATION & LENGTH AND WIDTH INFORMATION.
- CONCRETE WASHOUT AREA & SIGNS SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT.
- CONCRETE WASHOUT SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO THE OPERATORS OF CONCRETE TRUCKS & EQUIPMENT. WASHOUT OF THE CONCRETE DRUM IS PROHIBITED AT THE SITE.
- THE CONCRETE WASHOUT AREA SHALL BE REPAIRED; ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
- AT THE END OF CONSTRUCTION, ALL CONCRETE & MATERIALS SHALL BE REMOVE FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.

  CONCRETE WASHOUT AREAS SHALL BE LOCATED A MIN. OF 50 FEET AWAY FROM ANY
- PART OF A STORM SEWER SYSTEM.
- CONCRETE WASHOUT AREAS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAIN EVENT AND SHALL BE REPAIRED AS NECESSARY.
- CONCRETE WASHOUT AREA SHALL MEET THE GUIDELINES OF THE EPA'S CONCRETE WASHOUT BMP.

**REVISED:** 05/15/2016

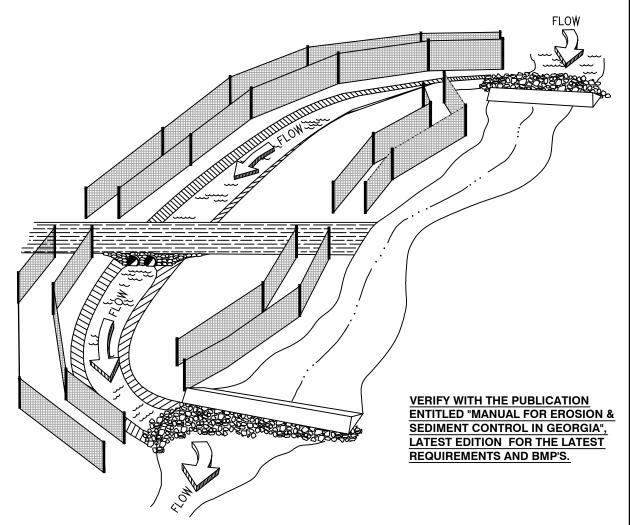
#### CONCRETE WASHDOWN AREA

DETAIL NO:

6049

DATE: 10/28/2009

#### STREAM DIVERSION CHANNEL



#### NOTES

- THE BOTTOM WIDTH OF THE STREAM DIVERSION SHALL BE A MINIMUM OF SIX FEET <u>OR</u> EQUAL TO THE BOTTOM WIDTH OF THE EXISTING STREAMBED (WHICHEVER IS GREATER).
- 2. SIDE SLOPES OF THE STREAM DIVERSION CHANNEL SHALL BE NO STEÉPER THAN 2:1.
- 3. THE CHANNEL SHALL BE EXCAVATED, CONSTRUCTING PLUGS AT BOTH ENDS.
- 4. TWO ROWS OF TYPE S SEDIMENT BARRIERS SHALL BE PLACED ALONG THE SIDES OF THE CHANNEL TO PREVENT UNFILTERED RUNOFF FROM ENTERING THE STREAM.
- 5. THE CHANNEL SURFACE SHALL BE SMOOTH (TO PREVENT TEARING OF THE LINER) AND LINED WITH THE MATERIAL SPECIFIED IN THE PLANS.
- 6. THE PLUGS ARE REMOVED WHEN THE LINER INSTALLATION IS COMPLETE (REMOVING THE DOWNSTREAM PLUG FIRST).

Dc

STREAM DIVERSION CHANNEL

DETAIL NO:

6050

DATE: 05/14/2016

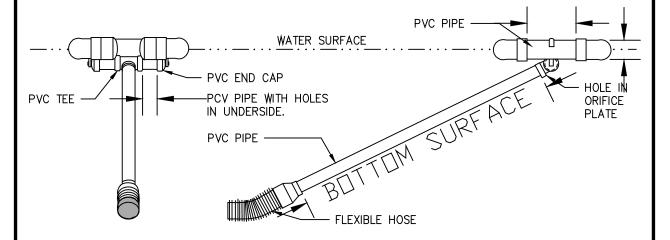
#### TEMPORARY SEDIMENT POND

NOTE: SKIMMER CONFIGURATION SHOWN IS TYPICAL. THE DESIGNER/ENGINEER MAY SUBMIT AN ALTERNATE SKIMMER DETAIL FOR REVIEW.

# SKIMMER PERSPECTIVE

#### SKIMMER FRONTAL SECTION VIEW

#### SKIMMER SIDE SECTION VIEW



VERIFY WITH THE PUBLICATION
ENTITLED "MANUAL FOR EROSION &
SEDIMENT CONTROL IN GEORGIA",
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REQUIREMENTS AND BMP'S.

REVISED: 05/15/2016

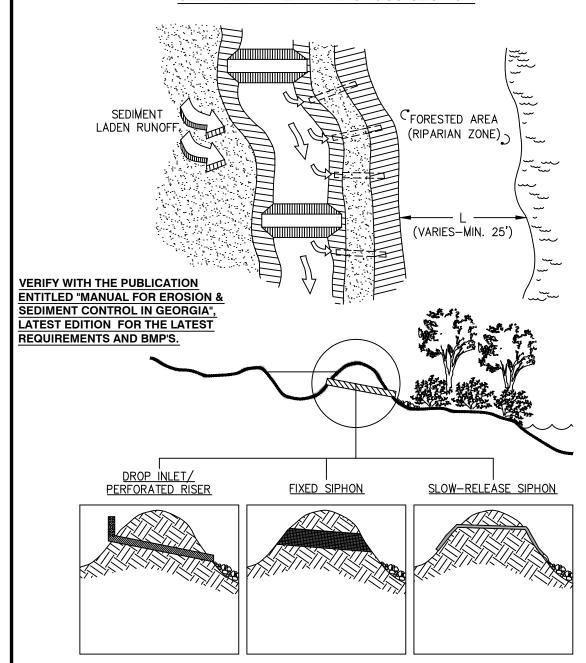
Sk FILTER SURFACE SKIMMER DETAIL NO:

6051

DATE: 05/14/2016

## INTEGRATED SEEP BERM EROSION CONTROL SYSTEM

SEEP BERM PLAN AND CROSS-SECTION



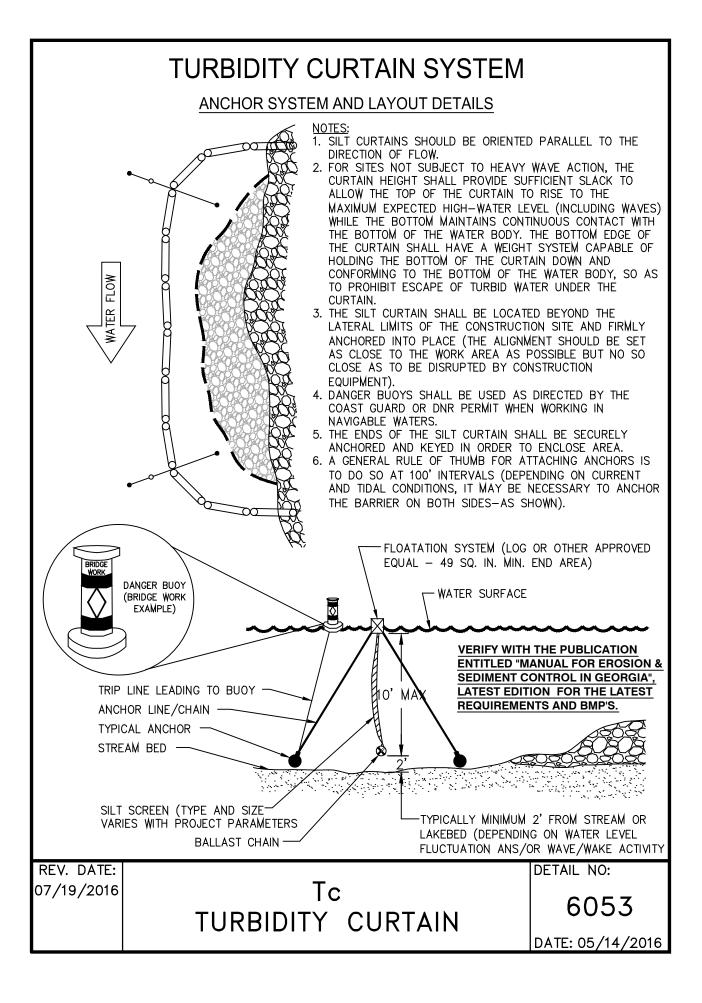
\*DESIGNER/ENGINEER MUST DEFINE IF SEEP BERM IS TO BE A TEMPORARY OR PERMANENT BMP.

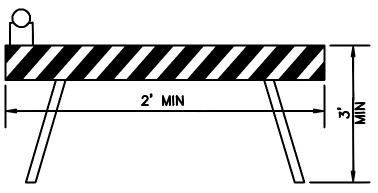
REVISED: 05/15/2016

SpB SEEP BERM DETAIL NO:

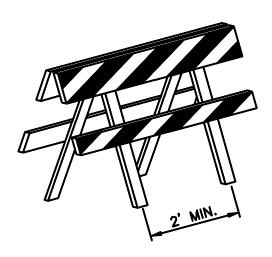
6052

DATE: 05/14/2016

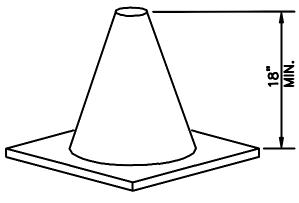




TYPE I BARRICADE



TYPE II BARRICADE



TRAFFIC CONES

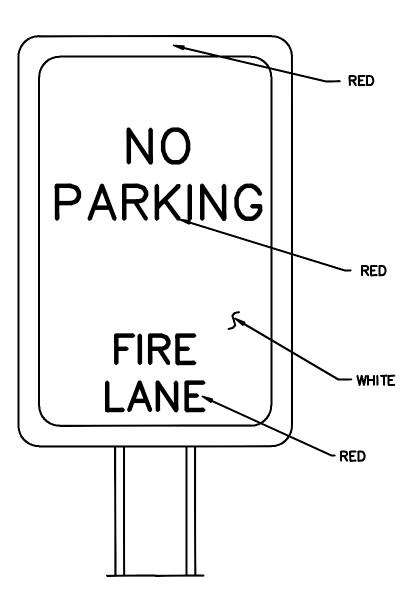
**REV. DATE: 06/2**6/2015

BARRICADES (TYPES I & II)
AND TRAFFIC CONE

DETAIL NO:

7001

DATE: 05/25/1996



NOTE: PROVIDE 12"x 18"x .080" ALUMINUM BASE STANDARD SIGN. BOLT SIDE TO #3 CHANNEL POST W/ TOP OF SIGN  $\odot$  5'- 6" ABOVE GRADE.

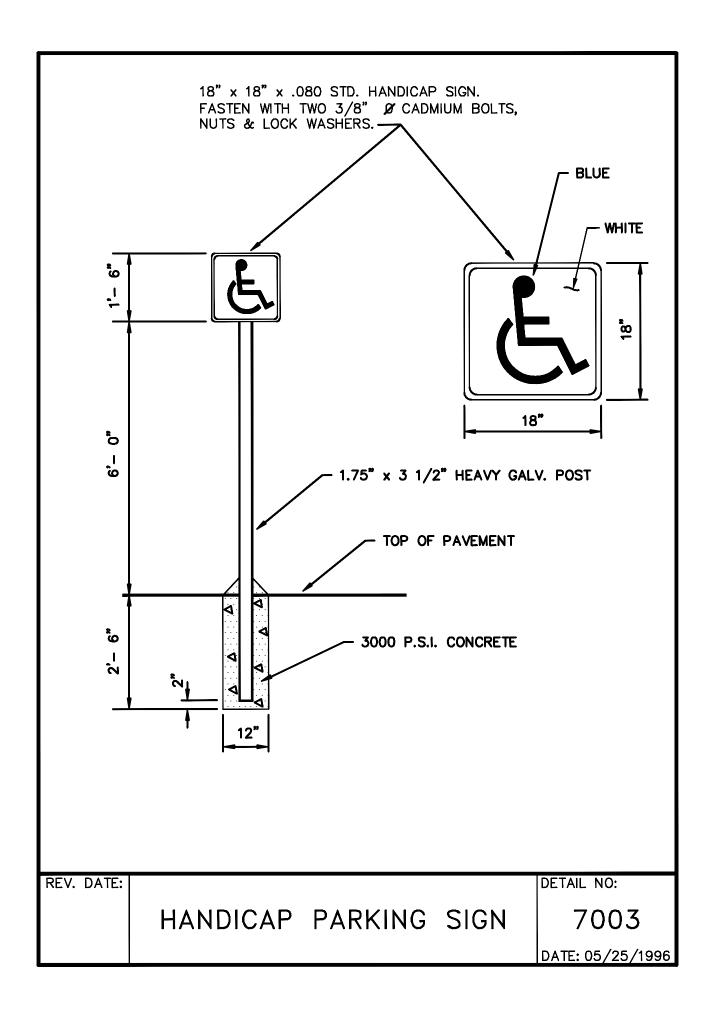
REV. DATE: 06/26/2015

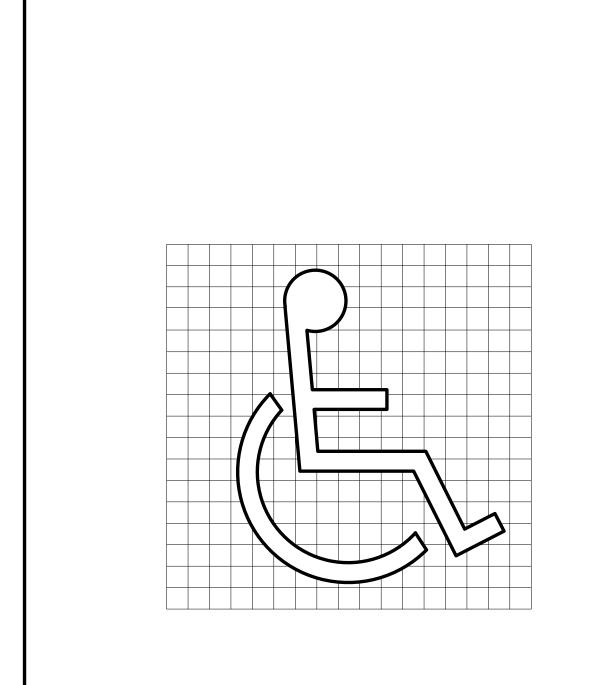
FIRE LANE SIGN

DETAIL NO:

7002

DATE: 05/25/1996



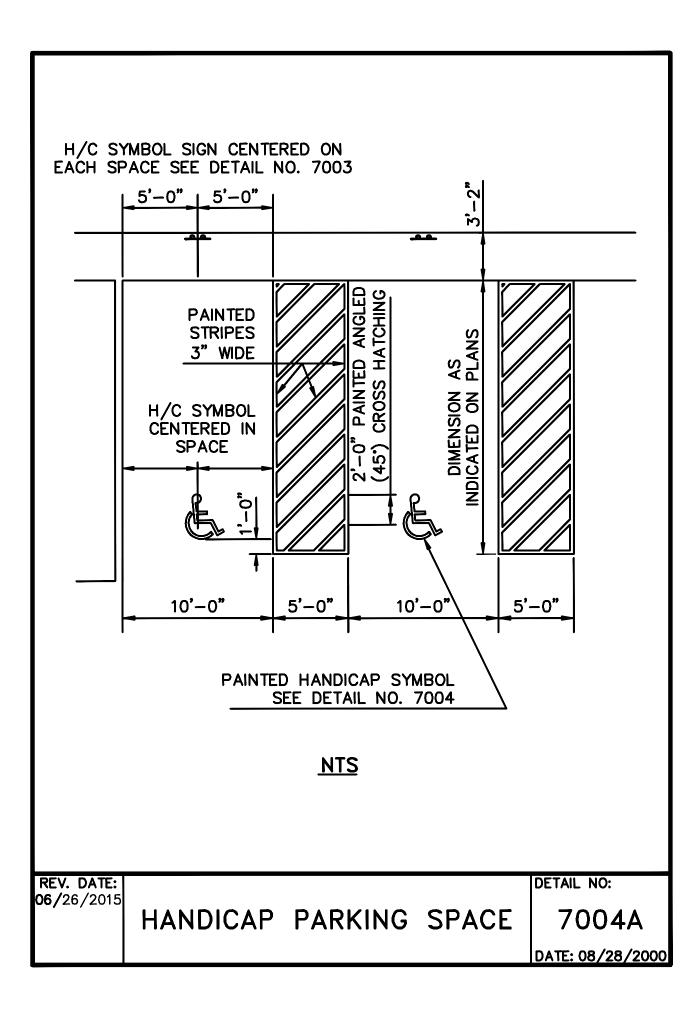


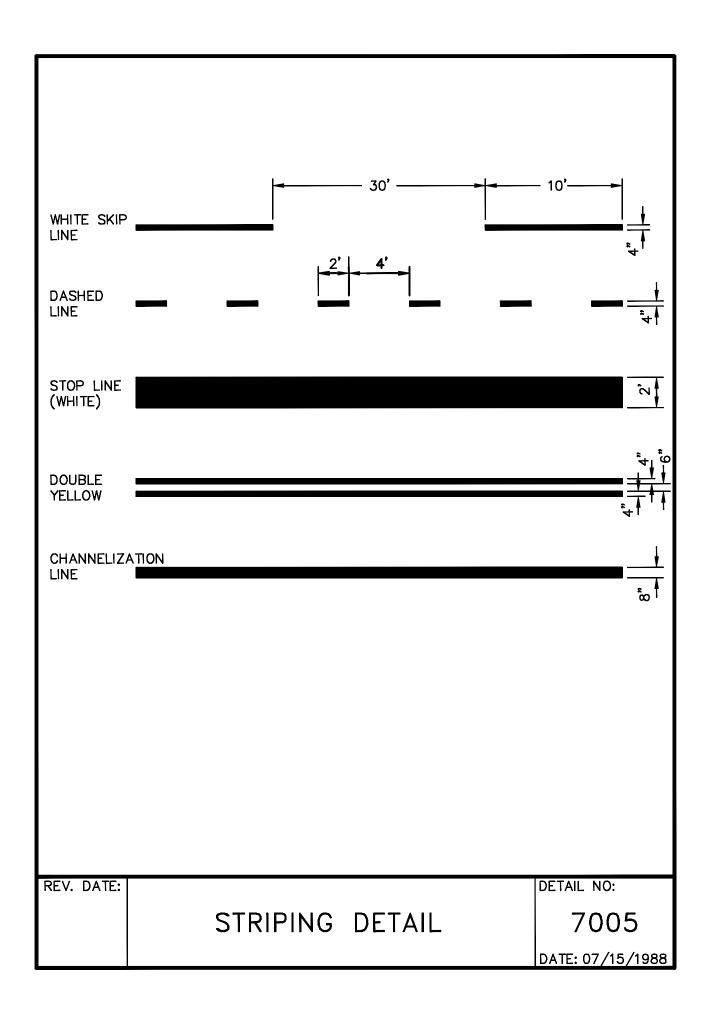
REV. DATE:

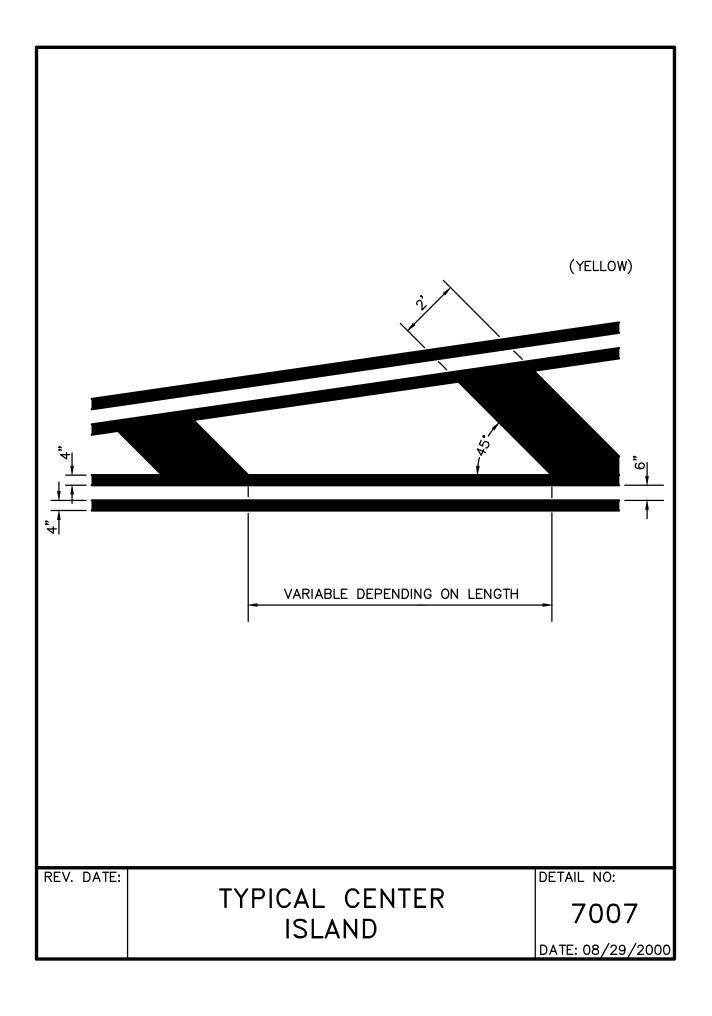
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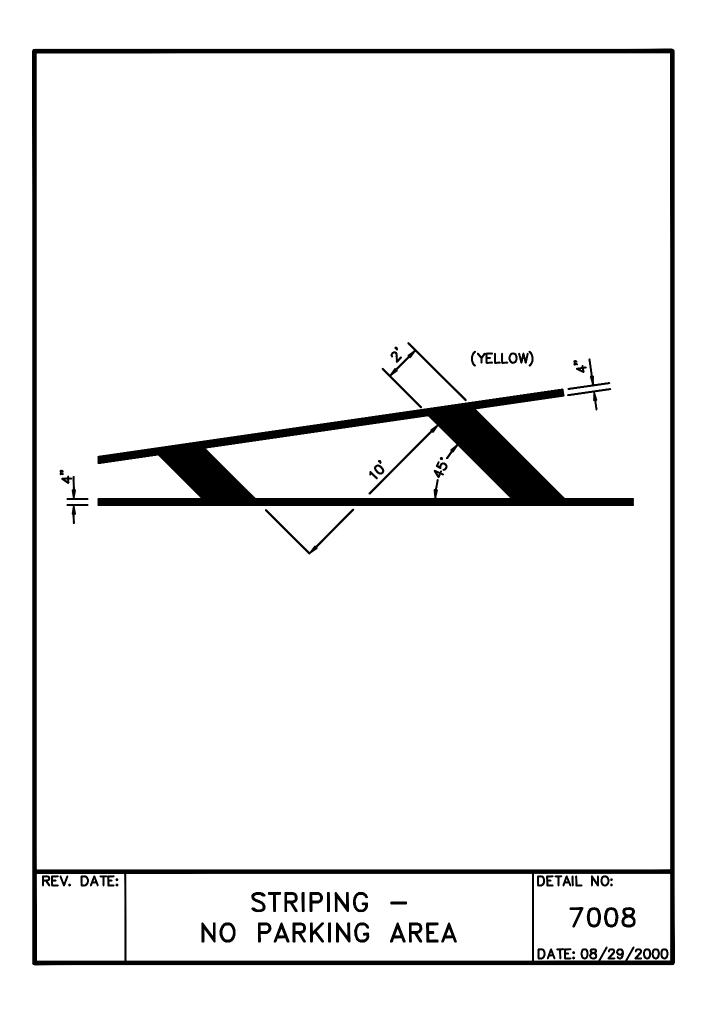
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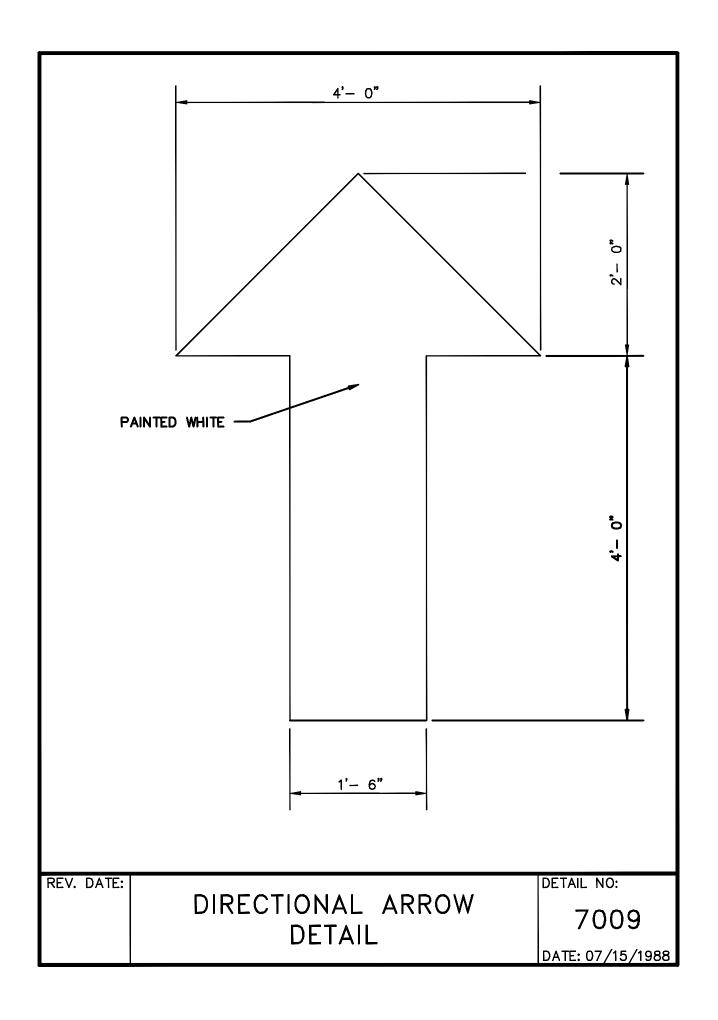
DATE: 05/25/1996

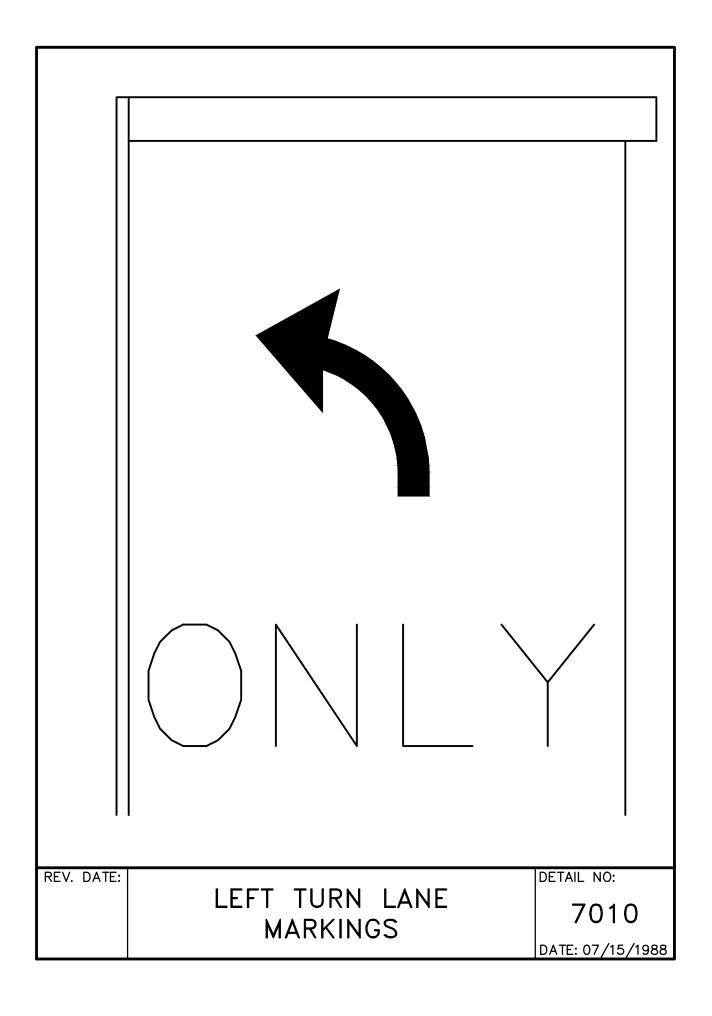


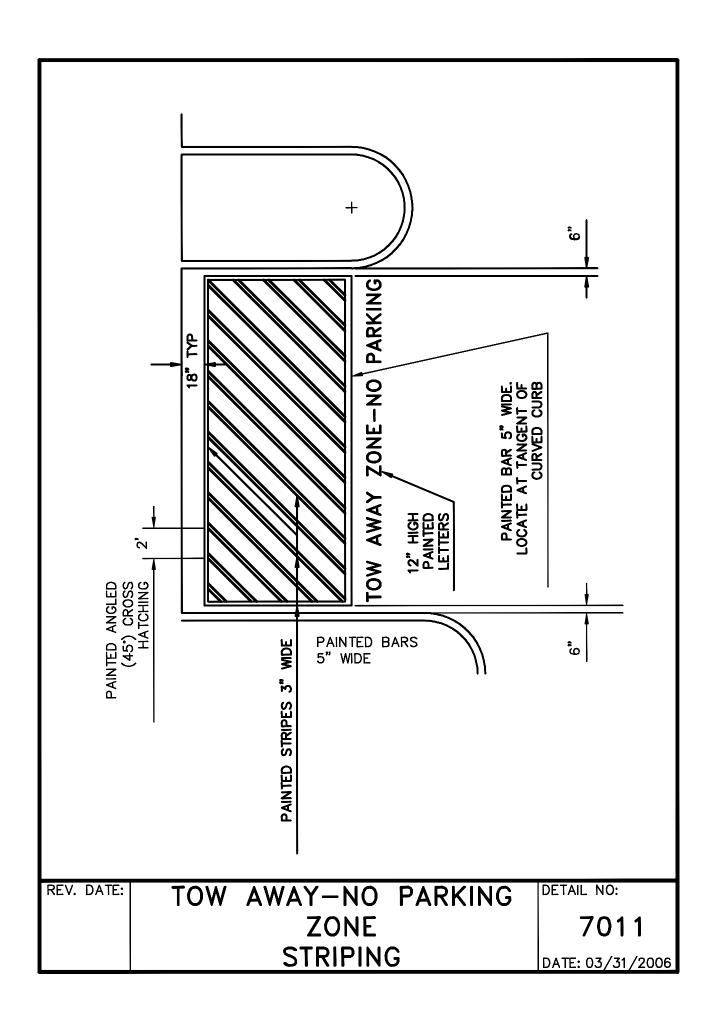


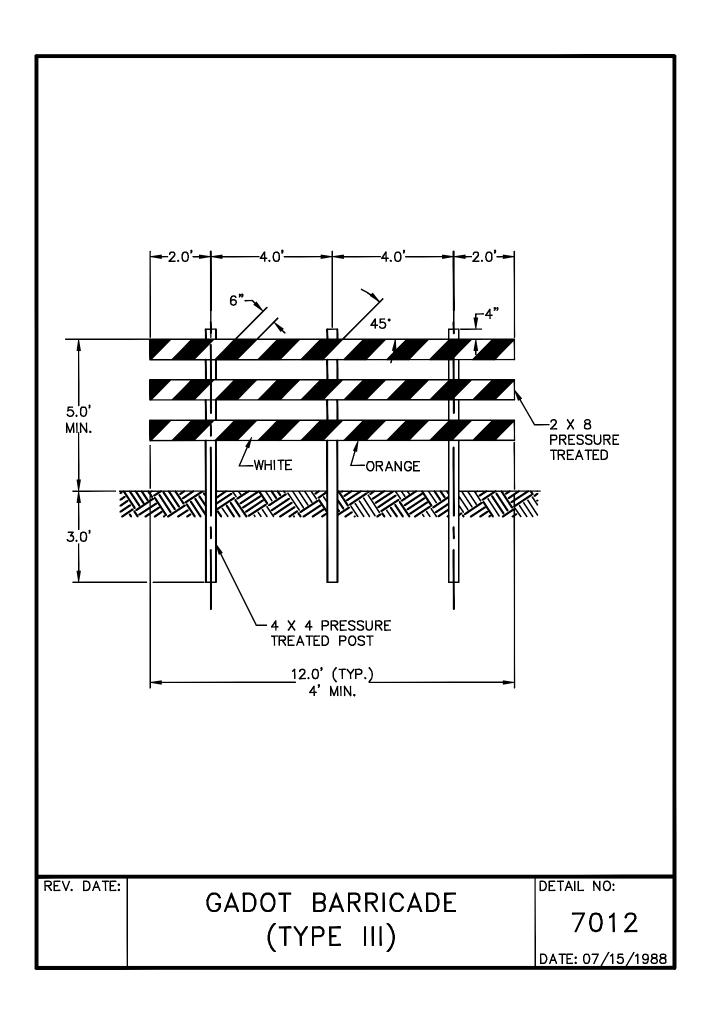




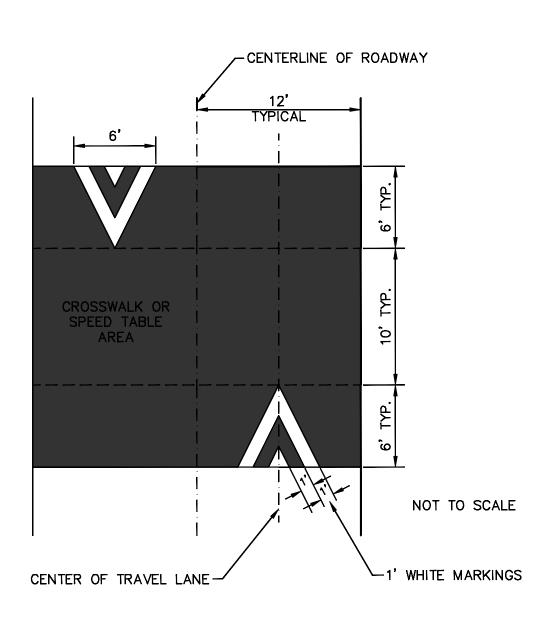








(	6X6P LOOP		
(	6X18 C-LOOP		
(	6X40 D-LOOP		
(	6X40 QUADRUPOLE LOOP		
1	RR. CONTROLLER CABINET		
	CONTROLLER CABINET	$\boxtimes$	
1	PULLBOX-1		
1	PULLBOX-2		
1	PULLBOX-3		
!	PULLBOX-4		
ı	PULLBOX-5		
	TRAFFIC POLE	•	
1	PEDESTRIAN POLE	P6	
	STRAIGHT LIGHT W/ BACK PLATE	<del>  ▶</del> 6	
,	STRAIGHT LIGHT	<del>&gt;</del> 6	
	OVERHEAD SIGN	<b>≓</b> <sup>R3−2</sup>	
	LEFT TURN LIGHT W/ BACK PLATE	2/5	
	LEFT TURN LIGHT	2/5	
REV. DATE:			DETAIL NO:
	TRAFFIC	LEGEND	7013
			DATE: 02/04/2013



NOTE: SPEED TABLES WILL NOT BE LOCATED WITHIN 20 FEET OF DRIVEWAYS.

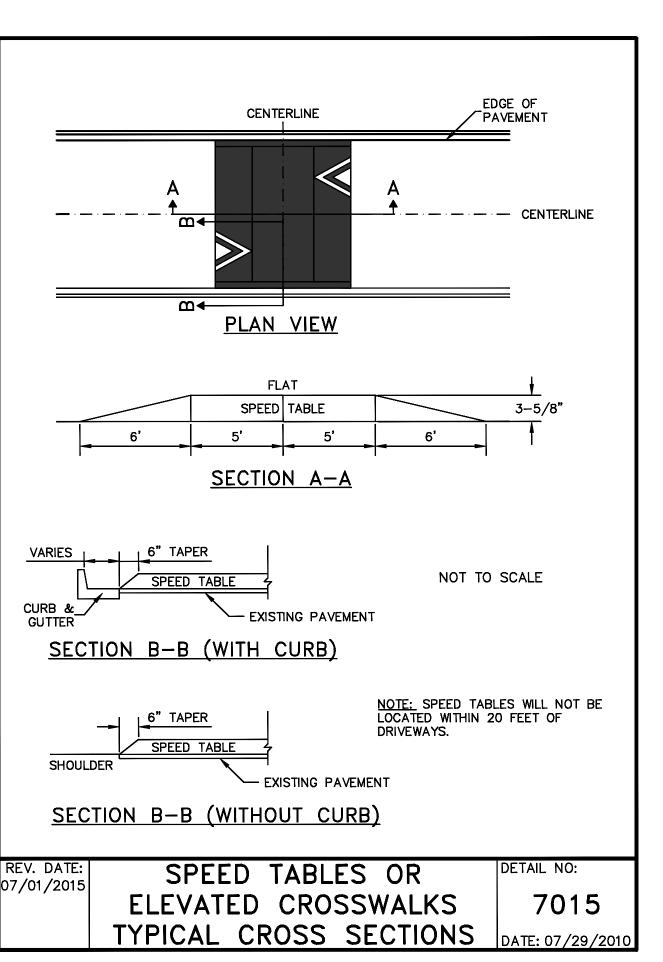
REV. DATE:

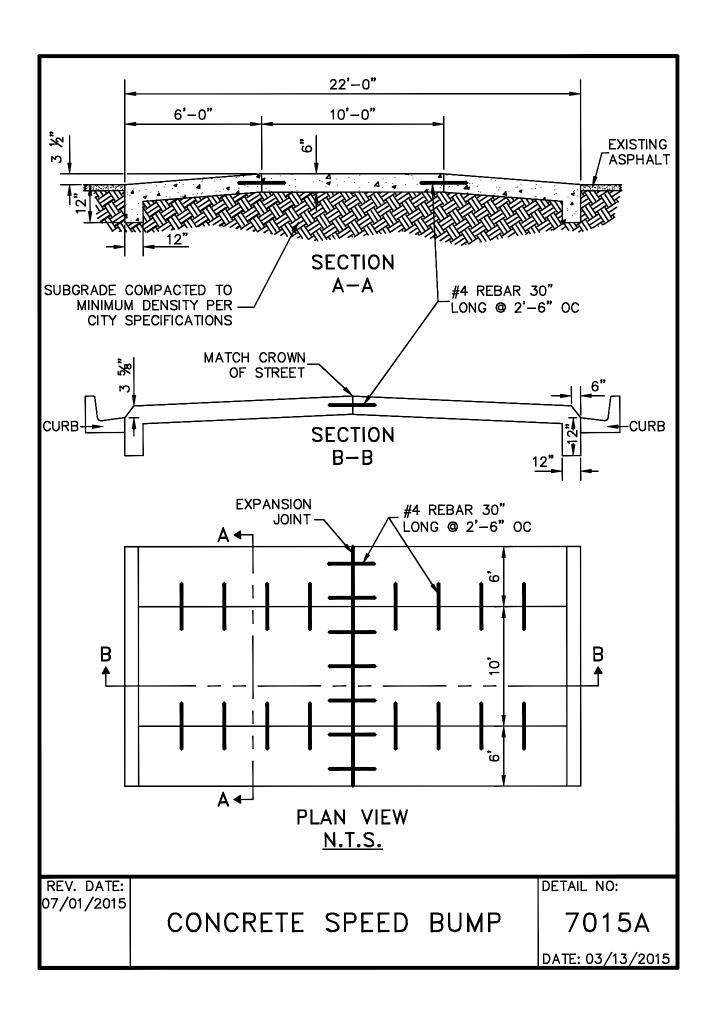
SPEED TABLES OR ELEVATED CROSSWALKS PAVEMENT MARKINGS

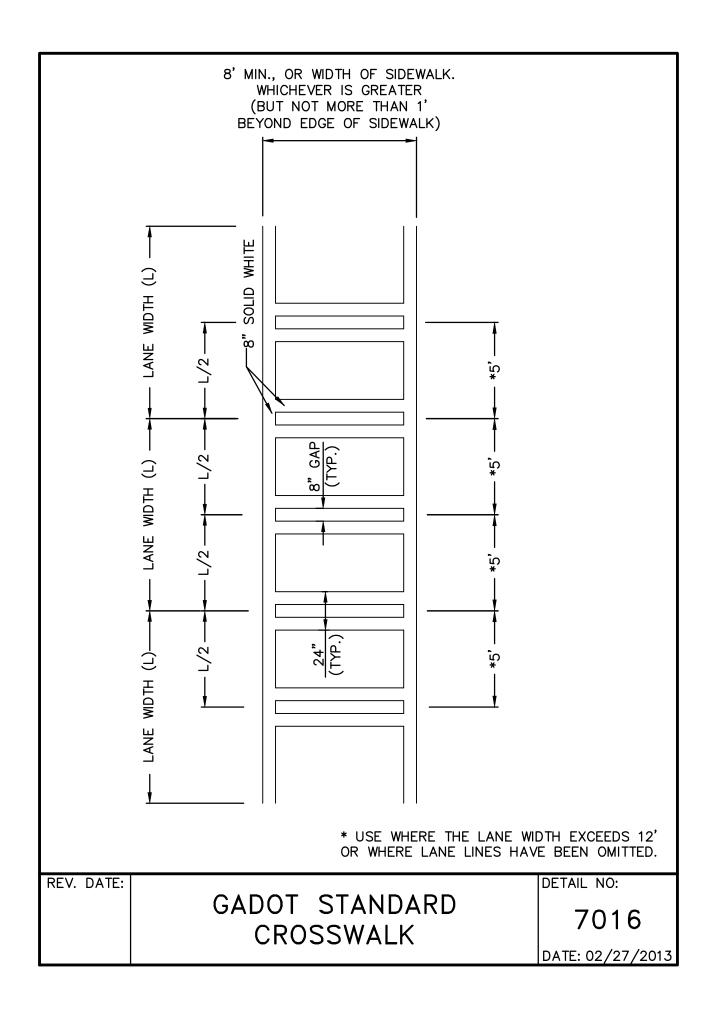
DETAIL NO:

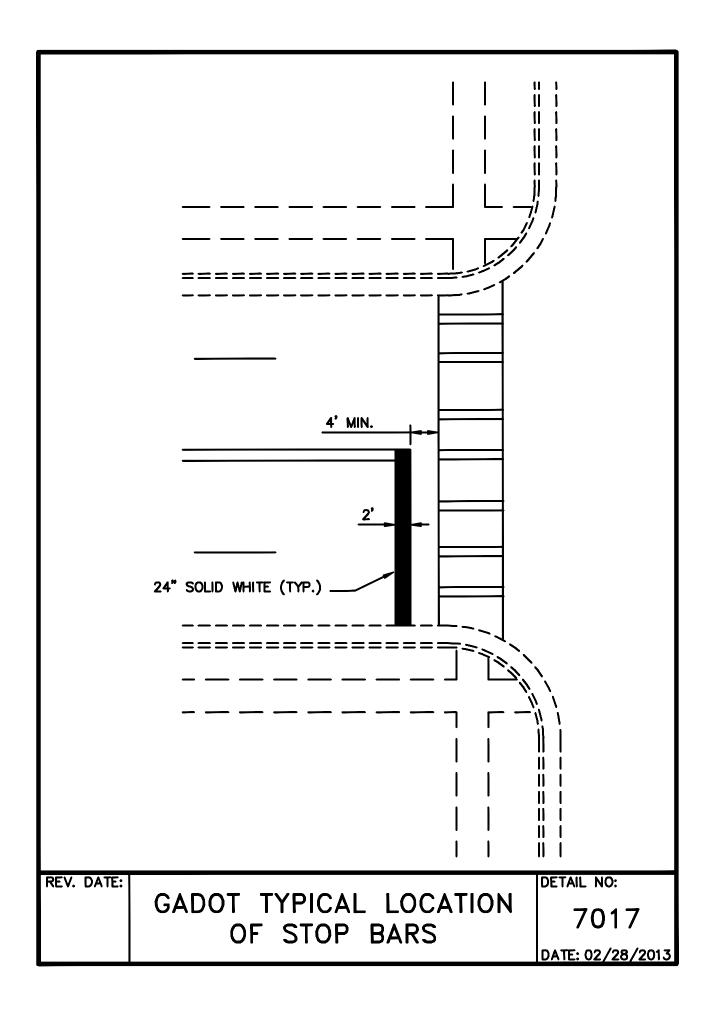
7014

DATE: 07/28/2010

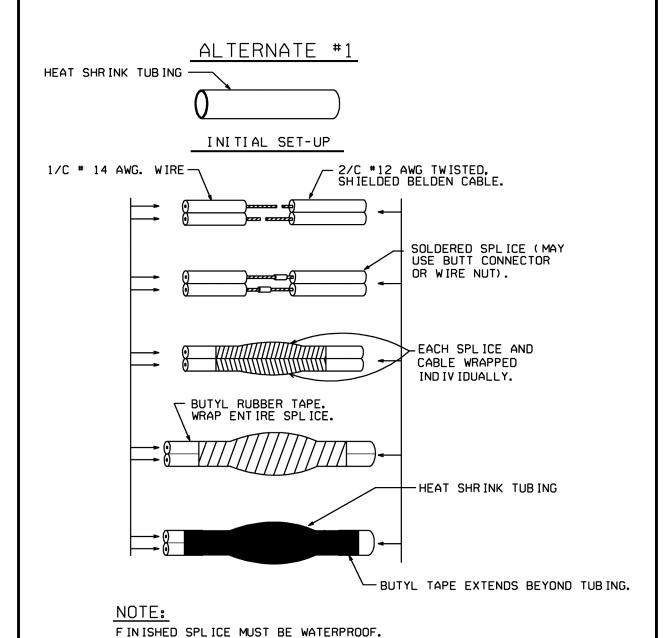








#### HOLD DOWN BOLTS WITH STAINLESS STEEL WASHERS & NUTS. NUTS SHALL BE RECESSED BELOW TOP OF COVER. LOOP LEAD-INS (TWISTED 3 SYMMETRICAL TURNS PER FOOT) PROVIDE 6 FEET OF SLACK FOR THE LOOP LEAD-INS FOR MAKING THE SPLICE(S) ABOVE GROUND REFERENCE TRAFFIC SIGNAL DETAIL INDUCTIVE—LOOP DETECTOR INSTALLATION GDOT DETAIL NO. TS—01 ALSO SEE COA STD. DETAILS NOS. 7019 & 7020. CONDUIT 2" MIN TO 4" MAX ABOVE GRAVEL TO LOOP CUTS BACK OF COARSE GRAVEL EP OR 3' DETA ILS -CONDUIT SIZE VARIES BOX-SPLICE OF PULL BOX COVER-SH IELDED CABLE MULTI-PAIR SHIELDED LOOP (PRE-TWISTED) LEAD-IN CABLE. DO NOT GROUND LOOP WIRE IN PULL BOX. TO CONTROLLER ENDS OF CONDUIT SHALL BE SEALED AND BE WATERPROOF (IYP.). Σ TRAFFIC SIGNAL" ON TOP NOTE: <u>.</u>2 તં Ζ̈́ 18 REV. DATE: 07/02/2015 DETAIL NO: PULL **BOX-SPLICE DETAILS** 7018 DATE: 03/04/2013



#### NOTE:

- 1. REFERENCE TRAFFIC SIGNAL DETAIL INDUCTIVE—LOOP DETECTOR INSTALLATION GDOT DETAIL NO. TS—01
- 2. ALSO SEE COA STD. DETAILS NOs. 7018 & 7020.

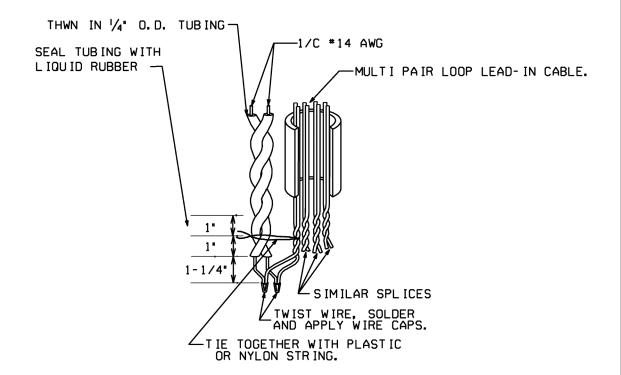
REV. DATE: 03/04/2013

SPLICE DETAILS ALTERNATE NO. 1

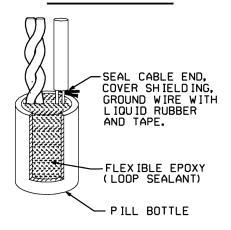
DETAIL NO:

7019

#### ALTERNATE #2



#### FINISHED SPLICE



#### NOTE:

- 1. REFERENCE TRAFFIC SIGNAL DETAIL INDUCTIVE—LOOP DETECTOR INSTALLATION GDOT DETAIL NO. TS—01
- 2. ALSO SEE COA STD. DETAILS NOs. 7018 & 7019.

REV. DATE: 07/02/2015

SPLICE DETAILS ALTERNATE NO. 2

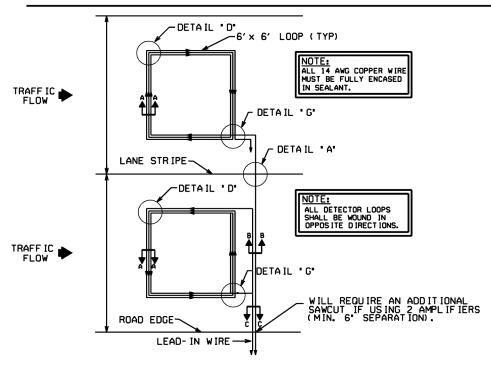
DETAIL NO:

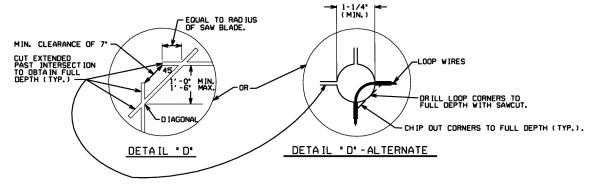
7020

#### INDUCTIVE LOOP VEHICLE DETECTOR DETAILS

USING STRANDED COPPER WIRE

#### PLAN VIEW OF STANDARD LOOP SAW CUTS





#### NOTE:

- 1. REFERENCE TRAFFIC SIGNAL DETAIL INDUCTIVE—LOOP DETECTOR INSTALLATION GDOT DETAIL NO. TS—01
- 2. ALSO SEE COA STD. DETAILS NOs. 7022 7024.

REV. DATE: 07/02/2015

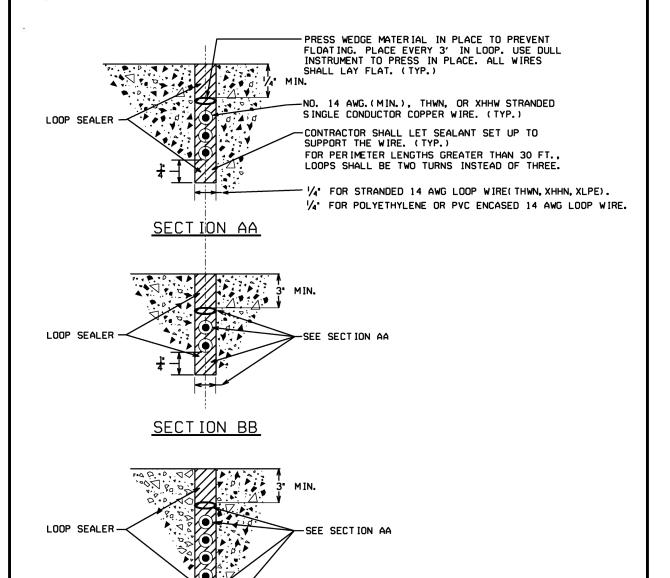
STANDARD LOOP SAW CUTS PLAN & DETAIL "D"

DETAIL NO:

7021

#### INDUCTIVE LOOP VEHICLE DETECTOR DETAILS

USING STRANDED COPPER WIRE



#### NOTE:

- 1. REFERENCE TRAFFIC SIGNAL DETAIL INDUCTIVE—LOOP DETECTOR INSTALLATION GDOT DETAIL NO. TS—01
- 2. ALSO SEE COA STD. DETAILS NOs. 7021, & 7022A 7024.

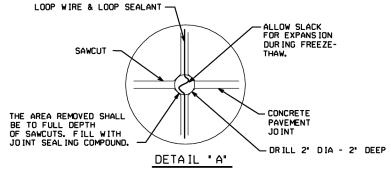
SECTION CC

REV. DATE: 07/02/2015 INDUCTIVE LOOP VEHICLE
DETECTOR DETAILS
SECTIONS "AA" - "CC"

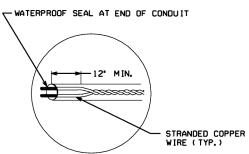
DETAIL NO:

7022

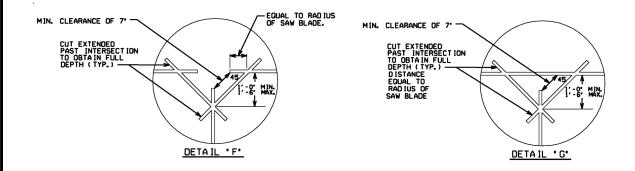
### INDUCTIVE LOOP VEHICLE DETECTOR DETAILS USING STRANDED COPPER WIRE



NOTE: USE FOR CONCRETE PAVEMENT ONLY.



DETAIL "E"



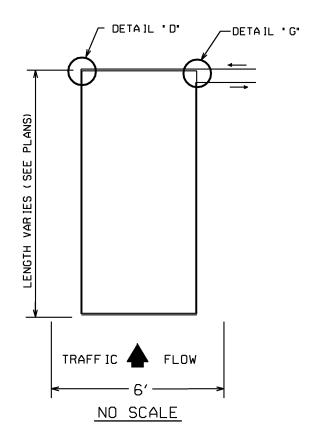
#### NOTE:

- 1. REFERENCE TRAFFIC SIGNAL DETAIL INDUCTIVE—LOOP DETECTOR INSTALLATION GDOT DETAIL NO. TS—01
- 2. ALSO SEE COA STD. DETAILS NOs. 7021-7022, & 7023-7024.

REV. DATE: 07/02/2015	INDUCTIVE LOOP VEHICLE	DETAIL NO:
, , , , , , , , , ,	DETECTOR DETAILS	7022A
	"A", "E", "F" & "G"	DATE: 03/04/2013

## INDUCTIVE LOOP VEHICLE DETECTOR DETAILS USING STRANDED COPPER WIRE

### PLAN VIEW OF STANDARD LOOP



## LOOP WIRE CONFIGURATION

THE DOUBLE LAYER CONFIGURATION (2-2) SHOWN IS A MINIMUM DESIGN FOR NORMAL INSTALLATIONS WHEN REQUIRED BY THE PLANS.

#### NOTE:

- REFERENCE TRAFFIC SIGNAL DETAIL INDUCTIVE-LOOP DETECTOR INSTALLATION GDOT DETAIL NO. TS-01
- ALSO SEE COA STD. DETAILS NOs. 7021 7022A, & 7024.

REV. DATE: 07/02/2015

INDUCTIVE LOOP VEHICLE DETECTOR DETAILS STANDARD LOOP PLAN VIEW DATE: 03/04/2013

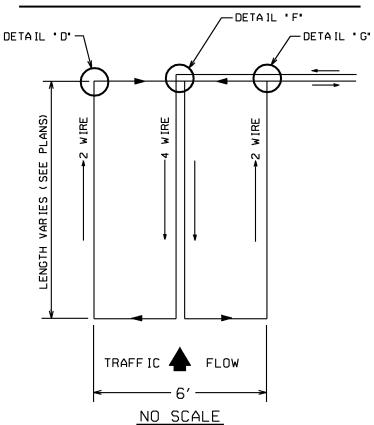
DETAIL NO:

7023

### INDUCTIVE LOOP VEHICLE DETECTOR DETAILS

USING STRANDED COPPER WIRE

## PLAN VIEW OF QUADRUPOLE



## LOOP WIRE CONFIGURATION

THE DOUBLE LAYER CONFIGURATION (2-4-2) SHOWN IS A MINIMUM DESIGN FOR NORMAL INSTALLATIONS WHEN REQUIRED BY THE PLANS.

#### NOTE:

- 1. REFERENCE TRAFFIC SIGNAL DETAIL INDUCTIVE—LOOP DETECTOR INSTALLATION GDOT DETAIL NO. TS—01
- 2. ALSO SEE COA STD. DETAILS NOs. 7021 7023.

∣ RE√	/. D/	ATE:
07/0	06/2	2015
0//	JU/ 2	2010

INDUCTIVE LOOP VEHICLE
DETECTOR DETAILS
QUADRUPOLE PLAN VIEW

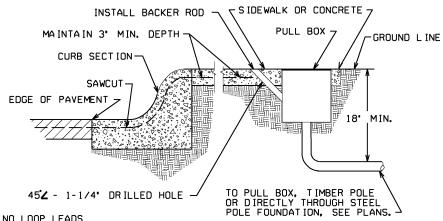
DETAIL NO:

7024

DATE: 03/04/2013

## TYPICAL CURB DETAIL

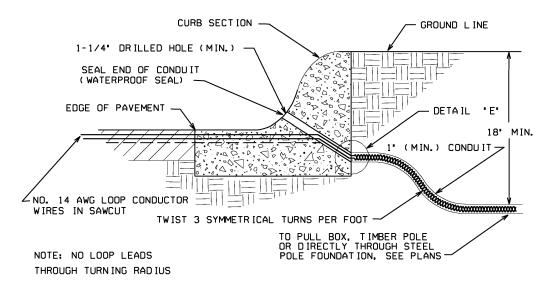
(WITH SIDEWALK)



NOTE: NO LOOP LEADS THROUGH TURNING RADIUS

## TYPICAL CURB DETAIL

(WITHOUT SIDEWALK)



#### NOTE:

- 1. REFERENCE TRAFFIC SIGNAL DETAIL INDUCTIVE—LOOP DETECTOR INSTALLATION GDOT DETAIL NO. TS—01
- 2. ALSO SEE COA STD. DETAILS NO 7025A.

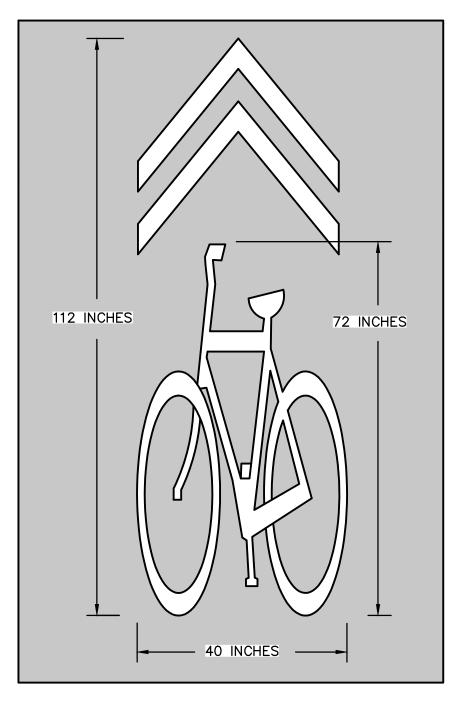
REV. DATE: 07/06/2015 INDUCTIVE LOOP VEHICLE
DETECTOR DETAILS
TYPICAL CURB DETAILS

DETAIL NO:

7025

DATE: 03/04/2013

# TO PULL BOX, TIMBER OR DIRECTLY THROUGH POLE FOUNDATION, SE - TWIST 3 SYMMETRICAL TURNS PER FOOT. SEAL END OF CONDUIT(WATERPROOF SEAL) DETAIL WHERE NO CURB EXISTS REFERENCE TRAFFIC SIGNAL DETAIL INDUCTIVE—LOOP DETECTOR INSTALLATION GDOT DETAIL NO. TS—01 ALSO SEE COA STD. DETAILS NO 7025. - GROUND LINE Ν̈́Ι 18 ĽΣ 1" (MIN,) CONDUIT DETAIL 'E' EDGE OF PAVEMENT -45.4 ω. WIN. PAVEMENT THROUGH TURN ING RAD IUS NOTE: NO LOOP LEADS NO. 14 AWG LOOP CONDUCTOR— WIRES IN SAWCUT. NOTE: REV. DATE: 07/06/2015 DETAIL NO: .00P **DETAILS DETECTOR** 7025A <u>CURB</u> DETAIL **WITH** NO DATE: 03/04/2013



#### NOTE:

BICYCLE MARKING TEMPLATE SHALL BE ENNIS—FLINT (PREMARK) ITEM PM600833VG, THERMOPLASTIC OR EQUAL.

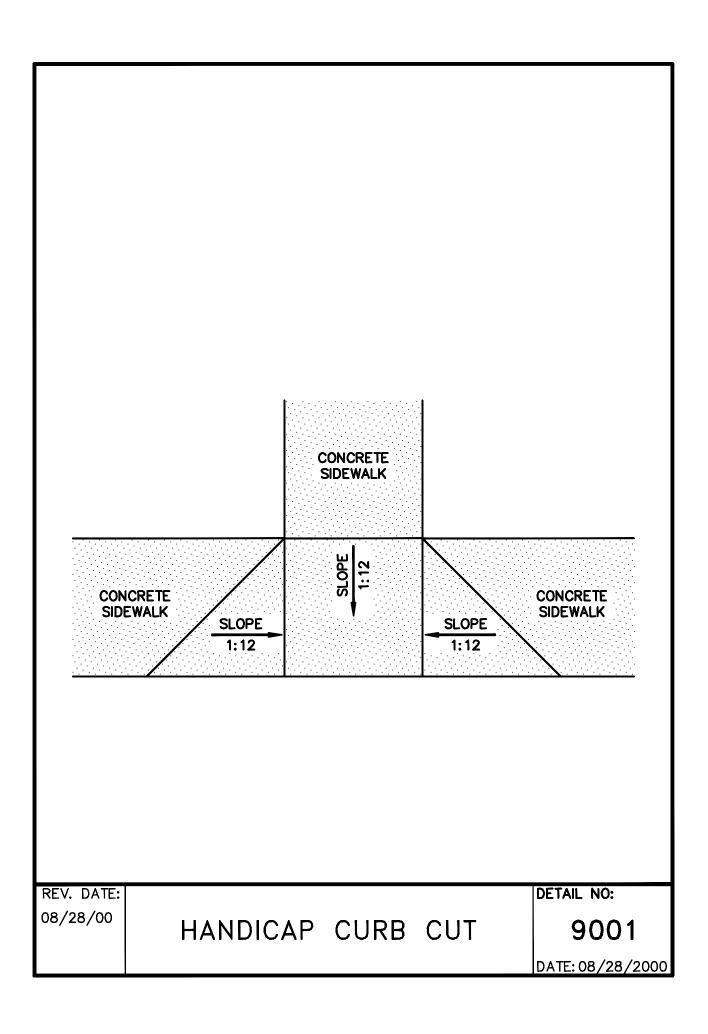
REV. DATE: 07/06/2015

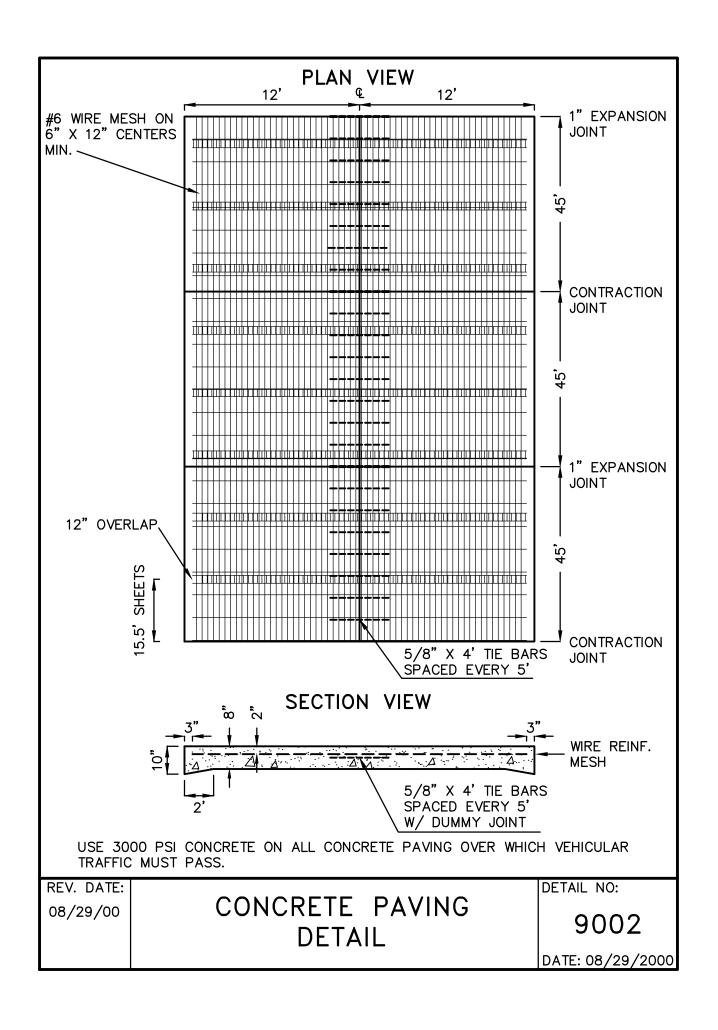
SHARED LANE MARKING BICYCLE MARKING

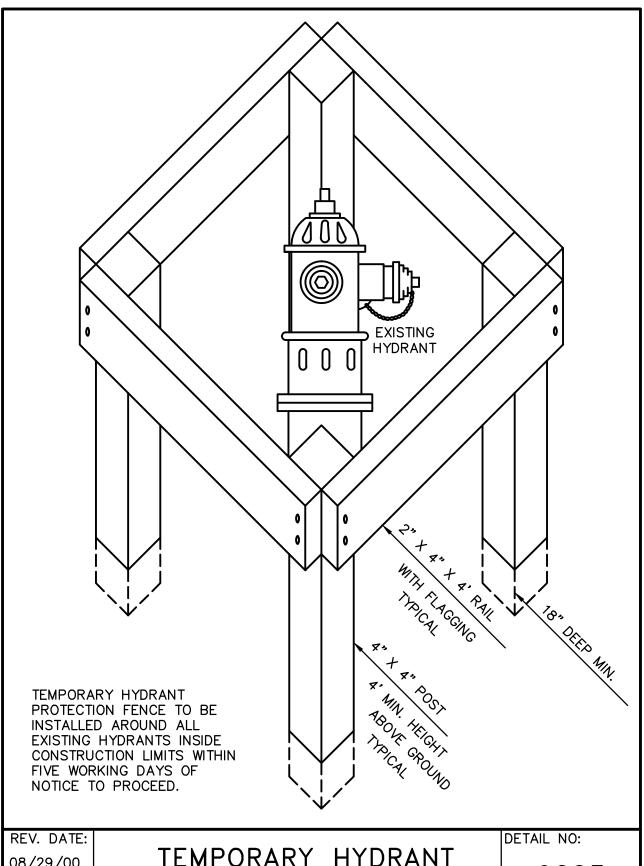
DETAIL NO:

7026

DATE: 03/19/2013





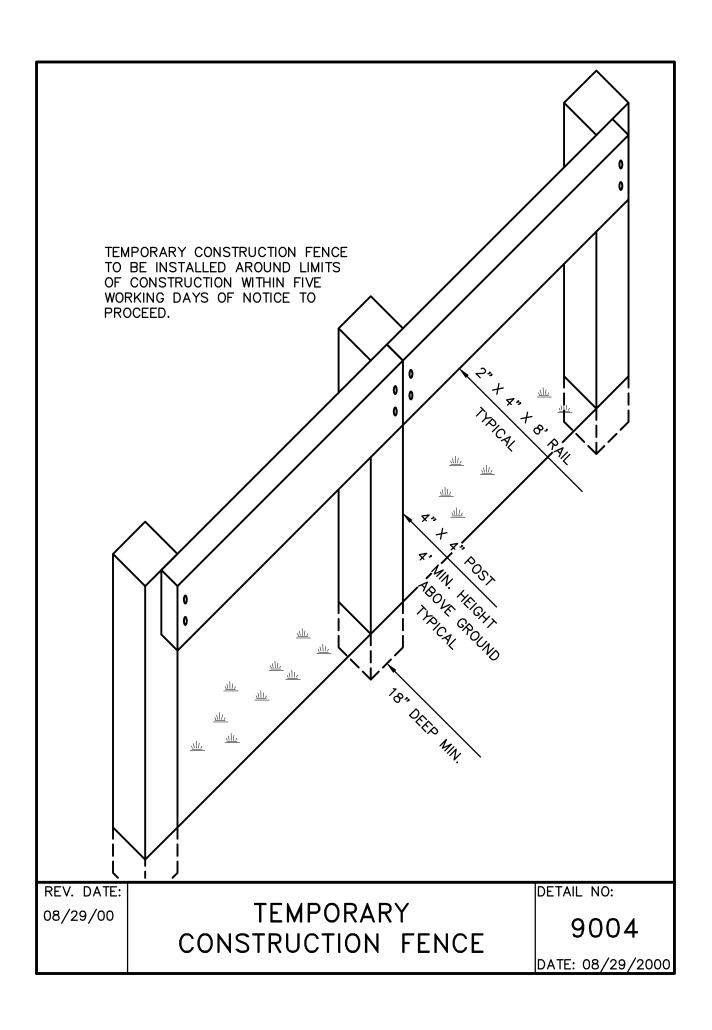


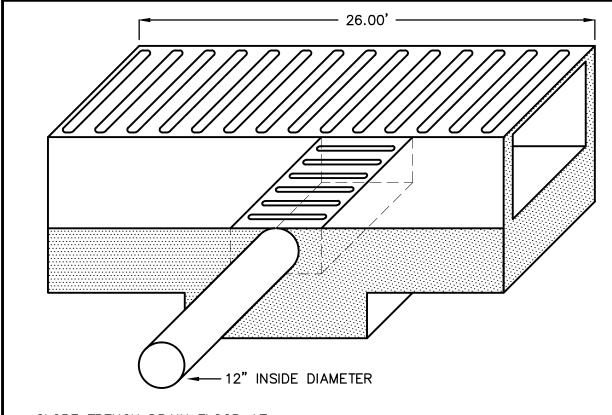
08/29/00

TEMPORARY HYDRANT PROTECTION FENCE

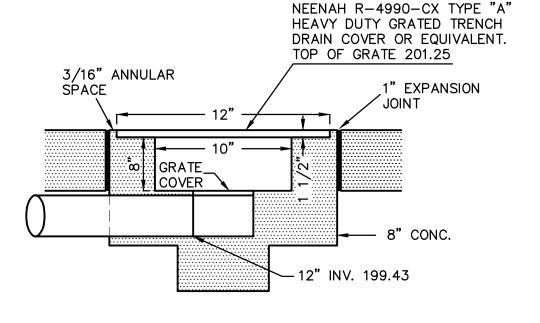
9003

DATE: 08/29/2000





SLOPE TRENCH DRAIN FLOOR AT A 1% GRADE TOWARD DRAIN



REV. DATE:

TRENCH DRAIN DETAIL

DETAIL NO:

9005

DATE: 08/29/2000

