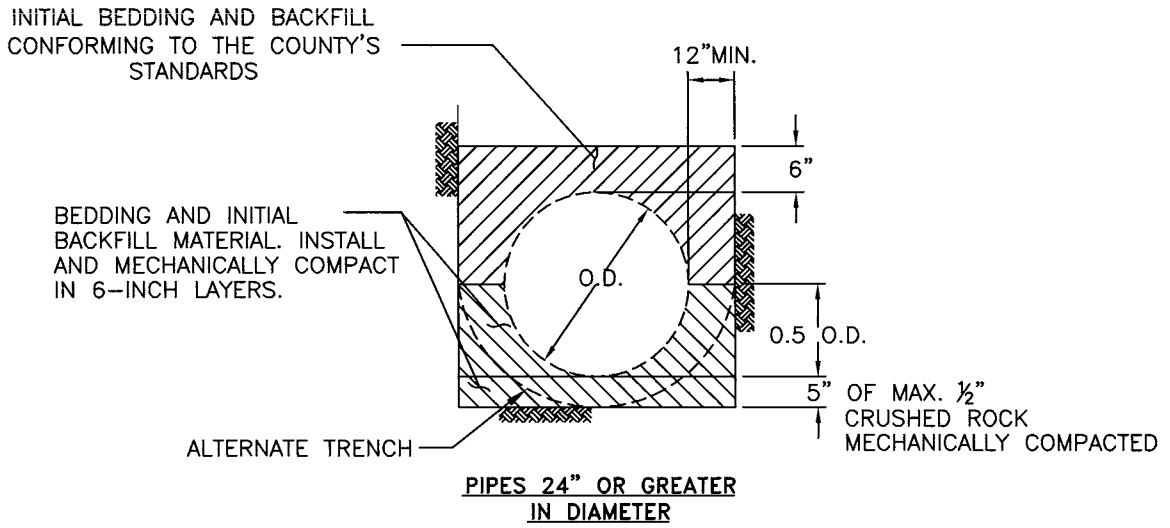
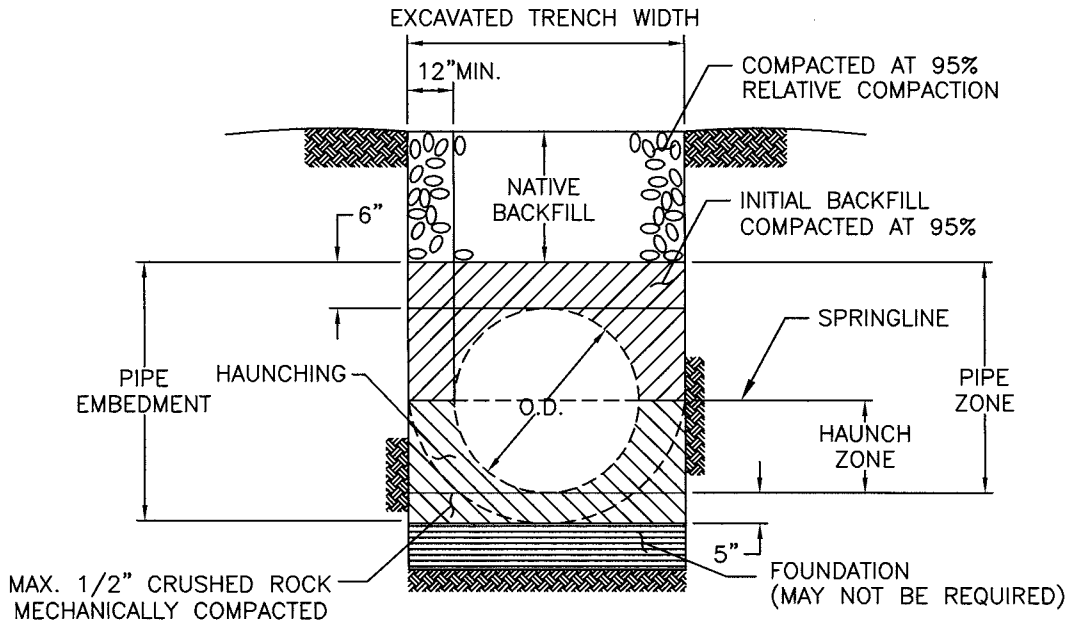
Standard Drawings Section 9 – Storm Drainage		
Drawing	**Sheets**	**Description**
9-1	1	Pipe Bedding and Initial Backfill (Storm Drainage)
9-2	1 of 2	Standard Stormdrain Manhole
9-2	2 of 2	Standard Stormdrain Manhole Notes
9-3	1	Gray Cast Iron Standard 24” Manhole Frame & Cover
9-4	1	Gray Cast Iron Standard 36” Manhole Frame & Cover
9-5	1	Grate Type Manhole Cover
9-6	1 of 2	Grated Curb Inlet
9-6	2 of 2	Grated Curb Inlet
9-7	1	Pipe Connections
9-8	1 of 2	Lined Channel Section
9-8	2 of 2	Lined Channel Section
9-9	1	Typical Ramp and Transition Detail
9-10	1	Erosion Control Pipe Discharge
9-11	1	Erosion Control Ditch Discharge
9-12	1 of 2	Chain Link Fence
9-12	2 of 2	Chain Link Fence
9-13	1	Utility Stream Crossing
9-14	1	Flexible Connector Pipe to Manhole Detail
9-15	1 of 4	Detention Basin Outflow Structure Elevation
9-15	2 of 4	Detention Basin Outflow Structure Trash Screen Enclosure
9-15	3 of 4	Detention Basin Slide Gate Restrictor Outflow Control Structure
9-15	4 of 4	Detention Basin Shear Gate Restrictor Outflow Control Structure



PIPES 24" OR GREATER IN DIAMETER

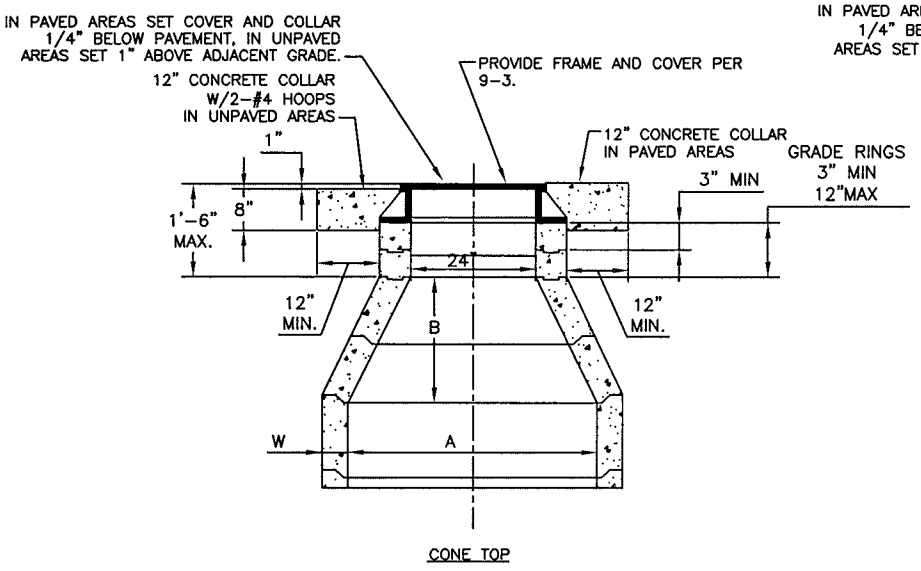


PIPES LESS THAN 24" IN DIAMETER

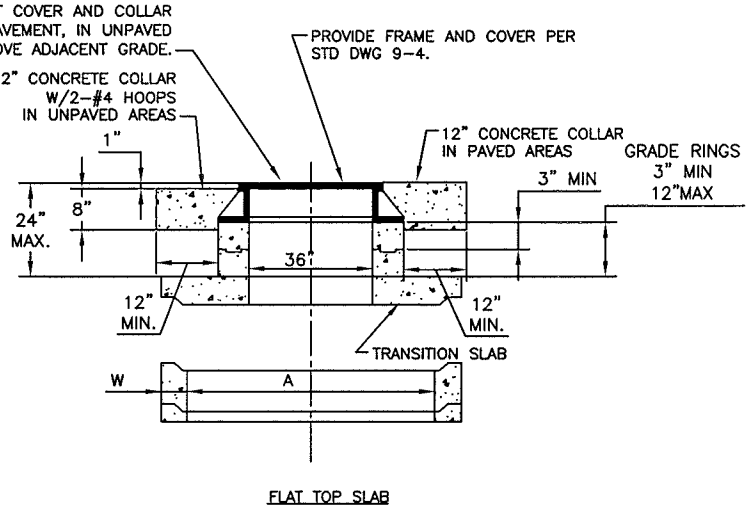
NOTES:

1. INITIAL BACKFILL MATERIAL SHALL BE THOROUGHLY COMPACTED AROUND PIPE.
2. TRENCH WIDTH SHALL CONFORM TO SECTION 9.
3. BEDDING AND INITIAL BACKFILL MATERIAL SHALL BE 1/2" CRUSHED ROCK, OR APPROVED EQUIVALENT.
4. REFER TO DRAWING 4–17 FOR TRENCH DETAILS IN IMPROVED AREAS.
5. HDPE PIPE, IF APPROVED BY COUNTY ENGINEER, SHALL BE BACKFILLED WITH 2–SACK LEAN CONCRETE BACKFILL MATERIAL.

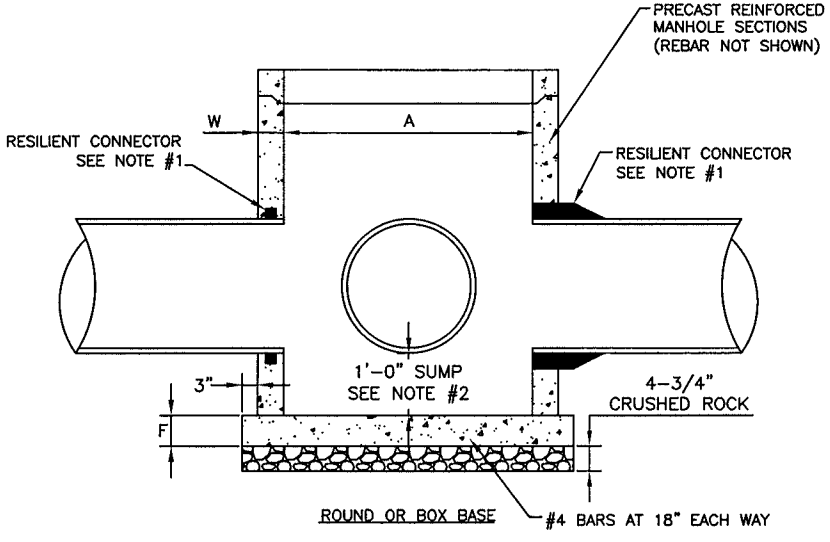
COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
PIPE BEDDING AND INITIAL BACKFILL (STORM DRAINAGE)	SHEET # 1 OF 1
Ramon Kattas 28 AUG 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9–1 NOT TO SCALE



CONE TOP

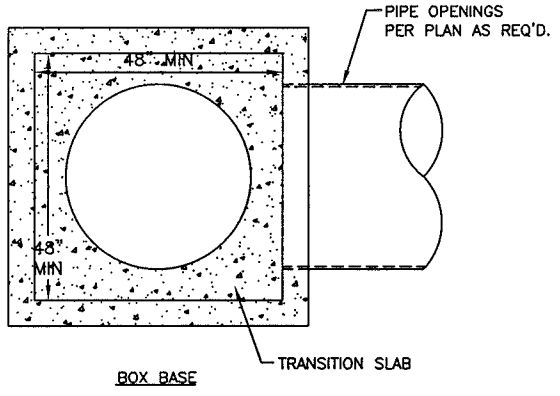


FLAT TOP SLAB



ROUND OR BOX BASE

#4 BARS AT 18" EACH WAY



BOX BASE

TABLE OF MINIMUM DIMENSIONS FOR ROUND MANHOLES				
M.H	A	B	W	F
48"	48"	18"	5"	7" MIN.
60"	60"	30"	6"	9" MIN.

COUNTY OF YOLO
PLANNING AND PUBLIC WORKS DEPARTMENT

DATE: 08/05/08

STANDARD STORMDRAIN MANHOLE

SHEET # 1 OF 2

Panos Kokkas 28 AUG. 08
COUNTY ENGINEER No. C42401 APPROVAL DATE

DRAWING #: 9-2
NOT TO SCALE

NOTES:

1. ON ALL PIPE UP TO 30" I.D., USE FLEXIBLE COMPRESSION GASKET OR BOOT CONNECTOR CONFORMING TO ASTM C-923. CONNECTION SHALL BE WATER AND SOIL TIGHT. FOR PIPES GREATER THAN 30" I.D., BASE MAY BE CAST-IN-PLACE AND A WATER STOP CONFORMING TO ASTM C-923 SHALL BE USED.

2. SUMP SHALL BE 1'-0" DEEP, MEASURED FROM INVERT OF OUTFALL PIPE. SUMP NOT REQUIRED IF OUTFALL IS 24" I.D. OR LARGER. SUMPS SHALL NOT BE ALLOWED OUT OF THE COUNTY RIGHT OF WAY.

3. RISER SECTIONS, CONES, AND ADJUSTING RINGS SHALL CONFORM TO ASTM C-478.

4. ALL JOINTS SHALL BE MADE WITH PREFORMED PLASTIC JOINT SEALING COMPOUND OR PRE-LUBRICATED GASKET. FOLLOWING INSTALLATION GROUT ALL INTERIOR AND EXTERIOR JOINTS.

5. CONCENTRIC COMPONENTS SHALL BE USED UNLESS OTHERWISE SPECIFIED ON THE PLANS.

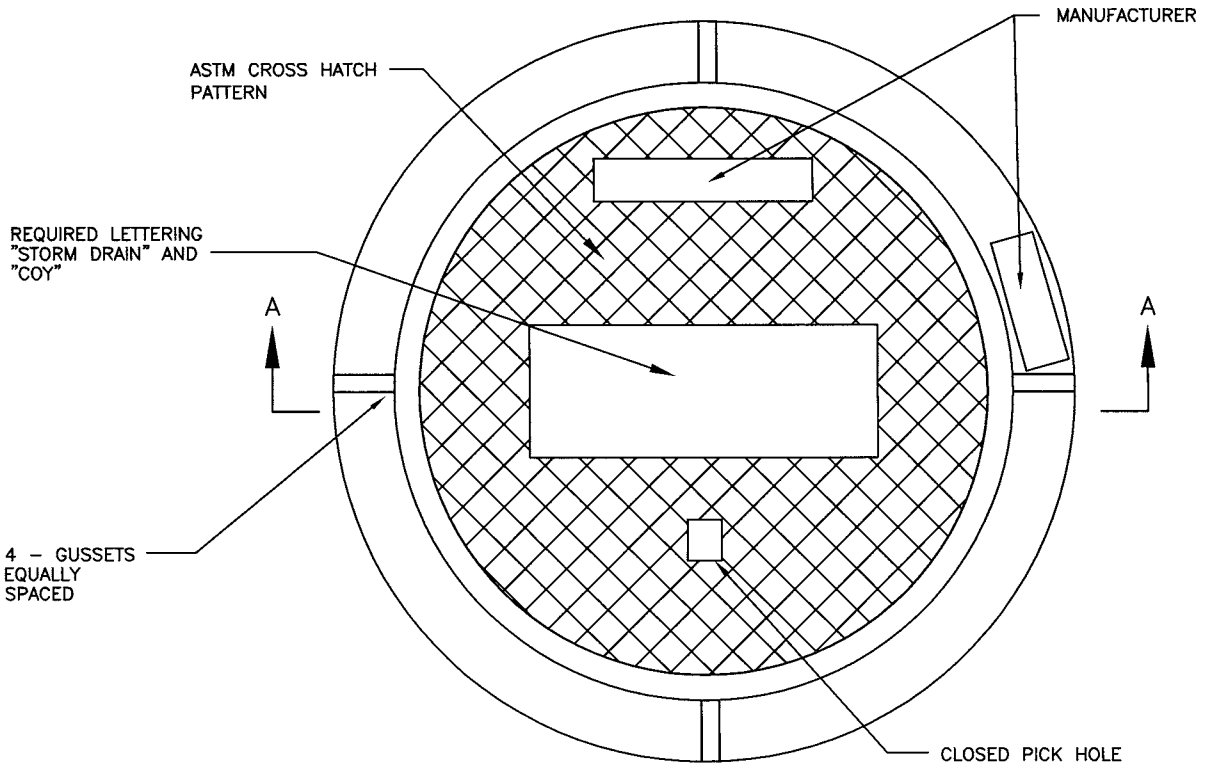
6. PRECAST MANHOLES SHALL BE SIZED TO PROVIDE THE FOLLOWING: THE ANNULAR SPACE ON THE INSIDE OF THE MANHOLE BARREL BETWEEN THE CORED PIPE CONNECTION HOLES SHALL BE A MINIMUM OF 10-INCHES. IF THE CONNECTION HOLE IS CAST MONOLITHICALLY WITH THE MANHOLE BARREL THE MEASUREMENT SHALL BE TAKEN FROM THE FINISHED CONCRETE CONNECTION SURFACE.

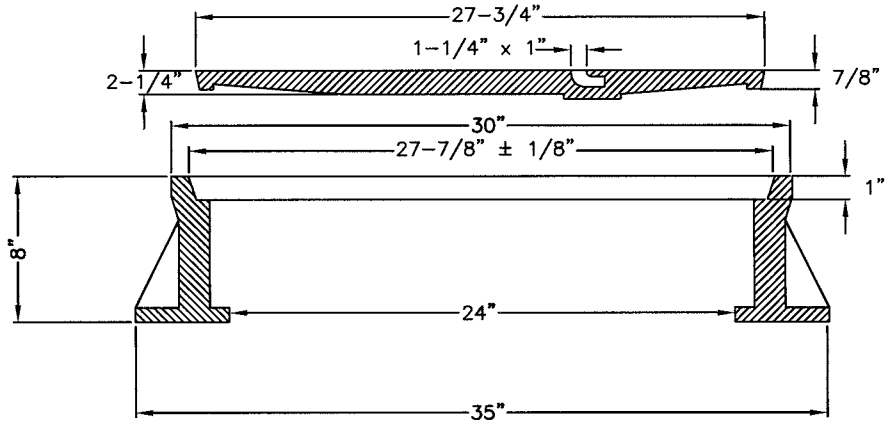
7. CONSTRUCT WITH FLAT SLAB-TOP WHEN HEIGHT IS TOO SHALLOW TO CONSTRUCT WITH CONES.

8. FOR THE SLAB REDUCER OF THE BOX MANHOLE (BOX TO ROUND DIAMETER), THE DIAMETER OF THE ROUND REDUCER SHALL BE A MAX OF 12" SMALLER THAN THE INSIDE BOX WIDTH.

9. FLAT SLAB TOP MANHOLES SHALL HAVE A 36" MANHOLE FRAME AND COVER.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
STANDARD STORMDRAIN MANHOLE	SHEET # 2 OF 2
Panos Kokkas 28 AUG-08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-2 NOT TO SCALE



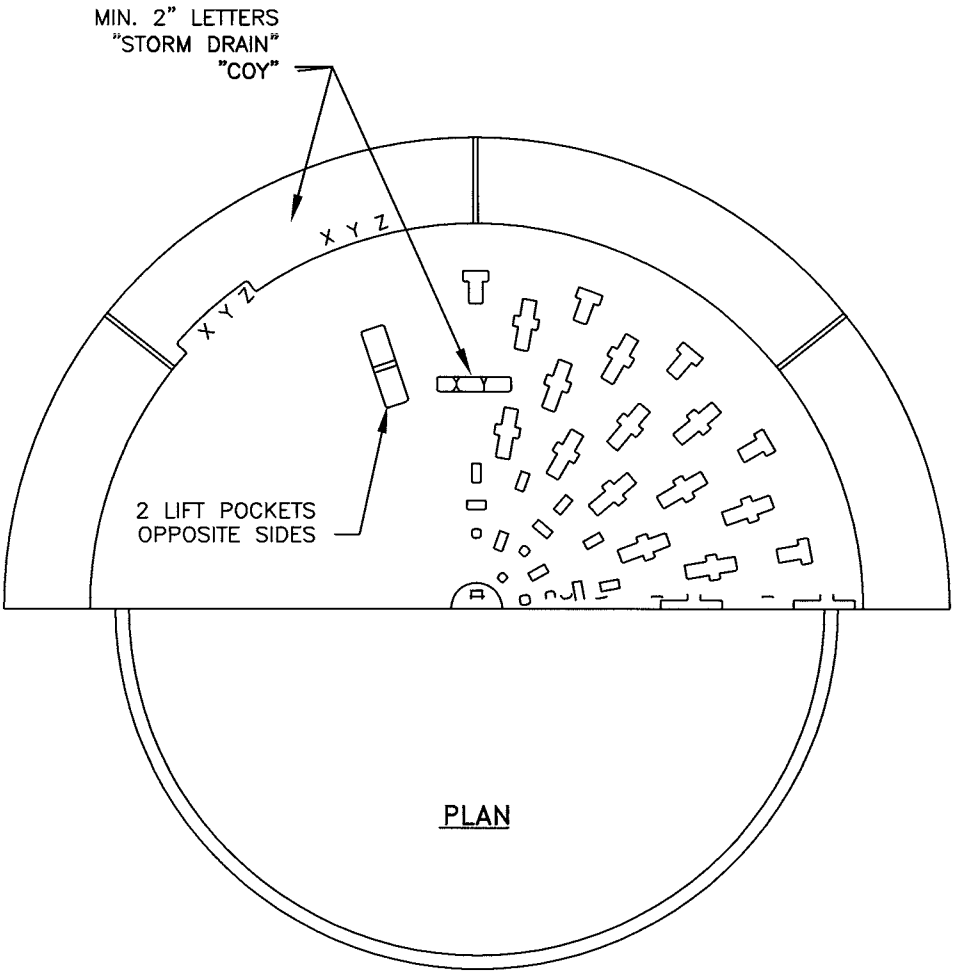


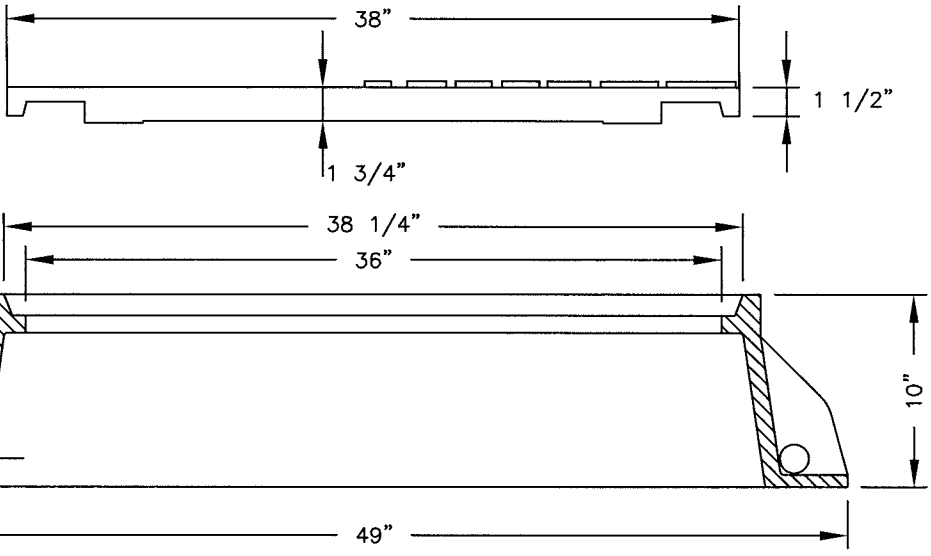
SECTION A–A

NOTES:

1. ALL CASTINGS TO CONFORM TO ASTM A48, CLASS 35B. D&L FOUNDRY A–1018, OR EQUIVALENT
2. FRAME AND COVER TO MEET H–20 LOAD SPECIFICATIONS.
3. MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES NOT TO EXCEED 1/64" TOLERANCE.
4. FRAME AND COVER SHALL HAVE A COATING OF BITUMINOUS MATERIAL.
5. LOCKING COVER TYPE FRAME AND COVERS SHALL BE USED IN EASEMENT AREAS UNLESS OTHERWISE APPROVED.
6. COVER SHALL BE LABELED AS REQUIRED BY SERVICE DISTRICT. COUNTY COVERS SHALL BE DENOTED "COY".

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
GRAY CAST IRON STANDARD 24" MANHOLE FRAME AND COVER	SHEET # 1 OF 1
Panos Kokkas 28 AUG 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9–3 NOT TO SCALE

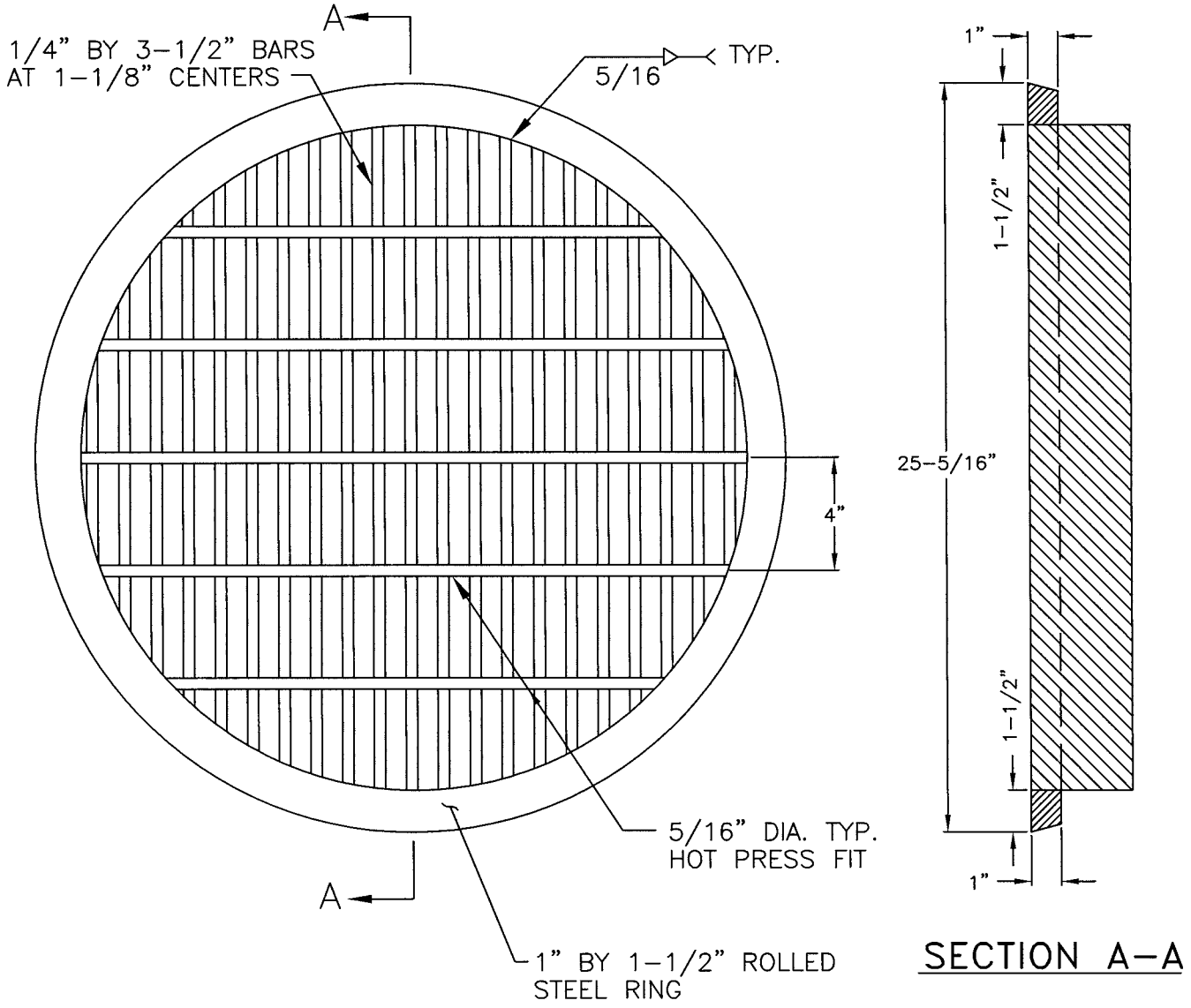




NOTES:

1. ALL CASTING TO CONFORM TO ASTM A48, CLASS 35B. D&L FOUNDRY A-1382, OR EQUIVALENT.
2. FRAME AND COVER TO MEET H-20 LOAD SPECIFICATIONS.
3. MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES NOT TO EXCEED 1/64" TOLERANCE.
4. FRAME AND COVER SHALL HAVE A COATING OF BLACK BITUMINOUS PAINT.
5. LOCKING COVER TYPE FRAME AND COVERS SHALL BE USED IN EASEMENT AREAS UNLESS OTHERWISE APPROVED.

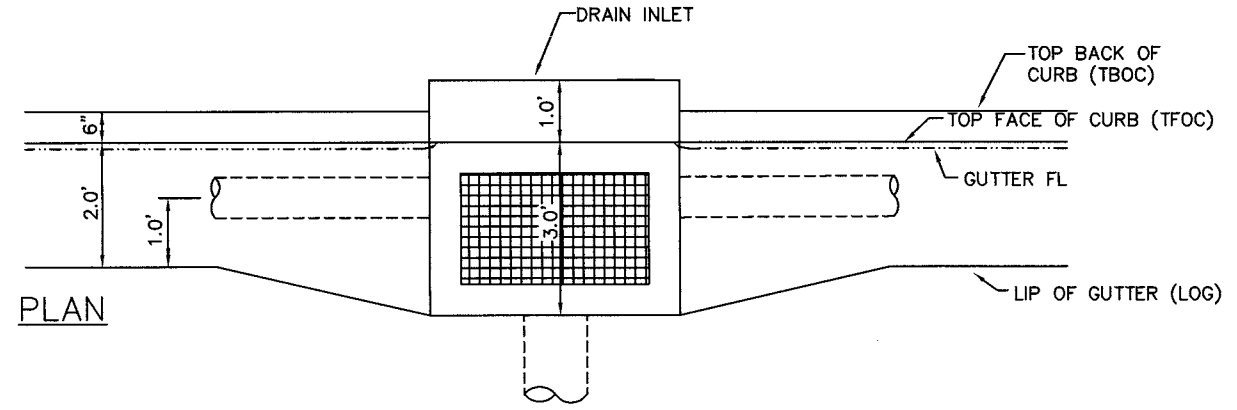
COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
GRAY CAST IRON STANDARD 36" MANHOLE FRAME AND COVER	SHEET # 1 OF 1
Patrick Kahlas 28 AUG 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-4 NOT TO SCALE



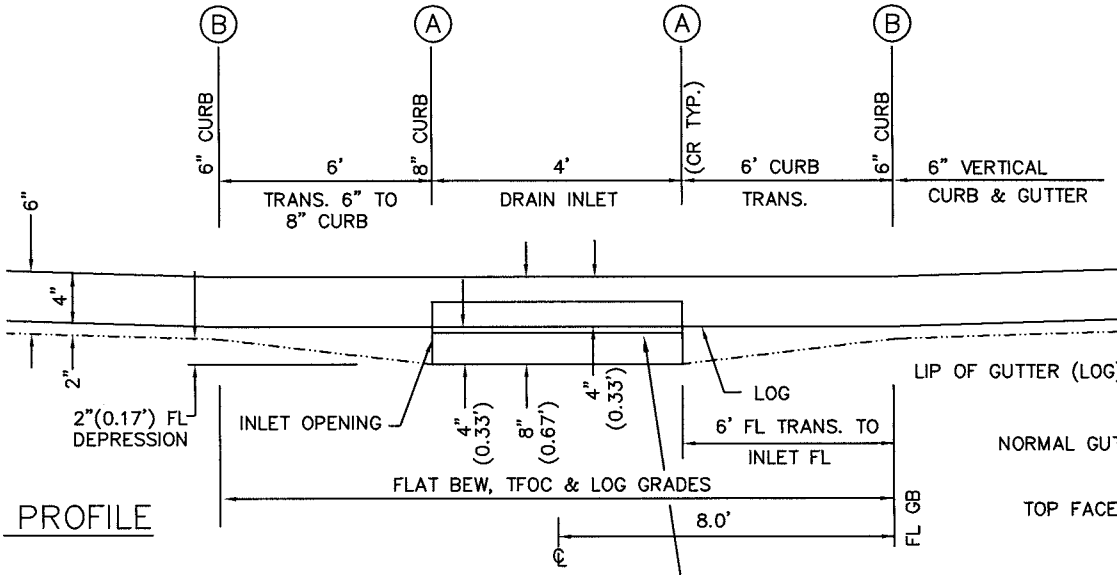
NOTES:

1. MANHOLE COVER SHALL FIT FRAME SHOWN ON DRAWING 9-2.
2. SEATING SURFACES SHALL BE MACHINED AS SHOWN IN DETAIL ON DRAWING 9-2.
3. THIS COVER MAY BE USED ONLY WITH APPROVAL OF THE COUNTY ENGINEER.
4. GALVANIZE AFTER FABRICATION PER ASTM 123.
5. PROVIDE BICYCLE PROOF AND ADA COMPLIANT GRATE.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
GRATE TYPE **MANHOLE COVER**	SHEET # 1 OF 1
Panos Kokkas 28 AUG. 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-5 NOT TO SCALE

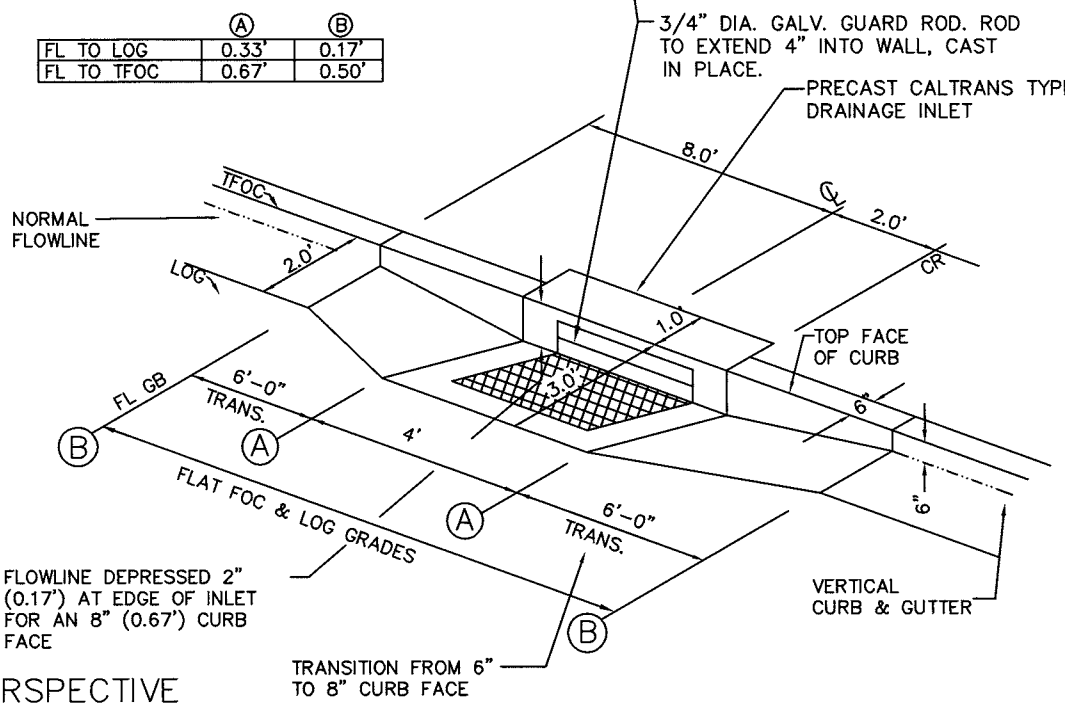


PLAN



PROFILE

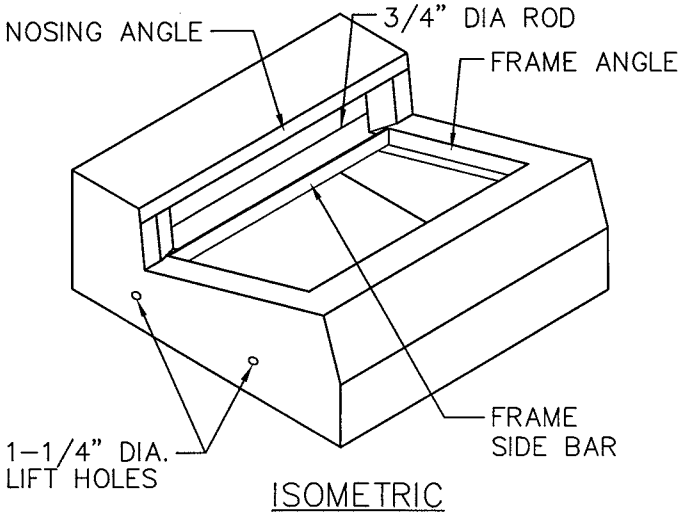
	A	B
FL TO LOG	0.33'	0.17'
FL TO TFOC	0.67'	0.50'



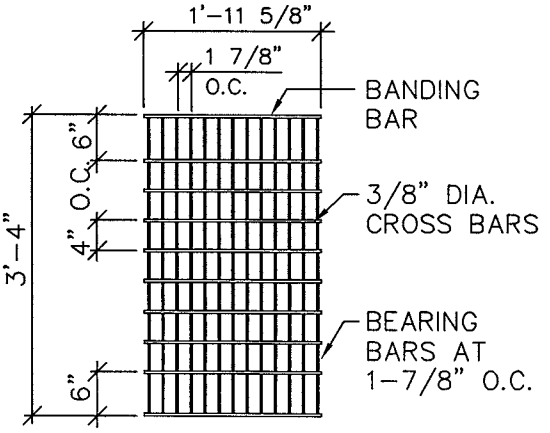
PERSPECTIVE

NOTE:
1. PROVIDE NPDES LOGO IN TOP OF CURB. "NO DUMPING DRAINS TO WATERWAY".

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
GRATED CURB INLET	SHEET # 1 OF 2
Panos Kokkas COUNTY ENGINEER No. C42401	28 AUG. 08 APPROVAL DATE
	DRAWING #: 9-6 NOT TO SCALE

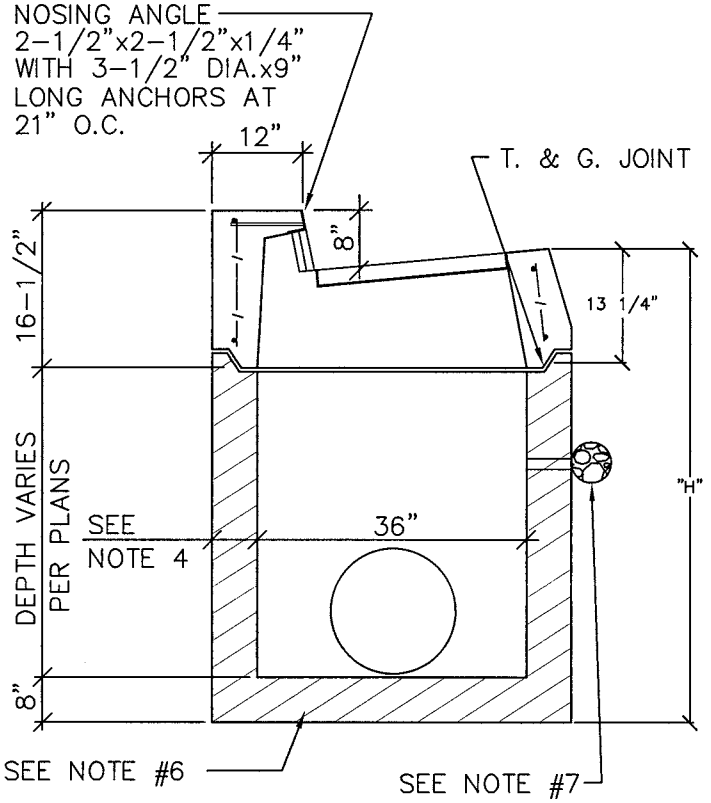


ISOMETRIC



GRATE PLAN

PRECAST GO TOP



SECTION

GRATE (24-13)
13 BEARING BARS, 3-1/2"x1/4"
2 BANDING BARS, 2-1/2"x1/4'
FRAME
4"x3"x1/4" ANGLES
3-1/2"x1/4" SIDE BARS

NOTES:

1. CONCRETE SHALL TEST TO 3000 PSI AT 28 DAYS.

2. FRAME, GRATE AND NOSING ANGLE SHALL BE HOT DIP GALVANIZED. AFTER FABRICATION PER ASTM SPEC. A-123, UNLESS SPEC'D OTHERWISE.

3. WEIGHT OF PRECAST TOP WITHOUT GRATE = 1350 LBS. WEIGHT OF GRATE = 141 LBS.

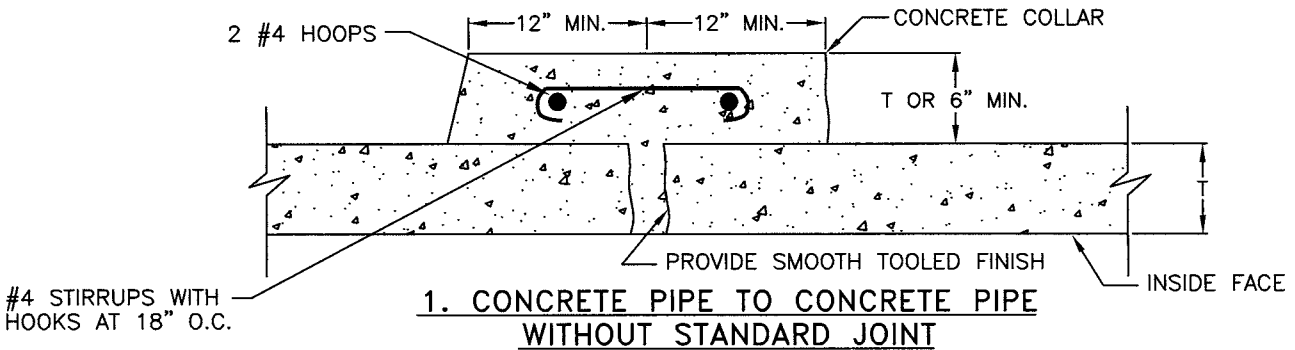
4. WHERE "H" IS 8'-0" OR LESS THE WALL THICKNESS SHALL BE 6". WHERE "H" IS GREATER THAN 8'-0" THE WALL THICKNESS SHALL BE 8".

5. REINFORCING OF PRECAST BASE SHALL BE PER CALTRANS STANDARD PLAN D-74B.

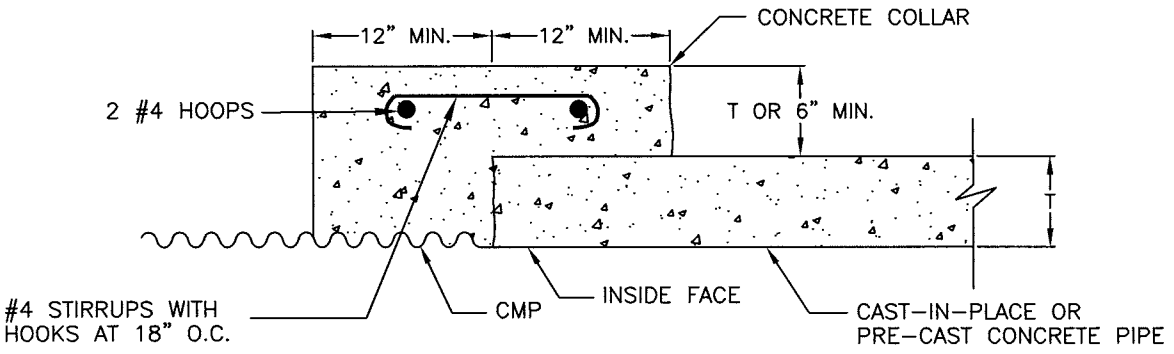
6. SET PRECAST INLET ON 6" LAYER OF MECHANICALLY COMPACTED 3/4" CRUSHED ROCK COMPACTED TO 95% OVER 8" SUBGRADE COMPACTED TO 95%.

7. PROVIDE THREE 2" DIAMETER SUBSURFACE DRAINS IN FACE OF INLET LOCATED 2" ABOVE STREET SUBGRADE. PROVIDE 1 CUBIC FOOT OF DRAIN ROCK ENCLOSED IN 12oz GEOTEXTILE WRAP AT EACH HOLE.

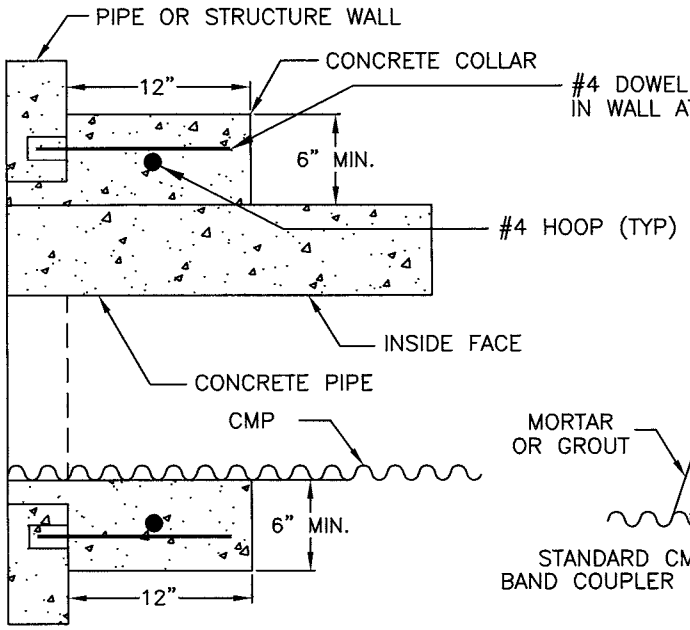
COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
DROP INLET TYPE "GO" VERTICAL CURB AND GUTTER ONLY	SHEET # 2 OF 2
Panos Kokkas 28 Aug. 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-6 NOT TO SCALE



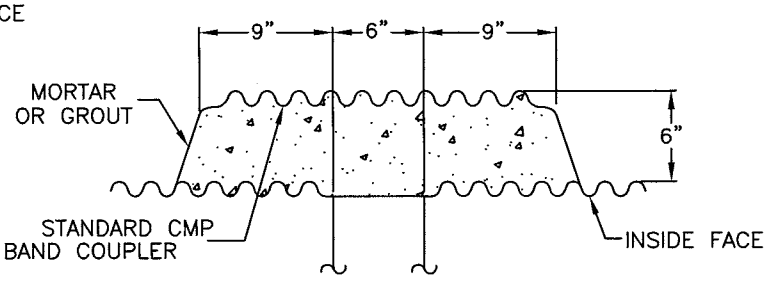
1. CONCRETE PIPE TO CONCRETE PIPE WITHOUT STANDARD JOINT



2. CAST-IN PLACE OR PRE-CAST CONCRETE PIPE TO CMP



3. CONCRETE PIPE, CMP INTO EXISTING PIPE OR STRUCTURE



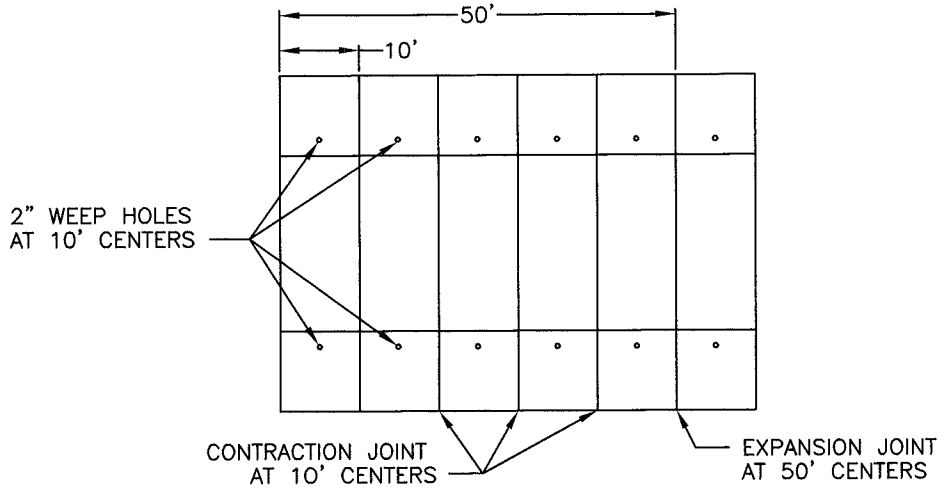
4. PIPES OF DISSIMILAR METALS

NOTES:

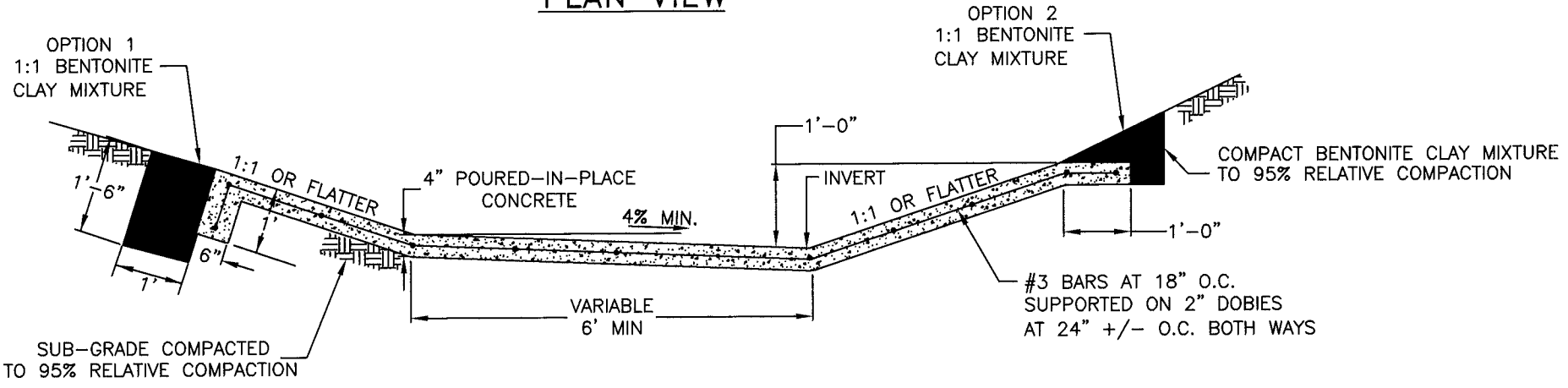
1. PIPE CONNECTIONS SHOWN ON THIS PAGE MAY BE USED ONLY WHEN APPROVED BY THE COUNTY ENGINEER.

2. USE MANUFACTURERS STANDARD COUPLINGS WHERE POSSIBLE.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
PIPE CONNECTIONS	SHEET # 1 OF 1
Panos Kokkas 28 AUG. 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-7 NOT TO SCALE

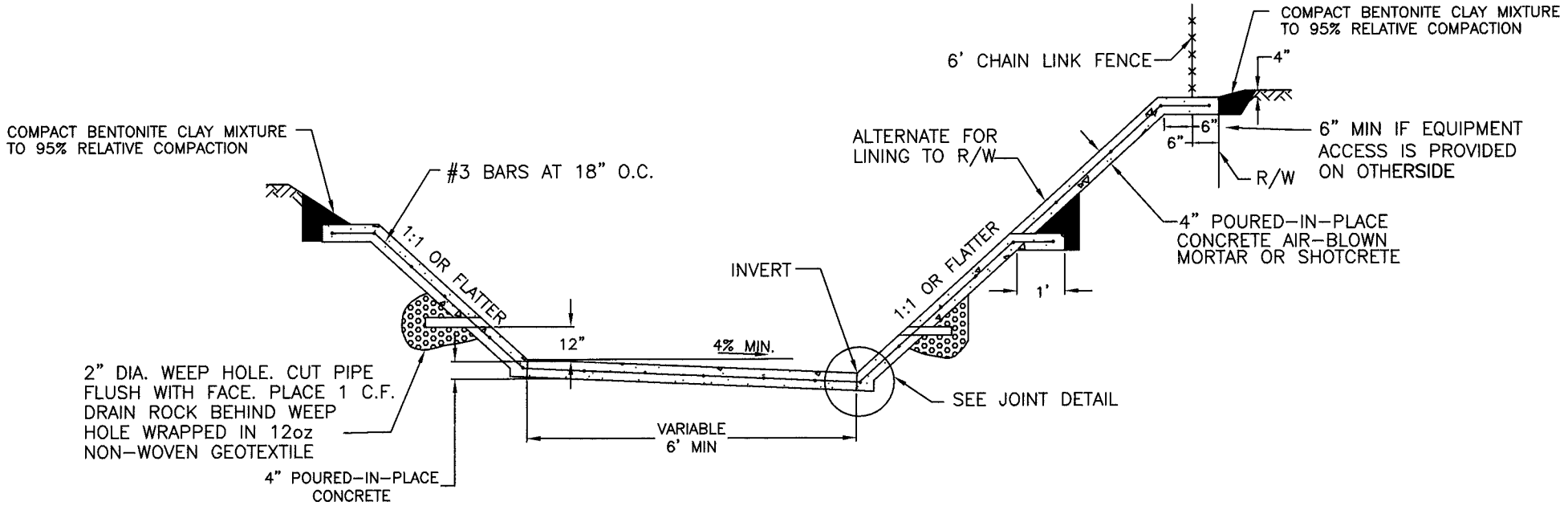


PLAN VIEW

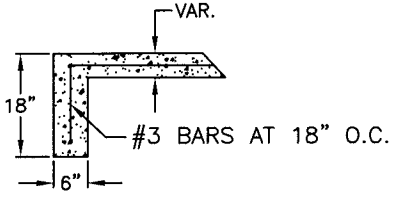


TYPICAL BOTTOM LINING

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
LINED CHANNEL SECTION	SHEET # 1 OF 2
Panos Kokkas COUNTY ENGINEER No. C42401	28 AUG. 08 APPROVAL DATE
	DRAWING #: 9-8 NOT TO SCALE

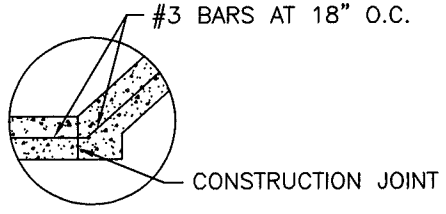


TYPICAL FULL LINING



CUTOFF WALL

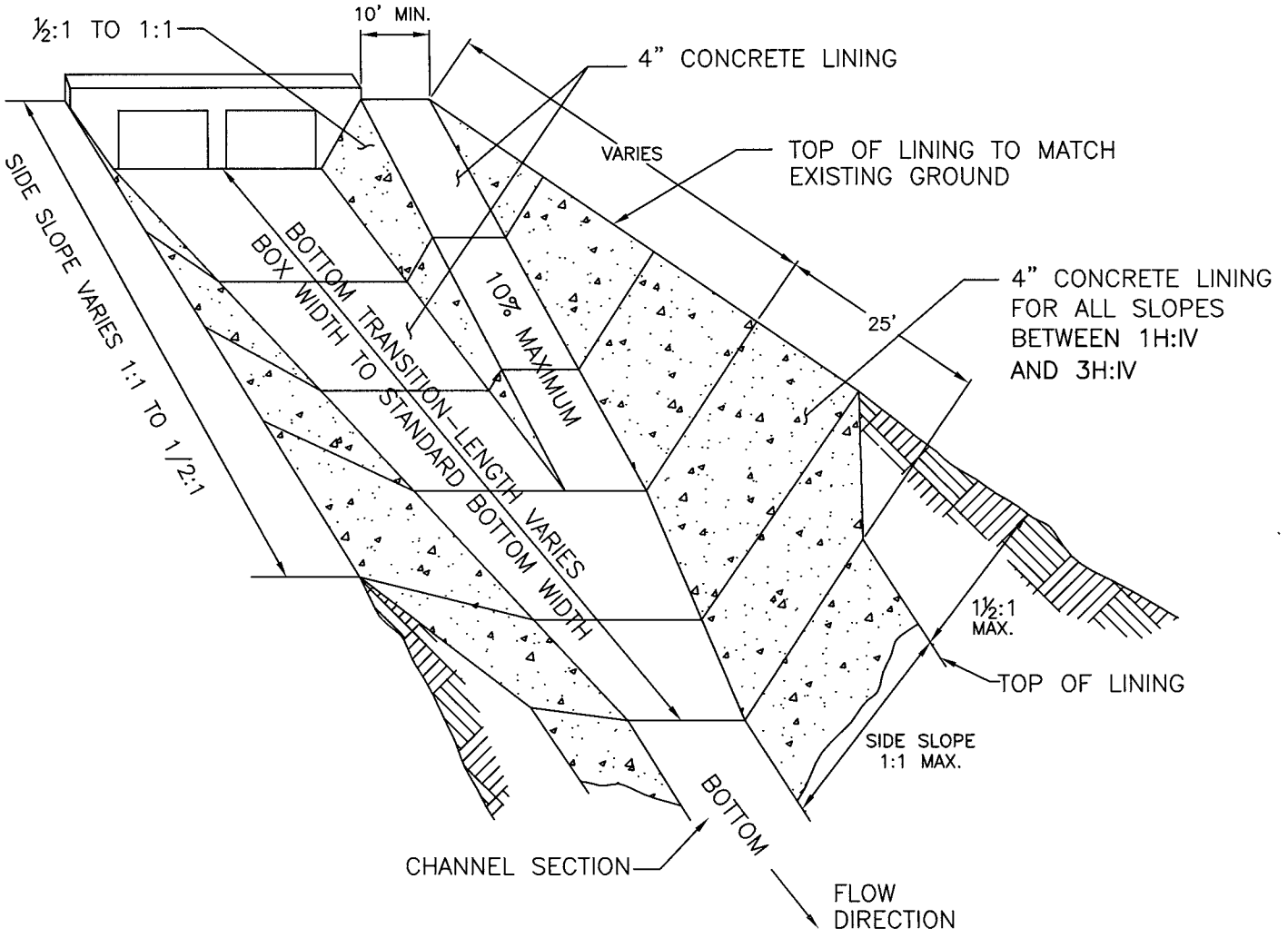
TO BE PLACED ALONG ENTIRE END OF LINED SECTION AT BEGINNING AND AT END OF LINING



JOINT DETAIL

ALL REBAR SHALL BE SUPPORTED ON 2" DOBIES AT 24" +/- O.C. BOTH WAYS

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
LINED CHANNEL SECTION	SHEET # 2 OF 2
Parvez Kakkar 28 AUG 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-8 NOT TO SCALE

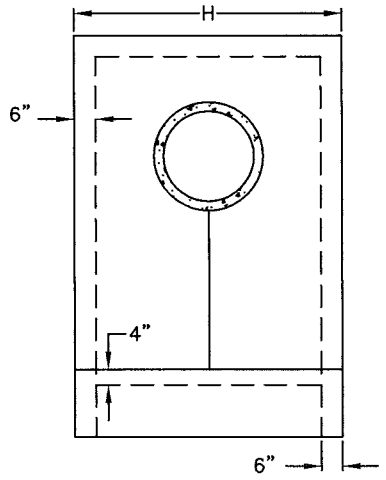


NOTES:

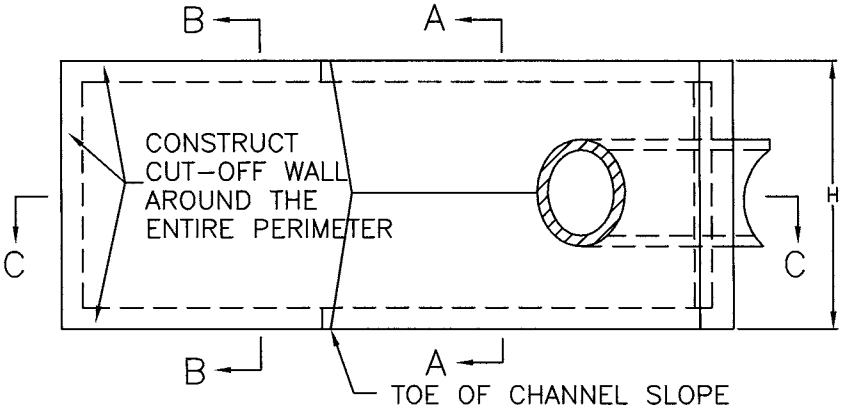
1. BOTTOM TRANSITION IS 25' MINIMUM LENGTH WITH NO RAMP.
2. WEEP HOLES AND JOINTS AS REQUIRED FOR ALL LINED CHANNEL SECTIONS.
3. LOW SIDE OF CHANNEL TO BE OPPOSITE RAMP.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
TYPICAL RAMP AND TRANSITION DETAIL	SHEET # 1 OF 1
Paul Kotkas 28 AUG. 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-9 NOT TO SCALE

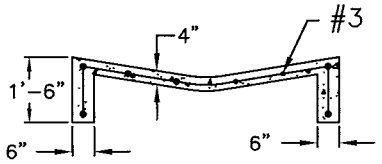
H=6'-0" MINIMUM
H=2X PIPE DIA. (3' TO 6')



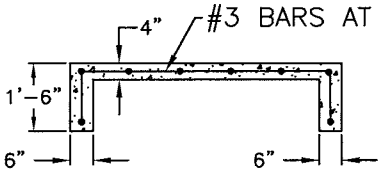
FRONT VIEW



TOP VIEW



SECTION A-A



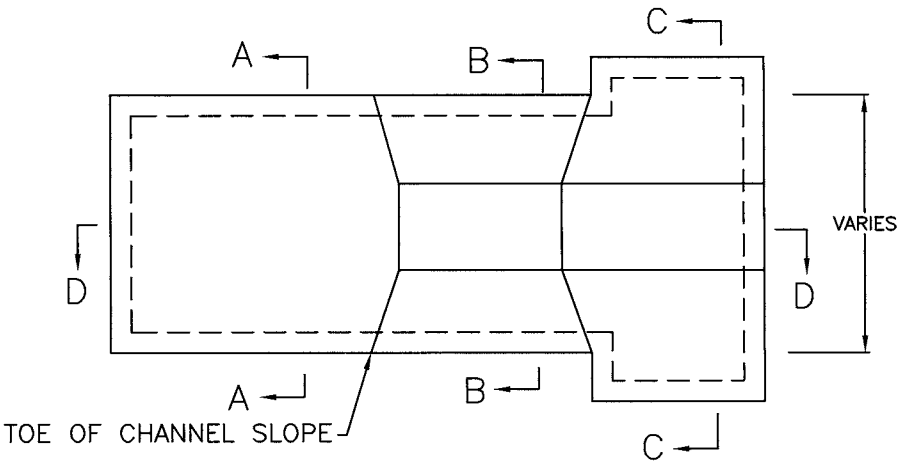
SECTION B-B

SECTION C-C

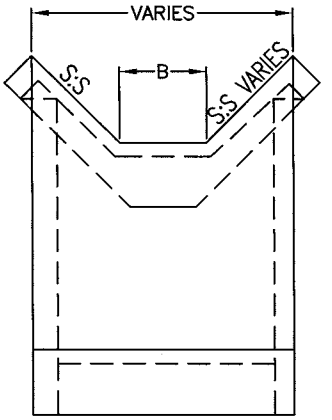
NOTES:

1. USE CLASS "B" CONCRETE OR GROUTED COBBLES AS SPECIFIED.
2. #3 BARS AT 18" CENTERS THROUGHOUT CONCRETE SUPPORTED ON 2" DOBIES AT 24" +/- O.C. BOTH WAYS.

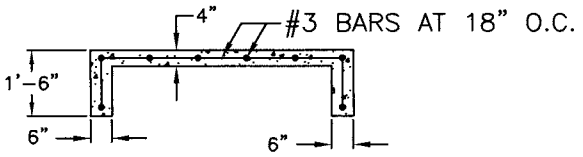
COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
EROSION CONTROL PIPE DISCHARGE	SHEET # 1 OF 1
Parvos Kotkas 28 Aug. 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-10 NOT TO SCALE



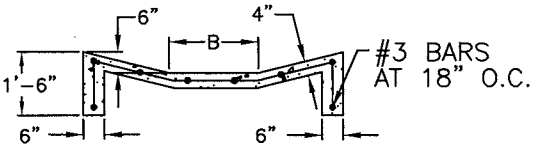
TOP VIEW



FRONT VIEW



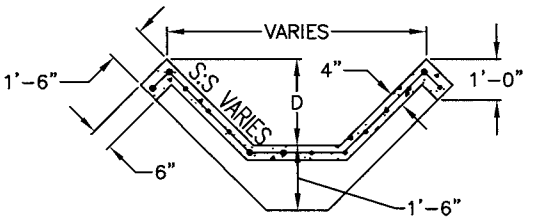
SECTION A-A



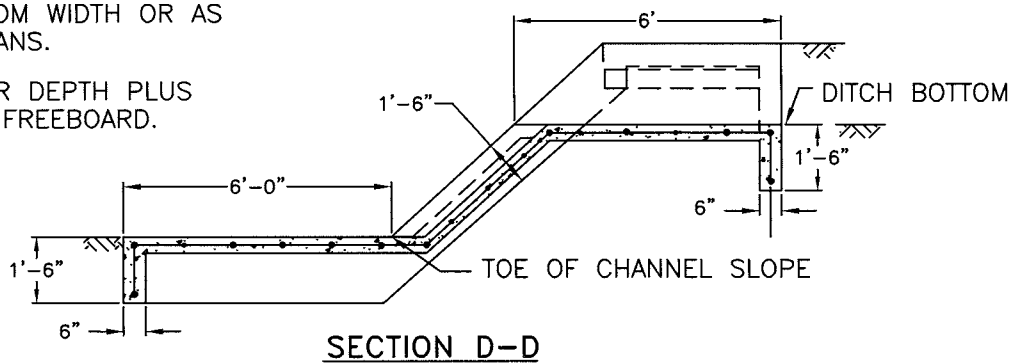
SECTION B-B

NOTES:

1. USE CLASS "B" CONCRETE.
2. #3 BARS AT 18" CENTERS THROUGHOUT CONCRETE SUPPORTED ON 2" DOBIES AT 24" +/- O.C. BOTH WAYS.
3. ON LINED CHANNELS APRON SHALL CONNECT TO SIDE LINING.
4. B=DITCH BOTTOM WIDTH OR AS SHOWN ON PLANS.
5. D=DITCH WATER DEPTH PLUS ONE FOOT OF FREEBOARD.

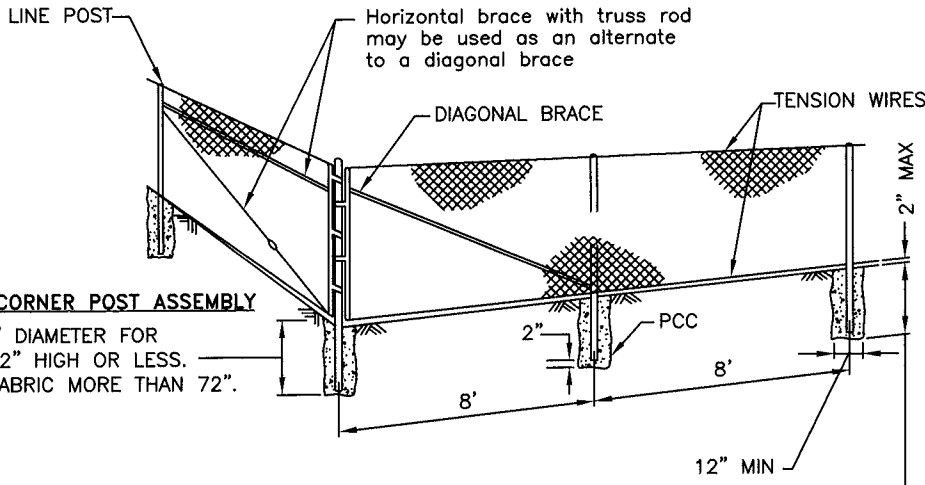


SECTION C-C



SECTION D-D

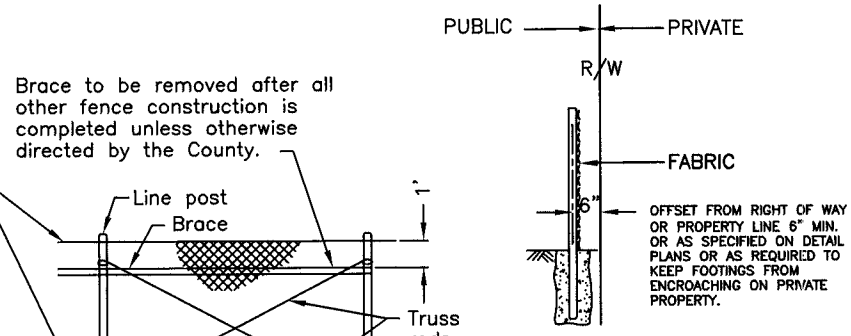
COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
EROSION CONTROL DITCH DISCHARGE	SHEET # 1 OF 1
Pamela Kaffas 28 AUG. 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-11 NOT TO SCALE



END AND CORNER POST ASSEMBLY

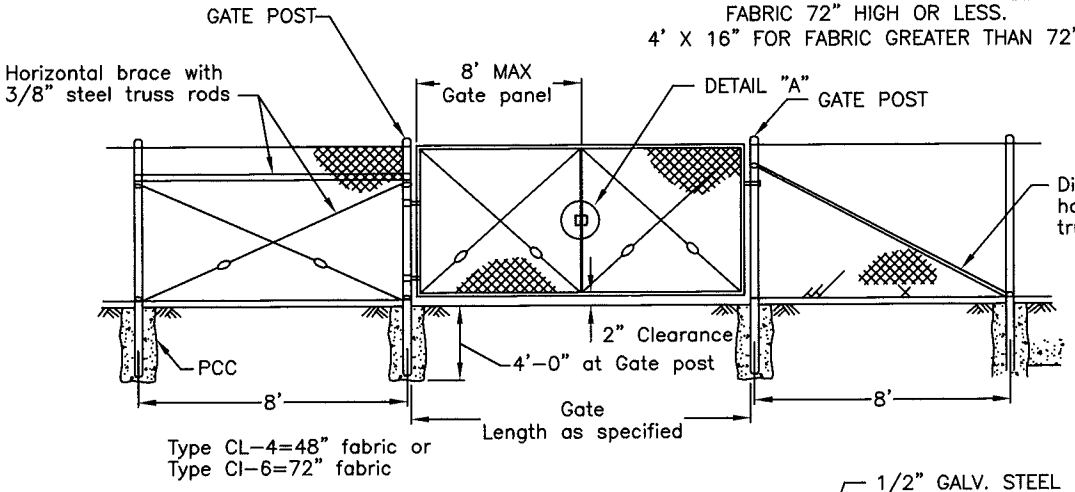
4'X12" DIAMETER FOR FABRIC 72" HIGH OR LESS.
4'X16" FOR FABRIC MORE THAN 72".

LINE POSTS:
4' X 12" DIAMETER FOR FABRIC 72" HIGH OR LESS.
4' X 16" FOR FABRIC GREATER THAN 72".

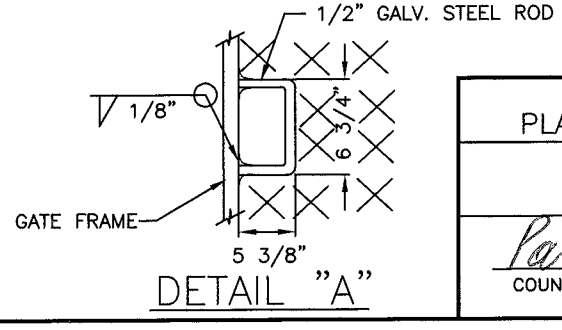


Line posts at 1000' maximum intervals braced and trussed in both directions except that this bracing and trussing may be omitted when the fabric is stretched by the equipment.

FENCE LOCATION



Type CL-4=48" fabric or
Type CI-6=72" fabric



DETAIL "A"

NOTES:

1. Chain link fabric shall be zinc coated steel manufactured in compliance with ASTM Standard A 392 with a 2 inch mesh of 9 gauge wire with knuckled selvage.
2. Tension wire shall be 7 gauge.
3. Where barbed wire is specified, it shall include 3 strands of galvanized 4 point wire attached with extension arms set at 45 degrees.
4. In residential areas, fabric shall be vinyl coated with slats, color determined by Director.
5. Increase diameter of concrete footing to 16" diameter for 8' chain link fencing.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
CHAIN LINK FENCE	SHEET # 1 OF 2
Pamela Kotkas 28AUG.08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-12 NOT TO SCALE

TYPICAL MEMBER DIMENSIONS (SEE NOTES BELOW)											
FENCE HEIGHT	LINE POSTS			END, LATCH AND CORNER POSTS				RAILS AND BRACES			
	NOMINAL ROUND O.D. (NOTES 7 AND 8)	H	ROLL FORMED	NOMINAL ROUND O.D. (NOTES 7 AND 8)	ROLL FORMED			NOMINAL ROUND O.D. (NOTES 7 AND 8)	H	ROLL FORMED	
											
Less than 6'	1-1/2"	1-7/8"x1-5/8"	1-7/8"x1-5/8"	2-1/2"	3-1/2" x 3-1/2"	2" x 1-3/4"		1-1/4"	1-1/2" x 1-5/16"	1-5/8" x 1-1/4"	1-3/4" x 1-1/4"
6'	2"	2-1/4" x 2"	2" x 1-3/4"	2-1/2'	3-1/2" x 3-1/2"	2-1/2" x 2-1/2"		1-1/4"	1-1/2" x 1-5/16"	1-5/8" x 1-1/4"	1-3/4" x 1-1/4"

GATE POST (NOTE 7)			
FENCE HEIGHT	GATE WIDTHS	NOMINAL O.D.	WEIGHT PER FOOT
Less than 6'	Up thru 6'	2-1/2"	5.79
	Over 6' thru 12'	4"	10.79
	Over 12' thru 18'	5"	14.62
	Over 18' to 24' max	6"	18.97
6'	Up thru 6'	3"	7.58
	Over 6' thru 12'	5"	14.62
	Over 12' thru 18'	6"	18.97
	Over 18' to 24' max	8"	28.55

Above post dimensions and masses are minimums.
Larger sizes may be used on approval of the County Engineer.

NOTES:

1. The above table shows examples of post and brace sections which may comply with the Standard Construction Specifications.
2. Sections shown in the tables must also comply with the strength requirements and other provisions of the Standard Construction Specifications.
3. Other sections which comply with the strength requirements and other provisions of the Standard Construction Specifications may be used on approval of the Engineer.
4. Options exercised shall be uniform on any one project.
5. Dimensions shown are nominal.
6. Offset to be 2'-0" at monument locations, measured at right angles to R/W lines. Taper to achieve offset to be at least 20' long.
7. Pipe sections for posts, rails, braces, and gates shall be schedule 40 galvanized pipe manufactured in conformance with ASTM F 1083.
8. Weight per foot values for 1-5/8" O.D. pipe = 2.27 lbs/ft, 2-3/8" O.D. pipe = 3.65 lbs/ft, 2-7/8" O.D. pipe = 5.79 lbs/ft.
9. Chain link gate frames shall be a minimum of 1-7/8" pipe weighing 2.72 lbs/ft.
10. Galvanized gate holders of heavy cast construction with counterbalanced latches shall be provided for all gates. Gate holders shall be anchored with a minimum 24" length of 1-5/8" schedule 40 pipe set in 8" diameter concrete base.

COUNTY OF YOLO
PLANNING AND PUBLIC WORKS DEPARTMENT

DATE: 08/05/08

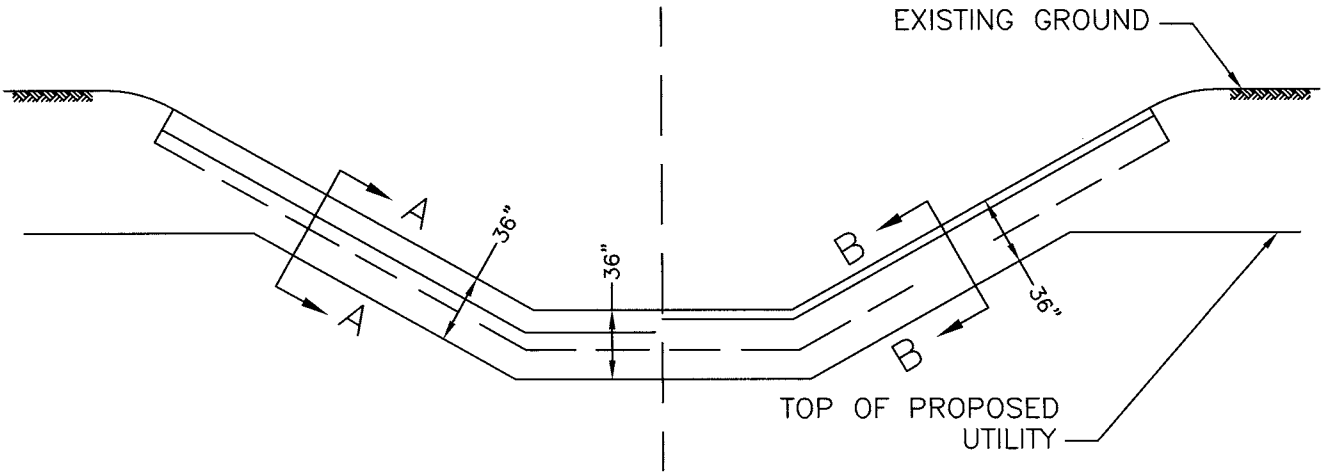
CHAIN LINK FENCE

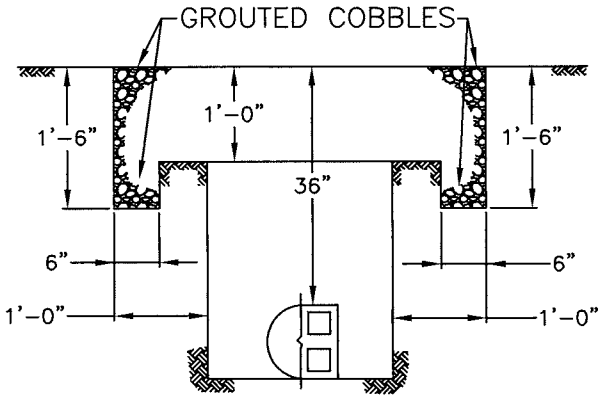
SHEET # 2 OF 2

Panos Kokkas — COUNTY ENGINEER No. C42401

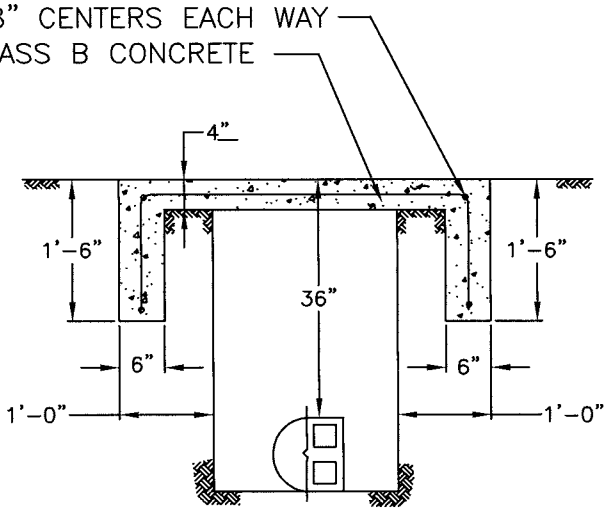
28 AUG. 08 — APPROVAL DATE

DRAWING #: 9-12
NOT TO SCALE





SECTION A–A

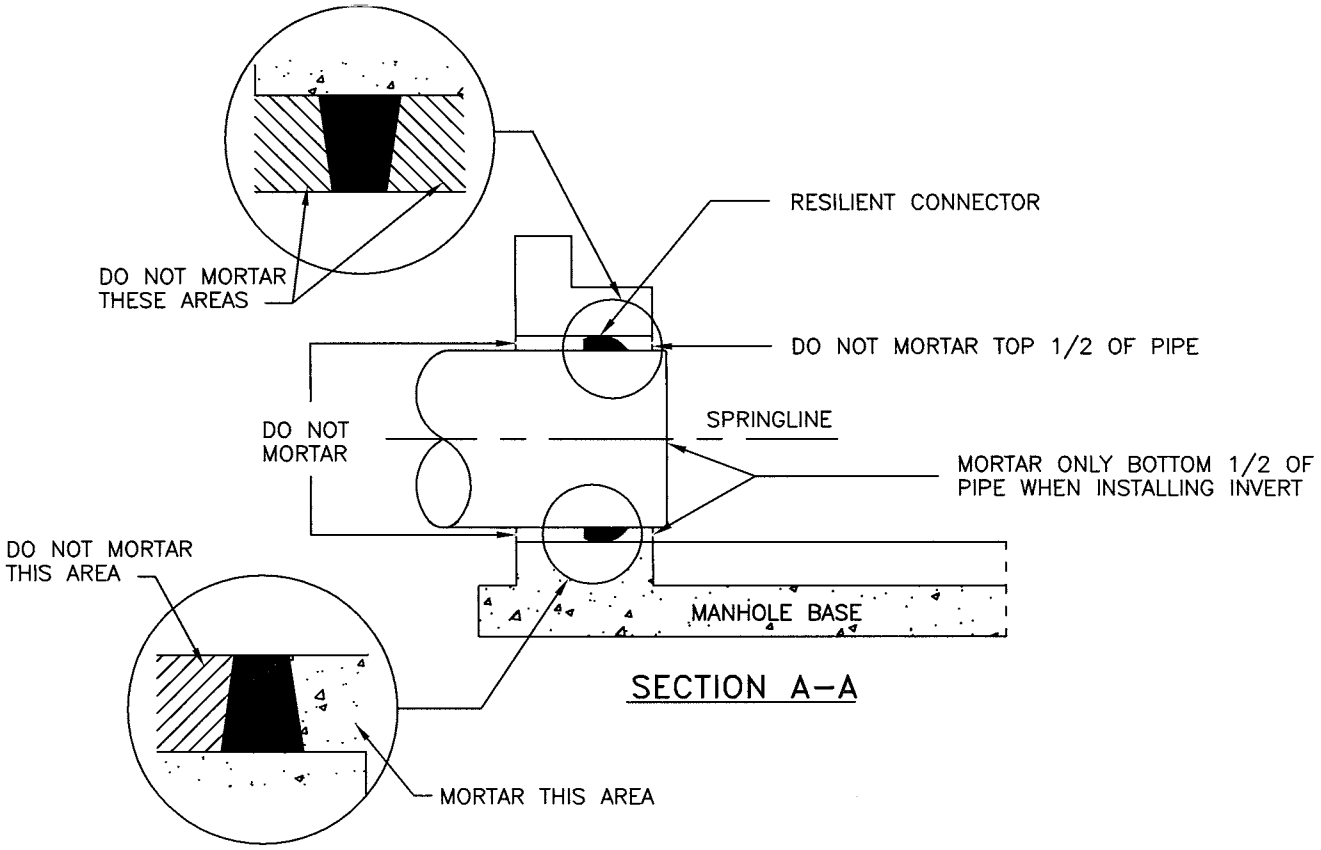


SECTION B–B

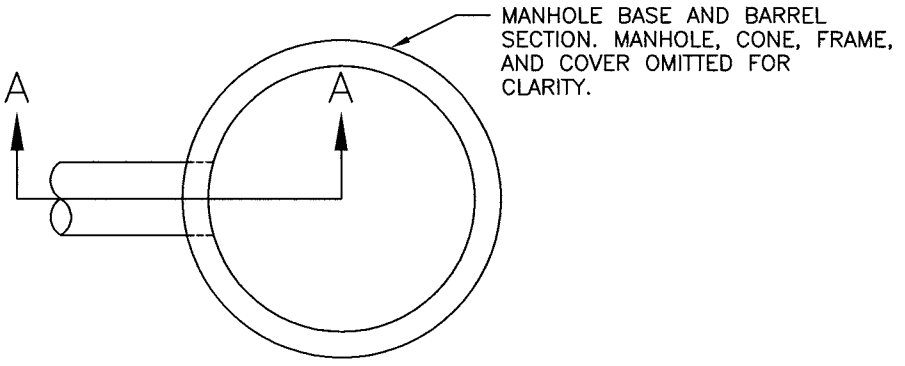
NOTES:

1. ALL UTILITY CROSSINGS OF EXISTING STREAMS SHALL BE AT LEAST 36" BELOW EXISTING CHANNEL SIDES AND BOTTOMS. DEEPER PLACEMENT MAY BE REQUIRED IF FUTURE CHANNEL IMPROVEMENTS ARE ANTICIPATED.
2. THE CUT SHALL BE SEALED AS SHOWN WITH GROUTED COBBLES OR CLASS B CONCRETE TO A WIDTH 1' EACH SIDE OF THE UTILITY TRENCH. ALL NATURAL STREAMS, AS SHOWN ON THE NATURAL STREAMS PLAN, SHALL UTILIZE GROUTED COBBLES.
3. CUT OFF WALLS SHALL CONFORM TO STANDARD DRAWING 9–10.
4. GRAVITY PIPES SHALL NOT BE SIPHONS.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
UTILITY STREAM CROSSING	SHEET # 1 OF 1
Paros Kakkas 28 AUG. 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9–13 NOT TO SCALE



SECTION A–A

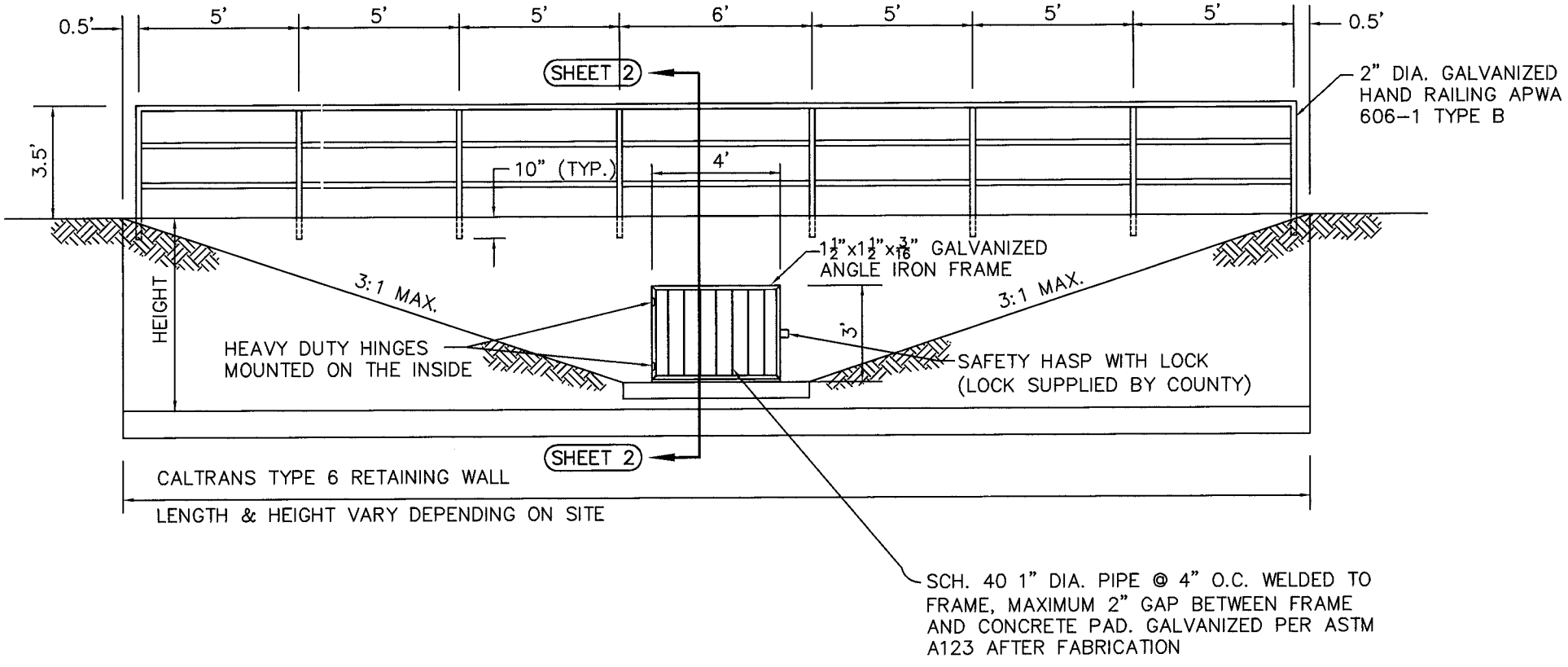


PLAN

NOTES:

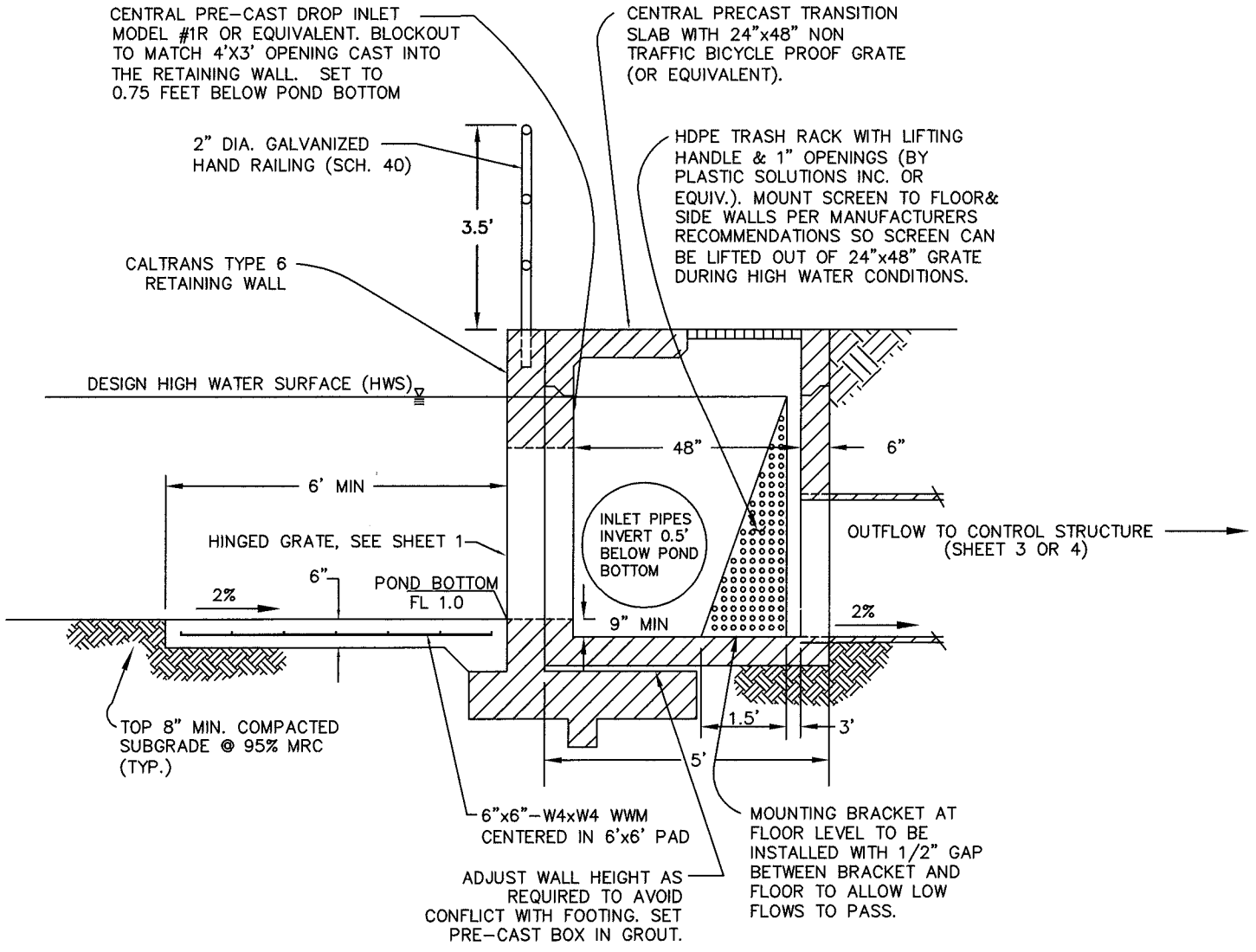
1. TO HELP CREATE A FLEXIBLE AND WATERTIGHT JOINT, DO NOT PLACE MORTAR AROUND THE CONNECTOR ON THE OUTSIDE OF THE STRUCTURE OR AROUND THE TOP HALF OF THE CONNECTOR ON THE INSIDE WHEN COMPLETING THE INVERT WORK.
2. RESILIENT CONNECTORS SHALL BE A–LOK, PRESS–SEAL OR APPROVED EQUIVALENT.
3. ALL CONNECTORS SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM C–923.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
FLEXIBLE CONNECTOR PIPE TO MANHOLE DETAIL	SHEET # 1 OF 1
Panos Kokkas 28 AUG 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9–14 NOT TO SCALE

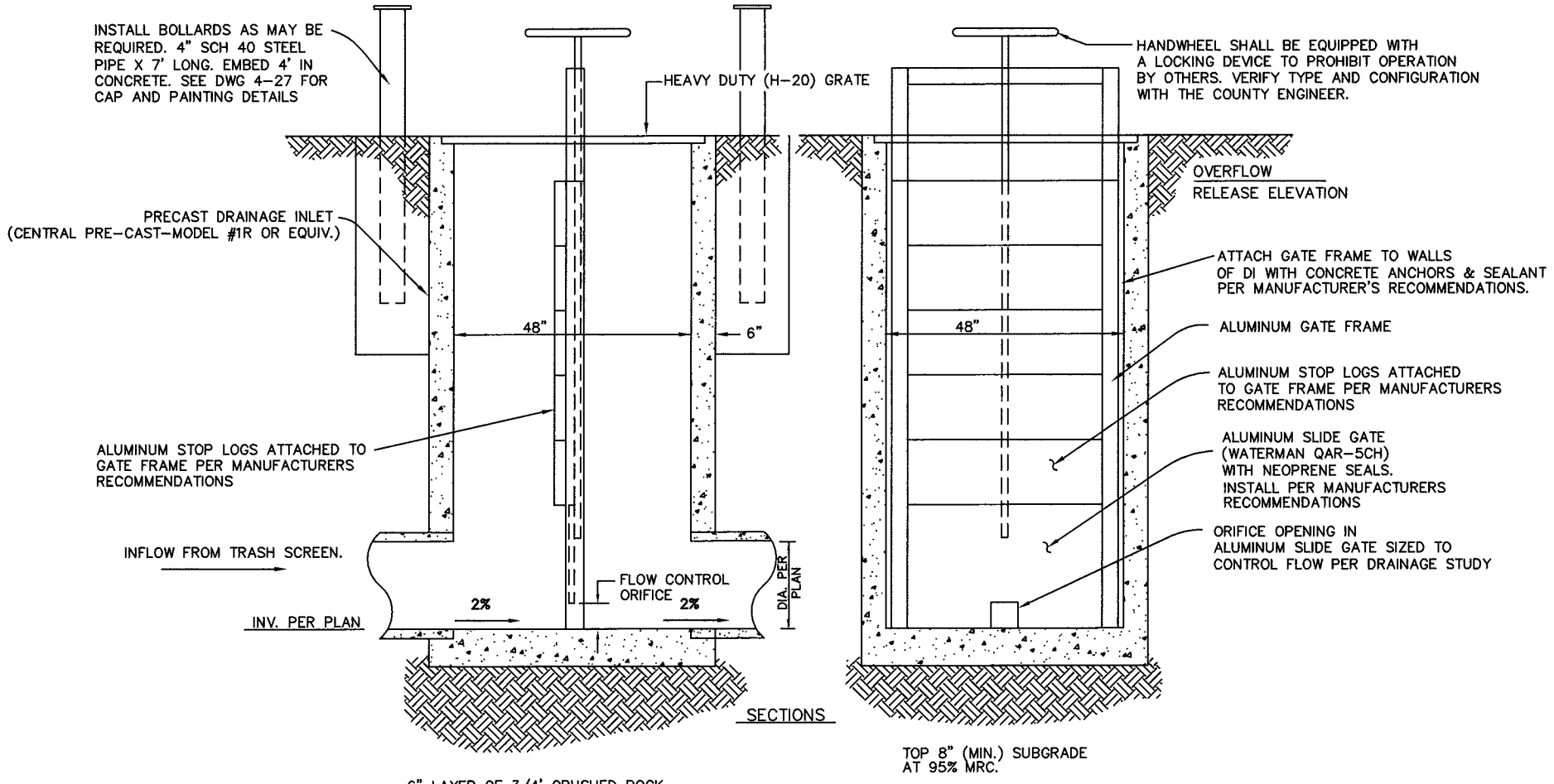


NOTE:
1. ALTERNATIVE OUTFLOW CONTROL STRUCTURES MAY BE APPROVED BY THE COUNTY ENGINEER.
2. CONTROL STRUCTURE SHALL BE ACCESSIBLE IN WET WEATHER CONDITIONS.
3. CONTROL STRUCTURE SHALL NOT BE LOCATED UNDER SIDEWALKS OR IN TRAFFIC AREAS.
4. PROVIDE FORMED VERTICAL CRACK CONTROL JOINTS AT EACH SIDE OF GALVANIZED ANGLE IRON FRAME AND MIDPOINTS AT HANDRAIL SUPPORTS.
5. PATCH HOLES IN FACE OF WIRE WITH NON-SHRINK GROUT TO PROVIDE UNIFORM APPEARANCE.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
DETENTION BASIN OUTFLOW STRUCTURE ELEVATION	SHEET # 1 OF 4
Ramon Kokkas 28 Aug 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-15 NOT TO SCALE



COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
DETENTION BASIN OUTFLOW STRUCTURE TRASH SCREEN ENCLOSURE	SHEET # 2 OF 4
Panos Kokkas 28 AUG. 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 9-15 NOT TO SCALE

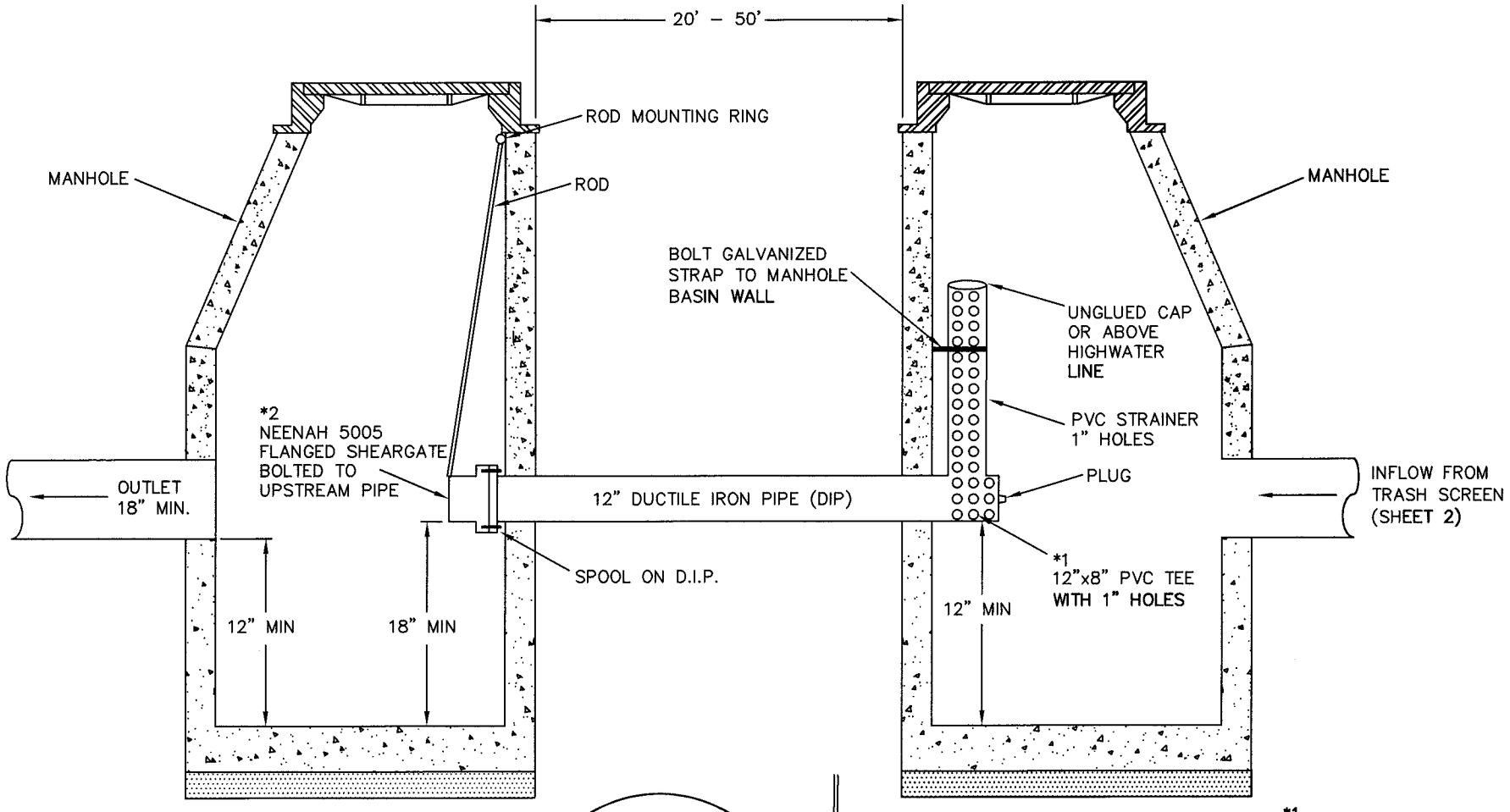


COUNTY OF YOLO
PLANNING AND PUBLIC WORKS DEPARTMENT

DETENTION BASIN SLIDE GATE RESTRICTOR
OUTFLOW CONTROL STRUCTURE

Parvez Kalkas 28 AUG. 08
COUNTY ENGINEER No. C42401 APPROVAL DATE

DATE: 08/05/08
SHEET # 3 OF 4
DRAWING #: 9-15
NOT TO SCALE



*1
AS REQUIRED BY ENGINEER'S ORIFICE CALCULATIONS

*2
ORIFICE SIZE PER ENGINEER'S CALCULATIONS RECTANGULAR OR CIRCULAR ORIFICE, A THE BOTTOM OF SHEAR GATE.

COUNTY OF YOLO
PLANNING AND PUBLIC WORKS DEPARTMENT

DETENTION BASIN SHEAR GATE RESTRICTOR
OUTFLOW CONTROL STRUCTURE

Carlos Kokkas 28AUG-08
COUNTY ENGINEER No. C42401 APPROVAL DATE

DATE: 08/05/08

SHEET # 4 OF 4

DRAWING #: 9-15

NOT TO SCALE