

## STANDARD CONCRETE SPECIFICATIONS

All ready mix concrete design, transportation and delivery procedures shall meet requirements specified in the State of California Department of Transportation “Standard Specifications”, Section 90, “Portland Cement Concrete” except as noted below:

Cement Content per yard	Min. 28-day compressive strength	Max permissible Water Cement ratio (U.S. gal. per 94 lb. Bag cement)*
4 sacks (376 lbs)	2000 PSI	7.6
5 sacks (470 lbs)	3000 PSI	6.6
6 sacks (564 lbs)	4000 PSI	5.3

\* Non air-entrained concrete

### Additional Requirements:

1. Maximum Aggregate size = 1”
2. Slump: 4”  $\pm$  1-1/2”
3. No admixtures or changes to the above specifications shall be incorporated into the concrete mix design unless prior approval from MID is obtained.
4. Concrete supplier to provide a record copy of the mix design for each strength of concrete specified.
5. Acceptance by MID shall be predicated on the following:
  - a. The delivery ticket is in accordance with the requirements specified by the “Standard Specifications”.
  - b. That not more that 1-1/2 hours have expired between the time shown on the delivery ticket and the time of placement.
  - c. If any one of the above conditions are not met, MID may reject the load and order if returned to the batch plant at no expense to MID.

## M.I.D. MORTAR MIX SPECIFICATIONS

### A. M.I.D. STANDARD MORTAR MIX (Preferred Mortar Mix)

M.I.D. STANDARD MORTAR MIX	
Quantity	Description
1	94 lb Bag of Portland Cement
7	Full Shovels of Sand
2	Full Shovels of Fireclay

1. The M.I.D. Standard Mortar Mix must be thoroughly dry mixed before adding water.
2. Use a soft bristle brush to bond mortar and existing concrete together.
3. All mortared joints and repairs exposed to sunlight must be wrapped in plastic to prevent cracking.
4. A minimum of 48 hours curing time is required.

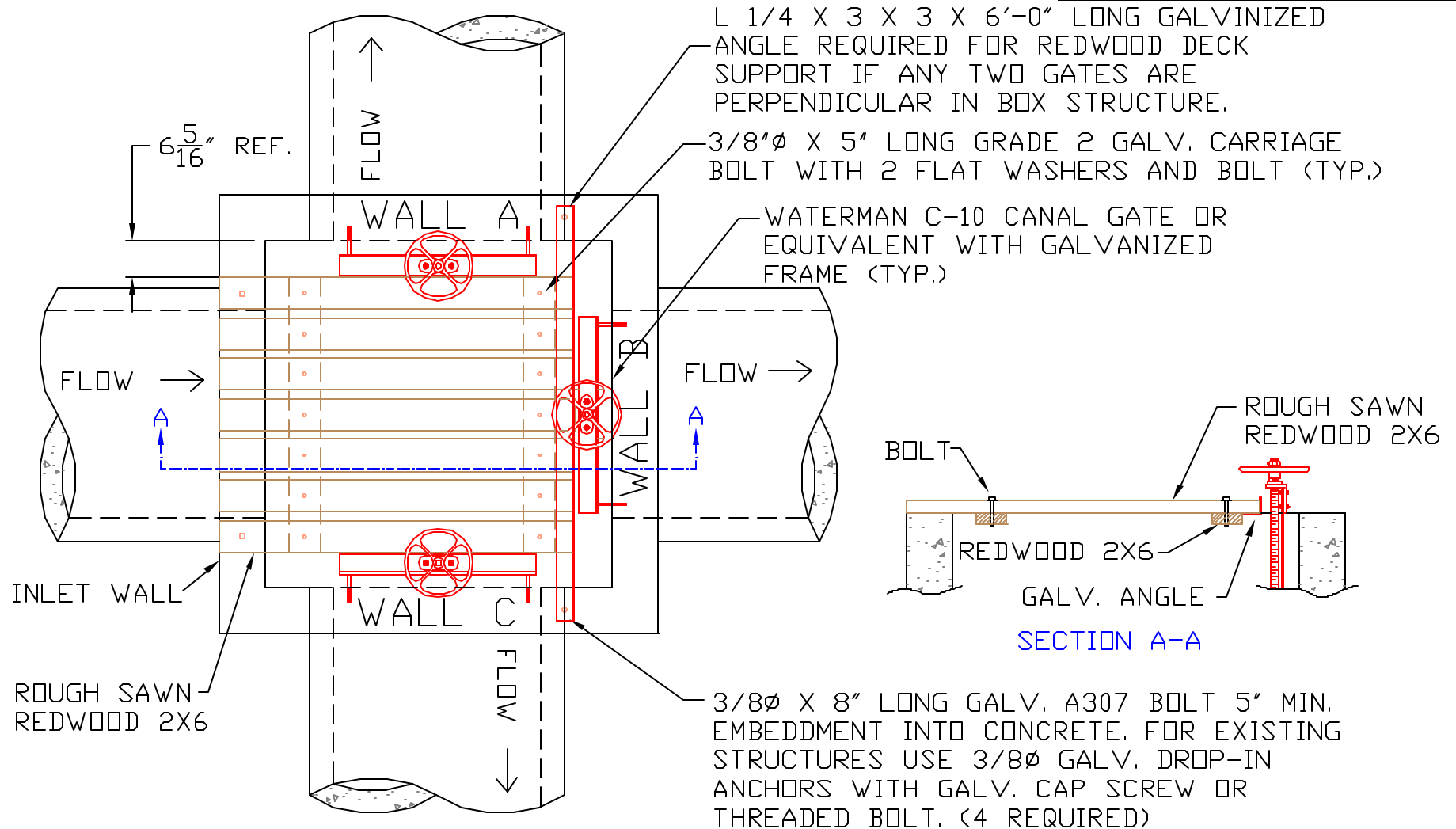
### B. OTHER STANDARD DRYING MORTAR MIXES (Acceptable)

1. All manufactured mortar mix products shall have consistent mix properties as the M.I.D. Standard Mortar Mix. All manufactured mortar mix products drying time must be consistent with the manufacturers recommendations, but not less than 48 hours.
2. Follow all manufacturer guidelines to create a smooth sealed bond.
3. Follow all manufacturer guidelines for proper surface preparation before mortaring

### C. QUICK DRYING MORTAR PRODUCTS (Acceptable only when approved.)

1. Use Custom-Plug Hydraulic Patching and Anchoring Cement or an equivalent product **only** in situations where 48 hours of curing time is not possible.
2. A Modesto Irrigation District representative must approve **all** manufactured quick drying mortar mix products.

REV	CHANGE	DATE	BY
①	RELEASE	01/05	DBB
②			
③			
④			



**NOTES:**

**GATES:** 12', 14' OR 16' X 52" POWDER RIVER "CLASSIC HEAVY DUTY GATE", OR EQUIVALENT. GATE OPENING VARIES BY LOCATION. REFLECTIVE TAPE TO BE PLACED ON TWO HORIZONTAL GATE MEMBERS.

**SWING POST:** POWER POLE, RAILROAD TIE, OR 6" STEEL POST (CONCRETE FILLED)

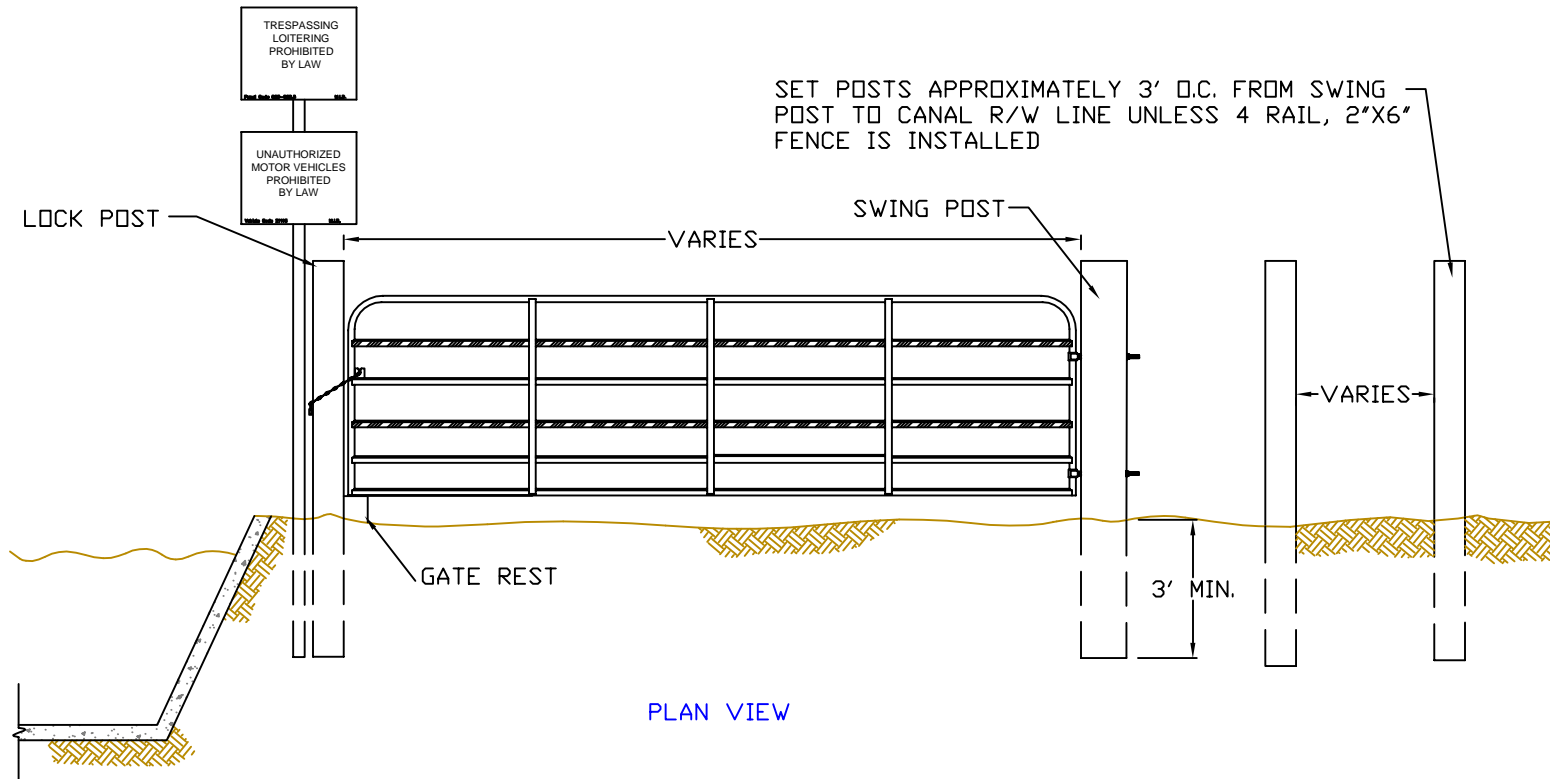
**LOCK POST:** 8" PREASURE TREATED PEELER CORE, 6" STEEL POST (CONCRETE FILLED), OR RAILROAD TIE

**LOCATION:** TYPICAL GATE INSTALLATION WILL BE SET BACK APPROX. 50' FROM CURB OR ROAD R/W.

**SIGNS:** SIGNS WILL BE INSTALLED ON A STEEL POST AND LOCATED 8' BEHIND GATE (OTHER LOCATIONS AS APPLICABLE)

**LOCKS:** M.I.D. D-219 LOCKS TO BE USED (PRIVATE LOCKS MAY BE AUTHORIZED).

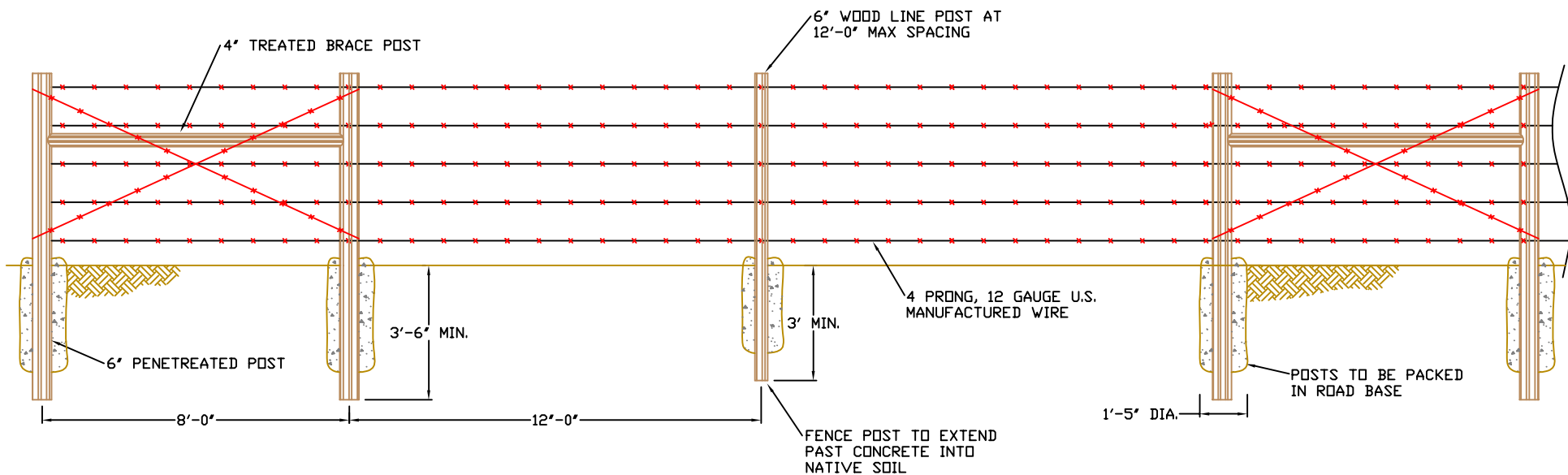
REV	CHANGE	DATE	BY
1	RELEASE	01/05	DBB
2			
3			
4			

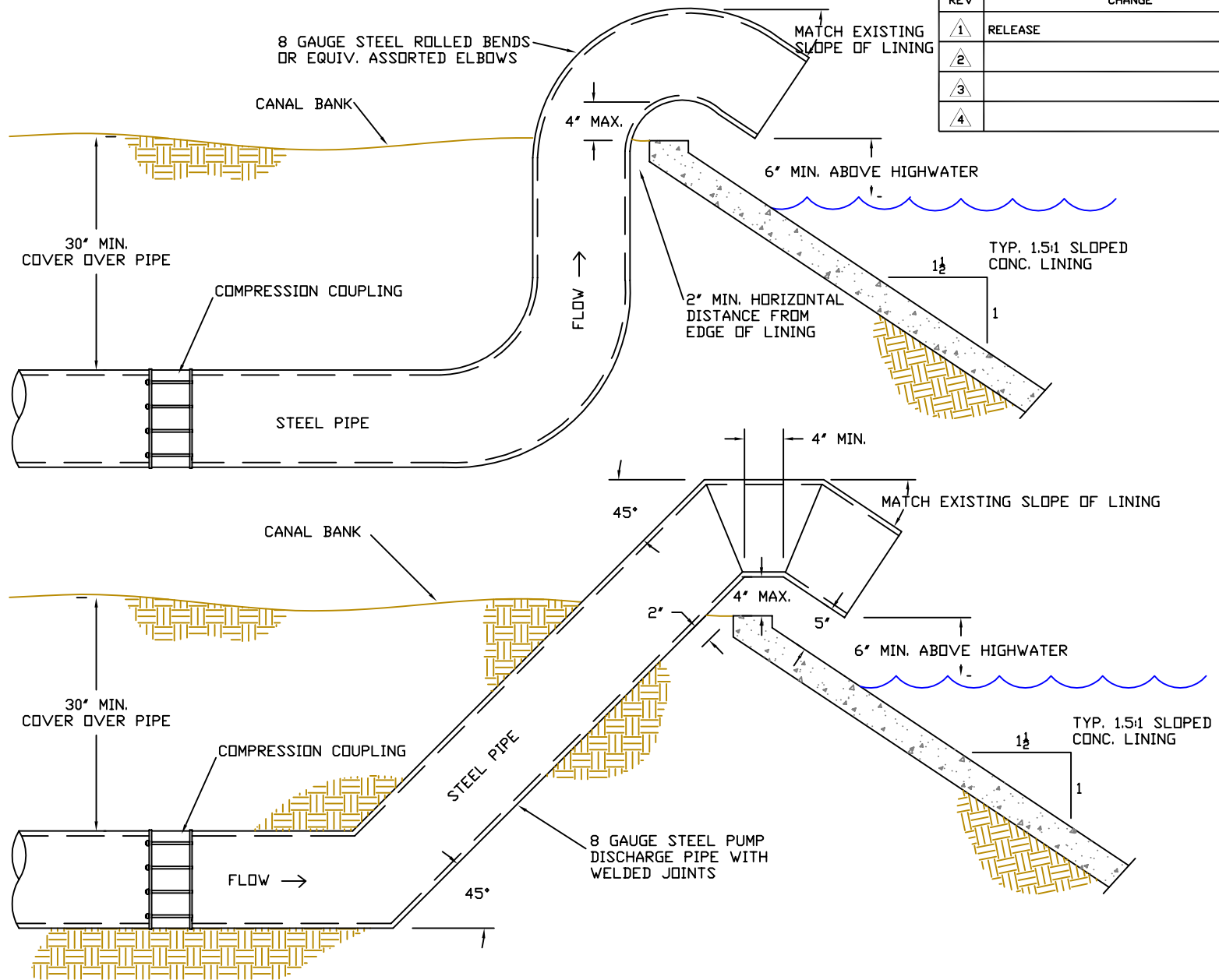


REV	CHANGE	DATE	BY
1	RELEASE	01/05	DBB
2			
3			
4			

NOTE:

1. H-BRACE UNITS SHALL BE INSTALLED PRIOR TO CUTTING EXISTING FENCE.
2. HEIGHT OF POSTS TO MATCH EXISTING POSTS.
3. NUMBER OF STRANDS TO MATCH EXISTING FENCE, 5 STAND MIN.
4. FENCE HEIGHT TO BE DETERMINED BY LANDOWNER (4'-6" TO 5'-0")
5. MINIMUM 6" DIAMETER PENETREATED POST.



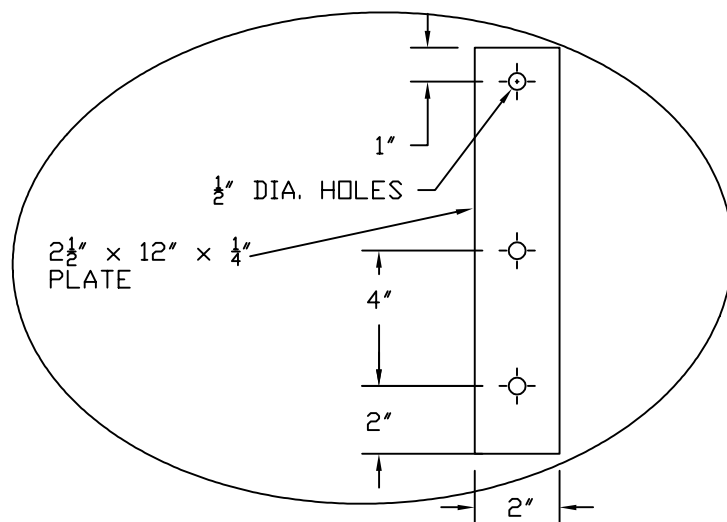


REV	CHANGE	DATE	BY
1	RELEASE	01/05	DBB
2			
3			
4			



# TYPICAL STEEL DISCHARGE LINE DETAILS

DATE: 9/20/04	DWG BY: AARON U
SCALE: NONE	APP. BY: BILL K
FILE NAME: M 25	



SECTION B-B

COVER MADE FROM 1/4" STEEL

CUT SLOT FOR LOCK PIN

6"

3"

A

DIA. OF COVER DETERMINED BY SIZE OF CONCRETE PIPE

10" EXTRA HEAVY TEE HINGE

VENT PIPE

PLAN VIEW

B

B

3/16"

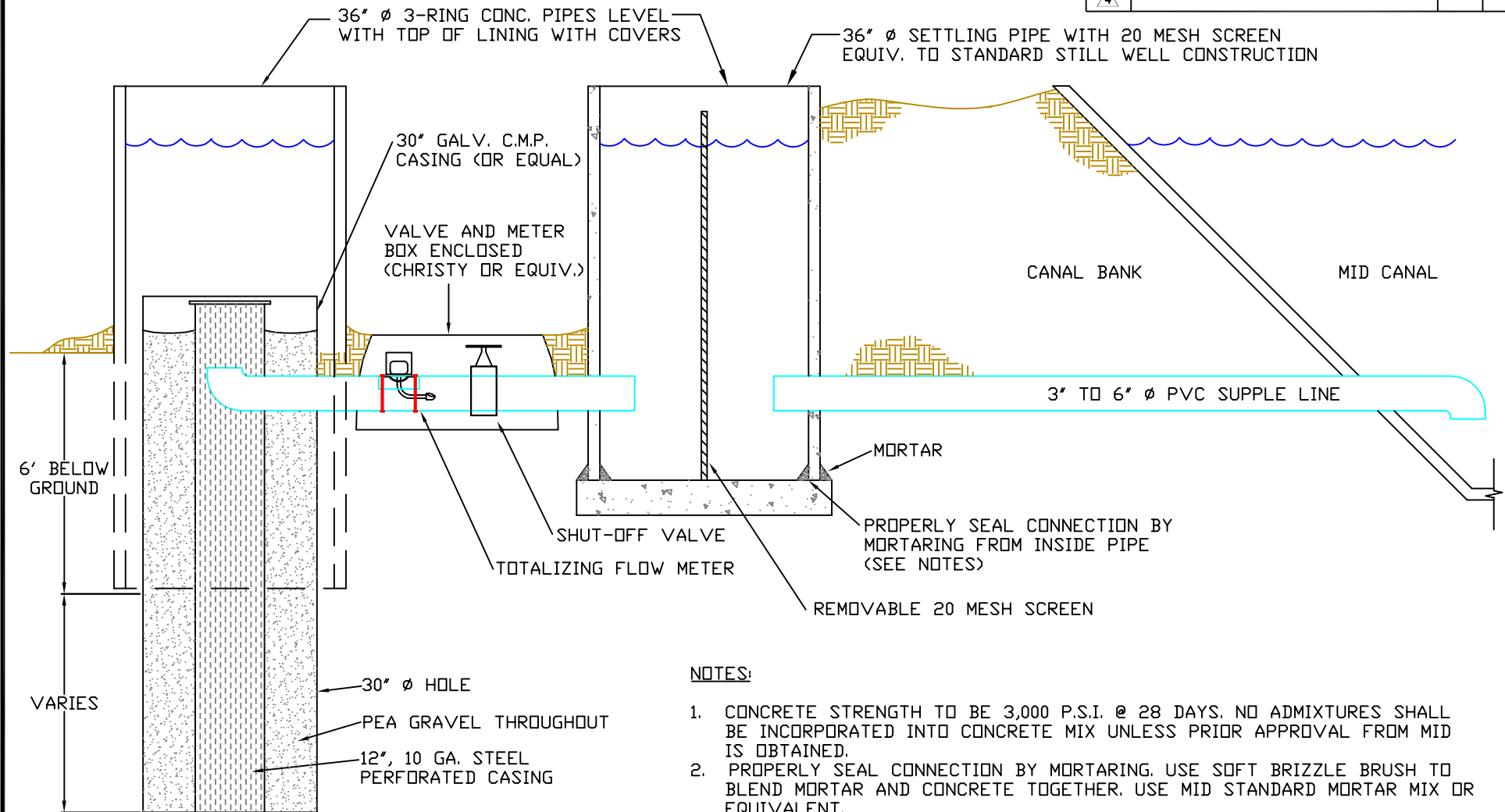
10" EXTRA HEAVY TEE HINGE

3/8" HILTI QUICK BOLT II OR EQUIVALENT

SECTION A-A

REV	CHANGE	DATE	BY
1	RELEASE	01/05	DBB
2			
3			
4			

REV	CHANGE	DATE	BY
1	RELEASE	01/05	DBB
2			
3			
4			



#### NOTES:

1. CONCRETE STRENGTH TO BE 3,000 P.S.I. @ 28 DAYS. NO ADMIXTURES SHALL BE INCORPORATED INTO CONCRETE MIX UNLESS PRIOR APPROVAL FROM MID IS OBTAINED.
2. PROPERLY SEAL CONNECTION BY MORTARING. USE SOFT BRIZZLE BRUSH TO BLEND MORTAR AND CONCRETE TOGETHER. USE MID STANDARD MORTAR MIX OR EQUIVALENT.