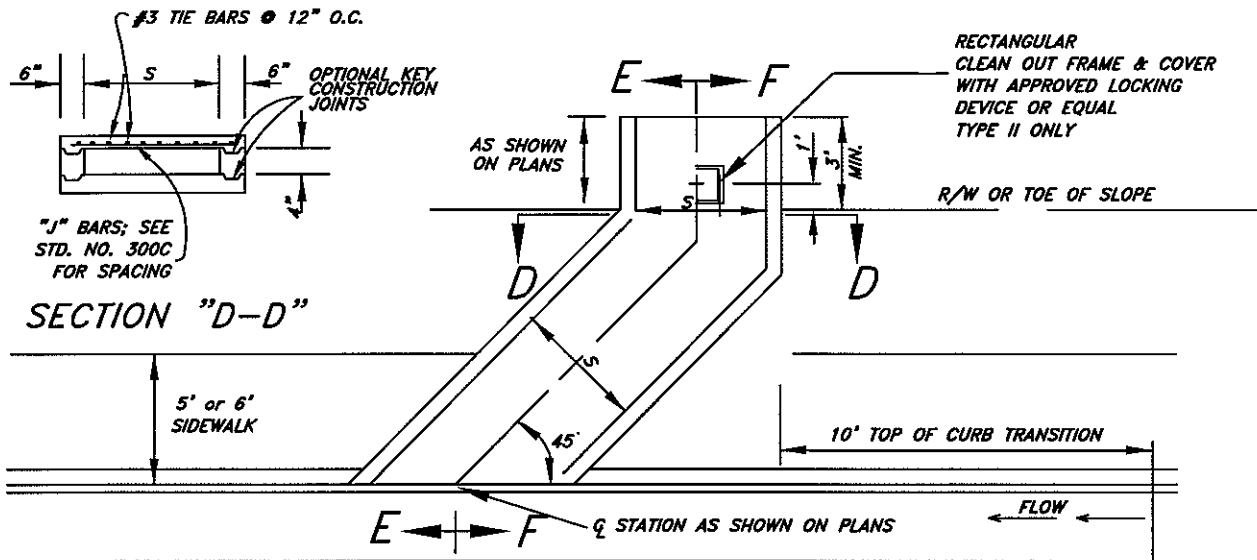


CITY OF LAKE ELSINORE
STANDARD PLANS

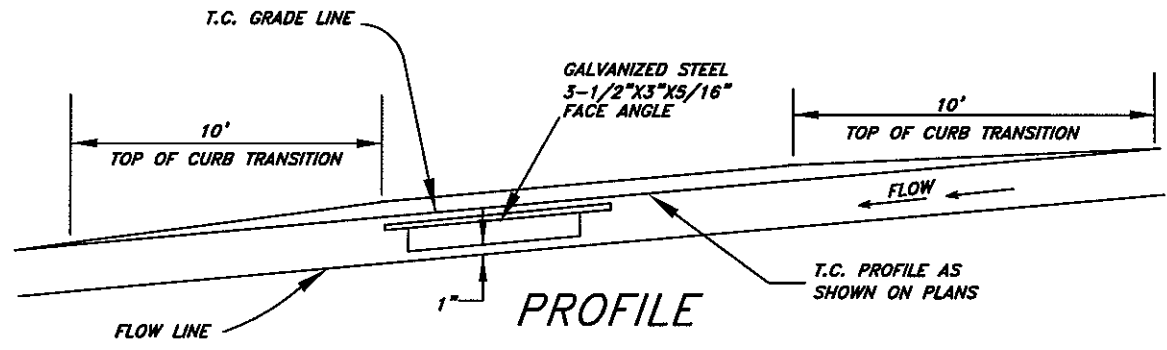
SECTION 3:
Drainage



RECTANGULAR
CLEAN OUT FRAME & COVER
WITH APPROVED LOCKING
DEVICE OR EQUAL
TYPE II ONLY

SECTION "D-D"

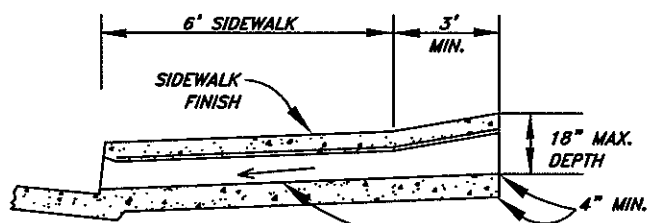
PLAN



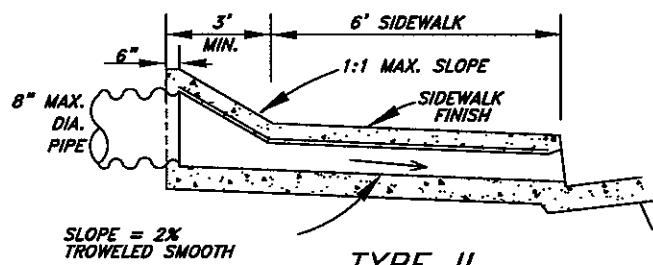
PROFILE

NOTES:

1. SPAN "S" AND HEIGHT OF OPENING AND CURB FACE AT CULVERT SHALL BE NOTED ON PLANS.
2. SEE STANDARD PLAN NO. 300C FOR DETAILS AND NOTES.
3. CONCRETE SHALL BE CLASS 560-C-3250.
4. FACE ANGLE SHALL BE ANCHORED BY FULL PENETRATION WITH A 3-5/8"X6-3/8" STEEL STUD OR BUTT WELD.
5. UNLESS OTHERWISE SPECIFIED, STANDARD FRAME AND COVER SHALL BE ALHAMBRA FOUNDRY GALVANIZED PIPE OR EQUAL.
6. 1 INCH STEEL CLEARANCE MINIMUM FROM FACE OF CONCRETE.
7. TOP OF INLET STRUCTURE TO MATCH ADJACENT SLOPE.



TYPE I SECTION "E-E"



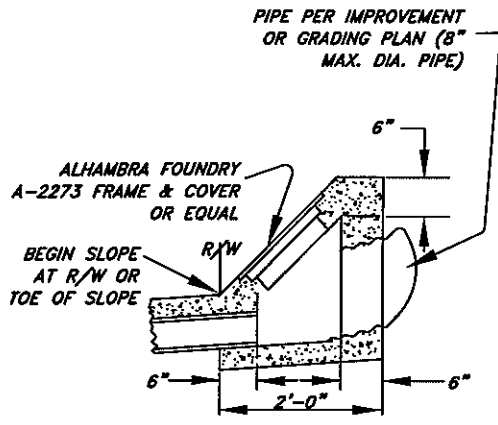
TYPE II SECTION "F-F"

REVISION	ENGINEERING	DATE
DATE APPROVED		07/09
	APPROVED BY	
	<i>[Signature]</i>	08/31/2009
	CITY ENGINEER	DATE

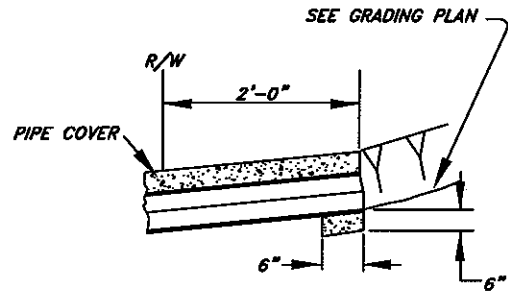
CITY OF LAKE ELSINORE
PREPARED BY PUBLIC WORKS

**PARKWAY CULVERT
TYPE "A"**

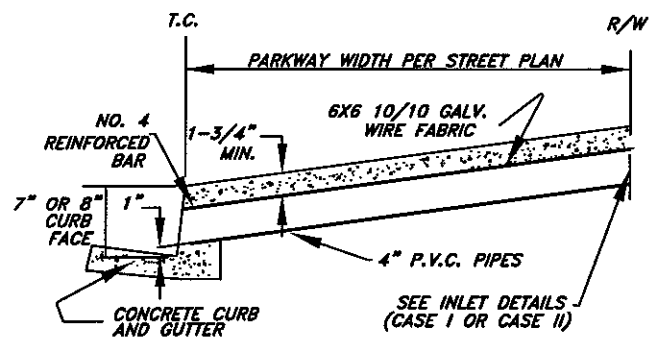
1 OF 3
NO.
300A



CASE I INLET
TRANSITION STRUCTURE SECTION

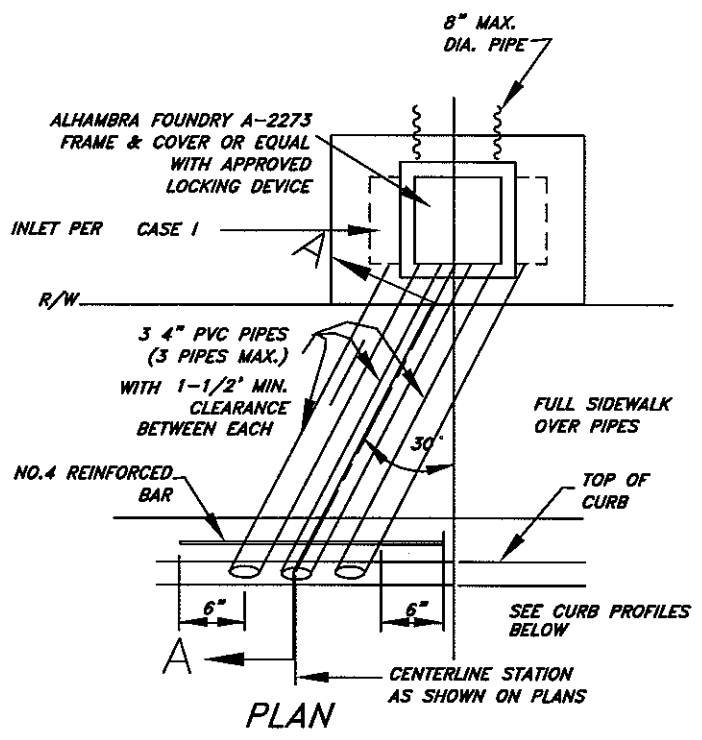


CASE II INLET

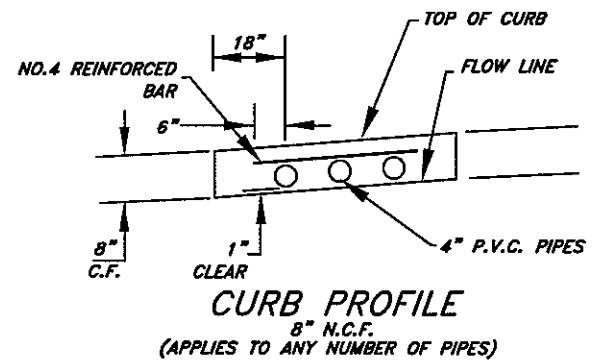


SECTION "A-A"

- NOTES:**
- 1.) SEE STD. NO. 300C FOR DETAILS AND NOTES.
 - 2.) ALHAMBRA FOUNDRY A-470 RECTANGULAR CAST IRON PIPE MAY BE SUBSTITUTED AT THE CONTRACTOR'S OPTION OR AS SPECIFIED ON THE PLANS.
 - 3.) CAST IRON FACILITIES SHALL HAVE A BITUMINOUS COATING CONFORMING TO AASHTO DESIGNATION:M190.
 - 4.) P.V.C. PIPES SHALL BE SCHEDULE 40 OR AS SPECIFIED ON THE PLANS.

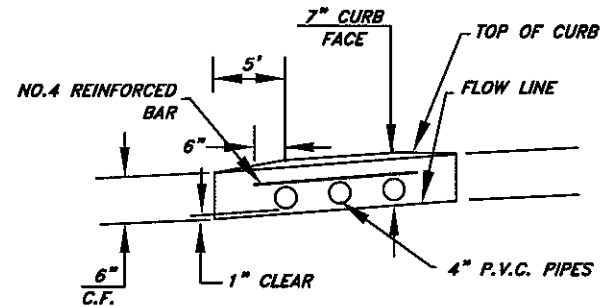


PLAN



CURB PROFILE

(APPLIES TO ANY NUMBER OF PIPES)



CURB PROFILE

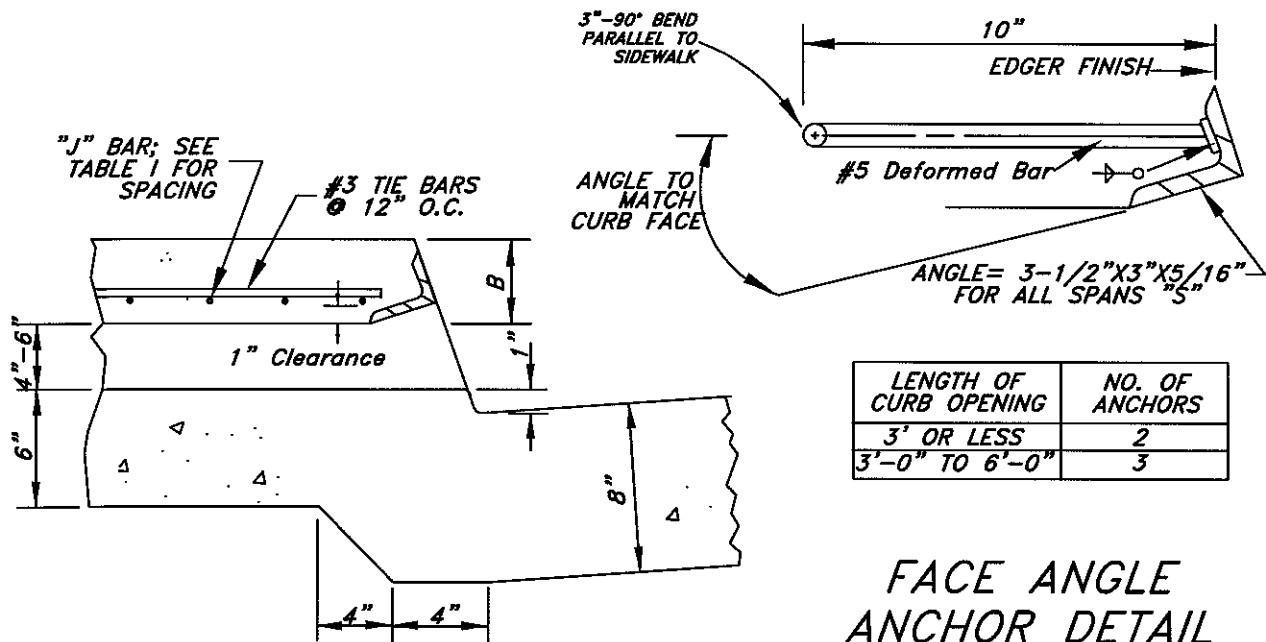
(APPLIES TO ANY NUMBER OF PIPES)

REVISION	ENGINEERING	DATE
DATE APPROVED		07/09
	APPROVED BY	
	<i>Ken A. Sanchez</i>	08/31/2009
	CITY ENGINEER	DATE

CITY OF LAKE ELSINORE
PREPARED BY PUBLIC WORKS

CURB OUTLET TYPE "B"

2 OF 3
NO. 300B



LENGTH OF CURB OPENING	NO. OF ANCHORS
3' OR LESS	2
3'-0" TO 6'-0"	3

FACE ANGLE ANCHOR DETAIL

OUTLET DETAIL

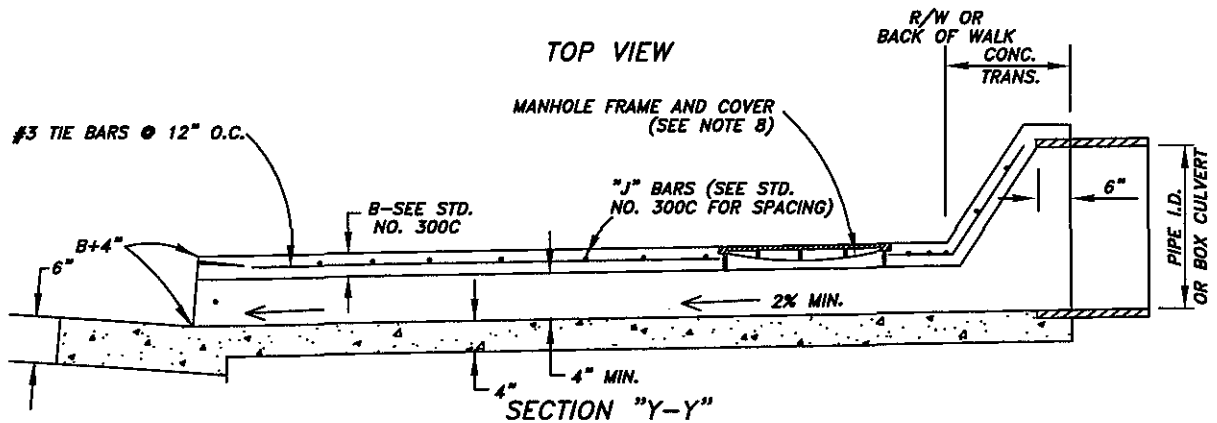
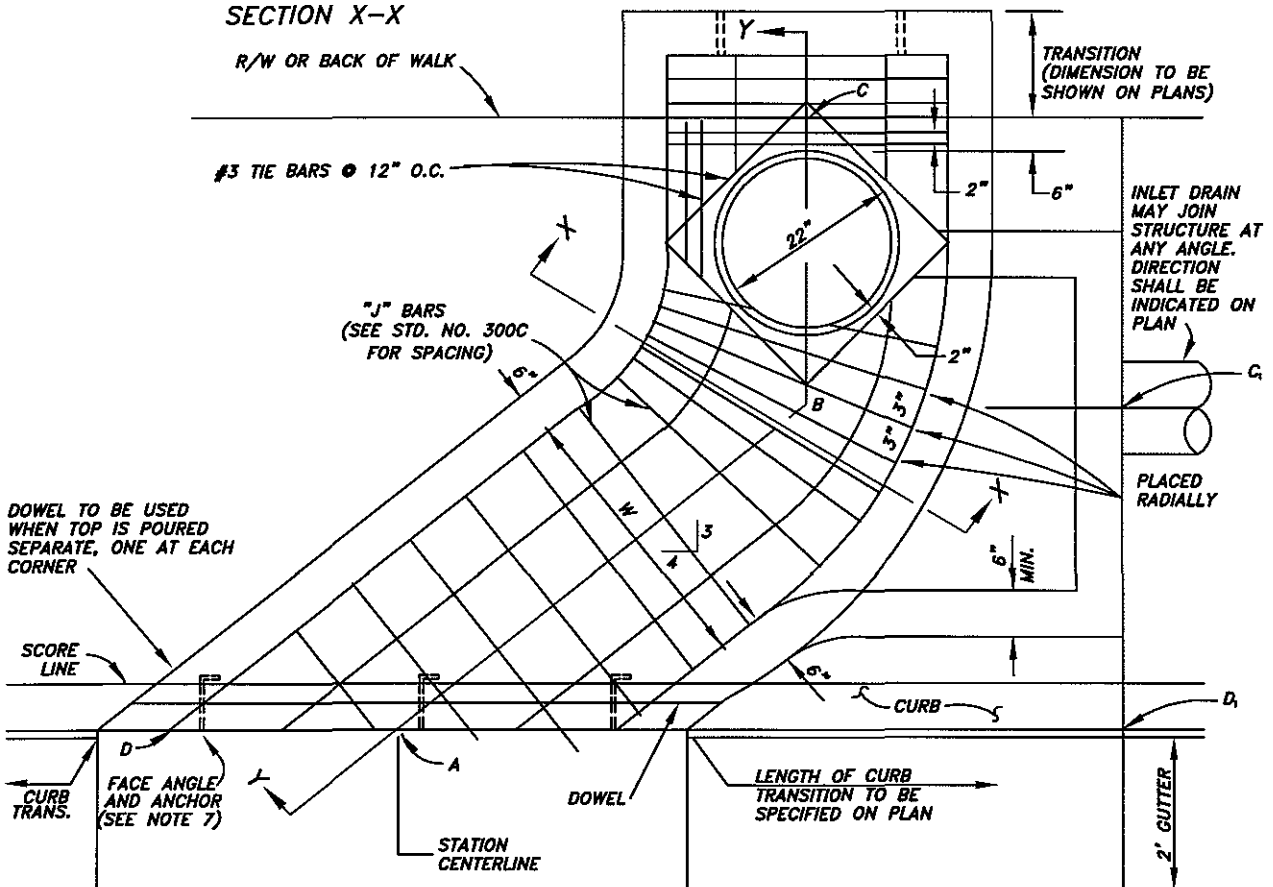
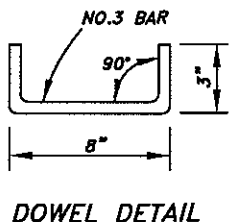
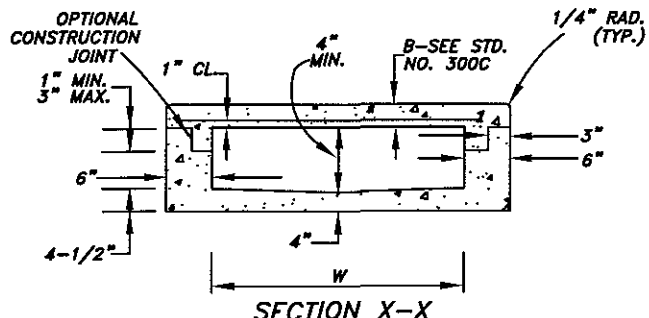
NOTES:

- 1.) USE PARKWAY CULVERT-TYPE "A" WHEN INLET VELOCITIES WILL BE 10 FEET PER SECOND OR GREATER.
- 2.) USE PARKWAY CULVERT-TYPE "B" WHEN INLET VELOCITIES WILL BE LESS THAN 10 FEET PER SECOND.
- 3.) FLOOR OF PARKWAY CULVERT SHALL HAVE A SMOOTH FINISH.
- 4.) ALL EXPOSED METAL SHALL BE GALVANIZED AFTER FABRICATION.
- 5.) HEIGHT OF CURB OPENING FOR TYPES "A" AND "B" PARKWAY CULVERTS WILL VARY WITH TYPE OF CURB.
- 6.) SPAN "S" AND HEIGHT OF CURB OPENING WILL BE DETERMINED FROM THE REQUIRED HYDRAULIC CAPACITY AND LIMITED TO THE DIMENSION IN TABLE I.
- 7.) REINFORCING STEEL SHALL BE 1" CLEAR TO INSIDE OF CULVERT UNLESS OTHERWISE SPECIFIED.
- 8.) CONSTRUCT P.C.C. WALK AS SPECIFIED ON PLAN. THE CONTRACT PRICE PAID FOR P.C.C. WALK ITEM SHALL INCLUDE WALK CONSTRUCTED IN CONJUNCTION WITH PARKWAY CULVERT.
- 9.) TYPE, DIMENSIONS, AND ELEVATIONS PER IMPROVEMENT PLAN.

SPAN "S"	B	STEEL SCHEDULE J-BARS		
		SIZE	SPACING C-C	LENGTH
2'-0"	3"	#3	6"	2'-9"
2'-6"	3"	#3	6"	3'-3"
3'-0"	3"	#3	6"	3'-9"
3'-6"	3"	#4	6"	4'-3"
4'-0"	3"	#4	6"	4'-9"
4'-6"	4"	#4	6"	5'-3"
5'-0"	4"	#4	6"	5'-9"
5'-6"	4"	#4	6"	6'-3"
6'-0"	4"	#4	6"	6'-9"

TABLE I

REVISION		ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE	
DATE	APPROVED	APPROVED BY		PREPARED BY PUBLIC WORKS	
		CITY ENGINEER		CURB OUTLET DETAILS AND NOTES	
		08/31/2009	DATE	3 OF 3	
				NO. 300C	



REVISION	DATE	APPROVED	ENGINEERING	DATE
				07/09
			APPROVED BY	
			<i>John A. Samuels</i>	08/31/2009
			CITY ENGINEER	DATE


CITY OF LAKE ELSINORE
 PREPARED BY PUBLIC WORKS

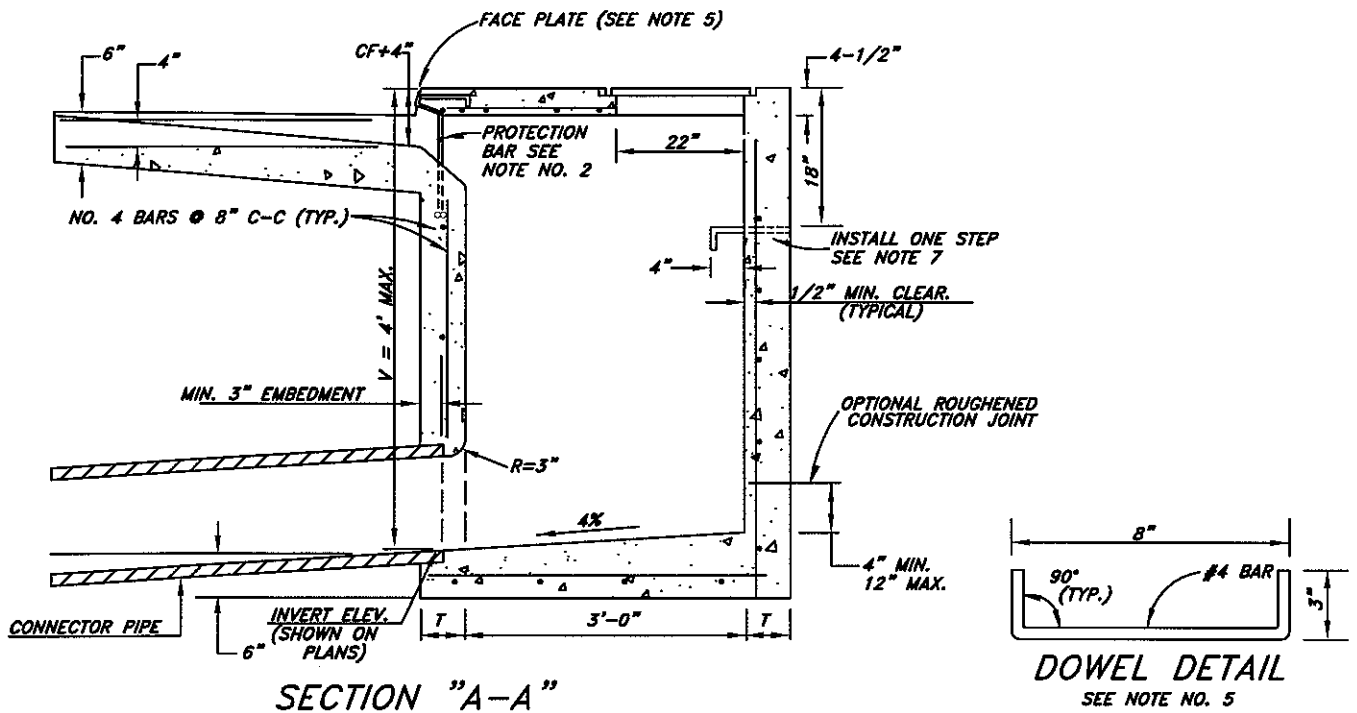
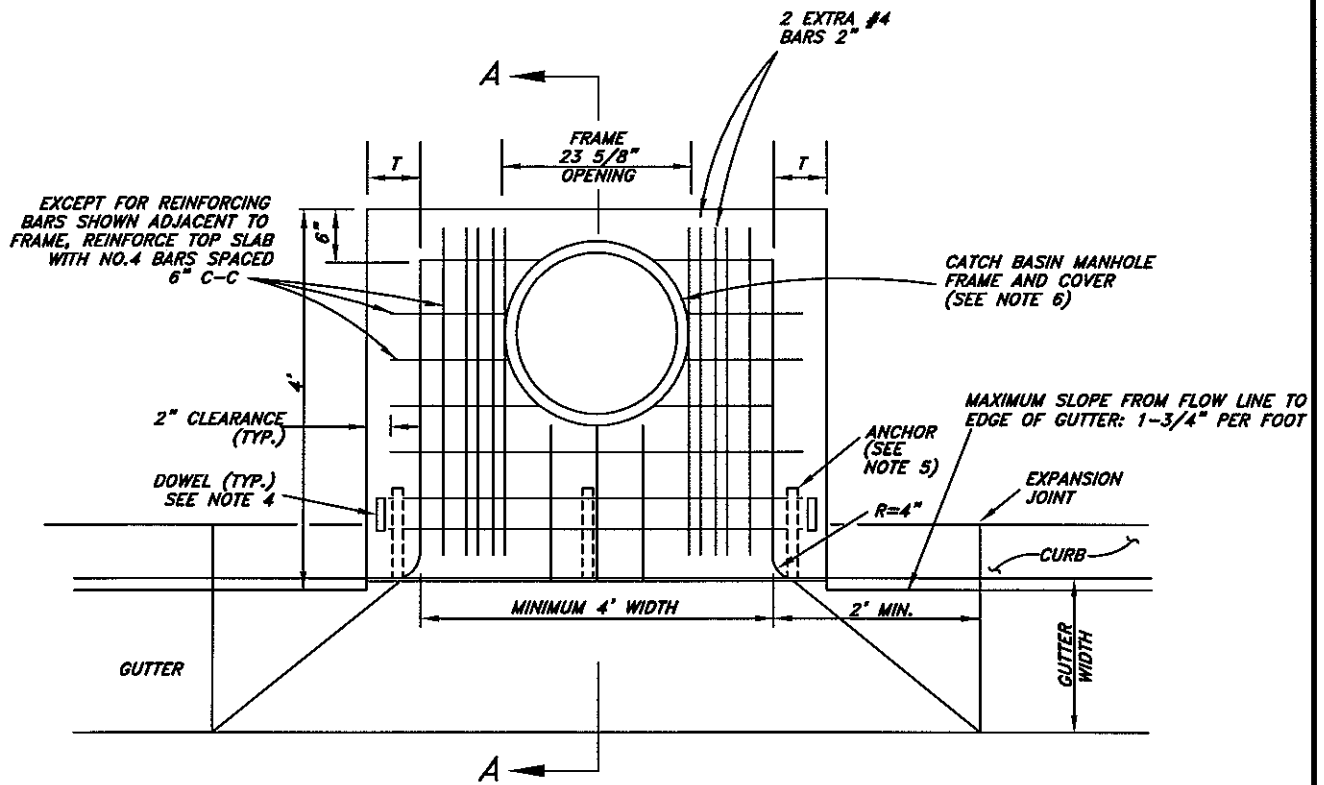
CURB OUTLET STRUCTURE

1 OF 2
 NO. 301A

NOTES:

- 1.) Concrete shall be class 560-C-3250 P.C.C., cured with white pigmented curing compound.
- 2.) The surface of all exposed concrete shall conform in slope, grade, finish, and scoring to existing curb, gutter and walk adjacent to the structure.
- 3.) Curvature of concrete surface shall be shaped by curved forms and shall not be shaped by plastering.
- 4.) The invert of the structure shall be given a steel troweled finish and constructed on a straight grade from the inlet invert through point B to point D. The V-section of the invert shall extend from point C through point B to point A. Warp the invert from the end of the V-section to join the gutter flow line at point D. The soffit of the structure shall be free of corrugations.
- 5.) Dimensions (unless otherwise indicated on the project plans):
 - A-B = 5'
 - B-C = 3'
 - C-D₁ = 3'
 - D-E = 5'
 - W = 3'
- 6.) Dowels shall be required at each corner and at 2 feet O.C. (max.) when the top slab is poured separately. When the top slab is poured monolithic with adjacent sidewalk, the dowels may be omitted.
- 7.) Install face angle and anchors at the outlet of the structure in conformance with Standard Plan No. 300C.
- 8.) Install catch basin manhole frame and cover conforming to A.P.W.A. Standard Plan No. 312-0. Agency inscription shall be "Lake Elsinore."

REVISION		ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE	
DATE	APPROVED	APPROVED BY		PREPARED BY PUBLIC WORKS	
		 CITY ENGINEER		CURB OUTLET STRUCTURE NOTES	
		08/31/2009 DATE		2 OF 2	NO. 301B



REVISION	ENGINEERING	DATE 07/09
DATE APPROVED	APPROVED BY	
	<i>Ken A. Demato</i>	08/31/2009
	CITY ENGINEER	DATE

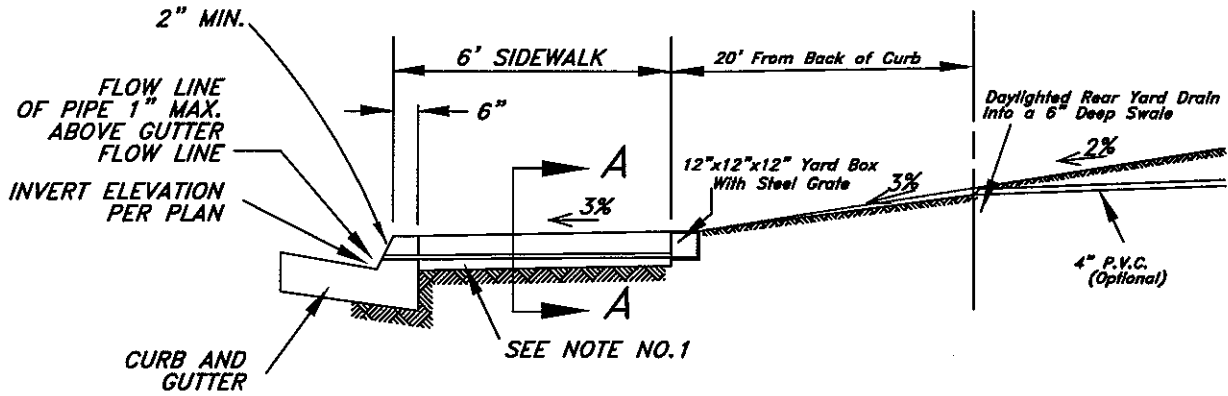
CITY OF LAKE ELSINORE
 PREPARED BY PUBLIC WORKS

CURB INLET CATCH BASIN

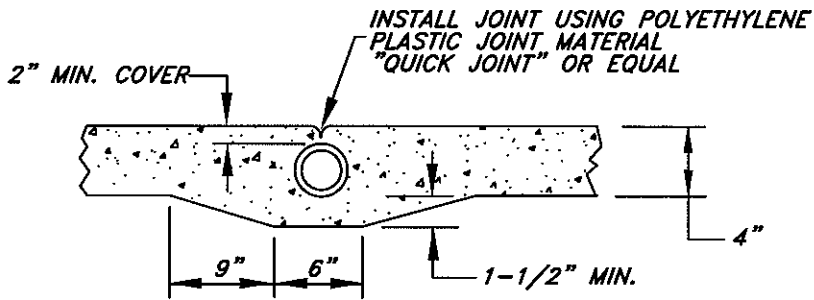
1 OF 2
 NO. 302A

STANDARD BEING REVISED

**CONTACT ENGINEERING TECHNICIAN
FOR INFORMATION**



ELEVATION



SIDEWALK SECTION "A-A"

NOTES:

- 1.) DRAINS SHALL BE 4 INCH DIA. P.V.C. PIPE (SCHEDULE 40) OR RECTANGULAR CAST IRON BOX FOR 6 INCH CURB FACE AND 4 INCH DIA. P.V.C. PIPE (SCHEDULE 40) OR RECTANGULAR CAST IRON BOX FOR 8 INCH CURB FACE.
- 2.) THE CURB SHALL BE CORED FOR ALL DRAIN PIPES.
- 3.) THE NUMBER OF PIPES AT ANY LOCATION SHALL NOT EXCEED 1 @ 12" O.C.
- 3.) ALL CURB CORES MUST BE BORED, USE OF WATER JET IS UNACCEPTABLE.

<table border="1"> <tr> <th>REVISION</th> <th>DATE</th> <th>APPROVED</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		REVISION	DATE	APPROVED													<p>ENGINEERING DATE 07/09</p> <p>APPROVED BY</p> <p><i>Yonk Sanchez</i> 08/31/2009 CITY ENGINEER DATE</p>	<p>CITY OF LAKE ELSINORE</p> <p>PREPARED BY PUBLIC WORKS</p>	<p>CURB DRAIN: RESIDENTIAL</p>	<p>NO. 303</p>
REVISION	DATE	APPROVED																		