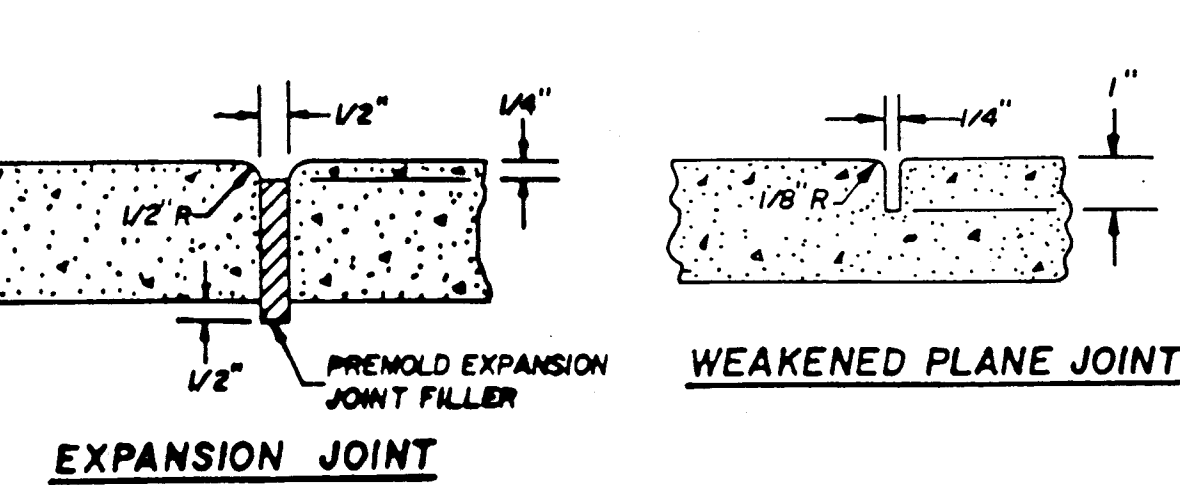
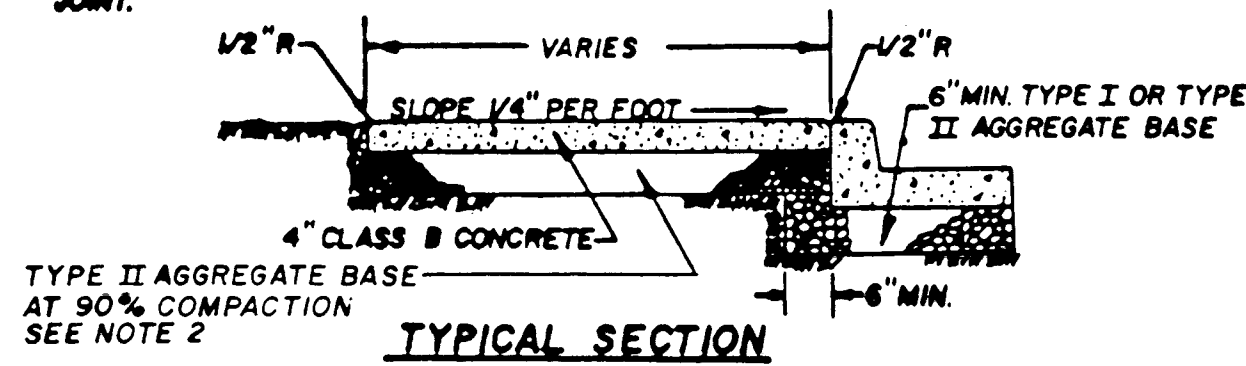
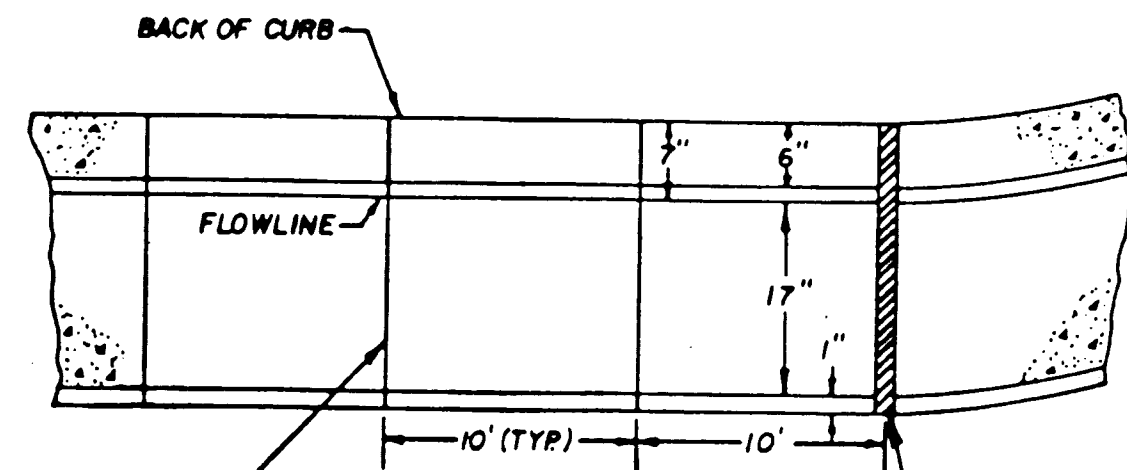


**PLAN**  
 1/2" EXPANSION JOINT AT 30' INTERVALS, AT COLD JOINTS AND AT BEGINNING AND END OF RETURN. EXPANSION JOINTS TO MATCH LOCATION OF CURB AND GUTTER EXPANSION JOINT.

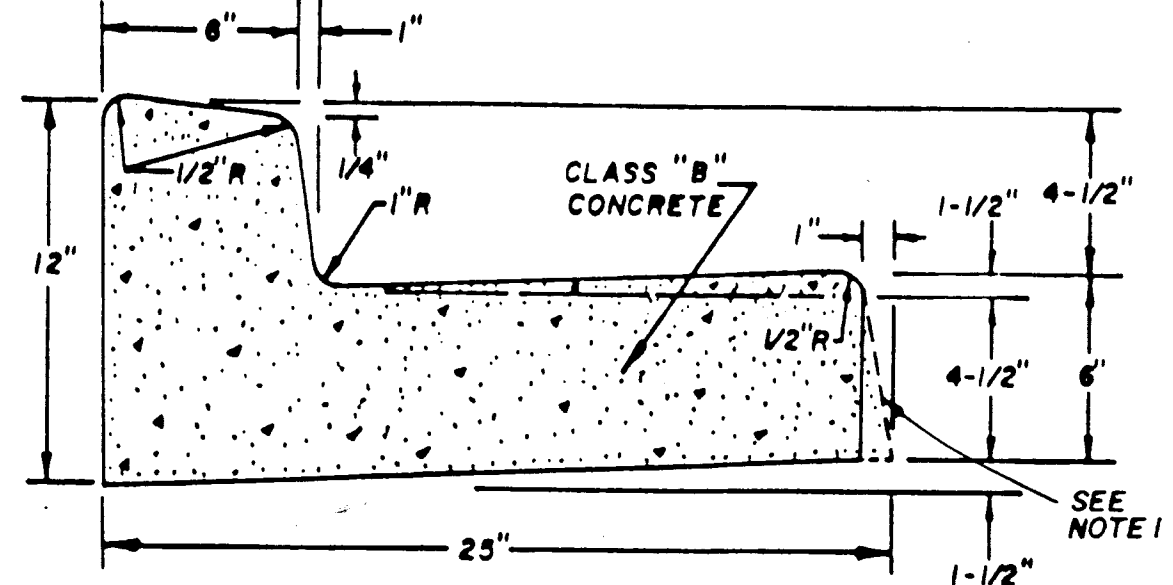


**NOTE:**  
 1. ON ALL CURB RETURNS A 1/2" EXPANSION JOINT SHALL BE CONSTRUCTED BETWEEN THE BACK OF CURB AND THE SIDE WALK FOR THE ENTIRE LENGTH OF THE RETURN.  
 2. THE TYPE II AGGREGATE BASE THICKNESS IS SHOWN ON THE TYPICAL SECTION DRAWINGS 202 - 207.  
 3. LONGITUDINAL WEAKENED PLANE JOINT REQUIRED AT MIDPOINT OF SIDEWALK 10' OR WIDER.

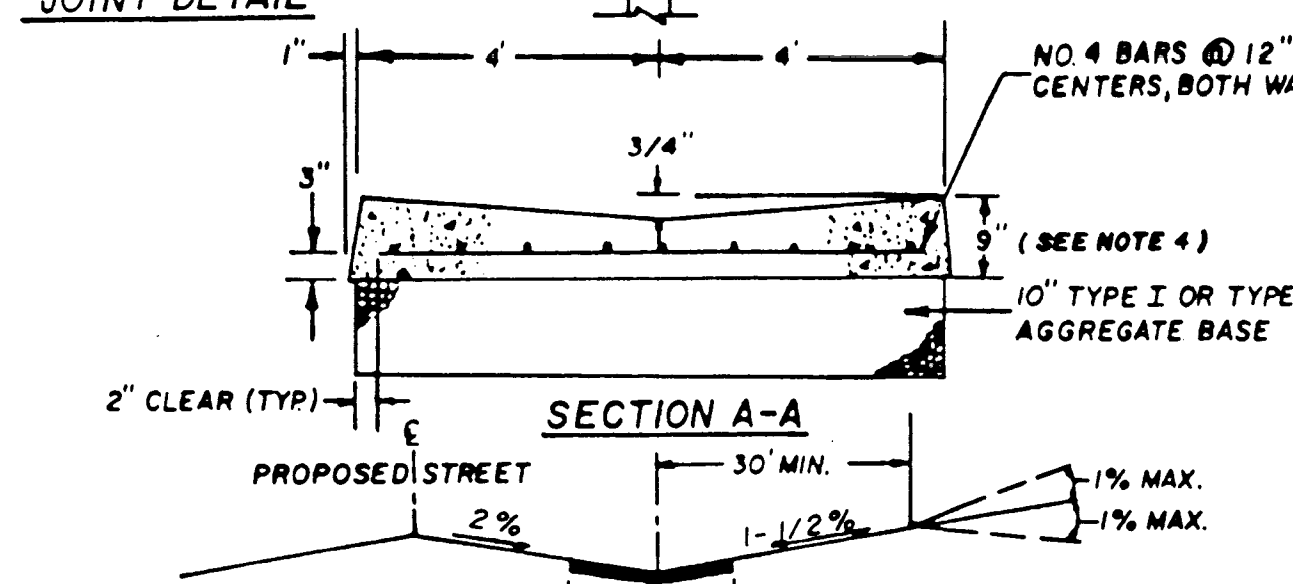
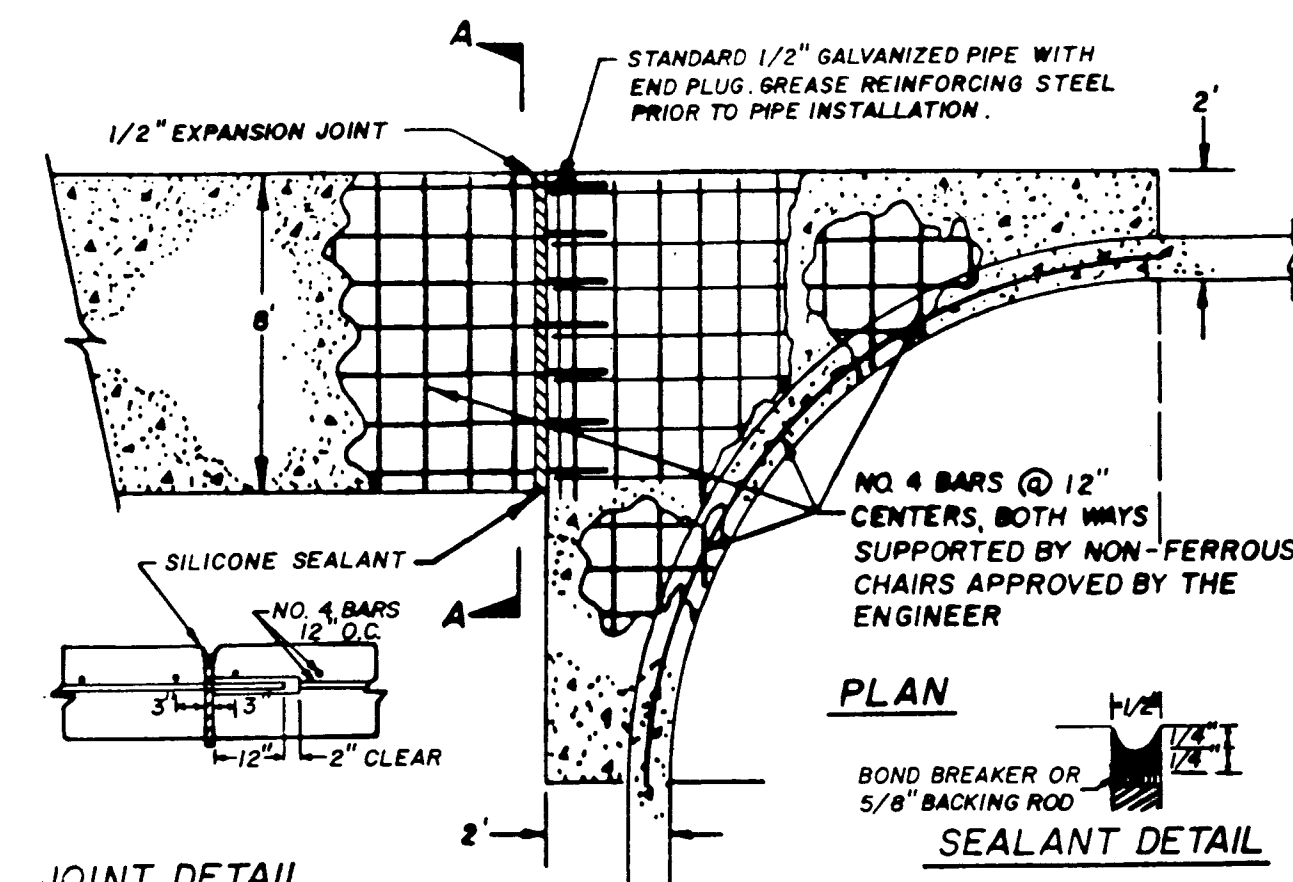


**PLAN**  
 1/2" EXPANSION JOINT AT ALL COLD JOINTS, AT BEGINNING & END OF RETURN AND AT 300' MAX. INTERVALS FOR EXTRUDED CURB AND 30' MAX. INTERVALS FOR FORMED CURB. FOR JOINT DETAIL SEE DWG. NO. 234

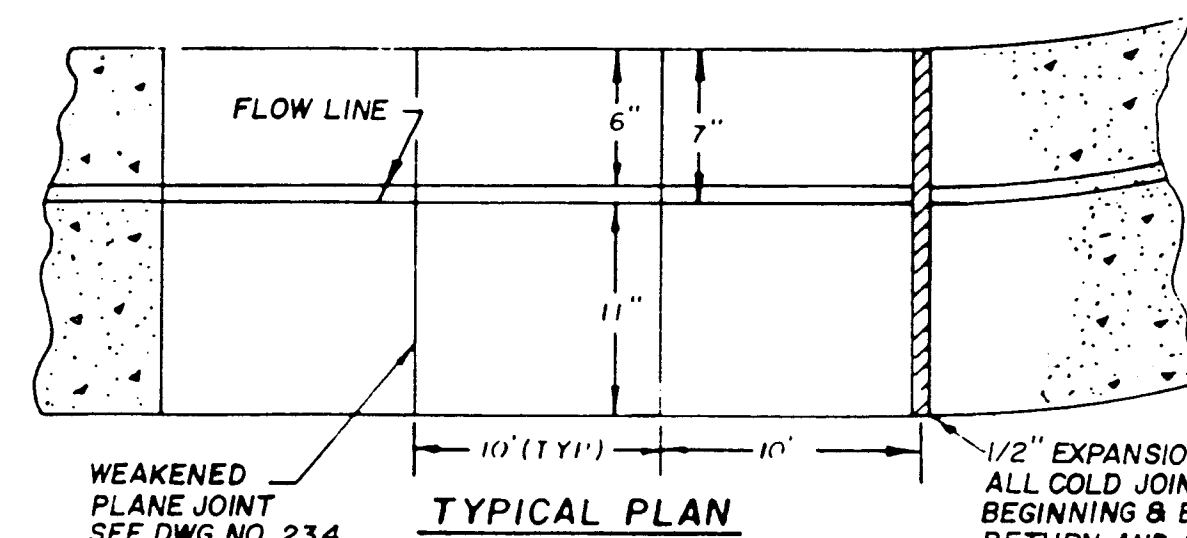
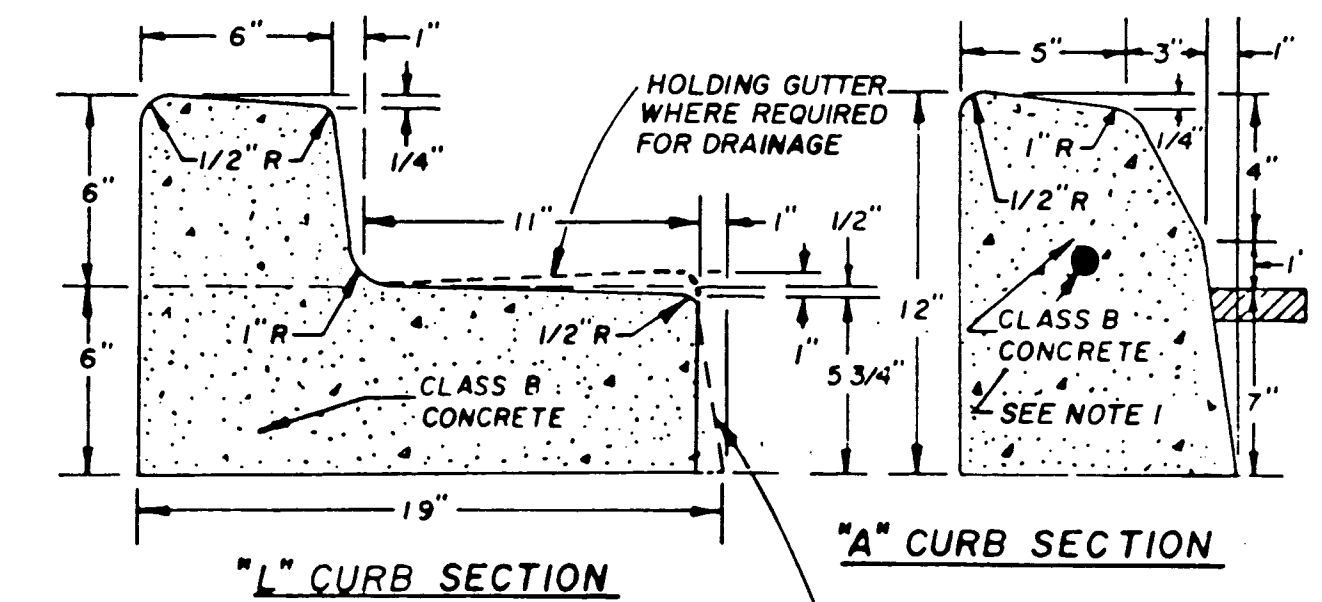
**NOTES:**  
 1. 1" BATTER ON GUTTER FACE OPTIONAL.  
 2. WHERE LONGITUDINAL SLOPE IS LESS THAN 0.4% THE FLOW LINE SHALL BE WATER TESTED.



**TYPICAL SECTION**



**NOTES:**  
 1. ALL CONCRETE SHALL BE CLASS B.  
 2. FINISHED ASPHALT CONCRETE SURFACE TO BE FLUSH WITH CROSS GUTTER LIP.  
 3. CONSTRUCTION OF CROSS GUTTER IS NOT ALLOWED ACROSS MAJOR COLLECTOR OR ARTERIAL STREETS.  
 4. ADJACENT SPANDREL SHALL BE 9" THICK P.C.C.



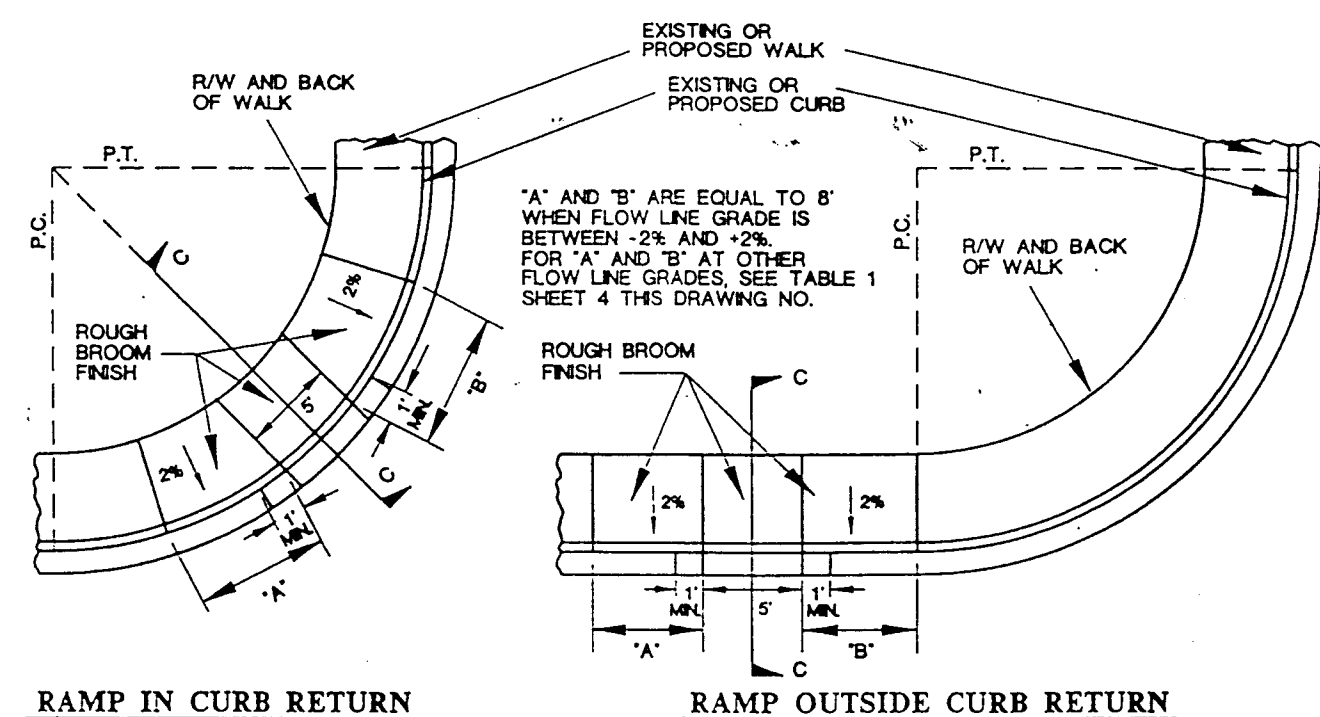
**NOTES:**  
 1. CONTINUOUS NO. 4 BAR REQUIRED IN NOSE OF MEDIAN ONLY.  
 2. 1" BATTER ON GUTTER FACE OPTIONAL.

3 CONSTRUCT CONCRETE SIDEWALK PER STD DWG 234

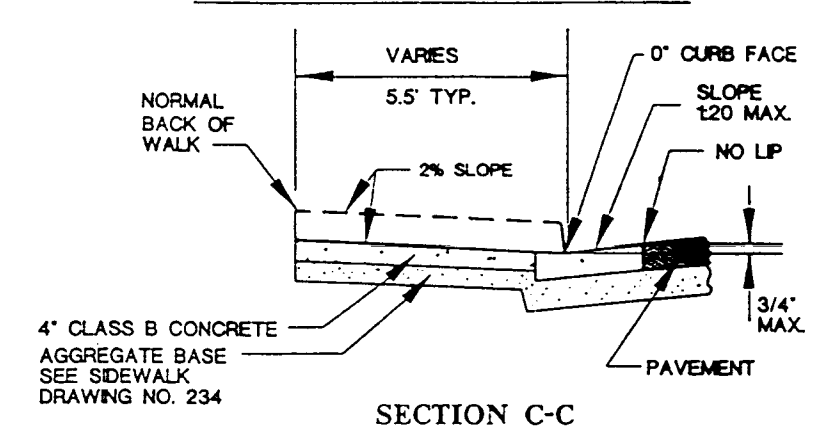
4 CONSTRUCT "L" TYPE CURB AND GUTTER PER STD DWG 216

5 CONSTRUCT 8' CROSS GUTTER PER STD DWG 228

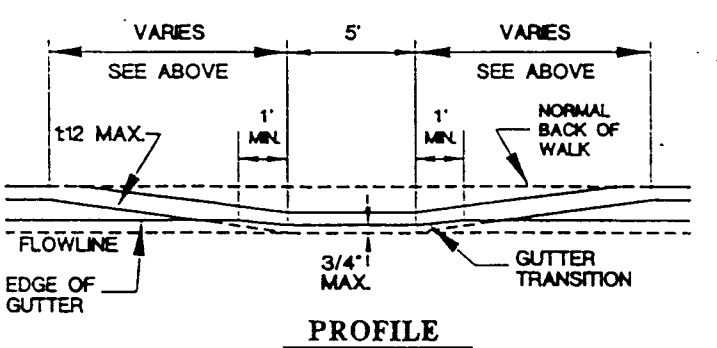
21 CONSTRUCT MODIFIED "A" TYPE ISLAND CURB WITH 12" CURB FACE PER STD DWG 219



**RAMP IN CURB RETURN**      **RAMP OUTSIDE CURB RETURN**



**SECTION C-C**



**PROFILE**

**NOTES:**  
 1. SIDEWALK RAMP WITHIN CURB RETURN SHALL BE LOCATED AT THE MIDPOINT OF CURB RETURN UNLESS OTHERWISE APPROVED.  
 2. SIDEWALK RAMP OUTSIDE OF THE CURB RETURN SHALL BE LOCATED ADJACENT TO THE RETURN UNLESS OTHERWISE APPROVED.  
 3. RAMP SHALL BE CONSTRUCTED WITH A ROUGH BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.  
 4. WHEN CONSTRUCTING RAMP WHERE CURB & GUTTER EXISTS, COMPLETELY REMOVE INTERFERING PORTIONS OF EXISTING CURB & GUTTER.  
 5. DETECTABLE WARNING CONSISTING OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN. A HEIGHT OF NOMINAL 0.2 IN. AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 IN. AND CONTRASTING VISUALLY WITH ADJOINING SURFACES MAY BE PLACED ON RAMP EXTENDING THE FULL WIDTH AND DEPTH OF THE RAMP.

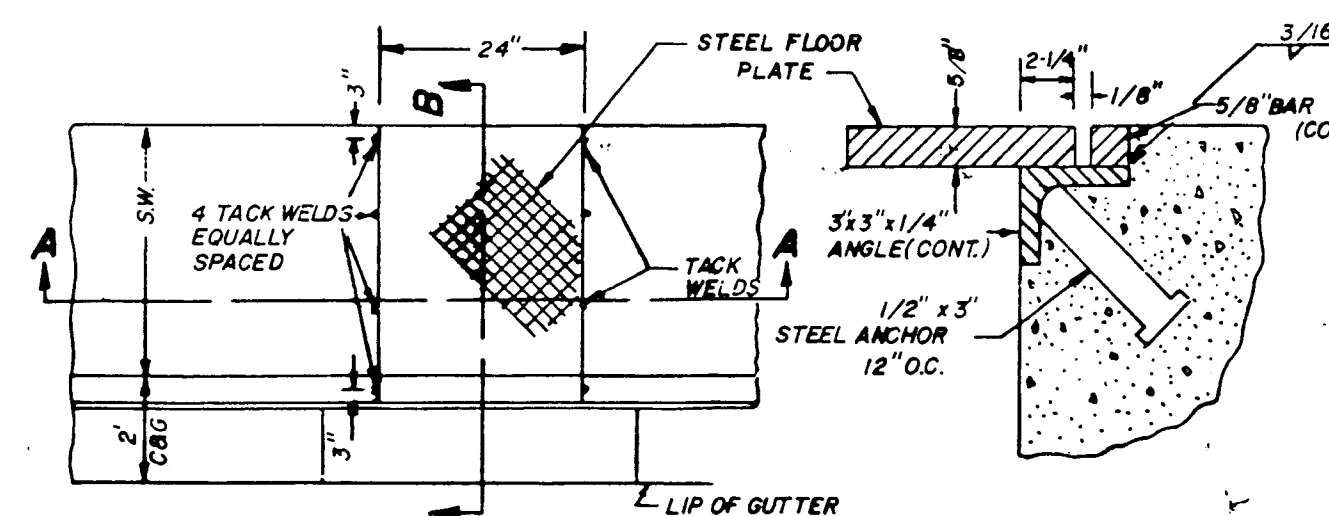
GRADE (%) 'B' TO 'A'	'A' (FT) MIN.	'B' (FT) MIN.
-6 TO -5.01	4.5	21.5
-5 TO -4.01	4.5	15.0
-4 TO -3.01	4.5	12.0
-3 TO -2.01	4.5	9.5
-2 TO 2	8.0	8.0
2.01 TO 3	9.5	4.5
3.01 TO 4	12.0	4.5
4.01 TO 5	15.0	4.5
5.01 TO 6	21.5	4.5

TABLE 1. TRANSITION LENGTHS FOR 1:12 SIDE SLOPES

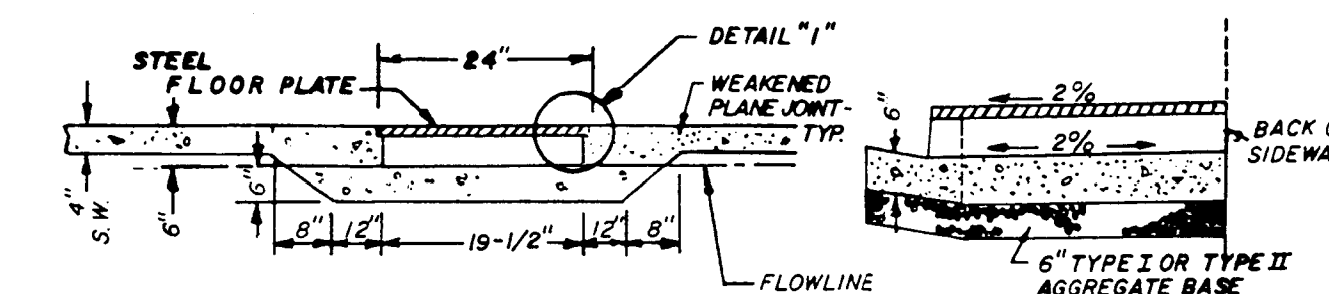
GRADE (%) 'B' TO 'A'	'A' (FT) MIN.	'B' (FT) MIN.
-6 TO -5.01	4.0	12.5
-5 TO -4.01	4.0	10.0
-4 TO -3.01	4.0	8.5
-3 TO -2.01	4.0	7.5
-2 TO 2	6.5	6.5
2.01 TO 3	7.5	4.0
3.01 TO 4	8.5	4.0
4.01 TO 5	10.0	4.0
5.01 TO 6	12.5	4.0

TABLE 2. TRANSITION LENGTHS FOR 1:10 SIDE SLOPES

**NOTE:**  
 CHARTS APPLY TO CURB WITH 6" CURB FACE. IF CURB HAS GREATER THAN A 6" CURB FACE A SPECIAL DESIGN IS REQUIRED.

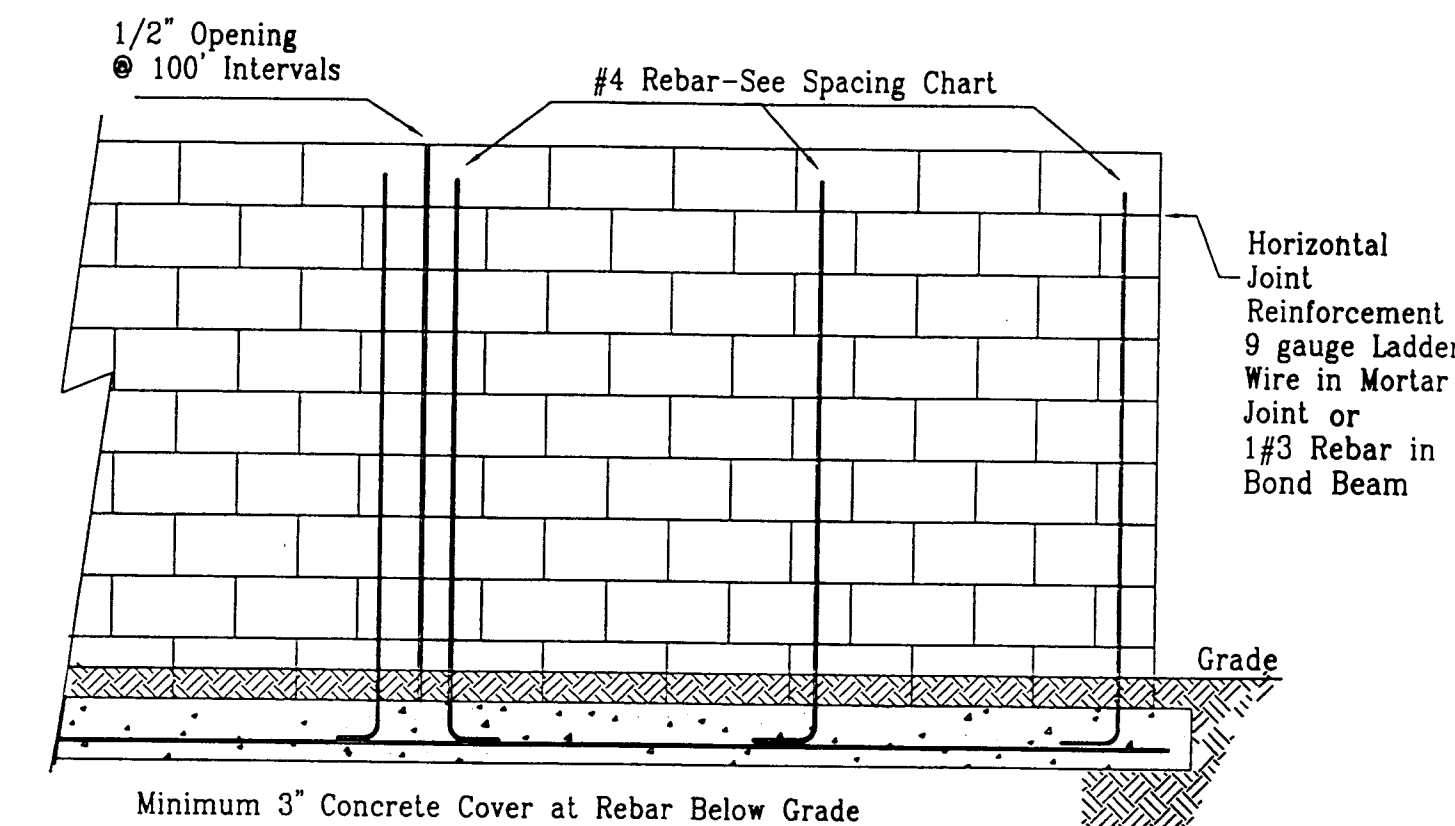


**PLAN**      **DETAIL "1-1"**



**SECTION A-A**      **SECTION B-B**

**NOTES:**  
 1. IF WIDTH OF PLATE IS GREATER THAN 24", A SPECIAL DESIGN IS REQUIRED.  
 2. ALL EXPOSED METAL PARTS SHALL BE GALVANIZED AND ALL GALVANIZING DAMAGED BY FABRICATION OR INSTALLATION SHALL RECEIVE TWO COATS OF ALUMINUM PAINT (GALVONOX OR EQUAL).  
 3. MAX OPENING 6" - 3/8" - 5 3/8" WITH 6% F



Minimum 3" Concrete Cover at Rebar Below Grade

Wall Height	Min. Wall Thickness	Rebar Spacing	Width of Footing
4'0"	6"	48"oc	12"
5'0"	8"	48"oc	14"
6'0"	8"	48"oc	16"
7'0"	8"	32"oc	20"
8'0"	8"	32"oc	22"

Grout Proportions: 1 Part Cement, 3 Parts Sand, 2 Parts Pea Gravel  
 Mortar Proportions: 1 Part Cement, 1/2 Part Lime, 4 1/2 Parts Sand  
 Concrete Minimum 2000 psi  
 Grout All Cells With Rebar

Typical Hook is Minimum 12 Bar Diameters 6" for #4

**INSPECTIONS REQUIRED**  
 1. Footings Prior to Placing Concrete  
 2. Wall Steel Prior to Grouting  
 3. Final Inspection After Completion

6 CONSTRUCT SIDEWALK RAMP PER STD DWG 235 (TYPE PER PLAN)

7 CONSTRUCT SIDEWALK UNDER DRAIN PER STD DWG 236

16 CONSTRUCT C. M. U. FENCE PER STD B-102

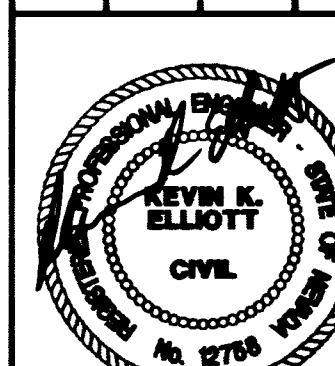
**LAURICH PROPERTIES, INC. (K-MART #9389)**  
 2500 WEST SAHARA AVENUE, SUITE 211  
 LAS VEGAS, NEVADA 89102  
 (702) 220-4500

**AGRA infrastructure inc.**  
 ENGINEERING GLOBAL SOLUTIONS  
 CHARLESTON BOULEVARD, SUITE 180  
 3016 W. LAS VEGAS, NEVADA 89102  
 PHONE: (702) 878-3617 FAX: (702) 878-3716

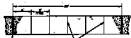
**STANDARD DETAIL SHEET**

**K-MART #9389**  
 7500 BLOCK OF WASHINGTON AVENUE  
 300' EAST OF BUFFALO DRIVE  
 CITY OF LAS VEGAS

**DESIGNED BY:** [Signature]  
**CHECKED BY:** [Signature]  
**PROJECT NO.:** 02-1989-130  
**SCALE:** 1"=40'



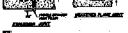
15 OF 17 SHEETS  
 DRAWING NO. 107-V3110



1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL

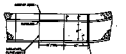


1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL

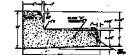


1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL

② CONCRETE WALL PER FIG. 200 AND 201

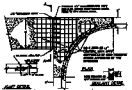


1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL



1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL

③ CONCRETE WALL PER FIG. 202 AND 203

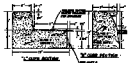


1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL



1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL

④ CONCRETE WALL PER FIG. 204 AND 205



1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL



1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL

⑤ CONCRETE WALL PER FIG. 206 AND 207



1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL

⑥ CONCRETE WALL PER FIG. 208 AND 209 (TYPE PER PLAN)

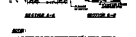
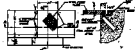
NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE WALL		
2	CONCRETE WALL		
3	CONCRETE WALL		
4	CONCRETE WALL		
5	CONCRETE WALL		
6	CONCRETE WALL		
7	CONCRETE WALL		
8	CONCRETE WALL		
9	CONCRETE WALL		
10	CONCRETE WALL		

FIG. 1. CONCRETE WALL PER FIG. 208 AND 209

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE WALL		
2	CONCRETE WALL		
3	CONCRETE WALL		
4	CONCRETE WALL		
5	CONCRETE WALL		
6	CONCRETE WALL		
7	CONCRETE WALL		
8	CONCRETE WALL		
9	CONCRETE WALL		
10	CONCRETE WALL		

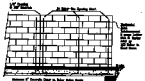
FIG. 2. CONCRETE WALL PER FIG. 208 AND 209

FIG. 3. CONCRETE WALL PER FIG. 208 AND 209



1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL

⑦ CONCRETE WALL PER FIG. 210 AND 211



1. 4" MIN. THICKNESS OF CONCRETE SLAB ON TOP OF WALL  
2. 4" MIN. THICKNESS OF CONCRETE SLAB ON BOTTOM OF WALL  
3. 4" MIN. THICKNESS OF CONCRETE SLAB ON SIDE OF WALL

⑧ CONCRETE WALL PER FIG. 212 AND 213

AGRA ENGINEERING, Inc.  
1000 N. 17th St., Phoenix, Arizona 85016  
Tel. 254-1211

STANDARD DETAIL SHEET  
CONCRETE WALL PER FIG. 200 AND 201

FIG. 1. CONCRETE WALL PER FIG. 208 AND 209

FIG. 2. CONCRETE WALL PER FIG. 208 AND 209

FIG. 3. CONCRETE WALL PER FIG. 208 AND 209