

**CITY OF COLTON  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION**



**CITY OF COLTON  
STANDARD  
DRAWINGS  
( In Searchable PDF )**

**160 S 10<sup>TH</sup> STREET,  
COLTON, CA 92324  
(909) 370-5065 (909)370-5072 FAX**



**STANDARD DETAIL DRAWINGS  
DEPARTMENT OF PUBLIC WORKS/ ENGINEERING DIVISION**

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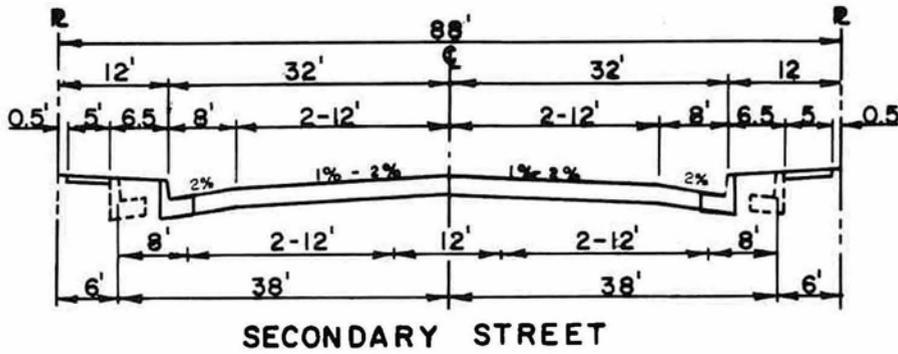
<u>NUMBER</u>	<u>TITLE</u>	<u>GROUP</u>
100	Standard Street Cross Sections	Street
101, 102	Special Street Cross Sections	Street
104	Alley Cross Sections	Street
105	Alley Intersection	Street
103	Cul de Sac & Knuckle	Street
114	Street Barricade	Misc- Street
115	Berms & Raised Bar	Misc- Street
125, 125A	Paddle Marker	Misc- Street
127	Sidewalk Jog for Fire Hydrants	Misc- Street
122	Recommended Utility Location	Misc- Street
123	Standard Street Name Sign	Misc- Street
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107	Traffic Island Curb & Gutter	Gutter
112	Cross Gutter	Gutter
113	Slotted Cross Gutter	Gutter
108	Sidewalk Details & Intersections	Sidewalk
109	Expansion Joints and Scoring Lines	Sidewalk
120	Sidewalk Details at Intersection, Ramp Ways	Sidewalk
110, 110A	Residential Driveways	Driveways
111	Commercial Driveways	Driveways
119	Standard Driveway Profiles for Curb Sidewalk	Driveways
124	Standard Trench Repair	Trench
201	Standard Pipe Bedding in Trenches	Trench
202	Alternate Pipe Bedding in Trenches	Trench
128	Sidewalk Drain	Drain
128A	Sidewalk Drain	Drain
128B	Sidewalk Drain	Drain
208	Parking Lot Drain	Drain
209	Drainage Manhole Details	Misc- Drainage
206	Intersection Culverts	Misc- Drainage



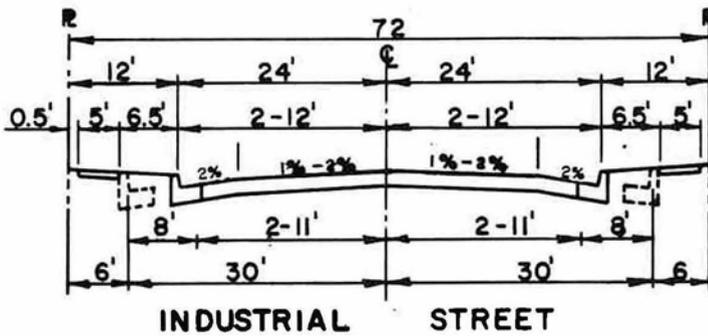
**STANDARD DETAIL DRAWINGS  
DEPARTMENT OF PUBLIC WORKS/ ENGINEERING DIVISION**

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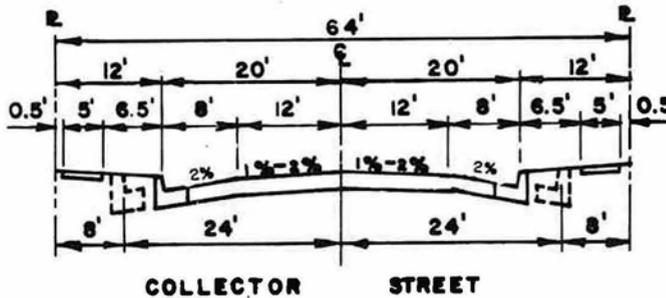
<u>NUMBER</u>	<u>TITLE</u>	<u>GROUP</u>
200	Standard Curb Inlet Catch Basin	Catch Basin
203	Detail of Catch Basin Openings	Catch Basin
204, 205	Special Connections to Catch Basin	Catch Basin
207	Drop Inlet Catch Basins	Catch Basin
116	Garden Wall Details	Garden Wall
116A	Garden Wall Details with Pilaster	Garden Wall
118	Retaining Wall 4 ft and 5 ft Maximum Height	Retaining Wall
118A	Retaining Wall 3 ft and 6 ft Maximum Height	Retaining Wall
118B	Retaining Wall 7 ft Maximum Height	Retaining Wall
118C	Retaining Wall 8 ft Maximum Height	Retaining Wall
126	City of Colton Title Block	Others
121	Standard Refuse Bin Enclosure	Others
117	Earthquake and Wind-Resistant Construction	Others



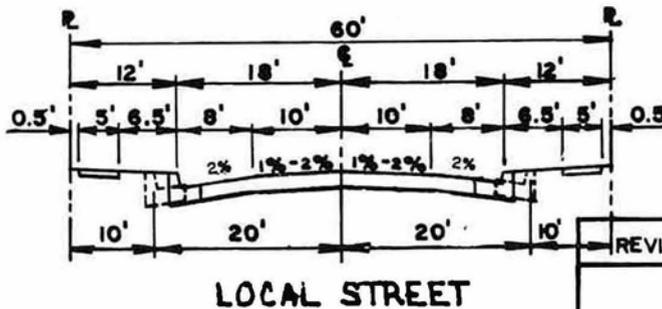
Pavement may be widened as shown to provide a left turn lane.



Pavement may be widened to 4-11' lanes + 2-8' parking strips.



Pavement may be widened to Industrial Street, without additional right of way.



Pavement may be widened to Collector Street without additional right of way.

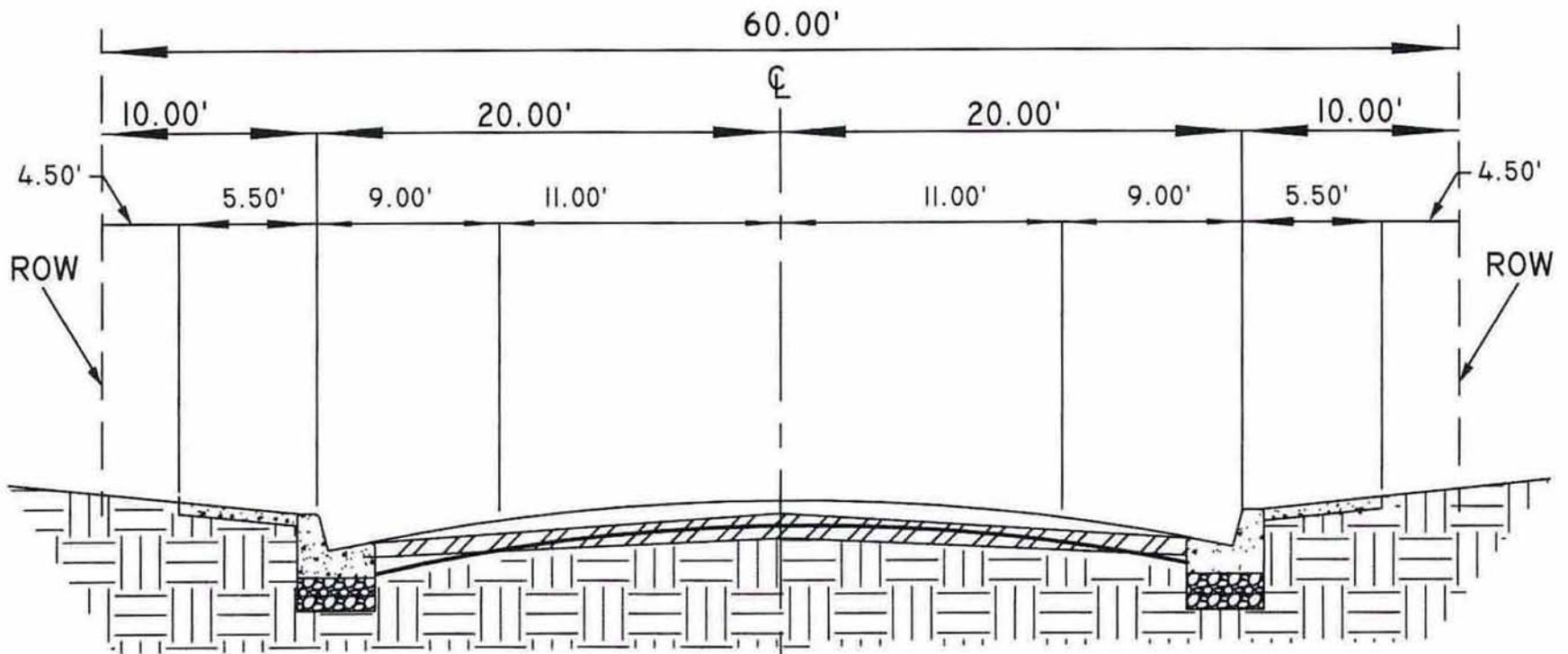
**NOTES:**

- 1. Broken line represents possible street widening without additional right of way.

Approved by Planning Director *[Signature]*

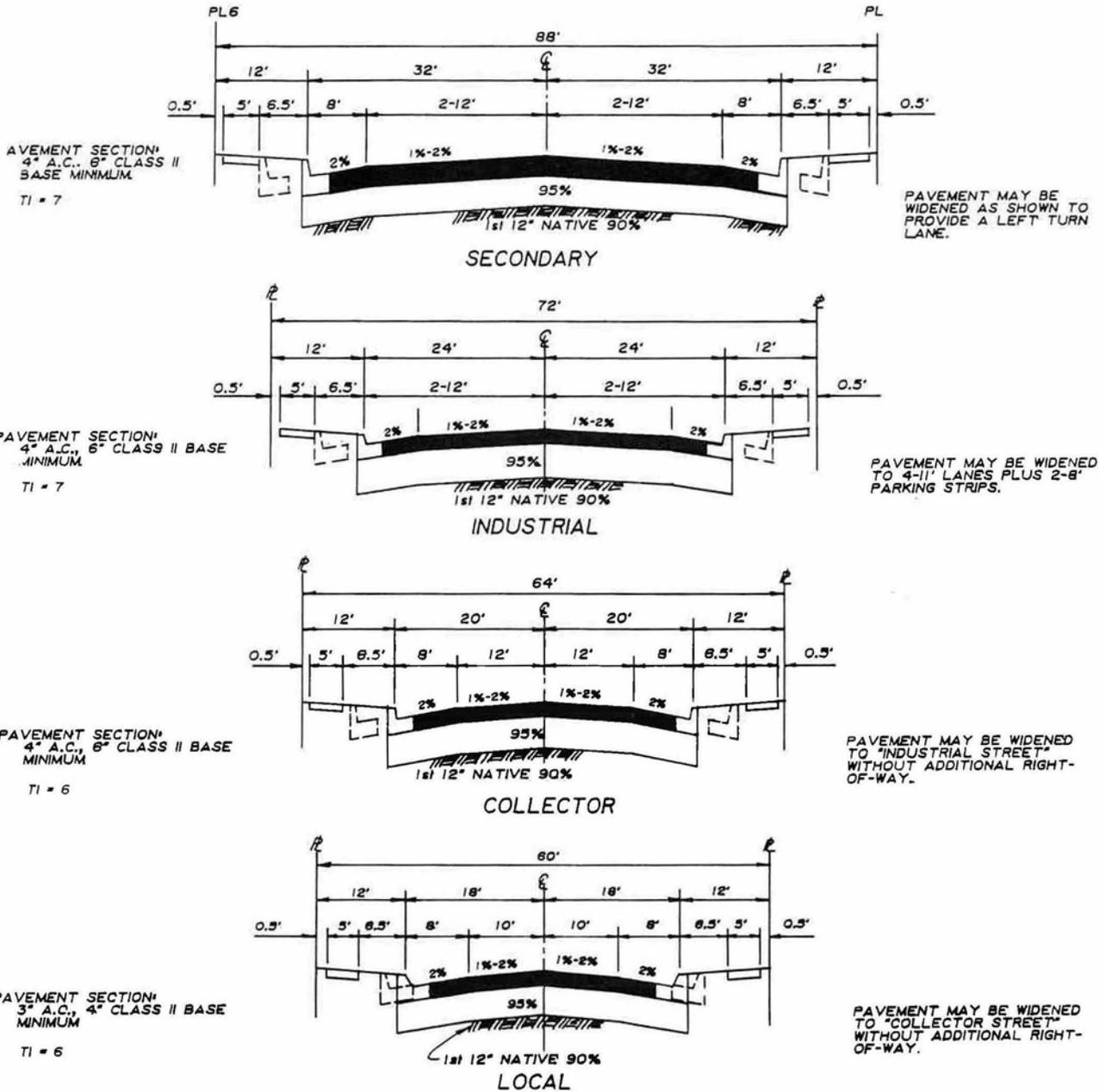
REVISION	REVISED CROSS SLOPES	3-17-88
	ADDED INDUSTRIAL STREET.	MAY 1964
	UPGRADED STREET SECTIONS	10-79

<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>		
<b>STANDARD STREET CROSS SECTIONS</b>		
DRAWN BY G. ATKINS	SCALE N.T.S	DRAWING NO. 100
CHK'D <i>[Signature]</i>	DATE OCT. 1963	
APP'D <i>[Signature]</i>		



# LOCAL STREET

<b>CITY OF COLTON</b>			
ENGINEERING DEPARTMENT			
<b>TYPICAL LOCAL STREET SECTION</b>			
DRAWN BY:	R TORRES	SCALE	N.T.S.
CHECKED BY:		DATE	NOVEMBER 1, 2004
APPROVED BY:			DRAWING No.



**NOTES:**

1. BROKEN LINE REPRESENTS POSSIBLE STREET WIDENING WITHOUT ADDITIONAL RIGHT-OF-WAY.
2. ASPHALT DENSITY 95% PER STANDARD SPECIFICATIONS SEC. 302-5.5.2
3. CLASS II BASE DENSITY 95% OR GREATER.
4. TOP 12" NATIVE 90% DENSITY.
5. ASPHALT MIX DESIGN PER CITY ENGINEER APPROVAL.
6. STRUCTURAL ANALYSIS REQUIRED FOR ALL PUBLIC STREETS. THESE SPECIFICATIONS ARE MINIMUMS.

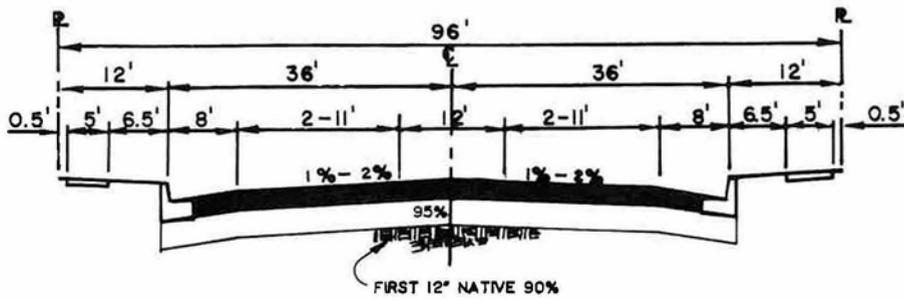
STRUCTURAL MINIMUMS	3-23-88	<i>B. J. [Signature]</i>
REVISIONS	DATE	APPROVED

**CITY OF COLTON**  
 PUBLIC WORKS DEPT: JOHN C. HUTTON, DIR.

**STRUCTURAL MINIMUMS/  
 STREET CROSS SECTIONS**

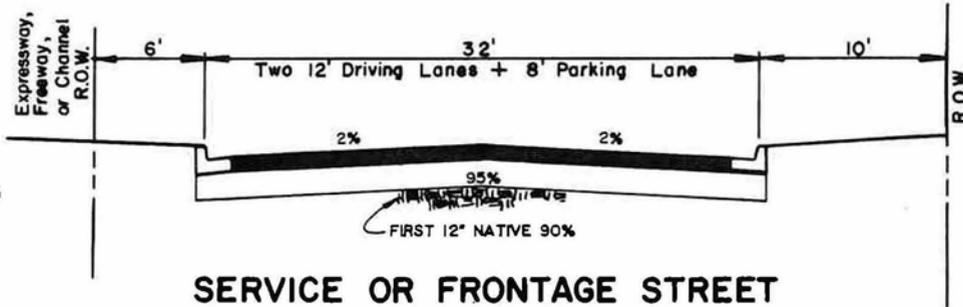
DRAWN BY: <i>R.E.W.</i>	SCALE: <i>N.T.S.</i>	DRAWING NO.  <b>102</b>
CHECKED BY:	DATE: <i>FEB. 1, 1988</i>	
APPROVED BY: <i>[Signature]</i> CITY ENGINEER R.C.E. 13440		

PAVEMENT SECTION  
 4" A.C. 6" CLASS II  
 BASE MINIMUM  
 TI = 7



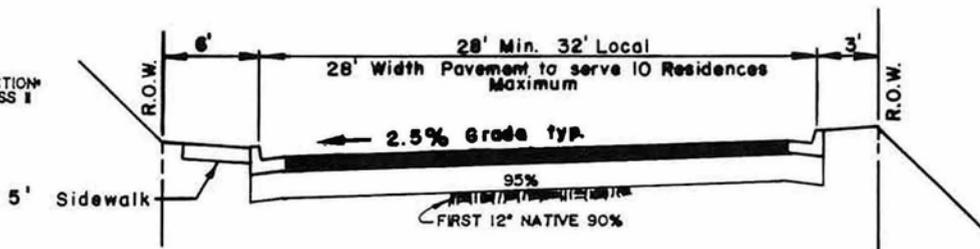
MAJOR STREET

PAVEMENT SECTION  
 4" A.C. 6" CLASS II  
 BASE MINIMUM  
 TI = 7



SERVICE OR FRONTAGE STREET

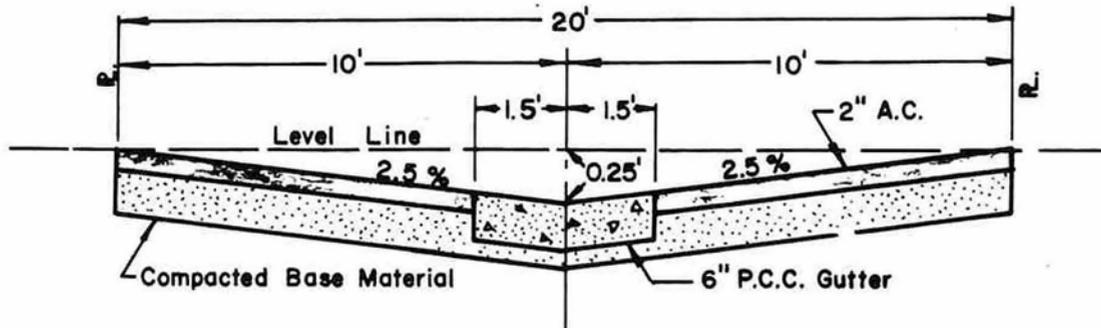
PAVEMENT SECTION  
 3" A.C. 4" CLASS II  
 BASE MINIMUM  
 TI = 6



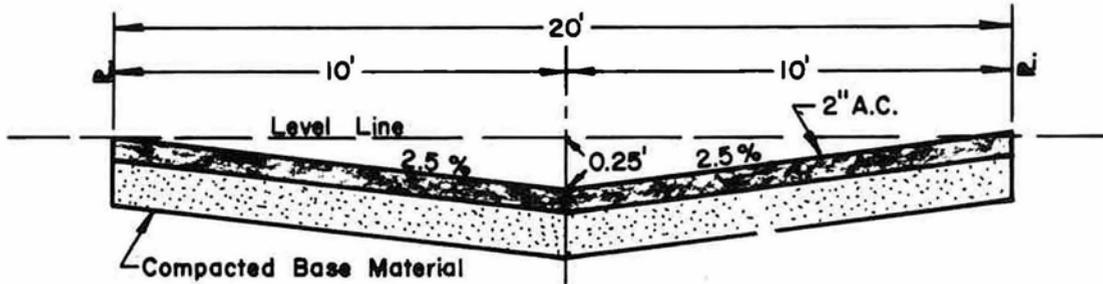
HILLSIDE SUBDIVISION STREET  
 (Minimum Design)

<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>		
<b>STRUCTURAL MINIMUMS/ STREET CROSS SECTIONS</b>		
DRAWN BY G. ATKINS	SCALE N.T.S.	DRAWING NO.  102
CHK'D <i>ONE</i>	DATE FEB. 1988	
APP'D <i>G. Bennett</i>		

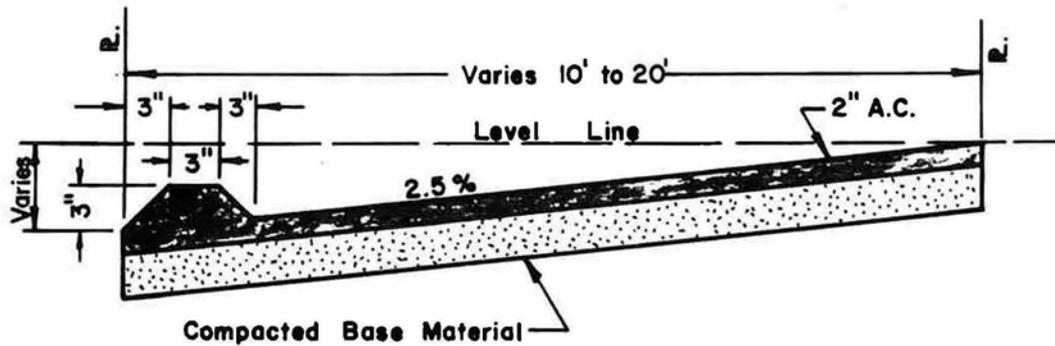




20' ALLEY WITH GRADES LESS THAN 2.00%



20' ALLEY WITH GRADES MORE THAN 2.00%



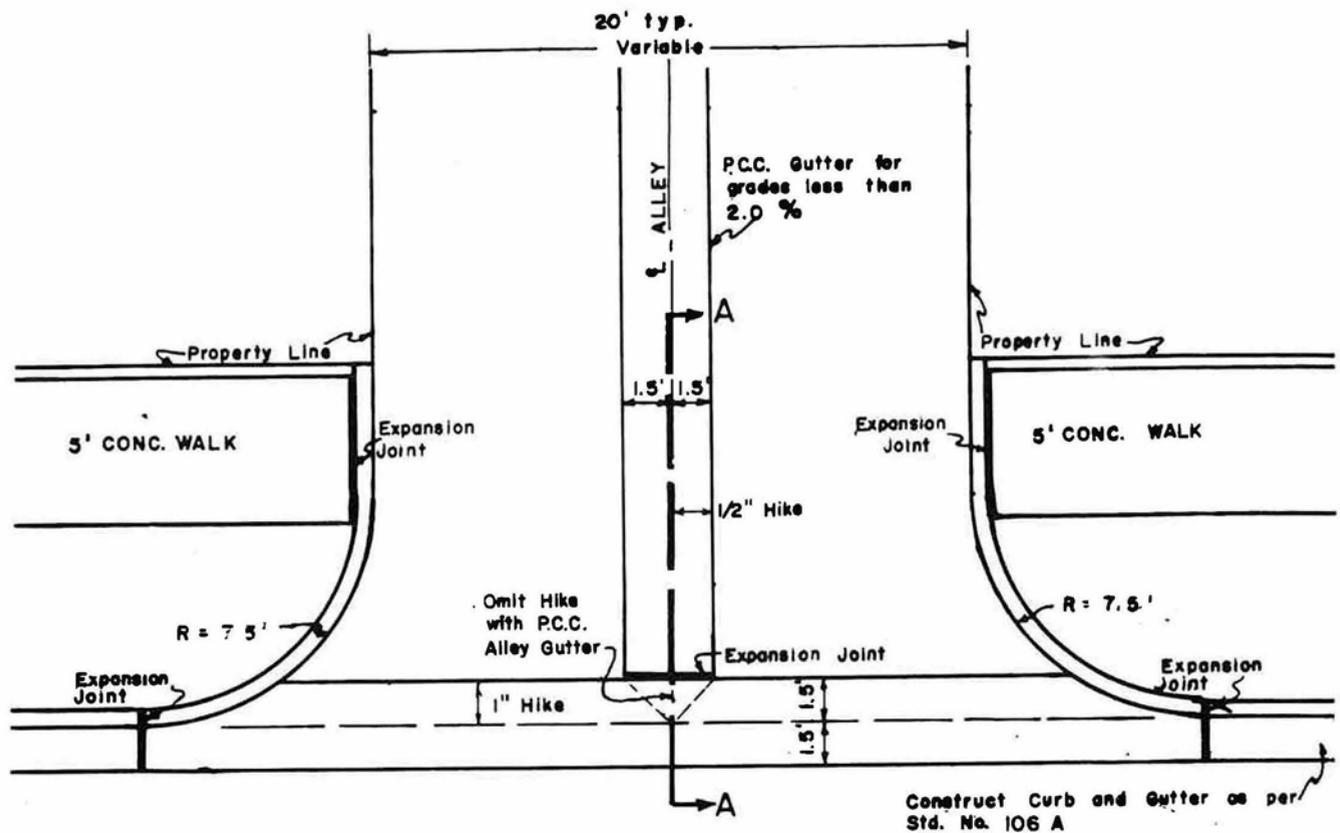
ALLEY LESS THAN 20'

**NOTES:**

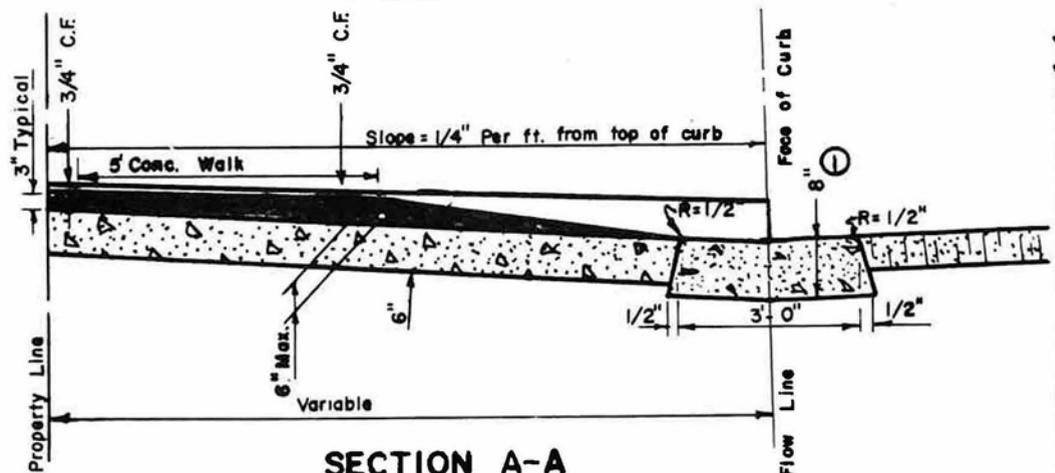
1. Thickness and Type of Base Material shall be as specified on plan. Native soil having R-Value of 70 or greater may be used if 6" thickness is scarified and recompacted.
2. Concrete for Valley gutter shall be Class "B" (5 Sock).
3. Design may provide for cross-fall on 20' Alley by having not greater than 5% cross-slope on one-half of alley and not less than 2% on the other half.

△ 4. Compaction shall be 90% Minimum

△ Added Note 7-19-92 Appd <i>[Signature]</i>		
<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>		
<b>STANDARD ALLEY CROSS SECTIONS</b>		
DRAWN BY G. ATKINS	SCALE N.T.S.	DRAWING NO.  104
CHK'D C. HOLMES	DATE OCT. 1962	
APP'D <i>[Signature]</i>		



PLAN



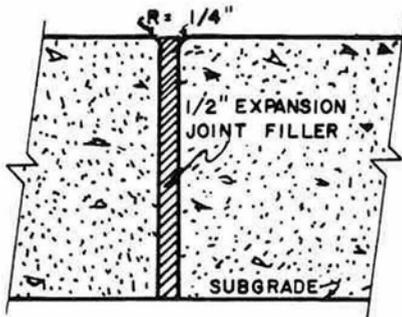
SECTION A-A

△ Compaction shall be 90% Minimum

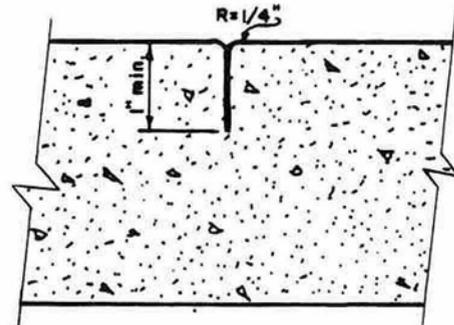
NOTE:

1. See Standard Drawing No. 104. for details and specifications not shown hereon.
2. Gutter shall be Class "B" concrete (5 sack)
3. Weakened Plane Joints shall be installed at 10' intervals.
4. Expansion joint of 1/2" asphaltic felt compound shall be installed at 50' intervals.

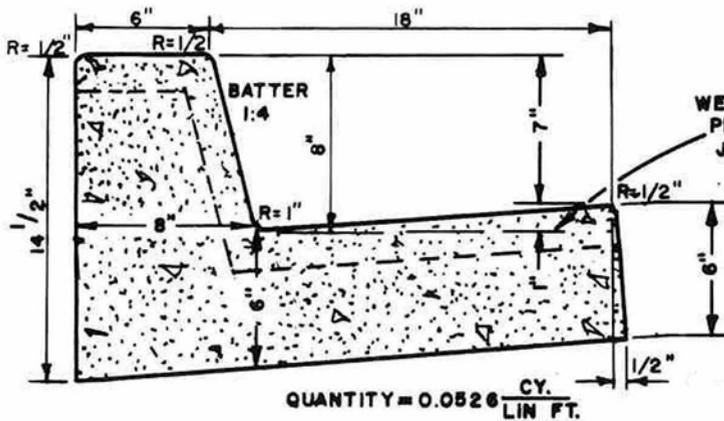
① Revised by R.C. 9/9/74 APP'D <i>[Signature]</i>			
<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>			
<b>ALLEY INTERSECTION</b>			
DRAWN BY	J.H.W.	SCALE	N.T.S.
CHKD.	<i>[Signature]</i>	DATE	AUGUST 1963
APPD.	<i>[Signature]</i>		DRAWING NO.
			<b>105</b>



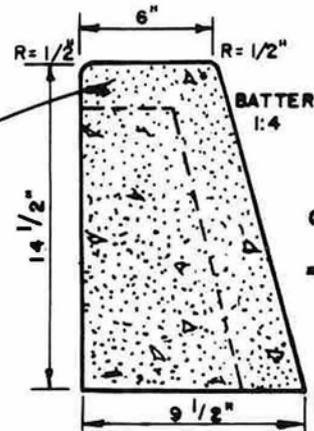
EXPANSION JOINT DETAIL



WEAKENED PLANE JOINT DETAIL



QUANTITY = 0.0526  $\frac{\text{CY.}}{\text{LIN FT.}}$



QUANTITY =  
= 0.0289  $\frac{\text{CY.}}{\text{LIN FT.}}$

CROSS SECTIONS

NOTE:

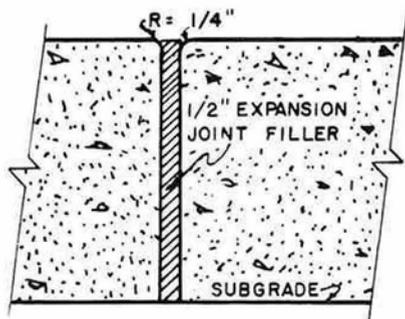
1. See Standard drawing 109 for details and location of joints.
2. Concrete to be class B (5 sack).
3. Minimum flow line grade of 0.4% to be maintained except where otherwise approved by the City Engineer.
4. Expansion joints of 1/2" asphaltic felt compound to be installed at all curb returns, on both sides of driveways and drainage structures, and at 50' intervals throughout the length of the curb and gutter.
5. Curb and Gutter typically shall have weakened plane joints at 10ft. intervals.
- △ 6. Compaction shall be 90% Minimum.

△ Added Note 7-15-92 Appd. *[Signature]*

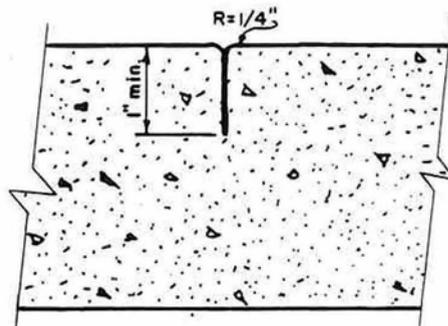
CITY OF COLTON  
PUBLIC WORKS DEPT.

8" CURB AND GUTTER

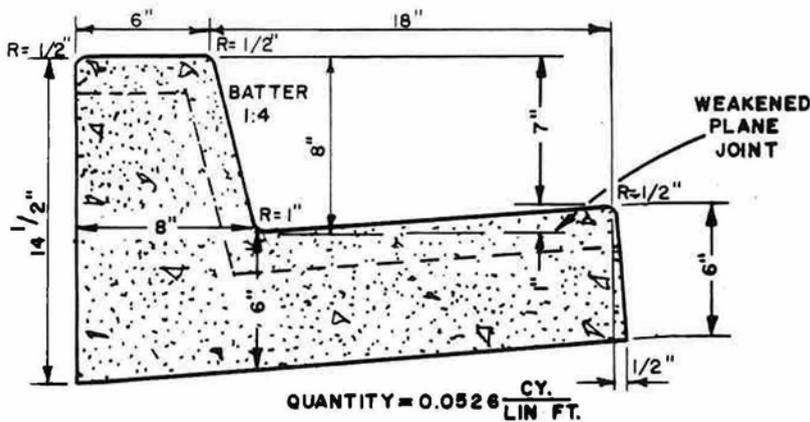
DRAWN BY JHW	SCALE N.T.S.	DRAWING NO. 106
CHK'D. <i>[Signature]</i>	DATE AUGUST 1963	
APP'D. <i>[Signature]</i>		



EXPANSION JOINT DETAIL



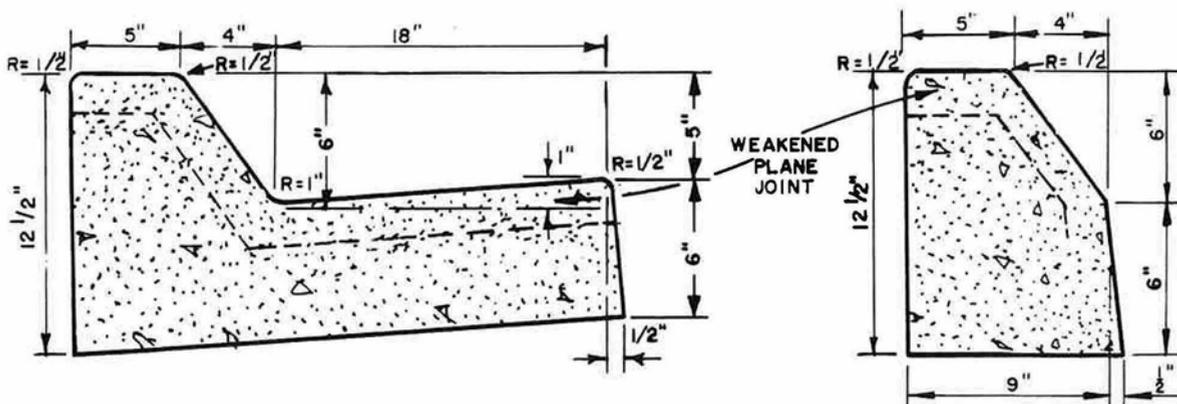
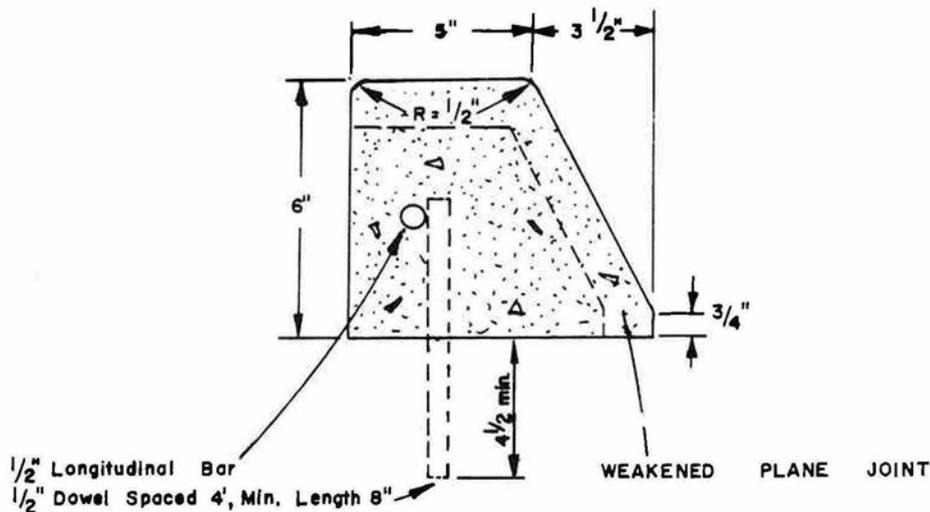
WEAKENED PLANE JOINT DETAIL



CROSS SECTIONS

- NOTE:
1. See Standard drawing 109 for details and location of joints.
  2. Concrete to be class B (5 sack).
  3. Minimum flow line grade of 0.4% to be maintained except where otherwise approved by the City Engineer.
  4. Expansion joints of 1/2" asphaltic felt compound to be installed at all curb returns, on both sides of driveways and drainage structures, and at 50' intervals throughout the length of the curb and gutter.
  5. Curb and Gutter typically shall have weakened plane joints at 10ft. intervals.
  6.  $\Delta$  Compaction shall be 90% Minimum.

$\Delta$ Added Note 7-15-92 Appd <i>[Signature]</i>			
CITY OF COLTON PUBLIC WORKS DEPT.			
8" CURB AND GUTTER			
DRAWN BY	J.H.W.	SCALE	N.T.S.
CHK'D.	<i>[Signature]</i>	DATE	AUGUST 1963
APP'D.	<i>[Signature]</i>		DRAWING NO. 106A



### CROSS SECTIONS

NOTE:

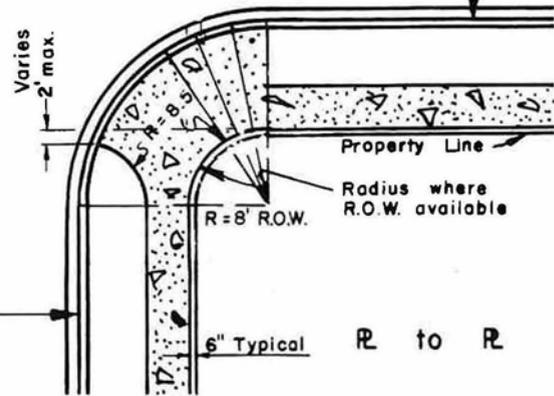
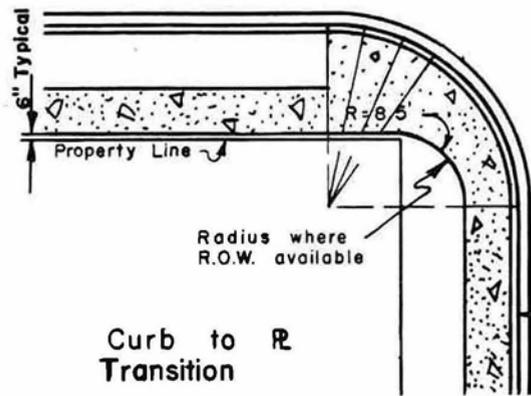
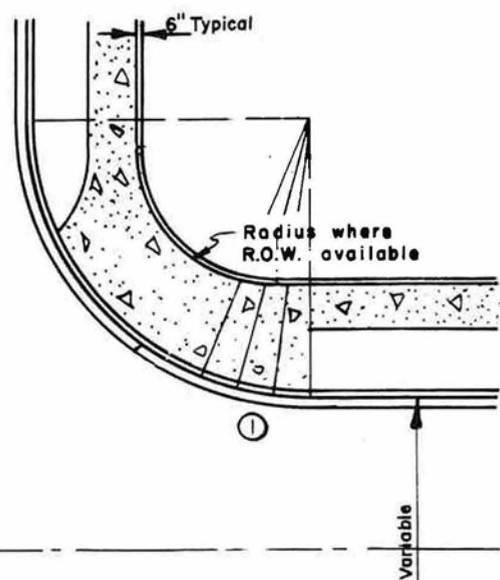
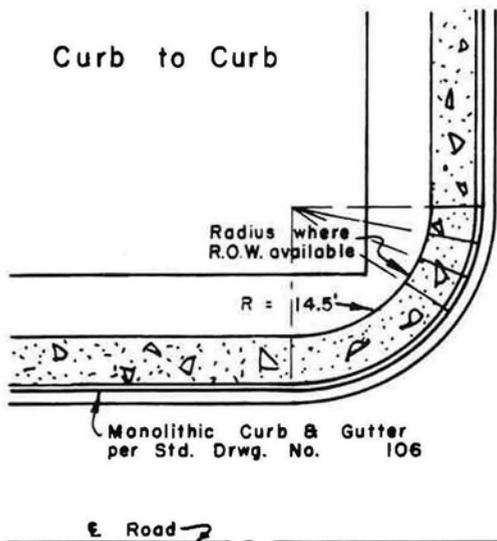
1. See Standard drawings 106 and 109 for details and location of joints.
2. Concrete to be class B (5 sack).
3. Minimum flow line grade of 0.4% to be maintained except where otherwise approved by City Engineer.
4. Expansion joints of  $\frac{1}{2}$ " asphaltic felt compound to be installed at all curb returns, on both sides of driveways and drainage structures, and at 50ft. intervals throughout the length of the curb and gutter.
5. Curb and Gutter typically shall have weakened plane joints at 10ft. intervals.
- △ 6. Compaction shall be 90% Minimum.

△ Added Note 7-15-92 App'd *HSE*

CITY OF COLTON  
PUBLIC WORKS DEPT.

TRAFFIC ISLAND  
CURB AND GUTTER

DRAWN BY	J.H.W.	SCALE	N.T.S.	DRAWING NO.
CHK'D.	<i>DAB</i>	DATE	AUGUST 1963	
APPD.	<i>b. Alan Wilson</i>			107



SPECIAL CONSTRUCTION

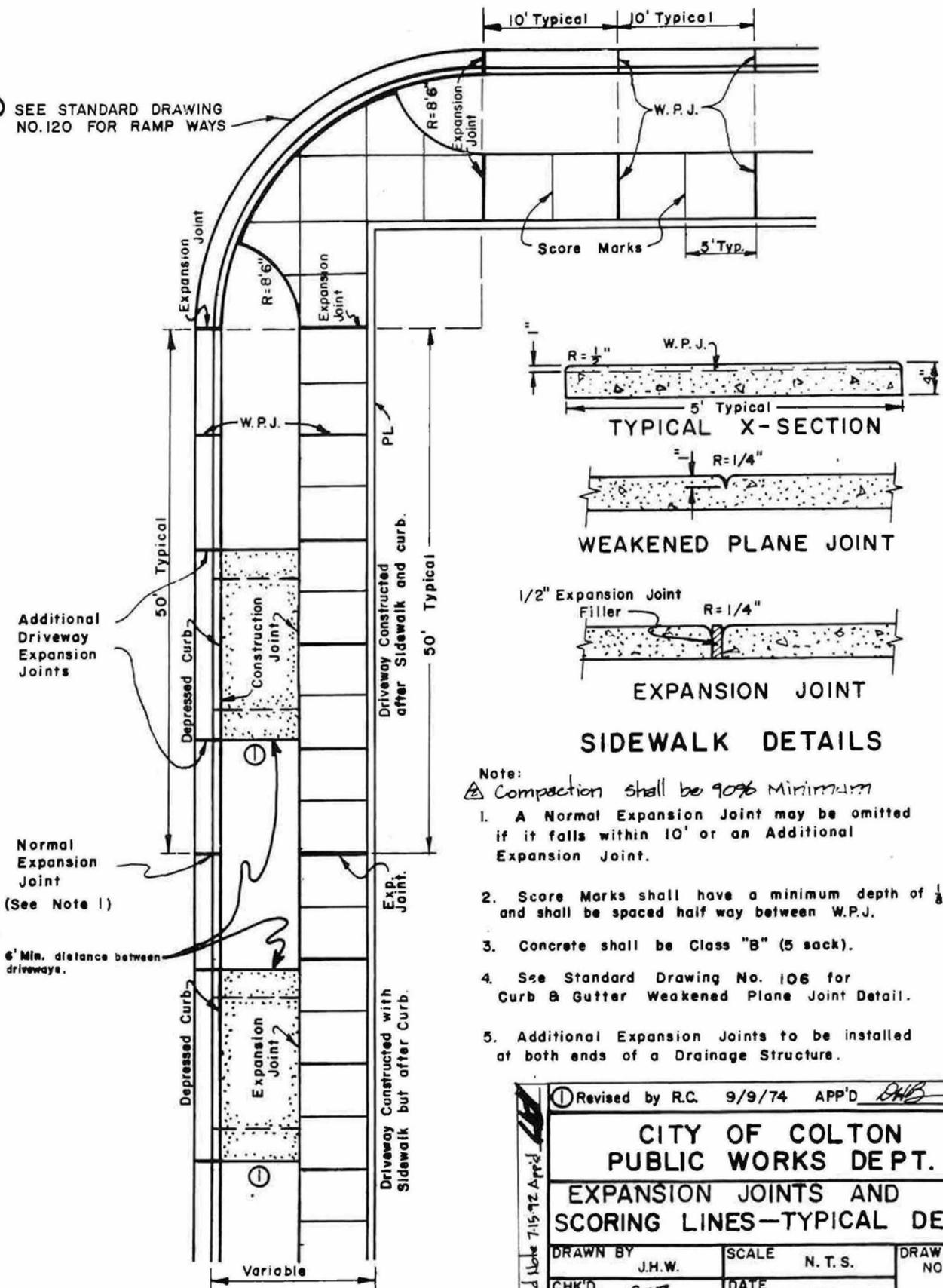
STANDARD CONSTRUCTION

NOTES

1. Curb Radius is to face of curb and equals 20' except where otherwise approved by City Engineer.
2. See Standard Drawing No. 109 for Expansion Joints and Scoring Details.
3. Sidewalk to be 5' wide except as approved by the City Engineer.
- ⓪ 4. See Standard Drawing No. 120 for Ramp Ways.
- ⚠ 5. Compaction Shall be 90% Minimum.

⚠ Added Note 7-15-92 App'd <i>[Signature]</i>		
⓪ Revised by R.C. 9/9/74 APP'D <i>[Signature]</i>		
<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>		
<b>SIDEWALK DETAILS AT INTERSECTIONS</b>		
DRAWN BY J.H.W.	SCALE N.T.S.	DRAWING NO. 108
CHKD. <i>[Signature]</i>	DATE AUGUST 1963	
APPD. <i>[Signature]</i>		

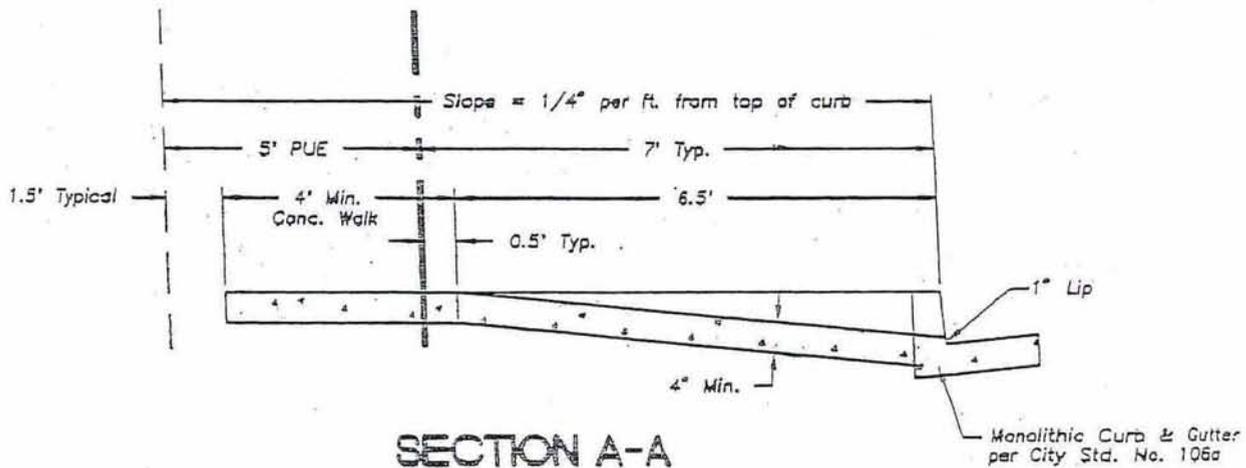
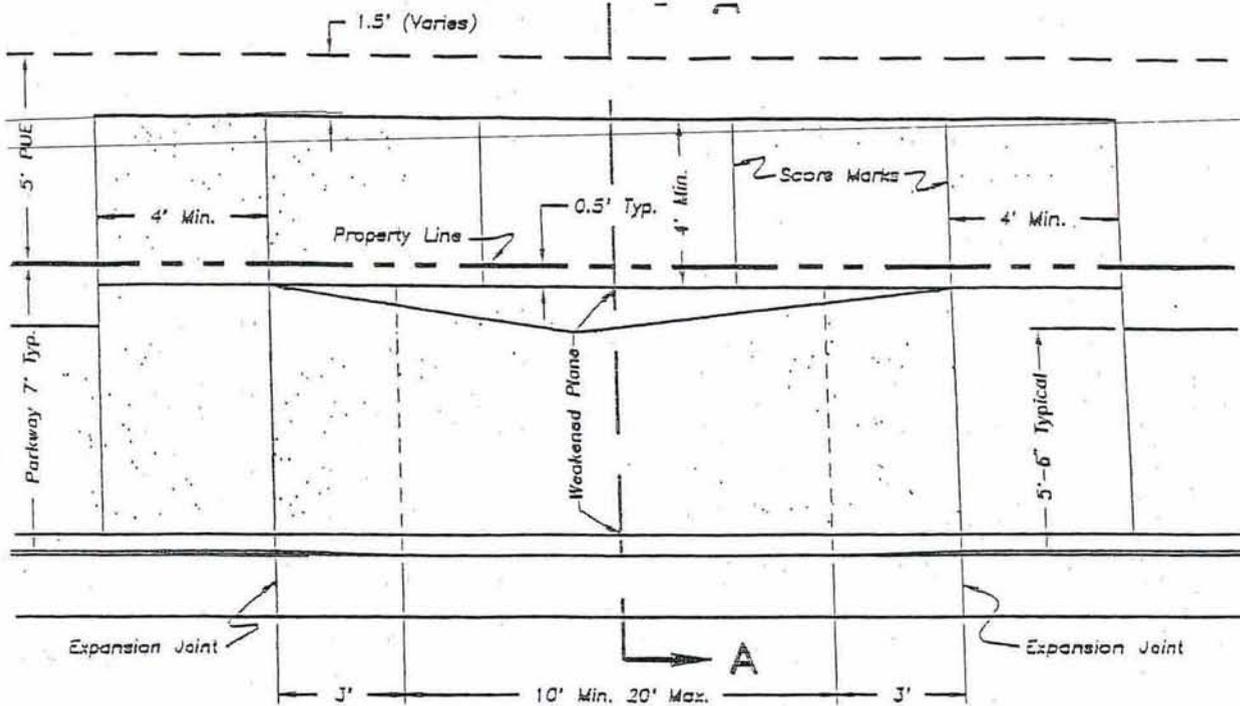
① SEE STANDARD DRAWING NO. 120 FOR RAMP WAYS



**SIDEWALK DETAILS**

- Note:
- ① *Compaction shall be 90% minimum*
  1. A Normal Expansion Joint may be omitted if it falls within 10' or an Additional Expansion Joint.
  2. Score Marks shall have a minimum depth of  $\frac{1}{8}$ " and shall be spaced half way between W.P.J.
  3. Concrete shall be Class "B" (5 sack).
  4. See Standard Drawing No. 106 for Curb & Gutter Weakened Plane Joint Detail.
  5. Additional Expansion Joints to be installed at both ends of a Drainage Structure.

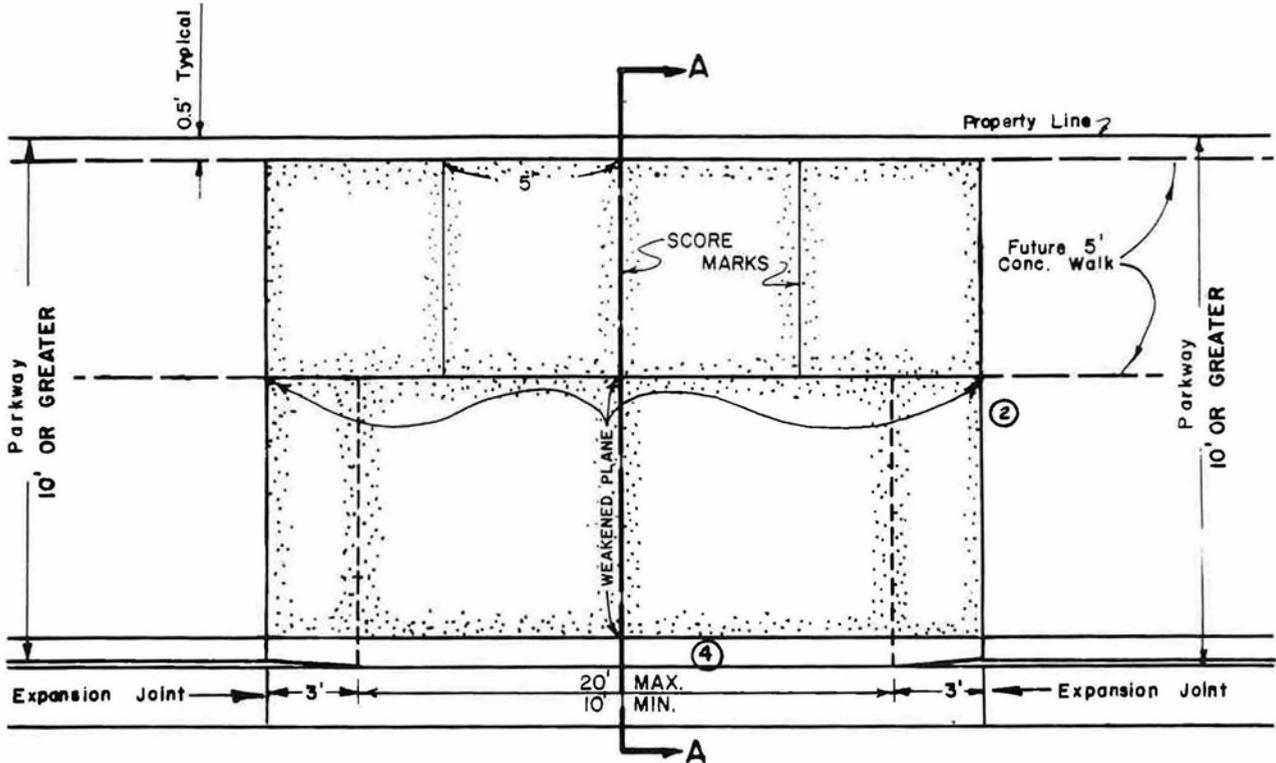
Added Note 7-15-72 App'd	① Revised by R.C. 9/9/74 APP'D <i>DAB</i>		
	<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>		
	<b>EXPANSION JOINTS AND SCORING LINES—TYPICAL DET.</b>		
	DRAWN BY J.H.W.	SCALE N. T. S.	DRAWING NO.
	CHK'D. <i>DAB</i>	DATE AUGUST 1963	109
APP'D. <i>b. Glenn Wilson</i>			



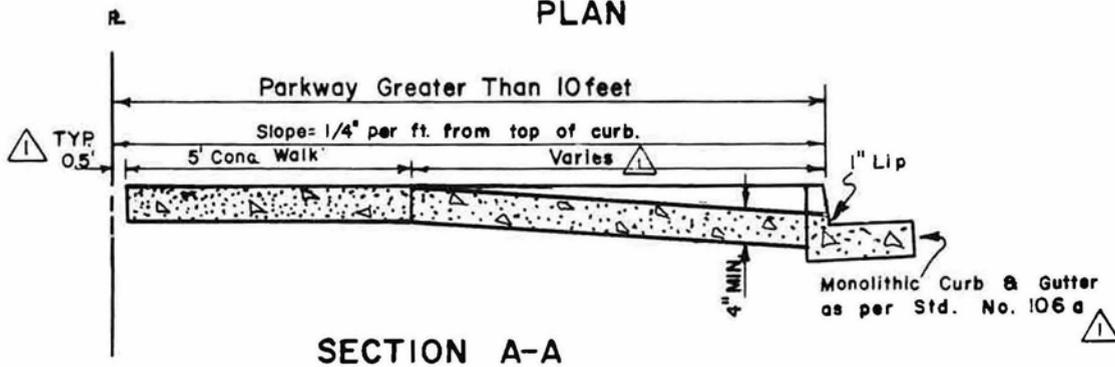
**NOTES:**

1. See Standard Drawing No. 109 for details and specifications not shown hereon.
2. Driveway to be class 520-C-2500 Portland Cement Concrete.
3. Weakened Plane to be constructed as shown.
4. Driveway to be located a minimum of 3ft. from the side property line.
5. Depressed curb may be saw cut subject to City Engineer's approval.

<b>CITY OF COLTON</b>		
PUBLIC WORKS DEPT. JOHN HUTTON DIR.		
<b>RESIDENTIAL DRIVEWAYS</b>		
CURB SIDEWALK (PARKWAY LESS THAN 10 FT.)		
DRAWN BY:	SCALE:	DRAWING NO.
C. WARRICK	Not To Scale	<b>110-B</b>
CHECKED BY:	DATE:	
TRW	June 19, 1996	
APPROVED BY:	 CITY ENGINEER R.C.E. 13240	



PLAN



SECTION A-A

⚠️ COMPACTION SHALL BE 90% MINIMUM

NOTE:

1. See Standard Drawing No. 109. for details and specifications not shown hereon.
2. Driveway to be class "B" Portland Cement Concrete (5 Sack).
3. Weakened Plane to be constructed as shown.

③ 4. Driveway to be located a minimum of 3ft. from the side property line.

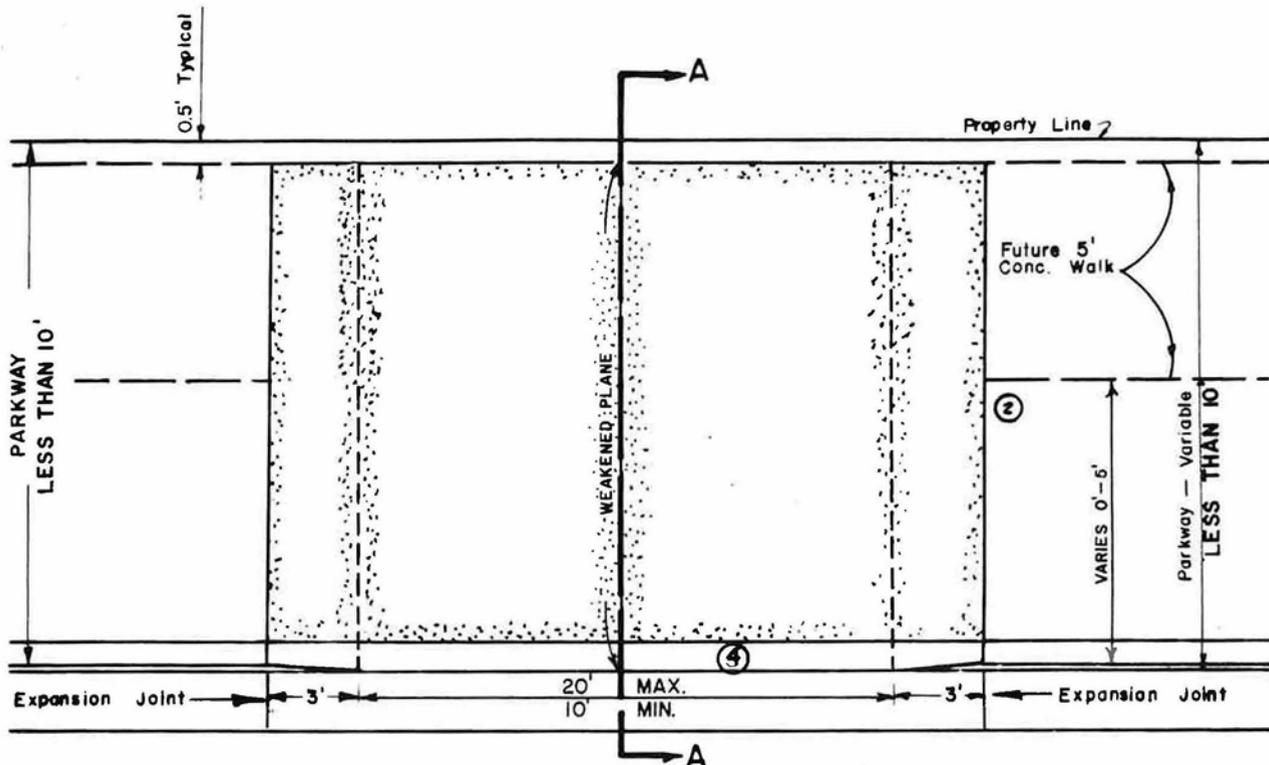
④ 5. Depressed curb may be saw cut subject to City Engineer's approval.

⚠️	Added Note 7-15-92 App'd	<i>[Signature]</i>
④	ADD NOTE (5) 4/13/88 App'd	<i>[Signature]</i>
⚠️	ADD NOTE BB 8/16/82 APP'D	<i>[Signature]</i>
②	Revised by R.C. 9/9/74 APP'D	<i>[Signature]</i>
⚠️	Rev. W.R.S. 1/11/67 APP'D	<i>[Signature]</i>

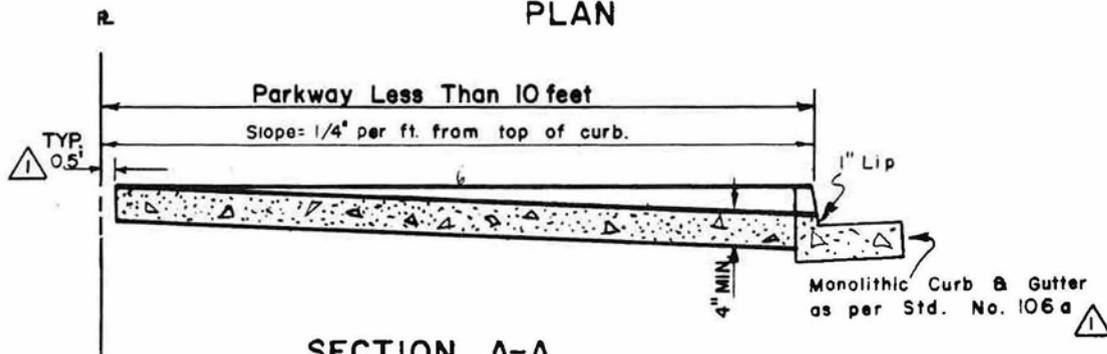
CITY OF COLTON  
PUBLIC WORKS DEPT.

RESIDENTIAL DRIVEWAYS  
PARKWAY 10 FT OR GREATER

DRAWN BY	J. H. W.	SCALE	N. T. S.	DRAWING NO.
CHKD.	<i>[Signature]</i>	DATE	AUGUST 1963	
APPD.	<i>[Signature]</i>			110



PLAN



⚠️ COMPACTION TO BE 90% MINIMUM

NOTE:

1. See Standard Drawing No. 109. for details and specifications not shown hereon.
2. Driveway to be class "B" Portland Cement Concrete (5 Sack).
3. Weakened Plane to be constructed as shown.
- ⚠️ 4. Driveway to be located a minimum of 3ft. from the side property line.
- ④ 5. Depressed curb may be saw cut subject to City Engineer's approval.

⚠️ Added Note 7-15-92 App'd <i>WRS</i>		
④ ADD NOTE (5) 4/13/88 App'd <i>WRS</i>		
⚠️ ADD NOTE. B.B. 8/6/82 APP'D <i>WRS</i>		
② Revised by R.C. 9/9/74 APP'D <i>WRS</i>		
Rev. 1/10/67 WRS ⚠️ APP'D. <i>WRS</i>		
<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>		
<b>RESIDENTIAL DRIVEWAYS PARKWAY LESS THAN 10 FT. ⚠️</b>		
DRAWN BY J. H. W.	SCALE N. T. S.	DRAWING NO.
CHK'D. <i>WRS</i>	DATE AUGUST 1963	<b>110-A</b>
APP'D. <i>b. Stewart Wilson</i>		

NOTE: 1. All commercial driveways to be 6" thick.

2. See Std. Dwg. No. 109 for details and spec. not shown hereon.

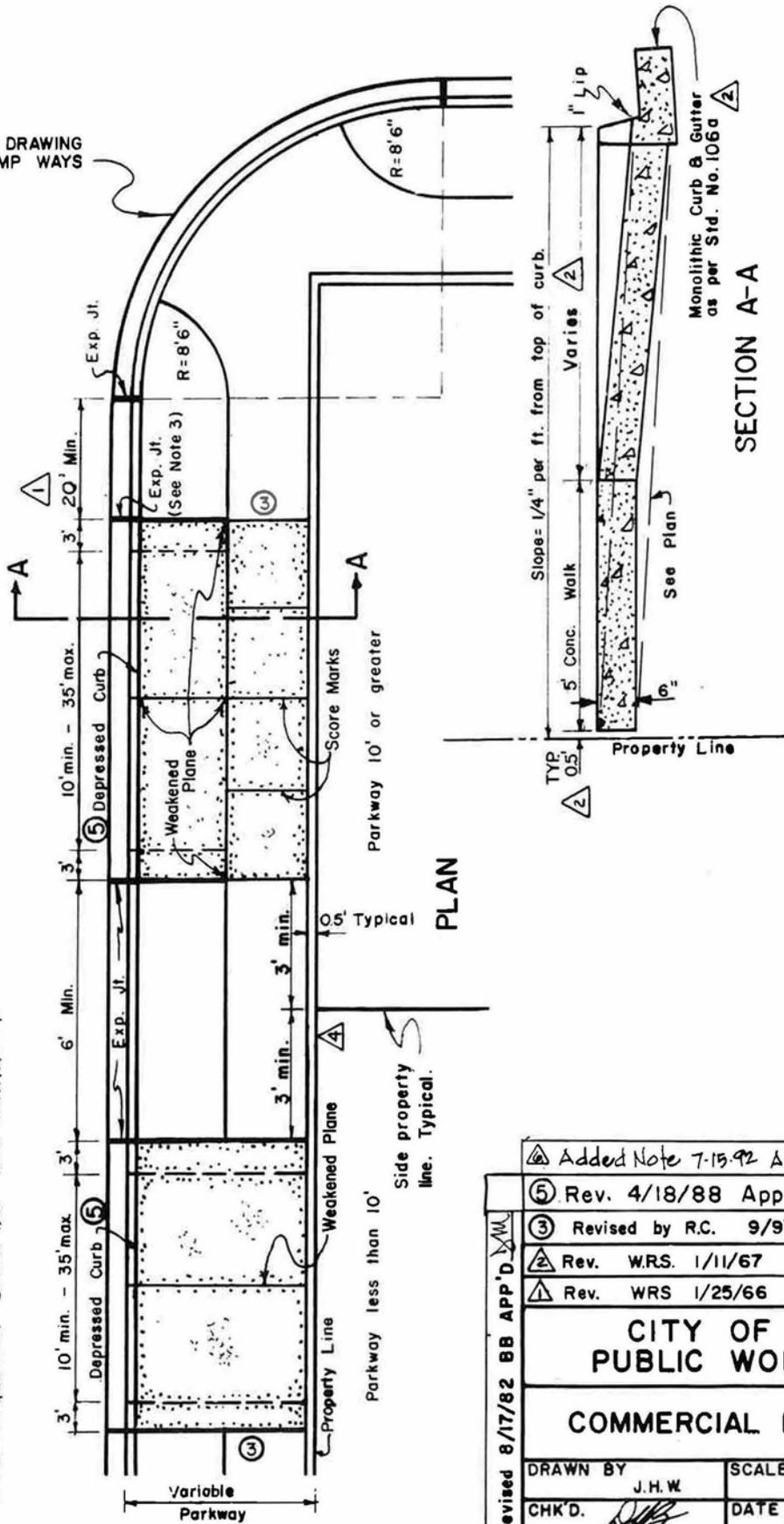
3. An additional Expansion Joint may be omitted if it falls within 10' of a Curb Return Expansion Joint.

4. Min. side property line offset 3'-0".

5. Depressed curb may be saw cut subject to City Engineer's approval.

6. Compaction shall be 90% Minimum.

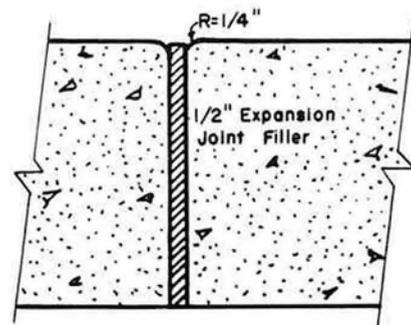
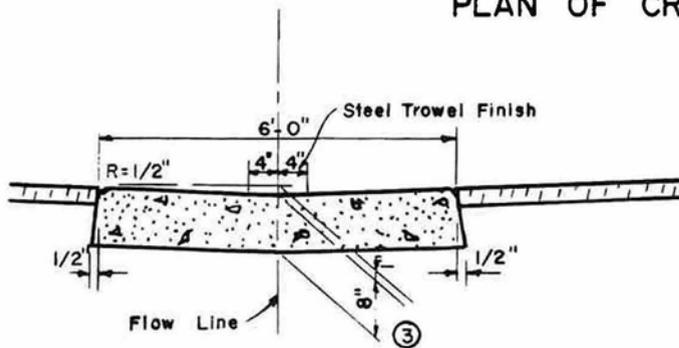
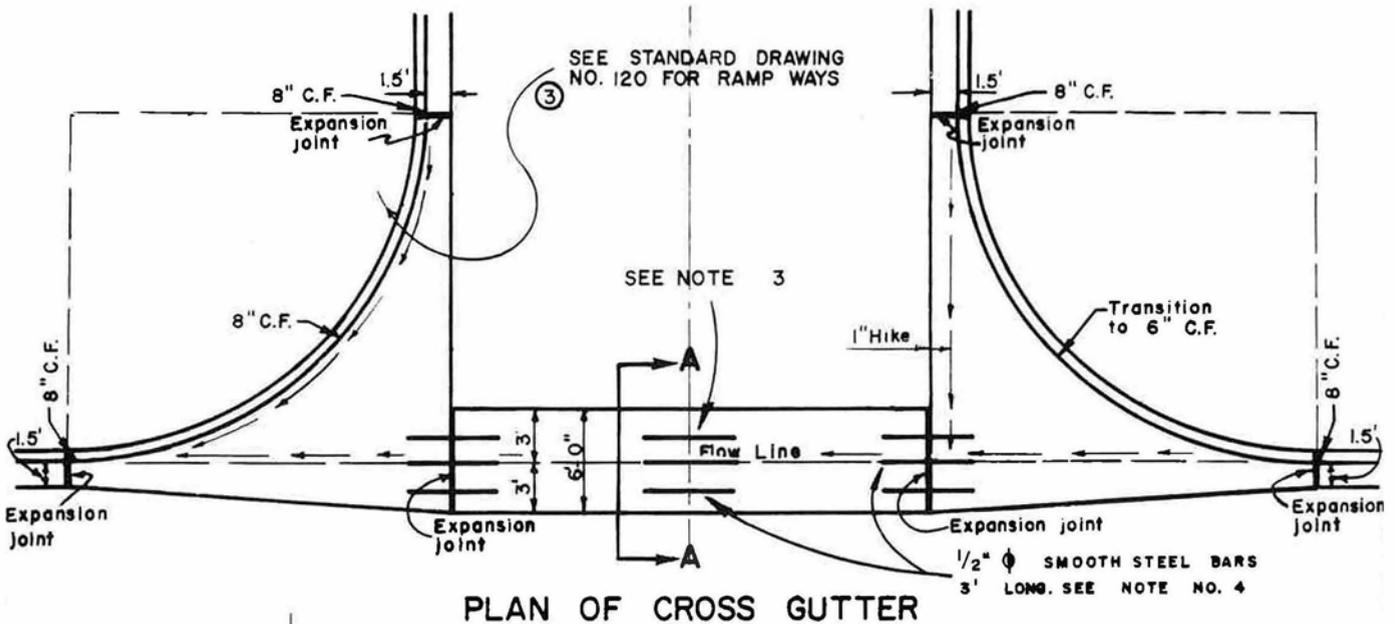
SEE STANDARD DRAWING NO. 120 FOR RAMP WAYS



PLAN

SECTION A-A

Added Note 7-13-92 App'd	<i>[Signature]</i>
Rev. 4/18/88 App'd	<i>[Signature]</i>
Rev. by R.C. 9/9/74 APP'D	<i>[Signature]</i>
Rev. WRS. 1/11/67 APP'D	<i>[Signature]</i>
Rev. WRS 1/25/66 APP'D	<i>[Signature]</i>
<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>	
<b>COMMERCIAL DRIVEWAYS</b>	
DRAWN BY J.H.W.	SCALE N.T.S.
CHK'D. <i>[Signature]</i>	DATE AUGUST 1963
APP'D. <i>[Signature]</i>	
Revised 8/17/82 BB APP'D <i>[Signature]</i>	
	III

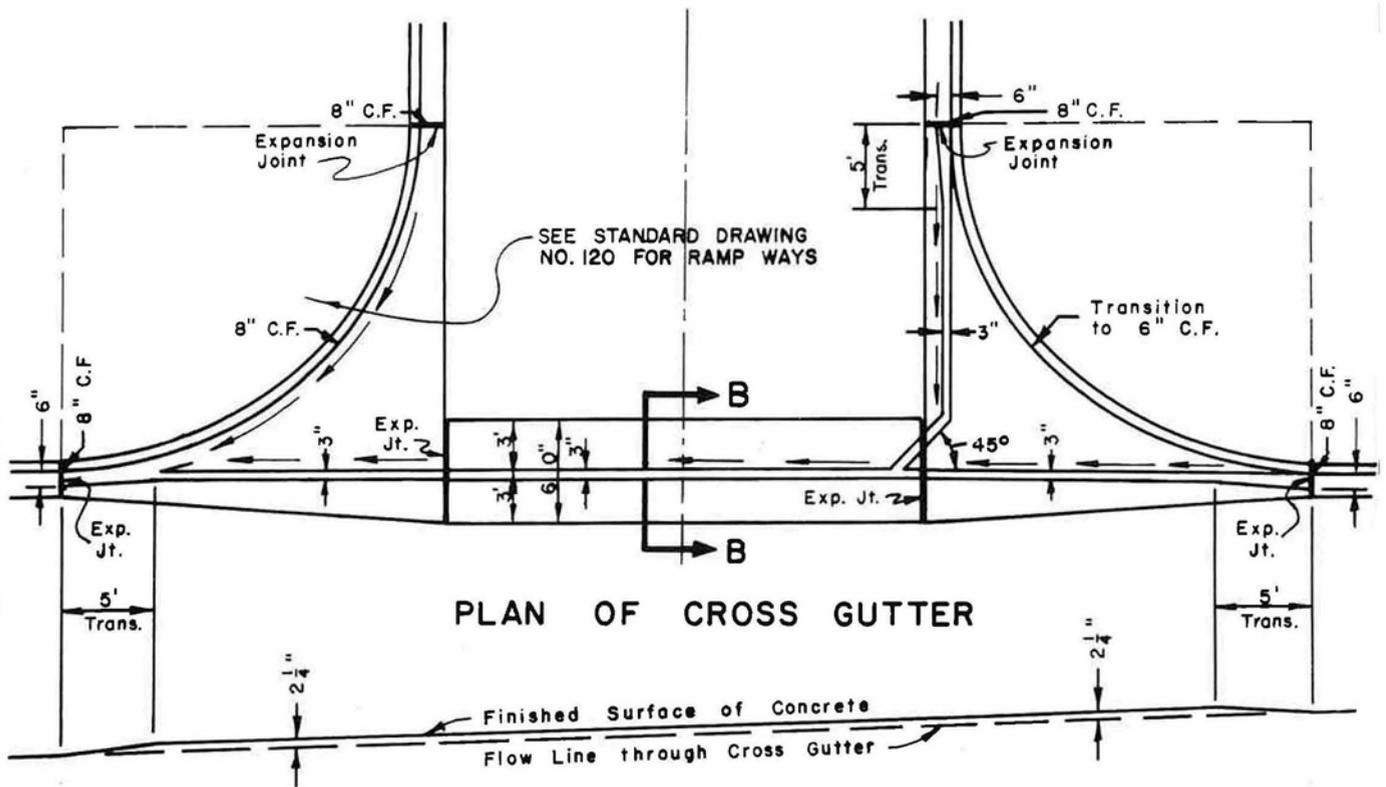


⚠ Compaction shall be 90% minimum

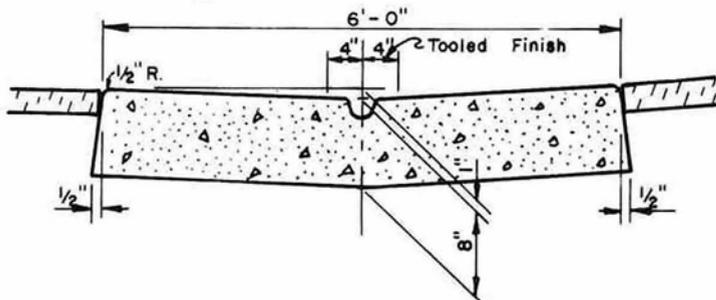
NOTES

1. Minimum Flow Line Grade 0.40% unless otherwise approved by City Engineer.
2. Cross Gutter to be Class "B" Portland Cement Concrete (5 Sack).
3. If length exceeds 40', or 1/2 of Cross Gutter is constructed at a time an extra expansion joint with steel bars shall be installed at center. ⚠
4. Half of smooth steel bars shall be oiled.

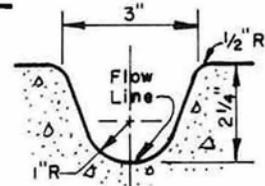
Added Note 7-15-92 App'd	③ Revised by R.C. 9/9/74 APP'D <i>DWB</i>	
	② Rev. 1/11/67 W.R.S. APP'D. <i>DWB</i>	
	① REVISION    ADDED 1/2" $\phi$ SMOOTH STEEL BARS    MAY 1964	
	CITY OF COLTON PUBLIC WORKS DEPT.	
CROSS GUTTER		
DRAWN BY J.H.W.	SCALE N.T.S.	DRAWING NO.
CHK'D. <i>DWB</i>	DATE AUGUST 1963	
APP'D. <i>L. Gunnarson</i>		112



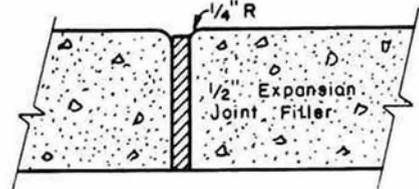
PROFILE ALONG FLOW LINE



CROSS GUTTER SECTION B-



SLOT DETAIL

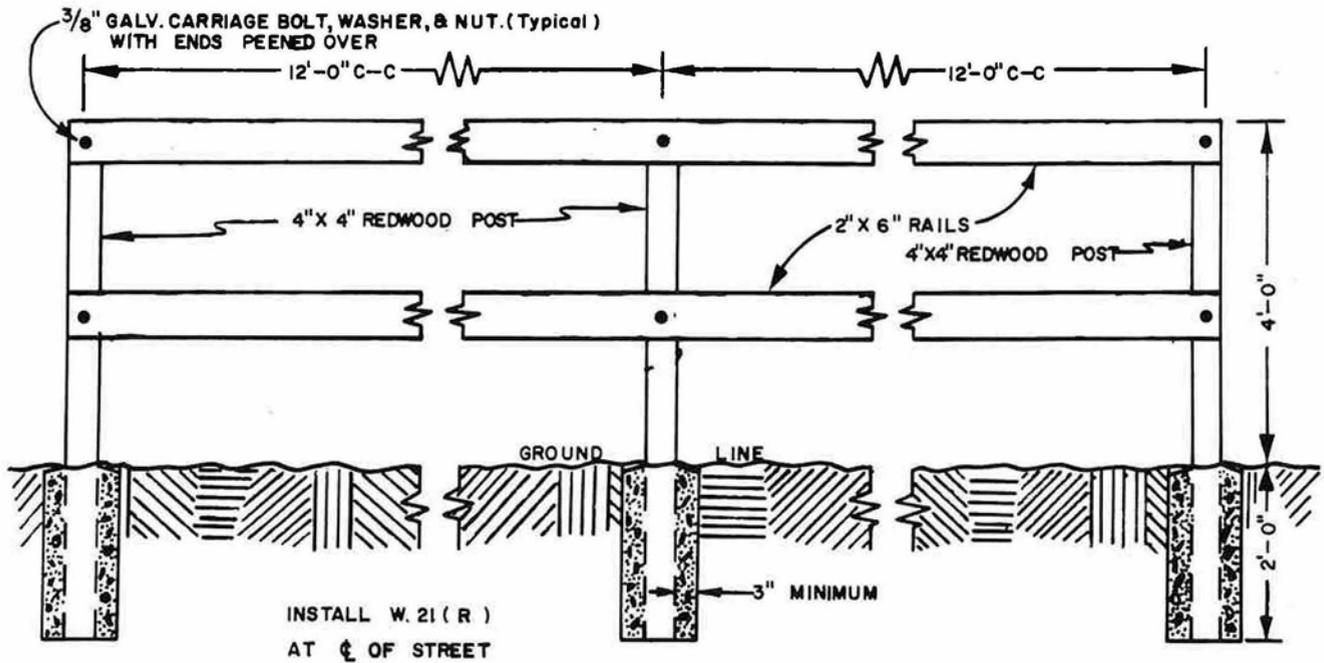


EXPANSION JOINT

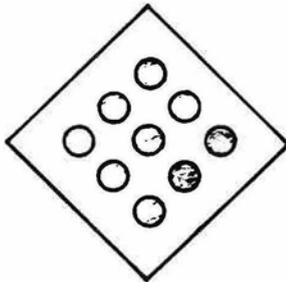
- NOTE:  $\triangle$  Compaction shall be 90% Minimum
1. Slotted Cross-Gutter to be used as directed by City Engineer.
  2. Minimum Flow Line Grade is 0.40% unless otherwise approved by City Engineer.
  3. Cross Gutter to be Class "B" Portland Cement Concrete (5 Sack).
  4. If length exceeds 40' an extra Expansion Joint with steel dowels shall be installed at center. See Std. 112 for Reinforcing Details.

$\triangle$ Rev. WRS. 1/11/67 APPD. <i>DWA</i>			
<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>			
<b>CROSS GUTTER - SLOTTED</b>			
DRAWN BY G.W.A.	SCALE N.T.S.	DRAWING NO.	
CHK'D <i>DWA</i>	DATE AUGUST 1963		
APP'D <i>L. Lundquist</i>			113

Added Note 7.15.92 Appd. *[Signature]*

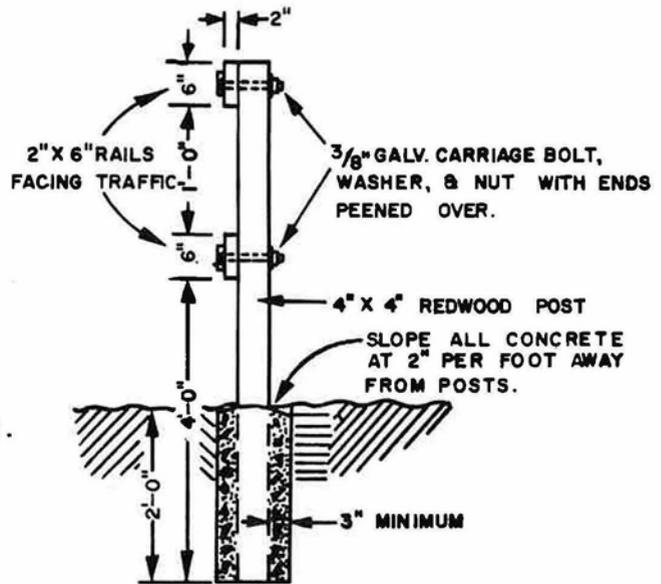


INSTALL W. 21 ( R )  
AT  $\phi$  OF STREET

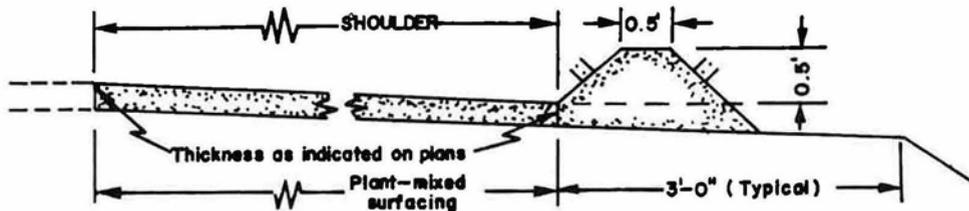


**NOTES:**

- 1- PAINT ALL EXPOSED SURFACES WHITE.
- 2- ALL POSTS TO BE EMBEDDED IN CLASS "C" CONCRETE, ENTIRE POST HOLE TO BE BACKFILLED WITH CONCRETE.

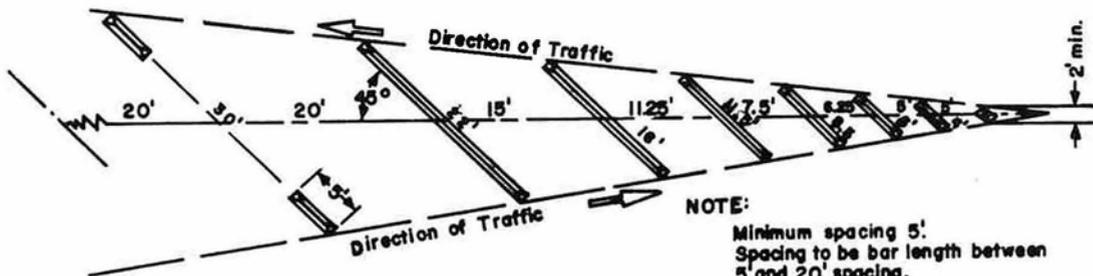


CITY OF COLTON PUBLIC WORKS DEPT.		
STREET BARRICADE		
DRAWN BY: TIBOR F.	SCALE: N. T. S.	DRAW'G NO.
CHK'D: <i>DAK</i>	DATE: OCTOBER 1963	
APP'D: <i>L. Almon Wilson</i>		114

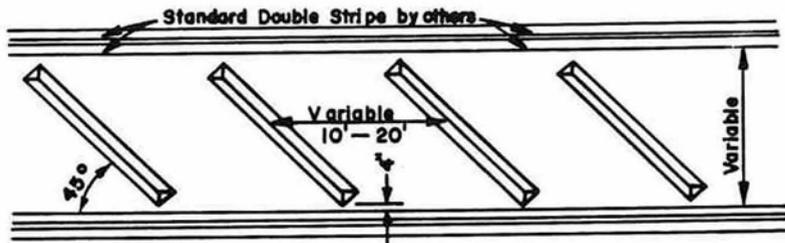


**PLANT-MIXED ASPHALT BERM**

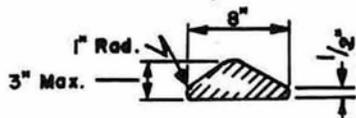
**TRANSITION SECTION**



**NOTE:**  
 Minimum spacing 5'.  
 Spacing to be bar length between 5' and 20' spacing.  
 Maximum spacing 20'.  
 When length is 15' or more a 5' bar shall be used at each end.



**NOTE:**  
 Raised Bars shall be formed on the job from plant-mix surfacing or commercial fibre bars per California Div. of Highway Standards and Specifications.

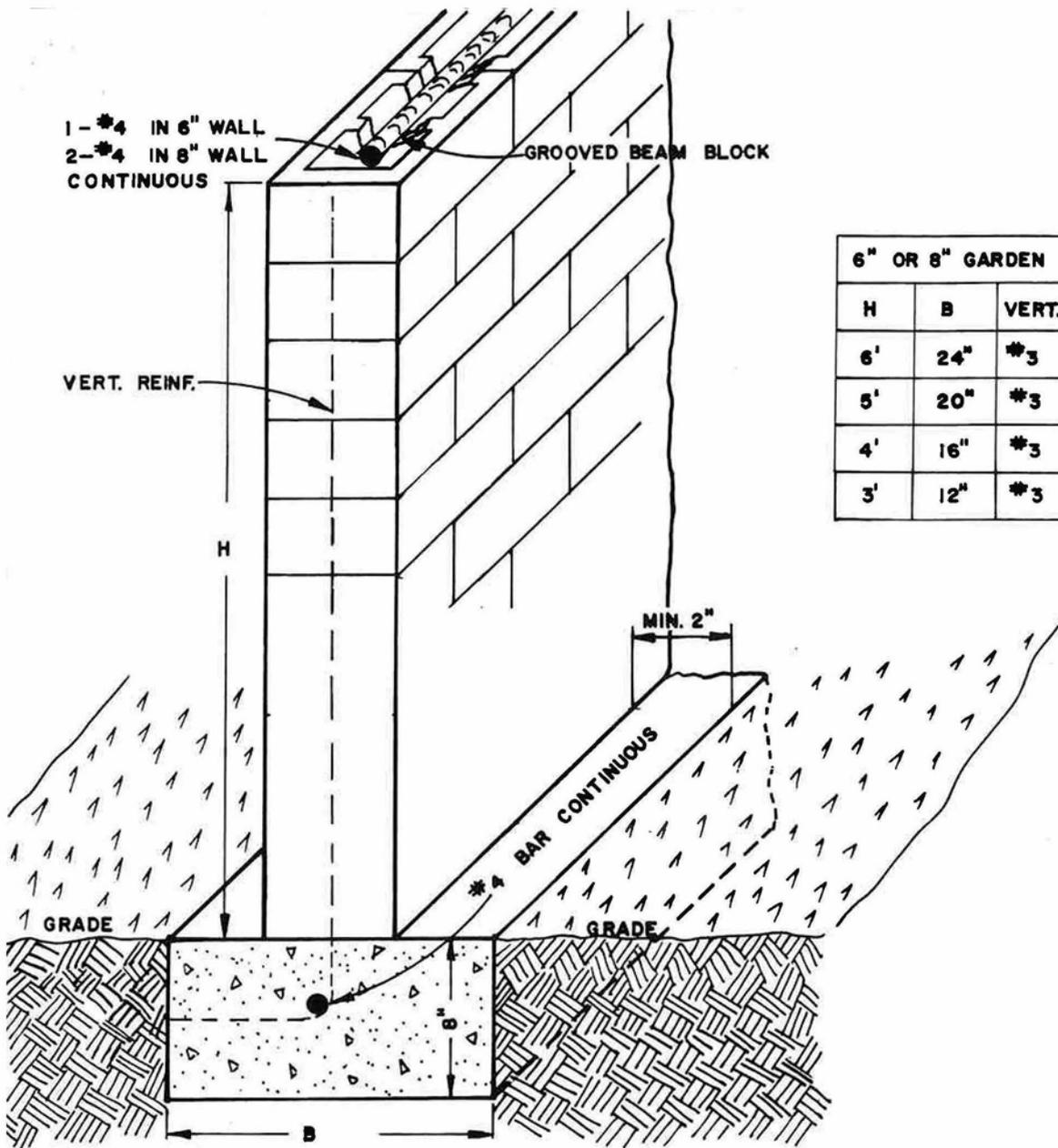


**CROSS-SECTION**



**SIDE VIEW**

<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>		
<b>BERMS AND RAISED BARS</b>		
<b>DRAWN BY:</b> T. FARKAS	<b>SCALE:</b> N. T. S.	<b>DRAWING NO.</b>  115
<b>CHK'D</b> <i>DNB</i>	<b>DATE:</b> AUG. 29, 1963	
<b>APP'D</b> <i>L. Stewart Wilson</i>		



6" OR 8" GARDEN WALL			
H	B	VERT. REINF.	
6'	24"	#3	32" OC
5'	20"	#3	48" OC
4'	16"	#3	48" OC
3'	12"	#3	48" OC

**NOTES**

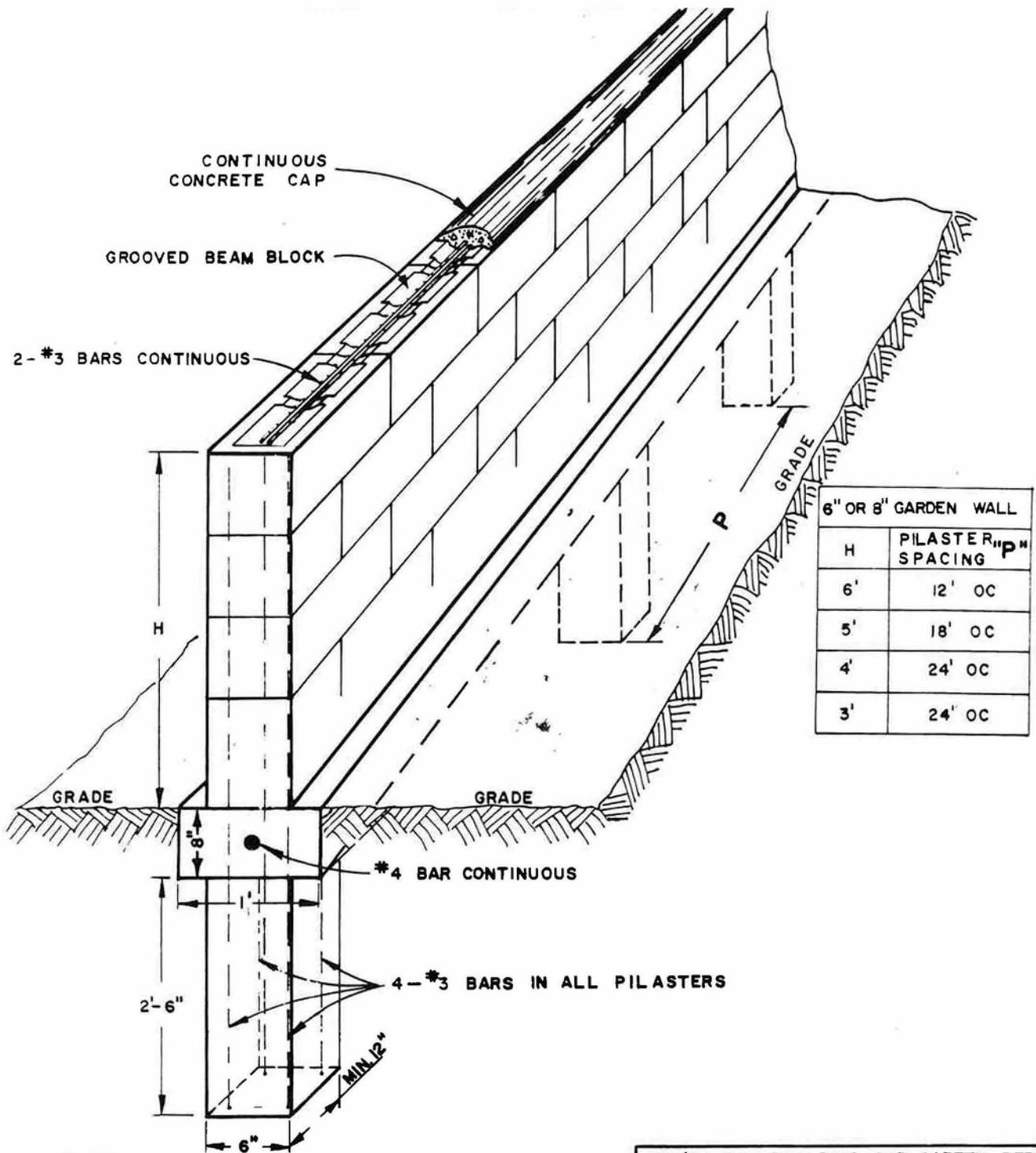
1. CONTINUOUS CONCRETE CAP
2. ALL CELLS TO BE GROUTED WHERE VERTICAL REINFORCEMENT IS REQUIRED
3. MIN. LAP OF REINF. 40 x DIA. OF BARS

APP'D BY BUILDING AND SAFETY DEPT. *John L. Stuss*

CITY OF COLTON  
PUBLIC WORKS DEPT.

**GARDEN WALL DETAIL**

DRAWN BY TIBOR FARKAS	SCALE: N.T.S.	DRAWING NO. 116
CHK'D <i>DFD</i>	DATE MARCH 1965	
APP'D <i>Blair Wilson</i>		



NOTES

1. CONTINUOUS CONCRETE CAP
2. ALL CELLS TO BE GROUTED WHERE VERTICAL REINFORCEMENT IS REQUIRED
3. MIN. LAP OF REINF. 40 x DIA. OF BARS

APP'D BY BUILDING AND SAFETY DEPT.

*John L. Lewis*  
CITY OF COLTON  
PUBLIC WORKS DEPT.

GARDEN WALL DETAIL

DRAWN BY:  
TIBOR FARKAS

SCALE:  
N.T.S.

DRAWING  
NO.

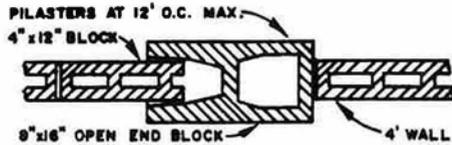
CHK'D *ELB*

DATE  
MARCH 1965

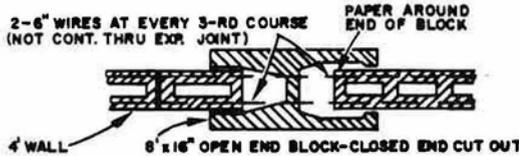
APP'D *John L. Lewis*

116-A

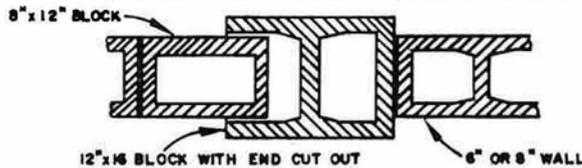
### 8"x16" PILASTER WITH 4" WALL



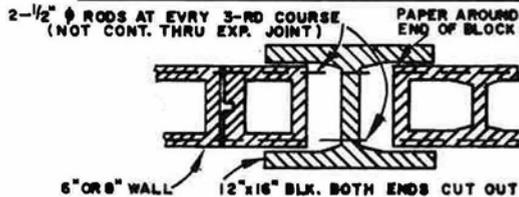
### 8"x16" PILASTER EXPANSION JOINT



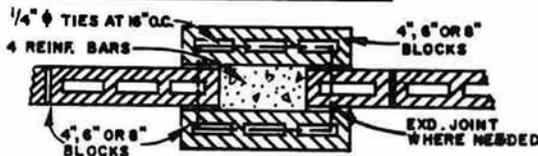
### 12"x16" PILASTER WITH 6" OR 8" WALL



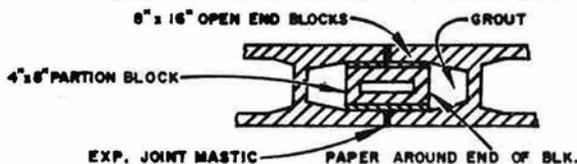
### 12"x16" PILASTER EXPANSION JOINT



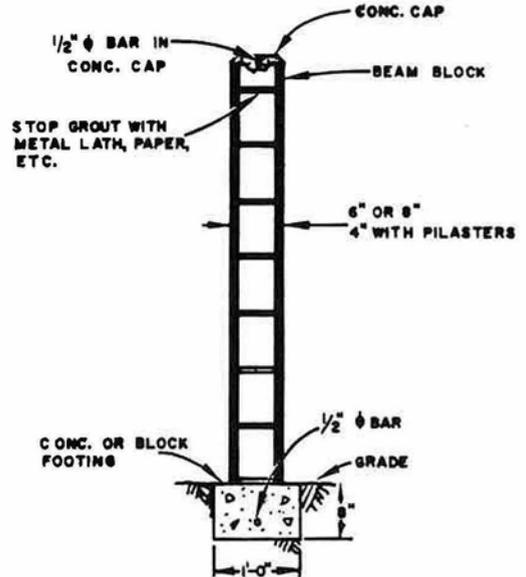
### BUILT-UP PILASTER



### EXPANSION JOINT IN RUN OF WALL



### MINIMUM CONSTRUCTION



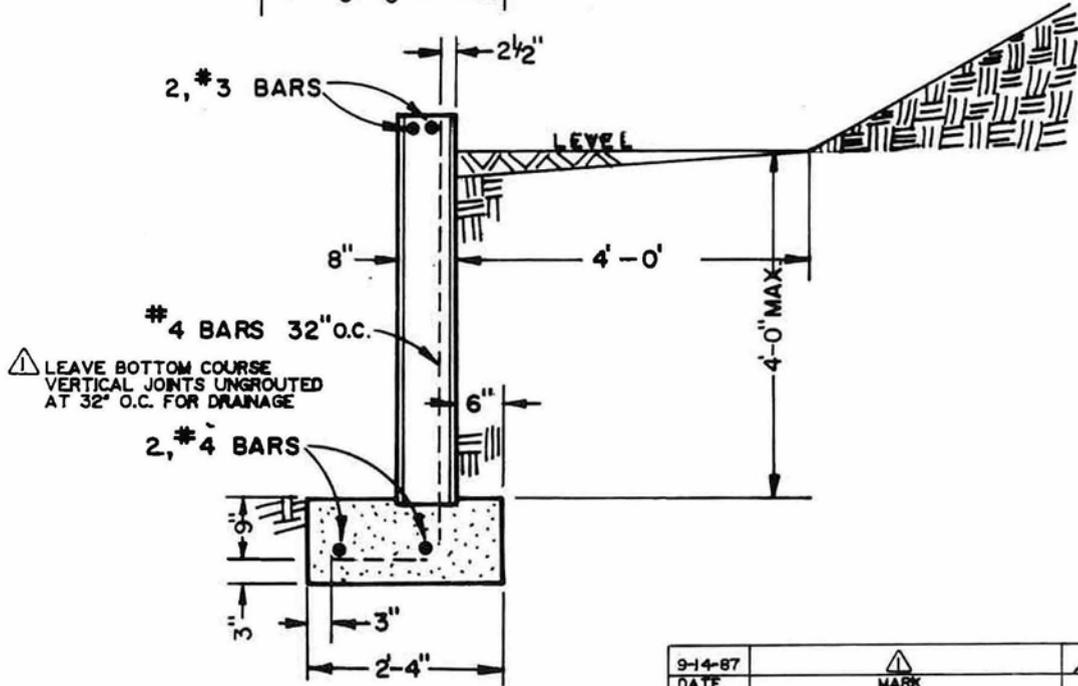
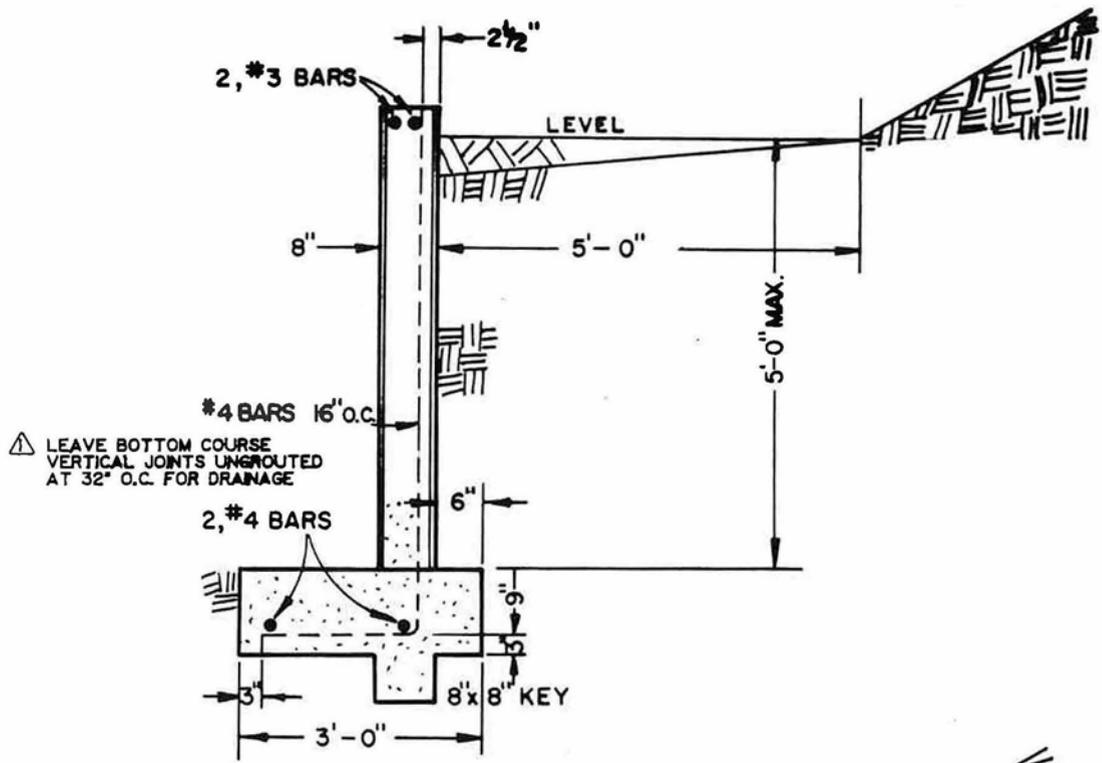
### WALL WITH PILASTER

FILL AND REINF. PILASTER FOR WIND AND EARTHQUAKE CONST. USE POSTHOLE OR SPREAD TYPE FOOTING AT PILASTER ALTERNATE PLASTER COURSES OPPOSITE.

APP'D BY BUILDING AND SAFETY DEPT.

CITY OF COLTON  
PUBLIC WORKS DEPT.  
EARTHQUAKE AND WIND  
RESISTANT CONSTRUCTION

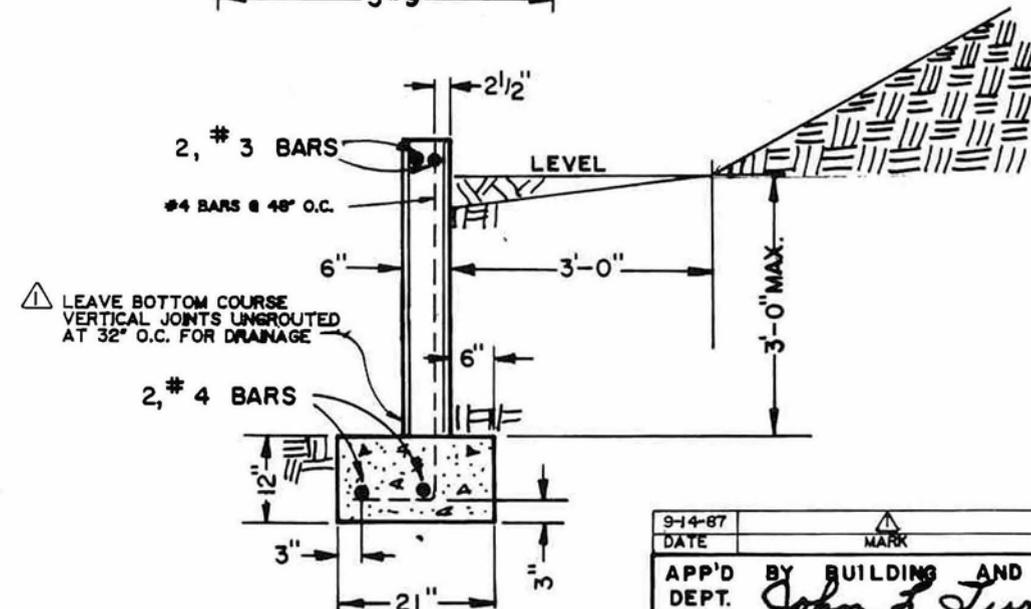
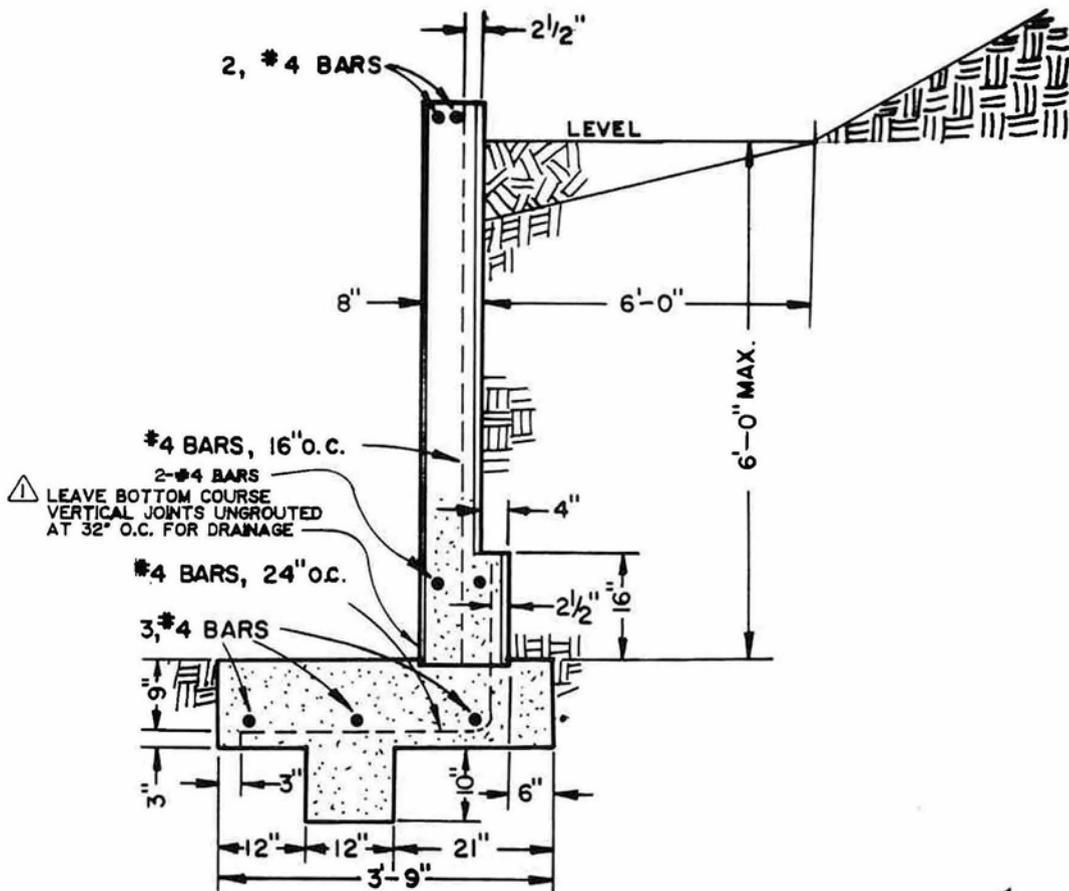
DRAWN BY TIBOR FARKAS	SCALE: N.T.S.	DRAWING NO.
CHK'D	DATE JUNE 1965	117
APP'D		



**NOTE**

GRADE "A" CONC. BLOCK ASTM C90 GROUT SOLID, MIX 1:2:2 PARTS PEA GRAVEL FOOTING MIX 1:3:4, 2000 PSI AT 28 DAYS, POUR ON UNDISTURBED NATURAL GRADE INTERMEDIATE GRADE DEFORMED REBARS OMIT MORTAR IN LOWEST VERTICAL JOINTS MORTAR 1: 3/2: 1/4 PART LIME PUTTY SP. 1500 PSF.

9-14-87	△	<i>Lgt</i>
DATE	MARK	APPROVED
APP'D BY BUILDING AND SAFETY DEPT. <i>John J. Lucas</i>		
CITY OF COLTON PUBLIC WORKS DEPT.		
RETAINING WALLS		
DRAWN BY: TIBOR FARKAS	SCALE: N.T.S.	DRAWING NO.
CHK'D <i>DAB</i>	DATE FEB. 1965	118
APP'D <i>Robert Wilson</i>		



**NOTE**

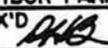
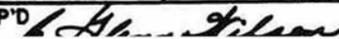
GRADE "A" CONC. BLOCK ASTM C90 GROUT SOLID,  
 MIX 1:2:2 PARTS PEA GRAVEL FOOTING MIX 1:3:4,  
 2000 PSI AT 28 DAYS,  
 POUR ON UNDISTURBED NATURAL GRADE INTER-  
 MEDIATE GRADE DEFORMED REBARS OMIT MORTAR IN  
 LOWEST VERTICAL JOINTS MORTAR 1: 3/2: 1/4 PART LIME  
 PUTTY SP. 1500 PSF.

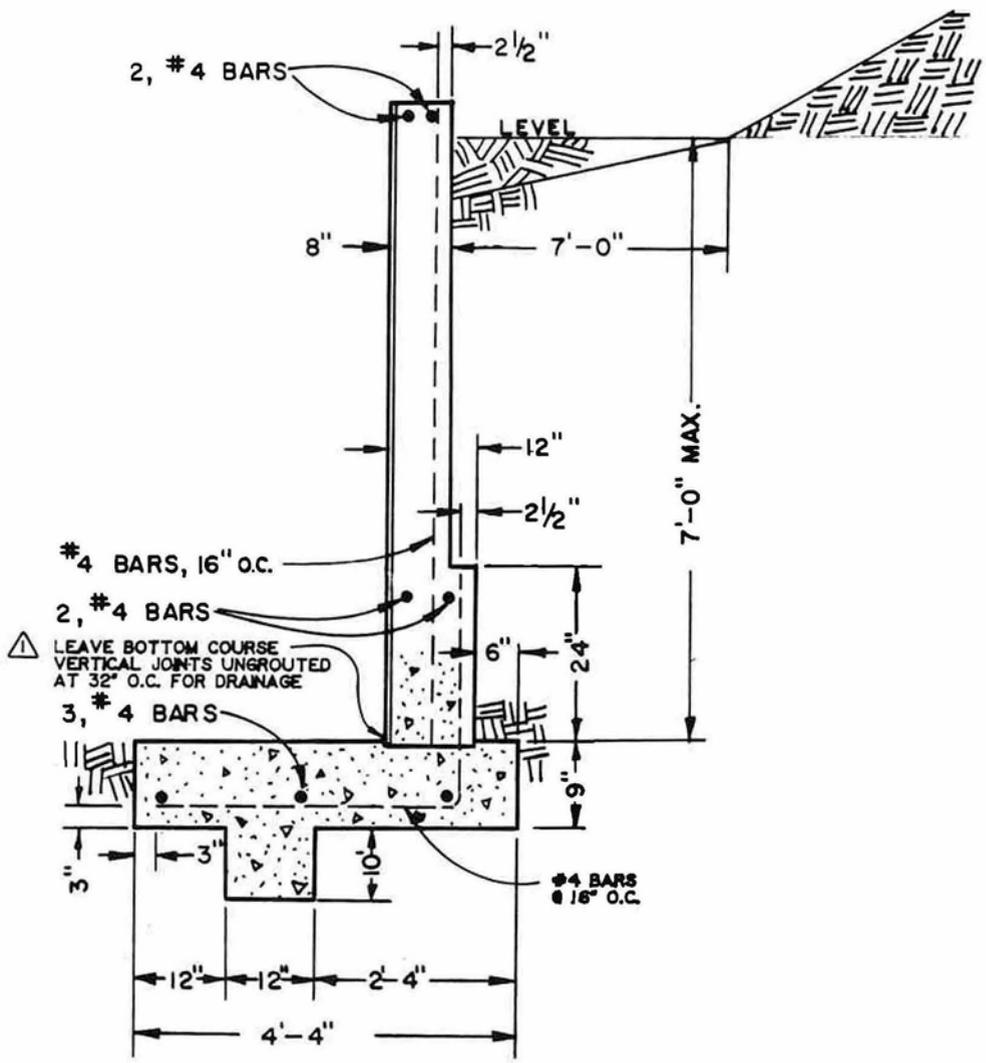
9-14-87 DATE  MARK  APPROVED

APP'D BY BUILDING AND SAFETY DEPT. 

CITY OF COLTON  
 PUBLIC WORKS DEPT.

RETAINING WALLS

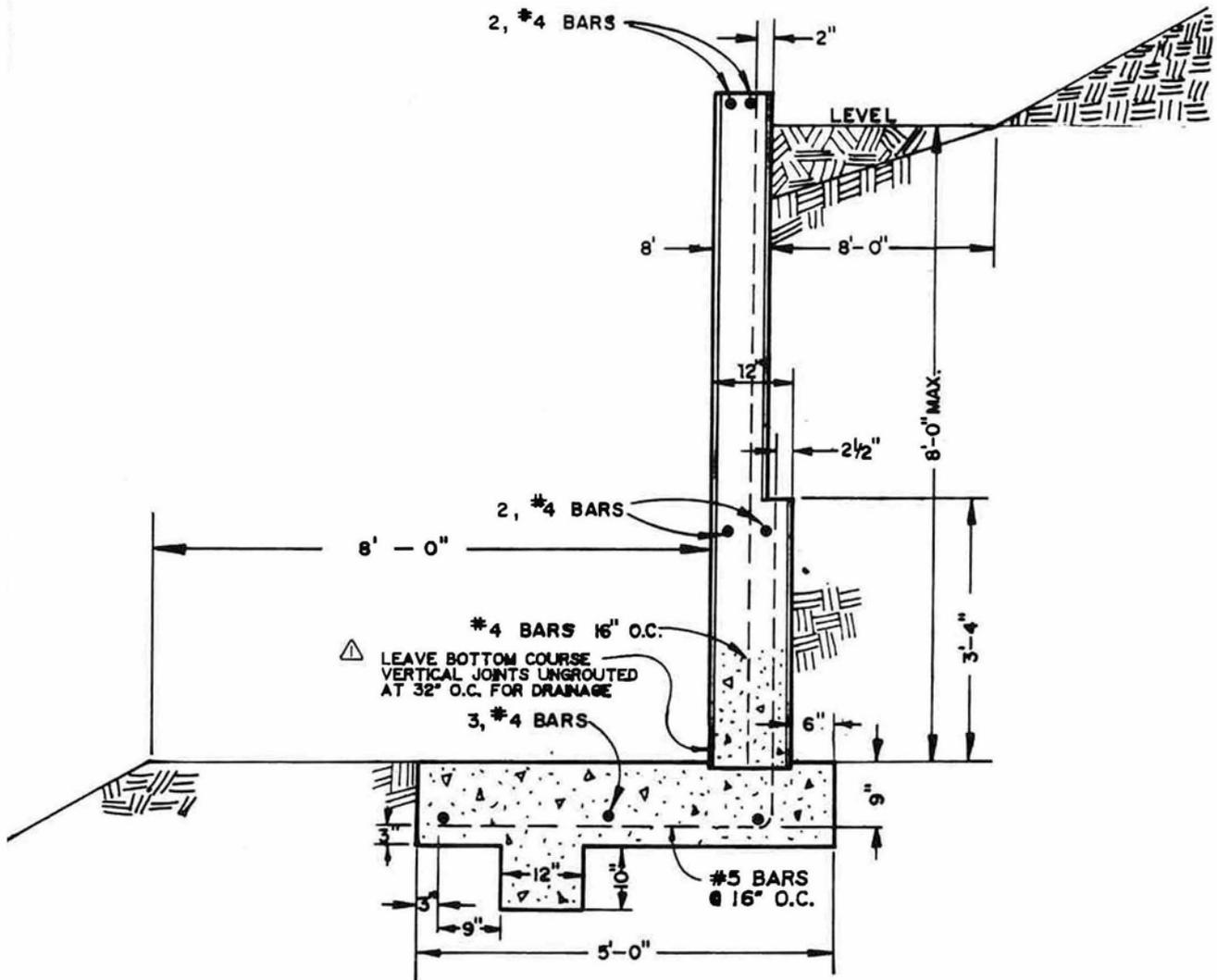
DRAWN BY: TIBOR FARKAS	SCALE: N.T.S.	DRAWING NO. 118-A
CHK'D 	DATE FEB. 1965	
APP'D 		



**NOTE**

GRADE "A" CONC. BLOCK ASTM C90 GROUT SOLID,  
 MIX 1:2:2 PARTS PEA GRAVEL FOOTING MIX 1:3:4,  
 2000 PSI AT 28 DAYS,  
 POUR ON UNDISTURBED NATURAL GRADE INTER-  
 MEDIATE GRADE DEFORMED REBARS OMIT MORTAR IN  
 LOWEST VERTICAL JOINTS MORTAR 1: 3/2: 1/4 PART LIME-  
 PUTTY SP. 1500 PSF.

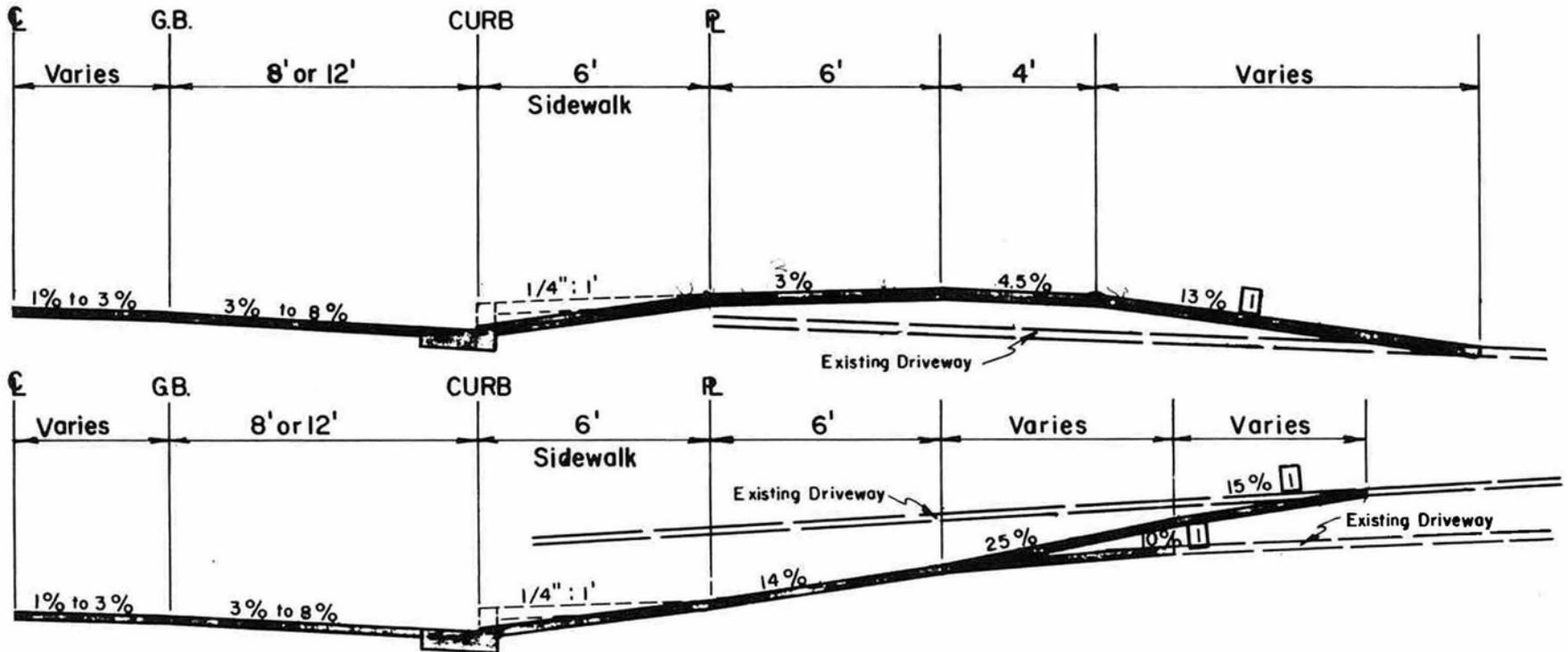
9-14-67 DATE	 MARK	 APPROVED
APP'D BY BUILDING AND SAFETY DEPT. <i>John P. Lewis</i>		
<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>		
<b>RETAINING WALLS</b>		
DRAWN BY: TIBOR FARKAS	SCALE: N.T.S.	DRAWING NO. <b>118-B</b>
CHK'D <i>DWB</i>	DATE FEB. 1965	
APP'D <i>J. H. ...</i>		



**NOTE**

GRADE "A" CONC. BLOCK ASTM C90 GROUT SOLID,  
 MIX 1:2:2 PARTS PEA GRAVEL FOOTING MIX 1:3:4,  
 2000 PSI AT 28 DAYS,  
 POUR ON UNDISTURBED NATURAL GRADE INTER-  
 MEDIATE GRADE DEFORMED REBARS OMIT MORTAR IN  
 LOWEST VERTICAL JOINTS MORTAR 1:3/2:1/4 PART LIME-  
 PUTTY SP 1500 PSF.

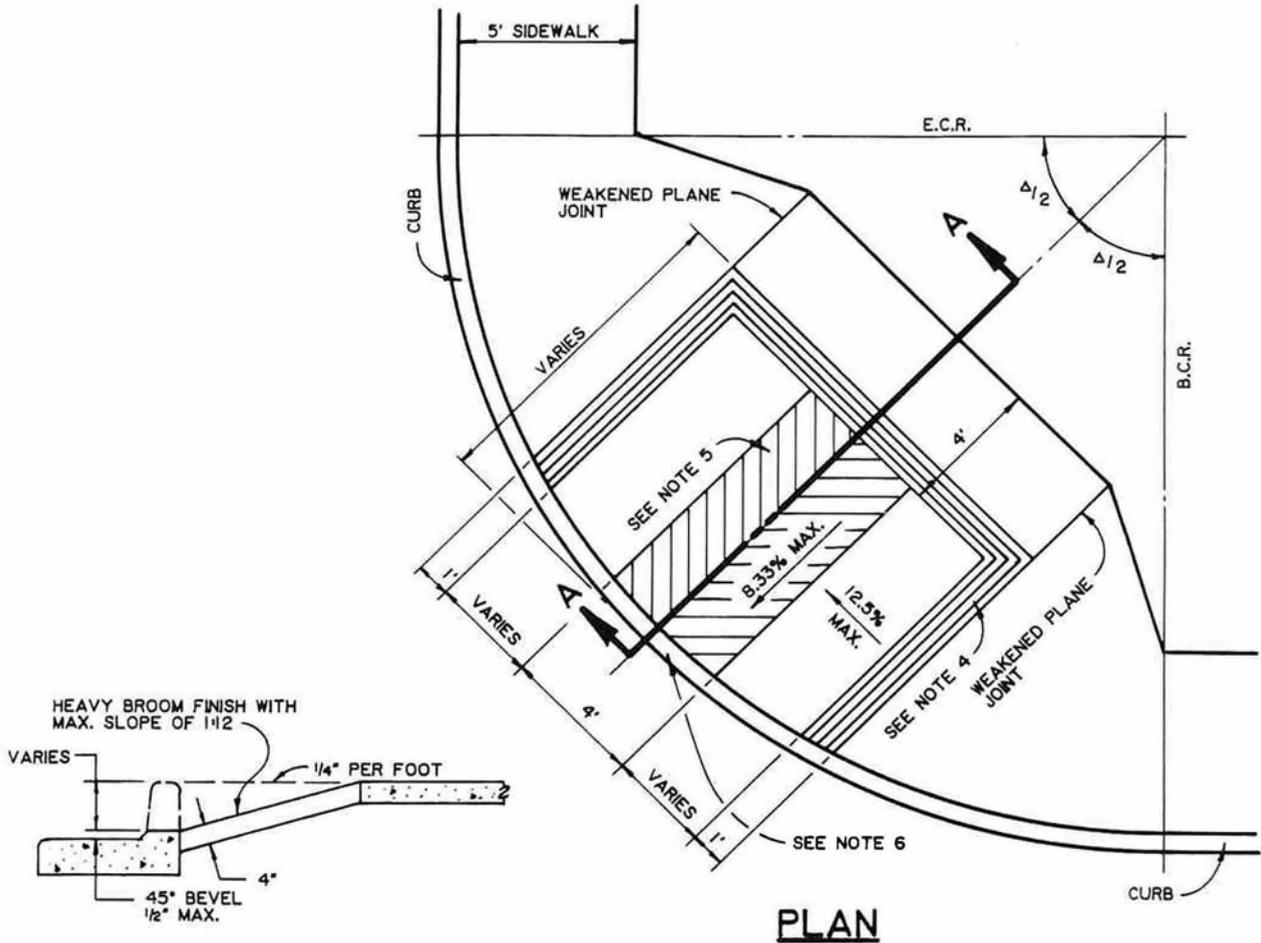
9-14-87	△	<i>[Signature]</i>
DATE	MARK	APPROVED
APP'D BY BUILDING AND SAFETY DEPT. <i>John L. Luce</i>		
CITY OF COLTON PUBLIC WORKS DEPT.		
RETAINING WALLS		
DRAWN BY: TIBOR FARKAS	SCALE: N.T.S.	DRAWING NO.
CHK'D <i>[Signature]</i>	DATE FEB. 1965	118-C
APP'D <i>[Signature]</i>		



NOTE:

☐ Grades shown are maximum.

<b>CITY OF COLTON PUBLIC WORKS DEPARTMENT</b>		
<b>STANDARD DRIVEWAY PROFILES FOR CURB SIDEWALK</b>		
DRAWN BY V. GILL	SCALE N. T. S.	DRAWING NO. 119
CHK'D	DATE AUGUST 1966	
APP'D		



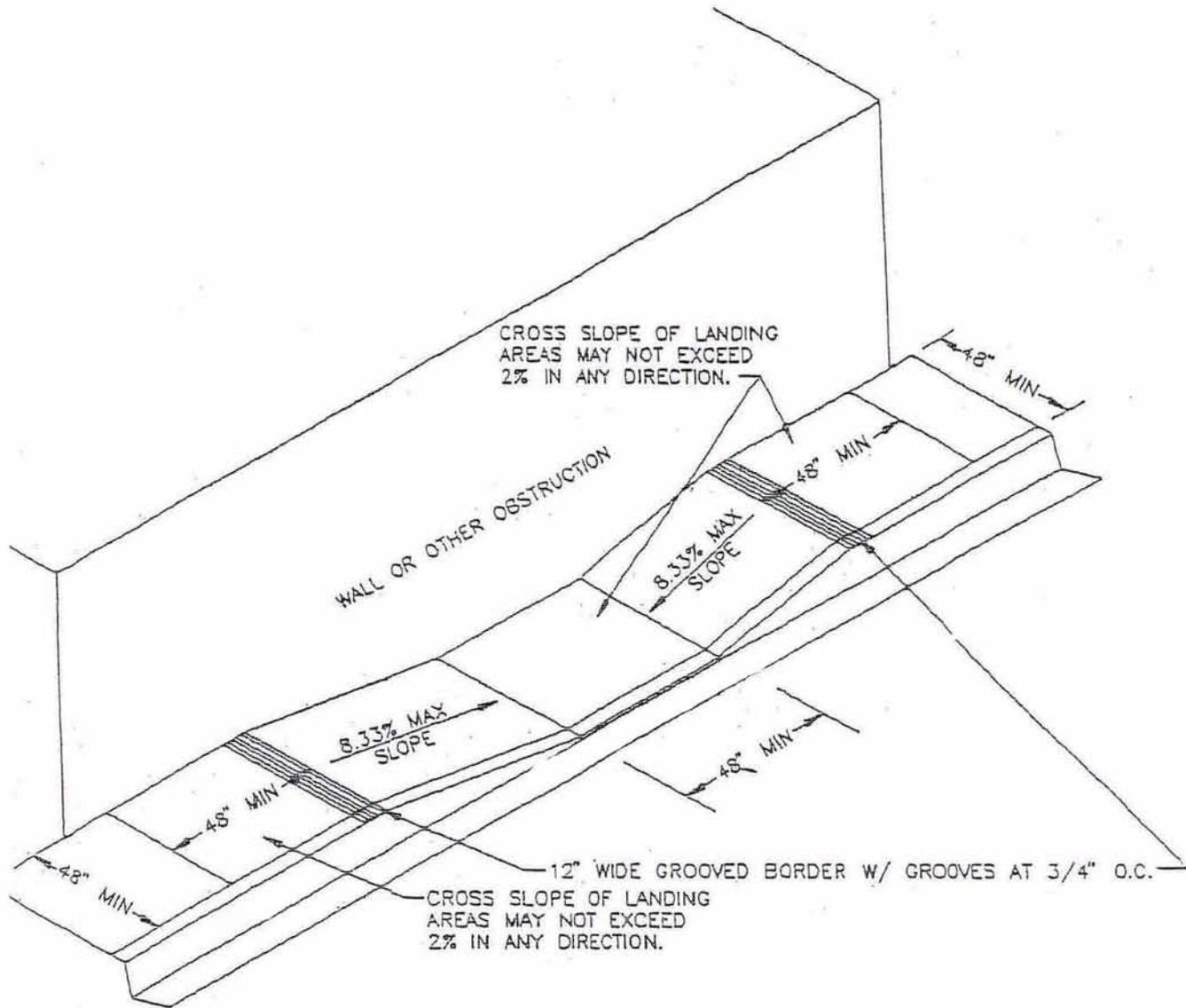
**SECTION "A-A"**

**NOTES:**

1. CONCRETE SHALL BE CLASS 520-C-2500
2. ADJUSTMENTS SHALL BE MADE IN THE FIELD TO ACHIEVE RAMP CONDITIONS
3. A LEVEL 4' MINIMUM DEPTH LANDING AT THE TOP OF THE RAMP OVER ENTIRE RAMP WIDTH
4. BORDER 1' WIDE (1/4" DEEP X 1/4" WIDE GROOVES 3/4" APART) ON THE LEVEL SURFACE AT THE TOP AND SIDES OF RAMP
5. HERRINGBONE GROOVES 1/4" DEEP X 1/4" WIDE, 1 1/2" APART WHEN RAMP IS CONSTRUCTED IN CENTER OF CURB RETURN
6. IF LIP IS NECESSARY, IT SHALL BE 1/2" MAXIMUM WITH A 45° BEVEL AT THE BOTTOM OF THE RAMP
7. WHERE THERE IS A DRIVEWAY APPROACH WITHIN 10' OF B.C.R. OR E.C.R., THE CITY ENGINEER MAY WAIVE WHEELCHAIR RAMP CONSTRUCTION
8. WHERE DIRECTED BY THE ENGINEER, WHEELCHAIR RAMP SHALL BE PROVIDED AT B.C.R. OR E.C.R.

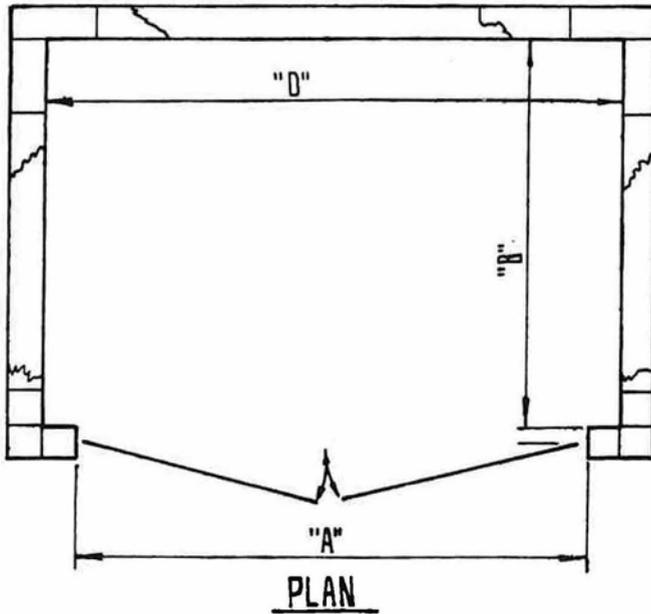
<b>CITY OF COLTON PUBLIC WORKS DEPARTMENT</b>		
<b>CURB RETURN WHEELCHAIR RAMP</b>		
DRAWN BY: <b>REW</b>	SCALE: <b>NTS</b>	DRAWING NO.  <b>STD. 120</b>
CHECKED BY:	DATE: <b>2-20-87</b>	
APPROVED BY: <i>C. Gordon Wilson</i>		
C. GORDON WILSON P.E. 15740		

REVISION	DATE	BY	APPROVED

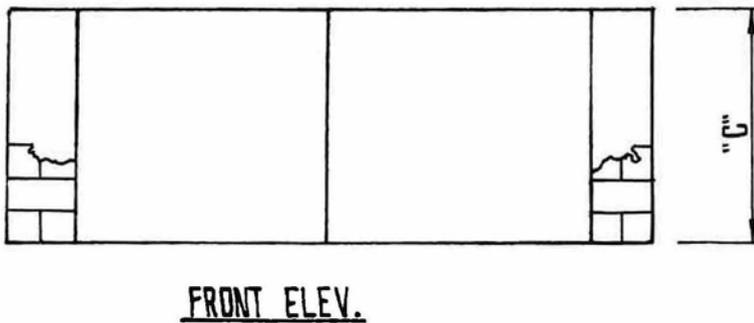


NOTE: USE ONLY WHEN EXISTING BUILDING, PERMANENT WALL, OR OBSTRUCTION PROHIBITS CONSTRUCTION OF STANDARD DRAWING NO. 120

<b>CITY OF COLTON</b>		
PUBLIC WORKS DEPT. JOHN HUTTON DIR.		
<b>ALTERNATE STANDARD CURB RETURN WHEELCHAIR RAMP</b>		
DRAWN BY: MJS	SCALE: NOT TO SCALE	DRAWING NO.
CHECKED BY: REV: SEPT 17, 1996	DATE: JULY 9, 1993	120-A
APPROVED BY: <i>[Signature]</i> CITY ENGINEER # P.E. 13440		



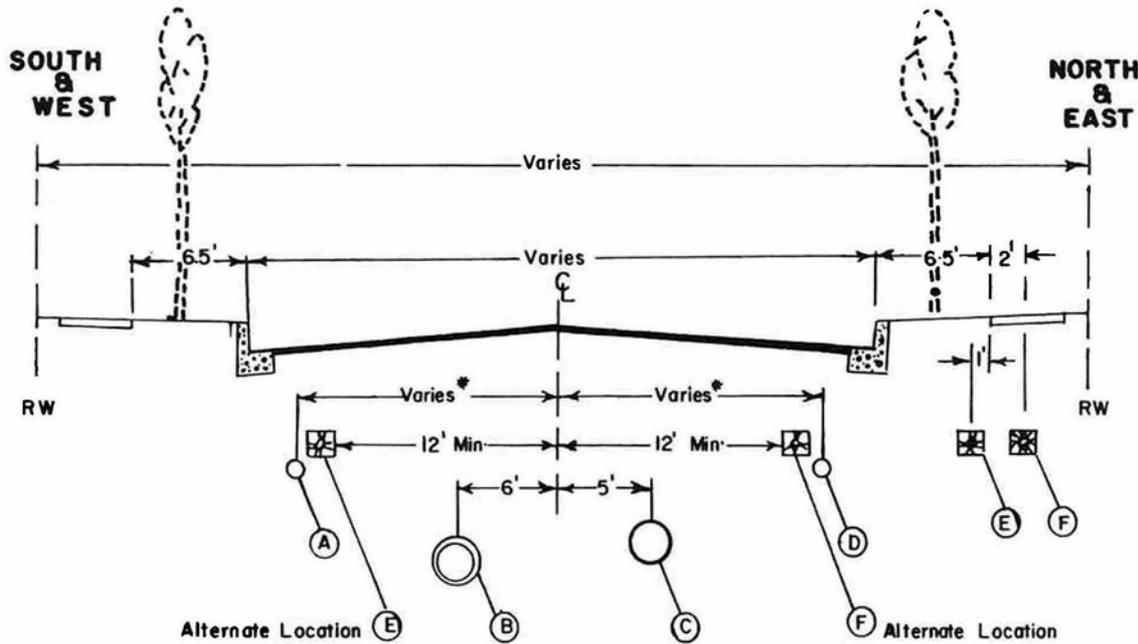
MINIMUM DIMENSIONS				
TYPE	"A"	"B"	"C"	"D"
SINGLE	8'-0"	6'-8"	5'-4"	9'-4"
DOUBLE	10'-0"	8'-8"	5'-4"	12'-8"



**CONSTRUCTED OF 9" X 8" X 16" BLOCK ON 4" THICK SLAB (LEVEL)**  
**TWO CUBIC YARD BIN ENCLOSURE**

<b>CITY OF COLTON PUBLIC WORKS DEPARTMENT</b>		DRAWING NO. <b>121</b>
DRAWN BY	SCALE <b>NTS</b>	DATE <b>8/4/15</b> APP'D <i>[Signature]</i>
CHK'D		

# RECOMMENDED UTILITY LOCATION



	UTILITY	MIN COVER
(A)	WATER	36"
(B)	STORM DRAIN	Varies
(C)	SEWER	Varies
(D)	GAS	30"
(E)	POWER	36"
(F)	TELEPHONE - CATV	30"

## RECOMMENDED UTILITY INSTALLATION SCHEDULE

1. STORM DRAIN
2. SEWER
3. POWER & TELEPHONE
4. CURB & GUTTER
5. WATER
6. GAS
7. PAVING

### NOTES

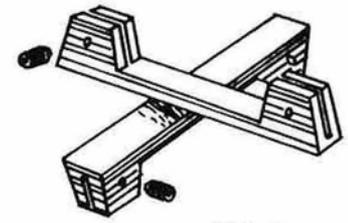
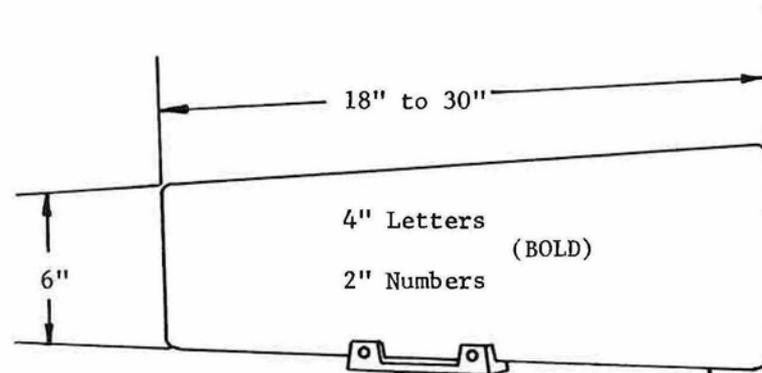
1. WHERE ULTIMATE STREET IMPROVEMENTS ARE TO BE CONSTRUCTED, MINIMUM COVER OF UTILITY LINES MAY BE VARIED TO FACILITATE INSTALLATION.
2. THE UTILITY COMPANIES SHALL MAKE EVERY EFFORT TO LOCATE THEIR FACILITIES IN THE RECOMMENDED LOCATIONS PARTICULARLY IN NEW SUBDIVISIONS.
3. EDISON & TELEPHONE UTILITIES MAY USE A COMMON TRENCH. ALTERNATE LOCATION MAY BE EITHER THE EDISON POSITION OR TELEPHONE POSITION.
4. VARIES 3' FROM THE CURB FACE TO 14' FROM CENTER LINE.
5. THE CENTER 24' OF THE STREET SHALL BE RESERVED FOR SEWER AND STORM DRAIN INSTALLATION.
6. SURFACE OF VAULT OR MANHOLE MUST MATCH PAVEMENT AND PARKWAY GRADES.
7. REPAIR OF TRENCHES AND REPLACEMENT OF PAVED SURFACING IN EXIST COUNTY ROADS SHALL BE IN ACCORDANCE WITH CURRENT SPECIFICATION FOR TRENCH REPAIR.
8. WHENEVER POSSIBLE, MANHOLE COVERS SHALL NOT BE PLACED WITHIN SIDE-WALKS.

## CITY OF COLTON PUBLIC WORKS DEPARTMENT

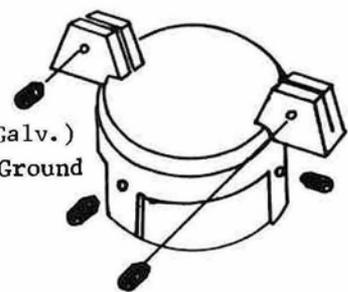
### RECOMMENDED UTILITY LOCATION

DRAWN BY TV	SCALE NTS	DRAWING NO.
CHK'D	DATE 2-24-1978	122
APP'D <i>B. Glenn Wilson</i>		

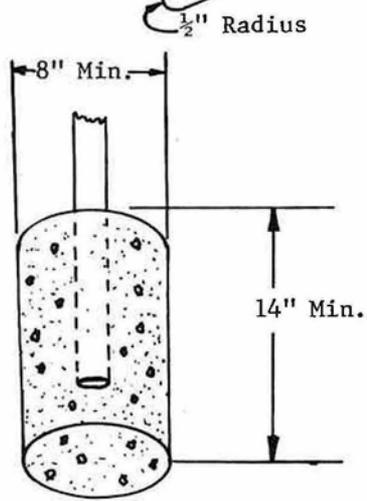
(Green-Background)  
 (White-Letters)  
 (White-Border)  
 3/8"



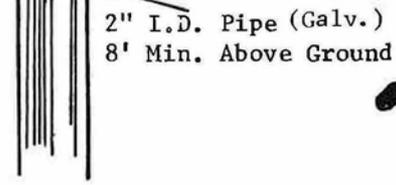
90° Cross Piece or Approved Equal



Wide Spread Grip or Approved Equal

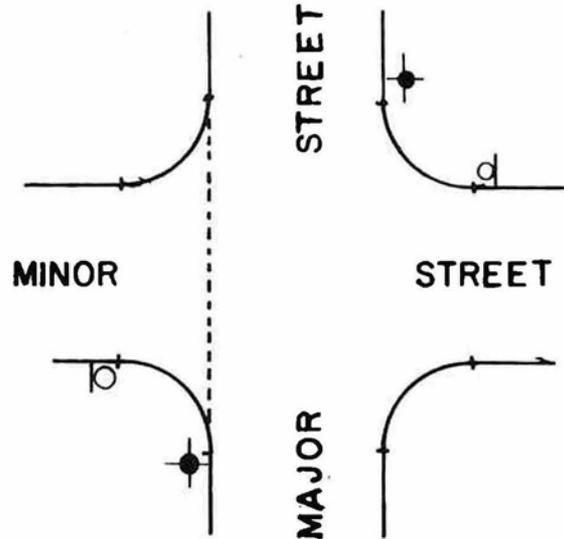
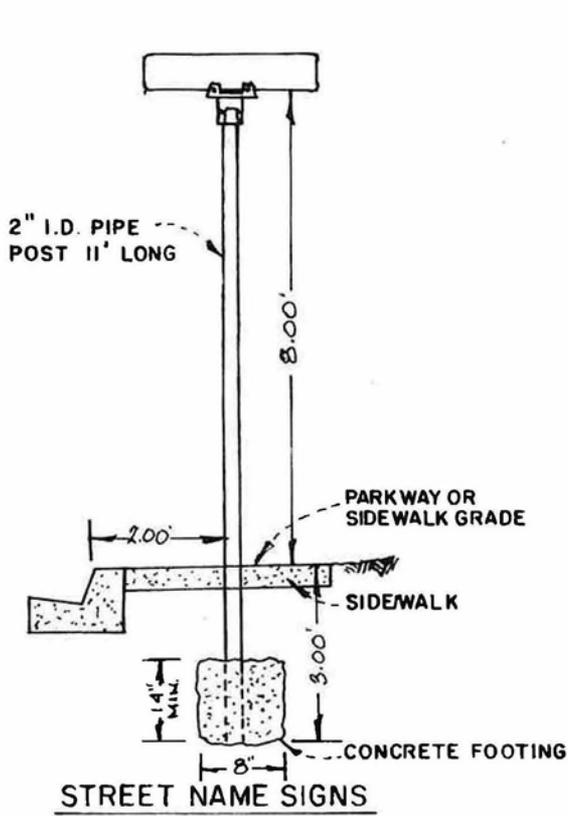


CONCRETE FOOTING



NOTE: Contact City Engineer for location of signs

<b>CITY OF COLTON PUBLIC WORKS DEPARTMENT STANDARD STREET NAME SIGN</b>		
DRAWN BY <i>ACH</i>	SCALE	DRAWING NO.
CHK'D	DATE	<b>123</b>
APP'D <i>Daniel A. Smith</i>		

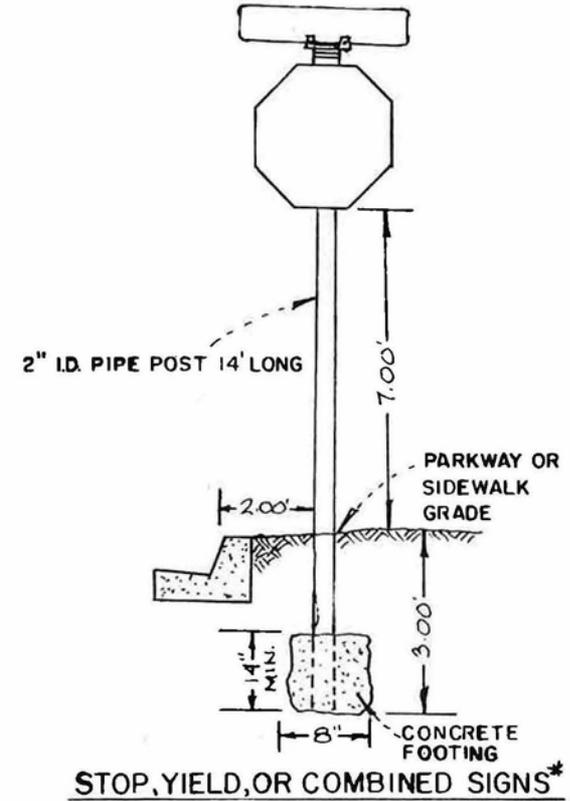


SIGN LOCATIONS

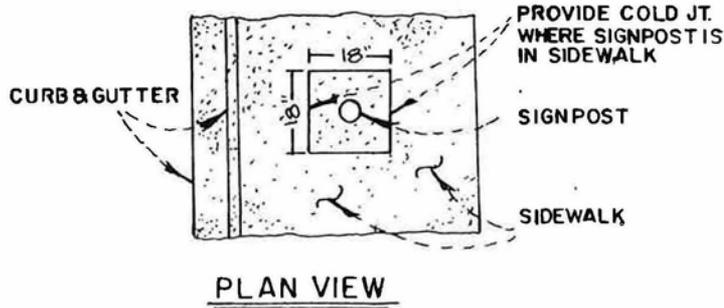
○ STOP SIGN

● STREET NAME SIGN

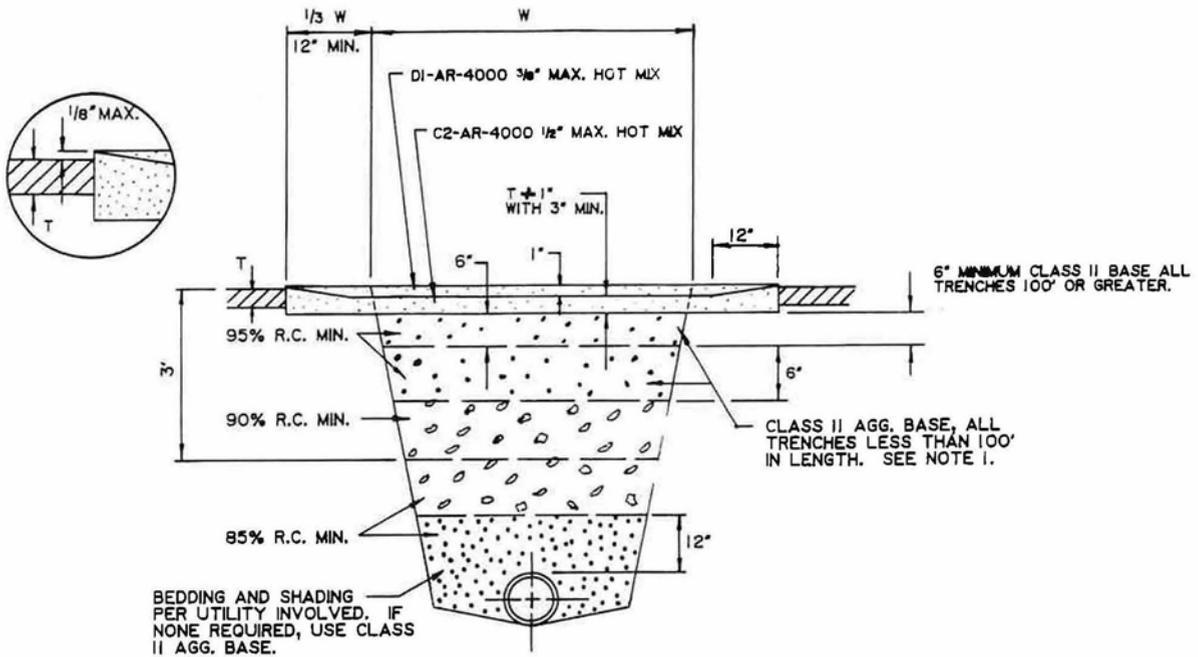
SIGNS TO BE PLACED 1' MAX. FROM E.C.R.



\* COMBINED SIGNS TO BE USED ONLY AT THE DIRECTION OF THE CITY ENGINEER.



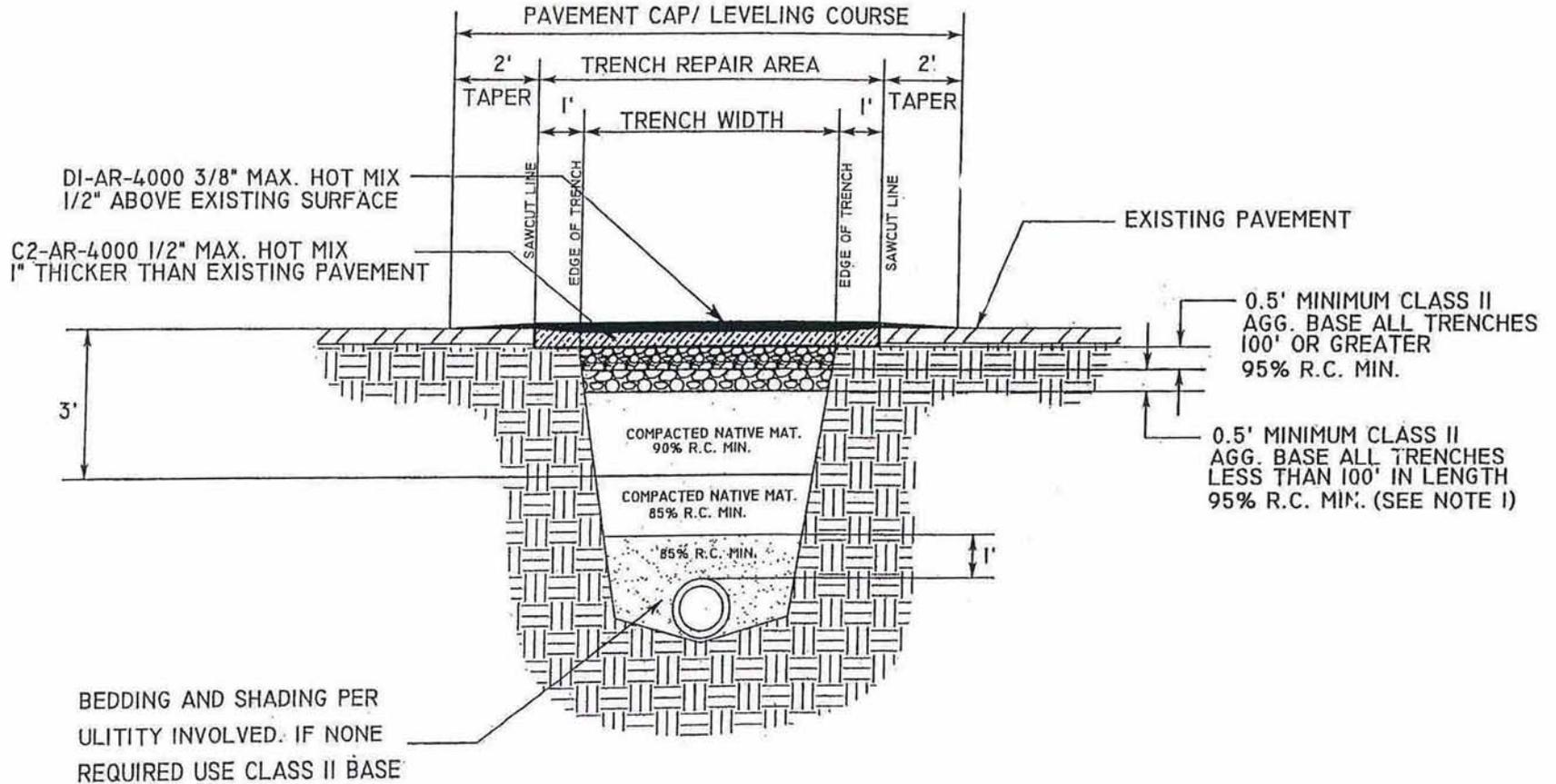
<b>CITY OF COLTON PUBLIC WORKS DEPARTMENT</b>		
<b>TRAFFIC SIGN PLACEMENT</b>		
DRAWN BY <b>BB</b>	SCALE <b>NO SCALE</b>	DRAWING NO.
CHK'D	DATE <b>11 JUNE, 84</b>	<b>123-A</b>
APP'D <i>Samuel A. Burnett</i>		



**GENERAL NOTES:**

1. TRENCH BACKFILL SHALL BE PER SEC. 306-1.3 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTIONS EXCEPT AS SHOWN ON THIS DRAWING.
2. COMPACTION OF BACKFILL SHALL BE VERIFIED BY CONTRACTOR AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS PRIOR TO THE PLACING OF THE PERMANENT PAVEMENT. COMPACTION TESTS SHALL BE TAKEN BY A LICENSED ENGINEER OR TESTING LABORATORY AT RANDOM LOCATIONS SELECTED BY THE TESTING FIRM AND/OR THE PUBLIC WORKS DEPARTMENT. LONGITUDINAL TRENCHES SHALL HAVE A COMPLETE SERIES OF COMPACTION TESTS TAKEN FOR EACH FOUR FEET OF THICKNESS OF BACKFILL PLACED. EACH SERIES SHALL CONSIST OF TESTS TAKEN AT APPROXIMATE MAXIMUM INTERVALS OF 250'. LATERAL TRENCHES SHALL HAVE COMPACTION TESTS TAKEN ON 50% OF THE LATERALS, ONE TEST FOR EACH FOUR FEET OF THE DEPTH OF THE LATERAL.
3. UNDERGROUND SERVICE ALERT SHALL BE NOTIFIED 2 WORKING DAYS PRIOR TO START OF WORK. 1-800-422-4133
4. UNTIL PERMANENT PAVEMENT IS REPLACED OVER A BACKFILLED TRENCH, A MINIMUM 2" THICKNESS OF TEMPORARY ASPHALT CONCRETE PAVING SHALL BE PLACED WITHIN THE TRENCH AREA. THE TEMPORARY PAVING SHALL BE PLACED AND COMPACTED IN SUCH A MANNER AS TO PROVIDE A SAFE AND SMOOTH TRAVELED SURFACE. PERMITTEE SHALL MAINTAIN THE TEMPORARY PAVEMENT IN THIS SAFE AND SMOOTH CONDITION UNTIL PERMANENT PAVING IS IN PLACE.
5. PRIOR TO PLACEMENT OF PERMANENT PAVING, EXISTING PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT LINE. CRACKED PAVEMENT ADJACENT TO THE TRENCH SHALL BE REMOVED.
6. ALL EDGES OF EXISTING PAVEMENT BEING JOINED AND SURFACE BEING OVERLAID SHALL RECEIVE A TACK COAT OF ASPHALT EMULSION.
7. ALL TRENCHES EXCEEDING 400 FEET IN LENGTH, MUST BE CAPPED WITH A MINIMUM 10' WIDTH UTILIZING A BARBER-GREENE (OR EQUIVALENT) PAVING MACHINE. A.C. CAP MUST BE 1" THICK (DI-AR-4000) ABOVE EXISTING PAVING EXCEPT WHERE EDGES ARE FEATHERED AS DIRECTED BY THE CITY ENGINEER.

<b>CITY OF COLTON</b>		
PUBLIC WORKS DEPT: JOHN C. HUTTON, DIR.		
<b>TRENCH REPAIR</b>		
DRAWN BY:	SCALE:	DRAWING NO.
R.E.W.	NONE	
CHECKED BY:	DATE:	<b>124</b>
	3-1-88	
APPROVED BY:	R.C.E. 13440	



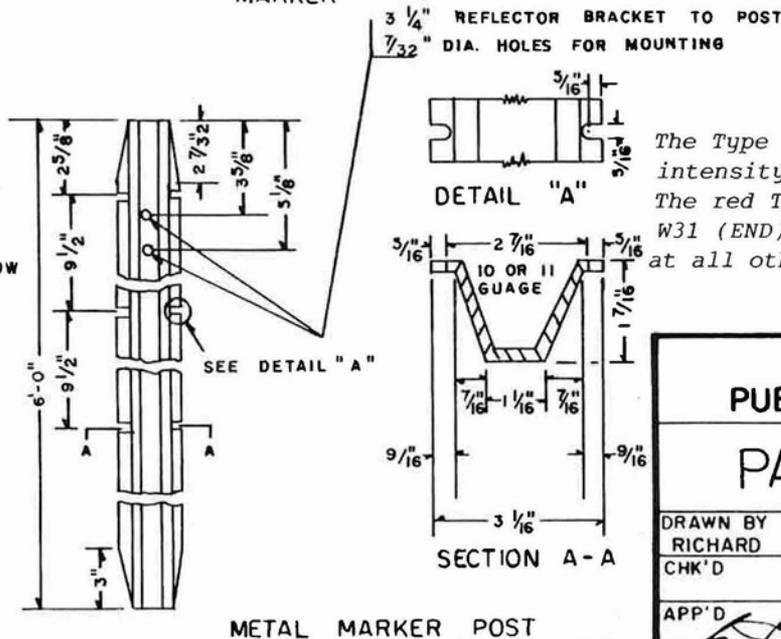
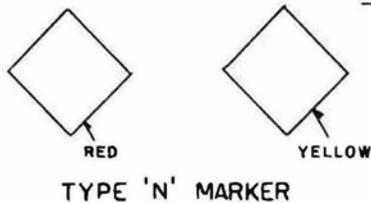
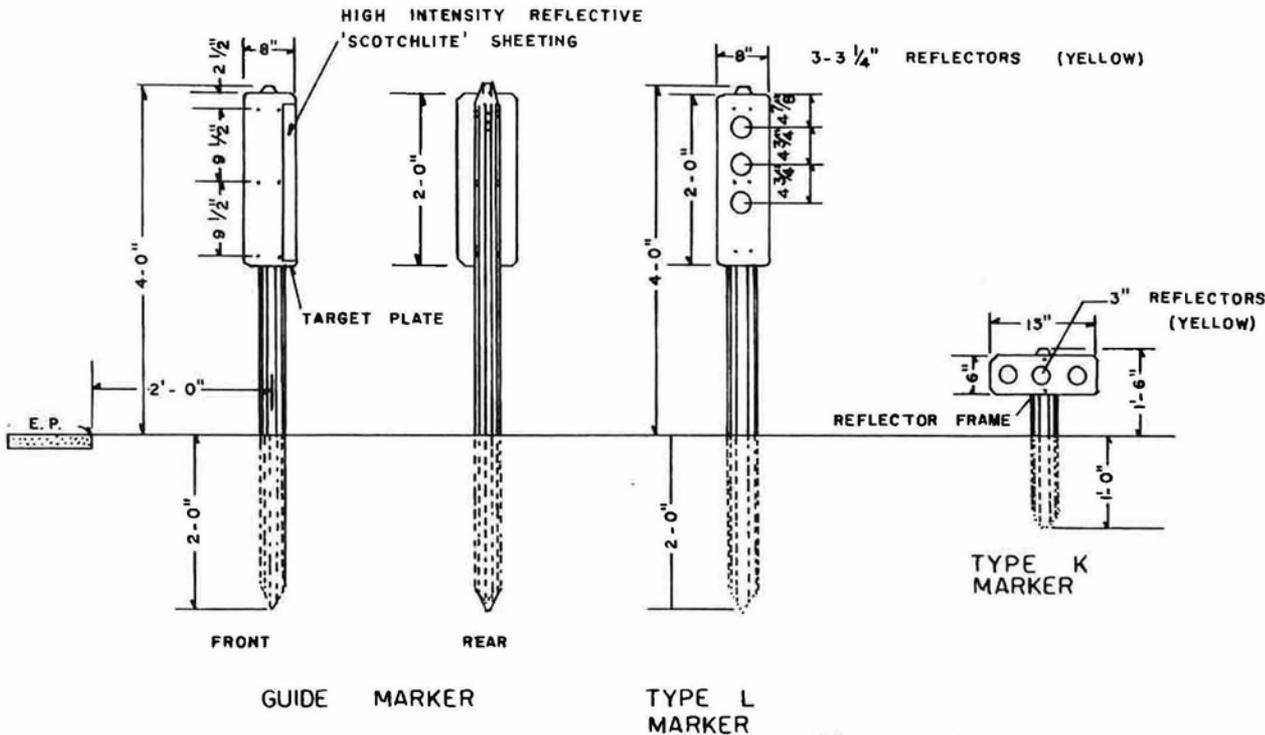
SEE SHEET 2 FOR GENERAL NOTES

<p>CITY OF COLTON ENGINEERING DEPARTMENT</p>		
<p><b>TRENCH REPAIR</b></p>		
DRAWN BY:	SCALE	DRAWING No.
CHECKED BY:	DATE APRIL 14, 2003	<p>124</p>
APPROVED BY:		

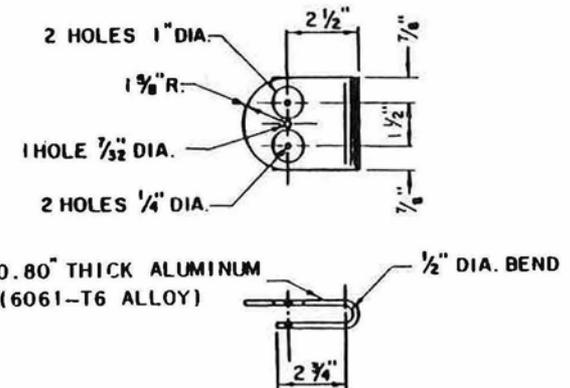
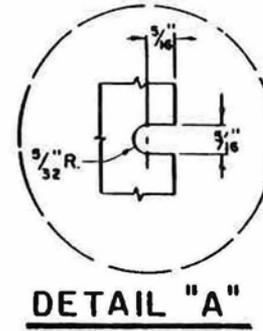
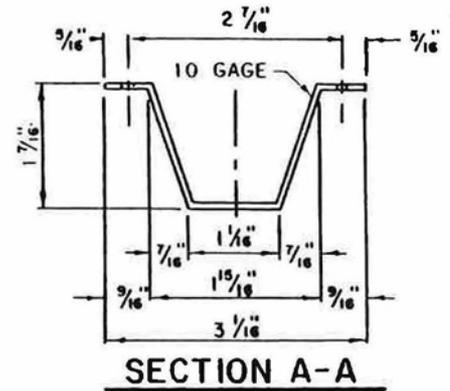
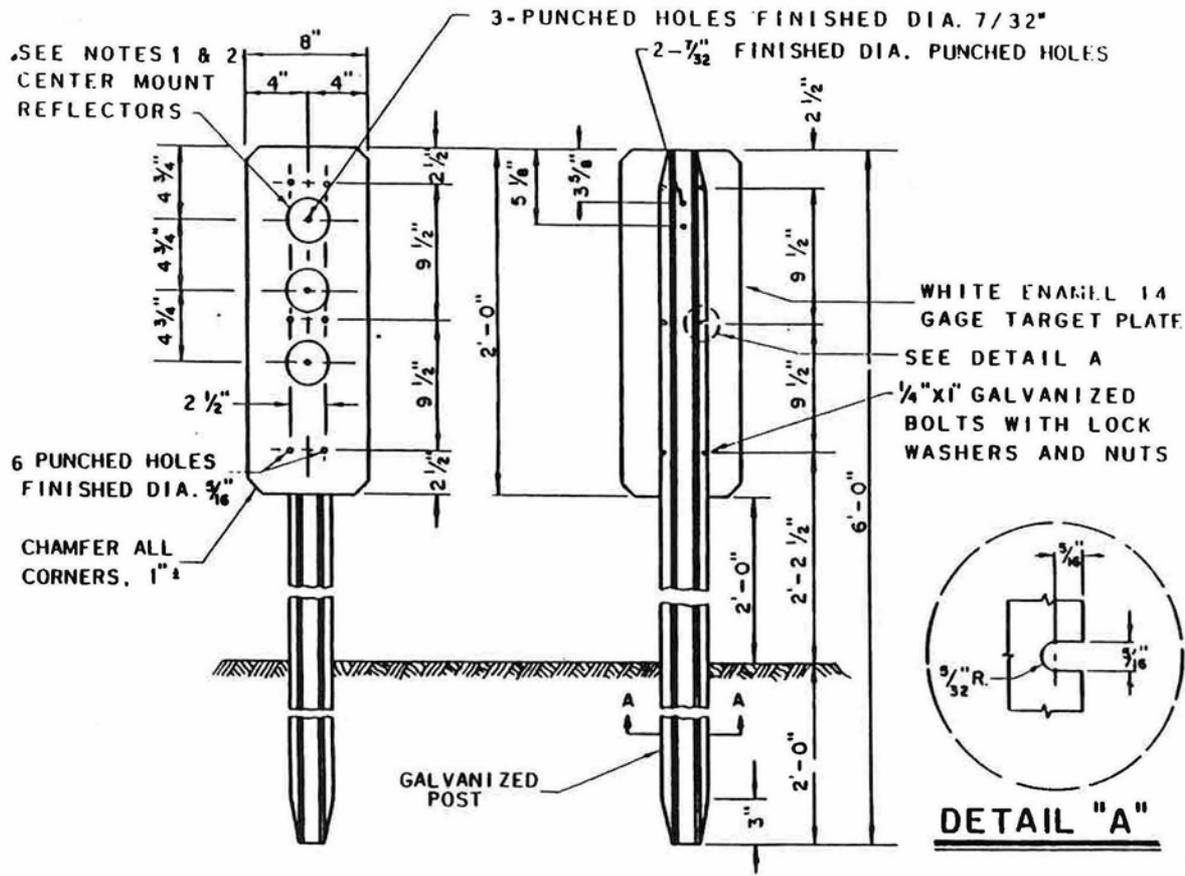
## GENERAL NOTES

- 1.) TRENCH BACKFILL SHALL BE PER SECTION 306-1.3 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTIONS, EXCEPT AS SHOWN ON THIS DRAWING.
- 2.) COMPACTION OF BACKFILL SHALL BE VERIFIED BY CONTRACTOR AND APPROVED BY THE ENGINEERING DEPARTMENT PRIOR TO THE PLACING OF PERMANENT PAVEMENT. COMPACTION TESTS SHALL BE TAKEN BY A LICENSED ENGINEER OR TESTING LABORATORY AT RANDOM LOCATIONS SELECTED BY THE TESTING FIRM AND/OR THE CITY ENGINEER. LONGITUDINAL TRENCHES SHALL HAVE A COMPLETE SERIES OF COMPACTION TESTS TAKEN FOR EACH FOUR FEET OF THICKNESS OF BACKFILL PLACED. EACH SERIES SHALL CONSIST OF TESTS TAKEN AT APPROXIMATE MAXIMUM INTERVALS OF 250 FEET. LATERAL TRENCHES SHALL HAVE COMPACTION TESTS TAKEN ON 50% OF THE LATERALS, ONE TEST FOR EACH FOUR FEET OF THE DEPTH OF THE LATERAL.
- 3.) UNDERGROUND SERVICE ALERT SHALL BE NOTIFIED 2 WORKING DAYS PRIOR TO THE START OF WORK. 1-800-422-4133.
- 4.) UNTIL PERMANENT PAVEMENT IS REPLACED OVER A BACKFILLED TRENCH, A MINIMUM 2" THICKNESS OF TEMPORARY ASPHALT CONCRETE PAVING SHALL BE WITHIN THE TRENCH AREA. THE TEMPORARY PAVING SHALL BE PLACED AND COMPACTED IN SUCH A MANNER AS TO PROVIDE A SAFE AND SMOOTH TRAVELED SURFACE. PERMITTEE SHALL MAINTAIN THE TEMPORARY PAVEMENT IN THIS SAFE AND SMOOTH CONDITION UNTIL PERMANENT PAVING IS IN PLACE.
- 5.) PRIOR TO PLACEMENT OF PERMANENT PAVING, EXISTING PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT EDGE. CRACKED PAVEMENT ADJACENT TO THE TRENCH SHALL BE REMOVED.
- 6.) ALL EDGES OF EXISTING PAVEMENT BEING JOINED AND SURFACE BEING OVERLAID SHALL RECEIVE A TACK COAT OF ASPHALT EMULSION.
- 7.) ALL TRENCHES EXCEEDING 400 FEET IN LENGTH, MUST BE CAPPED WITH A MINIMUM 10 FOOT WIDTH UTILIZING A PAVING MACHINE. MINIMUM OF 1" THICKNESS ( DI-AR-4000) ABOVE EXISTING PAVEMENT, EXCEPT WHERE EDGES ARE FEATHERED AS DIRECTED BY THE CITY ENGINEER.

CITY OF COLTON ENGINEERING DEPARTMENT		
TRENCH REPAIR		
DRAWN BY:	SCALE NONE	DRAWING No.
CHECKED BY:	DATE APRIL 14, 2003	124
APPROVED BY:		



<b>CITY OF COLTON PUBLIC WORKS DEPARTMENT</b>		
<b>PADDLE MARKER</b>		
DRAWN BY RICHARD BARTLETT	SCALE N. T. S.	DRAWING NO. 125
CHK'D	DATE 6/28/85	
APP'D <i>[Signature]</i>		



**REAR MOUNT BRACKET**

**NOTES:**

1. CLEARANCE MARKER (W-60R) THREE 3 1/4" YELLOW CENTERMOUNT REFLECTORS.
2. GUIDE MARKERS ONE 3 1/4" WHITE CENTERMOUNT REFLECTOR.
3. REAR MOUNT REFLECTOR BRACKET SHALL BE USED ON CURVES. BRACKET SHALL BE ATTACHED WITH 3/16" BLIND ALUMINUM RIVETS AND USED TO MOUNT A 3" WHITE REFLECTOR.
4. ALL MATERIALS SHALL CONFORM TO STATE OF CALIFORNIA, STANDARD SPECIFICATIONS
5. HOLE DIAMETERS APPLY TO DIMENSION AFTER ITEM IS PAINTED.

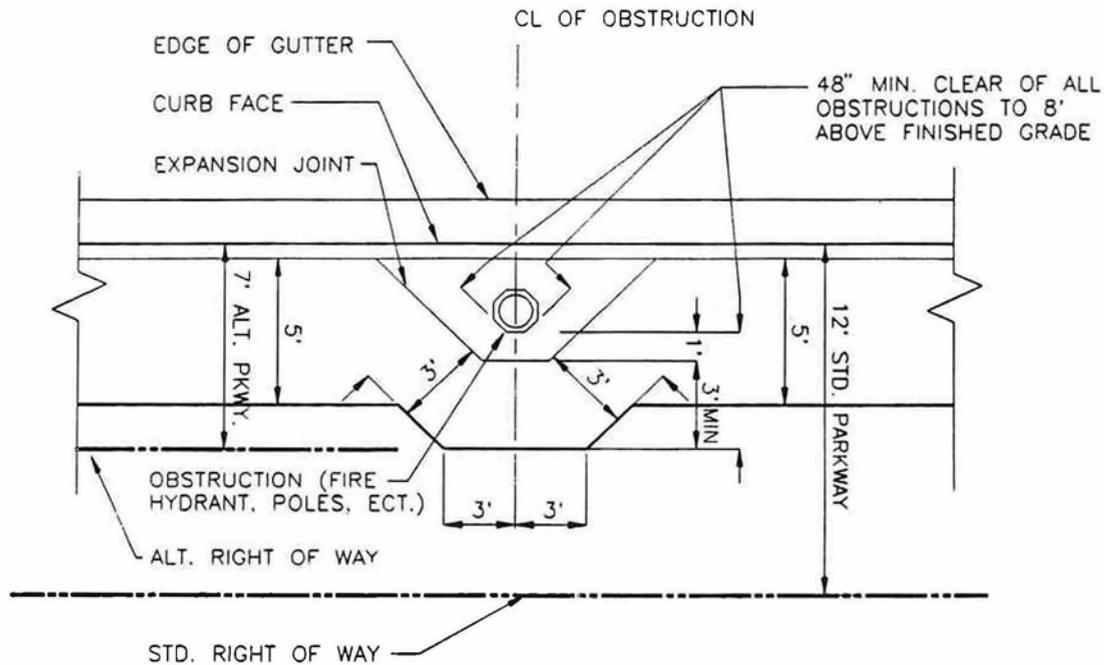
<b>CITY OF COLTON PUBLIC WORKS DEPARTMENT</b>		
<b>PADDLE MARKER</b>		
DRAWN BY R. BARTLETT	SCALE N. T. S.	DRAWING NO. 125A
CHK'D	DATE 7-25-85	
APP'D <i>[Signature]</i>		

<p style="text-align: center;"><b>CITY OF COLTON</b> PUBLIC WORKS DEPARTMENT</p>		REVISIONS		DATE	APPR.
		CITY ENGINEER		SCALE	
<p>NAME R.C.E. No. APPROVED</p>		HORZI.		VERT.	
		DATE		DATE	
		SHEET		OF	
<p style="text-align: center;"><b>PLAN NO.</b></p>					

**NOTE:**

1. Title block to be placed in LOWER RIGHT HAND corner of plans.
2. Use LEROY lettering guide for all letters and numbers.
3. Place on all Street, Water, Sewer, Storm drain, Grading and Drainage plans.
4. Revisions shall be entered from the bottom, up.

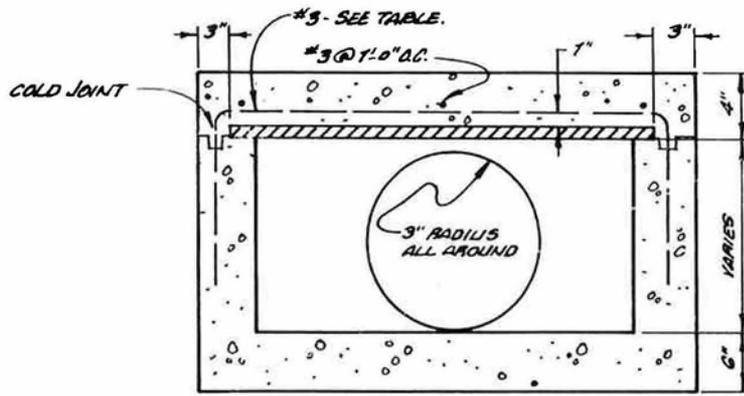
<p><b>CITY OF COLTON</b> PUBLIC WORKS DEPT. JOHN C. HUTTON, DIR.</p>	
<p><b>CITY OF COLTON</b> <b>TITLE BLOCK</b></p>	
DRAWN BY: <i>R.E.W.</i>	SCALE:
CHECKED BY:	DATE: <i>Feb 1, 1985</i>
APPROVED BY: <i>[Signature]</i> CITY ENGINEER R.C.E. 13440	DRAWING NO.  <b>126</b>



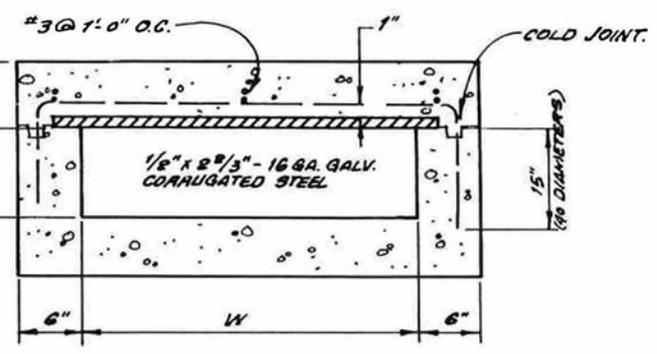
**NOTES:**

1. CONCRETE SHALL BE CLASS 520-C-2500
2. SEE STANDARD DRAWING 109 FOR EXPANSION JOINTS AND SCORING LINES.
3. ALL EXCESS DIRT TO BE REMOVED FROM PREMISES BY CONTRACTOR.
4. LIGHT BROOM FINISH PERPENDICULAR TO CURB.
5. PARKWAY FROM CURB TO PROPERTY LINE TO BE BROUGHT TO GRADE BY CONTRACTOR BEFORE FINAL APPROVAL.
6. THIS STANDARD APPLIES TO ALL OBSTRUCTIONS IN SIDEWALK AREA WHERE LESS THAN A 48" CLEAR WIDTH IS AVAILABLE FOR WHEELCHAIRS.

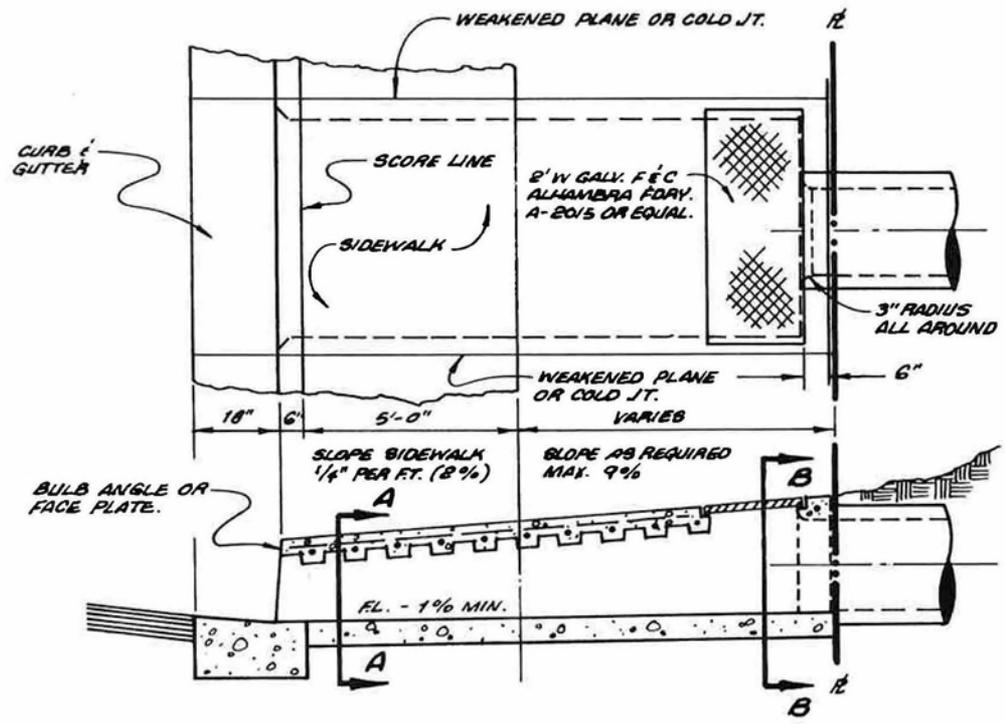
<p><b>CITY OF COLTON</b> PUBLIC WORKS DEPT: JOHN C. HUTTON, DIR.</p>		
<p><b>SIDEWALK JOG FOR ALL OBSTRUCTIONS</b></p>		
DRAWN BY: S.E.S.	SCALE: N.T.S.	DRAWING NO.
CHECKED BY: T.R.W.	DATE: JANUARY 1 1992	<p style="font-size: 2em; font-weight: bold;">127</p>
APPROVED BY: <div style="text-align: center;"> <p style="font-size: 0.8em; margin: 0;">R.C.E. 13440</p> </div>		



SECTION B-B



SECTION A-A



PIPE I.D.	8" C.F.	
	"W"	STEEL REBAR O.C.
4" MIN.	1'-0"	12"
6" MIN.	1'-0"	12"
8" MIN.	1'-6"	12"
10"	2'-6"	12"
12"	3'-6"	11"

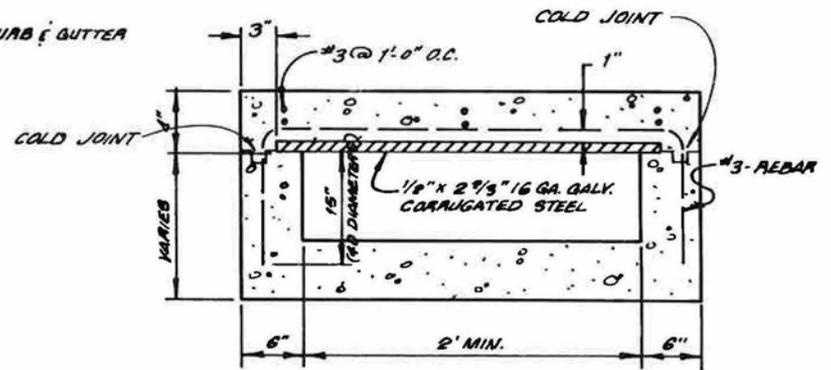
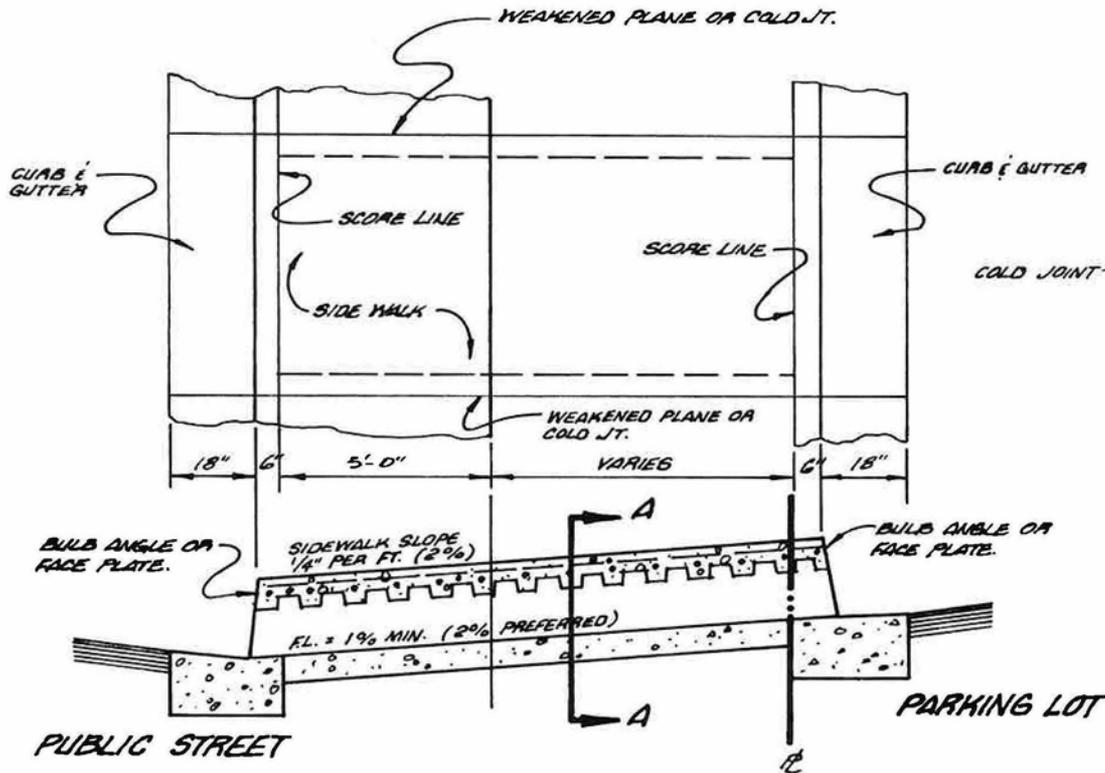
**CITY OF COLTON  
PUBLIC WORKS DEPARTMENT**

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**SIDEWALK DRAIN**

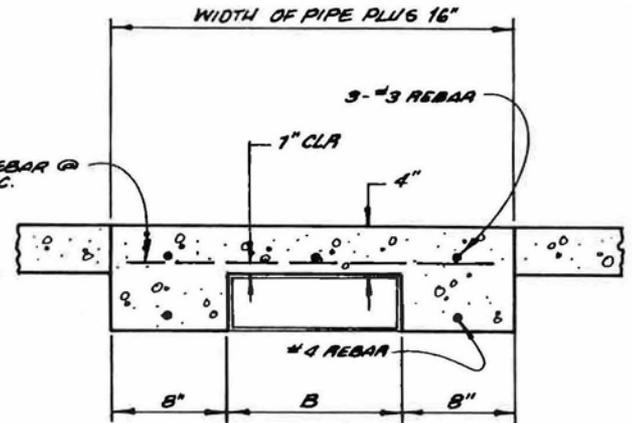
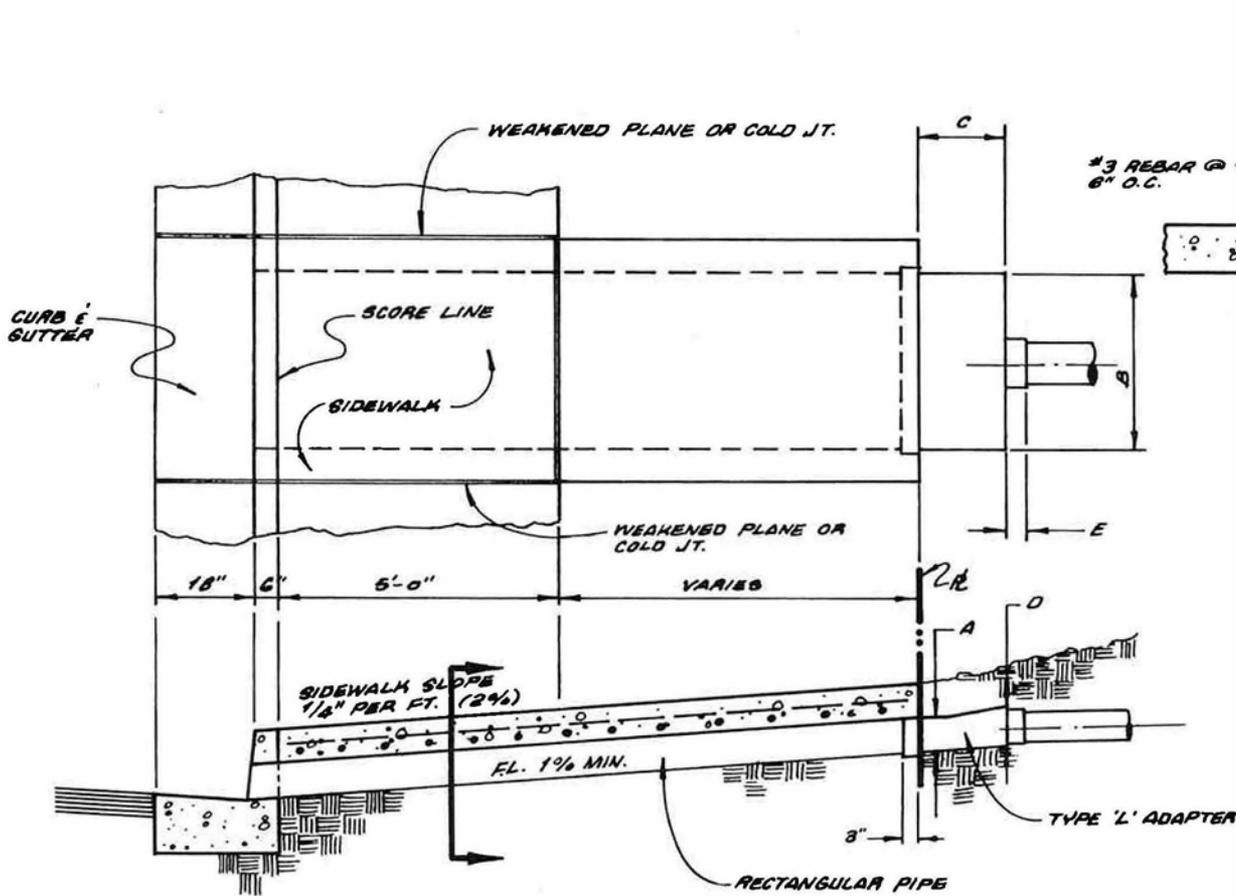
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DRAWN BY: C. WARRICK	SCALE: NO SCALE	DRAWING NO
CHK'D: TRW	DATE: MAY 17 1988	<b>128</b>
APP'D: <i>[Signature]</i> CITY ENGINEER ACE # 13440		



SECTION A-A

CITY OF COLTON PUBLIC WORKS DEPARTMENT		
SIDEWALK DRAIN		
DRAWN BY: C. WARRICK.	SCALE: NO SCALE	DRAWING NO.  128-A
CHK'D: TRW	DATE: NOV. 11, 1988	
APP'D: <i>Glenn Wilson</i> CITY ENGINEER ACE # 13440		



**SECTION A-A**

USE INDASCO PRODUCTS OR APPROVED EQUAL  
 INDASCO  
 11966 RIERA ROAD.  
 SANTA FE SPRINGS, CA. 90670  
 (813) 945-6511

RECTANGULAR PIPE			TYPE "L" ADAPTER				
	O.D.	I.D.	A	B	C	D	E
1	5 1/8" x 3 3/4"	5" x 3"	1 3 3/4"	5 1/2"	8"	6"	2"
2	8 1/2" x 4 1/4"	8" x 3 1/2"	2 4 1/4"	8 1/2"	12"	8"	2"
3	15 1/8" x 4 1/2"	15 1/8" x 3 1/2"	3 4 1/2"	15 1/8"	16 1/8"	10"	2 1/2"

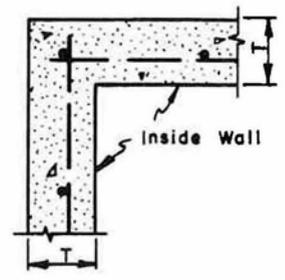
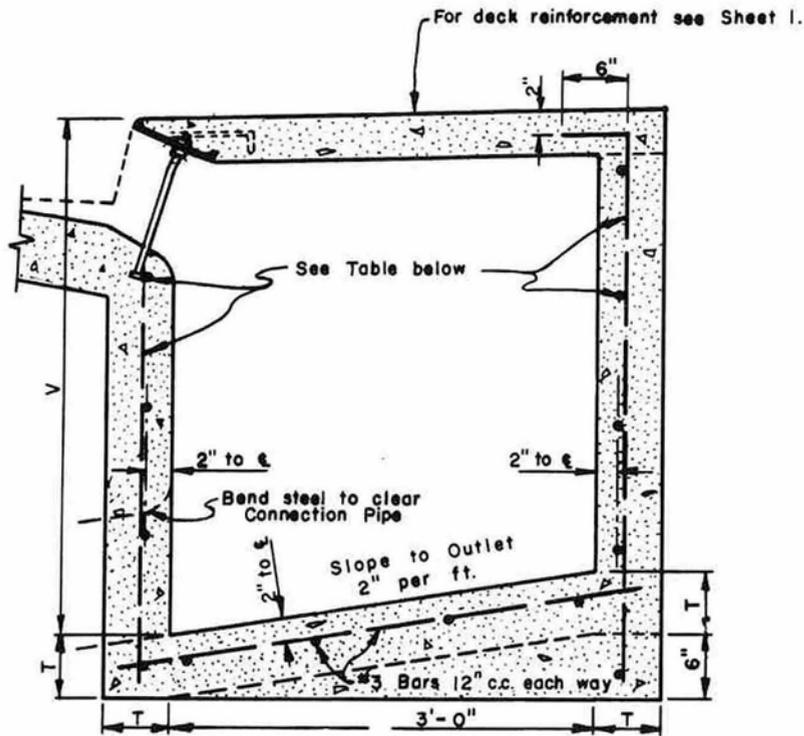
**CITY OF COLTON  
PUBLIC WORKS DEPARTMENT**

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**SIDEWALK DRAIN**

DRAWN BY: C. WARRICK	SCALE: NO SCALE	DRAWING NO. 128-B
CHK'D TRW	DATE: MAY 17 1988	
APP'D <i>Sam Wilson</i> CITY ENGINEER ACE # 13440		





SECTION B-B

TYPICAL SECTION

V OF CB	T	WALL RE-INFORCING (each way)
4' or less	6"	#3 at 12"
4' to 8'	8"	#4 at 12"
8' or more	10"	#5 at 12"

WALL DIMENSIONS & REINFORCEMENT

<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>		
<b>STANDARD CURB INLET CATCH BASIN</b>		
DRAWN BY G.W.A.	SCALE N.T.S.	DRAWING NO.
CHK'D <i>DJB</i>	DATE OCT. 1963	
APP'D <i>G. Stewart Wilson</i>		200

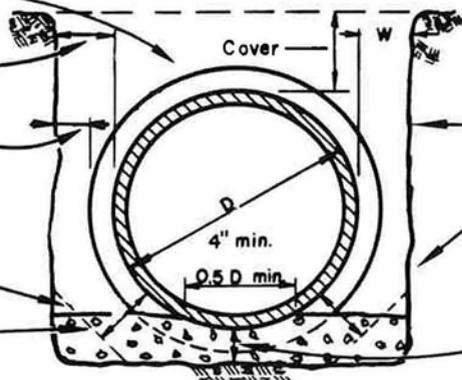
Backfill as specified on improvement planes

6" min. clearance to barrel

2" min. clearance to bell or collar

Excavation to this line permitted

Bedding A



Excavated bank or sheeting

Screed bedding A to fit curvature and grade of pipe. Type of screed and the method of use to be approved by the Engineer.

Bedding material below bottom of pipe shall be  $\frac{1}{2} D$  for pipes 39" and larger in diameter, and 4" for pipes less than 39" in diameter. In no case shall it be less than 1" below any bell or collar.

**BEDDING & BACKFILL AROUND PIPE (Load Factor 1.4)**

- (a) "W" at springing line shall not be less than 6" for any depth of trench. This dimension may include the thickness of any sheeting.
- (b) Where cover is 8' or less, "W", measured at top of pipe, may be any dimension greater than 6".
- (c) Where cover is greater than 8', "W", measured at top of pipe, shall not be greater than 8"; or else provide Case I bedding or stronger pipe. The stated 8" includes the thickness of any sheeting.

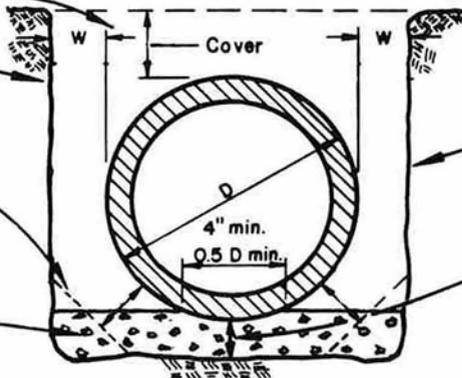
**CASE II - VITRIFIED CLAY AND PLAIN CONCRETE PIPE**

Backfill as specified on improvement planes

Excavated bank or sheeting

Excavation to this line permitted.

Bedding A



Screed bedding A to fit curvature and grade of pipe. Type of screed and the method of use to be approved by the Engineer.

Bedding material below bottom of pipe shall be  $\frac{1}{2} D$  for pipes 39" and larger in diameter, and 4" for pipes less than 39" in diameter. In no case shall it be less than 1" below any bell or collar.

**BEDDING & BACKFILL AROUND PIPE (Load Factor 1.4)**

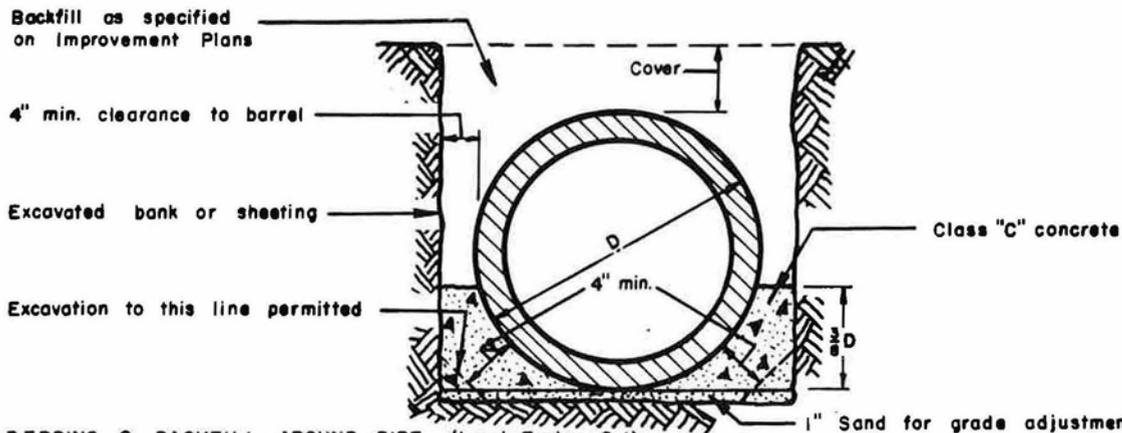
- (a) "W" at springing line shall not be less than the following: 6" for pipe 60" or less in diameter, 10" for pipe 63" to 96" inclusive in diameter, and 12" for pipe larger than 96" in diameter. These dimensions may include the thickness of any sheeting.
- (b) Where cover is 10' or less, "W", measured at the top of the pipe, may be any dimension greater than the above specified minimum, unless otherwise specified on the general plan.
- (c) Where cover is greater than 10', "W", measured at the top of the pipe, shall not be greater than 10" for pipe 96" in diameter or less, or 12" for pipe over 96" in diameter; or else provide Case I bedding or stronger pipe. These dimensions includes the thickness of any sheeting.

**CASE III - REINFORCED CONCRETE PIPE**

**NOTES:**

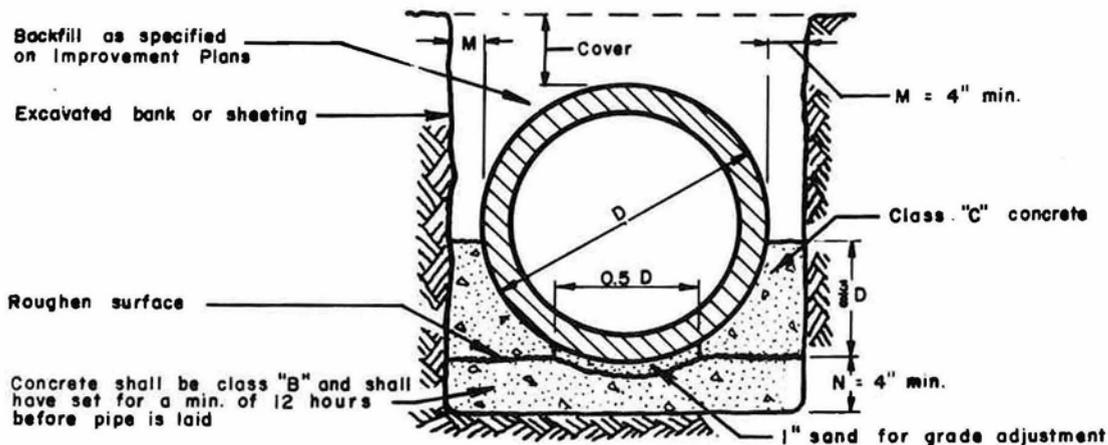
1. For Case I, Case IV, and Case V see STD. Dwg. No. 202
2. Bedding A shall be composed of sand, crushed rock or gravel, or other imported material as may be specified or otherwise approved by the Engineer.
3. Cost of bedding shall be included in the price for pipe in place.
4. Backfill shall contain no rocks larger than 4" in greatest dimension.
5. Where rocks are included in the bedding, "nesting" thereof will not be permitted.
6. 3 - Edge Bearing Test load factor = 1.0.

<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>			
<b>STANDARD PIPE BEDDING IN TRENCHES</b>			
DRAWN BY	G. W. A.	SCALE	N. T. S.
CHK'D	<i>DB</i>	DATE	NOV. 1963
APP'D	<i>L. Stewart</i>		DRAWING NO.
			<b>201</b>



**BEDDING & BACKFILL AROUND PIPE (Load Factor 2.1)**  
 The above shall be used where specified on plans or where required as an alternate to Case II or Case III Bedding as shown on Standard Drawing No. 201

### CASE I



**BEDDING & BACKFILL AROUND PIPE (Load Factor 3.0)**  
 The above shall be used where required by Engineer as an alternate to Case I against sheeting or unstable trench sides or to meet other conditions arising during construction. M and N shall be specified on the plans or by the Engineer.

### CASE IV

#### NOTES:

1. For Case II and Case III, see Standard Drawing No. 201
2. Backfill shall contain no rocks larger than 4".
3. 3 - Edge Bearing Test load factor = 1.0.
4. Cost of Bedding shall be included in the price for pipe in place.

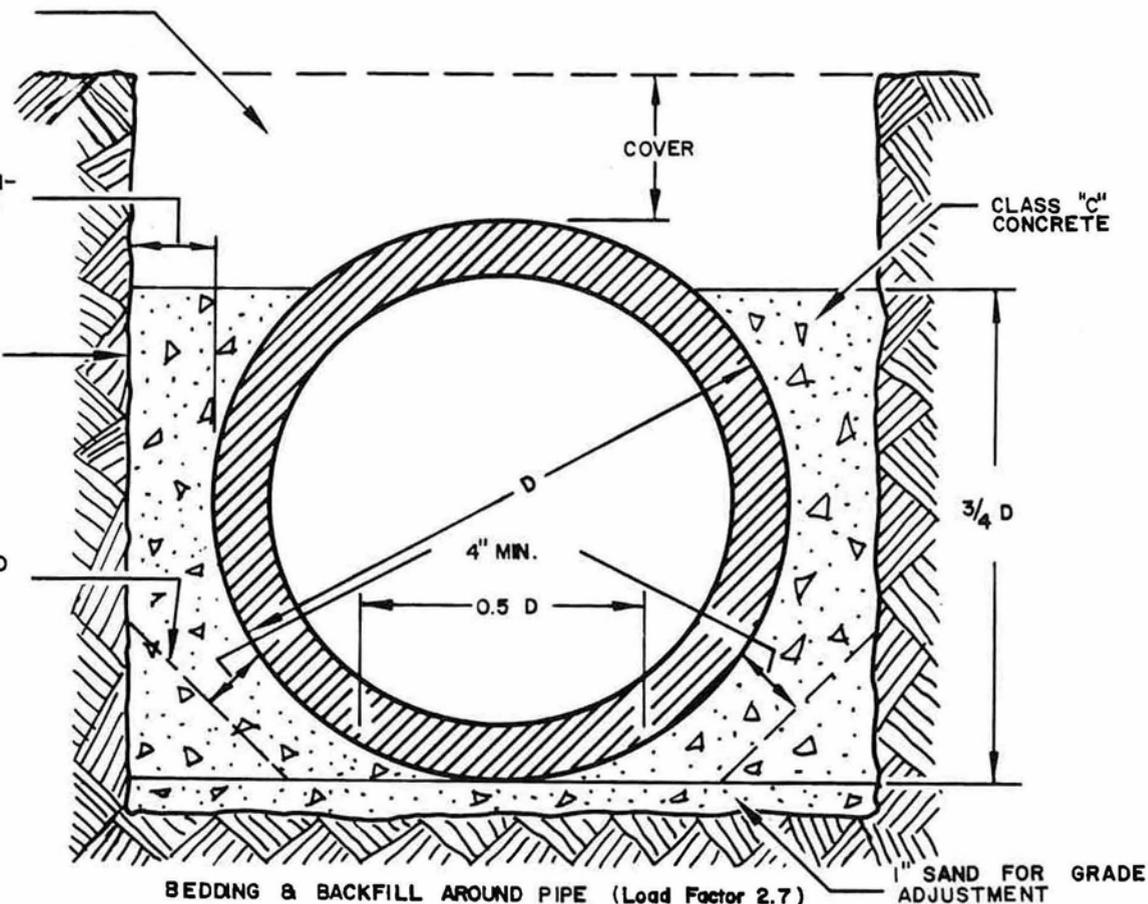
<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>			
<b>ALTERNATE PIPE BEDDING IN TRENCHES</b>			
DRAWN BY	G.W.A.	SCALE	N.T.S.
CHK'D	<i>[Signature]</i>	DATE	OCT. 1963
APP'D	<i>[Signature]</i>		
			DRAWING NO. <b>202</b>

BACKFILL AS SPECIFIED ON IMPROVEMENT PLANS

4" MIN. CLEARANCE TO BARREL

EXCAVATED BANK OR SHEETING

EXCAVATION TO THIS LINE IS PERMITTED



BEDDING & BACKFILL AROUND PIPE (Load Factor 2.7)

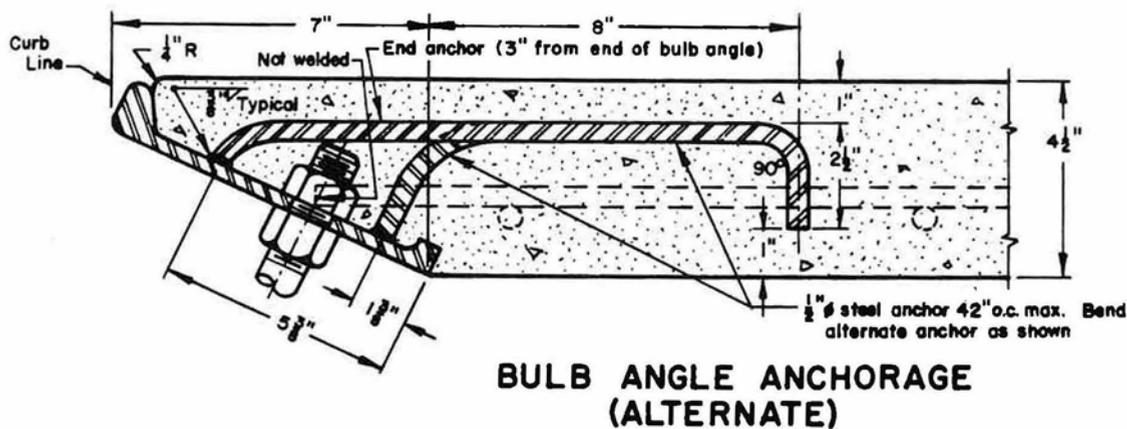
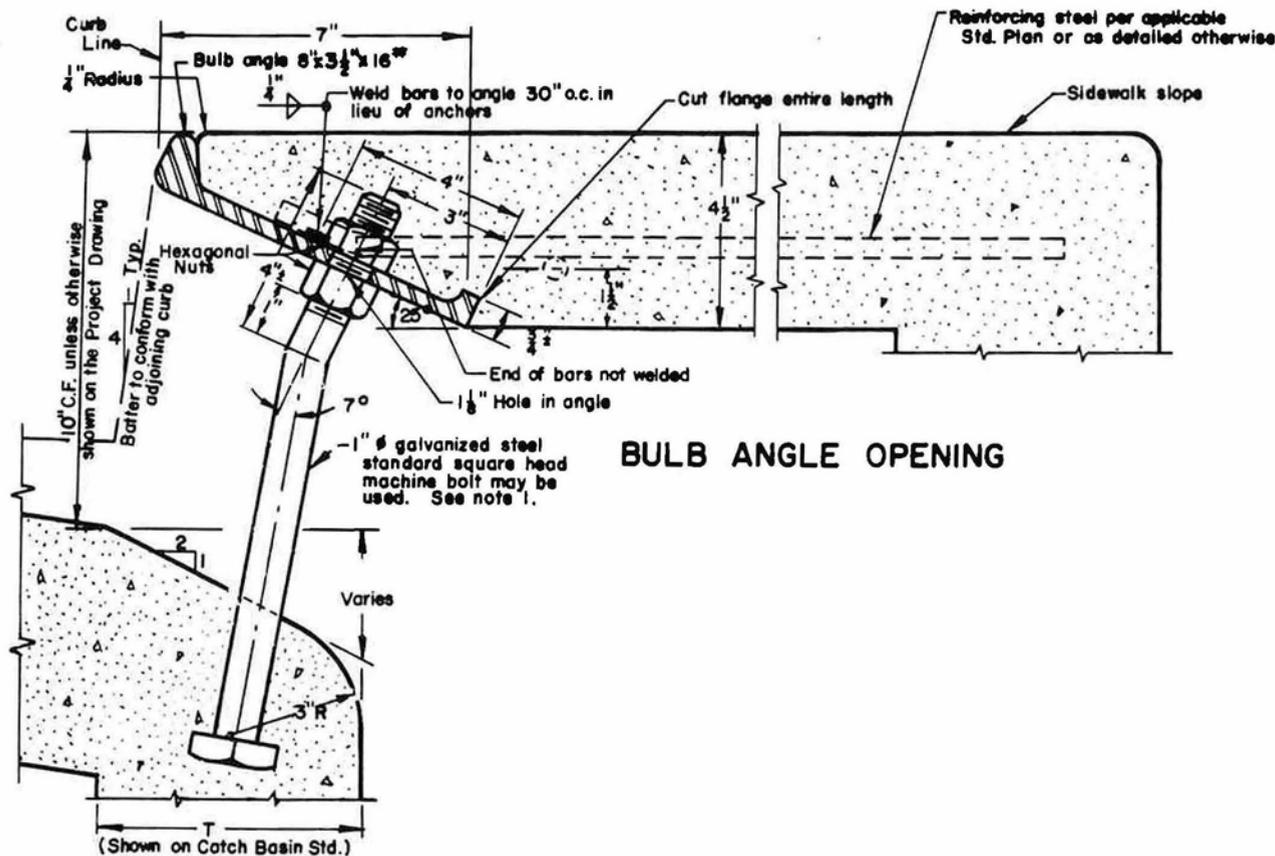
1" SAND FOR GRADE ADJUSTMENT

CASE V

NOTES

1. CASE V BEDDING SHALL BE USED WHERE SPECIFIED ON IMPROVEMENT PLANS.
2. FOR CASE II & III, SEE STANDARD NO. 201
3. FOR CASE I & IV, SEE SHEET 1.
4. BACKFILL SHALL CONTAIN NO ROCKS LARGER THAN 4".
5. 3-EDGE BEARING TEST LOAD FACTOR = 1.0
6. COST OF BEDDING SHALL BE INCLUDED IN THE PRICE FOR PIPE IN PLACE.

CITY OF COLTON PUBLIC WORKS DEPT		
ALTERNATE PIPE BEDDING IN TRENCHES		
DRAWN BY: T. FARKAS	SCALE N.T.S.	DRAWING NO.
CHK'D <i>[Signature]</i>	DATE NOV. 1963	202
APP'D <i>[Signature]</i>		

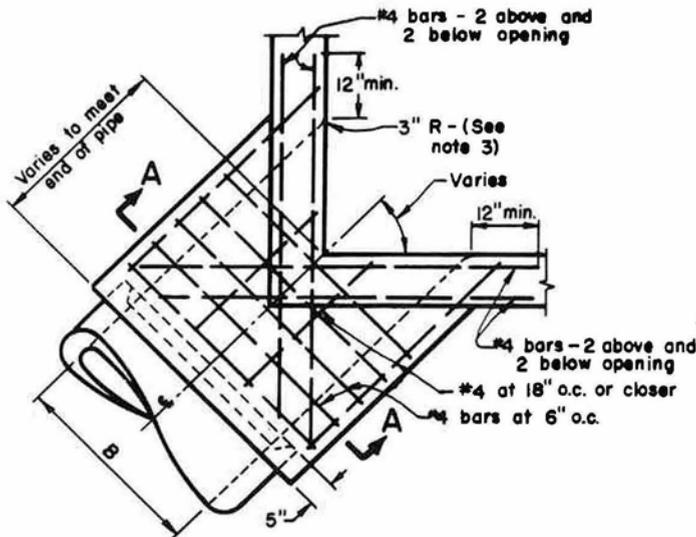


#### NOTES

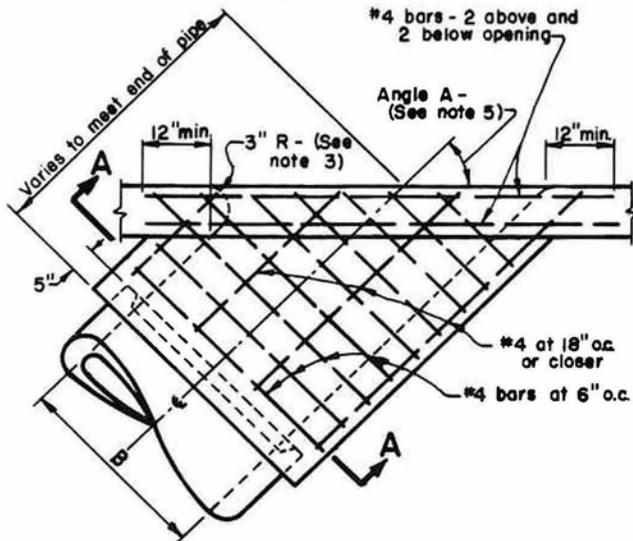
1. Support bolts shall be equal to Curb Face + 4".
2. Support bolts shall be installed when W exceeds 7'-0" and shall be spaced at not more than 7'-0" o.c. and not less than 5'-0" o.c.
3. All exposed metal parts shall be galvanized. All galvanizing damaged by welding shall receive two coats of Aluminum Paint.
4. Length of Bulb Angle shall be equal to W + 2T.

REVISION	NEW BULB ANGLE 8" x 3 1/2" x 16"	October 1966
<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>		
<b>DETAIL OF CATCH BASIN OPENING - TYPE "A"</b>		
DRAWN BY	G. W. A.	SCALE 1/4" = 1'
CHK'D	<i>[Signature]</i>	DATE OCT. 1963
APP'D	<i>[Signature]</i>	
		DRAWING NO. <b>203</b>

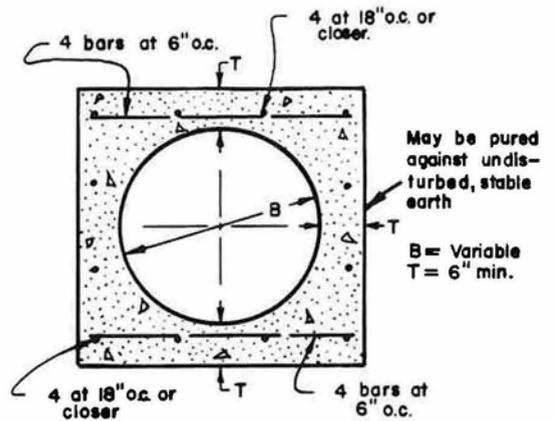




**PLAN - CORNER CONNECTION**



**PLAN - SIDE CONNECTION**



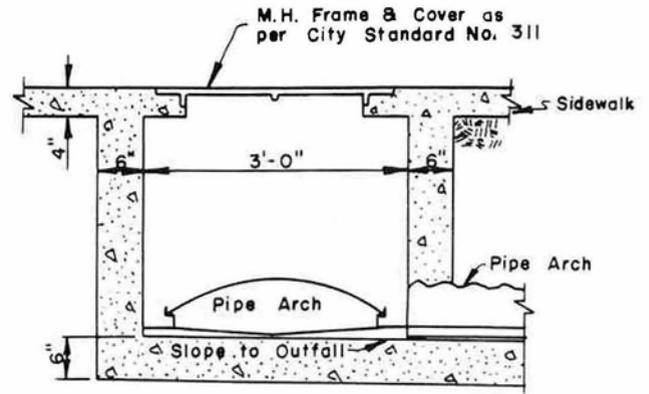
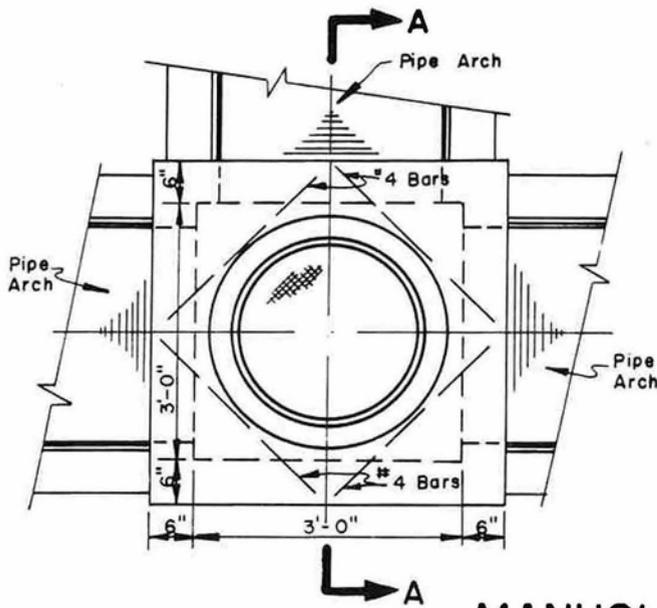
**SECTION A-A**

**NOTES:**

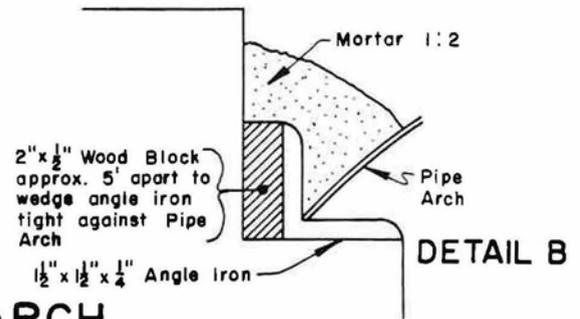
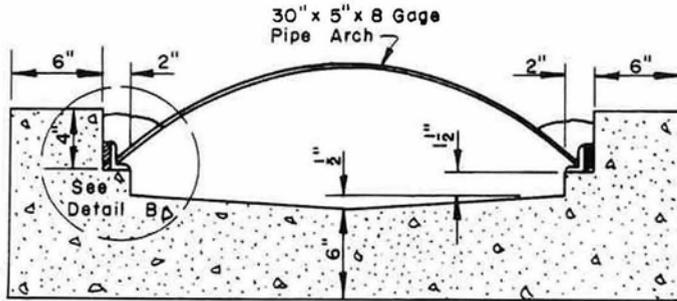
1. Reinforcing steel shall be  $\frac{1}{2}$ " clear from face of concrete unless otherwise shown.
2. Reinforcing steel for inside face of catch basin wall shall be cut at center of opening and bent into walls of monolithic construction.
3. Connection shall be poured monolithic with catch basin. The rounded edge of outlet shall be constructed by pouring concrete against a curved surface with a radius of 3".
4. Floor of structure shall be steel-troweled to spring line.
5. Connections shall be constructed when:
  - (a). Pipes, 12" through 72" in diameter, inlet or outlet through corner of catch basin.
  - (b). Angle A, for pipes 24" through 30" in diameter, is 70° or less.
  - (c). Pipes, 33" through 72" in diameter, inlet or outlet through the side wall of the catch basin.
6. Concrete shall be of the same class as the structure with which it is poured.

<b>CITY OF COLTON PUBLIC WORKS DEPT.</b>			
<b>SPECIAL CONNECTIONS TO CATCH BASINS</b>			
DRAWN BY	G.W.A.	SCALE	N. T. S.
CHK'D	<i>[Signature]</i>	DATE	OCT. 1963
APP'D	<i>[Signature]</i>		DRAWING NO.
			204

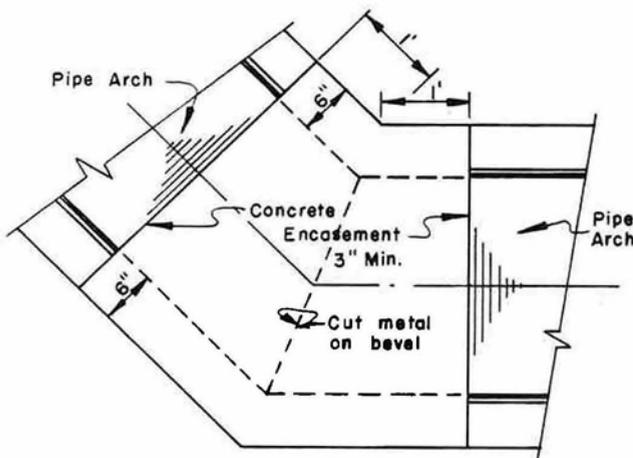




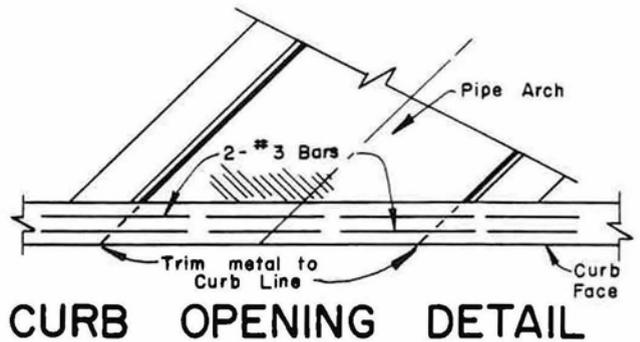
MANHOLE DETAILS



PIPE ARCH  
TYPICAL CROSS-SECTION

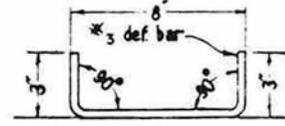
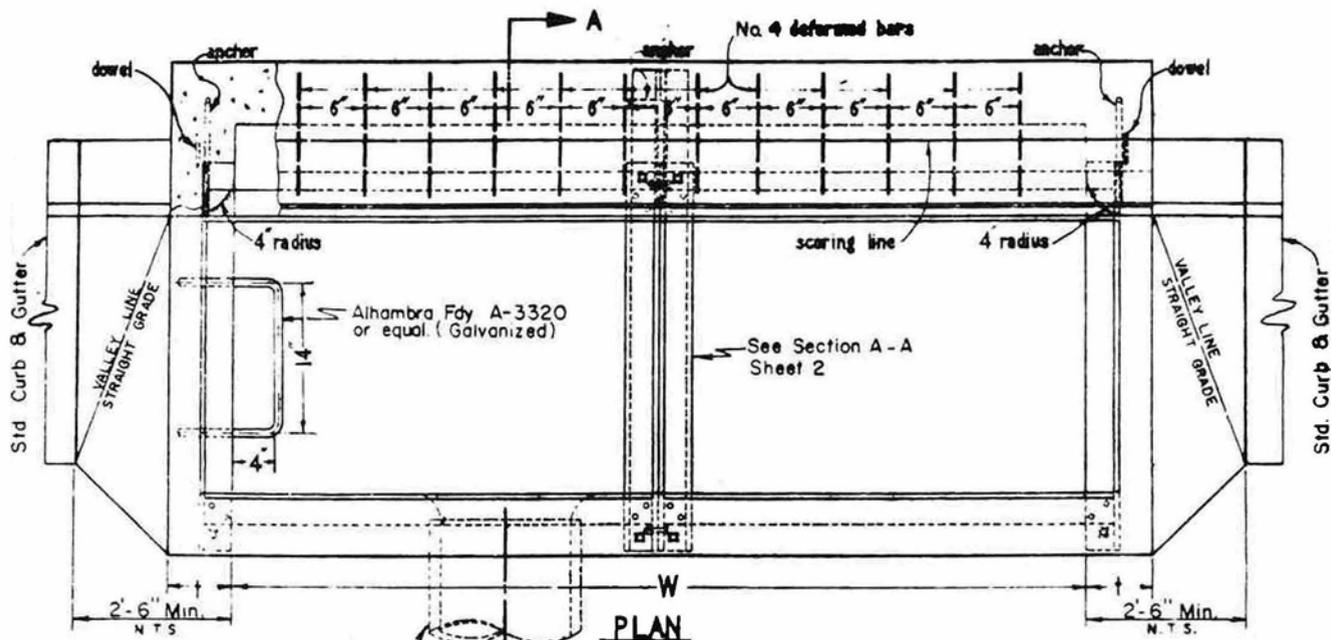


JUNCTION DETAIL  
For Joining to Existing Culverts

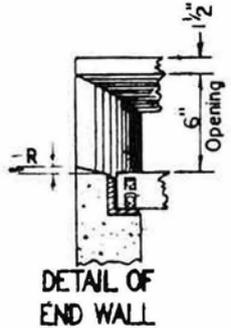
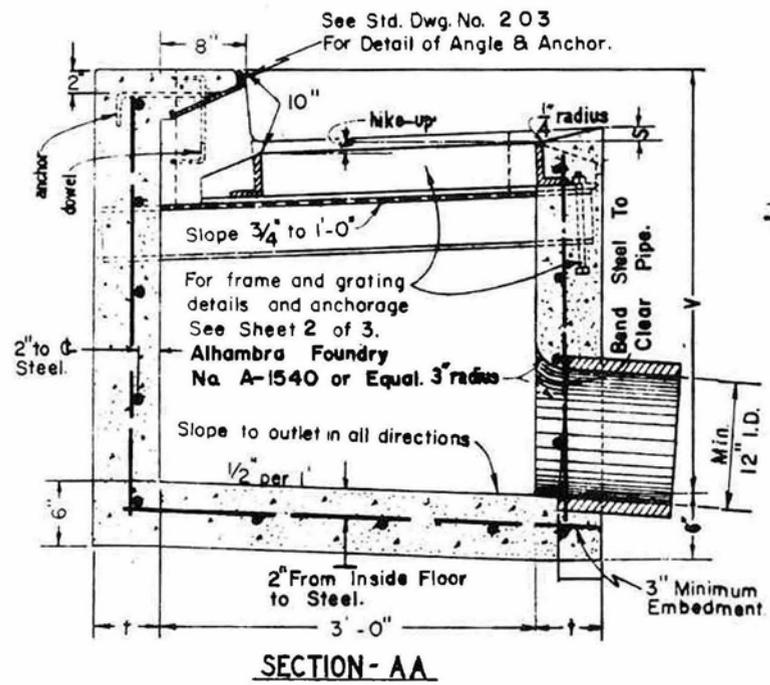


CURB OPENING DETAIL

CITY OF COLTON PUBLIC WORKS DEPT.			
CULVERT DETAILS			
DRAWN BY	G.W.A.	SCALE	N.T.S.
CHK'D	<i>DKB</i>	DATE	OCT. 1963
APP'D	<i>B. Glenn Wilson</i>		DRAWING NO.
			206



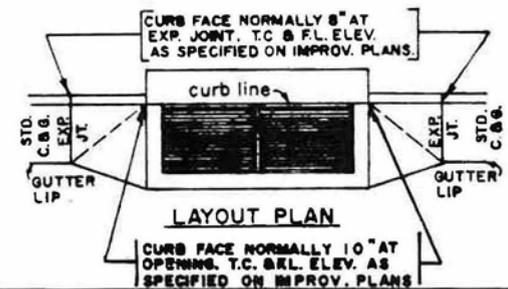
DETAIL OF DOWEL



SEE SHEET 3

STEEL LIST

No. of gratings	No. 4 Def. bars 11" long	8 x 3 1/2 x 16 Galv. Bulb Angle	Dowels	Anchor	3" Galv. steel steps
1	5	3-11	2	2	See notes
2	12	7-4	2	3	
3	19	10-10	2	4	



Notes:  
1. For Walls And Reinforcing See Sheet 3.

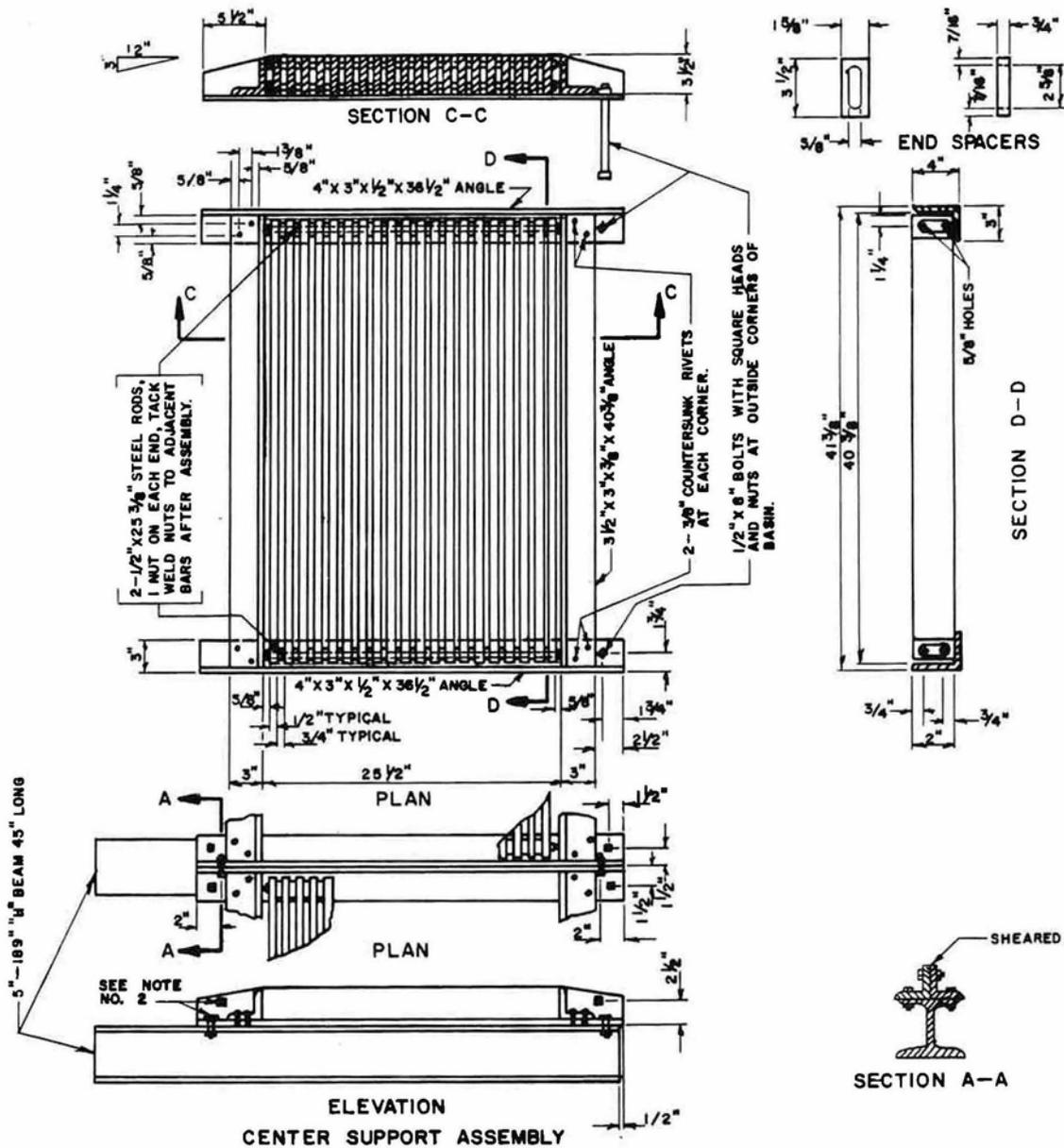
**CITY OF COLTON  
PUBLIC WORKS DEPARTMENT**

**DROP INLET CATCH BASIN**

DRAWN BY	SCALE N.T.S.	DRAWING NO <b>207</b>
CHK'D	DATE JUNE 29, 1965	
APP'D	1 OF 3	

*Daniel H. Burnett*

Revisions:	Date	By
2 Sheet No. 2 Redrawn	10-67	AK
1. Added Reinforcing Sheet 1 & 2	10-67	AK



**NOTES**

1. FRAME AND GRATING PER ALHAMBRA FOUNDRY NO. A-1840 OR EQUAL.
2. CENTER SUPPORT ASSEMBLY SHALL BE USED WHEN TWO OR MORE GRATINGS ARE SPECIFIED.
3. ALL BOLTS USED IN CENTER SUPPORT SHALL BE 1/2."
4. FRAME MAY BE RIVETED OR WELDED.
5. BOLTS SHALL BE USED TO JOIN TWO OR MORE FRAMES TOGETHER AND TO THE "H" BEAM.
6. ALL PARTS SHALL BE OF STRUCTURAL GRADE STEEL, EXCEPT END SPACERS, WHICH MAY BE CAST IRON OR STEEL.
7. ALL EXPOSED METAL PARTS SHALL BE GALVANIZED PRIOR TO ASSEMBLY. WELDING, MACHING, DRILLING SHALL BE DONE BEFORE GALVANIZING. ALL DIMENSIONS ARE FINISHED DIMENSIONS INCLUDING GALVANIZING.

<b>CITY OF COLTON PUBLIC WORKS DEPARTMENT</b>		
<b>DROP INLET CATCH BASIN</b>		
DRAWN BY	SCALE NONE	DRAWING NO.
CHK'D	DATE June 29, 1965	<b>207</b>
APP'D <i>Daniel H. Burnett</i>		2 OF 3

ANCHORS shall be 3 feet 5 3/8 inches center to center.

CONCRETE shall be Class B. When the basin is to be constructed within the limits of a proposed sidewalk or is contiguous to such a sidewalk, the top of the basin shall be poured monolithic with the sidewalk. In this case the dowels between wall and top slab shall be omitted and the top of the catch basin wall finished smooth.

CONNECTION PIPES may be placed in any position around the walls provided they point in the proper direction and the position is otherwise consistent with the improvement plan.

CURVATURE of the end-walls at curb opening shall be formed by curved forms and shall not be made by plastering.

DIMENSIONS: (V and W to be specified on plans)

Hike-up shall be parallel to plane of gutter - Slope 3/4" to 1'0"

R = 3/4 inch

S = 1 1/2 inches

t - See Reinforcing Section below

V = 3 feet 6 inches, minimum

W - 2 feet 11 3/8 inches for one grating. Add 3 feet 5 3/8 inches for each additional grating.

EXPOSED SURFACES of the catch basin shall conform in slope, grade, color, finish, and scoring to existing improvements adjacent to the basin. Where no sidewalk exists, the top shall be finished to conform to standard sidewalk slope and finish. Where no curb exists, the batter of exposed end walls above the street surface shall conform to batter for standard curb.

FLOOR of basin shall be given a steel-troweled finish.

FRAME AND GRATING to be Alhambra Foundry No. A-1540 or Equal.

OUTLET pipe shall be trimmed to the final shape and length before concrete is poured.

REINFORCING STEEL: (Deformed Bars)

Top Slab - #4 bars, one inch from top of slab.

SLOPE of floor parallel with curb shall be 1 in 12 unless otherwise specified. Slope floor from all directions to the outlet.

STEPS: 3/4 inch plain round galvanized steel steps are required as follows: (Alhambra Fdy. A-3320 or Equal).

If V is 4.5 feet or less, no steps are required.

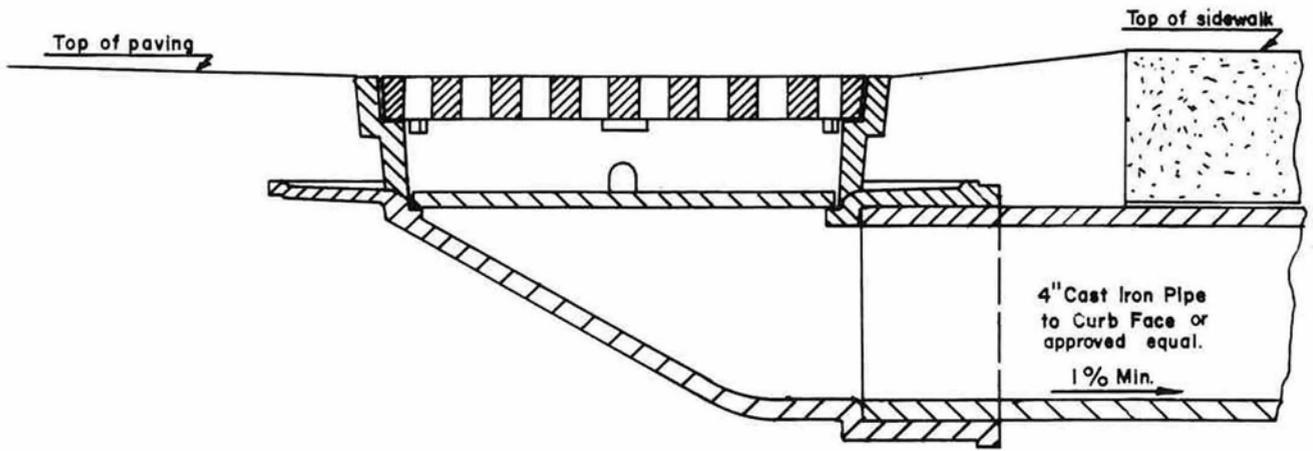
If V is more than 4.5 feet, and not more than 5.0 feet, install one step 12 inches above floor of basin.

If V is more than 5.0 feet, install steps 12 inches apart, with the top step 6 inches below the top of grating.

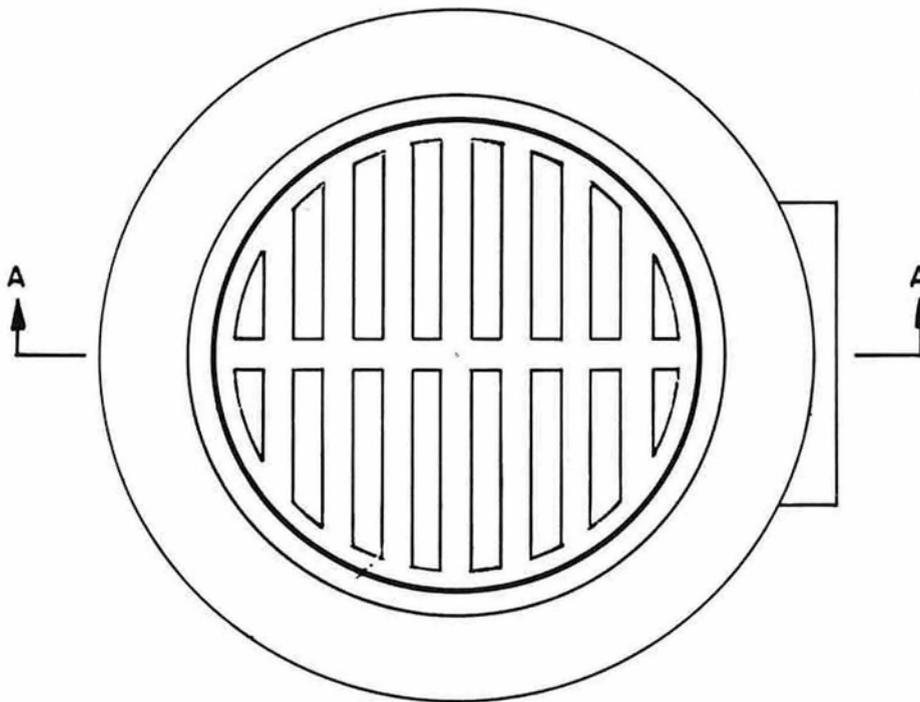
All steps shall be 4 inches clear from the wall, and anchored not less than 5 inches in wall of basin.

Walls And Floor		
V. of C.B.	T	Reinforcing (Both Walls)
4' or Less	6"	No. 3 at 12"
4' to 8'	8"	No. 4 at 12"
8' or More	10"	No. 5 at 12"

CITY OF COLTON PUBLIC WORKS DEPARTMENT		
NOTES FOR DROP INLET CATCH BASIN		
DWG. BY	SCALE N.T.S.	DWG. NO.
CHK'D	DATE June 29, 1965	207
APP'D <i>Samuel H. Burnett</i>		3 of 3



SECTION A-A



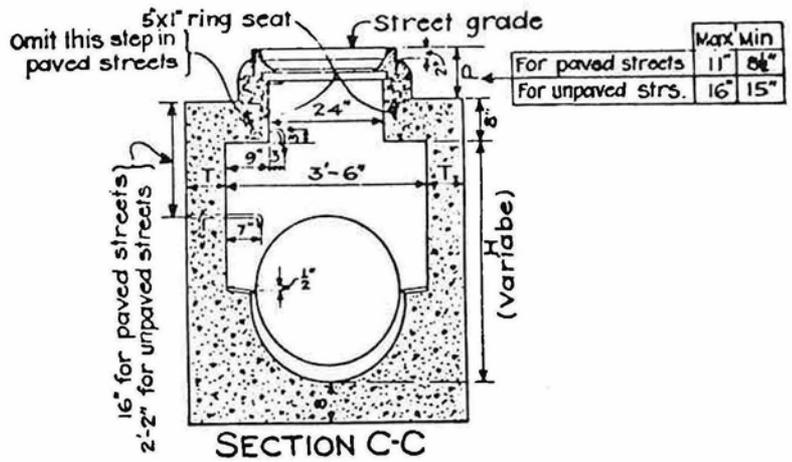
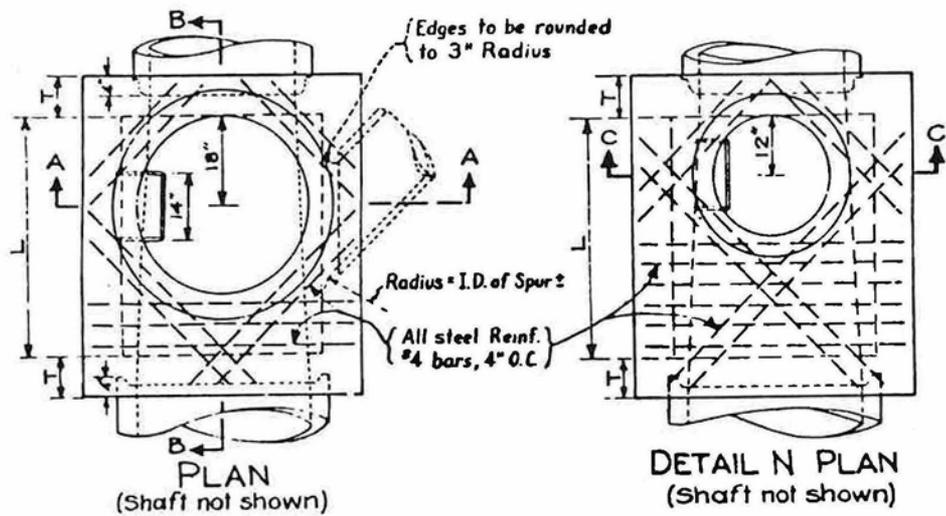
PLAN VIEW

**NOTE:**

1. Drain to be Alhambra Foundry No. A-372-4 or approved equal.
2. For large areas use additional drains.

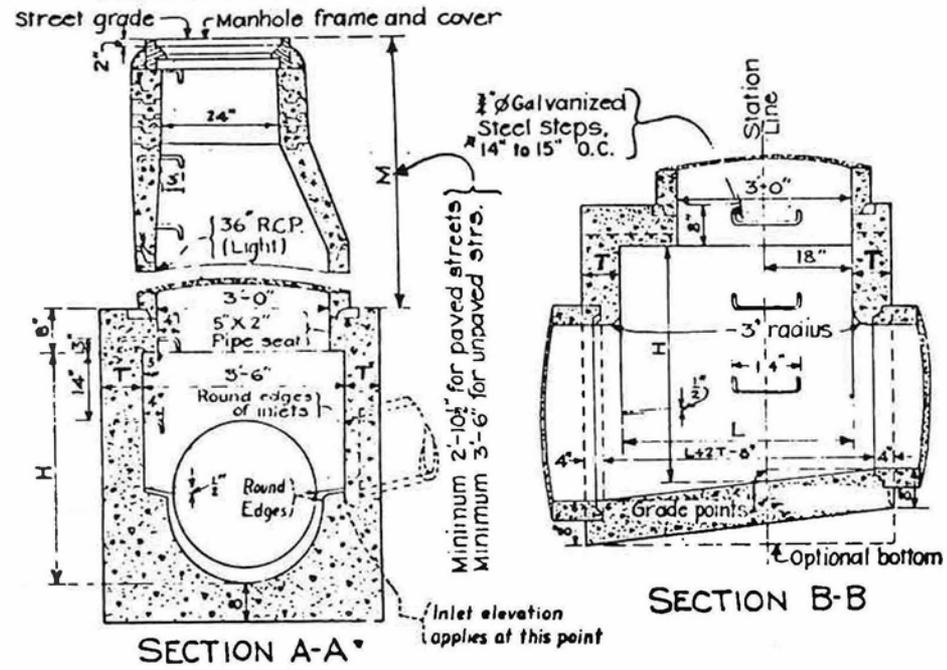
<b>CITY OF COLTON PUBLIC WORKS DEPARTMENT</b>		
<b>PARKING LOT DRAIN</b>		
Drawn by V. Gill	Date 1-15-68	Drawing No. <b>208</b>
Checked by	Scale None	
Approved by <i>[Signature]</i>		

Approved by Building Dep't.  
*[Signature]*



**NOTES**

1. H = HEIGHT SHALL NOT BE LESS THAN 4'-0"
2. L = LENGTH SHALL NOT BE LESS THAN 4'-0"
3. T = THICKNESS SHALL BE 8" WHEN H ≤ 8' AND 10" WHEN H > 8'
4. CLASS "B" CONCRETE TO BE USED (5.0 SACK)



<b>CITY OF COLTON PUBLIC WORKS DEPARTMENT</b>		
<b>DRAINAGE MANHOLE DETAILS</b>		
DRAWN BY	SCALE	DRAWING NO.
CHK'D	DATE	<b>209</b>
APP'D	<b>10-13-77</b>	
<i>Daniel H. Burnett</i>		