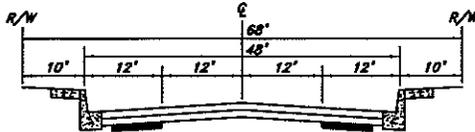
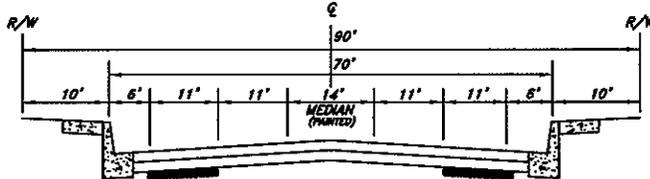


CITY OF LAKE ELSINORE
STANDARD PLANS

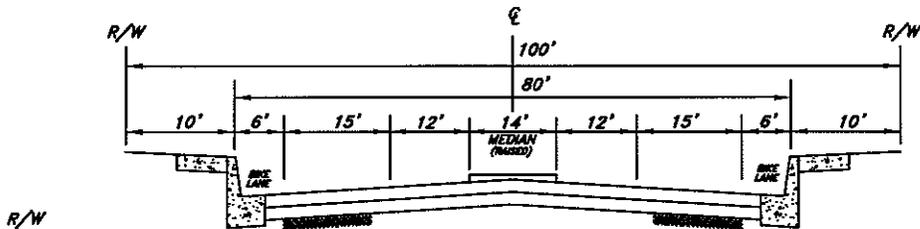
SECTION 1:
Street Sections



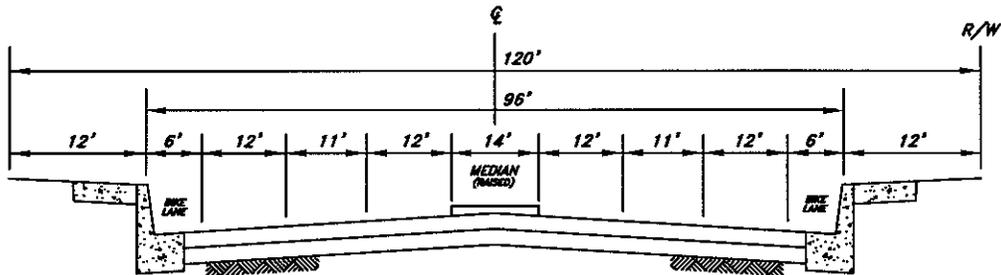
COLLECTOR HIGHWAY
(2-LANE)



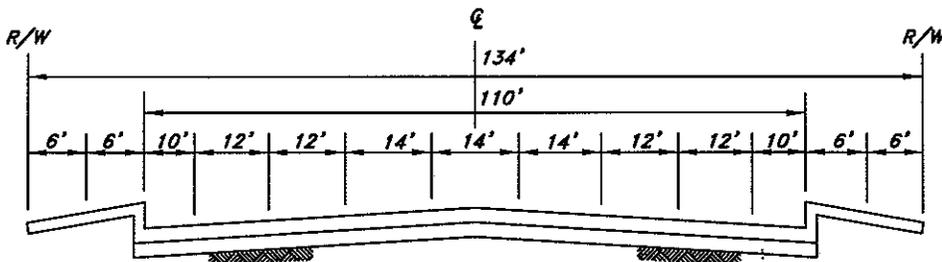
SECONDARY HIGHWAY
(4-LANE)



MAJOR HIGHWAY
(4-LANE)



URBAN ARTERIAL HIGHWAY
(6-LANE)



URBAN ARTERIAL-STATE HIGHWAY
(6-LANE)

CITY OF LAKE ELSINORE

CIRCULATION ELEMENT ROADWAY CROSS-SECTIONS

REVISION		ENGINEERING	DATE 01/09	CITY OF LAKE ELSINORE	
DATE	APPROVED				
		APPROVED BY		STREET CROSS SECTIONS	
		 CITY ENGINEER			
		08/31/2009 DATE			

ROAD TYPE

		MINOR LOCAL	LOCAL	COLLECTOR	SECONDARY ARTERIAL	MAJOR ARTERIAL	URBAN ARTERIAL	URBAN ARTERIAL (SR-74)	EXPRESSWAY
R/W		50	60	68	90	100	120	134	142
SURFACED WIDTH CURB TO CURB		36	40	48	70	80	96	110	110
MINIMUM RADII HORIZONTAL	FLAT (0-4%)	300	300	850	1600	2000	2000	2000	2000
	ROLLING (4-9%)	300	300	550	1000	1600	1600	1600	1600
	MOUNTAINOUS (9-15%)	150	150	300	550	1000	1000	-	-
MAXIMUM GRADE %	FLAT	4	4	4	3	3	3	3	3
	ROLLING	9	9	8	6	6	6	6	6
	MOUNTAINOUS	12	12	12	9	9	9	-	-
DESIGN SPEED (MPH)	FLAT	30	45	45	55	60	60	60	60
	ROLLING	30	30	35	48	55	55	55	55
	MOUNTAINOUS	20	25	30	35	48	48	-	-
INTERSECTION INTERVALS		200	200	200	330	660	1320	1320	1,25280

1. DIRECT RESIDENTIAL ACCESS RESTRICTED.
2. DIRECT ACCESS RESTRICTED.

NOTES:

- 1.) MINIMUM GRADE = 1.0%.
- 2.) ANY DEVIATION FROM APPROVED STD. WILL REQUIRE APPROVAL OF THE CITY ENGINEER..
- 3.) PART WIDTH STREETS SHALL HAVE A MINIMUM OF ONE-HALF WIDTH RIGHT-OF WAY PLUS AN ADDITIONAL FIFTEEN (15) FEET. ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED DUE TO A.C. PAVING REQUIREMENTS AS ESTABLISHED BY CITY ENGINEER.

REVISION		ENGINEERING	DATE 01/09	CITY OF LAKE ELSINORE	
DATE	APPROVED	APPROVED BY		PREPARED BY PUBLIC WORKS	
		 CITY ENGINEER		ROADWAY DESIGN REQUIREMENTS	
		08/31/2009 DATE		NO. 100B	

STREET CLASSIFICATION AND X-SECTION DESIGN STANDARDS

STREET CLASS	ROW* CURB TO CURB	TYPICAL SECTION (BIKE LANE & OR PARKING, TRAVEL LANES & MEDIAN)	PARKWAY WIDTH (FT.)	THRU LANES	DESIGN CAPACITY (A.D.T.)	MIN. TRAFFIC INDEX	MIN. A.C. THICKNESS (IN)	MIN. A.B. THICKNESS (IN)
URBAN ARTERIAL SR-74 (CENTRAL AVENUE) MEDIAN	134/110 (RAISED)	10 12 12 14 14 12 12 10 12	12	6+	50,000-60,000	10	5 1/2"	12"
URBAN ARTERIAL	120/96 (RAISED MEDIAN)	6 12 11 12 14 12 11 12 6 12	12	6	50,000-60,000	9	5 1/2"	6"
MAJOR ARTERIAL	100/80	6 15 12 14 12 15 6	10	4	32,000-40,000	8.5	5 1/2"	6"
SECONDARY ARTERIAL	90/70	6 11 11 14 11 11 6	10	4	20,000-32,000	8	5"	6"
COLLECTOR	68/48	12 12 12 12	10	2	10,000-15,000	5-7	4"	4"
LOCAL	60/40	8 12 12 8	10	2	N/A	5	3 1/2"	4"

* INTERSECTION WIDENING WHERE REQUIRED MAY INCREASE WIDTH VALUES

+ LEFT TURN LANES OR POCKETS WITHOUT ELIMINATING PARKING.

1. STREETS DESIGNATED AS TRUCK ROUTES MAY REQUIRE A TI OF 10 OR MORE.

NOTES:

MOST ARTERIAL STREETS REQUIRE BIKE LANES PER GENERAL PLAN. PARKING IS NOT USUALLY ACCOMMODATED ON ANY ARTERIAL STREETS. PARKING MAY BE ELIMINATED AT INTERSECTIONS TO ACCOMMODATE TURN POCKETS.

ALL OF THE ABOVE LANE WIDTHS SHALL BE USED TO DESIGN STRIPING PLANS UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.

REVISION DATE	APPROVED

PUBLIC WORKS DATE **01/09**

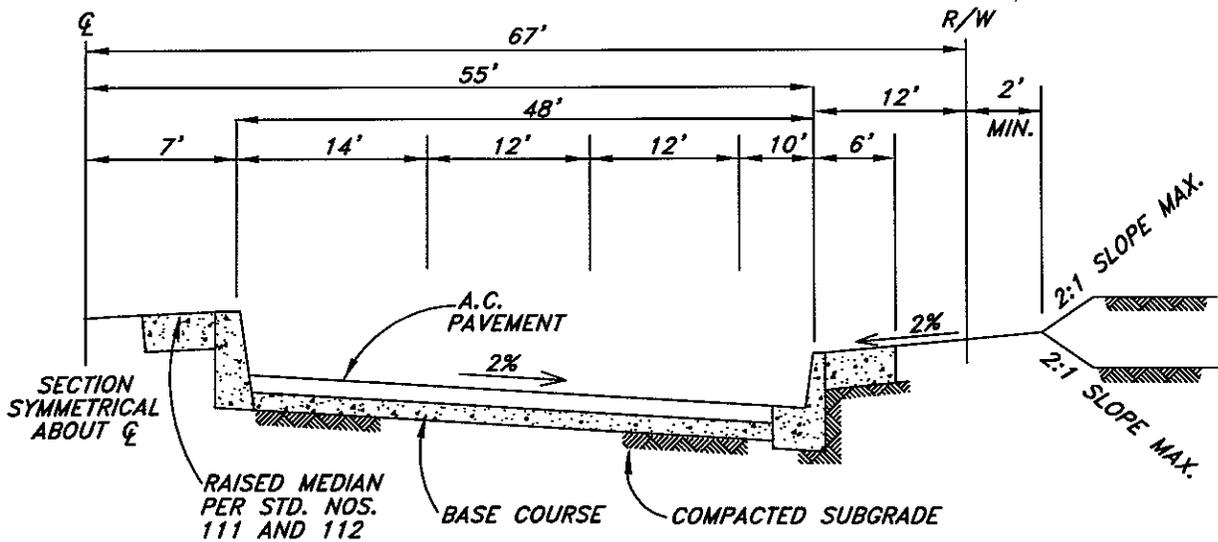
APPROVED BY

Ken A. Semando 08/31/2009
 CITY ENGINEER DATE

CITY OF LAKE ELSINORE
 PREPARED BY PUBLIC WORKS

STREET CLASSIFICATION AND X-SECTION DESIGN STANDARDS

NO. **100A**

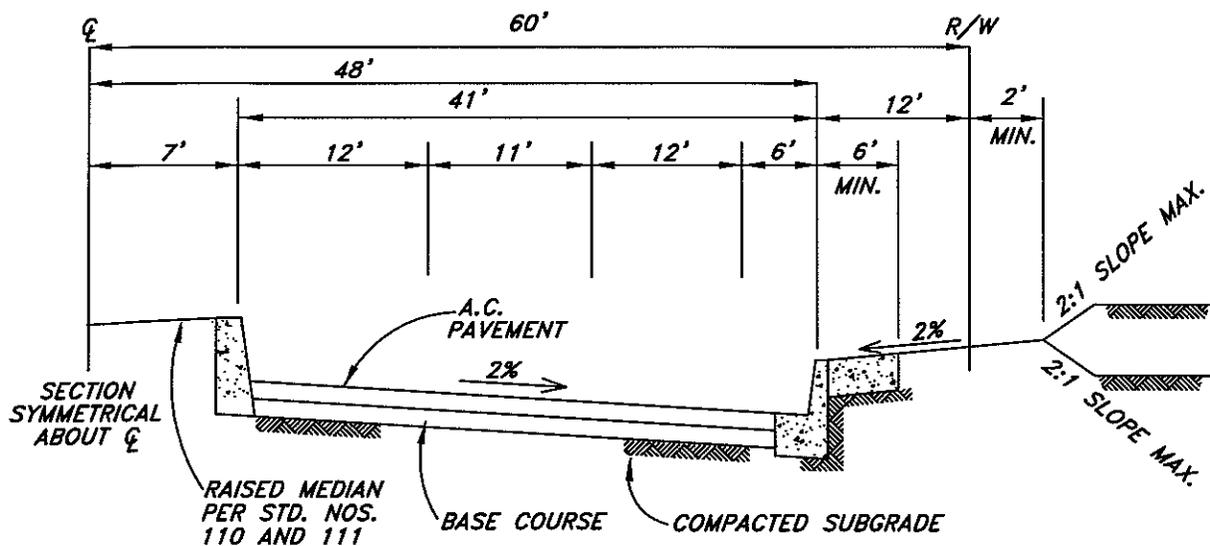


TYPICAL 1/2 WIDTH SECTION

NOTES:

- 1.) ADDITIONAL RIGHT OF WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL)
- 2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R-VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR. MIN. 5 1/2" AC/12"AB.
- 3.) STREETS SHALL BE CONSTRUCTED TO CENTERLINE PLUS 21' INCLUDING MEDIAN
- 4.) REFER TO THE GENRAL PLAN FOR BIKE LANE REQUIREMENTS
- 5.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

REVISION		ENGINEERING	DATE 01/09	CITY OF LAKE ELSINORE	
DATE	APPROVED				
		APPROVED BY		6 LANE URBAN ARTERIAL/ STATE HIGHWAY	
		 CITY ENGINEER			
			09/21/2009		
			DATE		



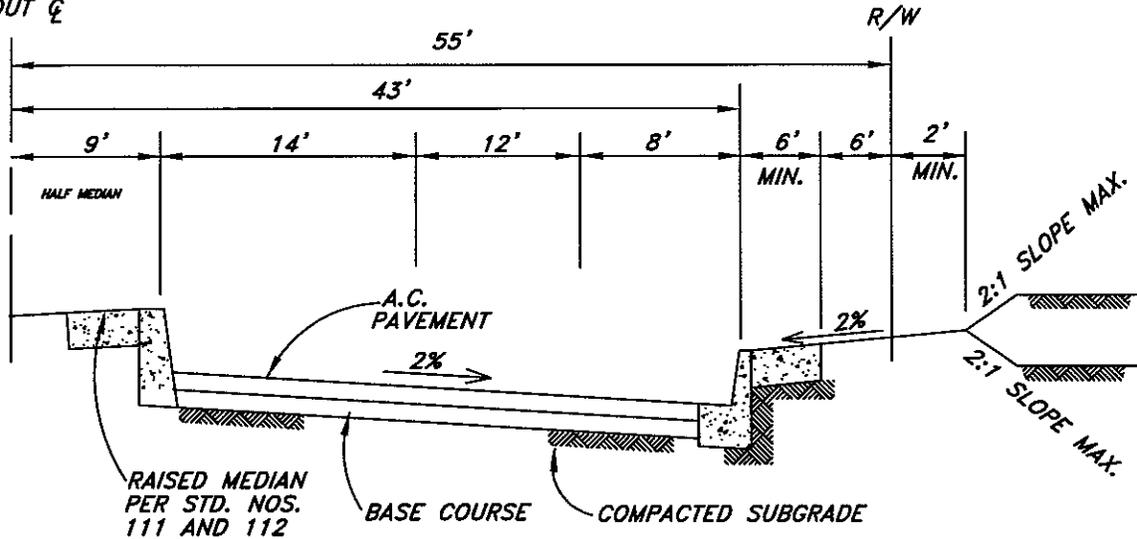
TYPICAL SECTION

NOTES:

- 1.) ADDITIONAL RIGHT OF WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.
- 2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R-VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR. SEE STD. PLAN NO. 100
- 3.) MIN. T.I.=9.
- 4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 19' INCLUDING FULL MEDIAN.
- 5.) REFER TO GENERAL PLAN FOR ANY BIKE LANE REQUIREMENTS
- 6.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

<table border="1"> <tr> <th>REVISION</th> <th>DATE</th> <th>APPROVED</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		REVISION	DATE	APPROVED													<p>ENGINEERING DATE 01/09</p> <p>APPROVED BY</p> <p><i>For A. Sandoz</i> 08/31/2009 CITY ENGINEER DATE</p>	<p>CITY OF LAKE ELSINORE</p> <p>PREPARED BY PUBLIC WORKS</p>	<p>NO. 102</p>
REVISION	DATE	APPROVED																	
		<p>URBAN ARTERIAL 6-LANE</p>																	

SECTION
SYMMETRICAL
ABOUT \bar{C}

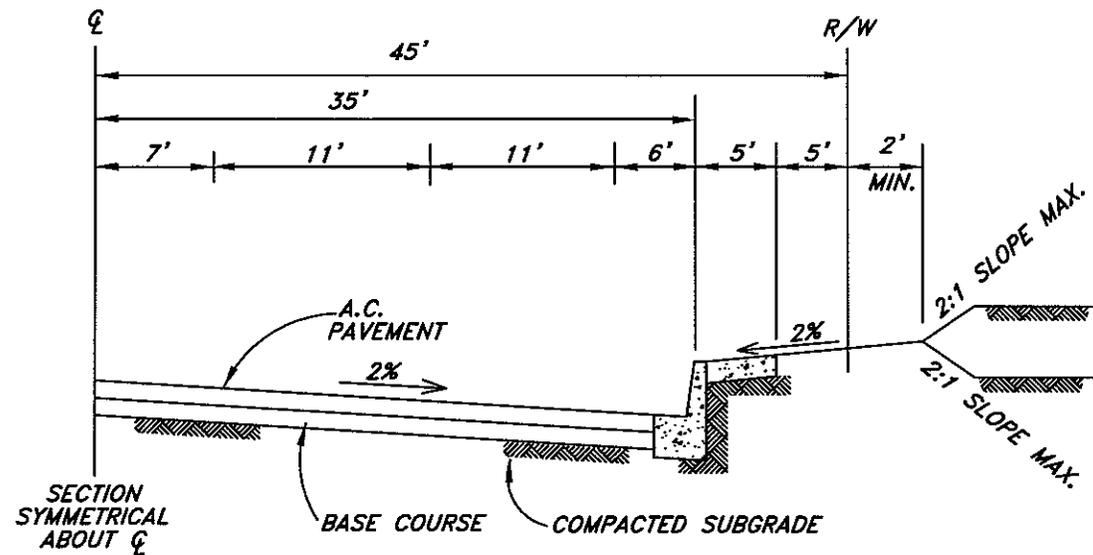


TYPICAL SECTION

NOTES:

- 1.) ADDITIONAL RIGHT OF WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.
- 2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R-VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR. MINIMUM STRUCTURAL SECTION .45' AC/ 1.00' AB.
- 3.) MIN. T.I. = 10.
- 4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 21' WIDTH MEDIAN.
- 5.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

REVISION		ENGINEERING	DATE 01/09	CITY OF LAKE ELSINORE PREPARED BY PUBLIC WORKS	
DATE	APPROVED	APPROVED BY			
		 CITY ENGINEER		DIVIDED ARTERIAL	NO. 103
		02/31/2009 DATE			

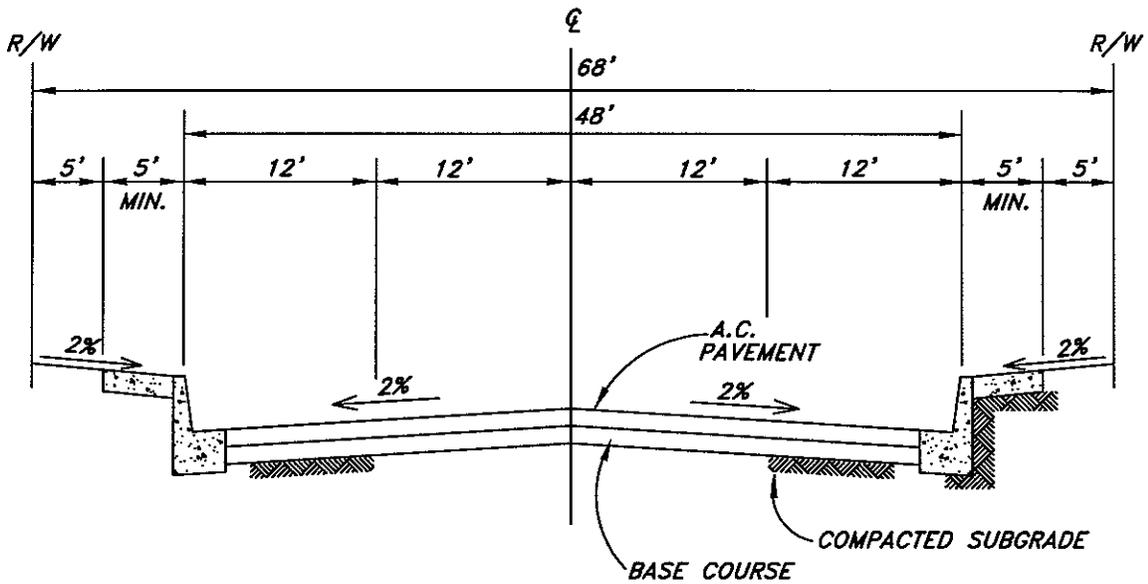


TYPICAL 1/2 WIDTH SECTION

NOTES:

- 1.) ADDITIONAL RIGHT OF WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY
- 2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R-VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR. SEE STD DWG 100
- 3.) MIN. T.I.=8
- 4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 19'.
- 5.) REFER TO GENERAL PLAN FOR BIKE LANE REQUIREMENTS
- 5.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

REVISION		ENGINEERING	DATE 01/09	CITY OF LAKE ELSINORE	
DATE	APPROVED				
		APPROVED BY		PREPARED BY PUBLIC WORKS	
		 CITY ENGINEER		SECONDARY ARTERIAL (4 LANE)	
		08/31/2009 DATE		NO. 104	

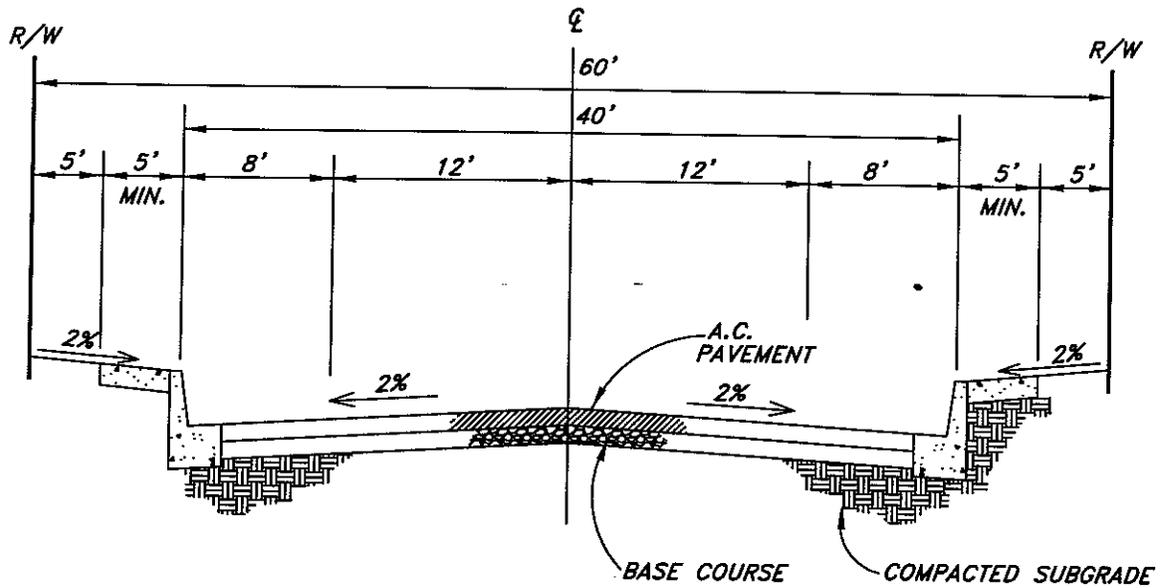


TYPICAL SECTION

NOTES:

- 1.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR, MIN. .4" AC/ 6" AB.
- 2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R-VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR. SEE STD DWG 100
- 3.) MIN. T.I. = 7.
- 4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 12'.
- 5.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

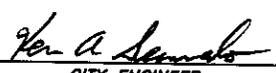
REVISION		ENGINEERING	DATE 01/09	CITY OF LAKE ELSINORE	
DATE	APPROVED	APPROVED BY			
		 CITY ENGINEER		COLLECTOR	NO. 105
		08/31/2009 DATE			

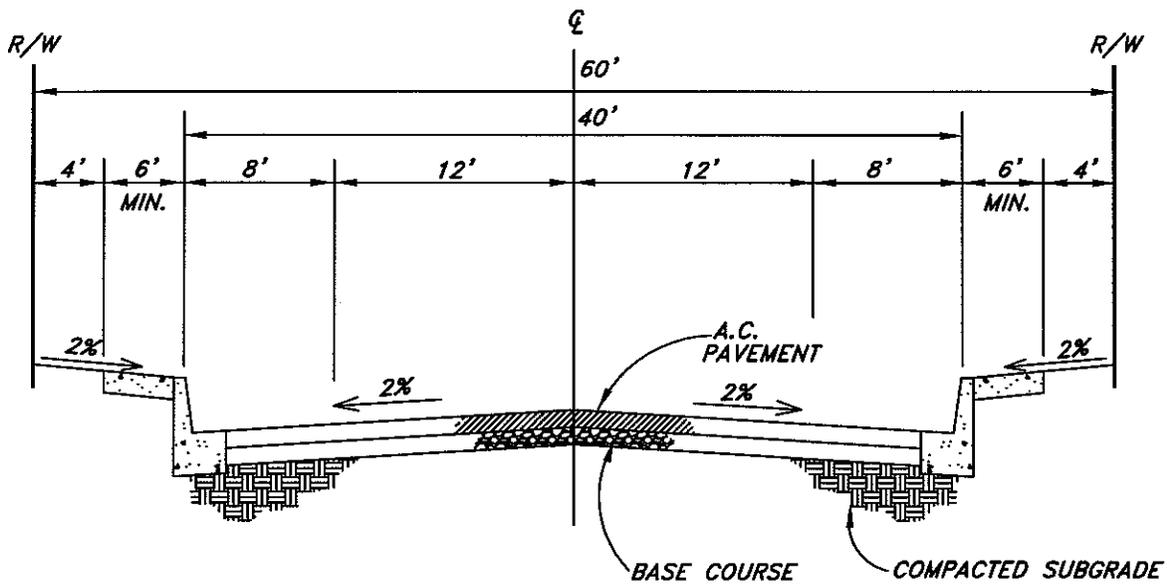


TYPICAL SECTION

NOTES:

- 1.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR, MIN 1/2" AC/6"AB.
- 2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R-VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR. SEE STD DWG 100
- 3.) MIN. T.I.=6.
- 4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 12'.
- 5.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

REVISION		ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE	
DATE	APPROVED				
		APPROVED BY		LOCAL STREET (Non-Circulation Road)	
		 CITY ENGINEER			
			DATE 08/31/2009		

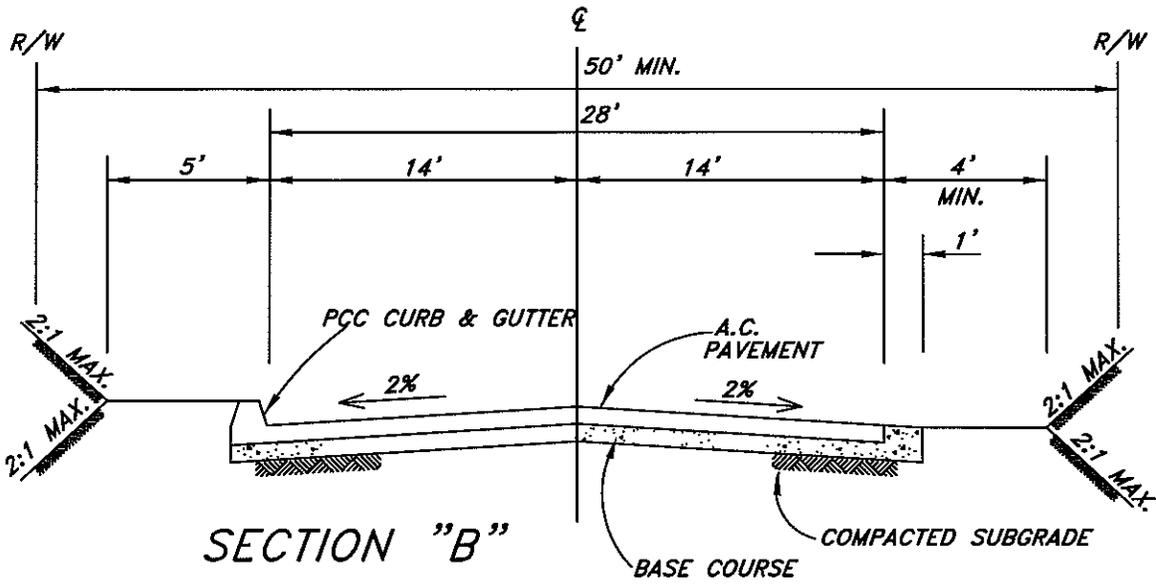


TYPICAL SECTION

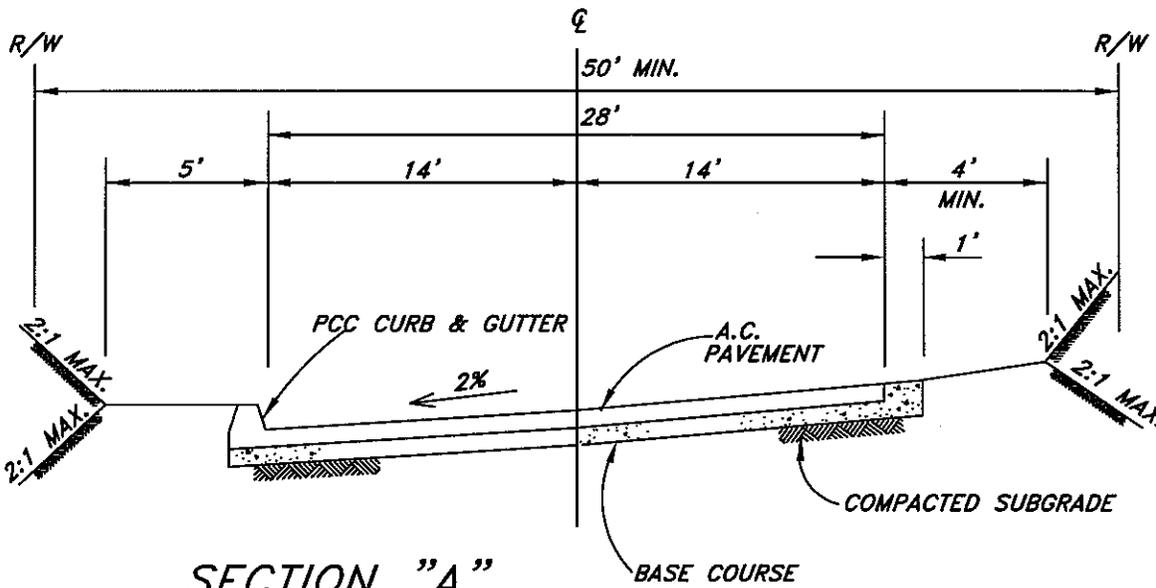
NOTES:

- 1) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR, MIN. .33' AC/.50' AB.
- 2) MIN. T.I. = 6.
- 3) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 12'.
- 4.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

<table border="1"> <tr> <th>REVISION</th> <th>DATE</th> <th>APPROVED</th> </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>[Signature]</i> 08/31/2009 CITY ENGINEER DATE</p>	<p>CITY OF LAKE ELSINORE</p> <p>PREPARED BY PUBLIC WORKS</p>	<p>NO. 108</p>
REVISION	DATE	APPROVED																	
		<p>GENERAL LOCAL STREET</p>																	



SECTION "B"

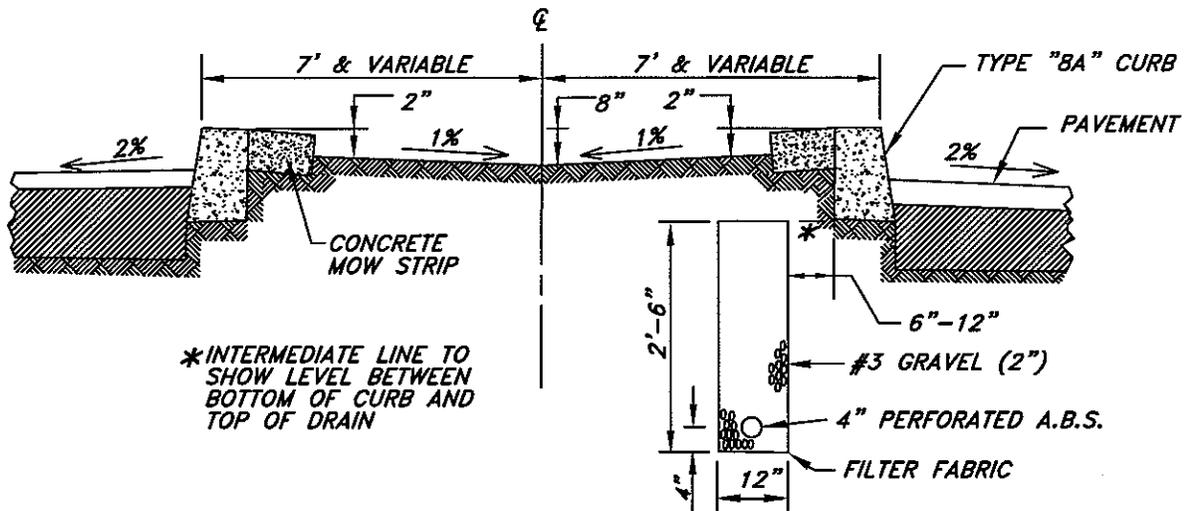


SECTION "A"

NOTES:

- 1.) DRAINAGE CONTROL TO BE APPROVED BY THE CITY ENGINEER.
- 2.) THICKNESS OF PAVEMENT TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR, MIN. .33' AC/ .50' AB.
- 3.) MIN. T.I. = 6.
- 4.) NO PARKING PERMITTED ON EITHER SIDE.
- 5.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

REVISION		ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE	
DATE	APPROVED	APPROVED BY		PREPARED BY PUBLIC WORKS	
				HILLSIDE RESIDENTIAL STREET	
			08/31/2009 DATE	NO. 109	
		CITY ENGINEER			



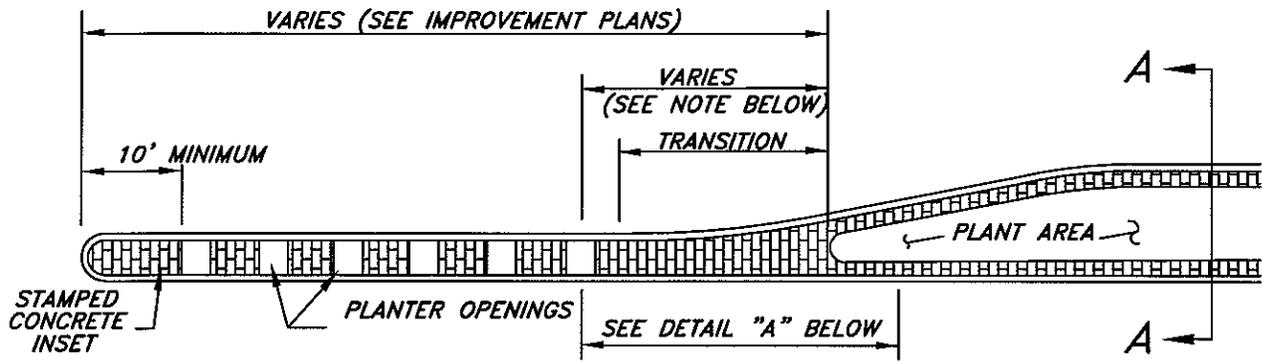
DRAINAGE STRUCTURE

TYPICAL BOTH SIDES OF Q - SUBJECT TO APPROVAL BY CITY ENGINEER

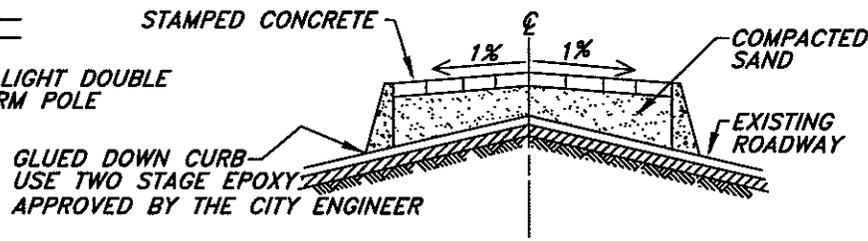
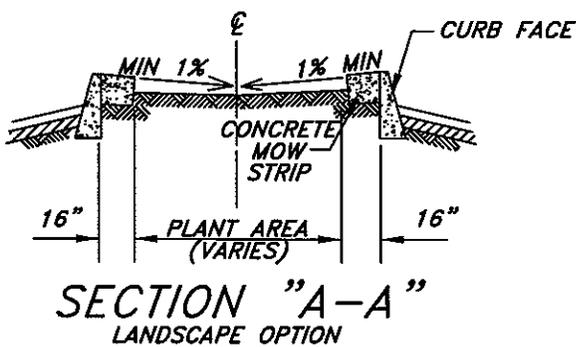
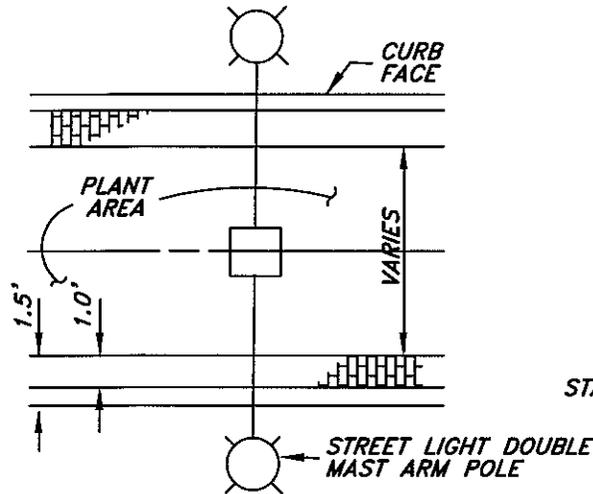
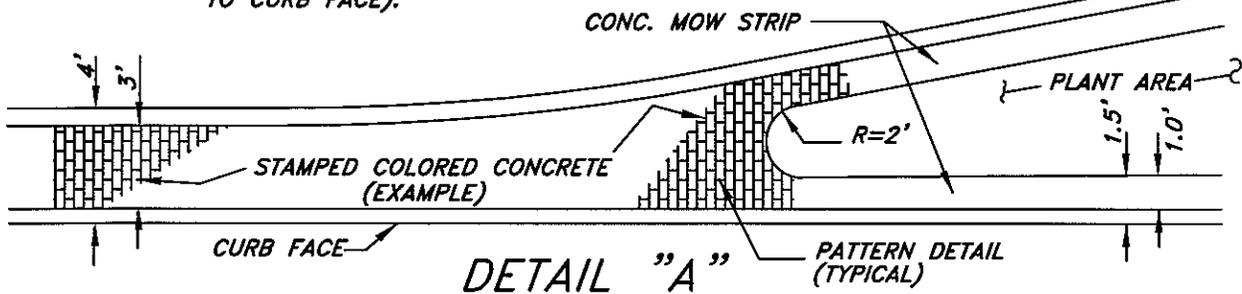
NOTES:

- 1.) SEE STD. DWG. No. 203 FOR TYPE "8A" CURB.
- 2.) MEDIAN DRAINAGE STRUCTURES SHALL BE PROVIDED TO PREVENT ANY WATER FROM OVERFLOWING CURBS.
- 3.) MEDIAN DRAINAGE STRUCTURES AND UNDERDRAINS SHALL DRAIN TO A POINT OF DISPOSAL MEETING APPROVAL OF THE CITY.
- 4.) PLACEMENT OF PLANTS SHALL NOT OBSTRUCT THE FLOW OF WATER TO THE EXTENT THAT IT WILL OVERFLOW CURBS OR OBSTRUCT SIGHT DISTANCE.
- 5.) MEDIAN AREAS LESS THAN 6' IN WIDTH SHALL BE PAVED WITH 12" PATTERN STAMPED COLORED CONCRETE. THE MINIMUM 3" THICK CONCRETE MOW STRIP SHALL HAVE A BRICK 4"X8" PATTERN, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- 6.) ALL LANDSCAPE AND IRRIGATION PLANS SHALL COMPLY WITH THE CITY'S DEVELOPMENT CODE AND LANDSCAPE DEVELOPMENT GUIDELINES AND SPECIFICATIONS, AND ANY APPLICABLE SPECIFIC PLAN DESIGN MANUAL, OR CONDITIONS OF APPROVAL.
- 7.) ALL LANDSCAPE, IRRIGATION, AND DRAINAGE PLANS AND DEVICES SHALL BE APPROVED BY THE CITY PRIOR TO INSTALLATION.
- 8.) THE LANDSCAPE PLAN SHALL MINIMIZE RUNOFF TO THE PAVEMENT, MINIMIZE MAINTENANCE, PROMOTE WATER CONSERVATION AND ASSURE DESIGN CONTINUITY OF THE PROPOSED PROJECT WITH EXISTING MEDIANS ON THE STREET. THE LANDSCAPE PLAN SO PREPARED SHALL CONSIST OF AREAS OF CREATIVE HARDSCAPE AND PLANTING, WITH NO MORE THAN 25% HARDSCAPE. WHERE IRRIGATION IS PROPOSED, DRIP IRRIGATION SYSTEMS ARE REQUIRED, WHERE APPLICABLE, AND PLANT MATERIALS SHALL BE APPROPRIATE TO THE PROPOSED SYSTEM. THE LANDSCAPE PLAN SHALL BE SUBJECT TO FINAL APPROVAL BY THE CITY ENGINEER. THE CITY ENGINEER MAY APPROVE VARIATIONS IN THESE STANDARDS IF STRICT APPLICATION OF THE PERCENTAGE PROVES INFEASIBLE.
- 9.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

REVISION		ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE	
DATE	APPROVED	APPROVED BY			
		 CITY ENGINEER		LANDSCAPED MEDIAN	NO. 110
			08/31/2009 DATE		



NOTE: THE NUMBER OF PLANTER OPENINGS WILL VARY BY LENGTH OF LEFT TURN POCKET. NO PLANTER OPENINGS SHALL EXTEND INTO THE TRANSITION SEGMENT OR BE LOCATED IN MEDIANS LESS THAN 6" WIDE (CURB FACE TO CURB FACE).



NOTE:
SEE GENERAL NOTES: STAMPED CONCRETE (STANDARD NO. 224.)
AND TYPE D-1 CURB (STANDARD NO. 204)

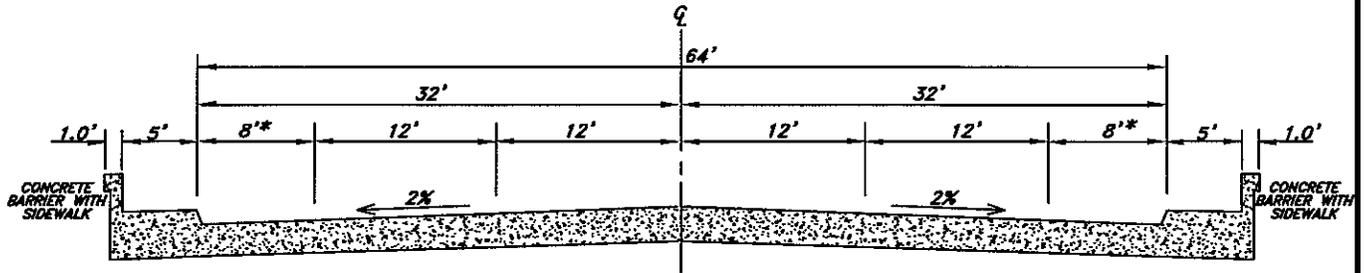
SECTION "A-A"
GLUED DOWN OPTION

REVISION	ENGINEERING	DATE 07/09
DATE APPROVED		
	APPROVED BY	
	<i>Her A Samala</i>	08/24/09
	CITY ENGINEER	DATE

CITY OF LAKE ELSINORE
PREPARED BY PUBLIC WORKS

MEDIAN HARDSCAPE

NO.
111



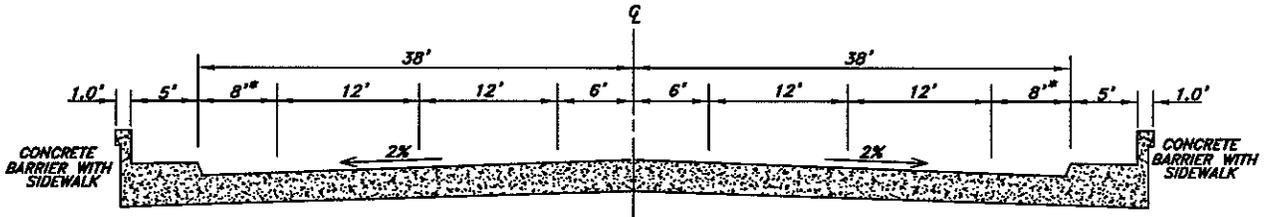
**SUBJECT TO REVISION BY THE CITY ENGINEER*

TYPICAL SECTION

NOTES:

- 1.) BRIDGE TYPE TO BE APPROVED BY CITY ENGINEER.
- 2.) RAISED SIDEWALK TO BE PROVIDED WHEN REQUIRED BY THE CITY ENGINEER. IF NOT REQUIRED, NON-SIDEWALK CONCRETE BARRIER SHALL BE USED.
- 3.) CONCRETE BARRIER SHALL BE TO CALTRANS STANDARDS OR AS APPROVED BY CITY ENGINEER.
- 4.) ULTIMATE TYPICAL BRIDGE SECTIONS TO BE CONSISTENT WITH THE APPROACH ROAD SECTION AS APPROVED BY THE CITY ENGINEER.
- 5.) CURBED MEDIAN TO BE USED ONLY WHEN APPROACHING HIGHWAY HAS A RAISED MEDIAN WIDTH ALSO. MEDIAN WIDTH MAY VARY WITH RAISED CURB
- 6.) CONCRETE BARRIER SHALL BE CALTRANS STANDARDS OR AS APPROVED BY THE CITY ENGINEER
- 7.) EXTERIOR DESIGN SHALL BE REVIEWED AND APPROVED BY THE COMMUNITY DEVELOPMENT DIRECTOR
- 8.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

REVISION		ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE PREPARED BY PUBLIC WORKS	
DATE	APPROVED	APPROVED BY			
		 CITY ENGINEER		MINOR ARTERIAL BRIDGE	NO. 115
			08/31/2009 DATE		

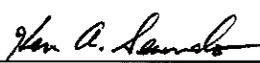


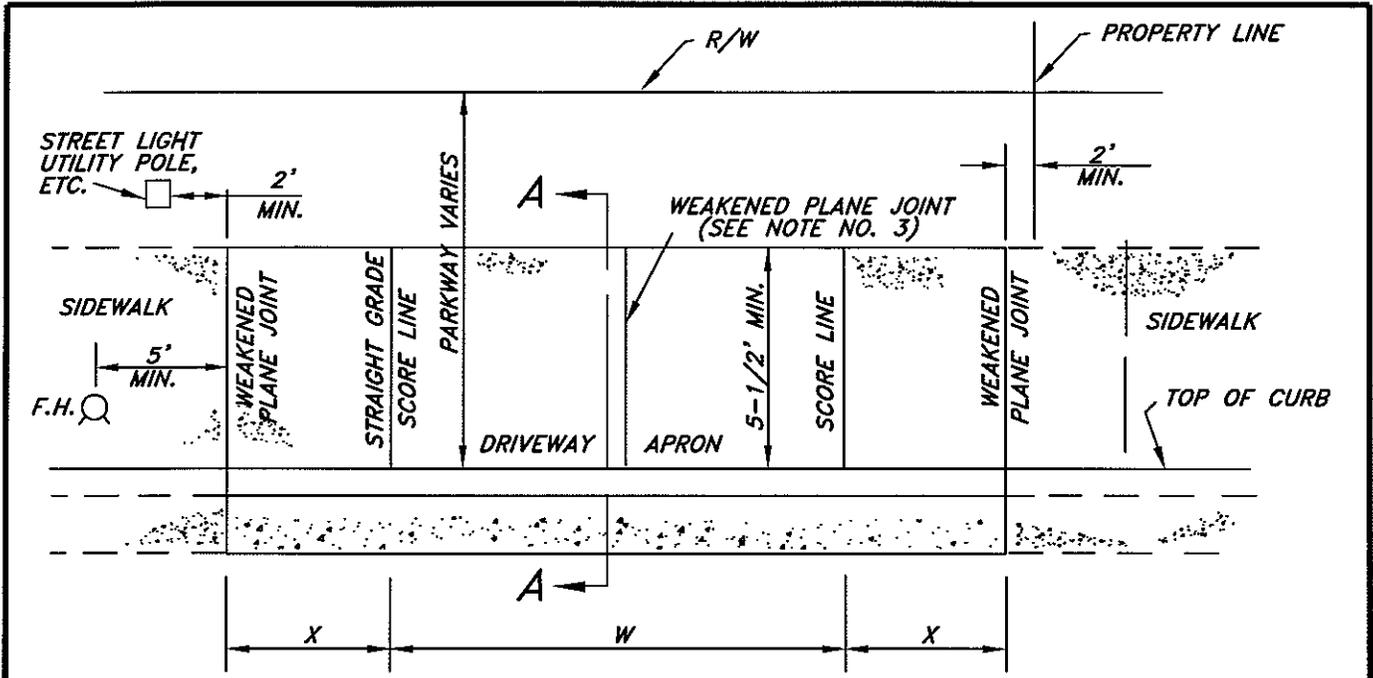
**SUBJECT TO REVISION BY THE CITY ENGINEER*

TYPICAL SECTION

NOTES:

- 1.) BRIDGE TYPE TO BE APPROVED BY CITY ENGINEER.
- 2.) RAISED SIDEWALK TO BE PROVIDED WHEN REQUIRED BY THE CITY ENGINEER. IF NOT REQUIRED, NON-SIDEWALK CONCRETE BARRIER SHALL BE USED.
- 3.) CONCRETE BARRIER SHALL BE TO CALTRANS STANDARDS OR AS APPROVED BY CITY ENGINEER.
- 4.) ULTIMATE TYPICAL BRIDGE SECTIONS TO BE CONSISTENT WITH THE APPROACH ROAD SECTION AS APPROVED BY THE CITY ENGINEER.
- 5.) EXTERIOR DESIGN SHALL BE REVIEWED AND APPROVED BY THE COMMUNITY DEVELOPMENT DIRECTOR
- 6.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

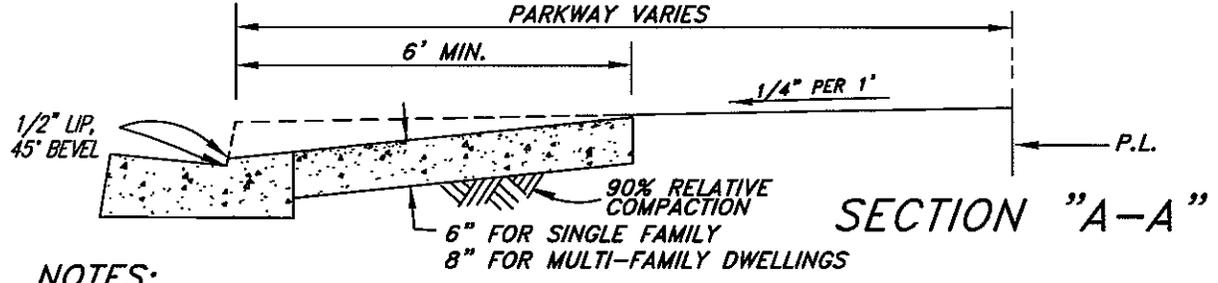
REVISION		ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE	
DATE	APPROVED	APPROVED BY			
		 CITY ENGINEER		08/31/2009	NO. 116
				DATE	
		ARTERIAL BRIDGE			



PLAN

X	6" C.F.	8" C.F.	OVER 8" C.F.
	6'	8'	Ø8.33%

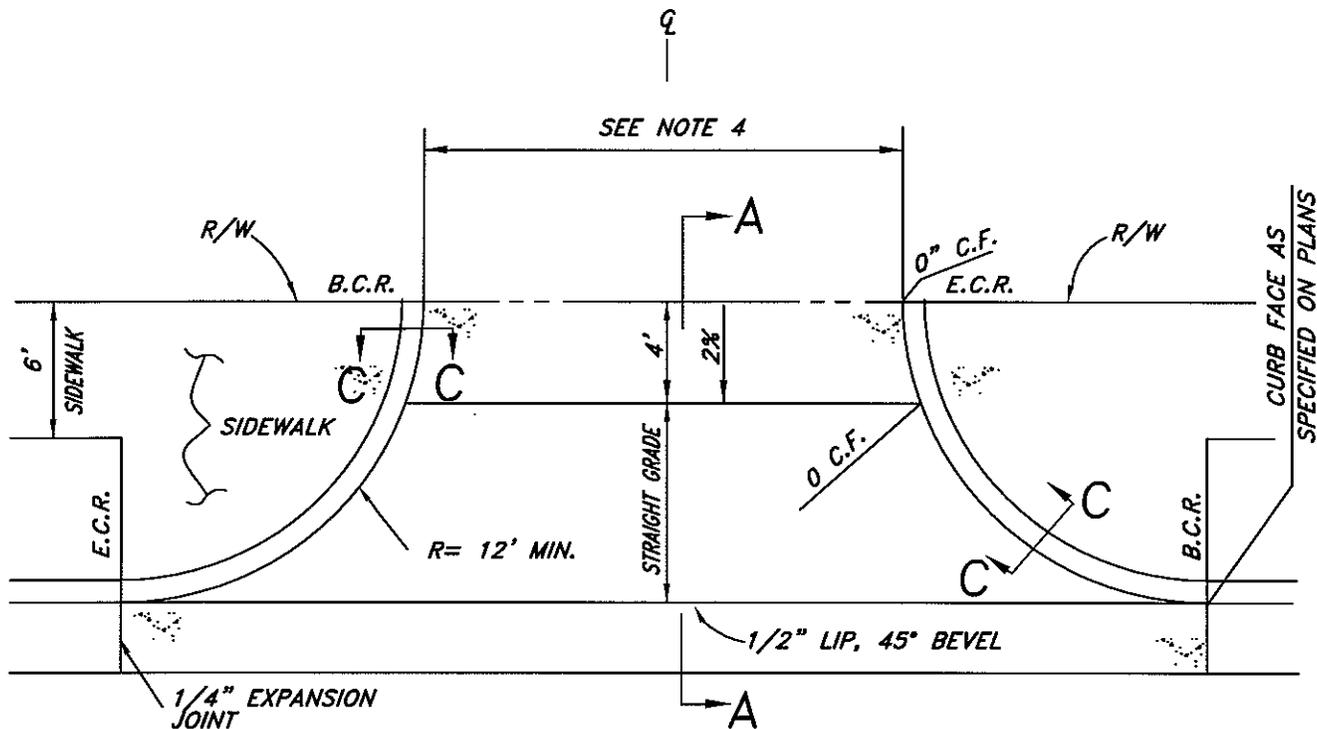
W	MIN.	MAX.
	12'	30'



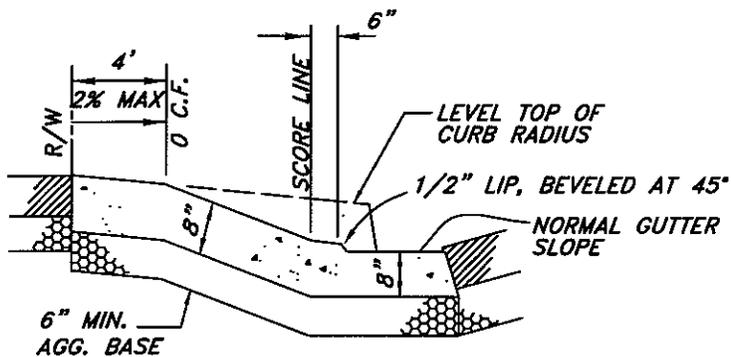
NOTES:

- 1.) ALL CONCRETE SHALL BE CLASS 520-C-2500, CURED WITH WHITE PIGMENTED CURING COMPOUND.
- 2.) ALL EXISTING P.C.C. TO BE REMOVED SHALL BE SAWCUT AT THE JOINTS.
- 3.) DRIVEWAYS WITH WIDTHS BETWEEN 14' AND 20' SHALL HAVE 1 WEAKENED PLANE AT JOINT AT 1/2W. DRIVEWAYS WIDER THAN 20' SHALL HAVE WEAKENED PLANE JOINTS NOT TO EXCEED 7' ON CENTER.
- 4.) FOR NEW DRIVEWAY APPROACHES ON EXISTING STREETS, A 12" WIDTH OF ASPHALT CONCRETE SHALL BE REMOVED AND REPLACED TO PCC GUTTER DEPTH.
- 5.) DRIVEWAYS FOR CORNER LOTS SHALL BE LOCATED ADJACENT TO THE PROPERTY LINE AWAY FROM THE INTERSECTION.
- 6.) WIDTH DIMENSION SHALL MATCH WIDTH OF GARAGE(S) OPENING UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- 7.) 14% MAX. GRADE BREAK BETWEEN DRIVEWAY AND APPROACH IS ACETABLE.
- 8.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

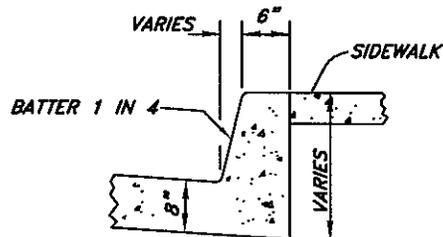
REVISION		ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE	
DATE	APPROVED	APPROVED BY			
		 CITY ENGINEER		RESIDENTIAL DRIVEWAY APPROACH	NO. 117
		DATE 08/31/2009			



PLAN VIEW



SECTION A-A



SECTION C-C

B.C.R. BEGINING CURB RADIUS
 E.C.R. END CURB RADIUS
 C.F. CURB FACE

NOTES:

- 1.) TYPE I APPROACH MAY BE USED WHEN SIDEWALK IS ADJACENT TO PROPERTY LINE.
- 2.) WEAKENED PLANE JOINT REQUIRED AT CENTERLINE OF APPROACH.
- 3.) CONCRETE SHALL BE CLASS 520-C-2500, CURED WITH WHITE PIGMENTED CURING COMPOUND.
- 4.) MINIMUM WIDTH SHALL BE 24', MAXIMUM WIDTH SHALL BE 40'
- 5.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

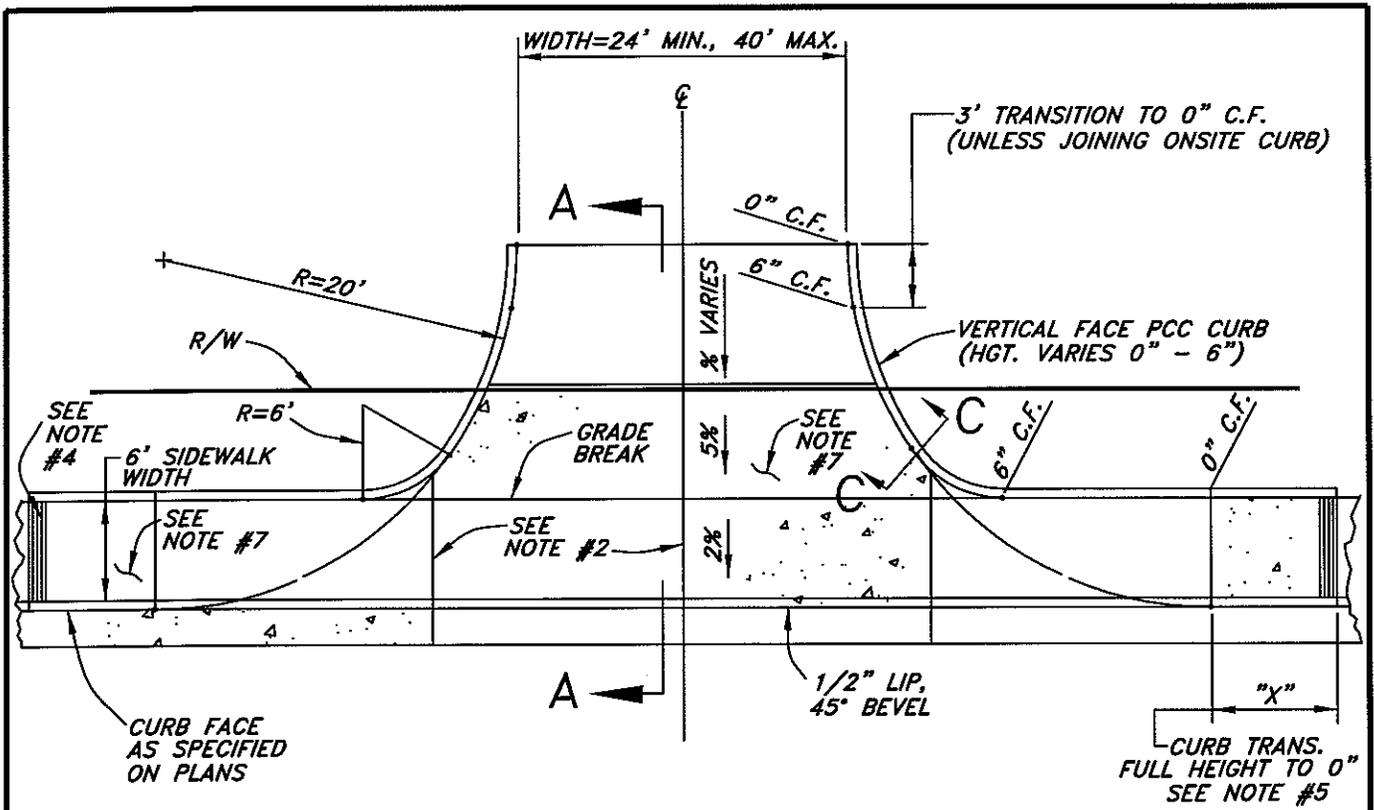
REVISION		ENGINEERING	DATE 07/09
DATE	APPROVED		
		APPROVED BY	
		<i>Ken A. Sannalo</i>	08/31/2009
		CITY ENGINEER	DATE

CITY OF LAKE ELSINORE

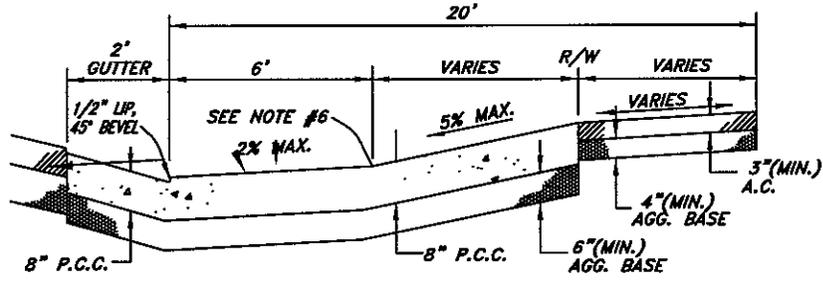
PREPARED BY PUBLIC WORKS

COMMERCIAL DRIVEWAY
 APPROACH: TYPE I

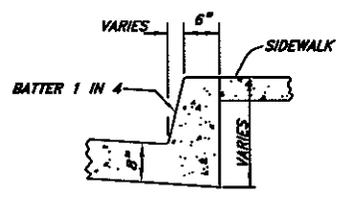
NO.
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SECTION "A-A"



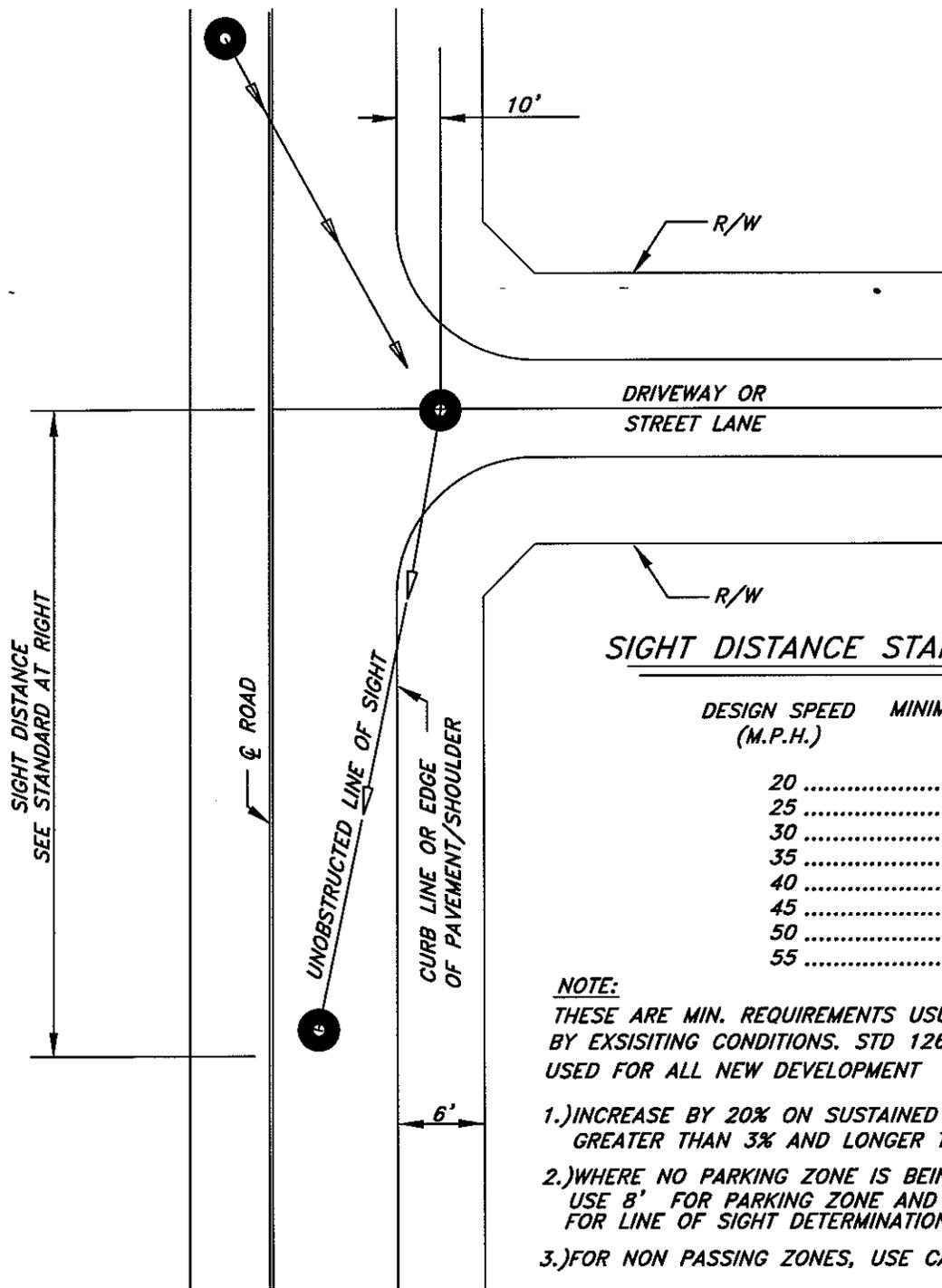
SECTION "C-C"



NOTES:

1. TYPE II APPROACH SHALL BE USED WHEN SIDEWALK IS ADJACENT TO CURB.
2. WEAKENED PLANE JOINT REQUIRED AT CENTERLINE OF APPROACH, AND AT 1/2 Δ
3. CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND. AND SPACED AT 3/4" O.C.
4. TOP OF SIDEWALK RAMP SHALL HAVE 12" WIDE BORDER WITH GROOVES 1/4" DEEP, WITH 1/8" RADIUS.
5. X SHALL HAVE A MAXIMUM SLOPE OF 1:12 (8.33%), AND A MINIMUM SLOPE OF 1:15 (6.67%).
6. MAXIMUM GRADE BREAK SHALL BE 3%.
7. RAMP SURFACE SHALL BE SLIP-RESISTANT AND SHALL BE OF CONTRASTING FINISH FROM ADJACENT SIDEWALK (MEDIUM BROOM FINISH OR EQUIVALENT).
8. ALL ACCESS RAMPS SHALL BE CONSTRUCTED TO THE MOST CURRENT REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS/CALIFORNIA CODE OF REGULATIONS TITLE 24-ACCESSIBILITY REGULATIONS. ADJUSTMENTS SHALL BE MADE IN THE FIELD TO ACHIEVE RAMP CONDITIONS.
9. STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

REVISION		ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE	
DATE	APPROVED				
		APPROVED BY		COMMERCIAL DRIVEWAY APPROACH: TYPE II	
		<i>[Signature]</i>	08/31/2009		
		CITY ENGINEER	DATE		



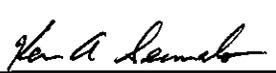
SIGHT DISTANCE STANDARDS

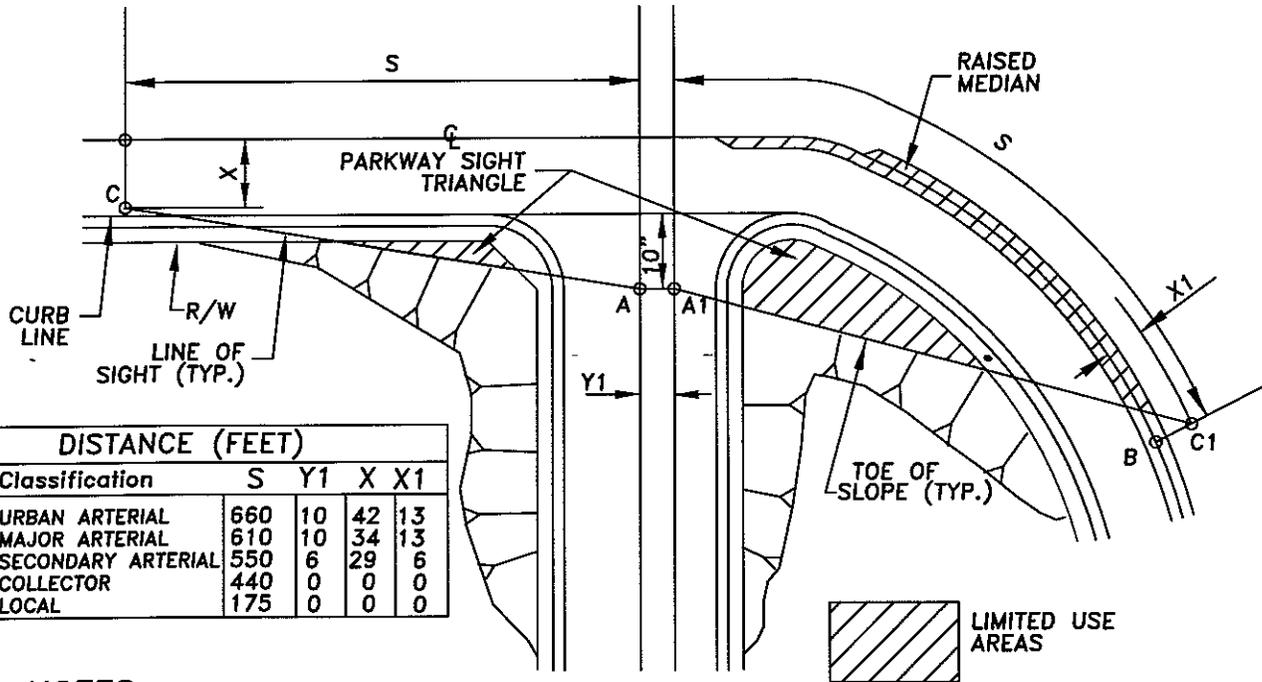
DESIGN SPEED (M.P.H.)	MINIMUM STOPPING (FT.)
20	125
25	150
30	200
35	250
40	300
45	360
50	430
55	500

NOTE:

THESE ARE MIN. REQUIREMENTS USUALLY DICTATED BY EXSISTING CONDITIONS. STD 126 SHALL BE USED FOR ALL NEW DEVELOPMENT

- 1.) INCREASE BY 20% ON SUSTAINED DOWN GRADE GREATER THAN 3% AND LONGER THAN 1 MILE
- 2.) WHERE NO PARKING ZONE IS BEING DETERMINED USE 8' FOR PARKING ZONE AND THEN APPLY 6' FOR LINE OF SIGHT DETERMINATION
- 3.) FOR NON PASSING ZONES, USE CALTRANS STANDARD.

REVISION	ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE	
DATE APPROVED	APPROVED BY		PREPARED BY PUBLIC WORKS	
	 CITY ENGINEER		MINIMUM SIGHT DISTANCE REQUIREMENT	
	DATE 08/31/2009		NO. 125	

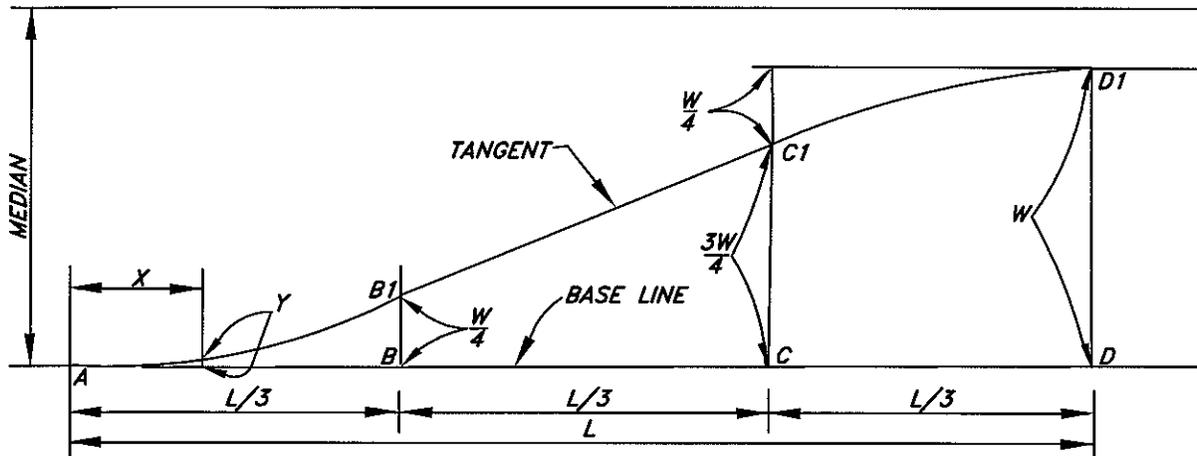


DISTANCE (FEET)				
Classification	S	Y1	X	X1
URBAN ARTERIAL	660	10	42	13
MAJOR ARTERIAL	610	10	34	13
SECONDARY ARTERIAL	550	6	29	6
COLLECTOR	440	0	0	0
LOCAL	175	0	0	0

NOTES:

1. This standard shall be used for all new development.
2. The limited use area is determined by the graphical method using the appropriate distances given in the above table. It shall be used for the purpose of prohibiting or clearing obstructions in order to maintain adequate sight distance at intersections.
3. The line of sight shall be shown at intersections on all landscaping plans, grading plans, and tentative tract plans where safe sight distance is questionable. In cases where an intersection is located on a vertical curve, a profile of the sight line may be required.
4. Walls or any obstructions that could restrict the view within the limited use area shall not be permitted.
5. The toe of the slope shall not encroach into the limited use area.
6. The limited use area shall be as near level as possible yet maintain proper drainage.
7. Plants and shrubs shall be of the type that will grow no higher than 30 inches above the ground within the limited use area.
8. No trees shall be allowed within the Parkway Sight Triangle.
9. Points A and A1 are the locations of a driver's line of sight while in a vehicle at an intersection 10 feet back from the projection of the curb line. The distance Y1 is the distance measured from the centerline of the road to the far right through traffic lane. The distance Y1 is equal to zero for T-intersections.
10. The distance S represents the safe stopping distance measured along the centerline of the road.
11. Points C and C1 are the locations (centerline of the travel lanes) where the driver of a vehicle, traveling at a given speed, has the minimum stopping sight distance required to bring the vehicle to a safe stop.

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DATE	APPROVED	APPROVED BY			
		 CITY ENGINEER		DATE	NO. 126
			08/31/2009	SIGHT DISTANCE DETAIL	



$$Y = 2.25W \left(\frac{X}{L}\right)^2$$

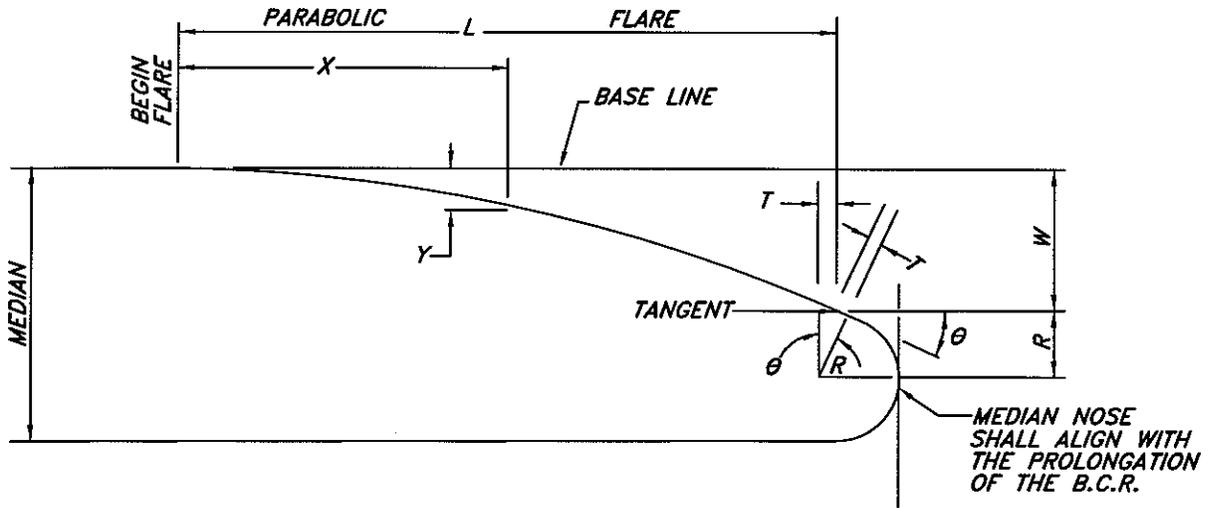
L=LENGTH OF TAPER
W=MAXIMUM OFFSET DISTANCE
X=DISTANCE ALONG BASELINE
Y=OFFSET FROM BASELINE

L	DISTANCE X												
	60'	5'	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'	60'
72'	6'	12'	18'	24'	30'	36'	42'	48'	54'	60'	66'	72'	
90'	7.5'	15'	22.5'	30'	37.5'	45'	52.5'	60'	67.5'	75'	82.5'	90'	
W	OFFSET Y												
	10'	0.16'	0.62'	1.41'	2.50'	3.75'	5.00'	6.25'	7.50'	8.59'	9.38'	9.84'	10.00'
	11'	0.17'	0.69'	1.55'	2.75'	4.13'	5.50'	6.88'	8.25'	9.45'	10.31'	10.83'	11.00'
	12'	0.19'	0.75'	1.69'	3.00'	4.50'	6.00'	7.50'	9.00'	10.31'	11.25'	11.81'	12.00'

NOTE:

- 1.) TO DETERMINE OFFSET DISTANCE FOR ANY LENGTH OF TAPER USE THE FORMULA $Y = 2.25W \left(\frac{X}{L}\right)^2$ FOR THE PORTIONS A-B1 AND C1-D1 WHICH ARE PARABOLIC CURVES. THE PORTION B1-C1 IS A TANGENT. WHEN THE BASE LINE IS CURVED, THE OFFSETS ARE APPLIED TO THE CURVED BASE LINE, AND B1-C1 IS NO LONGER A TANGENT.

REVISION		ENGINEERING	DATE 07/09	CITY OF LAKE ELSINORE	
DATE	APPROVED				
		APPROVED BY		MEDIAN TAPER	
		 CITY ENGINEER			
		DATE 08/31/2009		NO. 127	



$$Y = W \left(\frac{X}{L} \right)^2$$

L=LENGTH OF FLARE IN FEET
 W=MAXIMUM OFFSET DISTANCE IN FEET
 X=DISTANCE ALONG BASELINE IN FEET
 Y=OFFSET FROM BASELINE IN FEET

$$\tan \theta = \frac{2W}{L}$$

$$T = R \tan \frac{\theta}{2}$$

T=TANGENT
 R=RADIUS OF NOSE IN FEET

OFFSET Y

$\frac{X}{L}$	10'	15'	20'	25'	30'	40'	45'	50'	60'	70'	75'	80'	90'	100'
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FOR W/L=1:5

25'	0.80'	1.80'	3.20'	5.00'										
50'	0.40'	0.90'	1.60'	2.50'	3.60'	6.40'	8.10'	10.00'						

FOR W/L=1:10

50'	0.20'	0.45'	0.80'	1.25'	1.80'	3.20'	4.05'	5.00'						
100'	0.10'	0.23'	0.40'	0.63'	0.90'	1.60'	2.03'	2.50'	3.60'	4.90'	5.63'	6.40'	8.10'	10.00'

FOR W/L=1:15

45'	0.15'	0.33'	0.59'	0.93'	1.33'	2.37'	3.00'							
75'	0.09'	0.20'	0.36'	0.56'	0.80'	1.42'	1.80'	2.22'	3.20'	4.36'	5.00'			
90'	0.07'	0.17'	0.30'	0.46'	0.67'	1.19'	1.50'	1.85'	2.67'	3.63'	4.17'	4.74'	6.00'	

NOTE:

1.) IF STATION OF RADIUS POINT IS NOT GIVEN ON PLAN, TANGENT "T" MAY BE IGNORED.

REVISION		ENGINEERING		DATE 07/09	CITY OF LAKE ELSINORE				
DATE	APPROVED	APPROVED BY							PREPARED BY PUBLIC WORKS
		 CITY ENGINEER		08/31/2009	MEDIAN FLARE				NO. 128