

**NOTES:**

WALK WIDTH: 5' width for ramp at the street; 8' (min.) from sidewalk along side yards, with 12' wide easements and 2' buffers on both sides of the walk or 10' wide walk in a 10' wide easement and no buffer shall be okay.

EASEMENT LOCATION: Easement shall be located on one lot or on a common area tract.

WHERE USED: When required by the Local Entity, used to make neighborhood connections where streets are not required or feasible. Not limited to cul-de-sac locations.

## PEDESTRIAN/BICYCLE PATH CONNECTIONS

**LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS**

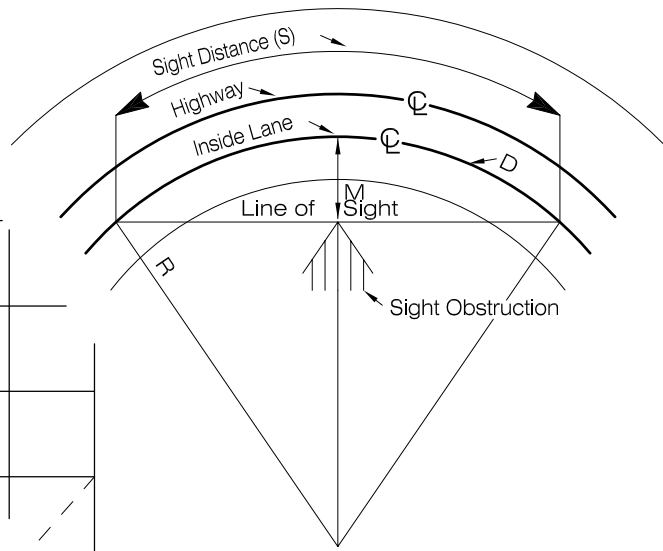
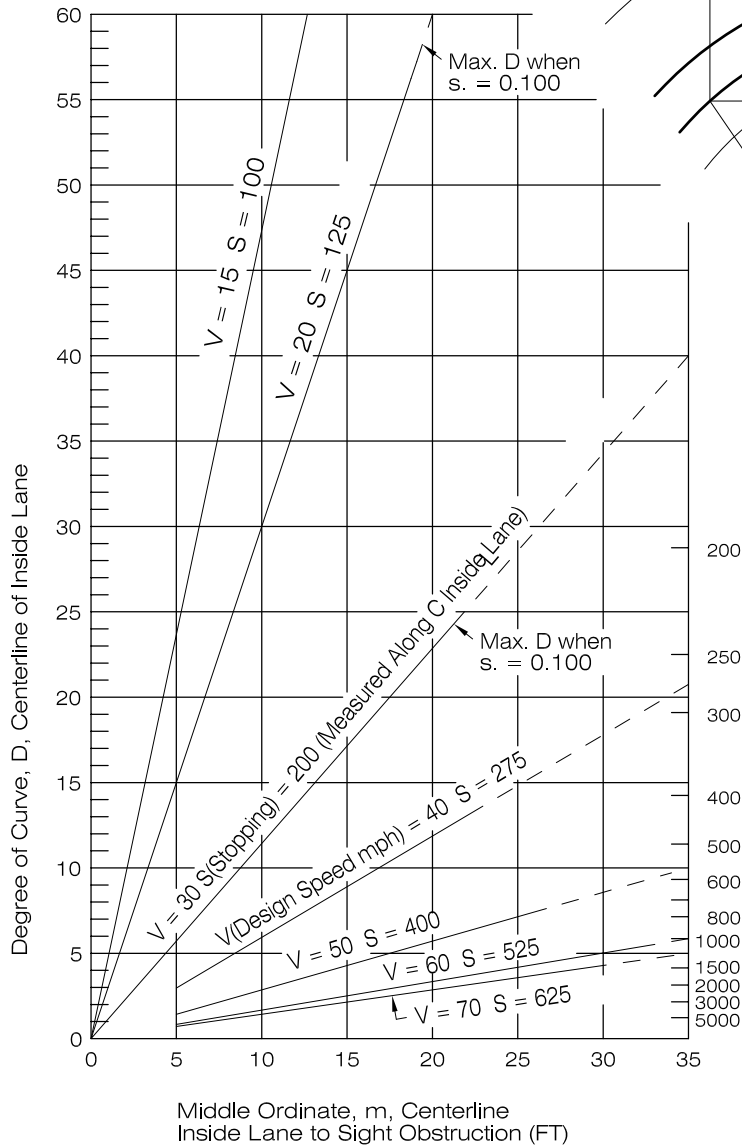
**DESIGN  
FIGURE**

**REVISION NO:**

**DATE: 09/11/00**

**FIGURE**

**7-14**



$$M = \frac{5730}{D} \left( 1 - \cos \frac{SD}{200} \right)$$

$$R = \frac{5730}{D} \text{ and } \theta = \frac{SD}{200}$$

$$M = R (1 - \cos \theta)$$

$$M = R \left[ 1 - \cos \frac{28.65S}{R} \right]$$

where

S = Stopping Sight Distance (FT)

D = Degree of Curve

M = Middle Ordinate (FT)

R = Radius (FT)

RANGE OF LOWER VALUES - relation between degree of curve and value of middle ordinate necessary to provide stopping distance on horizontal curves under open road conditions.

From "A Policy on Geometric Design of Highways and Streets 1990" by American Association of State Highway and Transportation Officials

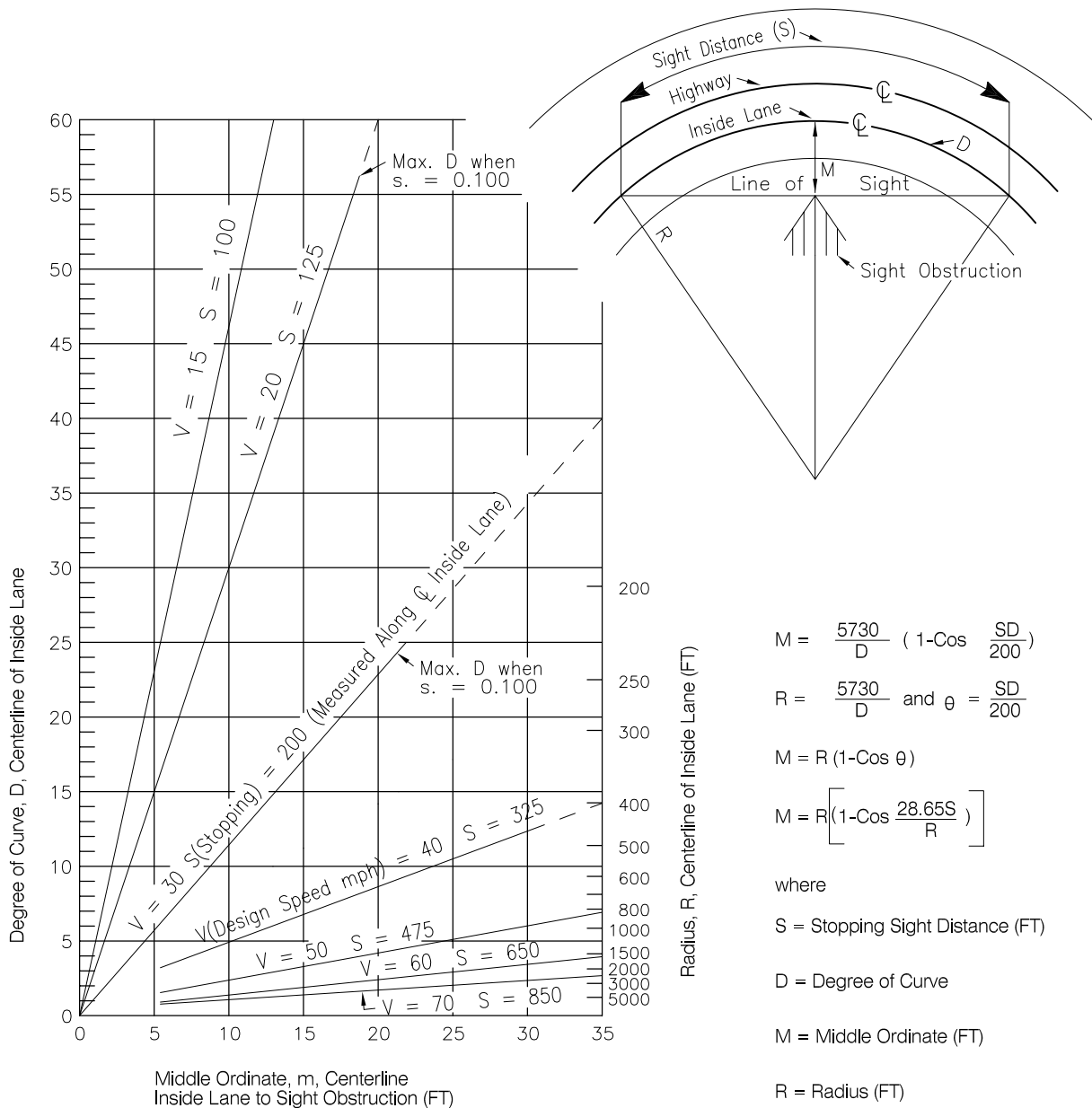
**LATERAL CLEARANCE TO SIGHT OBSTRUCTION INSIDE OF HORIZONTAL CURVES PROVIDING STOPPING DISTANCE FOR TURNING ROADWAYS**

LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

DESIGN  
FIGURE

REVISION NO:  
DATE: 08/07/00

FIGURE  
7-15.1



RANGE OF UPPER VALUES - relation between degree of curve and value of middle ordinate necessary to provide stopping distance on horizontal curves under curves under open conditions.

From "A Policy on Geometric Design of Highways and Streets 1990" by American Association of State Highway and Transportation Officials

**LATERAL CLEARANCE TO SIGHT OBSTRUCTION INSIDE OF HORIZONTAL CURVES PROVIDING STOPPING DISTANCE FOR TURNING ROADWAYS**

LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

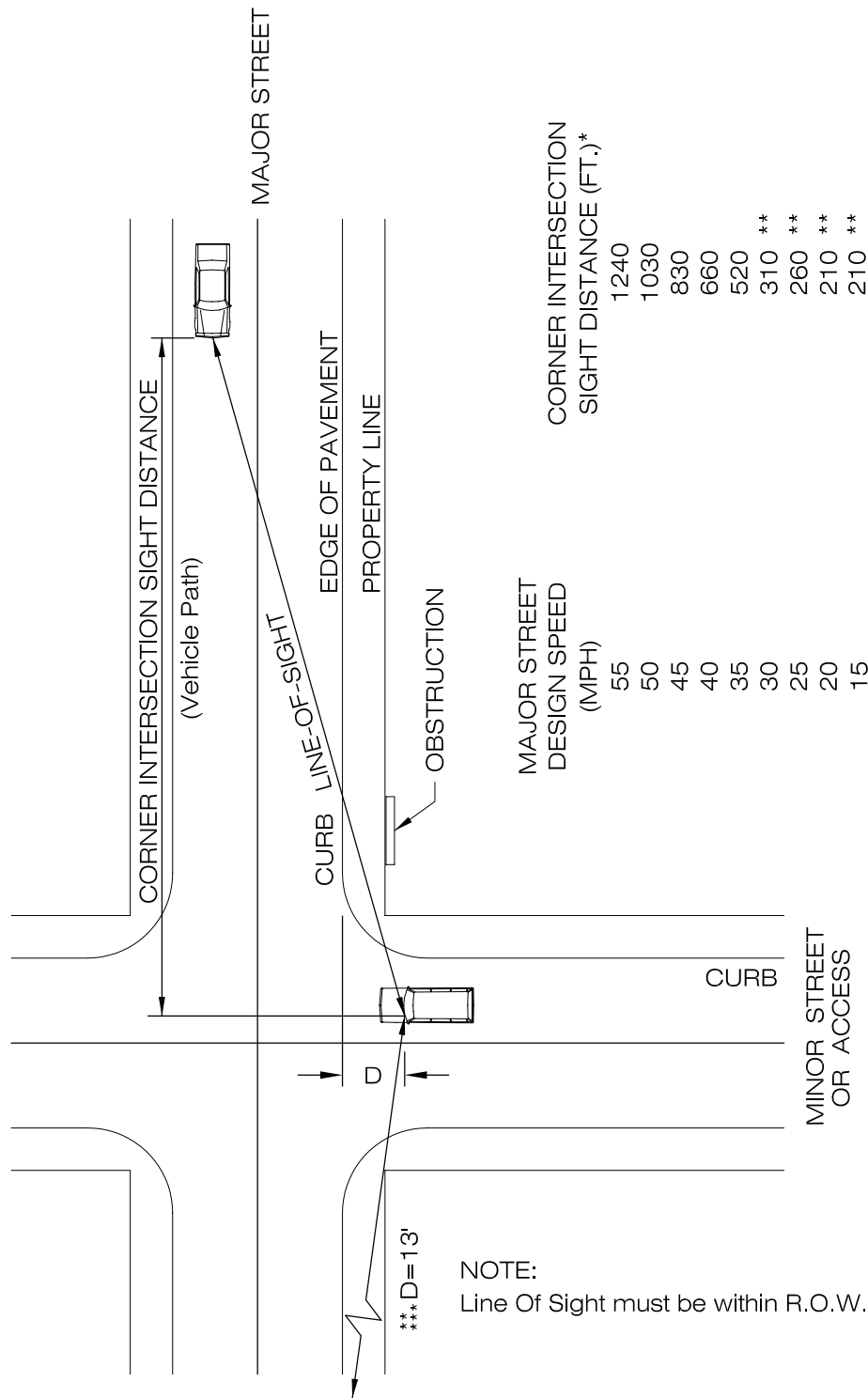
DESIGN  
FIGURE

REVISION NO:

DATE: 08/07/00

FIGURE

7-15.2



**SIGHT DISTANCE AT INTERSECTIONS**  
(Unsignalized)

From "A Policy on Geometric Design of Highways and Streets 1990"  
by American Association of State Highway and Transportation Officials

- \* Corner sight distance measured from a point on the minor road at 13 feet back from the edge of the major road pavement (flowline) and measured from a height of eye at 3.50 feet on the minor road to a height of object at 4.25 feet on the major road.
- \*\* At Local-Local street intersections only, the "D" distance shall be ten feet (10') and the sight distance shall be measured to the centerline of the street.
- \*\*\* For private driveway access to a public street, use 10 feet back from flowline (or shoulder for gravel roads).

1. These values apply to passenger cars on 2-lane roads only. Intersections and access serving trucks or on multi-lane roadways requires separate analysis.
2. Adjustments may be required for a skewed intersection.

**SIGHT DISTANCE (SIGHT TRIANGLE)**

LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

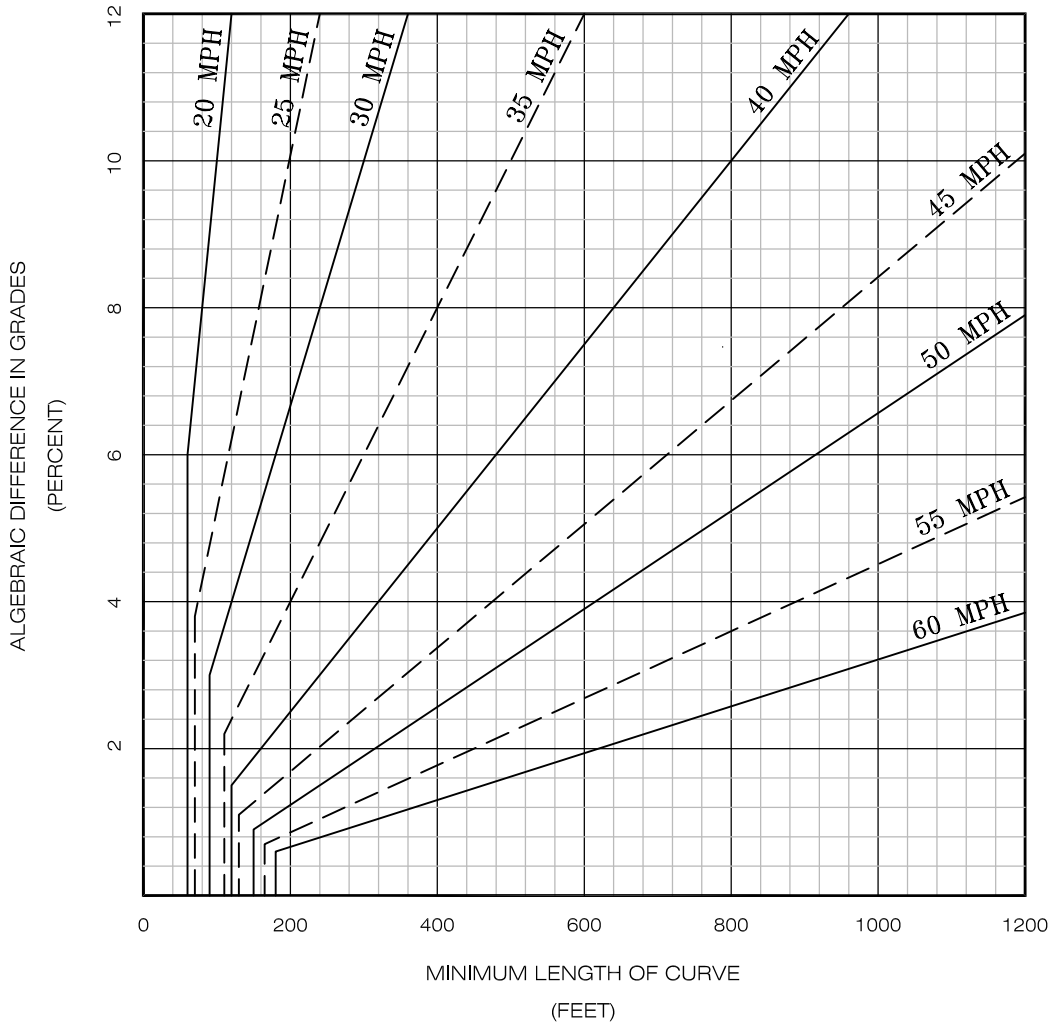
DESIGN  
FIGURE

REVISION NO:

DATE: 09/11/00

FIGURE

7-16



Design controls for crest vertical curves at design speeds.

From "A Policy on Geometric Design of Highways and Streets 1990"  
by American Association of State Highway and Transportation Officials

## VERTICAL CURVE LENGTHS - CREST

LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

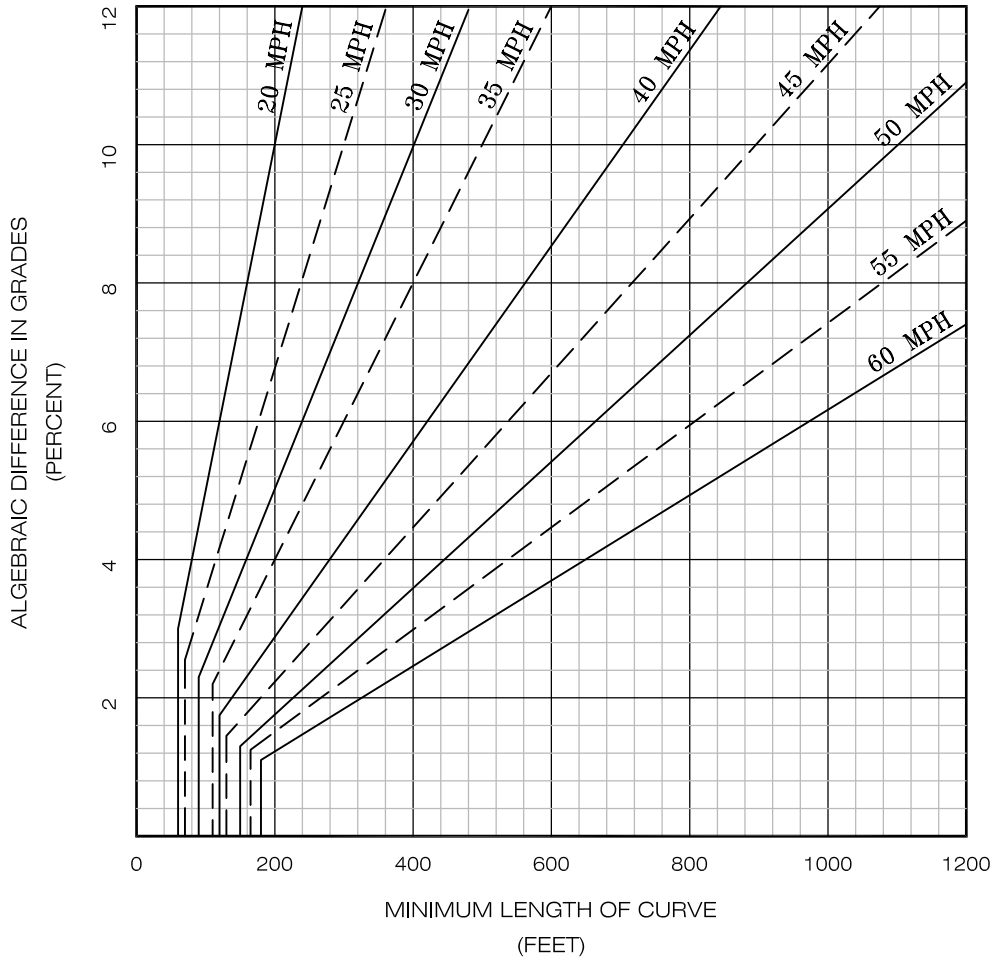
DESIGN  
FIGURE

REVISION NO:

DATE: 08/07/00

FIGURE

7-17



Design controls for sag vertical curves at design speeds.

From "A Policy on Geometric Design of Highways and Streets 1990"  
by American Association of State Highway and Transportation Officials

### VERTICAL CURVE LENGTHS - SAG

LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

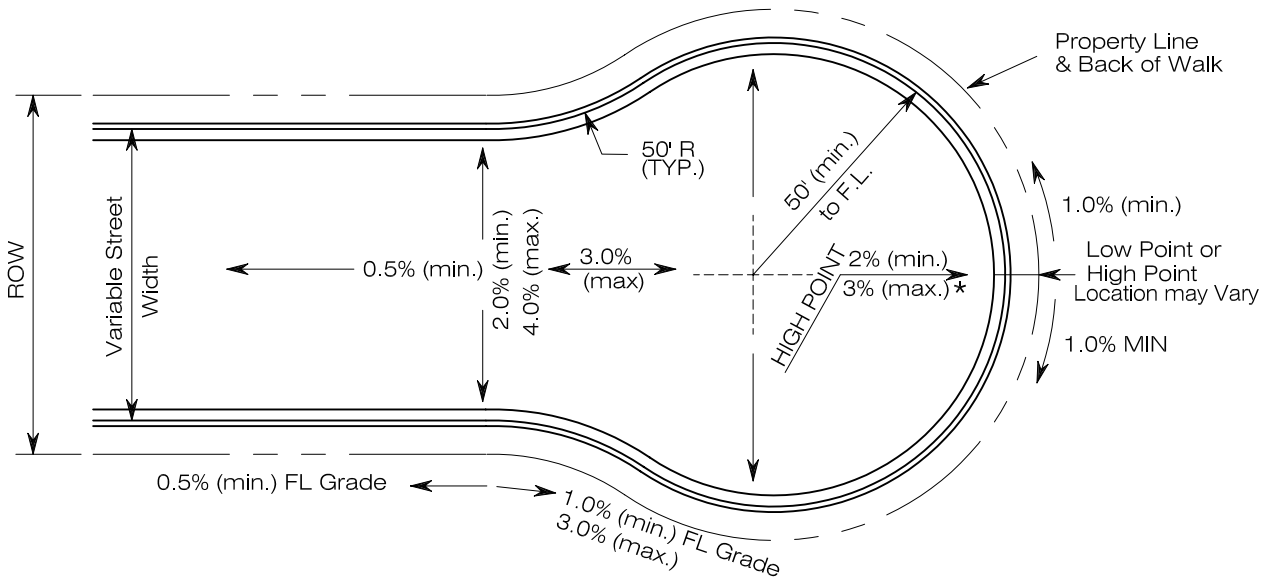
DESIGN  
FIGURE

REVISION NO:

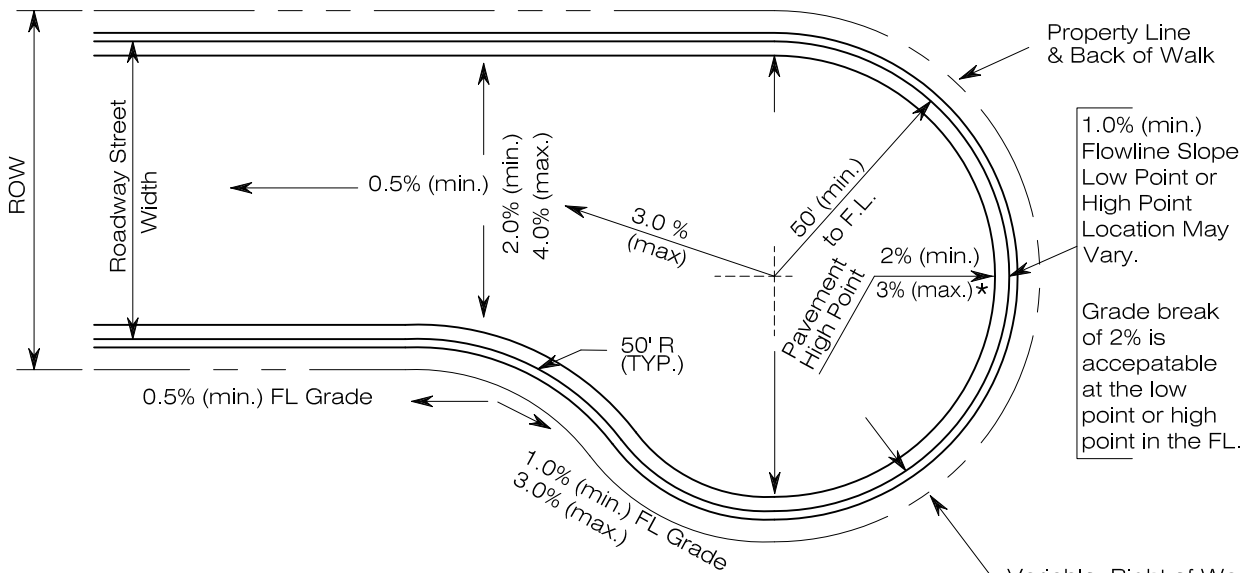
DATE: 08/07/00

FIGURE

7-18



**DRIVE-OVER CURB, GUTTER AND SIDEWALK**



**CURB AND GUTTER w/ ATTACHED WALK**

Variable: Right of Way must match requirements for the street classification.

\* Maximum grade shall be 4% on reconstruction.

Note: Cul-de-sac may be asymmetrical

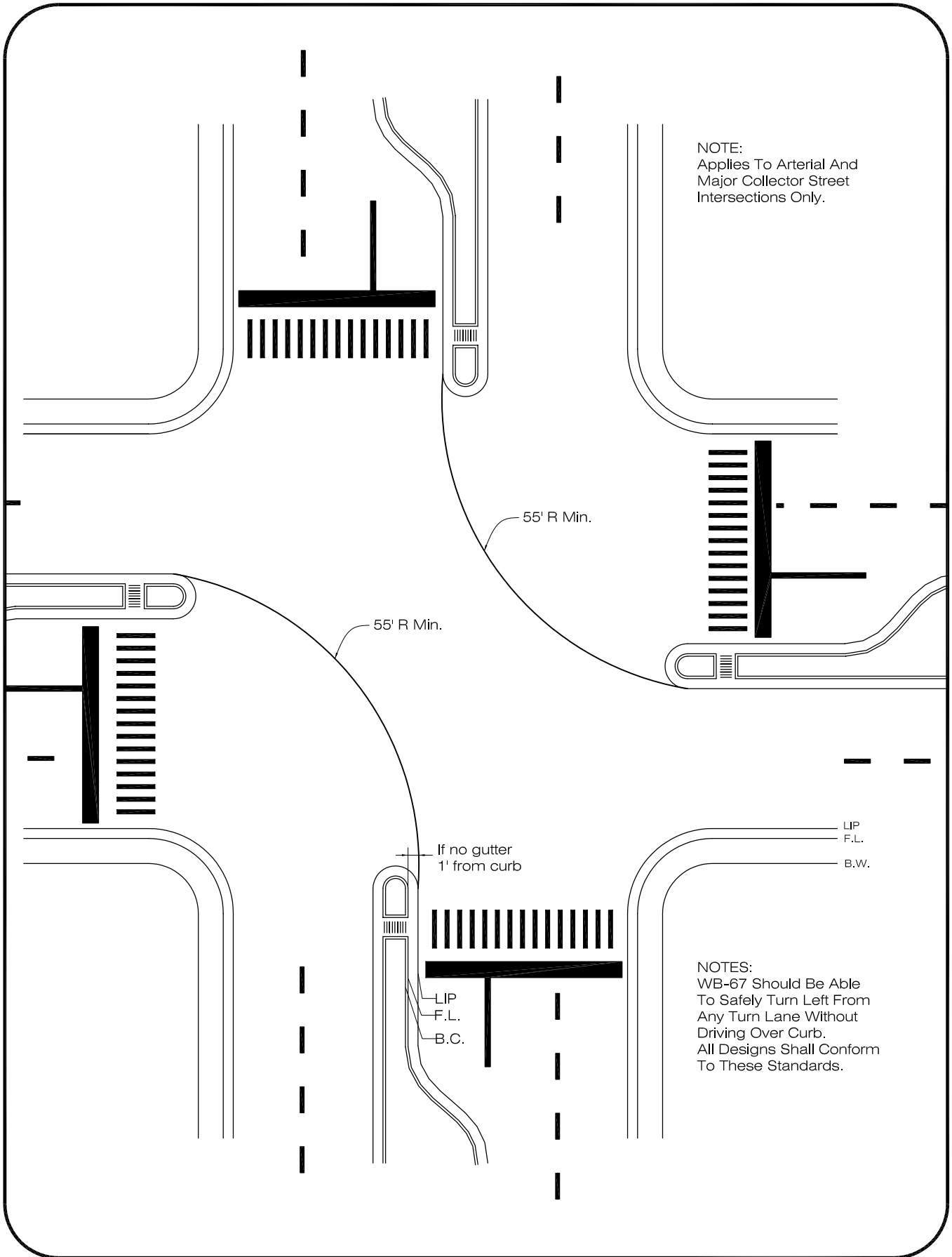
**CUL-DE-SAC DETAIL**

**LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS**

**DESIGN  
FIGURE**

**REVISION NO: 1  
DATE: 03/01/02**

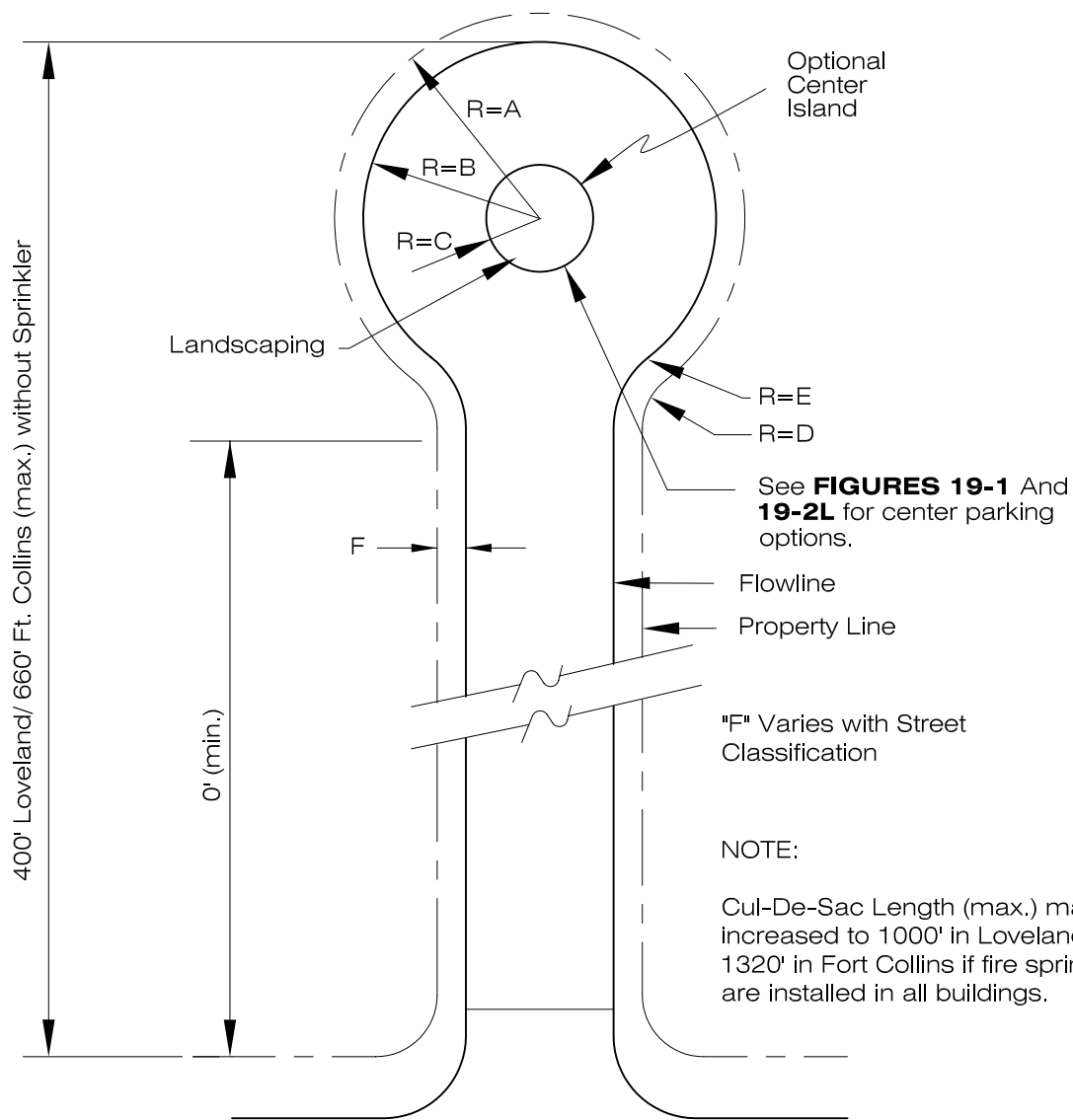
**FIGURE  
7-19**



## LEFT TURN CLEARANCE

<b>LARIMER COUNTY URBAN AREA STREET STANDARDS</b>	<b>DESIGN FIGURE</b>	<b>REVISION NO: 1</b>	<b>FIGURE 7-20</b>
		<b>DATE: 03/01/02</b>	





CLASSIFICATION OF CONNECTING STREET	RADIUS				
	A	B	C	D	E
LOCAL STREET	B + F	50'	22'	E - F	50'

NOTES:

1. All additional off-street parking shall be within private easement and maintained by a viable private party.
2. Cul de sac lengths over 1000' (L), 1320' (F) require secondary access.
3. All cul de sacs must meet Local Entity fire requirements.

**STANDARD CUL-DE-SAC**

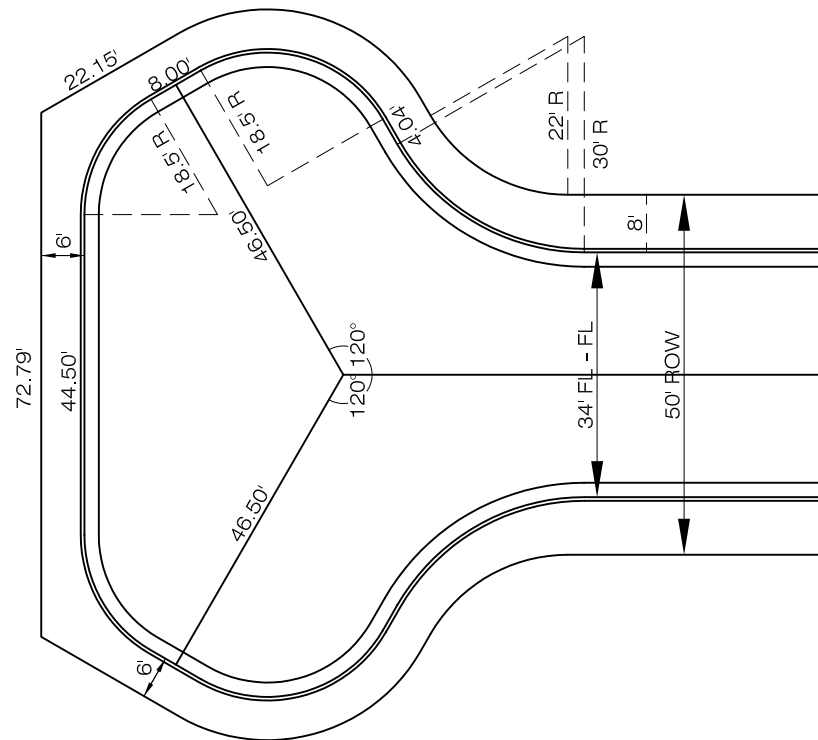
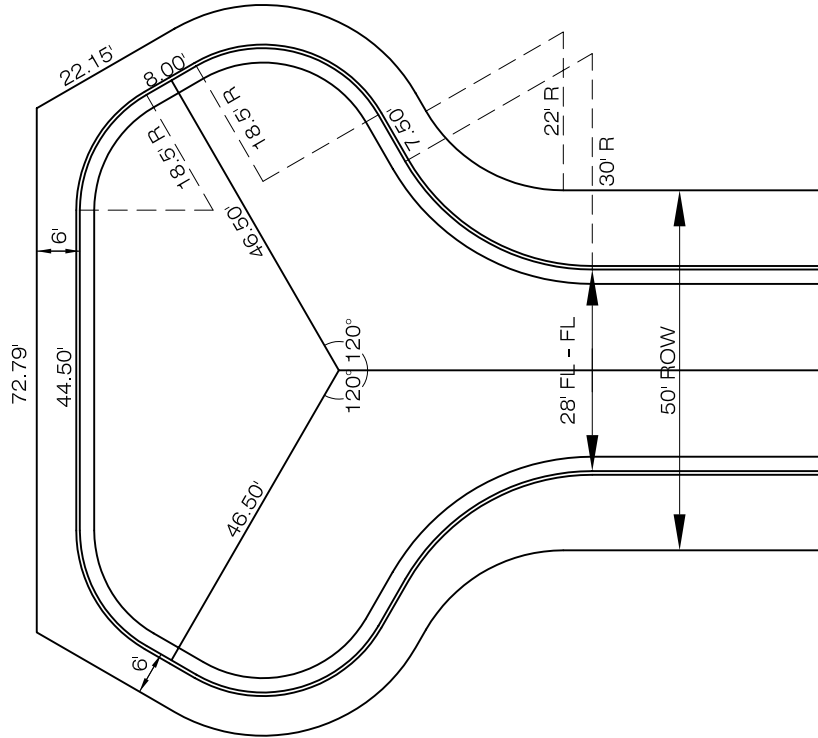
LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

DESIGN  
FIGURE

REVISION NO: 1  
DATE: 03/01/02

FIGURE  
7-21

# LOVELAND ONLY



## STANDARD DETAILS HAMMERHEAD TURNAROUND GEOMETRY

LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

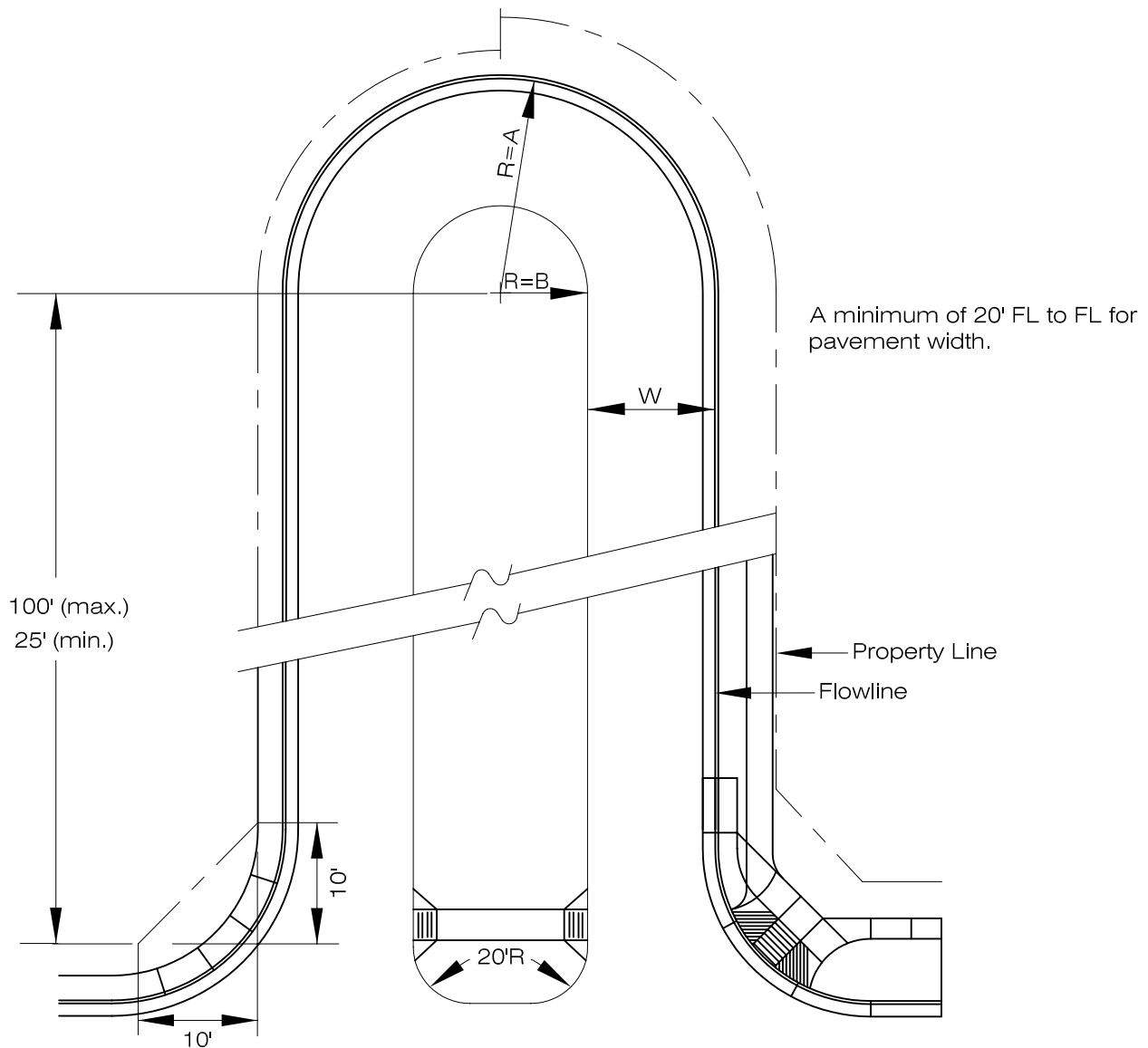
DESIGN  
FIGURE

REVISION NO: 1

DATE: 03/01/02

FIGURE

7-22L



STREET CLASSIFICATION	RADIUS (MIN.)		No Parking	Parking	
	A	B (MAX.)	W	One Side	Two Sides
LOCAL SINGLE FAMILY RESIDENTIAL	55'	30'	20'	28'	34'
LOCAL MULTIPLE FAMILY RESIDENTIAL	60'	30'	20'	28'	36'
LOCAL COMMERCIAL & INDUSTRIAL	65'	26'	24'	32'	38'

Note 3      Note 4

NOTES:

1. The sidewalk around the eyebrow shall be placed according to the street classification. The sidewalk across the street end of the island is to be placed in the same location as on the cross street.
2. Median may be landscaped or hardscaped as required by the Local Entity and shall be maintained by a viable private party.
3. Offstreet parking at the rate of 1 space for each dwelling unit served by the the eyebrow shall be provided in the median or in a perimeter parking bay.
4. When parking is restricted to one side, it shall be provided on the median-side of the roadway.

**STANDARD EYEBROWS (LOCAL STREETS ONLY)**

LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

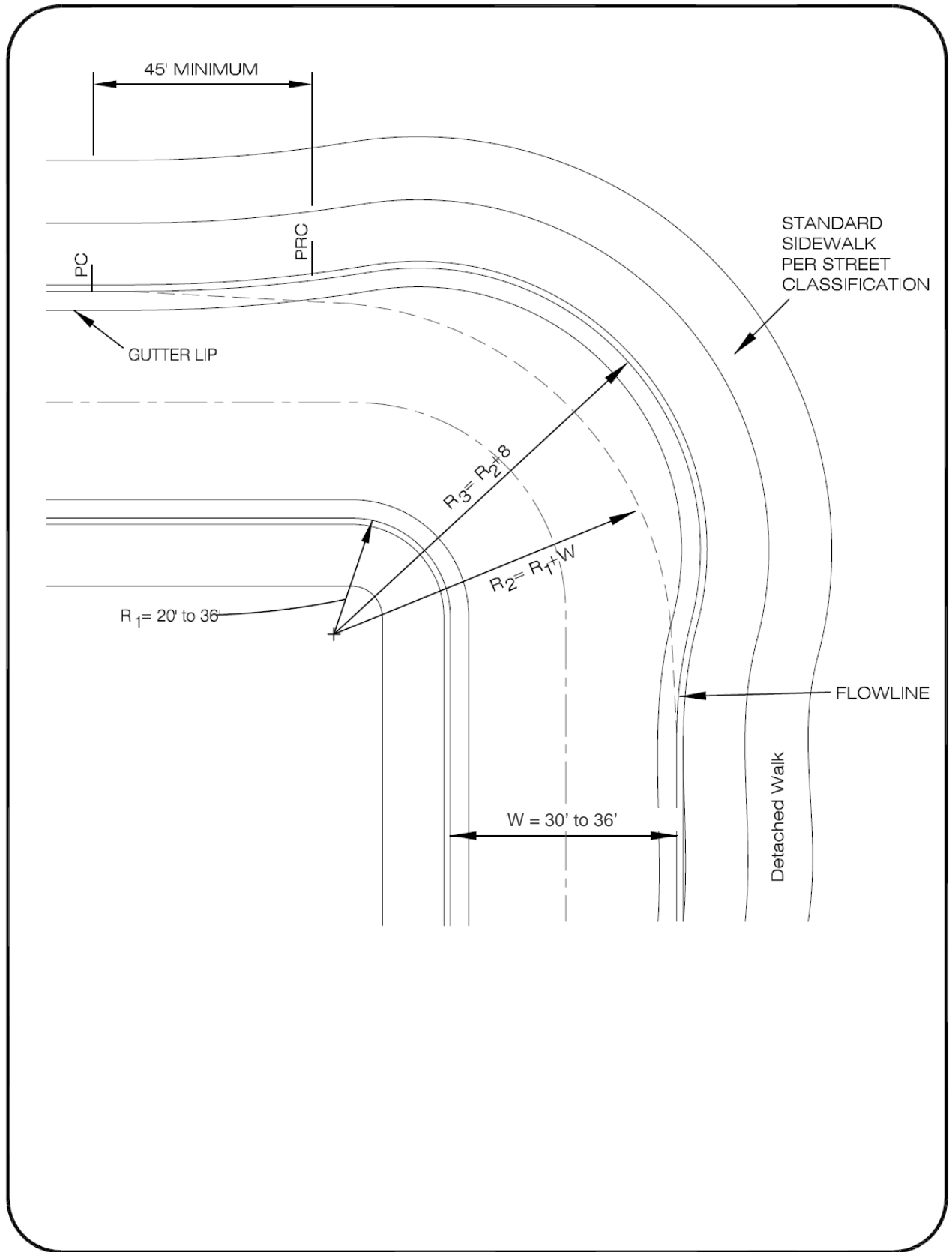
DESIGN  
FIGURE

REVISION NO:

DATE: 11/16/00

FIGURE

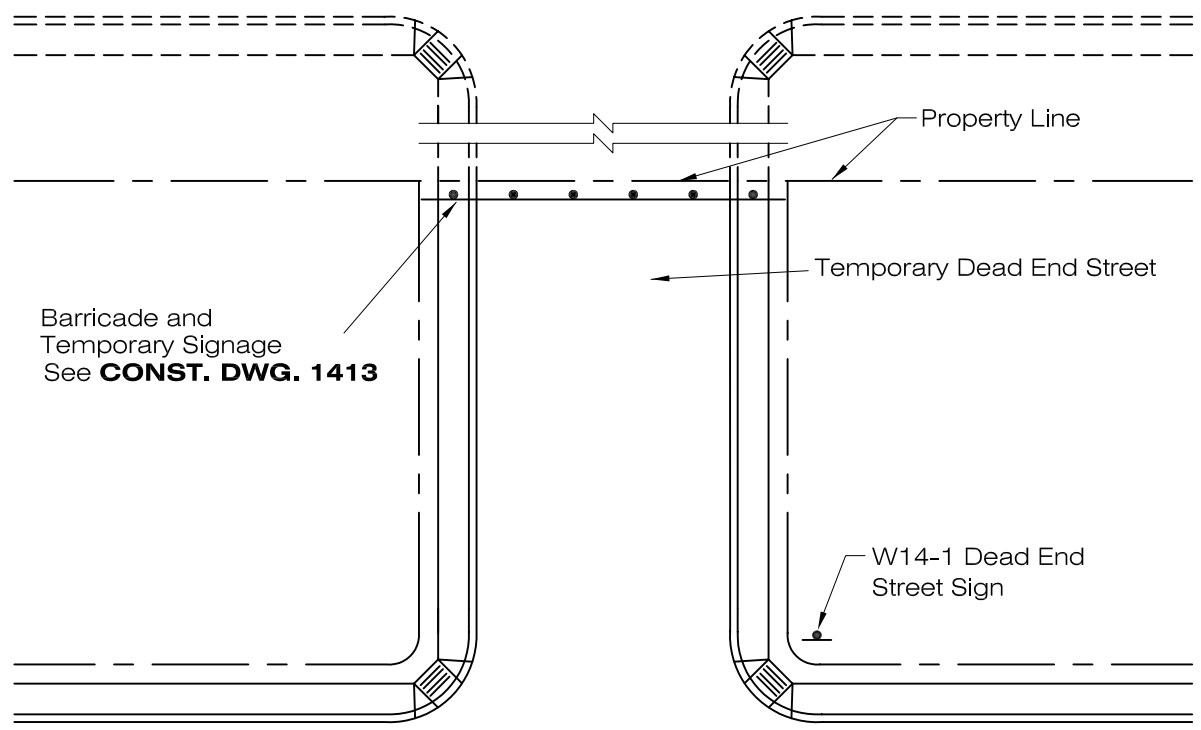
7-23



WIDENING DETAIL FOR STREET TURNS  $>60^\circ$  (LOCAL STREETS ONLY)

LARIMER COUNTY URBAN AREA STREET STANDARDS	DESIGN FIGURE	REVISION NO:	FIGURE
		DATE: <b>September, 2016</b>	7-24

FUTURE ROADWAY



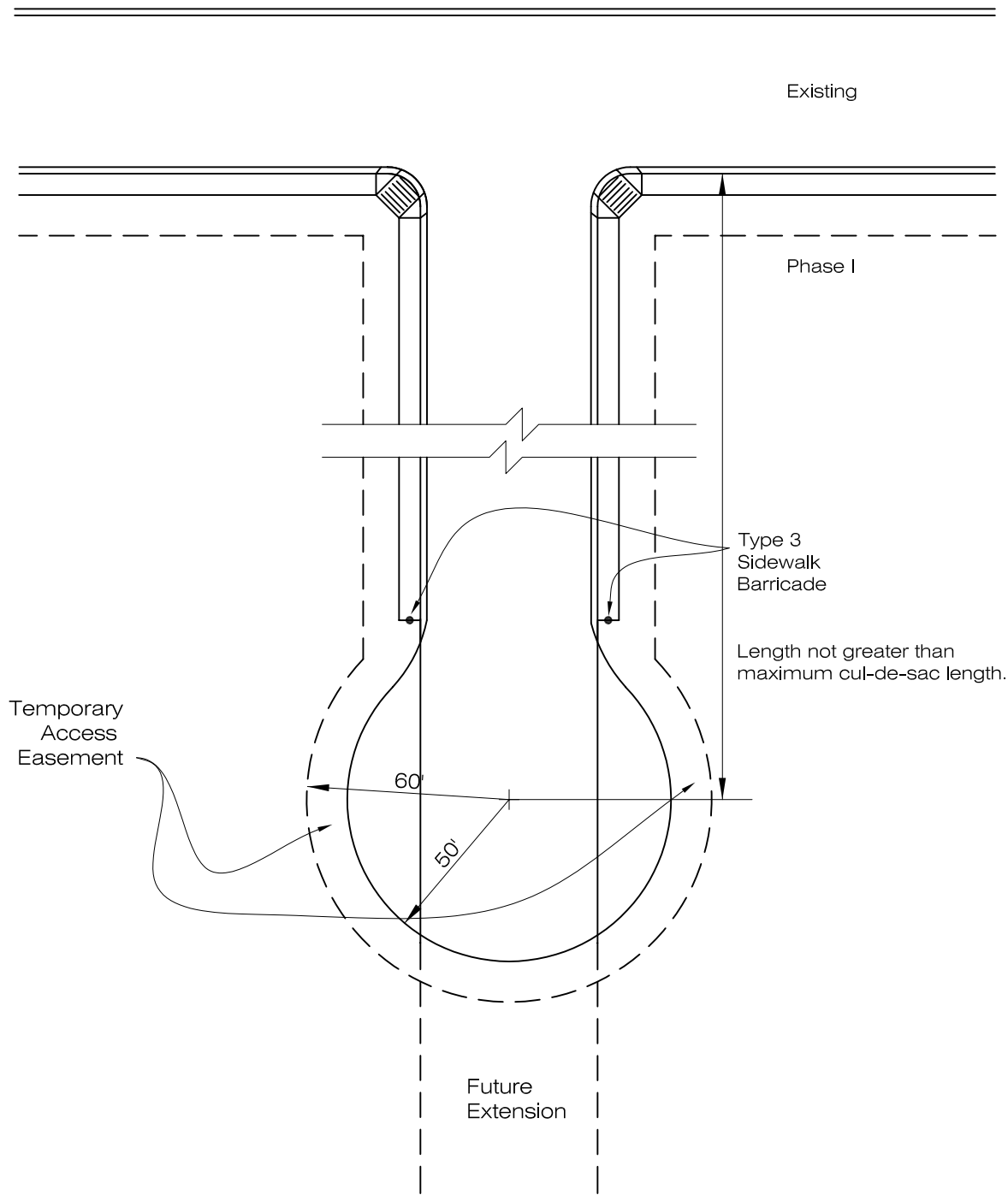
EXISTING ROADWAY

Notes:

- 1. The temporary dead end is limited to 150' in length.
- 2. A cul-de-sac is not required.
- 3. In Fort Collins, no access may be taken from a dead end street with no turn-around or cul-de-sac.

TEMPORARY DEAD END STREET

LARIMER COUNTY URBAN AREA STREET STANDARDS	DESIGN FIGURE	REVISION NO: 1	FIGURE 7-25
		DATE: 03/01/02	



NOTES:

1. A temporary easement is required for the temporary turnaround. The easement shall incorporate all of the all-weather surface, pavement and signage.
2. The turnaround shall consist of an all weather surface.

## TEMPORARY TURNAROUND

LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

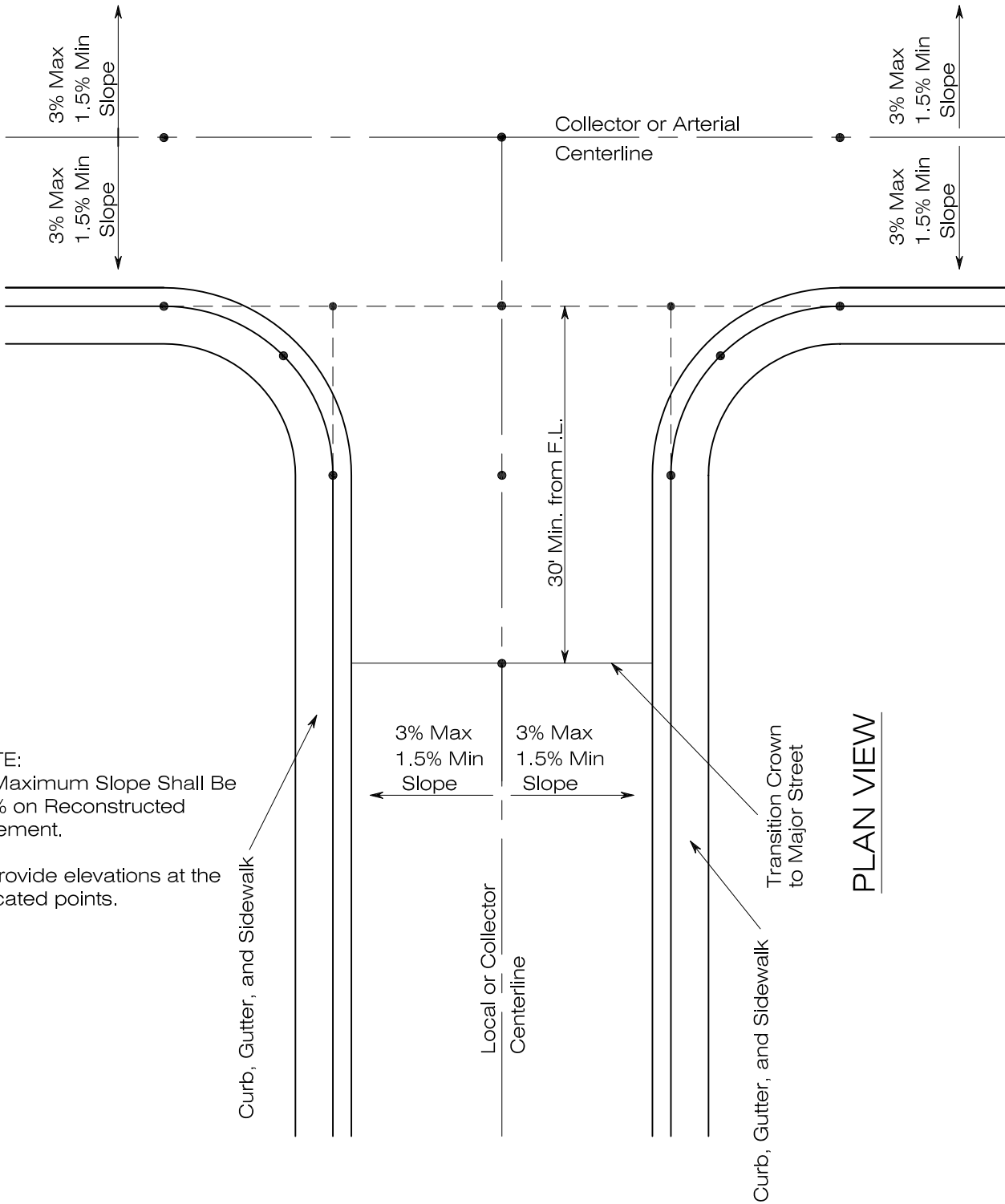
DESIGN  
FIGURE

REVISION NO: 1  
DATE: 03/01/02

FIGURE  
7-26



Design Engineer  
 ● Provide Spot Elevations  
 At These Points



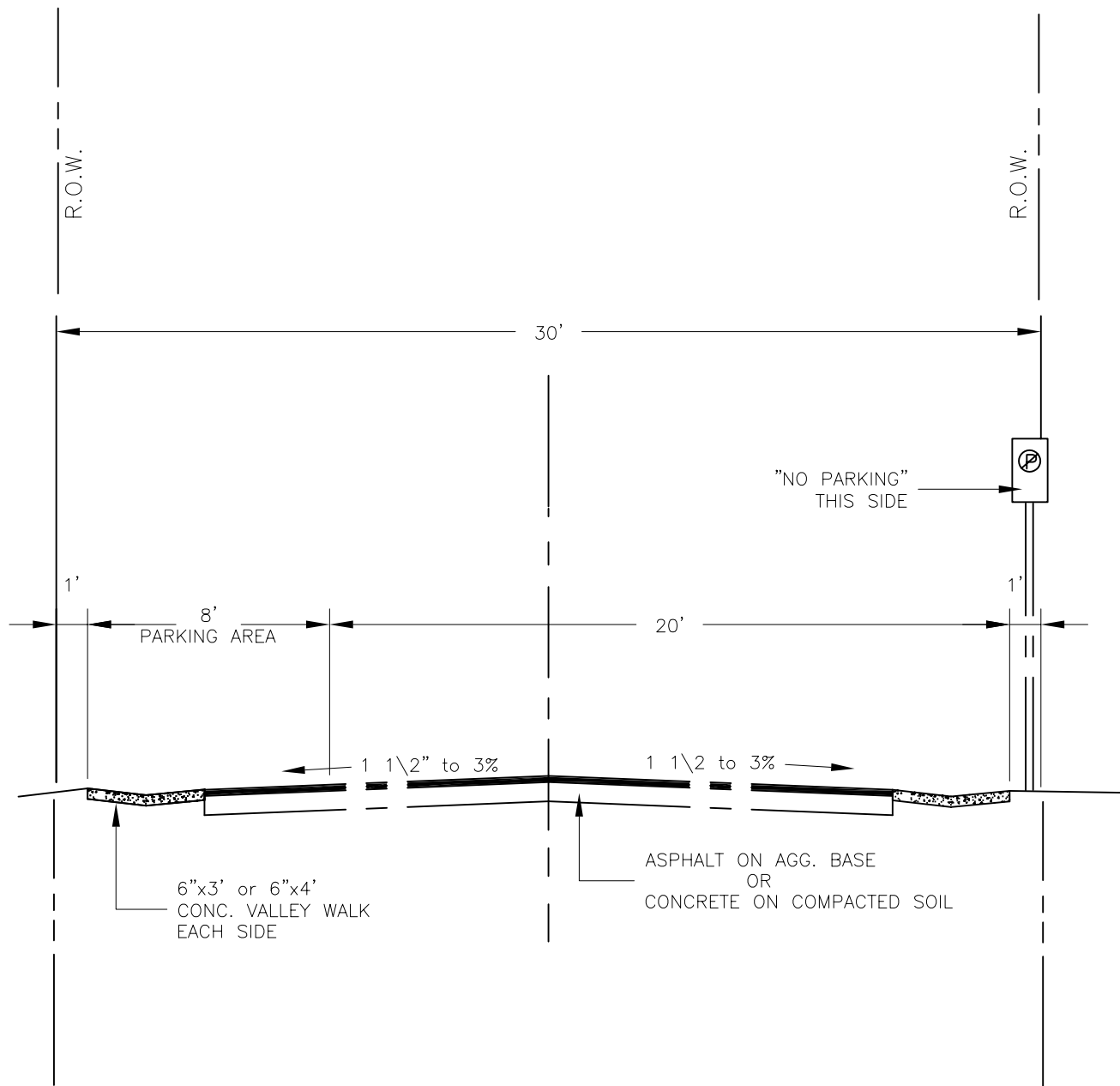
NOTE:  
 1. Maximum Slope Shall Be 4.0% on Reconstructed Pavement.  
 2. Provide elevations at the indicated points.

**STREET INTERSECTION APPROACH DETAIL**

LARIMER COUNTY URBAN AREA STREET STANDARDS	DESIGN FIGURE	REVISION NO:	FIGURE 7-28
		DATE: 11/16/00	



# LOVELAND (AFFORDABLE HOUSING ONLY)



**ALTERNATE CROSS SECTION - LOW VOLUME LOCAL STREET (CROWNED)**

LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

DESIGN  
FIGURE

REVISION NO:

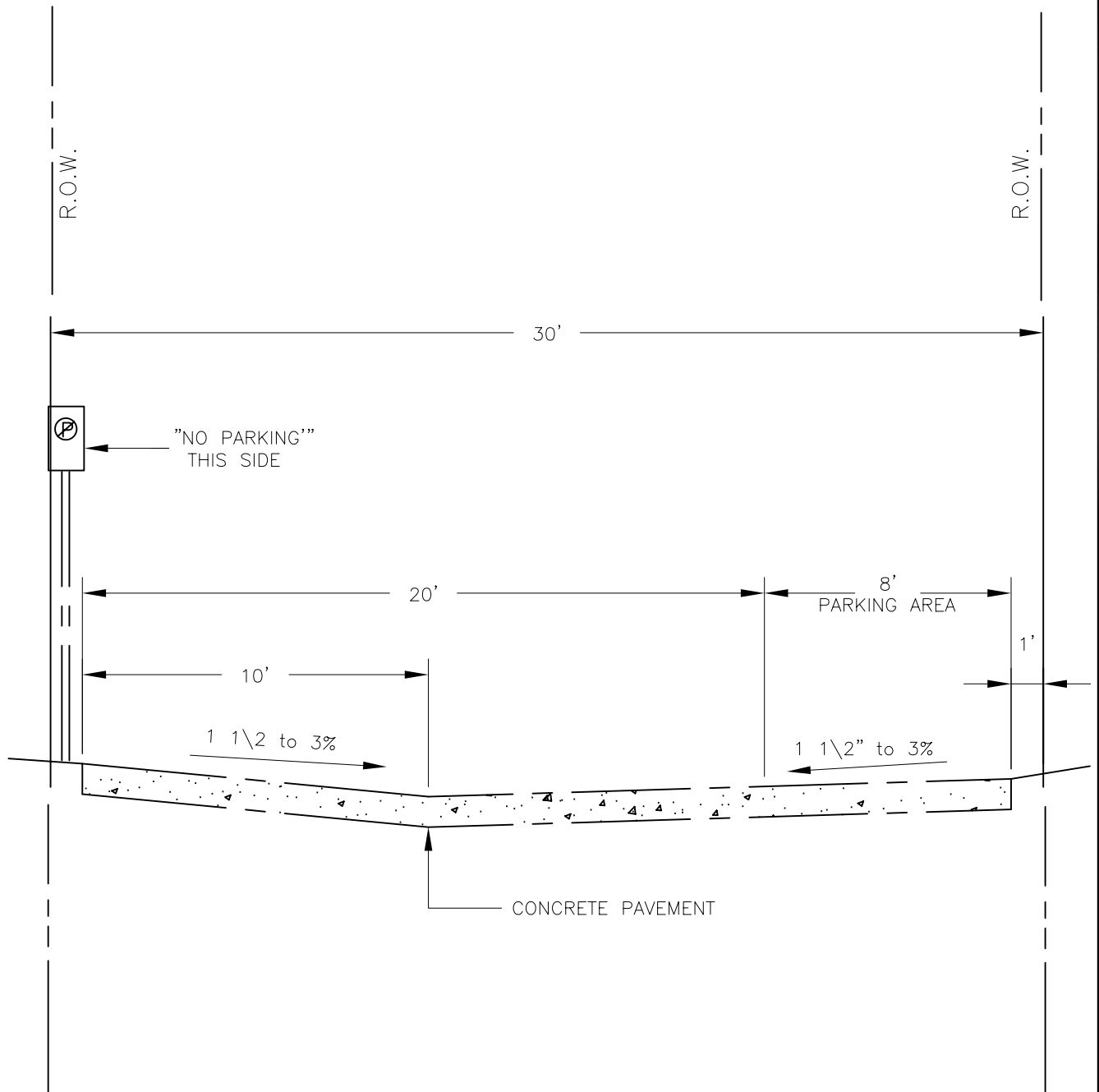
DATE: 08/04/99

FIGURE

7-29L



# LOVELAND (AFFORDABLE HOUSING ONLY)



**ALTERNATE CROSS SECTION - LOW VOLUME LOCAL STREET (INVERTED)**

**LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS**

**DESIGN  
FIGURE**

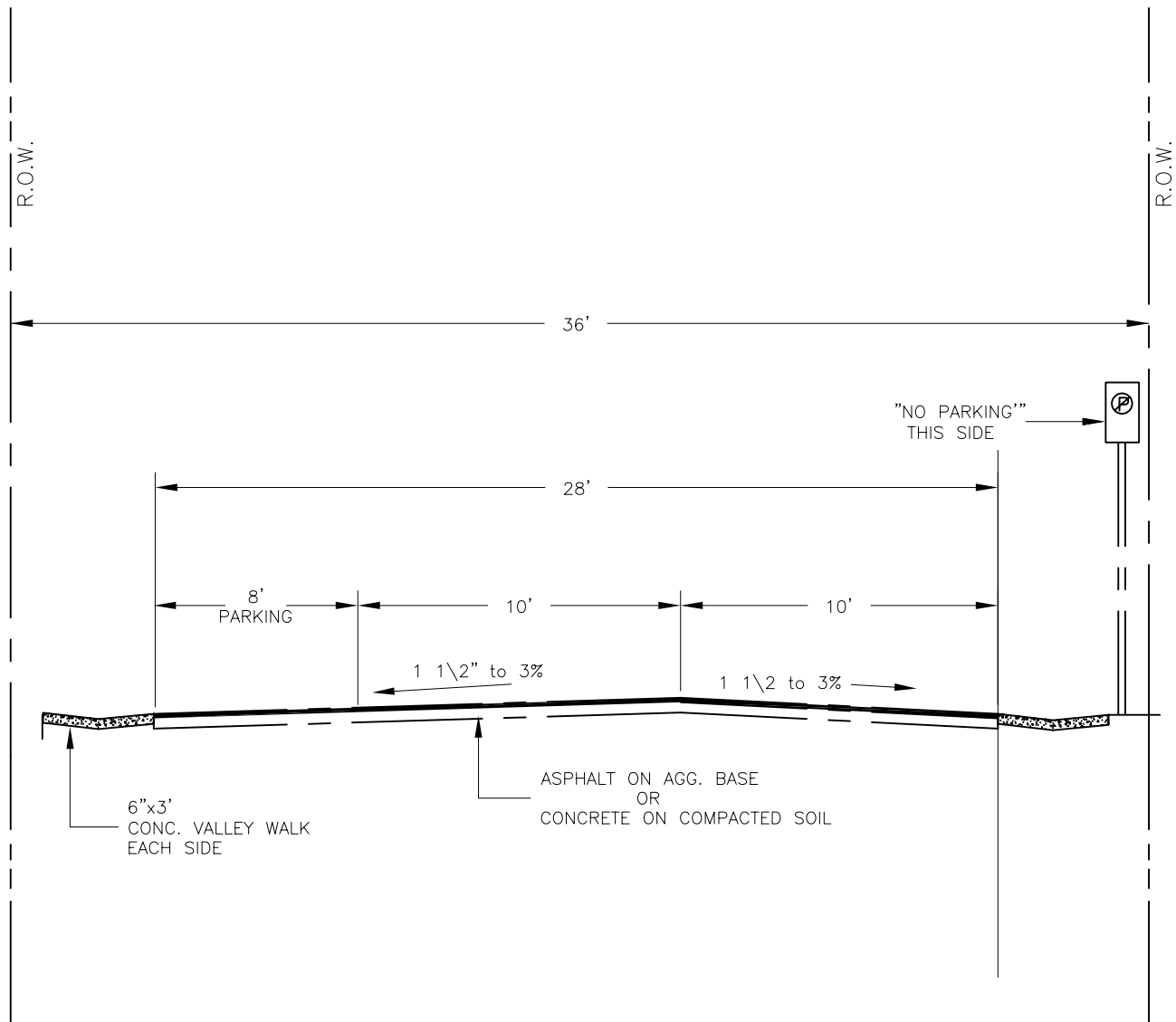
**REVISION NO:**

**DATE: 08/04/99**

**FIGURE**

**7-31L**

# LOVELAND (AFFORDABLE HOUSING ONLY)



## ALTERNATE CROSS SECTION - LOCAL STREET (CROWNED)

LARIMER COUNTY  
URBAN AREA  
STREET STANDARDS

DESIGN  
FIGURE

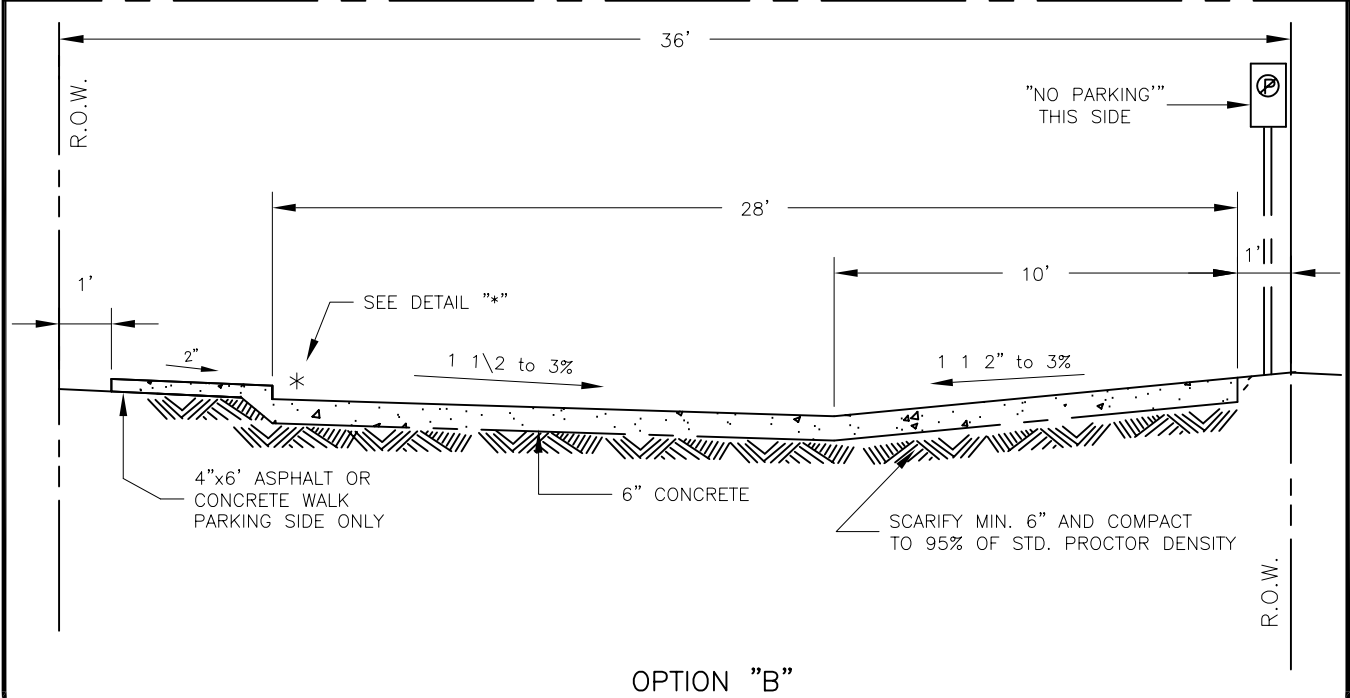
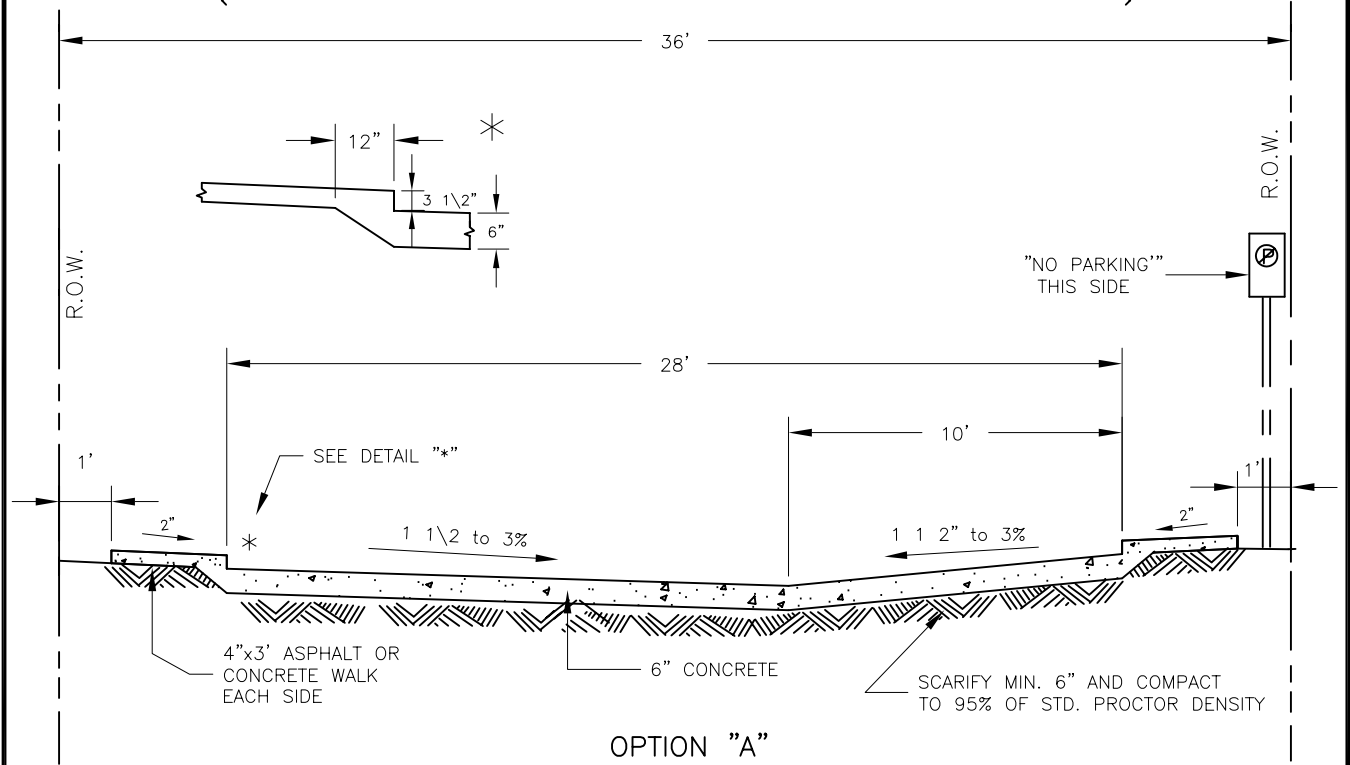
REVISION NO:

DATE: 08/04/99

FIGURE

7-32L

# LOVELAND (AFFORDABLE HOUSING ONLY)



## ALTERNATE CROSS SECTION - LOCAL STREET (INVERTED)

<b>LARIMER COUNTY URBAN AREA STREET STANDARDS</b>	<b>DESIGN FIGURE</b>	<b>REVISION NO:</b>	<b>FIGURE 7-33L</b>
		<b>DATE: 08/04/99</b>	