

MATERIALS

1. Hot Mix Asphalt (HMA) shall conform to Section 39, "Asphalt Concrete" of the CSS and shall consist of the following materials:
 - A. Type: HMA shall be Type "A".
 - B. Asphalt Binder: Asphalt binder for Type "A" HMA shall be steam-refined paving asphalt. The PG Grade shall be as approved by the City Engineer based upon the approved Job Mix Formula.
 - C. Aggregate: Aggregate for Type "A" HMA shall conform to 1/2-inch gradation.
2. Tack Coat shall conform to Section 94, "Asphaltic Emulsions" of the CSS and shall be Type SS1 or RS1 unless otherwise approved by the City Engineer.
3. Aggregate Base shall conform to Section 26, "Aggregate Bases" of the CSS and shall be Class 2 aggregate base (3/4-inch maximum). Compaction shall conform to Page 601.00.
4. Aggregate Subbase shall conform to Section 25, "Aggregate Subbases" of the CSS. Compaction shall conform to Page 601.00.
5. Subgrade compaction shall be 90% to 95% relative in accordance with Page 601.00
6. Geosynthetic Pavement Interlayer (Paving Fabric and Paving Mat) shall conform to Section 96, "Geosynthetics" of the CSS.
7. Shoulder Backing material shall be Class 2 aggregate base (3/4-inch maximum) and shall conform to Section 26, "Aggregate Bases" of the CSS.
8. Portland Cement Concrete (PCC) for general flatwork including curbs, gutters, sidewalks, and driveways shall conform to Section 90, "Concrete," of the CSS, and shall attain a minimum 28-day compressive strength greater than 2500 psi. High early strength (Type III) concrete may be substituted if the Contractor is planning on allowing traffic loads onto concrete pours within three (3) days after pouring. All concrete shall be plant-mixed and delivered by truck, unless concrete mixed on-site is specifically approved by the Engineer.
9. Pavement Striping and Markings shall consist of the following materials:
 - A. Thermoplastic (sprayable): Sprayable thermoplastic material used for traffic stripes shall conform to Caltrans Specifications PTH-02SPRAY. Thermoplastic material shall be free of lead, chromium, cadmium, barium and other toxic metals, and shall be applied at a minimum thickness of 90 mil (0.090").
 - B. Thermoplastic pavement markings: Thermoplastic material used for pavement markings shall conform to Caltrans Specification PTH-02ALKYD. Thermoplastic material shall be free of lead, chromium, cadmium, barium and other toxic metals, and shall be applied at a minimum thickness of 120 mil (0.12").
 - C. Paint: Paint for traffic stripes and marking shall comply with the following specifications:
 1. Waterborne Traffic Line (White, Yellow, Black) - Caltrans Specification PTWB-01R2.
 2. Acetone Based (White, Yellow, Black) - Caltrans Specification PT-150VOC(A)
 3. Waterborne traffic line for the international symbol of accessibility and other curb markings (Blue, Red, Green) - Federal Specification TT-P-1952E
 - D. Glass Beads: Glass beads used with paint shall comply with Caltrans Specification 8010-004. Glass beads used with molten thermoplastic shall be Type 2 beads complying with AASHTO M247 and shall have a coating that promotes adhesion of the beads to thermoplastic. Each lot of glass beads used in pavement markings shall contain less than 200 ppm each of arsenic and lead when tested under EPA Test Methods 3052 and 6010B or 6010C.
 - E. Retroreflective Pavement Markers: Retroreflective Pavement Markers shall conform to Section 81-3.02C, "Retroreflective Pavement Markers" of the CSS.
 - F. Marker Adhesive: Marker adhesive shall conform to Section 81-3.02D, "Hot Melt Bituminous Adhesive" of the CSS.
 - G. Pavement Striping Layout: Striping layout shall conform to the dimensions shown in the CSP.
 - H. Marking Templates: Marking templates shall be constructed of metal, plywood, plastic, or other standard template material and shall fit closely to the surface being marked. All marking templates shall conform to the dimensions shown in the CSP.

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|----------|----|----------|------|----------------------------|--|---|--|
| | | | | CITY OF SHASTA LAKE | | Approved:  | |
| | | | | Public Works Department | | 09-30-2023 | |
| | | | | STANDARD DRAWING | | City Engineer _____ Date _____ | |
| | | | | MATERIALS and REFERENCES | | Date: 09/2023 Dwg No.: | |
| | | | | | | Scale: None 100.00 | |
| REVISION | BY | APPROVED | DATE | | | | |

1. VERTICAL CLEARANCE: Vertical clearance above the roadway surface shall not be less than:

- Bridges and sign structures: 18 feet for all street classification
- All other items: 18 feet for expressways
16 feet for arterials
14.5 feet for collectors and local roads

2. BRIDGES:

Width: Bridges shall have a minimum width between curbs of 28 feet. Width shall be increased to provide sidewalks, parking, bicycle lanes, or additional traffic lanes where needed.

Design Loads: Design live loading for any bridge shall not be less than AASHTO HS-20 loading.

3. GEOMETRIC DESIGN: The right-of-way width for particular streets shall be determined by the City Engineer and shall be determined by addition of the widths necessary to provide the various items to be contained therein. The following widths are considered to be the desirable minimum in each instance.

| ITEM | MINIMUM WIDTH | STREET CLASSIFICATION |
|---|---------------|---|
| Center Median | 22 Feet | Expressway |
| | 12 Feet | Arterial, Collector |
| Travel Lane / Turn Lane | 12 Feet | Expressway, Arterial, Collector |
| | 11 Feet | Arterial, Collector |
| | 10 Feet | Arterial, Collector, Local, Cul-De-Sac, Alley |
| Shoulder | 6 Feet | Expressway, Arterial, Collector |
| Parking Lane | 7 Feet | All Streets |
| Bicycle Lane | 8 Feet | Expressway |
| | 5 Feet | Arterial, Collector |
| Parking Lane with Bicycle Lane | 14 Feet | Arterial, Collector |
| Divider between Frontage Road & Paralelling Road | 8 Feet | All Streets |
| | Curb to Curb | |
| Right of Way Line to Curb Face or Shoulder | 10 Feet | All Streets (Except Alley & Minor Collector) |
| Maximum Length Projected From Property Line of Intersecting Street to Center of Turn-Around | 600 Feet | Cul - De - Sac |

4. DESIGN SLOPE: The design slope of a street shall not exceed 8%. Potential exceptions may be allowed to permit short lengths (less than 500') of 10% slope, as approved by the City Engineer.

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| | | | | CITY OF SHASTA LAKE | | Approved:  | |
| | | | | Public Works Department | | 09-30-2023 | |
| | | | | STANDARD DRAWING | | City Engineer _____ Date _____ | |
| | | | | BASIC STREET DESIGN STANDARDS | | Date: 09/2023 Dwg No.: _____ | |
| REVISION | BY | APPROVED | DATE | | | Scale: None 110.10 | |

- The major functions of the urban streets fall into various Street Classifications, which each vary in design based primarily on projected traffic volumes.
- Expressway systems, including freeways and parkways, provide for expeditious movement of large volumes of through traffic between areas and across the City and are not intended to provide access to individual properties.
 - Arterial systems provide through traffic movement between areas and across the City. Direct access to abutting commercial property and multiple-family properties can be permitted subject to control of the location, number, and spacing of entrance and exit locations.
 - Collector streets, including cul-de-sacs, provide direct access to abutting parcels and are used for local traffic movements.

The alignment of all streets, both horizontal and vertical, shall be based upon the following:

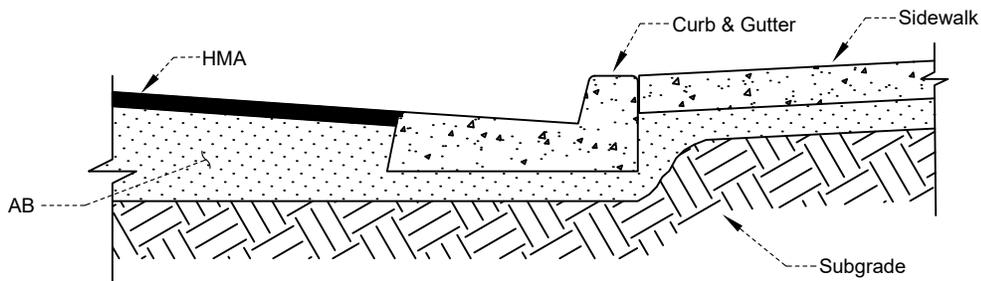
| Page No. | Street Classification | Min. ROW (FT) | Pavement Width (Curb to Curb, FT) | Turn Lane or Median Width (FT) | Curb Type | Min. Sidewalk Width (FT) | Max. Grade (%) | Min. Centerline Curve Radius (FT) | Min. Tangent Between Adjacent Curves (FT) | Min. Curb Radius (FT) | Min. Stopping Sight Distance (FT) | Property Line Radii at Intersections (FT) | Design Speed (MPH) |
|----------|-----------------------|---------------|-----------------------------------|--------------------------------|-----------|--------------------------|----------------|-----------------------------------|---|-----------------------|-----------------------------------|---|--------------------|
| | Alleyway | | | - | - | - | | | | 10 | | | |
| | Frontage Road | 45-60 | 32-40 | - | Vertical | 5 | 8 | 300 | See Footnote B | 10 | 155 | 30 | 25 |
| 113.10 | Cul-De-Sac | 50-60 | 32-40 | - | Vertical | 5 | 8 | 200 | See Footnote B | - | 155 | 20 | 25 |
| 112.10 | Local Street | 40, 50, 56 | 32-36 | - | Vertical | 5 | 8 | 200 | See Footnote B | 10 | 155 | 20 | 25 |
| 112.20 | Minor Collector | 60, 64 | 40-44 | - | Vertical | 5 | 8 | 500 | See Footnote B | 20 | 250 | 30 | 35 |
| 112.30 | Major Collector | 68, 80 | 48, 56 | 10, 12 | Vertical | 5-10 ^A | 8 | 800 | 100 | 20 | 250 | 30 | 35 |
| 112.40 | Minor Arterial | 84 | 64 | 12 | Vertical | 5-10 ^A | 7 | 1,000 | 100 | 20 | 360 | 40 | 45 |
| 112.50 | Principal Arterial | 96 | 60, 76 | 12, 18 | Vertical | 5-10 ^A | 7 | 1,850 | 100 | 30 | 495 | 40 | 55 |
| 112.60 | Principal Arterial | 110 | 36 x 2, 39 x 2 | | | | | | | | | | |
| 112.70 | Expressway | 130 | 36 x 2 | 22 | Vertical | - | 7 | 3,150 | 100 | 30 | 645 | 40 | 65 |

- NOTES:
- Width varies with type/density of development.
 - Minimum tangent length shall be determined by City Engineer.
 - Medians may be established in any street (subject to approval by the Planning Commission), depending on whether it is also used for turning purposes.
 - Desirable minimum intersection spacing:
 - Arterial/Arterial intersections - 1 mile
 - Arterial/Collector intersections - 1/2 Mile
 - Arterial or Collector/Local intersections - 500 ft to 600 ft
 - Desirable Signal Spacing:
 - 1/2 Mile (ideal)
 - 1,200 ft (min.)

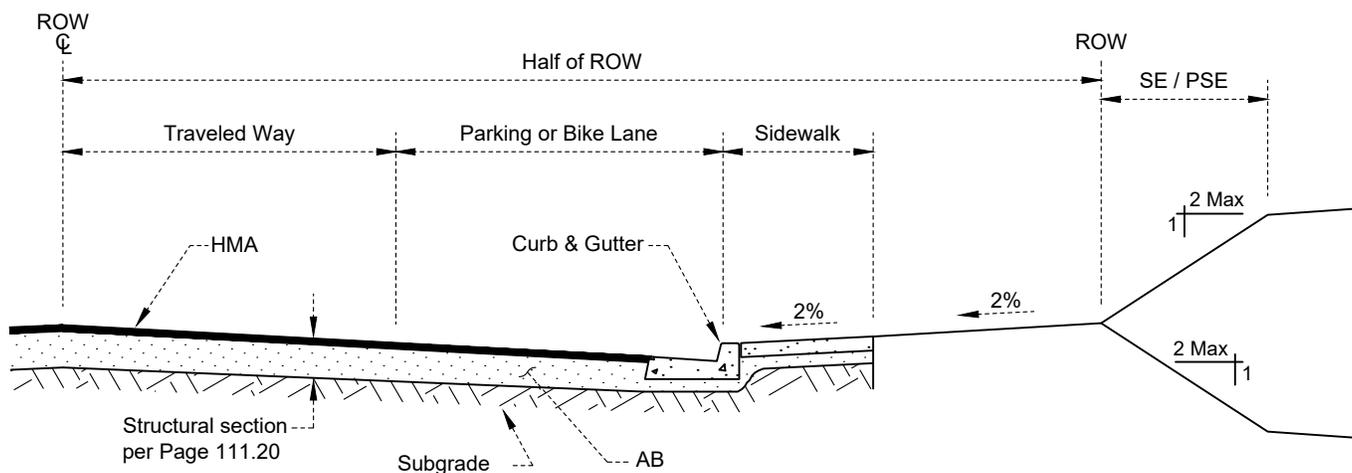
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CITY OF SHASTA LAKE
Public Works Department
STANDARD DRAWING
BASIC STREET DESIGN STANDARDS

Approved:  09-30-2023
Date
City Engineer _____ Date _____
Date: 09/2023 Dwg No.:
Scale: None 110.20



DETAIL SECTION AT CURB



TYPICAL HALF SECTION
Symmetrical about Centerline

NOTES

1. All materials shall conform to Page 100.00.
2. Compaction and density requirements shall conform to Page 601.00.
3. Full-width sidewalk shall be required on all streets unless otherwise directed by the City Engineer. See Pages 131.10, 131.20, and 131.30 for additional information.
4. Slope easement and/or public service easement width shall be determined by the City Engineer.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE
Public Works Department

STANDARD DRAWING

TYPICAL STREET CROSS SECTION LAYOUT

Approved:  09-30-2023

City Engineer _____ Date _____

Date: 09/2023 Dwg No.: 111.10

Scale: None

MINIMUM STRUCTURAL SECTIONS
Based on Caltrans Highway Design Manual Section 630
(Minimum Layer Thickness in Feet)

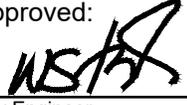
| Street Classification | TI Minimum | Material | R-Value of Subgrade Material | | | | | | | | | | | |
|--|------------|----------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| | | | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45+ | | | |
| Expressway & Principal Arterial | 10.0 | HMA | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| | | AB | 2.15 | 2.00 | 1.85 | 1.70 | 1.55 | 1.45 | 1.30 | 1.15 | 1.00 | 0.95 | 0.90 | |
| | | Full Depth HMA | 1.30 | 1.25 | 1.20 | 1.15 | 1.10 | 1.05 | 1.00 | 0.95 | 0.90 | 0.85 | 0.80 | |
| Minor Arterial | 9.0 | HMA | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | |
| | | AB | 2.00 | 1.90 | 1.75 | 1.60 | 1.50 | 1.35 | 1.20 | 1.10 | 0.95 | 0.85 | | |
| | | Full Depth HMA | 1.20 | 1.15 | 1.10 | 1.05 | 1.00 | 0.95 | 0.90 | 0.85 | 0.80 | 0.75 | | |
| Major Collector | 8.0 | HMA | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | |
| | | AB | 1.80 | 1.65 | 1.55 | 1.45 | 1.30 | 1.20 | 1.10 | 0.95 | 0.85 | 0.75 | | |
| | | Full Depth HMA | 1.05 | 1.00 | 0.95 | 0.95 | 0.90 | 0.85 | 0.80 | 0.75 | 0.70 | 0.65 | | |
| Cul-De-Sacs | 7.0 | HMA | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | |
| | | AB | 1.55 | 1.50 | 1.35 | 1.20 | 1.10 | 1.00 | 0.95 | 0.85 | 0.75 | 0.65 | | |
| | | Full Depth HMA | 0.90 | 0.85 | 0.85 | 0.80 | 0.75 | 0.70 | 0.65 | 0.60 | 0.55 | 0.50 | | |
| Minor Collector and Local Street with 151 to 300 Residences | 6.0 | HMA | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | |
| | | AB | 1.25 | 1.20 | 1.10 | 1.00 | 0.90 | 0.85 | 0.75 | 0.65 | 0.55 | 0.50 | | |
| | | Full Depth HMA | 0.75 | 0.70 | 0.70 | 0.65 | 0.60 | 0.60 | 0.55 | 0.50 | 0.45 | 0.45 | | |
| Local Street with 1 to 150 Residences and HMA Trails and Paths | 5.5 | HMA | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | |
| | | AB | 1.10 | 1.05 | 0.95 | 0.85 | 0.80 | 0.70 | 0.65 | 0.55 | 0.50 | 0.45 | | |
| | | Full Depth HMA | 0.65 | 0.65 | 0.60 | 0.60 | 0.55 | 0.55 | 0.50 | 0.45 | 0.45 | 0.45 | | |

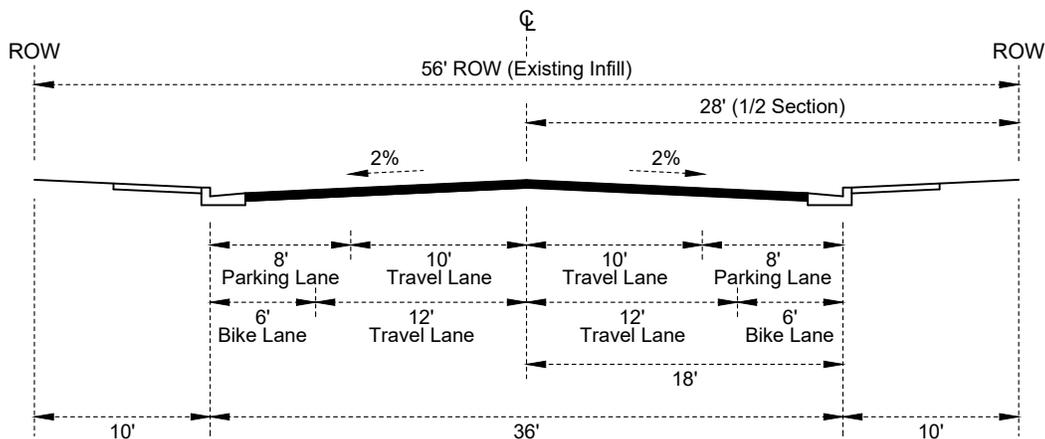
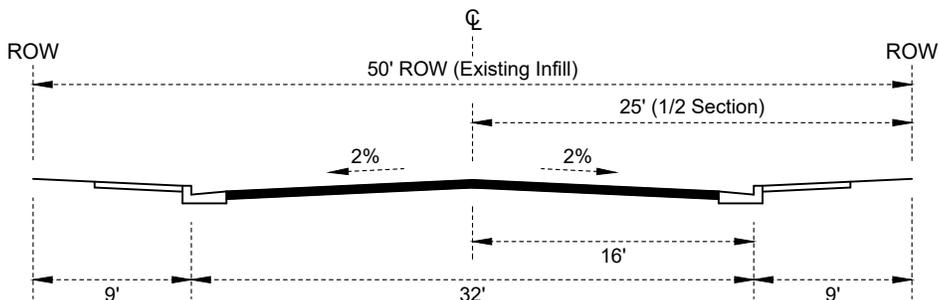
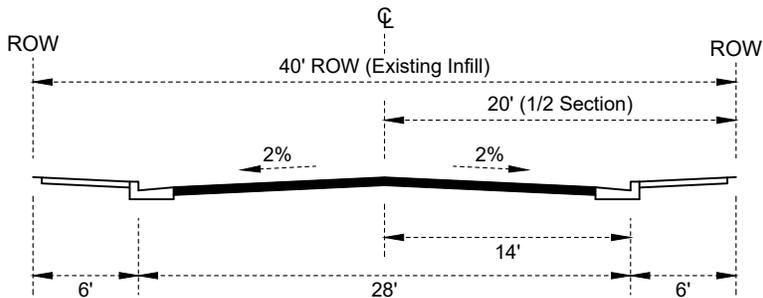
NOTES:
1. Alternate structural sections based on measured in-situ R-values utilizing subbase, base and HMA materials may be used subject to the approval of the City Engineer.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE
Public Works Department
STANDARD DRAWING

MINIMUM STRUCTURAL SECTIONS

Approved:  09-30-2023
City Engineer _____ Date _____
Date: 09/2023 Dwg No.: _____
Scale: None 111.20



NOTE:

1. Lane lines shown are typical configurations. Proposed modifications shall be subject to approval by the City Engineer.
2. Existing infill street standards apply ONLY to existing infill right-of-way.
3. Design Standards:
 - Projected ADT: Less than 2,000.
 - Access: Intersections at grade with direct access to abutting properties.
 - Traffic Features: Traffic control measures as warranted to provide adequate safety.
 - Roadway Geometrics: Roadway geometrics shall conform to Page 110.10 and 110.20.
 - Structural Section: Structural section shall be as shown on Page 111.20.
 - Bicycles: As determined by the City Engineer.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

**STREET STANDARD
LOCAL STREET (EXISTING INFILL)**

Approved:

09-30-2023

City Engineer

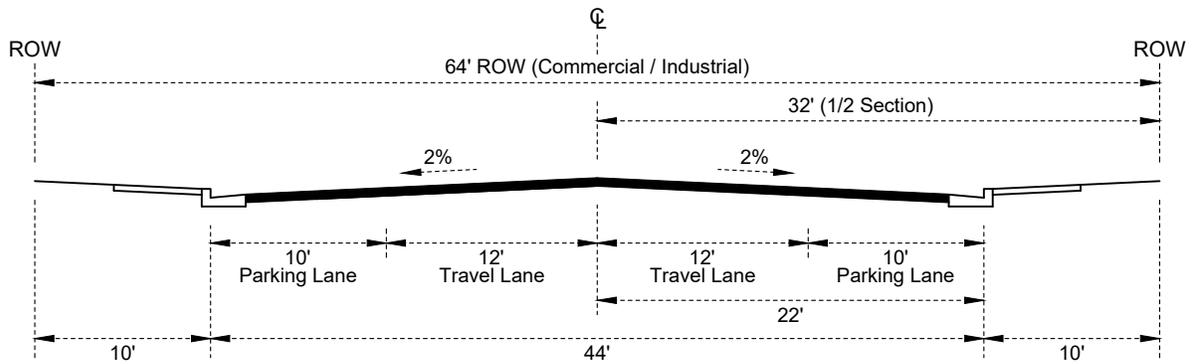
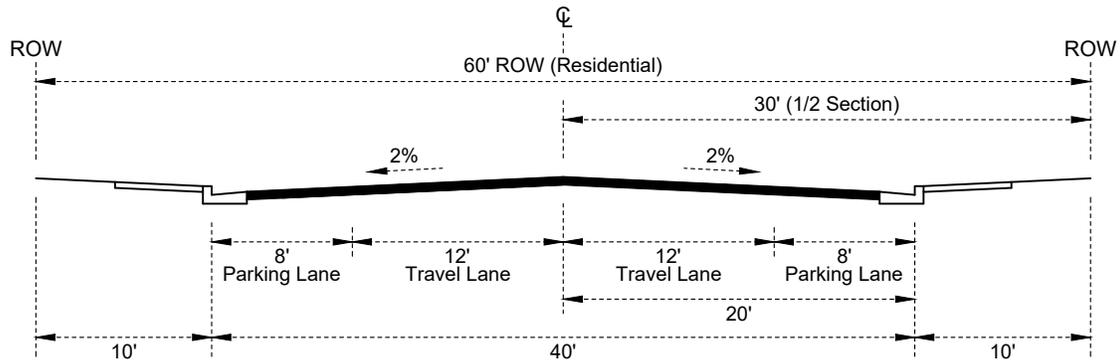
Date

Date: 09/2023

Dwg No.:

Scale: None

112.10



NOTE:

1. Lane lines shown are typical configurations. Proposed modifications shall be subject to approval by the City Engineer.
2. Design Standards:
 - Projected ADT: Up to 4,000.
 - Access: Intersections at grade with direct access to abutting properties.
 - Traffic Features: Traffic control measures as warranted to provide adequate safety, including traffic signals and parking restrictions.
 - Roadway Geometrics: Roadway geometrics shall conform to Page 110.10 and 110.20.
 - Structural Section: Structural section shall be as shown on Page 111.20.
 - Bicycles: As determined by the City Engineer.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

STREET STANDARD
MINOR COLLECTOR

Approved:

09-30-2023

City Engineer

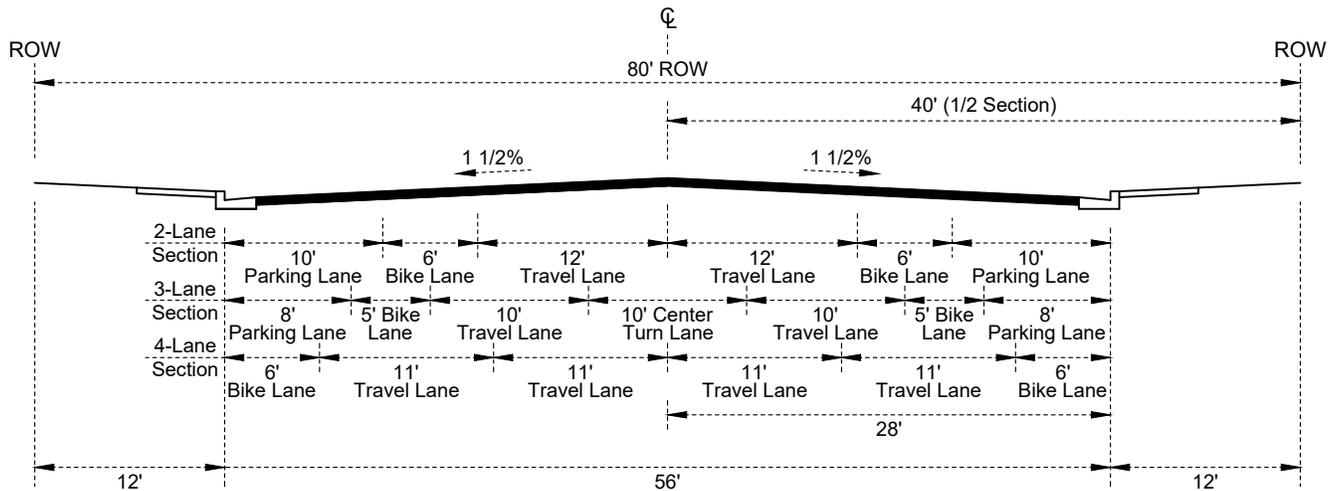
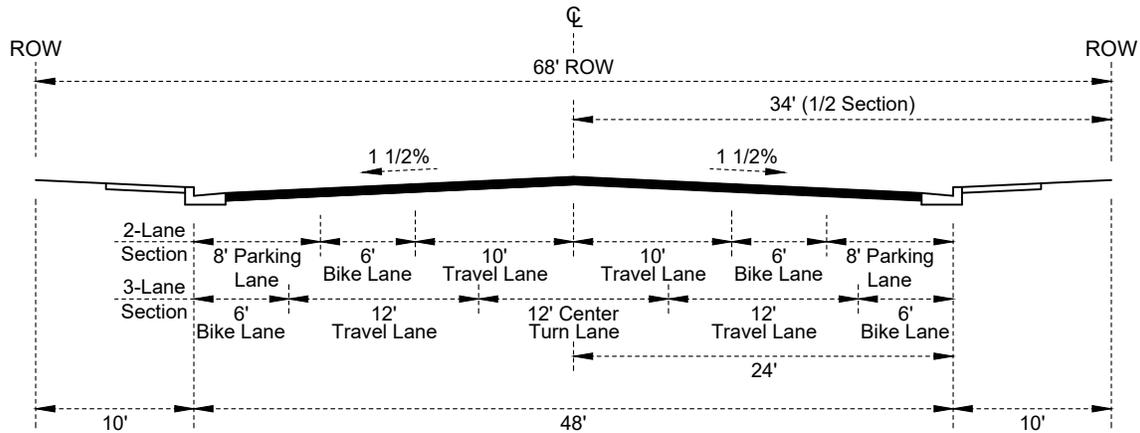
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Date: 09/2023

Dwg No.:

Scale: None

112.20



NOTE:

1. Lane lines shown are typical configurations. Proposed modifications shall be subject to approval by the City Engineer.
2. 80' ROW standard applies ONLY to existing 80' right-of-way.
3. Design Standards:
 - Projected ADT: Greater than 4,000.
 - Access: Intersections at grade with direct access to abutting properties.
 - Traffic Features: Traffic control measures as warranted to provide adequate safety, including traffic signals and parking restrictions.
 - Roadway Geometrics: Roadway geometrics shall conform to Page 110.10 and 110.20.
 - Structural Section: Structural section shall be as shown on Page 111.20.
 - Bicycles: As determined by the City Engineer.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

**STREET STANDARD
MAJOR COLLECTOR**

Approved:

09-30-2023

City Engineer

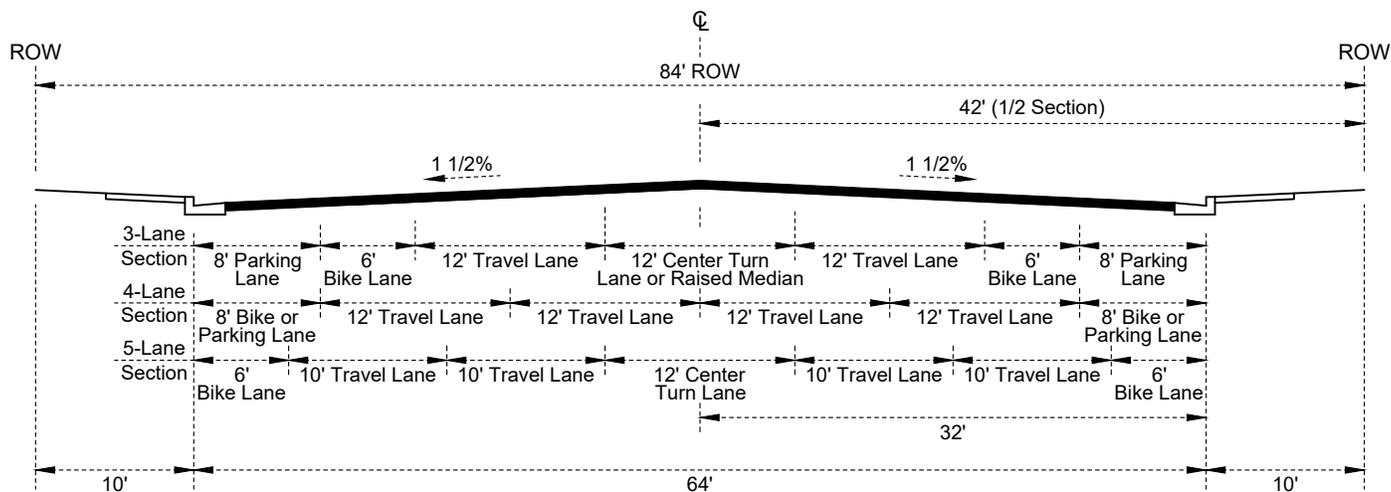
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Date: 09/2023

Dwg No.:

Scale: None

112.30



NOTE:

1. Lane lines shown are typical configurations. Proposed modifications shall be subject to approval by the City Engineer.
2. 84' ROW standard applies ONLY to existing 84' right-of-way. Special consideration shall be made for public service easements, intersection turn lanes, bus stops, and bike lanes.
3. Design Standards:
 - Travel Lanes: Two (2) to four (4).
 - Access: Intersections at grade with direct access to abutting properties. Subject to control of the location, number, and spacing of entrances and exits.
 - Traffic Features: Channelization used to control turning movements at intersections and at critical driveways. Traffic signals at major intersections. Parking and driveway restrictions as necessary.
 - Roadway Geometrics: Roadway geometrics shall conform to Page 110.10 and 110.20.
 - Structural Section: Structural section shall be as shown on Page 111.20.
 - Bicycles: As determined by the City Engineer.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

**STREET STANDARD
MINOR ARTERIAL**

Approved:

09-30-2023

City Engineer

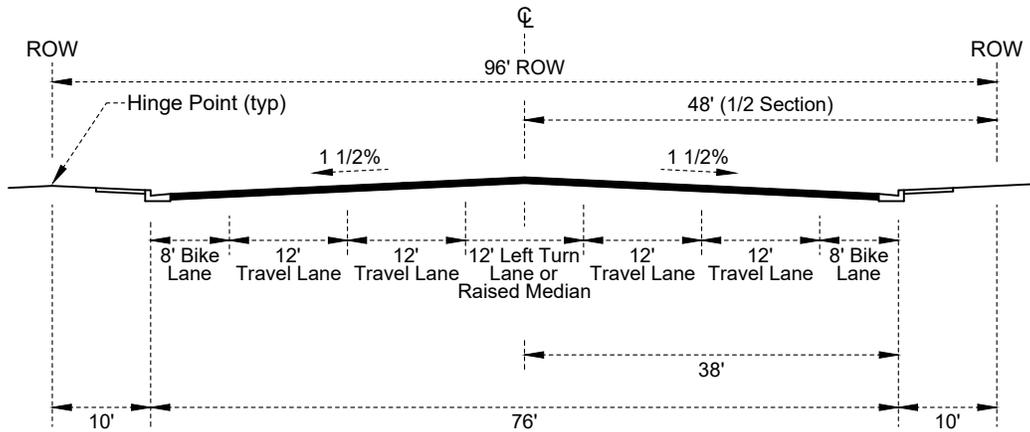
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Date: 09/2023

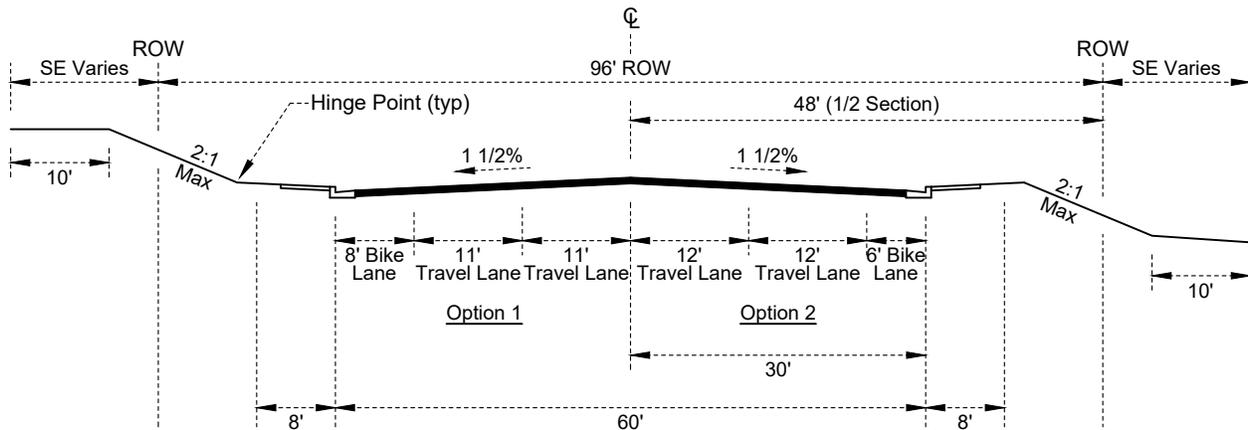
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112.40



FLAT TERRAIN



STEEP / MODERATE TERRAIN

NOTE:

- Lane lines shown are typical configurations. Proposed modifications shall be subject to approval by the City Engineer.
- Design Standards:
 - Travel Lanes: Four (4) to six (6).
 - Access: Intersections at grade with direct access to abutting properties. Subject to control of the location, number, and spacing of entrances and exits.
 - Traffic Features: Channelization used to control turning movements at intersections and at critical driveways. Traffic signals at major intersections. Parking and driveway restrictions as necessary.
 - Roadway Geometrics: Roadway geometrics shall conform to Page 110.10 and 110.20.
 - Structural Section: Structural section shall be as shown on Page 111.20.
 - Bicycles: As determined by the City Engineer.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

**STREET STANDARD
PRINCIPAL ARTERIAL**

Approved:

09-30-2023

City Engineer

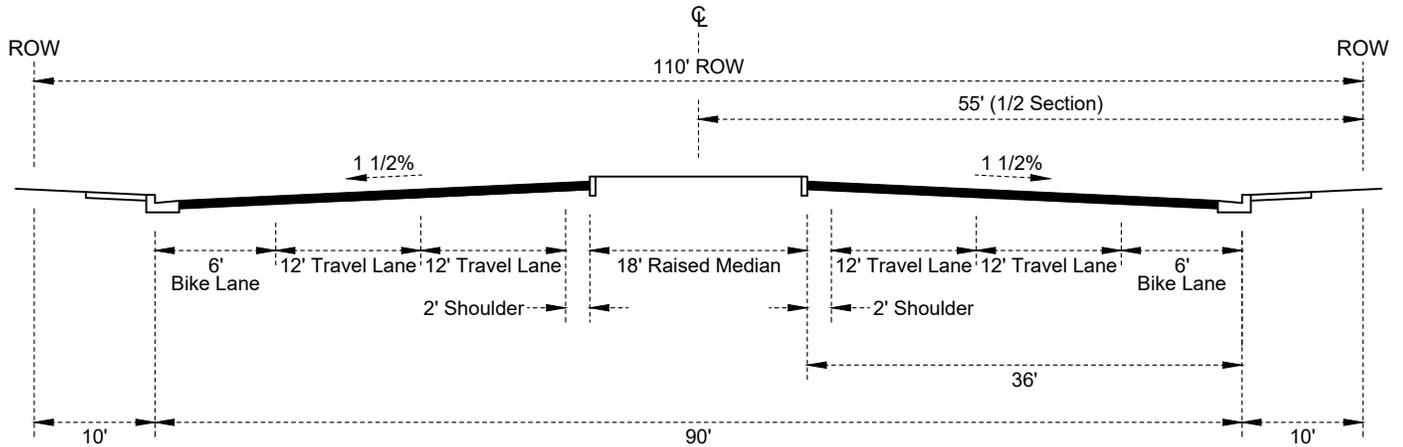
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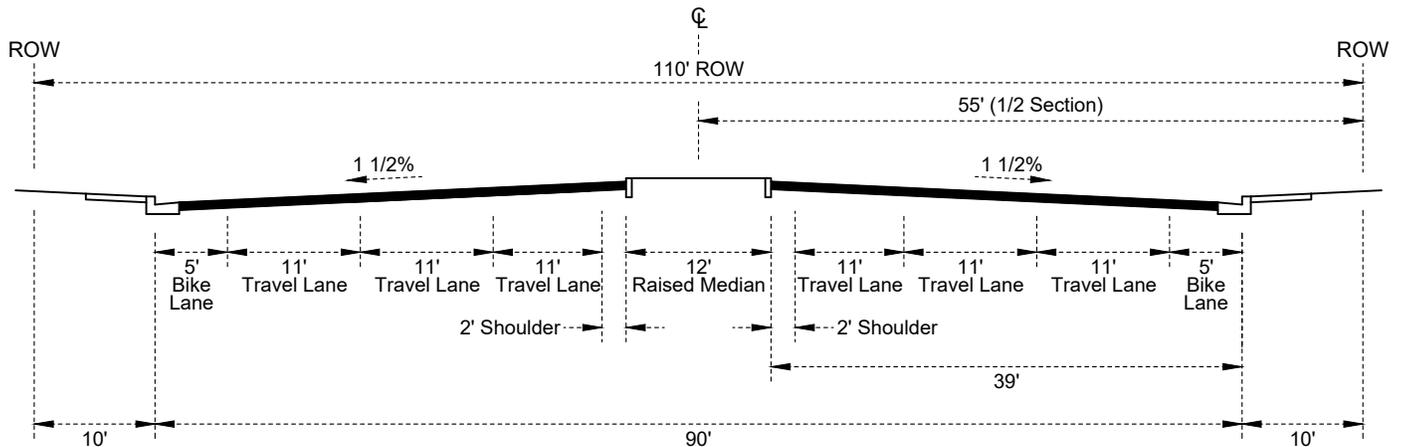
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Scale: None

112.50



4-LANE OPTION



6-LANE OPTION

NOTE:

1. Lane lines shown are typical configurations. Proposed modifications shall be subject to approval by the City Engineer.
2. Design Standards:

| | |
|---------------------|--|
| Travel Lanes: | Four (4) to six (6). |
| Access: | Intersections at grade with direct access to abutting properties. Subject to control of the location, number, and spacing of entrances and exits. |
| Traffic Features: | Channelization used to control turning movements at intersections and at critical driveways. Traffic signals at major intersections. Parking and driveway restrictions as necessary. |
| Roadway Geometrics: | Roadway geometrics shall conform to Page 110.10 and 110.20. |
| Structural Section: | Structural section shall be as shown on Page 111.20. |
| Bicycles: | As determined by the City Engineer. |

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE
Public Works Department

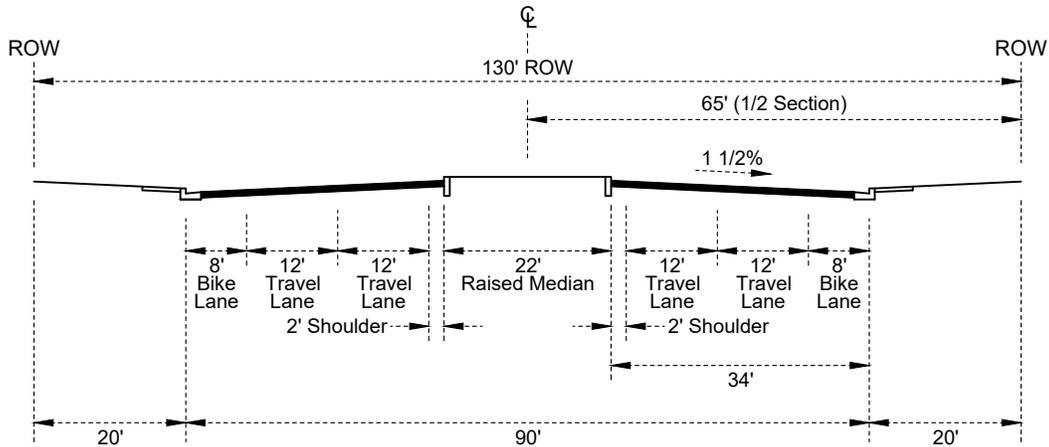
STANDARD DRAWING

**STREET STANDARD
PRINCIPAL ARTERIAL**

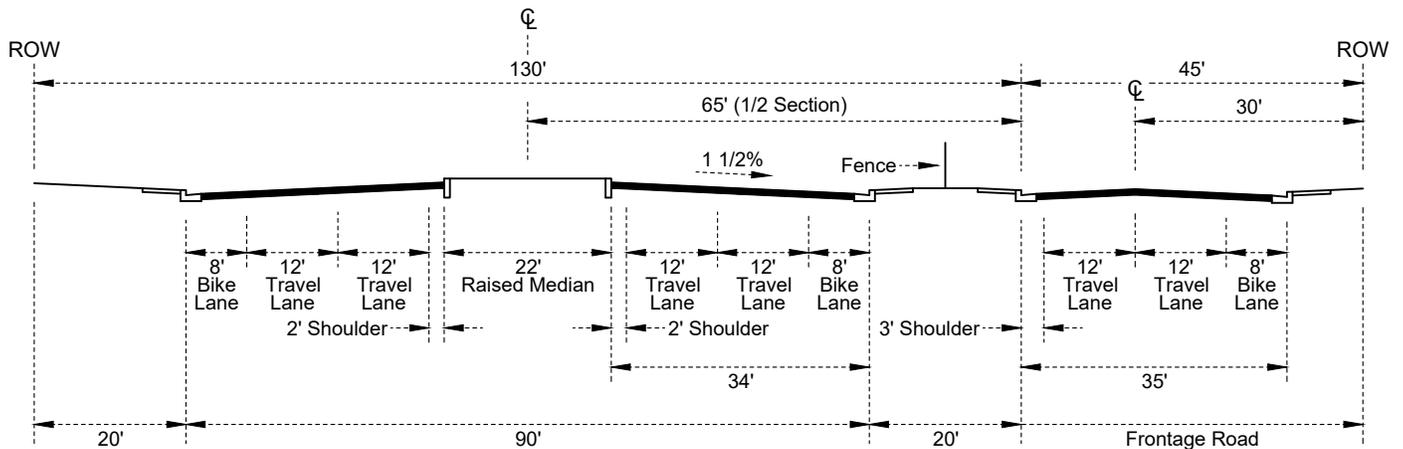
Approved: 09-30-2023
Date

City Engineer _____ Date _____

Date: 09/2023 Dwg No.: 112.60
Scale: None



PARKWAY OPTION



STANDARD EXPRESSWAY (4-LANE)

NOTE:

- Lane lines shown are typical configurations. Proposed modifications shall be subject to approval by the City Engineer.
- Design Standards:
 - Travel Lanes: Four (4) to six (6).
 - Access: Adjacent property typically does not access expressway. Parallel frontage roads shall be installed where necessary.
 - Traffic Features: Traffic controls and safety features as required.
 - Roadway Geometrics: Roadway geometrics shall conform to Page 110.10 and 110.20.
 - Structural Section: Structural section shall be as shown on Page 111.20.
 - Bicycles: As determined by the City Engineer.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

STREET STANDARD
EXPRESSWAY

Approved:

09-30-2023

City Engineer

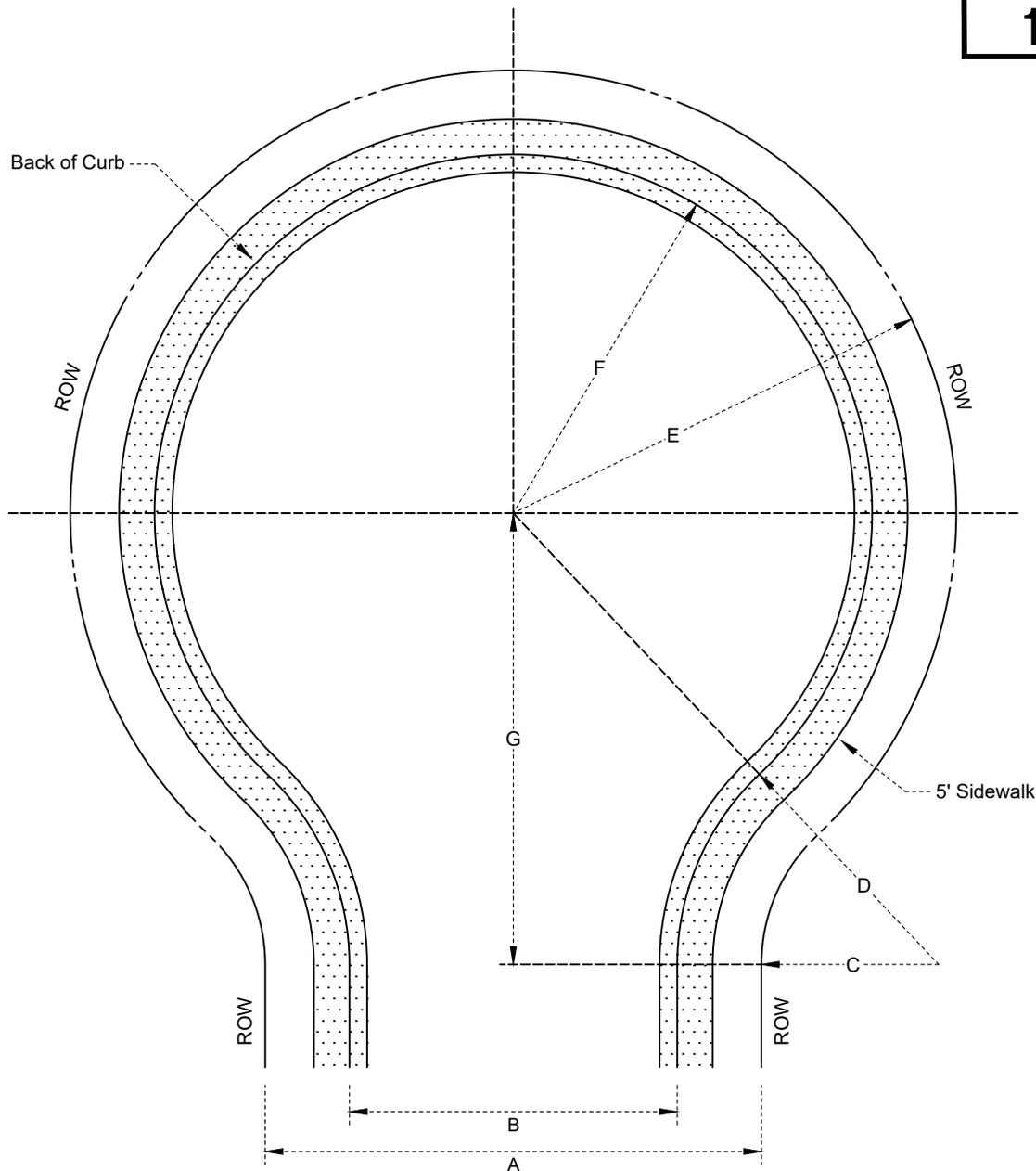
Date

Date: 09/2023

Dwg No.:

Scale: None

112.70



Data Table

| Case | A | B | C | D | E | F | G |
|------|-----|-----|-----|--------|-----|--------|--------|
| 1* | 50' | 37' | 20' | 26.50' | 50' | 43.50' | 53.62' |
| 2* | 50' | 33' | 20' | 28.50' | 50' | 41.50' | 53.62' |
| 3* | 56' | 37' | 20' | 29.50' | 50' | 40.50' | 50.95' |
| 4 | 60' | 41' | 20' | 29.50' | 50' | 40.50' | 48.99' |

NOTES:

1. Dimensions B, D and F are to back of curb.
2. Minimum ROW width = 50'.*
3. Minimum property line radius of cul-de-sac = 50'.*

* ROW width of less than 60' shall be limited to existing infill ROW only.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

TYPICAL CUL-DE-SAC DESIGN

Approved:

09-30-2023

City Engineer

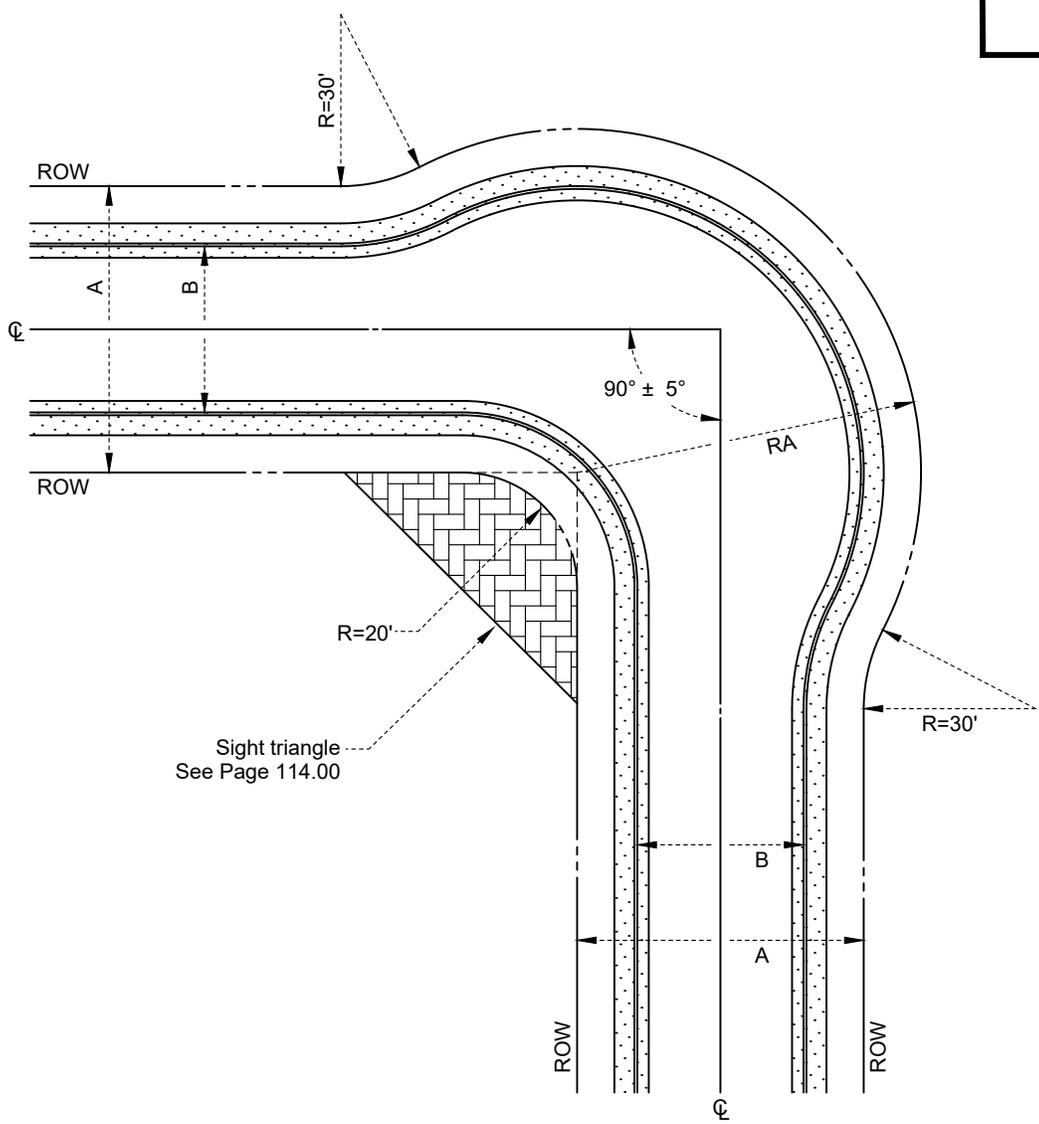
Date

Date: 09/2023

Dwg No.:

Scale: None

113.10



NOTES:

1. Intersection elbows are not required where the ROW centerline radius meets the minimum centerline curve radius shown on Page 110.20.
2. 'RA'= 50' where 'A' = 40'
60' where 'A' = 50'
68' where 'A' = 56'
72' where 'A' = 60'
3. A minimum of 50' of centerline tangent is required from the point of intersection of the centerlines to any adjacent ROW centerline curve.
4. ROW centerline angles at intersection elbows shall be between 85° and 95° .
5. See Page 114.00 for visibility control restrictions in sight triangles.
6. For curb-to-curb width (B), see Pages 112.10 through 112.80 (as applicable).

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

TYPICAL INTERSECTION ELBOW

Approved:

09-30-2023

City Engineer

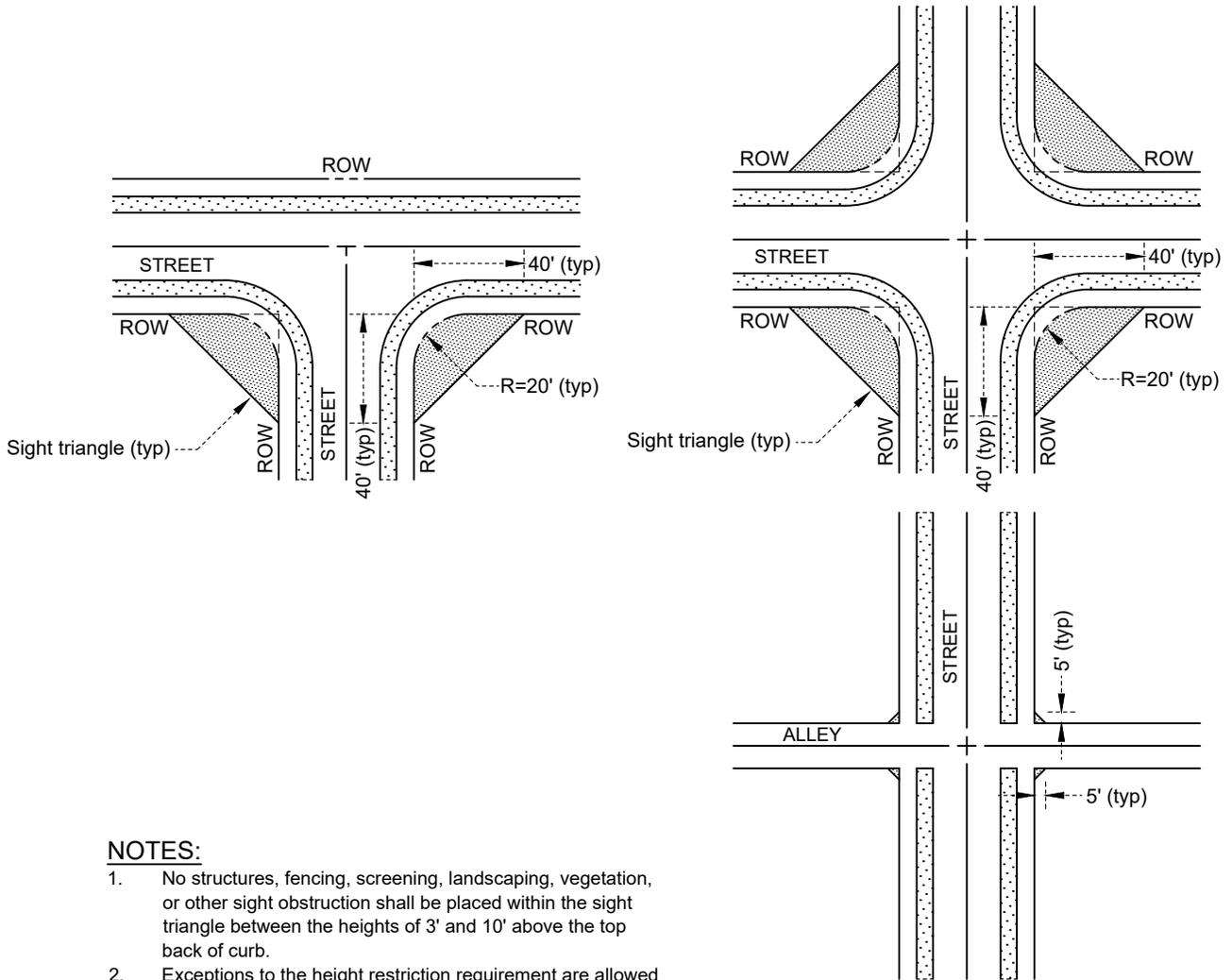
Date

Date: 09/2023

Dwg No.:

Scale: None

113.20



NOTES:

1. No structures, fencing, screening, landscaping, vegetation, or other sight obstruction shall be placed within the sight triangle between the heights of 3' and 10' above the top back of curb.
2. Exceptions to the height restriction requirement are allowed for street signage (street names and regulatory signs) and utility poles.

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| REVISION | BY | APPROVED | DATE |

CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

SIGHT TRIANGLE

Approved:

09-30-2023

City Engineer

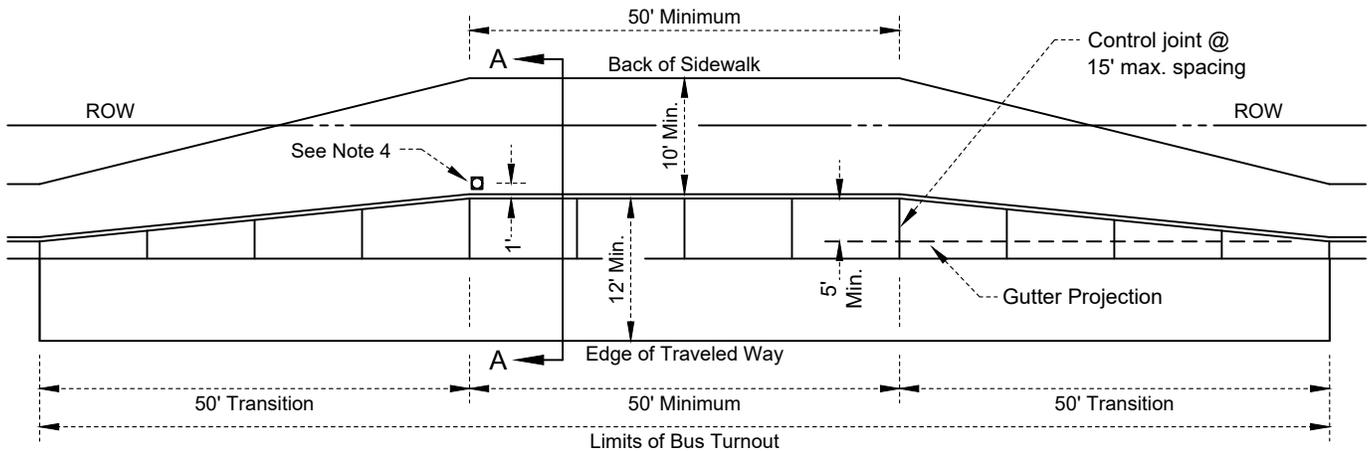
Date

Date: 09/2023

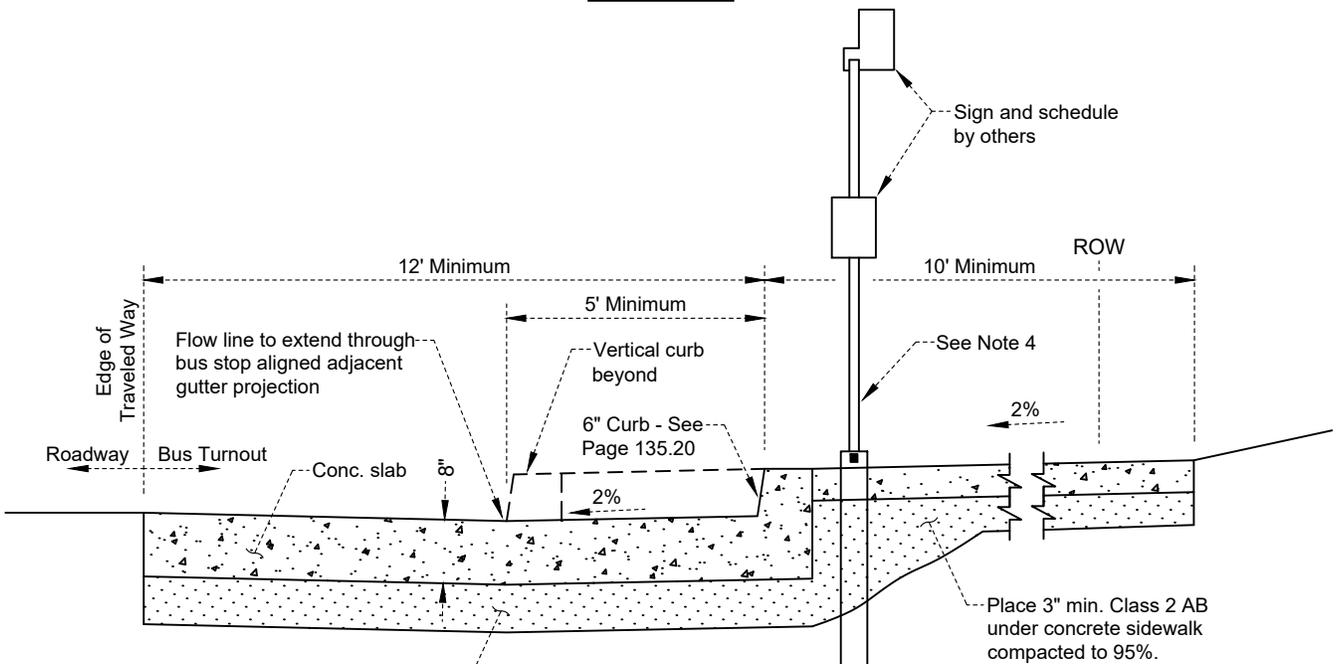
Dwg No.:

Scale: None

114.00



PLAN VIEW



Class 2 AB below concrete bus turnout. Thickness shall be equal to adjacent street base thickness or 6" minimum (whichever is greater), and shall be compacted to 95%.

SECTION A-A

NOTES:

1. All materials shall conform to Page 100.00.
2. Sidewalk easement dedication to back of sidewalk shall be made as required.
3. Control joints shall be 1-1/2" minimum depth tooled joints.
4. Quick change sign base and galvanized pipe post per page 152.10.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

BUS TURNOUT DETAIL

Approved:

09-30-2023

City Engineer

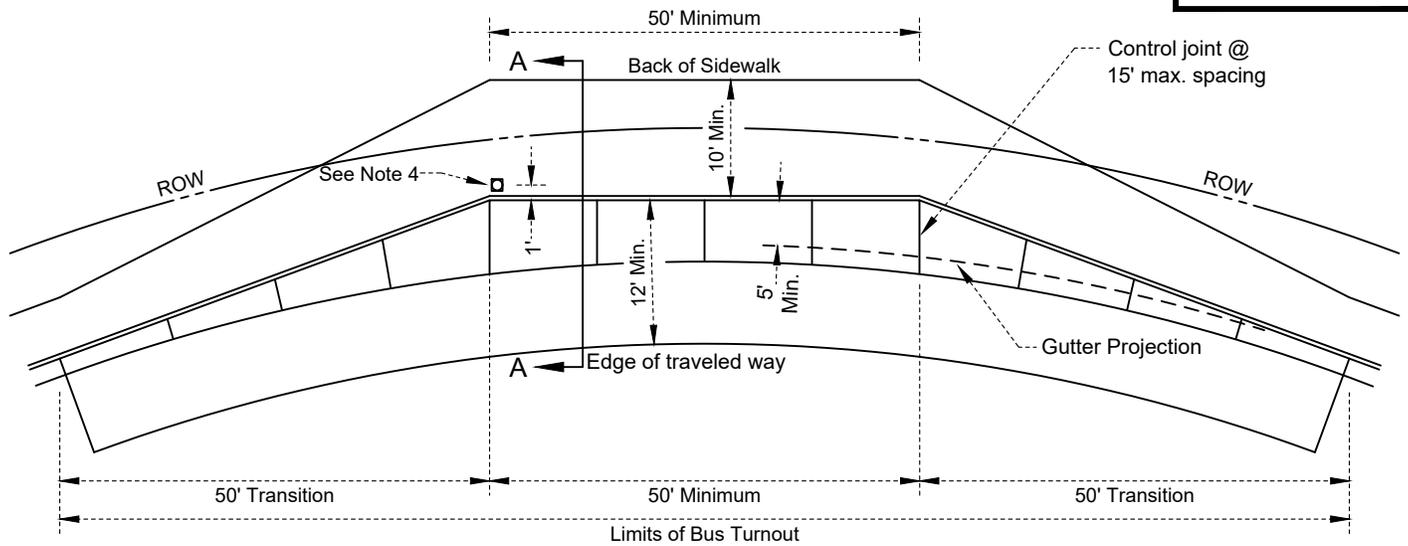
Date

Date: 09/2023

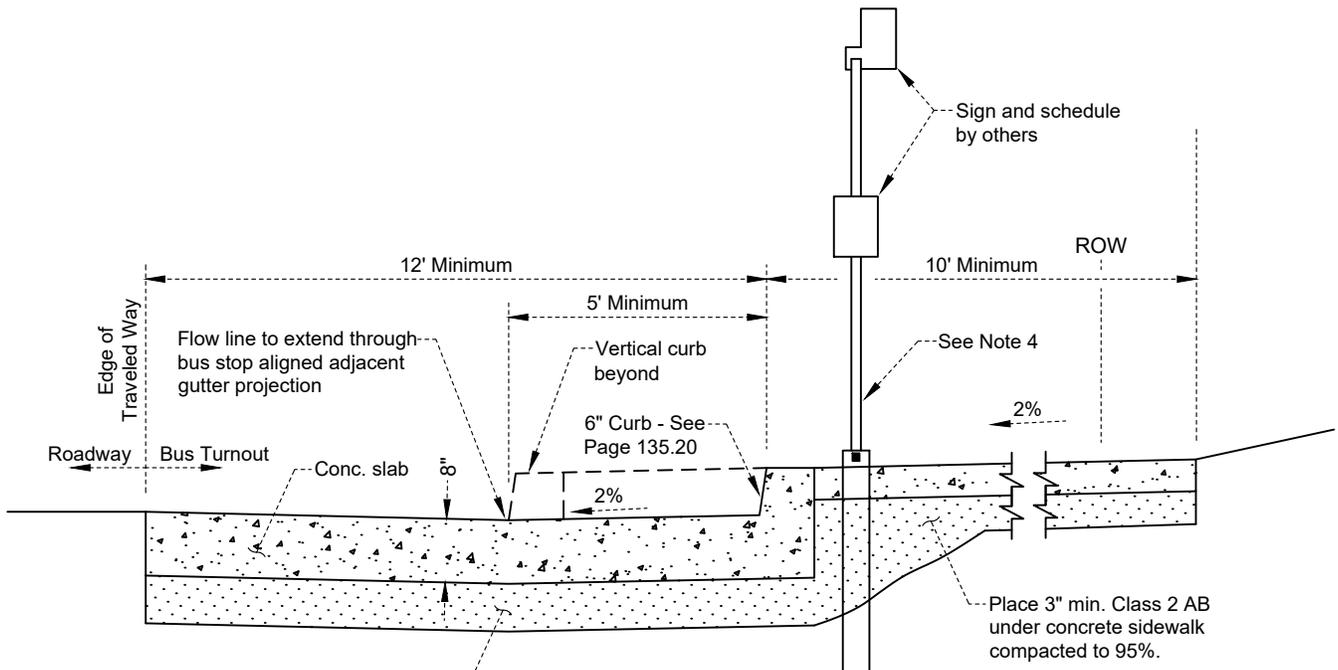
Dwg No.:

Scale: None

120.10



PLAN VIEW



Class 2 AB below concrete bus turnout.
Thickness shall be equal to adjacent street base thickness or 6" minimum (whichever is greater), and shall be compacted to 95%.

SECTION A-A

NOTES:

1. Sidewalk easement dedication to back of sidewalk shall be made as required.
2. Control joints shall be 1-1/2" minimum depth tooled joints.
3. Subgrade shall be compacted in accordance with page 601.00.
4. Quick change sign base and galvanized pipe post per page 152.10.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

BUS TURNOUT DETAIL
(CURVED STREET)

Approved:

09-30-2023

City Engineer

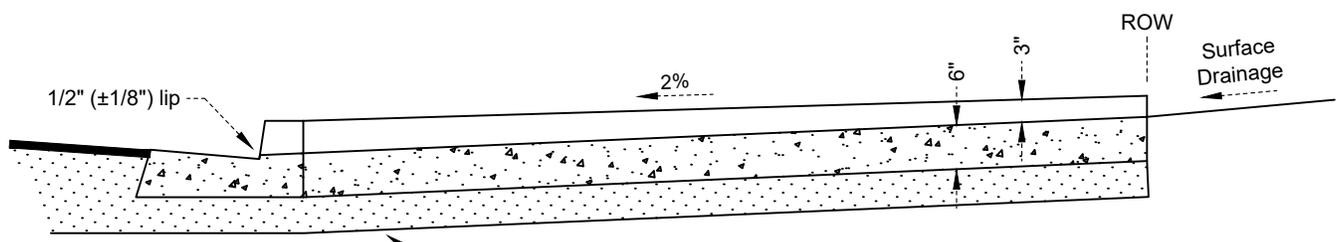
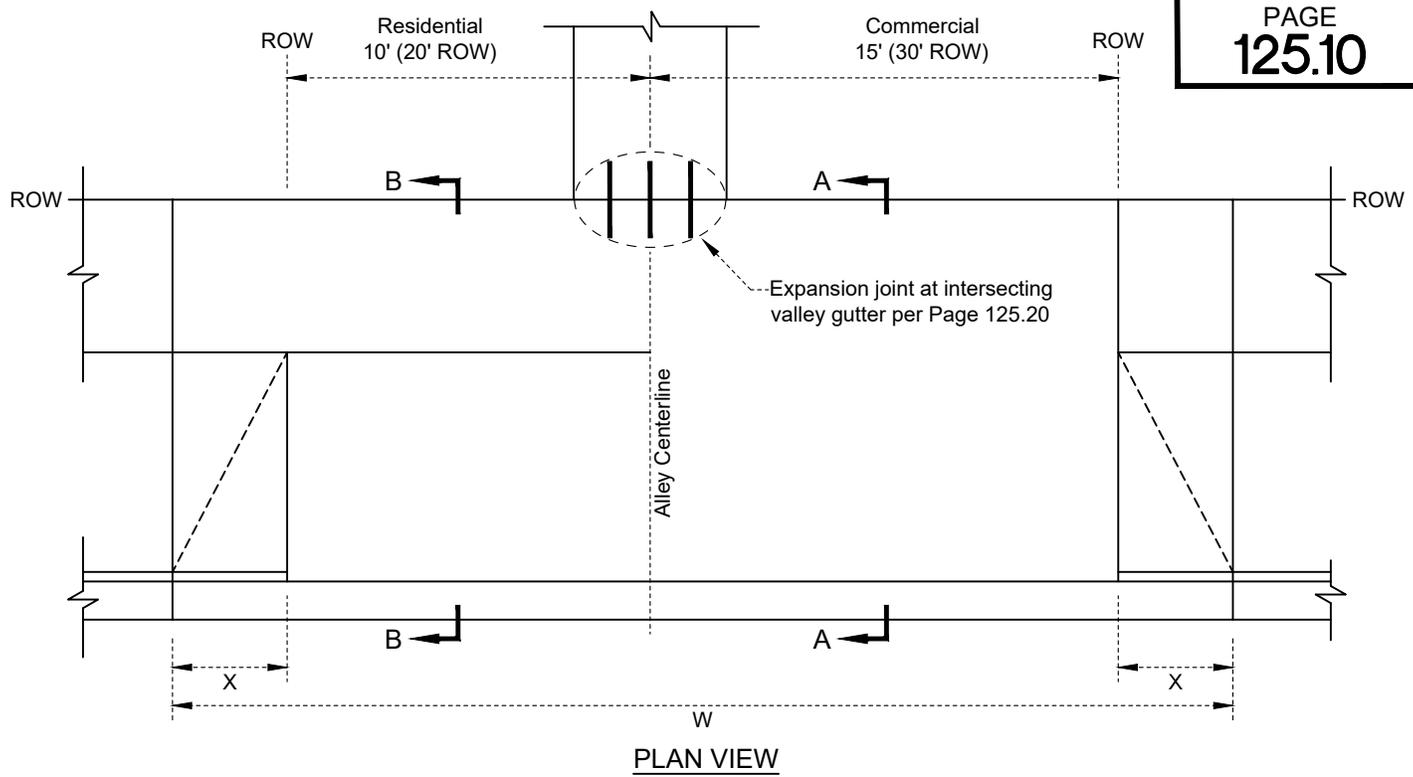
Date

Date: 09/2023

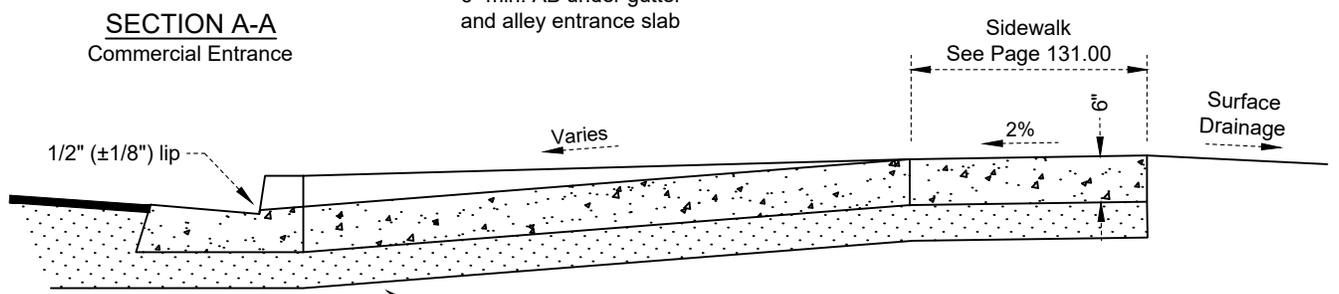
Dwg No.:

Scale: None

120.20



SECTION A-A
Commercial Entrance



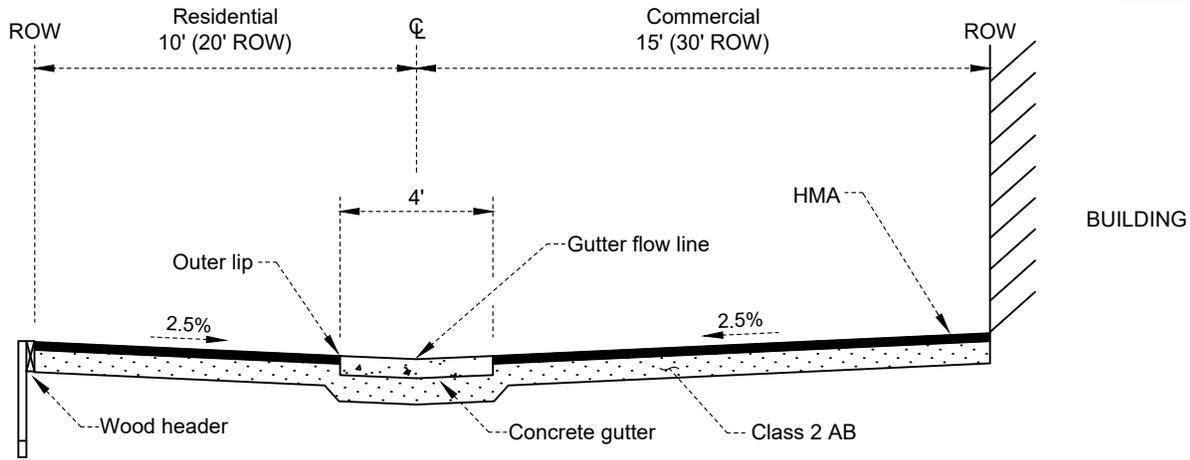
SECTION B-B
Residential Entrance

| TABLE OF DIMENSIONS | | |
|---------------------|-------|----------|
| Curb Height | X | W (min.) |
| 6 1/2" or less | 2'-6" | 17' |
| 7" TO 7 1/2" | 3'-0" | 18' |
| 8" TO 8 1/2" | 3'-6" | 19' |
| 9" TO 9 1/2" | 4'-0" | 20' |
| 10" TO 10 1/2" | 4'-6" | 21' |
| 11" TO 12" | 5'-0" | 22' |

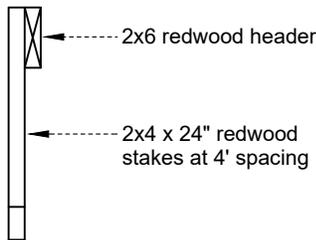
NOTES:

1. All materials shall conform to Page 100.00.
2. Weakened plane joints shall be to a depth of 2" and at intervals not to exceed 12' on center.
3. Within the curb and gutter section, the top 3/4" of the control joint shall be filled with polyurethane sealant (SIKAFLEX-1A or equal).

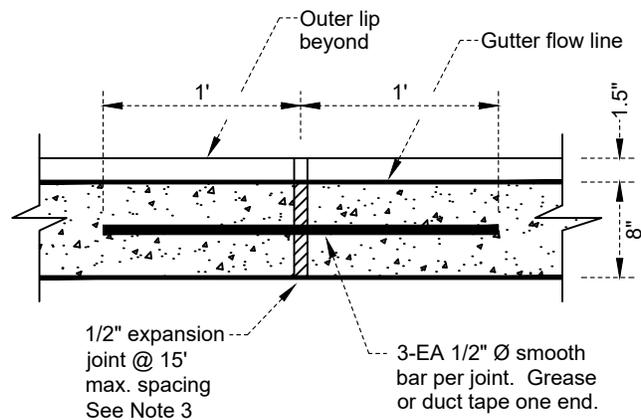
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| | | | | CITY OF SHASTA LAKE | | Approved: | |
| | | | | Public Works Department | | 09-30-2023 | |
| | | | | STANDARD DRAWING | | | |
| | | | | STANDARD ALLEY ENTRANCE | | City Engineer Date | |
| | | | | | | Date: 09/2023 Dwg No.: | |
| | | | | | | Scale: None 125.10 | |
| REVISION | BY | APPROVED | DATE | | | | |



ALLEY SECTION



HEADER DETAILS

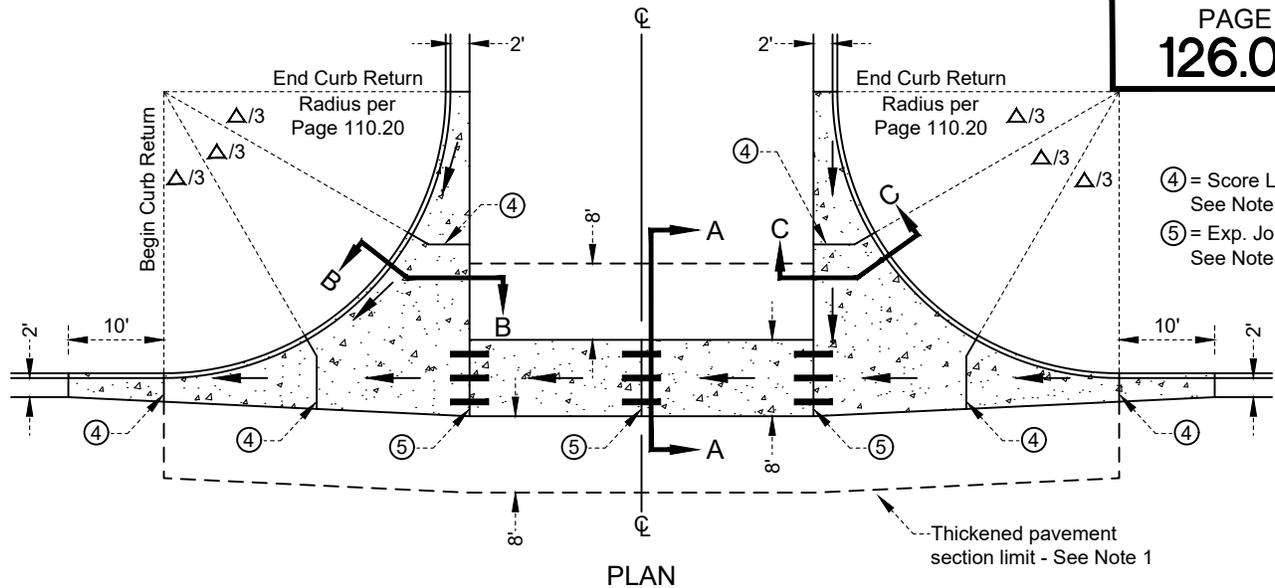


EXPANSION JOINT DETAIL

NOTES:

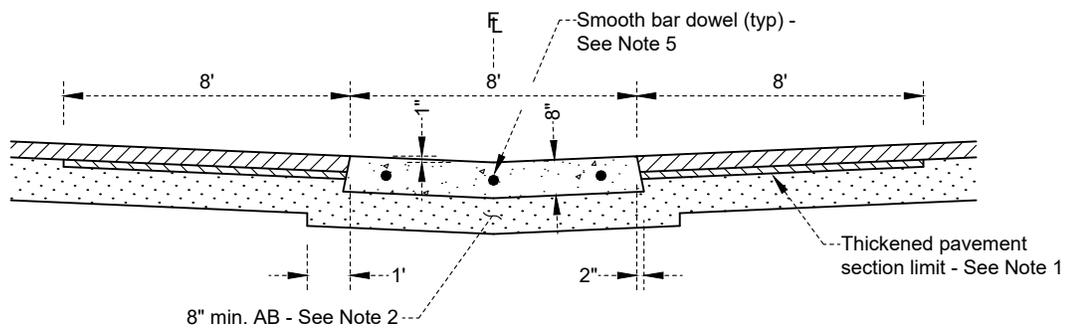
1. All materials shall conform to Page 100.00.
2. Surfacing and base thickness shall be determined in accordance with City standards or as directed by the Engineer, subject to the following minimum requirements:
AB: 4"
HMA: 2"
3. 1/2" pre-molded expansion joint material shall be held firmly in place prior to placing concrete.
4. Redwood headers shall be foundation grade or better.

| | | | | | | | |
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| | | | | CITY OF SHASTA LAKE | | Approved:  | |
| | | | | Public Works Department | | 09-30-2023 | |
| | | | | STANDARD DRAWING | | City Engineer Date | |
| | | | | ALLEY AND VALLEY GUTTER DETAILS | | Date: 09/2023 Dwg No.: | |
| REVISION | BY | APPROVED | DATE | | | Scale: None 125.20 | |

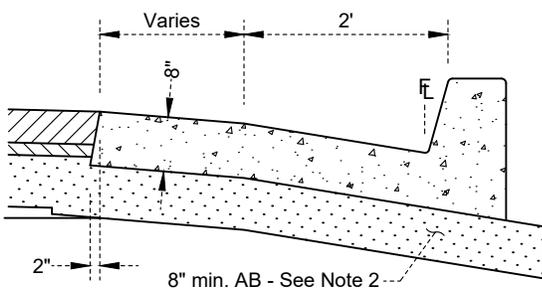


(4) = Score Line
See Note 4
(5) = Exp. Joint
See Note 5

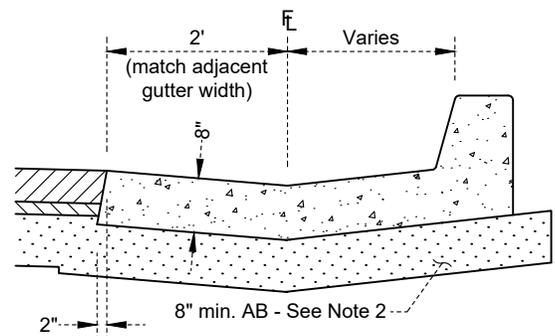
PLAN



SECTION A-A



SECTION B-B



SECTION C-C

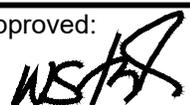
NOTES:

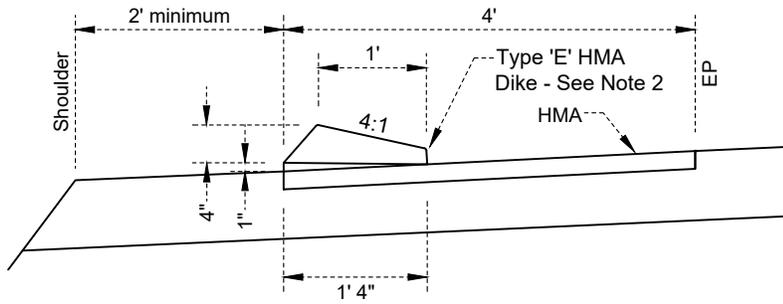
1. Thickened pavement section shall consist of street HMA section plus 2" HMA.
2. All materials shall conform to Page 100.00. A minimum of 8" AB shall be placed under all concrete.
3. Curb return, spandrels, and gutter shall be poured monolithically.
4. All score lines shall be 1/2" deep.
5. Expansion joint reinforcement shall consist of 3-EA 1/2" Ø smooth bar. Each bar shall be 4' long and shall be centered on the joint. Expansion joints shall be 1/2" wide and shall be filled with pre-molded expansion joint material.
6. When roll curb is used, the transition to vertical curb shall be complete 10' beyond the curb return. Vertical curb shall be used for all returns.
7. All concrete abutting HMA shall be constructed with a 2" batter.

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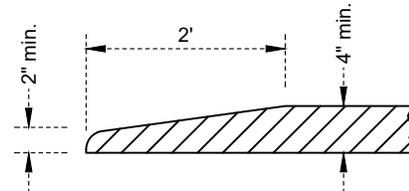
CITY OF SHASTA LAKE
Public Works Department
STANDARD DRAWING

CROSS GUTTER AND SPANDREL

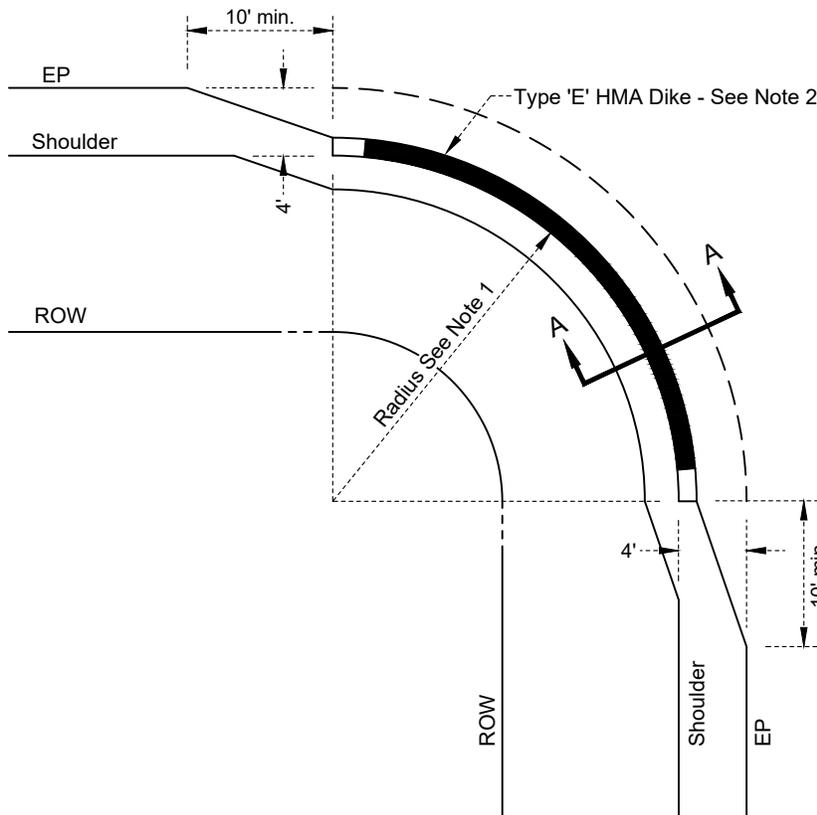
Approved:  09-30-2023
Date
City Engineer
Date
Date: 09/2023 Dwg No.:
Scale: None 126.00



SECTION A-A



END OF DIKE DETAIL



PLAN

NOTES:

1. Back of curb radius shall be determined by street classification - See Page 110.20.
2. Type 'E' HMA dike shall conform to CSP.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

HMA CURB RETURN

(for use at curb returns without concrete curbs)

Approved:

09-30-2023

City Engineer

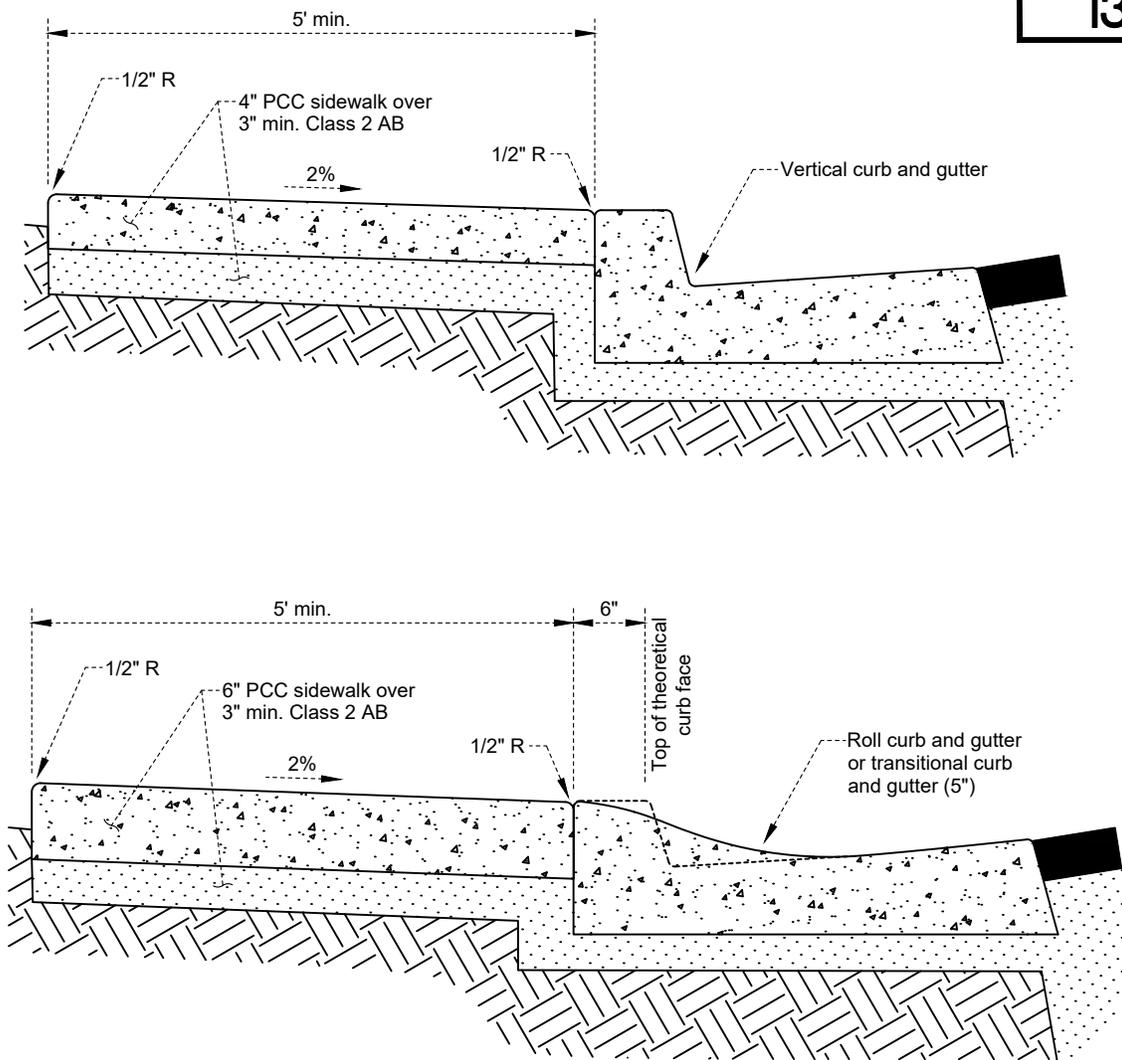
Date

Date: 09/2023

Dwg No.:

Scale: None

127.00



NOTES:

1. All material shall conform to Page 100.00.
2. Sidewalks shall maintain a minimum of 4' clear width at all times.
3. Sidewalk grades shall not exceed 5% except to match the grade of the adjacent street or roadway.
4. Sidewalks with continuous gradients shall have a level area at least 5' in length at intervals no greater than 400'.
5. Within all curb returns, sidewalk and curb ramps shall be a minimum of 6" thick.
6. Adjacent to roll curb and gutter, sidewalk shall be a minimum of 6" thick.
7. In areas where roll curb transitions to vertical curb or catch basins, sidewalk shall be a minimum of 6" thick.
8. All brooming shall be perpendicular to the curb.
9. Weakened plane joints shall be to a depth of 2" and at intervals not to exceed 12' on center.
10. 1/2" deep score lines shall be evenly spaced between weakened plane joints at 3' to 5' intervals.
11. All existing street signs shall be relocated and all required new signs placed per page 152.30 at the time of sidewalk installation. The City will provide the quick change base tube for the Contractor's installation for all existing signs.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

SIDEWALK STANDARD

Approved:

09-30-2023

City Engineer

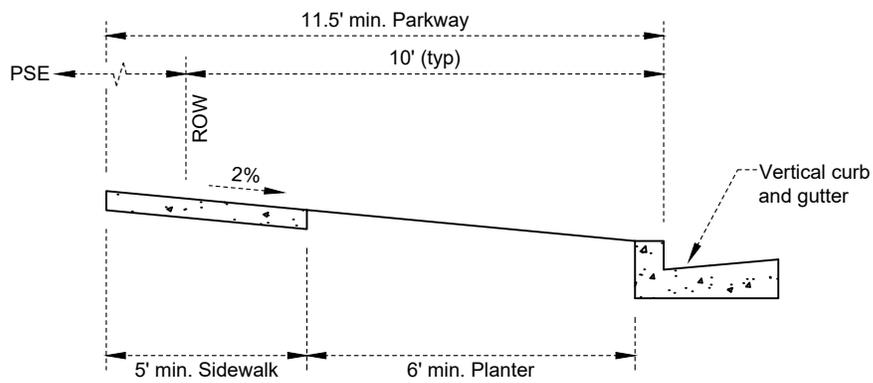
Date

Date: 09/2023

Dwg No.:

Scale: None

131.10



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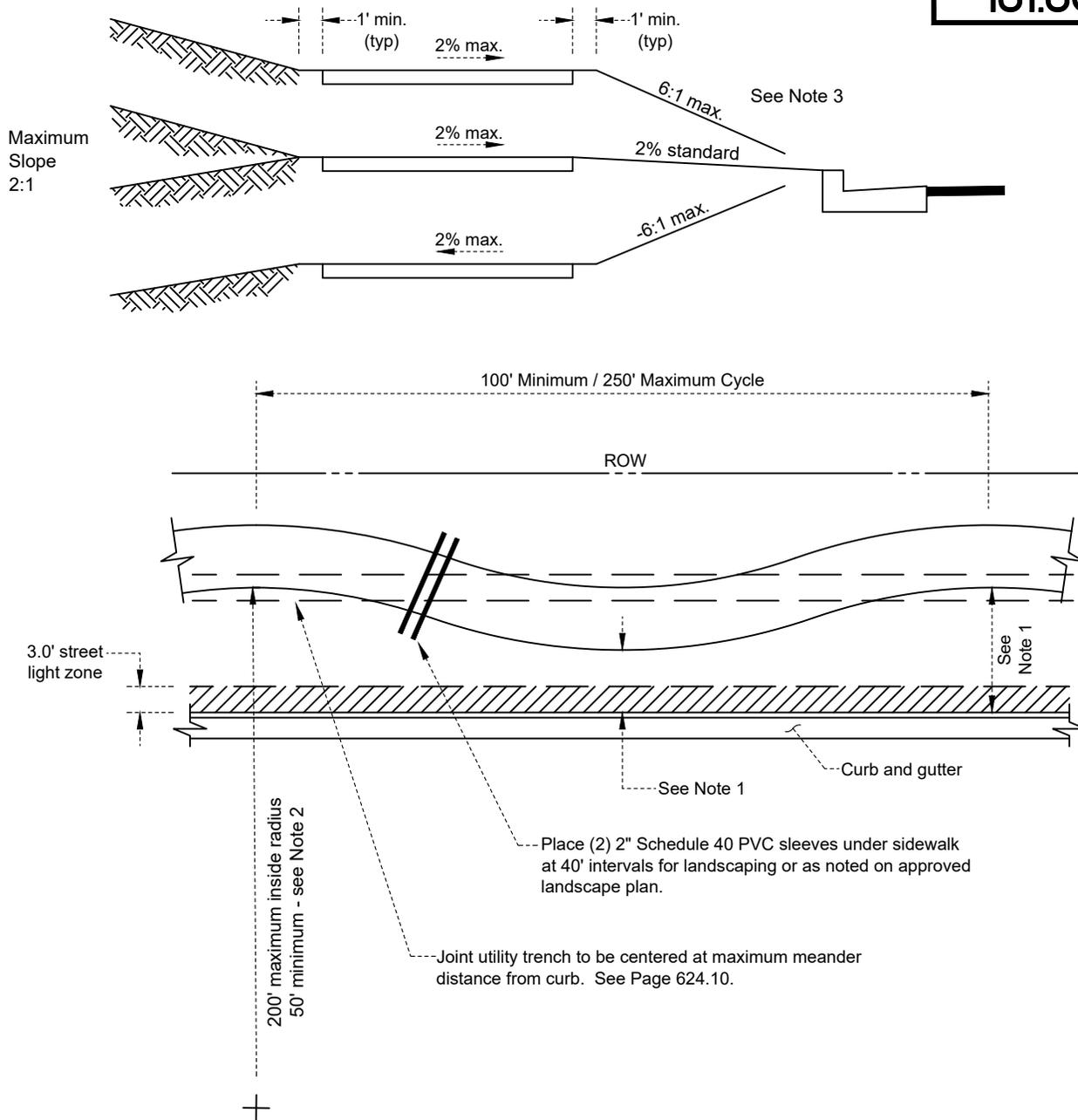
CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

**SEPARATED SIDEWALK
ALTERNATIVE**

| | |
|---|------------|
| Approved: | |
|  | 09-30-2023 |
| City Engineer | Date |
| Date: 09/2023 | Dwg No.: |
| Scale: None | 131.20 |



Notes:

1. Maximum and minimum meander distances shall be as specified on improvement plans. Typical meander distance shall be equal to sidewalk width.
2. The sidewalk curve radius should vary between 50 and 300 feet, and at each point of reverse curvature the radius should change to assist creating an arrhythmic layout.
3. The slope of the area between the curb and the sidewalk shall be 2% at all driveways and at all curb returns. Slope may increase to a maximum of 6:1 in all other areas.
4. Sidewalk width shall be as shown on improvement plans.
5. See Page 131.10 for sidewalk construction details.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

MEANDERING SIDEWALK

Approved:

09-30-2023

City Engineer

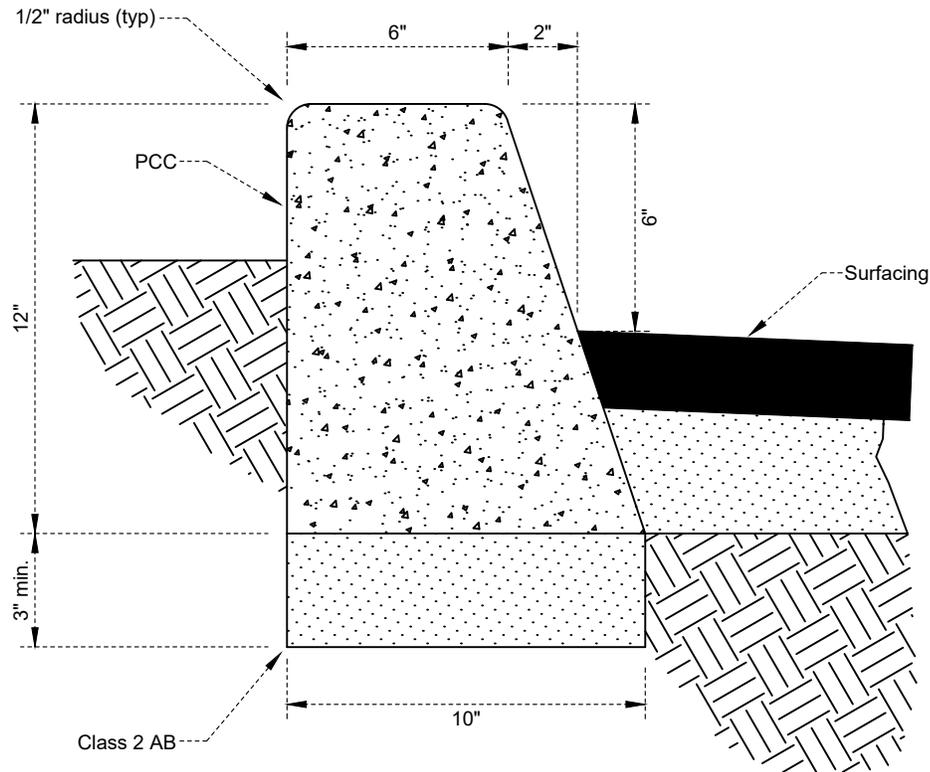
Date

Date: 09/2023

Dwg No.:

Scale: None

131.30



NOTES:

1. Curb-only section shall be used only in parking lots or as approved by the City Engineer.
2. All materials shall conform to Page 100.00. Concrete shall have 4" max. slump (1-1/2" max. slump for extruded curbs).
3. Cross sectional area = 0.66 sq. ft.
4. Weakened plane joints shall be to a depth of 2-inches and at intervals not to exceed 15' on-center. The top 3/4-inch of the weakened plane joint shall be filled with polyurethane sealant (SIKAFLEX-1A or equal).
5. All exposed surfaces shall receive a light broom finish parallel to the curb.

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| REVISION | BY | APPROVED | DATE |

CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

CONCRETE CURB

Approved:

09-30-2023

City Engineer

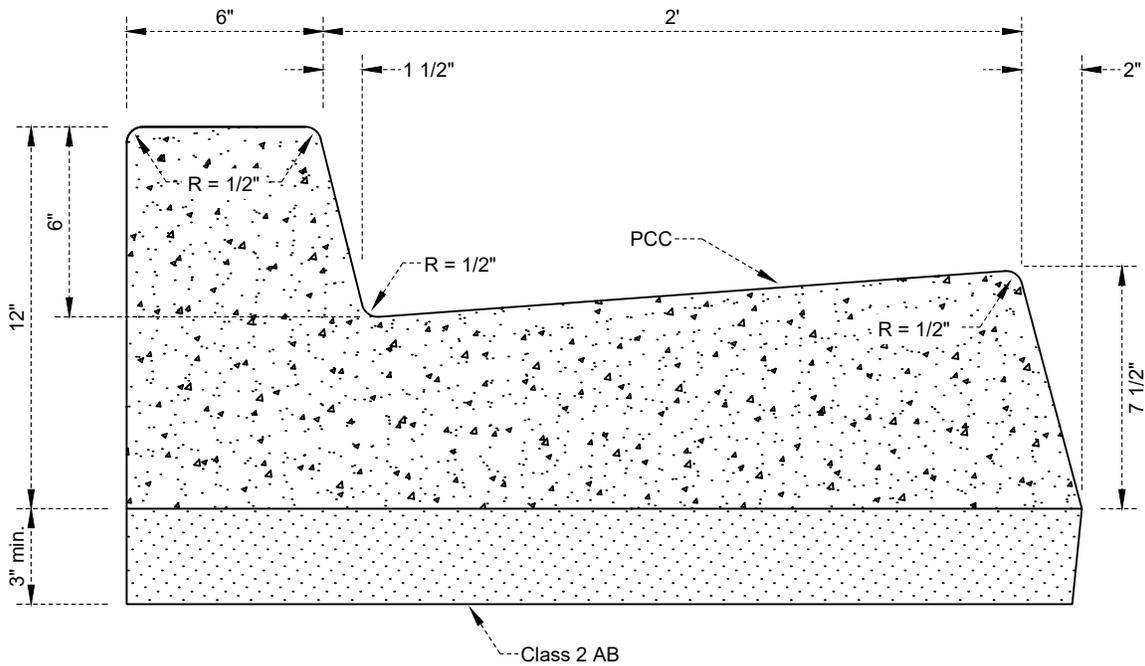
Date

Date: 09/2023

Dwg No.:

Scale: None

134.00



NOTES:

1. All materials shall conform to Page 100.00. Concrete shall have 4" max. slump (1-1/2" max. slump for extruded curb and gutter).
2. Cross sectional area = 1.70 SF.
3. Weakened plane joints shall be to a depth of 2" and at intervals not to exceed 16' on-center. The top 3/4" of the weakened plane joint shall be filled with polyurethane sealant (SIKAFLEX-1A or equal).
4. All exposed surfaces shall receive a light broom finish parallel to the direction of flow.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

6" CONCRETE CURB AND GUTTER

Approved:

09-30-2023

City Engineer

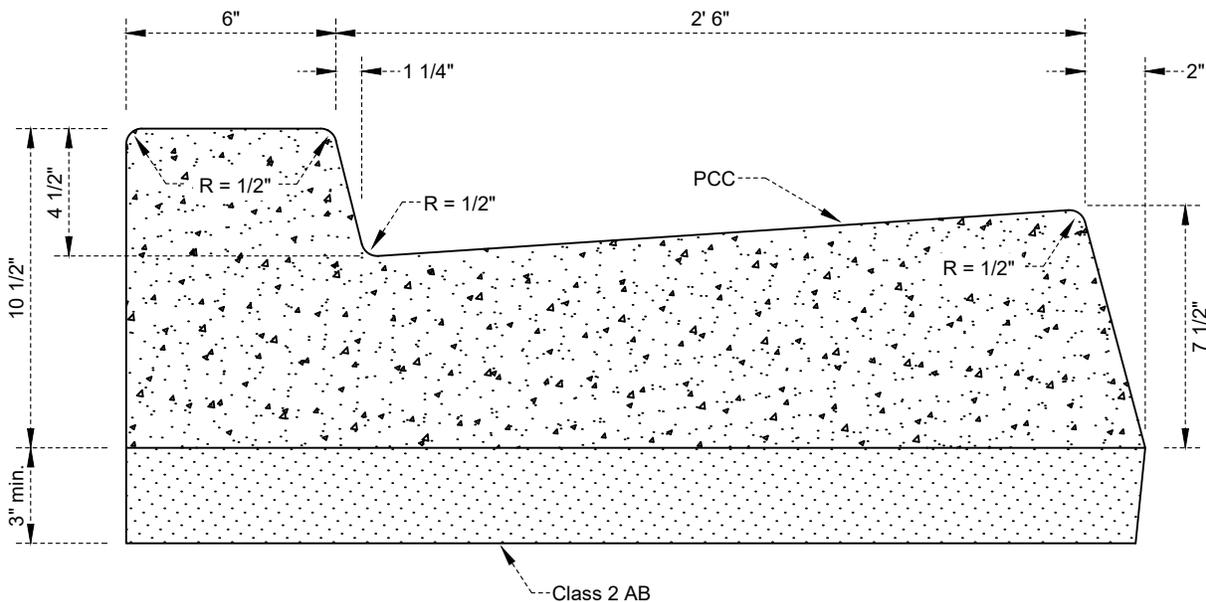
Date

Date: 09/2023

Dwg No.:

Scale: None

135.20



NOTES:

1. All materials shall conform to Page 100.00. Concrete shall have 4" max. slump (1-1/2" max. slump for extruded curb and gutter).
2. Cross sectional area = 1.97 SF.
3. Weakened plane joints shall be to a depth of 2" and at intervals not to exceed 12' on-center. The top 3/4" of the weakened plane joint shall be filled with polyurethane sealant (SIKAFLEX-1A or equal).
4. All exposed surfaces shall receive a light broom finish parallel to the direction of flow.
5. All sidewalk adjacent to 5" curb and gutter shall be no less than 6" thick.
6. When constructing a curb return adjacent to roll curb, the return shall be 5" vertical curb and gutter per this standard.
7. Transitions between roll and vertical curb shall be 5' long and shall be formed.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

5" CONCRETE CURB AND GUTTER
(vertical transition for roll curb)

Approved:

09-30-2023

City Engineer

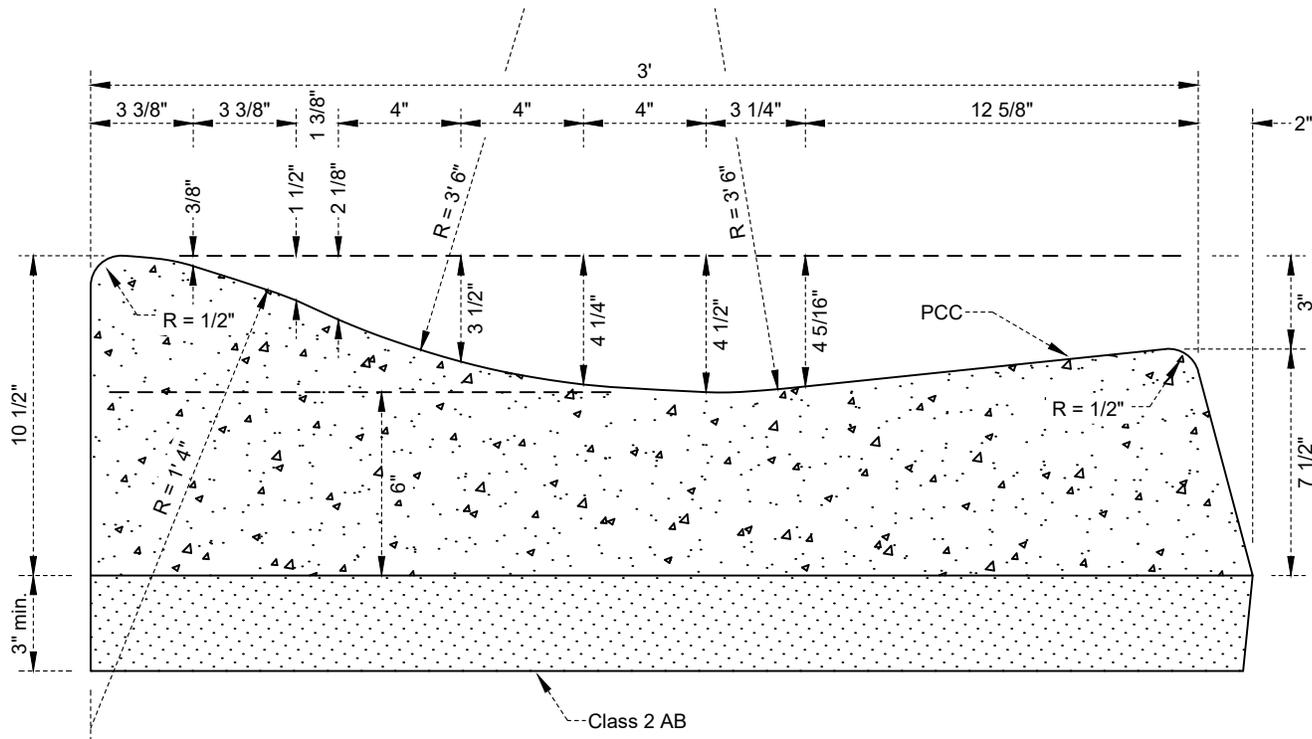
Date

Date: 09/2023

Dwg No.:

Scale: None

135.30



NOTES:

1. All materials shall conform to Page 100.00. Concrete shall have 4" max. slump (1-1/2" max. slump for extruded curb and gutter).
2. Cross sectional area = 1.84 SF.
3. Weakened plane joints shall be to a depth of 2" and at intervals not to exceed 12' on-center. The top 3/4" of the weakened plane joint shall be filled with polyurethane sealant (SIKAFLEX-1A or equal).
4. All exposed surfaces shall receive a light broom finish parallel to the direction of flow.
5. Roll curb and gutter is not permitted when grade of street is greater than 5% unless otherwise approved by the City Engineer.
6. All sidewalk adjacent to roll curb and gutter shall be no less than 6" thick.
7. When constructing a curb return adjacent to roll curb, the return shall be 5" vertical curb and gutter per Page 135.30.
8. Transitions between roll and vertical curb shall be 5' long and shall be formed.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

CONCRETE ROLL
CURB AND GUTTER

Approved:

09-30-2023

City Engineer

Date

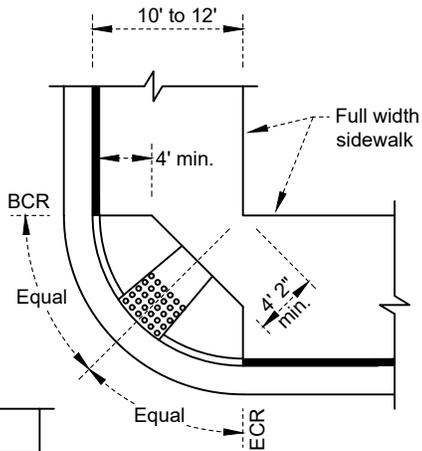
Date: 09/2023

Dwg No.:

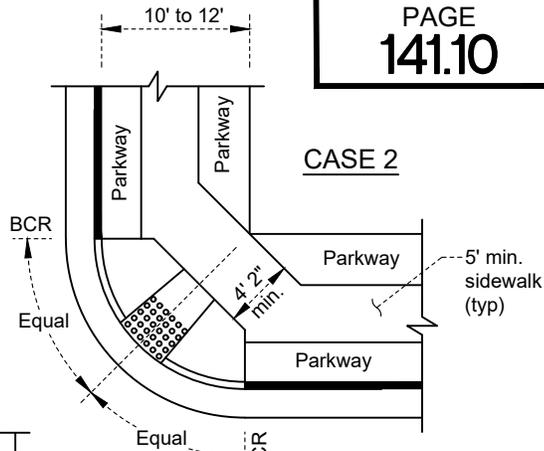
Scale: None

135.40

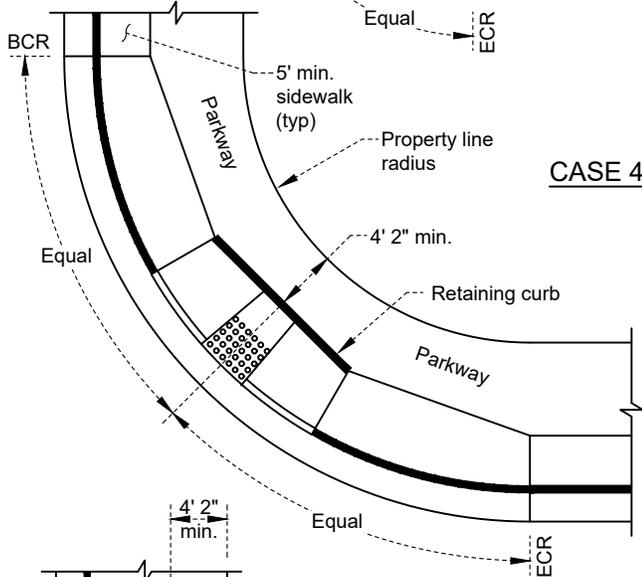
CASE 1



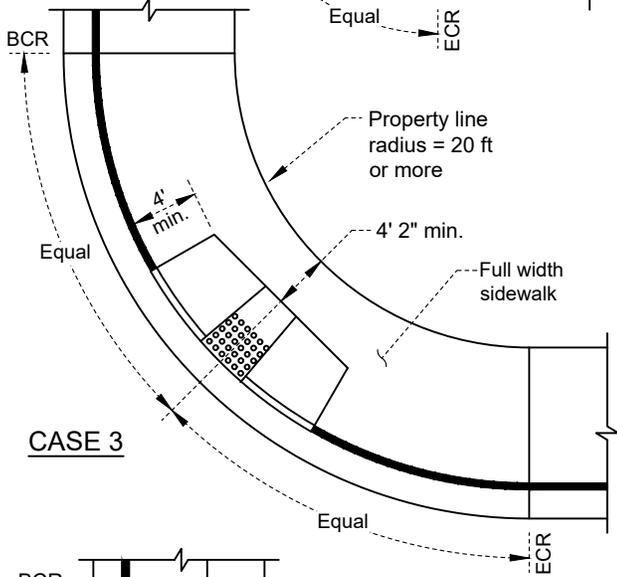
CASE 2



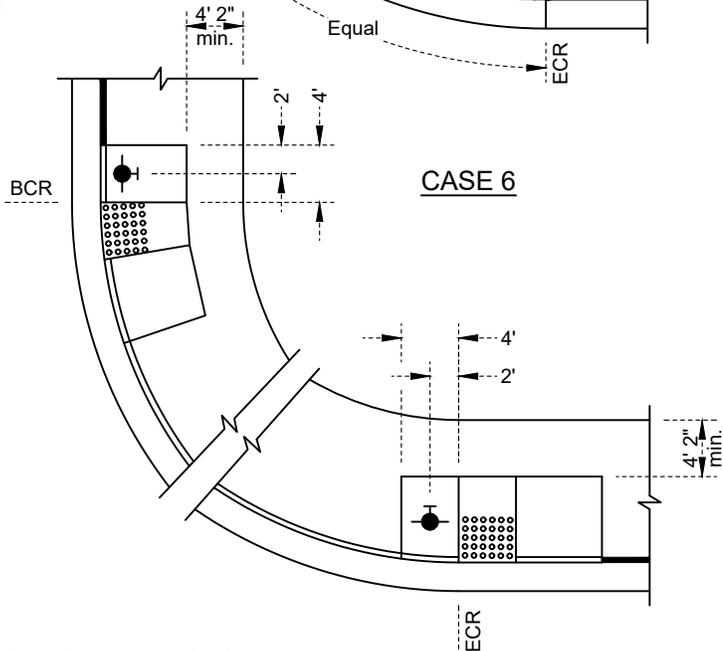
CASE 4



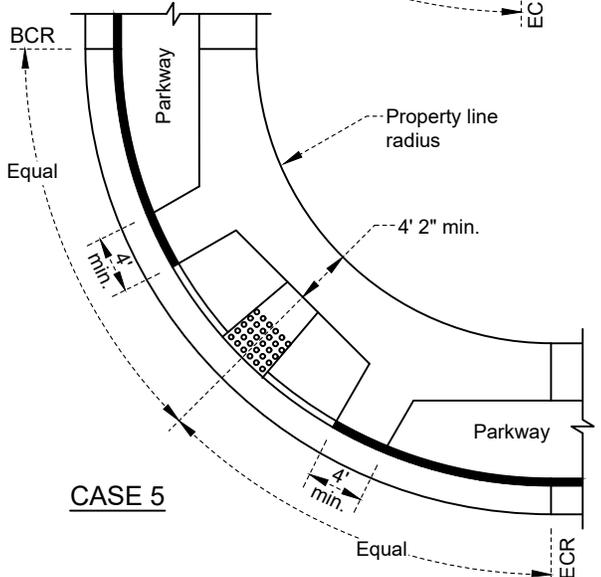
CASE 3



CASE 6



CASE 5



NOTES:

1. Installation of ramps at locations other than the middle of the curb return require the construction of two (2) ramps to serve both crosswalks (see Case 6).
2. Stamped or glued truncated domes are not allowed. Curb ramps shall have truncated domes pattern consistent with the most current Caltrans Standard Plans and/or direction from the State of California Division of State Architect's office for ADA compliance.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

CURB RAMP LOCATION

Approved:

09-30-2023

City Engineer

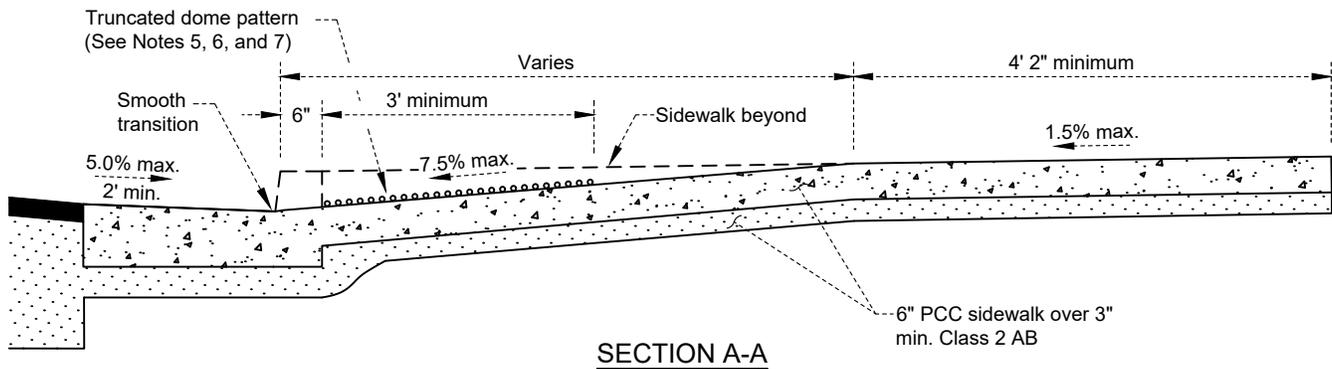
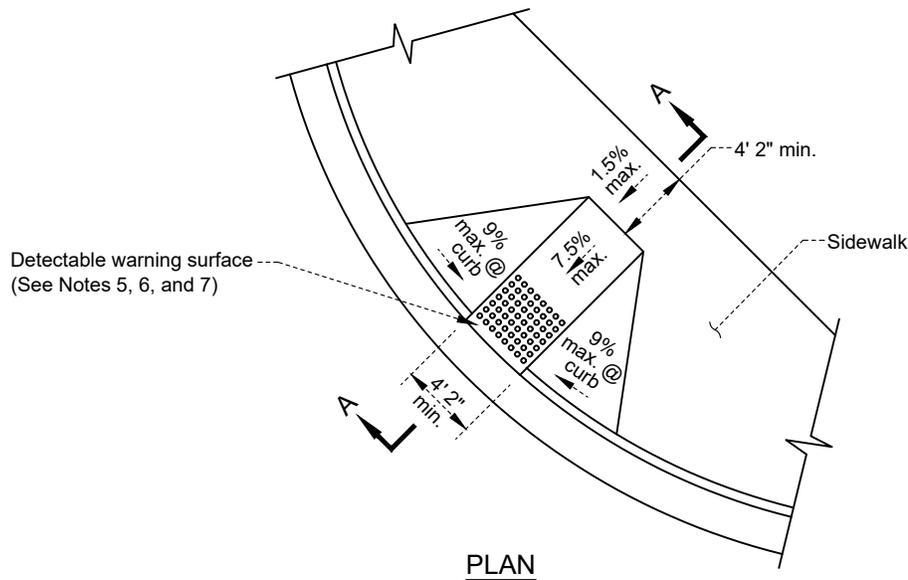
Date

Date: 09/2023

Dwg No.:

Scale: None

141.10



NOTES:

1. All materials shall conform to Page 100.00.
2. See Page 141.10 for ramp locations.
3. When adjacent to roll curb, use 5" vertical curb per Page 135.30 in all curb returns with a 5' transition to adjacent roll curb.
4. The texture of the ramp surface shall be rougher than the texture of the surrounding sidewalk, and shall be slip resistant.
5. Curb ramps shall have a detectable warning surface raised truncated dome pattern as shown on CSP A88A.
6. Detectable warning surface shall contrast visually with adjoining surfaces, either light-on-dark or dark-on-light. See ADA accessibility guidelines 4.29.2.
7. Detectable warning surface shall be wet set in concrete. Stamped or glued surfaces are not allowed. Curb ramps shall have truncated domes pattern consistent with the most current CSP and/or direction from the State of California Division of State Architect's office for ADA compliance.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

CURB RAMP LOCATION (Type A)

Approved:

09-30-2023

City Engineer

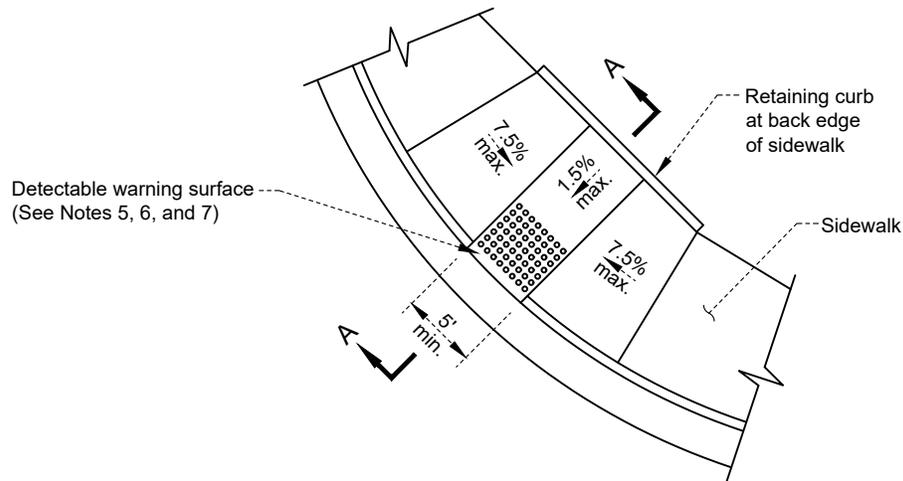
Date

Date: 09/2023

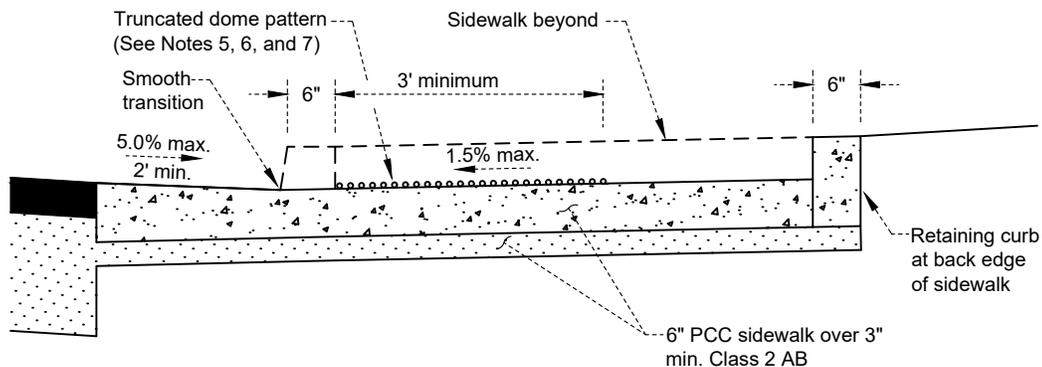
Dwg No.:

Scale: None

141.20



PLAN



SECTION A-A

NOTES:

1. All materials shall conform to Page 100.00.
2. See Page 141.10 for ramp locations.
3. When adjacent to roll curb, use 5" vertical curb per Page 135.30 in all curb returns with a 5' transition to adjacent roll curb.
4. The texture of the ramp surface shall be rougher than the texture of the surrounding sidewalk, and shall be slip resistant.
5. Curb ramps shall have a detectable warning surface raised truncated dome pattern as shown on CSP A88A.
6. Detectable warning surface shall contrast visually with adjoining surfaces, either light-on-dark or dark-on-light. See ADA accessibility guidelines 4.29.2.
7. Detectable warning surface shall be wet set in concrete. Stamped or glued surfaces are not allowed. Curb ramps shall have truncated domes pattern consistent with the most current CSP and/or direction from the State of California Division of State Architect's office for ADA compliance.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

CURB RAMP LOCATION (Type B)

Approved:

09-30-2023

City Engineer

Date

Date: 09/2023

Dwg No.:

Scale: None

141.30

1. DRIVEWAYS - GENERAL

All driveway approaches in City right-of-way shall be constructed in conformance with City of Shasta Lake Municipal Code and the appropriate driveway Standard Drawings, or as modified for special situations described herein and approved by the City Engineer.

2. DRIVEWAY APRONS

- A. Residential driveway aprons shall be constructed between the curb and the property line with PCC per Page 148.10.
- B. Commercial driveway aprons to a parking lot or "drive-in" business shall be constructed between the curb and the property line with PCC per Page 148.20 or 148.30.
- C. An industrial driveway apron shall be constructed between the curb and the property line per Page 148.20 or 148.30 with an approved PCC structural section based on the traffic index (TI) and ability of the soil (R-Value) to withstand truck wheel loads.
- D. In all cases above, it shall be the responsibility of the abutting property owner to maintain the driveway apron in a safe and suitable condition for the traffic to be carried, whether pedestrian or vehicular.
- E. Driveway aprons shall have a minimum PCC thickness of 6".

3. HIGH VOLUME DRIVEWAYS (COMMERCIAL / INDUSTRIAL)

Commercial and industrial driveways that serve a substantial number of vehicles or trucks shall have dimensions, sight distance, geometrics, spacing, etc., determined by the City Engineer.

4. AMOUNT OF FRONTAGE ALLOWED FOR DRIVEWAYS

- A. Parcels (excluding single family) shall be limited to one (1) driveway cut per street frontage and not more than fifty percent (50%) of the frontage may be devoted to driveways.
- B. Single family parcels with a frontage of more than 56' shall be limited to two (2) driveway cuts per street frontage, and not more than fifty percent (50%) of the total frontage may be devoted to driveways.
- C. Single family parcels with a frontage of less than or equal to 56' shall be limited to two (2) driveway cuts per street frontage, and not more than 28' of the total frontage may be devoted to driveways.

5. ONE-WAY DRIVEWAYS

Parcels (excluding single family) shall be limited to two (2) driveways (for circular one-way use) per street frontage and shall conform to Page 148.20 or 148.30 (or as modified by the City Engineer for special situations).

6. DRIVEWAY WIDTH "W"

The width of driveways "W" shall be measured at the back edge of curb where curb and gutter or roll curb and gutter exists, back edge of sidewalk where sidewalk exists, or property line where no improvements exist. In the case of a radial lot, width "W" may be the larger of these values.

7. MINIMUM WIDTH "W"

- A. The minimum width of standard residential driveways shall be 12 feet.
- B. The minimum width of all other driveways shall provide for the safe and efficient movement of traffic and should be approximately 25'.

8. MAXIMUM WIDTH "W"

- A. The maximum width of driveways for one- and two-family residences with a frontage greater than 56' shall be 50% of the frontage, up to a maximum of 40'.
- B. The maximum width of driveways for one- and two-family residences with a frontage less than or equal to 56' shall be 28'.
- C. The maximum width of all commercial driveways shall be 40 feet.
- D. In the case of a driveway located adjacent to an alley, the driveway apron may be combined with the alley only when approved by the City Engineer, and the total combined width shall not exceed 40 feet.
- E. The driveway width may be modified by the City Engineer to facilitate turning movements, where curb lanes are used, and where necessary to provide for the safe and efficient movement of traffic.

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|----------|----|----------|------|---------------------------------|--|---|--|
| | | | | CITY OF SHASTA LAKE | | Approved:  | |
| | | | | Public Works Department | | 09-30-2023 | |
| | | | | STANDARD DRAWING | | City Engineer _____ Date _____ | |
| | | | | DRIVEWAY STANDARDS AND CRITERIA | | Date: 09/2023 Dwg No.: 147.01 | |
| REVISION | BY | APPROVED | DATE | | | Scale: None | |

9. DISTANCE BETWEEN DRIVEWAYS

- A. No driveway shall be located closer than 3' feet from a side property line, except as allowed by specific Zoning Ordinance or Use Permit.
- B. The minimum length of full height curb between driveways on adjacent parcels shall be 6' feet except as allowed by specific Zoning Ordinance.
- C. No driveway shall be located closer than 6' from an existing or future alley entrance except as provided elsewhere in these Standards.
- D. Where two or more driveways are constructed on the same parcel and the frontage is greater than 56', the minimum length of full-height curb between driveways shall be 14'. Where practical, to provide curbside parking, the total length of full height curb between driveways shall be in multiples of 24'.
- E. Where two or more driveways are constructed on the same parcel and the frontage is less than or equal to 56', the minimum length of full-height curb between driveways shall be 9'.

10. DRIVEWAY GRADE (SLOPE)

The maximum grade for driveways within the public right-of-way (measured at the centerline) shall be limited to eight percent (8%). Areas required for pedestrian traffic shall not exceed two percent (2%).

11. DRIVEWAY DISTANCES FROM UTILITY OR SAFETY DEVICES

No driveway shall be located closer than 5' from a fire hydrant, traffic signal, street light standard, utility pole, guy wire, or any utility company service box.

12. UTILITY RELOCATION

Any necessary relocation of public or private utility facilities or other public improvements required to accommodate a driveway shall be accomplished without cost to the City.

13. SIGNAL AND ELECTRICAL CONDUIT

Where a traffic signal or highway lighting is planned or anticipated, a minimum of one 3" PVC conduit shall be placed under any new driveway apron and extend a minimum of one foot beyond the ends of the driveway without cost to the City. The conduit shall be placed behind, and 24" below, the top of curb, and shall be capped at both ends.

14. REMOVAL OF EXISTING DRIVEWAYS

When driveway construction is to take place on a parcel, any abandoned driveways shall be removed and replaced with standard curb, gutter, and sidewalk concurrently with the new construction and without cost to the City.

15. REMOVAL OF EXISTING CONCRETE

Where curb, gutter, and/or sidewalk is existing and no driveway depression has been provided, the concrete shall be sawcut and removed to the nearest score line or control joint beyond the 'X' distance on either side and replaced per the appropriate standards.

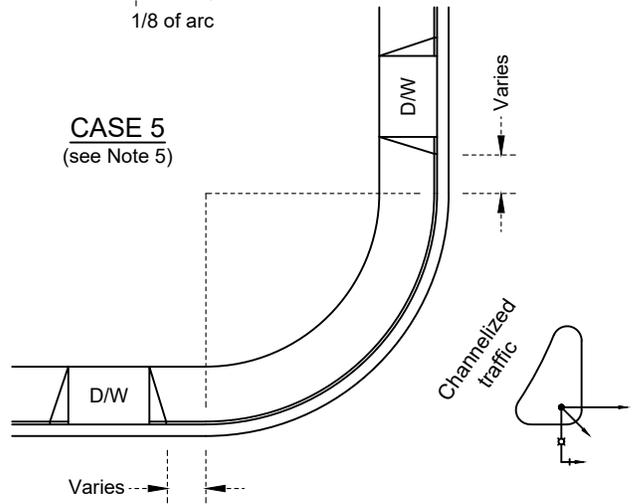
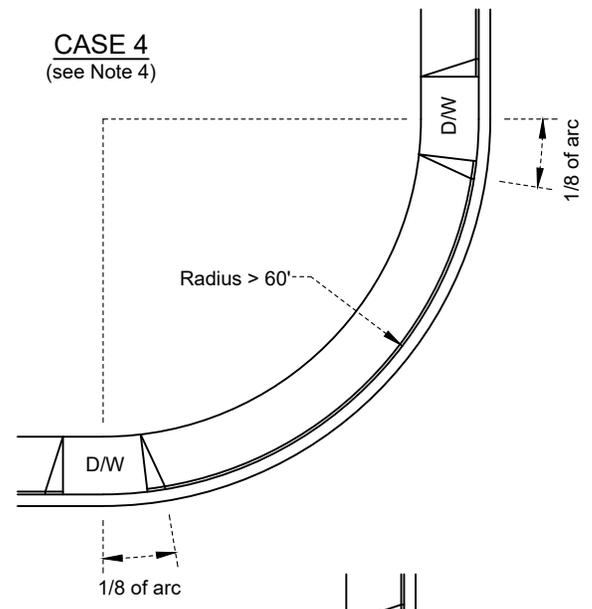
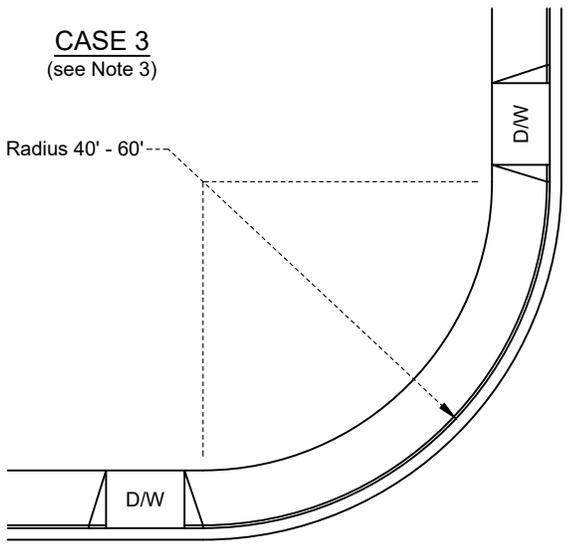
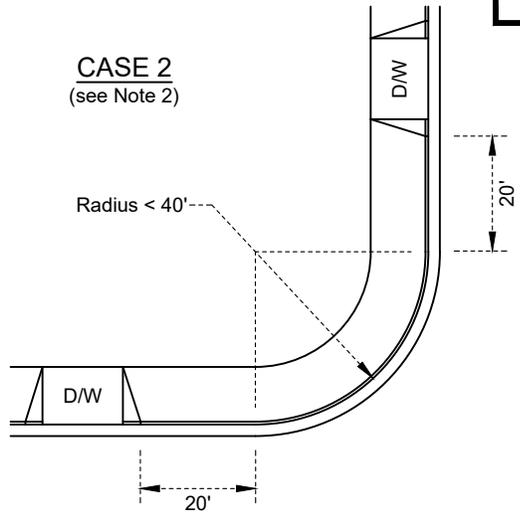
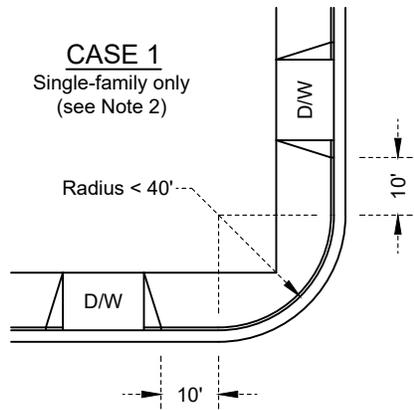
16. REMOVAL OF EXISTING ASPHALT CONCRETE

When a driveway is to be constructed adjacent to existing HMA, said HMA shall be removed to a neat vertical edge at a minimum of 12" off the new lip of gutter. The vertical edge shall receive a tack coat before placement of the new HMA per Page 611.00.

17. MODIFICATION

The above standards may be modified with written approval by the City Engineer.

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| | | | | CITY OF SHASTA LAKE | | Approved:  | |
| | | | | Public Works Department | | 09-30-2023 | |
| | | | | STANDARD DRAWING | | City Engineer _____ Date | |
| | | | | DRIVEWAY STANDARDS AND CRITERIA | | Date: 09/2023 Dwg No.: | |
| | | | | | | Scale: None 147.02 | |
| REVISION | BY | APPROVED | DATE | | | | |



NOTES:

1. All radius distances measured to top face of curb.
2. Where radius of the curb return is less than 40', no portion of any driveway shall be permitted within the specified distance of the curb return according to the designated land use.
3. Where radius of the curb return is less than 60', no portion of any driveway shall be permitted within the curb return.
4. On all curb returns where the radius is more than 60', driveways may encroach upon each end of the return a maximum distance equal to 12.5% or 1/8 of the total length of the arc of the curb return, subject to the approval of the City Engineer.
5. On all curb returns where channelization and/or compound curves are to exist, driveways shall not be permitted within the curb returns and their location shall be subject to the approval of the City Engineer.

| REVISION | BY | APPROVED | DATE |
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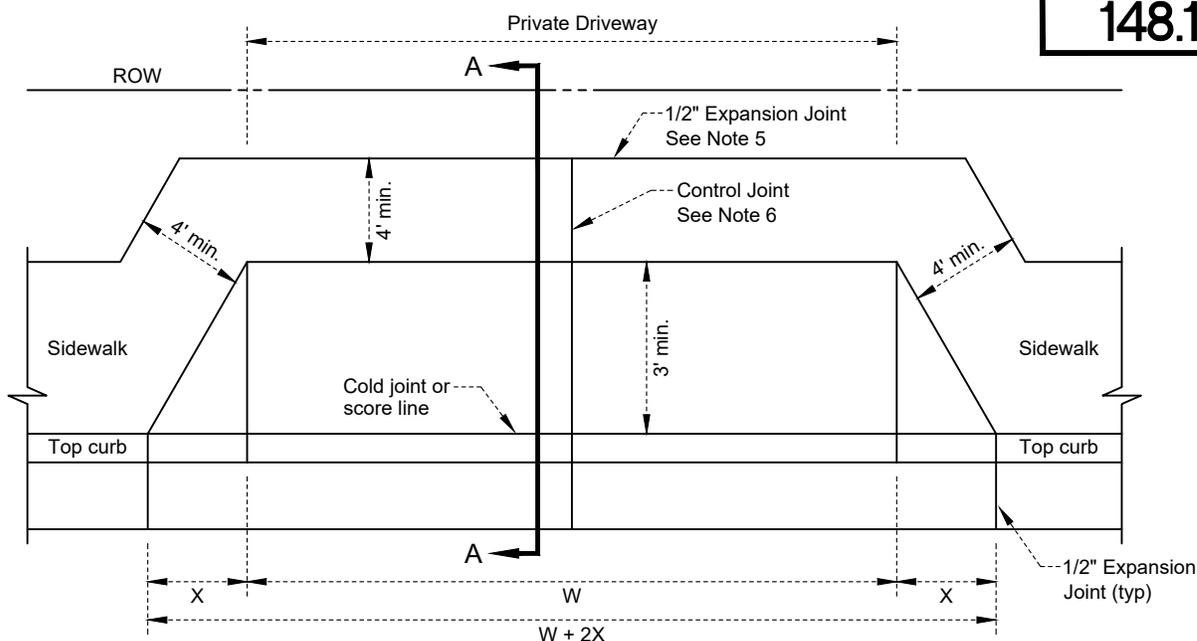
CITY OF SHASTA LAKE
Public Works Department
STANDARD DRAWING

STANDARD DRIVEWAY LOCATIONS

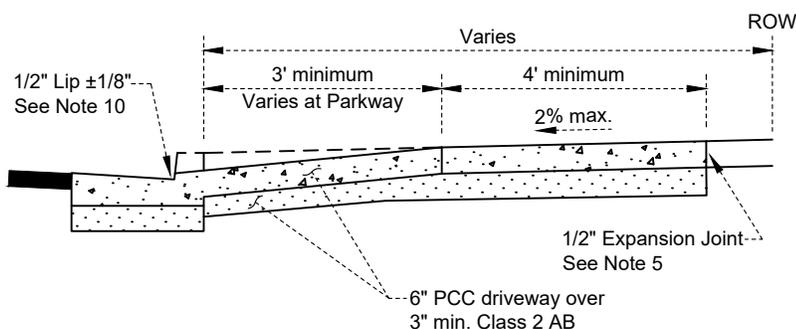
Approved:  09-30-2023
Date

City Engineer

Date: 09/2023 Dwg No.: 147.10
Scale: None



PLAN



SECTION A-A

| TABLE OF DIMENSIONS | | | |
|---------------------|-------|----------|--------------|
| Curb Face | X | W (min.) | W+2X' (min.) |
| 6 1/2" or less | 2' 6" | 12' | 17' |
| 7" to 7 1/2" | 3' | 12' | 18' |
| 8" to 8 1/2" | 3' 6" | 12' | 19' |
| 9" to 9 1/2" | 4' | 12' | 20' |
| 10" to 10 1/2" | 4' 6" | 12' | 21' |
| 11" to 12" | 5' | 12' | 22' |

NOTES:

1. All driveway designs shall conform to Pages 147.01 and 147.02.
2. The driveway depth between the back of curb and the street edge of the sidewalk shall not be less than 3'.
3. When the sidewalk is not adjacent to the curb and the distance between the back of curb and the street edge of the sidewalk is less than 3', driveways shall be constructed with sides at right angles to the curb.
4. All materials shall conform to Page 100.00.
5. 1/2" pre-molded expansion joint material shall be held firmly in place prior to placing concrete.
6. Weakened plane joints shall be to a depth of 2" and at intervals not to exceed 12' on center.
7. 1/2" deep score lines shall be evenly spaced between weakened plane joints at 3' to 5' intervals.
8. Weakened plane joints and score lines shall correspond with those in the adjacent sidewalk unless otherwise specified.
9. The area included within the slope of the driveway shall be given a heavy broom finish perpendicular to the curb.
10. The top of the driveway lip shall be troweled straight and true.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

STANDARD RESIDENTIAL DRIVEWAY

Approved:

09-30-2023

City Engineer

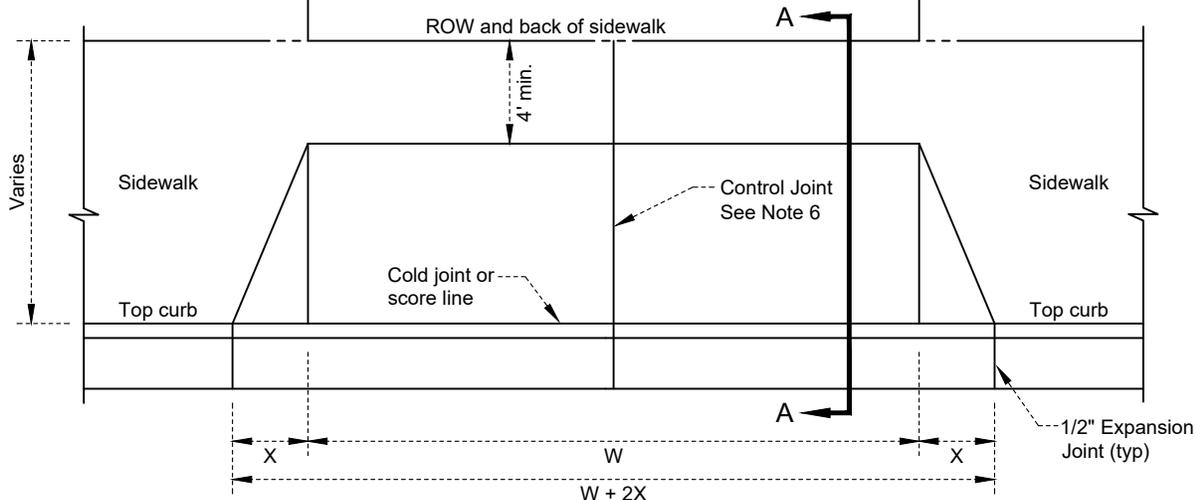
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Date: 09/2023

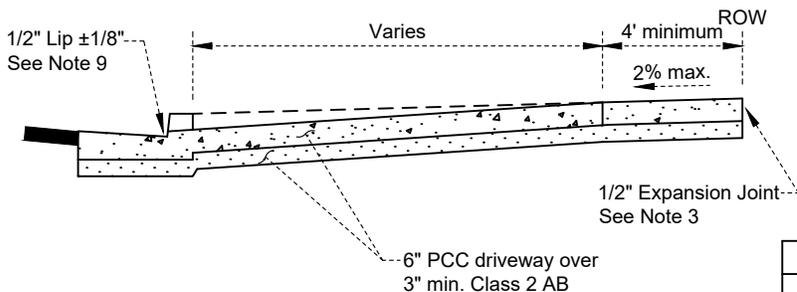
Dwg No.:

Scale: None

148.10



PLAN



SECTION A-A

| TABLE OF DIMENSIONS | | | |
|---------------------|-------|----------|--------------|
| Curb Face | X | W (min.) | W+2X' (min.) |
| 6 1/2" or less | 2' 6" | 30' | 35' |
| 7" to 7 1/2" | 3' | 29' | 35' |
| 8" to 8 1/2" | 3' 6" | 29' | 36' |
| 9" to 9 1/2" | 4' | 28' | 36' |
| 10" to 10 1/2" | 4' 6" | 27' | 36' |
| 11" to 12" | 5' | 26' | 36' |

NOTES:

1. All driveway designs shall conform to Pages 147.01 and 147.02.
2. All materials shall conform to Page 100.00.
3. 1/2" pre-molded expansion joint material shall be held firmly in place prior to placing concrete.
4. Weakened plane joints shall be to a depth of 2" and at intervals not to exceed 12' on center.
5. 1/2" deep score lines shall be evenly spaced between weakened plane joints at 3' to 5' intervals.
6. Weakened plane joints and score lines shall correspond with those in the adjacent sidewalk unless otherwise specified.
7. The area included within the slope of the driveway shall be given a heavy broom finish perpendicular to the curb.
8. The top of the driveway lip shall be troweled straight and true.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

STANDARD COMMERCIAL AND INDUSTRIAL DRIVEWAY

Approved:

09-30-2023

City Engineer

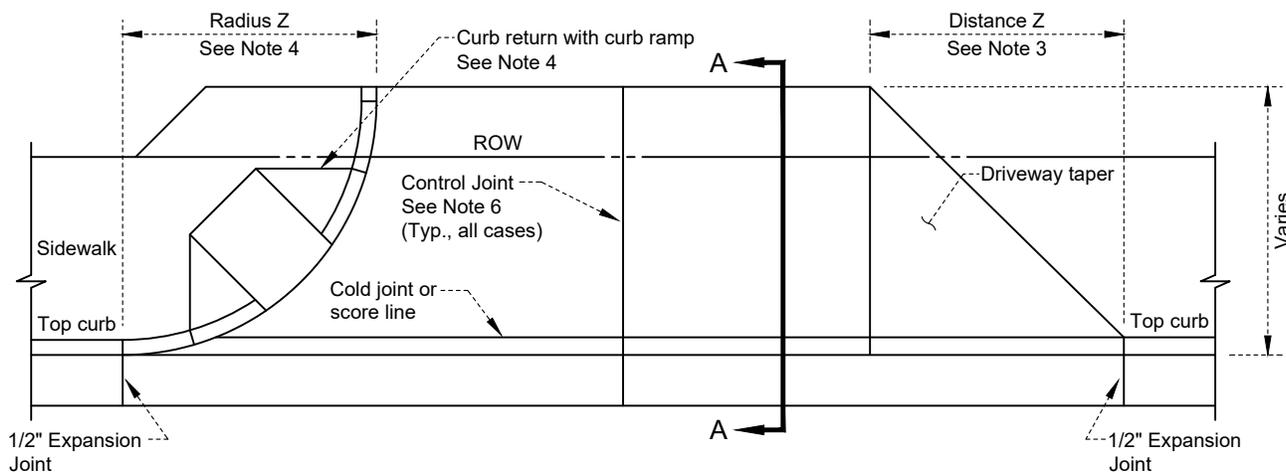
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Date: 09/2023

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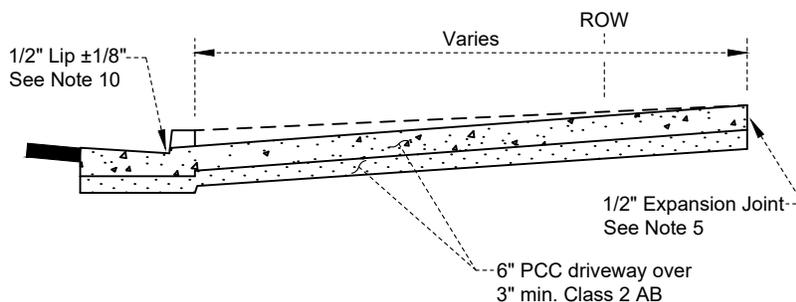
Scale: None

148.20



CASE A

CASE B



SECTION A-A

NOTES:

1. All driveway designs shall conform to Pages 147.01 and 147.02.
2. All materials shall conform to Page 100.00.
3. Distance 'Z' (extension of modified driveway) shall be of adequate size to facilitate vehicle right turns from curb thru lane. Length shall be determined by vehicle turn radius criteria and as approved by the City Engineer.
4. Curb returns may be used for modified driveways when radius 'Z' exceeds 15'. Curb ramps per Page 141.10 shall be designed into the curb returns.
5. 1/2" pre-molded expansion joint material shall be held firmly in place prior to placing concrete.
6. Weakened plane joints shall be to a depth of 2" and at intervals not to exceed 12' on center.
7. 1/2" deep score lines shall be evenly spaced between weakened plane joints at 3' to 5' intervals.
8. Weakened plane joints and score lines shall correspond with those in the adjacent sidewalk unless otherwise specified.
9. The area included within the slope of the driveway shall be given a heavy broom finish perpendicular to the curb.
10. The top of the driveway lip shall be troweled straight and true.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

MODIFIED COMMERCIAL AND INDUSTRIAL DRIVEWAY

Approved:

09-30-2023

City Engineer

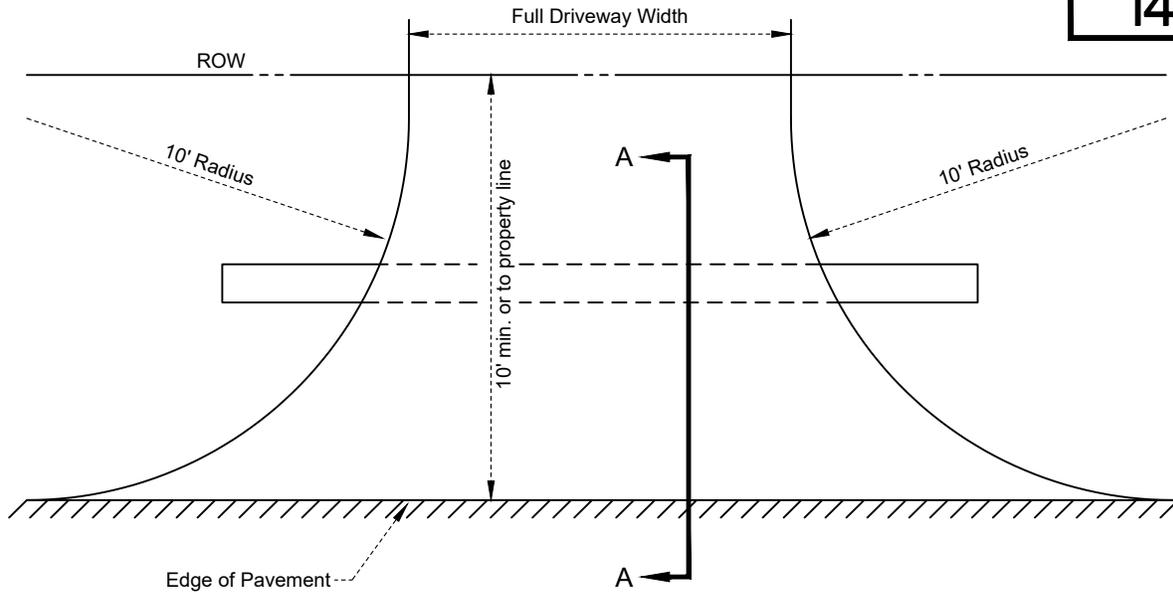
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Date: 09/2023

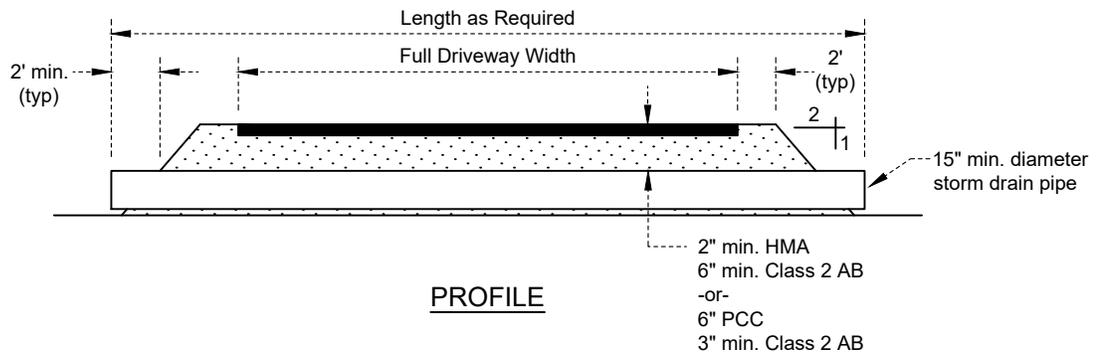
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Scale: None

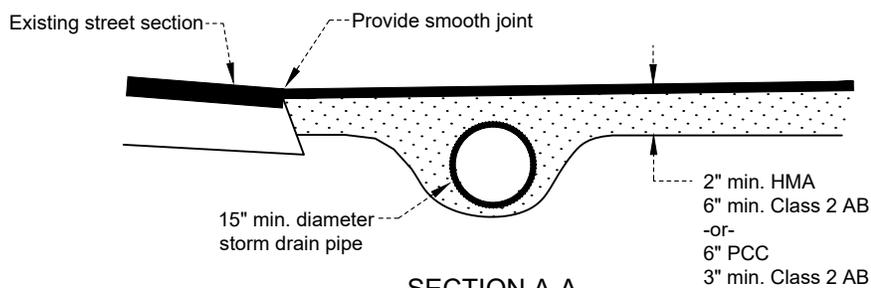
148.30



PLAN



PROFILE



SECTION A-A

NOTES:

1. All materials shall conform to Page 100.00.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

RESIDENTIAL DRIVEWAY CULVERT

Approved:

09-30-2023

City Engineer

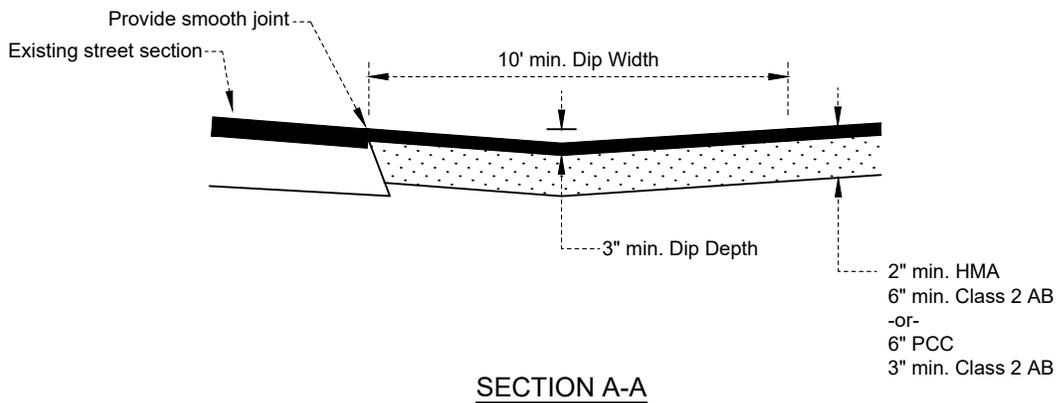
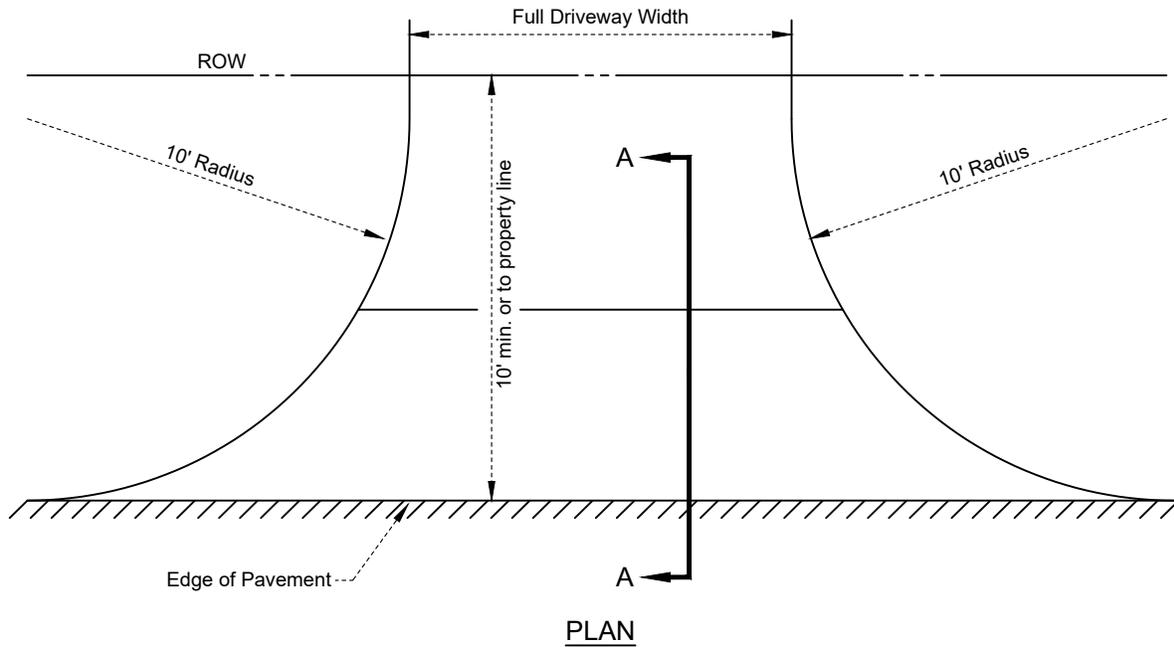
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Date: 09/2023

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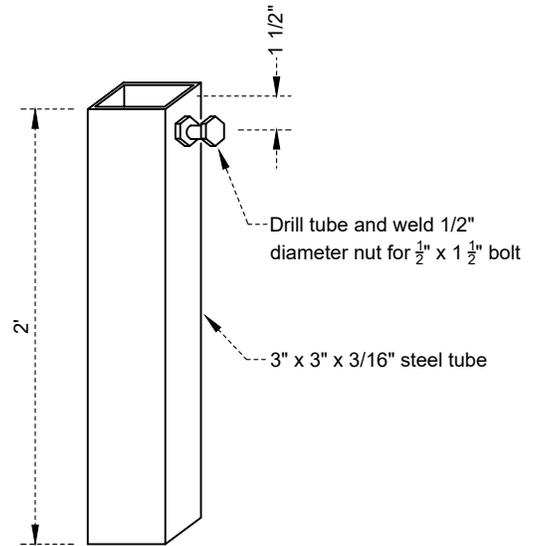
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149.10

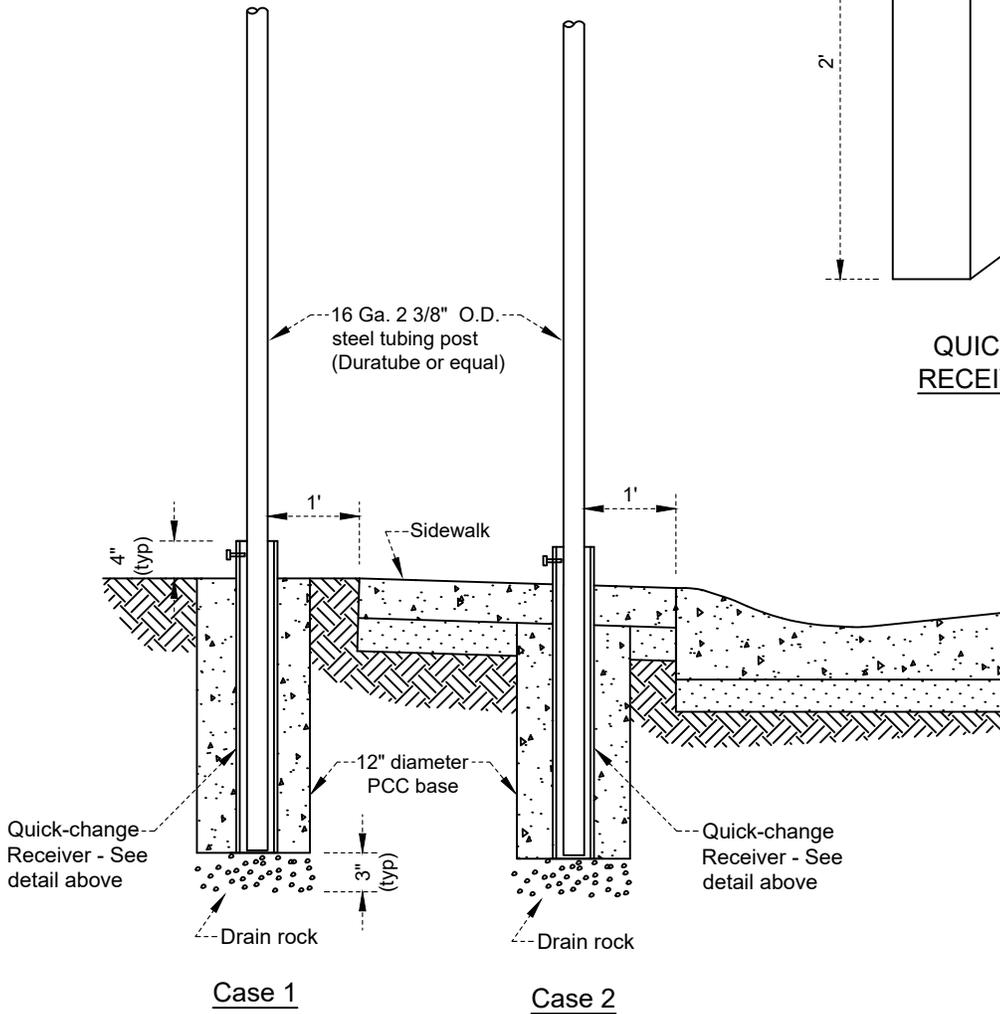


NOTES:
1. All materials shall conform to Page 100.00.

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|----------|----|----------|------|----------------------------|--|---|--------|
| | | | | CITY OF SHASTA LAKE | | Approved:  | |
| | | | | Public Works Department | | 09-30-2023 | |
| | | | | STANDARD DRAWING | | City Engineer _____ Date _____ | |
| | | | | RESIDENTIAL DRIVEWAY DIP | | Date: 09/2023 Dwg No.: _____ | |
| REVISION | BY | APPROVED | DATE | | | Scale: None | 149.20 |



QUICK-CHANGE RECEIVER DETAIL



QUICK-CHANGE RECEIVER INSTALLATION DETAIL

NOTES:

1. Case 1 installation shall be used for installations behind sidewalks or where sidewalks do not exist. Case 2 installation shall be used for installations in sidewalks.
2. All materials shall conform to Page 100.00.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

QUICK CHANGE SIGNPOST
RECEIVER INSTALLATION

Approved:

09-30-2023

City Engineer

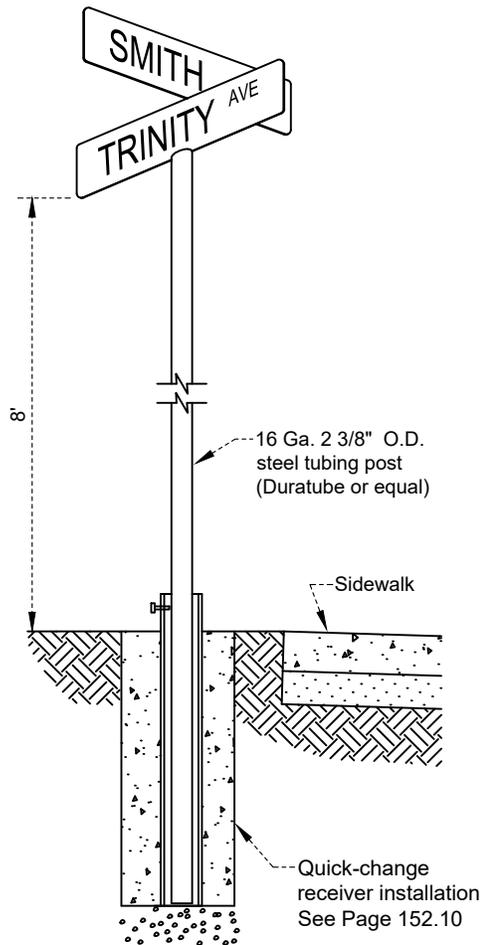
Date

Date: 09/2023

Dwg No.:

Scale: None

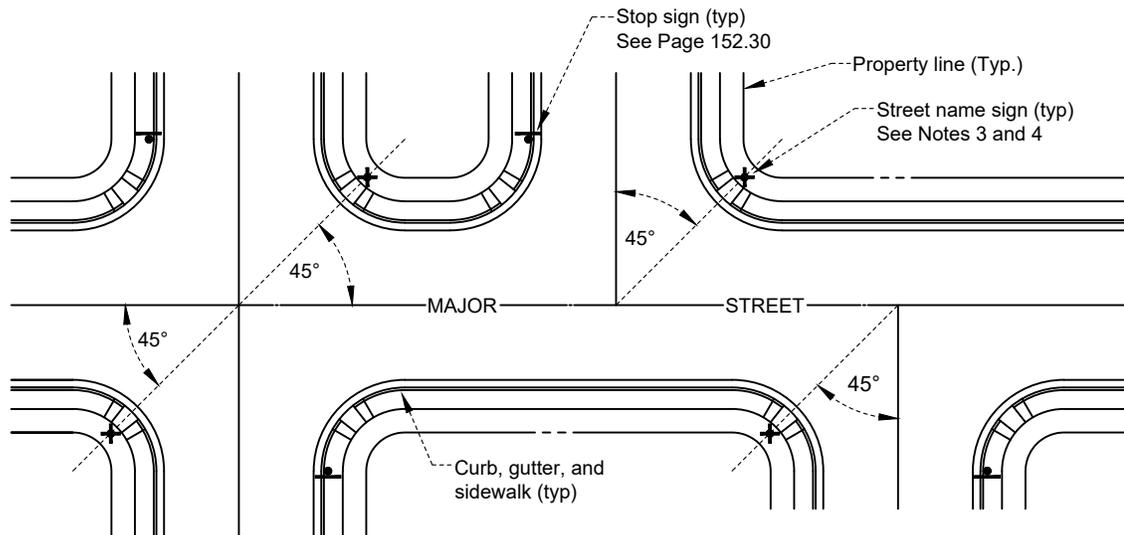
152.10



NOTES:

1. All variances in sign location shall be approved by the City Engineer.
2. Street sign to be located on the near right or far left side of intersection of the major street.
3. Street name signs in residential areas shall be installed 1' behind the back of sidewalk per Page 152.10.
4. Street name signs in commercial areas shall be installed 1' from the back of curb per Page 152.10.

**STREET NAME
SIGN ASSEMBLY**



TYPICAL SIGN LOCATION
For 30 ft curb radii at 90° intersections

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE
Public Works Department

STANDARD DRAWING

STREET NAME SIGN INSTALLATION

Approved:

09-30-2023

City Engineer

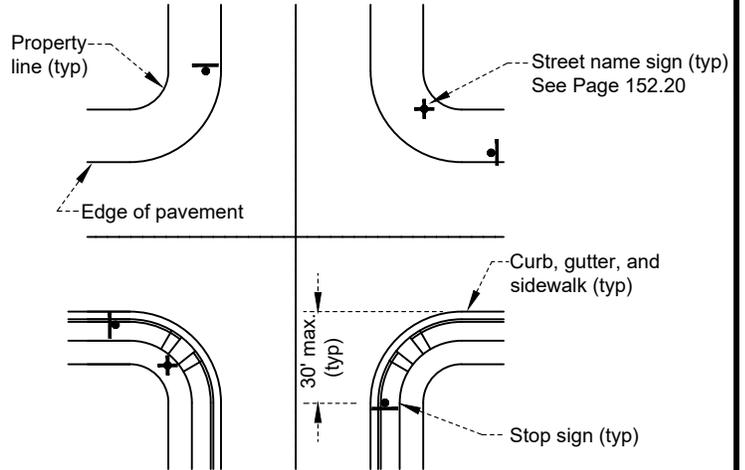
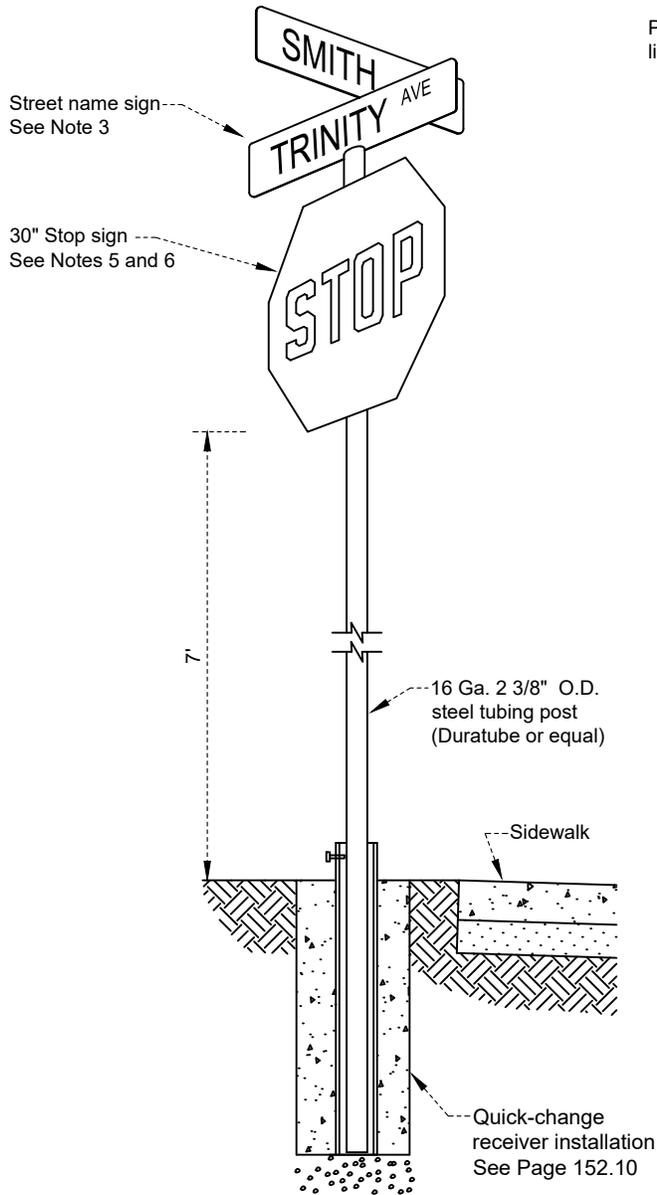
Date

Date: 09/2023

Dwg No.:

Scale: None

152.20

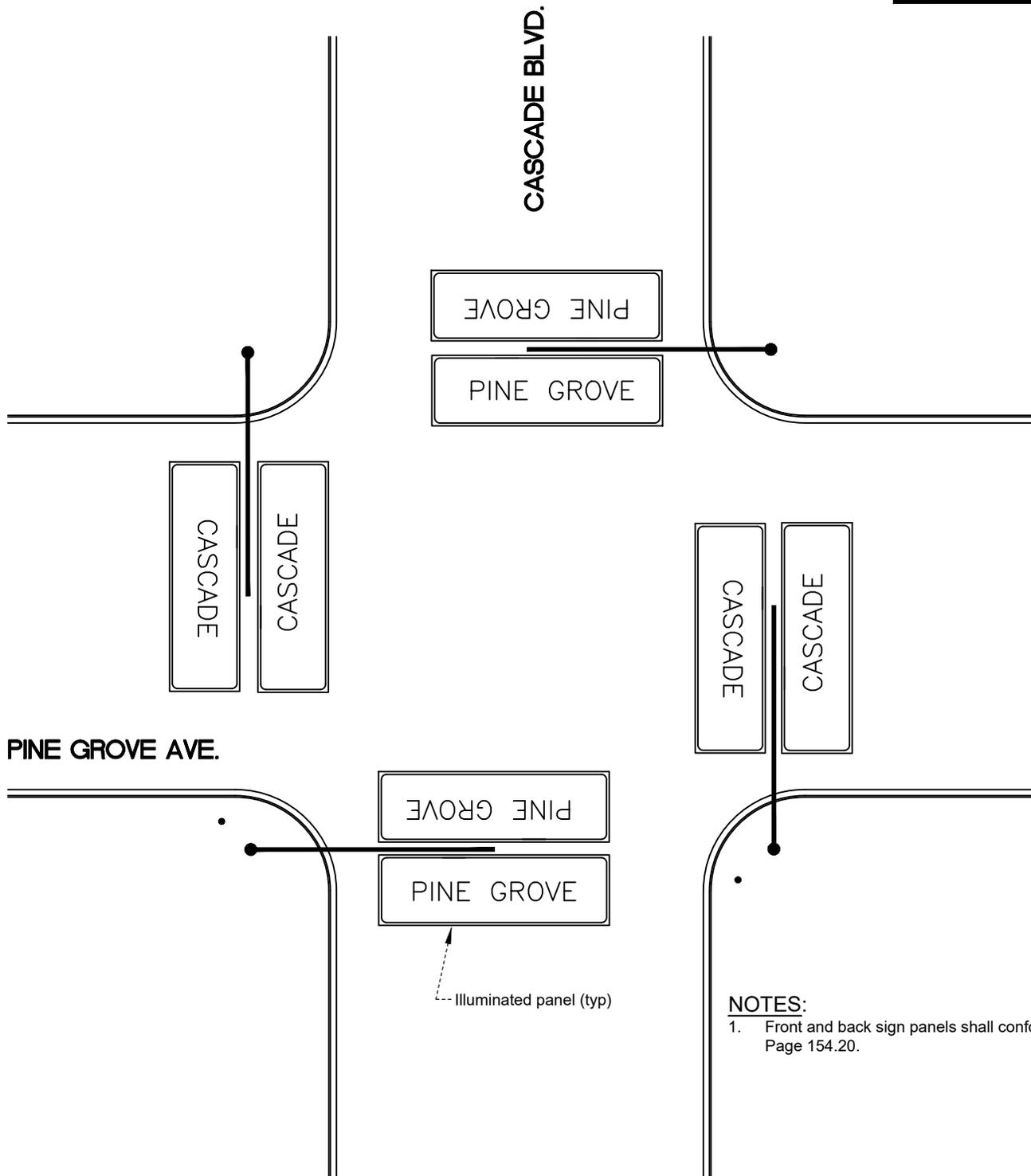


TYPICAL STOP SIGN LOCATION
For 30' curb radii at 90° intersections

- NOTES:**
1. All variances in sign location shall be approved by the City Engineer.
 2. Stop signs shall be located at the curb return. In areas where sidewalks are equal to or less than 4' wide or do not exist, the sign shall be installed either 1' behind the sidewalk or 1' of the edge of pavement. In areas where sidewalks are greater than 4' wide, the sign shall be installed 1' behind the back of curb.
 3. When the City Engineer determines that the stop sign and the street name sign shall be incorporated on one standard, the installation shall maintain the 7' clearance below the stop sign.
 4. For quick change receiver installation, see Page 152.10.
 5. Stop sign shown for example. This detail shall apply to all regulatory and warning signs, and ground clearance of 7' to the bottom of all signs shall be maintained.
 6. Retroreflective sheeting for all regulatory and warning signs shall conform to Section 82, "Signs and Markers" of the CSS.

STOP SIGN ASSEMBLY

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|----------|----|----------|------|---|--|---|--|
| | | | | CITY OF SHASTA LAKE Public Works Department | | Approved:  | |
| | | | | STANDARD DRAWING | | 09-30-2023 Date | |
| | | | | REGULATORY AND WARNING SIGN INSTALLATION | | City Engineer _____ Date | |
| | | | | | | Date: 09/2023 Dwg No.: | |
| | | | | | | Scale: None 152.30 | |
| REVISION | BY | APPROVED | DATE | | | | |



NOTES:

1. Front and back sign panels shall conform to Page 154.20.

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| REVISION | BY | APPROVED | DATE |

CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

**INTERNALLY ILLUMINATED STREET NAME SIGN
INTERSECTION LAYOUT**

Approved:

09-30-2023

City Engineer

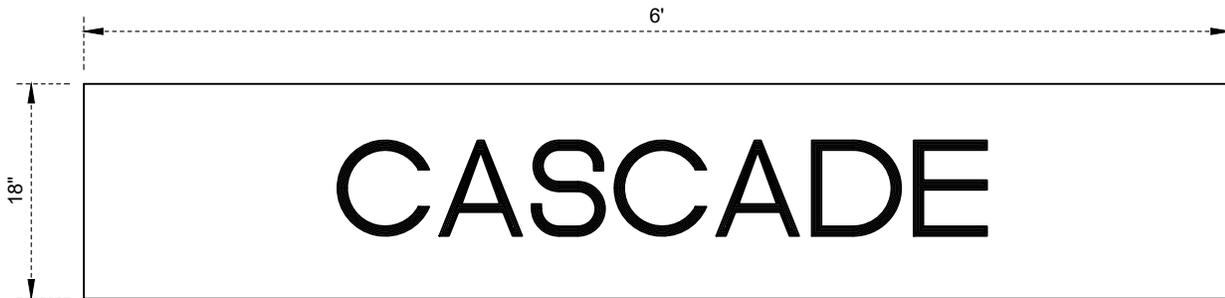
Date

Date: 09/2023

Dwg No.:

Scale: None

154.10

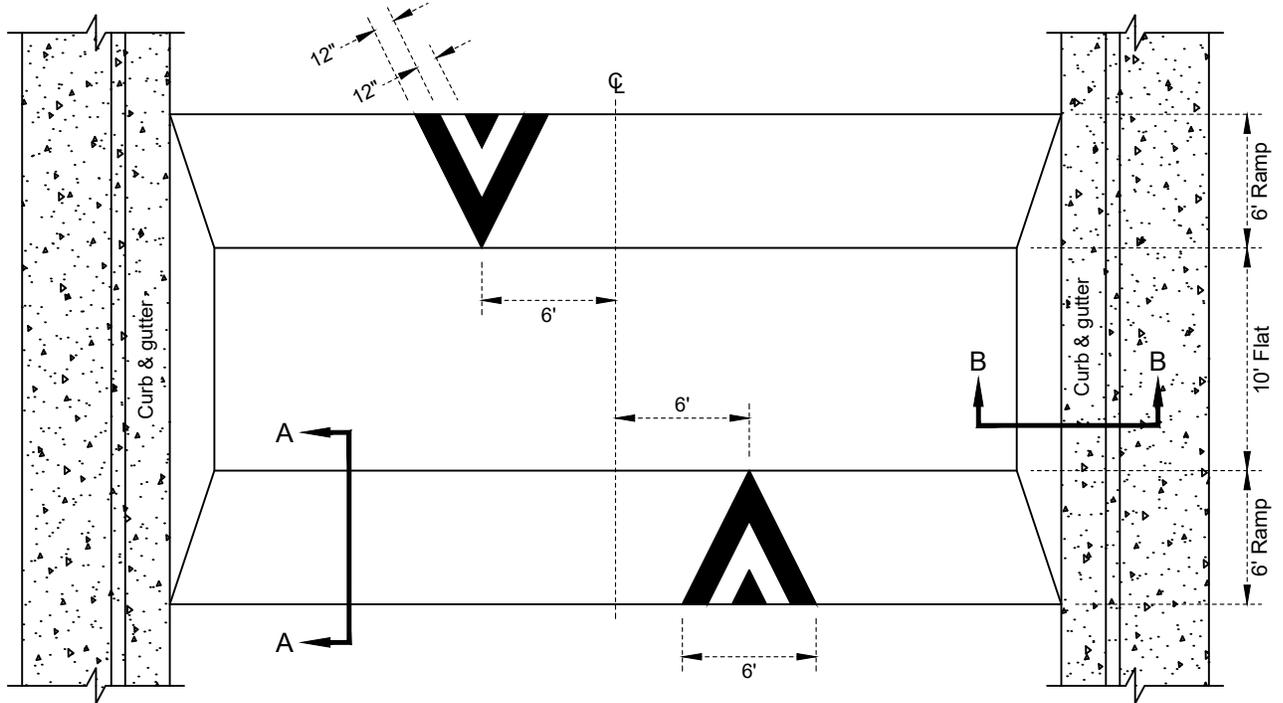


ILLUMINATED SIGN PANEL

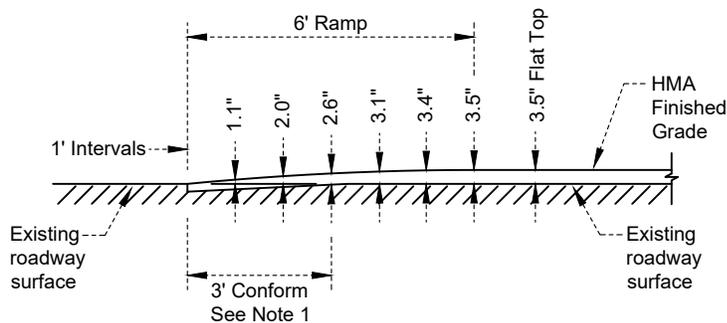
NOTES:

1. Internally illuminated street name sign configuration shall conform to CSP ES-7P Type 'A' with LED light engine.
2. Minimum vertical clearance from the bottom of the sign to the travelled way shall conform with Page 110.10.
3. Illuminated street sign lettering height shall be 8".

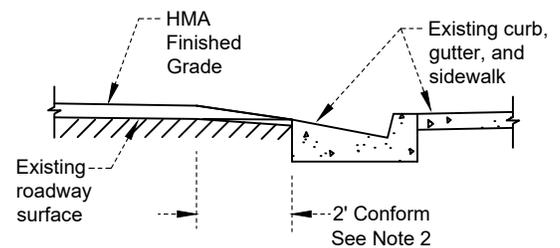
| | | | | | | |
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| | | | | CITY OF SHASTA LAKE Public Works Department | Approved:  | |
| | | | | | 09-30-2023 Date | |
| | | | | STANDARD DRAWING | City Engineer _____ Date _____ | |
| | | | | INTERNALLY ILLUMINATED STREET NAME SIGN DETAIL | Date: 09/2023 | Dwg No.: 154.20 |
| REVISION | BY | APPROVED | DATE | | Scale: None | |



PLAN VIEW



SECTION A-A



SECTION B-B

NOTES:

1. 3' wide x 1.5" min. depth cold plane conform (typ).
2. 2' wide x 1.5" min. depth cold plane conform (typ).
3. All speed table markings shall be 120 mil. (min.) thick white thermoplastic.
4. Layout reference marks shall be approved by the City Engineer prior to placement of striping or marking.
5. W17-1 ("SPEED HUMP") and W13-1P ("20 MPH") signage shall be installed approximately 75' ahead of the speed table installation in both directions in conformance with Page 152.30. Final signage location shall be approved by the City Engineer.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

SPEED TABLE

Approved:

09-30-2023

City Engineer

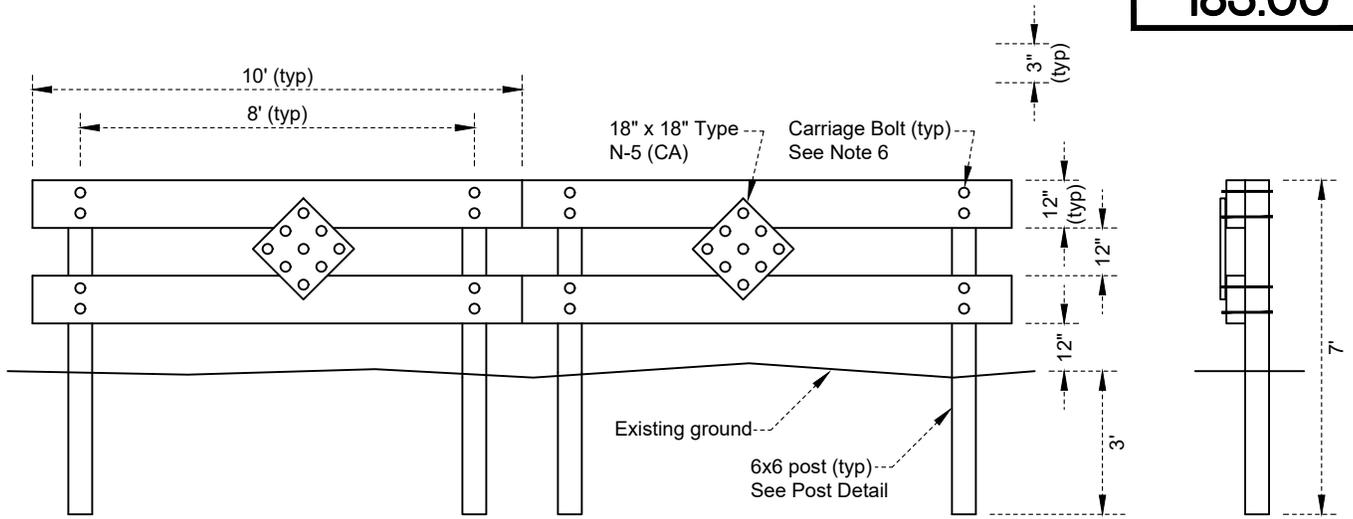
Date

Date: 09/2023

Dwg No.:

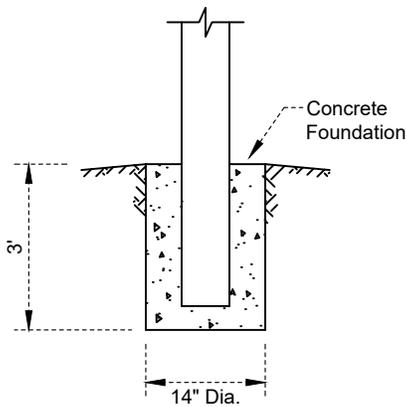
Scale: None

180.00

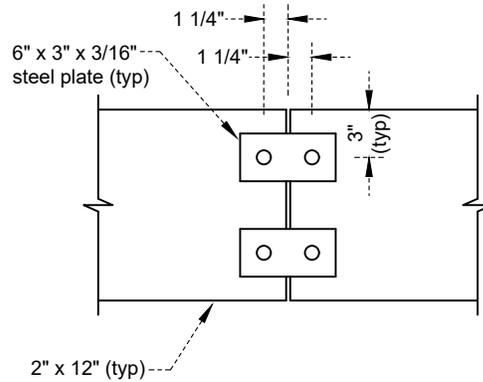


FRONT VIEW

SIDE VIEW



POST DETAIL



BUTT JOINT DETAIL

See Note 4

NOTES:

1. Concrete shall conform to Page 100.00.
2. Barricades shall be erected at street terminus as directed by the City Engineer.
3. All exposed surfaces shall be painted with two coats of white exterior grade paint.
4. Barricade installation shown is to be used for streets having curb to curb widths up to 40 feet. On wider streets, barricades shall be duplicated in multiples of 10' as directed by the City Engineer. All abutting barricade crossmembers shall be attached via butt joints as shown.
5. Signage shall be Type N-5 (CA) warning signs with safety reflectors.
6. All bolts shall be 2 1/2" galvanized carriage bolts with washers (each side) and nuts. Bolts shall be run completely down, and exposed threads shall be deformed to prevent removal.
7. Posts shall be 6" x 6" pressure treated lumber.
8. Barricades shall be 2" x 12" x 10' No. 2 or better Douglas Fir.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

TIMBER BARRICADE

Approved:

09-30-2023

City Engineer

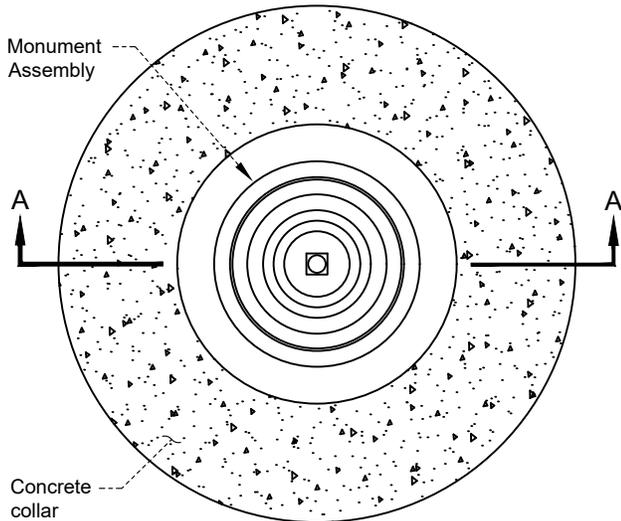
Date

Date: 09/2023

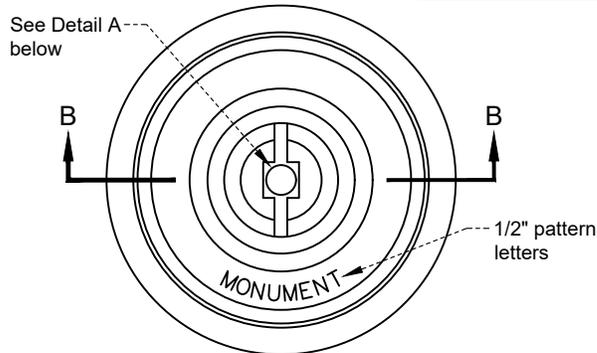
Dwg No.:

Scale: None

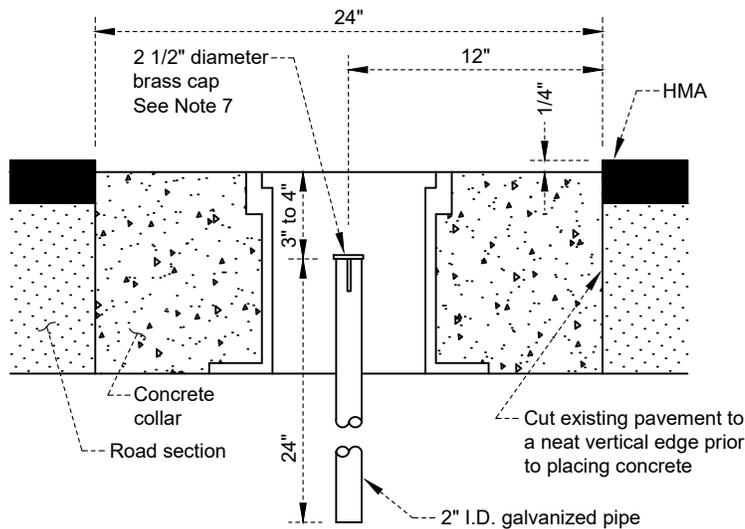
183.00



MONUMENT INSTALLATION

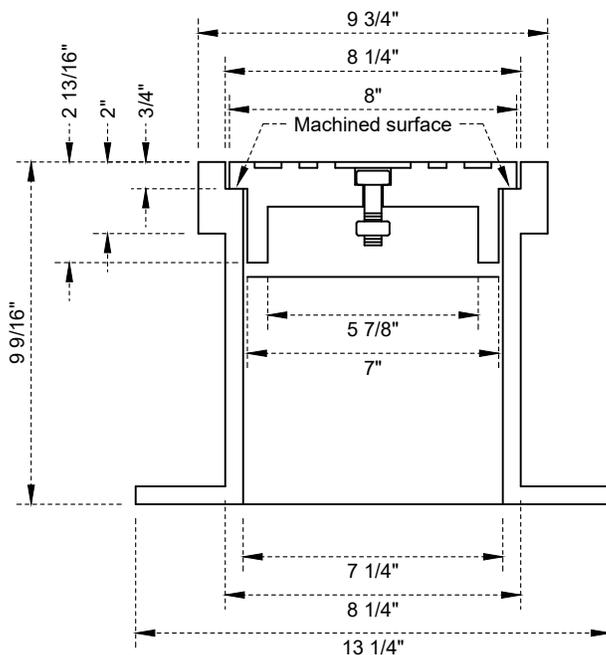


COVER DETAIL



SECTION A-A

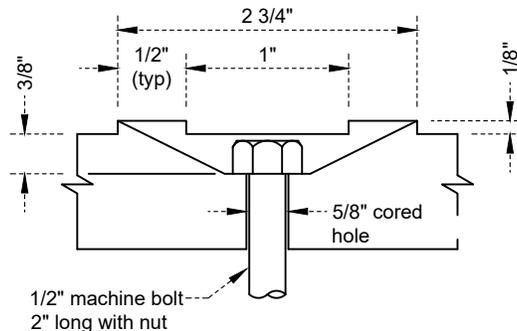
(Monument cover not shown)



SECTION B-B

NOTES:

1. Monument cover assembly shall be South Bay Foundry Model No. 1578 and 1579 or approved equal.
2. Bearing surface between frame and cover shall be machined to prevent rocking.
3. Casting shall be hot dip bituminous coated gray iron.
4. 2 1/2" diameter brass cap to be placed after pipe has been driven to finished elevation.
5. Top of brass cap shall not be placed less than 3" in depth from finished street grade.
6. All materials shall conform to Page 100.00.
7. Brass cap shall be punched and stamped with 'LS' or 'RE' number and shall be embedded in mortar placed in 2" I.D. galvanized pipe.



DETAIL 'A'

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE

Public Works Department

STANDARD DRAWING

SURVEY MONUMENT BOX ASSEMBLY

Approved:

09-30-2023

City Engineer

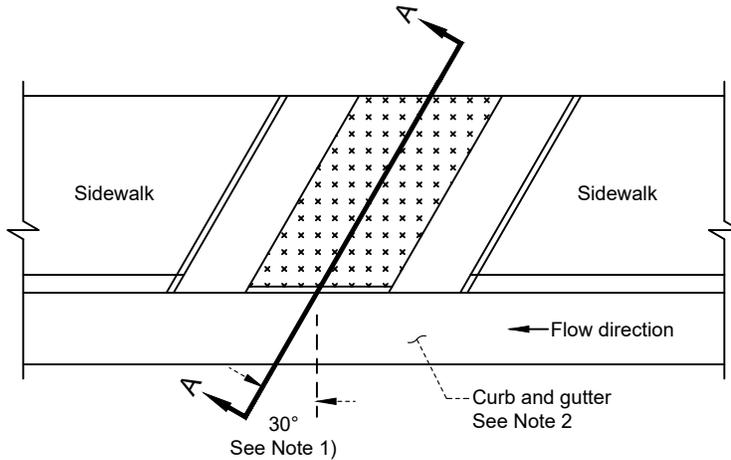
Date

Date: 09/2023

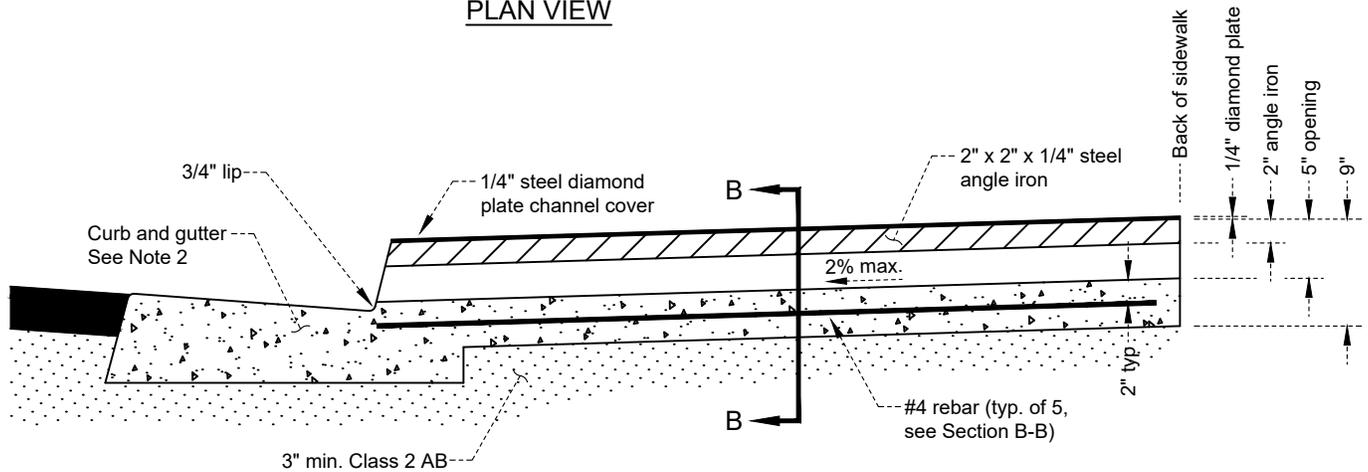
Dwg No.:

Scale: None

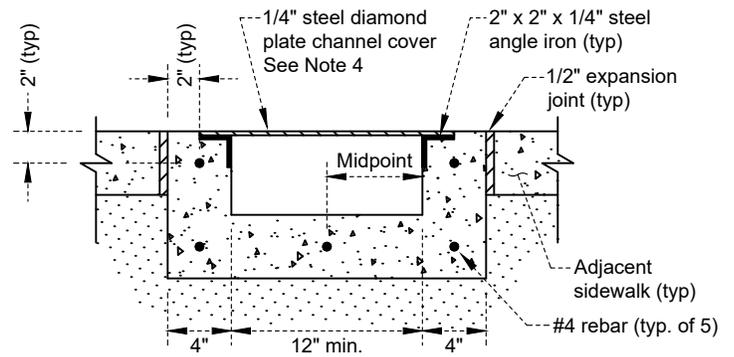
184.00



PLAN VIEW



SECTION A-A



SECTION B-B

NOTES:

1. Under sidewalk drain shall be constructed angled in the downstream direction, 30° off perpendicular to the face of curb, to insure proper flow.
2. Under sidewalk drain shall only be used on 6" or greater height vertical curbs.
3. If existing curb is rolled, transition to vertical curb shall be constructed on each side of sidewalk drain.
4. 1/4" steel diamond plate cover shall be secured to drilled and threaded angle iron with 3/8" dia. x 1/2" countersunk machine screws, 3 per side equally spaced.
5. Sidewalk drain width shall be 12" minimum / 18" maximum, sized as needed for anticipated flow. When required width exceeds 18", storm drain inlets shall be used.

| REVISION | BY | APPROVED | DATE |
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CITY OF SHASTA LAKE
Public Works Department

STANDARD DRAWING

UNDER SIDEWALK DRAIN

Approved:

09-30-2023

City Engineer

Date

Date: 09/2023

Dwg No.:

Scale: None

190.00