

CITY OF HIAWATHA GENERAL SUPPLEMENT TO SUDAS DESIGN MANUAL

This General Supplement to SUDAS Design Manual amends or supplements the Statewide Urban Design and Standards (SUDAS). All provisions which are not so amended or supplemented remain in full force and effect.

Chapter 1 – General Provisions

Section 1C – Submittal Procedures

Add the following: “E. Ownership of Data

All information collected by the designer and/or surveyor for City improvement projects shall become property of the City of Hiawatha and are subject to open records requests.”

Chapter 2 – Stormwater

Section 2A – General Information

Paragraph C. Conditions

Subparagraph 1.e, Add the following: ““Lot drainage slopes that have a design slope less than 2% shall have a minimum of a 6” tile installed.”

Paragraph D. Unified Sizing Criteria

Subparagraph 1 General Information. Replace Table 2A-1.01 with the following:

Table 2A-1.01: Summary of the Stormwater Sizing Criteria for improvements with proposed impervious areas over 11,000 square feet

Chapter 5 – Roadway Design

Section 5C – Geometric Design Tables

Acceptable Roadway Elements

Table 5C-1.02: Acceptable Roadway Elements

Add the following to Footnote 15 for Minimum Horizontal Curve Radius (ft):

“For local residential streets a minimum centerline radius of 150’ is allowed. Radius of 100’ may be allowed for local residential streets for cul-de-sacs.”

Section 5C – Geometric Design Elements

Vertical Alignment

D.4.b: Vertical Curves

Remove ““...For both sag and crest vertical curves with a low algebraic difference in grade, sight distance restrictions may not control the design of the curve. In these cases, rider comfort and curve appearance are the primary considerations for vertical curve design. Generally, vertical

curves with a minimum length (in feet) equal to three times the design speed (in mph) are acceptable...”

Add: “Shall be per approved design for constructability as approved by the City.”

Q: Intersection Radii

Add: Intersection radii may be modified with permission of the City Engineer”

Section 5L - Access Management

Driveway Design Criteria

Amend Table 5L-4.01 and the applicable footnotes both of which modify the residential driveway widths and curb openings.

Table 5L-4.01: Driveway Dimensions¹
(all dimensions are in feet)

Dimension Reference (See Figure 5L-4.01)		Major Arterial Street				Minor Arterial Street				Collector (Major and Minor)				Local Street			
		Residential	Commercial	Industrial	Agricultural	Residential	Commercial	Industrial	Agricultural	Residential	Commercial	Industrial	Agricultural	Residential	Commercial	Industrial	Agricultural
Width																	
Minimum	W	15	24	24	20	15	24	24	20	10	24	24	20	10	24	24	20
Maximum		30	45	45	30	30	45	45	30	38	40	45	30	38	32	40	30
Right-turn Radius ²																	
Minimum	R	10	10	25	25	10	10	25	25	10	10	25	25	10	10	10	20
Maximum		25	35	50	35	25	35	50	35	25	35	50	35	15	20	30	35
Min. Acute Angle ³		60°	70°	70°	70°	60°	70°	70°	70°	60°	70°	70°	70°	60°	70°	70°	70°
Pref. Acute Angle	A	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°
Min. Pavement Thickness (inches)	T	6/8	7/9	*	6	6	7	*	6	6	7	*	6	6	7	*	6

¹Major entrances require special design

²2 foot flares (F) may be used for residential and agricultural entrances.

³Any variation from 90 will be evaluated on a case by case basis. The minimum acute angle (measured from the edge of the pavement) is 60 .

⁴Maximum curb opening width shall not exceed 42 feet for residential driveway openings.

⁵All sidewalks shall be at least five (5) feet in width unless noted otherwise

* Requires special design.

Chapter 12 - Sidewalks and Bicycle Facilities 12A – Sidewalks

General Sidewalk Requirements

Amend SUDAS Design Manual Chapter 12A-Sidewalks, Section B. Sidewalk Classes by adding sub item #4 as follows:

4. General Specifications: These additional general specifications shall apply to all sidewalks in Hiawatha unless noted otherwise:

a. All sidewalks shall be at least five (5) feet in width.

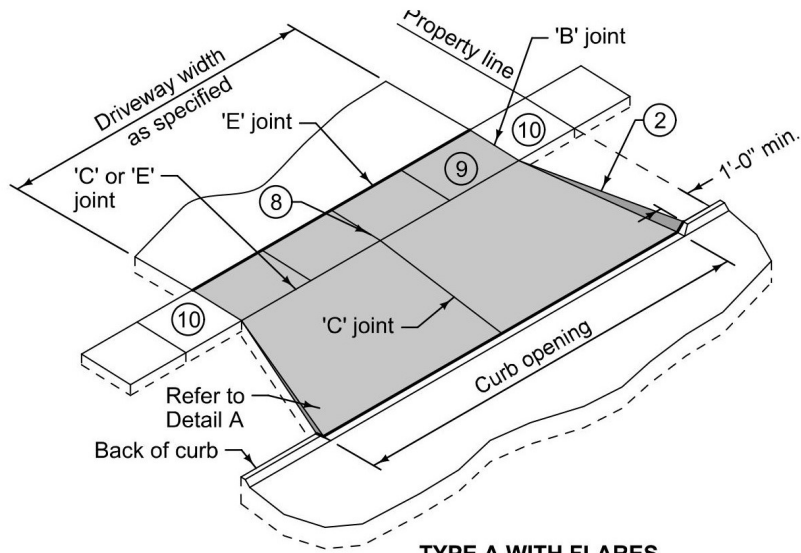
b. All sidewalks shall be Class B sidewalks placed one (1) foot from the edge of the right of way unless noted otherwise and approved by City Council.

FIGURES – Design Manual

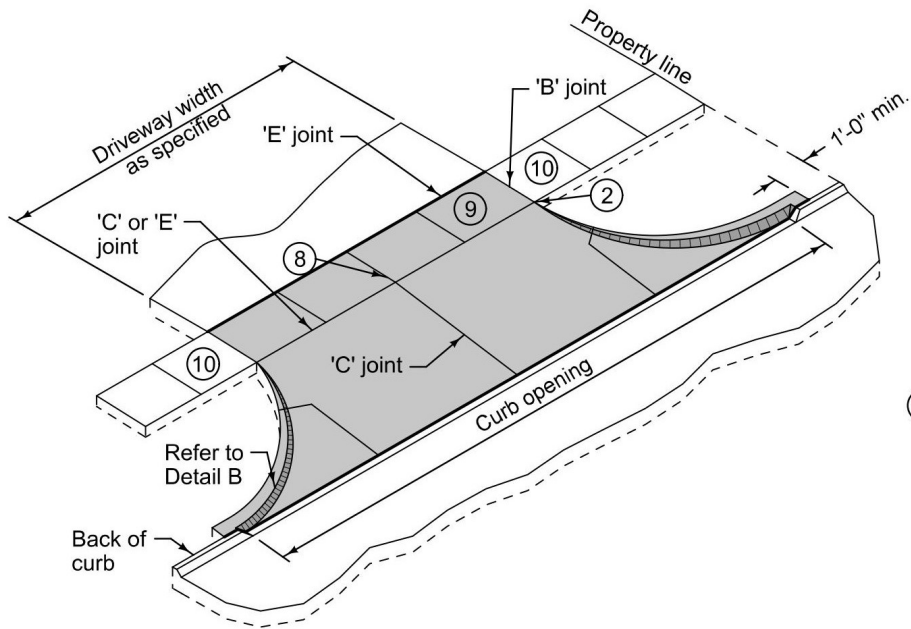
CHAPTER 5 - ROADWAY DESIGN

Figure 5L-4.04 Driveway Details

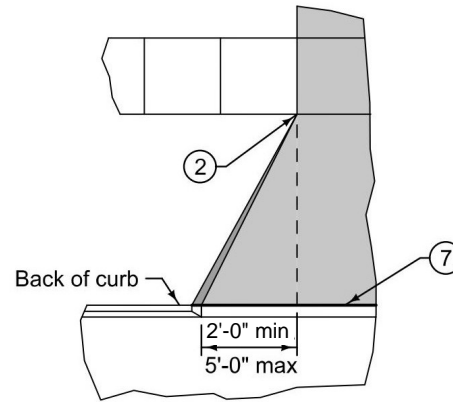
**End of Section
Adopted January 20, 2021
City of Hiawatha Resolution #21-**



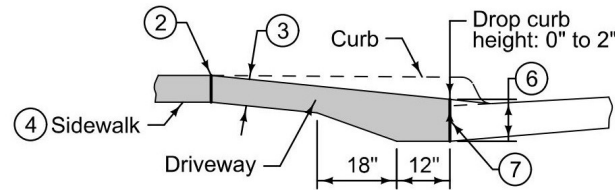
TYPE A WITH FLARES



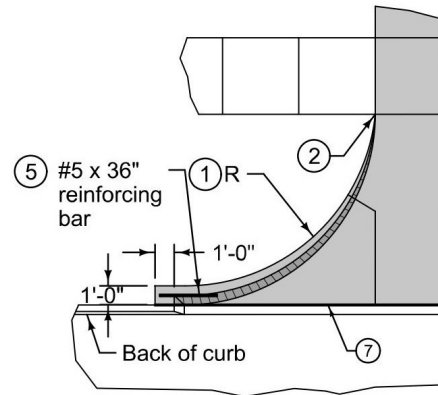
TYPE A WITH RADII



DETAIL A



TYPICAL SECTION



DETAIL B

- ① Driveway radius (R).
Residential: 10 foot minimum, 15 foot maximum.
Commercial and industrial: As specified in the contract documents.
- ② Transition the curb height to 0 inches at end of taper/radius or at the front edge of sidewalk. Do not extend raised curb across sidewalk.
- ③ Pavement thickness.
Residential: 6 inches minimum.
Commercial and industrial: 7 inches minimum.
- ④ Sidewalk thickness through driveway to match thickness of driveway.
- ⑤ Center reinforcing bar vertically in the pavement.
- ⑥ Match thickness of adjacent roadway, 8 inches minimum.
- ⑦ Provide 'E' joint at back of curb unless 'B' joint is specified.
- ⑧ For alleys, invert the pavement crown 2% toward center of alley.
- ⑨ Target cross slope of 1.5% with a maximum cross slope of 2.0%. If specified in the contract documents, construct the sidewalk through the driveway 5 feet wide to serve as a passing space.
- ⑩ If cross slope of adjacent sidewalk panel exceeds 2.0%, remove and replace to transition from existing sidewalk to sidewalk through driveway. If elevation change requires a curb ramp, comply with Figure 7030.205; verify need for detectable warning panel with Engineer.

JOINTS

(C) 1/4"W x 1-1/4"D Saw Cut

(E) 1/2" Expansion Joint*

Note: Expansion joint shall be full depth of pavement

*Joint Sealant Optional

FIGURE 5L-4.04 DRIVEWAYS