

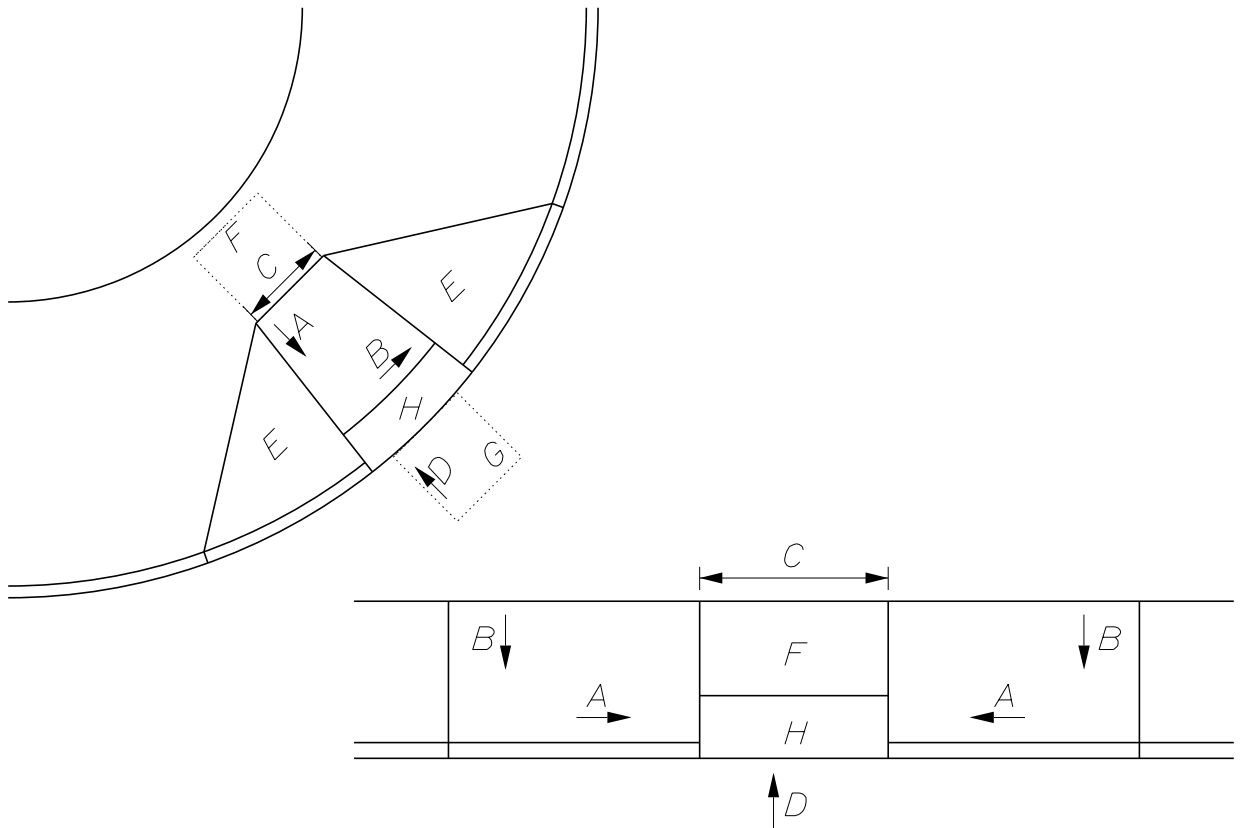
1. *Maximums and minimums do not have tolerances and are not to be exceeded or unmet.*
2. *The standard turning space (level landing) is 4'-0" x 4'-0" sloping no more than 2.0%. Where the turning space is constrained, the turning space shall be 4'-0" minimum by 5'-0" minimum. The 5'-0" dimension shall be provided in the direction of the ramp run.*
3. *Detectable warnings shall be installed at all signed or signalized intersections. They shall have a truncated dome surface. The domes shall be in a square pattern and aligned with pedestrian traffic where possible.*
4. *Detectable warnings shall span the width of the pedestrian ramp. See Standard Detail 608(02).*
5. *All detectable warning fields placed at the same intersection shall be made up of the same uniform material type. Detectable warnings shall be contrasting in color to the adjacent walkway.*
6. *A ramp with a running slope less than 5.0% is defined as a "Blended Transition". Blended transitions do not require a level landing at the top of the ramp. See 80I(26) for details.*
7. *The ramp length shall not exceed 15 feet. Adjust ramp length or slope as needed to provide access to the maximum extent feasible. See 80I(03) for details.*
8. *All curb ramp joints and grade breaks shall be flush.*
9. *Ramp grade breaks shall be perpendicular to the running slope.*
10. *There shall be a minimum of 12" Aggregate Subbase Course - Gravel under the sidewalk surface on pedestrian ramps.*
11. *Drainage structures, traffic signal equipment, or other obstructions shall not be installed in the curb ramp or turning space areas.*
12. *Before retrofitting ramps, the contractor shall verify removal limits are sufficient to provide positive drainage, maintain existing drainage patterns, and avoid ponding in the final configuration.*
13. *A temporary pedestrian access route shall be provided whenever the existing pedestrian access route in the public right of way is blocked by construction, alteration, maintenance, or other temporary conditions. Refer to MUTCD for guidance.*

## *PEDESTRIAN RAMP NOTES*

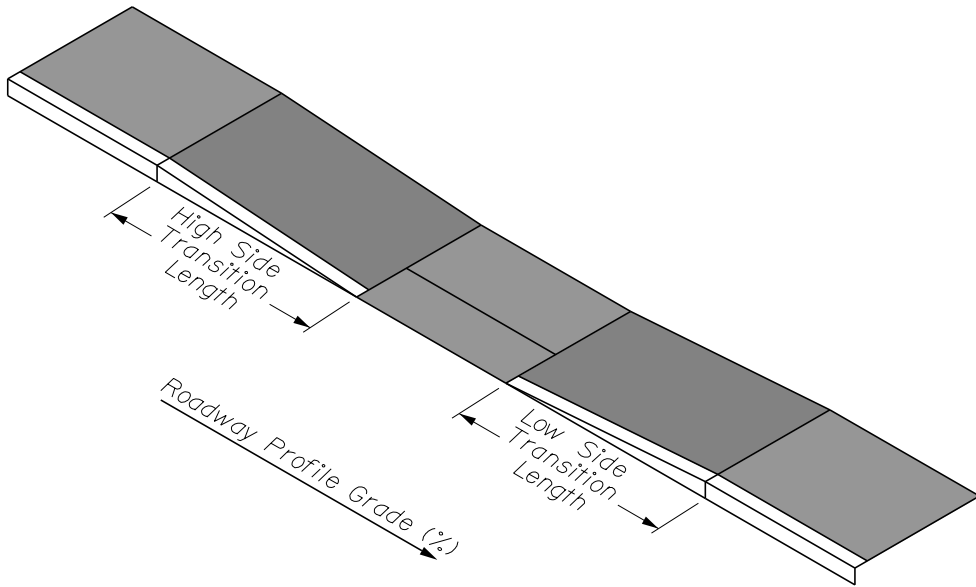
*80I(11)*

## CURB RAMP REQUIREMENTS

<b>Running Slope</b>	A	Max. 8.33% (1:12)
<b>Cross Slope</b>	B	Max. 2% (1:50) <i>Ramp cross slope at street crossings without stop or signal control may match roadway profile.</i>
<b>Clear Width</b>	C	Min. 5 feet <i>For existing ramps only, ramp width may remain 4 feet.</i>
<b>Counter Slope</b>	D	Max. 5% (1:20) <i>Adjacent surface must be flush with the ramp.</i>
<b>Flared Sides</b>	E	Max. 10% (1:10)
<b>Turning Space</b>	F	4 feet by 4 feet <i>Maximum slope of 2% in any direction. May include Detectable Warnings</i>
<b>Clear Space</b>	G	4 feet by 4 feet <i>Located at the bottom of the ramp outside active travel lanes.</i>
<b>Detectable Warnings</b>	H	<i>Required at traffic controlled intersections and mid-block crossings, full ramp width.</i>

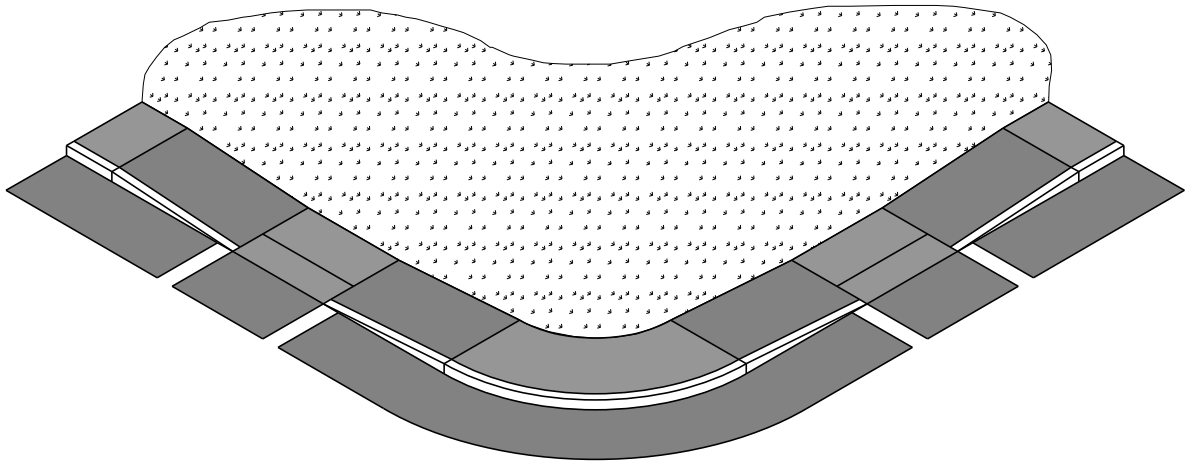


## PEDESTRIAN RAMP REQUIREMENTS

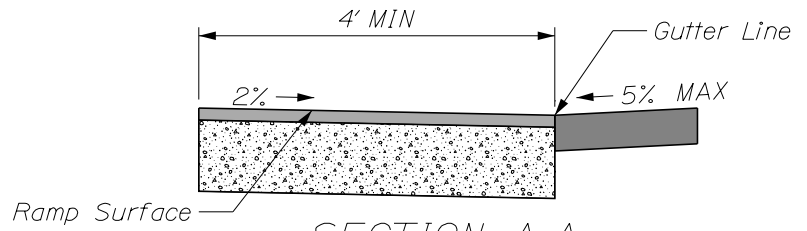


<b>Curb Ramp Length Table</b>						
<b>Curb Reveal (Inches)</b>		<b>7</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>3</b>
	<b>Roadway Profile Grade</b>	<b>Minimum Transition Length Required (Feet)</b>				
<b>Low Side Transition Length</b>	<b>-7% and Lower</b>	4.0	4.0	4.0	4.0	4.0
	<b>-6%</b>	8.0	4.0	4.0	4.0	4.0
	<b>-5%</b>	8.0	4.0	4.0	4.0	4.0
	<b>-4%</b>	8.0	8.0	4.0	4.0	4.0
	<b>-3%</b>	8.0	8.0	4.0	4.0	4.0
	<b>-2%</b>	8.0	8.0	8.0	4.0	4.0
	<b>-1%</b>	8.0	8.0	8.0	4.0	4.0
	<b>0%</b>	8.0	8.0	8.0	8.0	4.0
<b>High Side Transition Length</b>	<b>1%</b>	8.0	8.0	8.0	8.0	4.0
	<b>2%</b>	9.2	8.0	8.0	8.0	4.0
	<b>3%</b>	10.9	9.4	8.0	8.0	8.0
	<b>4%</b>	13.5	11.5	9.6	8.0	8.0
	<b>5%</b>	15.0	15.0	12.5	10.0	8.0
	<b>6%</b>	15.0	15.0	15.0	14.3	10.7
	<b>7% and Higher</b>	15.0	15.0	15.0	15.0	15.0

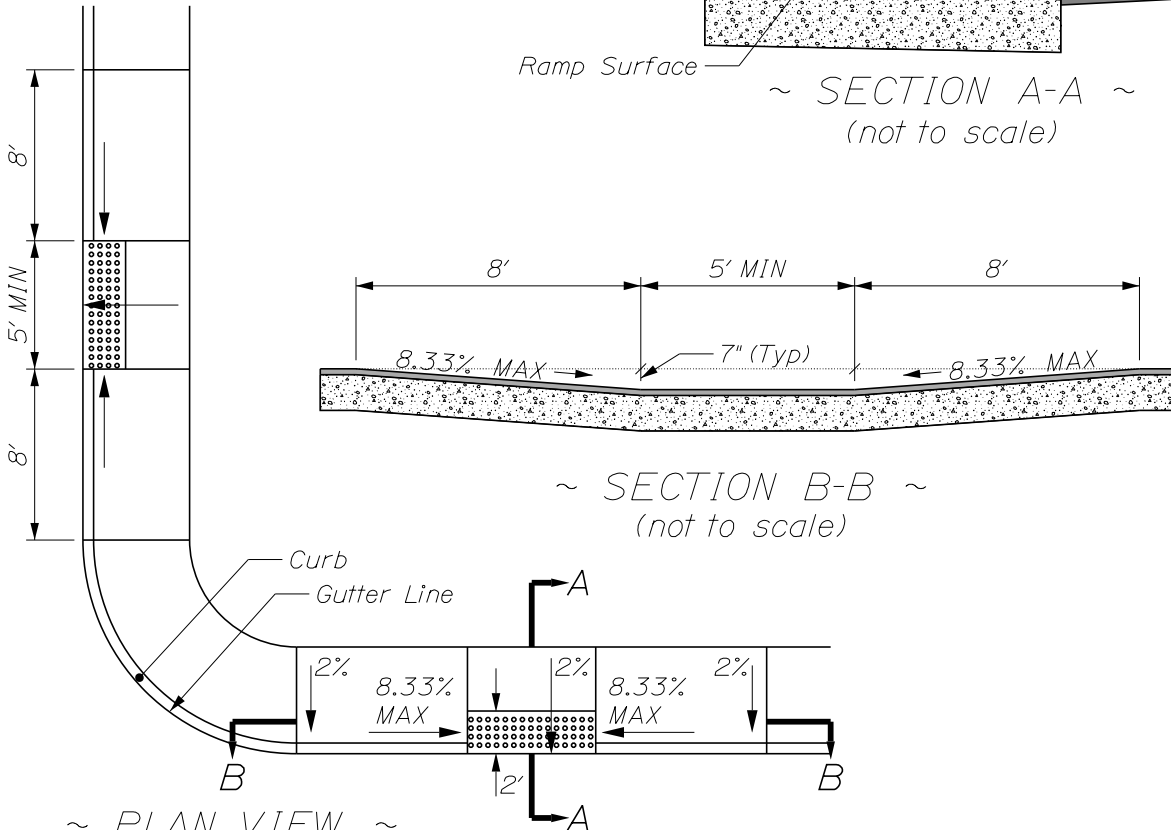
*This table represents the minimum length of a curb ramp based on the existing roadway profile and the curb reveal along the sidewalk. The minimum transition length required is based on 8.33% slope and the indicated curb reveal. Roadway profile grade should be rounded up to the nearest whole integer.*



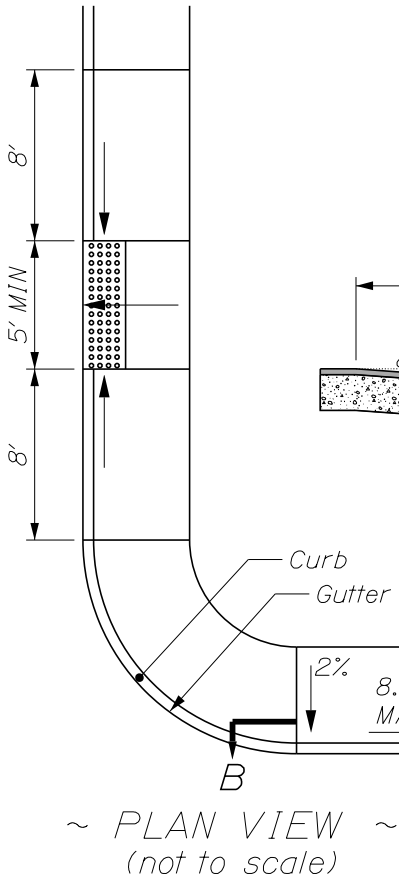
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~ SECTION A-A ~  
(not to scale)



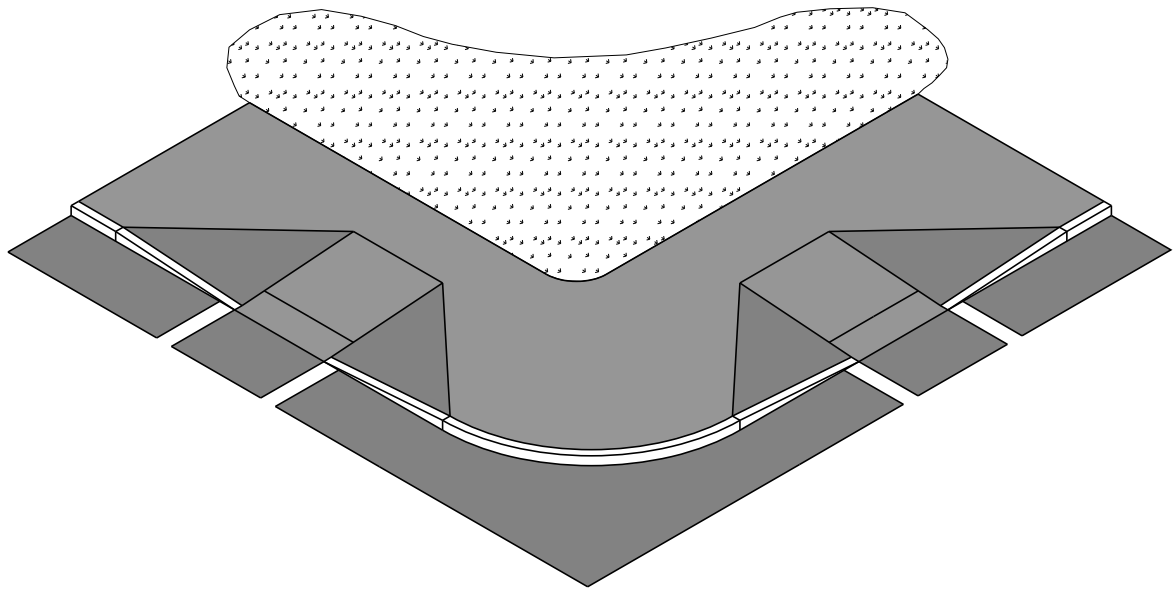
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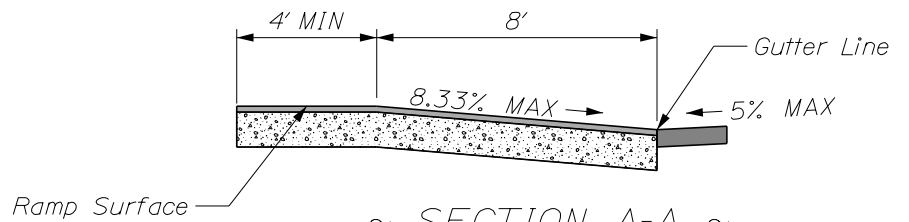
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(not to scale)

**Note:**

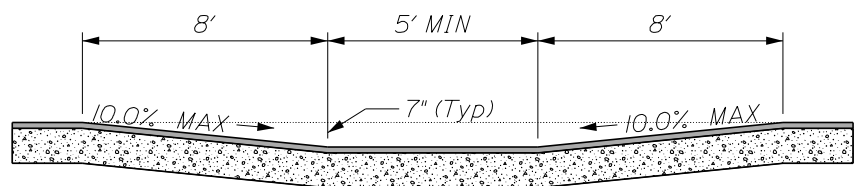
- This desirable design is the preferred option. Use other options only when required by design constraints.



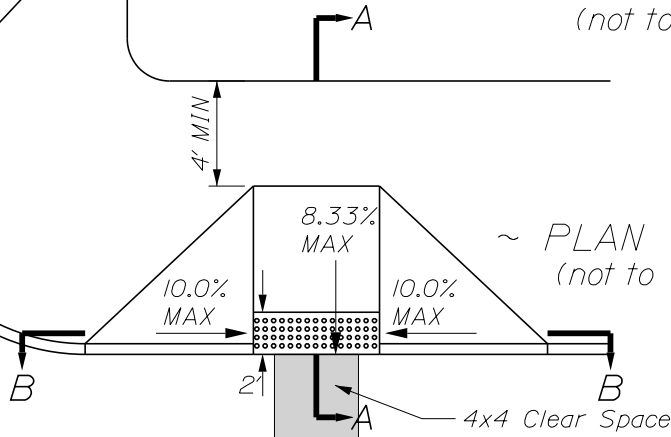
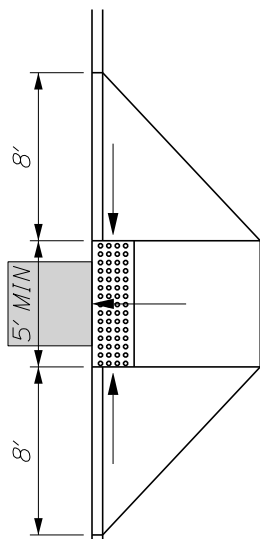
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(not to scale)



~ SECTION B-B ~  
(not to scale)

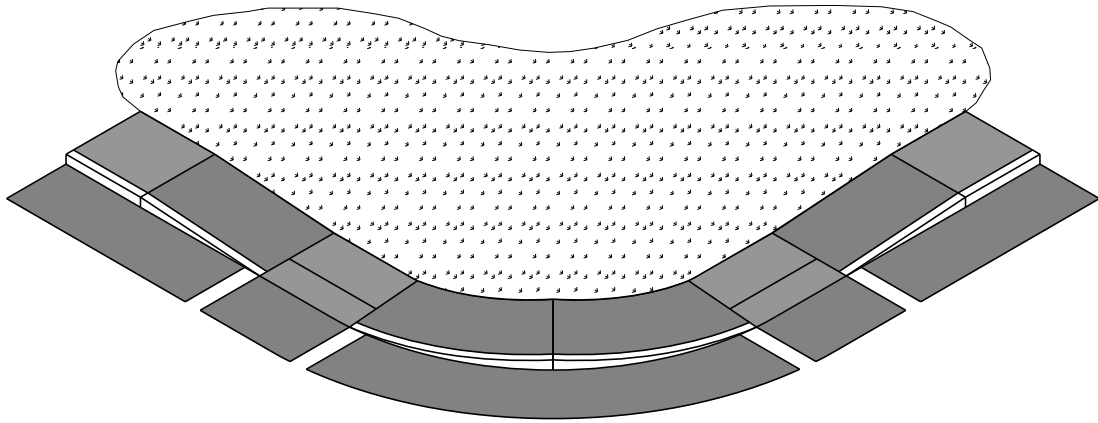


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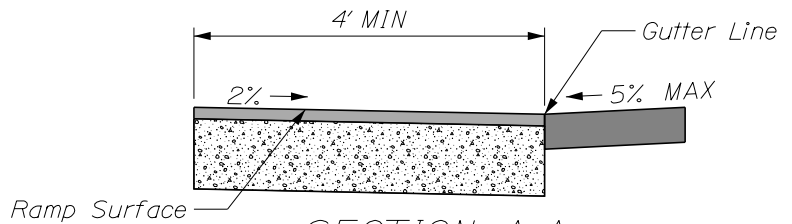
Note:

- This desirable design is the preferred option. Use other options only when required by design constraints.

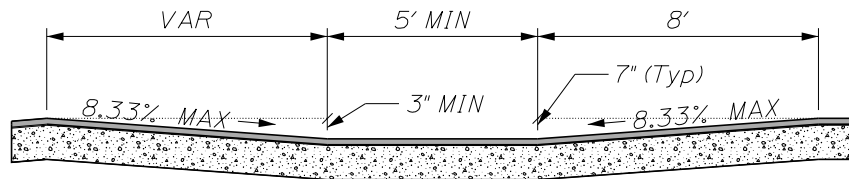
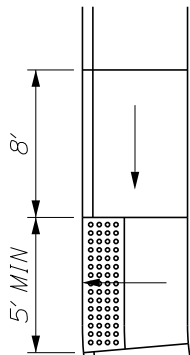
PERPENDICULAR PEDESTRIAN RAMP - OPTION 1  
801(15)



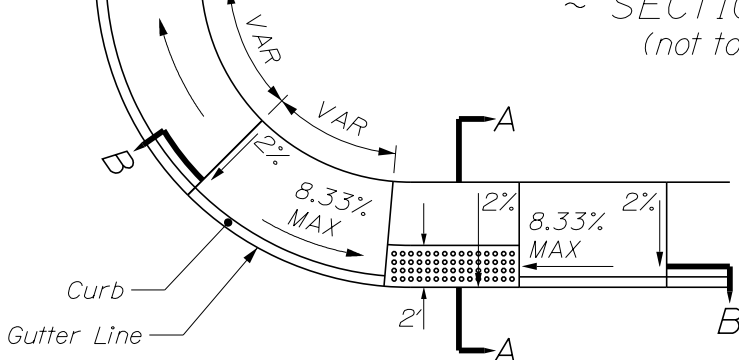
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(not to scale)



~ SECTION A-A ~  
(not to scale)



~ SECTION B-B ~  
(not to scale)



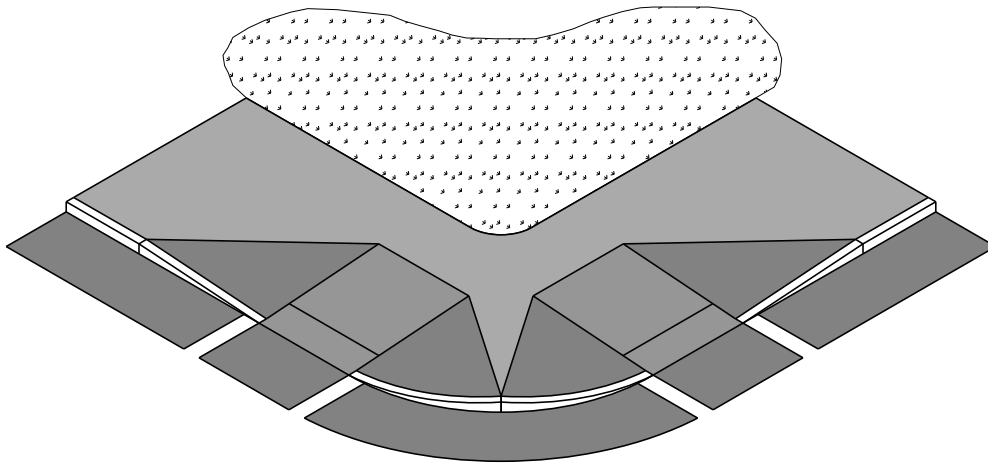
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Notes:

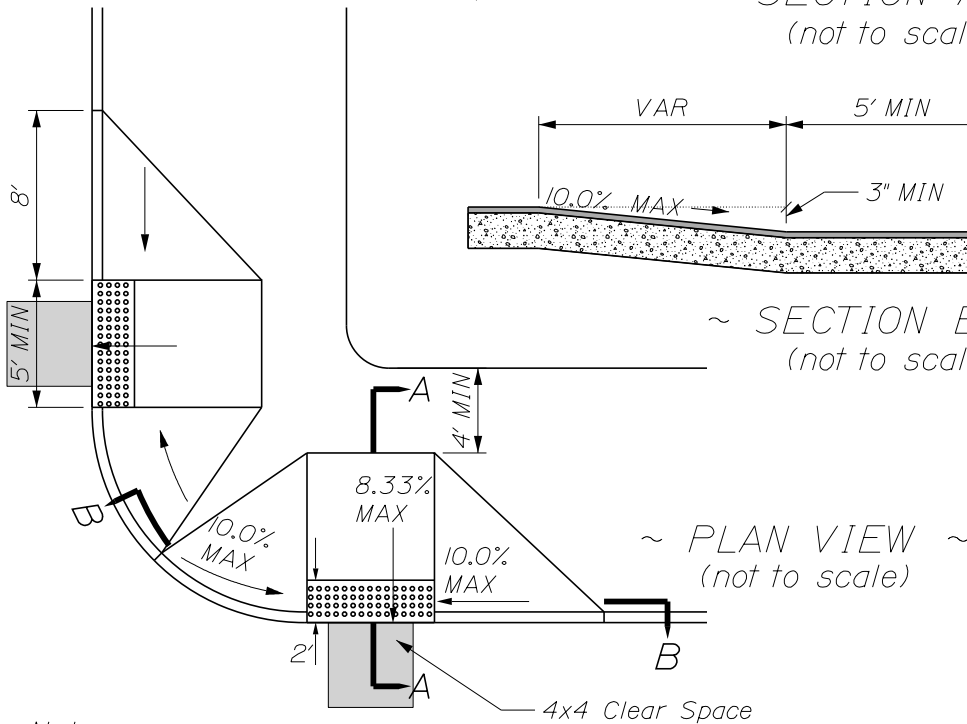
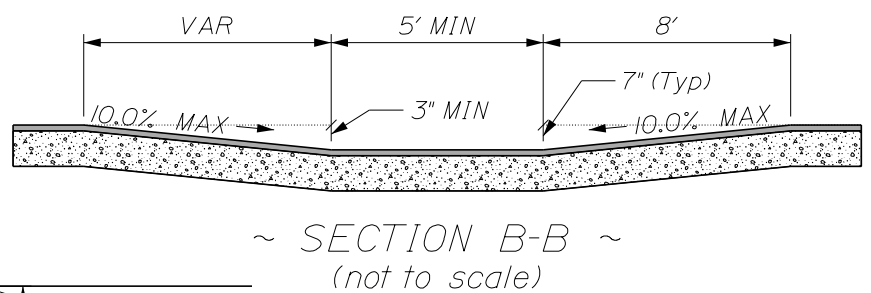
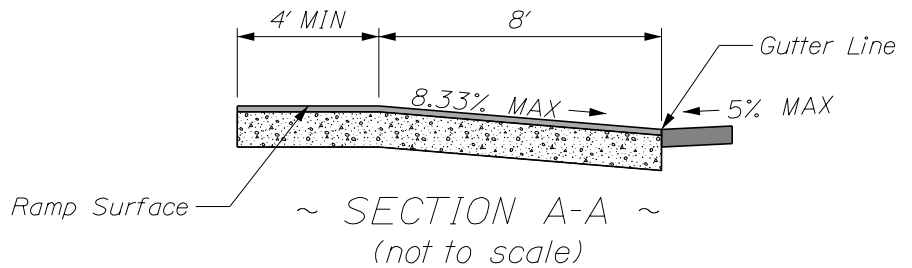
- This less desirable design should not be used unless required by design constraints. It may not provide adequate curb reveal. Use Option 1 when possible.
- No vehicular access shall be permitted through the radius curb.
- A minimum curb reveal of 3" is required at the apex of the curb radius.
- Minimum terminal curb length shall be 4ft.

PARALLEL PEDESTRIAN RAMP - OPTION 2A

80I(16)

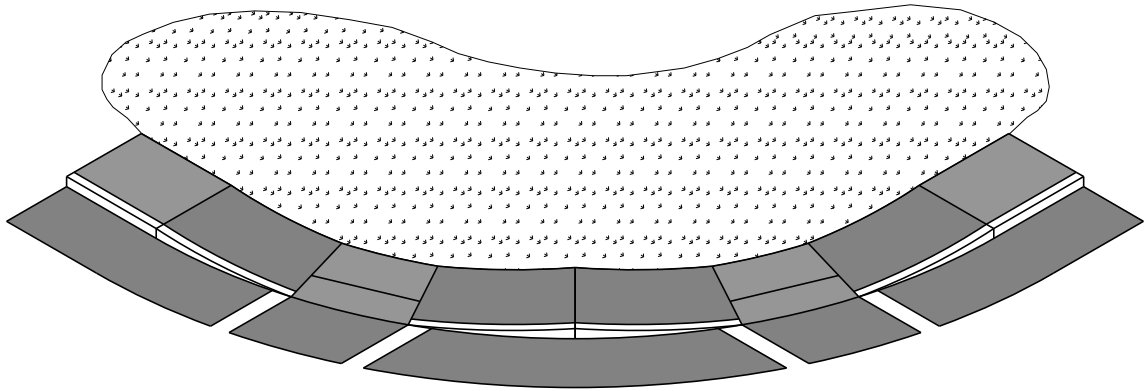


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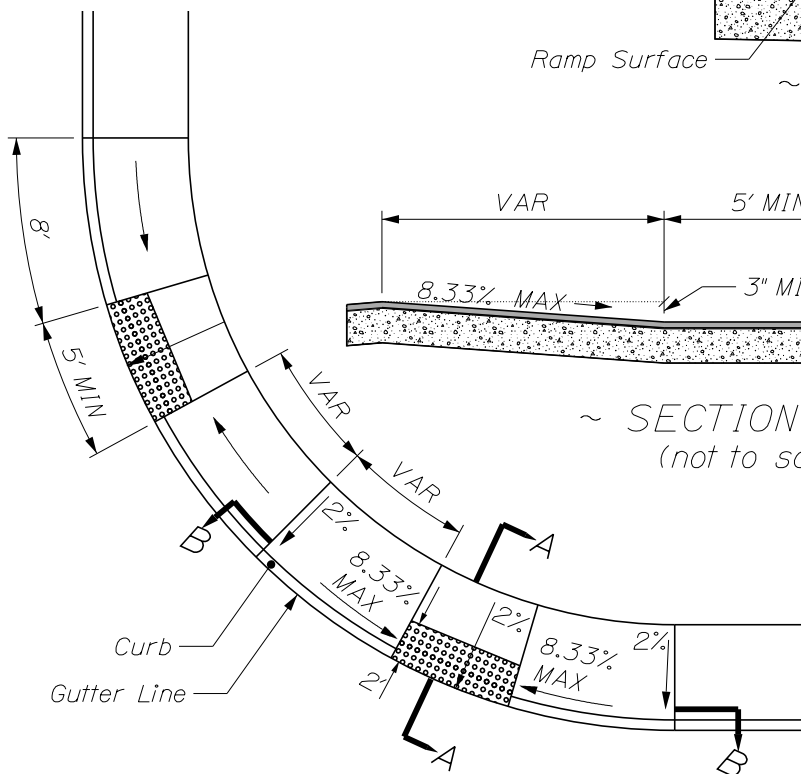
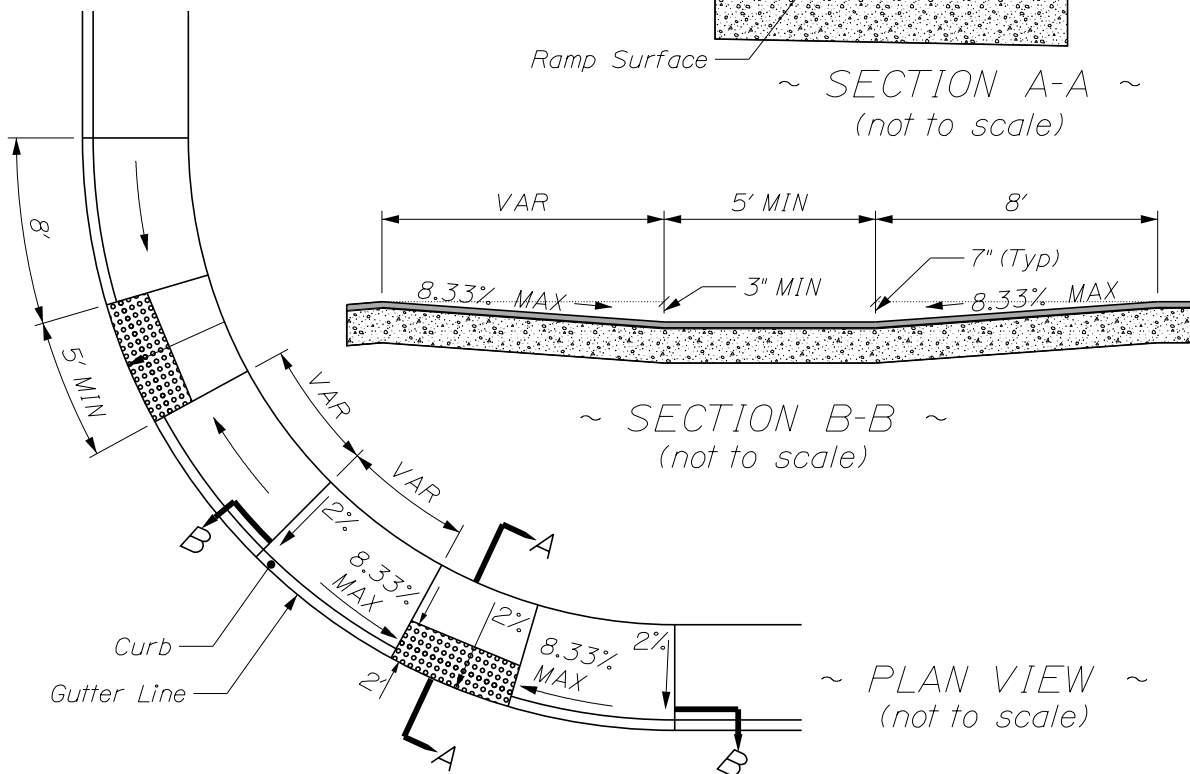
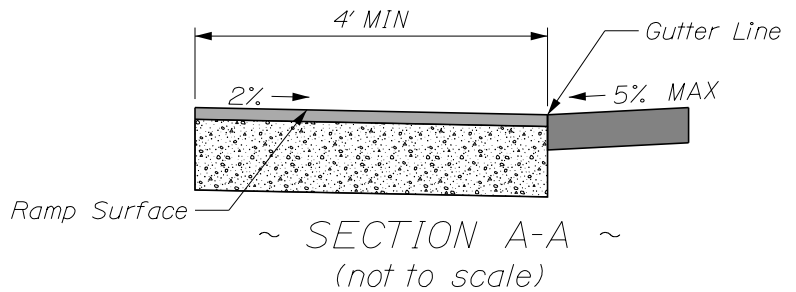


**Notes:**

- This less desirable design should not be used unless required by design constraints. It may not provide adequate curb reveal. Use Option 1 when possible.
- No vehicular access shall be permitted through the radius curb.
- A minimum curb reveal of 3" is required at the apex of the curb radius.
- Minimum terminal curb length shall be 4ft.



~ ISOMETRIC VIEW ~  
(not to scale)

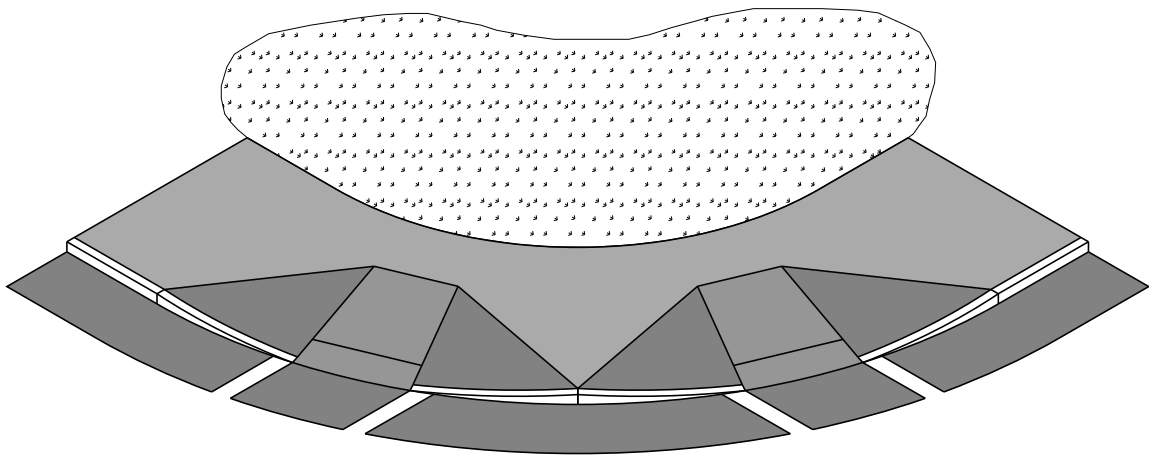


**Notes:**

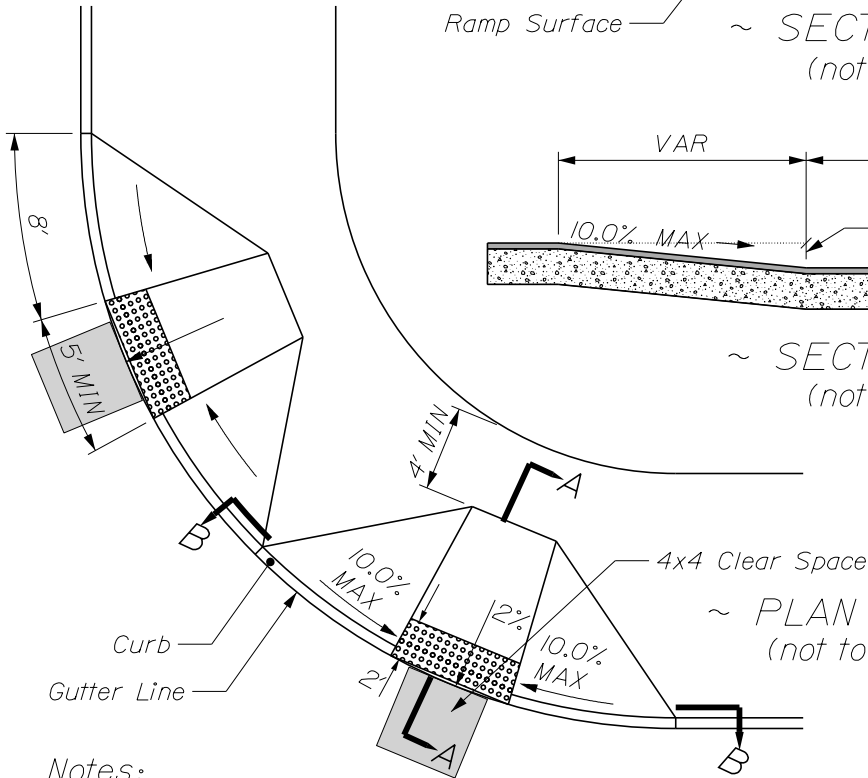
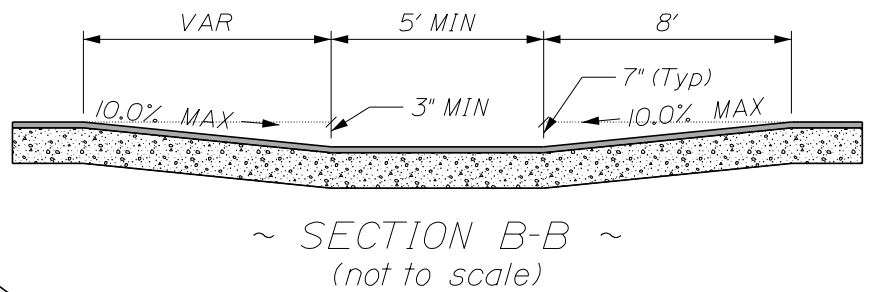
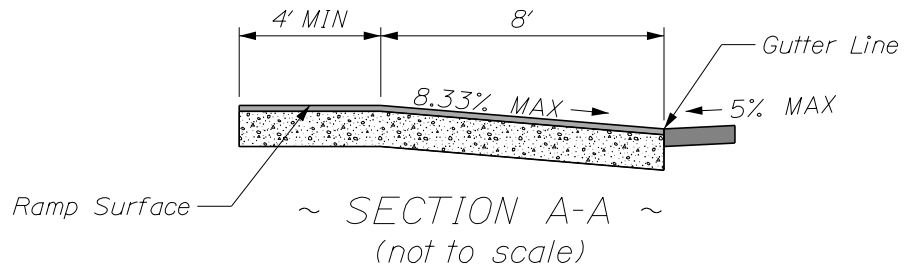
- This less desirable design should not be used unless required by design constraints. It may not provide adequate curb reveal. Use Option 1 when possible.
- No vehicular access shall be permitted through the radius curb.
- A minimum curb reveal of 3" is required at the apex of the curb radius.
- Minimum terminal curb length shall be 4ft.

PARALLEL PEDESTRIAN RAMP - OPTION 2B



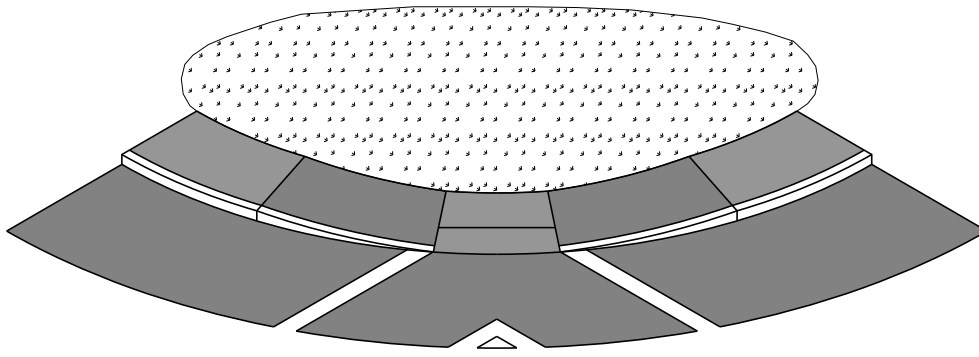


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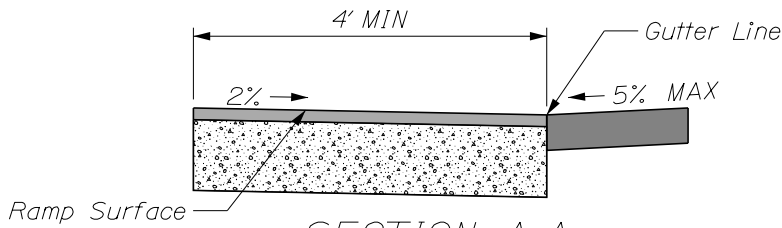


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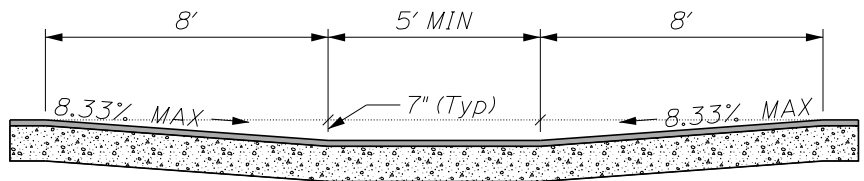
- This less desirable design should not be used unless required by design constraints. It may not provide adequate curb reveal. Use Option 1 when possible.
- No vehicular access shall be permitted through the radius curb.
- A minimum curb reveal of 3" is required at the apex of the curb radius.
- Minimum terminal curb length shall be 4ft.



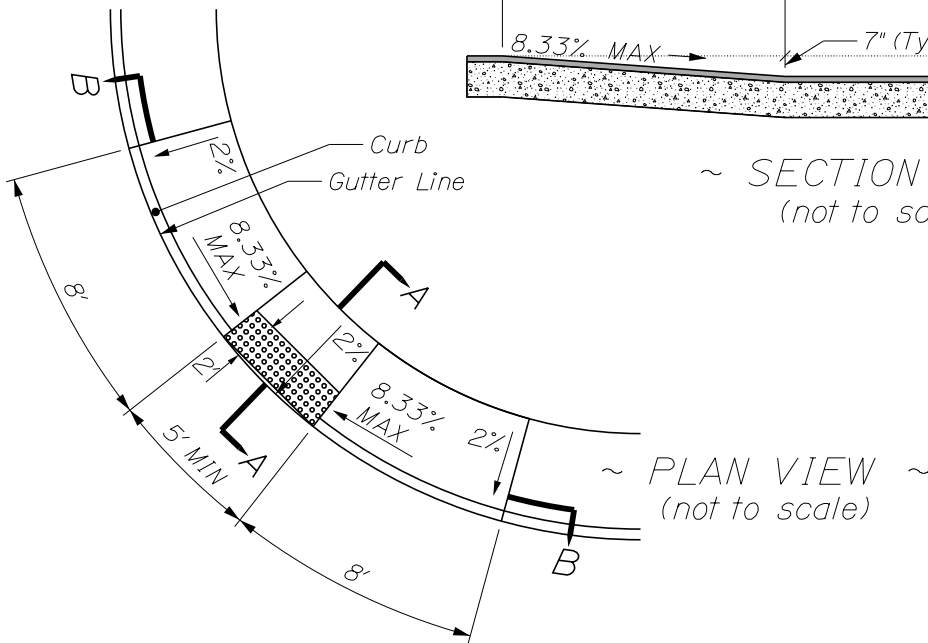
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(not to scale)



~ SECTION A-A ~  
(not to scale)



~ SECTION B-B ~  
(not to scale)

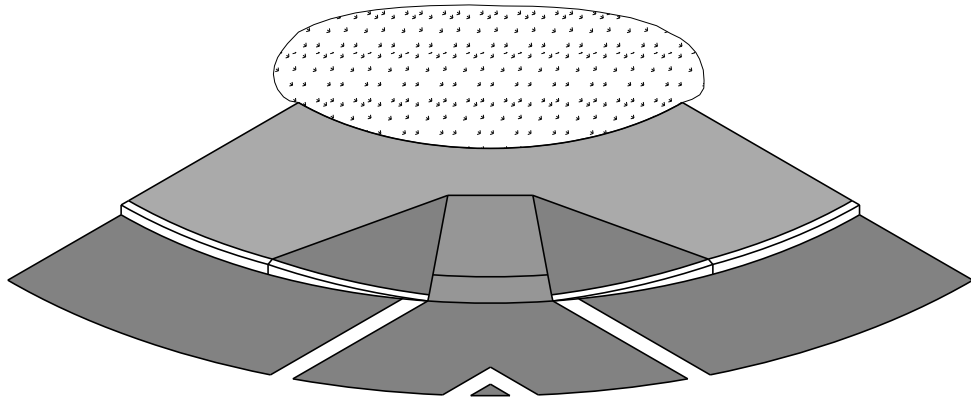


~ PLAN VIEW ~  
(not to scale)

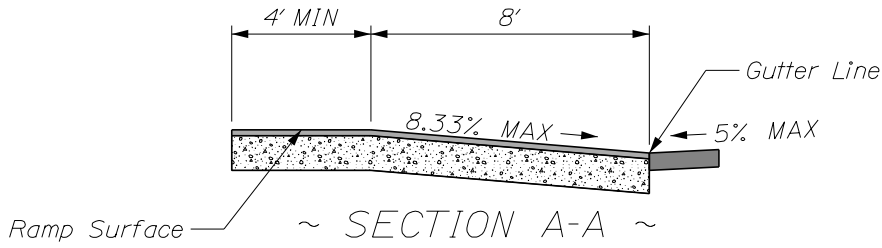
*Notes:*

- This less desirable design should not be used unless required by design constraints. It does not provide directional cues. Use Option 1 or Option 2 when possible.
- No vehicular access shall be permitted through the curb radius.

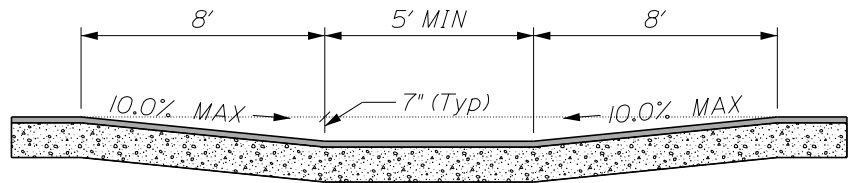
PARALLEL PEDESTRIAN RAMP - OPTION 3  
80I(20)



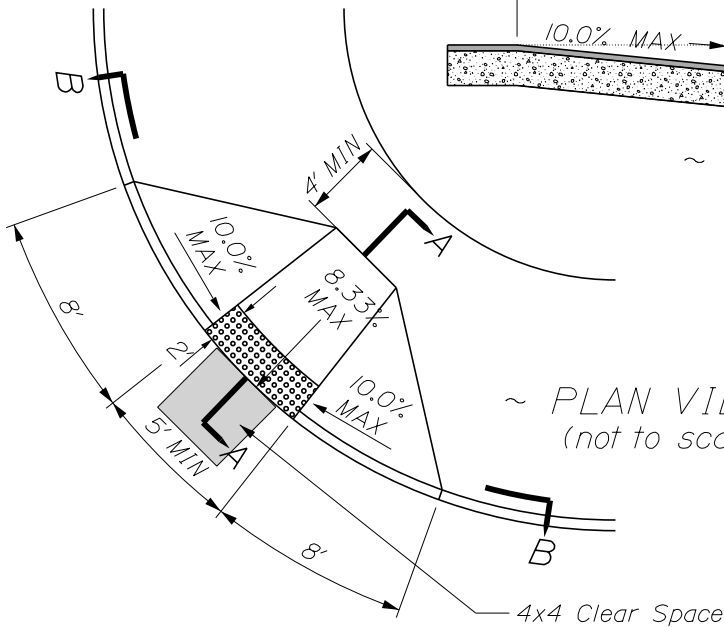
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(not to scale)



~ SECTION A-A ~  
(not to scale)



~ SECTION B-B ~  
(not to scale)

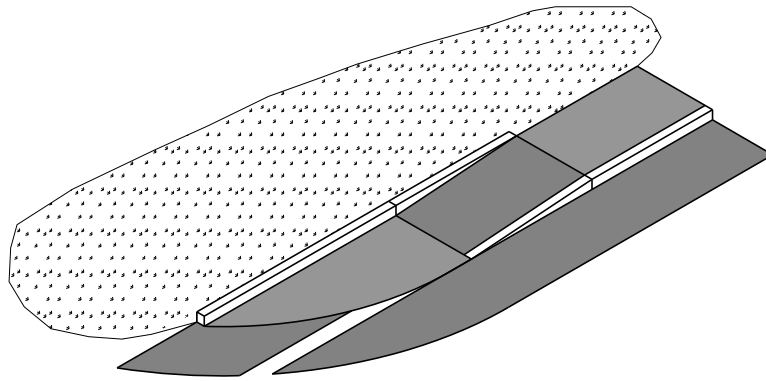


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(not to scale)

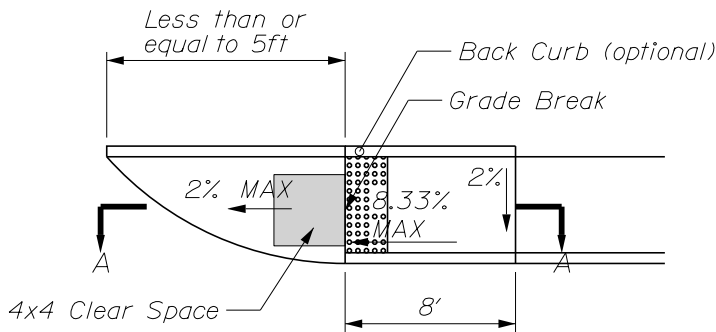
Notes:

- This less desirable design should not be used unless required by design constraints. It does not provide directional cues. Use Option 1 or Option 2 when possible.
- No vehicular access shall be permitted through the curb radius.

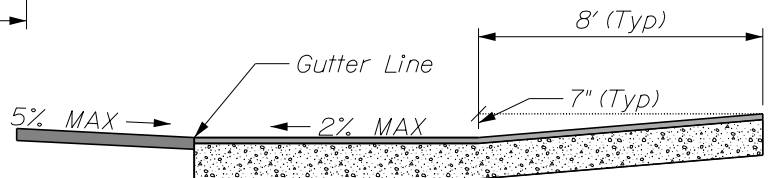
PERPENDICULAR PEDESTRIAN RAMP - OPTION 3



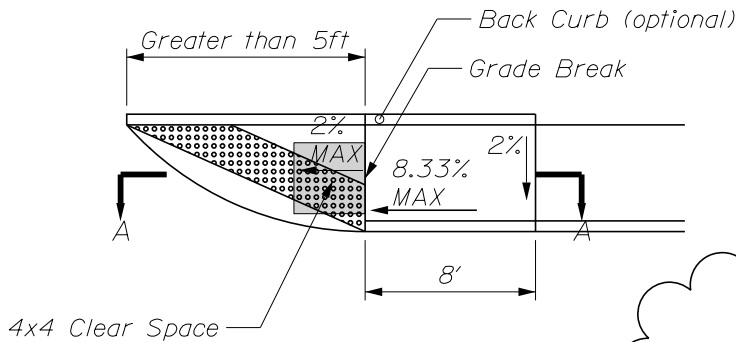
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(not to scale)



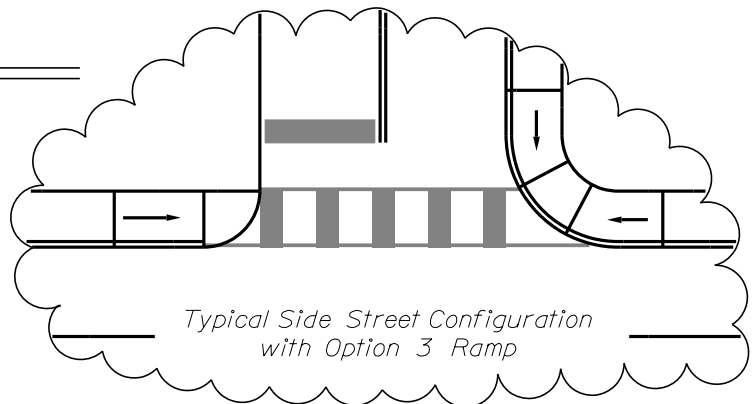
~ \*PLAN VIEW\* ~  
(not to scale)



~ SECTION A-A ~  
(not to scale)



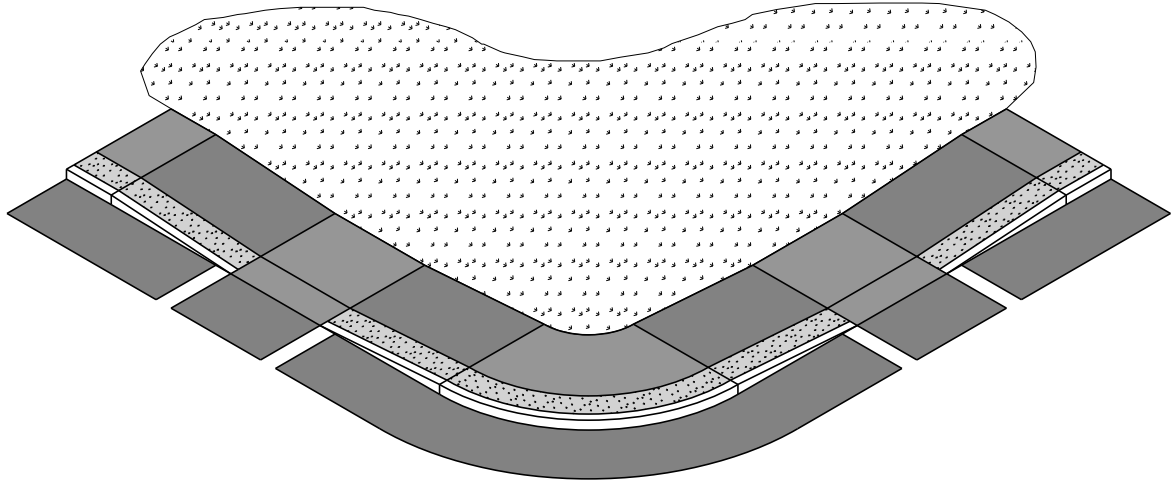
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(not to scale)



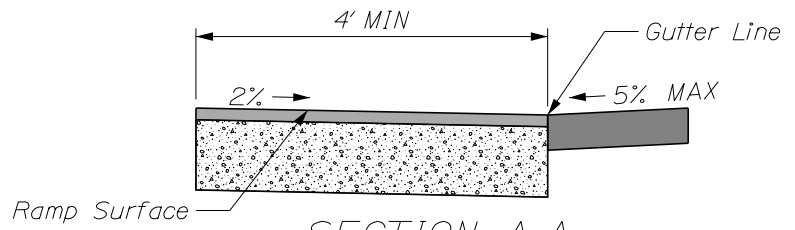
Typical Side Street Configuration  
with Option 3 Ramp

Note:

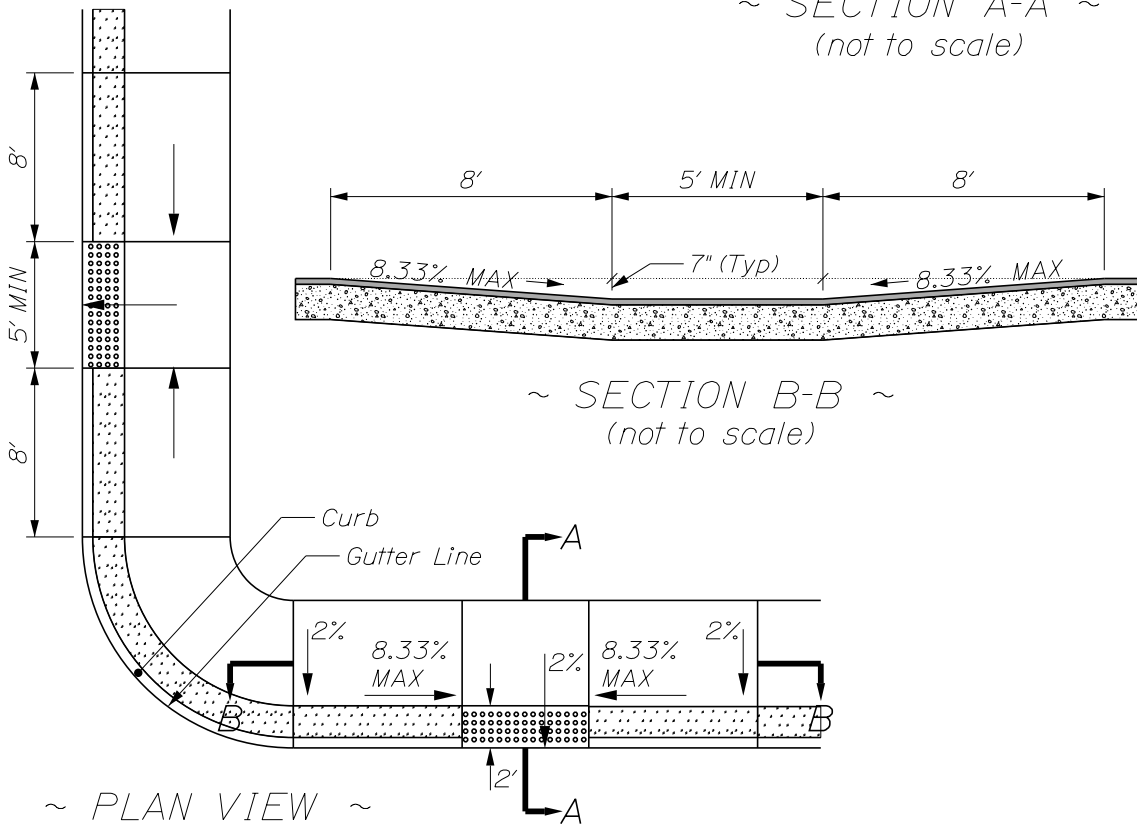
- No vehicular access shall be permitted through the curb radius.
- For use only when no sidewalk is present on the side road.
- \* Use this detectable placement if the distance from the grade break to the gutterline is less than or equal to 5ft.
- \*\* Use this detectable placement if the distance from the grade break to the gutterline is greater than 5ft.



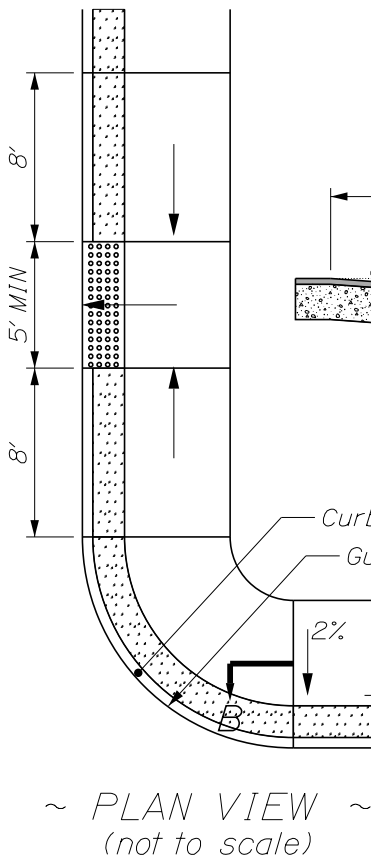
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(not to scale)



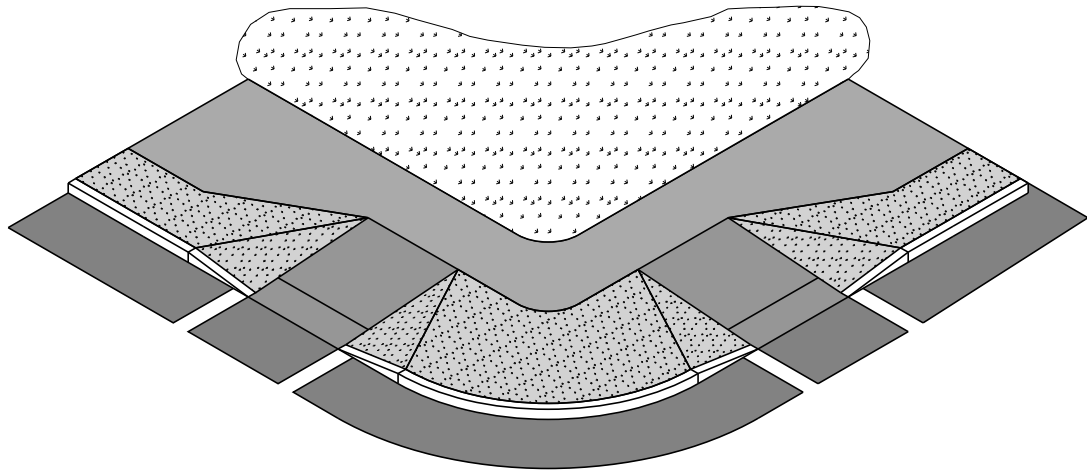
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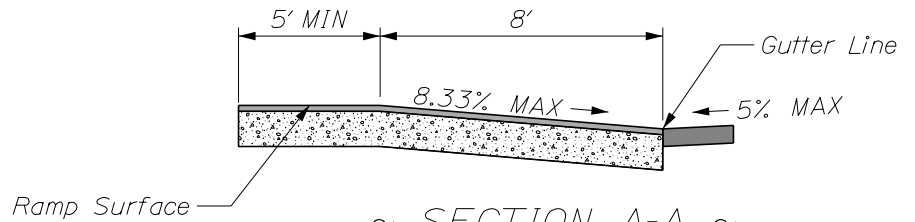
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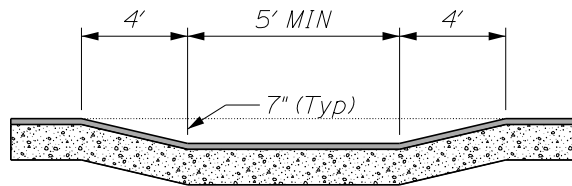
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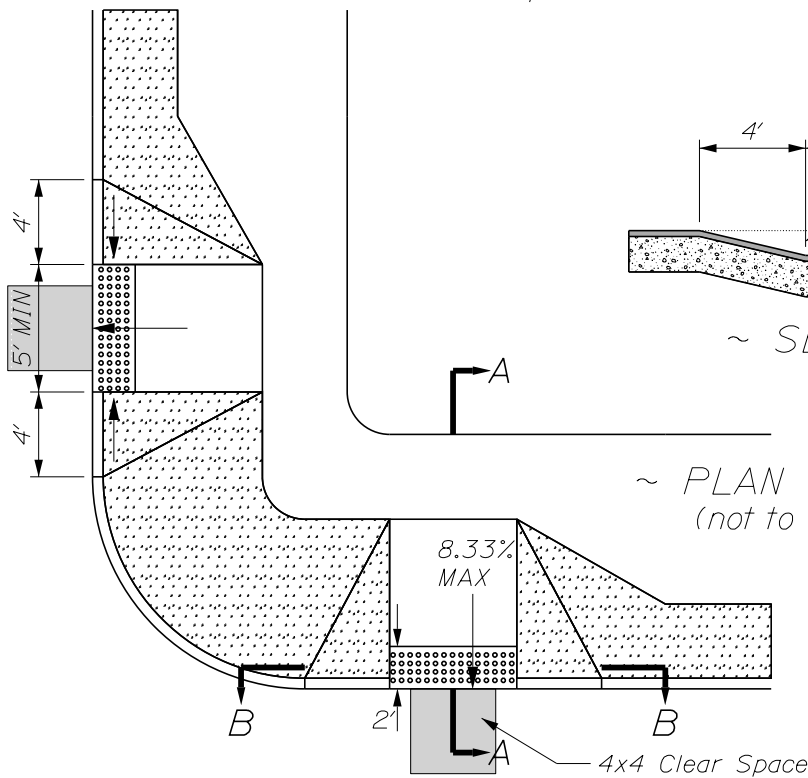
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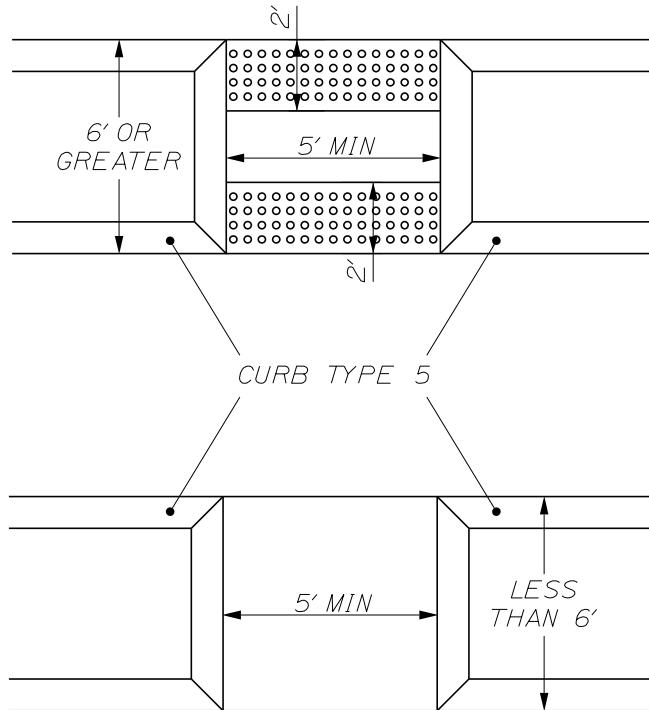
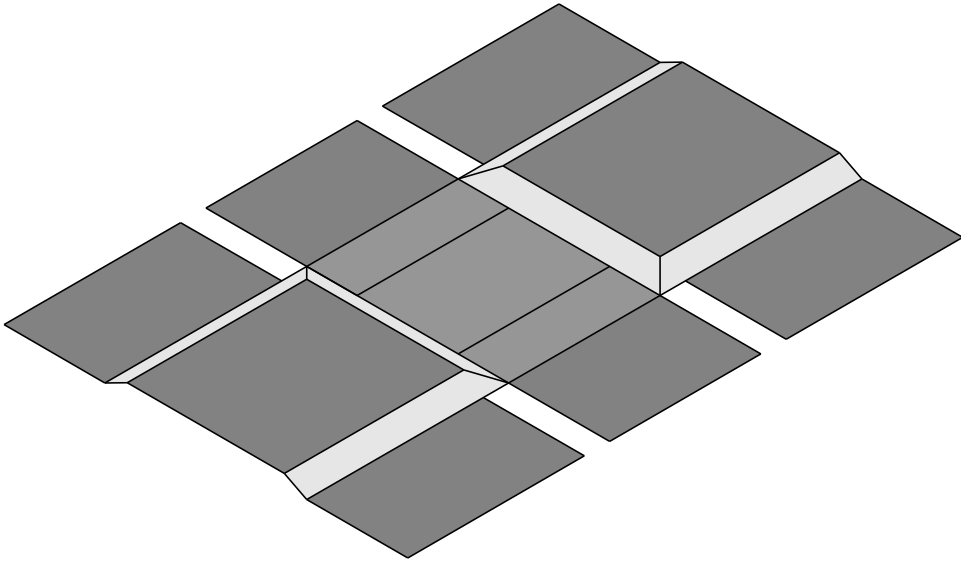
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(not to scale)



~ SECTION B-B ~  
(not to scale)



~ PLAN VIEW ~  
(not to scale)

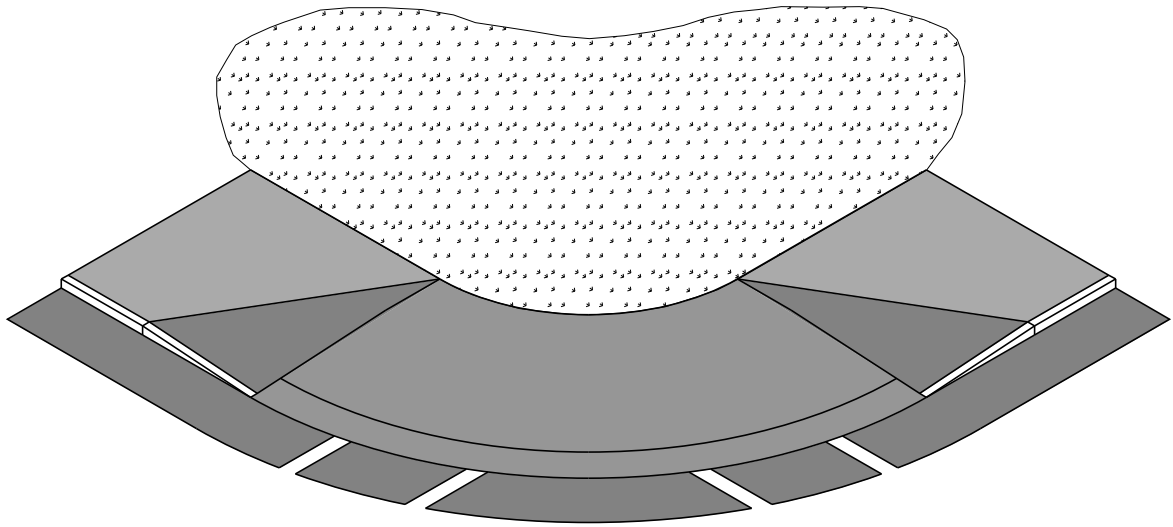


Note:

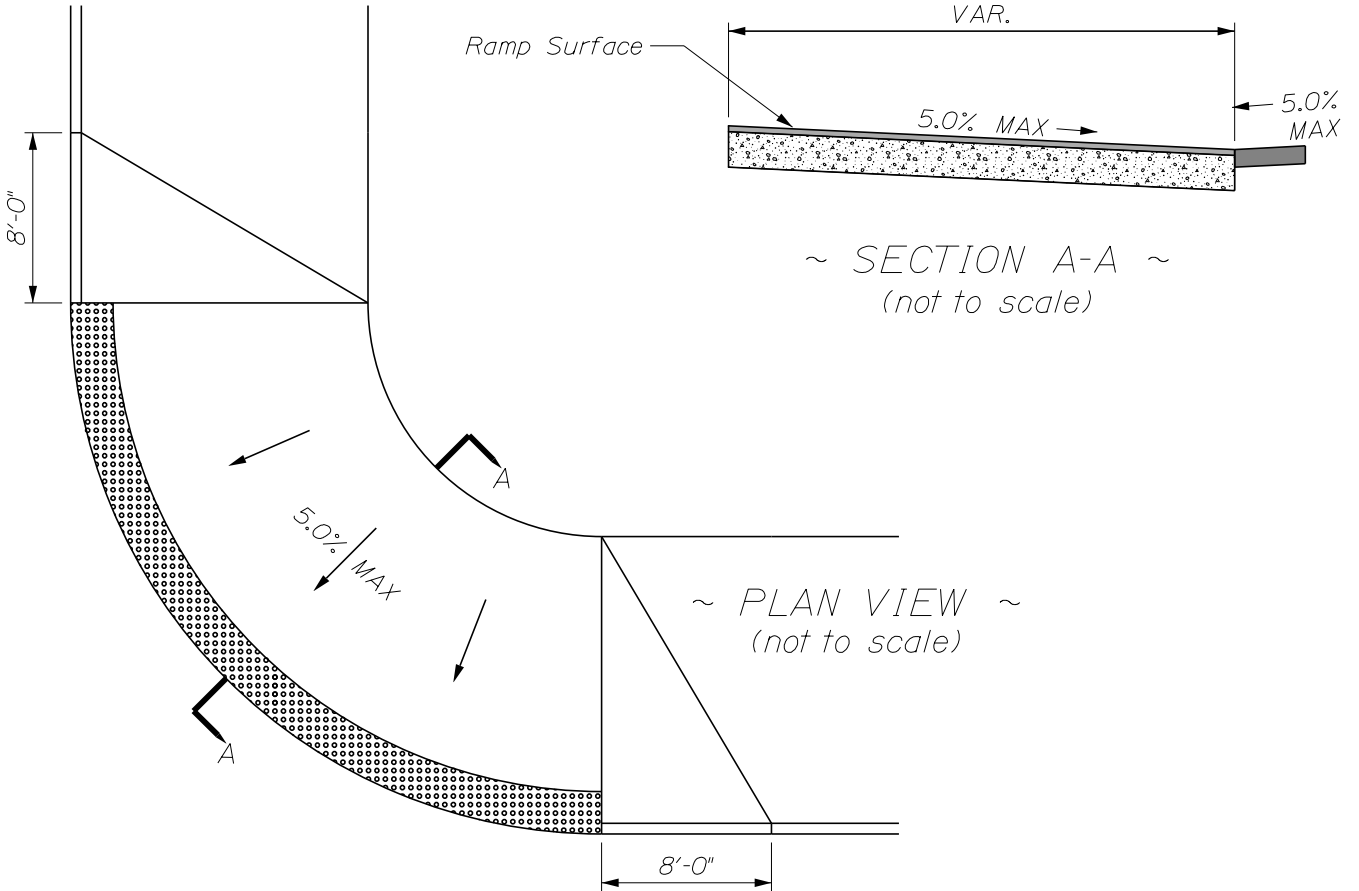
- Omit Detectable Warnings if the island crossing is less than 6'-0".

# ISLAND CROSSINGS

80(25)



~ ISOMETRIC VIEW ~  
(not to scale)



~ SECTION A-A ~  
(not to scale)

~ PLAN VIEW ~  
(not to scale)

Note:  
This option should only be used after all other options have been considered and deemed infeasible.