

ADA Compliance Checklist Guidance [Curb Ramps]



Contents

i)	Introduction1
ii)	Accessing the Compliant Checklist Form template on SharePoint2
1.	Filling out the right SP Number4
2.	Determine the intersection names4
3.	City
4.	District
5.	Quadrant4
6.	Ramp Type4
7.	Construction Year5
8.	Switch View/Display Form5
9.	Picture Attachment5
10.	Pedestrian Access Route (PAR)5
11.	Landing Slopes5
12.	Landing Dimension & Grade Break6
13.	Landing Locations6
14.	Ramp's Running Slope6
15.	Ramp's Cross Slope6
16.	Gutter Flow Line7
17.	Gutter Inslope
18.	Roadway Cross Slope7
19.	Spec 2521.3 Joint7
20.	Truncated Domes
21.	Water Flow and Drainage8
22.	Vertical Discontinuities8
23.	Ramp Compliance8
24.	Comments and General Non-Compliant Reason(s)9
25.	Construction Plan Correlation9
26.	Printed Name9
27.	Printed Date9

28.	Information Accuracy	9
29.	Submission	9
APPE	ENDIX	
Fig	gure 1 – Combined Directional	
Fig	gure 2 – Fan	11
Fig	gure 3 – Depressed Corner	
Fig	gure 4 – Tiered Perpendicular	
Fig	gure 5 – One-way Directional	
Fig	gure 6 – Parallel	13
Fig	gure 7 – Twin Perpendicular	
Fig	gure 8 - Intersection and Quadrant identification (1)	
Fig	gure 9 - Intersection and Quadrant identification (2)	14
Fig	gure 10a - Spec 2521.3c	15
Fig	gure 10b - Spec 2521.3c (allowable joint displacement)	15

i) Introduction

The **ADA Compliance Checklist** forms have been used extensively by the ADA Operations Unit since 2010 for federal compliance in conjunction with PROWAG in the field to ensure curb ramps are built to ADA compliance and MnDOT quality. However, most data collection was done on paper and the submission process had inefficiencies such as mailing paper copies or scanning the entire compilation of forms (sometimes up to 200 pages) to send out as email, and then finally entered into spreadsheet for analysis.

Although this had been done for the past few years, the percentages of submissions sent in by the construction staff is still well below expectation. The records show that only 31% of the total number of projects had compliance forms submitted to the ADA Ops. This can have a huge effect on statewide program as the number of compliant curb ramps is unclear for making crucial decisions.

By integrating ADA Compliance Checklist Forms into MnDOT's SharePoint library database, the submission procedure has moved online. With this, both *paper waste* and *man hour* spent on filling out the form multiple times by different entities will be reduced.

IMPORTANT: Only MnDOT employees are able to access the ADA SharePoint Library. Locals/Consultants will have to use the offline form supplied as mentioned below.

Internet connection

The online compliance form can only be used with an internet connection. If forms are to be used in the field, ensure there will be a signal at project location before utilizing mobile devices/tablet (e.g. iPad) for form submission.

What if - no internet connection?

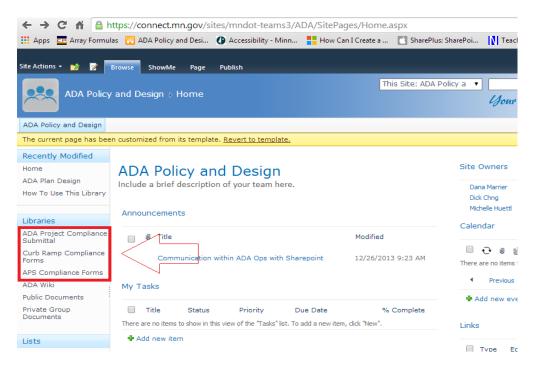
For projects located in areas with limited connectivity (weak signal/no internet), print out the compliance checklist forms <u>http://www.dot.state.mn.us/ada/tools.html</u> and fill it out on site. Enter all the acquired information on SharePoint (as shown in the next section) when internet is available.

For Tablet users:

DO NOT use **Safari** browser (the default browser for Apple devices) on iPads (or any other tablet that uses Safari) to fill out the compliance checklist form. The form may work but any attempt at uploading attachment(s) will crash the form. Alternatively, you can download Google Chrome (tested) or any other browser of your preference off App Store.

ii) Accessing the Compliant Checklist Form template on SharePoint

a) Open up your browser (preferably Internet Explorer for best view of the form) and key in address: https://connect.mn.gov/sites/mndot-teams3/ADA/SitePages/Home.aspx
If you try to access the site from an external network, there will be a security prompt.
Login with your AD (Network) username and password (e.g. Username: AD\john1doe):

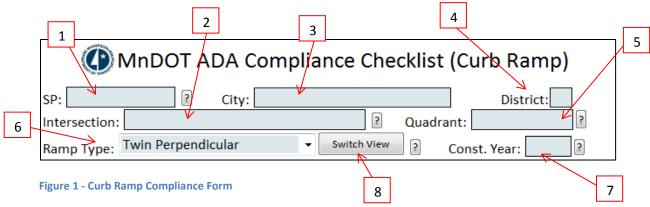


 b) Click on the left tab "Curb Ramp Compliance Forms" (or APS Compliance Form/ADA Project Compliance Submittal depending on which form you are submitting).

		n → Curb Ramp nce Library ~	Compli	ance Foi	rms ⊧	This L	ist: Curb Ran	np C ▼
		pload filled out comp ith Internet Explore		ecklists for	completed AI	DA curb		'JI
ADA Policy and Design	Dest vieweu w	ith Internet Explore						
· · · · · · · · · · · · · · · · · · ·								
Libraries	District	Name	SP #	City	Const Year	Intersection	Quad	Ramp Type
ADA Project Compliance Submittal	4	TH 32 and McKinley Ave	1403- 24	Hitterdal	2012	TH 32 and McKinley Ave	SW	Twin Perpendicular
Curb Ramp Compliance Forms		W_1403- 24_2014-01- 09T15 41 24				W		
APS Compliance Forms	4		4.400		2010	TH 32 and CR		Twin
ADA Wiki	4	TH 32 and CR 34_1403- 24_2014-01- 09T15 43 49	1403- 24	Hitterdal	2012	1H 32 and CR 34	NE	Perpendicular
Public Documents								
Private Group Documents	4	 TH 32 and CR 34_1403- 24_2014-01-	1403- 24	Hitterdal	2012	TH 32 and CR 34	SW	Twin Perpendicular
Lists		09T15_45_06						
Announcements	4	TH 32 AND CR 34_1403- 24_2014-01-	1403- 24	Hitterdal	2012	TH 32 AND CR 34	NW	Twin Perpendicular
Calendar								
Tasks	4	13T14_28_46 TH 32 AND CR 140	1403-		2012	TH 32 AND CR 34	SE	Twin Perpendicular
	-	34_1403-	24					
Discussions		24_2014-01- 13T14 30 05						
Team Discussion	4	TH 32 AND LINCOLN_1403- 24_2014-01- 14T14 33 18	1403- 24		2012	TH 32 AND LINCOLN	SOUTHWEST	Twin Perpendicular

c) Once at the Compliance Form Library, scroll to the bottom of the page and click "Add Document" (Note: if you do not have access, you will not be able to see the option).

Site	Content		LINCOLN_1403- 24_2014-01- 14T14_33_18	24			LINCOLN		Perpendicula
	ADA Wiki Announcements	М	Hamline _ Floral _6285-	6285- 135	Arden Hills	2013	Hamline & Floral	SW	Perpendicula
ĥ	APS Compliance Fc		135_2014-01- 17T13_40_30						
22222	Calendar	м	Hamline _ County RD	6285- 135	Arden Hills	2013	Hamline & County RD F	NE	Depressed Corner
ĥ	Compliance Checkl		F_6285-	155			County KD P		Comer
Ē	Documents		135_2014-01- 17T13_41_34						
9	Images	м	Hamline _ County RD	6285-	Arden Hills	2013	Hamline & County RD F	NW	Perpendicula
-	Links		F_6285-	135	HIIIS		County RD F		
_	Pages		135_2014-01- 17T13_41_53						
_	Private Group Doci	м	Hamline _		Arden 2013 Hills	2013	Hamline &	Hamline & SE Island N County RD F	Twin Perpendicula
_	Public Documents		County RD F_6285-				County RD F		
_	Site Assets		135_2014-01- 17T13_42_07						
-	Site Pages Tasks	м	Hamline _ County RD	6285- 135	Arden Hills	2013	Hamline & County RD F	SE Island S	Twin Perpendicula
	Team Discussion		F_6285- 135_2014-01-						
2	Workflow Tasks		17T13_42_20	6285-		0010			
_		м	M Hamline _ County RD		Arden Hills	2013	Hamline & SE County RD F	Perpendicula	
~	ecycle Bin I Site Content		F_6285- 135_2014-01- 17T13_42_51						



1. Filling out the right SP Number

Depending on the plan sheet, key in the relevant SP number that has the intersection associated with it. If it is a state aid project, enter the SAP number.

2. Determine the intersection names

State the intersection by combining the name of the street and trunk highway where the curb ramp is located. If there are no intersections, place the nearest landmark for easier identification through the use of Google Maps or similar web map services. Refer to <u>Appendix</u> for visual aid on how the intersections are named.

3. City

Fill in the name of the city the ramp is located in.

4. District

Put in the district number here depending on where the project is situated. For Metro, key in "M".

5. Quadrant

Determine the quadrant of the related curb ramp by facing True North. For Island/Pork Chop, Median, or Mid-block put <Quadrant Here>"Island/Median/Midblock" e.g. SE Island. Exception is allowed for mid-block along loop or roundabout that is difficult to be assigned a specific ordinal (NW, NE, SW, and SE) or cardinal direction (N, W, E, and S). In this situation, numbers are applicable should it compliment the intersection description. Refer to <u>Appendix</u> for visual aid on how the quadrants are determined.

6. Ramp Type

Ramp types are subjective due to various type of ramp being designed and added on. As of present (1/29/2014), the list comprises of:

- i) Perpendicular
- iii) Oneway Directional
- v) Tiered Perpendicular
- vii) Fan
- ix) Diagonal
- ii) Twin Perpendicular
- iv) Combined Directional
- vi) Parallel
- viii) Depressed Corner
- x) Other

7. Construction Year

Enter the year that the construction project was completed on in "yyyy" format.

8. Switch View/Display Form

Only after selecting the ramp type from the drop-down list, click on the button next to it (if you're on the main page, it will be displayed as "Display Form", and "Switch View" if you have already displayed the form with a ramp type selected).

	9	10			
Attach a photo of the comple	ted quadrant by clicking here	e [DO NOT us	e Safari or	i iPads to	
upload files]: ^{0 Click here to attach}	(max allowed size - 6	ИВ)			
(1) Minimum 4' wide pedestr	ian access route (PAR) maint	ained? 🔋	Yes	No	
(2) Landing slopes (%): 2 11		TH = Trunk SS = Side Si			
(3) Landing meets min. 4'x4' and perpendicular grade break(s)? 2 12 🔲 Yes 🔲 No					
(4) Are landing(s) located at the top of each ramp					
and at change(s) in direction and at inverse grades? 2 13 Yes No					

Figure 1 – Compliance Form (cont. 1)

9. Picture Attachment

Picture of the curb ramp shall not exceed 6 MB (6000KB). If it does, the form would not be able to be submitted. Also, DO NOT upload photos when submitting the form using Safari (iOS browser) as stated in the **Introduction** segment of this document. There is a known issue with iOS/Safari which iPad users might experience if any file upload is attempted. If field submission is absolutely necessary, consider using alternative web browsers such as Google Chrome for iPad.

10. Pedestrian Access Route (PAR)

A continuous clear width pedestrian access route (PAR) shall be 4 foot minimum, exclusive of the width of the curb, in every direction of travel. The cross slope along all PARs shall not exceed 2.0%.

11. Landing Slopes

Record the landing slopes in two directions perpendicular to each other. The landing must not have a slope greater than 2.0% in any direction. View may vary depending on the type of ramp selected. The recorded number differs slightly depending on the type of ramp. Refer to <u>Appendix</u> for visual aid on which section of quadrant to measure.

12. Landing Dimension & Grade Break

Landings shall be minimum 4' x 4' (5' x 5' min preferred) and contraction joints shall be constructed along all grade breaks. All grade breaks within the PAR shall be perpendicular to the path of travel.

13. Landing Locations

Check the landing locations. Landings shall be located anywhere the pedestrian access route (PAR) changes direction; at the top of ramps that have a running slope greater than 5.0%; and if the approaching walk is inverse grade.

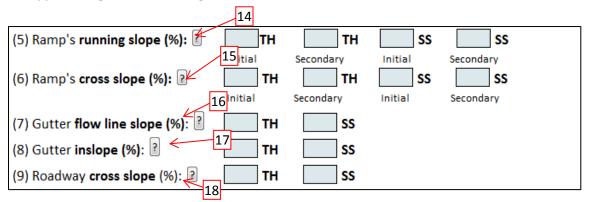


Figure 2 - Compliance Form (cont. 2)

14. Ramp's Running Slope

Record the largest running slope (i.e. slope in the direction of travel) value after checking a couple of locations on the ramp. This must be less than or equal to 8.3% (or 1 inch per foot). Use a 10 foot straight edge (or a straight edge the length of the ramp) with a smart level to check this. Refer to <u>Appendix</u> for visual aid on which section of quadrant to measure for.

15. Ramp's Cross Slope

Record the largest cross slope (i.e. slope perpendicular to the direction of travel) value after checking a few locations on the ramp. This must be less than or equal to 2.0%. In cases where the grade of the gutter flow line exceeds 2.0%, the ramp cross slope adjacent to the gutter may exceed 2.0% but must not exceed the slope of the flow line and must transition to a 2.0% cross slope as soon as is practical. Be sure to document this condition when it exists. Refer to <u>Appendix</u> for visual aid on which section of quadrant to measure for.

16. Gutter Flow Line

Check gutter flow line slope at the bottom of each ramp. The gutter flow line slope should not exceed 2.0% when practicable. Should the flow line exceed 2.0% and the form shows up as non-compliant, explain the reason for exceeding 2.0% to show best practices have been carried out. Refer to <u>Appendix</u> for visual aid on which section of quadrant to measure for.

17. Gutter Inslope

The gutter inslope must meet the applicable standard from Sheet 3 of 5 of the Pedestrian Curb Ramp Details Standard Plans (5-297.250). To expand on that, the inslope (if applicable, gutter outflow) of the gutter where the pedestrian's path of travel is not perpendicular to the gutter flow line should not exceed 3.0%; Ramp type includes Fan, Depressed Corner, Combined Directional and One-way Directional. As for ramps that are perpendicular to pedestrian's path of travel, the gutter inslope should not exceed 5.0%. Refer to <u>Appendix</u> for visual aid on which section of the quadrant to measure for.

18. Roadway Cross Slope

The roadway cross slope value measured perpendicular to curb flow line or edge of roadway should not exceed 5.0% at pedestrian crossing locations. This is especially true for gutter and bituminous patching locations.

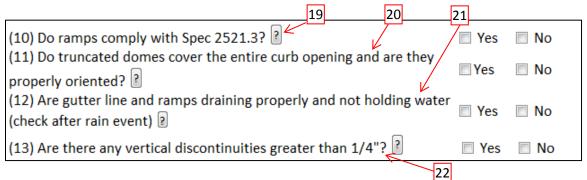


Figure 3 - Compliance Form (cont. 3)

19. Spec 2521.3 Joint

When checking the running slope with a 10 foot straight edge (or a straight edge the length of the ramp), make sure the surface is compliant with Spec. 2521.3C, which says "The surface shall not vary more than 3/16" from a 10 foot straight edge." Look for any bellies or ridges in the concrete ramp surface greater than 3/16". Also, the joints in the walk should be finished with a 1/4" radius jointing/edging tool or saw cut, and contraction joints should be approximately 1/8" wide per Spec. 2521.3C. Refer to <u>Appendix</u>: Figure 10 for visual aid on which segment the Spec refers to specifically.

20. Truncated Domes

Check truncated dome placement and orientation. If the ramp is directional the domes should be oriented in the direction of travel within the allowable set back limits, and in accordance with the applicable standard from Sheet 2 of 5 of the Pedestrian Curb Ramp Details Standard Plans (5-297.250). A minimum 4' width of truncated domes is required for all ramps openings for a minimum 24" continuous length in the path of travel. Truncated domes shall extend the full width of the ramp, landing, or blended transition within 3" on each end (between the edge of domes and beginning of curb taper). Radial detectable warnings shall be set back 3"-6" from back of curb/edge of roadway. Whenever rectangular detectable warnings are placed around a radius, they may be set back up to 9" from back of curb in the middle of the ramp and 3" at the corners. If 9" setback is exceeded, use radial detectable warnings. On rural ramps with no curb, domes shall be set in concrete 1' back from edge of roadway with 3" on the sides, and 1' minimum behind domes for visual contrast.

21. Water Flow and Drainage

After a rain event, check the completed ramps to make sure that neither the ramps nor the gutters are holding water and everything appears to be draining properly. If not draining properly, ramps/gutters shall be reconstructed to provide positive drainage.

22. Vertical Discontinuities

Vertical discontinuities (i.e. trip hazards) greater than ¼" are unacceptable. Any vertical discontinuities between ¼"- ½" may be beveled at a maximum 1:2 slope. All beveling of concrete requires Engineers approval and is not recommended. If any vertical discontinuities are greater than $\frac{1}{2}$ ", the panel or curb and gutter must be removed and replaced.

(14) Are ramps fully compliant ? If NO , check the reason(s) below. Explain why the ramp didn't meet compliance and how the ramp has been improved from the pre-construction condition (see ADA Compliance						
Checklist Guidance fo	or more info and attach	pages if needed):	Click here to attach a file			
	additional comment for n			0		
Figure 4 - Compliance Fo	rm (cont. 4)			2		



23. Ramp Compliance

If any portion of the ramp is not compliant, be sure to document the pre-construction and postconstruction ramp conditions and explain why the ramp cannot be fully compliant. If ramp is not compliant due to contractor's performance, ramp will need to be made compliant before project is substantially completed. Include photos with documentation. Also, check one of the given reasons that best describes why the ramp isn't compliant. Please click the check button after all information is entered or right before submission.

24. Comments and General Non-Compliant Reason(s)

If the ramp is shown to be NON-COMPLIANT, make sure to check the reason(s) located under the comment box (Topography, Utilities, Structure, and/or Contractor) and explain why the ramp is not compliant. If none of the reasons are checked, the submission of the form will not go through.

		V		
	(15) Was the curb ramp able to be built accord	ding to the plan details?	🗖 Yes 🗖	No L
	Printed Name:	26 Date (mm/dd/yyyy):		27
28	wledge and that I	(fully		
20	understand the checklist standards and am qualified to ca	rry out the inspection.		
	Submit to SharePoint	Library	<u> </u>	g 1
_		29		

Figure 6 – Compliance Form (cont. 5)

25. Construction Plan Correlation

Check if the curb ramp was able to be built according to plan details. This would include changes in the S and F values, corrections in noncompliant gutter flow lines not called out in plans, change in ramp type, changes to the PAR width, and modification of the landing dimensions. This information does not affect compliance but will only be used for curb ramp design improvements in the future.

26. Printed Name

Fill in the name of the person who gathered/filled out the information.

27. Printed Date

Fill in the date when the form was filled.

28. Information Accuracy

Check the box to indicate that all information entered is gathered as is from the field without any unauthorized modification.

29. Submission

Click the "Submit to SharePoint Library" to upload the form to ADA Form Library on SharePoint.

APPENDIX

The numbers placed in each figure represent the required data on the compliance checklist form for all ramp types.

No. as shown on the Form and in Figures below	DESCRIPTION
1	Pedestrian Access Route
2	Landing Slopes
3	Landing Dimensions
5	Running Slopes
6	Cross Slopes
7	Gutter Flow Line
8	Gutter Inslope (or Outslope)
9	Roadway Crossing (Cross Slope)

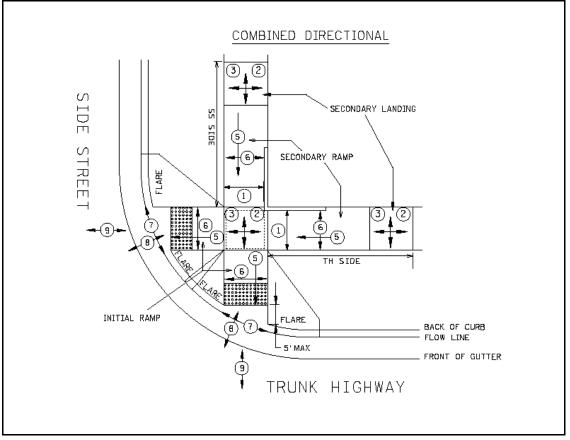


Figure 1 – Combined Directional

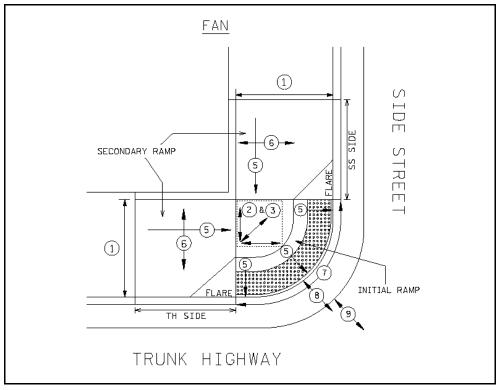


Figure 2 – Fan

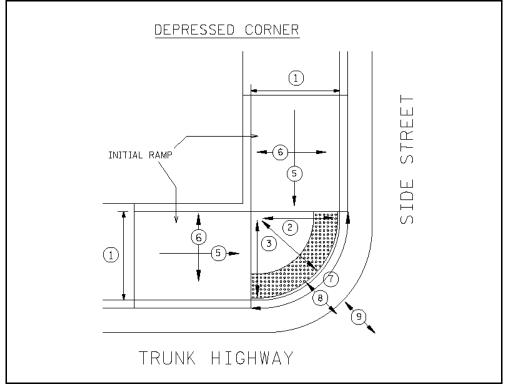


Figure 3 – Depressed Corner

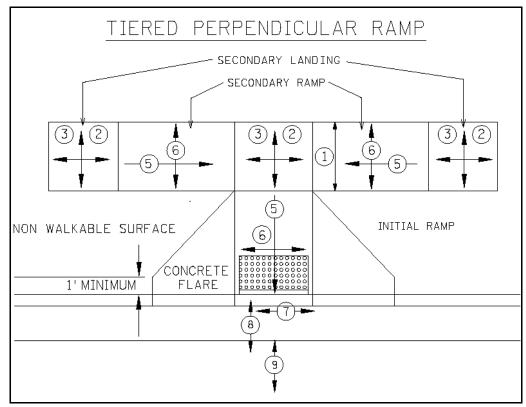


Figure 4 – Tiered Perpendicular

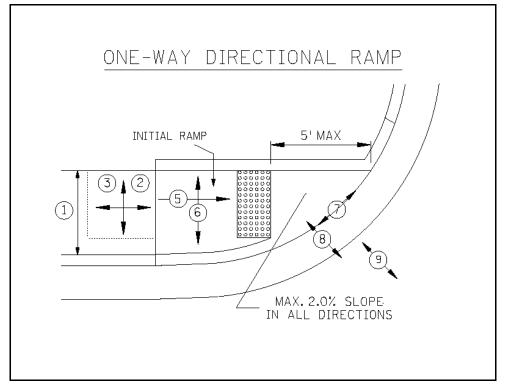


Figure 5 – One-way Directional

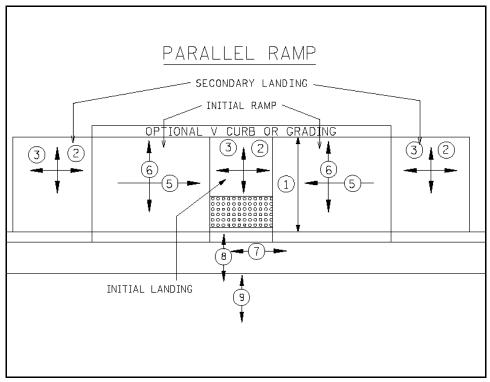


Figure 6 – Parallel

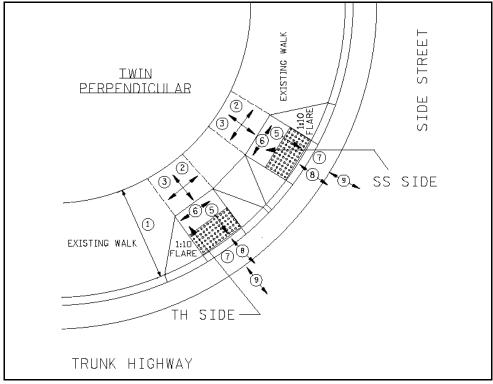


Figure 7 – Twin Perpendicular

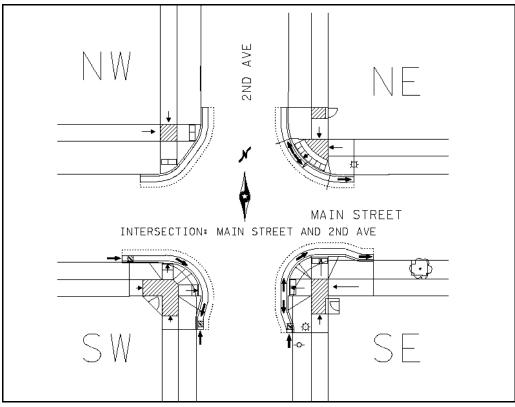


Figure 8 - Intersection and Quadrant identification (1)

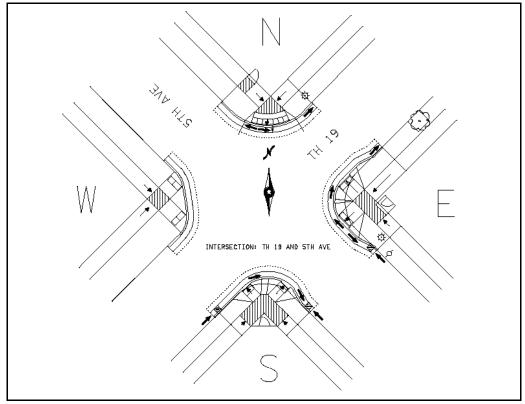


Figure 9 - Intersection and Quadrant identification (2)

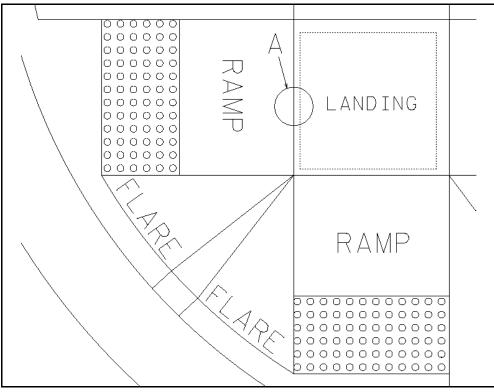


Figure 10a - Spec 2521.3c

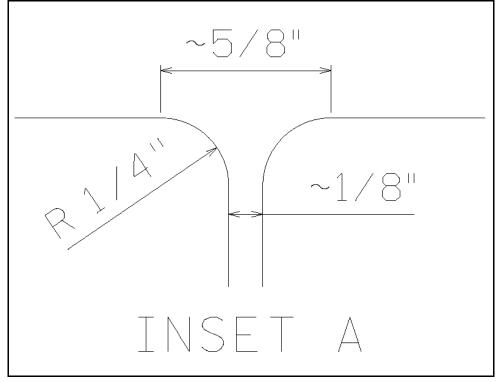


Figure 10b - Spec 2521.3c (allowable joint displacement)