

# Annual Statewide PM Meeting



January 20, 2016  
Bob Pappé, PE, PLS  
ODOT Traffic-Roadway Engineer



# ***2016 Statewide Project Managers Meeting***

## **Topics**

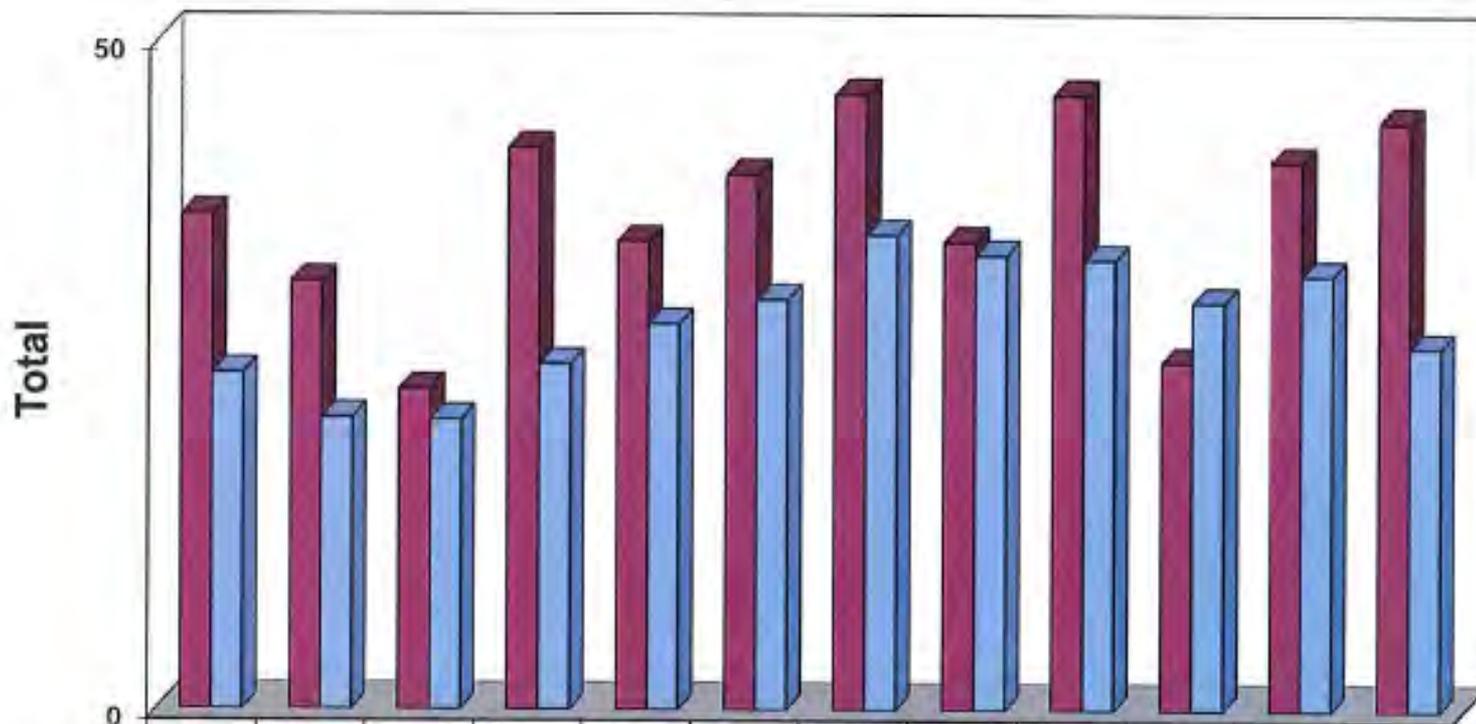
- Traffic Fatalities on Oregon Streets, Roads and Highways
- New Speed Limits – HB 3402
- Executive Work Zone Strategy Sessions
  - Guiding Principle
  - Decision Tree
- ADA
  - 00220.00 Accommodations for Public Traffic
  - Curb Ramps
  - Specifications and Standard Drawings
  - Paynote, inventory form

## Oregon Daily Traffic Toll Report

End Date of	12/31/2015 (1)	<u>Current Year</u>	<u>Previous Year</u>	<u>Percent Change</u> (2)
		12/31/2015	12/31/2014	
<b><u>Year to Date</u></b>				
<b>Total Deaths to Date</b>		<b>447</b>	<b>356</b>	<b>25.6%</b>
<b>Total Fatal Crashes to Date</b>		<b>413</b>	<b>321</b>	<b>28.7%</b>
Pedestrian Deaths to Date		77	55	40.0%
Pedalcyclist Deaths to Date		5	7	-28.6%
Motorcyclist Deaths to Date		57	46	23.9%

		<i>FATALS</i>	
<i>12/31/15</i>	<i>TOTAL</i>	<i>447</i>	<i>91 MORE</i>
<i>12/31/14</i>	<i>TOTAL</i>	<i>356</i>	<i>43 MORE</i>
<i>12/31/13</i>	<i>TOTAL</i>	<i>313</i>	<i>24 LESS</i>
<i>12/31/12</i>	<i>TOTAL</i>	<i>337</i>	

## Cumulative Fatal Comparison Current Year vs 5-Year Average



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
■ 2015 Deaths	37	32	24	42	35	40	46	35	46	26	41	44
■ 5-Year Average	25	22	22	26	29	31	36	34	34	31	33	27

Data from Statewide Crash file. Current Year data reported on this form is preliminary and subject to change pending cause of death determination or if death occurs after 30 days from date of crash. Prior years figures are final.

Crash data contact - Sylvia Vogel (503) 986-4240



# 2016 Statewide Project Managers Meeting

## HB 3402 Applies to:

- I-84: ECL Dalles to Idaho State Line, 65 mph trucks/buses, 70 mph all others
- Hwy 95: Idaho State Line to Nevada State Line, 65 Trucks/buses, 70 mph all others
- Hwy 20: Bend to Ontario, 60 mph trucks/ buses, 65 mph all others
- Hwy 97: Intersection with Hwy 197 to K. Falls, 60 mph trucks/ buses, 65 mph all others
- Hwy 197: Dalles to Intersection with Hwy 97, 60 mph trucks/ buses, 65 mph all others
- Hwy 31: Valley Falls to LaPine, 60 mph trucks/ buses, 65 mph all others
- Hwy 78: Burns Jct. to Burns, 60 mph trucks/ buses, 65 mph all others
- Hwy 395: Burns to John Day, 60 mph trucks/ buses, 65 mph all others
- Hwy 395: Riley to Calif. State Line, 60 mph trucks/ buses, 65 mph all others
- Ore. Rt 205: Burns to French Glen, 60 mph trucks/ buses, 65 mph all others
- Hwy 26: John Day to Vale, 60 mph trucks/ buses, 65 mph all others

Does Not Include: Hwy 97 from K.Falls to Calif State Line  
Hwy 97 from intersection with Hwy 197 to Washington State Line  
I-82 from I-84 to Washington State Line

## ***2016 Statewide Project Managers Meeting***

- Becomes Operational March 1, 2016 (Tuesday)
- Establishes a speed limit, not a violation of the basic rule.
- Existing designated speeds (less than statutory speed) are retained
- Adds truck differential speeds on non-interstate hwys
- More platooning behind slower trucks
- With Truck speed limit, the sign gets larger
- Curve warning signing,
- Passing lane changes, how much, re-striping
- Slowing traffic through towns, unincorporated communities
- **Construction Work Zones** – Construction speeds?

ROAD  
WORK  
AHEAD

# Oregon Work Zone Executive Strategy Session #5

## AGENDA

Monday,  
December 7, 2015

3:00 p.m.  
to 5:00 p.m.

ODOT HQ  
355 Capitol St. NE  
Salem, Oregon 97301

Gail L. Achterman  
Commission Room 103

Teleconference:  
1-866-590-5055  
Participant Code  
755731

1. Introductions & Background – Matt Garrett, ODOT – 10
2. Task Force / Resource Team Updates (15 min each)
  - **Engineering Enhancements** – Bob Pappe, ODOT
  - **Enforcement** – Captain David Anderson, OSP
  - **Separation & Mobility** – Brian Gray, AGC, Bob Russell, OTA and Walter Gamble, W.R. Gamble Engineering
  - **Communication Resource Team** – Dave Thompson, ODOT
3. 2015 and 2016 Construction Seasons – Joe Squire / Bob Pappe – 10
4. Work Zone Interstate Photo Radar – Anne Holder – 10
5. OSU – David Hurwitz, PhD – 10
6. Task Force Next Steps – Matt Garrett – 10
7. Good of the Order – All – 10

Task Forces	Work Items	Action Items	Lead	PDLT Involvement
Separation / Mobility (S/M)	1. Guiding Principle	<ul style="list-style-type: none"> <li>Finalize guiding principle</li> </ul>	S/M TF (Gray/Russell/Mather)	Information / Feedback
	2. Manuals / Directives	<ul style="list-style-type: none"> <li>Modify or create the following to align with the guiding principle:               <ol style="list-style-type: none"> <li>Traffic Control Design Manual</li> <li>Mobility Procedures Manual</li> <li>Highway Design Manual</li> <li>Construction Manual</li> <li>PD-16</li> <li>Maintenance</li> <li>New Directives?</li> <li>Other (TBD)?</li> </ol> </li> <li>Communicate changes</li> </ul>	a. Traffic / Roadway Section (Bob Pappe) b.	Information
Engineering Enhancements (EE)	3. Work Zone / Separation Devices (ongoing)	<ul style="list-style-type: none"> <li>Continue search for new separation devices</li> <li>Meet with contractors to discuss/test</li> <li>Sort Qualified Products List for existing separation devices (show applications)</li> <li>Add to Qualified Products List as devices receive FHWA approval</li> </ul>	EE TF (Bob Pappe)	Information
	4. Separation / Mobility Decision Tree	<ul style="list-style-type: none"> <li>Build Prototype</li> <li>Review / Feedback (Task Force, Regions, Contractors, OSU, and users)</li> <li>Pilot / Modify</li> <li>Tech Bulletin</li> <li>Expand / Enhance</li> </ul>	Traffic / Roadway Section (Bob Pappe)	<ul style="list-style-type: none"> <li>Obtain input from Regions</li> <li>Direct Regions to implement</li> </ul>
Law Enforcement (LE)	5. Portfolio / Project communication and coordination with LE	<ul style="list-style-type: none"> <li>Memo / Directive on communication</li> <li>Considerations / Criteria</li> <li>Performance Measures</li> <li>PDLT Annual Performance Report</li> </ul>	LE TF (Anne Holder)	<ul style="list-style-type: none"> <li>Feedback</li> <li>Direct Regions to implement</li> <li>Determine Reporting Needs</li> </ul>



# Guiding Principle

**Mission:** ODOT’s mission is to provide a safe, efficient transportation system that supports economic opportunity and livable communities.

**Goal:** Our work zone safety goal is zero fatalities and injuries, including ODOT employees, contractors, public safety professionals and the traveling public while efficiently moving people and goods.

**Guiding Principle:** The best work zone design and management plan will maintain safety and mobility, a balance that shall be analyzed continuously throughout the lifecycle of the facility.

**Directive/Strategy:** To accomplish this goal, project design teams shall consider the full range of options including but not limited to separation of the traveling public from workers and work areas, speed reductions, law enforcement, enhanced traffic control devices and signage, and overall roadway and work zone design. Effective communication with travelers is essential to establish reasonable expectations and minimize unsafe driver behavior. While there is no single solution that is appropriate for all roadway designs and work zones, whenever practicable workers should be separated from traffic.



## Resources:

- Mobility Committee
  - ODOT's Mobility Committee is a resource that can provide necessary balanced guidance.
  - Work through your mobility coordinator and the mobility committee to reach resolution.
  - Bring issues forward early in the scoping and design stage to avoid surprises and keep everyone in the problem solving mode.
- Work Zone Separation Decision Tree
  - The decision tree will help us identify separation options available per work zone.
  - Impacts to safety, mobility, scope, schedule, budget, delay, driver convenience, and 'other' impacts shall be identified when assessing separation options.
  - To help guide us through our decision making, the following decision tree is intended to provide new tools and approaches.



## Decision Tree

Print Form

### Evaluate Separation Opportunities, Other WZ Concepts, WZ Devices

Project Name (Section) \_\_\_\_\_ Key No. \_\_\_\_\_ Contract No. \_\_\_\_\_

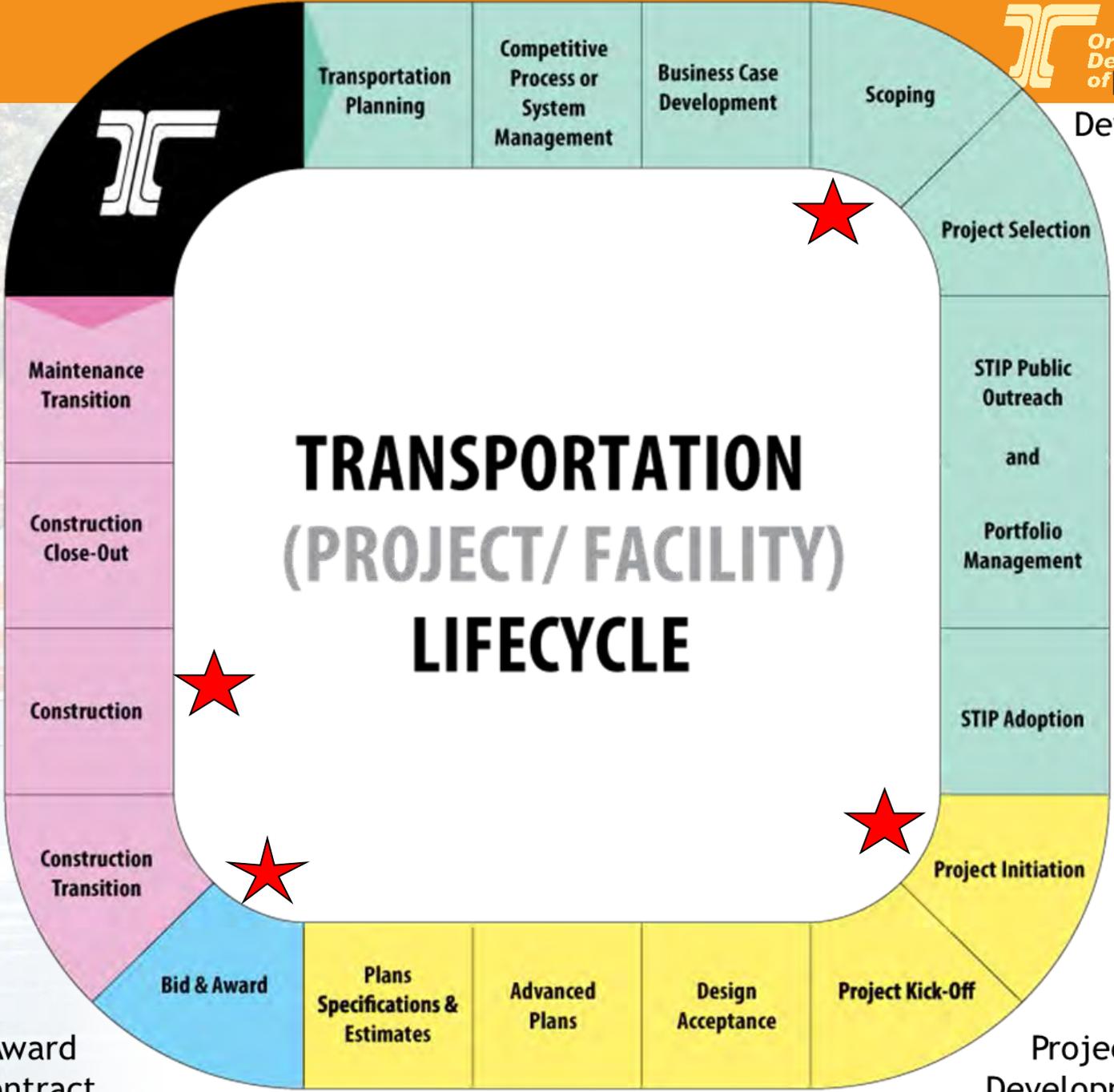
Highway \_\_\_\_\_ Project Leader / Project Manager \_\_\_\_\_ Agency Project Manager \_\_\_\_\_ Region \_\_\_\_\_

**Instructions:** At project initiation, work through each opportunity on this "decision tree." Add other project-specific decisions as needed. (Add more instructions as needed.)

Contractor \_\_\_\_\_

Opportunities to Evaluate	Possible	Impacts	Stakeholders	Decision
Full road closure	no			
Partial road closure	no			
Full detour	no, 100 miles around			
Partial detour	yes, construct temporary bridge	increases cost of project, adds time to schedule	Area Manager	no
Cross-overs	no, volumes too high for one lane during day			
Temporary barrier	yes	requires narrower lanes than mobility manual allows adds cost for temp barrier	Mobility Committee Area Manager	
Increased clear space	yes	requires narrower lanes than mobility manual allows	Mobility Committee	Yes, as long as no hard barrier
Decrease exposure time	yes, limit work hours	extends project duration	Area Manager - project schedule	
Accelerate/time incentives	yes, but need alternate contracting approval	need exemption, need more PE time	Area Manager, project PE schedule, later bid date, resources for alternate contracting	
Law enforcement OT hours	yes	LE OT hours, LE available?	LE, regions with LE OT hours - TSB	yes
Use drums and cones to close lane				
Use automated flagging station				
Use temporary transverse RS upstream of flagging station				
Use additional PCMS upstream to communicate with drivers				
Other:				

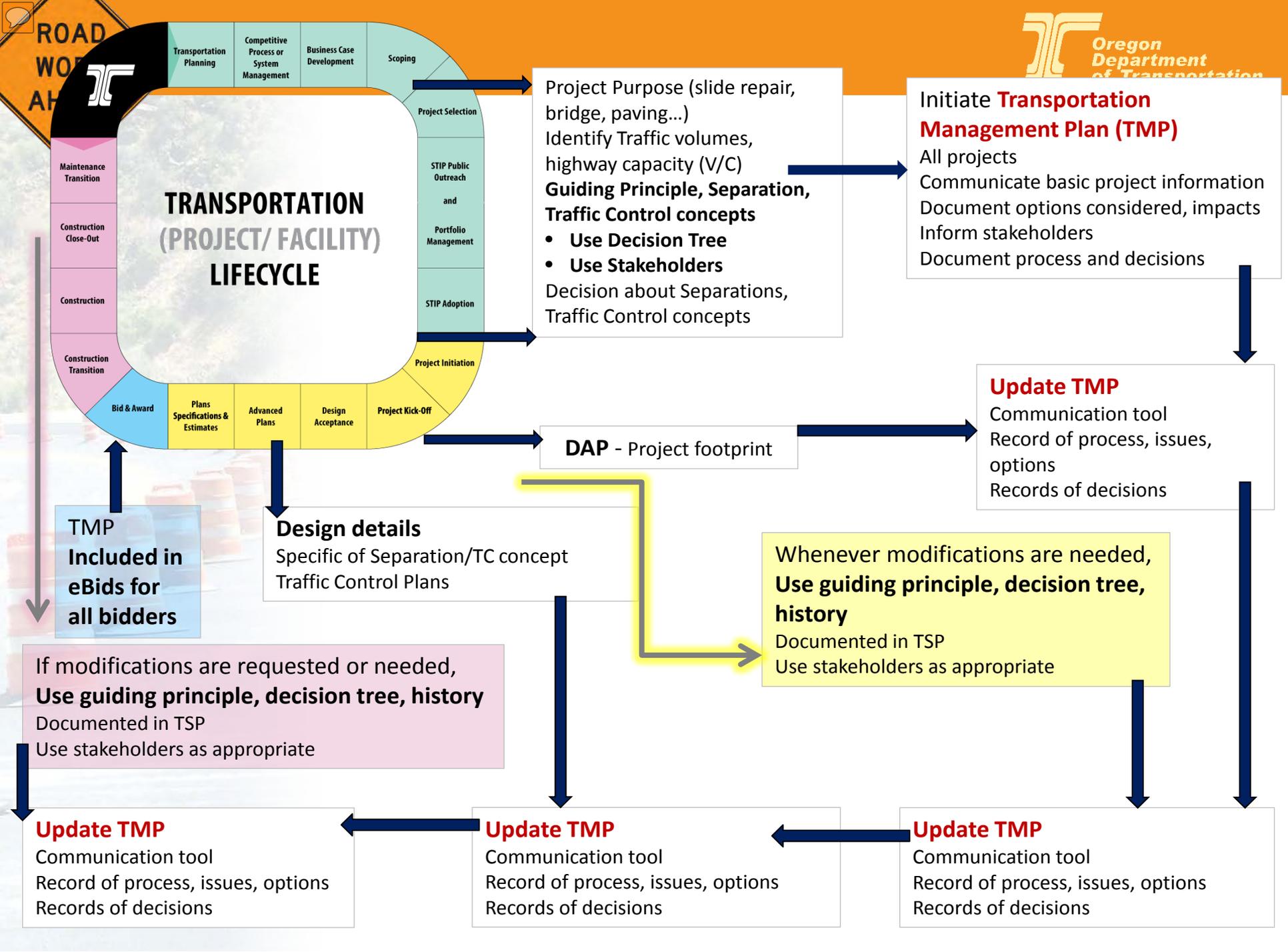
ADD ANOTHER ITEM



Construction Management

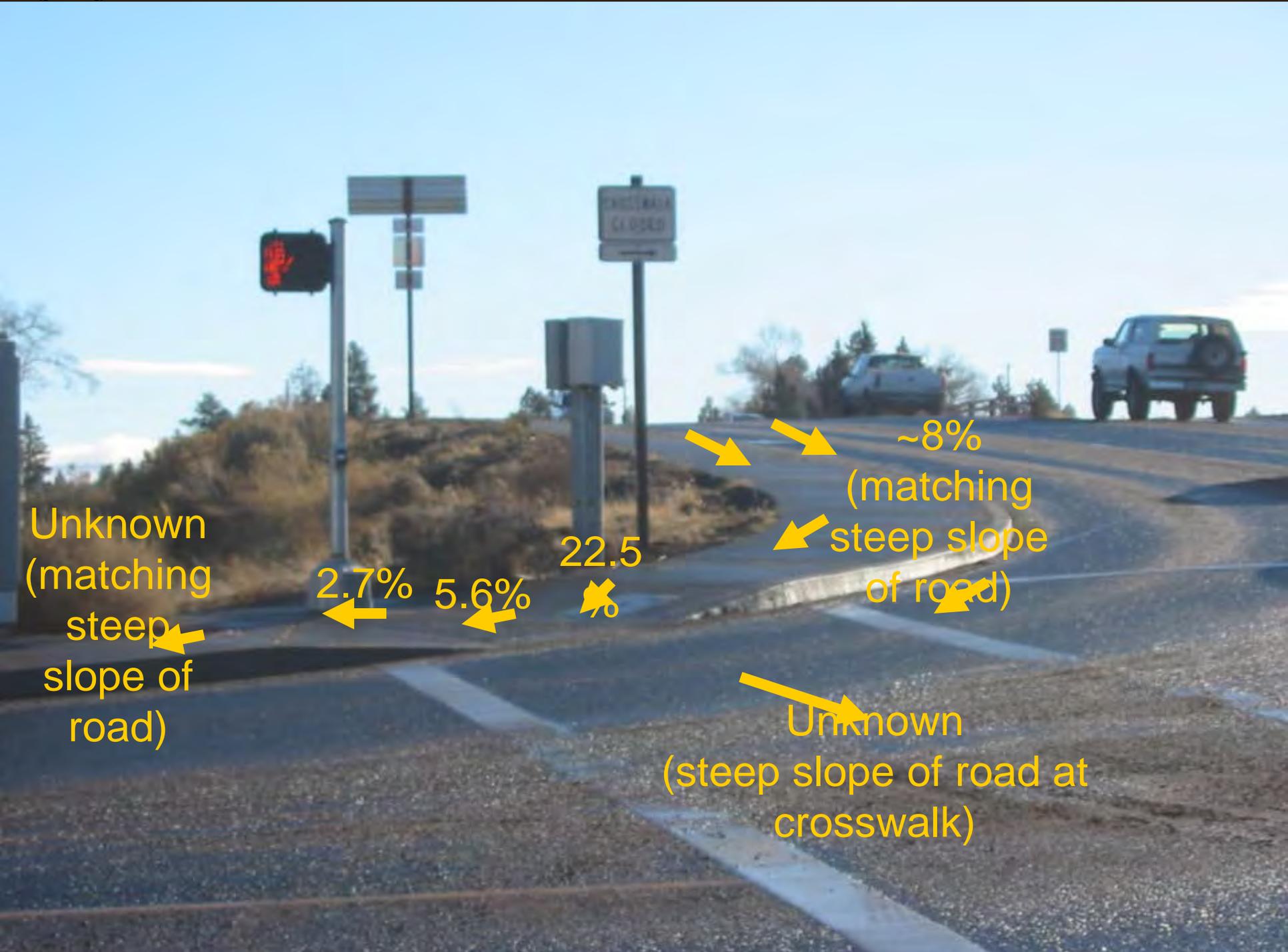
Award Contract

Project Development 13









Unknown  
(matching  
steep  
slope of  
road)

2.7%

5.6%

22.5  
%

~8%  
(matching  
steep slope  
of road)

Unknown  
(steep slope of road at  
crosswalk)

HILLBAH  
CLOSED



## Section 00220: Accommodations for Public Traffic

00220.00 Scope – This work consists of maintaining facilities to accommodate public traffic through and within the project for the life of the Contract. **Public Traffic includes motor vehicles, bicycles, and pedestrians.**

Subject	Oregon	United States
Population with a disability	14.1%	12.3%
Disability status	5.3%	5.9%
Hearing difficulty	3.6%	4.1%
Vision difficulty	3.9%	4.4%
Cognitive difficulty	4.1%	4.7%
Ambulatory difficulty	4.1%	4.7%
Self-care difficulty	4.1%	4.7%
Independent living difficulty	4.0%	4.6%



## Accommodating Pedestrians (including ADA needs)

- provide adequate temporary facilities as part of TCP
- Accessible routes through or around the work zone.
- Equal to or better than existing facilities, where practical
- Where impractical to provide a temp. facility, alternative measures should be developed, such as:
  - Alternate/detour routes on existing facilities
  - Partnership with local transit providers (Tri-Met, Chariots, LTD)
  - Shuttle services through private vendors
- Document what you've done (or haven't done) and why.



## ODOT Fundamentals

ODOT's responsibilities for complying with ADA requirements within ODOT RW are the same, regardless of if work is delivered by:

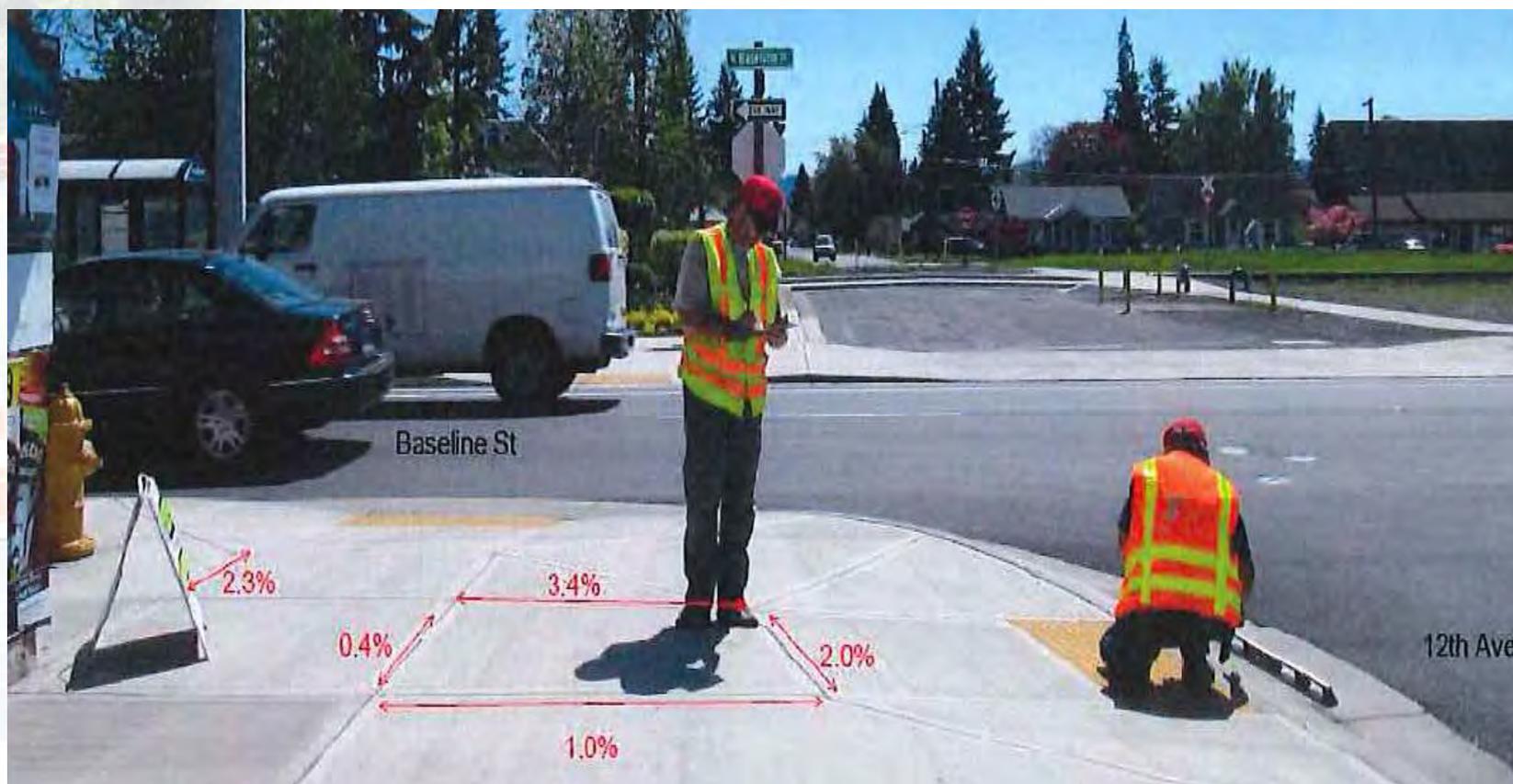
- STIP Projects,
- Maintenance self-performed or maintenance contract,
- by developers, utilities, local agencies
- by any other means.

**Every new curb ramp gets inspected using ODOT form.**

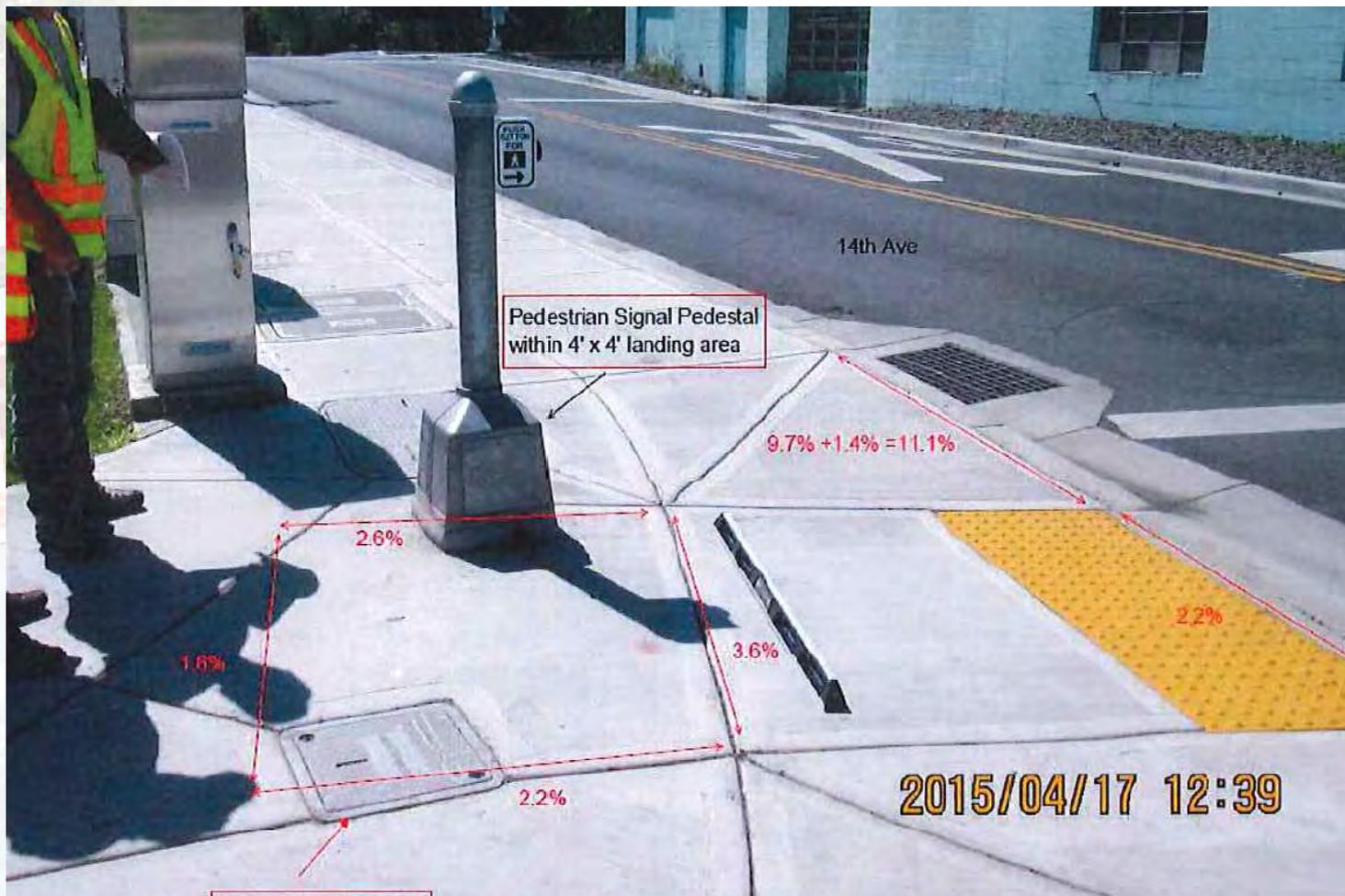
Newly constructed curb ramps that do not meet the required standards require corrective action so they do meet the required standards, up to and including removal and replacement.

## Newly constructed curb ramps:

What's acceptable for newly constructed curb ramps?



## Ramp grades plus obstructions



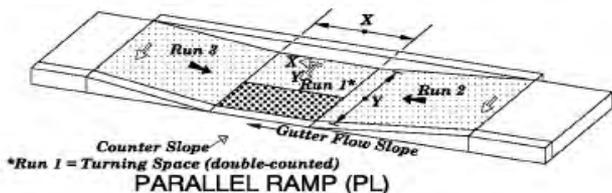
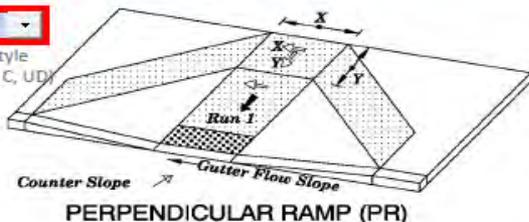


**ADA Ramp Inspection Form**

**Submit by E-mail**

Project Name (Section)  Construction Year  Contract No.  Highway No.  MP  Cross Street Name

Ramp Style (PR, PL, C, UD)



???  
**UNIQUE DESIGN (UD) - take photo**

- Pedestrian Access Route (to measure clear width)
- Truncated dome detectable warning surface
- Cross Slope (2.0% max.)
- Running Slope (8.3% max.)
- Counter Slope (5.0% max.)
- Landing Area (X & Y) (2.0% max. / 4' x 4' min.)
- Gutter Flow Slope (as directed)

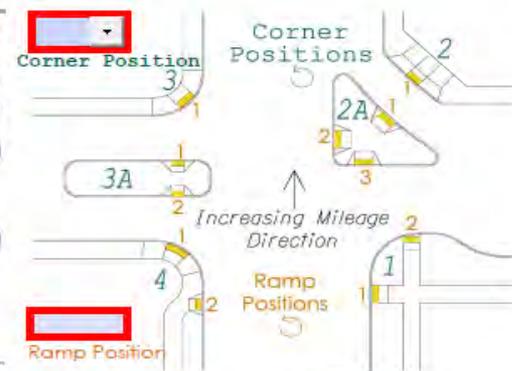
RAMP RUN 1	Pass	Fail
Running Slope 1	<input type="text"/> ≤ 8.3% <input type="radio"/> > 8.3% <input type="radio"/>	
Cross Slope 1	<input type="text"/> ≤ 2.0% <input type="radio"/> > 2.0% <input type="radio"/>	
Detectable Warning	<input type="text"/> (TD, X) <input type="radio"/> None <input type="radio"/>	
Lip Height	<input type="text"/> ≤ 1/4" <input type="radio"/> > 1/4" <input type="radio"/>	
Gutter Flow Slope	<input type="text"/>	
Counter Slope (+/-)	<input type="text"/> ≤ 5.0% <input type="radio"/> > 5.0% <input type="radio"/>	
Slope Differential = Running Slope 1 + Counter Slope	<input type="text"/>	

RAMP RUN 2	Pass	Fail
Running Slope 2	<input type="text"/> ≤ 8.3% <input type="radio"/> > 8.3% <input type="radio"/>	
Cross Slope 2	<input type="text"/> ≤ 2.0% <input type="radio"/> > 2.0% <input type="radio"/>	

RAMP RUN 3	Pass	Fail
Running Slope 3	<input type="text"/> ≤ 8.3% <input type="radio"/> > 8.3% <input type="radio"/>	
Cross Slope 3	<input type="text"/> ≤ 2.0% <input type="radio"/> > 2.0% <input type="radio"/>	

TURNING SPACE	Pass	Fail
Landing Width X	<input type="text"/> ≥ 4' <input type="radio"/> < 4' <input type="radio"/>	
Landing Length Y	<input type="text"/> and <input type="radio"/> or <input type="radio"/>	
Landing Slope X	<input type="text"/> ≤ 2.0% <input type="radio"/> > 2.0% <input type="radio"/>	
Landing Slope Y	<input type="text"/> ≤ 2.0% <input type="radio"/> > 2.0% <input type="radio"/>	

MISCELLANEOUS	Pass	Fail
Clear Width (feet)	<input type="text"/> ≥ 4' <input type="radio"/> < 4' <input type="radio"/>	
Physical Condition (G,F,P)	<input type="text"/>	
ADA Design Exception (Y,N)	<input type="text"/>	
Design Ex. Control Number	<input type="text"/>	



Function Condition (G,F,P)

Good (G) = all applicable boxes on left pass.  
Fair (F) = all boxes on left pass, except detectable warning  
Poor (P) = any box fails other than detectable warning

See also Standard Drawings RD755 and TM458 to assess provisions not shown: (flares, inlets, pushbutton reach, alignment, etc.)

Comment:

Inspector's Signature  Date

Print name clearly  Certification No.

Company/Agency  Crew No. (ODOT)

## Curb Ramp Inventory work

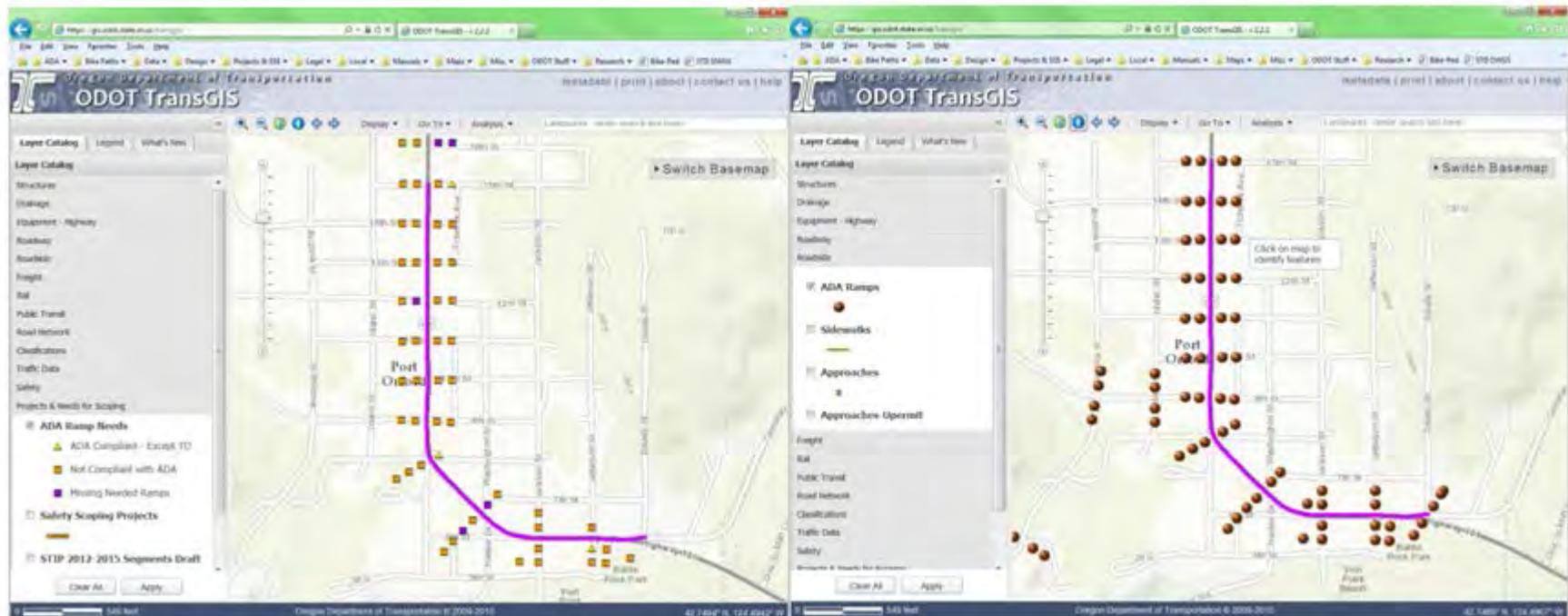
- Curb Ramp Inventory – Update 2011 Inventory
- Curb Ramp Data: Inventory & Construction Inspection
  - Data Model – Develop New Data Fields
  - Trans-Info - Add New Data Fields
  - Construction Inspection Form -
  - GPS Inventory Applications – Add New Data Fields
  - FACS-STIP Tool – Add New Data Fields to Data2Go
- Curb Ramp Inventory & Inspection Certification
  - Requirements & Criteria & Processes -
  - Training Materials - Develop
  - Training – Provide to Regions

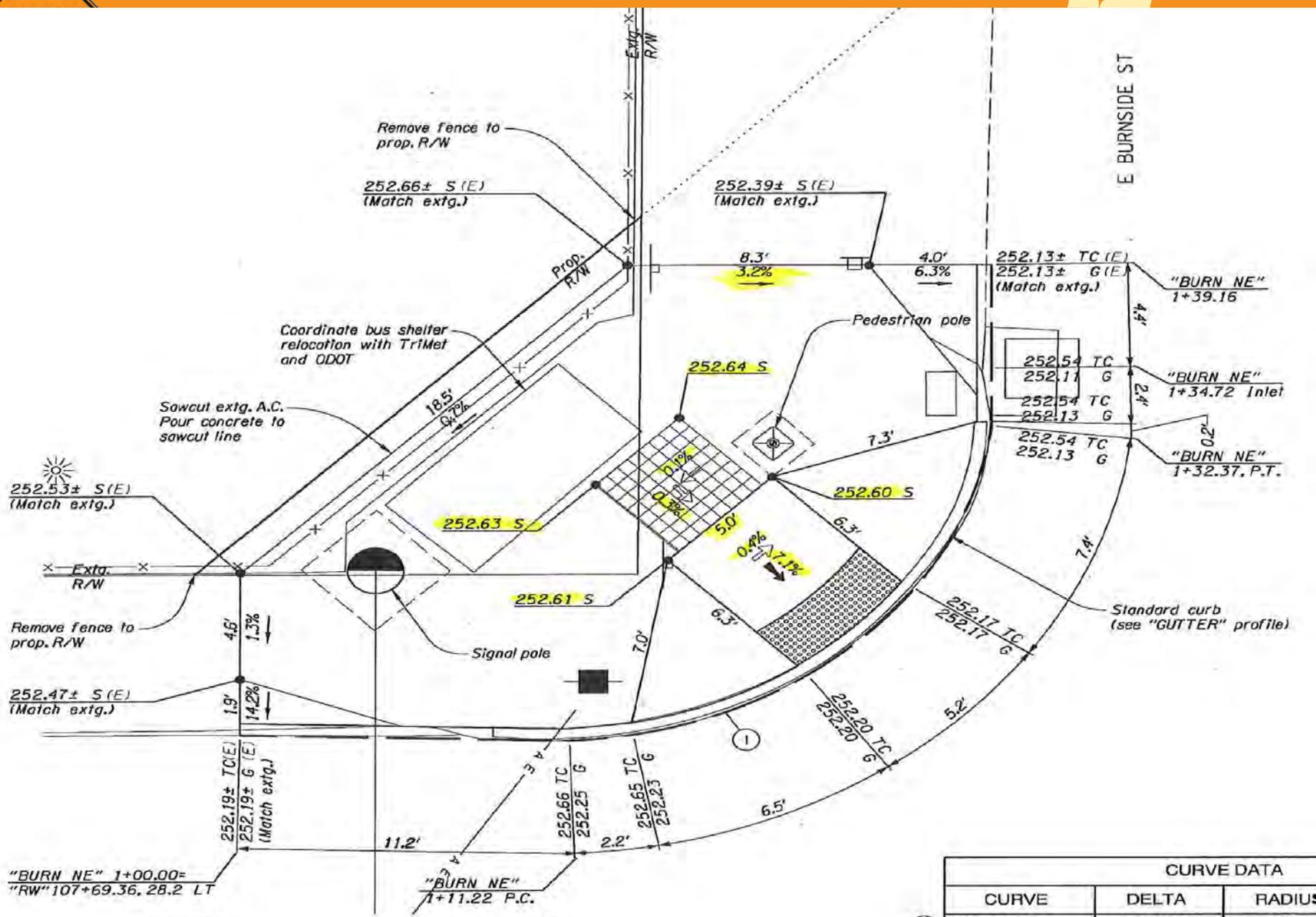
## Curb Ramp Inventory

GIS-based tools to view inventory

Available on ODOT's *TransGIS* website, can pull up condition of each ramp.

2011 Inventory is available on TransGIS, shows missing, good, fair, poor. Future data will provide data from Inspection Form.

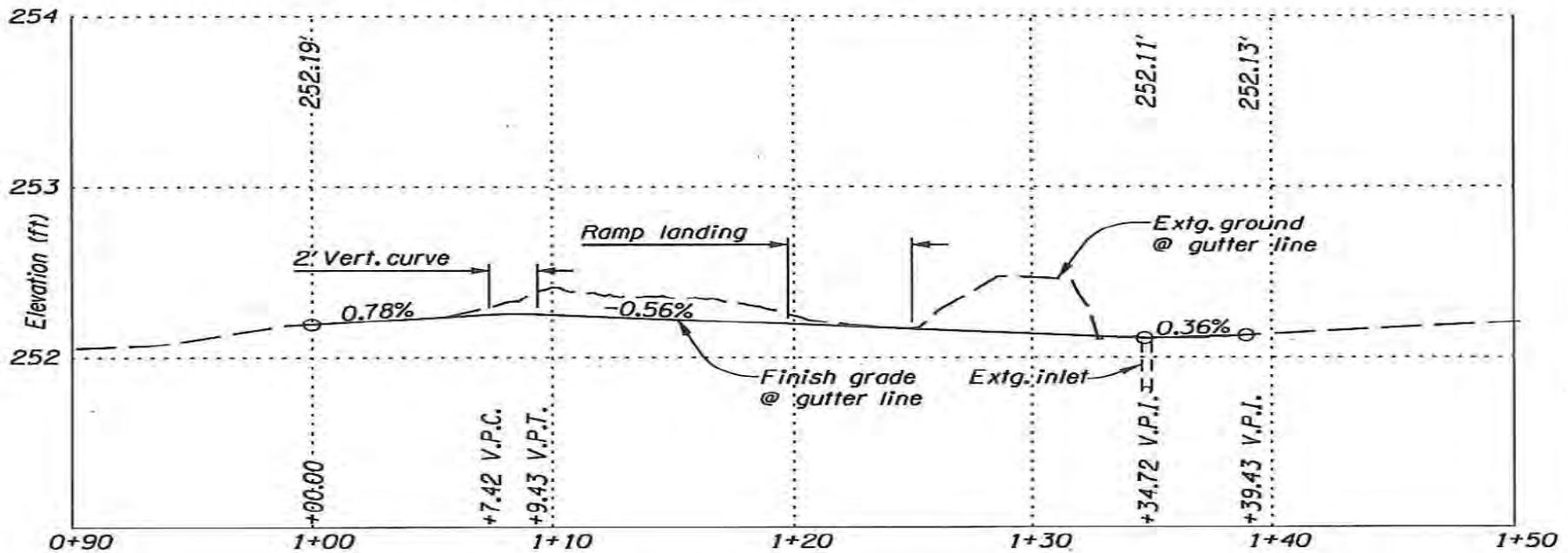




OR 213

PLAN  
Scale: 1"=5'

CURVE DATA		
CURVE	DELTA	RADIUS
① BURN NE	91°13'18"	15.0'



**BURNSIDE NE "GUTTER" PROFILE**  
 Scale: 1"=10' Horiz., 1"=1' Vert.

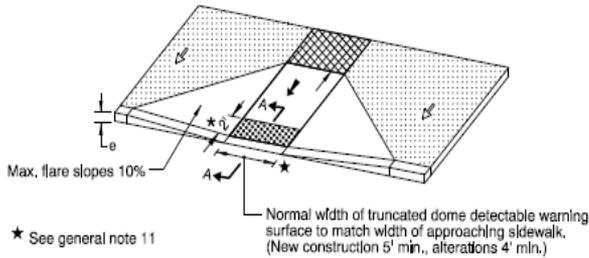
**LEGEND**

- TC Top of Curb elevation
- BC Bottom of Curb elevation
- S Surface elevation
- G Gutter elevation
- (E) Existing elevation
- ↖ Slope 2% max.
- ↙ Slope 8.33% (1":12") max. (Ramp length 15' max.)
- Slope as shown
-  Turning space (min. level area 48" x 48") 2% max. slope
-  Truncated dome detectable warning surface

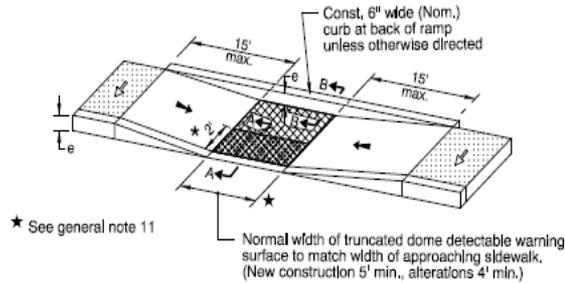
**NOTES:**

1. For details not shown, see std. drg. nos. RD700, RD755, RD756, RD757, RD759 & sht. 2B-41.
2. Dimensions and elevations shall be adjusted by Contractor & reviewed by Engineer to fit field conditions and comply with std. drgs.
3. Contraction and "Dummy" joints to conform to adjacent existing patterns.
4. Designed slopes shown. Slope symbols represent maximum allowable slopes for use in field verification.
5. Dimensions shown for the sidewalk width are from curb to curb and do not include the width of the curb itself.
6. Top back of curb is 0.01 Ft. higher than top face of curb for standard curb and curb and gutter.

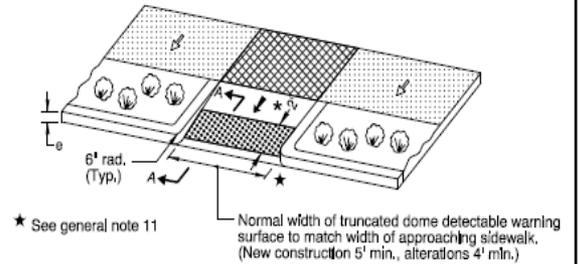




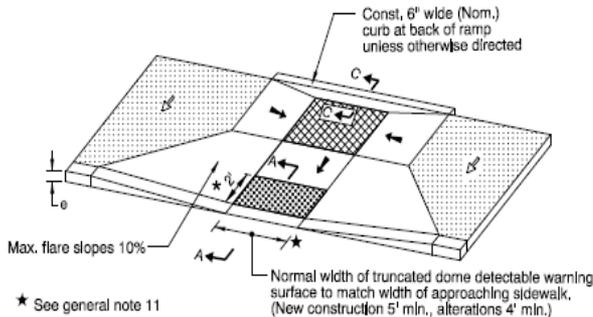
**PERPENDICULAR SIDEWALK RAMP DETAIL**  
 (Use "Parallel Sidewalk Ramp Detail" or "Combination Sidewalk Ramp Detail" when reqd. turning space cannot be obtained)



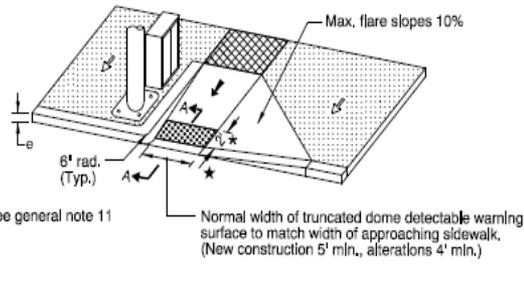
**PARALLEL SIDEWALK RAMP DETAIL**



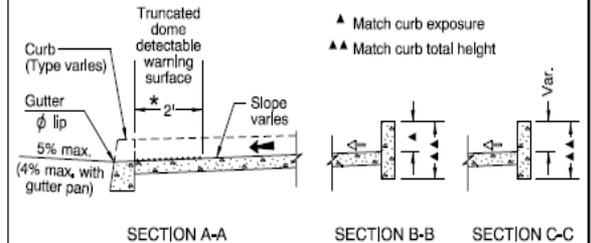
**PERPENDICULAR SIDEWALK RAMP DETAIL (THROUGH BUFFER STRIP)**



**COMBINATION SIDEWALK RAMP DETAIL**



**PERPENDICULAR SIDEWALK RAMP DETAIL (WITH SINGLE FLARE)**  
 (Use "Parallel Sidewalk Ramp Detail" or "Combination Sidewalk Ramp Detail" when reqd. turning space cannot be obtained)



- Sidewalk
- Turning space  
Min. level area 4' x 4'  
4' x 5' when constrained (with longer dimension in direction of ramp travel).  
For the purposes of this application, a 2% maximum construction slope (for drainage) is considered level.
- Truncated dome detectable warning surface
- Slope 1.5% design (2% max. construction)  
(Normal sidewalk cross slope)
- Slope 7.5% design (8.3% max. construction)  
(Ramp length 15' max.)
- \* 2' See general note 5

**GENERAL NOTES FOR ALL DETAILS:**

1. Sidewalk ramp details are based on United States Access Board Standards.
2. See Std. Drgs. RD700 & RD701 for curbs. See Std. Drg. RD720 for sidewalks. See Std. Drgs. TM503 & TM530 for crosswalk markings, widths, etc.
3. Tooled joints are required at all sidewalk ramp slope break lines.
4. Sidewalk curb ramp slopes shown are relative to the true level horizon (Zero bubble).
5. Place truncated dome detectable warning surface in the lower 2' adjacent to traffic of throat of ramp only. For details not shown, see Std. Drg. RD759.
6. Side flares that are not part of the path of travel may be any slope.
7. Sidewalk flare is not necessary where the ramp is protected from pedestrian cross-travel.

8. For the purpose of this drawing, a curb ramp is considered "perpendicular" if the angle between the longitudinal axis of the ramp and a line tangent to the curb at the ramp center is 75° or greater.
9. Ramps for paths intersecting a roadway should be full width of path, excluding flares. When a ramp is used to provide bicycle access from a roadway to a sidewalk, the ramp should be 8' wide.
10. For sidewalk ramp placement options, see Std. Drgs. RD756 & RD757.
11. Check the gutter flow depth at ramp locations to assure that the design flood does not overlap the back of sidewalk at ramp. If overlapping occurs place an inlet at upstream side of ramp or perform other approved design mitigation.
12. Only use details allowed by jurisdiction.
13. Site conditions normally require a project specific design. See project plans for details not shown.

CALC. BOOK NO. N/A

BASELINE REPORT DATE: 21-JUL-2015

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

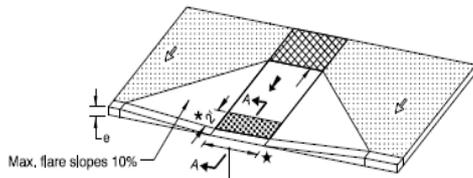
**OREGON STANDARD DRAWINGS**

**SIDEWALK RAMP DETAILS**

2015

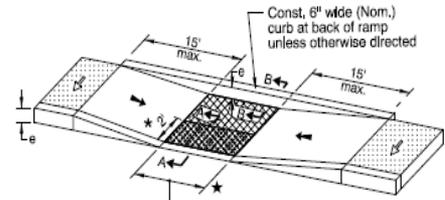
DATE	REVISION DESCRIPTION
01-2015	REVISED & ADDED NOTES
03-2015	ADDED DETAIL & REVISION NOTES

*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*



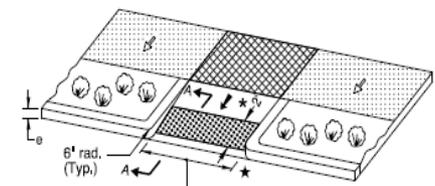
★ See general note 11

**PERPENDICULAR SIDEWALK RAMP DETAIL**  
(Use "Parallel Sidewalk Ramp Detail" or "Combination Sidewalk Ramp Detail" when reqd. turning space cannot be obtained)



★ See general note 11

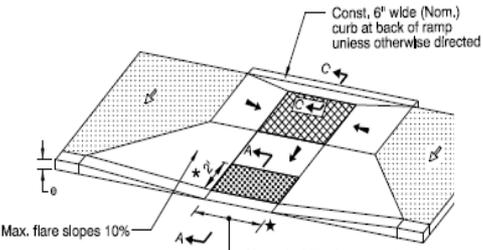
**PARALLEL SIDEWALK RAMP DETAIL**



★ See general note 11

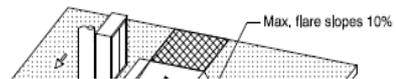
**PERPENDICULAR SIDEWALK RAMP DETAIL (THROUGH BUFFER STRIP)**

rd755.dgn 21-JUL-2015

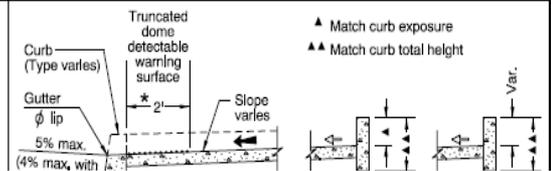


★ See general note 11

**COMBINATION SIDEWALK RAMP DETAIL**

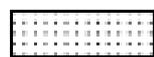


**SECTION A-A**



**SECTION B-B**

**SECTION C-C**

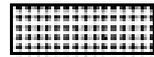


**Sidewalk**



**Turning space**  
Min. level area 4' x 4'  
4' x 5' when constrained (with longer dimension in direction of ramp travel).

For the purposes of this application, a 2% maximum construction slope (for drainage) is considered level.



**Truncated dome detectable warning surface**



**Slope 1.5% design (2% max. construction)**  
(Normal sidewalk cross slope)



**Slope 7.5% design (8.3% max. construction)**  
(Ramp length 15' max.)



**See general note 5**

(E)

RD755

- GENERAL NOTES FOR ALL DETAILS:**
1. Sidewalk ramp details are based on United States Access Board Standards
  2. See Std. Drgs. RD700 & RD701 for curbs. See Std. Drg. RD720 for sidewalk See Std. Drgs. TM503 & TM530 for crosswalk markings, widths, etc.
  3. Tooled joints are required at all sidewalk ramp slope break lines.
  4. Sidewalk curb ramp slopes shown are relative to the true level horizon (Zero)
  5. Place truncated dome detectable warning surface in the lower 2' adjacent to throat of ramp only. For details not shown, see Std. Drg. RD759.
  6. Side flares that are not part of the path of travel may be any slope.
  7. Sidewalk flare is not necessary where the ramp is protected from pedestrian

CALC. BOOK NO.     N/A    

BASELINE REPORT DATE     21-JUL-2015

## New Curb Ramp Construction Specifications

**00759.02 Required Submittals** - Before the preplacement conference, submit the following:

- **(a) Working Drawings** - Before the preplacement conference, submit six copies of unstamped working drawings according to 00150.35 for all sidewalk ramp work. **Include field verification of each ramp location, and all dimensions and grades necessary to demonstrate compliance with the Standard Drawings and Plans.** Notify the Engineer of any deficiencies or non-compliance with the Standard Drawings or Plans. The Engineer will provide additional or modified Plans as needed.
- **(b) Sidewalk Ramp Plan** - At least 21 Calendar Days before the sidewalk ramp work is scheduled to begin, **submit a plan for accomplishing all phases of the sidewalk ramp work**, including the following:
  - Surface preparation
  - Compliance with working drawings and details submitted under 00759.02
  - Compliance with current Standard Drawings and Plans
  - Waste handling and disposal

Do not begin any sidewalk ramp work before the plan for completing the work has been approved.

## New Curb Ramp Construction Specifications

**00759.03 Preplacement Conference** - **Before beginning any sidewalk ramp work, meet with the Contractor's supervisory personnel** and quality control manager, any sidewalk ramp subcontractors' supervisory personnel, and the Engineer at a mutually agreed upon time.

If the Contractor's personnel change, or if the Contractor proposes a significant revision to the plan for accomplishing the sidewalk ramp work, the Engineer may require additional preplacement conferences.

**00759.46 Concrete** - Add the following sentence after the first sentence:

Before placing concrete, **verify that forms are correctly positioned** to produce sidewalk ramps with proper slopes and dimensions to comply with the Standard Drawings and Plans.

**00759.50(c) Driveways, Walks, and Surfacings** - Add the following paragraph to the end of this subsection:

In addition, finish concrete surfaces of sidewalk ramps to be within the established slopes and dimensions allowed by the Standard Drawings and Plans. **Repair or remove and replace sidewalk ramps not meeting the Standard Drawings and Plans at no additional cost to the Agency.**

## New Curb Ramp Construction Specifications

**00759.90 Payment** - Add the following pay items:

### **Pay Item Unit of Measurement**

- (l) Concrete Driveway Connections..... Square Foot
- (m) **Retrofit Concrete Sidewalk Ramps** .....Each
- (n) **Extra for New Sidewalk Ramps**.....Each

Item (m) includes saw cutting and removing existing concrete walks, curbs, or ramps, and replacing them with new sidewalk ramps and curbs.

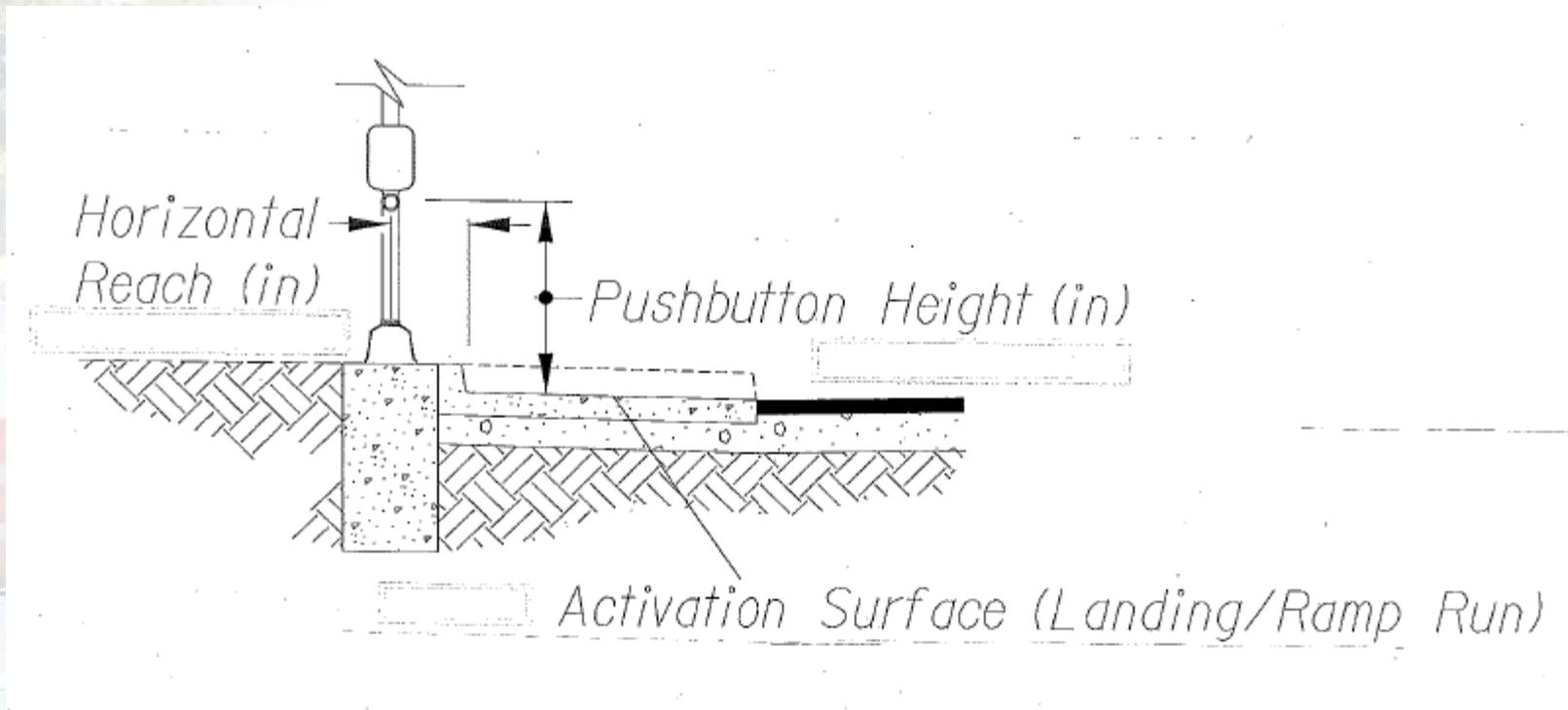
***(Use the following paragraph when item (n) is included in the pay item list above.)***

Item (n) includes the additional work required to construct a new sidewalk ramp in a new concrete sidewalk or monolithic curb and sidewalk. Payment for the area of the new sidewalk ramp will be made under the concrete walk or sidewalk pay item.

No separate or additional payment will be made for Sidewalk Ramp Working Drawings, Sidewalk Ramp Plan, Preplacement Conference, concrete form verification, and any necessary repair or removal and replacement of Sidewalk Ramps.



# 2016 Statewide Project Managers Meeting



ROAD  
WORK  
AHEAD



## Address ADA in three ways:

New work – include all aspects of ADA features to current standards.

Alterations – Example:

- resurfacing projects

Curb to curb width resurfacing, mill and inlay, overlay  
full city block through two intersections

Triggers constructing missing, updating existing to current standard.

- Many other work situations can be alterations that trigger some or all ADA features.
- Alteration work vs maintenance activities (not who does the work)

Transition Plan – ADA responsibilities for full system, independent of any project.

Resurfacing is an “alteration” that triggers requirement to add or upgrade curb ramps.

- New lift asphalt, with or without milling
- Micro-surfacing, thin-lift /L, Cape seals, in-place recycle

Work within a crosswalk can be a triggering “alteration”

Maintenance Activates that are not “alterations”

- Solely seal and protect road surface
- Striping, crack filling, surface sealing, chip seals, fog seals, joint repairs, pavement patching.
- In some cases, combinations of maintenance treatments at or near same time may qualify as an alteration and trigger CR

CONTACTS:

Rodger Gutierrez, ADA Engineer, ADA questions  
503 986-3554

Dave Polly, Sr. Standards Engr., Standard Drawings  
503 986-3738

Tyler Ferguson, Asset Mgt. Spec., inventory, measurement  
questions  
503 986-3524

Mike Kimlinger, Roadway Unit Mgr. 503 986-3557

Bob Pappé, STRE, TRS Section Mgr. 503 986-3606

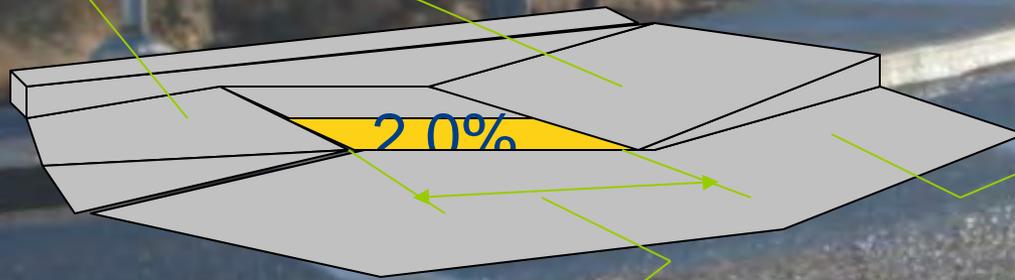
Create ramps that comply with standards (8.33%), with curb behind

Unknown (matching steep slope of road)

Unknown (matching steep slope of road)

Raise and blend roadway surface in order to provide a transition from the crosswalk to the level landing.

Create a level landing





Slide Title Here



*Haynes - Berkeley Springs; The Dallas - Colo. Hwy. "Laying Asphalt Concrete" 11-29-53 OSHD. CONST. DIV. #2420 J.*

## What's in Scope?



## Crosswalk slope vs roadway slope

The cross slope of a crosswalk is equivalent to the running grade of the highway or cross street.

*R302.6 Cross Slope. Except as provided in R302.6.1 and R302.6.2, the cross slope of pedestrian access routes shall be 2 percent maximum*

