



Earthquake Ready Burnside Bridge

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Facilities Standards List			
Design Element	Standard	Source	Notes
Classification	Major City Traffic Street Civic Main Street City Walkway Pedestrian District (West Only) Major City Bikeway Bicycle District (West Only) Major Emergency Response Street Major Transit Priority Street	City of Portland Transportation System Plan	
Design Speed	40 MPH on bridge (Posted 35 MPH), 30 MPH on city streets (Posted 25 MPH) (applies to streets under Burnside Bridge, and to Burnside Street west and east of Burnside Bridge)	Roadway/Transit Working Group #1	City desire to look at lowering posted speed to less than 35 MPH.
Design Vehicle	Design for existing vehicle usage. Accommodate emergency vehicles.	Roadway/Transit Working Group #1	Will work with City to develop Interchange Design Vehicle Assumptions Report (IDVAR) to document design vehicles.
Minimum Radius	764 ft. (40 MPH, no superelevation) 333 ft. (30 MPH, no superelevation)	AASHTO, A Policy on Geometric Design of Highways and Street, 2018	
Stopping Sight Distance	305 ft. (40 MPH) 200 ft. (30 MPH)	AASHTO, A Policy on Geometric Design of Highways and Street, 2018	
Grade	4.75%	City of Portland discussions (Cameron Glasgow/Eva Huntsinger)	Maximum standard is 5% for ADA. 4.75% reduces risk of exceeding tolerance during construction.
Minimum Allowable K Values (Crest and Sag Vertical Curves)	44 (Crest, 40 MPH) 64 (Sag, 40 MPH) 19 (Crest, 30 MPH) 37 (Sag, 30 MPH)	AASHTO, A Policy on Geometric Design of Highways and Street, 2018	
Superelevation	4% maximum for urban design. Can be omitted for low-speed urban street	AASHTO, A Policy on Geometric Design of Highways and Street, 2018	
Lateral Offset to Obstruction	30 in.	City of Portland	Bridge column placement, light poles
Vertical Clearance (Over Roadway, Bicycle, Sidewalk, Light Rail)	City Roads: 18 ft. standard, 16 ft. minimum I-5/Ramps: 17 ft. 4 in. Bicycle/Sidewalk: 12 ft. Light Rail: 15.5 ft. (match existing top of rail to bottom of existing bridge)	Roadway/Transit Working Group #1 and discussion with TriMet (John Griffiths) for Light Rail clearance	
ADA Standards	See City of Portland ADA Curb Ramp Design Form (Design) https://www.portlandoregon.gov/transportation/article/642921	City of Portland	Presence of, width, and grades of sidewalk; placement of curb ramps and crosswalks designed to ADA standards
Protected Bike Lane	7 ft. minimum	Multimodal Working Group #1	Width of bicycle and type of protection
Sidewalk	4 ft. width for Finishing Zone and 8 ft. clear width for Through Pedestrian Zone	City of Portland, Portland Pedestrian Design Guide	
Median	2 ft. (painted) on bridge	Multnomah County	
Travel Lane	10 ft. general purpose 11 ft. with transit (bus/streetcar)	Roadway/Transit Working Group #1	
Shoulder	2 to 0 ft.	ODOT Blueprint for Urban Design, 2020 (Assumed Urban Context: Downtown/Central Business District)	2 ft. minimum between travel lanes and vertical barriers
Streetcar	Dimensions: 8 ft. width 66 ft. length 11.9 ft. height (w/o pantograph)	Portland Streetcar, Inc.	
	Minimum Turning Radius: 82' desirable (59' absolute min)	Portland Streetcar, Inc.	59' creates maintenance issues
	Track Location: Outside lanes	Multimodal Working Group #1	
	In Travel Lane Envelope: 10' minimum	Portland Streetcar, Inc.	
	Maximum Grade: 7% desirable (8.5% min)	Portland Streetcar, Inc.	