

CHAPTER 4 - TRANSPORTATION

Table 2: Minimum Street Design Standards

Design Standards	Functional Classification											
	Arterial Blvd	Arterial	Major Industrial Collector	Major Commercial Collector Blvd	Major Commercial Collector	Major Collector Blvd	Major Collector	Neighborhood Collector Blvd	Neighborhood Collector	Local Access	Alleys	
											Com.	Res.
Minimum Structural Design	See Standard Drawing 4-6A											
ADT	14,000-40,000	14,000-40,000	3,000-14,000	3,000-14,000	3,000-14,000	3,000-14,000	3,000-14,000	500-3,000	500-3,000	0-500	N/A	N/A
Sidewalks	8' both sides (1)	8' both sides (1)	6' both sides	5' plant area 5' awning area	5' plant area 5' awning	6' both sides	6' both sides	5' both sides	5' both sides	5' both sides	None	None
Planting Strips (4)	10' between curb & walk both sides ----- 14' center median	10' between curb & walk both sides	6' between curb & walk both sides	2-lane = 10' median ----- 4-lane = 14' median	5' planting area 5' awning both sides	8' between curb & walk both sides ----- 14' center median	8' between curb & walk both sides	8' between curb & walk both sides (2) ----- 10' median	8' between curb & walk both sides (2)	8' between curb & walk both sides (2)	None	None
Street Tree Spacing (5)	40' on center	40' on center	40' on center	40' on center	40' on center	40' on center	40' on center	40' on center	40' on center	40' on center	None	None
Parking Lanes	None	None	None	7' both sides	7' both sides	None	None	None	6' one side	6' one side (6)	None	None
Curbs	Curb both sides	Curb both sides	Curb both sides	Curb both sides	Curb both sides	Curb both sides	Curb both sides	Curb both sides	Curb both sides	Curb both sides	None	None
Lane Widths	All Arterials and Major Collectors will use 10-foot travel lanes, 5-foot bike lanes and 11-foot center turn lanes. On high frequency bus routes and truck routes, upon evaluation, the City Engineer may require different lane width dimensions to address safety concerns. Street widths will be measured as shown on Standard Plans for each street classification.							2 lane - 1'-6'	1 lane-10' 1 lane-9'	1 lane-12'	12	Two-36" ribs
R-O-W	2 lanes - 88' 3 lanes - 88' 4 lanes - 104' 5 lanes - 104'	2 lanes - 68' 3 lanes - 79' 4 lanes - 88' 5 lanes - 99'	2 lanes - 56' 3 lanes - 67' 4 lanes - 76' 5 lanes - 87'	2 lanes - 80' 3 lanes - 84' 4 lanes - 104' (3)	2 lanes - 68' 3 lanes - 79' 4 lanes - 88' (3)	2 lanes - 80' 3 lanes - 80' 3 lanes - 96' (3)	2 lanes - 60' 3 lanes - 71' 4 lanes - 80' (3)	2 lanes - 74' 2 lanes w/ swale - 70'	2 lanes - 55' - 65' w/ class II and III 2 lanes w/ swale - 51' - 61' w/ class II and III	1 lane - 48' 1 lane w/ swale - 44'	12	12 No dead ends
Intersection Radii	35' turning radius (7)	35' turning radius (7)	35' turning radius (7)	35' turning radius (7)	35' turning radius (7)	35' turning radius (7)	35' turning radius (7)	25' curb radius (7a)	25' curb radius (7a)	30' curb radius (7a)	N/A	N/A
Cul-de-sac Radii	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	47' w/ 17' landscaped island	N/A	N/A
Pedestrian Bulb-outs	Curb bulb-outs required on all Arterials, Major Collectors, and Neighborhood Collectors where on-street parking exists. Downtown is defined as the area bounded by: Budd Inlet on the north; Budd Inlet and Capitol Lake on the west; along 11 <sup>th</sup> Avenue extending between Capitol Lake and Jefferson Street; along Jefferson Street, 11 <sup>th</sup> Avenue to Union Avenue; along Union Avenue, from Jefferson Street to Eastside Street; along Eastside Street on the east from Union Avenue to Olympia Avenue; and along Olympia Avenue in a westerly direction reconnecting with Budd Inlet on the north, including properties owned by the Port of Olympia.											
Grades	0.5-8%	0.5-8%	0.5-8%	0.5-10%	0.5-10%	0.5-10%	0.5-10%	0.5-12%	0.5-12%	0.5-15%	0.5-15%	0.5-15%
Maximum Design Speeds	35 mph	35 mph	30 mph	25 mph	25 mph	30 mph	30 mph	25 mph	25 mph	20 mph	10 mph	10 mph
Site Access	See Access Points and Intersection Criteria Guidelines							20' from intersection	20' from intersection	20' from inter-	N/A	N/A

									section				
Street Lighting	Highmast ornament	Highmast ornament	Highmast ornament	Highmast ornament	Highmast ornament	Highmast ornament	Highmast ornament	Highmast ornament	Highmast ornament	Ped Scale	N/A	N/A	
Access Width	See Access Points and Intersection Criteria Guidelines	10' at PL 15' at PL Curb	10' at PL 15' at PL Curb			10' at PL 15' at PL Curb	N/A	N/A					
Bicycle Facilities	All classifications of Arterials and Major Collectors will have Class II or Class III bicycle facilities as designated on the <a href="#">Comprehensive Plan Bicycle Transportation Map</a> . Exceptions are Plum Street, Olympic Way, Harrison Avenue east of Division Street, and Eskridge Boulevard from Capitol Way to Henderson Boulevard.								Class II or III as designated on bike map	Class II or III as designated on bike map	Class II or III as designated on bike map	N/A	N/A

- (1) Sidewalk width will be 10 feet in the Central Business District or where the extensions of existing frontage improvements are being extended and the sidewalk width is 10'.
- (2) Swale will only be used as an alternative design based on environmental standards. When swale required, swale width = 12' between curb and sidewalk, 6' tree easement opposite side of swale.
- (3) The need for left-turn channelization will be evaluated at intersections and access points.
- (4) Unless otherwise agreed upon by the City of Olympia, maintenance of street trees, turf or other landscaping within the planting strips is the responsibility of the adjacent landowner.
- (5) Exact spacing and species to be determined by Urban Forester. Spacing is approximate - exact spacing will depend on locations of streetlights, fire hydrants, driveways, sign clearance triangles, etc.
- (6) Block faces that are greater than 350 feet require parking bulb-outs at both street ends to define parking with a 100 foot No Parking Zone center block.
- (7) Turning radius dimensions represent the vehicle turning path. The smallest curb radius should be used while maintaining the specified turning radius. Lane width and the presence of a bike lane and parking lane affect a vehicle's turning path and allow a smaller radius to be used. All curb radii shall be designed to accommodate a bus, garbage and fire truck turning path. On streets with more than one lane in that direction of travel, large vehicles may encroach into no more than one-half of the adjacent travel lane to complete the turn. On Arterials and Major Collectors, encroachment into oncoming travel lanes is unacceptable. The minimum curb radius is 15 feet.
- (7a) At the intersection of two classes of streets, the radius for the higher class of street is used. Where larger truck types are anticipated, further engineering design will be required to determine an adequate radius.
- (8) Parking may be required on a case-by-case analysis of neighborhood parking needs.

Table 3: Street Characteristics

Street Characteristics	Arterial Street	Major Collector	Neighborhood Collector	Local Access Street
Types of Traffic Served	Regional and City-wide	Sub-regional, feed Arterial traffic	Subarea and local traffic, feed Major Collector traffic	Local traffic, feed Neighborhood/Major Collector or Arterial Traffic
Traffic Volumes	14,000 - 40,000 Average Daily Traffic	3,000 - 14,000 Average Daily Traffic	500 - 3,000 Average Daily Traffic	0 - 500 Average Daily Traffic
Percent Local Traffic	0 - 15% of origins and destinations are within a one mile radius of the street	0 - 30% of origins and destinations are within a one mile radius of the street	70% - 100% of origins and destinations are within a one mile radius of the street	80% - 100% of origins and destinations are within a one mile radius of the street
Average Travel Length	10 to maximum miles	2 to 15 miles	1 to 2 miles	Minimum to two miles
Street Spacing	1 - 2 miles	2 - ¾ mile	1000' - 1500'	350' - 500' (2 blocks)
Intersection Spacing (1)	500' - 750' (2-3 blocks)	350' - 500' (2 blocks)	250' - 350- (1 block)	250' - 350- (1 block)
Design Speed	30 - 35 mph	25 - 35 mph	25 mph	20 - 25 mph
On-Street Parking	No - except where parking exists and where exempt. Existing parking may be removed for other Transportation	No - except where parking exists and where exempt. Existing parking may be removed for other Transportation	Yes - with bulb-outs at intersections.	Yes - one side with parking bulb-outs to define parking areas.

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	needs. Where parking exists, intersection bulb-outs are required.	needs. Where parking exists, intersection bulb-outs are required.		
Driveway Access	No	No - except for existing developments	Yes	Yes
Bike Lanes (Class II or Class III)	Yes - except Plum, Olympic, or Harrison east of Division	Yes - except Eskridge from Capitol to Henderson	Optional - refer to <u>Comprehensive Plan Bicycle Map 6-2</u>	No
Planting Strips (between sidewalk and curb)	Yes	Yes	Yes	Yes
Sidewalks	Yes	Yes	Yes	Yes
Traffic Calming	No	As needed	Yes - if problem is anticipated or determined through an engineering study	Yes - if problem is anticipated or determined through an engineering study
Transit Shelters	Every 2 miles	Every 2 miles	None	None
Transit Pullouts	Every 2 miles	Every 2 miles	None	None

(1) These intersection spacing requirements will not be used as criteria/justification to close existing streets