

Aubrey Davis Park Master Plan
Trail width Survey 2019

Summary

The average width of the Mountains to Sound Trail is approximately 12' wide west of Mercer Island Town Center and is approximately 11' wide east of Town Center to SE 35th Street and North Mercer Way. The trail eastward to the East Channel Bridge averages less than 10' wide because of various physical constraints. Town Center was omitted from the survey because of transportation planning efforts that will study multi-modal integration there.

Average trail widths

Section of Trail	Number of measurements	Average pavement width
Eastern High Rise to West Mercer Way	13	12'7"
West Mercer Way to Restroom	16	12'4"
Restroom to 76 th Ave SE	15	12'7"
Island Crest Way to Shorewood Drive	29	11'0"
Shorewood Drive to North Mercer Way	20	10'11"
North Mercer Way to East Mercer Way	14	9'10"
East Mercer Way to East Channel Bridge	7	9'8"

Details

City of Mercer Island Parks and Recreation staff measured the width of the Mountains to Sound Trail. This took place during the week of July 29, 2019. The survey started at the eastern high rise of the floating bridge and progressed eastward.

Measurements were taken every 100 feet using a Rollotape measuring wheel and a 12' wooden stick marked in 3" increments. A tape measure was also used to refine measurements to the nearest inch. A soil knife was used to expose the pavement edge where it was covered with vegetation. Where the edge was covered with vegetation, that distance of the coverage was also measured. The type of edge material was also noted for each location. Each location was photodocumented with a point-and-shoot camera.

Pavement edges are typically not constructed vertically. They generally taper from the finished surface outward to match the subgrade. At a few locations the edge is not defined by a sharp angle between the finished surface and the outslope. This condition was found infrequently, perhaps 10% or less of the stations. Where that situation occurred, the edge was determined to be located where the trail surface was less than or equal to ¼" below the plane of the finished surface. See Figure 1.

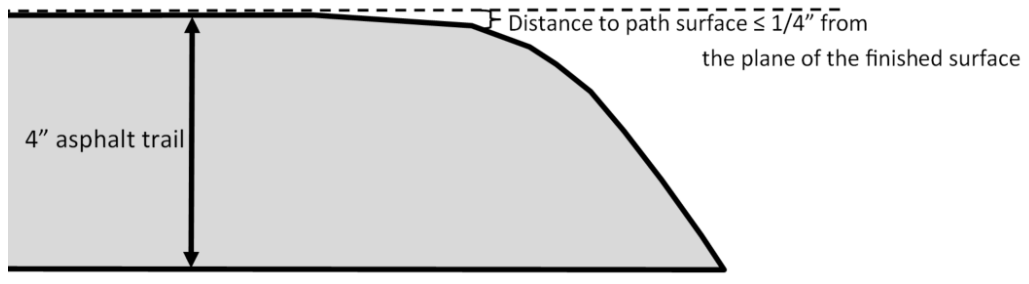


Figure 1: Schematic cross-section showing how the location of the path edge was determined at a poorly defined edge

Section	Station	Landmark	N Shoulder	N edge veg cover	Trail width		S edge veg cover	S shoulder	Date Collected	Width Inches	Av Width feet	residual inches
					total whole feet width	additional inches width						
EHR to WMW	0	gate to bridge	fine gravel	0	10	1	0	wall	7/29/2019	121		
EHR to WMW	108	E of cutoff trail	fine gravel	0	14	11	0	wall	7/29/2019	179		
EHR to WMW	200	W of end of shrub bed	fine gravel	0	17	2	0	wall	7/29/2019	206		
EHR to WMW	300	bike yield sign	coarse grav	0	12	6	0	coarse grav	7/29/2019	150		
EHR to WMW	400	tree alley	coarse grav	0	12	1	0	coarse grav	7/29/2019	145		
EHR to WMW	500	tree alley	coarse grav	0	11	11	0	coarse grav	7/29/2019	143		
EHR to WMW	600	tree alley	coarse grav	0	12	2	0	coarse grav	7/29/2019	146		
EHR to WMW	700	east of crack in trail	coarse grav	0	12	2	0	coarse grav	7/29/2019	146		
EHR to WMW	800	S of retaining wall	ivy bed	0	12	0	4	ivy bed	7/29/2019	144		
EHR to WMW	900	entrance to Lid	ivy bed	0	12	1	0	ivy bed	7/29/2019	145		
EHR to WMW	1000	W of bench	grass	0	12	1	12	ivy bed	7/29/2019	145		
EHR to WMW	1100	parking lot	fine gravel	0	12	3	1	grass	7/29/2019	147		
EHR to WMW	1200	40' west of bollards	grass	3	12	3	2	grass	7/29/2019	147	12.58974	7.07688
WMW to RR	0	bollards	coarse grav	0	12	0	0	ivy bed	7/29/2019	144		
WMW to RR	100	euonymus	coarse grav	0	12	2	0	ivy bed	7/29/2019	146		
WMW to RR	200	rugosa rose	grass	0	12	0	1	ivy bed	7/29/2019	144		
WMW to RR	300	playground	grass	0	12	0	0	coarse grav	7/29/2019	144		
WMW to RR	400	railing	curb	0	17	0	2	ivy bed	7/29/2019	204		
WMW to RR	530	E of trail to bb court	coarse grav	0	12	3	2	ivy bed	7/29/2019	147		
WMW to RR	600		coarse grav	0	11	10	2	ivy bed	7/29/2019	142		
WMW to RR	700	W of 70th	coarse grav	0	12	0	0	ivy bed	7/29/2019	144		
WMW to RR	800	tennis courts	grass	0	11	10	0	coarse grav	7/29/2019	142		
WMW to RR	930	stacks	grass	0	11	10	0	coarse grav	7/29/2019	142		
WMW to RR	1000	ADP sign	grass	3	11	10	0	coarse grav	7/29/2019	142		
WMW to RR	1100	retaining wall	coarse grav	0	12	0	0	dirt	7/29/2019	144		
WMW to RR	1200	W of Town Ctr sign	coarse grav	0	12	2	0	coarse grav	7/29/2019	146		
WMW to RR	1305	To Town Ctr sign	ivy bed	0	11	9	0	ivy bed	7/29/2019	141		
WMW to RR	1400	S of Feroglia sign	grass	0	12	2	0	grass	7/29/2019	146		
WMW to RR	1505	peace pole	dirt	0	11	10	0	grass	7/29/2019	142	12.29167	3.50004
RR to 76th	0	I90 trail sign	ivy bed	2	11	9	1	grass	7/30/2019	141		
RR to 76th	100	W of trail intersection	ivy bed	0	11	10	2	grass	7/30/2019	142		
RR to 76th	200	E of trail intersection	coarse grav	0	12	2	0	coarse grav	7/30/2019	146		
RR to 76th	300	ivy covered railing	coarse grav	0	12	0	0	moss	7/30/2019	144		
RR to 76th	400	E of curve	coarse grav	0	12	2	0	ivy bed	7/30/2019	146		
RR to 76th	500	bare retaining wall	coarse grav	0	12	1	0	ivy bed	7/30/2019	145		
RR to 76th	600	ivy covered ret. Wall	coarse grav	0	12	3	2	ivy bed	7/30/2019	147		
RR to 76th	700	ivy covered ret. Wall	coarse grav	0	12	2	0	ivy bed	7/30/2019	146		
RR to 76th	800	between 2 walls	coarse grav	0	12	0	0	dirt	7/30/2019	144		
RR to 76th	900	vault	ivy bed	0	12	3	0	coarse grav	7/30/2019	147		
RR to 76th	1000	end of ret. Wall	dirt	0	12	0	2	ivy bed	7/30/2019	144		

Section	Station	Landmark	N Shoulder	N edge veg cover	total whole feet width	additional inches width	S edge veg cover	S shoulder	Date Collected	Width Inches	Av Width feet	residual inches
RR to 76th	1100	bike yield sign	coarse grav	0	12	0	0	coarse grav	7/30/2019	144		
RR to 76th	1200	76th and NMW sidewk	coarse grav	0	12	2	0	ivy bed	7/30/2019	146		
RR to 76th	1300	I90 sign	moss	0	12	2	0	ivy bed	7/30/2019	146		
RR to 76th	1400	10' W of ST new trail	fine gravel	0	11	11	0	fine gravel	7/30/2019	143	12.06111	0.73332
ICW to Show Dr	0	bollards	dirt	0	10	3	0	dirt	7/30/2019	123		
ICW to Show Dr	100	WSDOT vault	dirt	0	10	3	0	ivy bed	7/30/2019	123		
ICW to Show Dr	200	low spot	dirt	0	10	3	0	dirt	7/30/2019	123		
ICW to Show Dr	300	I90 trail sign	grass	6	10	11	0	grass	7/30/2019	131		
ICW to Show Dr	400	lid connector trail	grass	0	11	7	1	grass	7/30/2019	139		
ICW to Show Dr	500	NMW and 84th	coarse grav	0	11	10	0	shrubs	7/30/2019	142		
ICW to Show Dr	600	overlook	coarse grav	0	11	8	0	coarse grav	7/30/2019	140		
ICW to Show Dr	700	retaining wall/katsuras	coarse grav	0	11	0	0	wall	7/30/2019	132		
ICW to Show Dr	800	ret wall at NMW	coarse grav	0	10	6	0	dirt	7/30/2019	126		
ICW to Show Dr	915	E of crosswalk	dirt	0	10	2	0	dirt	7/30/2019	122		
ICW to Show Dr	1000	8438	dirt	0	10	2	0	dirt	7/30/2019	122		
ICW to Show Dr	1100	arborvitae	dirt	0	10	2	0	leaves	7/30/2019	122		
ICW to Show Dr	1200	8448	dirt	0	10	1	0	leaves	7/30/2019	121		
ICW to Show Dr	1300	power pole and vault	shrubs	0	10	2	0	leaves	7/30/2019	122		
ICW to Show Dr	1420	E of paved cutthru	shrubs	16	10	7	0	ivy bed	7/30/2019	127		
ICW to Show Dr	1500	serviceberry	leaves	3	10	4	4	ivy bed	7/30/2019	124		
ICW to Show Dr	1600	8602	shrubs	2	10	7	0	grass	7/30/2019	127		
ICW to Show Dr	1700	8618	shrubs	4	10	1	0	leaves	7/30/2019	121		
ICW to Show Dr	1800	8620	weeds	1	10	2	0	ivy bed	7/30/2019	122		
ICW to Show Dr	1900	8630	shrubs	6	10	1	0	leaves	7/30/2019	121		
ICW to Show Dr	2000	8646	coarse grav	0	10	3	0	leaves	7/30/2019	123		
ICW to Show Dr	2100	beige mailbox	coarse grav	0	12	0	4	dirt	7/30/2019	144		
ICW to Show Dr	2200	sidewalk cutoff	fine gravel	0	12	4	0	dirt	7/30/2019	148		
ICW to Show Dr	2300	bus stop	fine gravel	0	12	1	10	leaves	7/30/2019	145		
ICW to Show Dr	2400	slope	fine gravel	0	12	1	0	leaves	7/30/2019	145		
ICW to Show Dr	2500	hydrant	fine gravel	0	12	3	3	shrubs	7/30/2019	147		
ICW to Show Dr	2600	89th PI SE	fine gravel	0	12	0	0	dirt	7/30/2019	144		
ICW to Show Dr	2700	ped sign	fine gravel	0	12	1	0	dirt	7/30/2019	145		
ICW to Show Dr	2800	vault	fine gravel	0	12	1	0	fine gravel	7/30/2019	145	10.96552	11.58624
Show Dr to NMW	0	water post	fine gravel	0	12	6	0	fine gravel	8/2/2019	150		
Show Dr to NMW	100	pears	fine gravel	0	12	10	0	fine gravel	8/2/2019	154		
Show Dr to NMW	200	old path	fine gravel	0	10	8	0	fine gravel	8/2/2019	128		
Show Dr to NMW	300	firs	grass	1	10	2	1	grass	8/2/2019	122		
Show Dr to NMW	400	katsura	grass	0	11	0	0	grass	8/2/2019	132		
Show Dr to NMW	500	corner of ret wall	fine gravel	0	11	10	0	grass	8/2/2019	142		
Show Dr to NMW	600	vaults	grass	4	11	7	0	grass	8/2/2019	139		
Show Dr to NMW	700	house	grass	1	11	8	1	grass	8/2/2019	140		

Section	Station	Landmark	N Shoulder	N edge veg cover	total whole feet width	additional inches width	S edge veg cover	S shoulder	Date Collected	Width Inches	Av Width feet	residual inches
Shorw Dr to NMW	800	slope	grass	1	11	8	2	leaves	8/2/2019	140		
Shorw Dr to NMW	900	pole	grass	3	11	9	0	leaves	8/2/2019	141		
Shorw Dr to NMW	1000	firs both sides	leaves	2	10	1	0	leaves	8/2/2019	121		
Shorw Dr to NMW	1100	Cov. Shores W	shrubs	3	9	9	2	ivy	8/2/2019	117		
Shorw Dr to NMW	1200	Cov. Shores	shrubs	0	10	4	0	ivy	8/2/2019	124		
Shorw Dr to NMW	1300	Cov. Shores	shrubs	0	9	11	0	ivy	8/2/2019	119		
Shorw Dr to NMW	1400	Cov. Shores	shrubs	0	9	6	0	ivy	8/2/2019	114		
Shorw Dr to NMW	1500	Cov Shores sign	shrubs	0	10	8	0	ivy	8/2/2019	128		
Shorw Dr to NMW	1600	bus stop	ivy	1	10	5	0	ivy	8/2/2019	125		
Shorw Dr to NMW	1700	w end guard rail	moss	1	10	4	0	shrubs	8/2/2019	124		
Shorw Dr to NMW	1800	near 35th	ivy	0	10	5	0	shrubs	8/2/2019	125		
Shorw Dr to NMW	1900	35th	curb	0	12	1	0	shrubs	8/2/2019	145	10.95833	11.49996
NMW to EMW	0	35th	grass	1	10	1	0	grass	8/2/2019	121		
NMW to EMW	100	no parking sign	grass	1	10	3	0	moss	8/2/2019	123		
NMW to EMW	200	gap in trees	grass	0	10	3	0	dirt	8/2/2019	123		
NMW to EMW	300	10 mph sign	grass	2	10	4	0	dirt	8/2/2019	124		
NMW to EMW	400	lawn	grass	1	10	2	4	ivy	8/2/2019	122		
NMW to EMW	526	bollards	shrubs	12	9	2	0	wall	8/2/2019	110		
NMW to EMW	618	house 3508, E of pullout	grass	3	9	9	0	wall	8/2/2019	117		
NMW to EMW	700	madrona	leaves	0	9	9	0	wall	8/2/2019	117		
NMW to EMW	800	fence	grass	1	9	10	0	wall	8/2/2019	118		
NMW to EMW	904	utility box	grass	2	10	1	0	wall	8/2/2019	121		
NMW to EMW	1000	hedge	shrubs	3	9	5	0	wall	8/2/2019	113		
NMW to EMW	1100	hedge	shrubs	2	9	9	0	wall	8/2/2019	117		
NMW to EMW	1200	carpool sign on ramp	dirt	0	9	5	0	ivy	8/2/2019	113		
NMW to EMW	1300	parking area	leaves	2	9	7	0	grass	8/2/2019	115	9.845238	10.14286
EMW to Bridge	0	bollards	grass	0	11	1	6	grass	8/2/2019	133		
EMW to Bridge	100	curve at ret wall	curb	0	11	3	3	ivy	8/2/2019	135		
EMW to Bridge	200		wall	0	9	4	0	wall	8/2/2019	112		
EMW to Bridge	300	catch basin	wall	0	9	3	0	wall	8/2/2019	111		
EMW to Bridge	400	light vault	wall	0	9	3	0	wall	8/2/2019	111		
EMW to Bridge	500		wall	0	9	4	0	wall	8/2/2019	112		
EMW to Bridge	600	gap	wall	0	8	0	0	wall	8/2/2019	96	9.642857	7.714284