



Juanita Public Pathway Feasibility Study

*Transportation Commission Briefing
May 29, 2024*



Juanita Public Pathway FEASIBILITY STUDY

May 22, 2024

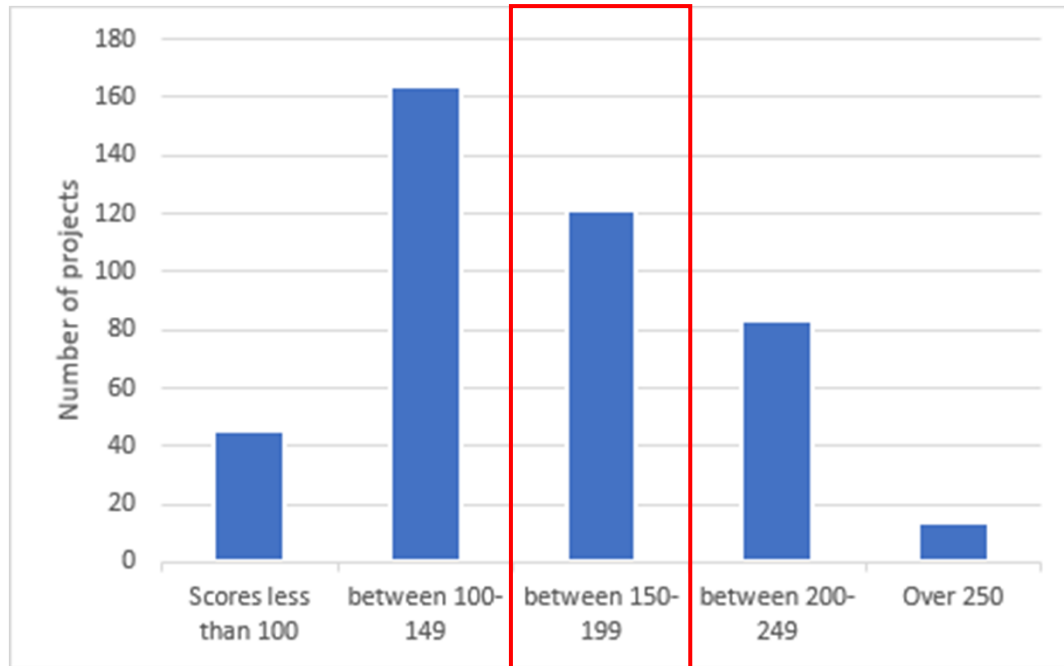


Victoria Kovacs, AICP (she/her)
Transportation Planner
Public Works Department

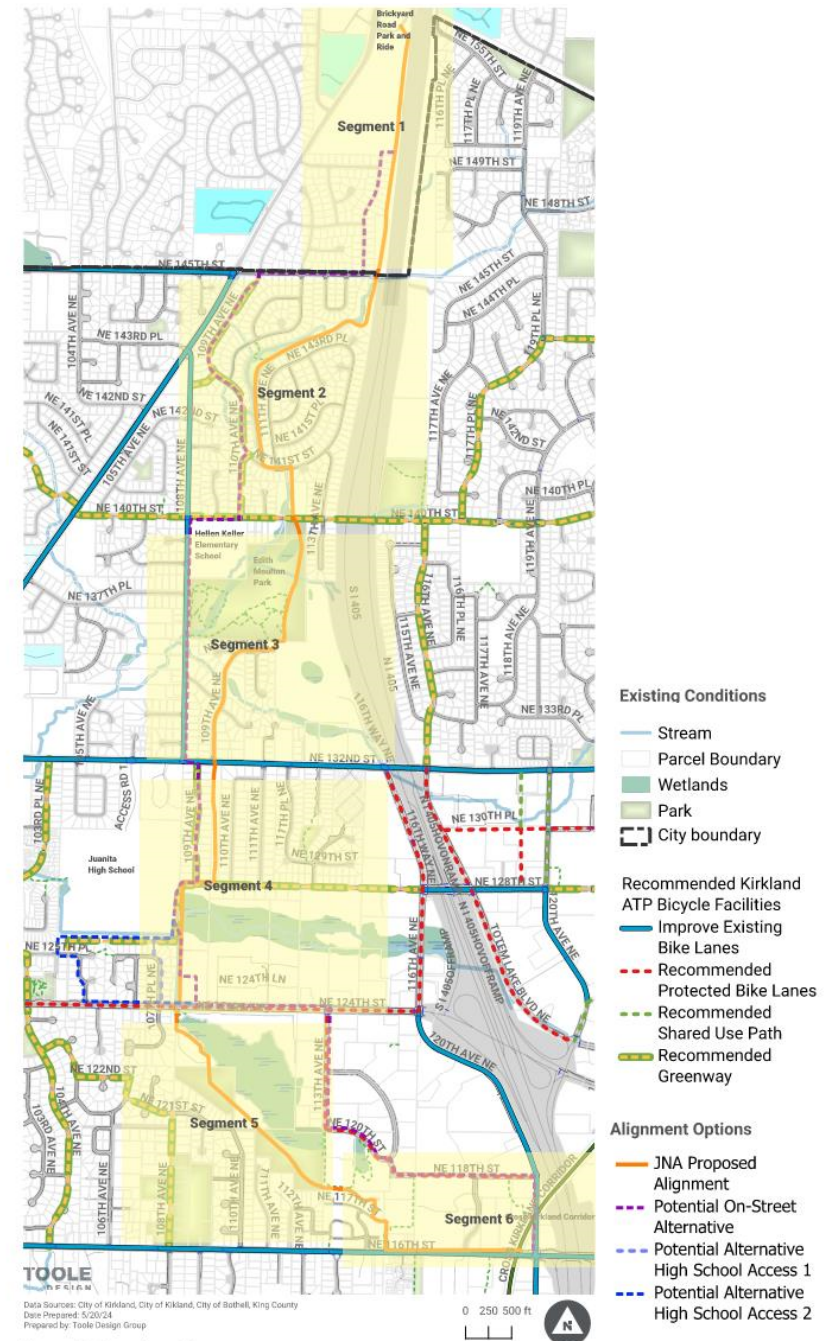


Juanita Public Pathway: Brickyard Road Park and Ride to CKC/NE 116th St

- Study Cost Opinion Low: \$17.8 million*
- Study Cost Opinion High: \$19.6 million*
- TSP Prioritization Score: 185 (350 possible)



*cost opinion does not include ROW acquisition, stormwater detention, lighting, year over year cost escalations, or maintenance



Juanita Public Pathway: Feasibility Criteria

SCORING METRICS			
	LOW	MEDIUM	HIGH
Connectivity & Directness			
Alignment is well-connected to the on-street biking and walking network. It should follow a direct route between destinations, with easy to follow routing and minimal out of direction travel.	No connections to any on-street biking/walking facilities	Connects at least one on-street biking/walking facility	Connects to multiple on-street biking/walking facilities
Access Points & Crossings			
Alignment is easily accessible to the neighborhood – access points are easy to find and use. Crossings of roadways should not pose barriers to movement, with traffic control and safety treatments for bicycles and pedestrians.	Major or multiple improvements to access points or crossings needed	Few improvements to access point or crossing needed	Easily accessible in current state, with safe roadway crossings
Active Transportation Potential			
Alignment is accessible and usable by all ages and abilities (AAA) , as indicated by: Slopes - does not require traversing steep slopes (grades of 5% for distances over 150 ft), so that it can provide an accessible path of travel. Surfacing - can be designed to accommodate all users (adequate width, firm, stable surfacing) Separation - from high volumes and speeds of motor vehicle traffic either through traffic calming interventions, physical separation, and/or enhanced crossing treatments.	Grades or other physical constraints limit use to pedestrians only for all or most of the alignment	Has some steep segment, stairs, or other constraints that would limit accessibility and use by wheeled users	Fully accessible and usable to both bicyclists and pedestrians
Right-of-way			
Alignment uses public right-of-way, and where not possible, should require minimal acquisition. Acquisition not only has cost implications but can also create challenges with public support.	Requires acquisition of entire parcels or multiple private parcels	May require an easements or partial acquisition of private parcels	No acquisition required

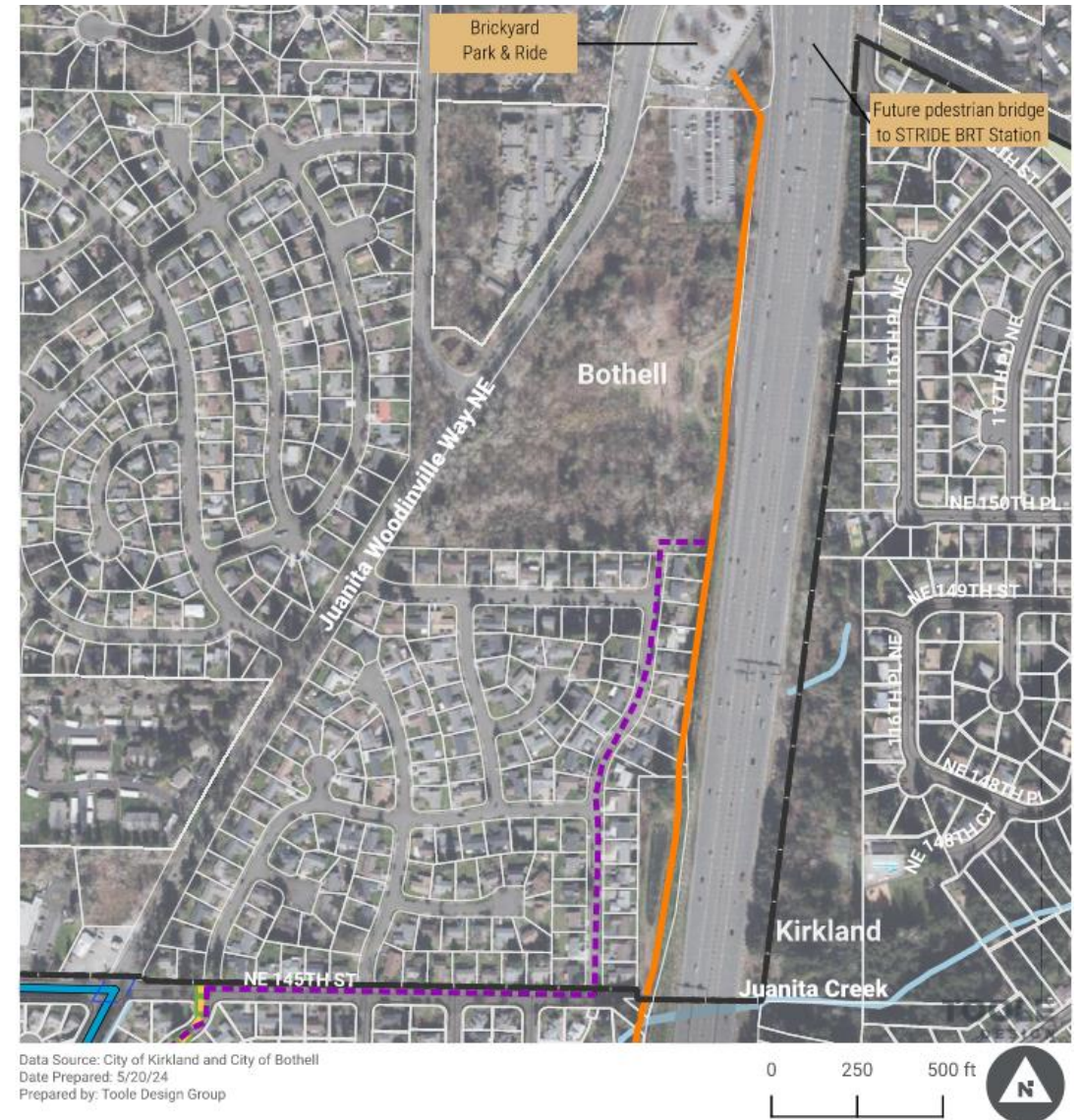
Juanita Public Pathway: Feasibility Criteria

Critical Areas			
Alignment avoids impacts to wetlands, streams and buffers, as well as erosion hazards or other critical areas in order to avoid triggering the need for environmental documentation and permitting.	Significant impacts to critical areas or significant terrain challenges	Small impacts to critical areas or minimal steep slopes	No impacts to critical areas, no steep slopes
Potential Structures or Bridges			
Alignment minimizes the need for extensive or expensive structures such as bridges, retaining walls, stormwater detention, or drainage infrastructure.	Multiple or significant structures required	Minimal structures required	Requires few to no structures
User Experience			
Physical Safety Alignment provides a safe, intuitive, comfortable user experience as defined by separation from arterials/roadways with high volumes and speeds of motor vehicle traffic, arterial crossings with pedestrian/bicycle treatments	No separation from arterials, arterial crossings without appropriate traffic control treatments	Alignment provides separation along some parts of the segment, but not the entire length. Some crossings do not have appropriate traffic control treatments	Fully separated or buffered from arterials, all crossings have appropriate traffic control treatments
Sense of Personal Security Alignment provides a sense of personal security with physical and visual connections to the neighborhood	No visual or physical connection to neighborhood/ poor sight lines	Limited visual or physical connection to neighborhood	Ample visual and or physical connection to the neighborhood
Access to Nature and Scenic Experience Per JNA's interests, there is a preference for alignments that provide a scenic experience, with a trail that passes through parks/natural areas	Segment does not pass through parks/ natural areas.	Limited parts of the segment pass through parks/ natural areas	The majority of segment passes through parks/ natural areas

Segment 1:

Brickyard Road Park and Ride to NE 145th St

- Study Cost Opinion Low: \$734,659*
- Study Cost Opinion High: \$1 million*
- TSP Prioritization Score: **N/A, City of Bothell**



Alignment Options

- JNA Proposed Alignment
- - - Potential On-Street Alternative

**cost opinion does not include ROW acquisition, stormwater detention, lighting, year over year cost escalations, or maintenance*

Segment 1: Brickyard Road Park and Ride to NE 145th St



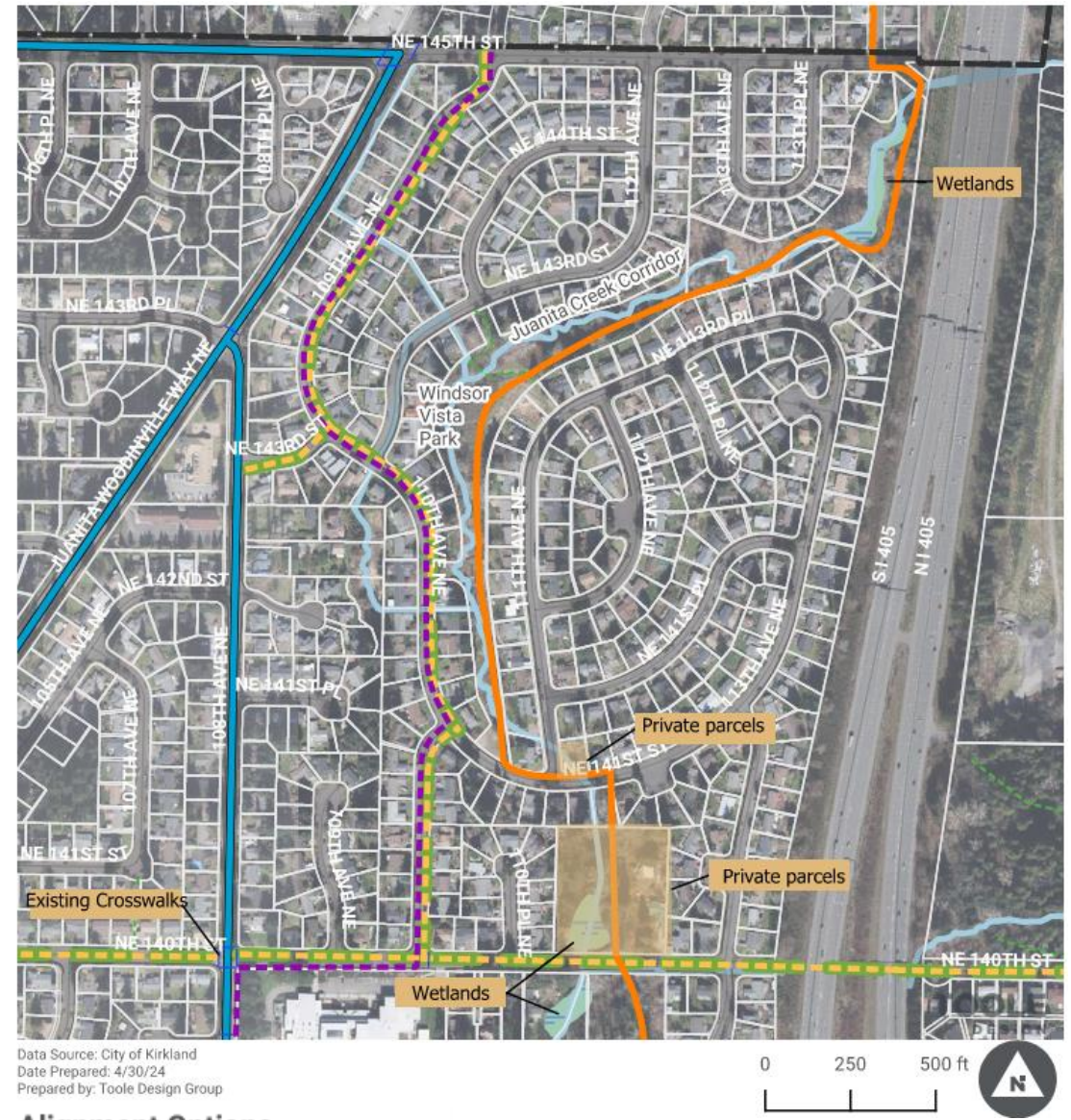
Segment 1: Brickyard Road Park and Ride to NE 145th St

FEASIBILITY EVALUATION CRITERIA	NOTES AND ANALYSIS	FEASIBILITY SCORE
Connectivity & Directness	<ul style="list-style-type: none"> Route is direct and connects to Park and Ride, but no other destinations or walking or walking facilities 	LOW
Access Points and Crossings	<ul style="list-style-type: none"> Minimal access between entry points at north and south No major street crossings 	LOW
Active Transportation Potential	<ul style="list-style-type: none"> There appears to be adequate right-of-way to create a shared-use path on the county-owned parcel Could accommodate all users (bicyclists and pedestrians) Terrain is mostly level 	MEDIUM
Right-of-way	<ul style="list-style-type: none"> Using the P&R and I-405 rights of way will require coordination with King County and WSDOT Alignment will also require acquisition or coordination with private property owners 	LOW
Critical Areas	<ul style="list-style-type: none"> Possible impacts to stormwater facility in WSDOT right-of-way north of NE 145th St 	MEDIUM
Potential Structures	<ul style="list-style-type: none"> None identified 	HIGH
User Experience: Physical Safety and Sense of Personal Security	<ul style="list-style-type: none"> Entirely separate from roadway, however, with no internal access points, segment could feel isolated between high I-405 retaining walls and the backyards of private parcels 	LOW
User Experience: Access to Nature and Scenic Quality	<ul style="list-style-type: none"> Path would provide an off-street experience, depending on distance from I-405, but highway noise could degrade the experience 	LOW
RECOMMENDATION	No action - segment is beyond Kirkland City limits and thus beyond the City's purview. Continue to coordinate with City of Bothell as opportunities present.	

Segment 2:

NE 145th St to Edith Moulton Park (NE 140th St)

- Study Cost Opinion Low: \$4.2 million*
- Study Cost Opinion High: \$4.5 million*
- TSP Prioritization Score: 110



*cost opinion does not include ROW acquisition, stormwater detention, lighting, year over year cost escalations, or maintenance

Segment 2: NE 145th St to Edith Moulton Park (NE 140th St)



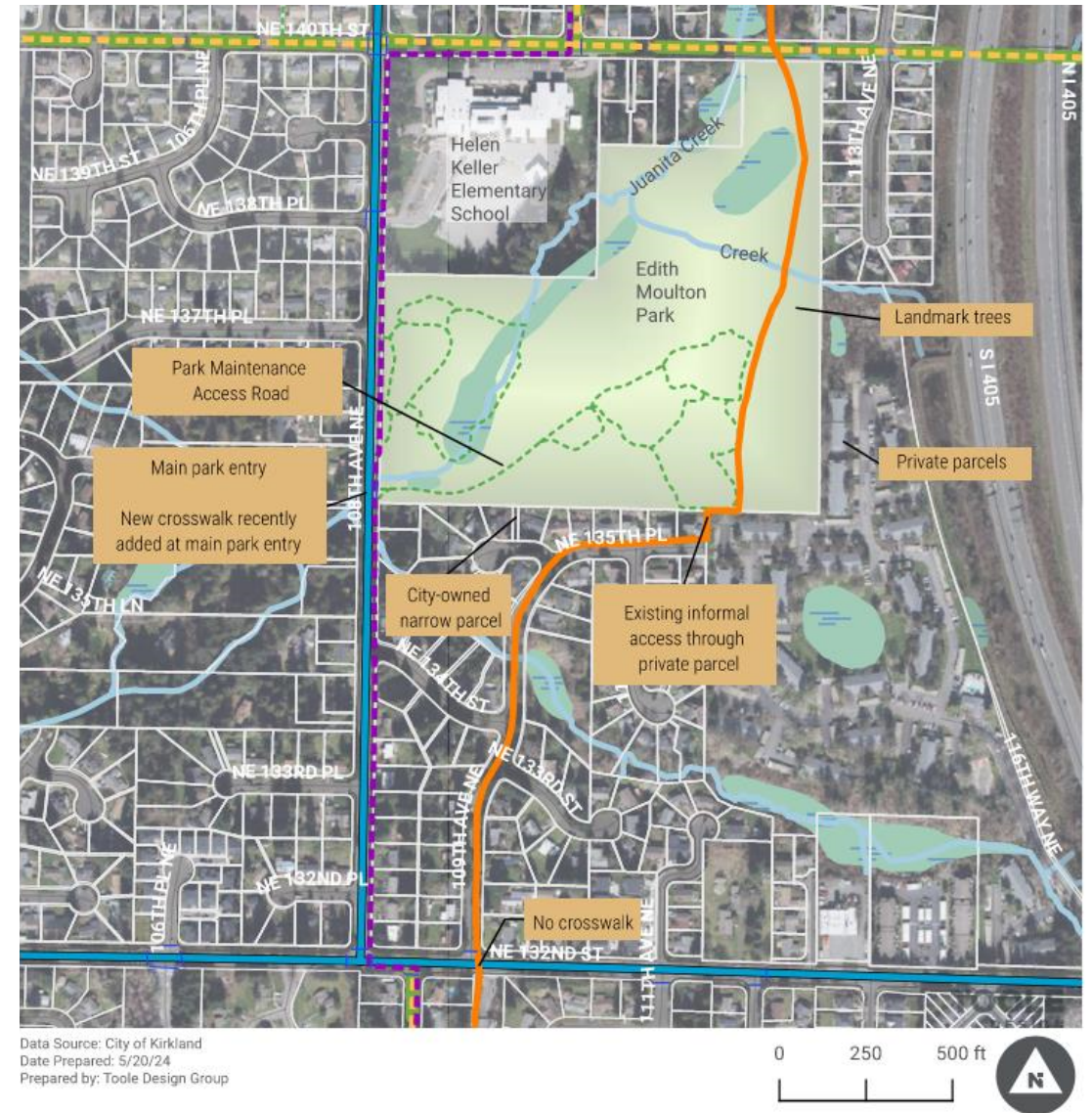
Segment 2: NE 145th St to Edith Moulton Park (NE 140th St)

Connectivity & Directness	<ul style="list-style-type: none"> Route is direct and would provide access to the neighborhood and Windsor Vista Park Route is roughly parallel with neighborhood greenways 	HIGH
Access Points and Crossings	<ul style="list-style-type: none"> Access via NE 145th Street and NE 141st, and also via each side of Windsor Vista Park off 110th Ave NE and 111th Ave NE There is one bridge across the creek but no access points or bridges at the north or south ends of Windsor Vista Park 	MED
Active Transportation Potential	<ul style="list-style-type: none"> The creek runs along the western side of the park in a ravine. There is not enough physical width or continuous level space on either side of the channel to create shared-use path Creek corridor is more suitable as a walking trail 	LOW
Right-of-way	<ul style="list-style-type: none"> Much of the path through this segment lies within Windsor Vista Park. The right-of-way through the park, from NE 145th to NE 141st varies from approximately 40 ft to over 200 ft wide South of NE 140th St, the path is proposed to cut through a private parcel to reach NE 140th St so would require right-of-way acquisition 	MED
Critical Areas	<ul style="list-style-type: none"> The path would create stream buffer and tree impacts There is also a mapped wetland on large parcel just north of 140th Street, with active and planned restoration areas. 	LOW
Potential structures	<ul style="list-style-type: none"> In addition, the path would require extensive retaining walls to create a level trail, and potentially an additional bridge for a stream crossing 	LOW
User Experience: Physical safety and Sense of Personal Security	<ul style="list-style-type: none"> Path would be very close to property lines of residences on east side of creek; privacy and security will likely be a concern for those residents 	MED
User Experience: Access to Nature and Scenic Quality	<ul style="list-style-type: none"> Path through park and along creek would provide high scenic and access to nature 	HIGH
RECOMMENDATION	Use on-street route (ATP/greenway recommendations) and maintain existing walkway through park as pedestrian (soft-surface) trail	

Segment 3:

Edith Moulton Park (NE 140th St) to NE 132nd St

- Study Cost Opinion Low: \$3.2 million*
- Study Cost Opinion High: \$3.5 million*
- TSP Prioritization Score: 140



Alignment Options

- JNA Proposed Alignment
- - - Potential On-Street Alternative

**cost opinion does not include ROW acquisition, stormwater detention, lighting, year over year cost escalations, or maintenance*

Segment 3: Edith Moulton Park (NE 140th St) to NE 132nd St



Segment 3: Edith Moulton Park (NE 140th St) to NE 132nd St

Connectivity & Directness	<ul style="list-style-type: none"> Proposed path would create a north-south connection through the park, which does not currently exist, and would provide access between neighborhoods to both the north and south of the park The path through the park would not be very direct South of the park, the route follows 109th Ave NE to NE 132nd and is very direct 	MED
Access Points and Crossings	<ul style="list-style-type: none"> The proposed path through the park would be accessed via new connections off NE 140th St to the north and via NE 132nd St to the south Currently the park can only be accessed from the west side along 108th Ave NE 	LOW
Active Transportation Potential	<ul style="list-style-type: none"> It could be possible to upgrade existing walking paths or add a shared-use path through the park but the park is heavily vegetated and in some locations has steep topography - primarily along the banks of the creek, so creating a wide, level path would require careful routing to avoid impacting natural resources 	LOW
Right-of-way	<ul style="list-style-type: none"> South of the park, existing informal access point at the eastern end of NE 135th Place (east of 110th Pl NE) is private There is a narrow public parcel off the NE 135th Pl cul de sac but it appears to connect to the park at location with steep slopes. Houses on either side of the parcel are quite close; there may be privacy concerns and fencing would likely be required. 	HIGH
Critical Areas	<ul style="list-style-type: none"> Juanita Creek runs through the park and the area around the stream is a mapped wetland The path alignment as proposed would impact the stream, the stream buffer, and the wetland, and may also require a stream crossing. Cut and fill of the wetland would likely be required to create a level path 	LOW
Potential structures	<ul style="list-style-type: none"> Depending on the alignment, the path could require crossing the stream, as well as retaining walls depending on the topography 	LOW
User Experience: Physical safety and Sense of Personal Security	<ul style="list-style-type: none"> Path could feel isolated in heavily vegetated areas; the distance could be between half and three-quarters of a mile long; utilizes local neighborhood streets to the south 	MED
User Experience: Access to Nature and Scenic Quality	<ul style="list-style-type: none"> Path through park and along creek would provide high scenic quality and access to nature 	HIGH
RECOMMENDATION	Use on-street route (ATP recommendations) and maintain existing path through walkways as pedestrian (soft-surface) trail	

Segment 4:

NE 132nd St to Juanita HS and NE 124th

- Study Cost Opinion Low: \$3.2 million*
- Study Cost Opinion High: \$3.5 million*
- TSP Prioritization Score: 180



Alignment Options

- JNA Proposed Alignment
- - - Potential On-Street Alternative

**cost opinion does not include ROW acquisition, stormwater detention, lighting, year over year cost escalations, or maintenance*

Segment 4: NE 132nd St to Juanita HS and NE 124th



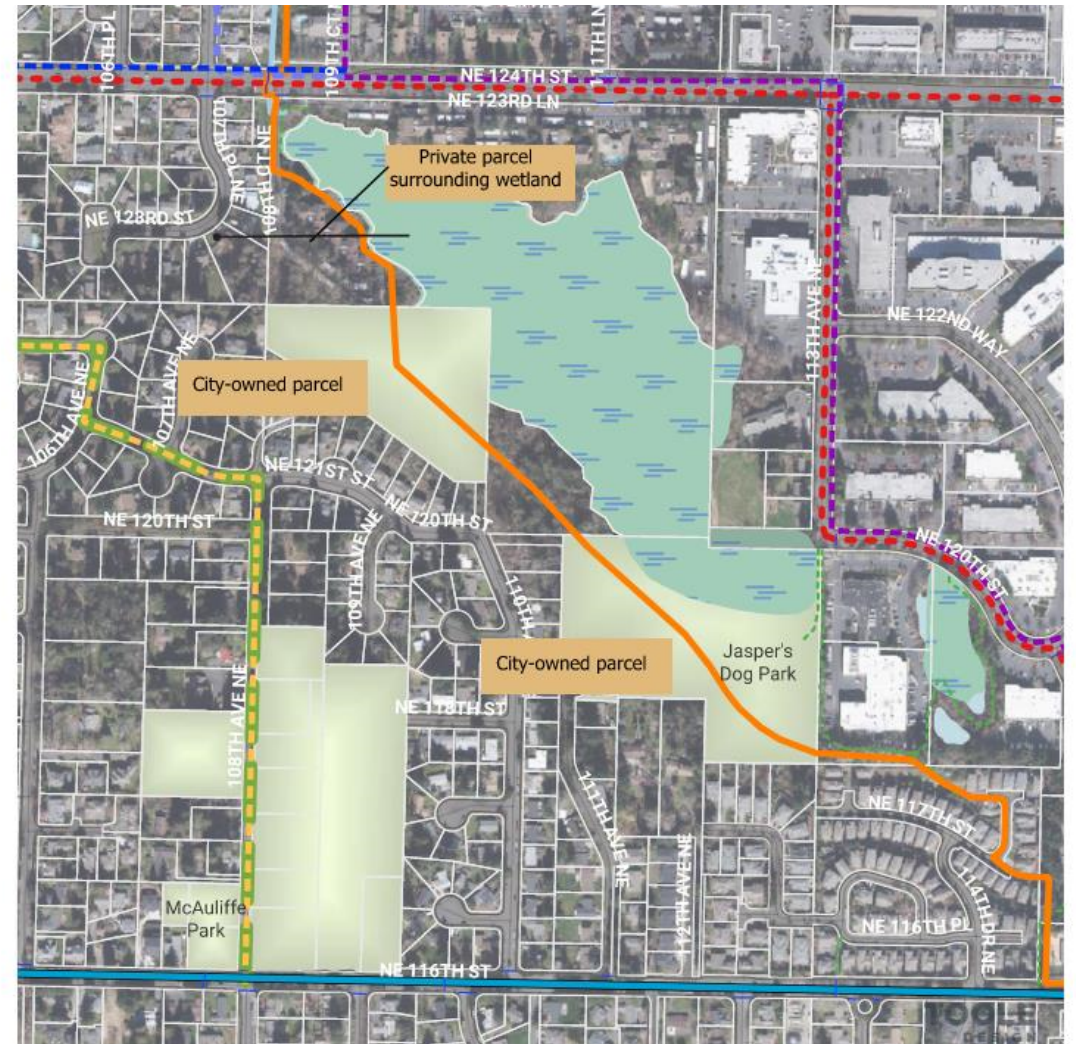
Segment 4: NE 132nd St to Juanita HS and NE 124th

Connectivity & Directness	<ul style="list-style-type: none"> Path is direct and would provide access between neighborhoods, bike lanes on NE 132nd St, and to high school The proposed path parallels a neighborhood greenway between NE 132nd St and NE 128th St The proposed path would enhance connectivity between the high school and NE 124th St 	HIGH
Access Points and Crossings	<ul style="list-style-type: none"> Multiple access points: from the north via NE 132nd St, in the middle via NE 128th St and Juanita High School, and from the south via NE 124th St 	HIGH
Active Transportation Potential	<ul style="list-style-type: none"> The power line right-of-way between NE 132nd and NE 128th St is fairly level South of NE 128th St, there a grade drop and it may be challenging to create an accessible path 	MED
Right-of-way	<ul style="list-style-type: none"> The entire segment is proposed on private parcels The Puget Sound Energy (PSE) power line corridor is not public land (PSE owns the full parcel between NE 132nd and NE 128th. South of NE 128th PSE has an easement on private property for the power poles and overhead lines). The substation with noise walls and vegetated buffer takes up the northern part of the right-of-way On the parcels to the south of NE 128th St, there is no publicly-owned right-of-way and the southern part is fully built out. The proposed alignment would mostly like need to follow along the property line Two easements between the high school property and NE 125th PI were identified, on either side of 10326 NE 125th PI and 10636 NE 125th PI 	LOW
Critical Areas	<ul style="list-style-type: none"> On the parcels south of NE 128th St, there is a stream running southeast to northwest as well as a large mapped wetland and stream. The path alignment as proposed would impact the stream, the stream buffer, and the wetland, and may also require a stream crossing. Cut and fill of the wetland would likely be required to create a level path 	LOW
Potential structures	<ul style="list-style-type: none"> The proposed path would require a bridge over the stream 	LOW
User Experience: Physical safety and Sense of Personal Security	<ul style="list-style-type: none"> At the northern end of the proposed path, the user experience would be negatively impacted by being immediately adjacent to the substation At the south end, the proposed path would likely be into a narrow space between parking areas and the property line 	LOW
User Experience: Access to Nature and Scenic Quality	<ul style="list-style-type: none"> Only the middle segment has scenic potential 	LOW
RECOMMENDATION	<ul style="list-style-type: none"> Recommend use of alternative on- street route (ATP/greenway plan recommendations) between NE 132nd St and NE 128th St. Recommend exploring use of easements between the southern border of high school and NE 125th PI to connect the high school to NE 124th St 	

Segment 5:

NE 124th St to Jasper's Dog Park

- Study Cost Opinion Low: \$5 million*
- Study Cost Opinion High: \$5.3 million*
- TSP Prioritization Score: 180



Data Source: City of Kirkland
Date Prepared: 4/20/24
Prepared by: Toole Design Group

Alignment Options

- JNA Proposed Alignment
- - - Potential On-Street Alternative

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Segment 5: NE 124th St to Jasper's Dog Park



Segment 5: NE 124th St to Jasper's Dog Park

Connectivity & Directness	<ul style="list-style-type: none"> Much of this area is undeveloped wetlands without any existing paths, except in Jasper's Dog Park, which has a north-south trail along the eastern property line The path would provide access through this area, providing an alternative to using the on-street network. 	LOW
Access Points and Crossings	<ul style="list-style-type: none"> Access via surrounding arterial streets: from the north via NE 124th St and from the east via 113th Ave NE/NE 120th St No internal connections/access points between the two access points 	LOW
Active Transportation Potential	<ul style="list-style-type: none"> The path is proposed along the west side, the steepest part of these parcels; a shared-use path may not be feasible This segment is more suitable as a walking trail 	LOW
Right-of-way	<ul style="list-style-type: none"> There are two City owned parcels in this area, but they do not connect where the path is proposed. City owns only the interior part of this the parcel between NE 124th and 110th Ave NE/NE 117th Street; the edges of the parcel are in private ownership. 	LOW
Critical Areas	<ul style="list-style-type: none"> There are mapped wetlands and a large area of erosion hazard/ steep slopes to the southwest the wetlands Development of a trail or path would be constrained by environmental protection regulations (wetland disturbance, potential cut and fill to retain slopes, vegetation removal) 	LOW
Potential structures	<ul style="list-style-type: none"> Possible retaining walls on steep slopes to accommodate a path 	LOW
User Experience: Physical safety and Sense of Personal Security	<ul style="list-style-type: none"> Path within the could feel isolated in areas Steeps grades changes could affect user experience for users with reduced mobility 	LOW
User Experience: Access to Nature and Scenic Quality	<ul style="list-style-type: none"> High access to nature and scenic qualities 	HIGH
RECOMMENDATION	<ul style="list-style-type: none"> Recommend use of alternative on- street route (ATP/greenway plan recommendations) between NE 124th St and NE 116th St. 	

Segment 6:

Jasper's Dog Park to CKC/NE 116th St

- Study Cost Opinion Low: \$1.5 million*
- Study Cost Opinion High: \$1.8 million*
- TSP Prioritization Score: 145



Alignment Options

- JNA Proposed Alignment
- - - Potential On-Street Alternative

**cost opinion does not include ROW acquisition, stormwater detention, lighting, year over year cost escalations, or maintenance*

Segment 6: Jasper's Dog Park to CKC/NE 116th St



Segment 6: Jasper's Dog Park to CKC/NE 116th St

Connectivity & Directness	<ul style="list-style-type: none"> Path would connect Jasper's Dog Park to the Cross Kirkland Corridor, which would be shorter than using surface streets but not as direct (113th Ave NE, NE 120th St, NE 118th St, and 120th Ave NE) 	LOW
Access Points and Crossings	<ul style="list-style-type: none"> From the north via Jasper's Dog Park and from the south via NE 116th Street 	LOW
Active Transportation Potential	<ul style="list-style-type: none"> There are existing walking paths within Jasper's Dog Park but this area has grades exceeding 5% so are more suitable as walking paths It maybe be possible to create segments of shared-use paths in other parts of this segment but existing land use may pose constraints 	LOW
Right-of-way	<ul style="list-style-type: none"> Much of the path is proposed on private parcels 	LOW
Critical Areas	<ul style="list-style-type: none"> There is a large Erosion Hazard area running northwest to southeast in this area 	LOW
Potential structures	<ul style="list-style-type: none"> There is a significant grade differential along NE 116th Ave NE between parcels and street, with tall retaining walls that would likely prevent any widening of the roadway/right-of-way to accommodate a trail NE 116th is elevated over the CKC. Creating a connection between the NE 116th and the CKC in this location would require long ramps, impacts to private properties, and other potential challenges 	LOW
User Experience: Physical safety and Sense of Personal Security	<ul style="list-style-type: none"> The proposed path would pass through land uses that include light industrial and multi-family housing. Depending on lighting, sight lines, and vegetation, this area may provide a high level of comfort for users 	LOW
User Experience: Access to Nature and Scenic Quality	<ul style="list-style-type: none"> Where proposed path would pass through developed area, the scenic quality would be low 	LOW
RECOMMENDATION	Use on-street route (ATP/greenway plan recommendations) and existing path through park as pedestrian (soft-surface) trail	

Questions & Next Steps:

- City Council Presentation 7/2