



Neighborhood Safety Program Update

Neighborhood Safety Program

The City Council authorized the Neighborhood Safety Program as a way to help “reenergize neighborhoods through partnerships on capital project implementation...” In 2014, representatives from the Kirkland Alliance of Neighborhoods (KAN) and other neighborhood leaders worked with City staff to develop and implement the Pilot Neighborhood Safety Program. In June of 2014, the City Council authorized the implementation of the ongoing Citywide Program starting in 2015.

Goals:

- Provide incentive for neighborhood participations.
- Address safety needs.
- Foster neighborhood self-help and build a sense of community.
- Increase collaboration within a neighborhood, between neighborhoods, and with City government.
- Leverage funding with match contributions and/or other agencies.
- Collaborate with businesses, schools, Parent Teach Student Associations (PTSA's), Cascade Bicycle Club, Feet First, Kirkland Greenways, and other organizations.
- Create an equitable distribution of improvements throughout the City.

Funding:

- Street Levy Pedestrian and Bicycle Safety (\$150,000/year).
- Walkable Kirkland Initiative (\$200,000/year) 2015 through 2020.
- Private Development Fees and Projects – when appropriate.
- Other City Programs – when appropriate.

Prioritization: Neighborhood leaders and staff have worked closely to develop and continuously improve a prioritization process that adheres to the Transportation Master Plan (TMP) criteria for funding safety improvements.

The TMP direction for the prioritization of sidewalks and crosswalks is used in the NSP process.

- **Improve safety**—Prioritize locations based on crash history and indicators of crash risk like adjacent street auto volume, speed and number of lanes.
- **Link to Land Use**—Choose sidewalks that expand and enhance walkability and places where current pedestrian volumes are high.
- **Connect to the Cross Kirkland Corridor**—Make numerous strong links to the CKC.
- **Make Connections**—Give high priority to projects that fill gaps by connecting existing sidewalks.
- **Connect to Transit**—Complete walkways that allow easy access to transit, particularly regional transit.

- **Community input**—Because of the scale of pedestrian projects, gathering the on-the-ground knowledge through community input is particularly important in selecting pedestrian projects.
- **Cost/likeliness to receive grant funding**—Projects that have lower cost or that are good candidates for grant funding should generally have a higher priority. However, caution must be exercised so that high cost, high value projects are also considered.
- **Title VI**—It is the City of Kirkland’s policy to ensure full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin or sex in the provision of benefits and services resulting from programs and activities.

For the specific data points under each of these categories, see Attachment A. See Attachment B for the Neighborhood Panel criteria.

The schedule for the 2018 NSP Program is as follows:

- Project Ideas Due:** December 1, 2017
- Project Conferences:** February 6 or 8, 2018
- Applications Available:** After Project Conference
- Applications Due:** February 15, 2018
- Staff Review/Technical Scores:** February 16–March 20, 2018
- Neighborhood Panel Site Tour:** March 13, 2018
- Panel and Staff Meeting:** March 13, 2018
- Panel Review:** March 20, 2018
- Panel Decision:** March 27, 2018
- Transportation Commission review:** March 28, 2018
- City Council decision:** April 17, 2018
- Projects announced:** April 18, 2018
- Projects completed by:** June 1, 2019

Staff from various divisions and departments scope the projects, recommend the most appropriate solution for the safety concerns, and develop cost estimates. Some projects are dropped if the solution doesn’t meet City standards, and others are re-designed to be more successful. All of the projects moving forward are supported by staff and City engineers.

Like last year, in an effort to be nimble for the changing bid climate, instead of giving specific cost estimates so early in the process (before engineering/bid documents are produced) staff provided cost ranges for each project. Table 1 below lists all of the applications submitted for 2018 funding.

Table 1 – 2018 Neighborhood Safety Program Applications

2018 Neighborhood Safety Program Applications			COST ESTIMATE CATEGORY		
			Low (K)	Medium (K)	High (K)
NSP #	Project Name	Rough Estimate	\$1-\$14	\$15-\$34	\$35-\$50+
CH 1	Trail Connection on the CKC at NE 53rd Street	\$4,100	\$1-\$14		
EH 1	Radar Speed Sign on 132nd Ave NE from NE 128th to NE 144th Street	\$45,000			\$35-\$50
EV 1	Radar Speed Sign on Kirkland Way at CKC	\$45,000			\$35-\$50
FH 1	Radar Speed Sign on 131st Way east of 94th Ave NE	\$57,000			\$35-\$50+
HL 1	Stair Improvements for CKC connection along NE 100 Street at Cotton Hill Park	\$37,890			\$35-\$50
JN 1	Bicycle Improvements 98th Ave and 100th Ave NE	\$36,000			\$35-\$50
MB 1	Crosswalk at Lakeshore Plaza at Marina Park	\$37,570			\$35-\$50
MK 1	Radar Speed Sign on Waverly Way at 5th Ave West	\$45,000			\$35-\$50
NK 1	Walkway Improvement on 7th Ave from 3rd to 6th Streets	\$56,250			\$35-\$50+
SRHBT 1	Rapid Flashing Beacon on NE 70th Street at 120th Ave	\$96,150			\$35-\$50+
TL 1	Traffic Control on Slater Ave NE at NE 119th Street	\$54,400			\$35-\$50+
Total of Cost Estimates		\$514,360			

The outcome of this year’s prioritization process with staff and the Neighborhood Panel will be presented to the Transportation Commission on March 28, 2018 (after the final decisions on March 27, 2018). See Attachment C for a map of all applications or go to the [web page posting the 2018 NSP applications](#).

Status of Projects: Delivering the NSP projects within one year from Council approval is the program goal. To date, only two projects have not been complete.

- The bid was awarded to Trinity Contractors, Inc. for the Intersection Improvements on Kirkland Way and Railroad Avenue at the [March 20, 2018](#) City Council meeting. Construction is expected to start in April with an anticipated completion by June, 2018.
- The Rapid Flashing Beacon on Market and 4th Street, funded by the Lake Front Pedestrian and Bicycle Improvements Project, is expected to be in construction this summer.

Program Evaluation: Aligning with the 2019-2023 Capital Improvement Program update process, staff, the Neighborhood Panel, and KAN will be doing a more comprehensive program evaluation in 2018. The City Council asked for consideration of the following program elements:

- **Project limit of \$50,000**

Every year, approximately three projects (out of an average of 10 projects per year) exceed the \$50,000 NSP project limit. These projects are approved by the Neighborhood Safety Panel and City Council because they are high priority projects addressing important safety concerns. Two-thirds of them are rapid flashing beacons. The others include extruded curbs, radar speed signs and permanent concrete stairs to the Cross Kirkland Corridor. In 2017, four of the seven funded projects (over half) exceed the \$50,000 project limit.

Staff has been diligently trying to reduce the cost of the NSP projects using a number of strategies:

- Providing flexibility in the construction timeline so City crews can do the work (during the winter);
- Using Job Order Contracting whenever feasible;
- Strategizing the timing of bids when contractors are looking for small work (between construction seasons); and,
- Recently hiring in-house project engineers with computer aided design skills to reduce design costs.

- **Annual funding Level \$350,000**

After Walkable Kirkland funding is eliminated in 2021 (at the end of the upcoming biennial CIP), the funding for NSP will drop to \$150,000 (annual allocation from the 2012 Levy).

In the past four years, over \$1.2 M in NSP projects have been funded while the NSP budget for this period was \$850,000. Staff has worked hard at leveraging funding through grants, private development fees and projects, and other City programs.

- **Benefits of doing a two year funding cycle**

The NSP engagement process with the community and subsequent prioritization process is intensive for both staff and neighborhood leaders. In addition, the quality of projects is high and several excellent projects fall below the funding level. One way to address both of these issues is to go to a two year funding cycle.

Staff will be looking for input from the Transportation Commission on these program evaluation topics.

Attachments:

- A NSP Technical Criteria
- B NSP Panel Criteria
- C NSP Map of 2017 Projects



Neighborhood Street Light Program (Fund)

Neighborhood Street Light Program

The City Council approved the Neighborhood Street Light Program during the adoption of the 2017 to 2022 Capital Improvement Program in [December of 2017](#). The November 30, 2017 Council memo stated the following about the program:

ST 0088 001 - Neighborhood Street Light Program - New project totaling \$198,000 in 2017 to provide street lighting to neighborhoods in the greatest need with locations to be selected through a prioritization process, funded with available balances from the closure of ST 0088 000- Arterial Streetlight LED Conversion.

The intent of this program is to provide a neighborhood street light selection process similar to the Neighborhood Safety Program (NSP). Street light projects will be proposed by neighborhood associations, evaluated against criteria developed by City staff, and final selection made by the NSP neighborhood panel or a similar group. Details of the street light program will be developed in partnership with KAN and Neighborhood Associations in early 2018 following Council adoption of the CIP.

The Neighborhood Street Light Program engages the community in identifying and prioritizing the installation of lights and poles to increase safety for pedestrians, bicycles, and drivers.

Staff outlined the following key decisions to discuss with KAN at their January 10, 2018 meeting.

1. Primary focus for the one-time funds
2. Prioritization criteria
3. Process to engage the community in identifying and prioritizing lighting improvements
4. Costs/funding

1. Primary focus for the one-time funds:

Staff and KAN agreed the primary safety concern is where pedestrians and bicyclists conflict with vehicles, with the highest risk of conflicts at intersection crosswalks. Based on Kirkland Police Department crash records, approximately one-third of pedestrian crashes occurs at intersection crosswalks, where streets are the busiest.

There was consensus that crosswalks at intersections should be the top priority. Second priority is mid-block crossings and the lowest priority is additional lighting for sidewalks in general. Neither KAN nor Staff felt the program should address personal safety (assaults, burglaries, etc.) at this time. If additional funds become available in the future, and the most important vehicle/pedestrian and bicycle conflict zones are improved, there may be an opportunity to address this aspect of street lighting.

City of Kirkland standards require street lights within 20 feet of a crossing with a formal crosswalk (i.e., marked using paint, asphalt stamping or thermoplastic). The City recognizes several crosswalks have been placed that do not have street lights within 20 feet to illuminate pedestrians and other users. Lack of illumination is a particular concern when crosswalks are on arterials with higher speed limits and streets with relatively high volumes of pedestrians, bicycles and vehicles.

2. Prioritization criteria:

To help characterize the extent of street light needs in preparation for the January KAN meeting, the City's Transportation Group compiled a list of existing crosswalks with deficient street lighting on major City streets and completed an initial ranking based on risk. The scoring criteria are described below, and listed on Attachment D, which also lists 46 crosswalks ranked using these criteria.

The crosswalks were categorized by street classification (neighborhood, collector or arterial), whether the crosswalk was on a school walk route, crash history and exposure, the North Carolina system of evaluating risk (based on speed, volumes and number of lanes) and facility type (i.e., midblock versus intersection crossing). The priorities were ranked as follows:

1. Arterials were scored the highest (highest speeds and volumes), followed by collectors (lower speeds and volumes) and then neighborhood streets (lowest speeds and volumes).
2. School Walk Routes scored higher because these have relatively high risk of potential conflicts during school hours.
3. Crosswalks with one or more documented crashes scored higher than those without a crash history.
4. Crosswalks with a North Carolina system rating N were scored the highest (in a high conflict zone needing more than a marked crosswalk), followed by P (probably could use an improvement) or C (considered adequate).

Attachment D presents the scoring for the top 46 crosswalks and their ranking based on the scoring system described above. Crosswalks that scored the highest are ones crossing arterials at intersections on school walk routes with high crash exposure and high North Carolina rating. Ten crosswalks in this list are highlighted in yellow and will have street lights added as part of the City's Lake Front project. One crosswalk highlighted in blue will only require an upgrade to an LED light, and the upgrade cost is covered by a different program.

3. Process to engage the community in identifying and prioritizing lighting improvements:

Staff outlined two draft prioritization processes for discussion with KAN and recommended the first one, which follows the NSP Process most closely as envisioned in the November 30, 2017 Council memo.

Recommended NSP Process:

Step 1: Neighborhoods identify street light needs within their neighborhoods, discuss and prioritize them with their neighborhood associations. A list of Suggest-A-Project street light requests would be provided to the neighborhood association in advance. There are currently 30 individual street light requests (out more than 920 requests) in the Suggest-A-Project database. The neighborhoods would submit their top two to three priority locations to the Neighborhood Safety Panel by March 2018.

Step 2: The Neighborhood Safety Panel and Staff would prioritize the requests from all of the neighborhoods (using criteria similar to the NSP) and make a funding recommendation to the Transportation Commission in March and to City Council in April with the 2018 NSP project recommendations.

Step 3: Staff would order lighting analyses from PSE for the top priorities locations and complete as many project requests as possible in order of priority.

Alternative Technically Based Process:

Step 1: Review the draft staff technical criteria and resulting list at the January 10, 2018 KAN meeting.

Step 2: Review the final staff technical criteria and resulting list of projects at KAN's March 14, 2018 meeting. KAN would provide input and the resulting project priorities would go to the Transportation Commission for input and be included in the City Council recommendations with the 2018 NSP projects in April 2018.

Step 3: Staff would order lighting analysis from PSE for the top priorities locations and complete as many project requests as possible in order of priority.

Selected Process:

KAN discussed both options and decided the technically based process and resulting priority list was the most objective and efficient method of deciding which projects are selected this year. KAN recommended using this process with half of the funding (\$100,000) in 2018 and review the results before deciding the process for 2019.

4. Costs:

Street lights can usually be added to existing poles without much cost. The major costs occur when adding street lights that require new poles. Installing a new street light pole can vary from approximately \$7,000 up to \$10,000 depending on the distance and effort required to connect to power. The City does not have budget set aside for installing street lights with new poles. Some previous ones were funded through the Neighborhood Safety Program. A few are being paid for by a group of homeowners.

One street light was already evaluated by PSE and will require only replacing the luminaire with an LED street light. 35 remain on this top list in Attachment ___ to be funded.

PSE's illumination evaluation might result in more of these light-deficient sites needing a luminaire upgrade to LED. These LED upgrades are paid for in a separate maintenance budget, which means the City can add street lights from the attached list until reaching the approximately \$100,000 cap for 2018.

Summary

For 2018, the City proposes to work with PSE to install street lights and poles at the top 10 to 15 locations on the attached list. The number installed will depend on the cost of each, up to a total of approximately \$100,000. In fall 2018, staff will return to KAN to discuss a process for future street light funding.

Attachments:

D Light Deficient Locations – Evaluation Summary

2018 NSP Technical Safety Criteria

Transportation Master Plan Policy		100
Improve safety—Prioritize locations based on crash history and indicators of crash risk like adjacent street auto		38
Crashes: Based upon Kirkland Police Department crash records from previous 5 years.	Ped/Bike (1=6, 1<=12)	12
	Vehicle (1=1, >1=2) - counted only when the project is related to auto safety	2
Roadway Design: Based upon existing conditions of the roadway.	No Sidewalk/Trails = 2 , Sidewalk 1 side = 1, Sidewalk on both sides =0 (0-2)	2
	Number of Lanes (2=1, >2=2)	2
Volume: Based upon TMP 2 way 24-hour daily auto volume counts on selected roadways and site specific traffic studies by Kirkland Public Works.	Under 3,000 average daily trips (0)	
	Between 3,001-15,000 average daily trips (3)	
	Over 15,001 average daily trips (6)	6
Roadway Speeds: Based upon posted speed limits, study data (when available), and anecdotal information. If there is speed data from NTCP, the	Speed limit 25 MPH and under (0)	
	Speed limit 26–30 MPH (3)	
	Speed limit 31 MPH and above (6)	6
Motorized and Nonmotorized Safety: The project enhances the safety of the following modes.	Bicycle (0-2) (2 if benefits cyclists or bicycle lane at this loca	2
	Pedestrian (0-2) (2 if pedestrian facility is at this location)	2
	Vehicular (0-2) (only if it addresses safety for a vehicle)	2
	Transit (0-2) (only if transit is at this location)	2
Make Connections—Give high priority to projects that fill gaps by connecting existing sidewalks.		16
Sidewalks: Existing sidewalk/gravel path (not applicable in parks).	Sidewalk, paved shoulder, or gravel path on both sides (0)	
	Sidewalk, paved shoulder, or gravel path on one side (4)	
	No shoulder or sidewalk either side: must walk in vehicle lane (8)	8
School Walk Route: The project extends, adds or completes a nonmotorized system identified in the School Walk Route gap analysis data.	Not located on a School Walk Route (0)	
	Improves School Walk Route where sidewalk (or extruded curb) exists on at least one side of the road (4)	
	Improves School Walk Routes where no sidewalk (or extruded curb) exists on either side of the road (8)	8
Link to Land Use—Choose sidewalks that expand and enhance walkability and places where current pedestrian		18

Walkability: Based upon the TMP walkability scores for roadways in Kirkland. The walkability score is made up of the following factors: proximity to parks, transit, schools, certain kinds of retail (See	Low—Walkability factor 1-5.5 (0)	
	Moderate—Walkability factor 6-9 (6)	
	High—Walkability factor of 9-13.5 (10)	
	Very High—Walkability factor of 13.5+ (14)	14
Link: The project connects to other multimodal facilities. (Radar speed signs do not link = 0)	No link to Pedestrian/Bicycle/Transit Facility (0)	
	Link to Pedestrian OR Bicycle OR Transit Facility (2)	
	Link to Pedestrian AND Bicycle AND Transit Facility (4)	4
Title VI—Health Equity Need: Projects that would serve populations at a higher risk for inactivity and/or poor health		16
Equity and Social Justice: Based upon WSDOT ALPACA & OSPI Report Card.*	Minority (<25%=0; 26%-40%=2; 41%<=3)	3
	Free & Reduced Meals (<5%=0; 6%-24%=2; 25%<=3)	3
	Language Block Group (>6%=3)	3
	Disabled (<9%=0; 9%-14%=2; 14%<=3)	3
	Elderly % Over 65 (>10%=2)	2
	Veterans (>8%=2)	2
Transportation Master Plan: Community input—Because of the scale of pedestrian projects, gathering the on-the-		4
Consistency with Plans: Based upon Neighborhood Plan(s), Park, Recreation, and Open Space (PROS) Plan, and Cross Kirkland Corridor Master Plan.	Aligns with existing plan (2)	2
	Does not align with existing plan (0) or -10 if does not meet RFB/Crosswalk Standards	
Neighborhood Association Support: Project was reviewed by the Neighborhood Association and	Project Priority 1 (2)	2
	Project Priority 2 (0)	
Transportation Master Plan: Cost/likeliness to receive grant funding—Projects that have lower cost or that are good		4
Project is paired with a good potential grant candidate. NSP funds can be City match or an	Yes (4)	4
	No (0)	
Maintenance		4
Maintenance of Project: Impacts to existing City maintenance needs. If project includes minor maintenance = 2.	Greater maintenance than existing (0)	
	Same maintenance as existing (2)	
	Less maintenance than existing (4)	4

*Application for Local Planning and Community Accessibility:

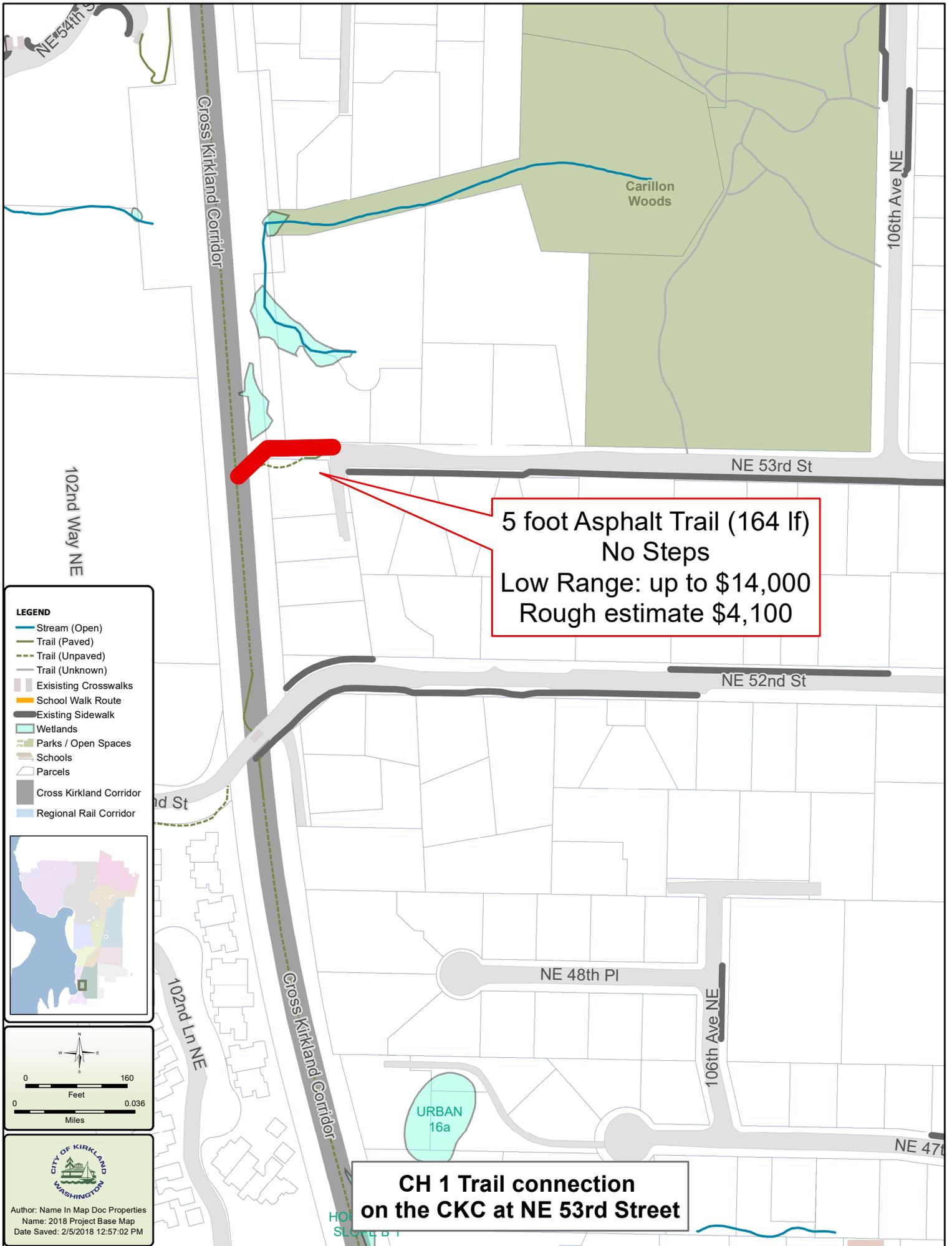
<http://www.wsdot.wa.gov/mapsdata/tools/communityaccessibility/>

Office of Superintendent of Public Instruction:

<http://reportcard.ospi.k12.wa.us/summary.aspx?groupLevel=District&schoolId=1519&reportLevel=School&year=2014-15>

2018 Neighborhood Safety Program Panel Scoring

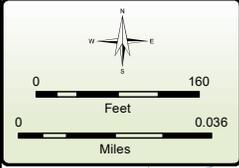
<p>Neighborhood Safety Program</p> <p>The City Council authorized the Neighborhood Safety Program (NSP) in June 2014. The purpose of the Program is to reenergize Neighborhood Associations by empowering them to work collaboratively to identify, prioritize and address pedestrian and bicycle safety issues in Kirkland neighborhoods. The Program is funded by voter approved 2012 Streets Levy (\$150,000 per year) and City Council's Walkable Kirkland Initiative (\$200,000 per year until 2020). Each year there is a total of \$350,000 available for projects citywide under \$50,000.</p>	<p>100</p>
<p>Neighborhood Benefit/Support (Up to 60 points)</p>	
<p>Neighborhood Benefit:</p> <p>Consider the following factors when deciding how many points to assign to each project:</p> <ul style="list-style-type: none"> • How many people does this project benefit? • Do the beneficiaries include school kids or other vulnerable populations? • How unsafe is the current situation? Does the project improve safety? • Does the benefit justify the cost? • Does the project create an important pedestrian or bicycle connection (e.g., to a business district, park, or school)? <p>Neighborhood Support:</p> <p>Is there support for the project within the neighborhood (e.g., businesses, schools, and PTsAs)? Were adjacent neighbors who will be impacted by the project contacted (e.g., street lights)? Were letters, emails, or a petition submitted with the application?</p>	<p>60</p>
<p>Community Benefit/Support (Up to 30 points)</p>	
<p>Community Benefit:</p> <p>Consider the following factors when deciding how many points to assign to each project:</p> <ul style="list-style-type: none"> • Does this project benefit people outside the neighborhood? Does it increase safety? • Does the project create a community-wide connection? <p>Community Support:</p> <p>Is there broad community support for the project outside the neighborhood (e.g., businesses, schools, PTsAs, and community groups)? Were letters, emails, or a petition submitted with the application?</p>	<p>30</p>
<p>Neighborhood/Community Project Partnership (Up to 10 points)</p>	
<p>Neighborhood(s) or community organization(s) are contributing to this project (e.g. donations or volunteer hours) and their roles have been identified.</p>	<p>10</p>



5 foot Asphalt Trail (164 lf)
 No Steps
 Low Range: up to \$14,000
 Rough estimate \$4,100

**CH 1 Trail connection
 on the CKC at NE 53rd Street**

- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - Trail (Unpaved)
 - Trail (Unknown)
 - Existing Crosswalks
 - School Walk Route
 - Existing Sidewalk
 - Wetlands
 - Parks / Open Spaces
 - Schools
 - Parcels
 - Cross Kirkland Corridor
 - Regional Rail Corridor

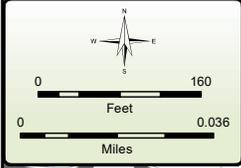
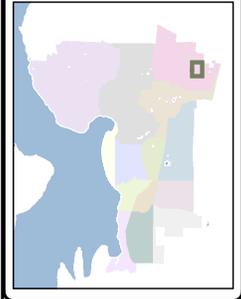


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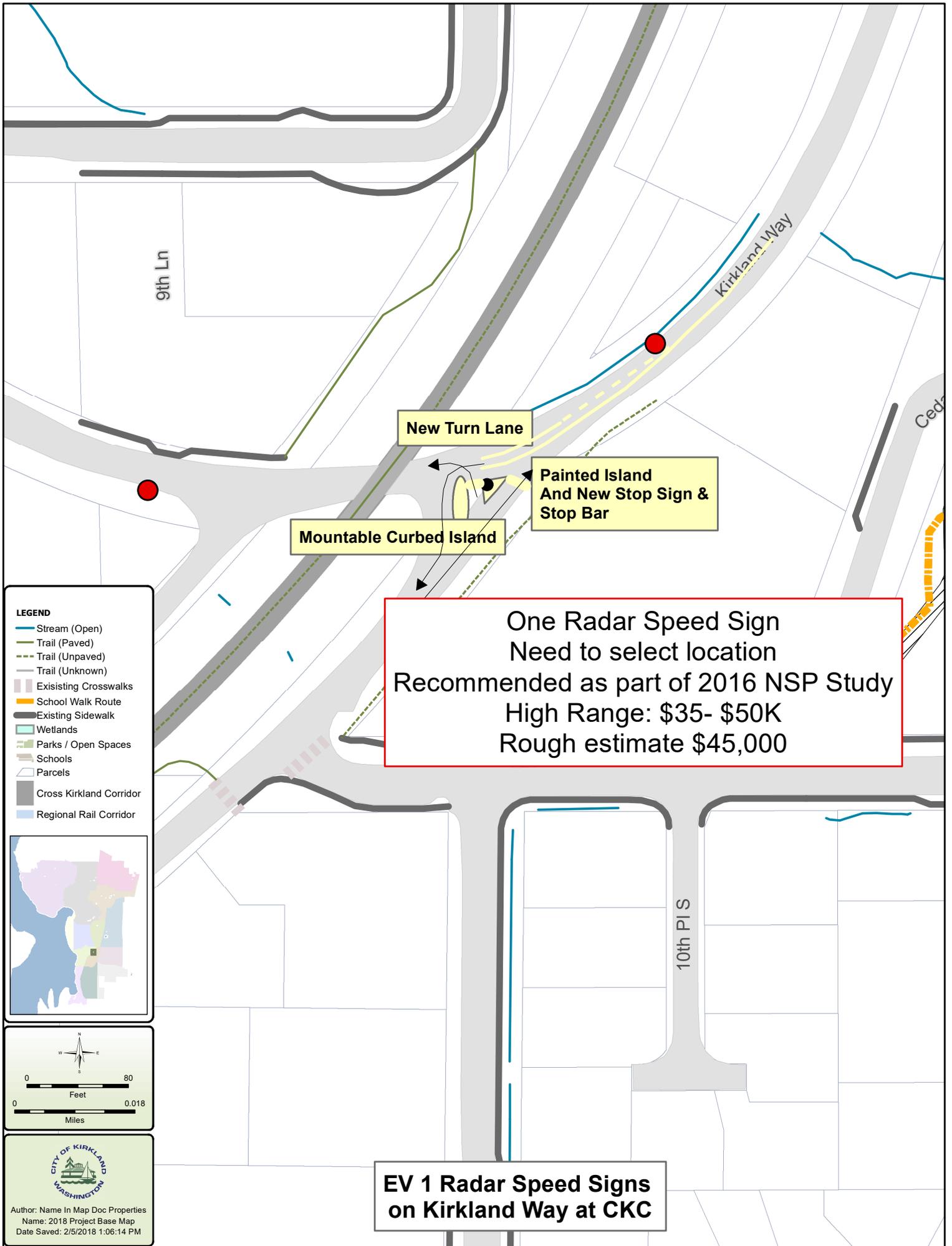
One Radar Speed Sign
 Need to select location
 High Range: \$35 - \$50K
 Rough estimate \$45,000

- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - Trail (Unpaved)
 - Trail (Unknown)
 - Existing Crosswalks
 - School Walk Route
 - Existing Sidewalk
 - Wetlands
 - Parks / Open Spaces
 - Schools
 - Parcels
 - Cross Kirkland Corridor
 - Regional Rail Corridor

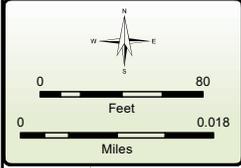
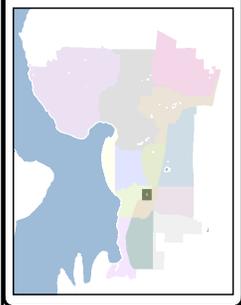


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**EH 2 Radar Speed Sign
 on NE 132nd Ave NE from NE 128th to 144th Stree**

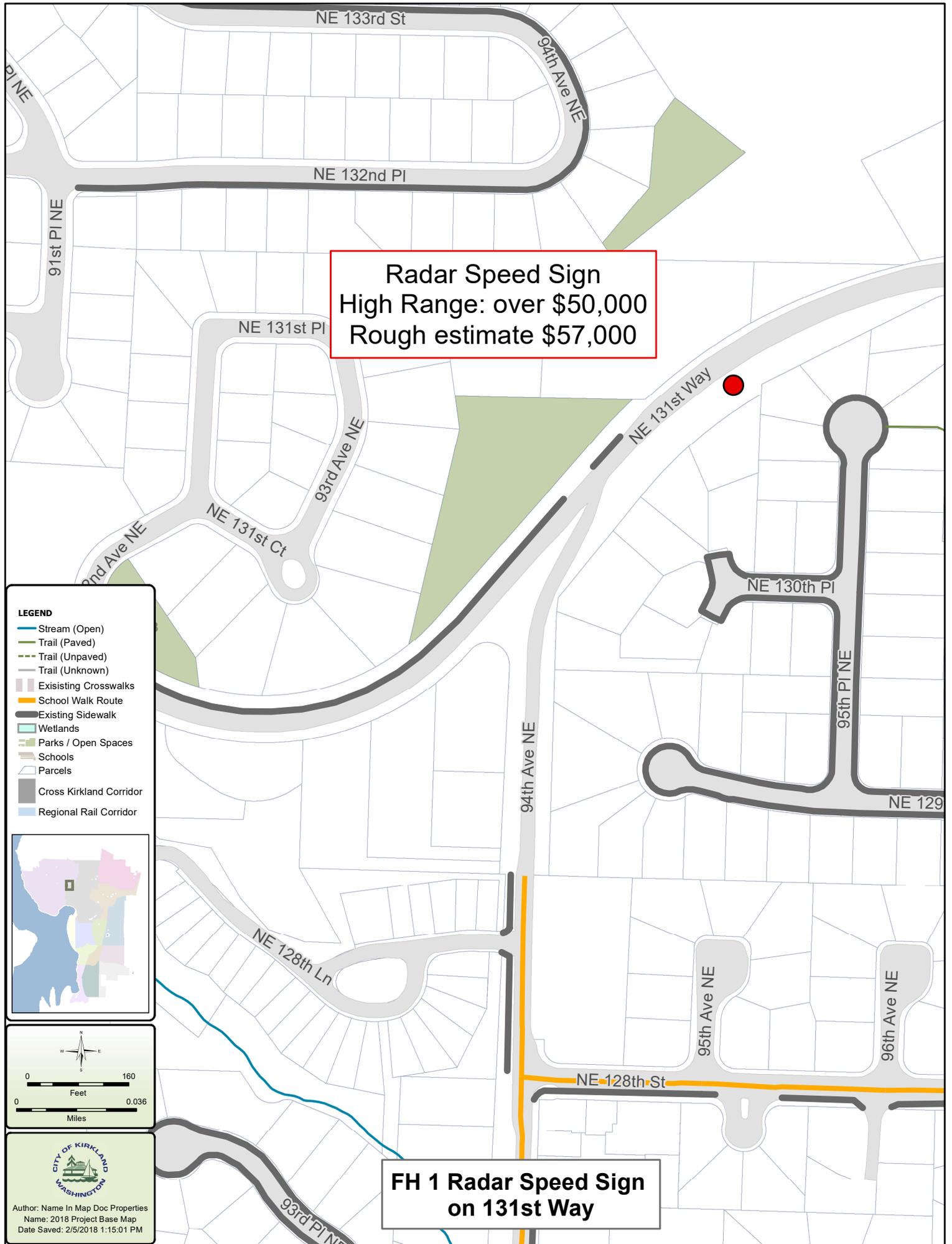


- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - Trail (Unpaved)
 - Trail (Unknown)
 - Existing Crosswalks
 - School Walk Route
 - Existing Sidewalk
 - Wetlands
 - Parks / Open Spaces
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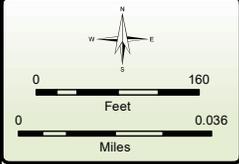
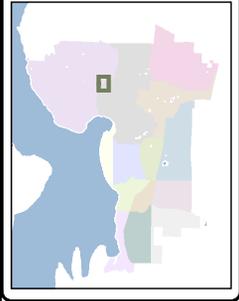
**EV 1 Radar Speed Signs
on Kirkland Way at CKC**



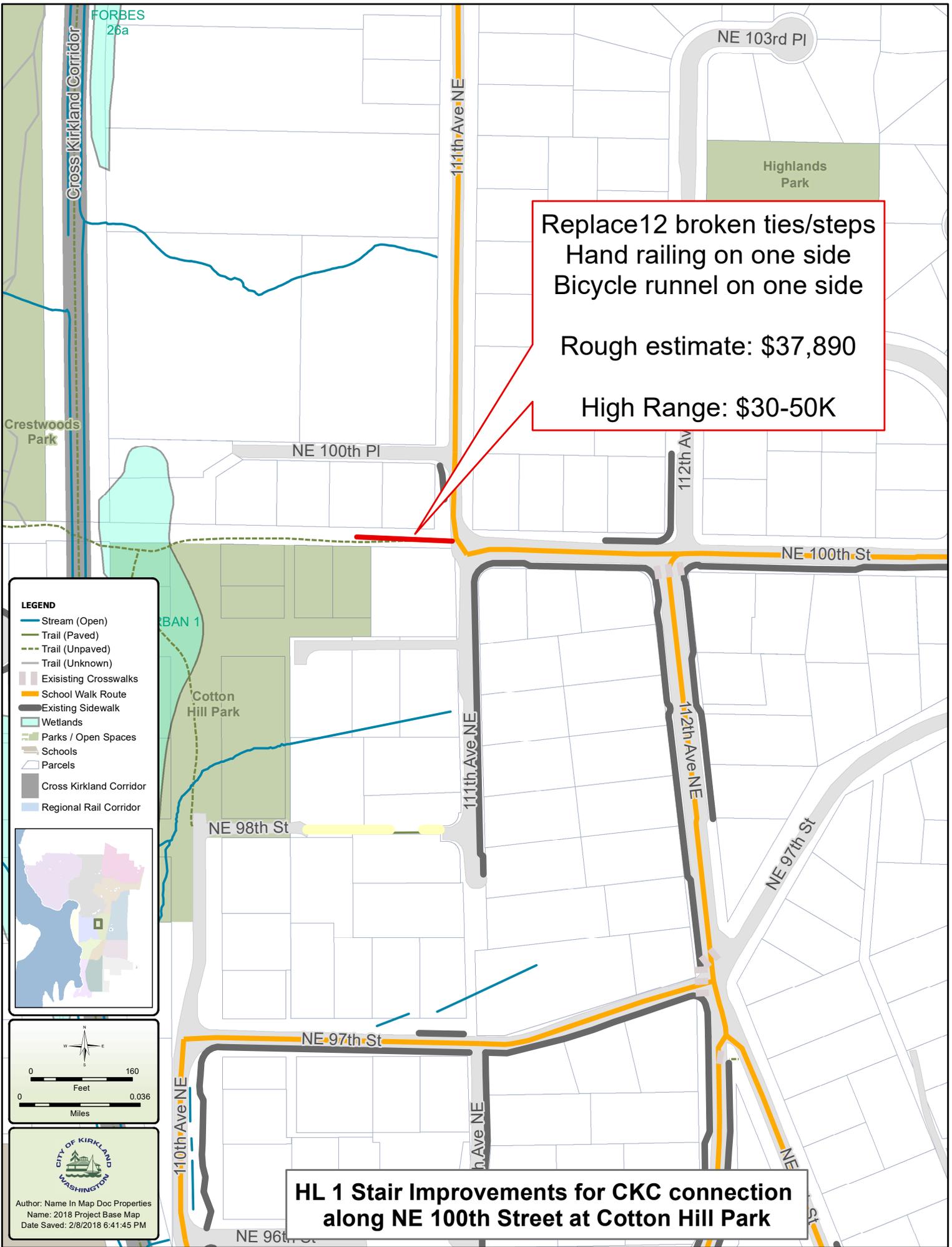
Radar Speed Sign
 High Range: over \$50,000
 Rough estimate \$57,000

FH 1 Radar Speed Sign
 on 131st Way

- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - Trail (Unpaved)
 - Trail (Unknown)
 - Existing Crosswalks
 - School Walk Route
 - Existing Sidewalk
 - Wetlands
 - Parks / Open Spaces
 - Schools
 - Parcels
 - Cross Kirkland Corridor
 - Regional Rail Corridor



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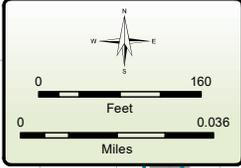
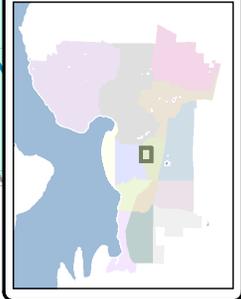


Replace 12 broken ties/steps
 Hand railing on one side
 Bicycle runnel on one side

 Rough estimate: \$37,890

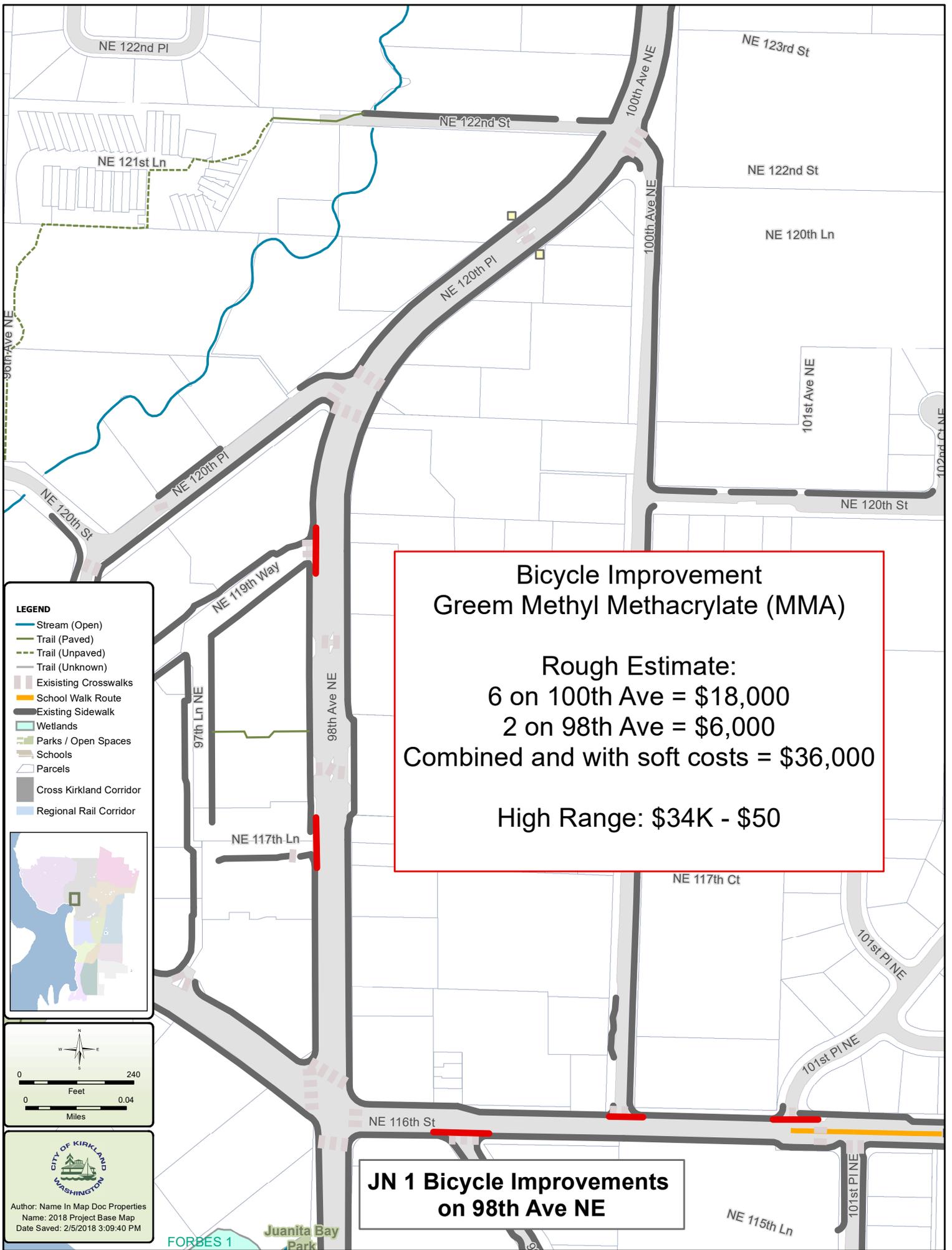
 High Range: \$30-50K

- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - - - Trail (Unpaved)
 - - - Trail (Unknown)
 - Existing Crosswalks
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**HL 1 Stair Improvements for CKC connection
 along NE 100th Street at Cotton Hill Park**

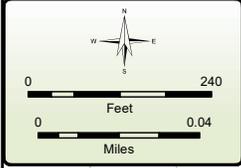
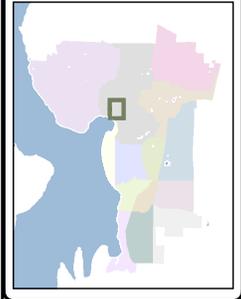


Bicycle Improvement
Green Methyl Methacrylate (MMA)

Rough Estimate:
 6 on 100th Ave = \$18,000
 2 on 98th Ave = \$6,000
Combined and with soft costs = \$36,000

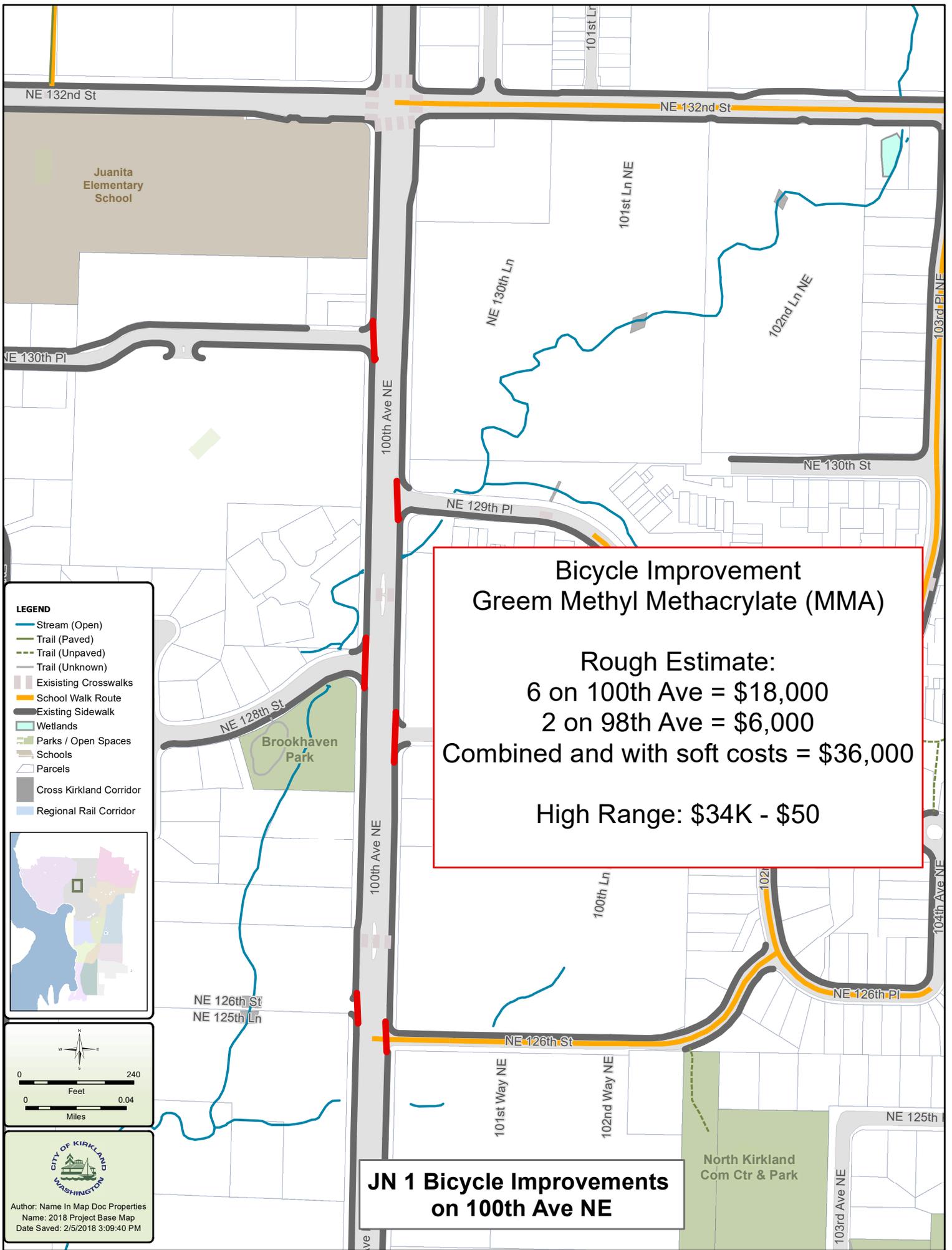
High Range: \$34K - \$50

- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - Trail (Unpaved)
 - Trail (Unknown)
 - Existing Crosswalks
 - School Walk Route
 - Existing Sidewalk
 - Wetlands
 - Parks / Open Spaces
 - Schools
 - Parcels
 - Cross Kirkland Corridor
 - Regional Rail Corridor



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JN 1 Bicycle Improvements
on 98th Ave NE



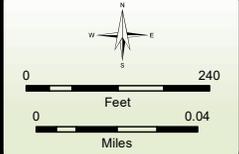
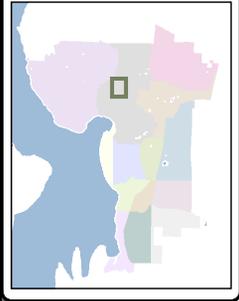
Bicycle Improvement
Green Methyl Methacrylate (MMA)

Rough Estimate:
 6 on 100th Ave = \$18,000
 2 on 98th Ave = \$6,000
Combined and with soft costs = \$36,000

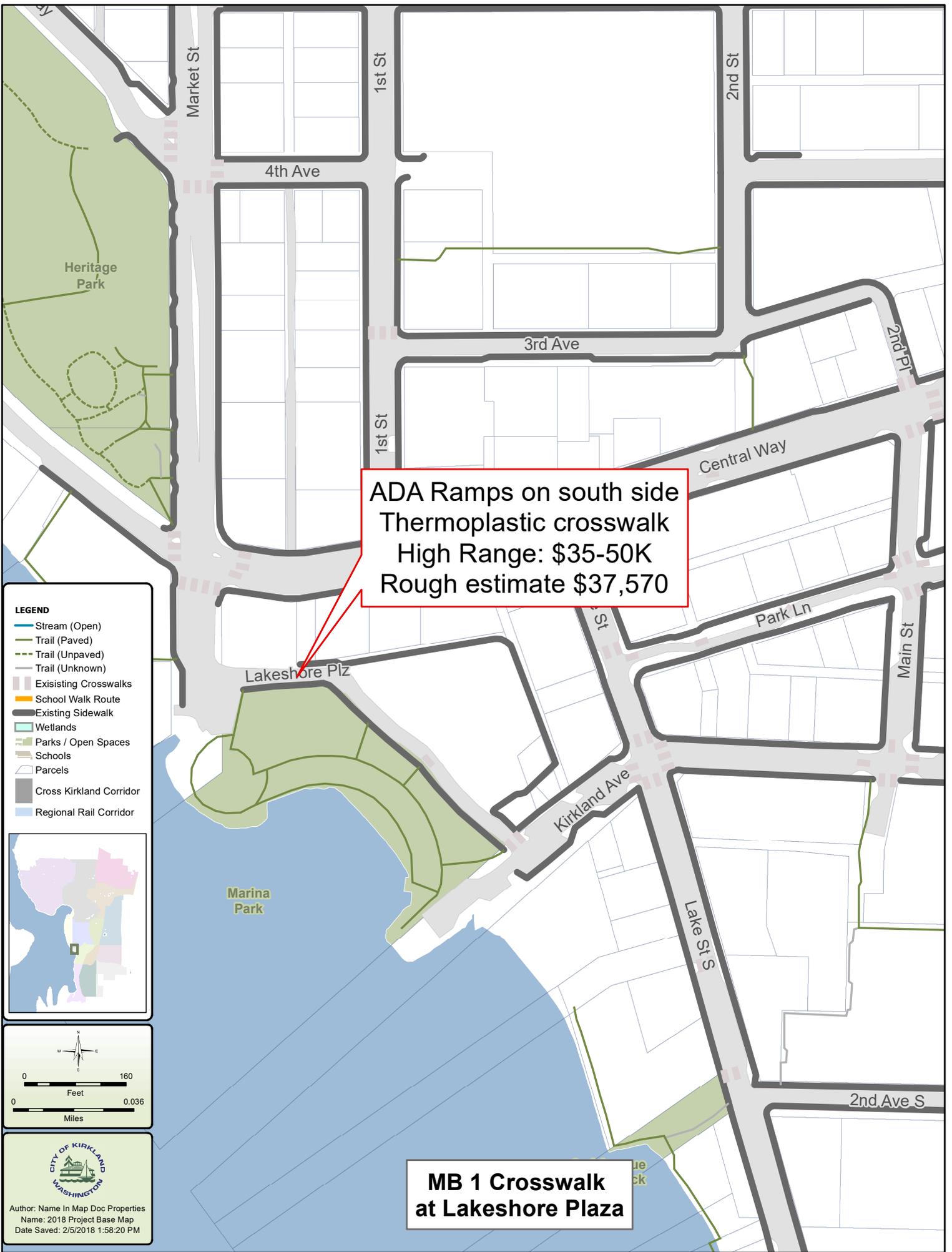
High Range: \$34K - \$50

JN 1 Bicycle Improvements
on 100th Ave NE

- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - - - Trail (Unpaved)
 - Trail (Unknown)
 - - - Existing Crosswalks
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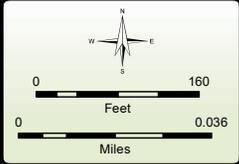
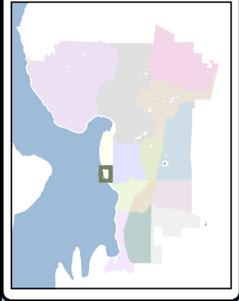




One Radar Speed Signs
 Need to determine location
 High Range: \$35 - \$50K
 Rough estimate \$45K

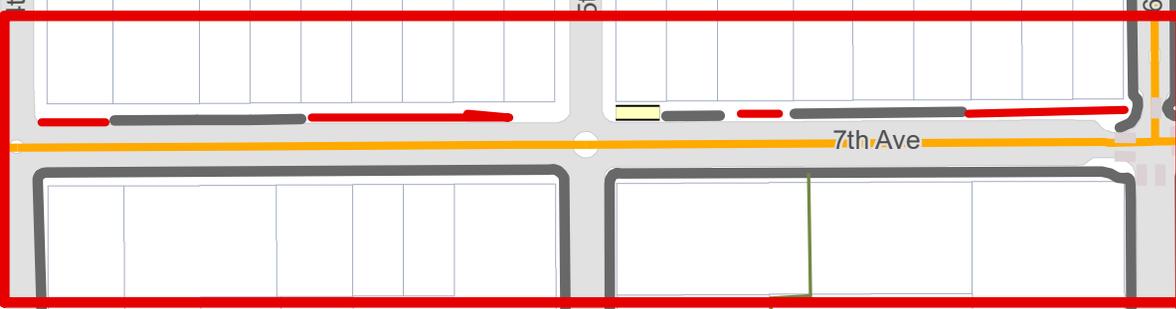
**MK 1 Radar Speed Sign
 on Waverly Way**

- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - - - Trail (Unpaved)
 - - - Trail (Unknown)
 - Existing Crosswalks
 - School Walk Route
 - Existing Sidewalk
 - Wetlands
 - Parks / Open Spaces
 - Schools
 - Parcels
 - Cross Kirkland Corridor
 - Regional Rail Corridor



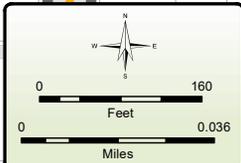
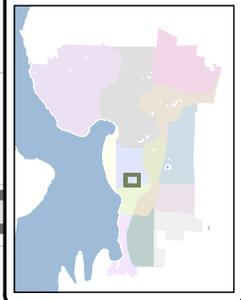
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 Name: 2018 Project Base Map
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Asphalt Pathway
 500 linear feet (\$75/ft)
 Infilled where sidewalk is missing
 High Range: Over 50K
 Rough estimate \$56,250

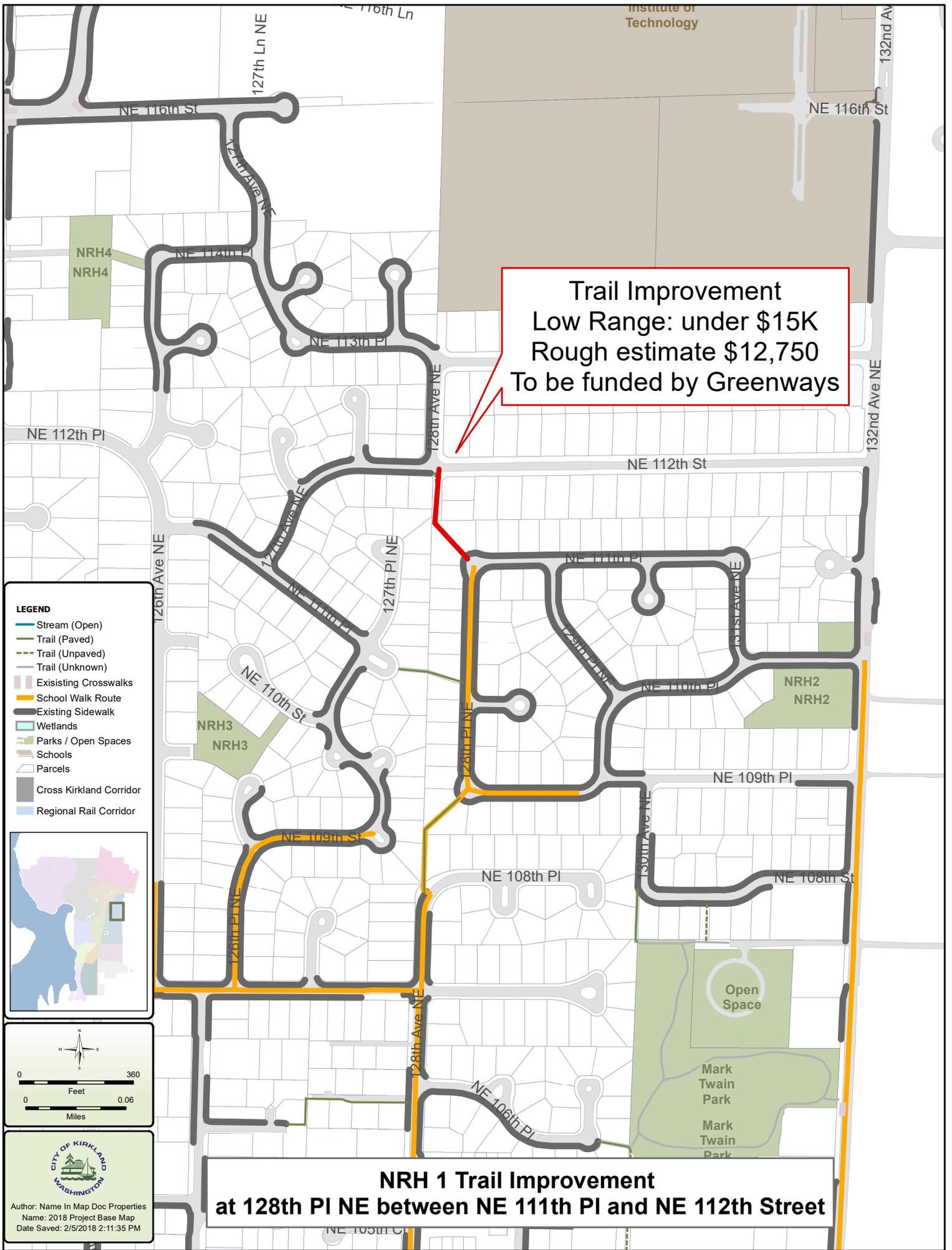


**NK 1 Walkway Improvement
 on 7th Ave from 4th to 6th Streets**

- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - Trail (Unpaved)
 - Trail (Unknown)
 - Existing Crosswalks
 - School Walk Route
 - Existing Sidewalk
 - Wetlands
 - Parks / Open Spaces
 - Schools
 - Parcels
 - Cross Kirkland Corridor
 - Regional Rail Corridor

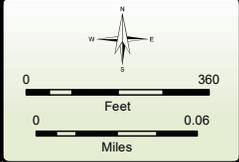
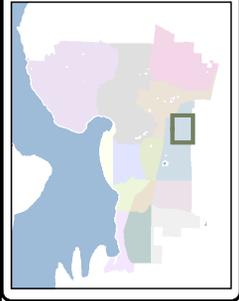


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 Name: 2018 Project Base Map landscape
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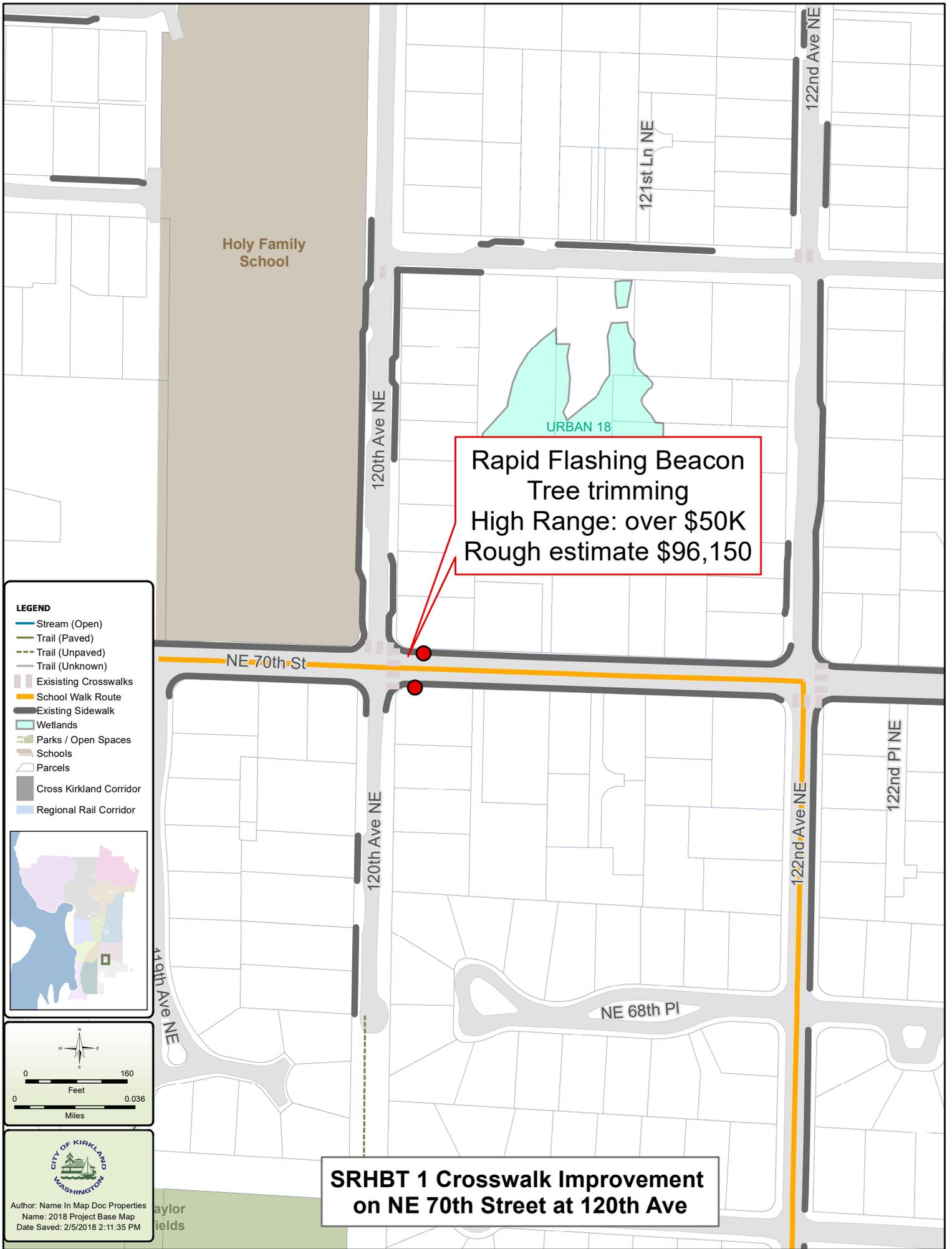
Trail Improvement
 Low Range: under \$15K
 Rough estimate \$12,750
 To be funded by Greenways

- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - Trail (Unpaved)
 - Trail (Unknown)
 - Existing Crosswalks
 - School Walk Route
 - Existing Sidewalk
 - Wetlands
 - Parks / Open Spaces
 - Schools
 - Parcels
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 - Regional Rail Corridor

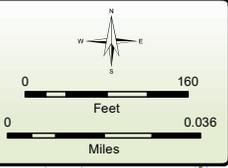


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**NRH 1 Trail Improvement
 at 128th PI NE between NE 111th PI and NE 112th Street**



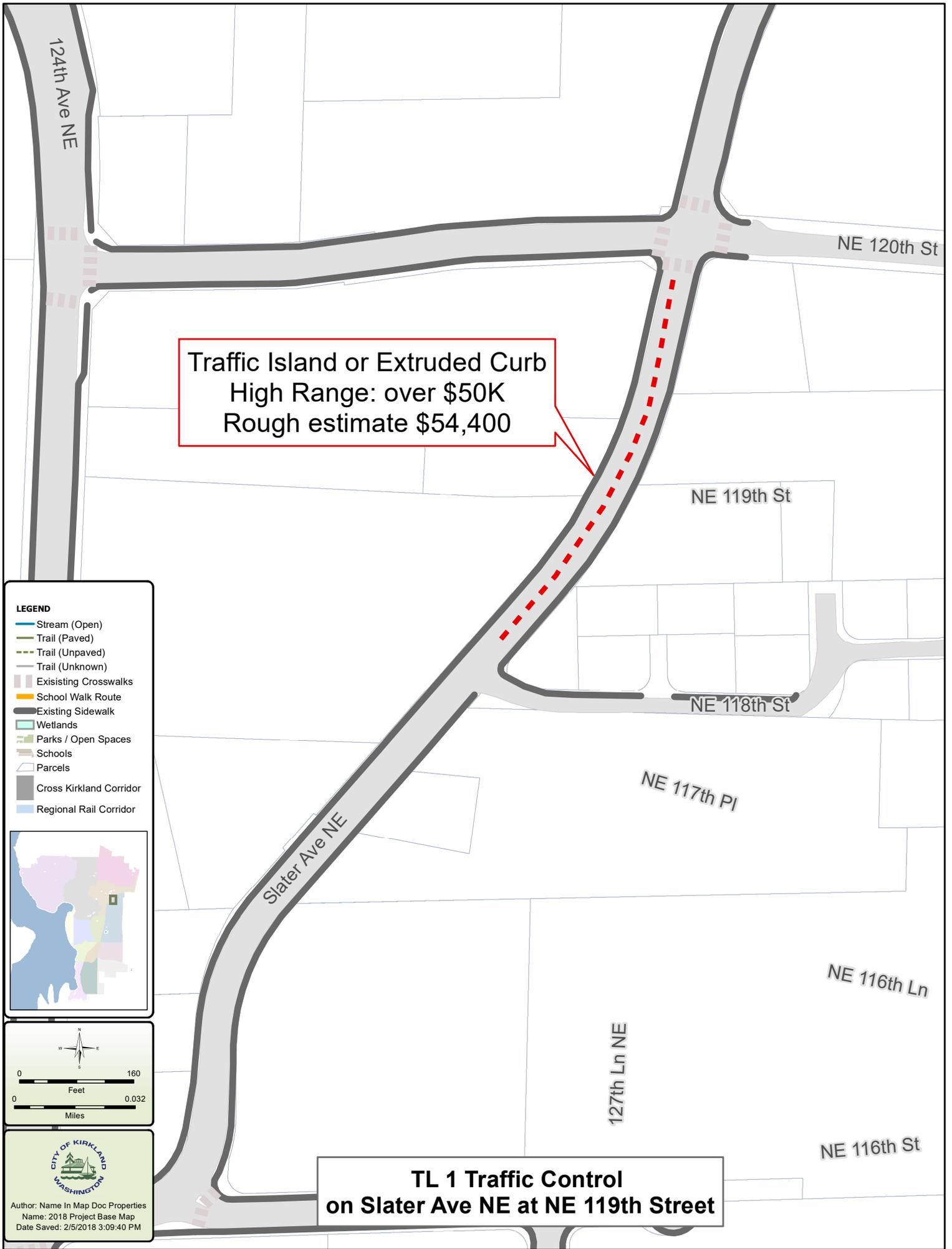
- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - Trail (Unpaved)
 - Trail (Unknown)
 - Existing Crosswalks
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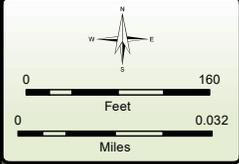
Rapid Flashing Beacon
 Tree trimming
 High Range: over \$50K
 Rough estimate \$96,150

**SRHBT 1 Crosswalk Improvement
 on NE 70th Street at 120th Ave**



Traffic Island or Extruded Curb
 High Range: over \$50K
 Rough estimate \$54,400

- LEGEND**
- Stream (Open)
 - Trail (Paved)
 - - - Trail (Unpaved)
 - Trail (Unknown)
 - - - Existing Crosswalks
 - School Walk Route
 - Existing Sidewalk
 - Wetlands
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**TL 1 Traffic Control
 on Slater Ave NE at NE 119th Street**

LIGHT DEFFICIENT LOCATIONS - EVALUATION SUMMARY

	Main Street	Location	Street Functional Type	School Walk Route	NC Rating	Facility Type	Crash Exp.	Total	Comments
1	Market	18th Ave	3	3	2	3	5	16	
2	108th Ave NE	62nd St	3	3	1	3	5	15	
3	NE 116th St	104th Ave NE	3	0	3	3	5	14	
4	Market	6th Ave	3	0	2	3	5	13	
5	124th Ave NE	NE 95th St	3	3	3	3	0	12	
6	Central Way	1st Stret	3	0	1	3	5	12	
7	Market	19th Ave	3	3	3	3	0	12	
8	Market	20th Ave	3	3	3	3	0	12	
9	NE 132nd St	129th Ave	3	3	2	3	0	11	Change luminaire to LED.
10	124th Ave NE	NE 97th Street	3	3	3	2	0	11	
11	Central Way	Us Bank	3	0	1	2	5	11	
12	NE 116th St	110th Ave	3	3	3	2	0	11	
13	NE 116th St	113th PI	3	3	3	2	0	11	
14	NE 70th/ NE 68th St	120th Ave NE	3	3	2	3	0	11	
15	NE 70th/ NE 68th St	124th Ave NE	3	3	2	3	0	11	
16	NE 132nd St	128th Ave NE	3	3	2	2	0	10	
17	NE 124th Street	98th Ave NE	3	3	1	3	0	10	
18	NE 70th St	111th Ave NE	3	3	2	2	0	10	
19	NE 70th/ NE 68th St	106th Ave NE	3	3	1	3	0	10	
20	NE 80th St	126th Ave NE	3	3	1	3	0	10	
21	108th Ave NE	NE 55th St/NWC	3	3	1	2	0	9	
22	132nd Ave NE	83rd St NE	3	3	1	2	0	9	
23	Lakeview Dr	NE 60th St (2)	2	3	1	3	0	9	
24	Market	14th Ave	3	0	3	3	0	9	
25	NE 112th St	116th Ave NE	2	3	1	3	0	9	
26	NE 112th St	115th Ave NE	2	3	1	3	0	9	
27	NE 112th St	108th Ave NE	2	3	1	3	0	9	
28	NE 80th St	130th Ave NE	2	3	1	3	0	9	
29	NE 80th St	128th Ave NE	2	3	1	3	0	9	
30	NE 60th St	East of 122nd Ave	2	3	1	3	0	9	
31	Central Way	Main	3	0	3	2	0	8	
32	Lake WA Blvd	NE 58th St	3	0	2	3	0	8	
33	Market	11th Ave	3	0	2	3	0	8	
34	Market	12th Ave	3	0	2	3	0	8	
35	Market	4th Ave	3	0	2	3	0	8	
36	Market	7th Ave	3	0	2	3	0	8	
37	132nd Ave NE	Voc. Tech	3	0	2	2	0	7	
38	Lake Street	10th Ave S	3	0	1	3	0	7	
39	Lake Street	5th Ave S	3	0	1	3	0	7	
40	Lake Street	7th Ave S	3	0	1	3	0	7	
41	Market	9th Ave	2	0	2	3	0	7	
42	NE 70th St/NE 68th st	112th Ave ne	3	0	2	2	0	7	NOTE: ped/vehicle crash occurred week of March 5. Ranking could change based on final police report.
43	6th St	Kirkland Ave	2	0	1	3	0	6	
44	Lake WA Blvd/Lake Street	Marsh Park	3	0	1	2	0	6	
45	NE 38th Place	South Kirkland PR	2	0	2	2	0	6	
46	Kirkland Ave	KPC	2	0	1	2	0	5	

LEGEND

Lake Front Project	
"Top Ten"	
Possible Additional Sites, budget permitting	
Requires only luminaire change.	
Remaining Sites	

PRIMARY EVALUATION CRITERIA AND SCORING

Street Functional Classification	Arterial = 3 Collector=2 Local=1
School Walk Route	Yes=3 No=0
Safety Risk per North Carolina Method	N=3 P=2 C=1
Facility Type	Intersection=3 Midblock Crosswalk=2 Sidewalk/shoulder=1
Crash Experience during the last five years	1 or more crashes=5 No Crashes=0