2019 Project Review Sheet (2020 Construction)

City Council District 7 (Ballot # 7G)

Project #	19-298
Project Title:	Add better lighting
Location:	Neighborhood: Queen Anne, 98109 Area: Intersection of Galer St and Taylor Ave N; the stairway up the hill from there (to the west).

SDOT Contact Information

SDOT Reviewer Name: John Marek

Reviewer Phone Number: (206) 684-5069

Review Date: August 6th, 2019

SDOT Project Summary

SDOT approves project

- ☐ Yes
- ☒ Yes, with revisions
- ☐ No

Comments: SDOT reviewed various crossing enhancements and based upon the traffic data and existing conditions and recommends the following package that can be phased in or funded individually if preferred: painted curb bulbs, additional streetlight, additional stairway pedestrian light.

There is an opportunity to partner with another program:

- ☐ Yes
- ☒ No

Partnering Program: N/A

Total Project Cost: $102,000 ($22,250 curb bulb, $15,000 streetlight, $64,750 stairway pedestrian light)

YVYC 2019: Project 19-298, Intersection of Galer St and Taylor Ave N; the stairway up the hill from there (to the west).

Solution and Comments:
This review has been completed for use in the 2019 Your Voice, Your Choice: Parks & Streets process.

This project was reviewed for potential crossing improvements at the marked crossing on the south side of the intersection. SDOT evaluated the location for a raised crossing, but due to the existing grade of 6 percent and challenges with drainage associated with this type of treatment, SDOT does not support a raised crossing at this location. As an alternative installation of a Rectangular Rapid Flashing Beacon (RRFB) was evaluated. New speed and volume data were collected which showed an Average Weekday Traffic Volume (AWDT) of 4,600 vehicles per day and the 85th percentile speeds in the southbound direction of approximately 29.5 mph and 27.3 mph. in the northbound direction. Based on those conditions SDOT would not support installation of an RRFB.

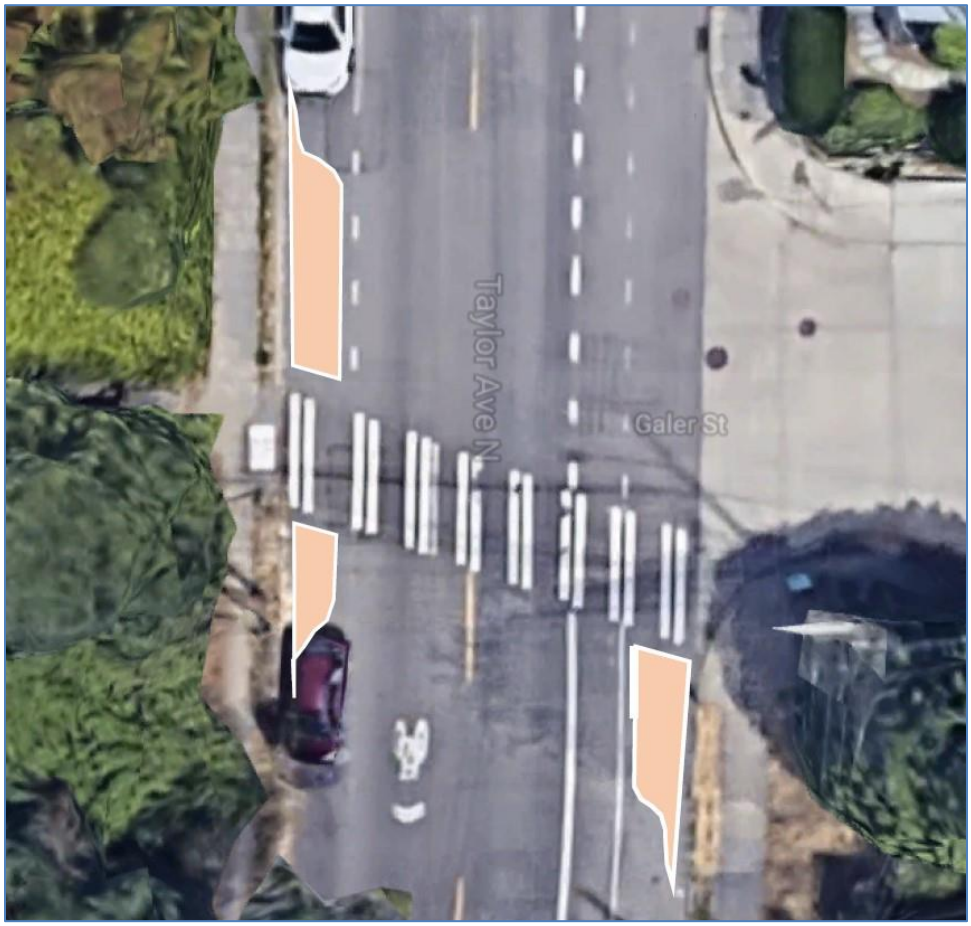
An alternative to installation of an RRFB would be to install paint and post curb bulbs on the southeast corner and the west side of the intersection. Painted curb bulbs can help to reduce the crossing distance pedestrians and improve pedestrian visibility, which may help encourage greater compliance of motorists stopping for pedestrians.

SDOT also completed a lighting analysis for both the intersection and the stairwell. Per SDOT lighting guidelines, the lighting level criteria for the intersection of Taylor Ave N & Galer St is 3.0 foot-candles (fc) for LED street lighting and a uniformity (average/minimum) of 3.0 or less. The existing light level is 1.94 fc and 1.62 uniformity. As a result, SDOT would support installation of an additional streetlight on the west side of Taylor Ave N and Galer St.

The lighting level criteria for pedestrian facility is 1.0 fc for an LED light source and a uniformity of 4.0 or less. The existing light level along the stairway is 0.03 fc with no uniformity. SDOT would support installation of additional pedestrian lighting along the stairway.

The three improvements could be implemented as one package or a combination of any of the three.

Image:



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Information Provided by Community Members

Project Idea: Better lighting for the Galer St Hill climb and a raised pedestrian crosswalk/flashing light on the intersection of Galer St and Taylor Ave N.

Need for Project: There isn't any lighting on the west side of the crosswalk so drovers headed SB on Taylor Ave don't stop. They're traveling downhill and so usually breaking the speed limit (going above 30mph). Pedestrian survival odds at that speed are quite low. It's also a highly trafficked crosswalk due to the location on the stairway walk between high frequency transit and Queen Anne hill. There's periodic reports of people in the neighborhood as well who have had near misses (and a dog out on a walk that got hit)... only a matter of time before it's a person.

Community Benefit from Project: Pedestrians walking up and down the stairs in east Queen Anne.

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Risk Registry

SDOT Review	Drainage impacts	Constructability	Community process
Medium	Low	Low	High

Curb Bulb Cost Estimate

Design Phase	
Preliminary Engineering (Survey) Costs	$0
Project Management Costs (City Labor)	$500
Design Costs (Consultant Fees, if externally designed, internal labor otherwise)	$2,000
Subtotal – Design Phase Costs	$2,500
Design Contingency (10% of Design Phase Subtotal)	$2,50
Total Design Phase Costs	$2,750
Construction Phase	
Construction Costs (include urban forestry, signs & markings, traffic control, layout or construction staking as necessary)	$15,000
Drainage Costs	$0
Estimating Contingency (10-20%)	$1,500
Subtotal – Construction Costs	$16,500
Construction Management (10-25% of Construction Cost)	$1,500
Construction Contingency (20%)	$1,500
Total Construction Phase Costs	$19,500
Total Project Cost = Total Design and Construction Phase Costs	$22,250

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Streetlight Cost Estimate

Design Phase	
Preliminary Engineering (Survey) Costs	$0
Project Management Costs (City Labor)	$2,000
Design Costs (Consultant Fees, if externally designed, internal labor otherwise)	$1,000
Subtotal – Design Phase Costs	$1,000
Design Contingency (10% of Design Phase Subtotal)	$100
Total Design Phase Costs	$3,100
Construction Phase	
Construction Costs (include urban forestry, signs & markings, traffic control, layout or construction staking as necessary)	$8,000
Drainage Costs	$0
Estimating Contingency (10-20%)	$800
Subtotal – Construction Costs	$8,800
Construction Management (10-25% of Construction Cost)	$1,500
Construction Contingency (20%)	$1,600
Total Construction Phase Costs	$11,900
Total Project Cost = Total Design and Construction Phase Costs	$15,000

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Stairway Pedestrian Lighting Estimate

Design Phase	
Preliminary Engineering (Survey) Costs	$0
Project Management Costs (City Labor)	$10,000
Design Costs (Consultant Fees, if externally designed, internal labor otherwise)	$4,000
Subtotal – Design Phase Costs	$7,000
Design Contingency (10% of Design Phase Subtotal)	$700
Total Design Phase Costs	$14,700
Construction Phase	
Construction Costs (include urban forestry, signs & markings, traffic control, layout or construction staking as necessary)	$35,000
Drainage Costs	$0
Estimating Contingency (10-20%)	$3,500
Subtotal – Construction Costs	$38,500
Construction Management (10-25% of Construction Cost)	$3,850
Construction Contingency (20%)	$7,700
Total Construction Phase Costs	$50,550
Total Project Cost = Total Design and Construction Phase Costs	$64,750

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