



INFORMATIONAL MEMORANDUM

TO: **Transportation and Infrastructure Services Committee**
FROM: **Hari Ponnekanti, Public Works Director/City Engineer**
BY: **Adam Cox, Transportation Project Manager**
CC: **Mayor Ekberg**
DATE: **March 31, 2023**
SUBJECT: **S 152nd Street Safe Routes to School Project**
Project No. 91710303

ISSUE

Discussion on undergrounding utilities for the 152nd St Safe Routes to School (SRTS) project.

BACKGROUND

The S 152nd Street SRTS project will design new curb, gutter, and sidewalks along the stretch of road between Tukwila International Boulevard and 42nd Avenue S. Additionally, improvements to the existing storm drainage system will be included to improve operation and water quality in the Gilliam Creek basin.

ANALYSIS

KPG-Psomas, Inc. (KPG) was selected to perform the design of the project in April 2022. The 30% plans and estimate (P&E) were submitted to the City in December 2022 and comments/review was submitted back to KPG to incorporate. The initial scope of work did not include undergrounding overhead utilities as the focus for the project was establishing pedestrian facilities, stormwater, and roadway improvements. During future discussions, undergrounding of overhead utility requirements/codes warrants further examination for this project.

Undergrounding overhead utilities for this project would require additional funds of at least \$3.2 million. In addition to the added design and construction costs, it is estimated that the construction start would be delayed a year due to the added scope of the undergrounding. The undergrounding could also double the calendar days to close out the project - not contract working days, but total time the contract is open due to pole removals, comm wire installation, and service conversion.

FINANCIAL IMPACT

The rough order of magnitude (ROM) provided by KPG for the additional design and construction to underground the overhead utilities is \$3.2 million, borne by the general fund with minimal support from grants.

Sound Transit is currently funding 100% the design of the pedestrian and roadway facilities. The City has also applied to the Washington State of Transportation (WSDOT) for SRTS funding. Unfortunately, we were not selected to receive funding, however, the project is first on the list to receive funding if additional funding becomes available or other awarded projects do not continue.

RECOMMENDATION

The Council is being asked to accept a deviation as described in TMC 11.28 for not requiring undergrounding overhead utilities on the project to allow the project to move forward toward the 60% design.

Attachments: 2023 CIP, Page 4
S 152nd Utility Undergrounding Memorandum

CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2023 to 2028

PROJECT: S 152nd St Safe Routes to School

Project No. 91710303

DESCRIPTION: Install curb, gutter, and sidewalks on both sides of S 152nd St, including widening pavement width by three feet to construct an on-street parking lane as a buffer between the roadway and sidewalk on the north side.

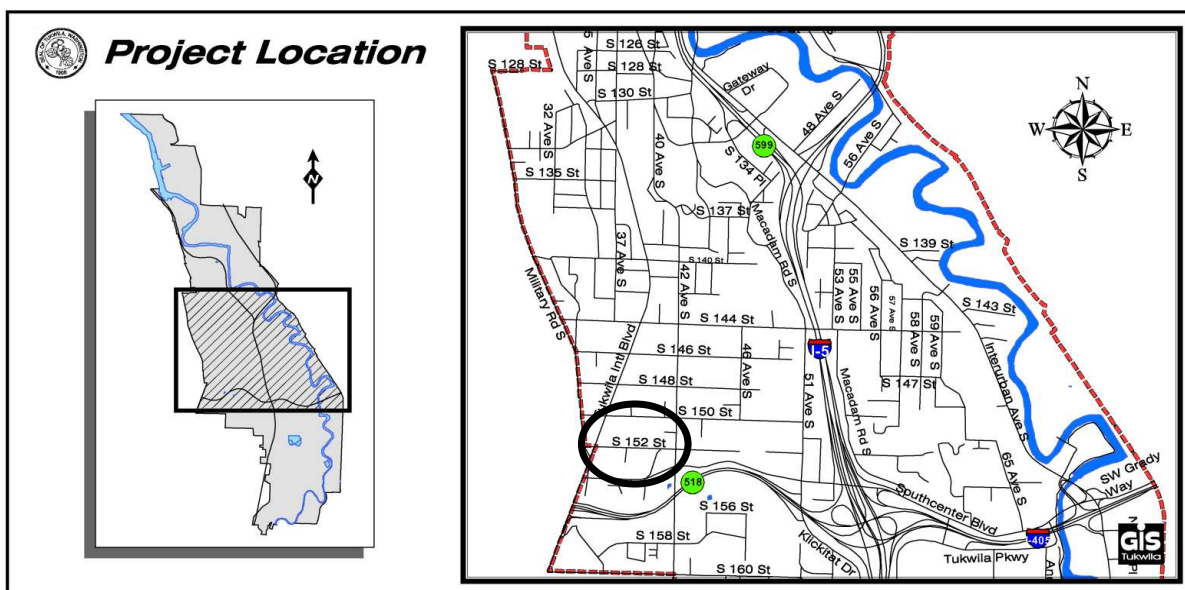
JUSTIFICATION: Enhance safety for students walking to Foster High School, Showalter Middle School, and Thorndyke Elementary School and encourage transportation choices for the neighborhood.

STATUS: Design funded, construction pending SRTS grant funding.

MAINT. IMPACT: New sidewalk and pavement will need to be maintained.

COMMENT: Sound Transit System Access Fund Grant of \$369k for design. Apply for SRTS grant in 2021 for construction.

FINANCIAL (in \$000's)	Through		Estimated							TOTAL
	2021	2022	2023	2024	2025	2026	2027	2028	BEYOND	
EXPENSES										
Design		453								453
Land (R/W)			15							15
Const. Mgmt.			400							400
Construction			3,600							3,600
TOTAL EXPENSES	0	453	4,015	0	0	0	0	0	0	4,468
FUND SOURCES										
Awarded Grant		369								369
Proposed Grant			3,200	-						3,200
Solid Waste Utility Tax			100							100
Surface Water Fund		84								84
103 Fund Balance	0		715	0	0	0	0	0	0	715
TOTAL SOURCES	0	453	4,015	0	0	0	0	0	0	4,468



Memorandum

To: Public Works Department, City of Tukwila
Cyndy Knighton – Project Manager

From: KPG Psomas
Bryce Corrigan, PE

Date: 5/17/2022

Re: S 152nd St Utility Undergrounding

The City of Tukwila has selected KPG Psomas to perform design of non-motorized improvements along S 152nd St from Tukwila International Boulevard to 42nd Ave S, about 1,600 linear feet. The purpose of this memorandum is to provide a budget estimate for power and communication utility undergrounding with the project corridor. Figure 1 shows the project location highlighted in blue:

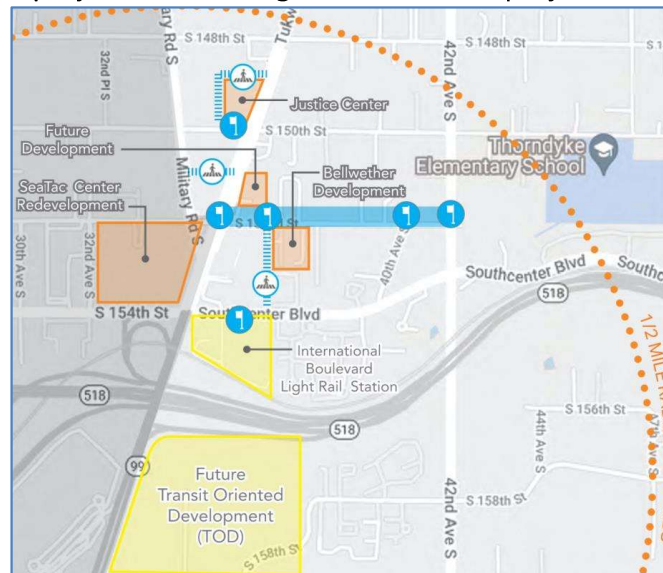


Figure 1: Project Location

Background

Pursuant to City Code 11.28.010 the City's desire is to underground all overhead electrical power and communication wires. The City has consistently enforced this practice upon themselves as part of Public Works' CIP projects where (per 13.08.085) the City desires to install any new utilities, street improvements (sidewalk, widening, etc) or change the grade of any roadway or alley. The boundary streets, Tukwila International Boulevard and 42nd Ave S both currently have the power and communication utilities underground.

Current S 152nd St Project

At this time there is not utility undergrounding being proposed for the S 152nd St Corridor as part of the non-motorized connection project. The extent of utility work on this project is a new drainage system, utility pole relocations, and surface adjustment of structures for the various providers within the project limits. The City requested of KPG Psomas to prepare a budget amount that undergrounding S 152nd St would cost. Below is that discussion.

First KPG PSomas evaluated the mean cost of the 53rd Project (2,100 linear feet) completed in 2019 which undergrounded Seattle City Light’s power infrastructure and Comcast and Lumen (Century Link) communication infrastructure. That Project’s undergrounding effort was completed for roughly **\$1,325 per linear foot, or \$440/linear foot/provider**. Second, we added 130% cost increase to that total to account for inflation and various worldly events that have taken place since then. We then compared this escalated cost to current 2022 estimates and bid tabulations from project of similar size and scope. The escalation and comparison yielded a 2023 projected cost of roughly **\$1,725/linear foot, or \$575/linear foot/provider** (assuming three providers). We then applied that to the S 152nd St Project and an approximate construction cost to underground the utilities is **\$2,800,000**. Engineering for this effort is approximately \$415,000. The total effort for utility undergrounding of S 152nd St would be roughly **\$3,215,000**. Please see the summary table below:

53RD AVE S SCHEDULE C	
2018	
Linear Feet	2100
No. Services	36
Total (avg of bidders)	\$ 2,781,966.00
\$/Service	\$ 77,276.83
\$/LF	\$ 1,325.00
2023 Inflation + Other Cost Impacts 130%	
Total in 2023	\$ 3,616,555.80
Total \$/Service in 2023	\$ 100,459.88
Total \$/LF in 2023	\$ 1,722.17
	use \$ 1,725.00
S 152nd St	
Linear Feet	1600
No. Services	28
Budget Estimate	\$ 2,760,000.00
\$/LF	\$ 1,725.00
\$/Service	\$ 98,571.43
Engineering + Final Design (15%)	\$ 414,000.00
RECOMMENDED BUDGET AMOUNT	
Total, Eng+Const (Rounded)	\$ 3,215,000.00
\$/LF	\$ 2,010.00
Est Total No Undergrounding	\$ 4,500,000.00
Est Total with Undergrounding	\$ 7,700,000.00