

ACTION TRANSMITTAL No. 2016-19

DATE: February 5, 2016
TO: Transportation Advisory Board
FROM: Technical Advisory Committee
PREPARED BY: Joe Barbeau, Senior Planner (651-602-1705)
SUBJECT: Scope Change Request for City of Minneapolis 35th and 36th Streets Overhead Signal Additions (HSIP)
REQUESTED ACTION: The City of Minneapolis requests a scope change to its HSIP-funded intersection signal project (SP # 141-030-023) to eliminate four of the 16 intersections from the project.
RECOMMENDED MOTION: That Transportation Advisory Board approve the requested scope change with no reduction in federal funds.

BACKGROUND AND PURPOSE OF ACTION: The City of Minneapolis was awarded \$1,209,600 in Highway Safety Improvement Program (HSIP) funding in 2011 for addition of overhead signals along 35th and 36th Streets in South Minneapolis. The improvements, at 16 intersections between Blaisdell Avenue South and Park Avenue South, are scheduled for fiscal year 2016.

The City of Minneapolis is requesting that four of the 16 intersections be removed from the project, as these locations overlap with another project scheduled for construction in 2017. While the number of intersections being improved decreases, the City has estimated an increased project cost due to the addition of new ADA curb ramps and related signal revisions meant to accommodate the improvements. The four locations to be removed are:

- 35th St / Stevens Ave
- 35th St / 2nd Ave
- 36th St / Stevens Ave
- 36th St / 2nd Ave

RELATIONSHIP TO REGIONAL POLICY: Projects that receive funding through the regional solicitation process are subject to the regional scope change policy. The purpose of this policy is to ensure that the project is designed and constructed according to the plans and intent described in the original application. Additionally, federal rules require that any federally-funded project scope change must go through a formal review and TIP amendment process if the project description or total project cost changes substantially. The scope change policy and process allow project sponsors to make adjustments to their projects as needed while still providing substantially the same benefits described in their original project applications. MnDOT Metro District manages the region's HSIP solicitation on behalf of TAB and the Metropolitan Council. The City, based on the additional elements it is adding to the 12 remaining intersections, requests that no reduction be made to the federal funding award amount.

A TIP amendment request accompanies this request.

STAFF ANALYSIS: MnDOT staff reviewed the original project and scoring. The project would still have been selected in that HSIP round without the four intersections proposed for removal.

COMMITTEE COMMENTS AND ACTION: At its January 21, 2016, meeting, the TAC Funding & Programming Committee recommended approval of the scope change request with no reduction in federal funds. There was discussion about reducing federal funds by \$63,000 (the federal portion of the removed project elements, but it was decided to recommend no reduction given the additional ADA elements.

At its February 3, 2016, meeting, TAC unanimously recommended approval of the scope change request with no reduction in federal funds.

ROUTING

TO	ACTION REQUESTED	DATE COMPLETED
TAC Funding & Programming Committee	Review & Recommend	1/21/2016
Technical Advisory Committee	Review & Recommend	2/3/2016
Transportation Advisory Board	Review & Approve	

December 22, 2015

Mr. Timothy Mayasich
Funding and Programming Chair
Metropolitan Council
390 Robert St. North
St Paul, MN 55101-1805

SUBJECT: 35TH AND 36TH STREETS OVERHEAD SIGNAL ADDITIONS
SCOPE CHANGE REQUEST
S.P. 141-030-023

Dear Mr. Mayasich:

The City was successful in the 2011 federal funding solicitation for the Highway Safety Improvements Program (HSIP) for overhead signal additions along 35th and 36th Streets in South Minneapolis. The State Transportation Improvement Program (STIP) has \$1,209,600 in federal funding (total project cost of \$1,344,000) scheduled for improvements at 16 intersections between Blaisdell Avenue S and Park Avenue S along 35th and 36th Streets in fiscal year 2016.

The purpose of this letter is to request a scope change for consideration to decrease the number of intersections from 16 to 12. The City identified four locations included in the HSIP project that overlap with the I-35W Transit/Access project S.P. 12782-327, which is currently being designed and will begin construction in 2017. MnDOT and City staff discussed potential ways of coordinating the two projects but ultimately determined it was most efficient to include the signal upgrades as part of the I-35W project and remove the four locations from the HSIP project.

A revised cost estimate is also included in the scope amendment. There are two elements that factor into the new estimate: 1) decrease from 16 to 12 intersections, 2) increase in construction costs at the remaining 12 intersections. The increase in cost is largely attributed to new ADA curb ramps now included in the scope and related signal revisions required to accommodate the ADA curb ramps (see Table 1). When combining the two cost elements, the total cost estimate for construction increases significantly. Although the original project description has changed since its submittal, the total benefits at the remaining 12 intersections are significantly higher than the original application due to additional safety countermeasures that are now proposed. The additional improvements meet the criteria to be considered eligible for federal funding and are crash countermeasures consistent with the intent of the HSIP program. Therefore, the City is requesting a scope change, in order to move forward with a modified project scope. Please consider this formal request from the City of Minneapolis for the change in scope of the 35th and 36th Streets Overhead Signal Additions project for fiscal year 2016.

ORIGINAL PROJECT DESCRIPTION

In the 2011 HSIP funding submittal, 16 intersections were identified for overhead signal upgrades along 35th and 36th Streets between Blaisdell Avenue S and Park Avenue S. Converting a pedestal signal into an overhead signal

is a proven crash reduction countermeasure. The City has been focused on installing overhead signals over the past 15 years and the projects have been very successful. Recent before and after crash records for overhead signal conversions show an 80% reduction in right angle (RA) crashes and a 30% reduction in total crashes. The 35th and 36th Street corridors were selected because of a high RA crash history.

The scope of 12 of the 16 intersections was to convert pedestal signals to overhead signals. The other four intersections already have existing overhead signals so the original scope was to install a longer mast arm and supplemental heads. These four intersections have an estimated 35% reduction in RA crashes. The locations are listed below:

- 35th St /Stevens Ave
- 35th St /2nd Ave
- 36th St /Stevens Ave
- 36th St /2nd Ave

REQUESTED CHANGE OF SCOPE

MnDOT is currently managing the design of the I-35W Transit/Access project. One element of the project scope includes signal upgrades with new ADA curb ramps at intersections adjacent to bridges crossing over I-35W. Construction is scheduled to begin in 2017. Four intersections in the 35th and 36th Streets Overhead project overlap with the I-35W Transit/Access project. MnDOT and City staff discussed potential ways of coordinating the two projects but ultimately determined it was most efficient to include the signal upgrades as part of the I-35W project and remove four locations from the HSIP project.

The following intersections are proposed to be removed from the HSIP project (see Table 1):

- 35th St /Stevens Ave
- 35th St /2nd Ave
- 36th St /Stevens Ave
- 36th St /2nd Ave

A major factor in the decision was that the four locations were the ones noted above that already had existing overheads. The proposed longer mast arms and supplemental heads were a small component of the original HSIP project scope thus it was feasible to remove the four intersections from the HSIP project. The City and MnDOT are collaborating on the design of the I-35W Transit/Access project to ensure the crash reduction countermeasures are included when the signal systems are eventually rebuilt with the I-35W project.

The second component to the scope amendment is the revised cost estimate that incorporates increased construction costs estimated for the remaining 12 intersections in the HSIP project. The period between 2011 and 2014 has been a time of change with evolving construction requirements related to ADA compliant curb ramp upgrades. When the 2011 application was submitted, the City was in the process of determining its ADA transition plan. Also, MnDOT had not yet determined in 2011 that an overhead signal upgrade project triggered curb ramp replacement. Up until 2012, the City built such projects without replacing the curb ramps. The 35th and 36th Streets Overhead Signal project was applied for in 2011 and did not include replacing the curb ramps in the cost estimate. Subsequently, beginning in 2014, the City's policy changed to include curb ramp replacement as part of all signal projects with underground work. This is also now consistent with MnDOT's current construction requirements for a federally funded project.

The curb ramp replacement is now included in the scope of the 35th and 36th Streets Overhead Signal project. This requires all four corners of a given intersection to be significantly disturbed whereas the original scope only impacted two corners in a minor way. The additional concrete removal will disrupt more of the existing signal system components; therefore, more elements of the signal system must be upgraded at the same time. Accessible Pedestrian Signals (APS), pedestrian countdown timers, and new 12" signal heads (replacing any existing 8" heads) will be installed (see Table 1).

Table 1: Revised Safety Improvements

Intersection	Included in Original HSIP Application Project Scope	Proposed Scope Change
35 th St /Blaisdell	OH	OH, R, APS, C, 12"
35 th St /1 st Av	OH	OH, R, APS, C, 12"
35 th St /Stevens	A	Remove
35 th St /2 nd Av	A	Remove
35 th St /3 rd Av	OH	OH, R, APS, C, 12"
35 th St /4 th Av	OH	OH, R, APS, C, 12"
35 th St /Portland	OH	OH, R, APS, C, 12"
35 th St S. / Park	OH	OH, R, APS, C, 12"
36 th St /Blaisdell	OH	OH, R, APS, C, 12"
36 th St /1 st Av	OH	OH, R, APS, C, 12"
36 th St /Stevens	A	Remove
36 th St /2 nd Av	A	Remove
36 th St /3 rd Av	OH	OH, R, APS, C, 12"
36 th St /4 th Av	OH	OH, R, APS, C, 12"
36 th St /Portland	OH	OH, R, APS, C, 12"
36 th St S. / Park	OH	OH, R, APS, C, 12"
<p>OH Overhead Signals A Install new longer mast arm and supplemental heads (OH already exists at this location) R ADA Compliant Pedestrian Ramps APS Accessible Pedestrian Signal (APS) C Pedestrian Countdown Timers 12" Convert all existing 8" signal lenses to 12" lenses</p>		

The construction costs associated with the four intersections proposed to be removed from the project is \$70,000 (of which \$63,000 is federal funding).

The current estimated construction cost for the remaining 12 intersections is \$3,075,000.

The STIP currently has \$1,209,600 federal funding.

The safety improvements now included in the project meets the intent of the HSIP program – to reduce serious injury crashes. The City believes that this additional work is eligible for federal funding. The HSIP program is intended to be 90% federal funding and 10% local cost participation. Thus, the City is requesting that the total federal funding remain at the previously allocated amount of \$1,209,600 for the 35th and 36th Streets Overhead Signal Additions project. This would result in a 39%/61% federal/local funding split, with a much higher local share than originally anticipated. Also we request that this project be considered for federal funding reallocation if any becomes available in 2016.

We look forward to discussing the revised project with you in more detail. If you have any questions, I can be reached at 612-673-2743 or by email at allan.klugman@minneapolismn.gov. (Please Note: I will be out of the office until January 6th. In the meantime, contact Ryan Anderson at 612-673-3986 or by email at ryan.anderson@minneapolismn.gov)

Sincerely,

CITY OF MINNEAPOLIS

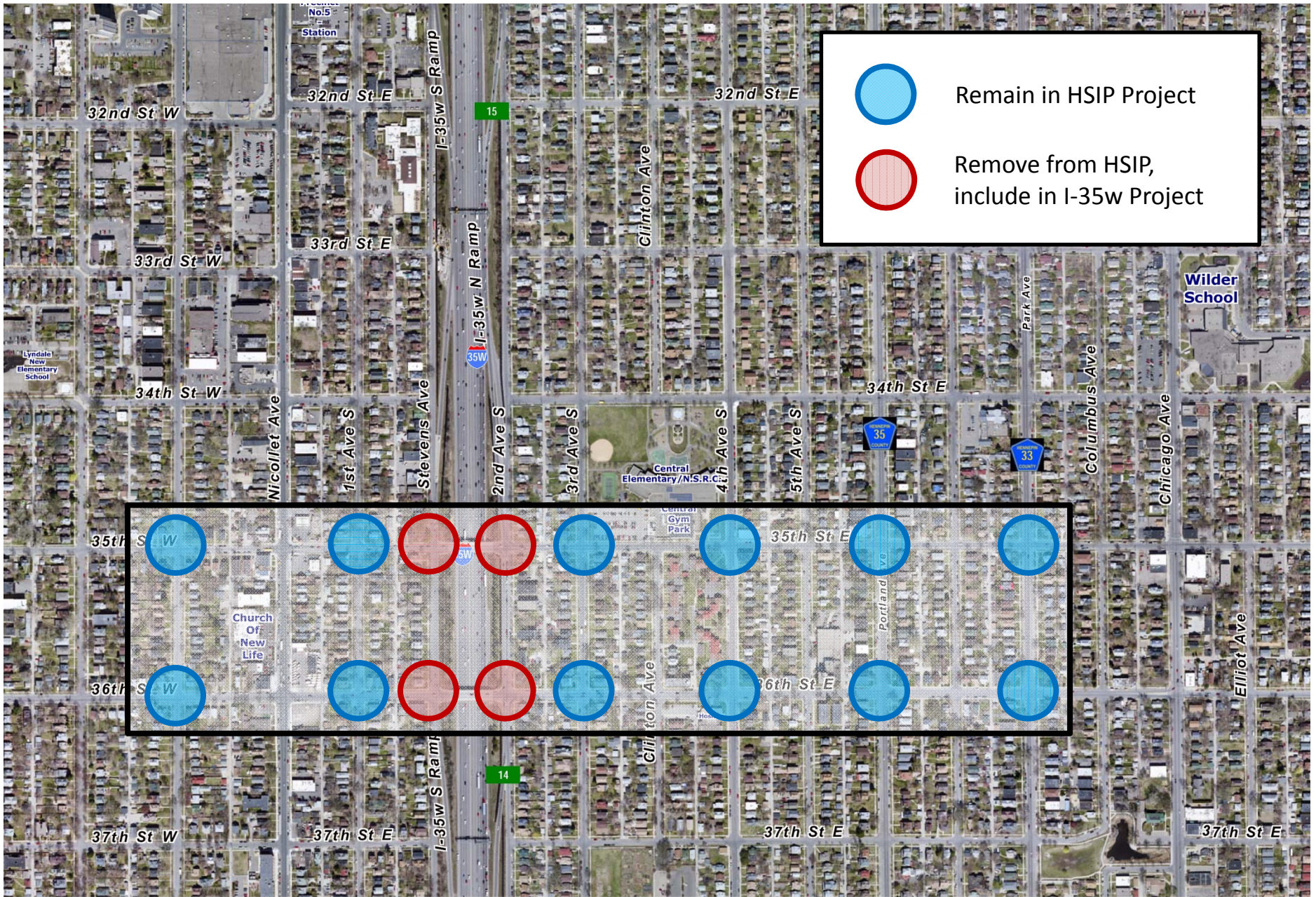
Allan Klugman, P.E., PTOE
Senior Professional Engineer



Attachments: Revised Cost Estimate
Project Location Map

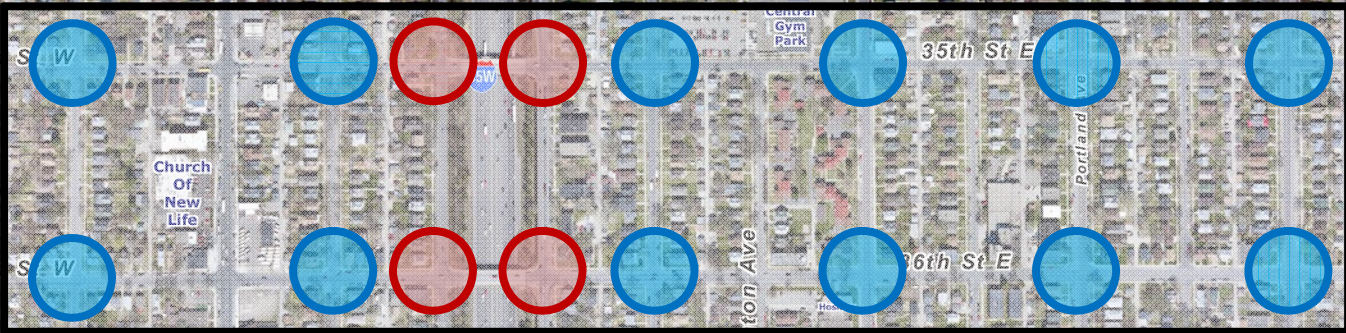
Project Elements and Estimate of Construction Costs – Revised 12/21/15

Based on the revised project elements (see Table 1) and current bid prices (2015) the estimate of construction costs have been revised as shown below.

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES		
Check all that apply	ITEM	COST
<input checked="" type="checkbox"/>	Mobilization (approx. 5% of total cost)	\$150,000
<input type="checkbox"/>	Removals (approx. 5% of total cost)	\$
<input type="checkbox"/>	Roadway (grading, borrow, etc.)	\$
<input type="checkbox"/>	Roadway (aggregates and paving)	\$
<input type="checkbox"/>	Subgrade Correction (muck)	\$
<input type="checkbox"/>	Storm Sewer	\$
<input type="checkbox"/>	Ponds	\$
<input type="checkbox"/>	Concrete Items (curb & gutter, sidewalks, median barriers)	\$
<input checked="" type="checkbox"/>	Pedestrian Curb Ramps (ADA)	\$500,000
<input type="checkbox"/>	Path/Trail Construction	\$
<input checked="" type="checkbox"/>	Traffic Control	\$75,000
<input type="checkbox"/>	Striping – durable crosswalk markings	\$
<input type="checkbox"/>	Signing	\$
<input type="checkbox"/>	Lighting	\$
<input type="checkbox"/>	Landscaping	\$
<input type="checkbox"/>	Bridge	\$
<input type="checkbox"/>	Retaining Walls	\$
<input type="checkbox"/>	Noise Wall	\$
<input checked="" type="checkbox"/>	Traffic Signals	\$2,100,000
<input type="checkbox"/>	Wetland Mitigation	\$
<input type="checkbox"/>	Other Natural and Cultural Resource Protection	\$
<input type="checkbox"/>	RR Crossing	\$
<input type="checkbox"/>		\$
<input type="checkbox"/>		\$
<input type="checkbox"/>		\$
<input type="checkbox"/>		\$
<input type="checkbox"/>		\$
<input type="checkbox"/>		\$
<input checked="" type="checkbox"/>	Contingencies	\$250,000
	TOTAL CONSTRUCTION COST	\$3,075,000



 Remain in HSIP Project
 Remove from HSIP, include in I-35w Project



12/22/2015

**SCHEDULE OF PRICES
TRAFFIC SIGNAL SYSTEM
HSIP PROJECT**

Note: This estimate is for one corner. The intersections proposed for removal include a total of eight corners (two per intersection) for a total of \$67,488.

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	ESTIMATED QUANTITY	ESTIMATED COST
2104.501	REMOVE SIGNAL CABLE	LIN FT	3.44	100	344.00
2104.523	SALVAGE SIGNAL HEAD (OVERHEAD)	EACH	547.1	1	547.10
2565.602	MASTARM POLE SIGN ARM	EACH	725	1	725.00
2565.602	MASTARM 36'	EACH	1927	1	1,927.00
2104.523	SALVAGE SIGNAL HEAD (OVERHEAD)	EACH	547.1	1	547.10
2565.602	INSTALL SALVAGED HEAD (OH)	EACH	264	1	264.00
2104.523	REMOVE POLE MOUNT SIGNAL SERVICE	EACH	1432	1	1,432.00
2104.523	12/C#14	LIN FT	5.41	100	541.00
2104.523	INSTALL NEW SIGNAL HEAD (OVERHEAD)	EACH	1154.95	1	1,154.95
2545.515	LIGHT FOUNDATION DESIGN M 30 FT	EACH	1780	0	-
2545.511	LIGHT STANDARD TYPE 3M-30 STAINLESS STEEL	EACH	3368	0	-
2565.602	LUMINAIRE 250 HPS DESIGN M	EACH	755	0	-
2565.602	TYPE 4C(L) (12" X 12" LED COUNT DOWN)	EACH	575	0	-
2565.602	TYPE 10B 12" LED (R-Y-G) & 12"LED (COUNT DOWN)	EACH	1625	0	-
2565.602	ONE WAY SIGNAL OH (R-Y-G) SPEC	EACH	2227	0	-
2565.602	EVP DETECTOR ONE-CHANNEL ONE-WAY	EACH	980	0	-
0564.602	TYPE D SIGN	EACH	500	1	500.00
2565.603	3" NON-METALLIC CONDUIT TRENCHED	LIN FT	9.09	0	-
2565.603	2" NON-METALLIC CONDUIT TRENCHED	LIN FT	8.82	0	-
2565.602	HANDHOLE DESIGN MPLS	EACH	1021.7	0	-
2565.603	12/C#14	LIN FT	5.41	0	-
2565.603	2/C #14 W/GRD	LIN FT	1.73	0	-
2565.603	4/C #20 (OPTICOM)	LIN FT	2.35	0	-
2565.603	3-1/C#8 COMBO	LIN FT	3.65	0	-
	COST INCREASE FOR 2014	LS	798	1	798.22
	ESTIMATED CONSTRUCTION COST				\$ 8,436.37