



## OFFICE OF THE LEGISLATIVE AUDITOR

STATE OF MINNESOTA • Joel Alter, Interim Legislative Auditor

October 28, 2021

TO: Senator Scott Dibble  
Representative Frank Hornstein

FROM: Joel Alter  
Director of Special Reviews and Interim Legislative Auditor

SUBJECT: Southwest Light Rail project costs and management

CC: Members of the Legislative Audit Commission  
Senator Scott Newman, Senate Transportation Policy and Finance Committee

On July 29, 2021, you sent a letter to Legislative Auditor Jim Nobles requesting that our office consider doing “an expedited special review of Southwest Light Rail Transit (Green Line extension) project costs, cost overruns, delays, and management.” You noted that the Metropolitan Council recently requested an additional \$200 million in contingency funds from Hennepin County for this project. You also posed a list of questions that you hoped a special review could address.

When our office receives complaints, allegations, or requests, we start by conducting a “preliminary assessment.” We request documents or seek answers to questions, largely for the purpose of helping us understand the concerns that have been raised and to determine whether to conduct further investigation. In the time since we received your request, we have communicated multiple times with representatives of the Metropolitan Council and AECOM Technical Services (ATS), which is one of the Council’s contractors on the project.

Unfortunately, our office cannot conduct a full-scale special review of the concerns you raised at this time. We have limited staffing for doing special reviews, and other commitments are consuming those resources. However, in lieu of such a review, I can offer the following:

1. This memo summarizes a dispute that has arisen between the Metropolitan Council and ATS that is pertinent to your concerns. If you have not seen the correspondence between the Council and ATS on this subject, you may find that this summary (and the correspondence itself, which is attached) gives you a clearer picture of the dispute than you had previously. The parties to the dispute agree that the correspondence we reviewed is classified as public under the Minnesota Government Data Practices Act.
2. We will add a topic regarding Southwest Light Rail Transit (LRT) Project Management to the list of possible evaluation topics that the Legislative Audit Commission will consider in 2022. The commission ultimately determines which evaluation projects our office conducts. The Southwest LRT project is large and complex, and a team of evaluators would be better able to examine the project’s management than would the more limited staffing resources available for a special review.

Our office generally does not involve itself in litigated issues, so we would probably not undertake additional review if this issue becomes the subject of a lawsuit. ATS told us that it hopes to continue working cooperatively with the Metropolitan Council and avoid “unnecessary litigation with any parties on the project.”<sup>1</sup>

## Project Background

The Southwest LRT line will be a 14.5-mile extension of the Green Line that now connects downtown Minneapolis and downtown St. Paul. Cities in the extension’s path include Minneapolis, St. Louis Park, Hopkins, Minnetonka, and Eden Prairie. The Metropolitan Council is the lead public agency in the development of Southwest LRT, and the Council is working with a variety of federal, state, county, and local agencies.

## Project Budget and Funding

The project budget was \$2.003 billion earlier this year, but the Metropolitan Council’s August 2021 decision to add \$200 million in Hennepin County funding for contingency purposes will, in effect, increase the project budget by that amount to about \$2.203 billion.

Through June 30, 2021, total project expenditures were \$1.176 billion. Of the \$204 million contingency budget that existed as of mid-2021 (prior to the subsequent approval of another \$200 million in contingency funds), about \$153 million had been spent as of June 30, 2021.<sup>2</sup>

Funding for this project is mostly from federal and county sources. The federal government is providing more than \$900 million, Hennepin County and its regional rail authority will provide—including the recently approved supplement to contingency funding—just under \$1.0 billion, and the Counties Transit Improvement Board provided nearly \$219 million prior to its dissolution in 2017. The State of Minnesota’s contribution is relatively small (about \$30 million).<sup>3</sup>

## Project Schedule

Construction for this project began in 2019. According to the Metropolitan Council, the construction schedule has been affected by two “significant construction challenges”: (1) the need for a “Corridor Protection Wall” in the eastern part of the line to separate the Southwest line from an adjacent railroad and (2) “unforeseen conditions related to construction of the Kenilworth tunnel resulting in the need for a different support of excavation method called a

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<sup>1</sup> Sarah Levitt, Corporate Vice President and Assistant General Counsel, AECOM Technical Services, letter to Joel Alter, Director of Special Reviews and Interim Legislative Auditor, Office of the Legislative Auditor, “Re: Draft Memorandum re. Southwest Light Rail Transit project,” October 22, 2021.

<sup>2</sup> The contingency budget is intended to help ensure that a project can meet the overall project budget by providing a cushion to deal with known or unforeseen risks. Some contingency amounts are allocated to certain project components, while others are unallocated. According to the Metropolitan Council, Federal Transit Administration projects typically fund all change orders and unforeseen costs from a project’s contingency budget.

<sup>3</sup> The state contribution consists of \$16.0 million in state vehicle sales tax revenue, \$7.3 million in General Fund revenue, \$5.0 million in general obligation bonds, and \$2.0 million in Department of Employment and Economic Development bonds.

Secant Wall.”<sup>4</sup> In mid-August 2021, the Council told us that both issues will affect the project’s overall schedule, but Council staff were still determining the specific impact on project completion dates.

I asked the Metropolitan Council why the wall to separate the LRT and railroad lines was an unforeseen cost. The Council responded:

This work was not included in the Civil Construction solicitation scope of work because at the time of the receipt of bids (May 3, 2018) the wall design was not complete pursuant to the review and approval by [Burlington Northern Santa Fe Railway] and was contingent on receipt of the Amended Record Of Decision (AROD) and Finding of No Significant Impact (FONSI) for the Supplemental [Environmental Assessment] which was issued by the [Federal Transit Administration] on May 15, 2018. Consequently, the timing necessitated the Corridor Protection Barrier be executed as a distinct change order...<sup>5</sup>

## Change Order Process

The Southwest LRT project has a process for proposing and authorizing “change orders” in construction contracts. A change order authorizes changes in the scope, terms, or conditions of work, and it may result in changes to contract costs or work schedules.

The persons or entities with authority to approve change orders vary, depending on the proposed change order’s potential cost impact. For example, the Metropolitan Council is the entity authorized to act on any change that would have more than a \$2.5 million impact on the project cost. Below that threshold, and depending on the estimated cost impact, there are various individuals authorized to sign off on proposed changes.<sup>6</sup> As of mid-August 2021, 461 change orders had been executed on the Southwest LRT project. Some of these individual changes have not had any estimated impact on project costs.

One tool for helping decisionmakers assess proposed changes is the “independent cost estimate” (ICE). According to a Southwest LRT document, such estimates help determine

...the reasonableness or unreasonableness of a bid or proposal. The ICE, along with the negotiations documented in [an internal memo], documents that the costs are fair and reasonable. The ICE is prepared by the [Southwest LRT] Project Office, which does not see the contractor’s change proposal prior to completing the ICE.<sup>7</sup>

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<sup>4</sup> Tamara Rein, Metropolitan Council, on behalf of Matt LaTour, Director, Program Evaluation and Audit, Metropolitan Council, e-mail to Joel Alter, Office of the Legislative Auditor, “Metropolitan Council Response to Legislative Auditor information request,” August 17, 2021.

<sup>5</sup> Matt LaTour, Metropolitan Council, e-mail to Joel Alter, Office of the Legislative Auditor, “Re: Following up,” August 23, 2021.

<sup>6</sup> For example, the Metropolitan Council’s Regional Administrator may sign off on changes of between \$1.0 million and \$2.5 million, and the Council’s Director of Construction may sign off on changes between \$50,000 and \$100,000.

<sup>7</sup> Metropolitan Council, “TSD-50-08 Change Orders Procedure, Revision 03-00” (August 2019), 3.

The Metropolitan Council requires development of an independent cost estimate for every procurement action, including contract modifications. The estimate is “based on product knowledge, experience, and market status,” and it must be completed before the Council receives bids or proposals.<sup>8</sup> The Council then analyzes the independent cost estimate and contractor proposal to inform its negotiations with the contractor for the final change order amount.<sup>9</sup>

Change orders resulting in the use of at least \$350,000 in project contingency funds require the approval of the Executive Change Control Board (ECCB). ECCB’s voting representatives include two Hennepin County commissioners, a Hennepin County Regional Rail Authority commissioner, and two Metropolitan Council members (including the Council chair). The Metropolitan Council chair serves as chair of the ECCB.

## **AECOM Technical Services (ATS) Contract**

In December 2014, the Metropolitan Council entered into a contract with ATS for architectural and/or engineering services for the Southwest LRT project. Under the terms of the contract, as amended, the Metropolitan Council has agreed to pay ATS up to a total of \$140.3 million for its services.<sup>10</sup> As of late September 2021, the Council had paid ATS almost \$132 million.

ATS—among its various responsibilities outlined in the contract—assists the Metropolitan Council in the change order process. For example, ATS reviews the proposed changes and determines the need for additional calculations, drawings, or specifications; develops independent cost estimates on proposed changes; and helps analyze the potential impact of change order requests on project scope, schedule, and cost.

## **ATS’s Concerns**

In light of the Southwest LRT project’s pace of using contingency funds, we contacted ATS to hear its perspective on the project’s change management processes and decisions affecting the overall project budget. ATS’s Executive Vice President reported to us that, starting in about January 2019, ATS began making verbal recommendations to the Metropolitan Council for changes they believed were necessary in construction contract administration. These recommendations were put in writing in a July 2021 letter sent from ATS’s Executive Vice President to the Southwest LRT Project Director.<sup>11</sup> In the letter, ATS recommended:

- **Changing the Metropolitan Council negotiation team to include more expertise in heavy highway construction claims.** ATS said the Council needed negotiators as tough and skilled as the negotiators for the Southwest LRT project’s main construction contractor.

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<sup>8</sup> Metropolitan Council, “FM 14a Procurement Procedure,” Revision 17 (January 2020), 14.

<sup>9</sup> This analysis—called a “cost or price analysis”—is a determination that the cost or price is fair and reasonable.

<sup>10</sup> As of September 2021, the contract as amended was scheduled to end December 31, 2021.

<sup>11</sup> Richard Wolsfeld, Jr., Executive Vice President, AECOM Technical Services, letter to Jim Alexander, Southwest Light Rail Transit Project Director, Metro Transit, July 1, 2021.

- **Comparing contract change requests to actual costs so that the Metropolitan Council can negotiate change orders more effectively with the project’s main construction company.** ATS said the Council “is being significantly overcharged” for contract changes.
- **Ensuring that the main construction contractor submits proposals for “Part 1 Change Orders,” which can then be “tracked for time and materials payment.”**<sup>12</sup> ATS said the construction contractor was “moving forward with changes in construction in the field without change orders first being executed.”
- **Adjusting the contract price based on the contractor’s actual cost of work performed in cases where there are large discrepancies between the cost estimates of ATS and the construction contractor.**<sup>13</sup>
- **Extending the overall construction schedule only in cases where it can be shown that changes will affect the “critical path.”** (The critical path is the minimum time needed to complete a project.) ATS said the Metropolitan Council “should be pushing [main construction contractor Lunda McCrossan Joint Venture] harder to mitigate schedule challenges.”
- **Giving higher priority to construction quality, and penalizing the construction contractor for items not built to plans and specifications.** ATS said it was concerned about the quality of the construction, “including low strength concrete, work constructed incorrectly, and incorrect pile layouts.” ATS said the construction contractor’s quality program was not sufficiently robust, and the contractor “appears to be using potential schedule delays as leverage in seeking approval to use subpar work as is.”

In addition, ATS said there had been ongoing discussions between ATS and the Metropolitan Council about how ATS should prepare “independent cost estimates” (ICEs). ATS began preparing cost estimates related to the Southwest LRT project after the Metropolitan Council awarded the design contract for the project in December 2014. Initially, ATS prepared estimates using what it called “standard processes and procedures that had been previously approved and used on the SWLRT Project under the Preliminary Contract, as well as the Met Council’s prior Central Corridor Light Rail Transit Project.”<sup>14</sup> But later, ATS’s Executive Vice President said there were “many instances” in which the Metropolitan Council’s instructions to ATS were “inconsistent with ATS’s views on appropriate costs and factors.”<sup>15</sup> He expressed particular concern about Council “instructions to apply specific contractor-negotiated prices in ICEs.” He said these instructions could undermine the independence of the estimates.

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<sup>12</sup> A two-part change order is one in which the scope of additional work is unpredictable or the cost of the work is unclear at the time the contractor is directed to move ahead with the work. Part 1 of a change order authorizes a change in the scope of work, up to a specified price that may not be exceeded.

<sup>13</sup> In his letter, the ATS Executive Vice President said such an approach would be preferable to making price adjustments based on unit prices or lump sum agreements.

<sup>14</sup> Richard Wolsfeld, Jr., AECOM Technical Services, letter to Joel Alter, Office of the Legislative Auditor, September 8, 2021, 2.

<sup>15</sup> Richard Wolsfeld, Jr., AECOM Technical Services, letter to Jim Alexander, Metro Transit, May 24, 2021, 2.

Starting in February 2020, ATS began adding disclaimers to its cost estimates to clarify that components of the estimates were developed using Metropolitan Council directives. But, according to ATS, the Metropolitan Council subsequently instructed ATS to remove the disclaimers. In May 2021, ATS said the Council expressed openness to disclaimer language, and ATS then proposed the following:

**Disclaimer**

Met Council has directed AECOM Technical Services (“ATS”) Advanced Design Consultant to use certain rates, prices, factors, and assumptions to estimate the costs for change orders for the duration of the SWLRT project. Because ATS has not exercised its independent judgment, but instead used Met Council-directed rates, prices, factors, and assumptions, this cost estimate is not an independent cost estimate.

**Representation and Warranty**

Met Council represents and warrants that it will not make any representations or characterizations that an ATS-prepared cost estimate is an “independent cost estimate” when the estimate is based, at least in part, on rates, prices, factors, and assumptions that Met Council directed ATS to use in preparing the cost estimate. Further, Met Council represents and warrants that it will not submit or present any cost estimate prepared by ATS without this disclaimer.<sup>16</sup>

ATS also asked the Metropolitan Council in May 2021 to agree to indemnify ATS and hold it harmless against any legal actions or claims arising from the use of Council instructions that were incorporated into ATS’s cost estimates.

In addition, ATS asserted in May 2021 that it remained concerned about the Metropolitan Council’s directives and might, in some instances, disregard them when preparing independent cost estimates. In a May 24, 2021, letter to the Southwest LRT project director, the ATS Executive Vice President said:

Absent clear direction from the government funding agencies that the Met Council’s instructions concerning [independent cost estimate] preparation are acceptable, ATS will prepare [independent cost estimates] based on our professional judgment in order to preserve the independence of the [independent cost estimates]. ATS will continue to prepare all [independent cost estimates] in accordance with [Design Task Protocol] 13, without applying additional process-related instructions from the Met Council when those instructions are contrary to ATS’s view of the appropriate costs for the particular change. Of course, ATS will continue to be open to discussions with Met Council about specific [independent cost estimates] and make appropriate and reasonable adjustments at the request of the Met Council.<sup>17</sup>

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<sup>16</sup> Richard Wolsfeld, Jr., AECOM Technical Services, letter to Jim Alexander, Metro Transit, May 27, 2021, 1-2.

<sup>17</sup> Richard Wolsfeld, Jr., AECOM Technical Services, letter to Jim Alexander, Metro Transit, May 24, 2021, 2.

ATS offered to conduct additional analyses that would reflect the Metropolitan Council's instructions, but it wanted these supplemental analyses to be separate from ATS's independent cost estimates.

In June 2021, ATS reached an interim agreement with the Metropolitan Council on a procedure for preparing independent cost estimates. ATS said it would follow this procedure "until we resolve the issues raised" earlier.<sup>18</sup>

## Metropolitan Council Responses

In a July 14, 2021, letter to ATS, Southwest LRT project director Jim Alexander said: "The [Metropolitan] Council strongly disagrees with the assertions and innuendoes in your [July 1, 2021,] letter."<sup>19</sup> He added:

Given AECOM's substantial involvement with the Project, you should be aware that the Council has retained outside expertise to support the cost and schedule re-baselining efforts currently underway with the Civil Contractor (LMJV) and the Systems Contractor (APJV). The Council is supported by a team of seasoned professionals: (1) Metropolitan Council Chair, Charlie Zelle, the former Commissioner of the Minnesota Department of Transportation; and (2) the same scheduling and legal support team engaged by the Minnesota Department of Transportation on its most recent complex claim resolution process, Trauner Consulting and Venable's Construction Law Group.<sup>20</sup>

In an August 25, 2021, letter to ATS, Alexander disputed ATS's notion of an independent cost estimate. He said:

...AECOM's assertion that Independent Cost Estimates (ICE) are independent of input from the Council is incorrect. AECOM ignores that a cost estimate is independent because it is performed independently from the Contractor's proposal not because it is independent from the owner's input.<sup>21</sup>

Alexander said that the Metropolitan Council's perspective on independent cost estimates was consistent with federal guidance. He said the federal government did not require the Metropolitan Council to contract with a different entity to prepare independent cost estimates; those estimates could be prepared by the Council itself. He said the Council's decision to use a consultant to prepare the estimates "does not prevent the Council from providing input on historical cost data or constructability."<sup>22</sup> Furthermore, he said:

ATS has an obligation to consider actual conditions and the risks associated with performing the work. It is the Council's right to point out to ATS when its

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<sup>18</sup> Richard Wolsfeld, Jr., AECOM Technical Services, letter to Jim Alexander, Metro Transit, June 8, 2021, 1.

<sup>19</sup> Jim Alexander, Metro Transit, letter to Richard Wolsfeld, Jr., AECOM Technical Services, July 14, 2021, 1.

<sup>20</sup> *Ibid.*

<sup>21</sup> Jim Alexander, Metro Transit, letter to Richard Wolsfeld, Jr., AECOM Technical Services, August 25, 2021, 1.

<sup>22</sup> *Ibid.*, 1-2.

estimate fails to consider actual site conditions, access constraints, and other issues related to the performance of construction work on a tight urban site adjacent to operating freight rail lines.<sup>23</sup>

Furthermore, Alexander asserted that ATS's prior estimates had contained many errors. He said:

The Council has documented numerous incidents where ATS cost estimating data contained incorrect assumptions which contributed to large differences between the [independent cost estimate] and the contractor's proposal. ATS has repeatedly failed to factor into its data the Project's many risk factors: working with the potential for unforeseen conditions; low productivity due to site constraint restrictions; down time due to train delays; and down time due to noise and vibration mitigation....

ATS failed to identify many constructability elements and constraints that were either missing or found to be incorrect through the cost analysis process. The Council's review found consistently missed scope or underrepresented costs for factors including, but not limited to, site access, site maintenance, site supervision, re-mobilization, trucking, off-site staging due to constrained corridors, over-estimation of efficiencies, [support of excavation], drilling, slurry removal, walls (rebar coupling work, method shaft, etc.) and stray current.<sup>24</sup>

He added:

There is no contractual basis for ATS asserting that the Council has no right to review and comment on ATS's estimate, especially when ATS's estimate is demonstrably incorrect. If ATS questions the accuracy of the Council's input, ATS has both the right and obligation to investigate the accuracy of that input on its own.<sup>25</sup>

Alexander said:

[T]he Council has worked with AECOM on [independent cost estimate] process changes, in particular the Means and Methods Checklist, to help ATS improve its understanding of the field conditions that affect change order cost pricing. This effort has successfully brought Council [independent cost estimates] more in line with market and field conditions.<sup>26</sup>

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<sup>23</sup> Jim Alexander, Metro Transit, letter to Richard Wolsfeld, Jr., AECOM Technical Services, August 25, 2021, 2.

<sup>24</sup> *Ibid.*, 2-3.

<sup>25</sup> *Ibid.*, 2.

<sup>26</sup> *Ibid.*, 3.



## Conclusion

The above summary illustrates that there has been a prolonged and significant difference of opinion between representatives of the Metropolitan Council and a Southwest LRT project contractor (ATS) regarding the preparation of independent cost estimates on the Southwest LRT project, as well as other project issues. We have not examined the validity of ATS's allegations or the Council's responses. This would likely require looking in detail at the decision processes and supporting information for a variety of individual instances in which there have been proposals for changes in project costs. As noted earlier, our office does not have the capacity to conduct such a review at this time.

I have attached to this memorandum the correspondence we reviewed between the two parties, in case you wish to read the parties' complete statements on their positions. Both parties in this case have cooperated fully with our office's requests for information.

Please feel free to follow up with our office if you have additional questions, or you may wish to pose questions directly to either of the two parties.

Attachments

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**ADDENDUM:**  
**Key Correspondence**  
**between**  
**AECOM Technical Services (ATS)**  
**and**  
**Metropolitan Council/Metro Transit**  
**Regarding the Independent Cost Estimate Process**  
**for the**  
**Southwest Light Rail Transit Project**

**This addendum supplements the Office of the Legislative Auditor’s memorandum (October 28, 2021) regarding the Southwest Light Rail Transit project. It includes key 2021 correspondence between the Metropolitan Council/Metro Transit and a contractor on the project (AECOM Technical Services, or ATS).**

May 24, 2021

Jim Alexander  
Metro Transit  
Southwest Project Office  
6465 Wayzata Blvd, Suite 500  
St. Louis Park, MN 55426  
Jim.Alexander@metrotransit.org

VIA EMAIL

**Re: Southwest LRT ADC  
ATS Project #60336960  
Metropolitan Council Contract No. 14P125  
Independent Cost Estimates**

Dear Mr. Alexander:

I write regarding ATS Technical Services (“ATS”) Advanced Design Consultant (“ADC”) independent cost estimate (“ICE”) process, which has been a recurring topic of conversation since construction began on the project. ATS continues to be concerned about Met Council’s instructions regarding the ICE process, and the instructions’ impact on ICE independence.

ADC Contract Task 6030, Assistance with Change Orders and Field Modifications, provides that ADC will “develop independent cost estimates for proposed changes.” ATS Design Task Protocol 13 (“DTP 13”), previously provided to the Met Council, “describe[s] the process for preparation and control of ADC-prepared Independent Cost Estimating (ICE) for contract deliverable packages and change orders.” As described in DTP 13, ATS will consider the following cost data in developing its ICEs:

- Association of General Contractors of MN Chapter (Wages)
- RS Means/NECA (Productivity)
- Equipment Watch (Equipment Rates)
- Vendor and Supplier Quotes (Contract-Specific or Project Library Pricing)
- MnDOT Average Bid Prices
- Contract Documents (Mark Up, Mobilization, Allowances)

The previously-provided C-3 Checking and Verification Procedure that applies to DTP 13 defines “Independent” as “those parties who maintain a level of objectivity with respect to the particular work product (internal or external) and who have not been directly involved with the production of the specific work product.”

During the project, Met Council has instructed ADC regarding modifications to the ICE process. ATS employees have summarized and documented these regularly changing instructions several times, including:

May 24, 2021

(1) a memorandum titled "Civil Change Order Independent Cost Estimates Process," dated April 23, 2020;

(2) an email titled "ICE's - list of 'direction' received from MC" from Michelle Julius, dated September 16, 2020; and

(3) a memorandum prepared at the direction of Met Council titled "Independent Cost Estimate process changes," dated December 21, 2020.

Some of these communications include ATS-driven requests, including creating a paper trail for audit purposes. The majority, however, reflect specific direction from the Met Council to ATS about how to develop the ICEs. As the Met Council team is well aware, in many instances these directions were inconsistent with ATS's views on appropriate costs and factors. Copies of the above-referenced communications are attached hereto.

ATS employees have voiced concerns regarding the Met Council's instructions regarding the ICE process, and whether incorporation of those instructions would undermine the independence of the ICE by requiring ATS to apply costs and other markups not reflected in the contract or supported by ATS's standard sources of cost estimate data. ATS employees have been particularly concerned about instructions to apply specific contractor-negotiated prices in ICEs.

Recently, Met Council again instructed ATS to revise its ICE process in a manner that would significantly increase the ICE costs. For example, Met Council instructed ATS to apply contractor-negotiated pricing to all ICEs involving electrical work going forward. Met Council likewise instructed ATS to make numerous changes to the ICE for CHG-624, including various contractor-negotiated pricing, limiting credits, applying various price adjustments on supplies and equipment, and applying an additional train delay. These CHG-624 comments also included several items to be applied to all future ICEs. In addition, Met Council instructed ATS to produce revised ICEs on CHG-354 and CHG-375 that incorporate contractor-negotiated electrical pricing and ICE process revisions from the December 2020 memorandum.

Absent clear direction from the government funding agencies that the Met Council's instructions concerning ICE preparation are acceptable, ATS will prepare ICEs based on our professional judgment in order to preserve the independence of the ICEs. ATS will continue to prepare all ICEs in accordance with DTP 13, without applying additional process-related instructions from the Met Council when those instructions are contrary to ATS's view of the appropriate costs for the particular change. Of course, ATS will continue to be open to discussions with Met Council about specific ICEs and make appropriate and reasonable adjustments at the request of the Met Council.

May 24, 2021

ATS will continue to work with Met Council in a productive and collaborative way. To the extent the Met Council would like additional analysis that includes specific factors, prices, or other mark-ups—including the Met Council instructions reflected in the attached communications that conflict with ATS's view of the appropriate cost for each individual change—we are happy to prepare an estimate that reflects those additional costs. However, any such estimate must stand separate and apart from ATS's ICE. We believe this approach is in the best interests of both the Met Council and ATS.

Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Wolsfeld, Jr.", written in a cursive style.

Richard Wolsfeld, Jr.  
Executive Vice President  
AECOM

CC: Travis Boone, Executive Vice President, Regional Chief Executive, West  
Dan Manojlovski, Senior Vice President, Regional Business Line Leader, Transportation  
Matthew Crane, Senior Vice President, Regional Chief Operating Officer, West

Attached: (1) Memorandum titled "Civil Change Order Independent Cost Estimates Process," dated April 23, 2020  
(2) Email titled "ICE's - list of 'direction' received from MC" from Michelle Julius, dated September 16, 2020  
(3) Memorandum titled "Independent Cost Estimate process changes," dated December 21, 2020

## Civil Change Order Independent Cost Estimates Process

### Independent Cost Estimate (ICE) is completed in two stages

- 1) Change Order Request (COR) Estimate Stage
- 2) Change Order (CHG) Estimate Stage

#### **1- Change Order Request (COR) Estimate Stage**

- a. ADC Project Controls develops quantity takeoff's and coordinates any additional internal ADC Design review of quantities, scope limits and general construction approach.
- b. ADC Project Controls incorporates Design comments into quantity Take-Off's and develops a **Draft COR Estimate** utilizing HCSS and Contract Specification 0700 (10.4.1 – 10.4.4 and 10.4.5.10) and 0800 (10.6.2) direction for Overhead and Profit Fee estimate without a mutually acceptable fixed fee; a working calendar of 10 Hours a day - 5 Days a week; and NECA difficult rate for the electrician production rate
- c. ADC Project Controls completes the **COR Estimate** via the SFO directed modifications below:
  - i. The Contractor's credit for all the base work on equipment(s) is 50% of the estimated equipment(s) cost From Blue Book/Equipment Watch (not the changed work per 0800 10.6.2.7).
  - ii. Add 8% to the estimated total adjusted cost as a DBE requirement allowance.
  - iii. Productivity adjustments (ie Freight Train Delays)
  - iv. For Change Adds, apply a 23% Overhead and Profit mark-up to the overall cost
  - v. For Change Deducts, deduct 5% on materials and 5% on labor for Overhead and Profit
  - vi. Base Bid Unit Costs for Contaminated Soil (200 series) and Piling (300 series) are calculated but are independent of the final COR Estimate
- d. ADC Project Controls will then request review comments from the Construction Team regarding general assumptions and construction approach via the **COR Estimate** with quantity take-off sheets as supporting documentation.
  - i. Construction may then identify and request scope clarifications by modification to the scope narrative, requesting plan/spec alterations or additions, or attaching additional information.
- e. Once Construction has confirmed the scope and construction approach included is sufficient for pricing, the **COR Estimate** is updated in eBuilder by ADC (Summary page, Pivot Table, and HCSS backup)

#### **2- Change Order (CHG) Stage**

- a. ADC Project Controls develops the **Draft CHG Estimate** by:
  - i. Reviewing the Construction Teams COR takeoff notes and incorporate applicable comments into the quantity takeoff's
  - ii. Obtaining final quantity take-offs from attached plans & specs and confirming with Design as needed.

- iii. Building the **Draft CHG Estimate** in HCSS with the above information and procedures shown in (1b)
- b. ADC Project Controls completes the **CHG Estimate** by Incorporating the standard adjustments from above (1c) and including any additional General Condition Scope items determined by the Construction Team
- c. ADC Project Controls requests review comments from the Construction Team confirming the scope general assumptions and construction approach via the **CHG Estimate** with quantity pivot-table take-off sheets as supporting documentation.
  - i. Any adjustments or modifications required by the Construction Team will be made to the applicable quantity Take-Off's and **CHG Estimate**.
  - ii. No costing information recommendations will be incorporated.
  - iii. After modifications have been made ADC will start the request review comments process again.
- d. Once ADC and the Construction Team align on scope and constructability approach, ADC will hold submission of the **CHG Estimate** into the e-Builder CHG process until notified by the Construction Team that the Contractor is nearing completion of their RFCP. This is in case the contractor discovers something in their process that impacts the scope.
- e. Once Construction notifies ADC that the scope and information included is sufficient for pricing, the **CHG Estimate** is uploaded in eBuilder by ADC (Summary page, Pivot Table, and HCSS backup)
- f. Independent Cost Estimate (**CHG Estimate**) is complete

### **3- Side-By-Side Cost Comparison & Summary Narrative**

- a. If Requested by the Construction Team, ADC Project Controls will utilize the **CHG Estimate** and Contractors RFCP Supporting documentation (supplied by the Construction Team) to support the creation of a Side-by-Side cost comparison summary of the contractor quantity's and pricing.
  - i. Determine congruency in scope and quantity.
    - 1. Confirm accuracy of ADC quantity if discrepancy is identified.
    - 2. Identify Cost effects of the **CHG Estimate** for confirmed missing components.
    - 3. Provide comments on items that appear missing or inconsistent from the Contractors RFCP.
  - ii. Support development of a narrative identifying possible causes for unaligned cost between **CHG Estimate** and Contractor's RFCP.
    - 1. Provide component pricing and/or quantity adjustments and resulting cost implication associated with those adjustments.
    - 2. Provide documentation supporting a need for a possible revision to Contractors RFCP

### **4- Project Controls Requests**

- a. As requested, a new **ICE** entry may be required if scope or constructability approach is found to need significant revisions.



**To:** Kronzer, Ryan[Ryan.Kronzer@metrotransit.org]; Ghandour, Sarah[Sarah.Ghandour@metrotransit.org]  
**From:** Julius, Michelle[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=C4F1CF86325A45AFAC2EE38088E48A42-MICHELLE.JU]  
**Sent:** Wed 9/16/2020 1:01:24 AM (UTC)  
**Subject:** ICE's - list of 'direction' received from MC

Ryan & Sarah –

Per our discussion on Friday 9/11, here are the items that ADC cost estimating has been asked to do in relation to ICE's

- Identify Quantity Change but not Cost Change for all Contract Unit Price Bid Items.
- Additional Report out of HCSS Cost & Price Report
- Bid Item Pivot Report
- Bid Item with Activity Pivot Report
- Modification of cost in the Pivot Report for 50% Equipment Credits
- Modification of cost in the Pivot Report for 23% Contractor Markup
- Modification of cost in the Pivot Report for 8% DBE add (16% DBE project requirement)
- Modification of cost in the Pivot Report for 40% train delay (in applicable areas)
- Electrical NECA Production adjustment to Difficult
- Submit to construction in e-Builder for preliminary review
- Preliminary Construction Review no longer in e-Builder, sent via email to Mark Watson for review, then once OK'd submit in eB
- Side-By-Side Comparison of the Pivot Report and the Contractors Pricing
- "What-If" Estimate for any changes identified from the S-B-S
- Negotiation Positions and summary write-up
- DRAFT Position Papers
- ICE Revisions in e-Builder
- No more ICE updates – need new ICE if scope changed from original ICE
- Scope meetings with SFO & LMV – receive direction to estimate scope using contractor preferred construction methods
- Direction to include additional temp sheeting, survey, testing, and mobilization
- Crew make-up to include full time cranes on rebar crews instead of part time off road forklift
- Develop Contract Change Orders without any changed contract documents. (ie RFI, un approved CSUB shop drawings, Corr, e-mails) – often RFI's, etc. come after ADC ICE complete & submitted
- Develop Unit Prices for items based off of the contractors submitted pricing
- Provide weekly ADC ICE priority list
- Work with SFO to review CHG HOT list
- Ongoing requests for ASAP return of ICE's for Part 1's
- Ongoing work to navigate the 'middle ground' that we are in – between MC construction, MC design, ADC design, LMJV, etc. – while trying to remain independent
- Continue to receive direction from multiple parties, and changing priorities – and work thru the challenges this creates
- Creating a paper trail of all ICE's for future audits (MC, FTA, etc.)

Any questions please let me know

Thanks

MJ

December 21, 2020

Ryan Kronzer  
Metro Transit  
Southwest Project Office  
6465 Wayzata Blvd, Suite 500  
St. Louis Park, MN 55426

**Re: Southwest LRT ADC  
AECOM Project #60336960  
Metropolitan Council Contract No. 14P125  
Independent Cost Estimate process changes**

Dear Mr. Kronzer:

As a follow up to various discussions over the last several months about the Advanced Design Consultant (ADC) independent cost estimate (ICE) process on the project, I offer the following process changes moving forward.

Based on our review and assessment, I believe these are defensible changes based on prior project experience in this market.

- Means & Methods Checklist (draft attached): This checklist would be used by the ADC cost estimating team to ensure that these specific elements are addressed for each change. The ADC cost estimating team will discuss the checklist with the Council's construction team (SFO, ACAR's, Mark Watson) for each change to see if they concur with the assumptions that have been made, or based on what they are seeing in the field for this particular location or type of work, the item may need to be adjusted. The checklist will also serve to highlight where gaps in information for pricing changes might exist and where a scope meeting is required with the Contractor.
- Production factor: ADC will continue to utilize the resources for production rates that we have been utilizing for the entire project (RS Means, MnDOT average rates, etc.). But now that the project is no longer in a competitive bid environment, and is in a change order environment, ADC will also utilize factors on the labor and equipment costs depending on the complexity of the change. This is a method that I have used on previous projects, based on either type of work, complexity of work, location of work, etc. for change order pricing in this market. Proposed factors include:
  - +25% on all changes to account for non-competitive / change order pricing
  - An additional +50% for complex scope changes
  - An additional +50% for complex scope changes that include coordinating with multiple subcontractors, stakeholders, etc.
  - NOTE: already include 40% production loss within the BNSF corridor. The factors listed above would be in addition.
- New ICE: Often the ADC ICE is submitted well in advance of the Contractor reviewing the change documents, in order to submit within our contract time frames. If the ADC ICE has already been submitted to the Council, but additional information is later presented, ADC will produce a new ICE to reflect. This would only happen if the Contractor has NOT yet submitted pricing. This includes but is not limited to:
  - Contractor RFI(s)
  - Revised plan sheet(s) and/or specification(s)

- Scope meeting(s)

Performing the items identified above, ADC ICEs should be more in line with market conditions in this area, as well as project specific issues.

If you have any questions, please let me know.

Sincerely,

A handwritten signature in blue ink that reads "Michelle Julius". The signature is written in a cursive, flowing style.

Michelle Julius, PE  
ADC Project Manager  
Vice President  
AECOM

CC: Richard Wolsfeld, Mark Ryan, Dan Ward, Sarah Ghandour

Attached: ICE Means & Methods Checklist

*ICE "Means and Methods Checklist" to aid scope discussion with ACAR's*

CHG# \_\_\_\_\_ ADC Estimator \_\_\_\_\_ SFO staff \_\_\_\_\_ Updated: 12-21-2020

ID	Description	Applicable	N/A	Notes / Explanation
1	Survey & Layout			
2	Mobilization / Remobilization			
3	Site Access			
	3.1 Temporary Roads			
	3.2 On-site hauling from remote delivery site			
4	Special site conditions			
	4.1 Crane mats			
	4.2 Crane pads			
	4.3 Existing utilities / Temp utilities			
	4.4 Dewatering			
	4.5 Potential underground obstructions			
	4.6 Narrow site constraints			
	4.7 Noise & vibration constraints			
5	Extended site conditions & maintenance			
	5.1 SWPPP (erosion control, street sweeper)			
	5.2 Traffic control			
	5.3 Temp Business &/or Ped access			
	5.4 On-site job trailers / restrooms			
6	Contractor required staffing			
	6.1 Scheduler			
	6.2 Site supervisor			
	6.3 Subcontractor supervision			
	6.4 Quality staff			
	6.5 Survey			
	6.6 Additional engineering services			
7	Off-site Work			
	7.1 Staging			
	7.2 Storage			
	7.3 Warehouse			
8	Additional Demolition			
	8.1 Removals beyond original scope			
	8.2 New removals			
9	SOE			
	9.1 Type			
	9.2 Additional			
	9.3 Design / Redesign			
10	Down Time / Standby / Idle time			
11	Resequencing of future work			
12	Mock-ups			
13	Testing			
	13.1 Material			
	13.2 Compliance			

*ICE "Means and Methods Checklist" to aid scope discussion with ACAR's*

CHG# \_\_\_\_\_ ADC Estimator \_\_\_\_\_ SFO staff \_\_\_\_\_ Updated: 12-21-2020

ID	Description	Applicable	N/A	Notes / Explanation
	13.3 Destructive			
14	Winter Conditions			
	14.1 Material upcharge			
	14.2 Labor inefficiencies			
	14.3 Temporary heating / blankets			
15	Escalation			
	15.1 Labor			
	15.2 Equipment			
16	Constructability approach regarding			
	16.1 Stray current			
	16.2 Drilling			
	16.3 Walls / panel construction			



Suite 1100  
800 LaSalle Avenue  
Minneapolis, MN 55415  
www.aecom.com

May 27, 2021

Jim Alexander  
Metro Transit  
Southwest Project Office  
6465 Wayzata Blvd, Suite 500  
St. Louis Park, MN 55426

**Re: Southwest LRT ADC  
AECOM Technical Services Project #60336960  
Metropolitan Council Contract No. 14P125  
Independent Cost Estimates**

Dear Mr. Alexander:

As we discussed following your receipt of my letter on May 24, 2021 (the “May 24 Letter”), AECOM Technical Services (“ATS”) desires to work with the Met Council to provide cost estimates for the Southwest Light Rail Transit (“SWLRT”) Project that are both useful to the Met Council and consistent with ATS’ contractual and legal obligations. From our conversation, I understand that the Met Council’s position is that ATS must incorporate the directed rates, prices, factors, and assumptions, including contractor-negotiated rates, into ATS cost estimates. In light of ATS’ concerns expressed in the May 24 Letter, including concerns regarding independence, you suggested that “preamble” or “disclaimer” language could be attached to each cost estimate, reflecting that the estimate contains these rates and is not independent.

ATS notes, however, that it previously included disclaimer language in its ICEs and supporting documentation, beginning in approximately February 2020. The Met Council then expressly instructed ATS to remove this language. When one estimator later included the language in supporting materials in December 2020, the Met Council again instructed ATS to remove such language from the eBuilder upload and all ICEs going forward.

Consistent with your suggestion from May 24, 2021, however, ATS proposes to proceed using the following “disclaimer” and “representation and warranty” language related to cost estimates:

**Disclaimer**

Met Council has directed AECOM Technical Services (“ATS”) Advanced Design Consultant to use certain rates, prices, factors, and assumptions to estimate the costs for change orders for the duration of the SWLRT project. Because ATS has not exercised its independent judgment, but instead used Met Council-directed rates, prices, factors, and assumptions, this cost estimate is not an independent cost estimate.

### **Representation and Warranty**

Met Council represents and warrants that it will not make any representations or characterizations that an ATS-prepared cost estimate is an “independent cost estimate” when the estimate is based, at least in part, on rates, prices, factors, and assumptions that Met Council directed ATS to use in preparing the cost estimate. Further, Met Council represents and warrants that it will not submit or present any cost estimate prepared by ATS without this disclaimer.

In addition, ATS requests that someone duly authorized at the Met Council commit to ATS that the Met Council—when it directs or has directed ATS to use specific rates, prices, factors, or assumptions in its cost estimates—will not assert that ATS has breached any contractual obligation, performed negligently, or otherwise seek any indemnification or other legal remedy against ATS based on ATS’ use of rates, prices, factors, or assumptions incorporated into cost estimates at the direction of Met Council. ATS cannot proceed to prepare cost estimates according to the current directives from the Met Council without this guarantee.

We also want Met Council to agree that, should ATS ever face any legal action or claim that arises out of, or is related to ATS’ use of rates, prices, factors, or assumptions that were incorporated into its cost estimates at the Met Council’s direction, Met Council will indemnify and hold harmless ATS and its respectivemembers, agents, officers, affiliates and employees with respect to all such claims, expenses (includingreasonable attorney’s fees), losses, damages, or lawsuits.

Upon agreement to the above language and conditions, ATS will agree to prepare cost estimates using the contractor-negotiated rates and other prices, rates, factors, and assumptions as instructed by Met Council.

Please let me know if you have any questions.

Sincerely,



Richard Wolsfeld, Jr.  
Executive Vice President  
AECOM Technical Services

CC: Travis Boone, Executive Vice President, Regional Chief Executive, West  
Dan Manojlovski, Senior Vice President, Regional Business Line Leader, Transportation  
Matthew Crane, Senior Vice President, Regional Chief Operating Officer, West

June 8, 2021

Jim Alexander  
Metro Transit  
Southwest Project Office  
6465 Wayzata Blvd, Suite 500  
St. Louis Park, MN 55426

**Re: Southwest LRT ADC  
AECOM Project #60336960  
Metropolitan Council Contract No. 14P125  
Independent Cost Estimates**

Dear Mr. Alexander:

I write to follow up on my May 27, 2021 letter regarding the cost estimate services provided by AECOM Technical Services ("ATS") for the Southwest Light Rail Transit ("SWLRT") Project. Recognizing the SWLRT Project's need for cost estimates to proceed, ATS will adopt the following procedure for cost estimates until we resolve the issues raised in my May 27 letter:

1. ATS will prepare cost estimates using the process set forth in Design Task Protocol 13, with certain prices, rates, factors, and assumptions received from the Met Council. ATS will upload this cost estimate with supporting materials to eBuilder in the "ICE Backup" field. The cost estimate will note that it incorporates prices, rates, factors, and assumptions received from the Met Council.
2. ATS will prepare a pivot table adding costs to the cost estimate as directed by Met Council in the December 21, 2020 memorandum. ATS will upload this pivot table to the following shared folder on the Met Council server:  
[REDACTED]  
[REDACTED]. ATS will note the pivot table includes prices, rates, factors, and assumptions received from the Met Council.
3. ATS will then pass the workflow to the Met Council construction team, which will be responsible for completing "ICE" and "ICE Amount" fields in eBuilder.

Please let me know if you have any questions.

Sincerely,



Richard Wolsfeld, Jr.  
Executive Vice President  
AECOM

CC: Travis Boone, Executive Vice President, Regional Chief Executive, West  
Dan Manojlovski, Senior Vice President, Regional Business Line Leader, Transportation  
Matthew Crane, Senior Vice President, Regional Chief Operating Officer, West



July 1, 2021

Jim Alexander  
Metro Transit  
SWLRT Project Director  
Southwest Project Office  
6465 Wayzata Blvd, Suite 500  
St. Louis Park, MN 55426

Dear Jim:

I write concerning cost estimates and the contingency for the SWLRT Project. I raised some of these issues in my letters to you dated May 24, 2021, May 27, 2021, and June 8, 2021. We hope to receive a response to those letters from the Met Council soon.

Given the current state of the budget and contingency, AECOM recommends that Met Council make major course corrections with the LMJV. The SWLRT Project will exhaust the contingency soon, given the current path of cost and schedule negotiations. AECOM believes construction contract administration changes are needed, and recommends:

- Change the Met Council negotiation team to include more expertise in heavy highway construction claims (including history with Tutor Perini, Lunda Construction, and C.S. McCrossan in this market). We recommend that Met Council request assistance from the MnDOT Claims Unit, which has this required experience. We have discussed how “tough/skilled” Tutor Perini is at negotiations; Met Council needs someone equally skilled.
- As we have discussed previously, AECOM believes that Met Council is being significantly overcharged by LMJV for contract changes, in both cost and schedule. We have requested that Met Council track actuals versus contract change requests and use this information to push back on LMJV estimates during change order negotiations. AECOM recommends that Met Council immediately begin this tracking and analysis on selected items.
- As Met Council is aware, LMJV is moving forward with changes in construction in the field without change orders first being executed. At a minimum, such changes should be issued as a Part 1 Change Order and need to be tracked for time and materials payment.

Jim Alexander  
July 1, 2021

- Per the Civil Contract General Conditions 00700, Article 10, Change of Contract Price can be determined in one of three ways:

**10.3 Contract Price Adjustment.** An equitable adjustment in the Contract Price (whether increased or decreased for additional or deleted Work) will be based solely upon: (i) unit prices; or (ii) lump sum agreement; or (iii) CONTRACTOR's actual cost of the Work, relating solely to CONTRACTOR's altered cash position in performing the changed Work. CONTRACTOR shall not request an adjustment based upon value conferred upon COUNCIL in excess of CONTRACTOR's actual cost, plus a CONTRACTOR's fee for Overhead and Profit. The CONTRACTOR's requested Contract Price adjustment will be determined as follows:

When large discrepancies exist between the cost estimates prepared by AECOM and LMJV, we recommend proceeding under 10.3(iii), by adjusting the contract price based upon the LMJV's actual cost of work performed.

- Per the Civil Contract General Conditions 00700, Article 11, Change of Contract Time, LMJV is obligated to mitigate changes on the schedule:

**11.6 Contractor Duty to Mitigate.** Where CONTRACTOR contends that an act or order of COUNCIL has changed or delayed the Work or caused a change in the schedule or sequence of the Work, CONTRACTOR shall change its schedule and Work sequences as needed to mitigate the effects on the unchanged Work or to the schedule. If CONTRACTOR believes that it must accelerate the Work in order to mitigate the delay impact on the Work, and intends to make a request for acceleration or movement of Work into earlier time frames within the Contract Time, CONTRACTOR shall request in writing a Change Order pursuant to ARTICLE 9 and ARTICLE 10 before initiating acceleration. Acceleration initiated to overcome delay caused by an event within CONTRACTOR's control shall not result in changes to Contract Price or Contract Time.

Accordingly, contract time should only be awarded when it can be shown that the work is affecting the critical path. Given the ongoing challenge in reaching agreement on a baseline schedule, this proves extremely difficult to track. However, the Met Council should be pushing LMJV to work harder to mitigate schedule challenges.

- In addition, quality remains a concern for AECOM, due to the number of NCRs and CNCRs outstanding for issues including low strength concrete, work constructed incorrectly, and incorrect pile layouts. The LMJV has consistently asked AECOM to "use as is" when quality issues arise, which requires engineering review and sometimes redesign to accommodate. AECOM's structures team, which has seen the highest number of NCRs and CNCRs, has been tracking time spent on these issues since April 2020. To date, AECOM and multiple subs have spent approximately \$250,000.00 on these requests. The LMJV quality program has not proven robust enough for the work being performed, and the LMJV appears to be using potential schedule delays as leverage in seeking approval to use subpar work as is. AECOM strongly encourages the Met Council to prioritize quality over schedule, and to take monetary deductions or push for removal and replacement for all items the LMJV does not construct in accordance with the plans and specifications.

Early in the civil construction project, AECOM provided these recommendations to Met Council based upon its prior experience with Lunda and McCrossan. Met Council expressed that it wanted to avoid any claims being filed by LMJV because contractor claims could have negatively impacted receipt of the FFGA, which has now been received. While AECOM

Jim Alexander  
July 1, 2021

maintains that these recommendations should have been adopted at the start of the project, the current state of the contingency requires Met Council to make immediate changes to how negotiations are handled with LMJV.

Last, the AECOM Team is now completing cost estimates using the process outlined in my June 8, 2021 letter, and Met Council personnel are now currently entering AECOM's cost estimate information into the "ICE" and "ICE Amount" fields in e-Builder. As you know, AECOM's cost estimates were prepared using rates, prices, and factors as directed by Met Council. AECOM expects Met Council to be transparent with all interested parties regarding the source of the cost estimate data and ICE Amount entered in e-Builder. Again, AECOM requests the Met Council provide the representations, warranties, and indemnifications outlined in my May 27, 2021 letter.

We all want this project to be successful and this letter is presented in that spirit.  
I will call you to discuss further.

Sincerely,



Richard Wolsfeld, Jr.  
Executive Vice President  
AECOM

CC: Michelle Julius



July 14, 2021

**Via Email**

Richard Wolsfeld, Jr. ([richard.wolsfeld@aecom.com](mailto:richard.wolsfeld@aecom.com))  
Executive Vice President  
AECOM  
800 LaSalle Avenue, Suite 1100  
Minneapolis, MN 55415

**RE: Southwest LRT**

Dear Richard:

I am in receipt of your letter dated July 1, 2021. The Council strongly disagrees with the assertions and innuendoes in your letter.

Given AECOM's substantial involvement with the Project, you should be aware that the Council has retained outside expertise to support the cost and schedule re-baselining efforts currently underway with the Civil Contractor (LMJV) and the Systems Contractor (APJV). The Council is supported by a team of seasoned professionals: (1) Metropolitan Council Chair, Charlie Zelle, the former Commissioner of the Minnesota Department of Transportation; and (2) the same scheduling and legal support team engaged by the Minnesota Department of Transportation on its most recent complex claim resolution process, Trauner Consulting and Venable's Construction Law Group.

The Council has full knowledge of its contract options regarding pricing and schedule issues with each contractor and the status of the Project's contingency. The Project has incurred major changes, specifically the corridor protection wall and work around the Kenilworth tunnel site.

Given AECOM's involvement in the Project, you should already know that the Council is in constant communication with key stakeholders discussing schedule and cost options, amongst other items (including certain issues noted in your letter).

Should you or anyone at AECOM have any concerns regarding the Project I can be reached directly at 612-373-3880.

Sincerely,

A handwritten signature in blue ink that reads "Jim Alexander". The signature is written in a cursive style and is positioned above a thin horizontal line.

Jim Alexander, P.E.  
SWLRT Project Director

cc: Joan Hollick  
SPODMC

**Via Email**

August 25, 2021

Richard Wolsfeld, Jr.  
Executive Vice President  
AECOM Technical Services ("ATS")  
Suite 1100  
800 LaSalle Avenue  
Minneapolis, MN 55415

Re: Independent Cost Estimates  
Metropolitan Council Procurement #14P125

Dear Mr. Wolsfeld:

This correspondence acknowledges letters from AECOM dated May 24, 2021, May 27, 2021, and June 8, 2021. As explained below, AECOM's assertion that Independent Cost Estimates (ICE) are independent of input from the Council is incorrect. AECOM ignores that a cost estimate is independent because it is performed independently from the Contractor's proposal not because it is independent from the owner's input.

Further, the Council's input is often required because independent estimates generated by ATS estimators frequently lack cost assumptions regarding constructability and site constraints that impact the final cost of negotiated change orders. Such input in no way undermines the integrity or independence of the estimate. The Council provides some examples below in an effort to further this discussion and work collaboratively to continue to improve the accuracy of cost estimates performed by ATS.

#### Historical Pricing Information

Agreed-upon rates and production factors gleaned from construction observations and change order negotiations for executed change orders are critical parts of the historical pricing information and cost data that may be used as part of an ICE. This is supported by the FTA's Best Practices Procurement & Procurement Manual (BPPM) which provides a list of sources for building the sponsor's ICE: "The ICE can range from a simple budgetary estimate to a complex estimate based on inspection of the product itself and review of such items as drawings, specifications, and prior data, such as cost data from prior procurements."<sup>1</sup> As noted by the FTA, "The requirement is that you [the Council] determine the negotiated price to be fair and reasonable, considering all the information [presented] at negotiations, including such things as complexity of the work, risks associated with performance, the amount of competition or the lack thereof, etc."<sup>2</sup> The use of historical pricing information, when applicable, gives

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<sup>1</sup> Best Practices Procurement & Procurement Manual, Section 4.6.1. - Independent Cost Estimates

<sup>2</sup> <https://www.transit.dot.gov/funding/procurement/third-party-procurement/independent-cost-estimate>

the Council “the best estimate of what the work ‘should cost’<sup>3</sup>. ATS has an obligation to consider actual conditions and the risks associated with performing the work. It is the Council’s right to point out to ATS when its estimate fails to consider actual site conditions, access constraints, and other issues related to the performance of construction work on a tight urban site adjacent to operating freight rail lines.

#### The Independent Government Cost Estimate

The cost estimate is independent because it is performed independently from the Contractor’s proposal and has the purpose of validating or analyzing the Contractor’s estimate to determine whether it is accurate or reasonable, not because or if it is performed by a consultant without government input. According to the FTA’s BPPM, “Before issuing a solicitation, recipients [the Council] must develop an independent cost estimate or ICE of the proper price and cost levels for the products or services to be purchased. . . The ICE is essentially the recipient’s [Council’s] estimate of what the item or service ‘should cost.’<sup>4</sup> The FTA notes here twice that it is the recipient’s (the Council’s) responsibility to produce the ICE. Regarding this excerpt from the BPPM, the FTA notes in its Frequency Asked Questions, the word ‘independent’ does not imply that it is performed by someone other than the grantee. This could be the case, however, if the grantee does not have the expertise for a large complex procurement.<sup>5</sup>” Utilizing a consultant for larger and more complex estimates is the Council’s decision and does not prevent the Council from providing input on historical cost data or constructability.

Based on the FTA guidance noted above, the Council is within its right to incorporate appropriate cost data into its ICEs. The Council expects that ATS warrant the accuracy and completeness of its work. Such obligation is not voided by the Council’s valid input on ATS’s estimate. There is no contractual basis for ATS asserting that the Council has no right to review and comment on ATS’s estimate, especially when ATS’s estimate is demonstrably incorrect. If ATS questions the accuracy of the Council’s input, ATS has both the right and obligation to investigate the accuracy of that input on its own.

#### Constructability Errors and/or Omissions

The Council has documented numerous incidents where ATS cost estimating data contained incorrect assumptions which contributed to large differences between the ICE and the contractor’s proposal. ATS has repeatedly failed to factor into its data the Project’s many risk factors: working with the potential for unforeseen conditions; low productivity due to site constraint restrictions; down time due to train delays; and down time due to noise and vibration mitigation. The Council provides examples below to further the discussion and work collaboratively to continue to improve the accuracy of ICEs performed by ATS.

ATS failed to identify many constructability elements and constraints that were either missing or found to be incorrect through the cost analysis process. The Council’s review found consistently missed scope or underrepresented costs for factors including, but not limited to, site access, site maintenance, site

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<sup>3</sup> <https://www.transit.dot.gov/funding/procurement/third-party-procurement/independent-cost-estimate>

<sup>4</sup> Best Practices Procurement & Procurement Manual, Section 4.6.1. - Independent Cost Estimates

<sup>5</sup> <https://www.transit.dot.gov/funding/procurement/third-party-procurement/independent-cost-estimate>

supervision, re-mobilization, trucking, off-site staging due to constrained corridors, over-estimation of efficiencies, SOE, drilling, slurry removal, walls (rebar coupling work, method shaft, etc.) and stray current. For example, within CHG 90, the Council identified nearly \$8M in reasonable costs from LMJV's proposal that were missing or incorrectly assumed in the ICE, such as crane mats, excavation, maintenance of the BNSF access road, subballast for the Northstar Track, and structural backfill at retaining walls E403, E405 and E407. Similarly, within CHG 591, the Council identified over \$45M in costs that were missing or incorrectly assumed in the ICE for re-mobilization, wall panels, gang forms, drilled shaft rebar, storm sewer pipe jacking, survey and water truck support.

Since then, the Council has worked with AECOM on ICE process changes, in particular the Means and Methods Checklist, to help ATS improve its understanding of the field conditions that affect change order cost pricing. This effort has successfully brought Council ICEs more in line with market and field conditions. We expect to continue to work collaboratively with AECOM in all aspects of AECOM's work.

Please let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Jim Alexander". The signature is written in a cursive, flowing style.

---

Jim Alexander, P.E.  
Project Director  
Southwest LRT Project

CC: Joan Hollick, Deputy Project Director, Southwest LRT Project  
SPO DMC