



INFORMATIONAL MEMORANDUM

TO: **Transportation and Infrastructure Services Committee**
 FROM: **Hari Ponnekanti, Public Works Director/City Engineer**
 BY: **Cyndy Knighton, Senior Program Manager**
 CC: **Mayor Ekberg**
 DATE: **May 7, 2021**
 SUBJECT: **West Valley Highway (I-405 – Strander Boulevard)**
Project No. 99310410, Contract No. 19-095
Supplemental Agreement No. 2

ISSUE

Supplemental Agreement with TranTech Engineering for the design on the West Valley Highway (I-405 – Strander Boulevard) Project. The Supplemental Agreement will increase the contract by \$564,185, for a new total of \$1,244,448.

BACKGROUND

Since September 2019, TranTech Engineering has been working on the design of the West Valley Highway project, which also includes improvement along Longacres Way from West Valley Highway to the Tukwila Station. The project has funding for the design and construction of this project from three grant sources: Transportation Improvement Board, CMAQ, and Sound Transit System Access Funds. The project is also on the Traffic Impact Fee list.

DISCUSSION

As the project has progressed, additional design and coordination with both WSDOT and Seattle Public Utilities (SPU) has been required to complete the design. Minor additional work was required for surveying, geotechnical analysis, and design of the HAWK signal on West Valley Highway. However, the bulk of the additional design that was required to meet the needs of SPU has resulted in substantially more work to design a bridge structure of the 60-inch watermain. This level of effort was not anticipated in the original scope of work nor the supplemental agreement that occurred in October 2020. Additional budget is needed to cover costs not included in the original scope of work. Supplement No. 2 also includes new scope and budget for construction management and support during the bidding period. The advertisement period for this project is currently anticipated for June. The late bidding period for construction beginning this year will add to the project cost. A 20% premium has been added to the engineer’s estimate to account for the summer escalation in costs.

FINANCIAL IMPACT

The increase in fee for the additional design effort totals is \$99,900 and the construction management and bidding support tasks is \$464,285. Budget is available for the additional engineering, construction management, contingency, and the summer escalation. The recently awarded Sound Transit System Access Fund grant will fund the additional costs for the construction phase of the project.

| Phase | Fee/Estimate | Fund Source | Amount |
|-------------------------|---------------------------|--------------------------|---------------------------|
| Design/ROW | \$809,754 | TIB Grant | \$2,434,380 |
| Construction | 4,354,494 | CMAQ Grant | 185,000 |
| Construction Management | 464,285 | System Access Fund Grant | 2,060,000 |
| | | Traffic Impact Fees | 607,000 |
| | | General Fund | 344,000 |
| Total | <u>\$5,628,533</u> | Total | <u>\$5,630,380</u> |

RECOMMENDATION

Council is being asked to approve the Supplemental Agreement No. 2 to Contract No. 19-095 with TranTech Engineering in the amount of \$564,185 and consider this item on the Consent Agenda at the May 17, 2021, Regular Meeting.

Attachments: 2021-2026 CIP Page 8
 Revised CIP Page
 Supplemental Agreement No. 2
[West Valley Highway PPT](#)

CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

PROJECT: **West Valley Hwy (I-405 - Strander Blvd)** Project No. 99310410

DESCRIPTION: Design and construct completion of seven lane sections of West Valley Hwy with curbs, gutters, storm drainage, lighting and traffic control, and a pedestrian activated signal near the Southcenter Pedestrian Bridge.
Shared use path on west side of West Valley Highway from the pedestrian bridge to Longacres Way S.

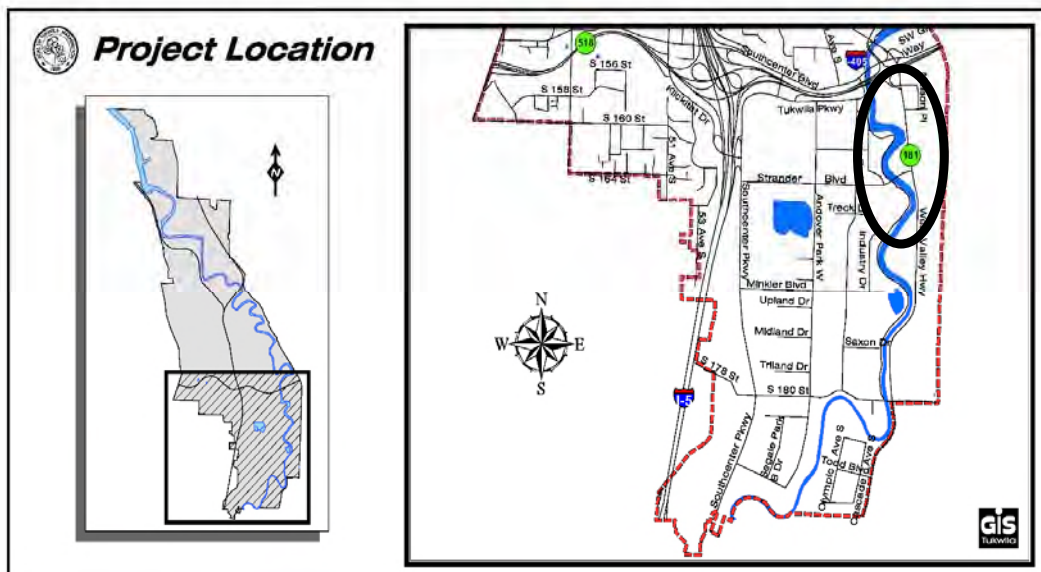
JUSTIFICATION: Safety and capacity items need completion. Portions have been completed by development.

STATUS: Combined with W Valley Hwy/S 156th Intersection in 2017. Continuing to work with development. Grant funding obtained for design and construction of West Valley Highway section. No funding for construction Longacres Way identified yet.

MAINT. IMPACT: Reduced maintenance.

COMMENT: Project is on Traffic Impact Fee List. Grants from Federal CMAQ awarded for \$628k that includes \$112k for design of sidewalk/bike path on Longacres Way (S 158th St) and State Transportation Improvement Board grant of \$2.4m for 2018/2020.

| FINANCIAL (in \$000's) | Through Estimated | | | | | | | | | |
|---------------------------|-------------------|------------|--------------|----------|----------|----------|----------|----------|----------|--------------|
| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | BEYOND | TOTAL |
| EXPENSES | | | | | | | | | | |
| Design | 130 | 418 | | | | | | | | 548 |
| Land (R/W) | 9 | 91 | | | | | | | | 100 |
| Const. Mgmt. | | | 430 | | | | | | | 430 |
| Construction | | | 2,765 | | | | | | | 2,765 |
| TOTAL EXPENSES | 139 | 509 | 3,195 | 0 | 0 | 0 | 0 | 0 | 0 | 3,843 |
| FUND SOURCES | | | | | | | | | | |
| Awarded TIB Grant | 14 | 160 | 2,260 | | | | | | | 2,434 |
| Awarded CMAQ Grant | 89 | 96 | | | | | | | | 185 |
| Mitigation | | | | | | | | | | 0 |
| Traffic Impact Fees | 577 | | 303 | | | | | | | 880 |
| City Oper. Revenue | (541) | 253 | 632 | 0 | 0 | 0 | 0 | 0 | 0 | 344 |
| TOTAL SOURCES | 139 | 509 | 3,195 | 0 | 0 | 0 | 0 | 0 | 0 | 3,843 |



CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

PROJECT: **West Valley Hwy (I-405 - Strander Blvd)** Project No. 99310410

DESCRIPTION: Design and construct completion of seven lane sections of West Valley Hwy with curbs, gutters, storm drainage, lighting and traffic control, and a pedestrian activated signal near the Tukwila Urban Center Pedestrian Bridge. Shared use path on west side of West Valley Highway from the pedestrian bridge to Longacres Wy S.

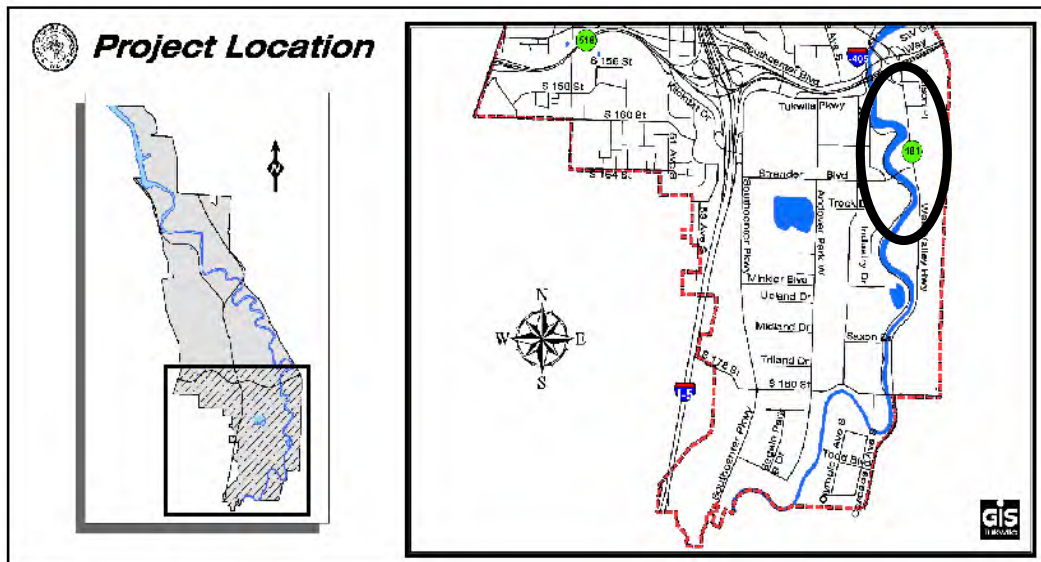
JUSTIFICATION: Safety and capacity items need completion. Portions have been completed by development.

STATUS: Combined with W Valley Hwy/S 156th Intersection in 2017. Continuing to work with development. Grant funding obtained for design and construction of West Valley Highway section.

MAINT. IMPACT: Reduced maintenance.

COMMENT: Project is on Traffic Impact Fee List. Grants from Federal CMAQ awarded for \$628k that includes \$112k for design of sidewalk/bike path on Longacres Way (S 158th St), State Transportation Improvement Board grant of \$2.4m for 2018/2020, and Sound Transit SAF grant for \$2.06m for construction along Longacres Way.

| FINANCIAL (in \$000's) | Through Estimated | | | | | | | | | |
|---------------------------|-------------------|------------|--------------|----------|----------|----------|----------|----------|----------|--------------|
| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | BEYOND | TOTAL |
| EXPENSES | | | | | | | | | | |
| Design | 130 | 455 | 216 | | | | | | | 801 |
| Land (R/W) | 9 | | | | | | | | | 9 |
| Const. Mgmt. | | | 465 | | | | | | | 465 |
| Construction | | | 4,355 | | | | | | | 4,355 |
| TOTAL EXPENSES | 139 | 455 | 5,036 | 0 | 0 | 0 | 0 | 0 | 0 | 5,630 |
| FUND SOURCES | | | | | | | | | | |
| Awarded TIB Grant | 40 | 240 | 2,154 | | | | | | | 2,434 |
| Awarded CMAQ Grant | 89 | 96 | | | | | | | | 185 |
| Awarded SAF Grant | | | 2,060 | | | | | | | 2,060 |
| Mitigation | | | | | | | | | | 0 |
| Traffic Impact Fees | 577 | (59) | 89 | | | | | | | 607 |
| City Oper. Revenue | (567) | 178 | 733 | 0 | 0 | 0 | 0 | 0 | 0 | 344 |
| TOTAL SOURCES | 139 | 455 | 5,036 | 0 | 0 | 0 | 0 | 0 | 0 | 5,630 |





| | | | |
|--|----------------------------|--------------------------|--|
| Supplemental Agreement Number _____ | | Organization and Address | |
| Original Agreement Number | | Phone: | |
| Project Number | Execution Date | Completion Date | |
| Project Title | New Maximum Amount Payable | | |
| Description of Work | | | |

The Local Agency of _____ desires to supplement the agreement entered in to with _____ and executed on _____ and identified as Agreement No. _____

All provisions in the basic agreement remain in effect except as expressly modified by this supplement. The changes to the agreement are described as follows:

I

Section 1, SCOPE OF WORK, is hereby changed to read:

II

Section IV, TIME FOR BEGINNING AND COMPLETION, is amended to change the number of calendar days for completion of the work to read: _____

III

Section V, PAYMENT, shall be amended as follows:

as set forth in the attached Exhibit A, and by this reference made a part of this supplement.

If you concur with this supplement and agree to the changes as stated above, please sign in the Appropriate spaces below and return to this office for final action.

By: _____ By: _____

Consultant Signature

Approving Authority Signature

Date

Exhibit "A"
Summary of Payments

| | Basic Agreement + Supplement #1 | Supplement #2 | Total |
|---|------------------------------------|---------------|-------|
| Direct Salary Cost | | | |
| Overhead (Including Payroll Additives) | | | |
| Direct Non-Salary Costs | | | |
| Fixed Fee | | | |
| Total | | | |

Exhibit "A"
Summary of Payments

| | Basic Agreement | Supplement 01 | Supplement 02 | Total |
|---|----------------------|----------------------|----------------------|------------------------|
| Direct Salary Cost | \$ 178,847.00 | \$ 45,371.00 | \$ 188,537.00 | \$ 412,755.00 |
| Overhead (Including Payroll Additives) | \$ 288,651.00 | \$ 77,144.00 | \$ 282,186.00 | \$ 647,981.00 |
| Direct Non-Salary Costs | \$ 53,654.00 | \$ 13,611.00 | \$ 56,560.00 | \$ 123,825.00 |
| Fixed Fee | \$ 10,786.00 | \$ 12,199.00 | \$ 36,902.00 | \$ 59,887.00 |
| Total | \$ 531,938.00 | \$ 148,325.00 | \$ 564,185.00 | \$ 1,244,448.00 |

EXHIBIT A

Supplement 02

West Valley Highway (Strander Blvd to I-405) Improvements Project

Introduction

The City of Tukwila (AGENCY) has retained TranTech Engineering, LLC (CONSULTANT) to provide a complete Contract Documents package for the West Valley Highway (Strander Blvd to I-405) Improvements (PROJECT) in Tukwila, Washington. Additional work is necessary to be added based on collaboration and coordination with WSDOT, SPU, and other third-party stakeholders. This supplement also adds work for optional tasks 12 Bidding Support During Advertisement and 13 Construction Management During Construction. The following describes supplement 02 to this work.

Scope of Work

1. Project Management

No Changes

2. Basis of Design

No Changes

3. Survey and Topographic Mapping - 1 Alliance Geomatics (1AG)

3.1 Right-of-Way, Property Lines & Easement Resolution

1AG will review and analyze additional information for right-of-way resolution and easements along Longacres Way. 1AG will also make modifications to the plans to address additional requests for the plans at the 90% comment stage from WSDOT.

4. Geotechnical Engineering-Landau Associates (LAI)

LAI will provide additional geotechnical engineering services requested by Seattle Public Utilities (SPU) and the AGENCY approved to support design of the bridge over the SPU watermain crossing West Valley Highway. Work elements include:

- A neutral plane analysis was completed as requested by SPU.
- Additional analysis was completed for a secant pile wall and a drilled shaft wall.
- Correspondence with SPU regarding options including meetings, phone calls, discussions and additions to the report.

LAI will revise its November 2019 technical memorandum to include:

- Neutral plane analysis.
- Secant pile wall and drilled shaft wall option information.

Assumptions

- LAI will be provided with a project base map in AutoCAD® format.
- The bridge will not be designed to resist the effects of soil liquefaction.
- If needed, pavement design will be completed at a later date under separate scope and budget.
- If needed, pilot infiltration tests will be completed at a later date under separate scope and budget.

5. Environmental and Permitting Services-Landau Associates (LAI)

No Changes

6. Public Outreach Support

No Changes

7. Traffic Analysis - Transpo

7.1 Pedestrian Crossing Evaluation

Transpo will provide additional pedestrian crossing evaluation, pedestrian push button design, and signal upgrades necessary to add the crosswalk on the north leg of the West Valley Highway/Longacres Way intersection required by WSDOT for SR 181. This crossing is not an existing crossing and is a WSDOT requirement added during review comments.

8. Third-Party Stakeholder Coordination

No Changes

9. Stormwater Compliance and Conveyance Design

No Changes

10. Plans, Specifications, & Engineer's Opinion of Construction Cost (EEOC)

The CONSULTANT will prepare the following additional items to be included in the final Bid Ready Contract Documents (Plans, Specifications, & Estimates) for AGENCY review, comment, approval, and advertisement. The AGENCY will compile a written response log to facilitate the CONSULTANT's tracking of all comments and for efficient inclusion in the contract documents. The CONSULTANT will maintain design documentation including design calculations. CONSULTANT will develop the following Plans all at 1"=20' plotted at full-size except for intersection and driveway details at 1"=10' plotted at full-size:

| Sheet Title | Estimated Sheets | Submittal Phase | | | | Bid Ready | Party |
|---|---------------------|-----------------|-----|-----|------|--------------|-------|
| | | 30% | 60% | 90% | 100% | | |
| Maintenance of Traffic (LAW and WVH/LAW intersection for additional crossing required by WSDOT) | 2 | | | | | X | TT |
| Illumination (West Valley Highway) | 1 | | | | | X | TT |
| Structural Sheets (additional sheets for bridge) | 14 | | | | | X | TT |
| Estimated # of additional Sheets | 17 | | | | | | |

Work Elements 10.3 – 10.5 of the original contract will apply for the above new sheets.

Assumptions:

- A second 100% submittal for only the additional sheets may be completed to allow the Agency to provide comments and the Consultant to respond to comments.

Deliverables:

- One full-size (22x34) copy of Plans submitted electronically (Adobe PDF) for each submittal.
- One copy of the Engineer’s Opinion of Construction Cost (MS Excel) for bid items.
- One copy of the Specifications (MS Word).

Design Criteria

The design criteria will remain the same as established under the original Scope of Services. Changes in any design standards or requirements after work has begun may result in extra services.

Project Deliverables

Documents, exhibits or other presentations for the work covered by this Agreement (“Documents”) will be furnished by the Consultant to the AGENCY upon completion of the various phases of the work. Whether the Documents are submitted in electronic media or in tangible format, any use of the Documents on another project or on extensions of this project beyond the use for which they were intended, or any modification of the Documents, or conversion of the Documents to an alternate system or format will be without liability legal exposure to the Consultant: AGENCY shall assume all risks associated with such use, modifications, or conversions.

Consultant may remove from the electronic Documents delivered to AGENCY all references to Consultant’s involvement and will retain a tangible copy of the Documents delivered to AGENCY which shall govern the interpretation of the Documents and the information recorded. Electronic files are considered working files only- Consultant is not required to maintain electronic files beyond 90 days after final project billing and makes no warranty as to the viability of electronic files beyond 90 days from date of transmittal.

11. Right-of-Way Coordination

No Changes

12. Bidding Support During Advertisement

The CONSULTANT will provide limited services prior to the contract advertisement and during the bidding period. The CONSULTANT shall perform limited review of contract documents, review bidder's request for information (RFI), and the CONSULTANT shall prepare bid document addendum as needed. The CONSULTANT will prepare the bid tabulations and bidder responsibility checklist.

Assumptions:

- The AGENCY will manage all activities related to the construction contract advertisement, award, and execution.

Deliverables:

- List of findings from the limited contract documents review.
- Review up to five (5) RFI's from contract bidders.
- Develop up to two (2) bid document addenda.
- Prepare bid tabulations
- Fill out bidder responsibility checklist

13. Construction Management

CONSTRUCTION WORKING DAYS

The construction working days assumed is 150.

The individual tasks to be completed by the CONSULTANT are as follows:

13.1 Project Management

This task includes administration of the contract between the CONSULTANT and the AGENCY, preparation of progress reports for the PROJECT. It also includes all administrative services needed to coordinate with the sub-CONSULTANT(s) and to monitor the PROJECT for scope, schedule, budget, and quality.

The following are the categorized activities associated with this task:

1. Progress Reports and Invoicing - progress reports will contain a narrative that identifies and describes significant activities performed in the previous period and significant upcoming activities along with the monthly invoice.

2. Construction Team Management, management of scope, schedule, budget, and quality.
3. Management of Sub-consultants.

Assumptions:

- The AGENCY will provide a project manager to respond to the CONSUTANT questions and approval for any potential contract changes, material over-runs, and differing site conditions.

Deliverables:

- Progress Reports
- Monthly Invoicing

13.2 Pre-construction Services

The CONSULTANT will assist with pre-construction meeting management. The following are the categorized activities associated with this task:

1. Provide agenda
2. Schedule meeting
3. Facilitate pre-construction meeting
4. Provide meeting notes after meeting

Assumptions:

- The AGENCY will provide the CONSULTANT 3 hard copies of the contract documents.
- The AGENCY will provide a location for the pre-construction meeting.

Deliverables:

- Pre-construction agenda, draft and final meeting meetings.

13.3 Construction Engineering Support

The CONSULTANT will provide engineering support for the contractor’s request for information (RFI) that require an engineering response during construction. This will be on an “on-call” basis at the Agency’s request during the construction phase of the project. Engineering support for materials submittals will occur as needed.

Assumptions:

- Engineers will provide engineering details, calculations, or responses for up to 10 RFIs.
- Does not include any inspection of materials that are prefabricated or shop fabricated. These inspections will be performed by WSDOT under agreement with the AGENCY.

Deliverables:

- Up to ten (10) RFI responses.
- Materials submittal approval assistance.

13.4 Resident Engineering

The CONSULTANT will provide a full-time resident engineer (RE) to the AGENCY for the duration of the contract. The RE will act as the owner's representative leading the CM team for coordination with Agency's staff, designers of record, and stakeholders. The RE's duties will be as follows:

1. Review and coordination with designers of record for responses to the Contractor's RFIs.
2. Reports directly and promptly to the AGENCY's CM Manger for matters relating to contract changes, permit violations, and PROJECT completion delays.
3. Preparation and management of the weekly meetings.
4. Preparation of agendas and leading preconstruction meetings for drilled shafts, bridge deck construction, and difficult concrete placements.
5. Management of risk log and the construction cost to complete.
6. Contractor submittals review (not approval).
7. Review and acceptance of the Contractor's lump sum breakdowns.
8. Daily review of IDRs and FNRs.
9. Review of monthly progress estimates.
10. Frequent site visits particularly during construction of critical elements.
11. Construction CPM schedule baseline reviews and monthly updates for determination of potential schedule slippage and delays.
12. Determination of entitlement for contractor's equitable adjustment requests.
13. Negotiations for equitable adjustment for contract changes.
14. Change orders, back up documentation language, independent cost estimates (ICE).
15. Materials test results review.
16. Final site inspection and punch list preparation.
17. Determination and issuance if PROJECT substantial and physical completions.
18. Closeout activities.
19. Attends Project Management Reviews (PMR).
20. Preparation of lessons learned and presentation to the Agency staff.

Assumptions:

- The AGENCY will provide a project manager to respond to the CONSULTANT questions and approval of any potential contract changes, material over-runs, and differing site conditions.
- The AGENCY will assume management of stakeholders and public relations.
- The AGENCY will execute and manage the EOR construction engineering support services contract.
- Shop and falsework drawings will be reviewed by the appropriate Engineers of Record.

Deliverables:

- RFI responses.
- Weekly meeting agenda.
- Preparation of preconstruction conference agendas for drilled shafts, difficult concrete placement, and bridge deck.
- Monthly preparation of risk log tracking and construction cost to complete.
- Lump sum breakdown review and acceptance.
- Construction CPM schedule responses to contractor.
- Entitlement determination, negotiations, correspondence to contractor, change order preparation and back up documentation.
- Resolution of end of construction issues including compensation for approved outstanding contract changes, liquidated damages, and claims.
- Preparation of substantial and physical completion letters.
- Preparation of end of PROJECT final inspection and punch-list.
- Preparation and presentation of PROJECT's lessons learned.

13.5 Site Inspection

The CONSULTANT will provide one inspector to perform site observation during 130 working days of the construction including:

1. Daily presence at the site while the Contractor is working.
2. Coordination with the documentation engineer for use of approved materials.
3. Attendance at the weekly meetings.
4. Force account (FA) monitoring and approval of contractor's FA submittals based on WSDOT/AGC Blue Book Rental Agreement.
5. Preparation of inspector's daily reports (IDRs), and field note records (FNRs).
6. Coordination with the Contractor for reconciliation of FNRs for monthly progress estimates.
7. Ensuring that only approved materials are installed.
8. Monitoring for the materials on hand (MOH).
9. Coordination with the materials testing designated by the AGENCY for any required materials sampling and testing.
10. Daily photo log of critical site activities.

11. Right-of-Way Coordination

No Changes

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Deliverables:

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Assumptions:

- Engineers will provide engineering details, calculations, or responses for up to 10 RFIs.
- Does not include any inspection of materials that are prefabricated or shop fabricated. These inspections will be performed by WSDOT under agreement with the AGENCY.

Deliverables:

- Up to ten (10) RFI responses.
- Materials submittal approval assistance.

13.4 Resident Engineering

The CONSULTANT will provide a full-time resident engineer (RE) to the AGENCY for the duration of the contract. The RE will act as the owner's representative leading the CM team for coordination with Agency's staff, designers of record, and stakeholders. The RE's duties will be as follows:

1. Review and coordination with designers of record for responses to the Contractor's RFIs.
2. Reports directly and promptly to the AGENCY's CM Manger for matters relating to contract changes, permit violations, and PROJECT completion delays.
3. Preparation and management of the weekly meetings.
4. Preparation of agendas and leading preconstruction meetings for drilled shafts, bridge deck construction, and difficult concrete placements.
5. Management of risk log and the construction cost to complete.
6. Contractor submittals review (not approval).
7. Review and acceptance of the Contractor's lump sum breakdowns.
8. Daily review of IDRs and FNRs.
9. Review of monthly progress estimates.
10. Frequent site visits particularly during construction of critical elements.
11. Construction CPM schedule baseline reviews and monthly updates for determination of potential schedule slippage and delays.
12. Determination of entitlement for contractor's equitable adjustment requests.
13. Negotiations for equitable adjustment for contract changes.
14. Change orders, back up documentation language, independent cost estimates (ICE).
15. Materials test results review.
16. Final site inspection and punch list preparation.
17. Determination and issuance if PROJECT substantial and physical completions.
18. Closeout activities.
19. Attends Project Management Reviews (PMR).
20. Preparation of lessons learned and presentation to the Agency staff.

Assumptions:

- The AGENCY will provide a project manager to respond to the CONSULTANT questions and approval of any potential contract changes, material over-runs, and differing site conditions.
- The AGENCY will assume management of stakeholders and public relations.
- The AGENCY will execute and manage the EOR construction engineering support services contract.
- Shop and falsework drawings will be reviewed by the appropriate Engineers of Record.

Deliverables:

- RFI responses.
- Weekly meeting agenda.
- Preparation of preconstruction conference agendas for drilled shafts, difficult concrete placement, and bridge deck.
- Monthly preparation of risk log tracking and construction cost to complete.
- Lump sum breakdown review and acceptance.
- Construction CPM schedule responses to contractor.
- Entitlement determination, negotiations, correspondence to contractor, change order preparation and back up documentation.
- Resolution of end of construction issues including compensation for approved outstanding contract changes, liquidated damages, and claims.
- Preparation of substantial and physical completion letters.
- Preparation of end of PROJECT final inspection and punch-list.
- Preparation and presentation of PROJECT's lessons learned.

13.5 Site Inspection

The CONSULTANT will provide one inspector to perform site observation during 130 working days of the construction including:

1. Daily presence at the site while the Contractor is working.
2. Coordination with the documentation engineer for use of approved materials.
3. Attendance at the weekly meetings.
4. Force account (FA) monitoring and approval of contractor's FA submittals based on WSDOT/AGC Blue Book Rental Agreement.
5. Preparation of inspector's daily reports (IDRs), and field note records (FNRs).
6. Coordination with the Contractor for reconciliation of FNRs for monthly progress estimates.
7. Ensuring that only approved materials are installed.
8. Monitoring for the materials on hand (MOH).
9. Coordination with the materials testing designated by the AGENCY for any required materials sampling and testing.
10. Daily photo log of critical site activities.

11. Monitor the site for contractor compliance with traffic control plans, environmental, and contract requirements.
12. Final site inspection and assistance with close out.

Assumptions:

- The AGENCY will provide a workspace at the site or the City for preparation of paperwork.
- The AGENCY will provide for materials sampling and testing completed through WSDOT.
- Inspectors will be compensated for weather days if encountered.
- AGENCY will provide inspector or supplement when multiple crews are working requiring multiple inspectors or beyond 130 working days.
- AGENCY will provide IDRs, FNRs, and all other documentation for work inspected by the AGENCY.

Deliverables:

- IDRs and FNRs for provided inspection.
- Monitoring and accounting for MOH.
- Daily site photos and management.
- Daily reports of the FA worked.

13.6 Office Engineering and Documentation Control

This Task includes activities associated with preparation of construction documentation consistent with the FHWA and LAG Manual requirements including:

1. Project files set up and maintenance.
2. Submittal log tracking/management.
3. Attending the Pre-con and preparation of meeting notes.
4. Weekly agenda preparation and meeting notes.
5. Preparation of monthly progress estimates.
6. Request for approval of materials (RAMs) reviews and approvals.
7. Maintenance of record of materials (ROM).
8. Contractor traffic control records management.
9. Materials testing and RAM approval coordination with inspector.
10. WSDOT special inspection and testing coordination.
11. Close out.
12. PMR and/or document review project documents preparation, coordination with WSDOT Local Program, and attendance.

Assumptions:

- AGENCY or WSDOT will provide the project ROM.
- The AGENCY will manage monthly progress estimate payment to the contractor based on inspector's FNR's and progress report.
- The AGENCY will execute, and process change orders.
- Supplement will be required for additional hours over those shown in Exhibit B.

Deliverables:

- Pre-con agenda, meeting draft and final notes.
- Complete contract paper-work tracking and documentation filing.
- Weekly meeting agenda preparation and meeting notes.
- Change order preparation.
- Monthly FNRs tabulation for the progress estimates.
- Punch-list preparation.
- PMR PROJECT documentation hard copies.

13.7 Post Construction Services

This task includes activities associated with project closeout. This task includes:

1. Evaluation and analysis of any outstanding change orders and claims.
2. A project walk-through with WSDOT after substantial completion.
3. Preparation of end of PROJECT punch list and PROJECT closeout documentation for auditing purposes and archiving.
4. Final contract voucher.
5. Drafting of record drawings and coordination with subconsultants for drafting of their particular disciplines.

Assumptions:

- The CONSULTANTS Resident Engineer and Office Engineer will provide guidance for preparation of documents.
- AGENCY will send notice of completion to DOR, L&I, and ESD.
- AGENCY will send final contract voucher for Contractor signature.

Deliverables:

- On site project walk through with WSDOT.

- Preparation of end of project punch list.
- Addressing and including WSDOT comments in the final documentation.
- Final Contract Voucher.
- Drafting of record drawings redlined by Contractor as a bid item.
- Preparation of archival hard copies of relevant PROJECT documentation delivered in boxes.

13.8 Subconsultant and Professional Services

This task includes activities performed by subconsultants and professional services covering traffic signal bid items, landscape and urban design elements, geotechnical engineering services, and materials testing.

1. One (1) change order each (two (2) total) relating to traffic signal items and landscape architecture and urban design.
2. Up to three (3) RFI's for traffic signals systems and geotechnical services.
3. Up to one (1) RFI for landscaping or urban design.
4. Materials submittal review associated with subconsultant discipline.
5. Drafting of record drawings up to the number of hours included in exhibit B.
6. Professional Services for Material Testing:
 - a. Concrete (air, slump, temperature, and compressive strength).
 - b. Soils sampling, gradation, and density.
 - c. HMA density.

Assumptions:

- Irrigation is not covered and if assistance is needed a supplement will be added.
- Additional RFI's will require a supplement.
- Additional change orders will require a supplement.
- Additional time required for record drawings will require a supplement.
- The AGENCY will arrange for WSDOT to provide testing, inspection and approval for a project element list provided by the CONSULTANT to include prefabricated and shop fabricated items.

Deliverables:

- Responses to RFI's up to maximum listed above
- Materials submittals responded to
- Drafting of record drawings redlined by Contractor

GENERAL ASSUMPTIONS

- Work performed under this scope is limited to the hours and fee listed in the Scope and Budget, Prime and Subconsultant Cost Computations. Any work requested that exceeds what is shown

in the Scope and Budget will be considered EXTRA WORK and be added as a Supplement to this Agreement.

- Shop drawings, construction and falsework drawings will be reviewed and approved by the EOR.



West Valley Highway (I-405 - Strander Blvd)

| | Principal | Project Manager | Construction Manager RE | Resident Engineer | Senior Structural Engineer | Senior Structural Engineer | Senior Traffic Engr. | Senior Civil Engineer | Senior Civil Engineer | Staff Structural Eng 2 | Staff Civil Engineer | Senior CAD Tech | Senior Inspector | Office Engineer | Admin | Total |
|--|-----------|-----------------|-------------------------|-------------------|----------------------------|----------------------------|----------------------|-----------------------|-----------------------|------------------------|----------------------|-----------------|------------------|---------------------------------|----------|-------------------|
| Design | | | | | | | | | | | | | | | | |
| Task 10 Plans, Specifications and Engineer's Estimate | | | | | | | | | | | | | | | | |
| 10.5 Ad Ready PS&E | 1 | | | | 8 | 184 | 64 | 40 | 8 | 40 | 102 | 89 | | 4 | | 540 |
| | | | | | | | | | | | | | | | | 0 |
| Modular Wetlands (Sub Element) | | | | | | | | 4 | 20 | | 20 | | | | | 44 |
| | | | | | | | | | | | | | | | | 0 |
| | | | | | | | | | | | | | | | | 0 |
| Construction | | | | | | | | | | | | | | | | |
| Task 12 Bidding Support During Advertisement | | | | | | | | | | | | | | | | |
| 12.1 Advertisement Support/Preconstruction services | 2 | 6 | | 8 | | 3 | 3 | 3 | 3 | | 4 | | | 21.5 | | 53.5 |
| Task 13 Construction Management During Construction | | | | | | | | | | | | | | | | |
| 13.1 Project Management | | | 20 | | | | | | | | | | | | 20 | 40 |
| 13.2 Pre-Construction Services | | 4 | | 12 | | | | | | | | | 8 | 16 | | 40 |
| 13.3 Construction Engineering Support | 2 | 8 | | 4 | | 42 | 30 | 40 | 10 | 2 | 4 | | 4 | 16 | | 162 |
| 13.4 Resident Engineering | | | | 300 | | | | | | | | | | | | 300 |
| 13.5 Site Inspector | | | | | | | | | | | | | 1220 | | | 1220 |
| 13.6 Office Engineering | | | | | | | | | | | | | | 800 | | 800 |
| 13.7 Post Construction Services | 2 | 2 | | 16 | | | | | | | 40 | 16 | 60 | 60 | | 196 |
| | | | | | | | | | | | | | | | | 0 |
| | | | | | | | | | | | | | | | | 0 |
| Total Labor Hours | 7 | 20 | 20 | 340 | 8 | 229 | 97 | 87 | 41 | 42 | 170 | 105 | 1292 | 917.5 | 20 | 3,396 |
| Labor Rates (DLR) | \$ 76.50 | \$ 57.00 | \$ 84.00 | \$ 58.00 | \$ 68.00 | \$ 62.00 | \$ 57.00 | \$ 57.00 | \$ 57.00 | \$ 45.00 | \$ 40.00 | \$ 42.00 | \$ 50.00 | \$ 45.00 | \$ 40.00 | 4 |
| Total Direct Salary Cost | \$536 | \$1,140 | \$1,680 | \$19,720 | \$544 | \$14,198 | \$5,529 | \$4,959 | \$2,337 | \$1,890 | \$6,800 | \$4,410 | \$64,600 | \$41,288 | \$800 | \$170,430 |
| | | | | | | | | | | | | | | Overhead (ICR) | 148.87% | \$253,719 |
| | | | | | | | | | | | | | | Fee | 30.00% | \$51,129 |
| | | | | | | | | | | | | | | Multiplier | 2.7887 | |
| | | | | | | | | | | | | | | Total Labor Cost | | \$475,279 |
| Subconsultants Cost | | | | | | | | | | | | | | | | |
| | | | | | PE Cost | CN Cost | | | | | | | | | | Total Cost |
| Landau | | | | | \$4,500 | \$6,268 | | | | | | | | | | \$10,768 |
| 1Alliance | | | | | \$1,000 | \$0 | | | | | | | | | | \$1,000 |
| Transpo | | | | | \$9,683 | \$4,181 | | | | | | | | | | \$13,864 |
| Pertect | | | | | \$0 | \$26,382 | | | | | | | | | | \$26,382 |
| | | | | | | | | | | | | | | Total Subconsultant Cost | | \$52,014 |
| Direct Costs (Copy, Fedex, Per Diem ...) | | | | | | | | | | | | | | | | |
| | | | | | Item | # | Amount | Unit | | | | | | | | |
| | | | | | Mileage | | 2486 | \$0.56 | | | Miles | | | | | \$1,392 |
| | | | | | Production Costs | | | | | | | | | | | \$500 |
| | | | | | Materials Testing | | | | | | | | | | | \$35,000 |
| | | | | | | | | | | | | | | Subtotal Direct Costs | | \$36,892 |
| Total | | | | | | | | | | | | | | Total Fee | | \$564,185 |

Exhibit B - Fee Schedule



West Valley Highway (I-405 - Strander Blvd)

| | Kash | Diane | Jim | Scott | Al | Diane | Debbie | Kassey | Kate | Donna | Merrilee/Jodi | Bridget/Merrilee | Total | |
|--|-------------|-----------------|----------------------------|----------------------------|----------------------|-----------------------|-----------------------|------------------------|----------------------|-----------------|-----------------|------------------|---------------------------------|--------------------|
| | Principal | Project Manager | Senior Structural Engineer | Senior Structural Engineer | Senior Traffic Engr. | Senior Civil Engineer | Senior Civil Engineer | Staff Structural Eng 2 | Staff Civil Engineer | Senior CAD Tech | Office Engineer | Admin | | |
| Design | | | | | | | | | | | | | | |
| Task 10 Plans, Specifications and Engineer's Estimate | | | | | | | | | | | | | | |
| 10.5 Ad Ready PS&E | 1 | | 8 | 184 | 64 | 40 | 8 | 40 | 102 | 89 | 4 | | 540 | |
| Modular Wetlands (Sub Element) | | | | | | | | | | | | | | |
| | | | | | | 4 | 20 | | 20 | | | | 44 | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Total Labor Hours | 1 | 0 | 8 | 184 | 64 | 44 | 28 | 40 | 122 | 89 | 4 | 0 | 584 | |
| Labor Rates (DLR) | \$ 76.50 | \$ 57.00 | \$ 68.00 | \$ 62.00 | \$ 57.00 | \$ 57.00 | \$ 57.00 | \$ 45.00 | \$ 40.00 | \$ 42.00 | \$ 45.00 | \$ 40.00 | | |
| Total Direct Salary Cost | \$77 | \$0 | \$544 | \$11,408 | \$3,648 | \$2,508 | \$1,596 | \$1,800 | \$4,880 | \$3,738 | \$180 | \$0 | \$30,379 | |
| | | | | | | | | | | | Overhead (ICR) | 148.87% | \$45,224 | |
| | | | | | | | | | | | Fee | 30.00% | \$9,114 | |
| | | | | | | | | | | | Multiplier | 2.7887 | | |
| | | | | | | | | | | | | | Total Labor Cost | \$84,716.52 |
| Subconsultants Cost | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | Cost | |
| | | | | | | | | | | | | | Landau | \$4,500 |
| | | | | | | | | | | | | | 1Alliance | \$1,000 |
| | | | | | | | | | | | | | Transpo | \$9,683 |
| | | | | | | | | | | | | | Total Subconsultant Cost | \$15,183 |
| Direct Costs (Copy, Fedex, Per Diem ...) | | | | | | | | | | | | | | |
| | Item | | | | # | Amount | | | | | | | Unit | |
| | Mileage | | | | | \$0.56 | | | | | | | Miles | \$0 |
| | | | | | | | | | | | | | Subtotal Direct Costs | \$0 |
| Total | | | | | | | | | | | | | Total Fee | \$99,900 |



West Valley Highway (I-405 - Strander Blvd)

| Optional Task Items | Principal | Project Manager | Construction Manager | Resident Engineer | Senior Structural Engineer | Senior Structural Engineer | Senior Traffic Engr. | Senior Civil Engineer | Senior Civil Engineer | Staff Structural Eng 2 | Staff Civil Engineer | Senior CAD Tech | Senior Inspector | Office Engineer | Admin | Total | | |
|--|-----------|-----------------|----------------------|-------------------|----------------------------|----------------------------|----------------------|-----------------------|-----------------------|------------------------|----------------------|-----------------|------------------|-----------------|----------|-------------------------|---------------------------------|------------------|
| Construction | | | | | | | | | | | | | | | | | | |
| Task 12 Bidding Support During Advertisement | | | | | | | | | | | | | | | | 0 | | |
| 12.1 Advertisement Support/Preconstruction services | 2 | 6 | | 8 | | 3 | 3 | 3 | 3 | | | | | 21.5 | | 53.5 | | |
| Task 13 Construction Management During Construction | | | | | | | | | | | | | | | | 0 | | |
| 13.1 Project Management | | | 20 | | | | | | | | | | | | 20 | 40 | | |
| 13.2 Pre-Construction Services | | 4 | | 12 | | | | | | | | | 8 | 16 | | 40 | | |
| 13.3 Construction Engineering Support | 2 | 8 | | 4 | | 42 | 30 | 40 | 10 | 2 | 4 | | 4 | 16 | | 162 | | |
| 13.4 Resident Engineering | | | | 300 | | | | | | | | | | | | 300 | | |
| 13.5 Site Inspector | | | | | | | | | | | | | 1220 | | | 1220 | | |
| 13.6 Office Engineering | | | | | | | | | | | | | | 800 | | 800 | | |
| 13.7 Post Construction Services | 2 | 2 | | 16 | | | | | | | 40 | 16 | 60 | 60 | | 196 | | |
| | | | | | | | | | | | | | | | | 0 | | |
| Total Labor Hours | 6 | 20 | 20 | 340 | 0 | 45 | 33 | 43 | 13 | 2 | 48 | 16 | 1292 | 913.5 | 20 | 2,812 | | |
| Labor Rates (DLR) | \$ 76.50 | \$ 57.00 | \$ 84.00 | \$ 58.00 | \$ 68.00 | \$ 62.00 | \$ 57.00 | \$ 57.00 | \$ 57.00 | \$ 45.00 | \$ 40.00 | \$ 42.00 | \$ 50.00 | \$ 45.00 | \$ 40.00 | | | |
| Total Direct Salary Cost | \$459 | \$1,140 | \$1,680 | \$19,720 | \$0 | \$2,790 | \$1,881 | \$2,451 | \$741 | \$90 | \$1,920 | \$672 | \$64,600 | \$41,108 | \$800 | \$140,052 | | |
| | | | | | | | | | | | | | | Overhead (ICR) | 148.87% | \$208,495 | | |
| | | | | | | | | | | | | | | Fee | 30.00% | \$42,015 | | |
| | | | | | | | | | | | | | | Multiplier | 2.7887 | | | |
| | | | | | | | | | | | | | | | | Total Labor Cost | \$390,561.62 | |
| Subconsultants Cost | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | Cost | |
| Transpo | | | | | | | | | | | | | | | | | \$4,181 | |
| Perteet | | | | | | | | | | | | | | | | | \$26,382 | |
| Landau | | | | | | | | | | | | | | | | | \$6,268 | |
| | | | | | | | | | | | | | | | | | Total Subconsultant Cost | \$36,831 |
| Direct Costs (Copy, Fedex, Per Diem ...) | | | | | | | | | | | | | | | | | | |
| Item | | | | | | # | Amount | | | | | | | | | Unit | | |
| Mileage | | | | | | 2486 | \$0.56 | | | | | | | | | Miles | \$1,392 | |
| Production Costs | | | | | | | | | | | | | | | | | \$500 | |
| Materials Testing | | | | | | | | | | | | | | | | | \$35,000 | |
| | | | | | | | | | | | | | | | | | Subtotal Direct Costs | \$36,892 |
| | | | | | | | | | | | | | | | | | Total Fee | \$464,285 |



Project Tukwila - West Valley Highway (I 405 - Strander Blvd)
Construction Design Supp.
Client TranTech Engineering, LLC
PM Brianne Ross

Contract Start Date 6/7/2021
Contract End Date 12/30/2022
Contract Duration: 18 Months

Last Update date 5/4/2021
Perteet Project No. 20190049.0001

| Task | Billing Rate | Sr. Associate | Sr. Engineer / Mgr | Lead Technician/ Designer | Accountant | Total Hours | Labor Dollars |
|--|--------------|---------------|--------------------|---------------------------|------------|-------------|---------------|
| Task 1 - Project Management | | \$71.00 | \$63.00 | \$37.00 | \$41.00 | 26.00 | \$1,506.00 |
| Total Task 1 - Project Management | | 0.00 | 20.00 | 0.00 | 6.00 | 26.00 | \$1,506.00 |
| Task 2 - Construction Design Support - Landscape/Urban Design | | 45.00 | 45.00 | 20.00 | | 110.00 | \$6,770.00 |
| Total Task 2 - Construction Design Support - Landscape/Urban Design | | 45.00 | 45.00 | 20.00 | 0.00 | 110.00 | \$6,770.00 |
| Expenses | | | | | | | |
| Total Expenses | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | \$0.00 |
| Total Hours | | 45.00 | 65.00 | 20.00 | 6.00 | 136.00 | |
| Total Dollars | | \$3,195.00 | \$4,095.00 | \$740.00 | \$246.00 | | \$8,276.00 |

| | |
|------------------|------------|
| Expenses: | |
| Mileage - \$.56 | 302 |
| Totals: | 302 |

| SUMMARY | | |
|-----------------------|---------|--------------------|
| Direct Salary Cost | | \$8,276.00 |
| Overhead Cost | 185.12% | \$15,321.00 |
| Fee 30% | | \$2,483.00 |
| Labor | | \$26,080.00 |
| Expenses | | \$302.00 |
| Subconsultants | | \$0.00 |
| CONTRACT TOTAL | | \$26,382.00 |

Transpo Group USA, Inc.
Cost Estimate Worksheet



| |
|---|
| Number / Project Name 19306/West Valley Highway |
|---|

Pay rates are effective from September 26, 2020 through June 25, 2021, within the ranges shown in the attachment.
Only key staff are shown and other staff may work on and charge to the project as needed by the project manager.

| | Project Manager | Quality Control | Project Engineer | CAD/ Graphics | Project Admin | | | | |
|-----------|-----------------|-----------------|------------------|---------------|---------------|--|--|--|--|
| initials | RP | KRC | TL | JL2 | AMC | | | | |
| job title | Assoc Prin L6 | Prin L7 | Eng L3 | Eng L1 | PA L4 | | | | |
| cost rate | \$68.03 | \$87.78 | \$43.08 | \$31.73 | \$47.79 | | | | |

Labor:

| Work Task | | | | | | | | | | Hours | Cost |
|-----------------------------|---|--|---|---|---|--|--|--|--|-------|-------|
| 1 RFI Responses (Assume 3) | 2 | | 3 | 6 | 2 | | | | | 13 | \$551 |
| 2 Change Orders (Assume 1) | 1 | | 2 | 3 | | | | | | 6 | \$249 |
| 3 Material Submittal Review | 1 | | 2 | | | | | | | 3 | \$154 |
| 4 Record Drawings | 2 | | 4 | 6 | | | | | | 12 | \$499 |
| 5 | | | | | | | | | | 0 | \$0 |
| 6 | | | | | | | | | | 0 | \$0 |
| 7 | | | | | | | | | | 0 | \$0 |
| 8 | | | | | | | | | | 0 | \$0 |
| 9 | | | | | | | | | | 0 | \$0 |
| 10 | | | | | | | | | | 0 | \$0 |
| 11 | | | | | | | | | | 0 | \$0 |
| 12 | | | | | | | | | | 0 | \$0 |
| 13 | | | | | | | | | | 0 | \$0 |
| 14 | | | | | | | | | | 0 | \$0 |
| 15 | | | | | | | | | | 0 | \$0 |
| 16 | | | | | | | | | | 0 | \$0 |
| 17 | | | | | | | | | | 0 | \$0 |

| | | | | | | | | | | | |
|--------------------|--------------|------------|--------------|--------------|-------------|------------|------------|------------|------------|-----------|-------------------|
| Total Hours | 6 | 0 | 11 | 15 | 2 | 0 | 0 | 0 | 0 | 34 | |
| Labor Costs | \$408 | \$0 | \$474 | \$476 | \$96 | \$0 | \$0 | \$0 | \$0 | | \$1,453.59 |

| | | | | | | | | | | | |
|-----------------|-------------|----------------|--|--|--|--|--|--|--|--|-------------------|
| Overhead | Rate | 157.63% | | | | | | | | | \$2,291.29 |
|-----------------|-------------|----------------|--|--|--|--|--|--|--|--|-------------------|

| | | | | | | | | | | | |
|------------------------------|---------------|--|--|--|--|--|--|--|--|--|-----------------|
| Fee (as a % of labor) | 30.00% | | | | | | | | | | \$436.08 |
|------------------------------|---------------|--|--|--|--|--|--|--|--|--|-----------------|

Miscellaneous Expenses:

| Item | Reimbursable Cost |
|---|-------------------|
| 1 Federal Express / Courier | \$0 |
| 2 Phone | \$0 |
| 3 Fax | \$0 |
| 4 Postage | \$0 |
| 5 Graphic supplies | \$0 |
| 6 Photography | \$0 |
| 7 Travel expenses (mileage) | \$0 |
| 8 Reproduction | \$0 |
| 9 Traffic counts | \$0 |
| 10 Traffic accident data | \$0 |
| 11 Spec. MPS model run | \$0 |
| 12 Transportation Concurrency Application | \$0 |

| | |
|------------------------------------|------------|
| Total Reimbursable Expenses | \$0 |
|------------------------------------|------------|

Subconsultants:

| Firm | Subs Cost |
|-------------------|-----------|
| 1 Subconsultant A | \$0 |
| 2 Subconsultant B | \$0 |
| 3 Subconsultant C | \$0 |
| 4 Subconsultant D | \$0 |
| 5 Subconsultant E | \$0 |

| | |
|-----------------------------|------------|
| Total Subconsultants | \$0 |
|-----------------------------|------------|

| | |
|-----------------------|-------------------|
| TOTAL ESTIMATE | \$4,181.00 |
|-----------------------|-------------------|