

RESOLUTION NO. 1547

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FIFE, PIERCE COUNTY, WASHINGTON AUTHORIZING A MODIFICATION TO A PROFESSIONAL SERVICES AGREEMENT WITH KPG, INC. FOR A PRELIMINARY INTERCHANGE JUSTIFICATION REPORT

WHEREAS, on May 8, 2012, the City executed a professional services agreement with KPG, Inc. for transportation engineering and planning services; and

WHEREAS, the 54th Avenue East interchange with I-5 is currently over capacity; and

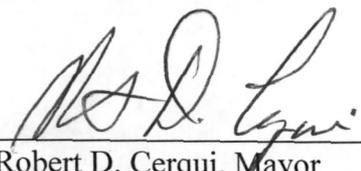
WHEREAS, as part of the transportation system plan the City is in the process of updating, the City has completed a design study of one build alternative for the reconstruction of the 54th Avenue interchange with I-5; and

WHEREAS, it is necessary to increase the scope of the professional services agreement with KPG to including a preliminary interchange justification report that would study this alternative and other build alternatives and conduct activities leading to the selection of a recommended configuration of the interchange; and

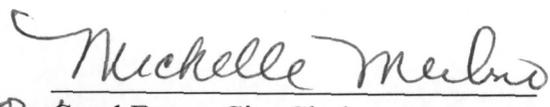
WHEREAS, City Staff has negotiated a scope of work and contract supplement with KPG as set forth in Exhibit A attached hereto; now therefore

BE IT RESOLVED that the Council hereby authorizes the City Manager to execute the Contract Supplement with KPG for preliminary 54th Avenue justification report services in the form attached hereto as Exhibit A, in the amount not to exceed \$313,409.

ADOPTED by the City Council at an open public meeting held on the 26th day of March, 2013.


Robert D. Cerqui, Mayor

Attest:


for Carol Etgen, City Clerk

RESOLUTION NO. 10

WHEREAS the City of Chicago is a member of the National League of Cities and the International City Managers' Association and it is the policy of the City to support the activities of these organizations;

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[Handwritten signature]
City Clerk

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Mayor

Contract Supplement

| | |
|--|---------------------------------------|
| <u>Project Name:</u> Transportation System Plan | <u>Contract Modification #:</u> 1 |
| <u>Type of Work:</u> Transportation Engineering/Planning | <u>Original Contract Date:</u> 5/8/12 |
| <u>Contractor:</u> KPG Inc. | <u>Date:</u> 3/1/13 |
| <u>KPG Project #:</u> 12015 | Page: 1 of 1 |

DESCRIPTION OF CHANGE:

The following modifications to the Contract are hereby ordered:

The scope of work is increased as shown in Exhibit A prepared by KPG. This Supplemental Agreement is added to this Contract. The project budget shall be increased by \$313,409 shown in Exhibit B.

CONTRACT AMOUNT:

| | |
|--|-----------|
| Original Contract Amount | \$400,000 |
| Current Modified Contract Price | \$400,000 |
| Amount of this Contract Modification (Increase/Decrease) | \$313,409 |
| New Modified Contract Price | \$713,409 |

The completion date is changed to 3/31/2014.

By the signatures below, the parties agree that this Contract Modification constitutes full and complete compensation and necessary adjustments to schedule for the issues giving rise to the modification. The work covered by this modification must be performed under the same terms and conditions as that included in the original contract.

CITY OF FIFE

Approved by: _____

Title: City Manager

Date: _____

Approved by: _____

Title: Principal

Date: _____

**EXHIBIT A
DRAFT SCOPE OF SERVICES
PRELIMINARY INTERCHANGE JUSTIFICATION REPORT
54TH AVENUE E INTERCHANGE WITH I-5**

INTRODUCTION

The 54th Avenue E interchange with I-5 is currently over capacity and traffic regularly backs up onto the I-5 mainline. The City of Fife (CITY) is in the process of updating their Transportation System Plan and performing a City Center Visioning Study. As part of these projects, the CITY has completed a design study of one build alternative for the reconfiguration of the 54th Avenue E interchange with I-5. Under this scope of work, the CONSULTANT shall study this alternative and other build alternatives and conduct activities leading to the selection of a Recommended Configuration of the interchange. The Recommended Configuration would be further analyzed in a full interchange justification report (IJR).

PROJECT LIMITS

The project area is approximately located along I-5 from the City of Fife western City limits at 65th Avenue E to the Port of Tacoma Road interchange. The project limits for the physical roadway improvements are anticipated to be as follows:

- On I-5 – from the City of Fife western City limits at 65th Avenue E to the Port of Tacoma Road interchange. I-5 milepost boundaries: 136.2 – 138.2.
- On 54th Avenue E – from 15th Street E to 23rd Street E.
- On Pacific Highway – from 51st Avenue E to 59th Avenue E.
- On 20th Street E – from 51st Avenue E to 62nd Avenue E.

The project limits for the traffic analysis and modeling will include the physical roadway limits as stated above and the year 2040 scenarios will include Phase 1 of the SR 167 interchange with I-5. The additional limits of the traffic analysis are required to capture the influence areas on I-5 that may benefit or be impacted by improvements to the 54th Avenue E interchange.

SCOPE OF SERVICES

This scope of work details the work elements needed to support the CITY in the selection of a recommended configuration to be further analyzed in a full IJR. The scope of work will consist of the following work elements.

- Work Element 1 – Project Management
- Work Element 2 – Base Mapping
- Work Element 3 – Alternatives Screening Analysis
- Work Element 4 – Travel Demand Forecasting and Operations Analysis
- Work Element 5 – Safety Analysis
- Work Element 6 – Environmental Review
- Work Element 7 – Cost Estimating
- Work Element 8 – Preliminary IJR Document
- Work Element 9 – Management Reserve

WORK ELEMENT 1: PROJECT MANAGEMENT

Task 1.1 - Project Management

The CONSULTANT shall conduct the project tracking of schedules, budgets, and products, and coordinate efforts necessary for project execution. These efforts shall include the coordination with subconsultants relating to work in progress and coordination with WSDOT.

Deliverable(s)

- Master Project Schedule

Task 1.2 - Monthly Progress Reports and Invoicing

The CONSULTANT shall prepare monthly progress reports identifying work completed in the previous month, work in progress, upcoming work elements, and reporting of any delays, problems, or additional information needs. These reports will be submitted with the CONSULTANT invoices.

Task 1.3 - Coordination Meetings

The CONSULTANT shall prepare for and attend up to five coordination meetings with the CITY to seek input on the work effort as it progresses.

WORK ELEMENT 2: BASE MAPPING

Task 2.1 - Base Map

The CONSULTANT will prepare a topographic base map of the project area described in the Project Limits section of this contract utilizing LIDAR, GIS data, and existing base mapping and topographic information provided by the CITY and/or WSDOT. The CONSULTANT will use AutoCAD Civil 3D 2011/2013 software to create the engineering base map.

Deliverable(s)

- Project base map

WORK ELEMENT 3: ALTERNATIVES SCREENING ANALYSIS

The CONSULTANT will perform a two-level screening process to evaluate alternatives on how they meet the project goals. The first level (Level 1) screening will develop interchange concepts and conduct a fatal flaw analysis to determine their viability and ability to meet the project goals. The second level (Level 2) screening will take viable alternatives from Level 1 and refine the design and analysis.

Task 3.1 - Level 1 Alternatives Development

The CONSULTANT will develop up to four unique interchange alternatives at a planning level. Supporting information will be developed and documented for each alternative in the following areas: traffic flow and operations, horizontal alignments, geometric constraints, environmental constraints, land use and transportation plans, forward compatibility with other projects, right-

of-way and property impacts. This information will be summarized in a document for each alternative.

Key Assumption(s)

- Up to four unique alternatives will be developed.
- Preliminary horizontal alignments will be developed for each alternative.
- WSDOT Design Manual will be used as the basis for design requirements.
- Planning level travel demand forecasts will be used for a qualitative assessment of traffic operations for each alternative.
- Right-of-way and property impact information will be based on parcel base maps.

Deliverable(s)

- Plan view plots of each alternative
- Summary document identifying traffic flow and operations, environmental constraints, geometric constraints, land use and transportation plans, forward compatibility with other projects, right-of-way and property impacts for each alternative.

Task 3.2 – Alternatives Screening Workshop

The CONSULTANT shall coordinate and facilitate one Alternatives Screening Workshop with personal from the CITY, WSDOT and other key stakeholders. The purpose of the workshop is to review conceptual build alternatives developed in Task 3.1, identify alternate configurations, and select two interchange configurations to move to a Level 2 screening.

Key Assumption(s)

- A maximum of four build alternatives will be analyzed in the alternatives screening effort.

Deliverable(s)

- Documentation of workshop will be prepared including alternatives screening decisions and recommended configuration selection.

Task 3.3 – Level 2 Alternatives Design Refinement

The CONSULTANT shall refine the geometric design of the two interchange configurations from Task 3.2. The design will be developed to a 5% level in order to:

- Provide data needed for a planning level cost estimate.
- Develop horizontal and vertical alignments.
- Identify potential design deviations.
- Quantify the approximate added impervious surface based on aerial imagery and identify storm water mitigation needs.

Key Assumption(s)

- A maximum of two build alternatives will be developed.
- WSDOT Design Manual will be used as the basis for design requirements.

Deliverables:

- Plan view layouts and vertical profiles of the two preferred alternatives.
- Description of areas where potential design deviations may be required.

WORK ELEMENT 4: TRAVEL DEMAND FORECASTING AND OPERATIONS ANALYSIS**Task 4.1 – Travel Demand Forecasting**

The CONSULTANT shall prepare Travel Demand Forecasting to a level of detail appropriate to assist in the alternatives screening process and selection of the recommended configuration within the Preliminary IJR. The CONSULTANT will use the PSRC travel demand model adapted by Fehr & Peers for the Fife Transportation System Plan. This model will be updated as needed to obtain baseline-forecasting information for the year of opening (2020) and horizon year (2040) as required by FHWA.

Under this task, the CONSULTANT shall draft a travel forecasting methods and assumptions technical memorandum that details the traffic forecasting methodology and baseline network assumptions to be employed on the Project. The CITY and WSDOT will review and approve the travel forecasting methods and assumptions technical memorandum prior to commencement of the travel forecasting effort. Work under this task shall include the following elements, several of which are already being conducted as part of the City of Fife Transportation System Plan (2040 only).

- Coordinate future land use changes and plans for the City of Fife, City of Tacoma, and Port of Tacoma, and Pierce County.
- Determine roadway network to assume for 2020 and 2040.
- Develop travel demand forecasting methods memorandum to confirm methods and gain consensus for developing traffic forecasts for the 2040 PM peak hour.
- Revise the travel demand model to reflect the agreed land use growth levels. New trip tables will be created.
- Revise the travel demand model to reflect future (2020 and 2040) baseline assumptions.
- Create select link analysis for each of the proposed interchange modifications to determine the trip distribution patterns and markets served by the interchange.
- Develop routing and O-D for vehicle routings in the study area for use in the traffic simulation model (VISSIM).

- Run traffic assignments in the revised model to obtain 2040 (PM peak) traffic volumes for No-Build and up to two Build Alternatives. Provide traffic data for up to 12 intersections and all I-5 freeway segments between the Port of Tacoma Road and (future) SR 167 interchanges. It is assumed that not all the build alternatives will require a revised traffic assignment run in the travel demand model.
- Conduct up to 4 sensitivity tests to analyze minor changes to the interchange configurations. One of these tests will also analyze the travel demand effects with and without the proposed SR 167 extension project.

Meeting(s)

- Maximum of four meetings

Key Assumption(s)

- Toll lanes or managed lanes on I-5 and SR 509 will not be included in any baseline or build alternative. SR 167 will be assumed to be tolled.
- PM peak volumes will be used for the screening of alternatives. AM peak volumes will only be used and/or developed to document existing conditions (2012), and horizon year conditions (2040) with the recommended configuration.
- The regional travel demand model will not be used to generate truck volumes in the study area. Truck volumes, routing, and percentages will be determined by updating prior studies related to growth at the Port of Tacoma and potential industrial growth in Fife and Tacoma. These truck volumes will be overlaid on top of the vehicular volumes generated from the regional travel demand model.

Deliverable(s)

- Draft travel demand forecasting methods and assumptions memorandum
- Final travel demand forecasting methods and assumptions memorandum
- Draft travel demand forecasting memorandum
- Final travel demand forecasting memorandum

Task 4.2 – Traffic Operations Analysis

The CONSULTANT shall conduct traffic operations for the No Build and up to 2 build configurations. The tools that will be used to conduct the traffic operations analysis will include VISSIM and the CITY's Synchro model. A Traffic operations methods and assumptions memo will be developed to gain consensus on the methods and assumptions to be applied to the traffic and safety operations analysis.

The traffic analysis of alternatives during the Level 1 screening process will be conducted using the EMME travel demand model and knowledge of existing and future travel patterns. The CONSULTANT will use EMME/2 (the travel demand model) to screen the alternatives down to two (2) build alternatives. This screening process will be at a high level, looking at the differences in raw model volumes and outputs (no LOS analysis).

For the Level 2 screening, more detailed analyses of up to 2 build alternatives will be performed using the CITY's Synchro model and the VISSIM simulation model. All screening analyses will be conducted using 2040 PM peak volumes. The 2020 volumes will be used to document year of opening conditions for the selected recommended configuration.

VISSIM will be used to test the effects of the two build alternatives on freeway operations for the section of I-5 from the future SR 167 extension to the Port of Tacoma Road interchange. The VISSIM model developed for Tideflats Area Transportation Study (TATS) will be used with minor adjustments during the Level 2 screening process. Further VISSIM refinements will be performed for the analysis of the recommended configuration. The CITY's Synchro model will be used to evaluate operations on the local street system and at the ramp interchanges. The CONSULTANT will perform AM peak 2-hour traffic counts at up to 12 intersections.

A summary of the scenarios that will receive detailed traffic operations analysis, the tool that will be used to conduct the analysis, and what is assumed for the SR 167 extension project is provided in the following table:

| Scenario | Analysis Tool | SR 167 Assumption |
|---|----------------|--|
| 2012 AM | VISSIM/Synchro | No |
| 2012 PM | VISSIM/Synchro | No |
| 2020 PM No Build | VISSIM/Synchro | No |
| 2020 PM Recommended | VISSIM/Synchro | No |
| 2040 PM No Build | VISSIM/Synchro | Phase 1 |
| 2040 AM Recommended | VISSIM/Synchro | Phase 1 |
| 2040 PM Recommended | VISSIM/Synchro | Phase 1 - test with and without SR 167 |
| 2040 PM Alternatives Analysis – Level 1 Screening | EMME | Phase 1 |
| 2040 PM Alternatives Analysis – Level 2 Screening (2 Build Alts.) | VISSIM/Synchro | Phase 1 |

Meeting(s)

- Maximum of four meetings

Key Assumption(s)

- VISSIM will be used to evaluate traffic operations on I-5 and ramps.
- The CITY's Synchro model will be used to analyze traffic operations on the local streets and the freeway ramp connections to the local street system.
- 2040 PM peak volumes will be used for the screening analysis. AM peak volumes will only be used to document existing conditions (2012) and horizon year conditions (2040) with the recommended configuration.

- The recommended configuration will be analyzed with and without the SR 167 extension (Phase 1 design).

Deliverable(s)

- Draft traffic operations methods and assumptions
- Final traffic operations methods and assumptions
- Draft traffic operations technical memorandum
- Final traffic operations technical memorandum

WORK ELEMENT 5: SAFETY ANALYSIS

Task 5.1 – Safety Analysis

The CONSULTANT will review the most recent three year collision history. Collision patterns and trends will be identified as well as calculation of crash rates per million vehicle miles traveled.

The CONSULTANT will assess changes to collision histories for the recommended configuration using the Federal Highway Administration collision reduction/counter measure factors. Collision estimates for the 2040 No-Build and recommended configuration will be derived based on existing collision data, in conjunction with traffic volume projections. The 2040 collision analysis study area will encompass the project footprint, as well as the freeway segments extending to the adjacent set of off/on-ramps.

Key Assumption(s)

- Three year collision history from WSDOT data will be used and supplemented with local information if available.

Deliverables:

- Technical Memorandum documenting collision history, and year 2040 no build and recommended configuration collision estimates.

WORK ELEMENT 6: ENVIRONMENTAL REVIEW

Task 6.1 – Wetland Reconnaissance

The purpose of the wetland reconnaissance is to preliminarily identify jurisdictional wetlands within the project corridor. The CONSULTANT will conduct an online search of available information of existing wetlands mapped within the project area. This includes but is not limited to, the National Wetlands Inventory (NWI) database; City critical areas maps; County critical areas maps; Natural Resources Conservation Service (NRCS) soils map data; and topographical maps. The CONSULTANT will also conduct a windshield survey by driving along and within the project corridor and determining by best scientific judgment potential wetlands and other aquatic areas within 200 feet of the project area.

Information to be collected during the field reconnaissance will include confirmation of existing wetland map data; photo documentation that accurately depicts the wetlands/aquatic resources within the project area as discovered during the field reconnaissance. Photos will include surrounding areas to trigger recollection for the windshield investigator; and field notes collected during the windshield investigation.

Task 6.2 – Cultural Resources Reconnaissance

The purpose of the cultural resources reconnaissance is to preliminarily identify historical properties and archeologically significant areas within the project corridor. The CONSULTANT will conduct an online search of available information of existing cultural resources mapping. This includes but is not limited to, the Washington Information System for Architectural and Archeological Records Data (WISSARD); and the National Register of Historic Places online database.

The CONSULTANT will also conduct a windshield survey by driving along and within the project corridor and confirming mapped data to real life data within 200 feet of the project area.

Task 6.3 – Prepare Environmental Screening Memorandum

The CONSULTANT will prepare an Environmental Screening Memo summarizing the findings from Tasks 6.1 and 6.2. The Memo will preliminarily identify specific environmental elements that would be impacted by this project, provide a summary of the anticipated impacts, and identify the necessary environmental reviews process.

Deliverable(s)

Draft Environmental Screening Memorandum
Final Environmental Screening Memorandum

WORK ELEMENT 7: COST ESTIMATING

Task 7.1 – Cost Estimating

The CONSULTANT will review project data, including the recommended interchange layouts that define location and size of proposed roadways, structures, general drainage needs, and right-of-way acquisitions needed. The CONSULTANT will perform planning-level cost estimating to prepare an engineer's estimate for the project consisting of the following specific elements:

- Planning-level construction cost estimate for the recommended configuration
- Planning-level cost estimate for preliminary engineering and right-of-way acquisition

Key Assumption(s)

- Cost estimating for roadway and structure elements will be based on the preliminary design configuration.
- Right-of-way cost estimating will use available GIS parcel maps provided by the CITY, County or WSDOT.

- Cost estimates will include quantity estimates for major project elements and will be based on square foot unit costs for structures and roadway elements.

Deliverable(s)

Planning level cost estimate for recommended configuration

WORK ELEMENT 8: PRELIMINARY IJR DOCUMENT

Task 8.1 – Prepare Preliminary IJR Document

The CONSULTANT will prepare a Preliminary IJR document. The document will address the following points at a planning level:

1. Need for the Access Point Revision
2. Reasonable Alternatives
3. Operational and Collision Analyses
4. Access Connections and Design
5. Land Use and Transportation Plans
6. Future Interchanges
7. Coordination
8. Environmental Processes

The CONSULTANT will submit a draft document to the CITY and WSDOT for review and comment. A final version will be developed incorporating the comments.

Key Assumption(s)

- The Preliminary IJR document will address the eight FHWA points at a planning level.

Deliverables:

Draft Preliminary IJR Document

Final Preliminary IJR Document

WORK ELEMENT 9: MANAGEMENT RESERVE

Task 9.1 – Management Reserve

The CITY may require additional services of the CONSULTANT during the Preliminary IJR analysis of the 54th Avenue E interchange with I-5. The scope of these services will be determined based on the unanticipated project needs or other considerations at the sole discretion of the CITY. These services could include additional interchange configurations, additional analysis, and addressing new issues that arise during the WSDOT and FHWA review. This work may include items identified in Tasks 1-8. This work will be conducted on an as needed basis within the budget allowances assigned for this task. The CONSULTANT will not proceed with this task until authorized by the CITY.

**Exhibit B
KPG Team**

DRAFT Project Budget For: City of Fife Preliminary IJR for the 54th Avenue E Interchange with I-5

Proposed Work Elements:

- Work Element 1. Project Management
- Work Element 2. Base Mapping
- Work Element 3. Alternatives Screening Analysis
- Work Element 4. Travel Forecasting and Operations Analysis
- Work Element 5. Safety Analysis

- Work Element 6. Environmental Review
- Work Element 7. Cost Estimating
- Work Element 8. Prepare Preliminary IJR Document
- Work Element 9. Management Reserve

Team Labor Hours

| | Rate | Work Element 1 | Work Element 2 | Work Element 3 | Work Element 4 | Work Element 5 | Work Element 6 | Work Element 7 | Work Element 8 | Work Element 9 | TOTAL |
|------------------------------------|-------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| KPG | | | | | | | | | | | |
| Senior Manager | \$180 | 34 | 2 | 26 | 8 | 2 | 0 | 0 | 8 | 10 | 90 |
| Senior Engineer | \$125 | 12 | 30 | 180 | 4 | 8 | 0 | 0 | 8 | 54 | 296 |
| Senior Planner | \$115 | 12 | 0 | 66 | 86 | 48 | 0 | 0 | 44 | 40 | 296 |
| Engineer | \$113 | 0 | 46 | 250 | 0 | 0 | 0 | 0 | 0 | 40 | 336 |
| Support | \$90 | 22 | 4 | 26 | 0 | 8 | 0 | 0 | 16 | 20 | 96 |
| Fehr & Peers | | | | | | | | | | | |
| Senior Manager | \$205 | 12 | 0 | 12 | 32 | 0 | 0 | 0 | 8 | 0 | 64 |
| Senior Engineer | \$160 | 0 | 0 | 34 | 124 | 0 | 0 | 0 | 12 | 0 | 170 |
| Planner | \$128 | 0 | 0 | 28 | 250 | 0 | 0 | 0 | 16 | 0 | 294 |
| Support | \$103 | 10 | 0 | 0 | 22 | 0 | 0 | 0 | 10 | 0 | 42 |
| Westby Consulting | | | | | | | | | | | |
| Senior Manager | \$154 | 28 | 0 | 108 | 24 | 12 | 0 | 0 | 52 | 0 | 224 |
| Widener & Associates | | | | | | | | | | | |
| Senior Manager | \$140 | 0 | 0 | 8 | 0 | 0 | 44 | 0 | 0 | 0 | 52 |
| Biologist | \$87 | 0 | 0 | 0 | 0 | 0 | 190 | 0 | 0 | 0 | 190 |
| Rohila Consulting | | | | | | | | | | | |
| Senior Engineer | \$125 | 0 | 8 | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 116 |
| CH2M Hill | | | | | | | | | | | |
| Senior Engineer | \$203 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| Engineer | \$142 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 0 | 0 | 110 |
| Support | \$72 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 14 |
| KPG Subtotal | | 80 | 82 | 548 | 98 | 66 | 0 | 0 | 76 | 164 | 1,114 |
| Fehr & Peers Subtotal | | 22 | 0 | 74 | 428 | 0 | 0 | 0 | 46 | 0 | 570 |
| Westby Consulting Subtotal | | 28 | 0 | 108 | 24 | 12 | 0 | 0 | 52 | 0 | 224 |
| Widener & Ass. Subtotal | | 0 | 0 | 8 | 0 | 0 | 234 | 0 | 0 | 0 | 242 |
| Rohila Consulting Subtotal | | 0 | 8 | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 116 |
| CH2M Hill Subtotal | | 0 | 0 | 0 | 0 | 0 | 0 | 129 | 0 | 0 | 129 |
| Team Total | | 130 | 90 | 846 | 550 | 78 | 234 | 129 | 174 | 164 | 2,295 |

Labor Fees

| | Work Element 1 | Work Element 2 | Work Element 3 | Work Element 4 | Work Element 5 | Work Element 6 | Work Element 7 | Work Element 8 | Work Element 9 | TOTAL |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------|
| KPG | | | | | | | | | | |
| Senior Manager | \$6,120 | \$360 | \$4,680 | \$1,440 | \$360 | \$0 | \$0 | \$1,440 | \$1,800 | \$14,200 |
| Senior Engineer | \$1,620 | \$4,050 | \$24,300 | \$540 | \$1,080 | \$0 | \$0 | \$1,080 | \$7,290 | \$39,960 |
| Senior Planner | \$1,380 | \$0 | \$7,590 | \$9,890 | \$5,520 | \$0 | \$0 | \$5,060 | \$4,600 | \$34,040 |
| Engineer | \$0 | \$5,198 | \$28,250 | \$0 | \$0 | \$0 | \$0 | \$0 | \$4,520 | \$37,968 |
| Support | \$1,980 | \$360 | \$2,340 | \$0 | \$720 | \$0 | \$0 | \$1,440 | \$1,800 | \$8,640 |
| Fehr & Peers | | | | | | | | | | |
| Senior Manager | \$2,460 | \$0 | \$2,460 | \$6,560 | \$0 | \$0 | \$0 | \$1,640 | \$0 | \$13,120 |
| Senior Engineer | \$0 | \$0 | \$5,440 | \$19,840 | \$0 | \$0 | \$0 | \$1,920 | \$0 | \$27,200 |
| Planner | \$0 | \$0 | \$3,584 | \$32,000 | \$0 | \$0 | \$0 | \$2,048 | \$0 | \$37,632 |
| Support | \$1,050 | \$0 | \$0 | \$2,310 | \$0 | \$0 | \$0 | \$1,050 | \$0 | \$4,410 |
| Westby Consulting | | | | | | | | | | |
| Senior Manager | \$4,312 | \$0 | \$16,632 | \$3,696 | \$1,848 | \$0 | \$0 | \$8,008 | \$0 | \$34,496 |
| Widener & Associates | | | | | | | | | | |
| Senior Manager | \$0 | \$0 | \$1,120 | \$0 | \$0 | \$6,160 | \$0 | \$0 | \$0 | \$7,280 |
| Biologist | \$0 | \$0 | \$0 | \$0 | \$0 | \$16,530 | \$0 | \$0 | \$0 | \$16,530 |
| Rohila Consulting | | | | | | | | | | |
| Senior Engineer | \$0 | \$1,000 | \$13,500 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$14,500 |
| CH2M Hill | | | | | | | | | | |
| Senior Engineer | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,015 | \$0 | \$0 | \$1,015 |
| Engineer | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$15,620 | \$0 | \$0 | \$15,620 |
| Support | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,008 | \$0 | \$0 | \$1,008 |
| KPG Subtotal | \$11,100 | \$9,968 | \$67,160 | \$11,870 | \$7,680 | \$0 | \$0 | \$9,620 | \$20,010 | \$136,808 |
| Fehr & Peers Subtotal | \$3,510 | \$0 | \$11,484 | \$60,710 | \$0 | \$0 | \$0 | \$6,658 | \$0 | \$82,362 |
| Westby Consulting Subtotal | \$4,312 | \$0 | \$16,632 | \$3,696 | \$1,848 | \$0 | \$0 | \$8,008 | \$0 | \$34,496 |
| Widener & Ass. Subtotal | \$0 | \$0 | \$1,120 | \$0 | \$0 | \$22,690 | \$0 | \$0 | \$0 | \$23,810 |
| Rohila Consulting Subtotal | \$0 | \$1,000 | \$13,500 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$14,500 |
| CH2M Hill Subtotal | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$17,643 | \$0 | \$0 | \$17,643 |
| Team Total | \$18,922 | \$10,968 | \$109,896 | \$76,276 | \$9,528 | \$22,690 | \$17,643 | \$23,686 | \$20,010 | \$309,619 |

Direct Expenses

| | Work Element 1 | Work Element 2 | Work Element 3 | Work Element 4 | Work Element 5 | Work Element 6 | Work Element 7 | Work Element 8 | Work Element 9 | TOTAL |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------|
| Mileage - KPG | \$60 | \$20 | \$60 | \$40 | \$40 | \$0 | \$0 | \$0 | \$0 | \$220 |
| Reproduction - KPG | \$100 | \$140 | \$180 | \$60 | \$60 | \$0 | \$0 | \$220 | \$0 | \$760 |
| Traffic Counts - KPG | \$0 | \$0 | \$0 | \$1,080 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,080 |
| Mileage - Fehr & Peers | \$0 | \$0 | \$60 | \$140 | \$0 | \$0 | \$0 | \$0 | \$0 | \$200 |
| Reproduction - Fehr & Peers | \$100 | \$0 | \$280 | \$380 | \$0 | \$0 | \$0 | \$200 | \$0 | \$960 |
| Mileage - Westby Consulting | \$40 | \$0 | \$40 | \$40 | \$0 | \$0 | \$0 | \$0 | \$0 | \$120 |
| Reproduction - Westby Consulting | \$20 | \$0 | \$40 | \$20 | \$20 | \$0 | \$0 | \$40 | \$0 | \$140 |
| Mileage - Widener & Associates | \$0 | \$0 | \$20 | \$0 | \$0 | \$60 | \$0 | \$0 | \$0 | \$80 |
| Reproduction - Widener & Ass. | \$0 | \$0 | \$20 | \$0 | \$0 | \$40 | \$0 | \$0 | \$0 | \$60 |
| Mileage - Rohila Consulting | \$0 | \$0 | \$60 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$60 |
| Reproduction - Rohila Consulting | \$0 | \$10 | \$30 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$40 |
| Mileage - CH2M Hill | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$40 | \$0 | \$0 | \$40 |
| Reproduction - CH2M Hill | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$30 | \$0 | \$0 | \$30 |
| Direct Expenses - KPG | \$160 | \$160 | \$340 | \$1,180 | \$100 | \$0 | \$0 | \$220 | \$0 | \$2,060 |
| Direct Expenses - Fehr & Peers | \$100 | \$0 | \$340 | \$520 | \$0 | \$0 | \$0 | \$200 | \$0 | \$1,160 |
| Direct Expenses - Westby Consulting | \$60 | \$0 | \$80 | \$60 | \$20 | \$0 | \$0 | \$40 | \$0 | \$260 |
| Direct Expenses - Widener & Ass. | \$0 | \$0 | \$40 | \$0 | \$0 | \$100 | \$0 | \$0 | \$0 | \$140 |
| Direct Expenses - Rohila Consulting | \$0 | \$10 | \$90 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$100 |
| Direct Expenses - CH2M Hill | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$70 | \$0 | \$0 | \$70 |
| Direct Expenses - Team Total | \$320 | \$170 | \$790 | \$1,760 | \$120 | \$100 | \$70 | \$460 | \$0 | \$2,790 |

PROJECT BUDGET GRAND TOTALS

| | Work Element 1 | Work Element 2 | Work Element 3 | Work Element 4 | Work Element 5 | Work Element 6 | Work Element 7 | Work Element 8 | Work Element 9 | TOTAL |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------|
| Fees | \$18,922 | \$10,968 | \$109,896 | \$76,276 | \$9,528 | \$22,690 | \$17,643 | \$23,686 | \$20,010 | \$309,619 |
| Direct Expenses | \$320 | \$170 | \$790 | \$1,760 | \$120 | \$100 | \$70 | \$460 | \$0 | \$2,790 |
| Total Project - KPG | \$11,260 | \$10,128 | \$67,400 | \$13,050 | \$7,780 | \$0 | \$0 | \$9,240 | \$20,010 | \$138,868 |
| Total Project - Fehr & Peers | \$3,610 | \$0 | \$11,824 | \$61,230 | \$0 | \$0 | \$0 | \$6,858 | \$0 | \$83,522 |
| Total Project - Westby Consulting | \$4,372 | \$0 | \$16,712 | \$3,756 | \$1,868 | \$0 | \$0 | \$8,048 | \$0 | \$34,756 |
| Total Project - Widener & Associates | \$0 | \$0 | \$1,160 | \$0 | \$0 | \$22,790 | \$0 | \$0 | \$0 | \$23,950 |
| Total Project - Rohila Consulting | \$0 | \$1,010 | \$13,590 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$14,600 |
| Total Project - CH2M Hill | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$17,713 | \$0 | \$0 | \$17,713 |
| TOTAL PROJECT | \$19,242 | \$11,128 | \$110,686 | \$78,036 | \$9,648 | \$22,790 | \$17,713 | \$24,146 | \$20,010 | \$313,409 |

KPG Team
Project Budget For: City of Fife Preliminary IJR for the 54th Avenue E Interchange with I-5

Proposed Work Elements:

- Work Element 1. Project Management
 - Task 1.1 Project Management
 - Task 1.2 Monthly Progress Reports and Invoicing
 - Task 1.3 Coordination Meetings
- Work Element 2. Base Mapping
 - Task 2.1 Base Map
- Work Element 3. Alternatives Screening Analysis
 - Task 3.1 Level 1 Alternative Development
 - Task 3.2 Alternatives Development Workshop
 - Task 3.3 Level 2 Alternatives Design Refinement
- Work Element 4. Travel Forecasting and Operations Analysis
 - Task 4.1 Travel Demand Forecasting
 - Task 4.2 Traffic Operations Analysis

- Work Element 5. Safety Analysis
 - Task 5.1 Safety Analysis
- Work Element 6. Environmental Review
 - Task 6.1 Wetland Reconnaissance
 - Task 6.2 Cultural Resources Reconnaissance
 - Task 6.3 Prepare Environmental Screening Memorandum
- Work Element 7. Cost Estimating
 - Task 7.1 Cost Estimating
- Work Element 8. Prepare Preliminary IJR Document
 - Task 8.1 Prepare Preliminary IJR Document
- Work Element 9. Management Reserve
 - Task 9.1 Management Reserve

Team Labor Hours

| | Rate | Task 1.1 | Task 1.2 | Task 1.3 | Task 2.1 | Task 3.1 | Task 3.2 | Task 3.3 | Task 4.1 | Task 4.2 | Task 5.1 | Task 6.1 | Task 6.2 | Task 6.3 | Task 7.1 | Task 8.1 | Task 9.1 | TOTAL |
|------------------------------------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------|
| KPG | | | | | | | | | | | | | | | | | | |
| Senior Manager | \$180 | 10 | 8 | 16 | 2 | 10 | 8 | 8 | 4 | 4 | 2 | 0 | 0 | 0 | 0 | 8 | 10 | 90 |
| Senior Engineer | \$135 | 0 | 0 | 12 | 30 | 80 | 16 | 84 | 0 | 4 | 8 | 0 | 0 | 0 | 0 | 8 | 54 | 296 |
| Senior Planner | \$115 | 0 | 0 | 12 | 0 | 34 | 16 | 16 | 28 | 58 | 48 | 0 | 0 | 0 | 0 | 44 | 40 | 296 |
| Engineer | \$113 | 0 | 0 | 0 | 46 | 160 | 0 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 336 |
| Support | \$90 | 0 | 10 | 12 | 4 | 8 | 8 | 10 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 16 | 20 | 96 |
| Fehr & Peers | | | | | | | | | | | | | | | | | | |
| Senior Manager | \$205 | 6 | 6 | 0 | 0 | 4 | 4 | 4 | 16 | 16 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 64 |
| Senior Engineer | \$160 | 0 | 0 | 0 | 0 | 22 | 8 | 4 | 44 | 80 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 170 |
| Planner | \$128 | 0 | 0 | 0 | 0 | 20 | 4 | 4 | 62 | 188 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 294 |
| Support | \$105 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 10 | 12 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 42 |
| Westby Consulting | | | | | | | | | | | | | | | | | | |
| Senior Manager | \$154 | 6 | 6 | 16 | 0 | 52 | 16 | 40 | 16 | 8 | 12 | 0 | 0 | 0 | 0 | 52 | 0 | 224 |
| Widener & Associates | | | | | | | | | | | | | | | | | | |
| Senior Manager | \$140 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 14 | 22 | 8 | 0 | 0 | 0 | 52 |
| Biologist | \$87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86 | 88 | 16 | 0 | 0 | 0 | 190 |
| Robila Consulting | | | | | | | | | | | | | | | | | | |
| Senior Engineer | \$123 | 0 | 0 | 0 | 8 | 46 | 8 | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 116 |
| CH2M Hill | | | | | | | | | | | | | | | | | | |
| Senior Engineer | \$203 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| Engineer | \$142 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 0 | 0 | 110 |
| Support | \$72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 14 |
| KPG Subtotal | | 10 | 18 | 52 | 82 | 292 | 48 | 208 | 32 | 66 | 66 | 0 | 0 | 0 | 0 | 76 | 164 | 1,114 |
| Fehr & Peers Subtotal | | 6 | 16 | 0 | 0 | 46 | 16 | 12 | 132 | 296 | 0 | 0 | 0 | 0 | 0 | 46 | 0 | 570 |
| Westby Consulting Subtotal | | 6 | 6 | 16 | 0 | 52 | 16 | 40 | 16 | 8 | 12 | 0 | 0 | 0 | 0 | 52 | 0 | 224 |
| Widener & Ass. Subtotal | | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 100 | 110 | 24 | 0 | 0 | 0 | 242 |
| Robila Consulting Subtotal | | 0 | 0 | 0 | 8 | 46 | 8 | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 116 |
| CH2M Hill Subtotal | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 129 | 0 | 0 | 129 |
| Team Total | | 22 | 40 | 68 | 90 | 436 | 96 | 344 | 180 | 370 | 78 | 100 | 110 | 24 | 129 | 174 | 164 | 2,395 |

Labor Fees

| | Task 1.1 | Task 1.2 | Task 1.3 | Task 2.1 | Task 3.1 | Task 3.2 | Task 3.3 | Task 4.1 | Task 4.2 | Task 5.1 | Task 6.1 | Task 6.2 | Task 6.3 | Task 7.1 | Task 8.1 | Task 9.1 | TOTAL |
|------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| KPG | | | | | | | | | | | | | | | | | |
| Senior Manager | \$1,800 | \$1,440 | \$2,880 | \$360 | \$1,800 | \$1,440 | \$1,440 | \$720 | \$720 | \$360 | \$0 | \$0 | \$0 | \$0 | \$1,440 | \$1,800 | \$16,200 |
| Senior Engineer | \$0 | \$0 | \$1,620 | \$4,050 | \$10,800 | \$2,160 | \$11,340 | \$0 | \$540 | \$1,080 | \$0 | \$0 | \$0 | \$0 | \$1,080 | \$7,200 | \$39,960 |
| Senior Planner | \$0 | \$0 | \$1,380 | \$0 | \$3,910 | \$1,840 | \$1,840 | \$3,220 | \$6,670 | \$5,520 | \$0 | \$0 | \$0 | \$0 | \$5,060 | \$4,600 | \$34,040 |
| Engineer | \$0 | \$0 | \$0 | \$5,198 | \$18,080 | \$0 | \$10,170 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$4,520 | \$37,968 |
| Support | \$0 | \$900 | \$1,080 | \$360 | \$720 | \$720 | \$900 | \$0 | \$0 | \$720 | \$0 | \$0 | \$0 | \$0 | \$1,440 | \$1,800 | \$8,640 |
| Fehr & Peers | | | | | | | | | | | | | | | | | |
| Senior Manager | \$1,230 | \$1,230 | \$0 | \$0 | \$820 | \$820 | \$820 | \$3,280 | \$3,280 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,640 | \$0 | \$13,120 |
| Senior Engineer | \$0 | \$0 | \$0 | \$0 | \$3,520 | \$1,280 | \$640 | \$7,040 | \$12,800 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,920 | \$0 | \$27,200 |
| Planner | \$0 | \$0 | \$0 | \$0 | \$2,560 | \$512 | \$512 | \$7,936 | \$24,064 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,048 | \$0 | \$37,632 |
| Support | \$0 | \$1,050 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,050 | \$1,260 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,050 | \$0 | \$4,410 |
| Westby Consulting | | | | | | | | | | | | | | | | | |
| Senior Manager | \$924 | \$924 | \$2,464 | \$0 | \$8,008 | \$2,464 | \$6,160 | \$2,464 | \$1,232 | \$1,848 | \$0 | \$0 | \$0 | \$0 | \$8,008 | \$0 | \$34,496 |
| Widener & Associates | | | | | | | | | | | | | | | | | |
| Senior Manager | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,120 | \$0 | \$0 | \$0 | \$0 | \$1,960 | \$3,080 | \$1,120 | \$0 | \$0 | \$0 | \$7,280 |
| Biologist | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$7,482 | \$7,656 | \$1,392 | \$0 | \$0 | \$0 | \$16,530 |
| Robila Consulting | | | | | | | | | | | | | | | | | |
| Senior Engineer | \$0 | \$0 | \$0 | \$1,000 | \$5,750 | \$1,000 | \$6,750 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$14,500 |
| CH2M Hill | | | | | | | | | | | | | | | | | |
| Senior Engineer | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,015 | \$0 | \$0 | \$1,015 |
| Engineer | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$15,620 | \$0 | \$0 | \$15,620 |
| Support | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,008 | \$0 | \$0 | \$1,008 |
| KPG Subtotal | \$1,800 | \$2,340 | \$6,960 | \$9,968 | \$35,310 | \$6,160 | \$25,690 | \$3,940 | \$7,930 | \$7,680 | \$0 | \$0 | \$0 | \$0 | \$9,020 | \$20,010 | \$136,808 |
| Fehr & Peers Subtotal | \$1,230 | \$2,280 | \$0 | \$0 | \$6,900 | \$2,612 | \$11,972 | \$19,306 | \$41,404 | \$0 | \$0 | \$0 | \$0 | \$0 | \$6,658 | \$0 | \$82,362 |
| Westby Consulting Subtotal | \$924 | \$924 | \$2,464 | \$0 | \$8,008 | \$2,464 | \$6,160 | \$2,464 | \$1,232 | \$1,848 | \$0 | \$0 | \$0 | \$0 | \$8,008 | \$0 | \$34,496 |
| Widener & Ass. Subtotal | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,120 | \$0 | \$0 | \$0 | \$0 | \$1,960 | \$3,080 | \$2,512 | \$0 | \$0 | \$0 | \$23,810 |
| Robila Consulting Subtotal | \$0 | \$0 | \$0 | \$1,000 | \$5,750 | \$1,000 | \$6,750 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$14,500 |
| CH2M Hill Subtotal | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$17,643 | \$0 | \$0 | \$17,643 |
| Team Total | \$3,954 | \$5,544 | \$9,424 | \$10,968 | \$55,968 | \$13,356 | \$40,572 | \$25,710 | \$50,566 | \$9,528 | \$9,442 | \$10,736 | \$2,512 | \$17,643 | \$23,686 | \$20,010 | \$309,619 |