

**MEMORANDUM**  
**For Meeting of January 27, 2009**

TO: Mayor and Councilmembers  
 THROUGH: Steve Worthington  
 FROM: Russ Blount and Ken Gill  
 SUBJECT: **Resolution 1281** – Authorize City Manager to sign a Professional Services Contract with KPG for Design Services associated with Local Improvement District 2008-02

**REPORT IN BRIEF:** Authorize a contract for design engineering and appraisal services for this project. Deliverables include plans and specifications for bid for construction.

**BACKGROUND:** The Council passed Resolutions 1237 and 1239 on September 9, 2008. Resolution 1237 authorized and directed the City Manager to sign petitions for a local Improvement District (LID) and Resolution 1239 set a public hearing for October 14 to formally consider the formation of a Local Improvement District (LID). Council held the public hearing and approved a first reading of Ordinance 1683 to form LID08-02 on October 14<sup>th</sup>, 2008. Second reading was approved and Ordinance 1683 adopted on October 28<sup>th</sup>, 2008.

**ATTACHMENTS:** Resolution 1281, EXHIBIT A-Scope of Work, EXHIBIT B-Budget.

**DISCUSSION:** Staff advertised a request for qualifications; received and reviewed 19 submittals, which were reviewed by five panelists. The panel selected three firms (KPG, RH2 and DEA) for interview on December 19, 2008, and selected KPG as the most qualified.

**FISCAL IMPACT:** \$624,034 or approximately 7.5% of the estimated construction cost.

**ALTERNATIVE COURSES OF ACTION:**

1. Approve Resolution 1281, authorizing award of a contract with RH2.
2. Amend Resolution 1281, and then approve the amended resolution.
3. Table Resolution 1281, direct staff to negotiate specific changes to the proposed contract, and to distribute the amended contract with Resolution 1281 in the packet for the meeting at which the tabled resolution is to be considered.
4. Decline to approve Resolution 1281.

**RECOMMENDATIONS:** Approve Resolution 1281, authorizing award of a contract with KPG.

**SUGGESTED MOTION:** Motion to approve Resolution 1281.



Russ Blount  
 Public Works Director

Approved for Agenda



Steve Worthington  
 City Manager

RESOLUTION NO. 1281

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FIFE, PIERCE COUNTY, WASHINGTON AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT WITH KPG FOR ENGINEERING SERVICES FOR LOCAL IMPROVEMENT DISTRICT 2008-02 TO FUND EXTENSION OF SANITARY SEWERS ON 45<sup>TH</sup> STREET EAST AND 48<sup>TH</sup> STREET EAST, AND WATER MAIN AND SANITARY SEWER ON 48<sup>TH</sup> STREET EAST, BOTH FROM 70<sup>TH</sup> AVENUE EAST

WHEREAS, by Ordinance No. 1683, adopted October 28, 2008 the City formed Local Improvement District 08-02 and ordered certain sanitary sewer improvements be constructed and installed on 70<sup>th</sup> Avenue East, south of 43<sup>rd</sup> Street East, and on 45<sup>th</sup> Street East, east of 70<sup>th</sup> avenue east, and certain sanitary sewer, water and storm drainage improvements be constructed and installed on 48<sup>th</sup> Street East, east of 70<sup>th</sup> Avenue East (the "Improvements"); and

WHEREAS, staff have reviewed 19 submittals for qualifications of engineers, interviewed three firms, determined that KPG is most qualified, and negotiated the scope and fee for preparation of plans and specifications for the Improvements; now, therefore,

BE IT RESOLVED that the City Manager is authorized to execute a contract with KPG Engineers Planners Scientists for preparation of plans and specifications for the LID 08-02 Improvements, in general conformance with the attached, for a total cost not to exceed \$624, 034.

ADOPTED by the City Council at an open public meeting held on the 27th day of January, 2009.

\_\_\_\_\_  
Barry D. Johnson, Mayor

Attest:

\_\_\_\_\_  
Steven Marcotte, City Clerk/Treasurer

EXHIBIT A  
**City of Fife**  
**48<sup>th</sup> Street East (LID 08-02)**

**KPG**  
**Scope of Work**  
**January 2, 2009**

**INTRODUCTION**

Improvements to be included within the LID 08-02 are anticipated to be the following:

- 70<sup>th</sup> Avenue East – Sanitary sewer starting approximately 140- feet south of 43<sup>rd</sup> Street East to Levee Road East.
- 45<sup>th</sup> Street East – Sanitary sewer starting at 70<sup>th</sup> Avenue East to the west edge of the American Fast Freight (AFF) development.
- 48<sup>th</sup> Street East – Sanitary sewer, storm sewer, water main, and roadway reconstruction from 70<sup>th</sup> Ave East to the east edge of the LID 08-02 boundary.
- Regional stormwater treatment facility location to be determined under the Preliminary Design Phase.

The following Scope of Work includes the effort to complete the above described improvements:

**SCOPE OF WORK**

**Task 1.0 – Management/Coordination/Administration**

Task covers the effort required to manage the contract and to assure that the project meets the client's expectations for schedule, budget, and quality of product:

- 1.1 The Consultant shall provide continuous project management and administration to complete bid documents.
- 1.2 Prepare and update a detailed project schedule.
- 1.3 Provide monthly progress reports.
- 1.4 Coordinate with City staff at monthly project meetings (estimated 12 meetings).
- 1.5 Prepare for and attend KPG team meetings (estimated 12 meetings).
- 1.6 Provide QA/QC reviews of all submittals (preliminary design, 90% and Final submittals)

## EXHIBIT A

### Products:

- Monthly progress letter and invoicing.
- Project Schedule utilizing Microsoft Projects.
- Meeting minutes for Consultant/City Meetings.
- QA/QC of all submittal packages.

### Assumptions:

- Project will last for approximately 12 months.

### Task 2.0 – Survey and Base Mapping

This task covers the effort to create a basemap of existing features and right-of-way lines along the project limits. Survey will be conducted in two phases. The first phase will provide information to determine existing right-of-way locations and elevations to confirm future service areas. The goal for the preliminary survey is to provide the required information to determine right-of-way and approximate elevations to perform preliminary design. This will allow preliminary design to move forward while the base mapping for the final design is being completed.

#### 2.1 Preliminary survey:

- 2.1.1 Locate existing monuments and property markers in the LID boundary as required to define right-of-way location.
- 2.1.2 Provide roadway centerline elevations at approximately 500-foot intervals for roads within the LID boundary and future service area which include the Freeman Road from the railroad tracks to Levee Road, 48<sup>th</sup> from the LID boundary to Freeman Road, 78<sup>th</sup> Ave East, 49<sup>th</sup> Street East, 50<sup>th</sup> Street East and connecting roads, 52<sup>nd</sup> Street East, and 85<sup>th</sup> Ave East.
- 2.1.3 Provide elevations of City property between 48<sup>th</sup> Street East and Levee Road. These elevations will only cover the outer limits of the property as required to determine sanitary sewer depths.
- 2.1.4 Provide preliminary mapping of the low area of the City property along Levee Road, elevations of Levee Road, elevations of access road along Puyallup River, and elevation of Ordinary High Water Mark of the Puyallup River. This information will be used during preliminary design to determine the feasibility of a water quality pond. If the water quality pond is to be determined feasible in this area, additional mapping will be required which is not included within this Scope and Budget.

- 2.2 Survey limits of the topographic mapping for final design will be from right-of-way to right-of-way lines on all roads within the LID limits and a 50-foot wide section along the

## EXHIBIT A

proposed storm drainage easement between AFF at the end of 45<sup>th</sup> Street East and 48<sup>th</sup> Street East.

- 2.3 Survey Control – Existing monuments and property markers will be located and horizontal and vertical control points set, which will be used for mapping and control during construction.
- 2.4 Right-of-Way:
  - 2.4.1 The existing right-of-way will be defined for all roadways within the LID project limits.
  - 2.4.2 Approximate Parcel Lines – Parcel lines location adjoining the right-of-way lines will be defined for all parcels along frontage of the adjacent roadways. Interior parcel lines which do not adjoin the ROW will not be defined.
- 2.5 Legal Descriptions and figures will be prepared for:
  - 2.5.1 One ROW take assumed to be in the SE corner of 48<sup>th</sup> Street East and 70<sup>th</sup> Ave East.
  - 2.5.2 Two permanent utility easements assumed to be located on a property line between AFF and 48<sup>th</sup> Street East.
- 2.6 Additional Survey – Two days of survey field time has been included in the budget to provide additional mapping which may include:
  - 2.6.1 Minor extensions of project limits.
  - 2.6.2 Staking of proposed improvements for right-of-way acquisition process.
- 2.7 Utility locations – KPG will utilize the services of Applied Professionals Services to mark locations of underground private utilities including gas, communications, and power.
- 2.8 Gravity utility structures – Measure downs and sketches will be provide for all sanitary and storm sewer structures.

### Products:

- Electronic basemap showing existing right-of-way, parcel lines for adjoining parcels, utilities, and surface features.
- Legal descriptions and figures for one ROW take and two utility easements.

### Assumptions:

- Existing Fife Benchmarks FS-31, 32, and 37 are usable.
- Preliminary Survey elevations will be collected with GPS and are intended to provide only approximate elevations as required to complete preliminary design.
- Basemap will be prepared in AutoCAD 2007 using KPG drafting Standards.
- Three title reports will be required, one for ROW take and two for utility easements.
- Horizontal and Vertical Datum will be City Standard.

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- Rights-of-Entry for survey will not be required.

### Task 3.0 – Preliminary Design Memo

Efforts under this task includes the anticipated work necessary to complete the preliminary design required to document design decisions to complete preliminary design. Design alternatives prepared and modified as required to meet City and project needs with the goal of arriving at a preferred alternative prior to proceeding to final design. The following issues will be addressed during preliminary design:

- Review existing LID information and transfer knowledge from RH2 to the KPG design team.
  - Confirm the sanitary sewer pipe size and depths required for the future extension of the sewer main.
  - Review alternative alignments options of the Sanitary Sewer.
  - Determine if a water main extension between 48<sup>th</sup> Street and AFF should be installed to create a loop system.
  - Review options for storm water treatment locations.
  - Review options to deal with overhead power line conflicts.
- 3.1 Review of existing LID information – The KPG will hire RH2 as a subconsultant to review existing information and gather information made during the LID formation stage. It is anticipated that this will require two (2) meetings with RH2. As part of this task RH2 will compile existing files and transfer to KPG.
- 3.2 Confirm sanitary sewer line size and depths – Under this task the design team will review the information provided by RH2 along with the survey information collected under the preliminary survey task to confirm required invert elevations and pipe sizes to insure that the ultimate service area of the LID can be served.
- 3.3 Alternative Sanitary Sewer alignment – Under this task the design team will review two options for locations of the sanitary sewer mainline versus what is shown in the preliminary LID formation stage documentation. Each comparison will consider easement and construction costs. The options which will be reviewed are as follows:

## EXHIBIT A

- 3.3.1 Locate sewer main in the existing paved surface of 45<sup>th</sup> Street East or locate it in an easement to the north of the existing roadway.
- 3.3.2 Locate the sewer main down 45<sup>th</sup> Street East then through the proposed utility easement between 45<sup>th</sup> Street East and 48<sup>th</sup> Street East. This alternative will compare the cost savings of the rerouted main line to the cost of the additional shallow sanitary sewer lines.
- 3.4 Preliminary Water Main Design – Under this task of work the design team will review the feasibility of making a water main connection between AFF and the east end of the water main extension on 48<sup>th</sup> Street East. This review will compare the benefits of the looped system (fire flow and maintenance) versus the increase initial construction costs.
- 3.5 Stormwater Treatment – For this task of work, a design memorandum will be prepared to compare two alternatives for treatment of the stormwater. These options are:
  - Alternative 1: Stormwater quality and quantity pond located along the south side of 48<sup>th</sup> Street East on the City owned property with an outfall to the Firwood Ditch. This option will be sized per the 2005 DOE manual to meet stormwater needs for the proposed stormwater LID area and commitments to AFF.
  - Alternative 2: Available City property between 48<sup>th</sup> St. E and Levee Road will be reviewed for possible locations of a the stormwater quality and quantity which may outfall to a loction different than the Firwood ditch. This alternative would be sized as described for Alternative 1 with the addition of other areas which are located within the LID boundary and could potential drain to the treatment pond location.
- 3.5.1 The design memorandum will compare property requirements, service area, construction costs, design costs, and permit timelines for each alternative.
- 3.6 Overhead Power Line conflicts – Effort under this task of work will consist of meetings with Puget Sound Energy (2 assumed) and Tacoma Power (1 assumed) to review alternatives on how best to deal with the existing overhead power lines along 70<sup>th</sup> Ave East and 48<sup>th</sup> Street East. A design memorandum will be prepared outline options and provide a recommendation as how to deal with the overhead power line conflicts. In addition to meeting with power purveyors KPG and Jacobs will meet to review options and how they relate to construction requirements such as excavation of Sanitary Sewer trench and installation of dewatering wells.
- 3.7 Review future service areas to determine locations of manholes and future laterals sizes and provide schematic layout for location of LID 08-2 Sewer Main locations and future service locations. The future service area is anticipated to include the Freeman Road from the railroad tracks to Levee Road, 48<sup>th</sup> from LID boundary to Freeman road,

## EXHIBIT A

78<sup>th</sup> Ave East, 49<sup>th</sup> Street East, 50<sup>th</sup> Street East and connecting roads, 52<sup>nd</sup> Street East, and 85<sup>th</sup> Ave East.

- 3.8 Coordination with City of Puyallup – This effort will consist of arranging and meeting with the City of Puyallup to review and compare future service areas for both water and sanitary sewer mains. Although the out come of this meeting will not modify and existing service areas it may dictate the size and elevations of the sewer mains installed under this LID so not to preclude areas which may be included within the service area in the future.

### **Products:**

The above preliminary design information will be summarized in a Technical Design Report containing the following technical memorandums:

- Updated construction cost estimate based on information provide by RH2.
- Updated preliminary assessment roll based on updated cost estimate.
- Required main sizes, slopes and depths for the sanitary sewer main.
- Alternative analysis for sanitary sewer location.
- Analysis of making a water main connection between AFF and 48<sup>th</sup> Street East.
- Alternative analysis for stormwater treatment pond size and location.
- Alternative analysis for dealing with existing overhead power line conflicts.
- Figure showing routing of sewer mains in future service areas.

### **Assumptions:**

- Upon completion of the Technical Design Report one meeting with the City will be conducted to review the recommendations and minor modifications will be performed prior to final submittal.
- Upon final submittal, the City will determine which options or alternatives will be incorporated into the final design.
- Alternatives and options outside those described above will not be reviewed.
- Final design will not proceed on items affected by preliminary design until decisions have been finalized by the City.
- Design of the alternative stormwater treatment pond located along Levee Road is not included in this Scope and Budget.

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### Task 4.0 – Public Involvement

Efforts under this task include the anticipated work necessary to form and execute a public involvement and outreach plan during the design portion of this project. This plan shall encapsulate and inform stakeholders such as property owners, City staff, council members, and the surrounding communities. Methods of outreach shall be in the form of property owner one-on-one meetings, open houses, council meetings, and informational flyers.

- 4.1 The consultant shall prepare up to three (3) public notices to inform citizens and businesses of the design progress and upcoming community meetings.
- 4.2 One-on-one property owner meetings (estimate 18 property owners @ 3 hours each). Depending on the issues involved with each parcel these meetings will be conducted by either the Project Manager or Project Engineer. These meetings will be:
  - 4.2.1 Inform property owners of what can be expected during construction.
  - 4.2.2 Locate existing waste drain line out of structures which will determine the best horizontal and vertical location of sewer service laterals.
  - 4.2.3 Determine water main service size and location base on anticipated use.
  - 4.2.4 A summary sheet will be provided for each meeting documenting conversations, property owner concerns and sketch of sewer laterals in relationship to structures.
  - 4.2.5 Prepare and obtain a temporary Construction Right-of-Entry for each property owner.
- 4.3 The consultant shall prepare for and attend two (2) community open house meetings.
- 4.4 The consultant shall prepare for and attend up to two (2) council meetings to update council on the projects progress and receive input.

#### Products:

- Public notices utilizing graphics software (InDesign).
- Community meeting graphics.
- Meeting notes from property one-on-one meetings and graphics.
- Council meeting graphics.

#### Assumptions:

- City shall prepare distribution list for public notices and mail notices.
- Community open house meeting venue shall be secured by the City.

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### Task 5.0 – Geotechnical Investigation

**5.1 Data Gathering and Geotechnical Exploration Plan:** The CONSULTANT will obtain and review existing information, coordinate and plan access and restoration for test holes, and identify features that affect other geotechnical design work elements. No field investigation will proceed until the geotechnical exploration plan has been approved by the City. The CONSULTANT will prepare a geotechnical exploration plan that identifies the location and type (boring, test pit) of investigation to be performed at each exploration location along the project. The exploration plan will include 1"=40' plan views showing these locations.

**5.2 Field Explorations:** The CONSULTANT will conduct a field exploration program to characterize soil and groundwater conditions to support design of the sanitary sewer, stormwater, and water pipelines, and stormwater detention facilities.

Complete a series of nine (9) borings and 6 cone penetrometer test (CPT) soundings to depths of between 15 and 40 ft below existing grades to characterize subsurface soil and groundwater conditions along the pipeline alignments. Four (4) borings and three (3) CPT soundings will be located on 70<sup>th</sup> Avenue East, one (1) boring and one (1) CPT sounding will be located on 45<sup>th</sup> Street Court East, and two (2) borings and two (2) CPT soundings will be located on 48<sup>th</sup> Street East. Two (2) additional borings are planned to support the potential new outfall to the Puyallup River. The borings will be completed by a Holocene Drilling, Inc. under subcontract to the CONSULTANT with a truck-mounted drill rig advancing hollow-stem augers. The CPT soundings will be completed by Insitu Engineering under subcontract to the CONSULTANT with a truck-mounted rig. The CONSULTANT will mark the boring locations in the field and arrange for underground utility location ("call before you dig") prior to drilling.

Piezometers will be installed in five of the borings for subsequent measurement of groundwater levels. Groundwater levels at the time of drilling (if encountered) will also be recorded. The piezometers will be installed in accordance with WAC 173-160. Piezometers will be fitted with a flush-mount monument cover to protect the piezometer from damage. We have budgeted for 3 rounds of groundwater measurements.

**5.3 Geotechnical Laboratory Testing:** Complete a limited geotechnical laboratory testing program consisting of natural moisture content determinations and grain size analyses (course-grain soil) and/or Atterberg limit determinations (fine-grain soil) on selected soil samples from the borings to aid in classifying site soils and determining pertinent engineering properties of the soil. We have budgeted for 16 moisture content determinations and 30 grain size analyses/Atterberg limit determinations.

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### Assumptions

- All subcontractors, equipment subcontractors, laboratories, traffic control personnel and other related subcontractor personnel will be selected, hired and paid by the CONSULTANT.
- Appropriate traffic control, consisting of flaggers and warning signs, will be provided during completion of explorations within the City right-of-way. We will submit a traffic control plan to the City for approval prior to commencing field explorations.
- If necessary, the City will arrange for right of entry onto private property to complete the explorations and provide a street use permit for work within the right-of-way. We have included in our budget the cost of the necessary street use bond.
- For this project, we have budgeted for a total of 225 ft of drilling and 150 ft of CPT soundings.
- Soil sampling will be in accordance with ASTM D1586 (Standard Penetration Test procedure), ASTM D3550 (Ring-lined Barrel Sampling of Soil), and ASTM 1587 (Thin-Walled Tube Sampling of Soil).
- Abandonment of the piezometers is not included in our scope of services. Abandonment of piezometers will be made part of the construction specifications.
- Upon completion of drilling and sampling, the boreholes without piezometers and the CPT soundings will be abandoned in accordance with WAC 173-160. Soil cuttings from the borings will be placed in drums and disposed of by the drilling subcontractor. The area around each borehole will be restored to the condition prior to drilling.
- Explorations located in streets will be patched with asphalt and those located in concrete driveways will be patched concrete
- Field exploration will be performed during the daylight hours.
- Soil samples will be disposed of 60 days after the date of the final report.

### Deliverables

- Geotechnical Exploration Plan
- Traffic Control Plan.

**5.4 Geotechnical Engineering Analyses:** The CONSULTANT will develop geotechnical engineering conclusions and recommendations in accordance with WSDOT Standard Specifications for design and construction of the proposed pipelines, including:

- construction dewatering considerations
- Soil classification per WAC 296-155 and lateral earth pressures for design of temporary shoring;

## EXHIBIT A

- suitability of excavated soil for use as trench backfill and import trench backfill requirements
- vertical loads on pipe
- uplift resistance for manholes and pipelines
- passive soil resistance and ultimate soil/pipe friction for resistance to lateral loads.
- Earthwork requirements and permanent slope configurations for the stormwater detention facility.

### Assumptions

- Pipe type, bedding, and pipe line support for the sanitary sewer main will be as used on past projects and other methods of pipe support or pipe bedding will not be reviewed.

- 5.5 Geotechnical Report:** The results of our field explorations, engineering analyses, and geotechnical engineering conclusions and recommendations, will be summarized in a draft geotechnical report for review by KPG and the City. The draft report will be provided for review by the project team. Upon receipt of review comments, we will address the comments and submit a signed and sealed geotechnical report.

### Deliverables

- An electronic copy (in pdf format) and two bound copies of the Draft Geotechnical Report.
- An electronic copy (in pdf format) and two bound and one unbound copies of the Final Geotechnical Report.

- 5.6 Dewatering Specifications:** With the assistance of KPG and the City, the CONSULTANT will develop a performance based dewatering specification for inclusions into the project documents. The dewatering specification will be submitted as a draft for review by the project team. Upon receipt of review comments, we will address the comments and submit a final dewatering specification.

### Deliverables

- Draft dewatering specification.
- Final dewatering specification.

- 5.7 Meetings:** The CONSULTANT will attend project meeting as requested by KPG. Our budget includes attending up to three project meetings at KPG's Tacoma office or the City of Fife's offices during the design phase of the project.

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### Task 6.0 – Environmental Permitting

This task covers permitting assistance to support the permitting of selected alternatives for the City of Fife Sewer Line project. It is anticipated the City will select two alternatives during the Preliminary design phase for stormwater treatment for this project.

- 6.1 Site Visit – The project area will be reviewed to determine possible environmental impacts and which permit may be required.
- 6.2 Review the two project alternatives and determine the required permits for each alternative.
- 6.3 Provide a matrix showing required permitting for each alternative in the form of a permit matrix.
- 6.4 Puyallup Tribe Coordination – Comments from the Puyallup Tribe will be solicited through the SEPA process by the City. Effort under this task includes providing the City with information as needed to address comments the City received from the Tribe. The Puyallup Tribe concerns will be summarized in a memorandum and required permits will be shown on the Permit Matrix.
- 6.5 The consultant will prepare the following anticipated permit submittals for the alternative under the Preliminary Design Task:
  - NPDES Construction Permit
  - State Environmental Policy Act (SEPA) Checklist
  - Joint Aquatics Resource Permit Application (JARPA)
  - Shoreline Permit Application
  - If needed a Biological Assessment in the form of a letter of No Effect will be prepared.

#### Products:

- Permit Matrix
- Puyallup Tribe Concern Summary Memorandum
- NPDES Construction Permit
- JARPA
- SEPA Checklist
- Shoreline Permit Application
- Letter of No Effect

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### Assumptions

- The City of Fife will be the lead agency for SEPA.
- All permitting fees will be paid by the City of Fife.
- KPG will provide a Stormwater Pollution Prevention Plan (SWPPP) under the design task to support the NPDES permit application.
- A Biological Assessment will be in the form of a Letter of No Effect. If the reviewing agencies determine it is a Not Likely to Adversely Affect or a Likely to Adversely Affect determination for listed species the scope and the budget will be revised.
- Section 106 cultural resource report will not be required.
- Air/Noise study will not be required.
- No wetland mitigation will be required
- Section 4(f) Evaluation will not be required.

### Task 7.0 – Plans, Specifications, and Estimates (90% and Final)

The Consultant shall prepare final plans, specifications, and estimates for the proposed improvements that include the following:

- Plans shall be prepared in such detail as to permit field layout and construction within a degree of accuracy acceptable to the City and in accordance with industry and WSDOT standards.
- Typical sections and details shall be provided, except for items available as standard details from the City, State or APWA drawings which will be included in the plan set via image/PDF files.
- The plans will show complete details of construction of the proposed improvement including:
  - Plan and profiles for Water, Sanitary Sewer, and Storm Sewer.
  - Locations of all service laterals.
  - Stormwater treatment plan and details.
  - Restoration limits.
  - Typical roadways restoration and details.
  - Utility adjustments.
  - Surfacing depths and details.
  - Roadway channelization.
  - Landscape restoration and details.
  - Private property restoration and details.

EXHIBIT A

- Approximate parcel lines, right-of-way and easement lines.

The estimated sheet count to be included in the final bid package is as follows:

Title	Number
Cover Sheet	1
Sheet Index, Legend, and Abbreviations	1
Typical Roadway Sections	1
Sanitary Sewer Plan and Profiles – 70 <sup>th</sup> Ave	5
Sanitary Sewer Plan and Profiles – 45 <sup>th</sup> Street	3
Sanitary Sewer Water Plan and Profiles – 48 <sup>th</sup> Street	5
Roadway & Storm Sewer Plan and Profiles – 48 <sup>th</sup> Street	5
Storm Sewer Plan and Profiles – Easement 45 <sup>th</sup> Street to 48 <sup>th</sup> Street	2
Restoration & Right-of-Way Plan/Plan	6
Storm Sewer Treatment Pond Plans	1
Storm Sewer Treatment Pond Details	1
Restoration Details	2
Utility Details	3
Site Preparation/TESC Details	1
<b>TOTAL</b>	<b>37</b>

As part of the design process Jacobs will perform QA/QC with a focus on constructability and claim avoidance. This review is in addition to KPG QA/QC reviews and will occur 90% stage of design. Jacobs' reviews will include the following:

- Lessons learned meeting during the beginning stage of the design process. This meeting will be used to review change orders and construction issues which has occurred on past projects which Jacobs has been involved.
- Jacobs will complete an in office review of the 90% construction documents.
- Jacobs will complete an on-site field review of the 90% construction documents comparing the existing conditions with the contract documents.

Deliverables with each Submittal to the City shall include the following:

City of Fife  
LID:08-02  
48<sup>th</sup> St. E

KPG  
1/02/09

## EXHIBIT A

### **90% Review Submittal**

The 90% submittal will be complete construction documents with the exception of minor notes and references and will include the following deliverables:

- Construction Cost Estimate
- 5 Sets Plans (11x17 size)
- 5 Sets Plans (22x34 size)
- 5 Sets Contract Specifications.

### **Final Submittal**

The Final Submittal shall ready for bid document reproduction and will include.

- 1 Construction Cost Estimate
- 5 Sets Plans (11x17 size)
- 5 Sets Plans (22x34 size)
- 1 Set Reproducible Ready Specifications
- 1 Set Reproducible Mylar's

- 7.1 The Consultant shall prepare specifications and submit for review at 90% stage and submit final specifications with the bid documents.
- 7.2 The Consultant shall calculate quantities and prepare construction cost estimates along with each submittal and with the bid documents.
- 7.3 The Consultant shall field review the project corridor to ensure the plans are showing an accurate representation of the proposed improvements and support the City during the bidding process.

### **Assumptions:**

- After the City has completed review of each submittal major changes will not occur to the design for items which were shown on the submittal.
- Construction documents will be prepared based on KPG Standards.
- Reproduction of Bid Packages is not included within this Scope of Work.
- Scope of Work and Budget Bidding assistance and Construction Services will be submitted for City approval prior to completion of Final Design.
- Design of optional Stormwater Treatment facilities located along Levee Road has not been included.

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### Task 8.0 – APPRAISAL SERVICES

Right-of-way appraisals for selected properties to verify the reasonableness of the preliminary assessments. This is not a special benefit study on all parcels only a selected few. Should a special benefit study be required it will be consider out of scope and a budget amendment may be required. The parcels selected for appraisals will be used for the following:

1. Determine fair market value of properties to be acquired as right-of-way and utility easements.
2. Determine values of existing properties prior to the LID and values based on the proposed LID Improvements. These "before and after" valuations will be used to test the reasonableness of the preliminary assessments.

In addition to appraisal Alan Brackett Shedd will attend meetings with City officials and/or City Counsel as requested. It is estimated that up to 8 hours of City meetings will be required. The following is a list of parcels which appraisals services are anticipated for and the reason for the appraisals:

- 1) Parcel 19 fee right-of-way acquisition
- 2) Parcel 28 easement right-of-way acquisition
- 3) Parcel 29 easement right-of-way acquisition
- 4) Parcel 3 "Before and After" LID appraisal
- 5) Parcel 5 "Before and After" LID appraisal
- 6) Rees Ownership "Before and After" LID appraisal

#### **Other Services:**

The City may require additional services of the Consultant. These services could include construction management and inspection services. At the time these services are required, the Consultant shall provide the City with a detailed scope of work and an estimate of costs. The Consultant shall not proceed with the work until the City has authorized the work and issued a notice to proceed.

E. BIT B

PROJECT SUMMARY - CITY OF FIFE 48TH STREET EAST LID 08-2										
CLIENT: City of Fife PROJ NAME: 48th St East LID 08-2 Job # 08091 PROJ MGR.: Terry Wright DATE: January 5, 2009			SUBCONSULTANT							
Task	Description	KPG ARCHIT/ENG	Landau Associates (Geo)	Landau Associates (Env)	Jacobs	APS	Alan Brackett Shedd		Totals	
1.0	Management/Coordination/Administrati	\$47,799							\$47,799	
2.0	Survey and Base Mapping	\$58,857				\$4,000			\$62,857	
3.0	Preliminary Design Memo	\$84,018			\$1,458				\$85,476	
4.0	Public Involvement	\$33,947							\$33,947	
5.0	Geotechnical Investigation		\$67,161		\$1,350				\$68,511	
6.0	Environmental Approval			\$12,916	\$375				\$13,291	
7.1	PS&E - 90%	\$205,547			\$14,218				\$219,765	
7.2	PS&E - Final	\$59,499			\$8,133				\$67,632	
8.0	Appraisal Services						\$21,750		\$21,750	
	Other Direct Costs	\$3,006							\$3,006	
<b>Totals</b>		<b>492,673</b>	<b>67,161</b>	<b>12,916</b>	<b>25,534</b>	<b>4,000</b>	<b>21,750</b>		<b>624,034</b>	

E. BIT B

CLIENT: City of Fife  
 PROJ NAME: 48th St East LID 08-2  
 Job # 08091  
 DATE: January 5, 2009

		SUMMARY OF KPG STAFF LABOR HOURS REQUIRED BY TASK											Total	Task Total	
TASK NO.	TASK DESCRIPTION	Project Manager	Senior Engineer	Project Engineer	Tech (EIT)	Constr. Mgr.	Res. Engineer	Sr. Surveyor	Project Surveyor	Survey Crew	Technician	Clerical	Hours		
		176.49	156.00	115.38	73.50	182.24	42.18	150.00	115.50	138.00	97.50	90.00			
												42.0	322.0	\$47,799	
1.0	Management/Coordination/Administration				12.0										
	Task 1 Hours =	160.0	60.0	48.0											
2.0	Survey and Base Mapping							22.0	162.0	202.0	92.0		478.0	\$58,857	
	Task 2 Hours =										22.0	16.0	669.0	\$84,018	
3.0	Preliminary Design Memo			296.0	116.0	8.0									
	Task 3 Hours =	165.0	46.0								40.0	52.0	266.0	\$33,947	
4.0	Public Involvement			72.0											
	Task 4 Hours =	56.0	46.0												
5.0	Geotechnical Investigation	See Summary sheet for Landau cost and Task sheet for hourly break down													
	Task 5 Hours =														
6.0	Environmental Approval	See Summary sheet for Landau cost and Task sheet for hourly break down													
	Task 6 Hours =														
7.1	PS&E - 90%		8.0	581.5	466.0	72.0	26.0	6.0	12.0			466.0	40.0	1,889.5	\$205,547
	Task 7.2 Hours =	212.0										160.0	16.0	519.5	\$59,499
7.2	PS&E - Final			116	84	40	20								
	Task 7.3 Hours =	84													
8.0	Appraisal Services	See Summary sheet for Alan Brakett Shedd cost and Task sheet for cost break down													
	Task 8 Hours =														
OTHER DIRECT COSTS															
	Other Direct Costs														
	Hours	677.0	160.0	1113.0	678.0	120.0	46.0	28.0	174.0	202.0	780.0	166.0	4,144.0		
	Total	\$119,484	\$24,960	\$128,418	\$49,833	\$21,869	\$1,940	\$4,200	\$20,097	\$27,876	\$76,050	\$14,940			
TOTALS															
														KPG DESIGN SERVICES LABOR TOTAL = \$489,667	

KPG#08091  
 Date: 1/5/2009

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OTHER DIRECT COSTS  
EXPENSE ESTIMATE

DATE: January 5, 2009

CLIENT: City of Fife  
PROJ NAME: 48th St East LID 08-2  
Job # 08091

EXPENSE ITEM	Cost	/ Unit	Qty	Total
Travel - Mileage	0.59	\$ / mile	0	\$0
Travel - Parking County	9.00	\$ / 4 hrs	0	\$0
Maps and Charts	-	estimate	LS	\$0
8 1/2 X 11 Copies	0.10	\$ ea	0	\$0
11 X 17 0	0.35	\$ ea	0	\$0
Blueline Prints	0.35	\$ ea	0	\$0
11 X 17 Plot Check Prints	1.00	\$ ea	0	\$0
Outside Reproduction est.(60%, 90%, Final)	1.00	estimate	0	\$1,000
	1.50	\$ ea	0	\$0
22 X 34 Copies	2.00	\$ ea	0	\$0
22X34 Plot Check Prints Copy (Bond)	6.00	\$ ea		\$0
Plots Large Vellum	8.00	\$ea	37	\$296
Plots Large Mylar	14.00	\$ea		\$0
Mountings 22 x 34	15.00	\$ea	0	\$0
Plot Prints Large Bond Color	22	\$ea	5	110
Photo Documentation	-	estimate	LS	-
Postage	100.00	estimate	LS	
Courier Service	100.00	estimate	LS	
Title Reports	400.00	ea	4	\$1,600
<b>Total KPG In-House Expense =</b>				<b>\$3,006</b>



CLIENT: City of Fife  
 PROJ NAME: 48th St East LID 08-2  
 Job # 08091  
 DATE: January 5, 2009

		TASK 1 HOUR BREAKDOWN													
		STAFF LABOR HOURS REQUIRED BY TASK													
TASK NO.	TASK DESCRIPTION	Classification	Project Manager	Senior Engineer	Project Engineer	Engineer Tech (EIT)	Constr. Mgr.	Res. Engineer	Sr. Surveyor	Project Surveyor	Survey Crew	Technician	Clerical	Total Hours	Task Total
		Initials	176.49	156.00	115.38	73.50	182.24	42.18	150.00	115.50	138.00	97.50	90.00		
1.0	<b>Management/Coordination/Administration</b>														
	Continuous Project Management (12 Months)		24.0											24	\$4,235.76
	Prepare and Update Schedule		12.0	36.0									6.0	54	\$8,273.88
	Provide Monthly Progress Reports		12.0										12.0	24	\$3,197.88
	Coordination Meetings w/City (12 assumed)		24.0	12.0	36.0								12.0	84	\$11,341.44
	Project Team Meetings (12 assumed)		12.0	12.0	12.0	12.0								48	\$6,256.44
	QA/QC (Preliminary, 90% & Final)		24.0											24	\$4,235.76
	Misc. Letters and Phone Calls		36.0											36	\$6,353.64
	Coordination w/Subconsultant		16.0										12.0	28	\$28.00
<b>OTHER DIRECT COSTS</b>															
	Other Direct Costs														
	Hours Total		160.0	60.0	48.0	12.0							42.0	322	
	Total		\$28,238	\$9,360	\$5,538	\$882							\$3,780		
<b>TOTALS</b>															\$43,922.80

CLIENT: City of Fife  
 PROJ NAME: 48th St East LID 08-2  
 Job # 08091  
 DATE: January 5, 2009

		TASK 2 HOUR BREAKDOWN													
		STAFF LABOR HOURS REQUIRED BY TASK													
TASK NO.	TASK DESCRIPTION	Classification	Project Manager	Senior Engineer	Project Engineer	Engineer Tech (EIT)	Constr. Mgr.	Res. Engineer	Sr. Surveyor	Project Surveyor	Survey Crew	Technician	Clerical	Total Hours	Task Total
		Initials	176.49	156.00	115.38	73.50	182.24	42.18	150.00	115.50	138.00	97.50	90.00		
2.0	Survey and Base Mapping													10	\$1,224.00
	<u>Preliminary Survey</u>							2.0	8.0					16	\$2,118.00
	Background Data and Research								4.0	12.0				16	\$2,208.00
2.1.1	Locate Monuments & Property Markers									6.0				6	\$828.00
2.1.2	Center Line Elevations - 500' O.C.									8.0				8	\$1,104.00
2.1.3	Preliminary Mapping of City Property														
2.1.4	Preliminary Mapping of Low Area - Levee Road									40.0				40	\$5,520.00
	<u>Final Field Survey</u>									24.0				24	\$3,312.00
2.2	Topographic Mapping - 70th Ave East (2180 LF)									40.0				40	\$5,520.00
2.2	Topographic Mapping - 45th Street East (1400 LF)									12.0				12	\$1,656.00
2.2	Topographic Mapping - 48th Street East (2250 LF)									8.0				8	\$1,104.00
2.2	Topographic Mapping - Easement Area (930 LF)													24	\$2,772.00
2.2	Topographic Mapping - Stormwater Treatment Pond								24.0		80.0			160	\$17,040.00
	Process Field Data and Check Survey Notes											80.0			
	Preparation of Basemap and Digital Terrain Model							4		20				24	\$3,360.00
2.3	Survey Control							8.0	10.0					18	\$2,355.00
								2.0	6.0					8	\$8.00
2.4.1	Determine Right-of-Way														
2.4.2	Determine Approximate Parcel Lines							6.0	24.0			12.0			\$42.00
2.5	Legal Desc & Figures - 2 Easements 1 Fee Take								6.0	16.0					\$22.00
2.6	Supplemental Field Survey														
2.7	APS Utility Locates														
OTHER DIRECT COSTS														478	
	Other Direct Costs								22.0	162.0	202.0	92.0			
									\$3,300	\$18,711	\$27,876	\$8,970			
	Hours Total														\$50,193.00
TOTALS															

See expense Sheet for APS Cost

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 CLIENT: City of Fife  
 PROJ NAME: 48th St East LID 08-2  
 Job # 08091  
 DATE: January 5, 2009

TASK 3 HOUR BREAKDOWN														
STAFF LABOR HOURS REQUIRED BY TASK														
Classification	Project Manager	Senior Engineer	Project Engineer	Engineer Tech (EIT)	Constr. Mgr.	Res. Engineer	Sr. Surveyor	Project Surveyor	Survey Crew	Technician	Clerical	Total Hours	Task Total	
														Initials
<b>TASK NO.</b>	<b>TASK DESCRIPTION</b>	176.49	156.00	115.38	73.50	182.24	42.18	150.00	115.50	138.00	97.50	90.00		
3.0	Preliminary Design Memo													
3.1	Review Exist Information	16.0	6.0	24.0									46	\$6,528.96
3.1	Review Exist Information - RH2	see expense sheet for Subconsultant cost - RH2 gathering info and attending 2 meetings												
3.1	Update Preliminary Construction Cost Est.	4.0	16.0			8.0						6.0	34.00	\$5,199.88
3.1	Update Preliminary Assessment Cost	1.0	12.0									4.0	17.00	\$2,408.49
3.2	Confirm Sanitary Sewer Line Size & Depths	12.0		32.0	16.0								60.00	\$6,986.04
3.3.1	Alternative Sanitary Sewer Alignment - 45th S	10.0		40.0	32.0								82.00	\$8,732.10
3.3.2	Alternative Sanitary Sewer Alignment - Alt. R	10.0		40.0	32.0								82.00	\$8,732.10
3.4	Preliminary Water Main Design	12.0		32.0	4.0								48.00	\$6,104.04
3.5.1	Stormwater Treatment Alternative 1	12.0		32.0	16.0					8.0			68.00	\$7,766.04
3.5.2	Stormwater Treatment Alternative 2	12.0		32.0	16.0								60.00	\$6,986.04
3.5.3	Stormwater Design Memorandum	8.0		24.0								6.0	38.00	\$4,721.04
3.6	Overhead Power Line Options	40.0	12.0	8.0									60	\$9,854.64
3.7	Review Future Service Areas & Figure	16.0		24.0						12.0			52	\$6,762.96
3.7	Coordination with City of Puyallup	12.0		8.0						2.0			22	\$3,235.92
<b>OTHER DIRECT COSTS</b>														
	Other Direct Costs													
	Hours	165.0	46.0	296.0	116.0	8.0						22.0	16.0	669
	Total	\$29,121	\$7,176	\$34,152	\$8,526	\$1,458						\$2,145	\$1,440	
<b>TOTALS</b>														<b>\$84,018.25</b>

E. BIT B

CLIENT: City of Fife  
 PROJ NAME: 48th St East LID 08-2  
 Job # 08091  
 DATE: January 5, 2009

		TASK 4 HOUR BREAKDOWN												
		STAFF LABOR HOURS REQUIRED BY TASK												
Classification	Initials	Project Manager	Senior Engineer	Project Engineer	Engineer Tech (EIT)	Constr. Mgr.	Res. Engineer	Sr. Surveyor	Project Surveyor	Survey Crew	Technician	Clerical	Total Hours	Task Total
		176.49	156.00	115.38	73.50	182.24	42.18	150.00	115.50	138.00	97.50	90.00		
TASK NO.	TASK DESCRIPTION													
4.0	Public Involvement											18.0	39	\$4,957.47
4.1	Public Meeting Notices (3)	3.0	18.0									8.0	9	\$896.49
4.2	1 on 1 Public Meetings (18 assumed)											9.0	11	\$1,162.98
	Prepare 18 Meeting Summary Forms	1.0											36	\$5,253.66
	Prepare Construction Right-of-Entry Form	2.0										8.0	62	\$8,050.50
	Prepare for Each Meeting	18.0		18.0								9.0	27	\$2,886.84
	Arrange and Conduct 18 Meetings	18.0		36.0									38	\$4,880.94
	Provide Summary of Each Meeting			18.0						20.0			44	\$5,857.92
4.3	Prepare & Attend 2 Public Meetings	6.0	12.0							20.0				
4.4	Prepare for 2 Council Meetings	8.0	16.0											
4.4	Attend 2 Council Meetings													
OTHER DIRECT COSTS												40.0	52.0	266
	Other Direct Costs											\$3,900	\$4,680	
	Hours	56.0	46.0	72.0										
	Total	\$9,883	\$7,176	\$8,307										\$33,946.80
TOTALS														

Job#:08091  
 Date:1/5/2009

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 CLIENT: City of Fife  
 PROJ NAME: 48th St East LID 08-2  
 Job # 08091  
 DATE: January 5, 2009

TASK 5 HOUR BREAKDOWN													
STAFF LABOR HOURS REQUIRED BY TASK													
Classification	Initials	Principal	Associate Hydrogeologist	Project Engineer	Staff Engineer	ACAD	Project Coordinator					Total Hours	Task Total
		190.00	155.00	127.00	104.00	75.00	80.00						
TASK NO.	TASK DESCRIPTION	Effort shown on this sheet is for Landau											
5.0	Geotechnical Investigation												
5.1	Data Gathering and Exploration Plan	2.0		2.0	4.0	2.0	4.0					14	\$1,520.00
5.2	Field Explorations	4.0	2.0	8.0	80.0		4.0					98	\$10,726.00
5.3	Geotechnical Laboratory Testing		1.0	2.0	4.0							7	\$825.00
5.4	Geotechnical Engineering Analyses	5.0	4.0	52.0								61	\$8,174.00
5.5	Geotechnical Report (draft & final)	11.0	4.0	58.0	16.0	16.0	20.0					125	\$14,540.00
5.6	Dewatering Specification (draft & final)	2.0	24.0				8.0					34	\$4,740.00
5.7	Project Meetings (3)	12.0	8.0	8.0								28	\$4,536.00
OTHER DIRECT COSTS													
	Drilling Subcontractor												\$12,700.00
	CPT Subcontractor												\$2,700.00
	Traffic Control												\$2,300.00
	Geotechnical Laboratory Testing												\$3,300.00
	Field Equipment												\$350.00
	Mileage												\$250.00
	Reproduction												\$500.00
	Other Direct Costs												
	Hours	36.0	43.0	130.0	104.0	18.0	36.0					367	
	Total	\$6,840	\$6,665	\$16,510	\$10,816	\$1,350	\$2,880						
TOTALS												\$67,161.00	

E. BIT B

CLIENT: City of Fife  
 PROJ NAME: 48th St East LID 08-2  
 Job # 08091  
 DATE: January 5, 2009

		TASK 6 HOUR BREAKDOWN												
		LANDAU - STAFF LABOR HOURS REQUIRED BY TASK												
TASK NO.	TASK DESCRIPTION	Classification	Senior Planner	Project Scientist	Project Coord.	CAD/GIS							Total Hours	Task Total
		Initials												
			140.00	104.00	80.00	75.00								
Effort shown on this sheet is for Landau														
6.0	Environmental Approval												4	\$488.00
6.1	Site Visit		2.0	2.0									12	\$1,536.00
6.2	Alternative Review		8.0	4.0									10	\$1,136.00
6.3	Environmental Matrix		4.0	4.0	2.0								4	\$560.00
6.4	Puyallup Tribe Coordination Assistance		4.0										2.5	\$320.00
6.5	Permit Preparation				0.5								11.5	\$1,227.00
	NPDES		2.0	8.0	0.5	1.0							13.5	\$1,507.00
	SEPA		2.0	8.0	0.5	1.0							24	\$2,880.00
	JARPA		4.0	8.0	0.5	1.0								\$2,769.00
	Shoreline Permit Application		12.0	10.0	2.0									
	Letter of No Effect		4.0	16.0	4.0	3.0								
OTHER DIRECT COSTS					\$400.00	\$93.00								
Other Direct Costs														\$493.00
Hours Total			42.0	52.0	9.5	5.0							108.5	
TOTALS			\$5,880	\$5,408	\$760	\$375								\$12,916.00

Job#: 08091  
 Date: 1/5/2009

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 CLIENT: City of Fife  
 ROJ NAME: 48th St East LID 08-2  
 Job # 08091  
 DATE: January 5, 2009

TASK 8 HOUR BREAKDOWN														
STAFF LABOR HOURS REQUIRED BY TASK														
Classification	Project Manager	Senior Engineer	Project Engineer	Engineer Tech (EIT)	Constr. Mgr.	Res. Engineer	Sr. Surveyor	Project Surveyor	Survey Crew	Technician	Clerical	Total		
												Initials	Hours	Task Total
TASK NO.	TASK DESCRIPTION	176.49	156.00	115.38	73.50	182.24	42.18	150.00	115.50	138.00	97.50	90.00	Hours	Task Total
7.1	PS&E - 90%													
	Cover Sheet	0.5		0.5						6.0			7	\$730.94
	Sheet Index, Legend & Abbreviations	0.5		2.0						8.0			10.5	\$1,099.01
	Typical Roadway Sections	6.0		24.0	10.0					8.0			48	\$5,343.06
	SS Plan and Profiles 70th (5 sheets)	24.0		65.0	70.0					60.0			219	\$22,730.46
	SS Plan and Profiles 45th (3 sheets)	14.0		40.0	40.0					36.0			130	\$13,536.06
	SS Plan and Profiles 48th (5 sheets)	24.0		70.0	70.0					60.0			224	\$23,307.36
	Road & SD Plan and Profiles 48th (5 sheets)	24.0		70.0	70.0					60.0			224	\$23,307.36
	SD Plan and Profiles - Easements (2 sheets)	4.0		28.0	14.0					32.0			78	\$6,085.60
	Restoration, Right-of-way Plan/Plan (6 sheets)	40.0		80.0	70.0		6.0	12.0		72.0			280	\$30,741.00
	Storm Sewer Treatment Pond Plan (1 Sheet)	10.0		48.0	24.0					16.0			98	\$10,627.14
	Storm Sewer treatment Pond Details (1 Sheet)	8.0		20.0	14.0					20.0			62	\$6,698.52
	Restoration Details (2 Sheets)	10.0		30.0	24.0					32.0			96	\$10,110.30
	Utility Details (3 Sheets)	16.0		48.0	30.0					48.0			142	\$15,247.08
	Site Preparation/TESC Details ( 1 Sheet)	1.0		12.0	6.0					8.0			27	\$2,782.05
	Construction Cost Estimate	6.0		12.0	24.0								42	\$4,207.50
	Contract Specifications	24.0	8.0	32.0								40.0	104	\$12,775.92
	<b>Jacobs Engineering Task Break Down</b>													
	Assistance with Qualified Contractor Requirements					8.0	8.0						16	\$1,795.36
	Lessons Learned Meeting with Jacobs					10.0							10	\$1,822.40
	Collection of and Providing CAD Files					8.0	8.0						16	\$1,795.36
	Attend 1 Design Meeting					8.0							8	\$1,457.92
	Jacobs QA/QC Office Review					20.0	10.0						30	\$4,066.60
	Jacobs QA/QC Field Review					10.0							10	\$1,822.40
	Jacobs QA/QC Review meeting					8.0							8	\$1,457.92
	<b>OTHER DIRECT COSTS</b>													
	Other Direct Costs													
	Hours	212.0	8.0	581.5	466.0	72.0	26.0	6.0	12.0		466.0	40.0	1890	
	Total	\$37,416	\$1,248	\$67,093	\$34,251	\$13,121	\$1,097	\$900	\$1,386		\$45,435	\$3,600		
	<b>TOTALS</b>													\$205,547.31

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 CLIENT: City of Fife  
 ROJ NAME: 48th St East LID 08-2  
 Job # 08091  
 DATE: January 5, 2009

TASK 9 HOUR BREAKDOWN													
STAFF LABOR HOURS REQUIRED BY TASK													
Classification	Project Manager	Senior Engineer	Project Engineer	Engineer Tech (EIT)	Constr. Mgr.	Res. Engineer	Sr. Surveyor	Project Surveyor	Survey Crew	Technician	Clerical	Total Hours	Task Total
Initials													
TASK NO.	TASK DESCRIPTION	176.49	156.00	115.38	73.50	182.24	42.18	150.00	115.50	138.00	97.50	90.00	
7.2	PS&E - Final												
	Cover Sheet	0.5		0.5						2.0			3 \$340.94
	Sheet Index, Legend & Abbreviations	0.5		2.0						6.0			8.5 \$904.01
	Typical Roadway Sections	2.0		6.0	2.0					4.0			14 \$1,582.26
	SS Plan and Profiles 70th (5 sheets)	10.0		10.0	10.0					20.0			50 \$5,603.70
	SS Plan and Profiles 45th (3 sheets)	6.0		6.0	6.0					12.0			30 \$3,362.22
	SS Plan and Profiles 48th (5 sheets)	10.0		19.0	10.0					20.0			59 \$6,642.12
	Road & SD Plan and Profiles 48th (5 sheets)	10.0		10.0	10.0					20.0			50 \$5,603.70
	SD Plan and Profiles - Easements (2 sheets)	2.0		8.0	4.0					16.0			30 \$3,130.02
	Restoration, Right-of-Way Plan/Plan (6 sheets)	6.0		12.0	12.0					24.0			54 \$5,665.50
	Storm Sewer Treatment Pond Plan (1 Sheet)	4.0		4.0	4.0					4.0			16 \$1,851.48
	Storm Sewer treatment Pond Details (1 Sheet)	4.0		4.0	4.0					4.0			16 \$1,851.48
	Restoration Details (2 Sheets)	6.0		4.0	4.0					8.0			22 \$2,594.46
	Utility Details (3 Sheets)	8.0		6.0	6.0					12.0			32 \$3,715.20
	Site Preperation/TESC Details ( 1 Sheet)	1.0		8.0	4.0					8.0			21 \$2,173.53
	Construction Cost Estimate	2.0		4.0	8.0								14 \$1,402.50
	Contract Specifications	12.0		12.0							16.0		40 \$4,942.44
	<b>Jacobs Engineering Task Break Down</b>												
	Jacobs QA/QC Office Review					24.0	12.0						36 \$4,879.92
	Jacobs QA/QC Field Review					8.0	8.0						16 \$1,795.36
	Jacobs QA/QC Review meeting					8.0							8 \$1,457.92
	<b>OTHER DIRECT COSTS</b>												
	Other Direct Costs												
	Hours	84.0		115.5	84.0	40.0	20.0			160.0	16.0		519.5
	Total	\$14,825		\$13,326	\$6,174	\$7,290	\$844			\$15,600	\$1,440		
	<b>TOTALS</b>												\$59,498.75

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 CLIENT: City of Fife  
 PROJ NAME: 48th St East LID 08-2  
 WORK ORDER: 08091  
 DATE: January 5, 2009

TASK 8 60% SUBMITTAL HOUR BREAKDOWN													
STAFF LABOR HOURS REQUIRED BY TASK													
Classification	Project Manager	Senior Engineer	Project Engineer	Engineer Tech (EIT)	Constr. Mgr.	Res. Engineer	Sr. Surveyor	Project Surveyor	Survey Crew	Technician	Clerical		
Initials	176.49	156.00	115.38	73.50	182.24	42.18	150.00	115.50	138.00	97.50	90.00	Total Hours	Task Total
8.0	Appraisal Services												
	Effort shown on this sheet is for Alan Brakett Shedd - APPRAISAL SERVICES												
1	Parcel 19 Fee Right-of-Way Acquisition											\$2,500.00	
2	Parcel 28 Easement Right-of-Way Acquisition											\$2,500.00	
3	Parcel 29 Easement Right-of-Way Acquisition											\$2,500.00	
4	Parcel 3 "Before and After" LID Appraisal											\$3,250.00	
5	Parcel 5 "Before and After" LID Appraisal											\$4,500.00	
6	Rees Ownership "Before and After" LID appraisal											\$4,500.00	
	Meetings											\$2,000.00	
<b>OTHER DIRECT COSTS</b>													
	Other Direct Costs												
	Hours												
	Total												
<b>TOTALS</b>												<b>\$21,750.00</b>	