



INFORMATIONAL MEMORANDUM

TO: Transportation and Infrastructure Committee
FROM: Bob Giberson, Public Works Director
BY: Ryan Larson, Senior Program Manager
CC: Mayor Ekberg
DATE: June 23, 2017
SUBJECT: 2017 Annual Small Drainage Program
Project No. 91741201, Contract No. 17-041
Supplemental Agreement No. 1 for Construction Management Services

ISSUE

Approve Supplemental Agreement No. 1 to Contract No. 17-041 with KPG, Inc. to provide construction management services for the 2017 Annual Small Drainage Program.

BACKGROUND

The Consultant Roster was reviewed and three engineering firms were evaluated to provide construction management services for the 2017 Small Drainage Program (see attached scoring and selection matrix). Each consulting firm evaluated has expertise in construction management. All the firms evaluated are well qualified; however, KPG possesses the best overall knowledge and understanding of the City's requirements. KPG has performed construction management on other City projects as well as designed the 2017 Small Drainage Program.

DISCUSSION

KPG provided a supplement, scope of work, and fee estimate for construction management services for the 2017 Small Drainage Program for \$79,873.16. The project construction contract with McCann Construction was awarded on June 19, 2017.

FINANCIAL IMPACT

Table with 3 columns: Description, Sup No. 1 CM, CM Budget. Row 1: Construction Mgmt. Sup No. 1, \$79,873.16, \$80,000.00

RECOMMENDATION

Council is being asked to approve Supplemental Agreement No. 1 to Contract No. 17-041 for construction management services with KPG, Inc. for the 2017 Small Drainage Program in the amount of \$79,873.16 and consider this item on the Consent Agenda at the July 17, 2017 Regular Meeting.

Attachments: 2017 CIP, Page 96
Qualification Review
Consultant Agreement

CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2017 to 2022

PROJECT: Annual Small Drainage Program

Project No. 9XX41201

DESCRIPTION: Select, design, and construct small drainage projects throughout the City.

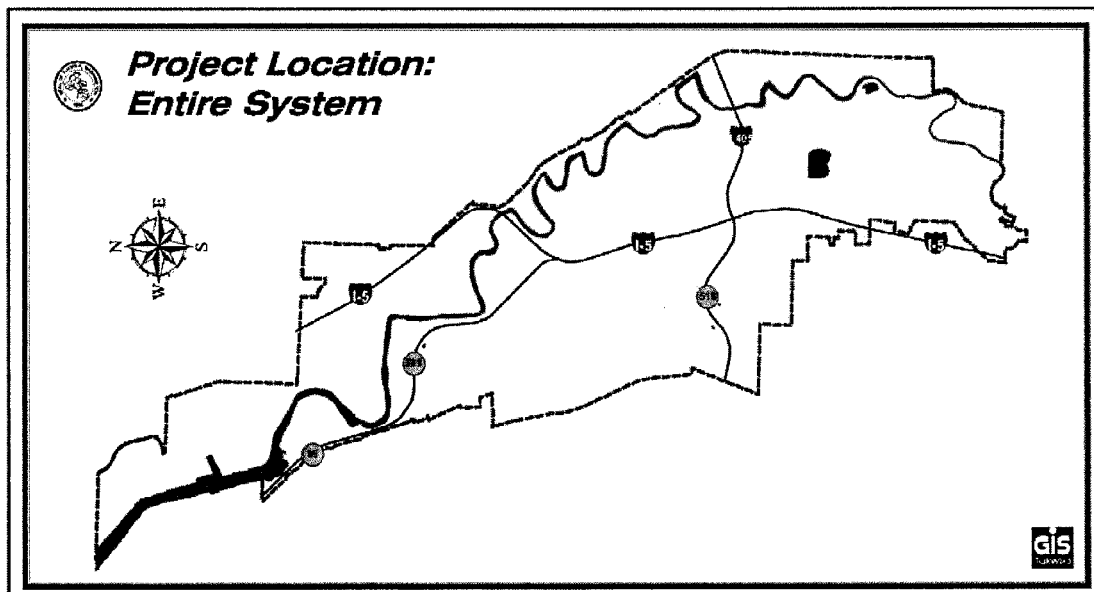
JUSTIFICATION: Provide drainage corrections for existing/ongoing drainage problems throughout the City, including culvert replacements, drain extensions, and pavement upgrades.

STATUS: Projects for this annual program are taken from Small Drainage Project List.

MAINT. IMPACT: Reduces maintenance.

COMMENT: Ongoing project, only one year shown in first column. Construction expenses may occur over two calendar years.

FINANCIAL (in \$000's)	Through		Estimated								TOTAL
	2015	2016	2017	2018	2019	2020	2021	2022	BEYOND		
EXPENSES											
Design	74	80	80	80	80	80	80	80	80	714	
Streamgages/Monitor	10	10	35	35	36	36	36	36	40	274	
Const. Mgmt.	62	80	80	80	80	80	80	80	80	702	
Construction	255	515	515	515	514	514	514	513	513	4,368	
TOTAL EXPENSES	401	685	710	710	710	710	710	709	713	6,058	
FUND SOURCES											
Awarded Grant										0	
Proposed Grant										0	
Mitigation Actual										0	
Mitigation Expected										0	
Utility Revenue	401	685	710	710	710	710	710	709	713	6,058	
TOTAL SOURCES	401	685	710	710	710	710	710	709	713	6,058	



2017 SDP – Contract for Construction Management Services				
	Akana	Harris & Associates	KPG, Inc.	
Drainage and paving project design/construction experience	3	3	4	
Knowledge of State and Tukwila Standards and Procedures	4	4	5	
Environmental Experience	4	3	4	
Experience with similar local agency projects	4	3	5	
Past Postive Experience on City Drainage and Paving Projects	3	3	5	
Small Scale Projects	5	3	5	
Utilities Coordination	4	4	4	
Construction Inspection	4	3	4	
TOTALS	31	26	36	
For each category, highest score is 5 (with the lowest score 1)				
Consultant with the highest score is ranked the best.				
Staff: Ryan Larson				
Selection Date: 6/5/17				
Selected Consultant: KPG, Inc.				
Selection Justification: KPG designed the project, has performed construction management on other City projects. KPG has performed well on previous city drainage and overlay projects in providing design and CM services. Based on overall score KPG best meets the requirements of this project.				

**SUPPLEMENTAL AGREEMENT NO. 1
AGREEMENT NO. 17-041
PROJECT NO. 91741201**

City of Tukwila
Public Works Department
6300 Southcenter Boulevard #100
Tukwila, WA 98188

KPG, Inc.
3131 Elliott Ave, Suite 400
Seattle, WA 98121

PROJECT: 2017 Small Drainage Program – Construction Services

This SUPPLEMENTAL AGREEMENT NO. 1 is to supplement the agreement entered into with KPG, Inc. and the City of Tukwila, which was executed on the 14th day of March, 2017.

All provisions in the basic agreement remain in effect, except as expressly modified as follows:

Article 2, Scope of Services, shall be supplemented with the following:

The Consultant agrees to provide construction services in accordance with the scope of work included as Exhibit A.

Article 4, Payment, shall be modified as follows:

Payment for work provided by Consultant shall be made as provided on Exhibit B, attached hereto, provided that the total amount of payment to the Consultant for this work not exceed \$79,873.16 without express written modification of the Agreement signed by the City. The new total contract shall not exceed \$118,637.99 without express written modification of the Agreement signed by the City.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals this _____ day of _____, 2017.

APPROVED:

CITY OF TUKWILA

APPROVED:

KPG, INC.

Allan Ekberg
Mayor

Nelson Davis, P.E.
Principal

Attested:

Christy O'Flaherty, City Clerk

EXHIBIT A
Construction Management Services

Scope of Work

June 18, 2017

City of Tukwila

2017 Small Drainage Program – Project No. 91741201

This work will provide construction management services for the construction contract to complete the City of Tukwila 2017 Small Drainage Program. These services will include design support, project management, documentation control, inspection, materials testing, public involvement, and contract administration during the construction of the project, as detailed below. KPG (“Consultant”) will provide to the City of Tukwila (“City”) construction management services for the project.

A detailed scope for the Contract follows:

I. INTRODUCTION

The following scope of services and associated costs are based upon the assumptions outlined below.

General Assumptions:

- The **proposed project team** will include one part-time documentation control specialist, a part-time resident engineer during construction activities, a part-time inspector, sub-consultant to provide services for materials testing, and other supporting tasks as deemed necessary.
- It is anticipated that part time site observation will be required based on contractor’s specific activities. The level of service is based on a construction project duration of approximately **60 working days**.
- KPG estimates a total project duration of 80 working days including preconstruction service, construction services, and project closeout. No suspensions or stop work periods are anticipated during this duration.
- It is anticipated that the KPG will update and modify the Record of Materials (ROM). This scope of services provides the management of the ROM and scheduling of required materials testing respectively.
- It is anticipated that the City will review and execute the insurance, bonds, and the Construction Contract.
- KPG will do all public outreach, and ensure affected residents are notified of impending contractor activities by door to door and or A-board signs that include date, hours of work, and a KPG staff phone number to call for questions.
- The design engineers from KPG will be available during construction to answer questions during

EXHIBIT A

construction and review RAM's, shop drawings, and answer RFI's as required.

- Services will be performed in accordance with the Contract plans & special provisions, and City engineering standards.

II. SCOPE OF WORK

The objective and purpose of this Construction Management Services Agreement is for the Consultant to successfully deliver the construction of the Project to the City by ensuring that the improvements are constructed in accordance with the approved Plans and Specifications, as may be amended or revised, that all of the required Project documentation is accounted for.

TASK 1 – MANAGEMENT/COORDINATION/ADMINISTRATION

Provide overall project management, coordination with the City, monthly progress reports, and invoicing. This effort will include the following elements.

- Organize and layout work for project staff. Prepare project instructions on contract administration procedures to be used during construction.
- Review monthly expenditures and CM team scope activities. Prepare and submit project progress letters to the City along with invoices describing CM services provided each month. Prepare and submit reporting required by funding source.

Deliverables

- *Monthly invoices and progress reports*

TASK 2 – PRECONSTRUCTION SERVICES

- 2.1 **Preconstruction Conference:** The Consultant will prepare an agenda for, distribute notices of, and conduct a preconstruction conference in the City's offices. The Consultant's project engineer, resident engineer, inspector, and document control specialist will attend the preconstruction conference. The Consultant will prepare a written record of the meeting and distribute copies of the minutes to all attendees and affected agencies, staff, etc.

At the Pre-construction conference, the Consultant shall facilitate discussions with the Contractor concerning the plans, specifications, schedules, issues with utilities, unusual conditions, Federal, State, and local requirements and any other items that will result in better project understanding among the parties involved.

Deliverables

- Preconstruction conference agenda with meeting minutes

TASK 3 – CONSTRUCTION SERVICES - FIELD

- 3.1 **On-site Observation:** The Consultant shall provide the services of one full time inspector during construction activities and other tasks necessary to monitor the progress of the work. Construction staff shall oversee all items necessary to complete the Work as

EXHIBIT A

described in the Plans and Specifications, and will observe the technical progress of the construction, including providing day-to-day contact with the Contractor and the City:

Field inspection staff will perform the following duties as a matter of their daily activities:

- i. Observe technical conduct of the construction, including providing day-to-day contact with construction contractor, City, utilities, and other stakeholders, and monitor for adherence to the Contract Documents. The Consultant's personnel will act in accordance with Sections 1-05.1 and 1-05.2 of the Standard Specifications.
- ii. Observe material, workmanship, and construction areas for compliance with the Contract Documents and applicable codes, and notify construction contractor of noncompliance. Advise the City of any non-conforming work observed during site visits.
- iii. Document all material delivered to the job site in accordance with the contract documents.
- iv. Prepare daily inspection reports, recording the construction contractor's operations as actually observed by the Consultant; includes quantities of work placed that day, contractor's equipment and crews, and other pertinent information.
- v. Interpret Contract Documents in coordination with the City and KPG.
- vi. Resolve questions which may arise as to the quality and acceptability of material furnished, work performed, and rate of progress of work performed by the construction contractor.
- vii. Establish communications with adjacent property owners. Respond to questions from property owners and the general public.
- viii. Coordinate with permit holders on the Project to monitor compliance with approved permits, if applicable.
- ix. Prepare field records and documents to help assure the Project is administered in accordance with the funding requirements.
- x. Collect and calculate delivery tickets and salesman's daily reports of aggregate. All tickets will be initialed with correct bid item and stationing identified (Construction Manual 10-2).
- xi. Attend and actively participate in regular on-site weekly construction meetings.
- xii. Take periodic digital photographs during the course of construction, and record locations.
- xiii. Punch list. Upon substantial completion of work, coordinate with the Client and affected agencies, to prepare a 'punch list' of items to be completed or corrected. Coordinate final inspection with those agencies.

Assumptions:

- Consultant will provide part time observation services for the days/hours that the contractor's personnel are on-site based on the Contractor's specific activities. Full time site observation is not anticipated.
- Consultant will provide qualified personnel for inspection of all bid item work.
- The Consultant's monitoring of the construction contractor's activities is to ascertain whether or not they are performing the work in accordance with the Contract Documents;

EXHIBIT A

in case of noncompliance, Consultant will reject non-conforming work, and pursue the other remedies in the interests of the City, as detailed in the Contract Documents. The Consultant cannot guarantee the construction contractors' performance, and it is understood that Consultant shall assume no responsibility for: proper construction means, methods, techniques; project site safety, safety precautions or programs; or for the failure of any other entity to perform its work in accordance with laws, contracts, regulations, or City's expectations.

3.2 Substantial Completion: Upon substantial completion of work, coordinate with the City and other affected agencies, to perform a project inspection and develop a comprehensive list of deficiencies or 'punchlist' of items to be completed. A punchlist and Certificate of Substantial Completion will be prepared by the Consultant and issued by the City.

3.3 Materials Testing: Coordinate the work of the materials testing technicians and testing laboratories in the observation and testing of materials used in the construction; document and evaluate results of testing; and address deficiencies. Frequency of testing shall be determined by the resident engineer.

Deliverables

- Daily Construction Reports with project photos – submitted on a weekly basis
- Punch List, Certificate of Substantial Completion
- Review test reports for compliance

TASK 4.1 – CONSTRUCTION SERVICES – OFFICE

A. **Document Control.** Original documentation will be housed at the Consultant's office, and filed in accordance with standard filing protocol. A copy of working files will be maintained in the field office.

Document Control consists of:

- Final Estimate (Approving Authority File)
 - Comparison of Preliminary and Final Quantities (Approving Authority File)
 - Final Records (Approving Authority File)
 - Record of Material Samples and Tests
 - Affidavit of Wages Paid
 - Release for the Protection of Property Owners and General Contractor
- B. **Project Coordination:** Liaison with City, construction contractor, engineer, utilities and property owners on a regular basis to discuss project issues and status.
- C. **Plan Interpretations:** Provide technical interpretations of the drawings, specifications, and contract documents, and evaluate requested deviations from the approved design or specifications. Coordinate with City for resolution of issues involving scope, schedule, and/or budget changes.
- D. **Weekly Meetings:** Lead weekly meetings, including preparation of agenda, meeting minutes, and distribution of minutes to attendees. Outstanding issues to be tracked on a weekly basis.
- E. **Initial Schedule Review:** Perform detailed schedule review of contractor provided CPM for conformance with the contract documents.
- F. **Lump Sum Breakdown:** Evaluate construction contractors' Schedule of Values for lump sum items. Review the Contract Price allocations and verify that such allocations are made in

EXHIBIT A

accordance with the requirements of the Contract Documents. Lump Sum Breakdowns for payment each month will be calculated with detailed data.

- G. **Monthly Pay Requests:** Prepare monthly requests for payment, review with the City, contractor and approve as permitted. Utilize City provided format for pay estimates, or Consultant format.
- H. **Monthly Schedule Review:** At the monthly cutoff, review contractor's updated schedule and compare with field-observed progress, as described in Section 1-08 of the Special Provisions. In addition, perform schedule analysis on contractor provided CPM updates and review schedule for delays and impacts. Coordinate with Contractor in the development of recovery schedules, as needed, to address delays caused by either events or issues within the Contractor's control or other events or issues beyond the Contractor's control.
- I. **Certified Payroll:** Process and track all certified payroll per State Prevailing Wage Requirements. This includes verifying the initial payroll for compliance and 10% of all payrolls submitted thereafter. Tracking payroll each week.
- J. **Weekly Statement of Working Days:** Prepare and issue weekly statement of working day report each week.
- K. **Subcontractor Documentation:** Process / Approve all required subcontractor documentation. Request to Sublets will be verified and logged. This includes checking System Award Management System (SAMS), verifying business licensing, reviewing insurance documentation, verifying city business licensing, Intent to Pay Prevailing Wage and Affidavit of Wages Paid. All subcontractor documentation will be logged into KPG's subcontractor logs.
- L. **Record Drawings:** Review record drawings prepared by the Contractor, and prepare a conformed set of project record drawings based on Contractor provided information and from inspection notes. Record drawings to be verified on a monthly basis, as part of the progress payment to the Contractor. Upon project completion, contractor provided markups will be verified for completeness and supplemented with inspection information. The Consultant will provide the marked up plan sheets with both the contractors and inspectors as-built information. Revisions to the CAD drawings will be based on these construction records.
- M. **Physical Completion Letter:** Following completion of all punchlist work, prepare physical completion letter to the contractor, and recommend that City and/or Utilities accept the project.
- N. **Project Closeout:** Transfer all project documents to the City for permanent storage.
 - Schedule review comments
 - As-built schedule
 - Meeting agendas and notes
 - Monthly Pay Estimates
 - Subcontractor Packets
 - Cost Projection
 - Physical Completion Letter
 - Final Project Documents

TASK 4.2 – SUBMITTAL/RFI PROCESSING

- A. **Submittals:** Coordinate review process for shop drawings, samples, traffic control plans, test reports, and other submittals from the Contractor for compliance with the contract documents. Key submittals to be transmitted to the City for their review and approval. Submittals shall be

EXHIBIT A

logged and tracked.

- B. **Request for Information (RFI):** Review and respond to RFI's. RFI's shall be logged and tracked.
- C. **Record of Materials (ROM):** Utilize ROM prepared by WSDOT and update based on Special Provisions and Plans for use on the project, based on the contract specifications. The ROM will be maintained by the Resident Engineer. The ROM will track all of the materials delivered to the site including manufacturer/supplier, approved RAM's, QPL items, material compliance documentation, and all other required documentation.

Deliverables

- Submittal log
- RFI Log
- Completed Record of Material for Material Certification

TASK 4.3 – CHANGE MANAGEMENT

- A. **Case Log:** Develop and maintain a case log which includes change orders, RFP's, Field Work Directives
- B. **Change Orders:** Develop change orders and provide technical assistance to negotiate change orders, and assist in resolution of disputes which may occur during the course of the project. Each change order will be executed in accordance with WSDOT Standard Specifications and contain the following:
 - Change order
 - Independent Cost Estimate
 - Time Impact Analysis
 - Contractor's Pricing
 - Verbal Approval Memo
 - Back up documentation
- C. **Field Work Directives:** Prepare field work directives as necessary to keep the contractor on schedule.
- D. **Minor Change Orders:** Develop minor change orders per WSDOT Standard Specifications. Each minor change order will be executed and contain the following:
 - Independent Cost Estimate
 - Verbal Approval Memo
 - Back up documentation
- E. **Force Account:** Track contractor force account labor, equipment and materials. All force account calculations will be verified by the engineer and double checked by the documentation specialist.

Deliverables

- Change Order(s)
- Case Management Log
- RFI Log
- Minor Change Order(s)
- Force Account Records

Exhibit B

Consultant Fee Determination

Project Name: City of Tukwila
2017 Small Drainage Program
Construction Services

Consultant: KPG

COST PLUS FIXED FEE

<u>Classification</u>	<u>Hours</u>		<u>Rate</u>	<u>Cost</u>
Project Manager	16	\$	67.00	\$ 1,072.00
Project Engineer	120	\$	41.00	\$ 4,920.00
Design Engineer	52	\$	37.00	\$ 1,924.00
CAD Technician	8	\$	30.00	\$ 240.00
Construction Inspector	312	\$	37.50	\$ 11,700.00
Survey Crew	0	\$	58.00	\$ -
Document Specialist	184	\$	38.00	\$ 6,992.00
Office Admin	16	\$	33.00	\$ 528.00
Total Direct Salary Cost (DSC)	708			\$ 27,376.00
Overhead (138.02% x DSC)				\$ 37,784.36
Fixed Fee (30% x DSC)				\$ 8,212.80
			Subtotal:	\$73,373.16

REIMBURSABLES

Mileage	\$1,000
Miscellaneous - Repro, Field Supplies	\$500
Subtotal:	\$1,500

SUBCONSULTANT COSTS

Material Testing Allowance	\$5,000
Subtotal:	\$5,000

TOTAL **\$ 79,873.16**

HOUR AND FEE ESTIMATE

EXHIBIT B



Project: City of Tukwila
 2017 Small Drainage Program
 Construction Services

Task	Description	Labor Hour Estimate							Total Budget	
		Project Manager	Resident Engineer	Design Engineer	CAD Technician	Const Inspector	Survey Crew	Document Specialist		Document Admin
		\$ 179.57	\$ 109.89	\$ 99.17	\$ 80.41	\$ 100.51	\$ 155.45	\$ 101.85	\$ 88.45	Budget
1 - Management and Administration (Estimated duration 16 weeks)										
	Weekly level of effort by Classification	1	0	0	0	0	0	0	0	1
	Preconstruction Budget Estimate	16	0	0	0	0	0	0	0	\$ 4,288.32
2 - Preconstruction Services (Estimated duration 2 weeks)										
	Weekly level of effort by Classification	0	4	0	0	8	0	8	0	0
	Preconstruction Budget Estimate	0	8	0	0	16	0	16	0	\$ 4,116.79
3 - Construction Services (Estimated duration 12 weeks)										
	Weekly level of effort by Classification	0	8	4	0	24	0	12	0	0
	Construction Period Budget Estimate	0	96	48	0	288	0	144	0	\$ 58,921.52
4 - Closeout/Record Dwg Services (Estimated duration 2 weeks)										
	Weekly level of effort by Classification	0	8	2	4	4	0	12	0	0
	Closeout / Record Dwg Budget Estimate	0	16	4	8	8	0	24	0	\$ 6,046.53
	Subtotal - Labor	16	120	52	8	312	0	184	16	\$ 73,373.16
Reimbursables & Subconsultants										
										Material Testing Allowance \$ 5,000.00
										Mileage \$ 1,000.00
										Miscellaneous - Repro, Field Supplies \$ 500.00
	Subtotal - Reimbursables									\$ 6,500.00
	Total Project Budget									\$ 79,873.16