EXHIBIT A

SCOPE OF SERVICES
CONSTRUCTION ADMINISTRATION, INSPECTION, AND ENGINEERING SERVICES
City of Camas, Washington
NW Larkspur Street Improvements
City Project #S-604
August 14, 2018

The purpose of the NW Larkspur Street Improvements Project is to reconstruct about 1,300 feet of NW Larkspur Street, north of NW Lake Road and to upgrade the existing storm, sewer and water lines. The following scope of work describes Otak's services to provide construction engineering, field observation, and documentation for the project, in accordance with the final construction documents prepared by Otak in June 2018. This scope assumes that the project will last approximate 24 weeks for active construction and will sit unfinished during the winter of 2018-2019.

1.0 PROJECT MANAGEMENT AND COORDINATION

1.1 Internal Coordination and Coordination with City of Camas

Otak will coordinate with City of Camas Engineering staff on a weekly basis to keep the City's project manager informed about project issues and schedule. A kickoff/coordination meeting will be conducted with Otak's project team and City staff to establish procedures/protocols and communication requirements for the project. Otak will assist in scheduling project related meetings, reviews, and other coordination activities needed to keep the project moving ahead.

Deliverables:

- On-going coordination and communication as needed to appropriately manage the project (no tangible deliverables for this task).

Assumptions:

- Assumes up to one hour per week for Otak's Project Manager to coordinate with the City Project Manager on project issues and updates.

1.2 Project Invoicing

This task will include preparation and review of the monthly invoice statements.

Deliverables:

- Monthly invoices – Submitted to City.

2.0 CONSTRUCTION ADMINISTRATION AND ENGINEERING

2.1 Project Setup

Otak will prepare the quantity paybook, prepare the spreadsheets for the monthly progress payments to the Contractor, Request for Approval of Materials (RAM), maintain the Record of Material (ROM), and prepare templates for other required documentation forms. Otak staff will work with the City to develop a list of deliverables and approximate timeframe for submitting information to the City (ie. throughout the duration of the project, monthly, at project completion, etc.).

Deliverables:

- Draft list of Deliverables to City with approximate time frame(s) for submittal.
- Final list of Deliverables to City once Otak/City meet to discuss.
- Record of Materials reformatted once Otak receives original ROM from WSDOT.

Assumptions:

- This task assumes WSDOT will assemble the initial Record of Materials (ROM) and Otak staff will reformat the data to create a user-friendly and concise ROM form.
- The forms for material submittals, progress payments and other reports will follow WSDOT standard forms and be produced using Excel.

2.2 Material Submittals

Otak and it subs will review material submittals (Manufacturer's Certificates of Compliance, Certificates of Material Origin, cut sheets, Qualified Product List sheets, etc), construction sequence schedules, shop drawings, and other items required from the Contractor. Otak will maintain a documented record of all material submittals in accordance with the Record of Materials and will review, approve, and track all Requests for Approval of Materials (RAM). Otak will log in, review, track and return each submittal within the timeframe established in the Standard Specifications. Otak will review the following submittals, including but not limited to: material specific submittals, traffic control plans, staging plans, erosion and pollution control plans, quality control plan, construction schedules, drainage structure shop drawings, demolition plans, HMAC and concrete mix designs, lighting pole and traffic signal pole submittals, submittals for traffic signal or electrical equipment and materials, landscaping and irrigation submittals, and others required by construction contract specifications.

Deliverables:

- Material and submittal log.
- RAM log.

Assumptions:

- The Construction Project Manager will spend approximately 2 hours per week on material submittals with the assistance of the Field Representative if required.

2.3 Meetings

Otak will attend meetings, including a preconstruction conference with City and Contractor, weekly project progress meetings as required, and utility coordination meetings. Other specific pre-work meetings may include the following (based on need during construction or contractor request): traffic control/staging, construction surveying, and HMA paving. Otak's Construction Project Manager and Field Representative will be in attendance at every meeting and the Project Manager will attend if necessary. Project meetings will be used to promote effective communication between the City, Otak, Contractor and other project stakeholders. Otak will issue meeting minutes for each meeting.

Deliverables:

- Meeting minutes.

Assumptions:

- Up to 24 weekly meetings (project manager attending up to 4 meetings with travel included).

2.4 Construction Administration and Engineering

Otak's Construction Project Manager and Field Representative will be the direct points of contact for the City and construction contractor and will coordinate with utility franchise companies. Otak's Construction Project Manager will coordinate with the Field Representative, Contractor, and City throughout the duration of the project, keep a record of decisions made, review and recommend solutions to change order requests and disputes with the Contractor, and assist the City with review of pay notes and draft pay estimates. Otak will draft construction contract change orders for City review and approval.

Deliverables:

- Record of field decisions.
- Pay notes to City for review and processing (monthly).
- Draft construction contract change orders for City review, approval, and processing.
- Certified Payroll including reviews (Assumes 2 hours per week)

Assumptions:

- This task assumes the Construction Project Manager will provide ten hours per week, and Construction Engineer will provide 2 hours per week for the assumed project duration of 24 weeks.

2.5 Response to Questions/Field Changes

Otak will respond to requests for information by the Contractor and provide supplemental information as needed to maintain the progress of the work. If field adjustments are required as a result of a change in conditions or a desired change by the City, Otak will prepare necessary change order documents (per 2.3) and plan revisions.

Deliverables:

- Log of RFI responses and field changes.

Assumptions:

- This task assumes an Construction Project Manager will provide 3 hours per week, and a Field Representative will provide one hour per week, and engineering staff will provide 3 hours per week responding to questions and field changes, for the assumed project duration of 24 weeks.

3.0 CONSTRUCTION OBSERVATION

3.1 Field Observation

Otak will provide a Field Representative to observe the construction work on a daily basis. The Field Representative will typically be the first point of contact, and will be readily accessible, for the business/property owners, general public, and others affected by the project. The Field Representative will observe construction, attend the pre-construction conference and progress meetings, complete daily inspection reports and weekly statements of working days, measure quantities and keep quantity paybooks, and review quantities with the Contractor prior to submittal to the City for payment. The Field Representative will maintain a full-size set of plans, noting changes to the work, to be used as the basis for construction record drawings, along with the Contractor's as-built records. The Field Representative will be on site daily when the Contractor is working and will adjust hours accordingly to coincide with contractor schedule and specific items of work. This task includes up to 4 hours per week for the winter shut down inspection of erosion control measures and reporting requirements.

Deliverables:

- Daily progress reports (submitted electronically, daily).

- Weekly statement of working days (submitted weekly).
- Quantity paybooks (submitted at project closeout).
- Monthly quantity spreadsheets (submitted monthly with progress estimate).
- ESC Reports

Assumptions:

- This task assumes a Field Representative will provide a full-time presence on-site as work demands. The assumed level of effort for budgeting purposes is 40 hours per week for the assumed project duration of 24 weeks and 3 hours per week for 16 weeks during the winter months. This task also covers the field observation for signal install.

3.2 Material Testing

Otak will provide material testing in conformance with City of Camas and WSDOT requirements. Prior to construction, Otak will meet with the City to determine the appropriate testing frequency for applicable materials and develop a tracking spreadsheet to ensure all testing occurs as required.

Assumptions: The proposed scope and fee for this task is based on the following material testing frequencies and anticipated site visits:

Compaction Testing:

- Subgrade – 1 trips
- Base Aggregate – 4 trips
- Asphalt – 3 trips
- Trench Bedding and backfill – 8 trips

Concrete Samples:

- Field Concrete Testing – 2 trip
- Cylinder Pick Up – 2 trip

Laboratory Services:

- Concrete Compressive Strength Test – 8 cylinders
- Moisture/Density Curve – 5 tests
- Sieve Analysis – 7 tests
- Ignition Oven Calibration (supplier provided samples) – 1 test
- Rice Density – 3 tests
- Ignition Grade, AC Content – 3 tests

Deliverables:

- Copies of material testing results (within 48 hours after results are available)

3.4 Final Inspections

The Construction Project Manager, Field Representative, and Design Project Manager will inspect the project and compile a punch list upon substantial completion. After the Contractor has completed all punch list items, the Construction Project Manager, Field Representative, and Design Project Manager will again inspect the project and establish the physical completion date.

Deliverables:

- Initial punch list for City review and comment.
- Final punch list incorporating all comments.
- Notification of punch list completion and physical completion date.

Assumptions:

- Construction Project Manager, Field Representative and Design Project Manager will spend approximately 2 half days for developing punch list and final walk through.

4.0 PROJECT CLOSEOUT

4.1 Closeout Documentation

Otak will compile project closeout documentation and coordinate with the Contractor and the City to obtain the required documents. Otak will assemble project documentation and deliver to the City at project completion.

Deliverables:

- Project quality and quantity documentation including final material tracking sheet, final pay estimate and final change order list.

4.2 As Constructed Record Drawings

The Final Plans will be revised to conform to construction record drawings from information supplied by the Contractor, Otak Survey and Field Representative. Otak will perform an as-built survey on elements required that changed during construction. Two hardcopy sets of "Construction Record" plans (paper format) and a CD with an electronic copy of the plans (AutoCAD .dwg file format) will be submitted to the City.

Deliverables:

- Hardcopy and electronic As-Constructed Plans.

5.0 SURVEY

5.1 Construction Staking

Provide construction surveying and staking for onsite improvements in accordance with the following:

Staking Requests:
The Contractor will be responsible for submitting a written construction staking request form (provided by Otak, Inc.) at a minimum of 48 hours (excluding weekends and holidays) prior to needing any construction staking. Requests for staking received after 2:00 p.m. shall be scheduled 48 hours from the start of the next business day.
Construction staking will not deviate from the written request form. Any staking requested outside of the written request will be rescheduled as a new request.
The Contractor shall be responsible for notifying the Otak survey department for any cancellations to the staking request. The Contractor must contact the Otak survey department prior to the survey crew's departure from the office, or costs incurred will be charged to the Contractor as an extra service.
The Contractor shall request areas to be staked in their entirety. The Contractor shall be responsible for the cost associated with extra driving time for multiple site visits for the same item.
Restaking will be done at the request of the Client and requests shall be by the Contractor and approved by the Client as described above. The signing of an Otak Additional Staking Authorization form shall be required from the Contractor prior to providing restaking.

Stake type/number of stakes:
Maximum number of stakes anticipated for staking of the project (staking as described below)

Description	No. of Stakes
Staking Item	
File set up/preparation	
Control	8.0
Clearing Limits	125.0
Sawcuts	15.0
Tree Removal	25.0
Rough Grading	108.0
Water Main &	30.0

Services	
Sanitary Sewer	70.0
Storm Drain	100.0
Walls	12.0
Curbs	250.0
Lights	24.0
Sidewalk/Ramps	20.0
Driveways	68.0
Signal Poles	8.0

IF APPLICABLE, staking of the above items will be as detailed below:

- Survey Control: Prepare, locate, and set and maintain survey control for use during the construction staking process.
- Clearing Limits: One set of construction limits stakes indicating extent of the reach of construction for grading operations, or for silt fencing, and/or tree protection.
- Rough Grade Stakes: Provide one (1) set of street rough grade stakes at 50-foot intervals, along the face of curb for indicating the amount of cut or fill to centerline grade. Slope stakes are to be provided when cut or fill exceeds three (3) feet in height.
- Lot Grading: Provide one (1) set of grading stakes where fill or cut exceeds three (3) feet on lots. Set hubs with cut/fill to finish grade at an interval agreed to with Contractor for lot grading.
- Storm Facility Grading: Provide one (1) set of grading stakes where fill or cut exceeds three (3) feet on pond. Set second set of stakes with cut/fill to finish grade at an interval agreed to with Contractor for pond grading.
- Retaining Wall Stakes: Provide up to two (2) sets of wall stakes that define horizontal control and base of wall elevations as defined by wall contractor.
- Stairway Stakes: Provide up to two (2) sets of stair stakes that define horizontal control and top/bottom of stairway elevations as defined by contractor.
- Curb Stakes: Provide one (1) set of finish offset curb or edge of pavement stakes at 25-foot intervals and at horizontal curve points, and curb return quarter points, with cuts or fills to top of curb or edge of pavement grade.
- Sanitary Sewer and Storm Drain: Provide one (1) set of offset stakes with reference for line and indicating the amount of cut or fill to the invert grade at the following intervals:
- Centerline of structure 10 feet, 25 feet, 50 feet, and
- Every 100 feet thereafter to the center of the next structure or the end of the pipe.

- Provide one (1) offset stake for center of structures, tees, and/or wyes. Manhole frames and covers are to be staked to the approximate finished elevation only; final adjustment to grade and cross-slope may be done from stakes, described above, or other improvements.
- Catch Basin and Storm/Sanitary Laterals: Provide one (1) set of catch basin, storm and sanitary sewer lateral stakes indicating invert and rim elevations.
- Water Lines: Provide one (1) set of offset stakes for the water piping at 50-foot stationing along the limits of the pipe alignment. Gate valves, butterfly valves, blow-offs, plugs and thrust blocks, and similar appurtenances will not be staked.
- Driveway Stakes: Provide one (1) set of stakes indicating the center of driveway depressions and the width of the depression at driveway locations and staking of driveways to match existing connection points.
- Light Poles: Provide one (1) set of stakes indicating the center of light poles.
- Property Corners: Provide one (1) set of temporary lot corners to be set by hub and lath. The corners are to be used to install water and utility service lines and appurtenances.
- As-Constructed field ties: Perform as-built surveys upon completion of public construction improvements per jurisdictional requirements. As-built information within the public right-of-way is necessary for the completion/acceptance of the Project by the governing public jurisdiction. Provide as-built data to Engineer of Record for As-Constructed plan preparation.

Conditions/Exclusions

Our scope of services and fees, as outlined herein, are based on the following assumptions and conditions:

Construction to be completed in one phase with a winter closure period from approximately Nov 2018-March 2019.

5.2 Post-Construction Survey

Provide construction surveying and staking for onsite improvements in accordance with the following:

- Recover and reestablish survey control
- Set up to 11 iron rods at new right of way angle points
- Set up to 3 iron rods at new street centerline
- Set up to 16 iron rods that may be disturbed by construction
- Prepare Record of Survey for recording by Clark County
- Prepare and submit completion form for DNR "Permit to Destroy".

Deliverables:

- PDF of survey for review by City
- PDF of recorded survey

- Monuments set as specified on survey

EXPENSES

Expenses have been estimated in the budget at approximately 5% of the labor cost, but will be invoiced based on actual costs incurred. Mileage for travel to and from the site will be reimbursed at $0.54 per mile and assumes 28 miles roundtrip.

ASSUMPTIONS

- The scope and budget have been prepared with the assumption that actual construction of the project will begin in September 2018 and take approximately 6 months (24 weeks) to complete and will likely be wintered over and resume construction in April 2019.
- The City will prepare and coordinate execution of the Construction Contract. The City will be responsible for completing proper documentation related to project funding.
- If utility potholing is required, it will be completed by others. Otak will assist with coordinating locations.
- Field Representative hours are based on 45 hours/week for 24 weeks and 4 hours for 16 weeks during wintering period.

EXHIBIT B

Larkspur Street Improvements

Fee Estimate
Summary of Otak, Inc. and all subconsultants
Otak Project # 18218

Task	*Description*	Otak	Col. West	GTE	*Total Hours*	*Total Budget by Task*
1	**PROJECT MANAGEMENT AND COORDINATION**					
1.1	Coordination with City of Camas	**40**		**4**	**44**	**$7,880**
1.2	Project Monitoring and Reporting	**40**		**2**	**42**	**$4,132**
2	**CONSTRUCTION ADMINISTRATION AND ENGINEERING**					
2.1	Project Setup	**16**		**22**	**38**	**$1,800**
2.2	Material Submittals	**56**		**4**	**60**	**$8,220**
2.3	Project Meetings	**132**			**132**	**$23,196**
2.4	Construction Administration and Engineering	**292**			**292**	**$43,636**
2.5	Response to Questions/Field Changes	**172**		**22**	**194**	**$26,746**
3	**CONSTRUCTION OBSERVATION**					
3.1	Field Observation	**982**		**18**	**1000**	**$115,270**
3.2	Material Testing					**$15,000**
3.3	Final Inspections	**40**		**4**	**44**	**$6,232**
4	**PROJECT CLOSEOUT**					
4.1	Closeout Documentation	**48**			**48**	**$6,036**
4.2	As Constructed Record Drawings	**74**		**8**	**82**	**$9,070**
5	**SURVEY**					
5.1	Construction Staking	**358**			**358**	**$32,190**
5.2	Post Construction Survey	**74**			**74**	**$6,970**
	Total Hours	**2324**		**84**	**2408**	
	Total Labor Cost	*$280,808*	*$15,000*	*$10,570*		***$306,378***
	Direct Expenses (5%)	*$14,040*		*$300*		***$14,340***
	Project Total	$294,848	$15,000	$10,870		**$320,718**

Note: Direct Expenses will be billed at cost.

EXHIBIT B

Larkspur Street Improvements

Fee Estimate
Otak, Inc.
Otak Project # 18218

		Senior Project Manager	Construction Project Manager	Office Engineer	Field Representative		Survey					
Task	*Description*	Civil Engineer X (Allen)	Construction Manager IV (Mark)	Civil Engineer IV (Phil)	Field Representative V (Chuck)	PIC/PLS Sr. Mgr	Survey Crew Chief II	Survey Field Tech III	Survey Office Tech III	Project Admin. Assistant (Yvonne)	*Total Hours*	*Total Budget by Task*
1	PROJECT MANAGEMENT AND COORDINATION											
1.1	Coordination with City of Camas	40									40	$7,360
1.2	Project Monitoring and Reporting	8								32	40	$3,872
2	CONSTRUCTION ADMINISTRATION AND ENGINEERING											
2.1	Project Setup		8							8	16	$1,800
2.2	Project Meetings	24	100	8							132	$20,336
2.3	Material Submittals		36	20							56	$7,700
2.4	Construction Administration and Engineering	24	240	28							292	$43,636
2.5	Response to Questions/Field Changes	24	76	72							172	$24,096
3	CONSTRUCTION OBSERVATION											
3.1	Field Observation				982						982	$112,930
3.2	Material Testing											
3.3	Final Inspections	8	16		16						40	$5,712
4	PROJECT CLOSEOUT											
4.1	Closeout Documentation	4	16	4	16					8	48	$6,036
4.2	As Constructed Record Drawings	4	8	24		2	12	12	12		74	$8,170
5	SURVEY											
5.1	Construction Staking					16	126	126	90		358	$32,190
5.2	Post-Construction Survey					6	24	24	20		74	$6,970
	Total Hours	136	500	156	1014	24	162	162	122	48	2324	
	Billing Rate	$184.00	$150.00	$115.00	$115.00	$195.00	$90.00	$75.00	$92.00	$75.00		
	Total Labor Cost	*$25,024*	*$75,000*	*$17,940*	*$116,610*	*$4,680*	*$14,580*	*$12,150*	*$11,224*	*$3,600*		***$280,808***
	Direct Expenses (5%)											***$14,040***
	Project Total											**$294,848**

EXHIBIT B

Larkspur Street Improvements

Fee Estimate
Columbia West
Otak Project # 18218

Task	*Description*					*Total Hours*	*Total Budget by Task*
1	**PROJECT MANAGEMENT AND COORDINATION**						
1.1	Coordination with City of Camas						
1.2	Project Monitoring and Reporting						
2	**CONSTRUCTION ADMINISTRATION AND ENGINEERING**						
2.1	Project Setup						
2.2	Project Meetings						
2.3	Material Submittals						
2.4	Construction Administration and Engineering						
2.5	Response to Questions/Field Changes						
3	**CONSTRUCTION OBSERVATION**						
3.1	Field Observation						
3.2	Material Testing						$15,000
3.3	Final Inspections						
4	**PROJECT CLOSEOUT**						
4.1	Closeout Documentation						
4.2	As Constructed Record Drawings						
5	**SURVEY**						
5.1	Construction Staking						
5.2	Post-Construction Survey						
	Total Labor Cost						***$15,000***
	Direct Expenses						
	Project Total						**$15,000**

Larkspur Street Improvements

Fee Estimate
GTE
Otak Project # 18218

Task	*Description*	Project Manager	Sr. Eng. Associate	Tech III		*Total Hours*	*Total Budget by Task*	
						0	**$0**	
1	**PROJECT MANAGEMENT AND COORDINATION**					**0**	**$0**	
1.1	Coordination with City of Camas	4				4	$520	
1.2	Project Monitoring and Reporting	2				2	$260	
2	**CONSTRUCTION ADMINISTRATION AND ENGINEERING**					0	$0	
2.1	Project Setup					0	$0	
2.2	Project Meetings	4	18			22	$2,860	
2.3	Material Submittals	2	2			4	$520	
2.4	Construction Administration and Engineering					0	$0	
2.5	Response to Questions/Field Changes	4	12	6		22	$2,650	
3	**CONSTRUCTION OBSERVATION**					0	$0	
3.1	Field Observation	9	9			18	$2,340	
3.2	Material Testing					0	$0	
3.3	Final Inspections	4				4	$520	
4	**PROJECT CLOSEOUT**					0	$0	
4.1	Closeout Documentation					0	$0	
4.2	As Constructed Record Drawings	2	2	4		8	$900	
5	**SURVEY**					0	$0	
5.1	Construction Staking					0	$0	0
5.2	Post-Construction Survey					0	$0	
	Billing Rate	$130.00	$130.00	$95.00		84.00		
	Total Labor Cost			*$0*	*$0*		***$10,570***	$0
	Direct Expenses						***$300***	
	Project Total						**$10,870**	