

RESOLUTION NO. 2811

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, PIERCE COUNTY, WASHINGTON, AUTHORIZING A PROFESSIONAL SERVICES AGREEMENT TO PARAMETRIX TO COMPLETE THE PROGRAMMING EFFORT AT THE SCADA CENTRAL COMPUTER AS PART OF THE SCADA SYSTEM UPGRADE, PHASE 6 EFFORT.


WHEREAS, the City Council approved Resolution 2712 on February 26, 2019 with RH-2, Inc. to complete the design and programming effort at the selected sewer lift station and water sites for the SCADA System Upgrades, Phase 6; and

WHEREAS, the City Council approved Resolution 2769 on July 23, 2019 awarding the contract for the construction effort of SCADA System Upgrade, Phase 6 to Source Electric; and


WHEREAS, the City received a quote from Parametrix to complete the programming effort at the SCADA Central Computer as part of the SCADA System Upgrades, Phase 6 effort in the amount of \$35,850.00;

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Bonney Lake does hereby authorize the Mayor to sign the attached Professional Services Agreement with Parametrix Engineering for project in the amount of \$35,850.00.

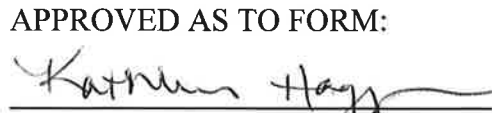
Passed by the City Council this 28th day of January, 2020.



Neil Johnson, Jr., Mayor

AUTHENTICATED:


Harwood T. Edvalson, City Clerk

APPROVED AS TO FORM:


Kathleen Haggard, City Attorney

City of Bonney Lake, Washington
City Council Agenda Bill (AB)

Department/Staff Contact: PS / Doug Budzynski	Meeting/Workshop Date: 28 January 2020	Agenda Bill Number: AB20-08
Agenda Item Type: Resolution	Ordinance/Resolution Number: 2811	Sponsor:

Agenda Subject: Award Professional Services Agreement to Parametrix for services to complete communication programming necessary at the city's SCADA Central Computer in conjunction with the SCADA Systems Upgrade - Phase 6 Improvements.

Full Title/Motion: A Resolution Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Professional Services Agreement To Parametrix For Services To Complete Communication Programming Necessary At The City's Scada Central Computer In Conjunction With The Scada Systems Upgrade - Phase 6 Improvements..

Administrative Recommendation: Approve

Background Summary: As part of the SCADA System Upgrades - Phase 6, RH-2 Consultants have completed the design for the communications upgrades to Lift stations #1, #3, #4, #5, #6, and the Panorama Water Booster Pump Station. On July 23, 2019, Council passed resolution 2769 which awarded the construction effort of the project to Source Electric. This contract will authorize Parametrix to update the programming at the City's SCADA Central Control that pertains to this phase of the upgrades. Parametrix has given the City a quote of \$35,850.00 to complete this effort. The budget for this PSA was scheduled for 2019, but the final PSA was not received until Jan. 2020. Therefore, the budget was never used.

Attachments: Resolution 2811, Professional Services Agreement, Map

BUDGET INFORMATION

Budget Amount	Current Balance	Required Expenditure	Budget Balance	Fund Source
Sewer \$300,000.00	\$300,000	\$29,900.00	\$270,100.00	<input type="checkbox"/> General
Water \$0.00	\$0.00	\$5,950.00	\$-5,950.00	<input checked="" type="checkbox"/> Utilities
				<input type="checkbox"/> Other

Budget Explanation: Sewer: Eden-402.018.035.594.35.63.01, SCADA Telemetry Upgrade, SCP-SCADA Telemetry Upgrade; Water: Eden-401.018.034.594.65.01, SCADA Telemetry Upgrade, WCP-F-01.

Revenue Source: Sewer SDC and Water SDC

COMMITTEE, BOARD & COMMISSION REVIEW

Council Committee Review:	<i>Approvals:</i>	Yes	No
	Chair/Councilmember	<input type="checkbox"/>	<input type="checkbox"/>
	Councilmember	<input type="checkbox"/>	<input type="checkbox"/>
	Councilmember	<input type="checkbox"/>	<input type="checkbox"/>

Forward to:

Consent Agenda: Yes No

Commission/Board Review:

Hearing Examiner Review:

COUNCIL ACTION

Workshop Date(s):

Public Hearing Date(s):

Meeting Date(s):

Tabled to Date:

APPROVALS

Director:

Mayor:

Date Reviewed

John Vodopich

Neil Johnson Jr.

by City Attorney:
(if applicable)

PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is made and entered into this 06 day of January, 2020, by and between the City of Bonney Lake ("City") and Parametrix, Inc. ("Consultant").

The parties hereby agree as follows:

- 1. Scope of Work.** The Consultant shall perform all work and provide all materials described in the Scope of Work set out in Exhibit A attached hereto and incorporated herein by this reference. Such work shall be performed using facilities, equipment and staff provided by Consultant, and shall be performed in accordance with all applicable federal, state and local laws, ordinances and regulations. The Consultant shall exercise reasonable care and judgment in the performance of work pursuant to this Agreement. The Consultant shall make minor changes, amendments or revisions in the detail of the work as may be required by the City, such work not to constitute Extra Work under this Agreement.
- 2. Ownership of Work Product.** Documents, presentations and any other work product produced by the Consultant in performance of work under this Agreement shall be tendered to the City upon completion of the work, and all such product shall become and remain the property of the City and may be used by the City without restriction; *provided*, that any such use by the City not directly related to the particular purposes for which the work product was produced shall be without any liability whatsoever to the Consultant.
- 3. Payment.** The Consultant shall be paid by the City for completed work and services rendered under this Agreement pursuant to the rates and charges set out in Exhibit B, attached hereto and incorporated herein by this reference. Such payment shall be full compensation for work performed or services rendered and for all labor, materials, supplies, equipment, and incidentals necessary to complete the work. All billings for compensation for work performed under this Agreement shall list actual time and dates during which the work was performed and the compensation shall be figured using the rates set out in Exhibit B; *provided*, that payment for work within the Scope of Work (Exhibit A) shall not exceed the fee/hour estimate set out in Exhibit B without written amendment to this Agreement, agreed to and signed by both parties.

Acceptance of final payment by the Consultant shall constitute a release of all claims, related to payment under this Agreement, which the Consultant may have against the City unless such claims are specifically reserved in writing and transmitted to the City by the Consultant prior to acceptance of final payment. Final payment shall not, however, be a bar to any claims that the City may have against the Consultant or to any remedies the City may pursue with respect to such claims.

The Consultant and its sub consultants shall keep available for inspection, by the City, for a period of three years after final payment, the cost records and accounts pertaining to this Agreement and all items related to, or bearing upon, such records. If any litigation, claim or audit is started before

the expiration of the three-year retention period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved. The three-year retention period shall commence when the Consultant receives final payment.

4. **Changes in Work.** The Consultant shall make all revisions and changes in the work completed under this Agreement as are necessary to correct errors, when required to do so by the City, without additional compensation.

5. **Extra Work.** The City may desire to have the Consultant perform work or render services in addition to or other than work provided for by the expressed intent of the Scope of Work. Such work will be considered Extra Work and will be specified in a written supplement which will set forth the nature and scope thereof. Work under a supplement shall not proceed until authorized in writing by the City. Any dispute as to whether work is Extra Work or work already covered by this Agreement shall be resolved before the work is undertaken. Performance of the work by the Consultant prior to resolution of any such dispute shall waive any claim by the Consultant for compensation as Extra Work.

6. **Employment.** Any and all employees of Consultant, while engaged in the performance of any work or services required by the Consultant under this Agreement, shall be considered employees of the Consultant only and not of the City, and any and all claims that may or might arise under the Workman's Compensation Act on behalf of said employees, while so engaged; any and all taxes arising out of Consultant's or Consultant's employees' work under this Agreement; and any and all claims made by a third party as a consequence of any acts, errors, or omissions on the part of the Consultant's employees, while so engaged, shall be the sole obligation and responsibility of the Consultant, except as provided in Section 12 of this agreement. The Consultant's relation to the City shall at all times be as an independent contractor.

7. **Nondiscrimination and Legal Compliance.** Consultant agrees not to discriminate against any client, employee or applicant for employment or for services because of race, creed, color, national origin, marital status, gender, age or handicap except for a bona fide occupational qualification with regard to, but not limited to, the following: employment upgrading; demotion or transfer; recruitment or any recruitment advertising; layoff or termination; rates of pay or other forms of compensation; selection for training; and rendition of services. The consultant represents and warrants that it is in compliance with and agrees that it will remain in compliance with the provisions of the Immigration Reform and Control Act of 1986, including but not limited to the provisions of the Act prohibiting the hiring and continued employment of unauthorized aliens and requiring verification and record keeping with respect to the status of each of its employees' eligibility for employment. The consultant shall include a provision substantially the same as this section in any and all contracts with sub consultants performing work required of the contractor under this contract. The consultant agrees to indemnify and hold the City harmless from any and all liability, including liability for interest and penalties, the City may incur as a result of the consultant failing to comply with any provisions of the Immigration Reform and Control Act of 1986. Consultant understands and agrees that if it violates this section, this Agreement may be terminated by the City, and that Consultant shall be barred from performing any services for the

City in the future unless and until a showing is made satisfactory to the City that discriminatory practices have terminated and that recurrence of such action is unlikely.

8. **Term.** This Agreement shall become effective upon the day of its execution by both parties, and shall terminate upon completion of the work and delivery of all materials described in Exhibit A.

9. **Termination by City.** The City may terminate this Agreement at any time upon not less than ten (10) days written notice to Consultant, subject to the City's obligation to pay Consultant in accordance with subsections A and B below.

A. In the event this Agreement is terminated by the City other than for fault on the part of the Consultant, a final payment shall be made to the Consultant for actual cost of work complete at the time of termination of the Agreement. In addition, the Consultant shall be paid on the same basis as above for any authorized Extra Work completed. No payment shall be made for any work completed after ten (10) days following receipt by the Consultant of the termination notice. If the accumulated payment(s) made to the Consultant prior to the termination notice exceeds the total amount that would be due as set forth in this subsection, then no final payment shall be due and the Consultant shall immediately reimburse the City for any excess paid.

B. In the event the services of the Consultant are terminated by the City for fault on the part of the Consultant, subsection A of this section shall not apply. In such event the amount to be paid shall be determined by the City with consideration given to the actual costs incurred by the Consultant in performing the work to the date of termination, the amount of work originally required which was satisfactorily completed to date of termination, whether that work is in a form or of a type which is usable by the City at the time of termination, the cost to the City of employing another person or firm to complete the work required and the time which may be required to do so, and other factors which affect the value to the City of the work performed at the time of termination. Under no circumstances shall payment made under this subsection exceed the amount which would have been made if subsection A of this section applied.

C. In the event this Agreement is terminated prior to completion of the work, the original copies of all work products prepared by the Consultant prior to termination shall become the property of the City for its use without restriction; *provided*, that any such use by the City not directly related to the particular purposes for which the work product was produced shall be without any liability whatsoever to the Consultant.

10. **Termination by Consultant.** Consultant may terminate this Agreement only in response to material breach of this Agreement by the City, or upon completion of the work set out in the Scope of Work and any Extra Work agreed upon by the parties.

11. **Applicable Law; Venue.** The law of the State of Washington shall apply in interpreting this Agreement. Venue for any lawsuit arising out of this Agreement shall be in the Superior Court of the State of Washington, in and for Pierce County.

12. Indemnification / Hold Harmless

Consultant shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees arising out of or resulting from the negligent acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City. In the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

Insurance

The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

A. Minimum Scope of Insurance

Consultant shall obtain insurance of the types described below:

1. Automobile Liability insurance covering all owned non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
2. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent contractors and personal injury and advertising injury. The City shall be named as an insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City.
3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
4. Professional Liability insurance appropriate to the Consultant's profession.

B. Minimum Amounts of Insurance

Consultant shall maintain the following insurance limits:

1. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.
2. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.
3. Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.

C. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions for Automobile Liability, Professional Liability and Commercial General Liability insurance:

1. The Consultant's insurance coverage shall be primary insurance as respect the City. Any insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.
2. The Consultant's insurance shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City.

D. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

E. Verification of Coverage

Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the work.

13. **Subletting or Assigning.** The Consultant shall not sublet or assign any of the work covered by this Agreement without the express written consent of the City.

14. **Entire Agreement.** This Agreement represents the entire Agreement between the parties. No change, termination or attempted waiver of any of the provisions of the Agreement shall be binding on any party unless executed in writing by authorized representatives of each party. The agreement shall not be modified, supplemented or otherwise affected by the course of dealing between the parties.

15. **Waiver.** Failure by any party to this Agreement to enforce any provision of this Agreement or to declare a breach shall not constitute a waiver thereof, nor shall it impair any party's right to demand strict performance of that or any other provision of this Agreement any time thereafter.

16. **Severability.** If any provision of this Agreement or its application is held invalid, the remainder of the Agreement or the application of the remainder of the Agreement shall not be affected.

17. **Execution and Acceptance.** This Agreement may be executed in several counterparts, each of which shall be deemed to be an original having identical legal effect. The Consultant hereby ratifies and adopts all statements, representations, warranties, covenants, and agreements contained in the supporting materials submitted by the Consultant, and does hereby accept the Agreement and agrees to all of the terms and conditions thereof.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

CITY OF BONNEY LAKE

CONSULTANT

By:


Neil Johnson Jr., Mayor

By:



Attachments:

Exhibit A: Scope of Work/Deliverables/Fee

Exhibit B: Rates

SCOPE OF WORK

City of Bonney Lake Controls Upgrade Phase 6

INTRODUCTION

The City of Bonney Lake's (City) existing SCADA system consists of the following primary components:

- Remote Telemetry Units (RTU): RTUs are control devices located at unmanned facilities such as potable wells, reservoirs, and sewer lift stations.
- Telemetry Systems: Radio and/or leased (hardwire) lines such as a digital subscriber line (DSL) which are used to convey information between the RTU and a polling device such as a Master Telemetry Unit (MTU) and/or Human Machine Interface (HMI).
- Master Telemetry Unit: Control device responsible for polling, collecting, and transmitting information to/from the RTUs via the telemetry system for transmittal to/from an HMI.
- Human Machine Interface: Graphical device used to display RTU information to a human operator. The HMI is also capable of accepting operator commands, providing historical data collection and data archive, and providing alarm management services.

The City is planning an upgrade project for the following systems:

- The control system and telemetry systems at the following sewer lift stations: LS-1, LS-3, LS-4, LS-5, and LS-6.
- The control system and telemetry at Panorama Booster Pump Station potable water site.

This project will occur in two stages and will be performed by two different companies.

1. In the first stage, the City will replace the existing Autocon based and some older Allen Bradley based RTUs and serial ultra-high frequency (UHF) data radio and leased line telemetry systems with new Allen Bradley CompactLogix programmable logic controllers (PLCs) based RTUs and an Ethernet UHF radio/Verizon DSL based telemetry system. The work associated with this stage is being performed by others and is outside the scope of this Scope of Work (SOW) for Parametrix Inc.
2. The second stage of the upgrade project includes the modification of the MTU and HMI necessary to accommodate the new RTUs and telemetry systems provided in Stage One. This SOW defines the effort associated with Stage Two of this upgrade project.

PROJECT ASSUMPTIONS AND EXCLUSIONS

The overall project assumptions and exclusions include:

- All work associated with Stage One of the City's RTU/telemetry system replacement effort is excluded from this SOW. Parametrix assumes that the upgraded site RTU and telemetry systems will be complete, finished, fully tested, and commissioned prior to the start of the work proposed in this SOW. Should the

system not be fully tested and commissioned prior to Parametrix arrival and require return visits outside this SOW, Parametrix will immediately issue a Change In Scope/Change Order to cover the additional costs associated with any additional return visits.

- Parametrix assumes that the work proposed in this SOW will not be interrupted or delayed by operational and/or maintenance issues associated with the SCADA system and/or the Stage One construction. Interruptions due to activities by others will be considered a delay in schedule and an impact to the defined Scope of Work. Parametrix will immediately notify the City should project impacts occur.
- This SOW is limited to programming services; no design services will be provided.
- Parametrix expects to be notified at least 10 working days in advance of when the on-site, Stage One work is expected to be completed and the Stage Two services described in this SOW are required. At the time of such notification, the City will provide Parametrix with the data table (tag names and addresses) for the RTU data intended for transmission to the MTU prior to the start of the work proposed in this SOW.
- Parametrix will immediately notify the City should project impacts occur.

SCADA UPGRADE WORK BREAKDOWN

Task 1 – Project Management and QA/QC Goal

Parametrix’s administrative staff provide oversight and guidance for the project to ensure that the project remains on schedule, within budget, and coincides with the original scope or work. Parametrix’s “Quality Assurance” practices provide “Quality Control” reviews performed by Parametrix personnel not associated with the project. Parametrix has found this QA/QC process to objectively identify any discrepancies in the way the project is being administered.

Approach

The specific activities included under this task shall include the following:

- Project administration and management of budget, contract, billing memos, and schedule; as well as coordinating individual tasks and maintaining project records.
- Parametrix’s QA/QC standard practices.
- Billings Effort: This activity is for project accounting and project coordination services that are not included as part of the Parametrix-audited overhead rate applied to this project.

Deliverables

Deliverables shall consist of the following:

- Monthly effort tracking, project progress reports, and generation of invoices.

Task 2 – Sewage Collection System, Lift Stations 1, 3, 4, 5, and 6

Goals

The goals of this task include:

- Change/add the lift station data tag “mapping” in the MTU to be compatible with the new RTUs (PLCs) in Lift Stations 1, 3, 4, 5, and 6.
- Change/add the HMI graphics to incorporate the new wet well analog level measurement produced by the new level transducers installed at Lift Stations 1, 3, 4, 5, and 6.
- Ensure the proper signals are attached to the new SCADA screens in the recently updated SCADA computer systems.

Approach

Modify the MTU and HMI as each lift station is transitioned from the existing Autocon based RTU and telemetry system to the new Allen Bradley PLC based RTU and telemetry system using the following procedure:

- Verify that the telemetry system is operating correctly between the lift station and the MTU.
- Verify that data from the new PLC is being received by the MTU through the new telemetry system.
- Provide message statement programming in the MTU PLC in order to bring the appropriate control information from the new Allen Bradley PLC based RTU into the MTU.
- Using the latest Lift Station template in the new Wonderware platform, ensure that all of the pertinent data and graphics installed represent the lift station operation appropriately.
- Verify all existing HMI Wonderware tags for the lift station are active and responding as expected.
- Verify all existing HMI alarms from the lift station through Top View and Historian software modules.
- Test the HMI Wonderware tags and alarms with City personnel to verify proper operation at the HMI station and the Top View notification application. A documented list of alarms will be provided to the City. Each alarm properly received will be noted as complete by City personnel and those with issues will be documented as punch list items. Punchlist items will be corrected and retested for correctness. Following successful completion of this test effort, any future support associated with this task will be provided via Task 4 below.

Deliverables

Deliverables shall consist of the following:

- Alarm test list for each station.
- One electronic copy of the programs associated with the HMI and the MTU.

Task 3 – Panorama Potable Water Booster Station

Goals

The goals of this task are:

- The Panorama Booster Station upgrade will be for DSL communications only. The existing AB PLC will be upgraded to an Ethernet PLC but the existing programming for the station is to remain. Installation of PLC and programming to be done by others.
- Modify the data tag “mapping” in the MTU to be compatible with the new telemetry installed at the Panorama Booster Treatment Facility during Stage One of the City’s upgrade project.

Approach

The approach to completing this task includes:

- Verify that the telemetry system is operating correctly between Panorama Booster and the MTU. Proper functioning of the telemetry system is the responsibility of others and is not included in this SOW.
- Verify that data from the Panorama Booster RTU is being received by the MTU through the new telemetry system. Proper functioning of the RTU is the responsibility of others and is not included in this SOW.
- Provide message statement programming in the MTU PLC in order to bring the appropriate control information from the Panorama Booster RTU into the MTU.
- Change the mapping of the existing HMI Wonderware data tags from the path associated with the existing telemetry system to the new telemetry system path.
- Verify all existing Wonderware tags for Panorama Booster are active and responding as expected.
- Verify all existing and new alarms from Panorama Booster through the Top View and Historian software modules.
- Test the HMI Wonderware tags and alarms with City personnel to verify proper operation at the HMI station and the Top View dial-out system. A documented list of alarms will be provided to the City. Each alarm properly received will be noted as complete by City personnel and those with issues will be documented as punch list items. Punchlist items will be corrected and retested for correctness. Following successful completion of this test effort, any future support associated with this task will be provided via Task 4 below.

Deliverables

Deliverables shall consist of the following:

- Alarm test list for each station.
- One electronic copy of the programs associated with the HMI and the MTU.

Task 4 – Support Goal/Approach/Deliverable

Goals

Provide a maximum of 4 hours of on-site support to troubleshoot system issues which may occur following completion of the testing services described in Tasks 2 and 3. It is assumed that any support required beyond these 4 hours will be performed under a separate on-call contract between the City and Parametrix.

PROJECT SCHEDULE

It is assumed this project will be completed in 360 days based on the contractor's hardware integration completion schedule/notification and the City's Notice to Proceed to Parametrix (whichever comes last).

					Guy Cosway	Amanda B. Lucas	Russell W. Wells	
					Sr Electrical Designer	Publications Supervisor	Electrical Designer IV	
					Rates:	\$200.00	\$140.00	\$170.00
Task	SubTask	Description	Labor Dollars	Labor Hours				
03		SCADA Upgrade Phase 6	\$35,490.00	210	6	6	180	
	01	Project Management & QA/QC	\$4,090.00	26	2	6		
	02	Lift Stations 1, 3, 4, 5, & 6	\$24,650.00	145			145	
	03	Panorama Booster Pump Station	\$5,950.00	35			35	
	04	Support	\$800.00	4	4			
Labor Totals:			\$35,490.00	210	6	6	180	
Totals:			\$35,490.00		\$1,200.00	\$840.00	\$30,600.00	\$

Other Direct Expenses

Mileage - \$0.58/mile	\$360.00
Other Direct Expenses Total:	\$360.00

Project Total **\$35,850.00**