

MANCHESTER WATER DISTRICT
Resolution No. 2024-03

**A RESOLUTION OF
THE BOARD OF COMMISSIONERS OF MANCHESTER WATER DISTRICT
APPROVING A CONTRACT WITH BHC CONSULTANTS FOR WELL 10
MANGANESE TREATMENT DESIGN SERVICES**

WHEREAS, District staff has determined the need for professional consulting services to finalize the design of Well 10's manganese treatment, permitting, bidding assistance, and preparation of the 2024 Public Works Board Trust Fund Loan application; and

WHEREAS, on August 30, 2023, pursuant to District Resolution 2016-06 Establishing a Small Public Works Roster Process for Consulting Services, District staff pulled a consultant roster from the District's hosting agency, MRSC Rosters, for the Main Category: Engineering Services and Sub-Category: Pump Station Design and Rehabilitation- Municipal Water System; and

WHEREAS, on August 30, 2023, staff selected three (3) consulting firms from the roster and downloaded their Statement of Qualifications (SOQ); and

WHEREAS, on November 3, 2023, staff evaluated and scored the three (3) consulting firms based on the information provided in their SOQ's for the proposed scope of work, and selected the most highly qualified firm, BHC Consultants; and

WHEREAS, District staff and BHC representatives have negotiated and agreed upon a defined scope of work (Exhibit A) and fee (Exhibit B) for the project in the amount of \$134,600; and

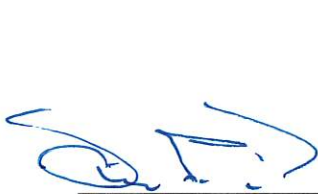
WHEREAS, the District General Manager is seeking Board authorization to execute a Professional Services Agreement with BHC Consultants for the Well 10 project in the amount of \$134,600.

NOW THEREFORE BE IT RESOLVED by the District Board that the District General Manager is authorized to execute a Professional Services Agreement with BHC Consultants in the amount of \$134,600.

THIS RESOLUTION was duly considered and approved by the Manchester Water District Board of Commissioners in a regularly scheduled open public meeting on March 12, 2024.

1. **Ratification.** Any act consistent with the authority granted pursuant to this Resolution occurring prior to the effective date of this Resolution is hereby ratified and affirmed; and
2. **Severability.** The provisions of this Resolution are declared separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section or portion of this resolution or the invalidity of the application thereof to any person or circumstances, shall not affect the validity of the remainder of the resolution, or the validity of its application to other persons or circumstances; and
3. **Effective Date.** This resolution shall become effective immediately upon adoption and signature as provided by law.

ADOPTED by the Manchester Water District Board of Commissioners on March 12, 2024.



Steve Pedersen
Board Chair



James E. Strode
Secretary



Robert Ballard
Commissioner

Exhibit A**Scope of Work****Manchester Water District
Well 10 Manganese Treatment****Statement of Understanding**

Manchester Water District's (District) Well 10 experiences manganese concentrations higher than the secondary maximum contaminant level (SMCL) of 0.05 mg/L. The District has provided manganese sample results for Well 10 that include the following:

Concentration (mg/L)	Date
0.15	8/24/2011
0.1203	5/12/2015
0.0792	7/20/2017

The District has also analyzed for other parameters that can affect manganese treatment systems including pH, silica, and total organic carbon (TOC). The results or concentrations for these parameters appear to be too low to interfere with the effectiveness of manganese treatment.

The ultimate capacity of Well 10 is 360 gpm, which discharges to the distribution system at a pressure of 100 psi. Currently Well 10 is used as a secondary source of supply and is blended with Well 11 and other sources in the distribution system. Well 10 operates with restricted hours.

The Well 10 site is a 1.32 acre wooded site that includes Well 11. The site is sloped, especially on the northern and eastern sides. The existing CMU well house on the site serves both Well 10 and Well 11 and includes electrical controls, chemical feed pumps, metering equipment, and SCADA equipment.

The 90% design level of completion for the Well 10 manganese treatment system was completed in 2020. The completion of the design and initiation of construction was paused until construction funding was pursued and secured. The District has requested that BHC Consultants, LLC (BHC), prepare a Public Works Trust Fund (PWTF) funding application, provide permitting assistance, prepare the final stage of design which consists of 100 Percent Design Documents and the Bid Ready Construction Documents, and provide bidding assistance. Engineering services during construction are not included at this time and, if desired by the District, will be addressed through an amendment.

Scope of Services

The work tasks include five components, as applicable:

- 1) Receivables: elements that will be provided by the District.
- 2) Work Tasks: tasks that will be completed by BHC.
- 3) Deliverables: the finished product that will be delivered to the District via electronic copy and hard copy.
- 4) Assumptions: assumptions used to develop each Work Task.
- 5) Meetings: meetings with District staff will be conducted at the District's offices.

Task 1 – Project Management

Work Tasks:

- 1.1 Develop Project Schedule.
- 1.2 Coordination with District: Coordinate with District staff by phone and email.
- 1.3 Status Reports and Invoices: Provide monthly status reports with invoices.
- 1.4 Project Team Coordination: Coordinate with project team on weekly basis to review current and upcoming tasks, deliverables and coordination efforts.

Deliverables:

- Project Schedule.
- Monthly status reports with invoices (Adobe pdf format).

Assumptions:

- Project duration of 12 months.

Task 2 – PWTF Application

Receivables:

- Financial information from the District.
- Board resolution that the District is fully supportive of submitting an application and is committed to accepting and paying back the loan.

Work Tasks:

- 2.1 Prepare the Draft PWTF Application. Update the Opinion of Probable Construction Costs (OPCC).
- 2.2 Incorporate edits from District review of Draft and prepare a Final Application that is ready for the District to submit to the PWTF through the District's Zoomgrants account.

Deliverables:

- Draft PWTF Application submittal to the District.
- Final PWTF Application that District can submit to the Public Works Board.

Assumptions:

- The OPCC will be updated for use in the PWTF Application. The OPCC will be scaled to provide an estimate of future costs for construction of the treatment system. However, actual contractor bids and construction costs may vary from the OPCC.
- Application for upcoming cycle will be similar to previous applications requiring updating and supplementing information rather than creating new content and/or collecting new data.

Task 3 – Permitting and SEPA Assistance

Receivables:

- Written review comments on permitting documents.

Work Tasks:

- 3.1 Kitsap County Permits: County permits may include Site Development Activity Permit (SDAP), Abbreviated Drainage Review - Engineered, clearing and grading permit, and building permit. BHC will prepare the permit documents for submittal to the County.
- 3.2 SEPA Checklist: If required, BHC will prepare the SEPA checklist for the project and submit to District for review. BHC will provide assistance to District in preparing public review notice. District is responsible for coordination and costs of advertisement with the newspaper of record.

- 3.3 Washington Department of Health (DOH) Project Report: Comments on the Draft Project Report were received from DOH in 2019. These comments have not been responded to yet. A Final Project Report and comment response letter will be prepared and submitted to DOH.

Deliverables:

- SDAP, Abbreviated Drainage Review – Engineered, clearing and grading permit, and building permit documents, where needed.
- SEPA Checklist documents.
- DOH Final Project Report.

Assumptions:

- The site is not located in close proximity to water bodies. It is assumed that Shoreline permits will not be required.
- The project will result in less than 7,000 sf of disturbed area and less than 2,000 sf of new/replaced hard surface; the parcel is outside of the Urban Growth Area; the parcel is within a Critical Drainage Area; and the project will be classified as a Small Project. Therefore, an Abbreviated Drainage Review – Engineered will be required, and the associated drawings and report are included in this scope.
- It is assumed that a SEPA Determination of Non-Significance will be justified for the project. An EA or EIS will not be required. The District will be the lead agency for the SEPA process.
- A cultural resources or archaeological evaluation is not expected to be required and has not been included in this scope.
- A detailed blending study, water quality evaluation, and corrosion control evaluation are not anticipated to be required by DOH and are not included in this scope. The District is already using Well 10; therefore it is assumed that new Source Approval will not be required by DOH.
- Construction permits, including electrical permits, will be obtained by the Contractor.
- If PWTF funding is received and if additional permitting other than that presented above is required, an amendment to this task may be required.

Meetings:

- None.

Task 4 – Final Design

Receivables:

- Written review comments on the 90 and 100 percent design submittals.

Work Tasks:

4.1 100 Percent Design Documents

- Address 90 Percent Design Submittal District review comments.
- Prepare 100 Percent level plans and specifications.
- Prepare 100 Percent opinion of probable construction cost.
- Prepare updated project schedule for the design and construction.
- Submit 100 Percent Design Documents including plans, specifications, opinion of probable construction costs estimate, and schedule to District.

4.2 Bid Ready Construction Documents:

- Address 100 Percent Design Submittal District review comments.
- Prepare construction bid level plans and specifications.
- Prepare final opinion of probable construction cost.
- Prepare updated project schedule for the design and construction.
- Submit Bid Ready Construction Documents (stamped and signed) including plans, specifications, opinion of probable construction costs estimate, and schedule to District.

4.3 Quality Assurance/Quality Control (QA/QC):

- Perform a QA/QC review of the 100 Percent Design Documents and Bid Ready Construction Documents.
- QA/QC reviews will be performed by the project manager and a senior or principal level engineer not directly involved in the design efforts.

Deliverables:

- Up to three (3) hard copies and one (1) electronic copy (Adobe pdf format) of 100 Percent Design Documents.
- Up to three (3) hard copies and one (1) electronic copy (Adobe pdf format) of Bid Ready Construction Documents.
- One (1) electronic copy (Adobe pdf format) of minutes for Meetings as necessary.

Assumptions:

- N.L. Olson has completed a topographical and geotechnical survey for the site. It is assumed that no additional topographical or geotechnical surveying is needed and these surveys will be adequate for completing the design.
- The 90% design of the treatment plant building consists of a one-room, concrete block structure constructed on a concrete slab on grade, similar to the District's existing well house. The treatment building design will need to be evaluated to see if it conforms to the 2021 IBC, and upgraded if it does not.
- It is assumed that the existing well pump is adequate and does not need replacement.
- The existing chemical feed systems can be used without upgrades. Additional chemical feed systems are not required and their design is not included in this scope.
- Per the existing geotechnical report, site soil conditions are adequate for the building and for local infiltration. The District prefers infiltration to be performed on the west and north sides of the site, away from the steep slopes to the east.
- The District intends to use an ATEC filtration system and ATEC will be sole-sourced in the specifications. ATEC will provide drawing layouts/details and specifications for the skid-mounted filtration system, which will be incorporated into the construction documents prepared by BHC.
- Controls provided as standard with the ATEC system will meet the District's needs. Additional customized controls or additional telemetry are not needed or included in this scope.
- The existing electrical service and distribution are adequate for adding this new building and treatment loads.
- The District maintains a portable standby generator. Permanent standby power will not be provided at the site. The existing Well 10 building will be equipped with a Crouse Hinds transfer switch for use with a portable generator, in accordance with District standards.
- If PWTF funding is received and if that funding requires unexpected edits to the Specifications, an amendment to this task may be required.
- Project specifications will be in the Construction Specifications Institute (CSI) format.
- Drawings will be prepared full size (22" x 34") using AutoCAD Release 2016/2018.
- Contractor copies of Bid Ready Construction Documents are not included.
- The Bid Ready Construction Documents will be provided to DOH for review and project approval.
- The Drawing List from the 90% design is shown below:
 - G-1, Title Sheet (Vicinity Map)
 - G-2, Index of Drawings and General Notes
 - G-3, Existing Site Plan and Survey Control
 - C-1, Demolition, Site and Grading Plan
 - C-2, Civil Details & Sections
 - C-3, Filter Details, 1 of 2
 - C-4, Filter Details, 2 of 2
 - A-1, Code Summary
 - A-2, Manganese Treatment Building, Floor Plan
 - A-3, Manganese Treatment Building, Roof Plan

- A-4, Well Building Elevations
- A-5, Typical Door and Louver Details
- A-6, Typical Architectural Details
- S-1, Structural General Notes, 1 of 2
- S-2, Structural General Notes, 2 of 2
- S-3, Manganese Treatment Building, Foundation/Floor Plan
- S-4, Manganese Treatment Building, Roof Framing Plan
- S-5, Typical Concrete Details
- S-6, Typical Masonry Details, 1 of 2
- S-7, Typical Masonry Details, 2 of 2
- E-1, Electrical Symbols and Legend
- E-2, Electrical Site Plan
- E-3, Electrical building Plan
- E-4, Electrical One-Line Diagram and Load Calc
- E-5, Electrical Schedules and Details
- E-6, Electrical Schedules and Details

Meetings:

- BHC proposes to conduct an onsite meeting at Well 10 prior to starting the 100 Percent Design Documents. The intent of the meeting is to receive any District request for changes to and comments on the 90% Design. This meeting will include the Project Manager, Project Engineer, Structural Engineer and Electrical Engineer.
- This scope provides for up to two (2) additional Meetings/Site Visits by the project team, in addition to the meeting described above. The meetings would be for up to two (2) hours in length each and include two (2) team members.

Task 5 – Bidding Assistance

BHC will provide assistance during the bid period including addressing bidder questions, issuing addenda, and reviewing bids. BHC will also prepare Issued for Construction documents.

Receivables:

- Questions from Bidders

Work Tasks:

5.1 Bid Period Services

- Assist the District with preparation and transfer of bid advertisements to appropriate publications and agencies, per District preference.
- Lead a pre-bid meeting and site walk-through early in the bidding period. For the meeting, an agenda will be prepared and BHC will lead the review of contract documents, highlighting special project requirements. Meeting/Site Visit assumed to be four (4) hours in length including up to two (2) BHC engineers.
- Respond to bidders' requests and issue a maximum of two (2) addenda that itemize necessary changes and clarifications to the bidding documents.
- Prepare Bid Tabulation

5.2 Issued For Construction Documents

- Prepare Issued for Construction Drawings and Specifications, consisting of the Bid Ready Construction Documents modified to include changes made by addenda.

Deliverables:

- Pre-bid meeting agenda, attendees list, and minutes
- Responses to questions from bidders
- Two (2) addenda, if required

- Bid Tabulation
- Issued for Construction drawings and specifications

Assumptions:

- District will utilize Bidder's Exchange or a similar process. District will be responsible for all fees associated with Bidder's Exchange or similar processes. BHC will assist in placement of the documents on Bidder's Exchange and will monitor bid progress.
- District will be responsible for all advertisement fees in local publications.

Meetings:

- Pre-Bid meeting as described above.

Task 6 – Management Reserve

This item is added in case additional activities are needed to complete this project. The Management Reserve will be used only upon written permission of the District.

Receivables:

- Written permission from the District is required to perform management reserve tasks or to access project management reserve funds.
- To be determined.

Work Tasks:

6.1 Task TBD. Project management reserve tasks to be determined.

Deliverables:

- To be determined.

Meetings:

- To be determined.

BUDGET

The Project Budget is \$134,600 and is attached as Exhibit B. This budget is based on, and in accordance with, the BHC's 2024 rate schedule, including a 10 percent mark-up on subconsultant costs and other direct costs. The District agrees to allow BHC (and sub-consultants) to adjust rates on an annual basis in January of each year. Budget may also be moved within the tasks and to other tasks, as needed.

PROJECT SCHEDULE

The preliminary project milestones are listed below; a detailed schedule will be developed after notice to proceed. The Project budget assumes that the design efforts associated with this scope of services will be completed within 12 months from notice to proceed. This schedule shall be equitably adjusted as the project progresses, allowing for changes in scope or for delays beyond BHC's control.

Preliminary Project Milestones:	Notice to Proceed	March 2024
	PWTF Application Submittal	June 2024 (depends on PWB deadline)
	SDAP Submittal to the County	August 2024
	Expected PWTF Funding Announcement	September 2024
	Building Permit Submittal	October 2024
	100 Percent Design Documents	October 2024
	Bid Ready Construction Documents	December 2024
	Expected PWTF Contract	January 2025
	Bid Advertisement	February 2025

Attachments

- Exhibit B – Project Budget

Exhibit B - Project Budget
Manchester Water District
Well 10 Manganese Treatment

EXHIBIT B

Task	Description	Principal in Charge and QA/QC			Project Manager			Project Engineer			Staff Engineer			Electrical Engineer			Structural Engineer			CAD/IS Manager			CAD Drafter			Clerical Support			TOTAL		
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
1.1	Project Management	4	\$ 1,120	12	\$ 2,880	4	\$ 676	4	\$ 756	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676
1.2	Coordination with District	4	\$ 1,120	12	\$ 2,880	4	\$ 676	4	\$ 756	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676
1.3	Status Reports and Invoices	2	\$ 560	16	\$ 3,924	2	\$ 324	2	\$ 324	2	\$ 324	2	\$ 324	2	\$ 324	2	\$ 324	2	\$ 324	2	\$ 324	2	\$ 324	2	\$ 324	2	\$ 324	2	\$ 324	2	\$ 324
1.4	Project Team Coordination	6	\$ 1,680	48	\$ 9,072	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676	4	\$ 676
2	PWTF Application	1	\$ 280	2	\$ 378	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352
2.1	Prepare and submit Final PWTF Application	1	\$ 280	2	\$ 378	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352
2.2	Prepare and submit Final PWTF Application	1	\$ 280	2	\$ 378	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352
3	Permitting and SEPA Assistance	2	\$ 560	4	\$ 756	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704
3.1	Kilasp County Permits	1	\$ 280	4	\$ 756	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352
3.2	SEPA Checklist	1	\$ 280	4	\$ 756	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352
3.3	DOH Project Report	1	\$ 280	4	\$ 756	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352
4	Final Design	3	\$ 840	12	\$ 2,256	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704
4.1	Final Design	3	\$ 840	12	\$ 2,256	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704
4.2	Final Design	3	\$ 840	12	\$ 2,256	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704	16	\$ 2,704
4.3	Quality Assurance/Quality Control (QA/QC)	12	\$ 3,360	14	\$ 2,640	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084	36	\$ 6,084
5	Bidding Assistance	1	\$ 280	4	\$ 756	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352
5.1	Bid Period Services	1	\$ 280	4	\$ 756	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352	8	\$ 1,352
5.2	Issued for Construction Documents	1	\$ 280	2	\$ 378	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014	6	\$ 1,014
6	Management Reserve	2	\$ 560	6	\$ 1,514	12	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028
6.1	Management Reserve	2	\$ 560	6	\$ 1,514	12	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028
6.2	Management Reserve	2	\$ 560	6	\$ 1,514	12	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028	16	\$ 2,028
Total Direct Labor		25	\$ 7,000	84	\$ 15,676	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196	84	\$ 14,196
Other Direct Costs																															
Printing																															
Travel Costs																															
TOTAL ODC																															
GRAND TOTAL																															