

AMENDMENT NO. 6 TO THE PROFESSIONAL SERVICES AGREEMENT
BETWEEN THE CITY OF MANHATTAN BEACH AND STANTEC CONSULTING
SERVICES, INC.

This Sixth Amendment ("Amendment No. 6") to that certain agreement by and between the City of Manhattan Beach, a California municipal corporation ("City") and Stantec Consulting Services, Inc., a New York corporation ("Contractor") (collectively, the "Parties") is hereby entered into as of August 18, 2020 ("Effective Date").

RECITALS

A. On May 17, 2016 the City and MWH Americas, Inc. a California corporation ("MWH") entered into an agreement to provide engineering design services for the Peck Reservoir Replacement Project ("Original Agreement"). Effective January 1, 2017, MWH was merged into its affiliated corporation Stantec Consulting Services, Inc., a New York corporation ("Stantec"). On March 30, 2017, the Parties entered into Amendment No. 1 assigning the Agreement to Stantec.

B. On May 18, 2018 City and Contractor entered into Amendment No. 2 to extend the term of the Agreement through December 31, 2020.

C. On July 24, 2018 City and Contractor entered into Amendment No. 3 to add additional services, and increased the Maximum Compensation by \$43,453.59 to pay for the additional services.

D. On April 1, 2019 City and Contractor entered into Amendment No. 4 to add additional services, and increased the Maximum Compensation by \$49,404.00 to pay for the additional services.

E. On July 31, 2020 City and Contractor entered into Amendment No. 5 to add additional services, and increased the Maximum Compensation by \$48,502.41 to pay for the additional services. The Original Agreement, as amended by Amendment No. 1, Amendment No. 2, Amendment No. 3, Amendment No. 4 and Amendment No. 5, is referred to herein as the "Agreement".

F. The Parties now desire to amend the Agreement to extend the term, modify the Scope of Services to add additional services, and increase the Maximum Compensation to pay for the additional services.

NOW, THEREFORE, in consideration of the Parties' performance of the promises, covenants, and conditions stated herein, the Parties hereby agree as follows:

Section 1. Section 2 of the Agreement is hereby revised to extend the term of the Agreement through June 30, 2023, unless sooner terminated as provided in Section 12 of the Agreement.

Section 2. Section 3.A of the Agreement is hereby revised to increase the Maximum Compensation amount by \$994,987.60 for a new Maximum Compensation of \$ 2,494,987.60.

Section 3. Exhibit A (Scope of Services) of the Agreement is hereby amended to include additional services for the Peck Reservoir Replacement Project by adding the services set forth on the attached Exhibit A (Scope of Services) attached to this Amendment No. 6. Exhibit B (Approved Fee Schedule) of the Agreement is hereby amended by adding the attached Exhibit B (Approved Fee Schedule) of this Amendment No. 6 to the Approved Fee Schedule.

Section 4. Except as specifically amended by this Amendment No. 6, all other provisions of the Agreement shall remain in full force and effect.

IN WITNESS THEREOF, the Parties hereto have executed this Amendment No. 6 on the day and year first shown above.

[SIGNATURE PAGE FOLLOWS]

The Parties, through their duly authorized representatives are signing this Agreement on the date stated in the introductory clause.

City:

City of Manhattan Beach,
a California municipal corporation

Contractor:

Stantec Consulting Services, Inc., a New
York Corporation

By: _____

Name: Bruce Moe
Title: City Manager

By: _____

Name: Venu Kolli
Title: Area Manager

ATTEST:

By: _____

Name: Liza Tamura
Title: City Clerk

APPROVED AS TO FORM:

By: _____

Name: Quinn M. Barrow
Title: City Attorney

APPROVED AS TO FISCAL IMPACT:

By: _____

Name: Steve S. Charelian
Title: Finance Director

APPROVED AS TO CONTENT:

By: _____

Name: Stephanie Katsouleas
Title: Public Works Director

EXHIBIT A
SCOPE OF SERVICES

Task 1 – Project Management

1.1 Project Management

Design Engineer will be responsible for management of engineering staff, management of its subconsultants as an independent contractor working in collaboration with the Construction Manager and under direct contract the City. The Construction Manager under separate contract to the City will lead the construction period activities and schedule.

Task 2 –Project Meetings

2.1 Construction Hand-Off Workshop

Design Engineer's Project Manager will participate in a 2-hour Construction Hand-Off Workshop. The purpose of the workshop is for the Design Engineer and the City teams to transfer project-specific knowledge to the Construction Manager who will be managing and monitoring construction. It is anticipated that the following topic will be covered in this meeting:

- Roles and Responsibilities
- Communication Protocols
- Overview of project objective
- Review of project elements
- Review of sequencing constraints
- Key issues to be addressed during construction
- Identification of risks and discussions of contingency plans
- Review sole source items and logistics for Submittal Review

It is assumed that the Design Engineer will lead the meeting, providing an agenda and subsequent meeting minutes.

2.2 Preconstruction Conference

Design Engineer will participate in a 4-hour Preconstruction Conference attended by City staff, Design Engineer, Treatment Subconsultant, Construction Manager, the Contractor, subcontractors, and vendors. This meeting will be scheduled and presided over by the City. In this meeting, The City's Construction Manager will describe Design Engineer's role in the project and the services the Design Engineer will provide during construction. The Construction Manager will prepare meeting minutes and Design Engineer will review and comment on the minutes.

2.3 Pre-Submittal Meetings

Design Engineer and Treatment Subconsultant will attend two pre-submittal meetings, 4 hours each, during the course of construction. The following deferred submittals will be discussed and planned at these meetings:

1. Equipment anchorage
2. Steel Open Web Joists
3. Guardrail and Handrail System
4. FRP Platforms
5. Metal Picket Gate and Fencing
6. MSE Wall System
7. Pre-cast Manhole and Vault Structures

8. Pressure Manganese Removal Filters and Anchorage
9. Glass-Fused Bolted Steel Tanks
10. Fiberglass Reinforced Plastic Storage Tanks
11. Carbon Steel Tanks for Aqueous Ammonia Storage

The purpose of the first meeting will be to discuss the contents of the submittals, design criteria, schedule of the submittals, and permitting requirements. The second meeting will be held after the deferred submittals have been provided and reviewed by the Design Engineer and submitted to the City Plan Check for approval. The purpose of the second meeting will be to discuss the submittal review, planning the permitting, and discussions regarding resubmittals.

Task 3 – Submittal Reviews

The Construction Manager will receive and log-in all submittals from the Contractor. The Construction Manager will forward copies of shop drawings and submittals to the Design Engineer or Treatment Subconsultant in general accordance with an agreed-upon submittal log. The Construction Manager is expected to be primary reviewer of 22 submittals, related to Division 1 specifications. The Design Engineer will be primary reviewer for 119 technical submittals and the Treatment Subconsultant for 67 technical submittals, related to the specification sections that each was responsible for. A log of anticipated submittals for each specification section is included as an attachment to this amendment. Design Engineer and Treatment Subconsultant will review the shop drawings and submittals for conformance with the requirements of the Contract Documents, review of contractor proposed substitutions, and return the submittal review comments to the City within ten (10) calendar days after receipt of submittal. Design Engineer will accommodate occasional expedited reviews for time sensitive submittals. Submittals are anticipated to consist of shop drawings, vendor tests, certifications, and test reports. All submittals will be made available electronically (PDF). It is assumed that 93 of the submittals will require a second round of review, and that the submittals reviewed by Construction Manager will require a minor supporting review from the Design Engineer. Technical submittal reviews are budgeted six (6) hours for each submittal review, three (3) hours for each second-round review, and two (2) hours for submittals that require minor supporting review.

Task 4 – Request for Information (RFI)

The Construction Manager will receive and log in all RFIs from the Contractor. The Construction Manager will forward to Design Engineer or Treatment Subconsultant certain RFIs generated by the Contractor or the City in accordance with an agreed-upon delegation of area of expertise and responsibility. Design Engineer or Treatment Subconsultant will return written responses to the Construction Manager within seven (7) calendar days of receipt of RFI, clarifying the requirements of the Contract Documents. Design Engineer and/or Treatment Subconsultant will generate necessary sketches, figures, and modifications to the drawings for clarifications. When required to avoid schedule delay or additional construction-related costs, Design Engineer will expedite the review of time sensitive RFIs. It is assumed that 150 RFIs will require Design Engineer and/or Treatment Subconsultant review and response. Design Engineer has budgeted seven (6) hours per RFI.

Task 5 – Contract Document Modifications, Design Changes, and Change Orders

If the Contract Documents require modifications due to changed conditions or City requests design changes or contractor proposes alternatives in accordance with the construction contract; Contract Manager will prepare preliminary change order documents and forward them to the City. The City will review the proposed change and request Design Engineer to incorporate requested changes. The City will issue the change order documents in a formal

Request for Proposal (RFP) or Field Change Order (FCO) to the Contractor. Design Engineer will prepare supporting calculations and other necessary information to support the design.

Any Contract Document that requires changes will be identified with date of change and reference (RFI number, RFP number, FCO number, etc.) shown on the document. Changes shown on drawings will be clearly marked and "clouded" for accurate identification of the scope of change by the Contractor and inspection staff. Construction Manager will maintain up-to- date Contract Documents. When a change is required on a contract drawing that has previously undergone a change, the updated drawing showing the previous change will be used as the base document to identify new changes. Design Engineer will submit complete change documentation to the City for use in RFIs, RFPs, and FCOs. This change documentation will consist of plan drawings, schematics, details, schedules, and specifications. The drawings will be signed and stamped by a professional engineer.

This task consists of up to ten (10) contract document modifications at thirty (30) hours each. It is understood that review of contractor proposed alternative will be reimbursed by the contractor and is not included in the budget for this task.

Task 6 – Factory visits and Site Visits

6.1 Factory Visits

Design Engineer or Treatment Subconsultant will attend three factory visits for equipment inspection/testing. Prior to the equipment being shipped to the City. The equipment that will be inspected at the factory is:

- Electrical Switchgear – one person from treatment subconsultant
- Treatment Vessels – one person from treatment subconsultant
- Horizontal Split-Case Pumps – one person from design engineer

It is assumed that one person from the Design Engineer or treatment subconsultant team will attend each factory visit. The Design Engineer or treatment subconsultant will charge travel costs, consisting of flight, mileage, hotel and per diem as a reimbursable direct cost.

6.2 Site Visits

As part of the work associated with Submittal Review (Task 3), RFIs (Task 4), or Design Changes (Task 5) it may be necessary for the Design Engineer and Treatment Subconsultant to visit the site to coordinate with the Construction Manager, Contractor, or City Staff to gather information. The travel time and time onsite for such meetings will be charged to this task. It is anticipated that there will be nineteen (19) site visits of three (3) hours each and one site visit at eight (8) hours, for a total of twenty (20) site visits. One of the site visits will be the final inspection walk through with the City and Contractor.

Design Engineer will conduct structural inspection and observation services of rebar and concrete placement in conformance with California Building Code Chapter 17. The inspections and observations will be documented on the City of Manhattan Beach's form and filed with the Construction Manager and Plan Check office. It is assumed that the Structural Engineer will perform 3 site visits for observation at 6 hours each.

The Design Engineer will coordinate with the Construction Manager to identify the locations and frequencies that samples will be taken by the Construction Manager or Contractor. This will be part of the site visits conducted throughout the project.

The Geotechnical Engineer of Record will conduct soil inspections consisting of:

- Soil inspection of exposed subgrade beneath all structures
- Periodic inspection of placement of bedding materials beneath foundations
- Periodic inspection of backfill material behind retaining walls

It is assumed that the Geotechnical Engineer will perform 8 site inspections.

Task 7 – Startup and Commissioning

7.1 Meetings

The Design Engineer and Treatment Subconsultant will attend up to eight (8) Startup and Commissioning meetings when requested by City staff. The scope of this task consists of time for meeting preparation, follow-up, and review of meeting minutes. Commissioning team meeting minutes will be prepared by the Construction Manager. The Design Engineer will review and comment on the meeting minutes. It is assumed that the complete work for each meeting will consist of eight (8) hours. It is also assumed a meeting will be held for the Greensand Filters, the Pump Station and six additional Start-up and Commissioning Meetings.

7.2 Permitting Assistance

As part of Startup and Commissioning, Design Engineer and Treatment Subconsultant will assist the City with final permitting of the project through two regulatory agencies. It is assumed that this will consist of one in person meeting for each agency, and preparation of one presentation for each agency. These agencies are DDW and LACSD. It is assumed that each meeting will be three (3) hours and the preparation of each presentation will be four (4) hours.

Task 8 – Operations Manual

It is anticipated that the Construction Manager will coordinate with the vendors and contractor to compile a set of manufacturers operation and maintenance manuals for equipment and packages. Treatment Subconsultant will prepare an Operations Manual for the operators that describe the functionality of the treatment system based on the control strategies, system and device features, general network configuration, and drawings developed in the design and permitting phases of the project. Features of the system will be described for normal equipment operation, monitoring, maintenance, and emergency operation.

Design Engineer will prepare an Operations Manual for the operators that will describe the functionality of the pump station based on the control strategies, system and device features, general network configuration, and drawings developed in the design and permitting phases of the project. Features of the system will be described for normal equipment operation, monitoring, maintenance, and emergency operation.

Following start-up and commissioning, the Design Engineer will address, resolve and/or incorporate comments, additions, or changes to the O&M manuals determined during commissioning. It is anticipated that this will consist of one O&M manual for the pump station and one O&M manual for the treatment system. One resubmission is assumed for each O&M manual.

Task 9 – Conformed and Record Drawings

After completion of bidding, Design Engineer will create a conformed set of drawings and specifications. This will consist of incorporating clarifications and edits to the drawings and specs from the bidding process. This drawing set will not be stamped and will be for the convenience of the parties.

After completion of construction, the City will transmit to Design Engineer the Final Field Markup Set of drawings. At that time, the Design Engineer will meet with the City and Resident Engineer to review the Contractor's Final Field Markup Set.

Design Engineer and Treatment Subconsultant will prepare Draft Record Drawings based on the Final Field Markup Set for the drawing set. The Design Engineer will submit the Draft Record Drawings to the Resident Engineer. The Draft Record Drawings will be reviewed for

content by City staff. A consolidated comment log will be returned to the Design Engineer and, if any comments are generated, the Design Engineer will revise the record drawings and resubmit to the Resident Engineer for review of the changes and acceptance of the record drawings.

When no additional comments are identified, Design Engineer will prepare the Final Record Drawings and submit them along with the Contractor's field markup set to the City. Design engineer will receive one consolidated comments log for draft record drawings submittal and any comments received after final record drawings are submitted will be at additional cost. All record drawings will contain a stamp indicating:

"Record Drawings"

These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be herein as a result."

The stamp will optimally be placed in the bottom right hand corner of the border and may be attached via x-ref. If importing the stamp via x-ref interferes with content in the bottom right hand corner, the stamp may also be placed in other open space along the bottom of the border. In addition, a note will be placed over the engineer's seal stating that "This drawing was originally approved for construction by [name of engineer] on [date] and sealed by [name of engineer] a licensed professional engineer in the State of California No. [License number] ". Design Engineer will submit an electronic copy of the record drawings to the City for review and approval. The acceptance of the record drawings will be deemed a condition for completion of work.

As part of Construction, the Contractor will generate several deferred submittals and proprietary product submittals. The Design engineer will incorporate drawings generated by the Contractor into the record drawing set. Contractor-generated drawings and the shop drawings will not be updated by Design Engineer.

Task 10 – Inspection and Observation

This task has been deleted.

Task 11 – Miscellaneous Technical Support

This task shall consist of \$30,000 of miscellaneous technical support and will be utilized upon direction of the City Project Manager.

Task 12 – Final QA/QC Validation and Southern California Edison Support

This task shall consist of the final QA/QC Validation and Edison support during the design. The rates for this task will utilize the previous contract rates. The balance of the amendment will utilize the revised rates. More specifically this item addresses the refinement of the piping and instrumentation diagrams (P&IDs), Additional Instrumentation and Controls Work, Southern California Edison Support, additional meeting attendance, additional project management and Opinion of Probable Construction Cost (OPCC) revision.

Below is Itemization of Anticipated Submittals for this Amendment No. 6

	CM	Stantec	Hazen
DIVISION 01 - GENERAL REQUIREMENTS			
01 10 00 Summary of Work	0	1	0
01 14 00 Construction Constraints	0	1	0
01 29 00 Measurement and Payment	0	0	0
01 29 73 Schedule of Values	0	1	0
01 32 16 CPM Construction Schedule	12	0	0
01 33 00 Contractor Submittals	0	0	0
01 33 17 Structural Design, Support And Anchorage	0	1	0
01 35 45 Construction Waste Management	1	0	0
01 35 53 Site Security	0	0	0
01 42 19 Reference Standards	0	0	0
01 50 00 Mobilization	0	0	0
01 50 10 Protection of Existing Facilities	0	0	0
01 51 00 Temporary Utilities	0	0	0
01 52 00 Field Office, Equipment, and Services	1	0	0
01 55 00 Site Access and Storage	1	0	0
01 57 19 Temporary Environmental Controls	0	0	0
01 60 00 Products, Materials, Equipment, and Substitutions	0	0	0
01 74 10 Testing and Disinfection of Concrete and Steel Water Structures	0	2	0
01 74 20 Gravity Pipeline Testing	0	1	0
01 74 30 Pressure Pipe Testing and Disinfection	0	1	0
01 74 40 Concrete Structure Testing	0	1	0
01 75 00 Equipment Testing and Plant Startup	0	1	2
01 77 00 Project Closeout	1	1	1
01 79 00 Owner Staff Training	1	1	1
DIVISION 02 - EXISTING CONDITIONS			
02 82 13 Asbestos Removal	0	1	0
02 41 19 Demolition and Reconstruction	1	0	0
DIVISION 03 - CONCRETE			
03 01 30 Concrete Repair and Rehabilitation	0	2	0
03 11 00 Concrete Forming	0	1	0
03 20 00 Concrete Reinforcement	0	1	0
03 31 00 Cast-in-Place Concrete	0	1	0
03 32 00 Joints in Concrete	0	1	0
03 60 00 Grouting	0	2	0
DIVISION 04 - MASONRY			
04 22 00 Reinforced Concrete Block Masonry	0	1	0
DIVISION 05 - METALS			
05 21 19 Open Web Steel Joists	0	1	0
05 30 00 Metal Decking	0	1	0
05 40 00 Cold Formed Metal Framing	0	1	0
05 50 00 Miscellaneous Metalwork	0	3	0
05 52 00 Aluminum Railings	0	1	0
DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES			
06 10 50 Miscellaneous Carpentry	0	1	0
06 20 00 Finish Carpentry	0	1	0
06 80 00 Fiber Glass Reinforced Plastic Fabrication	0	1	0

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 10 00	Dampproofing	0	1	0
07 13 00	Sheet Waterproofing	0	1	0
07 14 00	Fluid Applied Membrane Waterproofing	0	1	0
07 19 00	Surface Applied Water Repellents	0	1	0
07 21 13	Foundation Insulation	0	1	0
07 21 18	Building Insulation	0	1	0
07 22 18	Roof Insulation	0	1	0
07 28 00	Vapor Retarders	0	1	0
07 42 18	Metal Wall, Roof, and Soffit Panels	0	1	0
07 64 00	Elastomeric Coating	0	1	0
07 84 00	Fire Retarding and Fire Stopping Sealants	0	1	0
07 82 13	Sealants and Caulking	0	2	0

DIVISION 08 - DOORS AND WINDOWS

08 11 13	Steel Doors and Frames	0	1	0
08 33 00	Overhead Rolling Doors	0	1	0
08 38 13	Sectional Doors	0	1	0
08 61 13	Aluminum Windows	0	1	0
08 62 13	Skylights	0	1	0
08 71 00	Door Hardware	0	1	0
08 81 00	Glazing	0	1	0
08 81 00	Louvers	0	1	0

DIVISION 09 – FINISHES

09 28 00	Gypsum Board	0	1	0
09 30 13	Ceramic Tile	0	1	0
09 61 13	Suspended Acoustical Tile	0	1	0
09 86 00	Resilient Flooring	0	1	0
09 88 00	Protective Coating	0	3	0

DIVISION 10 – SPECIALTIES

10 14 00	Building Signage	0	1	0
10 28 13	Toilet and Shower Accessories	0	1	0
10 44 00	Fire Extinguishers	0	1	0
10 68 70	Metal Shelving and Work Benches	0	1	0
10 73 10	Metal Awnings	0	2	0

DIVISION 12 – FURNISHINGS

12 82 00	Wood Laboratory Casework	0	1	0
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DIVISION 21 - FIRE SUPPRESSION

21 13 13	Wet Pipe Sprinkler System	0	1	0
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DIVISION 22 - PLUMBING

22 10 10	Plumbing, Piping And Specialties	0	2	0
22 30 00	Plumbing Equipment	0	1	0
22 42 00	Plumbing Fixtures	0	1	0

DIVISION 23 – HVAC

23 00 00	Heating Ventilating and Air Conditioning	0	1	0
23 05 00	HVAC Testing and Balancing	0	1	0
23 05 23	General Duty Valves for HVAC Piping	0	1	0
23 05 28	Hangers and Supports for HVAC Piping and Equipment	0	1	0
23 05 48	Vibration and Seismic Controls for HVAC Piping and Equipment	0	1	0
23 05 63	Identification for HVAC Piping and Equipment	0	1	0
23 07 00	Pipe, Ductwork, and Equipment Insulation	0	1	0
23 07 13	Duct Insulation	0	1	0
23 07 18	HVAC Piping Insulation	0	1	0
23 31 13	Metal Ductwork System	0	1	0

23 34 00	Fan Equipment	0	1	0
23 65 26	Acoustical Louver	0	2	0
23 60 00	Air Conditioning Equipment	0	1	0

DIVISION 26 - ELECTRICAL

26 00 00	Electrical Work, General	0	0	2
26 01 28	Electrical Tests	0	0	1
26 05 10	Electric Motors	0	0	1
26 05 16	Industrial Control Panels	0	0	1
26 05 18	Wires and Cabling	0	0	2
26 05 28	Grounding	0	0	1
26 05 33	Electrical Raceway Systems	0	0	1
26 05 38	Wiring Devices	0	0	1
26 05 43	Underground Raceway Systems	0	0	1
26 05 73	Protective Device Studies	0	0	1
26 12 18	Panelboards and General Purpose Dry Type Transformers	0	0	1
26 22 00	Low Voltage Transformers And Switchgear	0	0	1
26 29 00	Low-Voltage Motor Control Centers	0	0	3
26 29 13	Solid-State Reduced Voltage Starting	0	0	1
26 29 23	Variable Frequency Drive Units	0	0	1
26 82 13	Standby Power Generation	0	0	1
26 60 00	Lighting	0	0	1

DIVISION 27 - COMMUNICATIONS

27 15 28	Outdoor Fiber Optic Cabling	0	0	1
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DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

28 13 18	Security Access and Surveillance	0	0	3
28 31 00	Fire Detection and Alarm	0	0	1

DIVISION 31 - EARTHWORK

31 10 00	Site Preparation	0	1	0
31 23 18	Dewatering	0	1	0
31 30 00	Earthwork	0	1	0
31 34 18	Geotextiles	0	1	0
31 35 28	Erosion Control Barrier	0	1	0

DIVISION 32 - EXTERIOR IMPROVEMENTS

32 11 13	A.C. Pavement and Base	0	1	0
32 31 18	Metal Picket Fences and Gates	0	1	0
32 32 36	MSE Retaining Walls	0	1	0
32 81 00	Dry Well System	0	1	0
32 83 00	Landscaping	0	1	0

DIVISION 33 - UTILITIES

33 05 18	Precast Concrete Manholes and Vaults	0	1	0
33 48 00	Underdrains	0	1	0
33 83 00	Landscape Irrigation	0	2	0
33 82 10	Steel Pipe, Spools, And Fittings (AWWA C200, Modified)	0	1	1
33 82 20	Double Iron Piping	0	1	0
33 85 40	Small PVC Non-Pressure Piping, Rubber Joints	0	1	0

DIVISION 40 - INSTRUMENTATION AND CONTROL FOR PROCESS SYSTEMS

40 05 00	Piping General	0	0	0
40 05 02	Piping Identification	1	0	0
40 05 08	Pipe Couplings	0	0	1
40 05 07	Pipe Supports	0	1	0
40 05 17	Copper Water Tube	0	1	0
40 05 18	Cast Iron Soil Pipe	0	1	0
40 05 23	Stainless Steel Pipe	0	0	1
40 05 24	Steel Pipe	0	1	0

40 06 30	PVC Pressure Pipe	0	0	1
40 81 00	Process Control and Instrumentation System	0	0	1
40 81 02	In-Line Liquid Flow Measuring	0	0	2
40 81 04	Gas Flow Measuring	0	1	1
40 81 08	Level Measuring	0	0	3
40 81 07	Level Detection	0	0	3
40 81 08	Pressure Measuring	0	0	2
40 81 08	Pressure Detection	0	0	2
40 81 12	Process Monitoring	0	0	4
40 81 20	Safety Monitoring	0	0	1
40 86 13	Control Panels	0	0	1

DIVISION 41 - PROCESSING EQUIPMENT

41 40 20	Pressure Manganese Removal Filters	0	0	1
41 40 21	Positive Displacement Blowers	0	0	1

DIVISION 43 - MATERIAL HANDLING EQUIPMENT

43 20 00	Pumps, General	0	1	0
43 23 21	Horizontal Split Case Pumps	0	1	0
43 23 67	Progressive Cavity Pumps	0	0	1
43 25 06	Chemical Dosing Submersible Sump Pumps	0	1	0
43 25 08	Submersible Sump Pumps	0	1	0
43 30 00	Valves General	0	0	0
43 30 12	Valves and Gate Actuators	0	1	0
43 40 14	Butterfly Valves	0	1	0
43 30 18	Check Valves	0	1	0
43 30 22	Ball Valves	0	0	1
43 30 22	Gate Valves	0	1	0
43 30 40	Control Valve	0	1	1
43 30 62	Miscellaneous Valves	0	1	2
43 40 00	Glass-Fused Bolted Steel Tanks	0	1	0
43 41 45	Fiberglass Reinforced Plastic Storage Tanks	0	0	1
43 41 48	Carbon Steel Tanks for Aqueous Ammonia Storage	0	0	1

DIVISION 48 - EQUIPMENT

48 01 00	Equipment General Provisions	0	0	0
48 33 44	Peristaltic Tube-Type Metering Pumps	0	0	1
48 33 60	Digital Dosing Metering Pumps	0	0	1
48 41 43	Static Mixer	0	0	1
48 41 48	Portable Tank Mixers	0	0	1

Original Submittals:	22	119	67
Resubmittals:	0	60	34
Support Review		14	8

EXHIBIT B

APPROVED FEE SCHEDULE

Activity No.	Activity Description	Contract Hourly Rate												Subconsultants												TOTAL PROJECT COST	
		Staff: Personnel			Hourly			Hourly			Hourly			Hourly			Hourly			Hourly			Hourly				
1.0 Project Management																											
1.1 Project Management		105	0	42	0	0	0	50	197	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	\$ 44,640	
1.2 Project Management Meetings		105	42					50	197	\$ 44,640																	
1.3 Inciting								0	0																		
2.0 Project Meetings		0	20	0	32	0	0	0	0	52	\$ 13,240	\$ 13,240	\$ 13,240	\$ 13,240	\$ 13,240	\$ 13,240	\$ 13,240	\$ 13,240	\$ 13,240								
2.1 Construction Handoff Workshop		6	8					14	\$ 3,580																		
2.2 Preconstruction Conference		6	8					14	\$ 3,580																		
2.3 Pre-submittal Meetings		8	16					24	\$ 6,080																		
3.0 Submittals		0	98	40	260	200	300	0	0	1088	\$ 214,560	\$ 214,560	\$ 214,560	\$ 214,560	\$ 214,560	\$ 214,560	\$ 214,560	\$ 214,560									
3.1 Submittal Review		98	40	260	200	300	0	0	0	580	\$ 118,740																
4.0 RFI		0	40	0	308	0	0	232	0	580	\$ 118,740	\$ 118,740	\$ 118,740	\$ 118,740	\$ 118,740	\$ 118,740	\$ 118,740	\$ 118,740									
4.1 RFI Review		40	308					232		580																	
5.0 Contract Document Modifications, Design Changes and Change Orders		0	0	0	40	100	0	0	0	240	\$ 42,800	\$ 42,800	\$ 42,800	\$ 42,800	\$ 42,800	\$ 42,800	\$ 42,800	\$ 42,800									
5.1 Contract Document Modifications		0	40	100	0	0	0	0	0	240																	
6.0 Factory Site Visits and Site Visits		0	0	0	77	65	0	0	0	211	\$ 45,605	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500								
6.1 Factory Site Visits		16	4					20		20																	
6.2 Site Visits		61	65					65		191																	
7.0 Startup and Commissioning		0	0	0	82	0	0	32	0	0	114	\$ 24,570	\$ 24,570	\$ 24,570	\$ 24,570	\$ 24,570	\$ 24,570	\$ 24,570	\$ 24,570								
7.1 Meetings		64						32		96																	
7.2 Permitting Assistance		18								18																	
8.0 Operations Manual		0	24	0	56	0	0	40	0	0	120	\$ 25,800	\$ 25,800	\$ 25,800	\$ 25,800	\$ 25,800	\$ 25,800	\$ 25,800	\$ 25,800								
8.1 Greenband OEM Manual		8	8							16																	
8.2 Pump Station OEM Manual		16	48					40		104																	
9.0 Conformed and Record Drawings		0	40	0	40	80	80	0	0	320	\$ 60,600	\$ 60,600	\$ 60,600	\$ 60,600	\$ 60,600	\$ 60,600	\$ 60,600										
9.1 Preformed and Record Drawings		40	40	80	80	80	80	0	0	320																	
10.0 Inspection		0	0	0	0	0	0	0	0	0	0	\$ 68,304	\$ 68,304	\$ 68,304	\$ 68,304	\$ 68,304	\$ 68,304	\$ 68,304									
10.1 Structural Inspection and Observation		110	185	72	0	0	0	0	0	0																	
10.2 Acceptance Testing		0	0	0	0	0	0	0	0	0																	
10.3 Soil Inspection		0	0	0	0	0	0	0	0	0																	
11.0 Miscellaneous Technical Support		0	0	0	0	0	0	0	0	0	0	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000									
SUBTOTAL		0	327	117	925	380	280	853	0	50	2932	\$ 590,555	\$ 31,500	\$ 622,055	\$ 237,896	\$ 16,500	\$ 254,397	\$ 876,452.00	\$ 31,500	\$ 630,359	\$ 288,127	\$ 16,500	\$ 304,629	\$ 994,987.60			
12.0 Final QA/QC Validation and Southern California Edison Coordination		0	0	0	0	0	0	0	0	0	0	\$ 68,304	\$ 68,304	\$ 68,304	\$ 68,304	\$ 68,304	\$ 68,304	\$ 68,304									
12.1 Final QA/QC Validation and Southern California Edison Coordination		0	0	0	0	0	0	0	0	0																	
SUBTOTAL		0	327	117	1035	565	352	853	0	50	3299	\$ 658,959	\$ 31,500	\$ 630,359	\$ 288,127	\$ 16,500	\$ 304,629	\$ 994,987.60	\$ 31,500	\$ 630,359	\$ 288,127	\$ 16,500	\$ 304,629	\$ 994,987.60			
TOTAL		0	327	117	1035	565	352	853	0	50	3299	\$ 658,959	\$ 31,500	\$ 630,359	\$ 288,127	\$ 16,500	\$ 304,629	\$ 994,987.60	\$ 31,500	\$ 630,359	\$ 288,127	\$ 16,500	\$ 304,629	\$ 994,987.60			

* Changes for Task 12 for both Staff and Hazeec will utilize the existing rates on the contract, the rest of the tasks will utilize the new proposed rates.

Additional Work Fee Estimate (Hazen Fees Only)										
Classification:		Company Officer (Vice President)	Principal Professional I (Senior Associate Engineer 2)	Supervising Professional (Senior Associate Engineer 1)	Senior professional (Associate Engineer)	Project Professional (Engineer)	Assistant Professional	Designer/CAD	Technician	Total
Hourly Rate:		\$295	\$245	\$210	\$185	\$160	\$140	\$130	\$100	Hours
2.3	Pre-submittal Meetings		2	2		2			6	\$1,230
3	Submittals									
3.1	Submittal Review		101	89	89	302			580	\$108,023
4	RFI									
4.1	RFI Review		40			160			200	\$35,400
5	Contract Document Modifications, Design Changes and Change Orders									
5.1	Contract Document Modifications	5	20	20	20	30	20	35	150	\$25,175
6	Factory Site Visits and Site Visits									
6.1	Factory Site Visits			16					16	\$3,360
6.2	Site Visits		15	15					30	\$6,825
7	Startup and Commissioning									
7.1	Meetings		12		12				24	\$4,860
7.2	Permitting Assistance		6		8				14	\$2,750
8	Operations Manual									
8.1	Greensand O&M Manual		2	8		40			50	\$8,570
9	Conformed and Record Drawings									
9.1	Prepare Conformed and Record Drawings	3	7		16		78	104	\$12,960	\$259
		8	205	150	109	570	0	20	113	1174
12.1	Final QA/QC and Southern California Edison Coordination*								0	\$0
		8	205	150	109	570	0	20	113	1174
										\$209,153
										\$7,116
										\$216,268
										\$45,665
										\$261,933

*Charges for Task 12 will utilize the existing contracting rates, the remaining tasks will utilize the new proposed rates