



NAPA SANITATION DISTRICT

BROWN & CALDWELL - TASK ORDER No. 46 NORTH NAPA SIPHON GATE REPLACEMENT PROJECT (CIP 21718)

Date: _____

Issued under Professional Services Agreement dated September 15, 2020.

To: Brown & Caldwell

Project Description:

North Napa Siphon Gate Replacement Project - Professional Engineering Services.

Description of Scope of Services to be performed by Consultant under this Task Order:

See Exhibit 'A' – Scope of Services

Description of Services to be Provided by District: See Exhibit 'A' – Scope of Services

Deliverables: See Exhibit 'A' – Scope of Services

Consultant Project Manager: Claire O'Brien, PE

Consultant Quality Control Manager: Jon Osborne, PE

Schedule to Perform Services: See Exhibit 'A' – Schedule

Time & Materials Not-to-Exceed Cost Limit: \$96,077

See Exhibit 'B' – Fee Schedule

APPROVALS:

BROWN & CALDWELL

By: _____
Authorized Representative

Date

NAPA SANITATION DISTRICT

By: _____
Purchasing Agent

Date

NSD Account No.: CIP 21718

201 North Civic Drive, Suite 300
Walnut Creek, CA 94596

T | 925.937.9010
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Exhibit A

July 28, 2021

Mr. Karl Ono
Napa Sanitation District
1515 Soscol Ferry Road
Napa, CA 94558

071171.023

Subject: Proposed Agreement for Siphon Rehab Design

Dear Mr. Ono:

In accordance with your request, Brown and Caldwell (Consultant) is pleased to present this proposal for the Siphon Rehab Design for the Napa Sanitation District (District).

Project Understanding

The District has a siphon in their collection system that conveys wastewater across the Napa River south of the McKinstry Street and 1st Street intersection. The inlet siphon structure consists of a 48-inch RCP gravity inlet, one 18-inch fiberglass siphon, and two 30-inch fiberglass siphons that exit the structure with approximately 35-foot vertical drop to the crossing of the Napa River. The inlet siphon structure controls flow with wall mounted slide gates at the 18-inch siphon and each of the 30-inch siphon pipelines. Corrosion of the slide gates have made them inoperable and have recently been removed by maintenance staff. There has been an increase of flushable wipes in the wastewater stream since early 2020 causing accumulation in the siphons.

In May of 2021, the District requested the Consultant to complete an evaluation of slide gate materials and costs that would allow isolation of each of the siphons to increase flow velocities and facilitate self-cleaning. The North Napa Siphon Gates Evaluation, completed by the Consultant, recommended replacement of the existing siphon gates with one 18-inch by 60-inch and two 30-inch by 60-inch Fiberglass Reinforced Plastic (FRP) gates.

The primary purpose of this Project is to develop the design of the improvements outlined in the North Napa Siphon Gates Evaluation dated May 5, 2021 and additional rehabilitation improvements that include siphon vault hatch replacement, a packaged, passive odor control insert for nuisance odors, and replacement of T-Lock on the interior walls with a coating system. The District has requested the use of the Wolverine Brand

Manhole Odor Insert to facilitate control of nuisance odors within the vicinity of the structure. The intent of this odor insert is not to provide complete odor control within the siphon inlet structure. The District's standard manhole coating specification and system will be used. Condition assessment of the siphon structure, structural evaluation or conducting a structural or coating evaluation is not included in this scope of work. The structural integrity of the siphon inlet structure underneath the T-Lock is unknown. Evaluation of the siphon inlet for optimal odor control or determining the effectiveness of the packaged insert is not included in this scope of work.

Basic Services include the following:

- Slide gate replacement (three total)
- Siphon inlet structure hatch replacement (three total)
- Siphon inlet wall T-Lock removal and rehabilitation with District standard coating system
- Conceptual bypass plan to complete scope of work
- Odor control packaged insert (Wolverine Brand Manhole Odor Insert)

Elements excluded from this scope of work, but may be included in Supplemental Services include:

- Wastewater flow monitoring
- Traffic control design
- Odor control design
- Condition assessment of the siphon inlet structure
- Coating evaluation
- Engineering Services During Construction

Bernadette Visitacion will serve as the Technical Lead for the project with Claire O'Brien as the Project Manager/Project Engineer and Jon Osborne as the QC reviewer. Claire will be supported by Consultant staff experienced in sanitary sewer design.

Scope of Services

The following is a description of the proposed services to be provided.

- Task 1 – Project Management, Meetings and QA/QC
 - Task 1.1 - Project Management and Meetings
 - Task 1.2 - Project Quality Control (QC) Technical Review
- Task 2 - Field Visit
- Task 3 – 75% Design
- Task 4 – Final Design
- Task 5 – Bid Period Services

TASK 1 - PROJECT MANAGEMENT, MEETINGS AND QA/QC

Activities performed under this task consist of those general functions required to maintain the project on schedule, within budget, and that the quality of the work products defined within this Scope of Services is consistent with the District's expectations and the Consultant's standards. Included specific activities are identified below.

TASK 1.1 - Project Management and Meetings

This Task includes project management, administration, invoicing, and controls to maintain schedule and budget.

Prepare a project management plan that identifies and schedules labor resources and reporting procedures. Keep project action and decision logs up to date. Develop a risk register and update throughout project. Monitor progress of individual tasks and coordinate completion of work products. Monitor task budgets and project schedule. Prepare and submit monthly invoices, assess progress against the project schedule and identify project delays, and potential deviations from the scope and budgets. Consultant will also prepare a fieldwork safety plan.

Task 1.1 Meetings:

- One kick-off meeting attended by two Consultant staff via teleconference (Microsoft Teams, assumed duration of 2 hours).
- Three progress meetings (assumed 30-minute duration) attended by two Consultant staff via teleconference.

Task 1.1 Deliverables:

- Monthly invoices (2-hours each month)
- Project Management Plan (2-hours)

TASK 1.2 - Project Quality Control (QC) Technical Review

Conduct internal senior technical QC review of the 75% and final design deliverables prior to submission to the District.

TASK 2 – Field Visit

The design team will conduct a site visit with District staff to obtain information regarding the siphon inlet and manhole lid dimensions as well as odor control improvement locations. Odor control design beyond the use of packaged insert is not included. The field visit is a visual inspection and does not include any other investigations or confined space entry.

Task 2.1 Meetings: One site visit with two Consultant team members. Assumed duration of 5 hours (including travel time).

Task 2.1 Deliverables: None.

TASK 3 – 75% Design Deliverable

A 75% design deliverable will be developed by the Consultant, which will include drawings, specifications, and a cost estimate.

Task 3 Meetings: 75% Design Review Workshop attended by two Consultants via tele-conference using Microsoft Teams (assumed duration of 2 hours).

Task 3 Deliverables:

- 75% Drawings in PDF format
- Specifications (technical and front end) conforming to CSI 2016 Master Format in PDF format
- Class 2 OPCC conforming to AACE standards, goal of estimate is -15% to +20%
- 60% Design Construction Schedule
- Meeting agenda and minutes from workshop

Task 3 Assumptions:

- The drawing set will include the following ten drawings:
 - Cover/Title Sheet
 - General Notes, Symbols and Abbreviations
 - Site Plan
 - Demolition Plan
 - Demolition Section
 - Bypass Plan
 - Mechanical Plan
 - Mechanical Section
 - Mechanical Details (two each)
- Front end specification word documents will be provided by the District. Consultant to update project specific information in the front end specifications.
- The technical specifications will include six equipment specifications.
- District review time is assumed to be two weeks.

TASK 4 – Final Design Deliverable

A final design deliverable will be developed by the Consultant, which will include drawings, specifications, and a cost estimate. Final design is considered signed and sealed.

Task 4 Meetings: None

Task 4 Deliverables:

- Final drawings in PDF and AUTOCAD formats
- Final specifications (technical and front end) conforming to CSI 2016 Master Format in PDF and MS Word files
- Class 1 OPCC conforming to AACEI standards, goal of estimate is -10% to +15%
- 90% Design Construction Schedule

Task 4 Assumptions:

- Consultant will incorporate review comments on the drawings listed under task 3.
- The technical specifications will include six equipment/material specifications.

TASK 5 – Bid Period Services

Consultant will provide the services described below during the bid period. The District will assemble and issue the bid packages based on the final design deliverables provided by Consultant.

- Consultant will provide responses to requests for clarification (RFC) from prospective bidders.
- Consultant will assist the District with preparation of addenda.
- Consultant will prepare a conformed design package (drawings and specifications) incorporating information issued as addenda and responses to RFCs during the bid period.

Task 5 Meetings: A one hour Pre-bid conference and one hour site walk attended in person by 2 Consultant staff, assumed duration of 5 hours (including travel time).

Task 5 Deliverables:

- Responses to bidders' requests for clarification
- Addenda to the bid documents
- Pre-Bid Conference (agenda presentation materials, and meeting minutes)
- Conformed specifications – 2 hard copies , 1 digital copy in PDF and 1 MS Word format
- Conformed drawings – 2 hard copies (22" X 34"), 1 digital copy in PDF format, and 1 copy in AutoCAD format

Task 5 Assumptions:

- 3 responses to bidder's requests for clarification will be provided with each requiring an average of 8 hours to complete.
- 2 addenda will be provided with each requiring an average of 8 hours to complete.
- 12 hours of effort assumed to develop the conformed set.

General Assumptions

1. Access to the site will be provided by District for the initial site visit.
2. Two (2) weeks of District review time is assumed for the 75% review period.
3. District to coordinate and compile all comments and provide in one format (MS Word or Excel).
4. This scope does not include any permitting work or assistance.
5. This project does not include any site/civil, structural, electrical, or instrumentation design.
 - a. While Consultant has made reasonable efforts to incorporate into our proposal known current project impacts of the COVID-19 pandemic, we have not accounted for unknown future changes due to the COVID-19 pandemic including, without limitation, additional restrictions by government agencies or others (such as the availability of the site for access or the availability of client or consultant staff or others), to the extent they delay or otherwise impact the project. In that event, Consultant will notify you so that we can work together in good faith as to how to address time, costs, or other unexpected impacts.
6. Due to COVID impacts, manufacture and delivery of equipment and materials may be delayed. Therefore, construction duration may extend past 6 months of estimated construction time.
7. Odor control design beyond the use of packaged insert is not included in this scope. Make and model of the odor insert requested by District will be added to the design drawings.
8. The Consultant will use the District's standard specifications that were revised in June 2021 for the coating specification.
9. District will be responsible for maintenance operation plan during construction shut-downs.
10. Drawings will be developed in AutoCAD 2021. Drawings will not be developed in a 3D model.
11. Opinions of Probable Construction Cost are estimates only. OPCC and feasibility projections are subject to many influences including, but not limited to, price of labor and materials, unknown or latent conditions of existing equipment or structures, and time or quality of performance by third parties. Such influences may not be precisely forecasted and are beyond the control of Consultant; actual costs incurred may vary substantially from the estimates prepared by Consultant. Consultant does not warrant or guarantee the accuracy of construction or development cost estimates. In preparing the OPCCs, the Consultant shall follow principles and guidelines of the Association for the Advancement of Cost Engineering International (AACE). OPCCs will not include costs associated with land acquisitions or easements. OPCCs will include:
 - Description of the maturity of the project definition to confirm appropriate Estimate Class.
 - Description of the Basis of Estimate.

- Description of the level of risk assessment that informed selection of contingency amount or percentage, and what risks are addressed in the estimate or contingencies, if any.
- Identification of the intended End Usage, including whether the estimate is a representation of the bid price or the cost of construction after completion (including change orders).
- Discussion of quality of reference or estimating data.

Schedule

For the Basic Services performed under this Task Authorization, duration of this scope of work is estimated to be four (4) months for design and three (3) months for bidding from the receipt of Notice to Proceed (NTP) from the District. Delays in scheduling field visits, meetings and receipt of comments will impact the overall schedule. Table 1 presents a summary of the project milestones with estimated dates. Consultant and the District will confirm submittal dates and review periods at the project kick-off meeting.

| Table 1. Project Milestones | |
|------------------------------------|-----------------------|
| Milestone | Estimated Date |
| Notice to Proceed | 8/12/2021 |
| Kickoff Meeting | 8/20/2021 |
| Field Visit | 08/23/2021 |
| 75% Design Deliverable | 10/05/2021 |
| Final Design Deliverable | 11/25/2021 |
| Bid Date | 12/09/2021 |

Compensation and Payment

Consultant will perform the work on a time-and-materials basis, for a fee not to exceed \$96,077. Time-related charges will be invoiced at a 3.2 multiplier plus an \$8 associated project cost. Table 2 presents the estimated fee by phase.

| Table 2. Consultant Fee | |
|--|------------|
| Phase | Total Fees |
| Phase 001 - Project Management, Meetings, and QC | \$18,877 |
| Phase 002 - Field Visit | \$2,264 |
| Phase 003 - 75% Design Deliverable | \$36,231 |
| Phase 004 - Final Design Deliverable | \$26,828 |
| Phase 005 - Bid Period Services | \$11,876 |
| Total | \$96,077 |

Terms and Conditions

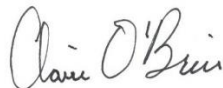
All work will be performed in accordance with the terms and conditions described in the Professional Services Agreement (Agreement) between the Consultant and the District (Attachment A). This Agreement is valid from September 15, 2020 through June 30, 2023.

We look forward to the opportunity to perform the work for you. Please call Claire O'Brien at 925-210-2208 if you have any questions.

Very truly yours,
Brown and Caldwell



Angela MacKinnon
Vice President



Claire O'Brien, PE
Project Manager

Attachment: Exhibit B: Budget Proposal

**EXHIBIT B
BUDGET PROPOSAL**

| Napa Sanitation District (CA) – Napa San Siphon Rehab Design | | | | | | | | | | | | | | | | | | | |
|--|---------------------------------|-----------------|--------------------------|-------------------|---------------------------------|----------------|-----------------|-------------------|---------------|---------------------|----------------|--------------------|------------------|-------------------|--------------------|------------|--------------------|----------------------|---------------|
| Phase | Phase Description | O'Brien, Claire | Okamura, Esther Elaine L | MacKinnon, Angela | Visitation-Sumida, Bernadette J | Osborne, Jon P | Lambert, Tait R | Agster, William P | Hoff, Kenneth | Terrazas, Richard W | Romero, Sara B | Goodburn, Daniel L | Tanner, Deanna L | Total Labor Hours | Total Labor Effort | Total ODCs | Total Expense Cost | Total Expense Effort | Total Effort |
| | | \$175.39 | \$118.78 | \$376.93 | \$261.50 | \$285.54 | \$162.75 | \$263.62 | \$192.32 | \$328.13 | \$90.30 | \$232.51 | \$127.46 | | | | | | |
| 001 | Project Management | 29 | 14 | 7 | 7 | 16 | 0 | 2 | 2 | 2 | 5 | 0 | 0 | 84 | 17,785 | 400 | 400 | 1,092 | 18,877 |
| 002 | Field Visit | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 2,184 | 0 | 0 | 80 | 2,264 |
| 003 | 75% Design Deliverable | 42 | 0 | 0 | 28 | 0 | 94 | 0 | 0 | 0 | 0 | 16 | 8 | 188 | 34,727 | 0 | 0 | 1,504 | 36,231 |
| 004 | Final Design Deliverable | 36 | 0 | 0 | 20 | 0 | 58 | 0 | 0 | 0 | 0 | 16 | 8 | 138 | 25,724 | 0 | 0 | 1,104 | 26,828 |
| 005 | Bid Services | 20 | 0 | 0 | 10 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 8 | 62 | 11,380 | 0 | 0 | 496 | 11,876 |
| GRAND TOTAL | | 132 | 14 | 7 | 70 | 16 | 176 | 2 | 2 | 2 | 5 | 32 | 24 | 482 | 91,801 | 400 | 400 | 4,276 | 96,077 |