



NAPA SANITATION DISTRICT

GHD- TASK ORDER No. 69
BROWNS VALLEY TRUNK PROJECT (CIP 14703)

Date: _____

Issued under Professional Services Agreement dated August 19, 2017.

To: GHD

Project Description:

Engineering Services during Construction for the Browns Valley Trunk Project (CIP 14703).

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

See Attachment 'A' – Scope

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

Deliverables: See Attachment 'A' –Scope of Work

Consultant Project Manager: Parastou Hooshialsadat/Brian Bacciarini

Consultant Quality Control Manager: Matt Winkleman

Schedule to Perform Services: March 2020 through December 2021

Time & Materials Not-to-Exceed Cost Limit: \$522,720

See Attachment 'B' – Fee Estimating Sheet

APPROVALS:

GHD

By: _____
Authorized Representative Date

NAPA SANITATION DISTRICT

By: _____
Purchasing Agent Date

NSD Account No.: CIP 14703



February 25, 2020

Ms. Robin Gamble Holley
NapaSan
1515 Soscol Ferry Road
Napa, CA 94558

Our Ref: 11121534

RE: Proposal for Professional Services – Browns Valley Trunk Project: Construction Phase, Napa, CA

Dear Ms. Gamble Holley:

GHD Inc. is pleased to submit this proposal and scope of work for the construction phase of the Browns Valley Trunk Project. The scope of work includes engineering and environmental support services and is based on the final bid documents and addenda for the project. The Browns Valley Trunk (BVT) includes approximately three miles of 15- to 48-inch diameter gravity trunk sewer between South Coombs Street at the West Napa Pump Station (WNPS) and Browns Valley Road east of Thompson Avenue.

Project Understanding and Background

The objective of the project is to construct a new trunk sewer (BVT) in West Napa that will alleviate hydraulic deficiencies within the collection system. The BVT will intercept and convey flows from the collection system at selected locations to the WNPS. The project is planned for construction between March 2020 and October 2021. In addition to the technical plans and specifications for construction of the new trunk sewer, the project will require encroachment permitting with the City of Napa and Caltrans, adherence to State Revolving Fund (SRF) funding requirements, and conformance to the various mitigation measures described in the project's Mitigated Negative Declaration (MND) completed in March 2017 and addendum completed in March 2018.

Construction management (CM) services, including onsite construction observation, is included in a separate contract. The scope of work provided herein is intended to provide support to the CM team and NapaSan for the following tasks: review of submittals; requests for information (RFIs) or clarification (RFCs); potential change orders (PCOs); site visits and meetings; environmental review; and other related services. In addition to project management, the scope of work is split into two primary tasks: design engineering services during construction and environmental services during construction.

The scope of work refers to "NapaSan's representative", which is intended to mean either NapaSan staff or the CM team, depending on the reference.

GHD has teamed with the following subconsultants for the construction phase of the project. GHD will manage the work performed by its subconsultants and incorporate the findings and deliverables from each subconsultant into GHD's project deliverables. Subconsultants will each have a point of contact that will be directly responsible to GHD's project manager.

- McMillen Jacobs Associates (MJA): Geotechnical consultation



- Wildlife Research Associates: Biological services
- Sonoma State University Anthropological Studies Center: Archaeological services

Scope of Work

We are pleased to provide this proposal to NapaSan for professional services on the Browns Valley Trunk Project. A detailed scope of work is provided below.

Task 1 – Project Management

1.1 Project Management

GHD will provide project management services during the project. The following summarizes our project management activities:

- Project coordination with NapaSan and project team. Coordination will include meetings and progress conference calls as necessary to communicate key project issues as they develop during the course of the work. Anticipated activities are noted below.
- Project staffing requirements. Evaluate and assign staff as needed to meet project quality and schedule requirements.
- Project progress. Evaluate and track progress on scope, schedule, and budget. Prepare monthly project activity reports to be provided with each of our monthly invoices during the project. These reports will provide NapaSan with a brief description of the activities completed during the previous month.
- Progress Meetings. GHD's project manager or deputy project manager will attend a monthly progress meeting at NapaSan. The purpose of the meetings is to discuss current and anticipated work items, project schedule, permitting coordination, etc. This meeting may be combined with a scheduled construction meeting. GHD's project manager and applicable staff will also attend biweekly progress calls to discuss project progress on a more frequent basis. A representative from the CM team is also anticipated to attend these calls.

Task 1 Deliverables

- Monthly progress reports; progress meeting and call notes

Task 2 – Design Engineering Services During Construction

2.1 Attend Partnering/Pre-Construction Meeting

The design project manager, construction phase project manager, and geotechnical lead will attend the partnering/pre-construction meeting at the NapaSan office. It is assumed that this task will be completed in a single day.

2.2 Review Contractor Submittals

GHD will provide review and comments for technical submittals required per the contract documents. Submittals will be logged, checked for completeness, and issued for review by NapaSan's representative, and all review



comments by GHD will be submitted directly to NapaSan's representative using a standard written format. In general, incomplete submittals will be immediately rejected. The budgeted amount of labor for GHD is based on an average of 4 hours per submittal and a total of 134 submittals. For budgeting purposes, approximately 1/3 of the submittals are assumed to require re-submittal and is an estimate only. Also for budgeting purposes, approximately 1/2 of the re-submittals are assumed to require a third submittal and is an estimate only.

The budgeted amount of labor for MJA is based on review of 10 original submittals and up to 6 related resubmittals for a total of up to 16 submittal reviews.

Budgeted effort includes preparation of a submittal log and correspondence with NapaSan and the CM team.

Actual requirements, including the time required for each submittal review, could vary. If the budgeted effort may be exceeded, GHD will notify NapaSan and provide a proposal for the revised estimated effort.

Task 2.2 Assumptions

- Submittals are assumed to be packaged and coordinated per the Contract Documents (i.e., shoring, soil stabilization, and dewatering submitted together and coordinated; traffic, pedestrian, and bicycle control (collectively, "traffic control") submitted together and coordinated).
- Some submittals will require additional effort beyond the estimated effort stated above. These submittals include: trenchless construction (submittal to include multiple parts and three separate tunnelling locations); traffic control (due to anticipated phasing of work and correspondence with the Contractor and City); and submittal(s) regarding connection to the West Napa Pump Station, including coordination with the pump station design team and Contractor. Additional effort is included in the fee estimate to cover these submittals.

2.3 Review Contractor RFIs/RFCs

GHD will respond to formal Requests for Information (RFIs) and Requests for Clarification (RFCs) issued by NapaSan's representative. Routine RFIs/RFCs that do not relate to design intent are assumed to be handled by NapaSan's representative. All RFIs/RFCs sent to GHD will be logged, documented, and communicated to GHD using a standard written format. The budgeted amount of labor is based on an average of 4 hours per RFI/RFC, plus administrative and clerical time, and 60 RFIs/RFCs and is an estimate only.

The budgeted amount of labor for MJA is based on review of 4 geotechnical-related RFIs/RFCs.

Actual requirements, including the time required for each RFI/RFC review, could vary. If the budgeted effort may be exceeded, GHD will notify NapaSan and provide a proposal for the revised estimated effort.

2.4 Construction Changes

Not included – design input to changes during construction will be provide through the RFI process. Proposed change orders resulting from RFI responses will be issued by NapaSan's representative. If differing site conditions or other issues require more significant design modifications, GHD will notify NapaSan and provide a proposal for the revised estimated effort.



2.5 Construction Meetings

GHD and MJA will attend the following project meetings:

- Meeting with Contractor prior to implementation of shoring / dewatering / soil stabilization facilities;
- Meetings (3) with Contractor prior to implementation of trenchless construction activities; and
- Two additional project meetings at NapaSan's request.

In addition to the meetings listed above, one representative from GHD will attend the following project meetings. GHD's project manager will generally attend the meetings.

- Attend ten (10) as-needed construction meetings and ten (10) site visits, for a total of 20 meetings/visits; and
- Attend a punchlist walkthrough prior to substantial completion of the project and supply written summaries and photo documentation of field observations to the Construction Manager.

2.6 Construction Phase Consultation

Not included. Additional scope will be provided in response to project changes which may include the following:

- Responses to informal RFI's outside the formal RFI process;
- Unforeseen environmental issues;
- Design support related to mitigation of potential claims; and
- Consultation related to handling of potentially or known contaminated soil and/or groundwater.

2.7 Periodic Geotechnical Observation of Construction

MJA will provide periodic observations of geotechnical-related construction, including during start-up of key elements such as shaft construction and tunnel portal preparation, tunnelling, dewatering well construction, trenching, soil stabilization, placement of foundation material, pipe bedding and embedment, CLSM, and trench backfilling. During the site visits, MJA will observe and document the progress of work, conformance of subsurface geotechnical conditions (soils and groundwater) as encountered by the contractor with those described in the project geotechnical report(s), and conformance of contractor work with reviewed submittals. The budget for this task is based on a 20-month construction schedule (March 2019 to October 2020), and includes making up to twenty (20) site visits. Observations reports will serve as reporting documentation for the project; there is no budget allowance to prepare a final summary report.

Task 3 – Environmental Services During Construction

The GHD Team will provide biological-related and archaeological-related services during construction in accordance with the environmental mitigation and monitoring requirements that have been adopted for the project. This proposal includes the following services.

3.1 Nesting Bird Surveys

If construction activities, including trenching activities, tree pruning, tree removal, etc. occur within the bird nesting season (March 1 – August 15), pre-construction nesting bird surveys will be performed within seven days prior to groundbreaking within the designated portion of the project alignment. GHD and Wildlife Research Associates



will coordinate with NapaSan and CM to identify the appropriate corridor segments to be surveyed, which are anticipated to potentially range from 0.25 to 0.5 mile in length. GHD and Wildlife Research Associates will conduct nesting bird clearance surveys and document the results. This scope of work assumes that up to 10 days of nesting bird clearance surveys would be required for the project, which would occur along different portions of the corridor at different times of the bird nesting season. Any active nests identified along the surveyed portion of the corridor will be marked with an appropriately-sized buffer to minimize the risk of construction disturbance. Nesting bird clearance survey results will be presented to the client via a biological memo.

GHD and Wildlife Research Associates will consult with the local California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS), as appropriate, regarding survey results for nesting birds at the project site. If no active nests are found during the survey(s), no consultation would be necessary.

3.2 Bat Habitat Assessments

Wildlife Research Associates will conduct a single daytime bat habitat assessment and survey of trees proposed for removal and within an area of potential disturbance in the northwest interchange of Highway 29 and Old Sonoma Road. Work will include a search for any suitable roost habitat for colonial species (cavities, crevices, exfoliating bark), as well as suitable foliage density for solitary, obligate tree-roosting species. Trees with suitable habitat features will be marked in the field. A written report will summarize detail methods, results, and specific avoidance and minimization recommendations, if required. GHD will review the report and provide comments.

On a separate day, Wildlife Research Associates will conduct a single daytime bat habitat assessment of trees proposed for pruning, and within an area of potential disturbance. Work will include a search for any suitable roost habitat for colonial species (cavities, crevices, exfoliating bark), as well as suitable foliage density for solitary, obligate tree-roosting species. Trees with suitable habitat features will be marked in the field. A written report will summarize detail methods, results, and specific avoidance and minimization recommendations, if required. GHD will review the report and provide comments.

3.3 Archaeological Services

GHD and the Sonoma State University Anthropological Studies Center (ASC) will provide the following as-needed archaeological-related services during project construction.

- Tailgate Training: ASC will supply an archaeologist to deliver a brief on-site tailgate session to construction personnel prior to commencement of excavation work. The training will describe the kinds of remains that may be present and what to do if materials are found.
- Tribal Representative Coordination: GHD and ASC will coordinate with NapaSan and Yocha Dehe Wintun Nation Tribal representatives as needed regarding potential tribal and archaeological monitoring services. This will include communication through conference calls, e-mails, and meetings, if required.
- Archaeological Monitoring Plan: If archaeological monitoring is required, ASC will develop an Archaeological Monitoring Plan for the treatment of previously unidentified archaeological resources that may be encountered during ground disturbing activities. GHD will review the Archaeological Monitoring Plan and provide comments.



- On-Call Archaeological Services: Should potential cultural resources be identified during the course of construction, or if archaeological monitoring is required, ASC will provide a professional archaeological monitor to the project area to perform archaeological monitoring and/or to conduct a limited site visit to identify the discovery and make an in-field assessment. ASC will report its findings in an e-mail to Client within 24 hours and make recommendations regarding the need for further treatment. This task includes up to 120 hours of on-call services including travel time and mileage.
- Archaeological Monitoring Report: ASC will prepare a draft and final archaeological monitoring report for any archaeological monitoring or site surveys conducted during construction. GHD will review the Archaeological Monitoring Report and provide comments.

3.4 Supplemental Historic Properties Inventory Report

If the Contractor and/or NapaSan identify a staging area to be used outside of the original project-related area of potential effect (APE) and not on pavement, then ASC will prepare a Supplemental Historic Properties Inventory Report to be used for consultation with the State Historic Preservation Office. GHD will assist with the APE mapping for the report, and will review the Supplemental Report, provide comments, and coordinate with the State Water Resources Control Board and the State Historic Preservation Office on NapaSan's behalf.

Task 3 Assumptions

- If Tribal representatives request compensation for consultation or monitoring, such arrangements will be made between NapaSan and the Tribe.
- Trees to be removed and/or trimmed must be marked and/or identified on a legible plan, provided to Wildlife Research Associates prior to site visits.

Deliverables

- Draft and Final Nesting Bird Survey Biological Memo
- Draft and Final Bat Tree Habitat Assessment Report
- Draft and Final Corridor Level Bat Tree Habitat Assessment Report
- Draft and Final Archaeological Monitoring Plan (if required)
- Draft and Final Supplemental Historic Properties Inventory Report (if required)
- Draft and Final Archaeological Monitoring Report

3.5 Other Environmental Assistance

Other environmental mitigation assistance as needed will be provided under this task. Activities may include:

- Preconstruction surveys of staging areas
- Maintenance of bat exclusionary netting at the West Napa Pump Station
- Arborist services associated with tree pruning
- Other activities not yet identified



Task 4 – Project Closeout

4.1 Prepare Record Drawings

GHD will prepare record drawings based on as-built records provided by NapaSan's representative. Record drawings will be prepared following substantial completion, once all available as-built records are provided. Record drawings will be provided in electronic format (CAD and pdf format) per NapaSan standards.

Deliverables

- Full-size Record Drawings (1 paper copy)
- CD electronic copy of Record Drawings

4.2 Prepare Standard Operating Procedure for Flow Control Manholes

GHD will prepare a standard operating procedure (SOP) for flow control manholes installed along the trunk sewer. The purpose of a SOP is to provide detailed instructions on identifying the most effective ways to operate each gate at flow control manholes. The document will contain the design intent of the gate installation, performance parameters, coordination with West Napa Pump Station operation, manufacturer's instructions, maintenance and inspection, and emergency action plan.

GHD will submit the draft SOP to NapaSan for review. GHD's project manager will meet with NapaSan to review the draft SOP. Following receipt of NapaSan comments, GHD will finalize and submit the SOP.

Deliverables

- Draft and Final standard operating procedure (SOP) (electronic format)

Assumptions

- GHD will not be responsible for site safety at any construction site;
- GHD and subconsultants will be named as additional insured under the contractor's liability insurance; and
- Contractor and/or NapaSan will provide the services of an independent testing laboratory to perform inspections, tests, and approvals of samples, materials, and equipment required by the Bid Documents.

Services Not Included

The following services are not included in the scope of work:

- Preparation of permit application documents. The scope of work assumes that the Contractor will prepare and submit all permit applications and administer all permit requirements for the project;
- Preparation of additional Bid Documents or Contract Documents for alternate bids or prices requested by NapaSan for the project or a portion thereof as a result of board's decision on February 19, 2020;
- Preparation of CEQA documentation;
- Public outreach;
- Construction staking, surveying, and testing;



- Construction observation and inspection services, including specialty inspections, other than those services specifically included in the scope of work; and
- Other services performed or furnished by GHD not otherwise provided herein for the scope of work.

NapaSan Responsibilities

In addition to NapaSan's other responsibilities as set forth in the scope of work, NapaSan shall at its expense:

- Attend the partnering/pre-construction meeting, and other job related meetings;
- Provide third-party construction management;
- Provide labor compliance as required by project funding, permit requirements, or other project requirements not provided in GHD's scope of work;
- Provide certified appraiser and negotiate easements with various property owners if/as necessary;
- Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of samples, materials, and equipment required by the Bid Documents, or to evaluate the performance of materials, equipment, and facilities of NapaSan, prior to their incorporation into the work with appropriate professional interpretation thereof; and
- Provide GHD with the findings and reports generated by the entities providing services to NapaSan.

Project Team

The following GHD Inc. personnel are assigned as project or technical leads for this project:

- Project Principal / Project Manager – Matt Winkelman, PE
- Project Engineer / Deputy Project Manager – Parastou Hooshalsadat, PE, PACP
- Environmental Review Lead – Brian Bacciarini
- Quality Assurance / Quality Control (QA/QC) – Greg Watanabe, PE
- Geotechnical Engineer – McMillen Jacobs Associates (sub)
- Environmental Services – Wildlife Research Associates (sub) and Anthropological Studies Center at Sonoma State University (sub)

Project Schedule

Engineering services will commence upon issuance of Notice to Proceed for this scope of work, following NapaSan's March 4, 2019 Board meeting. Construction is anticipated to begin in April 2020, following review and processing of early submittals and encroachment permitting. Construction substantial completion is anticipated in October 2021. Project completion is anticipated by the end of December 2021.

Engineering Fee

Compensation for services during construction (SDC) and additional bid phase services will be on a time and materials basis for \$522,720. See the fee breakdown below and the attached detailed fee estimate. With a construction cost estimate of \$21 million, the fee breaks down as a percentage of construction cost as follows:

Engineering SDC:	\$ 443,718 (2.1% of construction) +
Environmental SDC:	<u>\$ 79,002 (0.4% of construction)</u>
Project Total Fee:	\$522,720 (2.5% of construction)



Closing

We anticipate that, upon approval of the scope of work for the professional services for the Browns Valley Trunk Project: Engineering Services during Construction, GHD and NapaSan will enter into a contract after approval by NapaSan's Board at the March 4, 2020 meeting. The Notice to Proceed will be the date when NapaSan signs the agreed-upon task order.

Please don't hesitate to contact us if you have any questions regarding the scope of work. Thank you for the opportunity to serve the Napa Sanitation District.

Sincerely,

GHD Inc.

A handwritten signature in blue ink, appearing to read "Matt Winkelman", with a stylized flourish at the end.

Matt Winkelman, P.E.

Principal in Charge
2235 Mercury Way, Suite 150
Santa Rosa, CA, 95407
Matt.Winkelman@ghd.com
707.236.1546

A handwritten signature in blue ink, appearing to read "Hooshalsadat", with a stylized flourish at the end.

Parastou Hooshalsadat, P.E.

Deputy Project Manager
2235 Mercury Way, Suite 150
Santa Rosa, CA 95407
Parastou.Hooshalsadat@ghd.com
707.540.9695

ATTACHMENT 'B'



GHD - PROJECT FEE ESTIMATING SHEET

Project Name: Browns Valley Trunk Project - Services During Construction
Prepared by: P. Hooshialsadat, B. Bacciarini
Reviewed by: M. Winkelman

Client: NapaSan
Date: February 25, 2020

Job Number: _____

		LABOR COSTS										FEE COMPUTATION					
LABOR CATEGORY >		Principal	QA/QC	Project	Deputy	Proj. Engr.	Transp.	Senior	Biologist	CAD /	Admin	TOTAL	*OTHER	SUB	SUB	SUB	TOTAL
RATE >		\$285	\$285	Manager	PM	\$170	Engr.	Scientist	\$145	Graphics	\$180	HOURS	DIRECT	Geotech	Bio	Archaeo	FEE
Task / Item		/Hr	/Hr	\$285	\$195	/Hr	\$220	\$195	/Hr	\$180	/Hr		COSTS	(MJA)	(WRA, Bat, Arborist)	(ASC)	
Task 1 Project Management (Phase 10)																	
1.1 Project Management		2		152	152			2			6	314	\$2,041	\$8,720			\$86,197.00
Subtotal Task 1		2	0	152	152	0	0	2	0	0	6	314	\$2,041	\$8,720	\$0	\$0	\$86,197
Task 2 Design Engineering Svcs During Construction (Phase 20)																	
2.1 Attend Partnering/Pre-Construction Meeting				8	8							16	\$104	\$2,640			\$6,716
2.2 Review Contractor Submittals			16	78	160	400	72	16			54	796	\$5,174	\$16,400			\$177,064
2.3 Review Contractor RFIs/RFCs			2	22	60	120	40	8			10	262	\$1,703	\$8,200			\$61,413
2.4 Construction Changes			0	0	0	0	0			0	0	0	\$0				\$0
2.5 Construction Meetings					100		10					110	\$715	\$12,660			\$35,708
2.6 Construction Phase Consultation				0	0	0		0	0			0	\$0				\$0
2.7 Periodic Geotechnical Observation of Construction												0	\$0	\$34,800			\$36,540
Subtotal Task 2		0	18	108	328	520	122	24	0	0	64	1184	\$7,696	\$74,700	\$0	\$0	\$317,441
Task 3 Environmental Svcs During Construction (Phase 30)																	
3.1 Nesting Bird Surveys				2				10	32			44	\$286		\$14,675		\$22,855
3.2 Bat Habitat Assessments				2				8	8			18	\$117		\$4,125		\$7,738
3.3 Archaeological Services				2				16				18	\$117			\$23,000	\$27,957
3.4 Supplemental Historic Properties Inventory Report				2				8				10	\$65			\$5,000	\$7,445
3.5 Other Environmental Assistance									24			24	\$156		\$8,925		\$13,007
Subtotal Task 3		0	0	8	0	0	0	42	64	0	0	114	\$741	\$0	\$27,725	\$28,000	\$79,002
Task 4 Project Closeout (Phase 40)																	
4.1 Prepare Record Drawings						16	8			80	8	112	\$728				\$21,048
4.2 Prepare SOP for Flow Control Manholes		2	4	8	16	24				24	16	94	\$611				\$19,032
Subtotal Task 4		2	4	8	16	40	8	0	0	104	24	206	\$1,339	\$0	\$0	\$0	\$40,080
PROJECT TOTALS		4	22	276	496	560	130	68	64	104	94	1,818	\$ 11,817	\$ 83,420	\$ 27,725	\$ 28,000	\$ 522,720

*OTHER DIRECT COSTS include telephone, mileage, printing, photocopies and other miscellaneous direct expenses.