



GWA RESOLUTION NO. 35-FY2024

**RELATIVE TO APPROVAL OF ADDITIONAL FUNDING FOR THE DESIGN OF
DUNGCA BEACH SEWER LINE RELOCATION PROJECT,
GWA PROJECT NO. 22001**

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities (“CCU”) has plenary authority over financial, contractual, and policy matters relative to the Guam Waterworks Authority (“GWA”); and

WHEREAS, the GWA is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA advertised for design services via RFP-01-ENG-2020 for an engineering firm to design the Dungca Beach Sewer Line Relocation Phase I; and

WHEREAS, GWA subsequently executed a contract on April 26, 2021, for design services with the most qualified firm, GHD, in the amount of Five Hundred Ninety-Four Thousand Seven Hundred Thirty-Five Dollars and Twenty-Eight Cents (\$594,735.28); and

WHEREAS, Change Order #1 was executed in the amount of Thirty-Eight Thousand Eight Hundred Ninety Dollars and Forty-Seven Cents (\$38,890.47). The revised contract amount was adjusted to Six Hundred Thirty-Three Thousand Six Hundred Twenty-Five Dollars and Seventy-Five Cents (\$633,625.75); and

WHEREAS, the current change order is needed for additional design of the following: 1) stabilize the embankment and access road leading to GWA’s Bayside Pump Station, 2) replacement of the existing 8-inch aging Force Main, 3) telecommunication line for future SCADA, 4) sewer manhole rehabilitation, 5) installation of flow metering and logging device at the Pump station to monitor/evaluate the capacity of the wet well, and new 8” diameter sewer

1 gravity to accommodate the new/existing sewage flows from Lagoon Drive and existing I & I, 6)
2 a new two-lane asphalt paved road over relocated gravity sewer lines within the existing 40-foot
3 Right of Way to correct long-standing encroachment on private property, 7) modeling analysis of
4 the 8" sewer line and Pump Station to receive from such future development and, 8) upsize
5 of existing 8" to 10" sewer line for future developments; and
6

7 **WHEREAS**, the additional work noted above has been negotiated with GHD and a fee
8 proposal (Exhibit A) to perform these additional services is Six Hundred Eleven Thousand Two
9 Hundred Fifty-Three Dollars (\$611,253.00) with a ten percent contingency of Sixty-One
10 Thousand One Hundred Twenty-Five Dollars (\$61,125.00) for a total increase in funding of Six
11 Hundred Seventy-Two Thousand Three Hundred Seventy-Eight Dollars (\$672,378.00) for the
12 work noted above as well as any unforeseen design requirements GWA may deem necessary;
13 and
14

15 **WHEREAS**, the approval of the funding increase will bring the total authorized funding
16 for the design services to One Million Three Hundred Six Thousand Three Dollars and Seventy-
17 Five Cents (\$1,306,003.75); and
18

19 **WHEREAS**, funding for these additional design services will be from USEPA Grant
20 Funds, as applicable; and
21

22 **WHEREAS**, the approval of this resolution will enable the Dungca Beach Sewer Line
23 Relocation to be completed within 36 months.
24

25 **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities
26 does hereby approve the following:

- 27 1. The recitals set forth above hereby constitute the findings of the CCU.
- 28 2. The CCU finds that the requested funding authorization increases to be fair,
29 reasonable, and necessary for the Dungca Beach Sewer Line Relocation design
30 project.

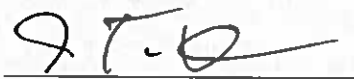
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- 1 3. The CCU hereby authorizes the management of GWA to execute a Change Order to
2 the contract with GHD Inc., for a total contract amount of One Million Two Hundred
3 Forty-Four Thousand, Eight Hundred Seventy-Eight Dollars and Seventy-Five Cents
4 (\$1,244,878.75) (Exhibit A).
5 4. The CCU hereby further authorizes a ten percent (10%) contingency of the Change
6 Order amount or Sixty-One Thousand One Hundred Twenty-Five Dollars
7 (\$61,125.00), increasing the authorized funding amount to One Million Three
8 Hundred Six Thousand Three Dollars and Seventy-Five Cents (\$1,306,003.75)
9

10 **RESOLVED**, that the Chairman certified, and the Board Secretary attests to the adoption
11 of this Resolution.
12

13 **DULY AND REGULARLY ADOPTED**, this 25th day of September 2024.
14

15 Certified by:

16 

17 **JOSEPH T. DUENAS**

18 Chairperson
19

Attested by:

20 

21 **PEDRO ROY MARTINEZ**

22 Secretary
23

24 **SECRETARY'S CERTIFICATE**

25 I, Pedro Roy Martinez, Board Secretary of the Consolidated Commission on Utilities as
26 evidenced by my signature above do hereby certify as follows:
27

28 The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular
29 meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally
30 held at a place properly noticed and advertised at which meeting a quorum was present and the
31 members who were present voted as follows:

AYES:	<u>5</u>
NAYS:	<u>0</u>
ABSENT:	<u>0</u>
ABSTAIN:	<u>0</u>





Your ref: 003
Our ref: 11228934

9 September 2024

**Guam Waterworks Authority
Rylma Carino and George Watson
Gloria B. Nelson Service Building
688 Rt. 15
Mangilao, Guam**

Subject: Dungca Beach Sanitary Sewer Line Relocation- Amendment B

Dear Mrs. Rylma Carino and Mr. George Watson,

GHD is pleased to submit this change proposal to amend our Scope of Work and Fee for the subject project.

The Scope of Work described under this amendment is to be completed under the Phase 1 design. The work is generally comprised of the following five (5) tasks:

- Task 3.1 Access Road Erosion Control
- Task 3.2 Replace Force Main From Pump Station to Route 30
- Task 3.3 Additional Telecommunication Conduits for Future SCADA from the Pump Station to Route 30
- Task 3.4 Sewer Manhole Partial Rehabilitation
- Task 3.5 Bayside Pump Station Flow Metering
- Task 3.6 New Trankilo Road Design
- Task 3.7. Analysis of Sewerline and PS for Future Developments
- Task 3.8. Upsize Sewerline for Future Developments

Design Task 3.1 will be prepared and submitted as an independent package with a 60% and 100% Deliverable schedule. The goal is to bid Task 3.1 prior to, or with the original Phase 1 package. Tasks 3.2, 3.3, and 3.4 will be directly incorporated into the original Phase 1 package and prepared towards the 100% Final Submittal. Task 3.5. will be prepared as an equipment and instructions package that is not part of the bid documents. If activated, Tasks 3.6 and 3.8 will be prepared and incorporated into the original Phase 1 package. Task 3.7 is an analysis that will be incorporated into the Basis of Design report.

Background:

An existing 20 foot wide utility easement connects Route 30 to the entrance of the Bayside Pump Station. A gravel access road within the easement is utilized daily by GWA operations staff to inspect the pump station, record flow data, and to perform any required maintenance work at the station. The gravel access road width varies from approximately 9.5 feet to 34 feet and is approximately 380 feet long. This access road is bordered by an existing stream to the south and a private, gated property to the north. GWA observed erosion of the edge of the gravel access road along the southern embankment that abuts the existing stream. GWA's concern over the condition of the access road has been increasing over time as erosion worsens, and especially after the notable effects of Typhoon Mawar in May 2023. GWA would like to stabilize the embankment and stream slope to help maintain adequate access to GWA's critical sewer infrastructure.

Since the original Dungca Beach Sanitary Sewer Line Relocation project will trench along the Bayside Pump Station access road to install the new 8" gravity main, GWA would like to take the opportunity to also replace the existing 6-inch force main, which is believed to be asbestos cement, to the limits of the Route 30 pavement edge, which is approximately 590 linear feet.

GWA, would also like to take the opportunity to install two empty 4-inch conduits in the access road while gravity main and force main work is being completed.

As GWA Operation's team had been investigating the upstream manholes leading to the Bayside Pump station in mid-May 2024, they observed heavy ground water intrusion in the manhole located directly west of the Bayside Pump Station. Their observations reveal water intrusion coming from a gap or crack between the outlet pipe and wall penetration of the manhole. GWA requests to include a detail and specifications to partially rehabilitate this manhole as part of Phase 1 to reduce groundwater intrusion into the sewer system. GWA expects to include the full rehabilitation of this manhole within the Phase 2 portion of this project.

In addition to concerns over maintaining access to the pump station and area piping, GWA would like to better understand the potential available capacity the pump station may have to accommodate additional connections. One customer that is interested in connecting to the pump station is the Agana Bay Condo which currently owns and operates a private lift station that pumps their sewage from the condominium to a terminal manhole on Route 30. GWA would like to understand if the Bayside Pump Station could handle the additional flows if the Agana Bay Condo sewage were to connect directly to the new GWA gravity line on Tan Marian Coatla Loop and eliminate the need of the condominium's lift station. To determine this, it is necessary to estimate the pump station capacity and the existing maximum flow into the pump station to determine if there is available excess capacity. This will require adequate flow metering and as was observed during a site visit in February 2024, the Bayside Pump Station is not equipped with a flow meter that automatically logs data. Installation of a flow meter and logging device that records data is recommended so that flow data can be gathered during the wet season and it can be determined if Agana Bay Condo's additional flow can be handled by Bayside Pump Station. GWA would like GHD to procure and configure an appropriate flow meter which will be installed and monitored by GWA staff.

As an additional measure, GWA would like to install in-line manhole flow meters in one or two of the upstream manholes. GHD will need to investigate the candidate manholes prior to recommending suitable flow meters. GWA requests GHD to procure suitable equipment. Installation and monitoring will be performed by GWA staff.

Scope of Work:

Task 1: Project Management and Administration. Includes coordination and meetings with Client, Design team, and relevant subconsultants

Task 1 Deliverables:

- Overall project schedule updates
- Monthly progress reports delivered along with monthly invoices
- Meeting minutes

Task 1 Assumptions

- Total of 13 Client meetings (4 months @ bi-weekly meetings, 3 months @ monthly, 2 review meetings,)
- All deliverables will be in electronic format. No hard copies will be provided.

Task 2: Data Gathering and Site Investigations

2.1 Site Topographic Survey

Guam Surveyors will update their Topographic survey map with the additional information along the existing access road, stream banks, stream mudline, retaining walls, and three upstream sewer manholes. See Figure A.

2.2 Environmental Surveys

EA will perform field surveys for protected species and habitat, including wetlands within and around the proposed project footprint. Wetland survey will be conducted in accordance with the procedures set forth by the U.S.ACE.

2.3 Geotechnical Investigation

- a. GeoEngineering will perform additional soil sampling and borings along the eroded access road. GeoEngineering will perform 2 borings at 75 feet deep. Effort includes processing of boring permit, DPW permit, mobilization, laboratory testing and reporting.
- b. GeoEngineering will perform the utility locates (potholing) at the locations of their proposed (2) borings.

2.4 Archaeological Research and Site Visit

- a. Based on meeting with the Guam SHPO on 6/3/24, SEARCH is to update the existing AMDP to discuss the new scope of work, new discoveries.
- b. SEARCH will perform (2) controlled excavation units on site. Effort of performing the excavation units, associated analysis, and reporting is included in this amendment.

2.5 Site field visits

- a. Site field visit to observe and assess the current condition of the access road, embankment, existing structures along proposed length of trenching.
- b. Site visit to observe and note the pump station piping configuration to help determine a suitable flow metering and recording device.
- c. Site visit to observe and document the existing condition of the three sewer manholes along the shore, upstream of the Bayside Pump Station. Refer to Figure B.

2.6 Review as-built documents

- a. Review existing 8" sewer force main and terminal manhole on Route 30
- b. Review drawings of existing utilities extending to Route 30

Task 2 Assumptions

- Team will utilize the existing geotechnical investigation reports completed under this project and the Bayside Pump Station project, as well as any previous boring information that GWA has in this area. Depending on the road erosion control measures selected, it may be necessary to obtain additional geotechnical information which will be addressed under a scope amendment as required.
- All deliverables will be in electronic format. No hard copies will be provided.

Task 2 Deliverables

- Topographic Survey Map
- Final Biological Report
- Final Wetland Delineation Report
- Addendum or Memo to the Geotechnical Report
- AMDP Addendum

Task 3: Design

The design phase encompasses the following five components:

Task 3.1. Access Road Erosion Control

This task entails the selection and design of temporary and permanent erosion control system for approximately 380 linear feet along the southern embankment of the existing gravel access road. Work includes consideration and evaluation of how the proposed new system will interface with the existing sheet pile and concrete retaining walls.

The following candidate erosion control systems will be considered:

- Riprap
- Erosion control mat
- Concrete retaining wall

- o Sheet pile wall
- o Gabion wall

Based on the field information collected and review of site conditions, GHD will prepare a brief analysis of candidate erosion control systems and summarize results in a memo. This will be a high-level screening evaluation based on generalized characteristics and relative cost ranking and permitting requirements. The candidate alternatives considered will be discussed with GWA staff who will select the preferred approach. The selected system will be prepared at a 60% and 100% design submittal. Depending on the site conditions and the alternative selected by GWA, additional geotechnical and design work may be required, which will be addressed under a separate scope amendment if needed.

The design work for the erosion control project will be prepared as a separate package from the Phase 1 work to allow for the permitting process to be completed separately. If the timing of the permitting process allows, the intent is for the erosion control portion to be incorporated into the Phase 1 bid set as an additive bid item. Another option is for the erosion control portion to be bid earlier as a separate project.

Task 3.2. Replace Force Main From Pump Station to Route 30

The existing 8 inch force main, which is understood to be asbestos cement pipe, has served its useful life and GWA would like to replace it while completing the other work along the access road. This design work will be incorporated into the Phase 1 design.

Task 3.3. Additional Telecommunication Conduits From the Pump Station to Route 30

While the other work is being completed along the access road, GWA would like to install two 4 inch, empty telecommunication conduits from the pump station to a new handhole along Trakilo street for future SCADA. These will be designed with pull boxes and pull strings so they can be utilized in the future as needed. This design work will be incorporated into the Phase 1 design.

Task 3.4. Sewer Manhole Partial Rehabilitation

Based on GWA Operation's team investigations, GWA would like to take measures to reduce the infiltration into the upstream manhole leading to the Bayside Pump station. This manhole receives continuous wastewater flow and leakage was observed between the outlet pipe and wall penetration of the manhole. GWA would like GHD to include in the Phase 1 design a detail and specifications as appropriate to partially rehabilitate this manhole reduce groundwater intrusion at this location. This is only intended as a partial mitigation as GWA expects to include the full rehabilitation of this manhole within the Phase 2 portion of the project.

Task 3.5. Bayside Flow Metering

a. Bayside Metering, data logging and analysis

The Bayside Pump Station does not have regular monitoring and logging of flow, and GWA would like to install a flow meter and logging device that records data so that flow data can be gathered during the wet season and GWA can determine if excess capacity is available for additional hookups. GHD, working with ArcSine Engineering, will procure and configure an appropriate flow metering device to be installed on the discharge piping within the pump station and will prepare instructions for the installation. GHD will provide the equipment installation effort in the event GWA staff will not be available to perform this work. GWA will maintain the meter and gather data for subsequent analysis. GHD will organize and analyze up to 4 months of data received from the flow meters to determine if the Agana Bay Condominiums are able to connect to the GWA line and Bayside Pump Station.

GWA would also like to temporarily measure flow within appropriate manholes leading into the Bayside Pump Station using stand alone portable equipment. GHD will work with GWA to identify candidate manholes and will research potential flow monitoring equipment to be installed by GWA in target manholes. GHD will prepare a brief summary memo to confirm with GWA the appropriate manholes and the proposed monitoring equipment. GHD will procure one set of monitoring equipment for GWA's use and will provide instructions as appropriate. GWA will install and manage the temporary monitoring equipment to gather data that can be compared to the data from the pump station flow meter. The procurement budget for the manhole metering equipment is covered under Task 5.

b. Installation of Pump Station Metering Equipment (Time and Materials)

Based on GWA's request, GHD is to provide labor to install the flow metering and logging equipment to be at the Bayside Pump Station in the event that GWA Operations staff is unavailable to perform the work. The specific equipment has not been determined at this time, therefore, this task is proposed to be expensed on a Time and Materials basis, as directed by GWA. The initial budget under this task is \$8,050. Additional budget may be requested in a subsequent amendment, as required based on the selected equipment and installation procedures.

Task 3.6. New Trankilo Road Design

Approximately 450 feet of existing paved road on Trankilo Road, near the Bayside Pump Station access road, is on private land (Lot 2122-#1-REM-1-2, Lot 2122-#1-REM-1-1-R2, and Lot 2122-#1-REM-2-1). GWA has requested for GHD to design a new two-lane asphalt paved road within the existing 40 foot Right of Way. The road design is to meet the Guam DPW Transportation standards and Stormwater Management Manual guidelines. The design will include adjustment or relocation of existing water valve, fire hydrant, and telecommunication boxes as needed for the design of the new road. The design will include signing and striping. The existing asphalt pavement within the private lands is to be demolished and restored to an impervious surface. Existing road signage will be removed as necessary. Relocation effort for power poles, other utilities, or structures outside of the ROW is not included. GWA will take the lead in coordinating this design effort and approvals with Guam DPW.

GHD will prepare 60% design drawing sheets related only to the road design for coordination with GWA and Guam DPW. Upon receipt of the 60% comments, the design will be further advanced to a 100% Final level to coincide, and to be included, with the overall 100% Phase 1 design package submittal. The intent is to bid this portion of work as a bid additive under one construction contract with the sewerline project.

Task 3.7. Analysis of Sewerline and PS for Future Developments

GWA noted there are at least five (5) undeveloped lots with potential for development (e.g. new homes, apartments, condominiums, or business) within the Trankilo Road sewer drainage area. GWA would like to understand the available additional capacity of the new 8" sewerline to receive flow from such future developments. GHD will evaluate the hydraulics of the 8" sewerline and will advise approximately how many additional units or single residences can be added to the line, as well as the infiltration/inflow (I&I) allowance. Similarly, GHD will evaluate the Bayside Pump Station's capacity to accept an assumed amount of additional flow from future developments. Note that analysis of the Pump Station's capacity is dependent on Task 3.5 of this change order to be in place.

Task 3.8. Upsize Sewerline for Future Developments

GWA requested for a fee proposal to upsize the new Trankilo Road sewerline from the current design of 8" to either a 10" or 12", in the event that GWA determines the sewage flow that we are to accommodate for future developments exceed the design capacity of an 8" gravity pipe. This task will include updating calculations, review for conflicts, updating pipeline plans, profiles, details and sections as necessary.

Task 3 Assumptions

- Assumes the erosion control system design can be configured to meet a NEPA Categorical Exclusion
- If GWA wishes to proceed with a sheet pile wall system or if the existing geotechnical information is otherwise inadequate for GWA's preferred erosion control system, additional geotechnical investigation may be required, and will be included under separate amendment.
- Does not include the design of a new pavement structure
- Does not include rehabilitation of any of the existing concrete retaining walls or sheet pile walls
- GWA to provide standard telecommunication conduit, duct bank and handhole details.
- One round of consolidated comments will be addressed for the 60% and 100% deliverables
- All deliverables will be in electronic format. No hard copies will be provided.
- The cost of flow monitoring equipment and installation is covered by Task 5.
- GWA will coordinate with Guam DPW on the design and approval of the new Trankilo Road

Task 3 Deliverables

- Draft and Final Alternatives Analysis Memo for Access Road Erosion Control System
- 60% Design Submittal (Drawings, Specs, BOD, Estimate) for Task 3.1 only
- 60% Preliminary Drawings for Task 3.6 only
- 100% Design Submittal (Drawings, Specs, BOD, Estimate) for Task 3.1 only
- 100% Final Design Submittal (Drawings, Specs, BOD, Estimate) for original scope and Tasks 3.2 to 3.4, 3.6, and 3.8 if directed.
- Brief Summary Memorandum confirming appropriate manholes used for flow monitoring
- Draft and Final equipment list and installation instructions for Task 3.5 only

Task 4: Permitting

4.1 USACE Section 404 Application and GEPA Section 401 Application

Prepare a Clean Water Act (CWA), Section 404 application (ENG Form 4345) required by the United States Environmental Protection Agency (USEPA) for submittal to the United States Army Corps of Engineers (USACE). EA will also prepare a CWA, Section 401 Water Quality Certification application required by the USEPA for submittal to the Guam Environmental Protection Agency (GEPA). The applications will describe the construction methodologies and best management practices to protect water quality.

4.2 Biological Assessment

Based on a list of species requested from the USFWS and NMFS, prepare a biological evaluation or assessment for those species that may be affected by the proposed project. Up to five species will be analyzed in detail. Potential marine species to be considered (depending on feedback from NOAA) include the green and hawksbill sea turtles, the coral *Acropora globiceps*, and the scalloped hammerhead shark. Potential terrestrial species include protected tree snails, the Mariana fruit bat, the Mariana common moorhen, and migratory birds. If the project does not merit a no effect determination for all potential species, a project-specific biological assessment may be required to support ESA, Section 7 consultation.

4.3 BSP CZMA Consistency Determination

Prepare a Coastal Zone Management Act (CZMA) Consistency Determination required by the National Oceanic and Atmospheric Administration (NOAA) and 15 CFR Part 930. Based on the review of existing data, will evaluate the consistency of components of the preferred alternative with existing programs, use requirements within the Coastal Zone, and compliance and consistency with the policies and procedures of the programs. Evaluate the proposed activities and prepare the Draft Coastal Zone Consistency Determination Package in accordance with the Procedures Guide for Achieving Federal Consistency with the Guam Coastal Management Program (GCMP) for client review and approval. Once the client comments are received, will revise the document and produce the Final Coastal Zone Consistency Determination Package for submission to BSP.

4.4 NEPA Categorical Exclusion

If an update to the NEPA documentation is required, we will work with the client to develop the project description and purpose and need statement. This will be presented to agencies during the NEPA pre-scoping meetings. We will gather relevant reports, documentation, and supporting information that could be used to describe the conditions within and near the project locations. Next, we will inventory the project areas. Resources involved may include cultural resources, floodplains, sensitive noise receptors, wetlands, threatened or endangered species or their habitat, water quality, social and economic characteristics of the population, and other environmental resources. We will support GWA in the preparation of the EPA Categorical Exclusion and Extraordinary Circumstances Review form (EPA checklist) and supporting documentation.

Three drafts of the categorical exclusion will be prepared: an internal review draft, an agency review draft, and a final. If, during preparation of the categorical exclusion, significant effects are determined likely to occur, the client will be informed and additional scope requested to prepare an environmental assessment.

Task 4 Assumptions:

- Initial determinations will be included in the draft document, but the lead agency will be responsible for the final determinations.
- Will prepare one draft, and one final document will be prepared.
- One round of consolidated comments will be addressed for each of the draft memos.
- GWA will conduct all public outreach
- GWA will coordinate with the Government and submit plans and applications
- Approval of the CatEX is contingent on successful consultation with applicable agencies such as SHPO, USFWS, and NMFS, which is beyond EA's control.
- No additional fieldwork or marine surveys will be conducted.
- All deliverables will be in electronic format. No hard copies will be provided.

Task5: Equipment Procurement (Time and Materials)

Based on GWA's request, GHD is to procure the flow metering and logging equipment to be installed at the Bayside Pump Station, as well as suitable meters to be used in the manholes. The specific equipment has not been determined at this time, therefore, this task is proposed to be expensed on a Time and Materials basis, as directed by GWA. The initial budget under this task is \$7,480. Additional budget may be requested in a subsequent amendment, as required based on equipment selection.

Task 6: Time Extension

Requesting contract time extension through **April 04, 2025** for design services.

Proposed Schedule: See attached Design Schedule A.

Fee Schedule for Additional Design Services:

TASKS	TOTALS
Original Contract Amount	\$594,735.28
Contract Amount Prior to Change Proposal	\$633,625.75
Amendment B	\$ 580,690.00
Guam GRT (at 5.263%)	\$30,563.00
TOTAL CHANGE PROPOSAL COST	\$611,253.00
AMENDED CONTRACT AMOUNT	\$1,244,878.75

Work that exceeds the scope of this proposal will be brought to your attention for review, approval and fee adjustment. The additional effort related to completing Phase 2 of the project will be provided in a separate amendment for GWA's review. Work performed will be billed monthly based on the estimated percent complete. We stand ready to provide the professional services necessary to assist GWA in this endeavor.

Regards,

Jecelia Llegado, PE
 Project Manager
 671-472-6792
 Jecelia.Llegado@ghd.com

Attachments:

1. **Dungca Beach Project Detailed Fee Schedule**
2. **Dungca Beach Project Fee Summary**

**Copy to: Matthew Kennedy
Steve McHaney
file**



Dungca Beach Project CO-02
11228934

Description	GHD	J Uno (Total Consulting)	EA (Environmental SE, REC- (Adult))	PreSite (Elisbach)	Geom Surveyor (Survey)	Gen/Eng/Instn (Geotech/Util/ Locations)	Total Subcontractors	Total Disbursements	Estimated Project Total
Task1	\$35,620	\$0	\$9,922	\$0	\$0	\$0	\$1,388	\$10,720	\$46,340
Subtask 1.1 Project Schedule	\$2,370	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,370
Subtask 1.2 Progress Reports	\$2,370	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,370
Subtask 1.3 Meetings and Coordinations	\$30,880	\$0	\$9,322	\$0	\$0	\$0	\$1,388	\$10,720	\$41,600
Task2	\$21,513	\$0	\$54,776	\$56,792	\$0	\$53,870	\$27,878	\$167,714	\$189,228
Subtask 2.1 Site Topographic Survey	\$2,293	\$0	\$0	\$0	\$11,000	\$0	\$1,650	\$12,650	\$14,943
Subtask 2.2 Environmental Surveys	\$2,683	\$0	\$34,176	\$0	\$0	\$0	\$5,128	\$39,302	\$41,985
Subtask 2.3a Geotechnical Field Investigation and Reporting	\$3,828	\$0	\$0	\$0	\$0	\$22,100	\$3,315	\$25,415	\$29,243
Subtask 2.3b Utility Investigation for Borings	\$0	\$0	\$0	\$0	\$0	\$11,770	\$1,766	\$13,536	\$13,536
Subtask 2.4a Archaeological AMDP Update	\$3,285	\$0	\$0	\$12,010	\$0	\$0	\$1,802	\$13,812	\$17,097
Subtask 2.4b Archaeological Excavation Units, Analysis and Reporting	\$0	\$0	\$0	\$54,782	\$0	\$0	\$8,217	\$62,999	\$62,999
Subtask 2.5 General Site Field Visit	\$5,885	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,885
Subtask 2.6 Review As-built documents	\$3,540	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,540
Task3	\$198,854	\$27,434	\$5,029	\$0	\$19,977	\$0	\$7,071	\$53,751	\$282,608
Subtask 3.1 Access road erosion control	\$118,512	\$8,701	\$5,329	\$0	\$0	\$0	\$2,104	\$16,134	\$184,646
Subtask 3.2 Replacement of Force Main	\$8,480	\$3,009	\$0	\$0	\$0	\$0	\$451	\$3,460	\$11,940
Subtask 3.3 Telecommunication conduit and duct bank	\$3,165	\$1,783	\$0	\$0	\$0	\$0	\$267	\$2,050	\$5,235
Subtask 3.4 Sewer manhole partial rehabilitation	\$4,555	\$1,200	\$0	\$0	\$0	\$0	\$160	\$1,360	\$5,915
Subtask 3.5a Bayside Pump Station Flow Metering (LS)	\$13,130	\$0	\$0	\$12,977	\$0	\$0	\$1,947	\$14,924	\$28,054
Subtask 3.5b Installation (T&M)	\$790	\$0	\$0	\$7,000	\$0	\$0	\$1,050	\$8,050	\$8,840
Subtask 3.6 New Trunkline Road Design	\$28,108	\$4,642	\$0	\$0	\$0	\$0	\$986	\$5,338	\$33,448
Subtask 3.7 Analysis of Sewerline and PS for Future Developments	\$9,740	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,740
Subtask 3.8 Upgrade Sewerline for Future Developments	\$12,355	\$2,100	\$0	\$0	\$0	\$0	\$315	\$2,415	\$14,770
Task4	\$12,470	\$0	\$53,103	\$0	\$0	\$0	\$9,465	\$72,868	\$85,338
Subtask 4.1 USACE Section 404 and GEPA Section 401 Application	\$3,118	\$0	\$6,481	\$0	\$0	\$0	\$972	\$7,453	\$10,571
Subtask 4.2 Biological Assessment	\$3,118	\$0	\$23,827	\$0	\$0	\$0	\$3,574	\$27,401	\$30,519
Subtask 4.3 BSP CAMA Consistency Determination	\$3,118	\$0	\$13,800	\$0	\$0	\$0	\$2,070	\$15,870	\$18,988
Subtask 4.4 NEPA Categorical Exclusion	\$3,118	\$0	\$18,995	\$0	\$0	\$0	\$2,849	\$21,844	\$24,962
Task5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtask 5.1 Flow meter and data logger equipment for Manholes (T&M)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,480	\$7,480
Total Labor Hours									
Estimated Project Total	\$268,457	\$21,434	\$111,930	\$65,792	\$19,977	\$11,000	\$39,750	\$304,753	\$580,690
GRT @ 52892%									
Project GRAND Total									
\$611,253									



Dungca Beach Project CO-02
11228934

Description		Sub Total
CCR-3.A: Access Road Erosion Control		\$469,071
Subtask 3.1 Access Road Erosion Control	\$134,645.78	
Portion of Subtask 1.1 Project schedule		
Portion of Subtask 1.2 Project Reports		
Portion of Subtask 1.3 Meetings and Coordination	\$36,707.00	
Subtask 2.1 Site Topographic Survey	\$14,942.50	
Subtask 2.2 Environmental Survey	\$41,984.90	
Subtask 2.3a Geo Technical Field Investigation & Reporting	\$29,242.50	
Subtask 2.3b Sub Contractor to Locate the Utilities	\$13,535.50	
Subtask 2.4a Archaeological Field Work	\$17,096.50	
Subtask 2.4b SEARCH to perform excavation of pits	\$62,999.30	
Subtask 2.5 General site visit	\$5,885.00	
Subtask 2.6 Review As-Built Documents	\$3,540.00	
Subtask 4.1 USACE Section 404 and GEPA Section 401 Application	\$10,570.65	
Subtask 4.2 Biological Assessment	\$30,518.55	
Subtask 4.3 BSP CMAA Consistency Determination	\$18,987.50	
Subtask 4.4 NEPA Categorical Exclusion	\$24,961.75	
CCR-3.A GRT @ 5.2632%	\$23,453.74	
CCR-3.B: Replacement of Force Main		\$12,568
Subtask 3.2 Replacement of Force Main	\$11,939.86	
CCR-3.B GRT @ 5.2632%	\$628.42	
CCR-3.C: Telecommunication Conduit and Duct Bank		\$5,511
Subtask 3.3 Telecommunication & Duct bank	\$5,235.15	
CCR-3.C GRT @ 5.2632%	\$275.54	
CCR-3.D: Sewer Manhole Partial Rehabilitation		\$6,247
Subtask 3.4 Sewer Manhole Rehabilitation	\$5,934.63	
CCR-3.D GRT @ 5.2632%	\$312.36	
CCR-3.E: Bayside Flow Metering		\$38,835
Subtask 3.5a Bayside SPS Flow Monitoring	\$28,053.55	
Subtask 3.5b Installation of Flow Monitoring (T & M)	\$8,840.00	
CCR-3.E GRT @ 5.2632%	\$1,941.79	
CCR-3.F: New Frankilo Road Design		\$45,346
Subtask 3.6 New Frankilo Road Design	\$33,445.62	
Portion of Subtask 1.1		
Portion of Subtask 1.2		
Portion of Subtask 1.3	\$9,633.30	
CCR-3.F GRT @ 5.2632%	\$2,267.33	
CCR-3.G: Analysis of Sewerline and PS for Future Developments		\$10,253
Subtask 3.7 Analysis of Sewer Line & PS for future development	\$9,740.00	
CCR-3.G GRT @ 5.2632%	\$512.64	
CCR-3.H: Upsize Sewerline for Future Developments		\$15,548
Subtask 3.8	\$14,770.48	
CCR-3.H GRT @ 5.2632%	\$777.41	
CCR-3.I: Equipment Procurement		\$7,873
Subtask 5.1 Flow Meter and Data Logger (Manhole) (T & M)	\$7,479.60	
CCR-3.I GRT @ 5.2632%	\$393.67	
GRAND TOTAL		\$611,253