


Agenda Report Reviewed by:
City Manager: 

CITY OF SEBASTOPOL
CITY COUNCIL
AGENDA ITEM

Meeting Date: November 15, 2022
To: Honorable Mayor and City Councilmembers
From: Larry McLaughlin, City Manager
Subject: Engineering Services for Zimpher Creek Sewer Improvements Part 1, 2
Recommendation: Approval of Amendment No. 41 of Master Agreement 2010-01-36 with GHD Inc. for Engineering Services for the Zimpher Creek Sewer Relocation Improvements Part 1, 2 for amount not to exceed \$130,000.
Funding: Currently Budgeted: X* Yes No N/A

Account Code 511-23-50-9902/Costs \$130,000 authorized in City Approved Budget (if applicable) AK (verified by Administrative Services Department)

*See funding breakdown in Fiscal Impact section.

INTRODUCTION:

The item is to request Council approval of Amendment No. 41 of Master Agreement 2010-01-36 with GHD Inc. for the Zimpher Creek Sewer Relocation Improvements Part 1 (CIP #0604-37.00) and Part 2 (CIP #0610-70.00).

BACKGROUND:

In September 2016 GHD was competitively selected to perform preliminary engineering, prepare a design, and provide construction engineering support for the rehabilitation or replacement of the existing sewer main from Zimpher Drive (upstream) to Murphy Avenue (downstream). The sewer main is 8-inch diameter and is comprised of a combination of PVC and ductile/cast iron pipe segments and 11 manholes. The alignment crosses Zimpher Creek in several locations as it winds down the creek channel while serving adjacent residential and commercial properties. The sewer main also serves numerous upstream parcels accessed from Covert Lane, including Norlee Street, The Village Green Condominiums and Teresa Court.

Between Zimpher Drive and Murphy Avenue the sewer main serves numerous residential and commercial properties. Root intrusion and blockages have resulted in past sanitary sewer overflows (SSOs) along this segment, and the numerous manholes and location have made access and maintenance challenging for City staff. Issues of seasonal flooding and erosion around manholes are also a concern. The City desires to eliminate the risk of future SSOs and main failures while improving pipeline performance and access at critical junctions.

The sewer main serves numerous properties along its alignment, and its continued service is critical. Relocating the main out of the creek channel and into a City street presents hydraulic challenges and could require small capacity pumping stations and residential plumbing retrofits. Rehabilitating the sewer main in place or replacing it in a similar alignment would maintain service to the existing parcels. The environmental risks associated with the sewer main remaining in very close proximity to the active creek channel must be mitigated.

DISCUSSION:

The engineering work was initially authorized under Amendment #19 but was subsequently stopped in order to obtain and complete the CCTV inspection work and findings. There were subsequent changes in Engineering Department staffing and that also caused a lapse in the oversight of the project and work.

The previous scope of work and budget for design was based on the assumption that the design would be Cured-in-place pipe (CIPP) rehabilitation. As part of GHD's previous scope of work, CCTV inspection video of the sewer main was reviewed, a topographic survey of the project area was performed, and a draft preliminary design report was prepared. The draft preliminary design report, which was issued in July 2017, evaluated three alternatives for the rehabilitation and replacement of the existing sewer main, plus a "do nothing" alternative. Two trenchless alternatives and one open cut alternative were considered for the rehabilitation or replacement of the sewer main along Zimpher Creek. The alternatives evaluated were:

1. CIPP rehabilitation
2. Horizontal directional drilling (HDD) installation, and
3. Construction of new sewer in public right-of-way.

Evaluation criteria were chosen to qualitatively and quantitatively compare project alternatives, including hydraulics, utility interferences, constructability, environmental reviews and permitting requirements, community impacts, and project costs. All the alternatives were determined technically feasible (i.e., it appears possible to construct each alternative). "Do Nothing" alternative was eliminated due to the lack of improvement for system reliability and regulatory compliance. Alternative 1, CIPP rehabilitation, was determined to be preferable over the other alternatives considered. This alternative had the lowest anticipated impacts to existing utilities and the community and was most preferable for constructability and project cost.

The project description and scope have been updated to better match what the CCTV inspections have identified as well as making sure that the new project descriptions match what is shown in the adopted Fiscal Year 2022-23 CIP. The project also included an additional improvement to reduce flows to the Zimpher Creek sewer main by rerouting the flows from Covert Lane to Healdsburg Avenue. A new 8" sewer (250 LF) would connect MH-402 in Covert Lane to MH-401 in Healdsburg Avenue, which allows for gravity flow. A new sanitary sewer cleanout will be installed near the intersection of Zimpher Road and Covert Lane to provide continued service to the properties that currently connect to the existing 8" sewer between MH-402 and MH-403. Excavation for the new sewer will be approximately 10 feet deep with various utility crossings that need to be considered in the design.

GOALS:

This action supports the following City Council Goals and General Plan Actions:

- Goal 2 - Maintain, Improve and Invest in the City's Infrastructure (Water, Sewer, Streets, Circulation, Parks, Storm Drains and Public Facilities).

PUBLIC COMMENT:

As of the writing of this staff report, the City has not received any public comment. If some staff receives public comment from interested parties following the publication and distribution of this staff report, such comments will be provided to the City Council as supplemental materials before or at the meeting. In addition, public comments may be offered during the public comment portion of the agenda item.

PUBLIC NOTICE:

This item was noticed in accordance with the Ralph M. Brown Act and was available for public viewing and review at least 72 hours prior to schedule meeting date.

FISCAL IMPACT:

The engineering design cost is included in the adopted Fiscal Year 2022-23 CIP budget as summarized in Table 1. The proposed Fee is \$130,000 and the funding source is summarized in Table 1.

Table 1 Fund Source Summary

Fund No. and Name	CIP Project	Approved Budget Amount
511 – Sewer Capital	#0604-37.00 Zimpher Creek Sewer Part 1	\$ 30,000.
511 – Sewer Capital	#0611-70.00 Zimpher Creek Sewer Part 2	100,000.
	Total	\$130,000.

RECOMMENDATION:

Staff recommends the Sebastopol City Council approve and authorize the City Manager to execute Amendment No. 41 of Master Agreement 2010-01-36 with GHD Inc. for Engineering Services for the Zimpher Creek Sewer Relocation Part 1, 2 Project Nos. 0604-37.00 and 0611-70.00 for an amount not to exceed \$130,000.

Attachments:

Proposal from GHD Inc.



2235 Mercury Way, Suite 150
Santa Rosa, California 95407
United States
www.ghd.com

Our ref: 11213893

November 08, 2022

Mr. Larry McLaughlin
City Manager/City Attorney
City of Sebastopol
7120 Bodega Ave.
P.O. Box 1776
Sebastopol, CA 95473

RE: Proposal for Professional Engineering Services: Zimpher Creek Sewer Relocation Part 1 (City Project No. 0604.37.00) and Part 2 (City Project No. 0610.70.00)

Dear Mr. McLaughlin:

GHD is pleased to provide this proposal for professional engineering services to develop plans, specifications and a construction estimate for the Zimpher Creek Sewer Relocation Project Parts 1 and 2. Part 1 is the rerouting of sewer flows from Covert Lane to Healdsburg Avenue (City Project No. 0604.37.00), and Part 2 is the rehabilitation or replacement of the sewer main between Zimpher Drive and Murphy Avenue (City Project No. 0610.70.00). This proposal is submitted in accordance with GHD's City Engineer Master Agreement 2010-01-36.

Background

In September 2016 GHD was competitively selected to perform preliminary engineering, prepare a design, and provide construction engineering support for the rehabilitation or replacement of the existing sewer main from Zimpher Drive (upstream) to Murphy Avenue (downstream). The sewer main is 8-inch diameter and is comprised of a combination of PVC and ductile/cast iron pipe segments and 11 manholes. The alignment crosses Zimpher Creek in several locations as it winds down the creek channel while serving adjacent residential and commercial properties. The sewer main also serves numerous upstream parcels accessed from Covert Lane, including Norlee Street, The Village Green Condominiums and Teresa Court.

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The sewer main serves numerous properties along its alignment, and its continued service is critical. Relocating the main out of the creek channel and into a City street presents hydraulic challenges and could require small capacity pumping stations and residential plumbing retrofits. Rehabilitating the sewer main in place or replacing it in a similar alignment would maintain service to the existing parcels. The environmental risks associated with the sewer main remaining in very close proximity to the active creek channel must be mitigated.

Preliminary Engineering

The previous scope of work and budget for design was based on the assumption that the design would be Cured-in-place pipe (CIPP) rehabilitation. As part of GHD's previous scope of work, CCTV inspection video of the sewer main was reviewed, a topographic survey of the project area was performed, and a draft preliminary design report was prepared. The draft preliminary design report, which was issued in July 2017, evaluated three alternatives for the rehabilitation and replacement of the existing sewer main, plus a "do nothing" alternative. Two trenchless alternatives and one open cut alternative were considered for the rehabilitation or replacement of the sewer main along Zimpher Creek. The alternatives evaluated were:

1. CIPP rehabilitation
2. Horizontal directional drilling (HDD) installation, and
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Evaluation criteria were chosen to qualitatively and quantitatively compare project alternatives, including hydraulics, utility interferences, constructability, environmental reviews and permitting requirements, community impacts, and project costs. All the alternatives were determined technically feasible (i.e., it appears possible to construct each alternative). "Do Nothing" alternative was eliminated due to the lack of improvement for system reliability and regulatory compliance. Alternative 1, CIPP rehabilitation, was determined to be preferable over the other alternatives considered. This alternative had the lowest anticipated impacts to existing utilities and the community and was most preferable for constructability and project cost.

The project also included an additional improvement to reduce flows to the Zimpher Creek sewer main by rerouting the flows from Covert Lane to Healdsburg Avenue. A new 8" sewer (250 LF) would connect MH-402 in Covert Lane to MH-401 in Healdsburg Avenue, which allows for gravity flow. A new sanitary sewer cleanout will be installed near the intersection of Zimpher Road and Covert Lane to provide continued service to the properties that currently connect to the existing 8" sewer between MH-402 and MH-403. Excavation for the new sewer will be approximately 10-feet deep, and there will be several utility crossings (underground water, gas, and electric lines).

The alternatives evaluated and rerouting of flows from Covert Lane to Healdsburg Avenue are shown on **Attachment 1** (Figures 1 – 5 from the preliminary engineering report).

Following submission of the draft preliminary design report the City placed the project on hold.

Scope of Work

GHD's proposed Scope of Work is to finalize the preliminary design report, prepare construction documents for the Project, including the City's "front end", or boilerplate specifications and package the documents for the City's advertising and bidding, as well as provide support to City staff during the bid period. This Scope of Work assumes the project includes Alternative 1 CIPP rehabilitation (City Project No. 0610.70.00), and rerouting of flows from Covert Lane to Healdsburg Avenue (City Project No. 0604.37.00). Below is a detailed summary of the proposed scope of services.

Task 1. Project Coordination

This task is for overall project management, team coordination, meetings, and project administration, HSE/JSEA health and safety, and related managerial items. It also includes budget and schedule tracking, project and contract oversight, QA/QC and project invoicing during the duration of design.

- 1.1 Project Management:** GHD will update the original Project Work Plan prepared for the project. The Project Work Plan communicates the background, scope, schedule, budget, and team member roles to the design team and is used to drive the project and maintain accountability. GHD will coordinate with team members and stakeholders during the design. GHD will submit monthly invoices to the City for our efforts on the project.
- 1.2 Project Meetings:** We have budgeted to attend three (3) meetings, one kick-off / field review meeting, one at 60% design, and one at 90% design. The kick-off meeting will review of the preliminary design report with the City, discuss the alternatives and any comment the City may have. GHD will also maintain regular contact with the City via phone calls, email and other methods to make sure communication remains open and consistent during the course of design.
- 1.3 Site Visits:** The Project Engineer will perform a site visit and review the project area to confirm layouts prior to the supplemental topographic survey, and additional site visits, as needed, during development of detailed design.
- 1.4 Project Quality:** GHD will perform quality control reviews of all submittals.

Deliverables:

- Project Work Plan
- Meeting agenda and minutes

Task 2. Topographic Survey

GHD's will perform a supplemental topographic survey in support of the project design.

- 2.1 Review Existing Information & CCTV:** GHD will review the previously completed Preliminary Design Report, mapping, survey, analysis results and other information. We will also review previously completed CCTV video inspection of the existing pipeline, and new CCTV video inspection to identify any issues which may have arisen with the sewer mains since the previous CCTV inspection. It is assumed the City will engage a CCTV video inspection contractor to perform a new inspection of the project sewer mains.
- 2.2 Finalize Preliminary Design Report:** GHD will incorporate review comments from the City into the draft Preliminary Design Report, update construction cost estimates for each alternative, reconfirm the recommended project and finalize the report.
- 2.3 Field Topographic Survey:** The supplemental topographic survey will include areas needed to further define the project area as needed for design of the recommended project. One day of field survey is included in the budget. Existing benchmarks and previously established survey control will be used.
- 2.4 Office Survey:** The previous topographic survey mapping will be updated. This mapping will be used for the development of design drawings.

Deliverables:

- Final Preliminary Engineering Report (electronic PDF)

Task 3. 60% Design

GHD will prepare 60% plans, technical specifications and opinion of probable construction cost using the updated topographic survey prepared in Task 2 and project information prepared for the Capital Improvement Plan design submittal.

3.1 Plans: We will develop the alignment and profile for the CIPP lining of the sewer main, identify spot repair areas from CCTV video review, utility crossings and prepare necessary details. The plans will depict existing utilities in plan view, and will show locations of bends, valves, and connections. Proposed details will be included, and the drawings will reference applicable City Standard details. We will also work with the City to review and incorporate operation and maintenance requirements in the design, as needed.

The following provides a list of the anticipated 9 sheets for the project, which may change to meet project needs and requirements:

- General: (Cover sheet and notes, symbols and abbreviations) 2 sheets
- Civil (Survey control, pipeline plan and profile): 4 sheets
- Civil Details: 3 sheets

3.2 Technical Specifications: Draft technical specifications will be provided for review and comments. Specifications will incorporate references to applicable City's standard specifications. Bid item descriptions will be developed describing work included in each item for payment. The City's front-end contract will be redlined, as needed, using tracked-changes for any additional project-specific items.

3.3 Opinion of Probable Construction Cost: The opinion of probable construction cost prepared for the CIP will be revised to AACE International Recommended Practice 56R-08 estimate class 2/3. We will adjust costs based on recent bids and other sources, and revise quantities to reflect the design.

We will rely in City utility mapping for existing water, sanitary sewer and storm drain piping, and incorporate this information into the topographic survey base map for the design. We will coordinate with the City on any utility locating or utility potholing needed to accurately depict existing City utilities in plan and profile. GHD will also rely upon previously obtained utility mapping from PG&E, Cablecom to verify locations of any underground utilities which may be in the project vicinity and show these utilities on the drawings. AT&T mapping was not received during the previous design effort, and a new request will be made.

The new pipe alignments will be designed to comply with California Division of Drinking Water requirements and rely on variances only where necessary. The 60% submittal will depict the recommended alignment, recommended profile, appurtenances, and details, as well as general notes, symbols, and abbreviations.

The 60% submittal will be provided to the City for review. Following review GHD will meet with the City to review comments and discuss revisions, options, and key coordination items.

Deliverables:

- Drawings (electronic PDF)
- Technical Specifications (electronic PDF)
- Opinion of Probable Construction Cost (electronic PDF)

Task 4. 90% Design (Pre-Final)

Following a design review meeting, GHD will prepare 90% plans, technical specifications and opinion of probable construction cost addressing City comments on the 60% design submittal. We will finalize the alignment and profile for the replacement sewer main, update details as necessary and finalize the slurry seal limits and requirements. The 90% submittal will depict the final recommended alignment, profile, appurtenances, and details.

4.1 Plans: The plans will depict the final pipeline alignments and profiles, existing utilities in profile, new sewer laterals and all other proposed improvements. All proposed details will be included, and the drawings will reference applicable City Standard details. We will also confirm operation and maintenance requirements are addressed in the design.

4.2 Technical Specifications: Complete technical specifications will be provided for review and comments. Bid item descriptions will be updated, as needed, describing work included in each item for payment. Proposed revisions from the 60% submittal will be accepted and new revisions made using track-changes.

4.3 Opinion of Probable Construction Cost: The opinion of probable construction cost prepared for the CIP will be revised to AACE International Recommended Practice 56R-08 estimate class 4/5. We will adjust costs based on recent bids and other sources, and revise quantities to reflect the 90% design.

The 90% submittal will be provided to the City for review. Following review GHD will meet with the City to review comments and discuss revisions, options, and key coordination items.

Deliverables:

- Drawings (electronic PDF)
- Technical Specifications (electronic PDF)
- Opinion of Probable Construction Cost (electronic PDF)

Task 5. Final Design

GHD will finalize the design and deliver a complete set of biddable contract documents and final engineer's opinion of probable construction costs. Plans, specifications, and estimate will be finalized based on City comments on the 90% submittal and addressing comments received.

Deliverables:

- Drawings (electronic DWG & PDF)
- Technical Specifications (electronic DOCX and PDF)
- Opinion of Probable Construction Cost (electronic EXCEL & PDF)

Task 6. Engineering Support during Bid and Award Phase

GHD will provide engineering support during the bid phase to assist the City with any technical questions related to the design and administrative needs for the bid.

- 6.1** We will prepare one (1) addendum, respond to written Requests for Information (RFI) and questions from bidders, and making any needed revisions to plans and specifications to address questions.
- 6.2** GHD will attend a pre-bid conference and site visits and assist the City in conducting the pre-bid conference. GHD will prepare minutes from the pre-bid conference and assist the City in documenting questions asked.
- 6.3** GHD will assist the City in reviewing the bids received with the intent of confirming the lowest responsive and responsible bidder and provide a brief letter summarizing the bids and recommending award.
- 6.4** Upon Contractor selection, GHD will prepare Conformed Construction Documents incorporating any changes made to the plans and specifications during the bid period.

Deliverables:

- Responses to questions and RFIs (electronic)
- Support documentation issued with addenda, including revised drawings and revised technical specifications (electronic)
- Pre-bid conference meeting minutes (electronic)
- Conformed Construction Documents (electronic plans and specifications DWG, DOCX and PDF).

Task 7. City Engineer Project Support

- 7.1 Attend four (4) project meetings: Kick-off, 60% design review, 90% design review. The final design review will be with the Public Works Superintendent and Public Works administrative staff to coordinate the bid documents and prepare for public bidding.
- 7.2 Review and approval of the plans and specifications for bidding and City Engineer signing of the documents. This task includes preparing agenda reports for Council authorization to bid, bid award and notice of completion.
- 7.3 Assist City in the bidding of the Project including preparing reports to Council for authorization to solicit bids and to award a construction contract following receipt of bids.

Assumptions and Exclusions

1. Meetings other than indicated are not required.
2. Designs would be in accordance with updated City of Sebastopol Standards, 2019 California Building Code, California Department of Transportation Standard Plans and Specifications, and other applicable standards
3. The project construction delivery method will be by competitive bidding.
4. Drawings will be prepared using AutoCAD Civil 3D 2020 or newer on a “22x34” sheet size.
5. Underground utility locating services is excluded. It is assumed the City can perform potholing to locate existing City-owned utilities within the project area.
6. The project is categorically exempt. The City will address any required environmental documentation.
7. All new work is within existing City right of way. New easements, boundary and right-of-way survey and filing a record of survey is excluded
8. One City staff will assist with access to manholes.
9. The site does not contain hazardous materials including contaminated soil and groundwater is excluded.
10. Preparation of a SWPPP is not required for the project.
11. City will provide consolidated review comments on the design.
12. City will advertise and bid the project.
13. At City’s request, GHD will prepare separate proposal for construction engineering assistance, construction management and construction observation.

Fee Proposal

GHD proposes to prepare the design for a time-and-materials fee not to exceed \$130,000. as shown on the Attachment 2 Cost Proposal. Services not included in this proposal can be provided by a negotiated fee in accordance with GHD’s City Engineer Master Agreement 2010-01-36 and GHD’s current standard rate schedule (Attachment 3).

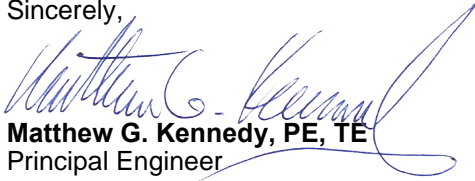
Schedule

GHD is prepared to begin work upon execution of a Task Order for this assignment under the terms of the Master Services Agreement with the City of Sebastopol. We propose to complete Task 2 within eight (8) weeks of an executed task order, pending completion of CCTV inspections. We will complete the 60% design within eight (8) weeks of Task 2 completion. Following City review, we propose to complete the 90% design within six (6) weeks, and the Final design within three (3) weeks. We assume two (2) weeks for City review of each submittal. We will endeavor to complete the design sooner so the project can be constructed during the dry season. We will work with the City to adjust the schedule, as needed, and be flexible with the City staff availability for cooperative and team-oriented execution.

Closing

We welcome the opportunity to continuing partnering with the City on this important project and look forward to contributing to its success. Should you have any questions, please do not hesitate to contact me.

Sincerely,



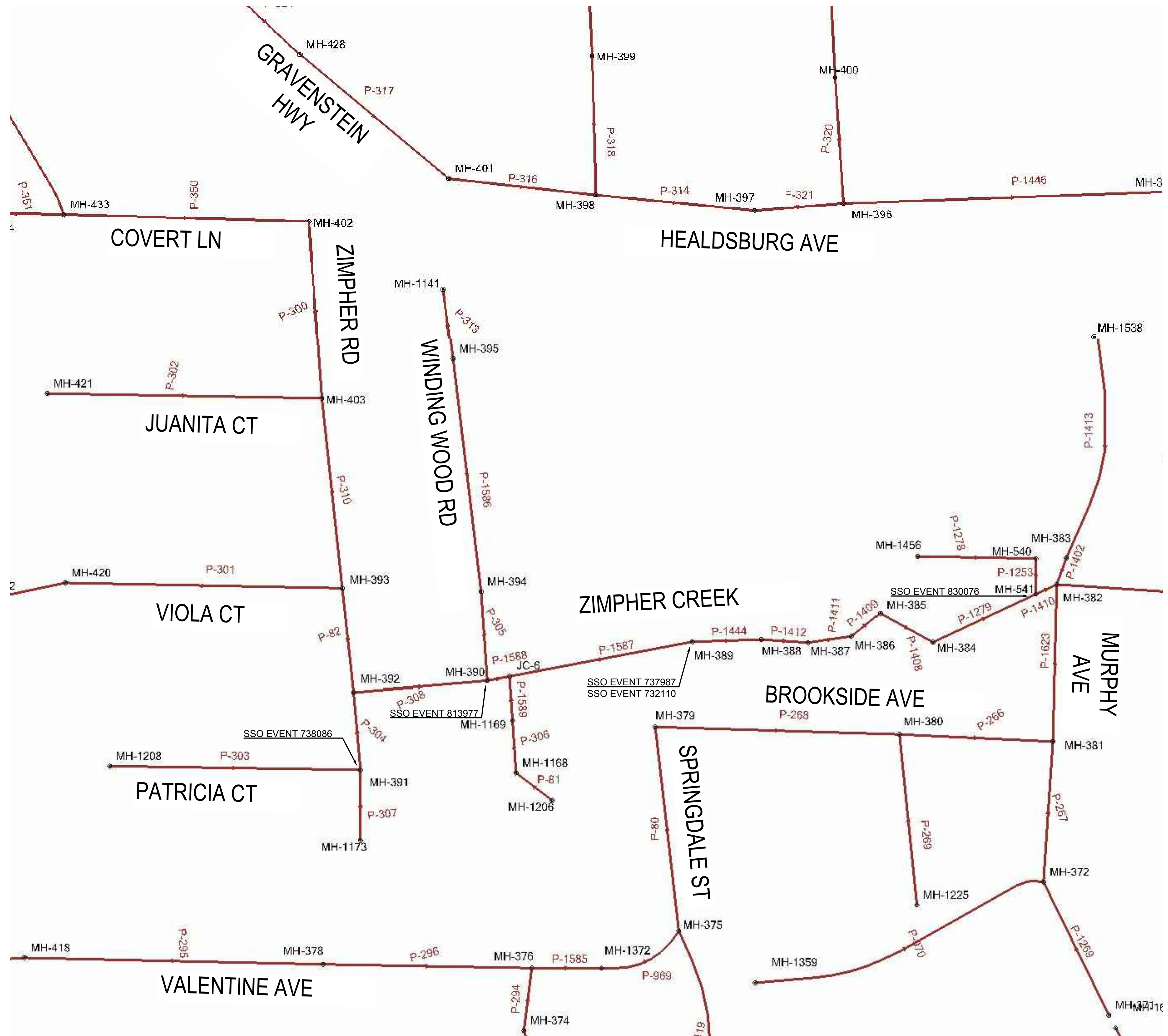
Matthew G. Kennedy, PE, TE
Principal Engineer

+1 707-540-3376
matt.kennedy@ghd.com

Copy to: Dante Del Prete
Mario Landeros, PE
Toni Bertolero, PE

Attachments:

1. Preliminary Design Alternatives and Covert Lane Sewer Rerouting (Figures 1-5)
2. Cost Proposal
3. GHD Standard Rate Schedule



PRELIMINARY

					<p>Bar is one inch on original size sheet</p> <p>0 1"</p>		<p>GHD Inc. 2235 Mercury Way Suite 150 Santa Rosa California 95407 USA T 1 707 523 1010 F 1 707 527 8679 W www.ghd.com</p>		<p>Drawn JC Designer JC</p> <p>Drafting PH Design Check MK</p> <p>Project Manager M. Kennedy Date July 2017</p> <p>Scale NTS</p>		<p>Client City of Sebastopol Project Zimpher Creek Sewer Main Project Title EXISTING SANITARY SEWER SYSTEM (SCHEMATIC)</p> <p>Project No. 11125176</p> <p>Original Size ANSI D Sheet No. FIGURE 1</p>		<p>Sheet 1 of 5</p>	
No.	Issue	Drawn	Approved	Date	<p>Reuse of Documents</p> <p>This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2017 GHD</p>		<p>This document shall not be used for construction unless signed and sealed for construction.</p>							



LEGEND

- ALTERNATIVE 1 - CIPP LINING
- REHABILITATE EXISTING MANHOLE

GENERAL NOTES

- FIELD TOPOGRAPHIC SURVEY WAS COMPLETED BY GHD INC. JUNE 2016. SEE SHEET V-001 FOR SURVEY INFORMATION.
- THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND ARE BASED ON OBSERVED TOPOGRAPHIC SURFACE FEATURES AND AVAILABLE INFORMATION. THE PROFESSIONAL PREPARING THIS MAP ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THESE FACILITIES OR FOR THE INADVERTENT OMISSION OF RELATED INFORMATION.

PRELIMINARY

					<p>GHD Inc. 2235 Mercury Way Suite 150 Santa Rosa California 95407 USA T 1 707 523 1010 F 1 707 527 8679 W www.ghd.com</p>		<p>Drawn JC Designer JC</p> <p>Drafting Check PH Design Check MK</p> <p>Project Manager M. Kennedy Date July 2017</p> <p>This document shall not be used for construction unless signed and sealed for construction.</p>		<p>Client City of Sebastopol</p> <p>Project Zimpher Creek Sewer Main Project</p> <p>Title SEWER REHABILITATION ALONG ZIMPHER CREEK ALTERNATIVE 1 - CIPP REHABILITATION</p> <p>Project No. 11125176</p> <p>Original Size ANSI D Sheet No. FIGURE 2</p>	
<p>Reuse of Documents</p> <p>This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2017 GHD</p>					<p>Scale AS SHOWN</p>		<p>Sheet 2 of 5</p>			



LEGEND

— ALTERNATIVE 2 - HDD

//// ABANDON EXISTING SS

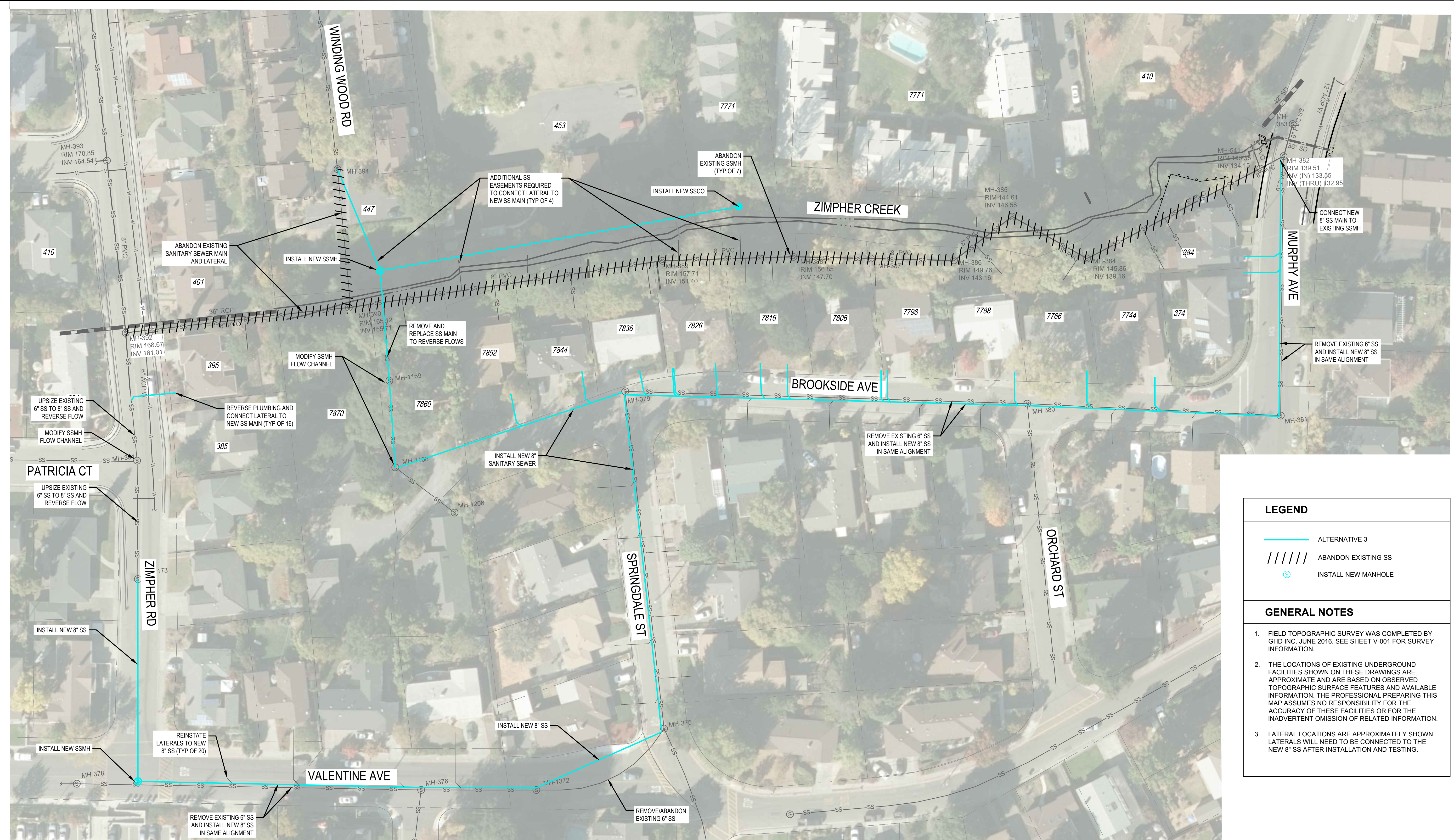
⊙ INSTALL NEW MANHOLE

GENERAL NOTES

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PRELIMINARY

No.	Issue	Drawn	Approved	Date		Bar is one inch on original size sheet 0 1"	GHD Inc. 2235 Mercury Way Suite 150 Santa Rosa California 95407 USA T 1 707 523 1010 F 1 707 527 8679 W www.ghd.com	Drawn JC	Designer JC	Client City of Sebastopol Project Zimpher Creek Sewer Main Project Title SEWER REHABILITATION ALONG ZIMPHER CREEK ALTERNATIVE 2 - HDD INSTALLATION Project No. 11125176
								Drafting PH	Design Check MK	



LEGEND

- ALTERNATIVE 3
- ////// ABANDON EXISTING SS
- ⊙ INSTALL NEW MANHOLE

GENERAL NOTES

1. FIELD TOPOGRAPHIC SURVEY WAS COMPLETED BY GHD INC. JUNE 2016. SEE SHEET V-001 FOR SURVEY INFORMATION.
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3. LATERAL LOCATIONS ARE APPROXIMATELY SHOWN. LATERALS WILL NEED TO BE CONNECTED TO THE NEW 8" SS AFTER INSTALLATION AND TESTING.

PRELIMINARY

		<p>Bar is one inch on original size sheet</p> <p>0 1"</p>	<p>GHD Inc. 2235 Mercury Way Suite 150 Santa Rosa California 95407 USA T 1 707 523 1010 F 1 707 527 8679 W www.ghd.com</p>	<p>Drawn JC</p> <p>Drafting Check PH</p> <p>Project Manager M. Kennedy</p> <p><small>This document shall not be used for construction unless signed and sealed for construction.</small></p>	<p>Designer JC</p> <p>Design Check MK</p> <p>Date July 2017</p> <p>Scale AS SHOWN</p>	<p>Client City of Sebastopol</p> <p>Project Zimpher Creek Sewer Main Project</p> <p>Title ALTERNATIVE 3 - CONSTRUCT NEW SEWER IN PUBLIC RIGHT-OF-WAY</p> <p>Project No. 11125176</p> <p>Original Size ANSI D</p> <p>Sheet No. FIGURE 4</p>	<p>Sheet 4 of 5</p>
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LEGEND

— INSTALL NEW SANITARY SEWER - OPEN CUT

//// ABANDON EXISTING SANITARY SEWER

GENERAL NOTES

1. FIELD TOPOGRAPHIC SURVEY WAS COMPLETED BY GHD INC. JUNE 2016.
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								Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2017 GHD	Drafting Check PH		Design Check MK
No.	Issue	Drawn	Approved	Date							Sheet 5 of 5



Attachment 2

GHD - PROJECT COST PROPOSAL

Project Name: Zimpher Creek Sewer Main Replacement
 Prepared by: Matt Kennedy
 Job Number: 11125176

Client: City of Sebastopol
 Date: November 8, 2022

Task / Item	LABOR CATEGORY > RATE >	LABOR COSTS										FEE COMPUTATION		
		PD \$295 /Hr	Proj Mgr. \$275 /Hr	QA/QC Eng. \$215 /Hr	Civil Eng. \$165 /Hr	City Eng. \$235 /Hr	2-Person Survey \$440 /Hr	Land Surveyor \$195 /Hr	CAD Designer \$185 /Hr	PA \$135 /Hr	TOTAL HOURS	*OTHER DIRECT COSTS	SUB- CONSULTANTS	TOTAL FEE
TASK- 1.0 Project Coordination														
1.1 Project Management		1	16							4	21	\$147.00		\$5,382.00
1.2 Project Meetings		2	8		8					1	19	\$159.00		\$4,404.00
1.3 Site Visits		1	4		4						9	\$76.00		\$2,131.00
1.4 Project Quality		1	1	2							4	\$28.00		\$1,028.00
SUBTOTAL TASK 1.0		5	29	2	12	0	0	0	0	5	53	\$410.00	\$0.00	\$12,945.00
TASK- 2.0 Preliminary Engineering Review														
2.1 Review Existing Info & CCTV		1	5		24						30	\$210.00		\$5,840.00
2.2 Finalize Preliminary Design Report		1	8	2	24						35	\$245.00		\$7,130.00
2.3 Project Field Surveys (PW)							8				8	\$256.00		\$3,776.00
2.4 Project Office Survey			1		1			4	4		10	\$70.00		\$2,030.00
SUBTOTAL TASK 2.0		2	14	2	49	0	8	4	4	0	83	\$781.00	\$0.00	\$18,776.00
TASK- 3.0 60% Design														
3.1 Plans		1	16	4	56				56		133	\$931.00		\$26,086.00
3.2 Technical Specifications		1	4	2	16					1	24	\$168.00		\$4,768.00
3.3 Opinion of Probable Construction Cost		1	4	1	8						14	\$98.00		\$3,028.00
SUBTOTAL TASK 3.0		3	24	7	80	0	0	0	56	1	171	\$1,197.00	\$0.00	\$33,882.00
TASK- 4.0 90% Design (Pre-Final)														
4.1 Plans		1	16	4	56				56		133	\$931.00		\$26,086.00
4.2 Technical Specifications		1	4	2	24					1	32	\$224.00		\$6,144.00
4.3 Opinion of Probable Construction Cost		1	4	1	8						14	\$98.00		\$3,028.00
SUBTOTAL TASK 4.0		3	24	7	88	0	0	0	56	1	179	\$1,253.00	\$0.00	\$35,258.00
TASK- 5.0 Final Design														
5.1 Prepare Final Design (PS&E)		2	12	2	24				24	2	66	\$462.00		\$13,452.00
SUBTOTAL TASK 5.0		2	12	2	24	0	0	0	24	2	66	\$462.00	\$0.00	\$13,452.00
TASK- 6.0 Engineering Support During Bid & Award														
6.1 RFIs and Addendum		1	4		4					1	15	\$105.00		\$2,735.00
6.2 Pre-Bid Conference			4								4	\$28.00		\$1,128.00
6.3 Review Bids		1	4							2	8	\$56.00		\$1,821.00
6.4 Conformed Construction Documents		1	4		2				2	1	15	\$105.00		\$2,775.00
SUBTOTAL TASK 6.0		3	16	0	6	0	0	0	2	4	42	\$294.00	\$0.00	\$8,459.00
TASK- 7.0 City Engineer Project Support														
7.1 Attend Project Meetings						8				2	10	\$70.00		\$2,220.00
7.2 Review and Approve Construction Documents						8				4	12	\$84.00		\$2,504.00
7.3 Bidding Support and Contract Award						8				4	12	\$84.00		\$2,504.00
SUBTOTAL TASK 7.0		0	0	0	0	24	0	0	0	10	34	\$238.00	\$0.00	\$7,228.00
PROJECT TOTALS		18	119	20	259	24	8	4	142	23	628	\$4,635.00	\$0.00	\$130,000.00

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



Attachment 3

FY2023 Standard Fee Schedule

GHD Description	2022/23 US Rate	GHD Description	2022/23 US Rate
PROFESSIONAL		ADMINISTRATION	
Senior Technical Director 1	\$ 340.00	Business Services Manager 1	\$ 280.00
Senior Technical Director 2	\$ 315.00	Business Services Manager 2	\$ 235.00
Senior Technical Director 3	\$ 283.00	Senior Admin Officer 1	\$ 182.00
Technical Director 1	\$ 263.00	Senior Admin Officer 2	\$ 152.00
Technical Director 2	\$ 237.00	Admin Officer 1	\$ 137.00
Senior Professional 1	\$ 215.00	Admin Officer 2	\$ 125.00
Senior Professional 2	\$ 195.00	Admin Officer 3	\$ 80.00
Professional 1	\$ 185.00	SITE BASED	
Professional 2	\$ 158.00	Senior Construction Manager	\$ 315.00
Professional 3	\$ 137.00	Construction Manager	\$ 265.00
Vacationer / Intern	\$ 126.00	Lead Site Engineer/Supervisor	\$ 237.00
CONSULTANT		Senior Site Engineer	\$ 215.00
Executive Consultant 1	\$ 425.00	Site Engineer	\$ 195.00
Executive Consultant 2	\$ 385.00	Lead Inspector	\$ 184.00
Senior Consultant 1	\$ 315.00	Senior Inspector	\$ 137.00
Senior Consultant 2	\$ 280.00	Inspector / Specialist 1	\$ 120.00
Consultant 1	\$ 235.00	Inspector / Specialist 2	\$ 110.00
Consultant 2	\$ 190.00	Clerk / Specialist 3	\$ 105.00
Consultant 3	\$ 150.00	Senior Site Manager 1	\$ 127.00
TECHNICAL		Senior Site Manager 2	\$ 115.00
Lead Design Technician 1	\$ 315.00	Senior Site Manager 3	\$ 105.00
Lead Design Technician 2	\$ 289.00	Senior Site Manager 4	\$ 95.00
Lead Design Technician 3	\$ 264.00	Operator/Labourer 1	\$ 85.00
Senior Design Technician 1	\$ 238.00	Operator/Labourer 2	\$ 80.00
Senior Design Technician 2	\$ 220.00	Operator/Labourer 3	\$ 60.00
Design Technician 1	\$ 195.00	PROJECT SUPPORT	
Design Technician 2	\$ 184.00	Business Services Manager 1	\$ 340.00
Drafting/Design 1	\$ 168.00	Business Services Manager 2	\$ 315.00
Drafting/Design 2	\$ 153.00	Senior Admin Officer 1	\$ 263.00
Drafting/Design 3	\$ 137.00	Senior Admin Officer 2	\$ 232.00
Drafting/Design 4	\$ 127.00	Admin Officer 1	\$ 215.00
Intern Drafting/Design	\$ 115.00	Admin Officer 2	\$ 195.00
		Admin Officer 3	\$ 178.00
		Admin Officer 4	\$ 153.00
		Admin Officer 5	\$ 137.00
		Admin Officer 6	\$ 80.00



FY2023 Rate Schedule Notes

- 1) Rates are for employees of GHD companies.
- 2) An administration fee will apply to all invoices to cover in-house disbursements (Associated Project Costs) on a project. This will be charged at a rate of either:
 - 6% of total professional fees
 - Office hourly rate of USD \$6.50, Field Services/Construction Inspector hourly rate of USD \$11.50
- 3) All travel will be invoiced at economy class rates. Lodging and meal expenses will be at cost plus agreed markup unless a per diem rate is negotiated.
- 4) All other project related disbursements, expenses and subcontractor costs will be invoiced with a markup of 15%.
- 5) Fee schedule is subject to change annually.
- 6) Leased and personnel vehicles, field equipment and disposable field supplies will be invoiced at established rates. Personal vehicle mileage rates will be charged in accordance with government regulated standard rates.