

# **Proposal for Annual Miscellaneous Water and Sewer Main Replacements**

Projects 14-21 and 14-22

Updated: April 3, 2015

Our proposal is divided into two parts: 1) Project Understanding and Approach and 2) Fee Schedule. Each part is presented as follows.

## **Part 1: Project Understanding and Approach**

Part 1 includes the following:

- Project Understanding
- Scope of Services
- Project Team
- Schedule

Each element is described below.

### **Project Understanding**

As described in the RFP, the sewer main replacement project will replace sewer mains and associated sewer laterals. The preferred method of sewer replacement is trenchless methods for both mains and laterals, with the most commonly used trenchless method being pipe bursting using HDPE material. For this project, sewer main replacement will utilize pipe bursting except for Boranda Avenue (due to sagging) and Cuesta Drive (existing CIP). The decisions regarding final sizing and construction methods will be made during Phase 1 of the design based on input from City staff and recommendations from NV5. The condition of the existing manholes will also be investigated and recommendations provided to the City regarding rehabilitation or replacement options.

The water main replacement project will replace water mains, service laterals, fire hydrants, and associated water system appurtenances. The water main replacement will utilize PVC pipe and be installed by open-trench method. The decision regarding the final sizing of water mains will be made during Phase 1 of the design based on input from City staff and recommendations from NV5.

We anticipate providing water and sewer pipe design and associated construction documents for the replacement of up to 6500 feet of water mains and services and for approximately 5000 feet of sanitary sewer mains and laterals for the project locations listed in Table 1.

Three construction contracts are possible: 1) Project 1 and Project 2; 2) Project 1, Project 2, and Option 1; 3) Project 1, Project 2, Option 1, and Option 2.

Additional considerations are as follows:

- Existing water meters on Boranda Avenue, Begen Avenue, Bond Way, Crane Avenue, Gantry Way, and Cuesta Drive are new and do not require replacement; service lines and meter boxes will need replacement.
- For Option 1, only service lines (from main property) are included in the City project; water meters, and on-site/private mains are excluded.

**TABLE 1  
SUMMARY OF WATER AND SEWER REPLACEMENTS**

PROJECT 1	WATER MAIN REPLACEMENT				SEWER MAIN REPLACEMENT		
	Zone	Existing	Proposed	LF	Existing	Proposed	LF
Boranda Avenue - El Camino Real to Hans Avenue	2	8" CIP	8" PVC	2000	8" VCP	12" PVC	2000
Begen Avenue - Gantry Way to Cuesta Drive	3	6" CIP	8" PVC	860	8" VCP	8" HDPE	930
Bond Way - Crane Avenue to Begen Avenue	3	4" CIP	8" PVC	330	6" VCP	8" HDPE	320
Crane Avenue - Gantry Way to Bond Way	3	4" CIP	8" PVC	460	6" VCP	8" HDPE	370
Gantry Way - Crane Avenue to Begen Avenue	3	4" CIP	8" PVC	330	6" VCP	8" HDPE	340
Begen Avenue - Cuesta Drive to Leona Lane	2	6" CIP	8" PVC	240	8" VCP	8" HDPE	240
Cuesta Drive - Miramonte Road to Begen Avenue	3	8" CIP	12" PVC	520	6" CIP	8" PVC	390
<b>TOTALS</b>				<b>4740</b>			<b>4590</b>
PROJECT 2	WATER MAIN REPLACEMENT				SEWER MAIN REPLACEMENT		
	Zone	Existing	Proposed	LF	Existing	Proposed	LF
Moffett Gateway - MH F5-052 to unidentified MH 360' east					15" VCP	18" HDPE	360
<i>Option 1:</i> Moffett Gateway: 2 new 12" services	2		12" PVC	750			
<i>Option 2:</i> Moffett Gateway: Leong Drive – Walker Drive to Winston Place	2	8" CIP	12" PVC	980			
<b>TOTALS</b>				<b>1730</b>			<b>360</b>

## Scope of Services

The scope of services is divided into basic engineering services and client meeting services as follows:

### Basic Engineering Services

Basic Engineering Services is divided into the following phases:

- Phase 1 – Preliminary Investigation and Refinement of Conceptual Plans
- Phase 2 – Schematic Design
- Phase 3 – Design Development/Construction Documents
- Phase 4 – Bidding
- Phase 5 – Construction
- Phase 6 – Post Construction

Tasks under each phase are described below. Basic engineering services apply to Project 1 and the proposed sewer replacement under Project 2. Engineering Services for Option 1 and Option 2 included in Table 1 are addressed under Additional Services. The design phases and tasks would be similar for Project 1 and Project 2. Preparation of Traffic Control plans is not anticipated for Project 2 sewer replacement.

## **Phase 1 – Preliminary Investigation and Refinement of Conceptual Plans**

### **Task 1: Project Management**

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This task will include preparation and periodic updates of the project schedule, coordination with subconsultant, monthly project invoicing and status reports, and monthly schedule. The initial project schedule will be submitted within five days of award of contract.

### **Task 2: Preliminary Investigation and Refinement of Conceptual Plans**

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For completion of this task, NV5 staff will be augmented by staff of a geotechnical engineer, Geocon Consultants (Geocon). Specific subtasks are as follows:

#### **Task 2.1: Review Existing Conditions**

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The NV5 team will attend a kick-off meeting with the City (included under Task 8) to review project requirements and existing information. Two members of the NV5 project team will visit the project sites to investigate existing site conditions, to identify opportunities and constraints, to verify the location of existing utilities, and to determine the condition of existing manholes. The site visit will occur after the topographic survey (Task 2.2) is completed. In addition, available background information provided by the City will be reviewed including: closed-circuit television (CCTV) logs; City utility maps of water, sanitary sewer, storm drain systems; and water and sewer as-built plans. Utility companies (gas, cable, phone) will be contacted to verify the location of other utilities within the project area. The initial contact will be in the form of an “A” letter. Utility “B” and “C” packages will subsequently be prepared during design development. The “B” letter package documenting utility locations will be submitted to the utility providers to verify correctness of the plans. The “C” letter package represents the final construction documents including any utility relocations. The project team will also review current City Standard Provisions, City Standard Details, as well as City codes, ordinances and design criteria.

- Deliverable: A brief technical memorandum (TM) will be prepared that summarizes background information and how data collected will be incorporated into the project design development. The TM will also include recommendations for manhole rehabilitation and a discussion of areas where trenchless methods may not be feasible for sewer rehabilitation.

#### **Task 2.2: Topographic Survey**

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For this task, for Project 1 and Project 2, NV5 will utilize traditional and GPS surveying methods to collect topographic data. Limits of this survey will be along the streets outlined in Table 1 and include

the areas lying 5 ft behind back of walk at one side of each street to 5 ft behind back of walk across therefrom. Data will include observed evidence of existing utilities found within these limits and will include: storm and sewer manhole rims elevations, clean outs, water valves, meters, boxes, backflow preventers, DCDA's, and hydrants; gas valves and surface evidence of gas lines; traffic signal and electrical cabinets, street lights and boxes, utility vaults, traffic signal poles, electrical poles, loop detectors, traffic sign posts, and observed surface evidence of electrical lines; cable TV boxes and observed surface evidence of lines, telephone poles, observed surface evidence of telephone lines and overhead lines; curb and gutter, and edges of sidewalks, fences, monument boxes, private signage, private driveways, curb ramps and rolled curbs. Trees 6 in DBH or greater will also be located as part of these efforts. Survey data will be supplemented with dips of storm and sewer manholes, catch basins, drainage inlets, and cleanouts (if accessible), as well as valve nut elevations to acquire accurate utility information.

Once the survey is completed, NV5 will prepare a detailed topographic base map for the use in design and construction of this replacement project. Drawings will be provided in AutoCAD.dwg format, and be capable of being plotted at a scale of 1"=20'.

- Deliverables: Topographic mapping at 1 in = 20 ft scale

### **Task 2.3: Geotechnical Soil Disposal Report**

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Geocon will conduct soil sampling and analysis and prepare a soil disposal report that will assess whether the soil excavated during construction activities will be accepted at a nearby landfill. Geocon will work under encroachment/access permits issued by the City.

Geocon's scope includes the following steps:

1. Site visit to mark sample locations for Underground Service Alert (USA) clearance
2. Notify USA of proposed sampling activities at least 48 hours prior to sampling
3. Advance 32 soil borings using direct push rig (or hand auger on unpaved areas) to maximum depth of 5 feet (Project 1) and 4 soil borings using direct push methods to a maximum depth of 5 feet (Project 2).
4. Provide traffic control plans and encroachment permit to perform soil sampling.
5. Collect one soil sample per boring for laboratory compositing and analysis
6. Composite 36 soil samples into 9 composite samples to represent the following project areas:
  - Boranda Avenue – El Camino Real to Hans Avenue (2 composite samples)
  - Begen Avenue – Gantry Way to Cuesta Drive (1 composite sample)
  - Bond Way – Crane Avenue to Begen Avenue (1 composite sample)
  - Crane Avenue – Gantry Way to Bond Way (1 composite sample)
  - Gantry Way – Crane Avenue to Begen Avenue (1 composite sample)

- Begen Avenue – Cuesta Drive to Leona Lane (1 composite sample)
- Cuesta Drive – Miramonte Road to Begen Avenue (1 composite sample)
- Moffett Gateway (1 composite sample)

7. Laboratory Analyses:

- 9 composite soil samples for TPHg/d/mo (8015M)
- 9 composite soil samples for VOCs (8260)
- 9 composite soil samples for Pesticides (8081)
- 9 composite soil samples for CAM 17 Metals (6010/7420)

8. Prepare draft soil disposal report for City review

9. Prepare final soil disposal report

- Deliverable: Soil disposal report

## **Task 2.4: Potholing**

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Following review of existing conditions, potholing may be required to augment available utility as-built information and verify potential conflicts with existing utilities. Exaro Technologies (potholing contractor) will be contacted to perform potholing activities for up to 10 locations (identified by NV5) or up to two days. Potholing includes vacuum excavation at the identified locations, followed by pothole restoration per City Standard Detail A-20. This task includes coordination with the potholing contractor. The potholing contractor will notify USA in advance of potholing activities, obtain an encroachment permit from the City, submit insurance certificates in conformance with City requirements, and provide traffic control as required. The results of the potholing activities will be incorporated into the construction plans. Potholing is not anticipated for Project 2.

## **Phase 2 – Schematic Design**

### **Task 3: Schematic Design**

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This task includes the following items:

1. Preparation of a schematic layout (alignment only) as 35 percent engineering plans for City review.
2. Preparation of preliminary construction cost estimates for City review.
3. Following receipt of City review comments, responses to each comment will be prepared.
4. Project review meeting with City to discuss comments on 35 percent plans (included under Task 8).

- Deliverable: PDF and four sets of 35 percent plans (alignment only) and preliminary construction cost estimate.

## **Phase 3 – Design Development/Construction Documents**

### **Task 4: Design Development/Construction Documents**

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This task will follow approval of the schematic design and construction cost estimates prepared in Task 3 and includes preparation of 65 percent, 95 percent, draft 100 percent and final 100 percent construction documents. Technical Specifications will include requirements for manhole rehabilitation or replacement options. Technical Specifications will be in accordance with Caltrans Standards and will include measurement and payment clauses for all bid items. The task also includes coordination and support for processing Caltrans encroachment permit of Boranda Avenue and El Camino Real. A preliminary list of drawings is included in Appendix A for Project 1 and Project 2.

#### **Task 4.1: Preparation of 65 Percent Construction Documents**

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Construction documents will be prepared at 65 percent design level, and will include plans, technical specifications, engineering calculations (pipeline sizing, thrust blocks, restraining joints) and engineer's estimates of probable construction cost. It is assumed that the City will provide the remainder of the bid documents including bid proposal forms, General Provisions, and Special Provisions. NV5 will coordinate with City construction and traffic engineers regarding construction phasing and traffic control plans to maintain public convenience during construction. Following the City's review of the 65 percent documents, the City will provide written comments to NV5. Two members of the NV5 project team will meet with the City to discuss the City's review comments (included under Task 8).

- Deliverable: PDF and four sets of 65 percent plans, technical specifications, construction cost estimate, and engineering calculations.

#### **Task 4.2: Preparation of 95 Percent Construction Documents**

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Construction documents will be prepared at 95 percent design level, and will include plans, technical specifications, and engineer's estimates of probable construction cost. NV5 will revise the 65 percent documents to incorporate City comments and directions. NV5 will provide written responses to all City comments with submission of the 95 percent documents. Following the City's review of the 65 percent documents, the City will provide written comments to NV5. Two members of the NV5 project team will meet with the City to discuss the City's review comments (included under Task 8).

- Deliverable: PDF and four sets of 95 percent plans, technical specifications and construction cost estimate, response to City comments on 65 percent submittal

#### **Task 4.3: Preparation of 100 Percent Construction Documents**

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Construction documents will be prepared at 100 percent design level, and will include plans, technical specifications, and engineer's estimates of probable construction cost. NV5 will revise the 95 percent

documents to incorporate City comments and directions. NV5 will provide written responses to all City comments with submission of the 100 percent draft documents. Following the City's review of the 100 percent draft documents, the City will provide written comments to NV5. Two members of the NV5 project team will meet with the City to discuss the City's review comments (included under Task 8).

NV5 will revise the 100 percent draft documents to incorporate City comments and directions. NV5 will provide written responses to all City comments with submission of the 100 percent final documents.

- Deliverable: PDF and four sets of 100 percent draft plans, technical specifications and construction cost estimate; response to City comments on 95 percent and 100 percent draft submittal; one wet-signed copy of the final 100 percent plans, four sets of 100 percent final plans, technical specifications, and cost estimate; One electronic copy and PDF of final 100 percent construction plans (AutoCAD), technical specifications (Microsoft Word format), and cost estimate (Microsoft Excel format). The final PS&E will also be provided in PDF format.

#### **Task 4.4: Caltrans Encroachment Permit (Project 1)**

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A Caltrans encroachment permit applications will be completed for anticipated construction on El Camino Real, the northerly limit of Boranda Avenue utility replacement.

### **Phase 4 – Bidding**

#### **Task 5: Bidding Period**

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This task includes assisting the City in responding to bidders' inquiries and requests for clarifications, preparation of one addendum, and preparation of conformed documents. Budget for this effort is limited to 6 hours for the NV5 project manager and 8 hours for Utility Design Engineer.

- Deliverable: PDF and four sets of contract addendum; PDF and one set of conformed documents including construction plans and technical specifications if required.

### **Phase 5 – Construction**

#### **Task 6: Construction**

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This task also includes advising the City during construction, attending the pre-construction conference, providing construction staking, reviewing and approving shop drawings and submittals, reviewing post-construction CCTV logs to determine acceptability of the rehabilitated sewer, and assisting the City in evaluating any contract change orders or construction claims.

## **Phase 6 – Post-Construction**

### **Task 7: Post-Construction**

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This task includes preparation of as-built record drawings. Following construction, the City will provide contractor's red-lined record drawings for NV5's use. NV5 will incorporate the changes during construction into the plans and submit the record drawings to the City.

- Deliverable: One signed, stamped set of record drawings on Mylar, One set of electronic files for each record drawing in AutoCAD and PDF format

## **Client Meeting Services**

### **Task 8: Meeting With Client**

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The following meetings are anticipated:

1. Three 2-hour review meetings following submission on the 35, 65, and 95 percent construction documents.
2. One 1-hour project kick-off meeting
3. One 1-hour progress review meeting
4. One 1-hour review meeting following submission of the draft 100 percent construction documents
5. Three 1-hour meetings during bidding, construction, and post-construction tasks

Meeting attendance includes NV5 project manager and utility design engineer.

## **Additional Services**

### **Task 9: Additional Client Meetings**

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For Project 1 and Project 2, additional meetings with the City may occur including:

1. Additional 2-hour meetings
2. Additional 1-hour meetings

A budget for these meetings on a per meeting basis for the NV5 Project Manager and Utility Design Engineer is as follows: \$704/2-hour meeting; \$352/1-hour meeting



## **Task 10: Preparation of Construction Documents for Option 1**

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Construction documents will be prepared for Option 1. Preparation of documents will involve Basic Engineering Services consistent with Tasks 2-7 including:

1. Preliminary Investigation and Refinement of Conceptual Plans
2. Schematic Design
3. Design Development/Construction Documents
4. Construction
5. Post-Construction

In addition for water service to MG-6, NV5 will assist the City in identifying and obtaining an easement through a private parcel. NV5 will prepare a legal description and plat of an easement for the proposed water line across Santa Clara County Assessor Parcel Number 153-19-002. The legal description and plat will be suitable for recordation by the Santa Clara County Recorder.

For Option 1, GeoCon will collect samples from 8 soil borings and analyze 2 composite samples as described in Task 2.3.

## **Task 11: Preparation of Construction Documents for Option 2**

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Construction documents will be prepared for Option 2. Preparation of documents will involve Basic Engineering Services consistent with Tasks 2-7 including:

1. Preliminary Investigation and Refinement of Conceptual Plans
2. Schematic Design
3. Design Development/Construction Documents
4. Construction
5. Post-Construction

For Option 2, GeoCon will collect samples from four soil borings and analyze one composite sample as described in Task 2.3.

## **Task 12: Special Engineering Services**

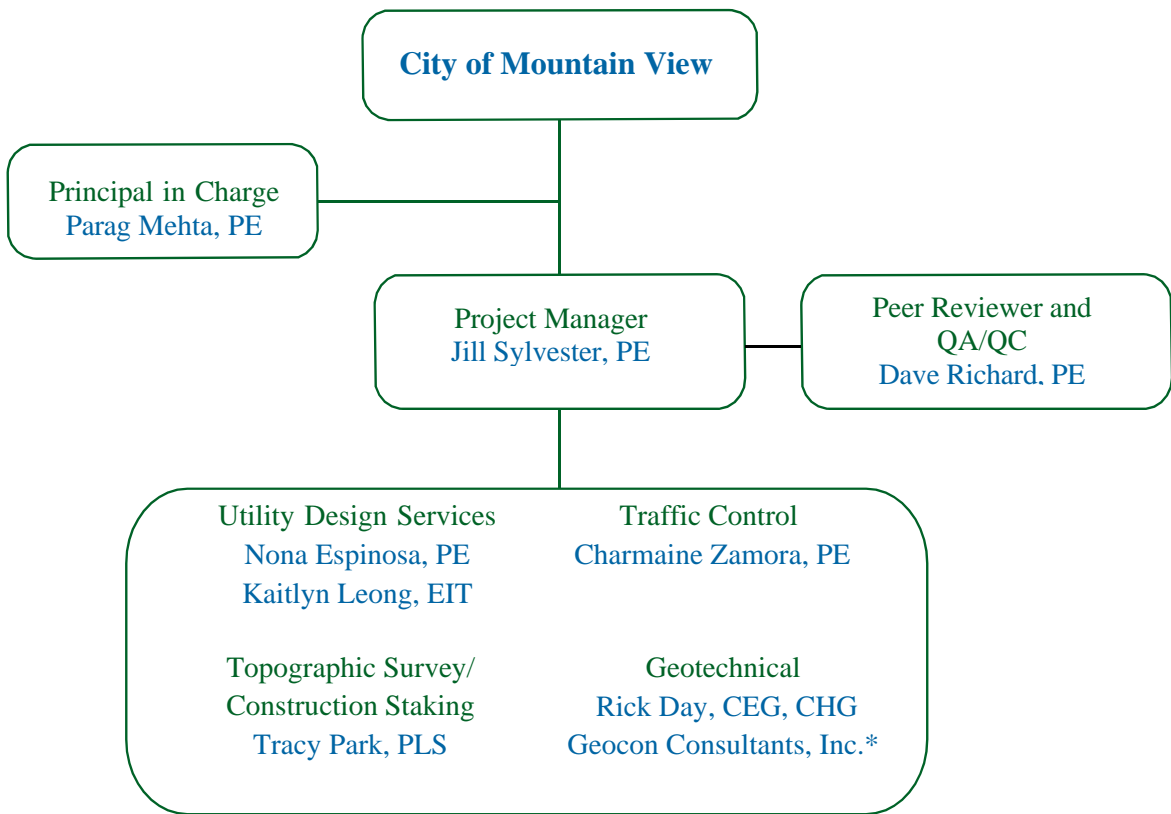
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When requested by the City, NV5 will perform Special Engineering Services as agreed to in writing. NV5 will be compensated for additional services as extra work. Special Engineering Services may include:

1. Construction Oversight
2. Additional Soil Sampling and Analysis
3. Geotechnical borings in support of Pipeline Design/Permit Applications
4. CEQA work in support of Pipeline Design/Permit Application

## Project Team

An organization chart for our Project Team is provided below. Information regarding roles, responsibilities, and percent of time expected to be spent on the project is summarized in Table 2.



*\*Subconsultant*

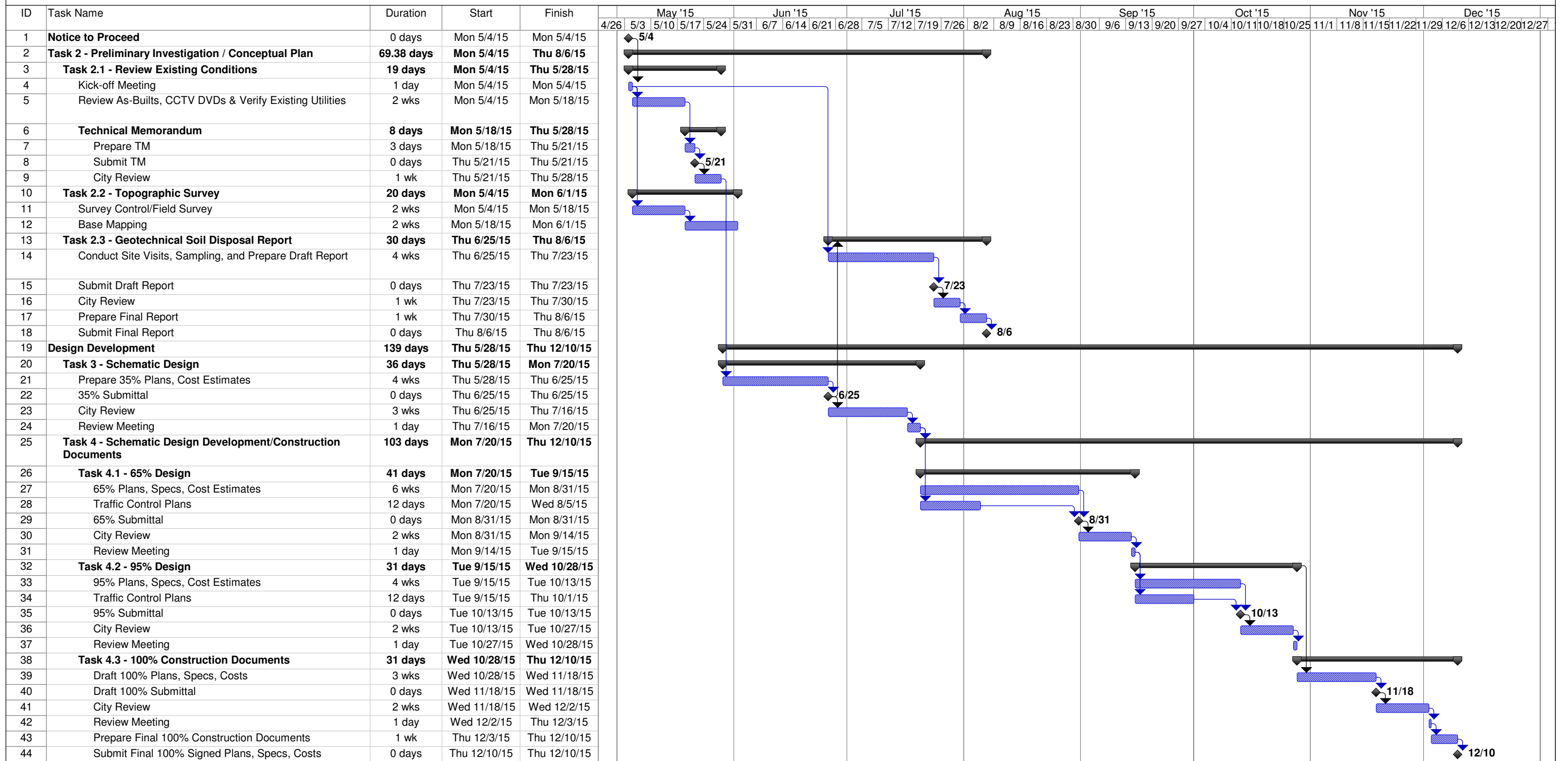
**TABLE 2  
KEY STAFF AND RESPONSIBILITIES**

<b>Team Member Project Role</b>	<b>Project Responsibilities</b>	<b>Percent of Time Expected on Project</b>
<b>Jill Sylvester, PE</b> Project Manager	As project manager, Jill will be in charge of your project on a daily basis and will be the City’s main point of contact. She will be responsible for working with the City to define the processes to be used and bring NV5’s experience to your projects.	50%
<b>Parag Mehta, PE</b> Principal in Charge	Parag will stay directly involved to ensure continuity of the process. Parag will ensure that adequate resources are available to Jill.	5%
<b>Dave Richard, PE</b> Peer Review	Dave will establish a plan for designers to document their work, document an independent design check, and conduct an independent design review.	5%
<b>Nona Espinosa, PE</b> Utility Designer Engineer	Nona will be involved in all phases of project development including from preliminary investigation through construction and will leverage her experience with past City water and sewer projects to guide design development.	25%
<b>Kaitlyn Leong, EIT</b> Utility Designer	Kaitlyn will support Jill with review of CCTV logs, verification of existing utilities, plan and profile design, and engineer’s estimate of probable construction costs.	50%
<b>Charmaine Zamora, PE</b> Traffic Control	Charmaine will be responsible for traffic control design. Charmaine will work closely with City construction and traffic engineers regarding construction phasing to minimize public inconvenience during construction.	15%
<b>Tracy Park, PLS</b> Topographic Survey	Tracy will be the local survey leader for all survey, mapping, staking, and potential right-of-way efforts.	10%
<b>Richard Day, CEG, CHG</b> Geotechnical Subconsultant Soil Disposal Report	Richard will lead project soil sampling and provide a soil disposal report summarizing soil sampling and laboratory analysis results.	10%

## Schedule

A tentative schedule for design completion is summarized in the following schedule.

**City of Mountain View  
Annual Miscellaneous Water and Sewer Main Replacements  
Project 14-21 and 14-22  
March 30, 2015**



## Part 2: Fee Schedule

Based on the proposed scope of services, a fee schedule has been prepared for Project 1, Project 2, Option 1, and Option 2. A detailed breakdown of anticipated effort and costs associated with each task is included in Appendix B along with an overall charge rate schedule. A fee estimate summary organized by task is presented below.

### Project 1

<b>Task</b>	<b>Fee</b>
<b>Basic Engineering Services</b>	
Project Management	\$3,700
Preliminary Investigation/Refinement of Conceptual Plans	\$59,155
Schematic Design	\$18,414
Schematic Design Development/Construction Documents	\$69,852
Bidding	\$1,896
Construction	\$33,318
Post-Construction	\$3,576
<b><i>Total Basic Engineering Services</i></b>	<b><i>\$189,911</i></b>
<b>Client Meeting Services</b>	
Two-Hour Review Meetings	\$4,224
One-Hour Meetings	\$6,336
<b><i>Total Client Meeting Services</i></b>	<b><i>\$10,560</i></b>
<b><i>Total for Project 1</i></b>	<b><i>\$200,471</i></b>

## Project 2

<b>Task</b>	<b>Fee</b>
<b>Basic Engineering Services</b>	
Project Management	\$1,588
Preliminary Investigation/Refinement of Conceptual Plans	\$18,102
Schematic Design	\$3,868
Schematic Design Development/Construction Documents	\$16,246
Bidding	\$1,896
Construction	\$6,268
Post-Construction	\$772
<b><i>Total Basic Engineering Services</i></b>	<b><i>\$48,740</i></b>
<b>Client Meeting Services</b>	
Two-Hour Review Meetings	\$4,224
One-Hour Meetings	\$6,336
<b><i>Total Client Meeting Services</i></b>	<b><i>\$10,560</i></b>
<b><i>Total for Project 2</i></b>	<b><i>\$59,300</i></b>

## Option 1

<b>Task</b>	<b>Fee</b>
<b>Additional Services</b>	
Review Existing Conditions	\$1,896
Topographic Survey	\$6,930
Geotechnical Soil Disposal Reports	\$12,166
Schematic Design	\$4,010
Potholing	\$5,562
Construction Documents	\$14,612
Construction	\$3,326
Post-Construction	\$1,334
<b><i>For Option 1</i></b>	<b><i>\$49,836</i></b>



## Option 2

<b>Task</b>	<b>Fee</b>
<b>Additional Services</b>	
Review Existing Conditions	\$1,686
Topographic Survey	\$8,137
Geotechnical Soil Disposal Reports	\$11,022
Schematic Design	\$4,220
Construction Documents	\$22,162
Construction	\$5,204
Post-Construction	\$1,124
<b><i>For Option 2</i></b>	<b>\$53,555</b>

## Appendix A

### Project 1 Plan Sheet List

Sheet #	Sheet Name	Description
1	Title Sheet	
2	General Notes	
3	Key Map	
4	Boranda Ave	Plan and Profile W/S
5	Boranda Ave	Plan and Profile W/S
6	Boranda Ave	Plan and Profile W/S
7	Boranda Ave	Plan and Profile W/S
8	Begen Avenue	Plan and Profile W/S
9	Begen Avenue	Plan and Profile W/S
10	Begen Avenue	Plan and Profile W/S
11	Bond Way	Plan and Profile W/S
12	Crane Avenue	Plan and Profile W/S
13	Gantry Way	Plan and Profile W/S
14	Cuesta Drive	Plan and Profile W/S
15	General	Details
16	General	Details
17	General	Tie-In Details
18	General	Tie-In Details
19	General	Tie-In Details
20	City Standard Details	Construction Details
21	City Standard Details	Construction Details
22	City Standard Details	Construction Details
23	Traffic Control	General Notes and Details
24	Traffic Control	Details
25	Traffic Control	Details
26	Traffic Control	Details
27	Traffic Control	Details
28	Traffic Control	Details
29	Traffic Control	Details
30	Traffic Control	Details

## Project 2 Plan Sheet List

Sheet #	Sheet Name	Description
1	Title Sheet	
2	General Notes	
3	Key Map	
4	Moffett Gateway	Plan and Profile S
5	City Standard Details	Construction Details
6	City Standard Details	Construction Details
7	City Standard Details	Construction Details

## Additional Plan Sheets to Add Option 1

Sheet #	Sheet Name	Description
8	Moffett Gateway Option 1	Plan and Profile W
9	Moffett Gateway Option 1	Plan and Profile W
10	General Option 1	Details
11	General Option 1	Tie-In Details
12	Traffic Control	General Notes and Details
13	Traffic Control Option 1	Details
14	Traffic Control Option 1	Details

## Additional Plan Sheets to Add Option 2

Sheet #	Sheet Name	Description
15	Moffett Gateway Option 2	Plan and Profile W
16	Moffett Gateway Option 2	Plan and Profile W
17	General Option 2	Details
18	General Option 2	Tie-In Details
19	Traffic Control	General Notes and Details
20	Traffic Control Option 2	Details
21	Traffic Control Option 2	Details

## Appendix B

### Detailed Fee Summary (attached) and Labor Hour Schedule

<b>Classification Title</b>	<b>Rate</b>
Engineering Manager	\$198
Senior Engineer	\$176
Assistant Engineer	\$105
Survey Manager	\$198
Senior Surveyor	\$181
2-person crew	\$280
1-person crew	\$185
Junior Surveyor	\$120
Project Assistant	\$90

**Fee proposal for Annual Miscellaneous Water and Sewer Main Replacements, Projects 14-21 and 14-22.  
Project 1**

TASKS	Engr Mgr.	Sr. Engr	Asst. Engr	Survey Mgr.	Sr Srvyr	2-Person Srvy Crew	1-person Srvy Crew	Jr Srvyr	Project Asst.	Subtotal NV5 Hours by Task	Sub-Consultant Costs	Subtotal Dollars by Task	Total Dollars by Task
	\$198	\$176	\$105	\$198	\$181	\$280	\$185	\$120	\$90		(including 10% markup)		
<b>BASIC ENGINEERING SERVICES PROJECT 1</b>													
<b>TASK 1-PROJECT MANAGEMENT</b>													
Prepare schedule		8							2	10		\$ 1,588	
Sub-consultant coordination		4								4		\$ 704	
Monthly Invoicing and status reports		8								8		\$ 1,408	
<b>Task 1 Subtotal</b>		<b>20</b>							<b>2</b>	<b>22</b>			<b>\$ 3,700</b>
<b>TASK 2-PRELIMINARY INVESTIGATION/REFINEMENT OF CONCEPTUAL PLANS</b>													
<i>Task 2.1-Review Existing Conditions</i>													
Site visit		8	8							16		\$ 2,248	
Review as-builts, CCTV logs & verify existing utilities		6	30							36		\$ 4,206	
Prepare technical memorandum		2	6							8		\$ 982	
<b>Task 2.1 Subtotal</b>		<b>16</b>	<b>44</b>							<b>60</b>			<b>\$ 7,436</b>
<i>Task 2.2-Topographic Survey</i>													
Field (Control)				1	1	8				10		\$ 2,619	
Field (Topo)				2		16	24			42		\$ 9,316	
Base Mapping								48		48		\$ 5,760	
<b>Task 2.2 Subtotal</b>				<b>3</b>	<b>1</b>	<b>24</b>	<b>24</b>	<b>48</b>		<b>100</b>			<b>\$ 17,695</b>
<i>Task 2.3-Geotechnical Soil Disposal Report including encroachment permit &amp; traffic control</i>													
Pre-field activities											\$ 2,926	\$ 2,926	
Field activities											\$ 10,120	\$ 10,120	
Laboratory analysis											\$ 5,280	\$ 5,280	
Reporting and project management		4								4	\$ 3,432	\$ 4,136	
<b>Task 2.3 Subtotal</b>		<b>4</b>								<b>4</b>			<b>\$ 22,462</b>
<i>Task 2.4-Potholing up to 10 potholes</i>													
Vacuum Excavated up to 2 days or 10 potholes		2	2							4	\$ 11,000	\$ 11,562	
<b>Task 2.4 Subtotal</b>		<b>2</b>	<b>2</b>							<b>4</b>			<b>\$ 11,562</b>
<b>Task 2 Subtotal</b>		<b>22</b>	<b>46</b>	<b>3</b>	<b>1</b>	<b>24</b>	<b>24</b>	<b>48</b>		<b>168</b>			<b>\$ 59,155</b>
<b>TASK 3-SCHEMATIC DESIGN</b>													
<i>Thirty five Percent (35%) Submittal</i>													
35% Submittal-Plans	8	40	80							128		\$ 17,024	
Cost estimate (preliminary)	1	2	8							11		\$ 1,390	
<b>Task 3 Subtotal</b>	<b>9</b>	<b>42</b>	<b>88</b>							<b>139</b>			<b>\$ 18,414</b>
<b>TASK 4-SCHEMATIC DESIGN DEVELOPMENT/ CONSTRUCTION DOCUMENTS</b>													
<i>Task 4.1-Preparation of 65 Percent Construction Documents</i>													
65% Submittal-Plans, Specs, Costs	12	45	90						6	153		\$ 20,286	
Traffic Control Plans		24	48							72		\$ 9,264	
<b>Task 4.1 Subtotal</b>	<b>12</b>	<b>69</b>	<b>138</b>						<b>6</b>	<b>225</b>			<b>\$ 29,550</b>

**Fee proposal for Annual Miscellaneous Water and Sewer Main Replacements, Projects 14-21 and 14-22.  
Project 1**

TASKS	Engr Mgr.	Sr. Engr	Asst. Engr	Survey Mgr.	Sr Srvyr	2-Person Srvy Crew	1-person Srvy Crew	Jr Srvyr	Project Asst.	Subtotal NV5 Hours by Task	Sub-Consultant Costs	Subtotal Dollars by Task	Total Dollars by Task	
	\$198	\$176	\$105	\$198	\$181	\$280	\$185	\$120	\$90	(including 10% markup)				
<b>Task 4.2-Preparation of 95 Percent Construction Documents</b>														
95% Submittal-Plans, Specs, Costs	12	40	80						6	138		\$ 18,356		
Traffic Control Plans		16	32							48		\$ 6,176		
<b>Task 4.2 Subtotal</b>	<b>12</b>	<b>56</b>	<b>112</b>						<b>6</b>	<b>186</b>			<b>\$ 24,532</b>	
<b>Task 4.3-Preparation of 100 Percent Construction Documents</b>														
100% Draft Submittal-Plans, Specs, Costs	8	16	34						6	64		\$ 8,510		
100% Final signed Plans, Specs, Costs	4	12	20						4	40		\$ 5,364		
<b>Task 4.3 Subtotal</b>	<b>12</b>	<b>28</b>	<b>54</b>						<b>10</b>	<b>104</b>			<b>\$13,874</b>	
<b>Task 4.4-Caltrans Encroachment Permit Assistance</b>														
Permit application and coordination		6	8							14		\$ 1,896		
<b>Task 4.4 Subtotal</b>		<b>6</b>	<b>8</b>							<b>14</b>			<b>\$1,896</b>	
<b>Task 4 Subtotal</b>	<b>36</b>	<b>159</b>	<b>312</b>						<b>22</b>	<b>529</b>			<b>\$ 69,852</b>	
<b>TASK 5-BIDDING</b>														
Assist City in responding to Bidder's Inquires/Clarifications		6	8							14		\$ 1,896		
<b>Task 5 Subtotal</b>		<b>6</b>	<b>8</b>							<b>14</b>			<b>\$ 1,896</b>	
<b>TASK 6-CONSTRUCTION</b>														
Construction staking					32	80				112		\$ 28,192		
Advise/consult with City		4								4		\$ 704		
Review shop drawings/submittals		4								4		\$ 704		
Review post-construction CCTV DVDs		4	16							20		\$ 2,384		
Assist City with evaluating CO and construction claims		4	6							10		\$ 1,334		
<b>Task 6 Subtotal</b>		<b>16</b>	<b>22</b>		<b>32</b>	<b>80</b>				<b>150</b>			<b>\$ 33,318</b>	
<b>TASK 7-POST-CONSTRUCTION</b>														
Record Drawings		6	24							30		\$ 3,576		
<b>Task 7 Subtotal</b>		<b>6</b>	<b>24</b>							<b>30</b>			<b>\$ 3,576</b>	
<b>CLIENT MEETING SERVICES PROJECT 1</b>														
<b>TASK 8-MEETING WITH CLIENT</b>														
Two-hour review meetings (3)			24							24		\$ 4,224		
One-hour meetings (6)			36							36		\$ 6,336		
<b>Task 8 Subtotal</b>			<b>60</b>							<b>60</b>			<b>\$ 10,560</b>	
<b>Total</b>	<b>45</b>	<b>331</b>	<b>500</b>	<b>3</b>	<b>33</b>	<b>104</b>	<b>24</b>	<b>48</b>	<b>24</b>	<b>1112</b>	<b>\$ 32,758</b>	<b>\$ 200,471</b>	<b>\$ 200,471</b>	
													<b>Basic Engineering Services</b>	<b>\$ 189,911</b>
													<b>Client Meeting Services</b>	<b>\$ 10,560</b>
													<b>Project 1 Total</b>	<b>\$ 200,471</b>

**Fee proposal for Annual Miscellaneous Water and Sewer Main Replacements, Projects 14-21 and 14-22.**

**Project 2**

TASKS	Engr Mgr.	Sr. Engr	Asst. Engr	Survey Mgr.	Sr Srvyr	2-Person Srvy Crew	1-person Srvy Crew	Jr Srvyr	Project Asst.	Subtotal NV5 Hours by Task	Sub-Consultant Costs	Subtotal Dollars by Task	Total Dollars by Task
	\$198	\$176	\$105	\$198	\$181	\$280	\$185	\$120	\$90	(including 10% markup)			
<b>BASIC ENGINEERING SERVICES PROJECT 2</b>													
<b>TASK 1-PROJECT MANAGEMENT</b>													
Prepare schedule		2							2	4		\$ 532	
Sub-consultant coordination		2								2		\$ 352	
Monthly Invoicing and status reports		4								4		\$ 704	
<b>Task 1 Subtotal</b>		<b>8</b>							<b>2</b>	<b>10</b>			<b>\$ 1,588</b>
<b>TASK 2-PRELIMINARY INVESTIGATION/REFINEMENT OF CONCEPTUAL PLANS</b>													
<i>Task 2.1-Review Existing Conditions</i>													
Site visit		3	3							6		\$ 843	
Review as-builts, CCTV logs & verify existing utilities		4	4							8		\$ 1,124	
Prepare technical memorandum		2	4							6		\$ 772	
<b>Task 2.1 Subtotal</b>		<b>9</b>	<b>11</b>							<b>20</b>			<b>\$ 2,739</b>
<i>Task 2.2-Topographic Survey</i>													
Field (Control and topo)					1	8				9		\$ 2,421	
Base Mapping								16		16		\$ 1,920	
<b>Task 2.2 Subtotal</b>					<b>1</b>	<b>8</b>		<b>16</b>		<b>25</b>			<b>\$ 4,341</b>
<i>Task 2.3-Geotechnical Soil Disposal Report including encroachment permit &amp; traffic control</i>													
Pre-field activities											\$ 2,926	\$ 2,926	
Field activities											\$ 4,796	\$ 4,796	
Laboratory analysis											\$ 660	\$ 660	
Reporting and project management		2								2	\$ 2,288	\$ 2,640	
<b>Task 2.3 Subtotal</b>		<b>2</b>								<b>2</b>			<b>\$ 11,022</b>
<b>Task 2 Subtotal</b>		<b>11</b>	<b>11</b>		<b>1</b>	<b>8</b>		<b>16</b>		<b>47</b>			<b>\$ 18,102</b>
<b>TASK 3-SCHEMATIC DESIGN</b>													
<i>Thirty five Percent (35%) Submittal</i>													
35% Submittal-Plans	4	6	12							22		\$ 3,108	
Cost estimate (preliminary)	1	2	2							5		\$ 760	
<b>Task 3 Subtotal</b>	<b>5</b>	<b>8</b>	<b>14</b>							<b>27</b>			<b>\$ 3,868</b>
<b>TASK 4-SCHEMATIC DESIGN DEVELOPMENT/ CONSTRUCTION DOCUMENTS</b>													
<i>Task 4.1-Preparation of 65 Percent Construction Documents</i>													
65% Submittal-Plans, Specs, Costs	4	12	12						6	34		\$ 4,704	
Traffic Control Plans (N/A)												\$ -	
<b>Task 4.1 Subtotal</b>	<b>4</b>	<b>12</b>	<b>12</b>						<b>6</b>	<b>34</b>			<b>\$ 4,704</b>
<i>Task 4.2-Preparation of 95 Percent Construction Documents</i>													
95% Submittal-Plans, Specs, Costs	4	10	12						6	32		\$ 4,352	
Traffic Control Plans (N/A)												\$ -	
<b>Task 4.2 Subtotal</b>	<b>4</b>	<b>10</b>	<b>12</b>						<b>6</b>	<b>32</b>			<b>\$ 4,352</b>
<i>Task 4.3-Preparation of 100 Percent Construction Documents</i>													
100% Draft Submittal-Plans, Specs, Costs	4	8	10						6	28		\$ 3,790	
100% Final signed Plans, Specs, Costs	4	8	8						4	24		\$ 3,400	
<b>Task 4.3 Subtotal</b>	<b>8</b>	<b>16</b>	<b>18</b>						<b>10</b>	<b>52</b>			<b>\$7,190</b>
<b>Task 4 Subtotal</b>	<b>16</b>	<b>38</b>	<b>42</b>						<b>22</b>	<b>118</b>			<b>\$ 16,246</b>

**Fee proposal for Annual Miscellaneous Water and Sewer Main Replacements, Projects 14-21 and 14-22.**

**Project 2**

TASKS	Engr Mgr.	Sr. Engr	Asst. Engr	Survey Mgr.	Sr Srvyr	2-Person Srvy Crew	1-person Srvy Crew	Jr Srvyr	Project Asst.	Subtotal NV5 Hours by Task	Sub-Consultant Costs	Subtotal Dollars by Task	Total Dollars by Task
	\$198	\$176	\$105	\$198	\$181	\$280	\$185	\$120	\$90	(including 10% markup)			
<b>TASK 5-BIDDING</b>													
Assist City in responding to Bidder's Inquires/Clarifications		6	8							14		\$ 1,896	
<b>Task 5 Subtotal</b>		<b>6</b>	<b>8</b>							<b>14</b>			<b>\$ 1,896</b>
<b>TASK 6-CONSTRUCTION</b>													
Construction staking					4	8				12		\$ 2,964	
Advise/consult with City		4								4		\$ 704	
Review shop drawings/submittals		4								4		\$ 704	
Review post-construction CCTV DVDs		2	2							4		\$ 562	
Assist City with evaluating CO and construction claims		4	6							10		\$ 1,334	
<b>Task 6 Subtotal</b>		<b>14</b>	<b>8</b>		<b>4</b>	<b>8</b>				<b>34</b>			<b>\$ 6,268</b>
<b>TASK 7-POST-CONSTRUCTION</b>													
Record Drawings		2	4							6		\$ 772	
<b>Task 7 Subtotal</b>		<b>2</b>	<b>4</b>							<b>6</b>			<b>\$ 772</b>
<b>CLIENT MEETING SERVICES PROJECT 2</b>													
<b>TASK 8-MEETING WITH CLIENT</b>													
Two-hour review meetings (3)		24								24		\$ 4,224	
One-hour meetings (6)		36								36		\$ 6,336	
<b>Task 8 Subtotal</b>		<b>60</b>								<b>60</b>			<b>\$ 10,560</b>
<b>Total</b>	<b>21</b>	<b>147</b>	<b>87</b>		<b>5</b>	<b>16</b>		<b>16</b>	<b>24</b>	<b>316</b>	<b>\$ 10,670</b>	<b>\$ 59,300</b>	<b>\$ 59,300</b>
											<b>Basic Engineering Services</b>	<b>\$ 48,740</b>	
											<b>Client Meeting Services</b>	<b>\$ 10,560</b>	
											<b>Project 2 Total</b>	<b>\$ 59,300</b>	



**Fee proposal for Annual Miscellaneous Water and Sewer Main Replacements, Projects 14-21 and 14-22.**

**Option 1**

TASKS	Engr	Sr.	Asst.	Survey	Sr	2-Person	1-person	Jr	Project	Subtotal	Sub-	Subtotal	Total
	Mgr.	Engr	Engr	Mgr.	Srvyr	Srvy Crew	Srvy Crew	Srvyr	Asst.	NV5 Hours by Task	Consultant Costs	Dollars by Task	Dollars by Task
	\$198	\$176	\$105	\$198	\$181	\$280	\$185	\$120	\$90	(including 10% markup)			
<b>ADDITIONAL SERVICES OPTION 1</b>													
<b>TASK A2-PRELIMINARY INVESTIGATION/REFINEMENT OF CONCEPTUAL PLANS</b>													
<i>Task A2.1-Review Existing Conditions</i>													
Site visit		2	2							4			\$ 562
Review as-builts & verify existing utilities		4	6							10			\$ 1,334
Task A2.1 Subtotal		6	8							14			\$ 1,896
<i>Task A2.2-Topographic Survey</i>													
Field (Control and topo)					1	8				9			\$ 2,421
Base Mapping								24		24			\$ 2,880
New Easement Plat and Legal					9					9			\$ 1,629
Task A2.2 Subtotal					10	8		24		42			\$ 6,930
<i>Task A2.3-Geotechnical Soil Disposal Report including encroachment permit &amp; traffic control</i>													
Pre-field activities											\$ 2,926	\$ 2,926	
Field activities											\$ 4,796	\$ 4,796	
Laboratory analysis											\$ 1,320	\$ 1,320	
Reporting and project management		2								2	\$ 2,772	\$ 3,124	
Task A2.3 Subtotal		2								2			\$ 12,166
<i>Task A2.4-Potholing</i>													
Vacuum Excavated up to 1 day		2	2							4	\$ 5,000	\$ 5,562	
Task A2.4 Subtotal		2	2							4			\$ 5,562
<b>Task A2 Subtotal</b>		<b>10</b>	<b>10</b>		<b>10</b>	<b>8</b>		<b>24</b>		<b>62</b>			<b>\$ 26,554</b>
<b>TASK A3-SCHEMATIC DESIGN</b>													
<i>Thirty five Percent (35%) Submittal</i>													
35% Submittal-Plans	4	8	10							22			\$ 3,250
Cost estimate (preliminary)	1	2	2							5			\$ 760
Task A3 Subtotal	<b>5</b>	<b>10</b>	<b>12</b>							<b>27</b>			<b>\$ 4,010</b>
<b>TASK A4-SCHEMATIC DESIGN DEVELOPMENT/ CONSTRUCTION DOCUMENTS</b>													
<i>Task A4.1-Preparation of 65 Percent Construction Documents</i>													
65% Submittal-Plans, Specs, Costs	2	8	12						6	28			\$ 3,604
Traffic Control Plans		6	12							18			\$ 2,316
Task A4.1 Subtotal	2	14	24						6	46			\$ 5,920
<i>Task A4.2-Preparation of 95 Percent Construction Documents</i>													
95% Submittal-Plans, Specs, Costs	2	8	12						6	28			\$ 3,604
Traffic Control Plans		4	8							12			\$ 1,544
Task A4.2 Subtotal	2	12	20						6	40			\$ 5,148
<i>Task A4.3-Preparation of 100 Percent Construction Documents</i>													
100% Draft Submittal-Plans, Specs, Costs	2	4	4						6	16			\$ 2,060
100% Final signed Plans, Specs, Costs		4	4						4	12			\$ 1,484
Task A4.3 Subtotal	2	8	8						10	28			\$ 3,544
<b>Task A4 Subtotal</b>	<b>6</b>	<b>34</b>	<b>52</b>						<b>22</b>	<b>114</b>			<b>\$ 14,612</b>

**Fee proposal for Annual Miscellaneous Water and Sewer Main Replacements, Projects 14-21 and 14-22.**

**Option 1**

TASKS	Engr Mgr.	Sr. Engr	Asst. Engr	Survey Mgr.	Sr Srvyr	2-Person Srvy Crew	1-person Srvy Crew	Jr Srvyr	Project Asst.	Subtotal NV5 Hours by Task	Sub-Consultant Costs	Subtotal Dollars by Task	Total Dollars by Task	
	\$198	\$176	\$105	\$198	\$181	\$280	\$185	\$120	\$90	(including 10% markup)				
<b>TASK A5-CONSTRUCTION</b>														
Construction staking (both lines same time)					6	8				14		\$ 3,326		
<b>Task A5 Subtotal</b>					<b>6</b>	<b>8</b>				<b>14</b>			<b>\$ 3,326</b>	
<b>TASK A6-POST-CONSTRUCTION</b>														
Record Drawings		4	6							10		\$ 1,334		
<b>Task A6 Subtotal</b>		<b>4</b>	<b>6</b>							<b>10</b>			<b>\$ 1,334</b>	
<b>Total</b>	<b>11</b>	<b>58</b>	<b>80</b>		<b>16</b>	<b>16</b>		<b>24</b>	<b>22</b>	<b>227</b>	<b>\$ 16,814</b>	<b>\$ 49,836</b>	<b>\$ 49,836</b>	
												<b>Option 1 Additional Engineering Services</b>		<b>\$ 49,836</b>

**Fee proposal for Annual Miscellaneous Water and Sewer Main Replacements, Projects 14-21 and 14-22.**

**Option 2**

TASKS	Engr Mgr.	Sr. Engr	Asst. Engr	Survey Mgr.	Sr Srvyr	2-Person Srvy Crew	1-person Srvy Crew	Jr Srvyr	Project Asst.	Subtotal NV5 Hours by Task	Sub-Consultant Costs	Subtotal Dollars by Task	Total Dollars by Task
	\$198	\$176	\$105	\$198	\$181	\$280	\$185	\$120	\$90	(including 10% markup)			
<b>ADDITIONAL SERVICES OPTION 2</b>													
<b>TASK A2-PRELIMINARY INVESTIGATION/REFINEMENT OF CONCEPTUAL PLANS</b>													
<i>Task A2.1-Review Existing Conditions</i>													
Site visit		2	2							4		\$ 562	
Review as-builts & verify existing utilities		4	4							8		\$ 1,124	
Task A2.1 Subtotal		6	6							12			\$ 1,686
<i>Task A2.2-Topographic Survey</i>													
Field (Control)					1	8				9		\$ 2,421	
Field (topo)				2			8			10		\$ 1,876	
Base Mapping								32		32		\$ 3,840	
Task A2.2 Subtotal				2	1	8	8	32		51			\$ 8,137
<i>Task A2.3-Geotechnical Soil Disposal Report including encroachment permit &amp; traffic control</i>													
Pre-field activities											\$ 2,926	\$ 2,926	
Field activities											\$ 4,796	\$ 4,796	
Laboratory analysis											\$ 660	\$ 660	
Reporting and project management		2								2	\$ 2,288	\$ 2,640	
Task A2.3 Subtotal		2								2			\$ 11,022
<b>Task A2 Subtotal</b>		<b>8</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>8</b>	<b>8</b>	<b>32</b>		<b>65</b>			<b>\$ 20,845</b>
<b>TASK A3-SCHEMATIC DESIGN</b>													
<i>Thirty five Percent (35%) Submittal</i>													
35% Submittal-Plans	4	8	12							24		\$ 3,460	
Cost estimate (preliminary)	1	2	2							5		\$ 760	
Task A3 Subtotal	5	10	14							29			\$ 4,220
<b>TASK A4-SCHEMATIC DESIGN DEVELOPMENT/ CONSTRUCTION DOCUMENTS</b>													
<i>Task A4.1-Preparation of 65 Percent Construction Documents</i>													
65% Submittal-Plans, Specs, Costs	4	10	14						6	34		\$ 4,562	
Traffic Control Plans Option 2		10	20							30		\$ 3,860	
Task A4.1 Subtotal	4	20	34						6	64			\$ 8,422
<i>Task A4.2-Preparation of 95 Percent Construction Documents</i>													
95% Submittal-Plans, Specs, Costs	4	10	14						6	34		\$ 4,562	
Traffic Control Plans Option 2		6	12							18		\$ 2,316	
Task A4.2 Subtotal	4	16	26						6	52			\$ 6,878
<i>Task A4.3-Preparation of 100 Percent Construction Documents</i>													
100% Draft Submittal-Plans, Specs, Costs	4	8	12						6	30		\$ 4,000	
100% Final signed Plans, Specs, Costs	2	6	10						4	22		\$ 2,862	
Task A4.3 Subtotal	6	14	22						10	52			\$ 6,862
<b>Task A4 Subtotal</b>	<b>14</b>	<b>50</b>	<b>82</b>						<b>22</b>	<b>168</b>			<b>\$ 22,162</b>

**Fee proposal for Annual Miscellaneous Water and Sewer Main Replacements, Projects 14-21 and 14-22.**

**Option 2**

TASKS	Engr Mgr.	Sr. Engr	Asst. Engr	Survey Mgr.	Sr Srvyr	2-Person Srvy Crew	1-person Srvy Crew	Jr Srvyr	Project Asst.	Subtotal NV5 Hours by Task	Sub-Consultant Costs	Subtotal Dollars by Task	Total Dollars by Task	
	\$198	\$176	\$105	\$198	\$181	\$280	\$185	\$120	\$90	(including 10% markup)				
<b>TASK A5-CONSTRUCTION</b>														
Construction staking (2 events)					4	16				20		\$ 5,204		
<b>Task A5 Subtotal</b>					<b>4</b>	<b>16</b>				<b>20</b>			<b>\$ 5,204</b>	
<b>TASK A6-POST-CONSTRUCTION</b>														
Record Drawings		4	4							8		\$ 1,124		
<b>Task A6 Subtotal</b>		<b>4</b>	<b>4</b>							<b>8</b>			<b>\$ 1,124</b>	
<b>Total</b>	<b>19</b>	<b>72</b>	<b>106</b>	<b>2</b>	<b>5</b>	<b>24</b>	<b>8</b>	<b>32</b>	<b>22</b>	<b>290</b>	<b>\$ 10,670</b>	<b>\$ 53,555</b>	<b>\$ 53,555</b>	
												<b>Option 2 Additional Engineering Services</b>		<b>\$ 53,555</b>