

SCOPE OF WORK
For
Bannock Avenue Neighborhood Streetscape Enhancements and Bannock Avenue Bacteria Treatment for Tecolote Creek Watershed Protection

1.0 INTRODUCTION

This Scope of Work (SOW) describes the Tetra Tech, Inc. (Tetra Tech) level of effort to support the City of San Diego (City) in the analysis and design of Bannock Avenue Neighborhood Streetscape Enhancements and Bannock Avenue Bacteria Treatment for Tecolote Creek Watershed Protection. The primary purpose of this project is to meet compliance with Municipal Stormwater Permit Order No. R9-2007-0001 by reducing pollutant loads and volume of runoff in a residential neighborhood through the use of several low impact development (LID) and other stormwater best management practice (BMPs) retrofits. Since this is the first large-scale application of its kind in the City, the secondary purpose of this project is to provide the City with valuable feedback regarding the design and effectiveness of these BMPs to guide future decision making for LID guidelines and implementation in San Diego.

The project is located within the Clairemont Mesa Community Plan Area, a medium density residential area. The project proposes to install bio-retention, treatment planters, pervious pavement, hydrodynamic separator unit(s), and AbTech (Bacterial Treatment System) units to achieve the desired pollutant load and runoff volume reductions from an area of approximately 65 acres. Runoff from this area will be diverted to the bioretention cells and permeable pavement that will capture, hold, and treat the design flow using soil infiltration and uptake and evapotranspiration provided by vegetation. Any volume of stormwater that cannot be treated with BMPs installed in the right-of-way will be treated with BMPs installed in North Clairemont Park. The project components will be designed to remove pollutants and priority constituents of concern in the Tecolote Creek Watershed, including bacteria, heavy metals, nutrients, pesticides and sediment. The system will be designed to achieve the final wet-weather objective in the total maximum daily load (TMDL) for indicator bacteria in Tecolote Creek.

The Tetra Tech team will address the following critical issues, including: investigating important geotechnical considerations; determining the optimal size, type, and location of BMPs; identifying a strategy to answer key management questions by monitoring the BMPs over time; engaging and educating the public and local neighborhood on the purpose and importance of the project; and developing a set of plans that can be efficiently and successfully implemented. One of the first tasks will be conducting a geotechnical investigation to assess the ability of the soils to infiltrate accumulated runoff and evaluate the risk related to infiltrating water near utilities and transportation infrastructure. Findings from this investigation will guide the design and configuration for all infiltration or filtration BMPs included in the project.

Identifying the most cost-effective sizes and combinations of BMPs to comply with TMDL wasteload allocations can be a challenge in urban watersheds. To assist with this key design step, Tetra Tech is proposing the use of the System for Urban Stormwater Treatment and Analysis Integration (SUSTAIN), a public domain watershed model and BMP planning tool developed by Tetra Tech for the Environmental Protection Agency (EPA) (<http://www.epa.gov/ednrmrl/models/sustain/index.html>). SUSTAIN will be used to determine the specific size and combination of BMPs best suited to meet the runoff requirements for the bacteria TMDL in Tecolote Creek at the minimum construction cost.

Although it is not the primary goal of the project, it is also important for the City to learn lessons from the process of designing, implementing, and monitoring these BMPs in local conditions. Our team will work

with City staff to identify key management questions that may be answered by monitoring the performance of the BMPs over the near and short terms. Once these questions are identified, the team will develop a monitoring strategy aimed at collecting important feedback from the installed systems to evaluate conditions or effectiveness. Ultimately, the results from these data collection activities must feed back into the City's overall guidance for implementation and design of LID BMPs.

By including a public outreach component for this project, the City helps to ensure that the goals of the project are embraced by the public and the means to achieving the goals are generally understood and accepted. Our team will work with the City to educate the public about the value of improved water quality, develop visual aids to communicate key design components, and solicit public input on design alternatives near residential units.

To complete the design, our team must also conduct environmental assessment and permitting tasks, prepare a traffic control plan for construction, develop a plan set (including specifications, drawings, and estimate), and provide support during the bidding and construction phase.

2.0 TECHNICAL APPROACH

The following tasks summarize the Tetra Tech approach to completing the work outlined in the Scope of Work.

TASK 1: Project Administration

Tetra Tech will maintain communication with the City's Task Order Manager or other designee to keep them apprised of progress, upcoming milestones, and any issues that could potentially impact project performance. For this Task Order, Mr. Jason Wright will serve as the Project Manager and he will be responsible for all official communications with the City.

Mr. Wright will be responsible for working with the Tetra Tech Contract Administrator to ensure monthly progress reports and invoices are submitted in an accurate and timely manner on or prior to the 5th day of each month during which the Task Order is active. Mr. Wright will ensure all desired information is included in a brief monthly progress report but a minimum the following information will be included:

1. Reporting period
2. Work completed in the reporting period (activities and accomplishments)
3. Work anticipated in the following reporting period
4. Expenditures in this progress report period and cumulative total

Deliverables:

- Monthly progress memos and meetings with City staff to ensure that work completed address issues and objectives

TASK 2: Geotechnical Investigation

Tetra Tech's subconsultant Allied Geotechnical Engineers, Inc. (AGE) will perform an additional evaluation of the local subsurface conditions to determine the feasibility and impact of infiltration as recommended in the conceptual report. The SOW and assumptions are presented in the following tasks:

2.1. Information Review

This task involves a review of readily available information, including published geologic literature and maps, as-built utility maps, topographic maps, and public records information maintained by the San Diego Regional Water Quality Control Board (RWQCB) and the County of San Diego Department of Environmental Health Services (DEHS).

Assumption

- The City will provide Tetra Tech with pertinent information including topographic base maps.

2.2. Planning, Permitting & Utility Clearance

This task includes the performance of several subtasks in preparation of the geotechnical field exploration program, as follows:

- Conduct a joint site reconnaissance visit with Tetra Tech to select suitable locations for the percolation test holes.
- Coordinate utility clearance of the proposed percolation test hole locations through Underground Service Alert (USA).
- Obtain a soil boring permit (or permit waiver) from the DEHS.
- Obtain encroachment and traffic control permits (if applicable) from the City.

2.3. Field Exploration and Testing Program

The conceptual plan indicates that streetscape enhancements will be installed at certain locations along Clairemont Mesa Boulevard, Dubois Drive, Manitou Way, Bannock Avenue, Genesee Avenue, Providence Road, New Haven Road, Appleton Street, Conrad Avenue, Millwood Road, Rebel Road, Ensign Street, Frink Avenue, and Lehrer Drive. Based on a review of the conceptual plan, AGE proposes to perform percolation tests at 10 locations, avoiding percolation test locations performed in the preliminary analysis. A total of three percolation tests will be performed at each location at approximate depths ranging from 3 to 8 feet below existing ground surface. AGE plans to perform the percolation tests in existing grass or dirt shoulders that are located between the sidewalk and the curb within the city right-of-way. The field exploration and sampling operations will be performed under the direction of a senior geologist or engineer.

Assumptions

- The test hole target depths are based on AGE's previous experience with similar projects. The actual test depths may be less than the target depth in the event that drilling refusal on hard cemented zones or large rock/boulders is encountered.
- AGE assumes that no exploratory soil borings are required for the proposed facilities at the North Clairemont Community Park.
- AGE assumes that, because percolation tests will be performed within the right-of-way, that it will not be necessary to inform the residents nor obtain their consent with regard to the presence of temporary soil stockpiles during the performance of the field testing activities.
- AGE will provide the approximate location for the percolation test holes following completion of the field testing activities.
- For cost estimating purposes, AGE has assumed that this project is not considered a public works project that is subject to compliance with State of California prevailing wage requirements.

2.4. Geotechnical Laboratory Testing

This task consists of the performance of laboratory testing on selected samples obtained from the deep exploratory soil borings. The testing will be performed in general conformance with the American Society for Testing and Materials (ASTM) or other generally accepted test methods.

Assumption:

- For cost estimating purposes, AGE assumes that the laboratory testing will be limited to: in-place moisture content and dry density, sieve & hydrometer analyses, Expansion Index, and compaction testing.

2.5. Reporting

AGE will analyze the field and laboratory test data, and prepare a written report to present a summary of findings, including the final field and laboratory test results, along with opinions and recommendations. The report will address the following issues:

- General surface and subsurface conditions.
- General geologic conditions and potential geologic hazards.
- Infiltration rates of the underlying soil material based on the results of the percolation testing program.
- Estimate of lateral migration rate and pathways of infiltrated water based on the results of the percolation testing program.
- Evaluate the potentially detrimental effect of the infiltrated water with regard to existing facilities such as pavements, utilities, building foundations, etc.
- Evaluate the depth to groundwater and usage of groundwater based on a review of readily available public records maintained by the DEHS and RWQCB.

Deliverable:

- Two (2) copies of the Final Geotechnical Report.

TASK 3: Design Analysis

Tetra Tech will prepare a Design Analysis Report which will identify the optimal BMP design (i.e., sizes, types, locations, and configurations) and establish a strategy for designing and monitoring the BMPs to answer key management questions.

Designing the optimal plan for retrofitting distributed BMPs into an existing neighborhood at the subwatershed scale can be very complex, requiring consideration of multiple BMPs with multiple configurations and performance standards. The process can be simplified by using a stormwater model and an optimization algorithm to consider all the design alternatives. Tetra Tech will use SUSTAIN to determine the optimal size and combination of BMPs to meet the runoff requirement for the bacteria TMDL and capture and treat the 85th percentile storm as specified in the *Stormwater Standards, A Manual for Construction and Permanent Stormwater Best Management Practices Requirements*, March 24, 2008. The tool allows our team the ability to evaluate all feasible and economical design options to meet the water quantity and water quality goals of the project based upon all known design constraints (e.g., infiltration capacity, topography, utilities, and infrastructure). A combination of bioretention and permeable pavement in the rights-of-way will be considered as part of a "Green Streets" approach as well as the potential for proprietary BMPs to be installed in North Clairemont Park to treat any portion of the 85th percentile storm that cannot be treated by BMPs in the rights-of-way or to provide any additional water quality improvement necessary. The output from this effort will be the optimized conceptual site layout that identifies the type,

size, and location of each BMP. This layout and analysis will act as the foundation for the final design drawings.

Because this is a pilot project, Tetra Tech will work with City staff to identify the key management questions that are to be investigated during the life of the project to support overall strategic planning for the City's Storm Water Department. The City will provide Tetra Tech with a list of management questions that will be used to evaluate this pilot project. Tetra Tech will develop a design aimed at providing feedback that the City will use to answer these questions. The questions will include, but are not limited to: an effectiveness assessment of the pollutant removal capacity compared to the design specifications, an assessment of the required maintenance frequency and cost compared to current Operation and Maintenance specifications, and an evaluation of the effects of varying curb cut configurations, soil media combinations, and ponding depths.

Once the appropriate management questions are identified, Tetra Tech will develop a design and management strategy that includes providing important feedback to the City to answer the questions. Ultimately, the feedback will be used to modify or validate assumptions currently included in existing City guidelines and documentation.

Design Analysis Report:

Tetra Tech will prepare a Design Analysis Report that summarizes the findings and resulting recommendations of the design analysis. The report will include recommendations for the type, size, location, and configuration of BMPs. Management questions will be highlighted and the strategies for answering those questions provided in detail (e.g., design of monitoring equipment, operations and maintenance activities). The report will present recommendations and strategies for consideration of design and implementation options in the implementation of the project. Costs assume that the draft Design Analysis Report will be prepared and two (2) rounds of review comments from the City will be incorporated into a final Report.

Deliverables:

- Two (2) Preliminary Draft Design Analysis Report
- Two (2) Draft Design Analysis Report
- Two (2) Final Design Analysis Report

TASK 4: Architectural Schematic Design

Tetra Tech's subconsultant Garbini and Garbini will provide Architectural Schematic Design Services that will consist of the following:

- Develop 5 renderings in 8-1/2" x 11" book form showing how the proposed BMP's would be integrated into the right-of-way. The illustrations will indicate how BMP's are integrated into the right-of-way with appropriate landscaping on the surface and show how the BMP's are designed to function below the surface. The renderings will be included in presentations to the public as part of the community outreach effort.
- Develop 3 landscape options with specific planting plans for the bioretention areas with choices for appropriate low water use non-invasive plant material on 24" x 36" boards for presentation purposes. The intent is to provide options that would be appropriate to the character of the Homeowners' existing properties. The 3 landscape options will be incorporated into the schematic designs.

FORMAT: All drawings will be prepared in AutoCAD and /or PhotoShop. Deliverables to the city will be in MicroStation and pdf formats.

Deliverables:

- Five (5) 8-1/2" x 11" Book Form Conceptual Illustrations
- Three (3) Rendered Drawings of the conceptual landscape options depicting specific planting plans for homeowners on 24" x 36" Boards

Technical specifications will be developed based on the 5 landscaping options and planting plans. The impacts of the root depth and required plant spacing will be evaluated in the development of the planting plan.

TASK 5: Community Outreach and Education

Tetra Tech will support the development and implementation of a plan for community outreach and education to inform local community groups of the plans for the area and educate them about the impact and importance of stormwater control and treatment. Tetra Tech will support City staff and the project team to conduct community relations during the design phase of the Bannock Avenue Neighborhood Streetscape project.

5.1. Project Management

Tetra Tech will attend community meetings and present the technical aspects of the project to provide City of San Diego Public Information Officers and Engineering & Capital Projects managers technical support for design concepts.

Deliverables:

- Technical Support for four (4) community Meetings

TASK 6: Environmental Assessment and Permitting

Tetra Tech's subconsultant, the Chambers Group, will provide the following environmental services and permit assessment based on the Preliminary Environmental Assessment Memorandum provided by the City:

6.1. Regional Water Quality Control Board Permits

Although not identified in the Preliminary Environmental Assessment Memorandum, it is anticipated that the project disturbance will exceed one acre and permits from the Regional Water Quality Control Board (RWQCB) will be required. Chambers Group will prepare permit applications and submit the application package to the RWQCB. Chambers Group also would coordinate with the RWQCB during permit preparation. The deliverables generated from this task include the permit application and the accompanying graphics, text, and matrices, as needed.

Deliverables:

- Application for RWQCB Permits

TASK 7: Final Engineering Design

This task includes preparation of the detailed design plans and specifications for construction.

7.1. Survey

The City's survey crew has completed and will provide Tt with the topographical survey conducted for the project site. It is assumed that the City will provide additional survey if necessary to complete the design of the project.

7.2. Research and Field Investigation

Tetra Tech will undertake thorough a review of available historical and record information. This task will be performed prior to the project kick-off. The research will include review of existing reports, studies, as-built plans, mapping and other information available from the City, County, and any other agencies. Specifically, the Tetra Tech team will perform the following:

- Conduct a complete and thorough review of the gathered documents including reports, utility location maps, tract maps, parcel maps, existing easement(s), legal descriptions or other pertinent information.
- Conduct complete utility coordination as required to construct the BMP measures implemented during the design analysis portion of the work.

7.3. Plan Submittals

The following is an estimated list of the required drawings.

Title Sheet	1 Sheet
Sheet Index, Abbreviations, and Notes	1 Sheet
Traffic Control (Genesee Ave & Clairemont Mesa Blvd)	5 Sheets
Overall - Street Plans (2 Viewports per sheet, 1:40 Scale)	15 Sheets
Overall - Storm Drain Plans	1 Sheet
Storm Drain Plan & Profile - Perforated Pipe (1:40 Scale)	2 Sheets
Storm Drain Plan & Profile - Overflow Pipe (1:40 Scale)	4 Sheets
North Clairemont Park - Hydrodynamic Separator Plan and Profile(1:20 Scale)	1 Sheet
BMP Detail Sheet (1:40 Scale)	3 Sheets
Construction Detail Sheet	3 Sheets
Overall - Landscape Plans	1 Sheet
Planting & Irrigation Plan (1:40 Scale)	15 Sheets
Plant & Irrigation Schedule and Quantities	1 Sheet
Detail Sheet	3 Sheets
Total	56 Sheets

7.4. Traffic Control Plans

It is estimated that implementation of most BMP's in the local streets (neighborhood streets) will not require lane closures, thus no traffic control plans will be required at those locations. However, the improvements within the right-of-way on Genesee Avenue, Clairemont Mesa Boulevard and Conrad Avenue will require lane closures at times. For the proposed work in those areas, Tetra Tech will prepare traffic control plans to manage the traffic through the project during construction. The plans will be prepared in accordance with the standards set forth by the City and California Department of Transportation (Caltrans) and any additional requirements from the City. The plans will address construction work hours, maintenance of access to adjacent properties and emergency vehicle access.

7.5. Technical Specifications

Tetra Tech will prepare technical specifications to support the drawings and complete the elements of the project. We will utilize the City's Standard Specifications and Standard Drawings where necessary. We will follow the City's Standard Specifications format used on their past projects including standards for accessibility and ADA requirements. It is assumed that the City will provide an electronic format version of the latest edition of the front-end documents and general provisions to be incorporated with the technical specifications.

7.6. Bid Quantities and Cost Estimates

Tetra Tech will provide a cost estimate, in bid format, prepared by our in-house Certified Cost Engineer at each submittal. The purpose of the cost estimate is to gauge the probable cost of the overall project in an effort to keep the design elements within the desired construction budget.

7.7. Design Development Submittals

Tetra Tech will prepare plans, specifications and estimates for each of the required submittals (30%, 60%, 100% and Final). Each subsequent set will be developed to a higher degree of completion.

7.7.1. The 30% Design will include:

- Title Sheet
- A preliminary layout plan of the BMP's.
- A preliminary layout of the storm drain improvements for bioretention overflows.
- A preliminary layout of the hydrodynamic structure at North Clairemont Park.
- Preliminary planting plans, plant palette and planting details.
- Cost estimate.

Deliverables:

- Two (2) full copies and one (1) pdf version of the 30% plans

7.7.2. The 60% Design will include:

- Title Sheet, Legend, Notes and Abbreviations.
- Traffic Control Plan.
- LID Improvement Plans.
- Overall Storm Drain Plans and Profile.
- North Clairemont Park Hydrodynamic Separator Plan and Profile
- Planting and irrigation plans, and landscape details.
- Cost estimate.
- Outline project specifications.

Deliverables:

- Two (2) full copies and one (1) pdf of the 60% plans and specifications

7.7.3. The 100% Design will include:

- Title Sheet, Legend, Notes and Abbreviations.
- Traffic Control Plan.
- LID Improvement Plans.
- Overall Storm Drain Plans and Profile.
- North Clairemont Park Hydrodynamic Separator Plan and Profile
- Planting and irrigation plans, and landscape details.

- Cost estimate.
- Project specifications.

Deliverables:

- Two (2) full copies and one (1) pdf of the 100% plans and specifications

7.7.4 The Final Design will include:

- A bid ready plan set.
- A bid ready Technical Specifications for all the identified items of work.
- A bid ready Bid Quantities and Final Opinion of Probable Cost Estimate

Deliverables

- Kick off meeting
- 30% Design
- 30% Design meeting
- 60% Design
- 60% Design meeting
- 100% Design
- 100% Design meeting
- One (1) Signed Bond drawings of the Final approved plans for construction.
- Electronic version of the drawings and specifications will be submitted for the final submittal package. Drawings will be in MicroStation format and specifications will be in Microsoft Word format. Electronic submittal will be delivered on a CD.

TASK 8: Bid Support

Assist the City in the bidding of the contract documents to include:

- Attending a pre-bid meeting.
- Answering up to 5 RFI's.
- Assist in preparing addenda regarding design issues.

TASK 9: Construction Support

Because of the unique nature of this project is it imperative that the design team communicate regularly with the city resident engineer to ensure that the BMPs are implemented as they are designed. There are many components of the design that must be installed as designed for the BMPs to function as they are intended to achieve the required TMDL. This is the first project of its scope to be implemented in the City of San Diego indicating that there will be very few, if any, contractors with the experience required to properly implement a project of this scope. Cooperation and communication between the design team and the contractor would best be accomplished if both parties are on site on a regular basis during the construction of the project. Tetra Tech will provide construction engineering support services to include:

- Review up to 25 Submittals and Resubmittals
- Respond up to 15 RFIs.
- Evaluate up to 5 contractor's request for change orders.
- Prepare up to 3 construction changes and attend up to 5 construction meetings.
- Provide up to 1 day of final walk through and start up assistance.

- The original CAD drawings will be modified to reflect the “as-built” changes from redlined plans provided by the contractor and the City. “Record Drawings” signed bond drawings will be provided to the City along with the electronic drawing files.

Schedule

Date/Schedule	Key Activity
Within 10 weeks of Notice to Proceed (NTP)*	Task 2: Final Geotechnical Report
Within 15 weeks of NTP	Task 3: Preliminary Design Analysis Report
Within 23 weeks of NTP	Task 3: Draft Design Analysis Report
Within 28 weeks of NTP	Task 3: Final Design Analysis Report
Within 51 weeks of NTP	Task 4: Conceptual illustrations and landscape options
Within 75 weeks of NTP	Task 5: Attend four (4) community planning meetings
Within 63 weeks of NTP	Task 6: Environmental Assessment
Within 36 weeks of NTP	Subtask 7.8.1: 30% Plans
Within 39 weeks of NTP	Subtask 7.8.1: 30% Design meeting
Within 48 weeks of NTP	Subtask 7.8.2: 60% Plans and Specifications
Within 51 weeks of NTP	Subtask 7.8.2: 60% Design meeting
Within 57 weeks of NTP	Subtask 7.8.3: 100% Plans and Specifications
Within 60 weeks of NTP	Subtask 7.8.3: 100% Design Meeting
Within 64 weeks of NTP	Subtask 7.8.4: Final Plans and Specifications
Within 65 weeks of NTP	Subtask 7.8.4: Final design meeting
Within 70 weeks of NTP	Task 8: Bid Support
Within 131 weeks of NTP	Task 9: Construction Support

*Assume NTP will occur prior to June 28, 2010

3.0 COST SUMMARY

This section provides the data and information for pricing the technical support to be provided under this Task Order. The following table presents the overall cost summary and the estimated task-specific costs for providing the support outlined in the previous sections. Tetra Tech proposes to perform this Delivery Order on a Time and Material basis using the rates included in our contract. All ODCs will be billed at actual incurred amounts. Tetra Tech proposes to invoice in accordance with Tetra Tech's 12 accounting periods each year.

Task Cost Summary

Task	Description	Total Cost
1	Project Administration	\$33,214
2	Geotechnical Investigation	\$78,247
3	Design Analysis	\$135,413
4	Architectural Schematic Design	\$29,331
5	Community Outreach and Education	\$25,476
6	Environmental Assessment and Permitting	\$10,423
7	Final Engineering Design	\$337,639
8	Bid Support	\$20,259
9	Construction Support	\$15,788
Total		\$685,791

JOB CATEGORY	FULLY BURDENED RATE	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	TOTAL
		Project Administration	Geotechnical Investigation	Design Analysis	Architectural Schematic Design	Community Outreach and Education	Environmental Assessment and Permitting	Final Engineering Design	Bid Support	Construction Support	
Principal	\$ 203.76	8 \$ 1,630	\$ -	\$ -	\$ -	\$ -	\$ -	16 \$ 3,260	\$ -	\$ -	24 \$ 4,890
Project Manager	\$ 174.65	60 \$ 10,479	16 \$ 2,794	80 \$ 13,972	8 \$ 1,397	16 \$ 2,794	4 \$ 699	200 \$ 34,931	24 \$ 4,192	8 \$ 1,397	416 \$ 72,656
Senior Civil Engineer	\$ 157.18	\$ -	40 \$ 6,287	120 \$ 18,862	16 \$ 2,515	24 \$ 3,772	8 \$ 1,257	440 \$ 69,161	40 \$ 6,287	16 \$ 2,515	704 \$ 110,658
Associate Civil Engineer	\$ 122.26	100 \$ 12,226	80 \$ 9,780	420 \$ 51,347	40 \$ 4,890	80 \$ 9,780	24 \$ 2,934	1035 \$ 126,534	80 \$ 9,780	80 \$ 9,780	1939 \$ 237,053
Junior Civil Engineer	\$ 87.33	\$ -	80 \$ 6,986	260 \$ 22,705	\$ -	\$ -	\$ -	240 \$ 20,958	\$ -	24 \$ 2,096	604 \$ 52,745
Senior Water Resources Specialist	\$ 142.63	\$ -	24 \$ 3,423	120 \$ 17,116	20 \$ 2,853	24 \$ 3,423	\$ -	200 \$ 28,527	\$ -	\$ -	388 \$ 55,342
Associate Water Resources Specialist	\$ 107.70	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0 \$ -	\$ -	\$ -	0 \$ -
Junior Water Resources Specialist	\$ 78.59	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0 \$ -	\$ -	\$ -	0 \$ -
Senior Planner	\$ 142.63	\$ -	\$ -	80 \$ 11,411	20 \$ 2,853	40 \$ 5,705	\$ -	80 \$ 11,411	\$ -	\$ -	220 \$ 31,379
SUBTOTAL LABOR		248 \$ 24,335	240 \$ 29,272	1080 \$ 135,413	104 \$ 14,508	184 \$ 25,476	36 \$ 4,890	2840 \$ 337,639	144 \$ 20,259	128 \$ 15,788	5004 \$ 607,581
SUBCONSULTANT	HOURS										
Allied Geotechnical Engineers, Inc.			\$ 48,975								\$ 48,975
Chambers Group, Inc.							\$ 5,533				\$ 5,533
Garbini & Garbinia Landscape Architecture, Inc.					\$ 14,823						\$ 14,823
SUBTOTAL SUBCONSULTANT		\$ -	\$ 48,975	\$ -	\$ 14,823	\$ -	\$ 5,533	\$ -	\$ -	\$ -	\$ 69,331
REPRODUCTION											\$ -
Plans and Specifications											\$ -
Black and White		\$ 70									\$ 70
Color		\$ 300									\$ 300
SUBTOTAL REPRODUCTION		\$ 370	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 370
TRAVEL											\$ -
a. Transportation											\$ -
b. Per Diem		\$ 1,088									\$ 1,088
HOTEL (MAXIMUM FED. RATE)		\$ 2,499									\$ 2,499
M&IE (MAXIMUM \$50/day)											\$ -
c. Mileage		\$ 4,923									\$ 4,923
SUBTOTAL TRAVEL		\$ 8,510	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,510
TOTAL		\$ 33,214	\$ 78,247	\$ 135,413	\$ 29,331	\$ 25,476	\$ 10,423	\$ 337,639	\$ 20,259	\$ 15,788	\$ 685,791



City of San Diego
Bannock Avenue Neighborhood
Streetscape Enhancements

ID	Task Name	Duration	Start	Finish	2011																								2012																						
					July		August		Septe		Octobe		Novem		Decem		Januar		Febru		March		April		May		June		July		August		Septe		Octobe		Novem		Decem		Januar										
					E	B	M	E	E	B	M	E	E	B	M	E	E	B	M	E	E	B	M	E	E	B	M	E	E	B	M	E	E	B	M	E	E	B	M	E	E	B	M	E	E	B	M	E	E	B	M
1	Project Summary	655 days	Mon 6/28/10	Fri 12/28/12	[Summary bar]																																														
2	Task 1: Project Administration	131 wks	Mon 6/28/10	Fri 12/28/12	[Task bar]																																														
3	Kick-off Meeting	1 hr	Thu 7/1/10	Thu 7/1/10	[Milestone diamond]																																														
4	Task 2: Geotechnical Investigation	50 days	Mon 6/28/10	Fri 9/3/10	[Task bar]																																														
5	Task 2: Final Geotechnical Report	10 wks	Mon 6/28/10	Fri 9/3/10	[Task bar]																																														
6	Task 3: Design Analysis	140 days	Mon 6/28/10	Fri 1/7/11	[Task bar]																																														
7	Subtask 3.1: Preliminary Design Analysis Report	15 wks	Mon 6/28/10	Fri 10/8/10	[Task bar]																																														
8	Subtask 3.1: City Reveiw of Preliminary Design Analysis Report	3 wks	Mon 10/11/10	Fri 10/29/10	[Task bar]																																														
9	Subtask 3.2: Draft Design Analysis Report	5 wks	Mon 11/1/10	Fri 12/3/10	[Task bar]																																														
10	Subtask 3.2: City Review of Draft Design Analysis Report	2 wks	Mon 12/6/10	Fri 12/17/10	[Task bar]																																														
11	Subtask 3.3: Final Design Analysis Report	3 wks	Mon 12/20/10	Fri 1/7/11	[Task bar]																																														
12	Task 4: Architectural Schematic Design	60 days	Mon 3/28/11	Fri 6/17/11	[Task bar]																																														
13	Task 4: Five (5) Conceptual Drawings and	12 wks	Mon 3/28/11	Fri 6/17/11	[Task bar]																																														
14	Task 4: Three (3) Landscape Options	12 wks	Mon 3/28/11	Fri 6/17/11	[Task bar]																																														
15	Task 5: Community Outreach and Education	120 days	Mon 6/20/11	Fri 12/2/11	[Task bar]																																														
16	Task 5: Attend four (4) community planning meetings	24 wks	Mon 6/20/11	Fri 12/2/11	[Task bar]																																														
17	Task 6: Environmental Assessment	60 days	Mon 6/20/11	Fri 9/9/11	[Task bar]																																														
18	Task 6: Application for RWQCB Permits	12 wks	Mon 6/20/11	Fri 9/9/11	[Task bar]																																														
19	Task 7: Final Engineering Design	185 days	Mon 1/10/11	Fri 9/23/11	[Task bar]																																														
20	Subtask 7.8.1: 30% Plans	8 wks	Mon 1/10/11	Fri 3/4/11	[Task bar]																																														
21	Subtask 7.8.1: City Review of 30% Plans	3 wks	Mon 3/7/11	Fri 3/25/11	[Task bar]																																														
22	Subtask 7.8.2: 60% Plans and Specifications	9 wks	Mon 3/28/11	Fri 5/27/11	[Task bar]																																														
23	Subtask 7.8.2: City Review of 60% Design	3 wks	Mon 5/30/11	Fri 6/17/11	[Task bar]																																														
24	Subtask 7.8.3: 100% Plans and Specifications	6 wks	Mon 6/20/11	Fri 7/29/11	[Task bar]																																														
25	Subtask 7.8.3: City Review of 100% Design	3 wks	Mon 8/1/11	Fri 8/19/11	[Task bar]																																														
26	Subtask 7.8.4: Final Plans and Specifications	4 wks	Mon 8/22/11	Fri 9/16/11	[Task bar]																																														
27	Subtask 7.8.4: City Review of Final Design	1 wk	Mon 9/19/11	Fri 9/23/11	[Task bar]																																														
28	Task 8: Bid Support	25 days	Mon 9/26/11	Fri 10/28/11	[Task bar]																																														
29	Task 8: Attend pre-bid meeting	1 hr	Mon 10/10/11	Mon 10/10/11	[Milestone diamond]																																														
30	Task 8: Answer up to 5 RFI's	5 wks	Mon 9/26/11	Fri 10/28/11	[Task bar]																																														
31	Task 9: Construction Support	305 days	Mon 10/31/11	Fri 12/28/12	[Task bar]																																														
32	Review up to 25 Submittals and Resubmittals	6 wks	Mon 10/31/11	Fri 12/9/11	[Task bar]																																														
33	Respond up to 15 RFIs.	6 wks	Mon 10/31/11	Fri 12/9/11	[Task bar]																																														
34	Prepare up to 3 construction changes and attend up to 5 construction meetings	6 wks	Mon 10/31/11	Fri 12/9/11	[Task bar]																																														
35	Provide up to 1 day of final walk through and start up assistance	1 day	Mon 1/2/12	Mon 1/2/12	[Milestone diamond]																																														
36	Evaluate up to 5 contractor's request for change orders	52 wks	Mon 1/2/12	Fri 12/28/12	[Task bar]																																														