

Council Meeting of
August 7, 2007

Honorable Mayor and Members
of the City Council
City Hall
Torrance, California

Members of the Council:

Subject: Public Works and Community Services – Appropriate an additional \$280,000 relative to increased grant funding, and award of a Consulting Services Agreement to Moffatt & Nichol for the Madrona Marsh Restoration and Enhancement Project, CIP No. I-77. Expenditure: \$294,927.

RECOMMENDATION

The Public Works Director and Acting Community Services Director recommend that the City Council:

1. Appropriate \$280,000 from the Water Enterprise Fund for the Madrona Marsh Restoration and Enhancement Project, CIP No. I-77 to cover an increase in reimbursable grant funding for the City of Torrance from \$500,000 to \$780,000, from the California State Coastal Conservancy; and
2. Award a Consulting Services Agreement in the amount of \$294,927 to Moffatt & Nichol of Long Beach, California to perform design consulting services for the Madrona Marsh Restoration and Enhancement Project, CIP No. I-77.

Funding

Funding is available through a \$780,000 grant awarded by the California State Coastal Conservancy via the Santa Monica Bay Restoration Commission for the Madrona Marsh Restoration and Enhancement Project. This is a reimbursement grant with funds appropriated from and reimbursed to the Water Enterprise Fund.

BACKGROUND

In 2002, the City received and the City Council accepted a \$780,000 reimbursement grant agreement from the California State Coastal Conservancy for the Madrona Marsh Restoration and Enhancement Project. The original scope of work included \$280,000 for construction of 2.5 miles of recycled water pipeline by the West Basin Municipal Water District.

In January 2003, City Council appropriated \$500,000 from the Water Enterprise Fund for the Madrona Marsh Restoration and Enhancement Project. These funds are reimbursed to the Water Enterprise Fund by the State as costs are incurred. Appropriations for the remaining \$280,000 were to have been requested as part of a proposed reimbursement agreement with the West Basin Municipal Water District towards the construction cost of their recycled water pipeline to supply water to the preserve.

The first task of the project was to analyze the affects of recycled water, potable water, and storm water runoff on the marsh and vernal pools, and prepare a White Paper technical memorandum presenting the results. The White Paper concluded that all water sources required some level of treatment prior to use in the preserve, but both recycled water and potable water would require expensive mechanical treatment. Storm water runoff could be treated more economically with passive wetlands treatment. Since the results of the White Paper disqualified the use of recycled water in the marsh, the Santa Monica Bay Restoration Commission subsequently approved the use of the \$280,000 for the restoration of the marsh, pending the use of the Chevron property at the southwest corner of the preserve at Sepulveda Boulevard and Madrona Avenue for passive wetlands treatment.

Discussions with Chevron, and coordination of an environmental site assessment of the property, took over two years to complete. The results of the assessment did not show any evidence of hazardous conditions on the site, and the Parks and Recreation Department are negotiating the proposed property transfer.

This project was also put on hold while the Madrona Marsh Master Plan was developed and approved.

ANALYSIS

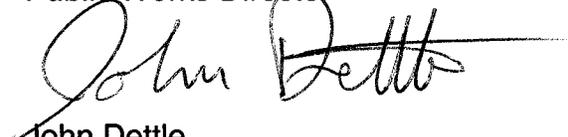
In October 2003, three proposals were received for design services for the original scope of work. The project team determined that Moffatt & Nichol Engineers are the most qualified firm and had the most reasonable fee. They have since revised their scope of work and fee, based on the results of the White Paper, the Madrona Marsh Master Plan and the proposed transfer of ownership of the Chevron property.

Their revised scope and fee not to exceed \$294,927 has been reviewed and approved by the project team. The fee includes all recommendations from the Madrona Marsh Master Plan with the understanding that the grant funds cannot cover all related construction costs. When the design is completed, staff will decide which parts of the project will be deferred for supplemental grant funding.

Design elements include storm water collection and treatment with passive wetlands treatment on the Chevron site, debris removal, exotic tree and plant removal, native plants and trees establishment, weed control, fine grading to expand the wetlands, gopher abatement, educational materials and a viewing platform.

Respectfully submitted,

ROBERT J. BESTE
Public Works Director



By John Dettle
Project Manager

CONCUR:



Robert J. Beste
Public Works Director



Norm Reeder
Acting Community Services Director



LeRoy J. Jackson
City Manager

for

Attachment: A) Consulting Services Agreement with Moffatt & Nichol

CONSULTING SERVICES AGREEMENT

This CONSULTING SERVICES AGREEMENT (“Agreement”) is made and entered into as of August 7, 2007 (the “Effective Date”), by and between the CITY OF TORRANCE, a municipal corporation (“CITY”), and Moffatt & Nichol, a California Corporation (“CONSULTANT”).

RECITALS:

- A. CITY wishes to retain the services of an experienced and qualified CONSULTANT to prepare final engineering documents for the restoration and enhancement of Madrona Marsh.
- B. CONSULTANT represents that it is qualified to perform those services.

AGREEMENT:

1. SERVICES TO BE PERFORMED BY CONSULTANT

CONSULTANT will provide the services listed in the Scope of Services attached as Exhibit A. CONSULTANT warrants that all work and services set forth in the Scope of Services will be performed in a competent, professional and satisfactory manner.

2. TERM

Unless earlier terminated in accordance with Paragraph 4 below, this Agreement will continue in full force and effect from the Effective Date through August 7, 2008.

3. COMPENSATION

- A. CONSULTANT’s Fee.

For services rendered pursuant to this Agreement, CONSULTANT will be paid in accordance with the Compensation Schedule attached as Exhibit B, provided, however, that in no event will the total amount of money paid the CONSULTANT, for services initially contemplated by this Agreement, exceed the sum of \$294, 927.00 (“Agreement Sum”), unless otherwise first approved in writing by CITY.

- B. Schedule of Payment.

Provided that the CONSULTANT is not in default under the terms of this Agreement, upon presentation of an invoice, CONSULTANT will be paid monthly the fees described in Paragraph 3.A. above, according to the Compensation Schedule. Payment will be due within 30 days after the date of the monthly invoice.

4. TERMINATION OF AGREEMENT

- A. Termination by CITY for Convenience.

- 1. CITY may, at any time, terminate the Agreement for CITY’s convenience and without cause.

2. Upon receipt of written notice from CITY of such termination for CITY's convenience, CONSULTANT will:
 - a. cease operations as directed by CITY in the notice;
 - b. take actions necessary, or that CITY may direct, for the protection and preservation of the work; and
 - c. except for work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.
3. In case of such termination for CITY's convenience, CONSULTANT will be entitled to receive payment for work executed; and costs incurred by reason of such termination, along with reasonable overhead and profit on the work not executed.

B. Termination for Cause.

1. If either party fails to perform any term, covenant or condition in this Agreement and that failure continues for 15 calendar days after the nondefaulting party gives the defaulting party written notice of the failure to perform, this Agreement may be terminated for cause; provided, however, that if during the notice period the defaulting party has promptly commenced and continues diligent efforts to remedy the default, the defaulting party will have such additional time as is reasonably necessary to remedy the default.
2. In the event this Agreement is terminated for cause by the default of the CONSULTANT, the CITY may, at the expense of the CONSULTANT and its surety, complete this Agreement or cause it to be completed. Any check or bond delivered to the CITY in connection with this Agreement, and the money payable thereon, will be forfeited to and remain the property of the CITY. All moneys due the CONSULTANT under the terms of this Agreement will be retained by the CITY, but the retention will not release the CONSULTANT and its surety from liability for the default. Under these circumstances, however, the CONSULTANT and its surety will be credited with the amount of money retained, toward any amount by which the cost of completion exceeds the Agreement Sum and any amount authorized for extra services.
3. Termination for cause will not affect or terminate any of the rights of the CITY as against the CONSULTANT or its surety then existing, or which may thereafter accrue because of the default; this provision is in addition to all other rights and remedies available to the CITY under law.

C. Termination for Breach of Law.

In the event the CONSULTANT or any of its officers, directors, shareholders, employees, agents, subsidiaries or affiliates is convicted (i) of a criminal offense as an incident to obtaining or attempting to obtain a public or private contract or subcontract, or in the performance of a contract or subcontract; (ii) under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense indicating a lack of business integrity or business honesty which currently, seriously, and directly affects responsibility as a public consultant or contractor; (iii) under state or federal antitrust statutes arising out of the submission of bids or proposals; or (iv) of violation of Paragraph 19 of this Agreement; or for any other cause the CITY determines to be so serious and compelling as to affect CONSULTANT's responsibility as a public consultant or contractor, including but not limited to, debarment by another governmental agency, then the CITY reserves the unilateral right to terminate this Agreement or to impose such other sanctions (which may include financial sanctions, temporary suspensions or any other condition deemed appropriate short of termination) as it deems proper. The CITY will not take action until CONSULTANT has been given notice and an opportunity to present evidence in mitigation.

5. **FORCE MAJEURE**

If any party fails to perform its obligations because of strikes, lockouts, labor disputes, embargoes, acts of God, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental control, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond the reasonable control of the party obligated to perform, then that party's performance shall be excused for a period equal to the period of such cause for failure to perform.

6. **RETENTION OF FUNDS**

CONSULTANT authorizes CITY to deduct from any amount payable to CONSULTANT (whether or not arising out of this Agreement) any amounts the payment of which may be in dispute or that are necessary to compensate CITY for any losses, costs, liabilities, or damages suffered by CITY, and all amounts for which CITY may be liable to third parties, by reason of CONSULTANT's negligent acts or omissions or willful misconduct in performing or failing to perform CONSULTANT's obligations under this Agreement. In the event that any claim is made by a third party, the amount or validity of which is disputed by CONSULTANT, or any indebtedness exists that appears to be the basis for a claim of lien, CITY may withhold from any payment due, without liability for interest because of the withholding, an amount sufficient to cover the claim. The failure of CITY to exercise the right to deduct or to withhold will not, however, affect the obligations of CONSULTANT to insure, indemnify, and protect CITY as elsewhere provided in this Agreement.

7. **CITY REPRESENTATIVE**

Robert J. Beste, Public Works Director, is designated as the “City Representative,” authorized to act in its behalf with respect to the work and services specified in this Agreement and to make all decisions in connection with this Agreement. Whenever approval, directions, or other actions are required by CITY under this Agreement, those actions will be taken by the City Representative, unless otherwise stated. The City Manager has the right to designate another City Representative at any time, by providing notice to CONSULTANT.

8. **CONSULTANT REPRESENTATIVE(S)**

The following principal(s) of CONSULTANT are designated as being the principal(s) and representative(s) of CONSULTANT authorized to act in its behalf with respect to the work specified in this Agreement and make all decisions in connection with this Agreement:

Michael J. McCarthy, P.E., Vice-President
Chris Webb, Senior Coastal Scientist

9. **INDEPENDENT CONTRACTOR**

The CONSULTANT is, and at all times will remain as to CITY, a wholly independent contractor. Neither CITY nor any of its agents will have control over the conduct of the CONSULTANT or any of the CONSULTANT’s employees, except as otherwise set forth in this Agreement. The CONSULTANT may not, at any time or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of CITY.

10. **BUSINESS LICENSE**

The CONSULTANT must obtain a City business license prior to the start of work under this Agreement, unless CONSULTANT is qualified for an exemption.

11. **OTHER LICENSES AND PERMITS**

CONSULTANT warrants that it has all professional, contracting and other permits and licenses required to undertake the work contemplated by this Agreement.

12. **FAMILIARITY WITH WORK**

By executing this Agreement, CONSULTANT warrants that CONSULTANT (a) has thoroughly investigated and considered the scope of services to be performed, (b) has carefully considered how the services should be performed, and (c) fully understands the facilities, difficulties and restrictions attending performance of the services under this Agreement. If the services involve work upon any site, CONSULTANT warrants that CONSULTANT has or will investigate the site and is or will be fully acquainted with the conditions there existing, prior to commencement of services set forth in this Agreement. Should CONSULTANT discover any latent or unknown conditions that will materially affect the performance of the services set forth in this Agreement, CONSULTANT must immediately inform CITY of that fact and may not proceed except at CONSULTANT’s risk until written instructions are received from CITY.

13. CARE OF WORK

CONSULTANT must adopt reasonable methods during the term of the Agreement to furnish continuous protection to the work, and the equipment, materials, papers, documents, plans, studies and other components to prevent losses or damages, and will be responsible for all damages, to persons or property, until acceptance of the work by CITY, except those losses or damages as may be caused by CITY's own negligence.

14. CONSULTANT'S ACCOUNTING RECORDS; OTHER PROJECT RECORDS

Records of the CONSULTANT's time pertaining to the project, and records of accounts between CITY and the CONSULTANT, will be kept on a generally recognized accounting basis. CONSULTANT will also maintain all other records, including without limitation specifications, drawings, progress reports and the like, relating to the project. All records will be available to CITY during normal working hours. CONSULTANT will maintain these records for three years after final payment.

15. INDEMNIFICATION

CONSULTANT will indemnify, pay for cost of defense, and hold harmless CITY, the City Council, each member thereof, present and future, its officers, agents and employees from and against any and all liability, expenses, including defense costs and legal fees, and claims for damages whatsoever, including, but not limited to, those arising from breach of contract, bodily injury, death, personal injury, property damage, loss of use, or property loss. The obligation to indemnify, pay for cost of defense, and hold harmless includes, but is not limited to, any liability or expense, including defense costs and legal fees, arising from the negligent acts or omissions, or willful misconduct of CONSULTANT, its officers, employees, agents, subconsultants or vendors. It is further agreed, CONSULTANT's obligations to indemnify, defend and hold harmless will apply, but only to the extent covered by CONSULTANT's negligence, even in the event of concurrent negligence on the party of CITY, the City Council, each member thereof, present and future, or its officers, agents and employees, except for liability resulting from the sole negligence or willful misconduct of CITY, its officers, employees or agents. Payment by CITY is not a condition precedent to enforcement of this indemnity.

16. NON-LIABILITY OF CITY OFFICERS AND EMPLOYEES

No officer or employee of CITY will be personally liable to CONSULTANT, in the event of any default or breach by the CITY or for any amount that may become due to CONSULTANT.

17. INSURANCE

- A. CONSULTANT must maintain at its sole expense the following insurance, which will be full coverage not subject to self insurance provisions:
1. Automobile Liability, including owned, non-owned and hired vehicles, with at least the following limits of liability:
 - a. Primary Bodily Injury with limits of at least \$500,000 per person, \$1,000,000 per occurrence; and
 - b. Primary Property Damage of at least \$250,000 per occurrence; or
 - c. Combined single limits of \$1,000,000 per occurrence.
 2. General Liability including coverage for premises, products and completed operations, independent contractors/vendors, personal injury and contractual obligations with combined single limits of coverage of at least \$1,000,000 per occurrence.
 3. Professional liability insurance with limits of at least \$1,000,000 per occurrence.
 4. Workers' Compensation with limits as required by the State of California and Employers Liability with limits of at least \$1,000,000.
- B. The insurance provided by CONSULTANT will be primary and non-contributory
- C. CITY, the City Council and each member thereof, members of boards and commissions, every officer, agent, official, employee and volunteer must be named as additional insured under the automobile and general liability policies.
- D. CONSULTANT must provide certificates of insurance and/or endorsements to the City Clerk of the City of Torrance before the commencement of work.
- E. Each insurance policy required by this Paragraph must contain a provision that no termination, cancellation or change of coverage can be made without thirty days notice to CITY.

18. SUFFICIENCY OF INSURERS AND SURETIES

Insurance or bonds required by this Agreement will be satisfactory only if issued by companies admitted to do business in California, rated "B+" or better in the most recent edition of Best's Key Rating Guide, and only if they are of a financial category Class VII or better, unless these requirements are waived by the Risk Manager of CITY ("Risk Manager") due to unique circumstances. In the event the Risk Manager determines that the work or services to be performed under this Agreement creates an increased or decreased risk of loss to CITY, the CONSULTANT agrees that the minimum limits of any insurance policies or performance bonds required by this Agreement may be changed

accordingly upon receipt of written notice from the Risk Manager; provided that CONSULTANT will have the right to appeal a determination of increased coverage by the Risk Manager to the City Council of CITY within 10 days of receipt of notice from the Risk Manager.

19. CONFLICT OF INTEREST

- A. No officer or employee of the CITY may have any financial interest, direct or indirect, in this Agreement, nor may any officer or employee participate in any decision relating to the Agreement that effects the officer or employee's financial interest or the financial interest of any corporation, partnership or association in which the officer or employee is, directly or indirectly interested, in violation of any law, rule or regulation.
- B. No person may offer, give, or agree to give any officer or employee or former officer or employee, nor may any officer or employee solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation or any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any way pertaining to any program requirement, contract or subcontract, or to any solicitation or proposal.

20. NOTICE

- A. All notices, requests, demands, or other communications under this Agreement will be in writing. Notice will be sufficiently given for all purposes as follows:
1. Personal delivery. When personally delivered to the recipient: notice is effective on delivery.
 2. First Class mail. When mailed first class to the last address of the recipient known to the party giving notice: notice is effective three mail delivery days after deposit in an United States Postal Service office or mailbox.
 3. Certified mail. When mailed certified mail, return receipt requested: notice is effective on receipt, if delivery is confirmed by a return receipt.
 4. Overnight delivery. When delivered by an overnight delivery service, charges prepaid or charged to the sender's account: notice is effective on delivery, if delivery is confirmed by the delivery service.
 5. Facsimile transmission. When sent by fax to the last fax number of the recipient known to the party giving notice: notice is effective on receipt. Any notice given by fax will be deemed received on the next business day if it is received after 5:00 p.m. (recipient's time) or on a non-business day.

6. Addresses for purpose of giving notice are as follows:

CONSULTANT: Moffatt & Nichol
3780 Kilroy Airport Way, Suite 600
Long Beach, CA 90806
Ph: (562) 426-9551
Fax: (562) 424-7489

CITY: City Clerk
City of Torrance
3031 Torrance Boulevard
Torrance, CA 90509-2970
Fax: (310) 618-2931

- B. Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified, will be deemed effective as of the first date the notice was refused, unclaimed or deemed undeliverable by the postal authorities, messenger or overnight delivery service.
- C. Either party may change its address or fax number by giving the other party notice of the change in any manner permitted by this Agreement.

21. PROHIBITION AGAINST ASSIGNMENT AND SUBCONTRACTING

This Agreement and all exhibits are binding on the heirs, successors, and assigns of the parties. The Agreement may not be assigned or subcontracted by either CITY or CONSULTANT without the prior written consent of the other.

22. INTEGRATION; AMENDMENT

This Agreement represents the entire understanding of CITY and CONSULTANT as to those matters contained in it. No prior oral or written understanding will be of any force or effect with respect to the terms of this Agreement. The Agreement may not be modified or altered except in writing signed by both parties.

23. INTERPRETATION

The terms of this Agreement should be construed in accordance with the meaning of the language used and should not be construed for or against either party by reason of the authorship of this Agreement or any other rule of construction that might otherwise apply.

24. SEVERABILITY

If any part of this Agreement is found to be in conflict with applicable laws, that part will be inoperative, null and void insofar as it is in conflict with any applicable laws, but the remainder of the Agreement will remain in full force and effect.

25. TIME OF ESSENCE

Time is of the essence in the performance of this Agreement.

26. GOVERNING LAW; JURISDICTION

This Agreement will be administered and interpreted under the laws of the State of California. Jurisdiction of any litigation arising from the Agreement will be in Los Angeles County, California.

27. COMPLIANCE WITH STATUTES AND REGULATIONS

CONSULTANT will be knowledgeable of and will comply with all applicable federal, state, county and city statutes, rules, regulations, ordinances and orders.

28. WAIVER OF BREACH

No delay or omission in the exercise of any right or remedy by a nondefaulting party on any default will impair the right or remedy or be construed as a waiver. A party's consent or approval of any act by the other party requiring the party's consent or approval will not be deemed to waive or render unnecessary the other party's consent to or approval of any subsequent act. Any waiver by either party of any default must be in writing and will not be a waiver of any other default concerning the same or any other provision of this Agreement.

29. ATTORNEY'S FEES

Except as provided for in Paragraph 15, in any dispute, litigation, arbitration, or other proceeding by which one party either seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing party will be awarded reasonable attorney's fees, together with any costs and expenses, to resolve the dispute and to enforce any judgment.

30. EXHIBITS

All exhibits identified in this Agreement are incorporated into the Agreement by this reference.

31. CONSULTANT'S AUTHORITY TO EXECUTE

The person(s) executing this Agreement on behalf of the CONSULTANT warrant that (i) the CONSULTANT is duly organized and existing; (ii) they are duly authorized to execute this Agreement on behalf of the CONSULTANT; (iii) by so executing this Agreement, the CONSULTANT is formally bound to the provisions of this Agreement;

and (iv) the entering into this Agreement does not violate any provision of any other Agreement to which the CONSULTANT is bound.

CITY OF TORRANCE
a Municipal Corporation

Moffatt & Nichol
a California Corporation

Frank Scotto, Mayor

By: _____
Michael J. McCarthy, P.E.
Vice-President

ATTEST:

Sue Herbers
City Clerk

APPROVED AS TO FORM:
JOHN L. FELLOWS III
City Attorney

By: _____

Attachments: Exhibit A Scope of Services
 Exhibit B Compensation Schedule

Revised: 1/30/01

EXHIBIT A
SCOPE OF SERVICES

PROPOSAL FROM MOFFATT & NICHOL

MADRONA MARSH REHABILITATION AND ENHANCEMENT PROJECT

This revised scope of work is in response to the City's revised Scope issued on October 19, 2006. Revisions are highlighted in yellow below. This section of the proposal describes the technical approach to develop the final design for the Madrona Marsh Restoration and Enhancement project and supporting the City through construction. The strength of our approach is evidenced by a multidisciplinary team that has worked together before on restoration efforts. As such, we can solve problems and address unique site challenges successfully, while streamlining the design process. We have visited the site several times and have developed a relatively thorough understanding of conditions and project objectives.

The scope of work described below also includes our standard practices of a comprehensive project management system and an established quality assurance / quality control program to maximize the value to our clients.

Task 1 - Preliminary Design

Task 1-1 Initial Meeting

As discussed in the scope of services included with the RFP, there will be a kick-off meeting with the City staff to discuss the scope and schedule for the final design of the Madrona Marsh restoration and enhancement project. For the kick-off meeting, the consulting team will be represented by those specialists responsible for the major technical disciplines required for the project which includes project management, engineering, ecology, and architecture.

The material provided by the city as discussed in Exhibit D of the original RFP dated September 25, 2003 will be provided to the team during the initial kick-off meeting or soon thereafter. Any other guidance or requirements by the City will also be discussed during the kick-off meeting.

Task 1-2 Data Gathering

Previous studies and data for Madrona Marsh and the surrounding areas will be assembled to assist the project team in preparing the restoration plan. Major sources of these studies will include the City, Friends of Madrona Marsh, West Basin Municipal Water District, U.S. Army Corps of Engineers, Caltrans, Los Angeles County, and Chevron. Data will include available engineering drawings for utilities and facilities for water lines, storm drains and others as appropriate in the vicinity of the Marsh. Members of the proposed project team also have prior experience with the Madrona Marsh and already have some of these data. Environmental documentation previously prepared for the project to obtain the necessary permits will also be a major source of existing data.

The Madrona Marsh Preserve and Nature Center Management Plan and the "White Paper" Technical Memorandum addressing the quality and impact of the marsh's water sources and treatment types will be the basis for completion of subsequent tasks

Task 1-3 Utility Research

Complete utility research and documentation services will be provided to accurately record information for the project design. The specific tasks to be undertaken are discussed in the following section.

Task 1-3a Contact Underground Services Alert

Underground Services Alert will be contacted to acquire a list of registered utility companies that own or operate utilities in the project area. This list will not be considered a complete list of utility operators in the area, and will be used to supplement the local utility contact information only.

Task 1-3b Identify Local Utilities

A list of utility companies will be compiled from USA and local utility agencies (through City personnel and local utility operators including oil refineries).

Task 1-3c Preliminary Contact with Utilities

A preliminary notice will be sent to each utility company requesting utility information for the project area. Responses will be documented and information provided to the utilities as required. Particularly close communications will be maintained with West Basin Municipal Water District and City of Torrance for design of the recycled water connections and storm drainage systems.

Task 1-3d Second Contact with Utilities

A second utility notice will be sent out that includes preliminary plans of the project for the utility company/agency to confirm the locations of their facilities. Conflicts may further be identified from this second notice. Sketches and/or plans will be prepared as necessary to obtain approval for recycled water connections and storm drain routing. The plans will be prepared for assistance in obtaining permits, but others will obtain the necessary permits.

Task 1-3e Third Contact with Utilities

A third utility notification will be made with final design plans for their record information and to aid in coordination during construction.

Task 1-3f Final Documentation of Utility Research

A final documentation of all notices and responses will be prepared and provided to the City.

Task 1-4 Design Elements

Task 1-4a Project Area Base Map

A photogrammetric and land survey will be conducted to produce a base map of the Marsh. The photogrammetric survey will be conducted to Map Accuracy Standards for 0.5-foot contours over the site (wetlands and uplands). The base map will include adjacent roadways. The datum for this survey will be on the State Plane Coordinate System (NAD83) and the vertical datum will be adjusted to City, County, or USGS benchmarks as determined by research with the City of Torrance. Conventional survey techniques will also be used to provide additional survey points under vegetation canopies and areas covered by water.

Water areas will be surveyed on a 50-foot grid in order to provide the 0.5-foot contours to match the overall site vernal pool area survey. Riparian wetland areas will be mapped to contour intervals of 0.5 feet.

The utility information collected in Task 1-3 will be incorporated with the base map to delineate all utility lines in the same coordinate system used for the project design. This process will assist in identifying active or abandoned utility lines with coordination of the surface features picked up by the surveyor.

Task 1-4b Wetland Delineation and Survey

Using standard methods developed for more formal wetland delineations, the edge of the marsh wetlands will be established by placing pin-flags onsite. These locations will be specified using current survey technology and placed on the base maps. Two methods of edge location are possible on this project; standard line-of-sight surveying or GPS. We will rely on standard survey techniques for most of the work and only use GPS for areas that are difficult to access under the tree cover. It will be possible to identify the primary marsh area edges to a high degree of precision by using standard flagging along this edge. For areas occurring within the vegetation canopies and not easily seen from the outside, the standard survey method will be more difficult, and the degree of accuracy may not be warranted against the amount of time it would require to shoot the edge. At these locations a GPS unit with accuracy below one meter will be used. We are encouraging possible use of both methods to be used as a means of managing field time.

Task 1-4c Bathymetric Survey of Open Water Areas

It is assumed that the portion of the Marsh submerged during the course of preparing the final design can be surveyed with wading survey crewmembers. The survey of these areas is described in Task 1-4a above.

Task 1-4d Habitat Survey

Following several hours of onsite field inspection, a number of habitat or vegetation types can be identified. The position of Madrona Marsh in the context of the geologic dune complex of coastal Los Angeles county presents a more complicated situation. In many respects, the back dune area possesses attributes of dunes but also that of coastal sage uplands. This latter condition may be the result of past land uses, neglect and abuse, or other related urban activities. The presence of the access road to the oil

drilling platform has characteristics unlike dune soil, however very friable sandy soil exists just off the road, which is very indicative of dune habitat. These characteristics are not universally present throughout the non wetland areas.

Vegetation communities do not, however, equate to different habitats. This distinction will be examined and brought out in the analysis. The locations of high weed populations have also changed the characteristics of the flora and the soil. Dunes typically have limited vegetation with significant areas of open soil exposed to the elements. Dense foliage, such as the weed assemblages in various locations, has created microhabitats with microclimates that have perpetuated changes in the soil structure. By using a flagging and GPS system and standard surveying methods it will be possible to define the boundaries of the various vegetation communities. We propose to conduct surveys over the entire site, locating edges or changes in habitat, or vegetation type. Using a marking system that can be retrieved later will form the basis for surveying or GPS instrumentation to place points on the base map. Prior location of points to be located will facilitate efficient use of surveyor's time.

Task 1-4e Biological Resources Inventory

Seasonal field surveys will be performed in upland and aquatic areas during two seasons (fall and spring), and vernal pool features will be surveyed one time for invertebrates and floristic species during their respective seasonal growth peaks. This inventory will include review of existing biological data and regional environmental documents and records. Survey forms will be developed and used in the field. Our team welcomes as much assistance from local volunteers and City staff as possible, with the caveat that all recorded data must be taken systematically for inclusion into the project data base. Our biologists will work with City staff to develop the systematic data collection methods. A draft and final Biota Inventory Report will be prepared presenting results.

Task 1-4f Water Level Control and Management Plan

The success of the restoration project will depend on how the water resources available for the Marsh are utilized. A water management plan will be developed which will address areas to be submerged, depth of water coverage, and the time periods for inundation to achieve the habitat goals. The management plan will also include estimates of water volume to meet these requirements. These water volume estimates will be broken down by season and the intensity of the wet weather season.

Seasonal water level management in the marsh will be included in the design. Water level control is needed for nesting, fledgling and predation protection of the waterfowl in the marsh, and to maximize use of habitat for the various resident and migratory species. A brief letter report will be prepared presenting a narrative plan and showing structures or designs for the management.

Task 1-4g Habitat Restoration and Enhancement

Grading Plan - Expansion of the existing wetlands will be determined in coordination with the hydrologist and civil engineers addressing water drainage on site. Final determination will be the result of water supply limitations, suitable substrate, elevations and quantity of soil requiring excavation. It is expected to be an iterative process handled concurrently with the design of the water quality improvement methods for runoff water. A grading plan will be prepared to meet the habitat restoration requirements dictated by the project goals. The plan will be produced at 1"=50' scale and will include earthwork quantities.

Projected Saturated Wetland Fringe Zones - Following determination of the amount of grading, edge elevations, and an evaluation of existing wetland fringe characteristics, it will be possible to project the probable limits of the new wetland border. Input from the hydrologist and/or engineer will confirm anticipated elevations of the new marsh and subsequently the new wetland fringe zone.

Vegetation Transition Zones/Tree Planting Plan - There are a number of native tree species that can be established on site. Exact species locations will be determined by the amount of water, or soil saturation and duration that is expected. Designs that are suitable for urban situations and will serve to enhance the biological attributes of the marsh can be developed. This task will require coordination with the landscape architect for irrigation support and interviews with City personnel and/or Friends of Madrona Marsh.

The tree planting concept presented in the RFP shows planting to occur in the fill location near the drilling platform, and near the northwest corner of the sump area, in addition to the added function of providing tree planting to control noise and light pollution on site primarily along Sepulveda Boulevard. The existing trees and lower traffic on Prairie and Plaza de Amo should not require added planting. Along Maple, several trees currently exist, however sufficient areas can be planted to increase the barrier effect. Also we propose that a multilayer planting scheme be used where bushes and multi-stem trees are used to increase the foliage density. Noise reduction by vegetation is an often misunderstood field of environmental regulation. Studies have shown that it requires almost 100 feet of dense forest vegetation to reduce the noise by 3 dBa. The human ear "perceives" a reduction when it does not actually occur. A soil topped berm is more effective in noise reduction which can be as much as 5-10 dBa. Wildlife in an urban landscape have generally adapted to the noise environment. However, if noise is intrusive to human visitors, the proposal to do extensive planting along Sepulveda and the sump area may very well provide the best solutions. The remaining three roads probably do not create noise at a sufficient level where even the perception of noise abatement would have an effect.

Gopher Abatement Plan - Several methods of gopher removal have been used in the industry. The specifics of the location and density of the problem will determine the most effective and economical approach. This task will

include interviews with pest extermination experts and is viewed as a simple pest control issue. The resulting abatement plan may or may not be surface destructive, conditional upon the extermination method used. Some populations occur in the wetland areas at the southwest corner of the property. The City's goal is to prevent gophers from entering upland and planted areas and roads/trails for a period of one year.

Demolition and Debris Removal – Existing debris in the project site will be identified and locations illustrated on the base map. Removal procedures will be specified where necessary.

Site Improvement Plan - Access roads and trails can pose some threats to the adjacent landscape if not properly designed or located. Trails and an observation deck that serves as a vantage point for educational purposes will be sited following results of the habitat survey and proposed wetland expansion design. Signage information can range from the discussion of island landscapes in an urban environment, to the connectivity of this wetland and the impacts to off site, and more significant resources, such as Santa Monica Bay. Specific notes on the geology and historical facts of the area can also serve to demonstrate the relationship of humans with the natural world.

Trail layout will be done assuming that none of the trails will be constructed formally with a decomposed granite surface, but will be like existing small foot trails on grade. No designs for new, formal trails with runner boards and a new surface are proposed.

We understand that the City requests our assistance in preparing the *content* for one new sign board at the observation platform near the sump (Personal communication with Tracy Drake by Chris Webb on 11/2/06). Any design of the sign for construction by our team would utilize existing designs for signs already installed by the City. Our team will not have to generate new construction plans and specifications for this new sign.

The City also requires design of one new overlook of the sump. We propose to use an existing design of a similar overlook rather than designing a new, unique one to save effort and costs. The existing overlook is shown in the attached figure as designed for a similar effort. We assume that this overlook is to be included in the plan set for this proposal. A different and new overlook design would require additional effort and costs to design. Ms. Drake indicated in a telephone call on 11/16/06 that City would like the materials comprising the overlook to be Trex or an equivalent composite material appearing like wood. The overlook should have two benches and railings, and the surface should be slotted and slightly sloped for drainage.

We also understand that the City needs a new swing gate to be installed along the perimeter fence at the sump (further personal communication with T. Drake). M&N will include designs for the gate in our preliminary and final engineering documents.

The project team has extensive experience in working closely with the stakeholders and landscape architects in developing the trail systems for other projects. The most recent effort was the Ballona freshwater marsh in Playa Vista development north of Madrona and at Laguna Lake in Fullerton. In addition, trails were designed for the dune system of the Ballona saltmarsh located in the western extreme of the property.

Weeding Plan - As indicated on the resource material in Appendix F of the RFP, there are several species of non-native plants inhabiting, and in some cases dominating, significantly large areas of the site so as to make the resource value of those areas almost nonexistent. Several small stands of trees occur throughout the site. Removal by mechanical means is the only reasonable means of controlling these species. Other specimens of non-native species, because of their size or their growth-habit, also make it more practical to use mechanical means of removal. The most effective means of controlling non-native species is to use all of the various methods available when they are appropriate. Use of chemicals is a costly proposition; it can be very expensive and is not always effective if done incorrectly. Exotics or weed control and eradication on site is considered to be one of the most important tasks that must be accomplished if any restoration effort on the uplands is to succeed.

The project team has consistently dealt with weed populations over the years of doing various ecological restoration projects. Experiments with methods for eradicating giant reed, *Arundo donax* in the early 1980's and since then this technique has been widely adopted throughout the range of this species. Additional experience has involved weed control methods in the vicinity of San Jose on abandoned agricultural fields using mechanical, labor, and chemical methods.

This task will require extensive involvement with City personnel for clarification of scope, such as how the existing small plantings already conducted by the Friends should be handled.

Additionally, a Mowing Plan will be prepared by our biologists with recommendations for fire prevention and habitat enhancement to address weed control. The plan will be presented as a draft document for City review and a final document after incorporation of comments.

Irrigation Plan – Irrigation requirements to maintain the designed habitat will be identified. These requirements will include water volumes, facility requirements, locations, and implementation plans. The facilities will be included on the enhancement plans. The specifications will address implementation and other pertinent issues necessary to maintain the planned habitat areas where irrigation will be required. It is anticipated that the bulk of the water to be used for irrigation will be supplied from the planned recycled water line to be located adjacent to the Marsh. The plan will show expansion and improvement of the existing marsh perimeter system and Nature Center system, with a connection to an offsite (Maple Avenue) recycled water line.

Storm Water Management Improvement Plan - Our experience with wetland water treatment systems suggests some interesting opportunities for collecting storm water and using natural wetland species to assist in water cleaning prior to entering the primary marsh complex. Small marsh-like areas can be created that serve to clean the storm water and deliver it to the marsh.

Working with the water quality engineers on the project team, a natural system can be developed that keeps maintenance low but provides wetland cleanup of urban storm water.

Our team has most recently gained experience using wetland plants as a preliminary water quality treatment process and as the primary system in Ballona freshwater marsh. Other experience has included experimentation with "StormTreat Tanks" which effectively treated water runoff in a smaller area. Our goal in this project is to assist in use of natural plant materials and to direct any physical structures to avoid existing resources of value.

The design will include plans for installation of stormwater filtration units adjacent to selected catch basins along Madrona Avenue and Sepulveda Avenue, and a bypass drain, with the storm catch basins along Madrona Avenue being rerouted to a constructed wetlands on the former Chevron property, then on to the Maple Sump for additional constructed wetlands treatment, with modifications made at the bottom of the sump to maximize wetlands-type treatment in the sump. Additional design considerations include a trash collection system (i.e., CDS) for the Maple Avenue Sump, a phosphates treatment system (i.e., Microbe Lift and/or mechanical filtration), an aeration system for enhanced treatment, a valve/bypass from the sump force main back to the Chevron wetlands, and a gate/weir in the manhole downstream of the wetlands.

Task 1-5 Prepare Preliminary Plans

Preliminary plans, specifications and estimates (PS&E) will be prepared as part of Task 1 to the level of 35% completion. This level of completion represents a set of drawings for City review and will include draft technical specifications. Sheets will conform to the City's CADD standards and be generated at 50 scale. We recommend consideration of 50 scale plans as the site can be shown on fewer sheets, thus reducing effort and costs, while still meeting project objectives. The plans to be submitted may include the following:

- a. Title Sheet
- b. Base map showing existing conditions;
- c. Demolition and debris removal;
- d. Projected wetlands delineation;
- e. Wetlands treatment (BMP) plan;
- f. Grading, excavation and fill;
- g. Drainage and irrigation modifications and improvements;

- h. Non-native habitat removal;
- i. Native habitat restoration;
- j. Access trails and roads;
- k. Interpretive overlook or signage;
- l. Temporary Irrigation; and
- m. Construction staging.

Task 1-6 – Preliminary (35%) Plan Submittal

The plans prepared under Task 1-5 will be submitted to the City for review and comment. Six (6) complete full-size sets of the plans and draft specifications will be provided according to the City's standards. One Meeting will be held with City personnel to discuss comments on the preliminary (35%) design and to address all issues including constructability of the wetlands restoration plan.

Task 2 – Final Design

Final PS&E will be prepared following comments from the City on the 35% submittal. Additional detail drawings as required will be included at 20 scale. Six (6) sets of both 90% and 100% submittals are anticipated to also include quantity and cost estimates. The final product for this task will be "bid-ready" construction drawings in both electronic and hard copy format as required by the City.

Any supplemental provisions to the City's standard specifications, general provisions, and bid documents will be identified and included in the final set of specifications for the project.

The engineers will be available to meet twice with the City staff to address plan check comments, and to assist in coordinating the State Department Health Services permit for the recycled water retrofit plans.

Four additional meetings are proposed as review sessions during the design phase and to update the City on the project status.

Task 3 – Storm Water Management Improvements

Task 3-1 Develop Water Quality Plan

The City of Torrance will provide the White Paper that has been developed to assess water quality in the Marsh and, if not included, the existing and proposed land uses and acreages for each drainage sub-basin on-site and off-site that drains to the Madrona Marsh. The white paper will be reviewed and a summary of available local water quality data will be prepared. Sources of BMP effectiveness information that will be compared with the white paper results include EPA's Nationwide BMP Database and the Caltrans BMP database. Based upon the white paper and our review, we will

develop a list of constituents of concern. As part of developing this list, we will review current regulatory requirements for receiving waters, including water quality standards, TMDL targets, and Basin Plan requirements. Constituents to be evaluated in developing the list of constituents of concern will include trash, sediment, nutrients, pathogen indicators, and toxics (trace metals, pesticides, and PAHs). The product of this task will be a memorandum on the pollutants of concern and the proposed white paper BMPs as they impact the Marsh enhancement plan

The project team will work with the City to develop a conceptual water quality control plan. The plan will illustrate what potential BMPs may be utilized for various land uses draining to the marsh as well as potential designs and sizing of Natural Treatment System (NTS) facilities. As part of this task, the project team will review alternative marsh enhancement layouts to develop potential source and treatment control BMPs for addressing water quality that could be incorporated into the overall project design. This work will include providing input and ideas on BMP selection and locations and on storm water system layout. The BMPs selected by the project team will be summarized in the form of a water quality plan for the Marsh enhancement project.

A storm drain facility design will be developed to meet the requirements of the "White Paper". Design features will implement Best Management Practices (BMPs) to effectively reroute the storm drainage to the wetlands treatment area (former Chevron property) and on to the sump on the south east corner of the project site. Hydrology Q's (runoff rates in cubic feet per second for varying return periods: 10, 25, 50-year returns) will be provided by the City of Torrance or Los Angeles County Department of Public Works records. Hydraulics will be designed to meet the White Paper's requirements and the system's habitat needs. Pump facilities for return flow will be assessed as required to update to the new system's dynamics.

As specified by the City, the design may include plans for installation of stormwater filtration units adjacent to selected catch basins along Madrona Avenue and Sepulveda Avenue, and a bypass drain, with the storm catch basins along Madrona Avenue being rerouted to a constructed wetlands on the former Chevron property, then on to the Maple Sump for additional constructed wetlands treatment, with modifications made at the bottom of the sump to maximize wetlands-type treatment in the sump. Additional design considerations include a trash collection system (i.e., CDS) for the Maple Avenue Sump, a phosphates treatment system (i.e., Microbe Lift and/or mechanical filtration), an aeration system for enhanced treatment, a valve/bypass from the sump force main back to the wetlands treatment area, and a gate/weir in the manhole downstream of the wetlands treatment area.

Task 3-2 Preliminary and Final Designs

The results of the work conducted for the storm water management procedures in this task will be incorporated into the preliminary and final Marsh enhancement plans described in Tasks 1 and 2 above.

Task 4 – Bid Phase Services

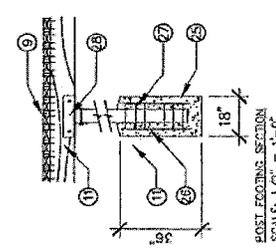
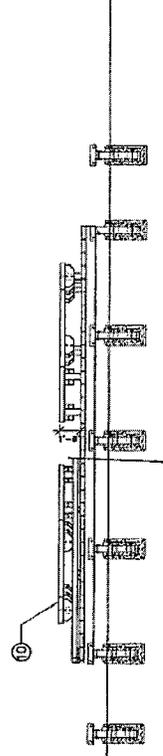
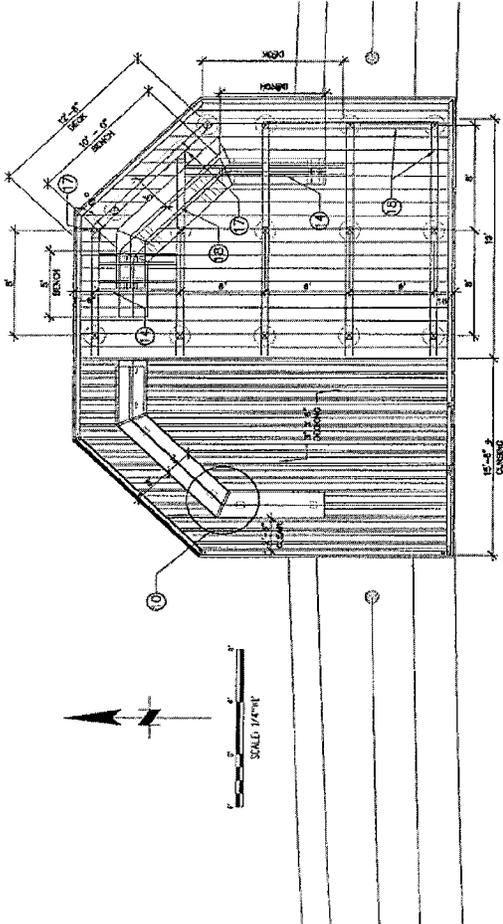
Support will be provided to the City during the construction bid phase of the project, although to a limited extent. Clarifications to the design will be provided where required in order to respond to questions from prospective bidders. If addenda to the bid package are required, these will be prepared for the City who will be responsible for distribution to the bidders. Review of the bids and selection recommendations will be made to the City.

Task 5 – Construction Management Support

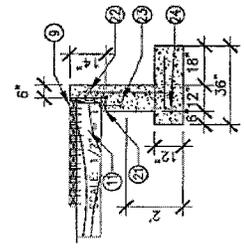
Construction support services will be provided to the City of Torrance, but also to a limited extent. This support will include participation in one pre-construction conference meeting and preparation of responses to limited (10) requests for information. Review of a limited number of submittals (5) from the construction manager will be provided when required due to issues related to the project design. Additional support services can be provided if needed under a new task to be determined.

Task 6 – Design Educational Elements

Our team will assist the City in preparing their brochure by providing specific information on the various elements of the project and the context of how these improvements will enhance the current biological values and management operations of the Madrona Marsh. Our team members responsible for the educational development in this project have been involved in numerous education venues, from preparation and teaching of workshops, seminars, and courses through the development of a brochure for the U.S. Navy at Point Loma in San Diego explaining the natural and environmental resources and management on the bases.



POST FOOTING SECTION
SCALE: 1/2" = 1'-0"

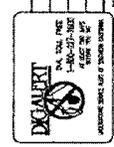


CONCRETE FOOTING SECTION
SCALE: 1/2" = 1'-0"

1. TRASH RECEPTACLE - SEE DETAIL 20, SHEET 10
2. DECOMPOSED GRANITE TRAIL - SEE DETAIL 21, SHEET 11
3. DECOMPOSED GRANITE PAVING RAMP - SEE DETAIL 22, SHEET 11
4. TRUSS BRACKETS WITH WOODS JOISTS OF 10'S OR 12'S TO 8" ABOVE ADJACENT FINISH SURFACE - SEE DETAIL 4, SHEET CD-7
5. WOOD DECK EDGERS AROUND TRUSS BRACKETS
6. WELDLONGS OVER - 4" X 4" BEAM DETAIL
7. SPACE LOCATION (TYPICAL)
8. SPACER BLOCK LOCATION (TYPICAL)
9. 3 X 6 BECKING PLANS
10. BENCH
11. FINISH GRADE
12. RAMP GRADE BEYOND
13. BEAM BRACE 1/4" X 6" X 12" W/ 3/4" DIA. HOLES FOR 5/8" DIA. ANCH BOLTS. PROVIDE WASHERS BOTH ENDS.
14. 2" X 10" BLOCKING FOR BEAM POSTS (TYPICAL) 14. SECURE WITH LOG CUP ANGLES
15. OUTLINE OF PLANK BECKING
16. POST NOTING - SEE SECTION VIEW ABOVE
17. BEAM BRACE 1/4" X 6" X 12" W/ (3) 3/4" DIA. HOLES
18. FOR 5/8" DIA. ANCH BOLTS. PROVIDE WASHERS BOTH ENDS
19. 5 X 10 BEAM
20. CONCRETE FOOTING - SEE SECTION VIEW ABOVE
21. POST FOOTING - 15" X 16" CONCRETE PIER (C. 2500 PSI) COMPACTED SUB-BASE 80% OF STANDARD PRODUCTION DENSITY 2 X 5 SILL PLATE
22. #4 BAR @ 12" O.C.
23. J PIN @ 18" O.C.
24. #4 BARS CONC. HORIZONTAL AS SHOWN
25. POST FOOTING - 15" X 16" CONCRETE PIER 25 (C. 2500 PSI)
26. (6) #4 BARS AND (3) TIE BARS @ 6" O.C. FULL HT.
27. #4 BAR SETTING PINS - 3/8" DIA. 6 X 6 POST
28. SIMPSON POST FOOT CAP (PROVE # ENDS) 28.

SCALE: 1/2" = 1'-0"

SCALE 1/4"=1'-0"



REV	DATE	DESCRIPTION	BY



PROJ. NAME: CITY OF COSTA MESA
PROJECT NUMBER:
CITY ENGINEER:

REVISIONS:
 DATE: 8/20/08
 SHEET 1 OF 1

CITY OF COSTA MESA
FAIRVIEW PARK WETLANDS AND RIPARIAN HABITAT PROJECT
CONSTRUCTION DETAILS
CD-6

Example Overlook - Assumed for this Proposal

EXHIBIT B
COMPENSATION SCHEDULE

SUMMARY COSTS									
	LABOR COSTS			OTHER DIRECT COSTS			MARKUP	SUBTASKS TOTALS	TASK TOTAL
	M&N	Geosyn	Rteger	Reed	M&N	Subs			
Task 1 - Preliminary Design (35%) Complete									
1.1 Initial Meeting	\$1,301	\$900	\$1,260	\$1,526		\$355	\$404	\$5,746	\$121,919
1.2 Data Gathering	\$2,516			\$1,352			\$135	\$4,003	
1.2a Estimate Concept Construction Costs									
1.3 Utility Research	\$3,144							\$3,144	
1.4 Design Elements	\$7,148		\$22,855	\$2,591	\$30,135	\$4,860	\$6,044	\$73,633	
1.5 Prepare Preliminary Plans and Estimates	\$19,792			\$10,072			\$1,007	\$30,871	
1.6 Preliminary Plan (35% Complete) Submittal	\$2,562			\$1,782			\$178	\$4,522	
Task 2 - Final Design									
2.1 Finalize Construction Plans and Specs	\$5,054			\$22,665			\$2,266	\$29,985	\$77,562
2.2 Prepare Supplemental Provisions	\$4,940			\$1,884			\$188	\$7,012	
2.3 Prepare Quantity and Cost Estimates	\$7,106			\$4,822			\$482	\$12,410	
2.4 Submit 90% and 100% Complete Plans and Specs	\$14,660			\$1,712	\$1,200		\$291	\$17,863	
2.5 Provide "Bid-Ready" Drawings and Specs	\$4,726			\$981			\$98	\$5,805	
2.6 Assist in Obtaining Permits	\$2,516							\$2,516	
2.7 Conduct and Attend Meetings/Reviews	\$716			\$1,140			\$114	\$1,970	
Task 3 - Storm Water Management Improvements									
3.1 Review and Incorporate "White Paper" Data		\$7,452			\$514		\$797	\$8,763	\$77,572
3.2 Design Water Supply and Drainage Improvements	\$7,894	\$25,414			\$1,754		\$2,717	\$37,779	
3.3 Prepare Prelim and Final Plans and Specs	\$14,982	\$14,376			\$232		\$1,461	\$31,031	
Task 4 - Bid Phase Services									
4.1 Respond to Requests for Clarification	\$1,442			\$1,132			\$113	\$2,687	
4.2 Issue Bid Package Addenda	\$1,264			\$564			\$56	\$1,884	
4.3 Review Bids and Provide Award Recommendation	\$1,738			\$150			\$15	\$1,903	
Task 5 - Construction Support Services									
5.1 Attend Pre-Construction Conference	\$1,496			\$816			\$82	\$2,394	\$8,363
5.2 Respond to Requests for Info and Submittal Reviews	\$3,576			\$2,176			\$218	\$5,970	
Task 6 - Design Educational Element									
6.1 Assist in Public Education			\$2,760				\$276	\$3,036	\$3,036
TOTALS									
	\$108,553	\$48,142	\$26,875	\$55,364	\$30,135	\$8,915	\$16,943	\$294,927	\$294,927