

Council Meeting of
December 18, 2012

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

Members of the Council:

SUBJECT: Public Works – Approve agreement for Machado Lake Nutrient & Toxics TMDL BMP Implementation Plan. Expenditure: \$76,948.

RECOMMENDATION

Recommendation of the Public Works Director that City Council approve a Consulting Services Agreement with Carollo Engineers to prepare a Best Management Practices Implementation Plan, for compliance with the Machado Lake Nutrient and Toxics Total Maximum Daily Loads, for an amount not to exceed \$76,948.

Funding

The budget for Machado Lake Watershed Best Management Practices for Nutrient and Toxics TMDLs, CIP No. I-110 is proposed to be increased as a program modification for the First Quarter Budget Review to provide sufficient funds for this contract and project management.

BACKGROUND/ANALYSIS

The City of Torrance is part of the Machado Lake watershed and must comply with the Machado Lake Nutrient Total Maximum Daily Loads (TMDL) and the Machado Lake Toxics TMDL adopted by the Los Angeles Regional Water Quality Control Board (RWQCB). The Machado Lake TMDLs require the City to implement monitoring and reporting programs and submit Best Management Practices (BMP) Implementation Plans for each TMDL. The RWQCB approved the City's Machado Lake Nutrient TMDL Monitoring plan on July 28, 2011.

Flow monitoring is required to prove our compliance with the Machado Lake Nutrient and Toxics TMDLs because we propose to divert as much urban run off and stormwater as possible to detention basins for infiltration. A contract for stormwater quality monitoring was awarded to Northgate Environmental Management, Inc. on September 27, 2011.

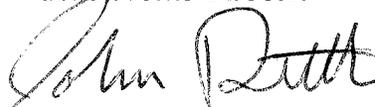
Staff met with RWQCB staff and it was agreed that the City of Torrance could submit both a combined Machado Lake Nutrient and Toxics TMDL Monitoring Plan and a combined BMP Implementation Plan. The Machado Lake Nutrient and Toxics TMDL Monitoring Plan was submitted to the RWQCB on September 17, 2012 and the Machado Lake Nutrient and Toxics BMP Implementation Plan is due to RWQCB in September 2013.

Carollo Engineers prepared a citywide Stormwater Quality Master Plan that included conceptual designs for diverting stormwater for infiltration. An important part of preparing the Stormwater Quality Master Plan was preparing a Stormwater Quality Model for the City of Torrance. Staff requested Carollo Engineers to provide a proposal to recalibrate the Stormwater Quality Model using the past year of monitoring data and use it to prepare the Machado Lake Nutrients and Toxics TMDL BMP Implementation Plan. Carollo Engineers is especially qualified to prepare the Machado Lake Nutrient and Toxics BMP Implementation Plan because of their experience with using City's Stormwater Quality Model to select and size BMPs. Staff negotiated with Carollo Engineers to prepare a combined Machado Lake Nutrient and Toxics BMP Implementation Plan that will provide 30% design level plans and cost estimates needed to apply for grants.

Staff is proposing to fund this agreement from Machado Lake Watershed Best Management Practices for Nutrient and Toxics TMDLs, CIP No. I-110. The budget for CIP No. I-110 is proposed to be increased as a program modification for the First Quarter Budget Review on December 18, 2012 to provide sufficient funding for this contract.

Respectfully submitted,

ROBERT J. BESTE
Public Works Director



By: John Dettle
Engineering Manager

CONCUR:



Robert J. Beste
Public Works Director



LeRoy J. Jackson
City Manager

Attachments: A. Consulting Services Agreement for Carollo Engineers

CONSULTING SERVICES AGREEMENT

This CONSULTING SERVICES AGREEMENT (“Agreement”) is made and entered into as of December 18, 2012 (the “Effective Date”), by and between the CITY OF TORRANCE, a municipal corporation (“CITY”), and Carollo Engineers, Inc., a Delaware corporation (“CONSULTANT”).

RECITALS:

- A. CITY wishes to retain the services of an experienced and qualified CONSULTANT to prepare a Best Management Practices Implementation Plan for the Machado Lake Nutrient and Toxics TMDLs.
- 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 shall perform the services required pursuant to this Agreement in accordance with the prevailing standard of care applicable to engineers utilizing the same skill and ability ordinarily required of engineers performing the same or similar services under the same or similar circumstances in the State of California.

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 December 18, 2014.

3. **COMPENSATION**

- A. CONSULTANT’s Fee.

For services rendered pursuant to this Agreement, CONSULTANT will be paid in accordance with the Fee Proposal 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 \$76,948 (“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 Fee Proposal. 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:

Graham J. G. Juby, Ph.D., P.E.
Inge Wiersema, P.E.

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.

CITY shall furnish CONSULTANT available studies, reports and other data pertinent to CONSULTANT's services; obtain or authorize CONSULTANT to obtain or provide additional reports and data as required; furnish to CONSULTANT services of other required for the performance of CONSULTANT's services hereunder, and CONSULTANT shall be entitled to use and rely upon all such information and services provided by CITY or others in performing CONSULTANT's services under this Agreement.

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 costs 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 vendor. 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 negligence or willful misconduct of CITY, its officers, employees, or agents. Payment by CITY is not a condition precedent to enforcement of this indemnity.

CONSULTANT shall not be responsible for warranties, guarantees, fitness for a particular purpose, breach of fiduciary duty, loss of anticipated profits or for economic, incidental or consequential damage to CITY or any third party arising out of breach of contract, termination, or for any other reason whatsoever. Additionally, CONSULTANT shall not be responsible for acts and decisions of third parties, including governmental agencies, other than CONSULTANT's subconsultants, that impact project completion and/or success.

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 (“City of Torrance”), the Successor Agency to the Former Redevelopment Agency of the City of Torrance, 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: Carollo Engineers, Inc.
10540 Talbert Avenue, Suite 200 East
Fountain Valley, CA 92708

Fax: (714) 593-5101

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

Carollo Engineers, Inc.,
A Delaware corporation

Frank Scotto, Mayor

By: _____
Graham J. G. Juby, Ph.D., P.E.
Vice President

ATTEST:

Sue Herbers, City Clerk

By: _____
Inge Wiersema, P.E.
Associate Vice President

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

By: _____

Attachments: Exhibit A Scope of Services
 Exhibit B Fee Proposal

Revised: 10/29/2008

EXHIBIT A
SCOPE OF SERVICES

Project: City of Torrance - Machado Lake BMP Implementation Plan

SCOPE OF SERVICES

The preparation of this Implementation Plan is divided into the following seven (7) tasks.

1. Data Collection, Review and Analysis

The purpose of this data collection and review task is to make recommendations regarding potential revisions and/or additions to the selected BMPs that would be needed to address the Machado Lake nutrient TMDL. Under this task, Carollo will compile data, graphics and results needed to complete the BMP evaluation and implementation report from the following main sources:

1. Stormwater Quality Management Plan (SQMP) -
2. Flow monitoring database
3. PLAT model
4. Regional or local meteorological data

First, Carollo will use long-term regional meteorological data to identify whether the flow monitoring data were collected during dry, average, or wet seasons. We will use the results of this analysis to characterize the mass loading estimated from the flow monitoring data. We will also use the mass loading derived from the flow monitoring data, data from SQMP, PLAT model results to determine the spatial extent of water quality problems. In particular, we will use the results of PLAT and historic land use data to evaluate and characterize stormwater quality and recommend any changes to the selected BMPs.

Under this task, Carollo will also calculate descriptive statistics from the flow monitoring data, compile and create relevant maps and graphics that will provide a comparison with water quality objectives and assist in the identification of any pollutants or sources that may be problematic in the watershed.

2. Model Recalibration

As part of this task, Carollo will use recent stormwater monitoring data collected by the City to recalibrate the stormwater model. The model will be recalibrated for one storm event that will be selected with City staff. Calibration results will be presented in a brief technical memorandum.

3. BMP Modeling

The City has decided to modify four BMP recommendations from the SQMP. These BMPs are:

1. Infiltration trenches at the airport to collect stormwater by gravity
2. Divert stormwater from Q17 to Well No. 8
3. Divert stormwater from Q20 to Walnut sump by gravity
4. Divert stormwater from Q02 and Q16 to farmland adjacent to the airport

The purpose of this task is to modify the existing stormwater model prepared for the SQMP to reflect the revised configurations. Upon recalibration (see Task 2), the infrastructure components of the four BMPs listed above will be resized as necessary. These revised BMP configurations will be used as a basis of preliminary design and cost estimates in subsequent tasks.

4. Utility Search

For the selected BMP locations, Carollo will perform a utilities search. Known utility companies will be contacted and ask to provide utility information in the project area. Where utilities appear to be in potential conflict with proposed construction, efforts will be initiated to coordinate with utilities to confirm actual horizontal and vertical locations of the existing infrastructure. As needed, proposed stormwater infrastructure will be relocated to avoid major utility conflicts, and the conceptual plan layouts will be updated accordingly.

5. Detailed BMP Drawings

Carollo will prepare detailed drawings for each BMP site. These drawings will be drawn to scale. It is assumed one plan view drawing will be prepared for each site. Draft drawings will be prepared and submitted electronically for City review. Comments will be incorporated in final drawings. Hence, four draft and four final drawings will be submitted as part of this task.

6. Cost Estimates

For each selected BMP, Carollo will develop a planning level capital cost estimates. The estimated capital costs will include construction costs, contingencies, and markups for engineering, legal, and administration fees. Cost estimate will based on cost data developed from past construction projects for the City and capital cost estimates for similar projects for other nearby utilities.

7. BMP Evaluation and Selection Report

Carollo will use the information from Tasks 1-5 to develop a BMP Evaluation and Selection Report. This report will include a summary of the flow monitoring results, detail modeling results, BMP site selection criteria and BMP screening analysis. The flow monitoring and water quality modeling results are intended for use in assessing pre-construction BMPs conditions. It will also be utilized in the assessment of identified BMPs and design modifications to selected BMPs.

Carollo will also use the collected field data and the applicable results obtained from the city's water quality model (PLAT) to assess compliance with WLAs under the Machado Lake nutrient TMDL. Based on the assessment of compliance, Carollo will identify in the BMP Evaluation and Selection Report structural BMPs for nutrient mitigation to bring the City into compliance with the TMDL.

Carollo will detail the methodology used in sizing the selected BMPs based upon standard design criteria for the BMP, including but not limited to peak flow rate or water-quality treatment volume, drainage area, and predicted performance at that size in terms of total nutrient load reduction. We will summarize and include in the report supporting calculations for each BMP site. Preliminary water quality data analysis obtained during the flow monitoring will be part of the draft report.

Carollo will prepare an initial draft report for the City's review and comment. Comments will be incorporated in a draft report that will be submitted to the RWQCB for review and approval.

8. Review and Incorporate Regional Water Board Comments

Upon receipt of comments from the Regional Board, Carollo will review and update the BMP Evaluation and Selection Report. All comments will be addressed and a final report submitted to the board for approval.

9. Permit Assistance

Carollo will help the City obtain permits as part of the planning and design phase of this project and expects to have all required permits prior to the start of construction. Carollo has included 16 labor hours to help City staff prepare documentation that will be required to obtain permits for this project.

10. Project Management and Meetings

It is estimated that the project duration would be approximately 3 months. We have included one kickoff meeting and one progress meeting to review the draft report and draft design drawings. Additional communications are anticipated to take place via conference calls.

EXHIBIT B

FEE PROPOSAL



**City of Torrance
BMP Implementation Plan for Machodo Lake
Fee Proposal**

Task Description	Project Manager		Project Engineer		Staff Engineer		CAD Design		Admin		Total Labor Hours	Labor Fee	Sub consultants	PECE	ODC	Total Fee
	Inge Wiersema	\$ 213	Sam Darkwah	\$ 197	Brian Brenhaug	\$ 165	Li-Chen Wang	\$ 147	Alicia Lopez	\$ 90						
Hourly Rate																
1. Data Collection and Review		16	8								24	\$ 4,472		\$ 228		\$ 4,700
2. Model recalibration	2	40	12	4	0	0					54	\$ 10,286	\$ -	\$ 513		\$ 10,340
3. BMP Modeling		32	4								36	\$ 6,954		\$ 342		\$ 7,306
4. Utility Search	2	12	0								14	\$ 2,790	\$ 5,000	\$ 133		\$ 7,923
5 Detailed BMP drawings	4	32	0	64							100	\$ 16,564		\$ 950		\$ 17,514
6. Cost Estimates	2	4	16								22	\$ 3,854		\$ 209		\$ 4,063
7. BMP Evaluation and Selection Report	2	27	15								44	\$ 8,220		\$ 418	\$ 200	\$ 8,838
8. Review and Incorporate RWQCB Comments	4	8	4								16	\$ 3,088		\$ 152	\$ 200	\$ 3,440
9. Permit Assistance	4	8	4								16	\$ 3,088		\$ 152		\$ 3,240
10. Project Management and Meetings	24	8	0						15		48	\$ 8,128		\$ 456	\$ 1,000	\$ 9,584
Total	44	187	63	64	16	374	\$ 67,454	\$ 5,000	\$ 3,553	\$ 1,400	\$ 76,948					

Kay, Carol

From: Dettle, John
Sent: Monday, December 10, 2012 9:10 AM
To: Kay, Carol
Subject: FW: BMP Implementation Plan Proposal
Attachments: image001.gif

John C. Dettle, P.E.

Engineering Manager, Public Works Department
 City of Torrance | 20500 Madrona Avenue | Torrance, CA 90503 | (310) 618-3059 | fax (310) 781-6902 | jdettle@TorranceCA.Gov | www.TorranceCA.Gov

From: Beste, Robert
Sent: Thursday, November 29, 2012 10:47 AM
To: Dettle, John
Subject: FW: BMP Implementation Plan Proposal

Rob Beste

Public Works Director
 City of Torrance | 20500 Madrona Avenue | Torrance CA 90503 | 310.781.6900 voice | 310.781.6902 fax | rbeste@torranceCA.gov

From: Jackson, LeRoy
Sent: Thursday, November 29, 2012 10:47 AM
To: Beste, Robert
Subject: RE: BMP Implementation Plan Proposal

concur to take to council -- ljj

-----Original Message-----

From: Beste, Robert
Sent: Thursday, November 29, 2012 10:45 AM
To: Jackson, LeRoy
Subject: FW: BMP Implementation Plan Proposal

Please concur. Thanks

Rob Beste

Public Works Director
 City of Torrance | 20500 Madrona Avenue | Torrance CA 90503 | 310.781.6900 voice | 310.781.6902 fax | rbeste@torranceCA.gov

From: Dettle, John
Sent: Wednesday, November 28, 2012 2:41 PM
To: Beste, Robert
Subject: FW: BMP Implementation Plan Proposal

Hi Rob, I still need LeRoy's approval to prepare contract. Thanks

Hi LeRoy,

This e-mail is to request your concurrence to award a Professional Services Agreement to Carollo Engineers for the preparation of a BMP Implementation Plan for Machado Lake Nutrient and Toxics TMDLs, not to exceed \$76,948. This plan will take the BMP modeling information from the NPDES Master Plan, re-calibrate the model with two seasons of water quality monitoring data and prepare 30% design level plans for the selected BMPs. BMPs will include diversions to Walnut Sump, possible diversion to Well No. 8 and a proposed diversion to an underground infiltration system at the City's airport, where the farm fields were.

Carollo Engineers prepared the NPDES Master Plan and we negotiated the plan up to a 30% design level to provide enough detail and cost information to apply for grants. The report is due September 2013.

CIP No. I-110 budget is proposed to be increased by \$25,000 on December 4th to provide sufficient funding for this contract and staff time.

John C. Dettle, P.E.

Engineering Manager, Public Works Department

City of Torrance | 20500 Madrona Avenue | Torrance, CA 90503 | (310) 618-3059 | fax (310) 781-6902 |
jdettle@TorranceCA.Gov | www.TorranceCA.Gov

From: Inge Wiersema [mailto:IWiersema@carollo.com]

Sent: Wednesday, October 10, 2012 11:56 AM

To: Dettle, John

Cc: Samuel Darkwah; David Rydman

Subject: BMP Implementation Plan Proposal

Dear John:

Here you go. Please let me know if this is all you need.

Also: I got an email back from our reservoir design lead and he said that he was not aware of Carollo doing an inundation study previously. So unfortunately we can't help you with that.

I have a lunch meeting, but will call you when I get back in the office.

Regards,

Inge Wiersema, P.E.

Associate Vice President

Regional Planning Manager

Carollo Engineers, Inc.

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