Agenda Item #:

Staff Report
City of Manhattan Beach

TO: Honorable Mayor Powell and Members of the City Council

THROUGH: David N. Carmany, City Manager

FROM: Jim Arndt, Director of Public Works
Steve Finton, City Engineer
Michael A. Guerrero, Principal Civil Engineer

DATE: June 5, 2012

SUBJECT: Approval of Plans and Specifications for the Greenbelt Low Flow Infiltration Project and Authorize the City Manager to Solicit Construction Bids; and Award a Professional Services Contract to Geosyntec Consultants ($94,095) for Reporting and Monitoring Services

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RECOMMENDATION:

Staff recommends that the City Council pass a motion to:

1. Approve the plans and specifications for the Greenbelt Low Flow Infiltration Project and authorize the City Manager to solicit construction bids; and,
2. Award a professional services contract to Geosyntec Consultants in the amount of $94,095 for project reporting and monitoring services

FISCAL IMPLICATION:
The project includes funding in the amount of $500,000 in State grant funds from the CA State Water Resources Control Board (SWRCB) through the Proposition 84 Agricultural Water Quality Grant Program for the purpose of protecting beaches and coastal waters from pollution and toxic contamination. The grant includes City matching funds in the amount of $100,000 which includes $50,000 of City staff in-kind services (project management, design, construction management/inspection) and $50,000 from the Storm Water Fund that was budgeted in the FY 2008-2009 Capital Improvement Plan. An additional appropriation of $130,000 from the City Storm Water Fund was budgeted for the FY 2012-2013 CIP based on updated cost estimate information.

BUDGET	
Proposition 84 SWRCB Grant	$500,000
FY2008-2009 CIP Stormwater Fund	$ 50,000
FY2012-2013 CIP Stormwater Fund	$130,000
TOTAL BUDGET	$680,000

ANTICIPATED EXPENDITURES	
Construction	$525,000
Construction Contingency (±10%)	$ 51,955
Reporting/Monitoring (Geosyntec)	$ 94,095
Soils Testing/Percolation (Willdan Eng)	$ 8,950
Total Anticipated Costs	$680,000

BACKGROUND:
Proposition 84, The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Act of 2006 (Public Resources Code Section 75001, et seq.), was passed by California voters in the November 2006 general election. Prop 84 includes funding for the purpose of matching grants for protecting beaches and coastal waters from pollution and toxic contamination. The grant program is administered by the CA SWRCB with local oversight by the Santa Monica Bay Restoration Commission (SMBRC).

The Manhattan Beach Public Works Department submitted an application requesting Prop 84 funding for the installation of an infiltration system to be installed within the greenbelt in Veteran's Parkway in the area from 2nd Street to 6th Street. The infiltration system will be installed below ground to preserve the existing use of the greenbelt as a running/walking path and to support loads associated with municipal maintenance vehicles. The infiltration system will intercept storm flows from the City's existing storm water system and includes a 55.2 acre tributary area that contributes to the storm water run-off at the connection location at Ardmore Avenue at 2nd Street.

DISCUSSION:
The original scope of the infiltration project submitted to the SWRCB included installation of the proposed infiltration system within the wood chip pathway portion of the greenbelt of Veteran's Parkway between 2nd Street and 6th Street. The proposed infiltration system will intercept flows from the City's existing storm water system at an existing catch basin located along Ardmore Avenue at 2nd Street. The storm water low flows will be diverted at a proposed underground concrete cast-in-place diversion weir box. The diverted flows will be screened for trash and gross solids removal at a proposed Continuous Deflective Separation (CDS) unit and then will be directed by gravity flow to a subsurface infiltration system which will also provide limited storage of storm flows for subsequent percolation into the sandy soils below the greenbelt. Storm flows which exceed the infiltration or storage capacity of the percolation lines will return by gravity flow to the existing storm drain system for discharge at the existing storm drain outfall located at the Strand at 1st Street.

In order to intercept the storm flows at the existing catch basin located along Ardmore Avenue at 2nd Street an excavation of approximately 15 feet in depth is required at the southerly end of the proposed infiltration system at 2nd Street. The infiltration system consists of two parallel 24-inch diameter perforated steel-reinforced polyethylene pipes with the system as originally proposed at 1,100 feet in length to 6th Street. For installation of the infiltration system by gravity flow an excavation of approximately 30 feet in depth is required at the northerly end of the pipe at 6th Street. The infiltration system requires a footprint of approximately 6 feet in width with additional width considerations during construction due to the need of the appropriate shoring for installation. Placement of the proposed infiltration system also includes consideration of existing underground

utilities located within the jogging path, specifically the City irrigation system for Veteran's Parkway and electrical and telemetry lines for the Los Angeles County Department of Public Works West Coast Basin Barrier Project.

Due to the significant shoring required to install the infiltration system as originally proposed from 2nd Street to 6th Street, Public Works staff also analyzed the possibility of an alternative alignment for the infiltration system from 2nd Street to Boundary Place that would provide a comparable length of infiltration pipe as the original design proposal. While the excavation at the intercept point at 2nd Street remains at approximately 15 feet in depth, the excavation at the terminus near Boundary Place requires an excavation of approximately 12 feet in depth. While the alternate alignment presents a more constructible alignment based on depth of pipeline installation and associated shoring, record drawing research and a site survey revealed a conflict with an existing underground utility (West Coast Basin Barrier Project electrical and communications lines) that crosses diagonally across the proposed infiltration system trench for a portion of the proposed alignment. While both the originally proposed alignment from 2nd Street to 6th Street and the alternative alignment from 2nd Street to Boundary Place each have construction issues that need to be overcome in order to complete the infiltration system installation, Public Works staff determined that the alternative alignment from 2nd Street to Boundary Place presented the more constructible alternative and therefore staff is recommending construction of the alternative alignment.

Due to the limited width of the existing wood chip pathway (approximately 12 feet wide), the need for shoring to install the proposed infiltration system, and the heavy equipment required to install the infiltration pipe the Public Works Department is recommending closing the pathway during construction. It is anticipated that the pathway users will be detoured to utilize either the existing sidewalk along Valley Drive or Ardmore Avenue for the 4 blocks of the project from 2nd Street to Boundary Place. It is anticipated that construction will take approximately 12 weeks to complete with a majority of the work taking place at the storm water collection point near 2nd Street at Ardmore Avenue.

Design of the proposed infiltration system is based on the hydraulics of the City's existing storm drain system with specific regards to the inflow of storm water into the system at the existing catch basins. Based on the capacity of the existing catch basins and storm drain system the peak flow that enters the storm drain system at the proposed low flow intercept point is approximately 103 cubic feet per second. The proposed infiltration pipe will provide a storage capacity of approximately 6,750 cubic feet. The geotechnical consultant completed the soils percolation testing and determined that the underlying soil has a minimum infiltration rate of at least 2 inches per hour which exceeds the minimum required rate of 0.5 inch per hour based on County of Los Angeles Department of Public Works Geotechnical and Materials Engineering Division guidelines. Based on the capacity of the existing City catch basins and storm drain system, the proposed infiltration system, and the percolation rate of the soil Public Works estimates that 100% of the low flow surface water run-off will be eliminated and the first half-inch of a typical storm event will be diverted and infiltrated into the underlying soil after the project is completed.

A Public Meeting was held by Public Works staff on June 07, 2012 in order to discuss design concepts of the infiltration project and to present the estimated construction schedule, the effects on pathway users, and the anticipated construction detour during trenching and pipeline installation operations. Notices were delivered to residents within the vicinity of the project site and also to

Robinson Elementary School and the City of Hermosa Beach. Only one person attended the meeting and the project was thoroughly discussed with the interested resident.

If approved by City Council, staff would proceed to advertise the project for construction bids. Bids would be opened in August/2012 and construction would begin in October/2012. However, the construction schedule start date is dependent on the SWRCB approval of the required grant reports discussed below and delivery of the CDS unit from the manufacturer.

Plans and Specifications
Plans and specifications have been completed and are available for review in the City Clerk's Office in City Hall.

Reporting and Monitoring Services
A significant component of the Prop 84 grant funding requires that the City submit detailed project reporting to the SWRCB (Monitoring Plan, Quality Assurance Project Plan, Final Project Effectiveness Report). The City is also required to perform post-construction water quality and flow monitoring to assess the project effectiveness of the infiltration system. The reporting and monitoring services require specialized knowledge of storm water pollutant constituents and monitoring, sampling, and testing procedures to ensure that accurate, thorough, and complete data is obtained according to the guidelines set by the SWRCB. According to the grant requirements set by the SWRCB, the Monitoring Plan and the Quality Assurance Project Plan must be approved by the SWRCB prior to the start of construction and the Final Project Effectiveness Report must be completed by February 28, 2013.

Due to the extremely strict schedule dictated by the grant requirements set by the SWRCB Public Works staff determined that working with a sole source consultant would provide the appropriate service level based on previous experience with these types of State grant compliance processes. Geosyntec Consultants has submitted a proposal to provide all of the required grant services which include the reporting services, water quality monitoring and laboratory testing, and flow monitoring equipment and data collection.

Geosyntec Consultants proposal includes:

- Preparation of Monitoring Plan
    - Identify baseline water quality; identify non-point sources of pollution; determine monitoring schedule/frequency; determine monitoring methodology including analyte selection and coordination with analytical laboratories; determine reporting requirements; provide quality control
- Preparation of Quality Assurance Project Plan
    - Identify quality objectives and criteria for measurement and documentation; determine data generation and acquisition including sampling and analytical methods; determine data validation; provide quality control
- Coordination of Post-Construction Water Quality and Flow Monitoring
    - Coordinate continuous flow monitoring of flow upstream of proposed diversion to infiltration system and flow monitoring downstream within existing storm drain system; Collect samples of influent to test for bacteria; Collect precipitation data; Collect beach testing monitoring data
- Coordination of Flow Monitoring Equipment

  - Provide flow monitoring equipment to provide continuous flow monitoring both upstream and downstream of proposed infiltration system
- Preparation of Project Effectiveness Report
  - Assess project goals and desired outcomes and analyze water quality and flow monitoring data to determine project effectiveness

Geonsyntec Consultants provided the City with similar professional services for the previously completed CA State Proposition 50 Porous Paving/Permeable Beach Parking Lots Project (2006) to the satisfaction of Public Works Department staff.

Due to the specialized nature of the services, the firm's knowledge of the City's existing storm water system, the firm's knowledge and experience of the SWRCB grant reporting and monitoring requirements, and the restrictive grant task schedule set by the SWRCB the Public Works Department is recommending that a professional services agreement be awarded to Geosyntec Consultants in the amount of $94,095 in accordance with their submitted proposal to complete the work.

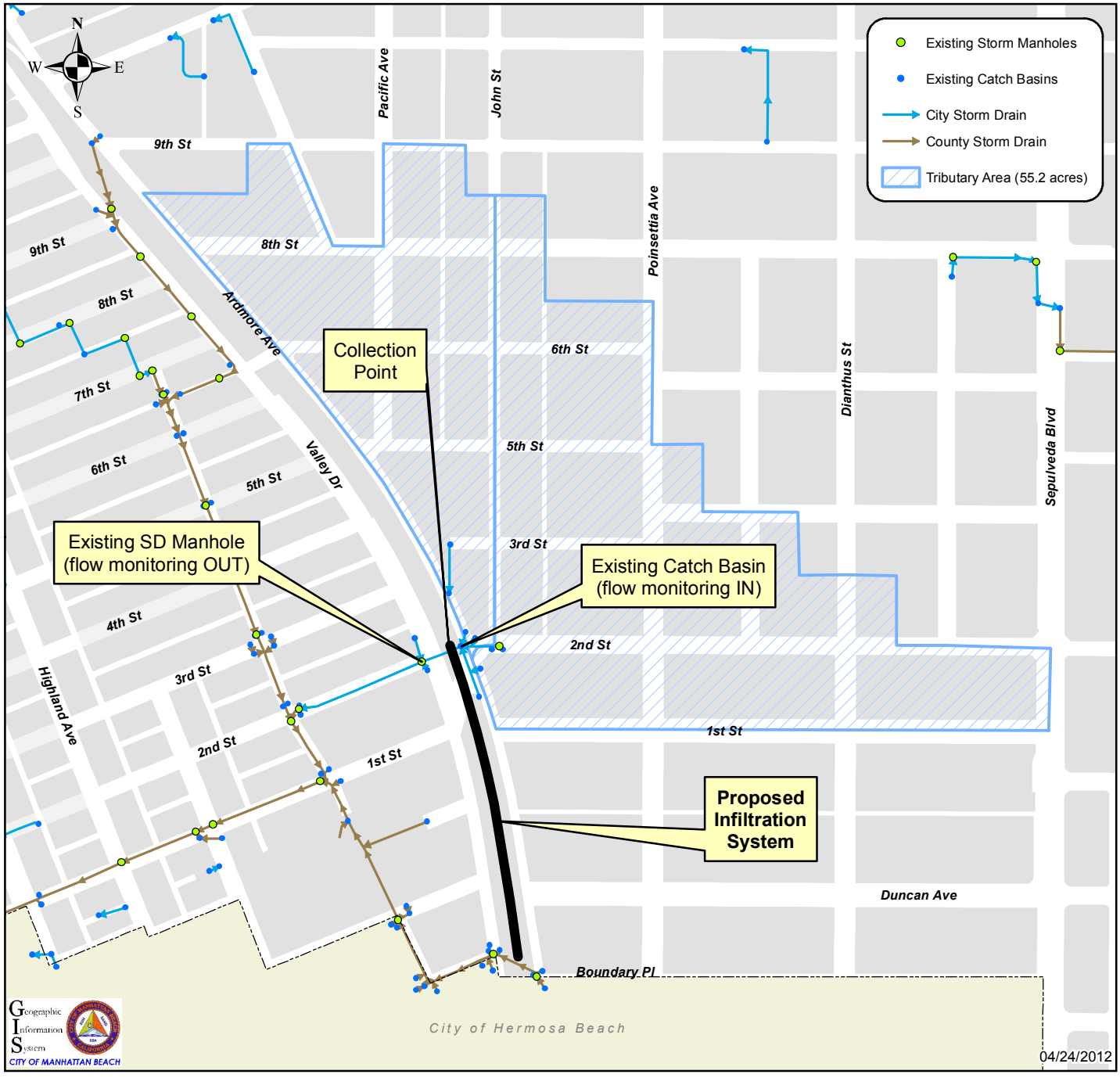
Attachments:

1. Project Site Map
2. Public Meeting Notice
3. Geosyntec Consultants Professional Services Agreement

cc: Henry Mitzner, Controller
Jeanne D. O'Brien, Accountant
Eden Serina, Budget Analyst

Greenbelt Low Flow Infiltration Detail

City of Manhattan Beach



City Hall 1400 Highland Avenue Manhattan Beach, CA 90266-4795
Telephone (310) 802-5000 FAX (310) 802-5001 TDD (310) 546-3501

*** Public Meeting Notice ***

Subject: Greenbelt Low Flow Infiltration Project

Dear Manhattan Beach Resident/Business Owner:

Included in the City's Capital Improvement Program is the construction of a low flow infiltration system within the Veteran's Parkway wood chip pathway in the area from 2nd Street to Boundary Place.

The Public Works Department has scheduled a Public Meeting should you have specific questions about the project or require additional information:

- Thursday, June 07, 2012 at 6:00pm
- Manhattan Beach City Hall Council Chambers (1400 Highland Avenue)

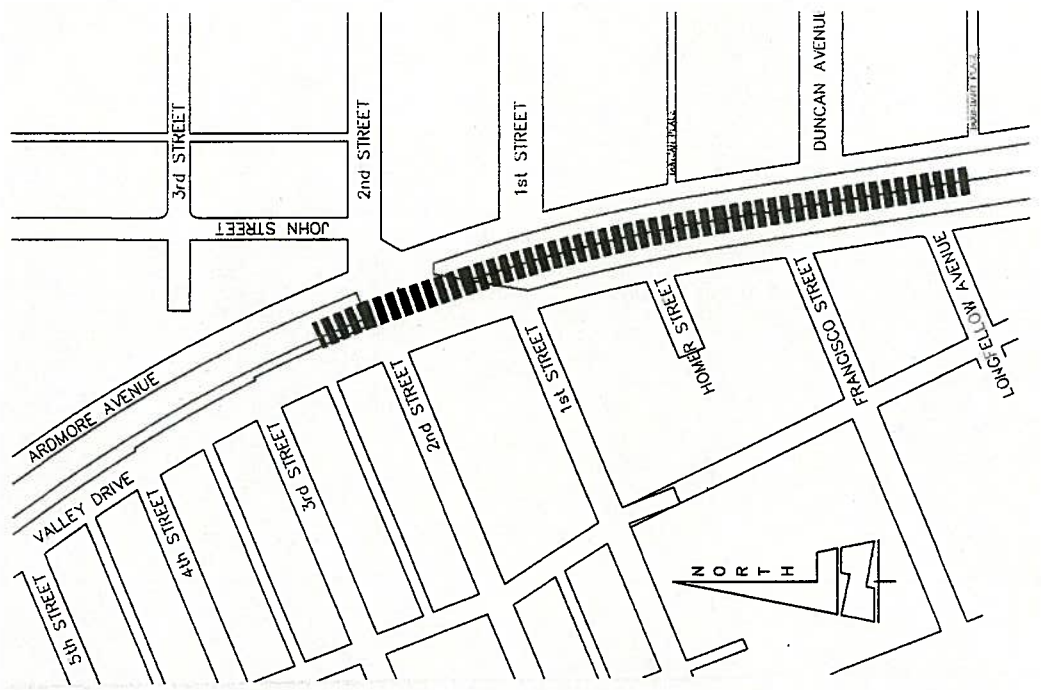
The project will intercept surface water flows from the existing catch basin located at Ardmore Avenue and 2nd Street. The low flows will be screened for trash and gross solids removal and will then be directed by gravity flow to a subsurface infiltration system that consists of perforated pipe for subsequent percolation into the underlying sandy soils. Intercepting surface water flows and allowing them to percolate into the ground will thereby reduce discharge to the existing storm drain beach outfall located at 1st Street and the Strand and reduce bacteria associated with this type of surface run-off.

Due to the anticipated extensive excavation and associated shoring to install the infiltration pipe (approximately 12 to 15 feet deep), the need for heavy construction equipment to complete the work, and the limited width of the existing wood chip path the Public Works Department anticipates that the path will be closed temporarily within the vicinity of the construction site for reasons of public safety. Parkway path users will be directed through a detour to use the existing sidewalks along Valley Drive or Ardmore Avenue for portions of the 4-block project stretch that are under construction. The Public Works Department anticipates that construction will commence in late Summer or early Fall 2012 and will last approximately 3 months, however, the final construction schedule will be finalized once the design is completed and the construction contract is awarded to a Contractor.

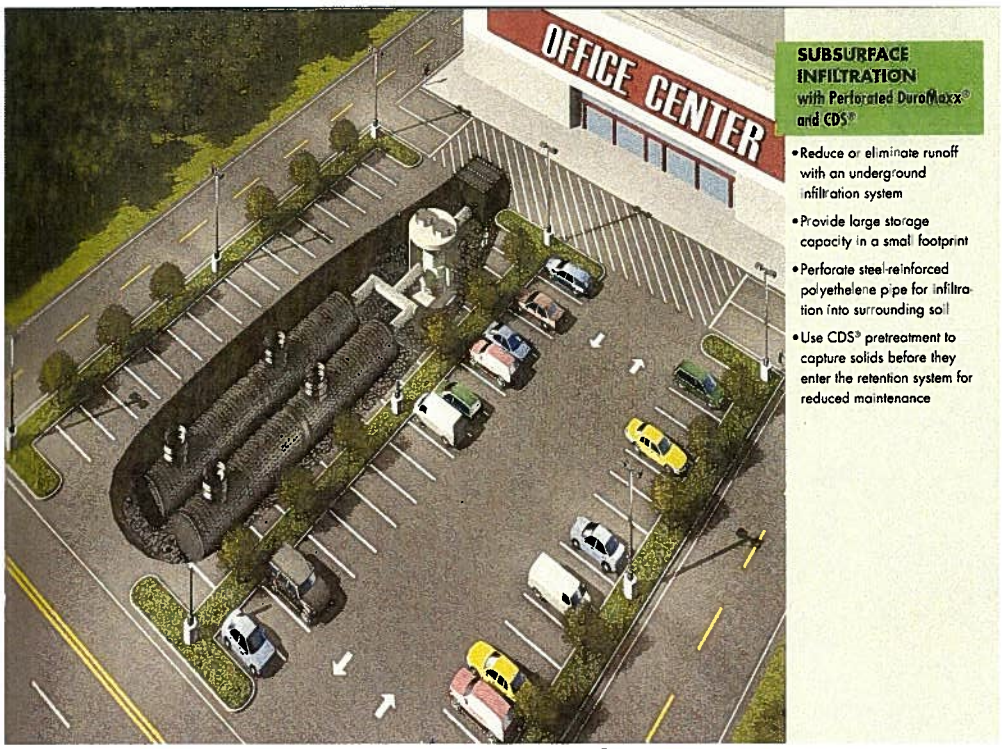
The project is funded by Proposition 84 state grant funds through The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Act of 2006. Prop 84 includes funding for the purpose of matching grants for protecting beaches and coastal waters from pollution and toxic contamination. The grant program is administered by the California

State Water Resources Control Board with local oversight by the Santa Monica Bay Restoration Commission. The grant also includes City matching funds from the Storm Water Fund.

The Public Works Department welcomes any inquiries you may have regarding the project. Please feel free to contact Mr. Michael Guerrero at (310) 802-5355 or mguerrero@citymb.info should you require any further information regarding the scheduled work. The project represents a major improvement in the City's environmental programs related to storm water pollution prevention and your assistance and patience during the construction period will be appreciated.



Project Vicinity Map



Example of Proposed Infiltration System Technology
(Sample of technology only/Project does not include parking lot or building)

Dept Original

AGREEMENT

THIS AGREEMENT is made this 24th day of May, 2012 by the CITY OF MANHATTAN BEACH, a municipal corporation, ("CITY"), and (Geosyntec Consultants), a consultant, ("CONSULTANT").

RECITALS

The following recitals are a substantive part of this Agreement:

1. City is desirous of obtaining services necessary to:

   Perform water quality and flow reporting and monitoring of storm water run-off;

2. CONSULTANT is qualified by virtue of experience, training, education, and expertise to accomplish these services.

AGREEMENT

THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. **Term of Agreement**. This Agreement shall terminate upon completion of Scope of Services, unless earlier terminated as provided below.

   1.1 Termination. CITY and CONSULTANT shall have the right to terminate this Agreement, without cause, by giving fifteen (15) days written notice. Upon receipt of a termination notice, CONSULTANT shall:

   (1) promptly discontinue all services affected (unless the notice directs otherwise); and

   (2) promptly deliver all data, reports, estimates, summaries, and such other information and materials as may have been accumulated by CONSULTANT in performing the Agreement to CITY, whether completed or in progress. CONSULTANT shall be entitled to reasonable compensation for the services it performs up to the date of termination.

2. **Services to be Provided**. The services to be provided hereunder shall be ***those set forth in Exhibit "A", Scope of Work***, which is attached hereto and incorporated herein by this reference.

3. **Compensation**. CONSULTANT shall be compensated as follows:

3.1 Amount. Compensation under this Agreement shall not exceed Ninety-four thousand ninety-five dollars and 00/100 cents ($94,095.00) as set forth in Exhibit A.

3.2 Payment. For work under this Agreement, payment shall be made per monthly invoice. Payment shall be made within thirty (30) days of approval of CONSULTANT'S invoice. For extra work not a part of this Agreement, written authorization by CITY will be required.

3.3 Expenses. CONSULTANT shall not be entitled to any additional compensation for expenses.

4. **Professional Standards**. CONSULTANT shall maintain the level of competency presently maintained by other similar practitioners in the State of California, for professional and technical soundness, accuracy and adequacy of all work, advice, and materials furnished under this Agreement.

5. **Time of Performance**. CONSULTANT shall complete all services required hereunder as and when directed by CITY. However, CITY in its sole discretion, may extend the time for performance of any service.

6. **Employees and Subcontractors**. CONSULTANT may, at CONSULTANT'S sole cost and expense, employ such other person(s) as may, in the opinion of CONSULTANT, be needed to comply with the terms of this Agreement, if such person(s) possess(es) the necessary qualifications to perform such services. If such person(s) is/are employed to perform a portion of the scope of work, the engagement of such person(s) shall be subject to the prior approval of the CITY.

7. **Insurance Requirements**.

7.1 Commencement of Work. CONSULTANT shall not commence work under this Agreement until it has obtained CITY approved insurance. Before beginning work hereunder, during the entire period of this Agreement, for any extensions hereto, and for periods after the end of this Agreement as indicated below, CONSULTANT must have and maintain in place, all of the insurance coverages required in this Section 7. CONSULTANT'S insurance shall comply with all items specified by this Agreement. Any subcontractors shall be subject to all of the requirements of this Section 7 and CONSULTANT shall be responsible to obtain evidence of insurance from each subcontractor and provide it

to CITY before the subcontractor commences work.

All insurance policies used to satisfy the requirements imposed hereunder shall be issued by insurers authorized to do business in the State of California. Insurers shall have a current A.M. Best's rating of not less than A-:VII unless otherwise approved by CITY.

7.2 Coverages, Limits and Policy Requirements. CONSULTANT shall maintain the types of coverages and limits indicated below:

(1) COMMERCIAL GENERAL LIABILITY INSURANCE - a policy for occurrence coverage, including all coverages provided by and to the extent afforded by Insurance Services Office Form CG 0001 ed. 11/88 or 11/85, with no special limitations affecting CITY. The limit for all coverages under this policy shall be no less than one million dollars ($1,000,000.00) per occurrence. CITY, its employees, officials and agents, shall be added as additional insureds by endorsement to the policy. The insurer shall agree to provide the City with thirty (30) days prior written notice of any cancellation or non-renewal in coverage. The policy shall contain no provision that would make this policy excess over, contributory with, or invalidated by the existence of any insurance, self-insurance or other risk financing program maintained by CITY. In the event the policy contains such an "other insurance" clause, the policy shall be modified by endorsement to show that it is primary for any claim arising out of the work performed under this Agreement. The City of Manhattan Beach Insurance Endorsement Form No. 1 (General Liability) must be executed by the applicable insurance underwriters.

(2) COMMERCIAL AUTO LIABILITY INSURANCE - a policy including all coverages provided by and to the extent afforded by Insurance Services Office form CA 0001, ed. 12/93, including Symbol 1 (any auto) with no special limitations affecting the CITY. The limit for bodily injury and property damage liability shall be no less than one million dollars ($1,000,000) per accident. CITY, its employees, officials and agents, shall be added as additional insureds by endorsement to the policy. The insurer shall agree to provide the City with thirty (30) days prior

written notice of any cancellation or non-renewal in coverage. The policy shall contain no provision that would make this policy excess over, contributory with, or invalidated by the existence of any insurance, self-insurance or other risk financing program maintained by CITY. In the event the policy contains such an "other insurance" clause, the policy shall be modified by endorsement to show that it is primary for any claim arising out of the work performed under this Agreement. The City of Manhattan Beach Insurance Endorsement Form No. 2 (Auto) must be executed by the applicable insurance underwriters.

(3) WORKERS' COMPENSATION INSURANCE - a policy which meets all statutory benefit requirements of the Labor Code, or other applicable law, of the State of California. Employers Liability Insurance with a minimum limit of no less than one million dollars ($1,000,000) per claim. The policy shall contain, or be endorsed to include, a waiver of subrogation in favor of CITY.

(4) PROFESSIONAL ERRORS & OMISSIONS - a policy with minimum limits of one million dollars ($1,000,000) per claim and aggregate. This policy shall be issued by an insurance company which is qualified to do business in the State of California and contain a clause that the policy may not be canceled until thirty (30) days written notice of cancellation is mailed to CITY.

7.3 Additional Requirements. The procuring of such required policies of insurance shall not be construed to limit CONSULTANT'S liability hereunder, nor to fulfill the indemnification provisions and requirements of this Agreement. There shall be no recourse against CITY for payment of premiums or other amounts with respect thereto. CITY shall notify CONSULTANT in writing of changes in the insurance requirements. If CONSULTANT does not deposit copies of acceptable insurance policies with CITY incorporating such changes within sixty (60) days of receipt of such notice, CONSULTANT shall be deemed in default hereunder.

Any deductibles or self-insured retentions must be declared to and approved by CITY. Any deductible exceeding an amount acceptable to CITY shall be subject to the following changes:

(1) either the insurer shall eliminate, or reduce, such deductibles or self-insured retentions with respect to CITY and its officials, employees and agents (with additional premium, if any, to be paid by CONSULTANT) ; or

(2) CONSULTANT shall provide satisfactory financial guarantee for payment of losses and related investigations, claim administration, and defense expenses.

7.4 Verification of Compliance. CONSULTANT shall furnish CITY with original endorsements effecting coverage required by this Agreement. The endorsements are to be signed by a person authorized by the insurer to bind coverage on its behalf. All endorsements are to be received and approved by CITY before work commences. Not less than fifteen (15) days prior to the expiration date of any policy of insurance required by this Agreement, CONSULTANT shall deliver to CITY a binder or certificate of insurance with respect to each renewal policy, bearing a notation evidencing payment of the premium therefor, or accompanied by other proof of payment satisfactory to CITY.

8. **Non-Liability of Officials and Employees of the CITY**. No official or employee of CITY shall be personally liable for any default or liability under this Agreement.

9. **Non-Discrimination**. CONSULTANT covenants there shall be no discrimination based upon race, color, creed, religion, sex, marital status, age, handicap, national origin, or ancestry, in any activity pursuant to this Agreement.

10. **Independent Contractor**. It is agreed that CONSULTANT shall act and be an independent contractor and not an agent or employee of CITY, and shall obtain no rights to any benefits which accrue to CITY'S employees.

11. **Compliance with Law**. CONSULTANT shall comply with all applicable laws, ordinances, codes, and regulations of the federal, state, and local government.

12. **Ownership of Work Product**. All documents or other information created, developed or received by CONSULTANT shall, for purposes of copyright law, be deemed works made for hire for CITY by CONSULTANT as CITY'S employee(s) for hire and shall be the sole property of CITY. CONSULTANT shall provide CITY with copies of these items upon demand and in any event, upon termination or expiration of the term of this Agreement.

13. **Conflict of Interest and Reporting**. CONSULTANT shall at all times avoid conflict of interest, or appearance of conflict of interest, in performance of this Agreement.

14. **Notices**. All notices shall be personally delivered or mailed to the below listed addresses. These addresses shall be used for delivery of service of process.

a. Address of CONSULTANT is as follows:

Geosyntec Consultants
3415 S. Sepulveda Blvd., Suite 500
Los Angeles, CA 90034

b. Address of CITY is as follows:

City of Manhattan Beach
1400 Highland Ave
Manhattan Beach, CA 90266

(with a copy to):

City Attorney
City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, CA 90266

15. **Consultant's Proposal**. This Agreement shall include CONSULTANT'S proposal or bid which is incorporated herein. In the event of any inconsistency between the terms of the proposal and this Agreement, this Agreement shall govern.

16. **Licenses, Permits, and Fees**. CONSULTANT shall obtain a Manhattan Beach Business License, all permits, and licenses as may be required by this Agreement.

17. **Familiarity with Work**. By executing this Agreement, CONSULTANT warrants that:

(1) it has investigated the work to be performed;

(2) it has investigated the site of the work and is aware of all conditions there; and

(3) it understands the difficulties and restrictions of the work under this Agreement. Should CONSULTANT discover any conditions materially differing from those inherent in the work or as represented by CITY, it shall immediately inform CITY and shall not proceed, except at CONSULTANT's risk, until written instructions are received from CITY.

18. **Time of Essence**. Time is of the essence in the performance of this Agreement.

19. **Limitations Upon Subcontracting and Assignment**. Neither this Agreement, or any portion, shall be assigned by CONSULTANT without prior written consent of CITY.

20. **Authority to Execute**. The persons executing this Agreement on behalf of the parties warrant that they are duly authorized to execute this Agreement.

21. **Indemnification**. CONSULTANT agrees to indemnify, defend, and hold harmless CITY and its elective or appointive boards, officers, agents, attorneys and employees from any and all claims, liabilities, expenses, or damages of any nature, including attorneys' fees arising out of CONSULTANT'S negligence, willful misconduct or fraud in the performance of the Agreement by CONSULTANT, CONSULTANT'S agents, officers, employees, subcontractors, or independent contractor(s) hired by CONSULTANT. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. The obligations of this paragraph shall survive the termination of this Agreement.

22. **Modification**. This Agreement constitutes the entire agreement between the parties and supersedes any other agreements, oral or written. No promises, other than those included in this Agreement, shall be valid. This Agreement may be modified only by a written agreement executed by CITY and CONSULTANT.

23. **California Law**. This Agreement shall be construed in accordance with the laws of the State of California. Any action commenced about this Agreement shall be filed in the appropriate branch of the Los Angeles County Municipal or Superior Court.

24. **Interpretation**. This Agreement shall be interpreted as though prepared by both parties.

25. **Preservation of Agreement**. Should any provision of this Agreement be found invalid or unenforceable, the decision shall affect only the provision interpreted, and all remaining provisions shall remain enforceable.

26. **Entire Agreement**. This Agreement supersedes any and all other agreements, either oral or in writing, between the parties with respect to the subject matter herein. Each party to this Agreement acknowledges that representations by any party not embodied herein, and any other agreements, statements, or promises concerning the subject matter of this Agreement, not contained in this Agreement, shall not be valid and binding. Any modification of this Agreement will be effective only if it is in writing signed by the parties. Any issue with respect to the interpretation or construction of this Agreement are to be resolved without resorting to the presumption that ambiguities

should be construed against the drafter.

27. **Attorneys' Fees**. In the event that legal action is necessary to enforce the provisions of the Agreement, or to declare the rights of the parties hereunder, the parties agree that the prevailing party in the legal action shall be entitled to recover attorneys' fees and court costs from the opposing party.

IN WITNESS THEREOF, the parties hereto have executed this Agreement on the day and year first shown above.

CONSULTANT

By _____
KENSUSILO

CITY OF MANHATTAN BEACH

By _____
David N. Carmany, City Manager
5/24/2012

ATTEST:

_____ 5-31-12
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

_____ mgj.
Public Works Approval

EXHIBIT A

SCOPE OF WORK/COMPENSATION

Upon CITY'S written notice to proceed, CONSULTANT shall provide the services set forth in CONSULTANT'S proposal attached hereto and incorporated herein as part of this Exhibit A. If the services under each task provides an "option", the CONSULTANT shall provide to CITY the services under "Option 1." It is expected that such services will be provided to CITY by CONSULTANT only upon CITY'S express written request.

CONSULTANT shall be paid for each of the tasks under Option 1, in the amount as set forth in CONSULTANT's proposal. In no event shall the total compensation to CONSULTANT exceed $94,095.00.

Geosyntec consultants

3415 S. Sepulveda Blvd. Suite 500
Los Angeles, CA 90034
PH 310.957.6100
FAX 310.957.6101
www.geosyntec.com

April 9, 2012

Mr. Michael Guerrero
Principal Civil Engineer
City of Manhattan Beach
1400 Highland Ave.
Manhattan Beach, CA 90266

Subject: **Proposal for Preparation of the project Monitoring Plan (MP), Quality Assurance Project Plan (QAPP), and Project Effectiveness Report and Coordination of Post-Construction Monitoring for the Greenbelt Low Flow Infiltration Project**

Dear Mr. Guerrero:

Geosyntec is pleased to provide this proposal for services for the Greenbelt Low Flow Infiltration Project. The following describes proposed project scope, fee, deliverables, assumptions, and schedule. The basis for this proposal is Grant Agreement No. 10-653-554 between the City of Manhattan Beach and the State Water Resources Control Board, the Project Assessment and Evaluation Plan (PAEP), and observations made at a site visit on December 2nd, 2011.

Scope

Task 1 – Project Management and Meeting Activity

Geosyntec will meet with City staff or their representative(s) to discuss project goals and establish an effective, clear approach. The budget covers one kickoff meeting, one project meeting and various project management tasks such as budget and schedule management, correspondence, coordination, and administrative assistance.

Task 1 cost: $9,780

Task 2 – Preparation of Monitoring Plan and Quality Assurance Project Plan

Task 2 covers preparation of the Monitoring Plan and the Quality Assurance Project Plan (QAPP). As required by the Grant Agreement, the project will include both water quality and flow monitoring.

The Monitoring Plan is an integral tool in delineating the collection of data used to evaluate project effectiveness, as defined in the PAEP. The Grant Agreement requires the Monitoring Plan be consistent with the State's Surface Water Ambient Monitoring Program (SWAMP) guidelines and must include a QAPP tailored to SWAMP requirements. SWAMP guidelines and requirements have been collaboratively developed by stakeholders across the state to support water resource management in California. The SWAMP guidelines require additional effort in order to avoid later rejection of data or additional monitoring after expected completion of the project.

The Monitoring Plan and Quality Assurance Project Plan will include the following information specific to the Project for the water quality and flow monitoring programs:

- Description of the baseline water quality to be addressed;
- Identification of the non-point source(s) of pollution to be prevented or reduced by the Project;
- Site selection, rationale and GPS information for both sampling locations;
- Monitoring schedule, including the sampling/observation/maintenance frequency;
- Methodology, including equipment or instrument specifications, analyte selection, coordination with analytical laboratories, and monitoring equipment maintenance recommendations;
- Reporting requirements, including what data will be collected and how it will be used to evaluate project effectiveness;
- Quality control, including corrective actions for field activities and data review procedures; and

- QAPP, included as an appendix to the Monitoring Plan, will be prepared using the SWAMP-compatible template and will outline the following:
    - Project management tasks associated with monitoring (e.g., project organization, problem definition and background, quality objectives and criteria for measurement, documents and records, etc.);

- Data generation and acquisition (e.g., sampling process design, sampling methods, sample handling custody, analytical methods, quality control, instrument/equipment testing and inspection, data management, etc.);
- Assessment and oversight (e.g., assessment and response actions and reports to management);
- Data validation and usability (e.g., data review, verification and validation, verification and validation methods, and reconciliation with user requirements); and
- Provide necessary Standard Operating Procedures (SOPs).

Cost – Preparation of Monitoring Plan: $12,800
Cost – Preparation of QAPP: $14,420

Task 2 cost: $27,220

Task 3 – Coordination of Post-Construction Water Quality and Flow Monitoring

Task 3 is coordination of the post-construction monitoring.

Geosyntec will perform the proposed post-construction water quality and flow monitoring in accordance with the Monitoring Plan and will coordinate with the contract laboratory so that that the laboratory analyses area performed in accordance with the procedures outlined in the QAPP. Geosyntec will utilize Weck Laboratories based in City of Industry, CA (www.wecklabs.com) for all laboratory analytical services. The monitoring program will likely consist of the following components:

- Continuous monitoring of dry and wet weather flow upstream the diversion to the infiltration system and also at a second point in the receiving downstream storm drain line;
- Collecting grab samples of influent to the infiltration unit to test for bacteria, specifically total coliform, fecal coliform, and enterococcus;
- Collecting precipitation data from the Los Angeles County Department of Public Works; and
- Collecting pre- and post-construction AB411 monitoring data from the local county environmental health department.

The goal of post-construction monitoring will be not only to assess project effectiveness, but also to work with the City throughout the monitoring period to refine the adaptive management procedures, and ultimately improve the project effectiveness.

Task 3 cost: $14,001
(Note that Task 3 cost is reduced to $11,836 for Option 1 of Task 4)

Task 4 – Flow Monitoring Equipment

There are several options for the selection of flow monitoring equipment both with respect to type of equipment and to rental vs. purchase. In this proposal we present 4 options. Geosyntec recommends Option 1. For all options it is assumed that there will be two flow monitoring points, one at the outlet pipe of the upstream catch basin and the other at the inlet pipe to the downstream manhole. The upstream point will measure total flow to the system and the downstream point will measure bypass flow.

Option 1: This option is based on the use of a WIFI-based flow logger which will allow for remote downloading of flow data as well as real-time monitoring of influent and effluent flow. Real-time monitoring will allow the consultant, as well as the client, to track flow online as it happens, and can therefore plan water quality sampling events accordingly, reducing the number of false starts. Installed equipment at each monitoring point will include a Hach FL904 flow logger and the Flo-Dar sensor and/or AV9000 area velocity flow meter, and cables and mounting equipment required for complete assembly and installation. The use of the Flo-Dar sensor and/or AV9000 will be determined on site depending on what is most suitable based on the site conditions. This will not affect the price. Total cost for this task is $20,309. This price is firm until the end of January 2012 based on the vendor's terms and conditions and subject to change thereafter. The cost covers rental for a seven month period and also includes removal of equipment. Installation and removal will be the responsibility of the equipment supplier. Hach will be responsible for equipment maintenance and will provide a web-based user interface where all recorded flow data will be available to view and to download.

Total cost for Task 4 - Option 1 is $20,309.

Option 2: This option is based on flow metering equipment which cannot be remotely monitored. The rental cost for this equipment will be less than for Option 1, however, will require more labor from the Consultant since maintenance is not provided by Hach. If maintenance and/or downloading of data is performed by the City, Option 2 could provide a lower total proposal fee than for Option 1. Installed equipment at each monitoring point will include a Hach Sigma 920 Area Velocity Flow Meter, an in-pipe ultrasonic depth sensor (or similar), and cables and mounting equipment required for complete assembly and installation. Use of the Hach Sigma 920 offers a high level of accuracy as well as measurement redundancy in the form of two sensors providing a backup if one sensor should fail. Total cost for this task is $17,422. This price is firm until the end of January 2012 based on the vendor's terms and

conditions and subject to change thereafter. The cost covers rental for a five month period and also includes removal of equipment. Installation and removal will be the responsibility of the equipment supplier.

Total cost for Task 4 - Option 2 is $17,422

Option 3: If the City is interested in purchasing the equipment, the total cost for the flow monitoring equipment described above in Option 2, including installation is $24,279. This price is firm until the end of January 2012 and subject to change thereafter.

Total cost for Task 4 - Option 3 is $24,279

Option 4: A less expensive alternative includes the use of the Hach FL900 Flow Logger. This option does not offer measurement redundancy and therefore bears a greater risk of data loss. For this reason, Geosyntec recommends the use of the Hach Sigma 920. However, if it is of interest to the City, we can provide a quote for this option.

Total cost for Task 4 - Option 4 – upon request

Task 5 – Preparation of Project Effectiveness Report

Geosyntec will use its familiarity with the PAEP, project design, Monitoring Plan, and program to prepare a post-construction Project Effectiveness Report to serve as the project capstone. This report will be used to assess the effectiveness of the infiltration system and its collective impact on downstream receiving waters. The Project Effectiveness Report will assess original project goals and desired outcomes, as defined in the PAEP, with respect to the monitoring results, pre-defined output indicators (i.e., the environmental condition(s) that will be changed to indicate the goal has been met), and the specific target measurements that will indicate that the desired outcome has been reached.

Task 5 cost: $24,950

Deliverables

- Monitoring Plan including QAPP (draft and final), transmitted electronically in PDF format.
- Project Effectiveness Report (draft and final), transmitted electronically in PDF format.

The Geosyntec Quality Management Plan requires that all deliverables undergo both a peer review and senior review prior to delivery to the client. The peer review process involves the review and checking of data, calculations, analyses, models, studies, and other project activities. Peer reviews are intended to identify and correct errors or mistakes in draft work products and to evaluate the work inputs, methodologies, and results. Peer reviews are conducted by Geosyntec personnel selected by the PM based on qualifications, relevant experience, and/or training to perform the review. Senior review is the term that applies to the ongoing review of the entire project to confirm that the project scope, schedule, budget, and health and safety requirements are achieved, that the project-related guidelines of the Risk Management Plan and Quality Management Plan are satisfied, and that the project has been performed in accordance with the applicable standard of professional care.

Assumptions

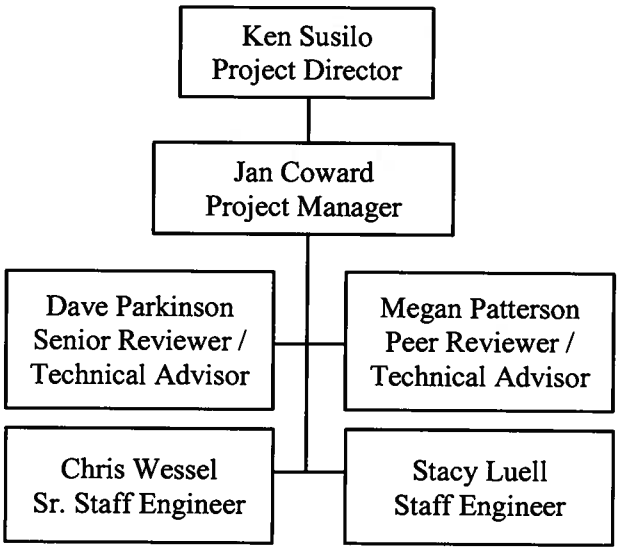
- Meetings will be held at Geosyntec's Los Angeles office or as conference calls
- The Monitoring Plan including QAPP will be provided to the City electronically in the following stages:
  -Draft – for review and comment by City;
  -Draft Final – for review and comment by State Water Board;
  -Final – After resolution and incorporation of all comments.
- The Project Effectiveness Report will be provided to the City electronically in the following stages:
  -Draft – for review and comment by City;
  -Draft Final – for review and comment by State Water Board;
  -Final – After resolution and incorporation of all comments.
- Given that the final project report must be submitted by February 28, 2013 and assuming that monitoring will commence in the beginning of July 2012, it is assumed for this proposal that the duration of the monitoring period will be 5 months.
- Geosyntec will be responsible for collection of flow and water quality monitoring data. It is assumed that no confined space entry will be required and that grab samples can be collected using an extension pole from above ground. It is also assumed that the City will provide personnel and/or necessary equipment to allow access to the manhole(s) containing the flow monitoring equipment.
- The cost proposal is based on an average of two (2) water quality sampling events per month, for a maximum of 10 events during the 5 month monitoring period. The actual

number of sampling events may be fewer due to the unpredictable nature of urban dry weather flow, so some false starts can be expected. A maximum of 2 false starts will be billed to the client. If possible, at least two samples will be collected during wet weather flow events (runoff producing event with a 72-hour antecedent rainfall <0.10 inches). Water quality samples will be collected during normal business hours (8am – 5pm, Monday through Friday). It is assumed that downloading of flow data and collection of grab samples will be performed during each sampling event. If additional site visits are required due to maintenance issues or the absence of anticipated runoff, incurred labor costs will be billed to the client based on the attached rate schedule.

- The City will be responsible for maintaining the constructed infiltration facilities and all connecting City-owned storm drains.
- The City will provide Geosyntec the AB411 monitoring data.
- Geosyntec will be responsible for performing basic maintenance of monitoring equipment (replacing batteries and desiccant) and will keep the City informed as to when water quality monitoring takes place, or when anomalous results are encountered. It is assumed that this will not require confined space entry.
- The City of Manhattan Beach will provide the necessary traffic control equipment for all monitoring activities.
- Installation and use of a temporary rain gage will not be necessary. High resolution precipitation data will be available from the Los Angeles County Department of Public Works for the automatic rain gage ID no. 1070, located in Manhattan Beach.

Staff

Geosyntec has assembled a comprehensive and highly qualified team to provide the services required by the City of Manhattan Beach's Department of Public Works under this contract. Our team will be organized as follows. Biosketches are provided below.



KEN SUSILO – PROJECT DIRECTOR

Mr. Ken Susilo, P.E., D.WRE., CPSWQ has 20 years of experience in planning, permitting, engineering design, hydraulics, hydrology, computer modeling, stormwater management, and integrated water resources. Susilo was the stormwater engineer for the Malibu Legacy Park Project and he has served as Project Director for numerous stormwater BMP design projects in Southern California, such as Oros Street, Vermont Avenue, and the Westchester Infiltration BMP project. He has managed watershed based Water Quality Plans and was the Project Director of the groundbreaking GIS-based Structural BMP Prioritization and Analysis Tool. Mr. Susilo has managed projects that have required and/or have directly conducted analyses supporting preparation of watershed management plans; sedimentation, hydrologic and hydraulic analyses; biological assessments and stream/channel restoration/retrofitting plans; GIS products; CEQA/NEPA documentation; and resource agency permitting. This includes design services requiring knowledge of relevant civil engineering principles and the capability to perform hydrologic, hydraulic, structural, and water quality treatment analyses necessary for the successful design of water quality improvement projects; LID and BMP technologies; CASQA and LID manuals; Orange County MS4 permits; local, state, and other public works standard plans and specifications. He has a demonstrated capability in completed designs for urban runoff

treatment/diversion, habitat restoration, and/or other water quality improvement projects, including the support of resource agency permits, including the Coastal Commission.

JAN COWARD – PROJECT MANAGER

Jan Coward has been working within the field of environmental and water resources engineering since 1997. He has managed and worked with projects for the design of stormwater BMPs, transportation systems for water, sewerage and stormwater, hydrological/hydraulic computer modeling of catchments and stormwater / combined sewer systems, and design of treatment facilities for leachate. His work has included project management, planning and design, production of technical drawings and specifications, preparation of tender documents and construction site control. His experience with digital modeling of catchments and stormwater systems includes everything from building and calibrating models, to using them for determining design criteria, critical flows, capacity analysis and testing of remedial measures. He is presently deputy PM for a bioinfiltration project for the City of Malibu which involves post-construction monitoring as well as preparation of the PAEP, Monitoring Plan, QAPP, and Project Effectiveness Report.

CHRIS WESSEL, P.E., QSP/QSD – PROJECT STAFF

In his 2 years at Geosyntec, Mr. Wessel has been involved in a variety of projects which have included topics such as stormwater planning and BMP design, hydraulic and hydrologic modeling, stormwater pollution prevention plan development and NPDES permitting under the new California Construction General Permit, dry and wet weather field sampling and collection, and compliance with water quality objectives including Total Maximum Daily Loads (TMDLs), Basin Plan Objectives, and NPDES effluent limits. Mr. Wessel served as a lead developer of the monitoring plan for Hermosa Beach's Pier Avenue Improvement Project, and is currently responsible for the plan's implementation. This monitoring plan relies on five automated flow meters placed at various locations within the Pier Avenue watershed to account for infiltrated flow and storm drain overflow. Mr. Wessel is responsible for regular data retrieval, equipment upkeep and maintenance, and analysis of the collected data. As a Qualified SWPPP Practitioner (QSP), Mr. Wessel has provided on-site field training, BMP inspections, water quality sampling, and audits for permit compliance at a variety of construction sites throughout Southern California. Mr. Wessel has also been involved in a variety of other monitoring activities, including regular surface water sampling for a private land developer and groundwater sampling at numerous locations throughout the greater Los Angeles area.

MEGAN PATTERSON, P.E. – PEER REVIEWER

Ms. Patterson has 4 years of experience contributing to many technically complex, controversial, and time critical projects for the public, private, and non-profit sectors. Her project experience includes industrial and municipal NPDES Permit compliance and reporting, surface water management and wet and dry weather monitoring, stormwater planning and engineering feasibility studies to address water quality and volume reduction goals, TMDL implementation

planning, source characterization, and structural BMP design. Ms. Patterson is also experienced in hydrologic and hydraulic modeling, litigation support, and technical reviews.

DAVID PARKINSON, PH.D., R.G. – SENIOR REVIEWER

Dr. Parkinson has 26 years of experience working on a wide variety of groundwater, surface water, water resources and environmental remediation projects. He is responsible for all aspects of technical work products from proposals to final reports. Dr. Parkinson has participated in a number of TMDL development and implementation projects in Southern California, including Santa Clara River, Los Angeles River, Ballona Creek, and Santa Monica Bay Beaches. He has prepared and reviewed a number of modeling efforts aimed at understanding quantity, quality and impacts to and from both groundwater and surface water. He has investigated large regional groundwater recharge capabilities in numerous locations in the southwest US, as well as worked on a variety of artificial groundwater recharge projects for water supply augmentation, from conceptualization through post-construction monitoring. Other technical responsibilities include construction or review of groundwater, surface water, and groundwater-surface water interaction models. He is an author on numerous scientific articles and abstracts.

STACY LUELL – PROJECT STAFF

Stacy Luell has most recently worked as a graduate research associate in the Biological and Agricultural Engineering program at North Carolina State University, where she recently completed her Master of Science degree. Her research work has focused extensively on bioretention cells and swales, particularly in the linear highway environment. Her experience includes gathering stormwater samples and hydrology data in the field, analysis and synthesis of stormwater quality and hydrology data, and the development of monitoring designs and the installation of monitoring equipment. She holds a BMP Inspection and Maintenance Certification, and is experienced with AutoCAD, ArcGIS, Flowlink, and HEC-RAS.

Fee

Geosyntec recommends Option 1, which is presented below. Total costs and costs per task are also presented for Options 2 and 3.

Task	Cost		
	Option 1	***Option 2***	***Option 3***
1 – Project Administration	$9,780	$9,780	$9,780
2 – Preparation of Monitoring Plan and Quality Assurance Project Plan	$27,220	$27,220	$27,220
3 – Coordination of Post-Construction Water Quality and Flow Monitoring	$11,836	$14,001	$14,001
4 –Flow Monitoring Equipment	$20,309	$17,422	$24,279
5 – Preparation of Project Effectiveness Report	$24,950	$24,950	$24,950
Total	**$94,095**	**$93,372**	**$100,230**

Schedule

We propose the following schedule assuming that the project design is adequate to prepare a Monitoring Plan at the time of receiving the Notice to Proceed (NTP).

Item/Milestone	Date
Kickoff meeting	Within one week from receiving NTP
Submittal of draft Monitoring Plan and QAPP	6 weeks from receiving NTP
Submittal of final Monitoring Plan and QAPP (assuming two weeks of review by the City)	10 weeks from receiving NTP
Post-Construction Monitoring (5 months)	Mid-July – Mid-December, 2012

Submittal of draft Project Effectiveness Report	February 8th, 2013
Submittal of final Project Effectiveness Report (assuming comments from City are received by February 15th)	February 28th, 2013

This work will be conducted on a time and materials basis according to the attached rate sheet. If you have any questions please do not hesitate to call.

Very truly yours,
Geosyntec Consultants

Ken Susilo, PE, D.WRE, CPSWQ
Principal

Jan Coward
Project Engineer

Attachments:

- Geosyntec Consultants – 2012 B Rate Schedule

CONFIDENTIAL

GEOSYNTEC CONSULTANTS
2012 RATE SCHEDULE

Engineer/Scientist	**Rate/Hour**
Staff Professional	$110
Senior Staff Professional	$125
Professional	$145
Project Professional	$165
Senior Professional	$185
Associate	$205
Principal	$225
Construction Services	
Engineering Technician I	$ 57
Engineering Technician II	$ 62
Senior Engineering Technician I	$ 67
Senior Engineering Technician II	$ 72
Site Manager I	$ 80
Site Manager II	$ 90
Construction Manager	$100
Design, Graphical, and Administrative Services	
Designer	$120
Senior Drafter/Senior CADD Operator	$ 105
Drafter/CADD Operator/Artist	$ 90
Admin Assistant/Tech Word Processor	$ 57
Clerical	$ 47
General	
Direct Expenses	Cost plus 12%
Subcontract Services	Cost plus 12%
Communications Fee	3% of Professional Fees
Specialized Computer Applications (per hour)	$ 15
Personal Automobile (per mile)	Current IRS Rate
Photocopies (per page)	$ .09

Rates are provided on a confidential basis and are client and project specific.
Unless otherwise agreed, rates will be adjusted annually based on a minimum of the US Department of Labor, Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers.
Rates for field equipment, health and safety equipment, and graphical supplies presented upon request.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 3/25/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Greyling Insurance Brokerage 450 Northridge Parkway Suite 102 Atlanta GA 30350	CONTACT NAME: Jerry Noyola PHONE (A/C, No, Ext): (770) 552-4225 FAX (A/C, No): (866) 550-4082 E-MAIL ADDRESS: jerry.noyola@greyling.com
INSURED Geosyntec Consultants, Inc. 900 Broken Sound Parkway NW Suite 200 Boca Raton FL 33487	INSURER(S) AFFORDING COVERAGE AXV — NAIC # INSURER A: Commerce & Industry Insurance — 19410 INSURER B: Chartis Specialty Insurance Co. — 26883 AXV INSURER C: New Hampshire Insurance Company — 23841 AXV INSURER D: Ins. Co. of the State of PA — 19429 AXV INSURER E: INSURER F:

COVERAGES **CERTIFICATE NUMBER:** 11-12 (Geosyntec FL) **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY [X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR [X] Contractual Liability GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [X] LOC			GL 417-86-18	9/1/2011	9/1/2012	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 1,000,000 $ 25,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY [X] ANY AUTO [ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS [X] HIRED AUTOS [X] NON-OWNED AUTOS			CA 505-39-37 (AOS) CA 195-54-51 (MA)	9/1/2011 9/1/2011	9/1/2012 9/1/2012	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
B	[X] UMBRELLA LIAB [X] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $			UMB 8085625	9/1/2011	9/1/2012	EACH OCCURRENCE AGGREGATE	$ 10,000,000 $ 10,000,000
C D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N [N] (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WC 0206-35-626 (AOS) WC 0206-35-627 (CA)	9/1/2011 9/1/2011	9/1/2012 9/1/2012	[X] WC STATU-TORY LIMITS [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
B	Professional Liability Contractors Poll. Liab.			COPS 1951904	9/1/2011	9/1/2012	Per Claim Aggregate	$8,000,000 $10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: Green Belt Low Flow Infiltration Project. The City of Manhattan Beach is named as an Additional Insured on the above referenced liability policies with the exception of workers compensation & professional liability where required by written contract. This insurance is primary & non-contributory where required by written contract. Waiver of Subrogation is applicable where required by written contract & allowed by law.

5/14/12

CERTIFICATE HOLDER

City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, CA 90266

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Matias Ormaza/JERRY

POLICY NUMBER: GL 417-86-18

COMMERCIAL GENERAL LIABILITY
CG 20 10 07 04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations
BLANKET AS REQUIRED BY WRITTEN CONTRACT	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. **Section II - Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location And Description Of Completed Operations
Blanket as required by written contract	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

POLICY NUMBER: CA 505-39-37

COMMERCIAL AUTO
CA 20 48 02 99

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED INSURED

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM
GARAGE COVERAGE FORM
MOTOR CARRIER COVERAGE FORM
TRUCKERS COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" under the Who Is An Insured Provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Endorsement Effective: 09/01/11	Countersigned By: A. Angelucci (Authorized Representative)
Named Insured: GEOSYNTEC CONSULTANTS	

SCHEDULE

Name of Person(s) or Organization(s):
BLANKET WHERE REQUIRED BY WRITTEN CONTRACT

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to the endorsement.)

Each person or organization shown in the Schedule is an "insured" for Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured Provision contained in **Section II** of the Coverage Form.