Flood Control & Water Conservation DISTRICT

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399 Elmhurst Street • Hayward, CA 94544 • (510) 670-5480 • www.acgov.org/pwa

Request for Proposal

Water Quality and Flow Monitoring Services Associated with the Alameda County Public Works Agency (ACPWA) Low Impact Development Demonstration Project at Turner Court Parking Lots in Hayward, Alameda County

July 23, 2013

I. Introduction

The Alameda County Flood Control and Water Conservation District (District) is seeking proposals from firms (Contractor) that wish to provide water quality and flow monitoring services for the Alameda County Public Works Agency (ACPWA) Low Impact Development Demonstration Project located at the parking lots of 951 Turner Court in the City of Hayward, in Alameda County. The District intends to enter into a contract with the Contractor for a maximum period of three (3) years.

This Request for Proposal (RFP) describes the project, the anticipated scope of services, the required contractor expertise and experience, and the information that must be included in the proposal. Failure to submit information in accordance with the RFP requirements and procedures may be cause for disqualification.

This is a one-step RFQ/RFP process. The District will evaluate written proposals on the basis of thoroughness, completeness and content, as described in section VI of this RFP: "Form of the Proposal." Final ranking will be based on the submitted, written proposals.

The number-one ranked Contractor will be invited to negotiate the final scope of work and budget details. If the negotiation process is successful, a Standard Services Agreement (Contract) with the District will be prepared and recommended for execution by the Board of Supervisors. The number-one ranked Contractor will be required to submit a Certificate of Insurance showing the required insurance coverage. A sample Contract and insurance requirements (and accompanying exhibits) are available at:

- Go to: http://www.acgov.org/pwa/
- Under "Doing Business with Us," select "Current List of RFPs/RFQs"
- Click on "RFP – Water Quality and Flow Monitoring Services at Turner Court."

II. Background

This section provides a brief description of the project and the general scope of work. The District expects that the Contractor will use its expertise and experience to make recommendations, as appropriate, regarding the scope of work needed to satisfy the District's water quality and flow monitoring objectives for the project.

Project Description

The proposed project is for the monitoring of water quality and flow ***associated with*** the Low Impact Development (LID) Demonstration Project at ACPWA Turner Court Parking Lots (Turner Court LID Project). The required monitoring services include water sampling, analysis and reporting tasks to cover three wet seasons starting October 1, 2013 through July 31, 2016.

Turner Court LID Project

The Turner Court LID Project seeks to implement Low Impact Development (LID) measures within a design to retrofit two existing parking lots that service two Alameda County Public Works Agency (ACPWA) buildings at 951 and 951A Turner Court in Hayward, Alameda County, California. The proposed project seeks to treat all of the flow draining both parking lots. The following LID site design and biotreatment measures will be implemented at the project site: pervious asphalt, porous concrete and permeable pavers, bioretention (rain gardens, biofiltration and green gutters), flow-through and stormwater planters, interceptor trees, and rain barrels. The proposed project will serve as a site for education and outreach of LID concepts for Alameda County contractors and Clean Water Program stormwater managers.

The design intent is to treat all stormwater runoff that drains to the receiving outlets at each site. The design approach follows the LID Feasibility Evaluation Process (Bay Area Stormwater Management Agencies Association, 2011). Implementation of Low Impact Development measures throughout the project site and minimizing impervious surface areas while providing adequate drainage and parking facilities should pose no risks to water quality.

In September 2012, ACPWA was notified that the Turner Court LID Project had been recommended for funding in the amount of $1,600,000 under Proposition 84 by the State Water Resources Control Board (SWRCB). Proposition 84, the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006, was approved by California voters in the general election on November 7, 2006. Proposition 84 provides the State Water Board $90 million for matching grants to local public agencies for the reduction and prevention of storm water contamination of rivers, lakes, and streams.

At the October 3, 2012 SWRCB board meeting, the Storm Water Grant Program recommended funding lists were presented for SWRCB adoption. The State subsequently provided the District the State Standard Funding Agreement on June 10, 2013 for review and execution.

The grant agreement requires pre- and post-project water quality and flow monitoring for three years. With construction of the Turner Court LID Project slated for Summer 2015, two pre-construction monitoring season and one post-construction monitoring season will be required. ***This RFP is soliciting proposals for the water quality and flow monitoring required by the Storm Water Grant Program.***

III. Scope of Work

Time is of the essence in execution of the monitoring services for the Turner Court LID Project. It is critical to have monitoring services prepared to catch the "first flush" storm event beginning water year 2013-2014, i.e., field teams must be ready to deploy on October 1, 2013.

To meet this critical timeline, the District has already initiated tasks such as Quality Assurance Project Plan and Monitoring Plan preparation, monitoring equipment procurement, and equipment installation—with equipment to be installed by the District by October 1, 2013.

Equipment to be installed by District includes: Isco 6712 sampler, Isco 750 area velocity flow meter, telemetry hardware, walk-in security enclosure, 12 volt battery, solar panel and a pH/conductivity meter.

This Scope of Work includes:

Task 1: Equipment Maintenance/Demobilization/Decommissioning

Site equipment will be maintained throughout each monitoring season including: service, calibration, desiccant replacement, cleaning, etc. At the conclusion of the first two monitoring seasons, some site equipment will be demobilized for the summer and stored at the District's facilities. At the beginning of the second and third monitoring seasons, some equipment will be re-installed including newly cleaned intake tubing and strainer. The annual installation of tubing and strainer will require a three-person confined space entry. At the conclusion of the third and final monitoring season, and at the direction of the District, the site may be fully decommissioned and returned to its original, pre-installation condition, as much as practicable. A confined space entry will be required for final site decommissioning. All District-owned equipment will be removed and returned to the custody of the District at the conclusion of the equipment decommissioning effort.

Task 2: Storm Monitoring

Three storms will be targeted for monitoring during each of three storm seasons identified for this project (fall 2013 through spring 2016), for a total of nine storm events monitored over the project duration. For each monitored event, samples will be collected from two locations: 1) discharge point from main parking lot located at 951 Turner Court (Station 1), and 2) discharge point from main parking lot located at 951A Turner Court (Station 2). Exhibits showing monitoring locations, Stations 1 and 2, are available on the District website as described in Section I above. The exact location of sample collection will be coordinated with the District. Three monitored storms each season will be tentatively distributed as follows: 1) first-flush/early season, 2) mid-winter, and 3) late-season.

Station No. 1, 951 Turner Court

For monitoring station No. 1, flow-weighted, whole-storm composite samples will be collected for all constituents listed in Task 6, except for oil and grease samples which must be collected as a manual grab sample. For each monitored event, the first composite aliquot sample will be collected after the first storm-specific runoff volume interval has been reached, aliquots will continue to be collected at the fixed runoff volume interval till event runoff ceases. A minimum of ten aliquot samples will be collected per event to satisfy representativeness criteria. The composite sample will be homogenized and subsampled on site for each analytical parameter, and for field filtration and preservation. Notes on specific sampling techniques are as follows:

- Conductivity and pH of the composite sample will be measured in the field at the time of subsampling.
- The oil and grease manual grab sample will be collected in six (6) spatial and/or temporal aliquots and composited at the analytical laboratory.
- For field quality assurance/quality control purposes, blind field duplicate samples and field blank samples will be collected at a minimum ten percent frequency over the life of the project.

- Standard observations will be recorded on a field data log sheet by the on-site field crew to document weather conditions, activities within the drainage area that may impact water quality, presence of oil, or other visual pollutants, odor, etc.
- Time-series data for water depth and flow rate will be collected by the contractor. Time series rainfall data will be collected by ACPWA and will be provided to the contactor following each monitored event.

Station No. 2, 951A Turner Court

For monitoring location No. 2, manual grab samples will be collected for all analytical parameters. The same analytical suite of parameters will be collected at location No. 2 as at location No. 1. Flow measurement data will not be collected at location No. 2. The manual grab samples will be targeted for collection during the rising limb of the hydrograph, near to peak runoff. The grab samples will be collected in one of two ways: 1) pumped from the drop inlet vault with a portable peristaltic pump sampler, or 2) grab sampled from the curb and gutter conveyance at the point of discharge to the drop inlet. Standard observations will be recorded on a field data log sheet.

Task 3: Laboratory Analyses

The following table details analytical constituents, methods, and reporting limits for all parameters to be determined by the proposed testing laboratory at each of two sampling locations:

Constituent	Unit	Method	Reporting Limit
Conventional			
Turbidity	NTU	EPA 180.1	0.05
Hardness as $CaCO_3$	mg/L	SM 2340C (titration)	5
Total Dissolved Solids (TDS)	mg/L	SM 2540C	10
Suspended Sediment Concentration (SSC)	mg/L	ASTM D 3977-97B	3
Dissolved Organic Carbon (DOC)	mg/L	SM 5310B	0.5
Total Organic Carbon (TOC)	mg/L	SM 5310B	0.5
Oil & Grease (O&G)	mg/L	EPA 1664A	5
Nutrients			
Ammonia as Nitrogen (NH_3-N) –LL	mg/L	SM 4500 NH3-C	0.02
Nitrate as Nitrogen (NO_3-N) –LL	mg/L	EPA 300.0	0.05
Total Kjeldahl Nitrogen (TKN)	mg/L	SM 4500 NH3-C	0.1
Total Phosphorous –LL	mg/L	SM 4500P-E	0.01
Dissolved Ortho-Phosphate –LL	mg/L	SM 4500P-E	0.01
Metals (total recoverable & dissolved)			
Arsenic (As)	µg/L	EPA 200.8	0.1
Cadmium (Cd)	µg/L	EPA 200.8	0.1
Chromium (Cr)	µg/L	EPA 200.8	0.1
Copper (Cu)	µg/L	EPA 200.8	0.5
Iron (Fe)	µg/L	EPA 200.8	50
Lead (Pb)	µg/L	EPA 200.8	0.1
Manganese (Mn)	µg/L	EPA 200.8	0.5
Mercury (total only)	µg/L	EPA 1631	0.0005
Nickel (Ni)	µg/L	EPA 200.8	0.1
Zinc (Zn)	µg/L	EPA 200.8	1.0
Petroleum products			
TPH (diesel)	mg/L	EPA 8015	50
TPH (motor oil)	mg/L	EPA 8015	200

Task 4: Data Management and Reporting

Analytical laboratory results will be reviewed and verified immediately upon receipt by Contractor to ensure that all samples that were submitted were analyzed, that all samples were analyzed within acceptable holding times, to the method reporting limit, and within acceptable laboratory QC limits. Any inconsistencies in laboratory analysis and reporting will be addressed by the Contractor with the lab manager immediately so that corrective actions and/or reanalysis may occur as soon as possible.

All laboratory, field and time-series data will be maintained in a database by the Contractor. After the conclusion of each of the first two monitoring seasons, an annual interim draft report will be prepared to document field and laboratory methods, provide a QA/QC summary, and present field, hydrologic and laboratory data results.

After the conclusion of the third season (post-LID construction), an end-of-project report will be prepared to document field and laboratory methods, provide a QA/QC summary, present field, hydrologic and laboratory data results, and interpret these results with statistical significance tests to highlight any post-construction runoff water quantity/quality differences.

The District will provide the following information at the initiation of contract work as necessary:

- Aerial imagery of the general area of the identified project locations.
- Existing survey data (historical and District survey) for the project vicinity.
- All existing available maintenance records. Contractor shall coordinate with Maintenance and Operation Department staff on the gathering and reviewing of existing maintenance information.
- Access to District facilities related to the identified project locations.

IV. Minimum Expertise and Experience Required:

Contractors must demonstrate the following expertise and experience:

- Demonstrate successful completion of past water quality and flow monitoring services of similar scope of work, during the past three years. Provide Client's name and contact information;
- Demonstrate Contractor's ability to provide sufficient staffing and mobilization of field team(s) to monitor the required storm events and provide required water quality and flow monitoring services (24/7 on-call implementation capability). Provide specific project examples from the past three years, as well as current staffing capability;
- Demonstrate successful ompliance with established Quality Assurance Project Plans and Monitoring Plans for past water quality and flow monitoring projects. Provide Client's name, project title and contact information;
- Field experience with equipment to be installed by District, listed in Section III: ISCO sampling equipment, telemetry hardware, and solar panel power source, and other proposed equipment;
- Ability to comply with current OSHA confined space entry requirements;
- Proficiency with: general water chemistry and toxicity testing; fixed-station stormwater sampling, estimation of loadings for pollutants of concern, interpretation of chemical, toxicity and water quality, trace elements, persistent bioaccumulative pollutants, pesticides; water quality screen parameters, health risk screening indicators;
- Ability to meet data quality and reporting standards applicable to the scope of work;
- Experience with municipal storm water NPDES permits, and understanding of San Francisco Bay Area stormwater regulatory issues.

V. Conduct of the Study

This assignment is intended to be a cooperative effort between the District and Contractor staff. The Contractor is expected to provide all the necessary technical resources and skills, expertise, support services, and the related project management of these resources. Contractor is required to provide a management plan as described under Section VI.D.5. District staff will provide overall project management and administrative direction.

VI. Form of the Proposal

Proposal content should be focused and specific to this project. Proposal content and completeness are important and, although proposal length is not limited, clarity and conciseness are essential and will be considered in assessing the proposer's capabilities. In order to simplify the process and to obtain the maximum degree of comparability, the proposal should be organized in the following manner:

A. Transmittal Letter

B. Title page – show the RFP subject, the name of the proposer's firm, address, telephone number, e-mail address, name of the contact person, and the date.

C. Table of Contents – include a clear identification of the material by section and page number.

D. Proposal Content:

1. Overview and Summary - this section should clearly convey the Contractor's understanding of the work and project approach. Contractor should address the following:

   a. Understanding of the purpose of the project as specified in Section II, "*Background*" and III, "*Scope of Work*;"

   b. Summary of the overall approach to the project and the methodologies that will be used, and administrative and operational management expertise that will be employed.

2. Detailed Work Plan – this section should include a full description of the work elements and the proposed methodology. The work description should be detailed to a sufficient level (work elements, sub-elements, etc.) to show a clear understanding of the precise work required to meet project goals and objectives. Provide a detailed description covering all the discussed requirements. Discuss the reasons for any proposed changes made to the scope of work as outlined in Section III.

3. A list of three former (within the past three years) or present clients for whom the Contractor has performed water quality and flow monitoring services consistent with the proposed scope of work.

4. Project Delivery Schedule - Include a schedule with major milestones specifically between contract execution through completion of monitoring and final reporting. It is anticipated that the Contractor contract will be scheduled for approval by Alameda County Board of Supervisors by the end of September 2013.

5. Management Plan

   This section should describe the Contractor's approach to management of the work. If the proposal is a team effort, the allocation of work to the team members should be indicated. The management plan should describe the following:

   a. Organizational work assignments structure, including work elements and sub-elements performed by sub-contractors.

   b. Staffing plan, including the names, titles and qualifications of key personnel and the assignment of personnel to individual work elements. Resumes should be attached as

appendices. Staffing assignments should be specific enough to demonstrate understanding of skills required and commitment of proper resources. Any changes in staffing must be mutually agreed upon by the Contractor and District.

c. Management approach, including the role of the prime contractor and sub-contractors, and any specific features of the management approach that require explanation. Include a description of sub-contractor supervision.

d. The scope of work provided in Section III, "*Scope of Work*," lists the minimum required tasks. Identify other activities that you propose to implement in support of the required tasks. Identify all tasks or activities that would be fully supported by your organization and those that would require assistance from the District.

f. Quality Assurance and Quality Control Procedures - Provide a description of the techniques used by the firm to provide quality control and assurance.

VII. Small Local Emerging Business (SLEB) Certifications for Contractor Firm and Subcontractors

The purpose of the SLEB program is to provide incentives for SLEB participation in the public procurement process and to provide training and development opportunities to support their growth. The District supports Alameda County's efforts to contract with small local emerging businesses (SLEBs).

Contractors not meeting the definition of a local small or emerging business are required to subcontract a minimum of 20% of the contract amount with a SLEB or SLEBs in order to be eligible for contract award.

Indicate whether proposing firm(s) and other firms serving as sub-contractors are certified as Alameda County SLEBs. Indicate the percentage of work to be performed by SLEBs. Contractors interested in submitting the RFP should indicate if prime has an office located in Alameda County, and how the firm is planning on meeting the SLEB requirements.

For more information regarding the SLEB program, go to: http://www.acgov.org/auditor/sleb

You are encouraged to visit the online SLEB database at http://www.acgov.org, "Doing Business with Us/Small, Local & Emerging Business Program," "Online Services," "SLEB Certified Vendor Listing" for assistance in locating potential SLEB contracting firms.

VIII. Selection Process

The District will review all RFPs that are submitted by the submittal deadline, evaluate the submittals and select one firm on the basis of the following criteria:

- Contractor firm and personnel, and sub-contractor (if any) qualifications and experience as required in Section IV above.
- Demonstration of required project experience and expertise
- Demonstration of understanding of scope of services requested by this RFP
- Meeting SLEB requirements
- References, including contact information

IX. Pre-Proposal Meeting

A mandatory pre-proposal meeting will be held on **Tuesday July 30th at 10:30 AM** at the Alameda County Public Works Agency building, Conference Room 230A, located at 951 Turner Court, in Hayward.

At the pre-proposal meeting, a brief tour of the project site will be conducted. After the pre-proposal meeting,

interested firms will be required to submit a written proposal by Wednesday, August 14, 2013, 4:00 p.m. PST.

X. RFP Submittal Deadline

One original, signed by an officer authorized to bind the company, and three copies of the proposal must be received at the Alameda County Public Works Building at the address below by **4:00 p.m. PST on Wednesday, August 14, 2013**. Submittals received after that date/time will not be considered, and any submittal received after the scheduled time shall be returned to the Contractor unopened. Faxed or e-mail submittals are not acceptable.

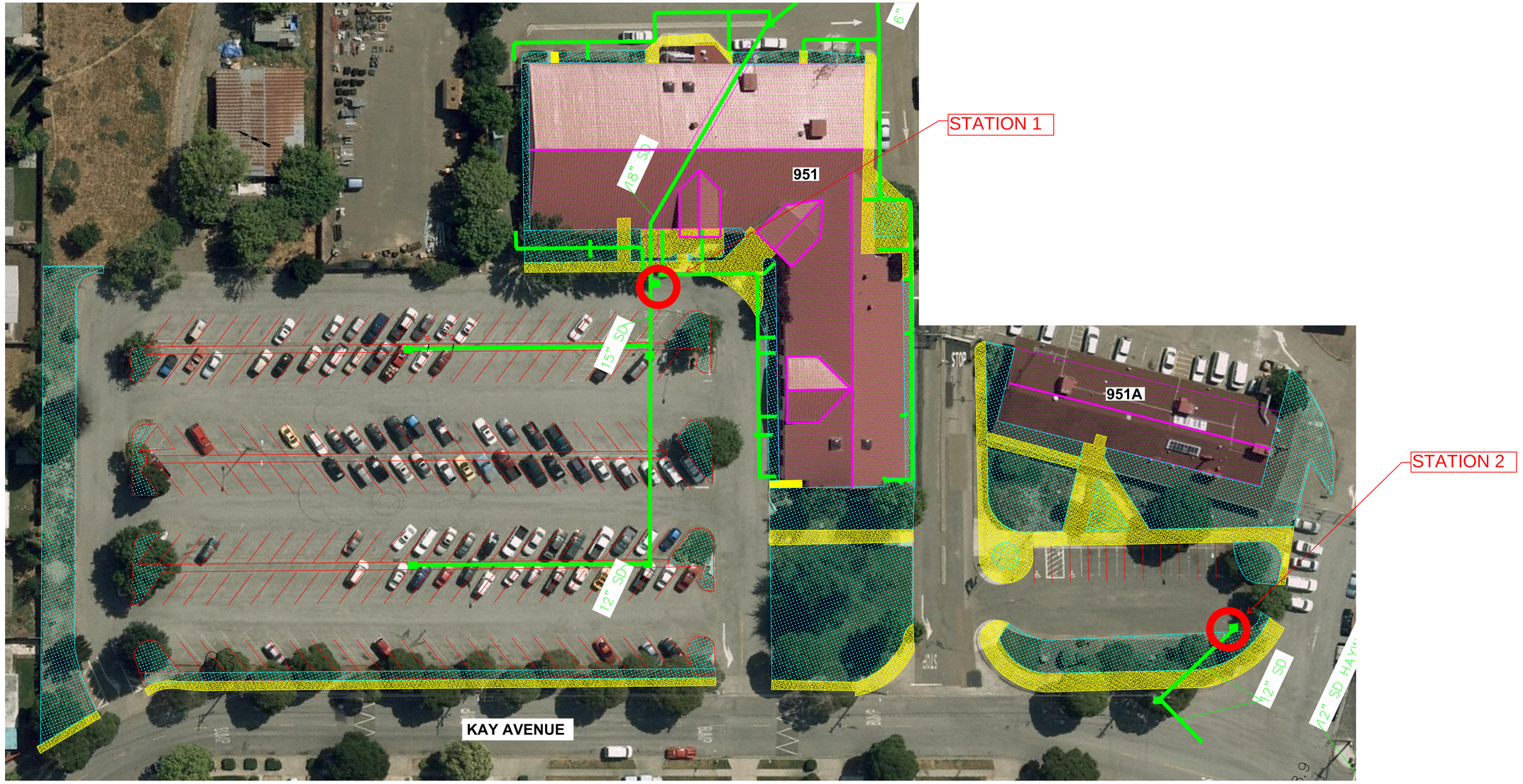
Alameda County Public Works Agency
Flood Control Program
Attn: Moses Tsang, Supervising Civil Engineer
399 Elmhurst Street, Room 113
Hayward, CA 94544-1307

XI. Important Dates

- Mandatory Pre-proposal Meeting: Tuesday, July 30, 2013, at 10:30 AM at 951 Turner Court, Hayward, California, Conference Room 230A.
- RFP Submittal Deadline: Wednesday, August 14, 2013, 4:00 p.m. PST
- Final Ranking by: Tuesday, August 20, 2013
- Contract Negotiation with No. 1 ranked firm: between August 21 and September 4, 2013
- Board Approval for Contract: September 24, 2013
- Begin Contract Work: October 1, 2013

District reserves the right to reject any and all proposals or issue subsequent RFP's. It is to be understood and agreed by the Contractor that this RFP does not obligate District to pay any costs incurred by Contractor in the preparation and submission of a proposal. District reserves the right to approve or reject any sub-contractors proposed for work under this proposal.

If you have technical questions regarding this project, please contact Ms. Chien Wang, Project Engineer, at (510) 670-5552 or e-mail chien@acpwa.org.



GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)
1 inch = 30 ft.

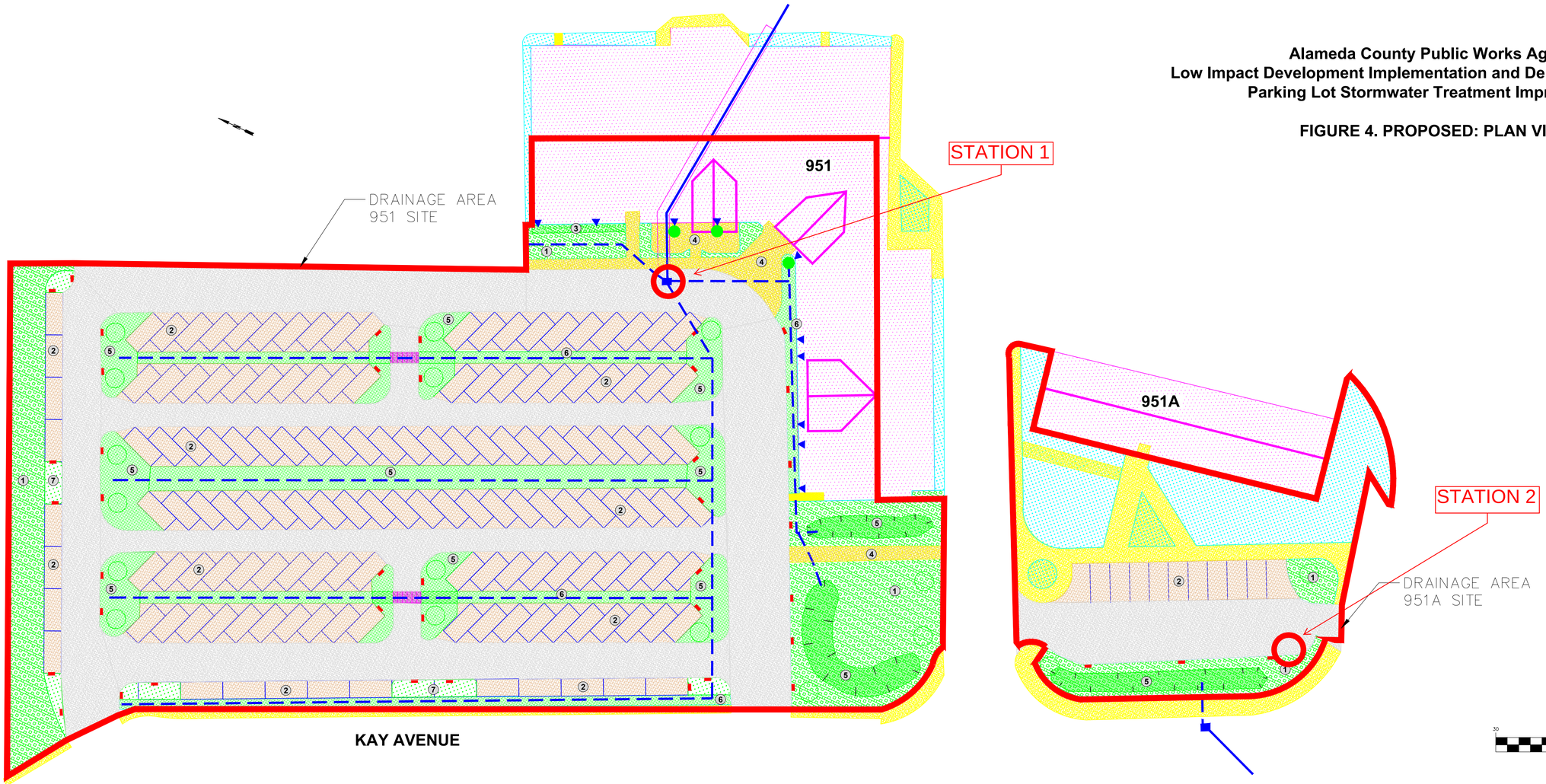
	EXISTING BUILDING
	EXISTING LANDSCAPING
	EXISTING SIDEWALK
	EXISTING PARKING
	EXISTING STORM DRAIN

Alameda County Public Works Agency
Low Impact Development Implementation and Demonstration Project
Parking Lot Stormwater Treatment Improvements

FIGURE 3. EXISTING: PLAN VIEW

Alameda County Public Works Agency
Low Impact Development Implementation and Demonstration Project:
Parking Lot Stormwater Treatment Improvements

FIGURE 4. PROPOSED: PLAN VIEW



1		BAY-FRIENDLY PLANTING (SELF-TREATING AREA OR SELF-RETAINING AREA)
2		PERVIOUS PAVEMENT
3		FLOW-THROUGH PLANTER (SELF-RETAINING AREA)
4		PERMEABLE PAVERS
5		RAIN GARDEN (SELF-RETAINING AREA): BIOTREATMENT/BIORETENTION
6		GREEN GUTTER (SELF-RETAINING AREA): BIOTREATMENT
7		STORMWATER PLANTER
		INTERCEPTOR TREES

		RAIN BARREL
		EXISTING ROOF DOWNSPOUT DISCONNECTED FROM CLOSED STORM DRAIN SYSTEM AND ROUTED TO BIOTREATMENT AREA
		PROPOSED UNDERGROUND DRAINS AND STORM DRAIN TO CONNECT TO EXISTING
		EXISTING STORM DRAIN
		STORMWATER CURB CUTS
		GRATED CROSSING
		IMPERVIOUS ASPHALT