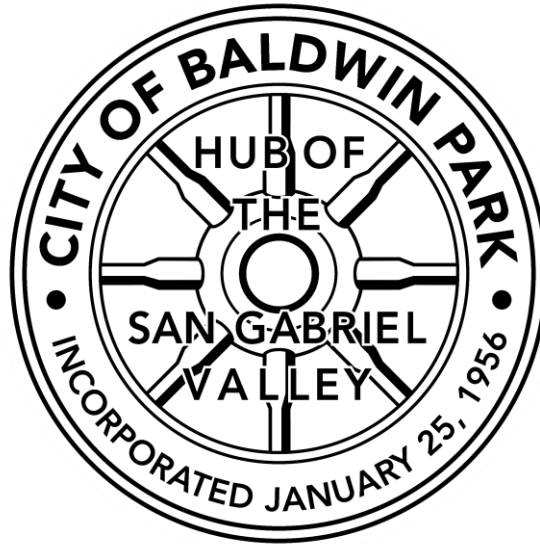


CITY OF BALDWIN PARK

March 22, 2021



REQUEST FOR PROPOSAL

FOR

**Engineering Services for Barnes Park Multi-Benefit
Stormwater Capture Project (Barnes Park Project)**

PROPOSALS DUE
Monday, April 19, 2021 by 5:00pm

CITY OF BALDWIN PARK
ENGINEERING DIVISION
14403 E. PACIFIC AVENUE
BALDWIN PARK, CA 91706

I. Introduction

The City of Baldwin Park is requesting proposals from qualified professional engineering firms to provide engineering services for Barnes Park Multi-Benefit Stormwater Capture Project (Barnes Park Project). The engineering services desired include, but are not limited to, final design of a stormwater infiltration facility and above ground grading, specifications, and cost estimates for construction, operations and maintenance, and post-construction monitoring of the Barnes Park Project. Services desired also include coordination with the City's landscape architect to incorporate landscape and park enhancements to the grading plans. The design will be based on a previously completed 30% design prepared by Tetra Tech. See Attachment C.

II. Background

The proposed project will capture, treat and infiltrate approximately 440 acres of stormwater from various land uses within the City (i.e., mainly Single-Family Residential, Multi-Family Residential, and Commercial). The facility will be located under existing landscape on the southern portion of Barnes Park, located at 3251 Patriitti Ave, Baldwin Park, CA 91706. A diversion structure on the existing 81-inch diameter LACFCD Storm Drain (BI 9705) would divert stormwater from Bess Ave into a pre-treatment device before being gravity fed into an underground infiltration gallery facility (BMP). Once stormwater fills the chamber, an actuated valve would close and take the system offline to prevent surcharge. The goal of this project is to treat, capture and infiltrate approximately 10 acre-feet of wet and dry weather flows, which is just shy of the stormwater runoff volume of the 85th percentile design storm (i.e., 13.4 ac-ft).

This project was included in the Upper San Gabriel River Enhanced Watershed Management Plan (EWMP) prepared in June 2015 (revised January 2016). The selection of Barnes Park as one of eight regional projects was based on an extensive screening process with coordination of the USGR EWMP group. The project has been presented to the USGR IRWMP group and approved for inclusion in the USGR IRWMP Plan. A programmatic Environmental Impact Report (PEIR) was certified by the Los Angeles County Board of Supervisors on May 26, 2015. A Feasibility Study which included 30% Preliminary Design for the Upper San Gabriel River EWMP group that included the Barnes Park Regional EWMP project was completed by Tetra Tech, on November 14, 2018. The Feasibility Study included a review of existing site conditions, regional structural BMP Design components, long-term monitoring plan, preliminary schedule, and costs (since revised for the SCW application), regulatory and permitting evaluation, site and landscaping plans, Phase 1 Environmental Site Assessment and preliminary Initial Study. Geotechnical investigation and infiltration testing reports were also conducted and are found in the appendices of the Feasibility Study Report.

Additionally, the City of Baldwin Park is planning to expand the park to the north (Barnes Park Expansion Project) on parcels owned by the City and the San Gabriel Valley Water Company, respectively. The City is soliciting public input on the desired amenities and the responses have so far indicated priority on a new playground, soccer field, and tennis courts. The Expansion Project will need to be incorporated into the final design drawings for the overall project.

III. Scope of Services

The following is a general outline of the scope of work to be provided by the consultant. While it is intended that the following scope of work include all elements essential to prepare construction plans for the project, those submitting proposals are advised to perform their own field reconnaissance and include any items which they feel have been overlooked. The consultant may also note any required items which they feel to be excessive or unnecessary. The description and cost of such items should be noted separately in the proposal. Services required to complete this project by the consultant shall include:

1. PROJECT ADMINISTRATION AND COORDINATION

- a. Kick-off Meeting (Video or Conference Call) – Upon receipt of a written notice to proceed from the City, the Consultant shall conduct a kick-off meeting with the City staff to review the scope of the project, prepare construction plans for a project schedule and confirm deliverables.
- b. Coordination – The Consultant shall be responsible for the coordination with all utilities company affected by this improvement, coordinate and manage all sub-consultants including city selected sub-consultants.
- c. Monthly meetings (Video or Conference Call) – The Consultant shall schedule a monthly meeting with City staff and provide meeting minutes.

2. GEOTECHNICAL REPORT

- a. Review the Preliminary Limited Geotechnical Design report for Barnes Park prepared by Tetra Tech (March 20, 2018). See Attachment C.
- b. Assess if additional deep borings are required to collect additional data for the final design report.
- c. Perform potholing
- d. Prepare a geotechnical report if additional investigation is conducted.

3. ENGINEERING SURVEY

- a. Prepare all required engineering surveying including a topographic survey related to the project.

4. UTILITY DOCUMENTATION, ROW AND UTILITY RESEARCH

- a. Review the Feasibility Study Report prepared by Tetra Tech. See Attachment C.
- b. Assess additional research that may be required.
- c. Prepare a report/documents detailing the findings if additional utility research is needed.

5. ENVIRONMENTAL DOCUMENTATION

- a. A Programmatic Environmental Impact Report (PEIR) was certified by the Los Angeles County Board of Supervisors on May 26, 2015. Each individual watershed project is to prepare an environmental document tailored to the area in which the proposed project is to be sited. For Barnes Park, a Phase One Environmental Assessment and Initial Study were prepared as part of the Feasibility Study. In

addition, a hydrology study (September 2016) that includes Barnes Park was prepared by the LA County Public Works Department, Water Resources Division. A geotechnical investigation for infiltration feasibility was also prepared in May 2018 and is included in the Feasibility Study Report. See Attachment C.

- b. Review the Preliminary Initial Study [Tetra Tech, June 19, 2018 (See Attachment C)] and prepare final CEQA documentation including special study for air quality impacts on community.

6. DESIGN

- a. Prepare construction plans and documents for stormwater capture capacity and conduct water quality analysis to determine the maximum potential drainage area that could be captured and meet water quality standards.
- b. Prepare construction plans for BMPs to achieve water quality standards for the project tributary area and size and to capture pollution concerns.
- c. Prepare construction plans for recommendations for the BMP location, type, size, pre-treatment and structures.
- d. Conduct hydrologic and hydraulic analysis using LACDPW standards.
- e. Conduct Watershed Management Modeling System (WMMS2) latest edition and System for Urban Stormwater Treatment and Analysis Integration (SUSTAIN) to support the design of stormwater capture capacity.
- f. Conduct water conservation analysis to determine the potential annual groundwater recharge volume associated with the project site.
- g. Review the City's Storm Drain Master Plan, assess flooding areas near the project location, and determine new storm drain locations that may need to be incorporated to relieve flooding conditions.
- h. Consultant to obtain permits, including but not limited to local municipal and zoning codes and applicable permits with the Los Angeles County Flood Control District (LACFCD).
- i. Other related

7. LANDSCAPING AND AMENITIES (COORDINATION WITH LANDSCAPE ARCHITECT)

- a. Review the conceptual landscape plan provided in Attachment 3 of the Feasibility Study Report.
- b. Oversee and coordinate with the City's Landscape Architect during the preparation of landscape plans to restore vegetation impacted by the project. Landscape plans shall include, but not be limited to the following: addition of a new dog park, basketball court, soccer/play fields, green space/picnic areas, ADA compliant running/walking paths, lighting, irrigation, signage, incorporation of above ground improvements to the infiltration facility area. Landscape Architect is to also prepare final renderings of landscape plans.
- c. Incorporate Landscape Architect's plans into the civil drawings.

8. OPERATION AND MAINTENANCE (O&M)

- a. Develop an O&M Plan describing the activities that are expected to be necessary to perform O&M for the project to ensure it remains in good working order, which should include the frequency of maintenance, replacement, and schedule of system components for a period of 20 years.
- b. The O&M Plan shall address the activities described in Exhibit F (Operations and Maintenance Guidance Document) of the Safe Clean Water Program Regional Program Transfer Agreement. See Attachment D.
- c. A preliminary O&M Plan, reviewed and approved by the City, shall be submitted to the Safe Clean Water Program when the design phase of the project is complete.
- d. A final O&M Plan, reviewed and approved by the City, shall be submitted to the Safe Clean Water Program when construction is complete.

9. MONITORING PLAN

- a. Review the monitoring plan prepared by Tetra Tech (Appendix H of the Feasibility Study Report). See Attachment C.
- b. Revise the post-construction monitoring plan so that it meets Safe Clean Water Program requirements. The Plan shall evaluate the effectiveness of stormwater treatment facilities and shall include the project description; quality objectives; sampling design; sampling procedures; quality control; data management verification, and reporting; data quality assessment; and data analysis procedures. Stormwater quality monitoring data shall be collected and reported in a manner consistent with the SWRCB database (CEDEN) for a period of three years.
- c. The monitoring plan, reviewed and approved by the City, shall be submitted to the Safe Clean Water Program when the design phase of the project is complete.

10. COST ESTIMATE

- a. Prepare a construction cost estimate.
- b. Prepare operations and maintenance cost estimate.
- c. Prepare post-construction monitoring cost estimate.

11. PUBLIC OUTREACH AND EDUCATION

- a. Provide monthly updates or quarterly presentations to City Council and the Safe Clean Water Program USGR WASC (including graphics, PowerPoints, memos, etc.).
- b. Prepare digital 3D renderings, spotlight videos and time lapse videos to share with the public.
- c. Support the preparation of applications for awards of distinction.
- d. Prepare a Stakeholder and Community Outreach/Engagement Plan per the requirements of the Safe Clean Water Program. The Plan shall include discussion on how local NGOs or CBOs will be involved, if applicable, and if not, why. The Plan shall also include at least one Outreach and two or more Engagement Activities, as defined in the Regional Program Transfer Agreement (see Attachment D).

- e. Conduct required Stakeholder and Community Outreach/Engagement activities, which shall include at least one Outreach and two or more Engagement Activities, as defined in the Regional Program Transfer Agreement. See Attachment D.
- f. Organize various project events such as groundbreaking ceremony, ribbon cutting ceremony, etc.

12. SAFE CLEAN WATER PROGRAM REPORTING

- a. Prepare Quarterly Progress/Expenditure Reports using a format provided by the Safe Clean Water Program and submit them to the Program within 45 days following the end of the calendar quarter (i.e. March, June, September, and December). See table below for schedule. The Reports shall include items specified in Section B-33 of the Regional Program Transfer Agreement. See Attachment D.

Quarter	End of Quarter	Report Due
First Quarter	September	15 November
Second Quarter	December	15 February
Third Quarter	March	15 May
Fourth Quarter	June	15 August

- a. Annually, prepare a summary of the Quarterly Progress/Expenditure Reports that will be submitted to the USGR Watershed Area Steering Committee to explain the previous year’s Quarterly Progress/Expenditure Reports. The summary report shall be submitted six (6) months after the close of the Fourth Quarter. The summary reports shall include items specified in Section B-33 of the Regional Program Transfer Agreement. See Attachment D.
- b. Prepare as needed information or reports requested by the Safe Clean Water Program. This may include material necessary or appropriate for evaluation of the Program or to fulfill any reporting requirements of the County, state or federal government.

2. BID SUPPORT

- a. Respond to Request for Information (RFI) on the design plans or in the special provisions. (Note: Consultant shall be required to provide responses to contractors’ inquiries clarifying any errors, discrepancies, missing information, and oversights in the PS&E during the bidding period at no cost to the City. This may involve revising the plans and specifications as necessary to appropriately respond to the inquiries. Consultant shall provide responses within two (2) working days after receiving the initial inquiry.)

3. CONSTRUCTION SUPPORT

- a. Attend pre-construction meetings.
- b. Respond to Request for Information (RFI) on the design plans or in the special provisions. (Note: Consultant shall be required to provide responses to contractors' inquiries clarifying any errors, discrepancies, missing information, and oversights in the PS&E during the construction period at no cost to the City. This may involve revising the plans and specifications as necessary to appropriately respond to the inquiries. Consultant shall provide responses within two (2) working days after receiving the initial inquiry.)
- c. Review and recommend for approval project material submittals.
- d. Prepare documents related to Construction General Permit compliance, such as, but not limited to, the following: the SWPPP, NOI, Risk Level Determination, PRDs, Annual Reports, inspections, NOT in the State Water Board (SMARTS), etc.
- e. Provide field visits during construction.
- f. Prepare As-Built Plans.

Each sheet of plans shall include the City of Baldwin Park title blocks and bear the professional seal, certificate number, registration classification, and expiration date of the professional responsible for their preparation. The signature of the responsible shall be included on final submittals.

Plans submittals shall be 50%, 75%, 90% and 100%. Final plans shall be formatted for 24" x 36" min. plans. Final submittal shall include one set plotted on Mylar and electronic copies of the AutoCAD files complete.

IV. Proposal Format

Work Proposals shall be concise, well-organized and demonstrate the consultant's qualifications and experience relating to the proposed project. The Cost Proposal shall reflect all costs associated with the proposed project. At minimum, proposals shall include the following information:

A. The Work Proposal (1 hard copy and 1 electronic PDF copy in flash drive format)

The Work Proposal should include, as a minimum, the following information, presented in a clear and concise manner:

- i. **Work Plan:** A statement of your understanding of the project and a detailed description of your approach to implement all of the tasks listed under Section III, "Scope of Services."
- ii. **Organizational Chart:** A chart identifying the key personnel assigned to the project. Identify the name of the project manager and the individual authorized to negotiate the contract on behalf of the consulting firm. Include the workload of the project manager and key team members, as well as their availability to complete the tasks.
- iii. **Project Schedule and Deadlines:** A comprehensive schedule for the completion of the tasks. Indicate the time frame or period for each task and a total time for completion.

- iv. Firm/Staff Qualifications: Identify a minimum of three (3) similar stormwater regional projects in size and cost completed within the past five (5) years.
- v. Objections to Professional Services Agreement: Objections shall be submitted in writing with justification clearly stated. Any consultant with objections to terms contained in the City's Professional Services Agreement (Attachment A) must advise the City of such objections and requested modifications as part of its Work Proposal. Failure of a proposer to accept the terms of the City's Professional Services Agreement may result in the rejection of the proposal. It shall be the responsibility of the prospective consultant to review all sections and exhibits of the Professional Services Agreement, including insurance requirements. If no objections are received, the City will assume the proposer is able to and will enter into the Professional Services Agreement and fulfill the terms and requirements set therein. The City may recover any damages accruing to the City as a result of the successful consultant's failure or refusal to execute the City's Professional Services Agreement.

B. The Cost Proposal (1 hard copy and 1 electronic PDF copy in flash drive format)

The Cost Proposal should include a comprehensive summation of fees for the tasks described in the "Scope of Services," organized as follows:

- i. Cost Proposal: The Cost Proposal shall be organized within a task-by-task schedule that includes the following details:
 - a. Time estimates for principals, staff, sub-consultants, etc. with hourly billing rates.
 - b. Cost for materials and incidental services, including travel expenses, copying, printing, and plotting. Any proposed percentage mark-up for reimbursable expenses.
 - c. Total cost per task.
 - d. The cost proposal grand total shall be an amount "Not-to-Exceed."
- ii. Hourly Rate Schedule: A statement of hourly rates for all proposed staff classifications, including hourly rates for sub-consultants.

V. Procedures

1. Inquiries and Addenda

For inquiries regarding this RFP, please contact John Beshay, via electronic mail only at JBeshay@baldwinpark.com. Proposers must e-mail inquiries no later than **5:00 p.m. on April 1, 2021**. Inquiries received after that date and time will not be answered.

The City will issue any revisions to this RFP as addenda. The City will distribute addenda to all potential proposers and post addenda on the City's website. Proposers are responsible for receipt of all addenda. Therefore, each proposer should contact the City to verify that he or she has received all addenda issued, if any. The City's issuance of a written addendum is the only official

method whereby the City will interpret, clarify, or provide additional information concerning this RFP. No oral revisions to any provision in this RFP shall be binding.

2. Anticipated Schedule

Milestone	Date
RFP Issued	Thursday, March 22, 2021
Deadline for Inquiries	Thursday, April 1, 2021 by 5:00pm
Deadline for Proposals	Monday, April 19, 2021 by 5:00pm
Interviews	TBD if required
Award	Wednesday, May 19, 2021
Notice to Proceed (tentative)	TBD

3. Review, selection process and Evaluation

The City reserves the right to reject any or all proposals or parts of the proposals, to negotiate modifications of proposals submitted, and to negotiate specific work elements with a proposer into a project of lesser or greater magnitude than described in this RFP or the proposer's reply.

The process for selection includes the following sequence:

- Review proposals.
- Identify the best qualified Consulting firms.
- Reference checks.
- Evaluation of the quality, maturity and financial stability of the firm.
- An evaluation of the firm's ability and experience in providing services, including:
 - Experience with local government.
 - Scope of activities covered.
 - Length of time involved.
 - Level of client satisfaction
 - Cost/benefit relationship
 - Relative success
- An evaluation of the experience and training of the proposed Consultant's team
- If deemed necessary, Interview with qualified proposers
- Negotiate with best qualified Consultant firms
- Present City's recommendation to the City Council
- Execution of professional agreement for consulting services

A panel of City of Baldwin Park will evaluate all proposals submitted and select the top competitive proposals. Evaluation of qualification statements and proposals will be based on the information called for in this RFP. Brochures or other promotional presentations beyond that requested or elaborate artwork, papers, binders or expensive visuals are not desired.

The City of Baldwin Park reserves the right to waive any irregularities or informalities in any RFP process when it is in the best interest of the City to do so; to re-advertise for proposals, if desired; to sit and act as sole judge of the merit and proposals of the service offered and; to evaluate in its absolute discretion, the qualification statement and proposal of each Proposer, so as to select the Proposer which best serves the requirements of the City, thus ensuring that the best interest of the City will be served.

The City may make such investigation as it deems necessary to determine the ability of a Consultant to furnish the required services, and the Proposer will furnish to the City all such information and data for this purpose as the City may request. The City reserves the right to reject any submittals if the evidence submitted by, or investigation of, such Proposer fails to satisfy the City that such proposer is properly qualified to carry out the obligations of a contract and to deliver the services contemplated herein or; the submittal of any Proposer who has previously failed to perform properly, or complete on time, contracts of a similar nature. Any material misrepresentation or material falsification of information provided to the City in the Proposal, or at any point in the evaluation process, is grounds for rejection. The City expressly reserves the right to reject the submittal of any Proposer who is in default on the payment of taxes, licenses or other moneys due to the City of Baldwin Park.

The City reserves the right to conduct a background inquiry of each Proposer which may include the collection of appropriate criminal history information, contractual and business associations and practices, employment histories, financial background, and reputation in the business community.

4. Professional Services Agreement

The City will identify the consultant that best meets the needs of the City and enter contract negotiations with that highest ranked firm. Should the City fail to reach an agreement with the top ranked firm, the City may enter negotiations with the next highest rated consultant and so on. City Staff will make a recommendation to the City Council for the award of a Professional Services Agreement to the consultant that best furthers the City's objectives.

The successful consultant will be expected to execute the attached Professional Services Agreement (Attachment A) approximately fifteen (15) days prior to City Council consideration. A recommendation for contract award will be presented to the City Council for consideration on May 19, 2021 (tentative).

5. Insurance Requirements

The successful consultant shall secure all insurance required under the Professional Services Agreement provided by the City and supply any necessary documentation to the City fifteen (15) days prior to City Council consideration.

6. Acceptance or Rejection of Proposal

The City reserves the right to accept, reject, or accept a portion of any and all proposals. The City also reserves the right to waive any informality or irregularity in any proposal or in the RFP as deemed to be in its best interest. Additionally, the City may, for any reason, decide not to award an agreement as a result of this RFP or cancel the RFP process. The City shall not be obligated to respond to any proposal submitted, nor be legally bound in any manner by the submission of the proposal. The City reserves the right to negotiate project deliverables and associated costs.

7. Legal Responsibilities

All proposals must be submitted, filed, made, and executed in accordance with State and Federal laws related to proposals for contracts of this nature whether the same or expressly referred to herein or not. Any company submitting a proposal will by such action thereby agree to each and all of the terms, conditions, provisions, and requirements set forth, contemplated, and referred to in the RFP, and other contract documents, and to full compliance therewith.

8. Discrepancies and Misunderstandings

Contractors and consultants must satisfy themselves by personal examination of the worksite, specifications, and other contract documents and by any other means as they may believe necessary, as to the actual physical conditions, requirements, and difficulties under which the work must be performed. No contractor or consultant will at any time after submission of a proposal make any claim or assertion that there was any misunderstanding or lack of information regarding the nature or amount of work necessary for the satisfactory completion of the job. Any errors, omissions, or discrepancies called to the attention of the City will be clarified by the City in writing to all proposers prior to the submission of the proposals.

9. Proposer Interested in More than one Proposal

No person, firm, or corporation will be allowed to make or file, or be interested in more than one proposal for the same work unless alternate bids are called for. No proposal will be accepted from a consultant who has not been licensed in accordance with the provisions of the State Business and Professional Code.

10. Ethics in Public Contracting

Each consulting entity, by submitting a proposal, certifies that it is not a party to any collusive action or any action that may be in violation of the Sherman Antitrust Act by submitting a proposal, the proposer certifies that it was made without fraud; that it has not offered or received any kickbacks or inducements from any other entity in connection with this RFP. The proposer further certifies that no relationship exists between itself and the City or another person or organization

that interferes with fair competition or constitutes a conflict of interest with respect to a contract with the City of Baldwin Park.

11. Proprietary Information

The proposals received shall become the property of the City of Baldwin Park and are subject to public disclosure. Proposers are to indicate any restrictions on the use of data contained in their responses. Those parts of a proposal which are defined as business or trade secrets, as that term is defined in California Government Code, Section 6254.7, and are reasonably marked as "Trade Secrets", "Confidential" or "Proprietary" shall only be disclosed to the public if such disclosure is required or permitted under the California Public Records Act or otherwise by law. Proposers who wish to have such information maintained confidentially shall be responsible for advancing all reasonable attorney's fees and costs associated with disputes that may arise respecting whether records are subject to disclosure.

12. Incurring Costs

The City is not liable for any costs incurred by Proposers in responding to this RFP.

13. Solicitation of Proposal Only

Nothing contained herein shall be deemed as a binding offer or commitment by the City, its officers, agents, employees, or related parties. Each party or parties responding to this RFP do acknowledge that they are not guaranteed that they will be selected as the consultant or offered an opportunity to provide the requested services.

14. Rejection of Submission of Proposals

The proposal request does not commit the City of Baldwin Park to award any contract. The City reserves the right, at its sole discretion, to reject any or all proposals without penalty, to waive irregularities in any proposals or in the proposal procedures, and to be the final judge as to which is the responsible, qualified proposal. Any proposal which contains items not specified, items which are incorrect, which does not complete all the items scheduled or does not respond to items in the manner specified in this request may be considered non-responsive and may be rejected on these bases in the sole discretion of the City.

Proposals offering less than 90 days for acceptance from the proposed closing date may be considered non-responsive and may be rejected. Non-acceptance of any proposal will not imply any criticism of the proposal or convey any indication that the proposal was deficient. Non-acceptance of any proposal will

mean that another proposal was deemed to be more advantageous to the City of Baldwin Park, or that no proposal was deemed acceptable.

15. Letters of Objection

If a proposer discovers any ambiguity, conflict, discrepancy, omission, or other errors in the RFP, he/she shall notify the City of Baldwin Park in writing not less than three (3) days before the date of opening.

Inquiries concerning this RFP should be submitted in writing to **Sam Gutierrez, Public Works Director**, and the envelope should be marked "Plan Check, Design, Construction Management, Inspection and related services". Inquiries are to state the page and applicable RFP section(s) or paragraph number(s) to which the question(s) pertain. Clarification shall be given by written notice to all proposers

The RFP and all subsequent modifications are hereby designated as the sole reference and authority for the preparation of proposals and take precedence over any and all information related to the acquisition obtained from any source either by verbal or written communications.

16. Public Information

Except for proprietary information, clearly designated, all materials received relative to this request will become public information and be available for inspection as provided under the public records act (Government Code, Section 6200, et seq.). The City reserves the right to retain all proposals submitted, whether the proposal was selected or judged to be non-responsive.

17. Proposal Validity Period

Submitted proposals shall be valid for at least ninety (90) days from the date of submission.

18. News Releases

The proposer shall not make news releases pertaining to an award resulting from proposals made in response to the request without the prior written approval of the City of Baldwin Park. In addition, the successful proposer must agree not to release any advertising copy mentioning the City of Baldwin Park or quoting the opinion of any City employee without written approval by the City of Baldwin Park.

19. Minority and Woman Owned Business

The City of Baldwin Park herewith notifies all potential proposers that it will insure that in any contract or agreement entered, that minority and woman owned business enterprises will be afforded full opportunity to participate in this procurement, and will not be discriminated against on the grounds of sex, race, color or national origin in the consideration for award.

20. Conflict of Interest

Except for items that are clearly promotional in nature, mass produced, trivial in value and not intended to invoke any form of reciprocation, employees of the City of Baldwin Park may not accept gratuities, entertainment, meals, or anything of value whatsoever from current or potential proposers. The offer of such gratuity to an employee of the city shall be cause for declaring such supplier to be an irresponsible proposer and preventing the firm from responding to this RFP.

Attachments:

Attachment A – City of Baldwin Park Professional Services Agreement

Attachment B – [See City Website Bids and RFPs for Supporting Documents](#)

Attachment C - Barnes Park Project Feasibility Study Report (Link provided)

https://cityofbaldwinpark-my.sharepoint.com/:f:/g/personal/john_cityofbaldwinpark_onmicrosoft_com/Et9THjSUeVREsau1vefkjMQBTHOYSgaK2VSPxMa8smEnVg?e=XFzc3j

Attachment D – Safe Clean Water Program, Regional Program Scope of Work

CONSULTANT SERVICES AGREEMENT

THIS AGREEMENT is made and entered into this ___ day of _____, 2021 by and between the City of Baldwin Park, ("City"), and [COMPANY NAME] ("Consultant").

In consideration of the following mutual covenants, provisions and agreements, and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, City and Consultant agree as follows:

1. SCOPE OF SERVICES. Consultant agrees to perform during the term of this Agreement, the tasks, obligations, and services set forth in the "Scope of Services" attached to and incorporated into this Agreement as Exhibit "A." Duration of Scope of Services may be extended on a month-to-month basis, but shall not exceed the total compensation.

2. COMPENSATION. City shall pay for the services performed by Consultant pursuant to the terms of this Agreement at the time and manner set forth in the "Schedule of Compensation" attached to and incorporated into this Agreement as Exhibit "B."

3. TIME FOR PERFORMANCE. Consultant shall perform the services above described in a timely manner in accordance with the professional standard practices [SHORT DESCRIPTION OF TIME CONSTRAINTS].

4. AUDIT OR EXAMINATION. Consultant shall keep all records of funds received from City and make them accessible for audit or examination for a period of three years after final payments are issued and other pending matters.

5. STATUS OF CONSULTANT. Consultant shall provide all necessary personnel, equipment and material, at its sole expense, in order to perform the services required of it pursuant to this Agreement. For the purpose of this Agreement, Consultant shall be deemed, for all purposes, an independent contractor and shall have control of all work and the manner in which it is performed. Consultant shall be free to contract for similar services to be performed for other entities while under contract with City. Consultant is not an agent or employee of City, and is not entitled to participate in any pension plan, insurance, bonus or similar benefits City provides for its employees. Consultant shall be responsible to pay and hold City harmless from any and all payroll and other taxes and interest thereon and penalties, therefore, which may become due as a result of services performed hereunder.

6. ASSIGNMENT. This Agreement is for the specific services with Consultant as set forth herein. Any attempt by Consultant to assign the benefits or burdens of this Agreement without written approval of City is prohibited and shall be null and void; except that Consultant may assign payments due under this Agreement to a financial institution.

7. RIGHT TO UTILIZE OTHERS. City reserves the right to utilize others to perform work similar to the Services provided herein.

8. COMPLIANCE WITH LAW. Contract services shall be provided in accordance with the applicable laws and regulations of all governmental agencies that are in force at the time services are performed. Consultant shall be responsible for becoming aware of and staying abreast of all such laws and ensuring that all services provided hereunder conform to

such laws. The terms of this Agreement shall be interpreted according to the laws of the State of California.

9. **LIABILITY.** Consultant shall indemnify, and hold harmless City, its officials, officers, and employees against any and all actions, claims, damages, liabilities, losses or expenses of whatsoever kind, name or nature, including legal costs and reasonable attorneys' fees, whether or not suit is actually filed, and any judgment rendered against City and/or its officials, officers, or employees that may be asserted or claimed by any person, firm, or entity arising out of Consultants' negligent performance, or the negligent performance of its agents, employees, subcontractors, or invitees, as well as, negligent acts or omissions of Consultant, its agents, employees, subcontractors or invitees, however, this indemnity clause shall not apply if there is concurrent passive or active negligence on the part of City, or its officials, officers, agents or employees.

10. **INSURANCE.** Consultant shall maintain insurance coverage in accordance with the following during the course of its performance hereunder:

- (A) **Comprehensive General Liability Insurance** (including premises and operations, contractual liability, personal injury and independent Consultants' liability) with the following minimum limits of liability:
 - (1) Personal or Bodily Injury -- **\$1,000,000**, single limit, per occurrence; and
 - (2) Property Damage -- \$1,000,000, single limit, per occurrence; or
 - (3) Combined single limits -- \$2,000,000.
- (B) **Comprehensive Automobile Liability Insurance** including as applicable own, hired and non-owned automobiles with the following minimum limits of liability:
 - (1) Personal or Bodily Injury -- \$1,000,000, single limit, per occurrence; and
 - (2) Property Damage -- \$1,000,000, single limit, per occurrence; or
 - (3) Combined single limits -- \$2,000,000.
- (C) **Professional Liability Insurance** with annual aggregates of **\$1,000,000** or such other amount as may be approved in writing by the City.
- (D) **Worker's Compensation Insurance** that complies with the minimum statutory requirements of the State of California.
- (E) Prior to commencement of services hereunder, Consultant shall provide City with a certificate of Insurance reflecting the above, and an endorsement for each policy of insurance which shall provide:
 - (1) The City, and its officials, officers, agents and employees are named as additional insured (with the exception of Professional Liability and Worker's Compensation);
 - (2) The coverage provided shall be primary (with the exception of Professional Liability and Worker's Compensation) as respects to City, its officials, officers, agents or employees; moreover, any insurance or self-insurance maintained by City or its officials, officers,

agents or employees shall be in excess of Consultants' insurance and not contributed with it.

- (3) The insurer shall provide at least thirty (30) days prior written notice to City of cancellation or of any material change in coverage before such change or cancellation becomes effective.
- (F) With respect to Workers' Compensation Insurance, the insurer shall agree to waive all rights of subrogation against City and City personnel for losses arising from work performed by Consultant for City, and the insurer's agreement in this regard shall be reflected in the Workers' Compensation Insurance endorsement.

11. OWNERSHIP OF DOCUMENTS. All of the documents required to be prepared pursuant hereto shall, upon the completion thereof, be deemed for all purposes to be the property of City. City's ownership of documents includes any and all analysis, computations, plans, correspondence and/or other pertinent data, information, documents, and computer media, including disks and other materials gathered or prepared by Consultant in performance of this Agreement. Such work product shall be transmitted to City within ten (10) days after a written request therefore. Consultant may retain copies of such products. Any re-use by City shall be at the sole risk of City and without liability to Consultant.

12. RECORDS AND INSPECTIONS. Consultant shall maintain full and accurate records with respect to all services and matters covered under this Agreement. City shall have free access at all reasonable times to such records, and the right to examine and audit the same and to make transcripts therefrom, and to inspect all program data, documents, proceedings and activities. Consultant shall maintain an up-to-date list of key personnel and telephone numbers for emergency contact after normal business hours.

13. TAXPAYER IDENTIFICATION NUMBER. Consultant shall provide City with a complete Request for Taxpayer Identification Number and Certification, Form W-9, as issued by the Internal Revenue Service.

14. CONFLICT OF INTEREST. Consultant agrees that any conflict or potential conflict of interest shall be fully disclosed prior to execution of contract and Consultant shall comply with all applicable federal, state and county laws and regulations governing conflict of interest.

15. POLITICAL ACTIVITY/LOBBYING CERTIFICATION. Consultant may not conduct any activity, including any payment to any person, officer, or employee of any governmental agency or body or member of Congress in connection with the awarding of any federal contract, grant, loan, intended to influence legislation, administrative rulemaking or the election of candidates for public office during time compensated under the representation that such activity is being performed as a part of this Agreement.

16. RIGHT TO TERMINATE. City may terminate this Agreement at any time, with or without cause, in its sole discretion, with thirty (30) days written notice.

17. EFFECT OF TERMINATION. Upon termination as stated in Paragraph "16" of this Agreement, City shall be liable to Consultant only for work performed by Consultant up to

and including the date of termination of this Agreement, unless the termination is for cause, in which event Consultant need be compensated only to the extent required by law. Consultant shall be entitled to payment for work satisfactorily completed to date, based on proration of the compensation set forth in Exhibit "B" attached hereto. Such payment will be subject to City's receipt of a close-out billing.

18. LITIGATION FEES. Should litigation arise out of this Agreement for the performance thereof, the court shall award costs and expenses, including reasonable attorney's fees, to the prevailing party. In awarding attorney's fees, the court shall not be bound by any court fee schedule but shall award the full amount of costs, expenses and attorney's fees paid and/or incurred in good faith. "Prevailing Party" shall mean the party that obtains a favorable and final judgment. Should litigation occur, venue shall be in the Superior Court of Los Angeles County. This paragraph shall not apply and litigation fees shall not be awarded based on an order or otherwise final judgment that results from the parties' mutual settlement, arbitration, or mediation of the dispute.

19. COVENANTS AND CONDITIONS. Each term and each provision of this Agreement to be performed by Consultant shall be construed to be both a covenant and a condition.

20. INTEGRATED AGREEMENT. This Agreement represents the entire Agreement between the City and Consultant. No verbal agreement or implied covenant shall be held to vary the provisions of this agreement. This Agreement shall bind and inure to the benefit of the parties to this Agreement, and any subsequent successors and assigns.

21. MODIFICATION OF AGREEMENT. This Agreement may not be modified, nor may any of the terms, provisions or conditions be modified or waived or otherwise affected, except by a written amendment signed by all parties.

22. DESIGNATED REPRESENTATIVES. The Consultant Representative (A) designated below shall be responsible for job performance, negotiations, contractual matters, and coordination with the City. The City Representative (B) designated below shall act on the City's behalf as Project Manager.

(A) CONSULTANT
[NAME]
[ADDRESS 1]
[ADDRESS 2]
[TELEPHONE]

(B) City of Baldwin Park
Att.: Sam Gutierrez
14403 East Pacific Avenue
Baldwin Park, CA 91706
(626) 960-4011 ex. 460

23 NOTICES. Notices pursuant to this Agreement shall be in writing and may be given by personal delivery or by mail. Notices shall be directed to City's Designated Representative identified in Paragraph "21" of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day first above written.

CITY OF BALDWIN PARK

By: _____
Mayor

Dated: _____

CONSULTANT: [COMPANY NAME]

Name/Title By: _____

Dated: _____

City of Baldwin Park

Barnes Park

Scope of Work

Prepared for the Safe Clean Water Program
Los Angeles County Flood Control District



Prepared by the City of Baldwin Park
John Beshay, Engineering Manager
14403 East Pacific Avenue
Baldwin Park, CA 91706

January 18, 2021

Project Information

Project Name:	Barnes Park
SCW Watershed Area:	Upper San Gabriel River
SIP Funding Program:	Infrastructure Program
Call for Projects Cycle:	Round 1, FY 2020-2021
Funding Requested:	\$14,735,690 for design, planning, and construction

A-1 Budget Plan

Table 1: Budget Plan

Fiscal Year	SCW Program Contribution <i>(as programmed in the approved SIP)</i>	City's Contribution	Funded Activity
FY 20-21	\$1,000,000	--	Environmental documentation; 100% design, planning, and permitting; O&M Plan development; Stakeholder and community outreach/engagement activities
FY 21-22	\$1,500,000	--	Same as above
FY 22-23	\$7,400,000	\$1,500,000	Construction (including contingencies) and construction management
FY 23-24	\$4,835,690	\$1,500,000	Construction (including contingencies), construction management, inspection, testing, and park enhancements
FY 24-25	--	--	
Total	\$14,735,690	\$3,000,000	--

A-2 SCW Program Goals

The project and Budget Plan is consistent with the SCW Program Goals per Chapter 18, Section 4 of the LACFCD Code. See the table below for further information.

Table 2: SCW Program Goals

Goal	Method of Achievement
✓ Improve water quality and contribute to attainment of water-quality requirements.	The proposed project entails the installation of an underground stormwater vault to capture and infiltrate runoff from an 81-inch storm drain that collects stormwater from the residential area northeast of the park. Runoff from this wash will be diverted to a pretreatment system and then to an underground infiltration vault. The project has a capture area of 440 acres and its completion will ultimately represent implementation of the Upper San Gabriel River Enhanced Watershed Management Program and therefore progress toward compliance with the MS4 Permit and applicable TMDLs.
✓ Increase drought preparedness by capturing more Stormwater and/or Urban Runoff to store, clean, reuse, and/or recharge groundwater basins.	See response above. Treated water will infiltrate to the groundwater for recharge or be directed back to the storm drain if the vault is full.
✓ Improve public health by preventing and cleaning up contaminated water, increasing access to open space, providing additional recreational opportunities, and helping communities mitigate and adapt to the effects of climate change through activities such as increasing shade and green space.	See responses above. In addition to providing water quality and water supply benefits, the project will create passive-use green space with the removal of pavement and concrete, which will be replaced with natural materials. The park will also be enhanced with the planting of native vegetation and drought tolerant trees, providing additional shade.
✓ Leverage other funding sources to maximize SCW Program Goals.	The City will be leveraging \$3,000,000 in local funds, grant funds (Prop 68 and other), and Measure W Municipal Program funds to implement the project.
✓ Invest in infrastructure that provides multiple benefits.	See responses above.
✓ Prioritize Nature-Based Solutions.	The project will restore natural system functions that contribute to water supply, water quality, and flood management. The project will include the planting of 17 drought tolerant trees as well as native plants, shrubs, and grasses.
✓ Provide a spectrum of project sizes from neighborhood to regional scales.	The project will be regional in scale.
✓ Encourage innovation and adoption of new technologies and practices.	See responses above.
✓ Provide DAC Benefits, including Regional Program infrastructure investments, that are not less than one hundred and ten percent (110%) of the ratio of the DAC	According to the State of California Office of Hazardous Health Assessment DAC assessment tool, CalEnviroScreen 3.0, the pollution burden in the census tract where Barnes Park is located is at the 96 th percentile, or more generally among the worst

population to the total population in each Watershed Area.	in the State. The rate of toxic releases is also rated in the same range. The project will provide direct benefits to the DAC by providing it not only with water quality and water supply benefits, but with improved health outcomes, recreational opportunities, and climate change resilience.
✓ Provide Regional Program infrastructure funds benefitting each Municipality in proportion to the funds generated within their jurisdiction, after accounting for allocation of the one hundred and ten percent (110%) return to DACs, to the extent feasible.	This is achieved through Regional Program funding.
✓ Promote green jobs and career pathways.	The project requires a skilled workforce to ensure proper design, installation, operations and maintenance, and record-keeping/reporting of all project components.

Quantitative targets and corresponding metrics¹ will be provided upon request during subsequent reporting; however, achievement of these metrics may not be fully realized until the project has been constructed.

A-3 Estimated Reasonable Total Activity Cost

See the table below for the estimated total activity cost for all phases and tasks included in the work schedule for the Funded Activity.

Table 3: Estimated Activity Cost

Phase	Activity	Cost
Design	Feasibility Study	\$0 (completed)
Design	Complete Environmental Documentation	\$470,000
Design	30% Design	\$0 (completed)
Design	100% Design, Planning, and Permitting; O&M Plan	\$854,000
Design/Construction	Agency Project Management; Stakeholder and Community Outreach/Engagement Activities	\$15,999
Construction	Construction Surveying	\$20,000
Construction	Construction, including contingencies	\$12,813,644
Construction	Construction Management, Inspection, and Testing	\$1,922,047
Construction	Park Enhancements	\$1,640,000
Total (includes City contribution of \$3,000,000)		\$17,735,690
Total minus City contribution of \$3,000,000		\$14,735,690

¹ Annual volume of stormwater captured and 1) treated, 2) reused, or 3) recharged to a managed aquifer; Annual creation, enhancement, or restoration of Community Investment Benefits; Annual acreage increases in Nature-Based Solutions and claimed level of NBS (with matrix demonstrating determination of good, better, best); Annual expenditures providing DAC Benefits.

A-4 Funded Activity Description and Scope of Work

The scope of work will primarily entail the following activities:

Task 1: Project Management

- Technical and administrative services as needed for project completion, including review of all work performed, coordination with budgeting and scheduling, and completion of reporting requirements.

Task 2: Design, Engineering, and Construction

- Development of 100% design plans
- Construction of the project

Task 3: Environmental Planning and Permitting

- Preparation and processing of applicable environmental documentation (CEQA) and permits. See Table 4 below for the permits expected for this project.

Task 4: Stakeholder and Community Outreach and Engagement

- Conduct Outreach and at least 2 Engagement Activities per the requirements of the Safe Clean Water Program. See Section A-8 for additional details.

Task 5: Development of the O&M Plan

- An O&M Plan will be developed as part of the 100% final design and will detail the maintenance requirements for project components. See Section A-5 for additional information.

Task 6: Refinement of the Post-Construction Monitoring Plan

- A Post-Construction Monitoring Plan has been developed; however, it may be refined as needed. See Section A-6 for additional information.

Table 4: Anticipated Permitting

Agency	Permit
LACFCD	Major Modification Permit
LACFCD	Discharge Permit
LACDPW	Encroachment Permit
LACDPW	Landscape Review/Permit
SWRCB	Construction General Permit
SCE	Design Permit
LACDPH	Cross Connection and Water Pollution Control Program
SCAQMD	Rule 403

A-5 Operations and Maintenance (O&M) Plan

The expected operations and maintenance elements are shown in the table below. It is expected that operations of the system will be managed by the City and maintenance by a service contractor. Operations of the diversion structure will incorporate coordination and notifications to the LACFCD to ensure that there will be no effect on the flood control conveyance system operation. A full O&M Plan will be developed as part of the 100% final design.

Table 5: Anticipated O&M

Description	Frequency	No. of Times per Year
Pump Station		
Valve Inspection and Cleaning (Vacuum)	Annually	1
Pump Inspection and Cleaning (Vacuum)	Annually	1
Valve Maintenance	Annually	1
Control Panel Maintenance	Annually	1
Storm Drain Diversion and Pretreatment		
Hydro-jetting Pipes being Diverted	Every 3-5 Years	1/5
Drop Inlet System – Inspection and Cleaning	Quarterly	4
Pretreatment Device – Vacuum	Quarterly	4
Storage		
Dry Season Inspection and Cleaning (Vacuum)	Bi-monthly	3
Wet Season Inspection and Cleaning (Vacuum)	Bi-monthly	3

A-6 Post-Construction Monitoring

See Attachment A for the monitoring plan. Additionally, it is understood that stormwater quality monitoring data shall be collected and reported in a manner consistent with the SWRCB database (CEDEN) for a period of three years.

A-7 Sustainability Rating

An application for the Institute for Sustainable Infrastructure (ISI) Envision verification program has not been submitted. However, the City is considering the pursuit of ISI verification and may apply in the near future.

A-8 Stakeholder and Community Outreach/Engagement Plan

Since the funding requested exceeds \$10M, Outreach and at least two Engagement Activities must be conducted. See the table below for the Stakeholder and Community Outreach and Engagement Plan. A more robust plan is anticipated to be developed after the project RFP has been awarded to a contractor. Additionally, the project is proposed at an existing park; therefore, no displacement or gentrification is anticipated as a result. The City acknowledges that the project will be fully subject to and comply with any County-wide displacement policies and anti-displacement requirements.

Table 6: Stakeholder and Community Outreach and Engagement Plan

Required Activity	Plan
Outreach	The City will utilize Online Media Outreach (email blasts, social media, publication on a website), Local Media Outreach (newsletters), and Grassroots Outreach (distribution of flyers or other printed materials) to provide information to residents and information about upcoming meetings and other engagement activities. As required, the District will be included in all social medial outreach and notified of all meetings and other engagement events. Additionally, outreach efforts through web-based platforms will first be requested to the District at least four weeks before the requested publish date.
≥2 Engagements	The City will conduct at least two engagement activities to solicit, address, and seek input from community members. This may be in the form of a workshop or coordinated with council, commission, or committee meetings where public input is invited. Note that the method of the engagement activity will depend on the situation with the COVID-19 pandemic. All City events (festivals, fairs, open houses) where City staff would typically have a booth set up are cancelled until further notice. Meetings and workshops may be held virtually if necessary.

A-9 Tracking Infrastructure Program Project Benefits

Upon Activity Completion, the expected benefits include:

- Final design and construction of the Barnes Park Project and park enhancements, to include stormwater quality treatment components and new recreational/community benefits, such as the additions listed below. Existing play and exercise equipment areas and splash pad will remain.
 - New dog park
 - New basketball court
 - Two new soccer/play fields
 - New green space and picnic areas
 - New ADA compliant running/walking paths
- Completion of stakeholder and community outreach/engagement.
- Development of the O&M Plan.
- Refinement of the Post-Construction Monitoring Plan, as needed.

Aside from the Funded Activity, the future implementation of the project will include O&M and monitoring. Anticipated benefits of the fully implemented project include those described in Table 2. The City will submit an overview of the benefits achieved upon the Activity Completion. Quantitative targets and corresponding metrics will be provided during subsequent reporting when the anticipated online reporting tool is available.

A-10 Work Schedule and Completion Date

Table 7: Anticipated Work Schedule

Phase	Activity	Start Date	Completion Date
Design	Environmental Planning & Permitting; 100% Design; Development of O&M Plan; Refinement of Post-Construction Monitoring Plan	May 2021	Dec 2022
Design	Outreach and 2 Engagement Activities	May 2021	Dec 2022
Design	Award Contract	March 2023	March 2023
Construction	Construction	March 2023	June 2024

Attachment A: Post-Construction Monitoring Plan

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ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
AVB	Area-Velocity Bubbler
BMPs	Best Management Practices
CIMP	Coordinated Integrated Monitoring Program
EWMP	Enhanced Watershed Management Plan
LTA	Long-Term Assessment
NOAA	National Oceanic and Atmospheric Association
MS4	Municipal Separate Storm Sewer System
USGR	Upper San Gabriel River
SCADA	Supervisory Control and Data Acquisition
SGR	San Gabriel River
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
WQOs	Water Quality Objectives

1.0 INTRODUCTION

Performance Monitoring of stormwater Best Management Practices (BMPs) is a critical component of a BMP implementation program. Monitoring provides the BMP's designer a mechanism to validate certain design assumptions and to quantify pollutant-removal performance. Specific monitoring objectives should be considered early in the design process to ensure that BMPs are adequately configured for monitoring.

Proper configuration and equipment are critical to collect the data necessary to evaluate BMP effectiveness and predict restorative maintenance. The two main goals of this monitoring program are:

1. BMP effectiveness monitoring to document the performance of the BMP and to quantify stormwater volume captured and pollutant removal achieved, and
2. Maintenance monitoring to track BMP performance and to predict required maintenance.

The Upper San Gabriel River (USGR) EWMP Group is required by the Los Angeles County Municipal Separate Storm Sewer System (MS4) permit to meet water quality limits for the metals (copper, zinc, and lead) Total Maximum Daily Load (TMDL) and the Bacteria TMDL in the San Gabriel River (SGR) Watershed. The objective of this monitoring plan is to demonstrate BMP performance, determine water quality improvements and track performance for accurate predictive maintenance. The components of the plan discussed herein are the monitoring methodology (including weather tracking, monitoring locations, constituents, frequency, and sampling methods), QA/QC protocol, and data analysis.

2.0 MONITORING PLAN SUMMARY

This monitoring plan focuses on the TMDL pollutants identified in the USGR EWMP Group Coordinated Integrated Monitoring Program (CIMP). To measure the performance of the regional BMPs, flow-weighted composite samples should be collected at the inlet and outlet of the system (refer to site figures provided in Section 4 which indicate preliminary monitoring points). Autosamplers may be installed at the inlet and outlet of each stormwater BMP depending on funding available. The final monitoring locations will be determined during the design phase of each project. At a minimum, samples should be analyzed for Zinc (total recoverable Zinc) and E. coli, which are identified as the priority TMDLs in the USGR EWMP Group CIMP. Data from a range of storm events are evaluated and compared to determine the performance of the BMP for the priority TMDL pollutants.

Maintenance monitoring of the BMP facility can be achieved by installing equipment that will collect data continuously. This equipment will be connected to a cloud-based data system, which will provide the capability to assess and report performance in real-time and to predict when routine maintenance will be needed or when failure may occur.

3.0 MONITORING METHODOLOGY

This section will outline the monitoring methodology from pre- to post-event practices, including the necessary equipment to perform these tasks. The methodology includes:

- weather tracking and mobilization,
- monitoring locations,
- constituents,
- frequency,
- and sampling methods

3.1 WEATHER TRACKING AND MOBILIZATION

To determine if and when mobilization will occur, the National Oceanic and Atmospheric Association (NOAA) National Weather Service Forecast Office's point forecast for the desired area will be examined (<https://www.wrh.noaa.gov/forecast/wxtables/>). The NOAA point forecast system allows users to select a specific location on a map and returns a tailored forecast. See **Table 3-1** below for a list of coordinates and web addresses correlating to the forecast for each site. This forecast includes a precipitation depth estimate as well as a percentage chance precipitation will occur. The CIMP identifies the triggering sampling for wet weather conditions is a 70% probable forecast of greater than 0.25 inches of precipitation of rain where the preceding 72 hours of dry weather has less than 0.1 inches of rain.

Table 3-1. NOAA Forecast Locations and Web Addresses

Site	Latitude/Longitude	Web Address
Barnes Park	34.0660/-118.0000	https://www.wrh.noaa.gov/forecast/wxtables/index.php?lat=34.067570000000046&lon=-117.999819999999994
Wingate Park	34.0850/-117.8660	https://www.wrh.noaa.gov/forecast/wxtables/index.php?lat=34.09280000000007&lon=-117.866909999999996
Finkbiner Park	34.1330/-117.8480	https://www.wrh.noaa.gov/forecast/wxtables/index.php?lat=34.13780000000003&lon=-117.8628
San Angelo Park	34.0430/-117.9950	https://www.wrh.noaa.gov/forecast/wxtables/index.php?lat=34.04959000000002&lon=-118.002119999999999
Cortez Park	34.0590/-117.8880	https://www.wrh.noaa.gov/forecast/wxtables/index.php?lat=34.06460000000004&lon=-117.890189999999996
Allen J Martin Park	34.0470/-117.9690	https://www.wrh.noaa.gov/forecast/wxtables/index.php?lat=34.03973000000008&lon=-117.962289999999994
La Puente Park	34.0250/-117.9640	https://www.wrh.noaa.gov/forecast/wxtables/index.php?lat=34.02618000000007&lon=-117.951169999999999

3.2 MONITORING LOCATIONS

The regional BMP's for this project are located throughout the USGR watershed, specifically at public parks. These BMP's consist of the following components:

- Storm drain or channel diversion
- Pretreatment device
- Subsurface storage facility (some sites include drywells)
- Pump station and return line for filtration facilities, and optional pump station and return line for infiltration facilities

See **Table 3-2** for a summary of the BMP design features.

Monitoring of the BMPs is required at distinct locations for the different monitoring methods, and are also site-specific, varying based on the type of BMP. BMP effectiveness monitoring consists of both flow monitoring and chemical sampling, which are described in Section 3.5.1. Chemical sampling for all of the BMP's is required at the

diversion structure. If the subsurface structure has a filtration system, chemical sampling should also be done at the discharge point from the subsurface structure. Automatic flow monitoring is also required at the inlet of each BMP. For maintenance monitoring, a water level logger will be located near the inlet of the BMP. Soil moisture sensors should be placed on the surface of the soil within the vaults where infiltration will occur. Storage vaults with filtration systems do not need soil moisture sensors. For drywells, a flowmeter should be placed at the invert of discharge pipe from the pretreatment device.

See Attachments 1 through 7 for a monitoring schematic of each regional BMP site. These monitoring locations are based on the proposed feasibility study concepts and are subject to change in the final design of the BMP. The final monitoring locations will be determined during the project design phase.

Table 3-2. BMP Summary Table

Site	Type of BMP	BMP Storage (ac-ft)	Design Infiltration/ Filtration Rate
Barnes Park	Subsurface storage/infiltration vault	10.0	5.0 in/hr
Wingate Park	Subsurface storage/infiltration vault	14.6	1.5 in/hr
Finkbiner Park	Subsurface storage/infiltration vault	19.0	1.9 in/hr
San Angelo Park	Subsurface storage/filtration vault & drywells	5.7	5.76 cfs & 7.1 in/hr
Cortez Park	Subsurface storage/filtration vault	4.0	2.88 cfs
Allen J Martin Park	Subsurface storage/filtration vault & drywells	9.0	5.76 cfs & 7.0 in/hr
La Puente Park	Subsurface storage/filtration vault	1.5	2.88 cfs

3.3 CONSTITUENTS

The constituents to be monitored are dictated by the CIMP. The parameters that should be monitored are metals (lead, copper, and zinc), E. coli, flow, pH, hardness, and total suspended solids (TSS). Sampling bottle type, preservatives (if necessary), holding times, and field parameters are required to be included in the SAP during the design phase.

3.4 FREQUENCY

Chemical sampling should be done during both wet and dry weather. During the first year of BMP operation, a minimum of three (3) storms at the beginning of the wet season should be sampled. Wet weather as defined by the CIMP is a storm even with a 70% probable forecast of greater than 0.25 inches of precipitation of rain where the preceding 72 hours of dry weather has less than 0.1 inches of rain. Three (3) dry weather samples should also be collected within the first year of BMP operation. After the first year of operation, one (1) wet weather and one (1) dry weather sample should be collected.

3.5 SAMPLING METHODS & PROCEDURES

To meet the monitoring plan objectives, BMP effectiveness and maintenance monitoring must be conducted to measure the performance of the regional BMPs and predict maintenance needs. Chemical sampling is also required to calculated pollutant loading. All sampling procedures should be performed in accordance with the

CIMP and local agency requirements. A Sampling and Analysis Plan (SAP) will be required during final design of the BMP, which will provide more project specific information.

3.5.1 BMP Effectiveness Monitoring

BMP effectiveness monitoring is required to document the performance of the BMP and to quantify stormwater volume captured and pollutant removal achieved. These goals are achieved through both flow monitoring and chemical sampling, which are explained in detail below.

3.5.1.1 Flow Monitoring

Flow at the BMP inlet location should be measured in real time using an area-velocity bubbler (AVB) flow meter with an AVB sensor. This automatic sensor will transmit real time flow data to a cloud-based system that the BMP operator can easily see the information. Data analysis to determine stormwater volume is described in Section 5.

3.5.1.2 Chemical Sampling

During wet weather, chemical samples should be collected at the diversions structure and outlet pipe location (for filtration systems only) over the duration of the storm event to obtain flow-weighted pollutant concentrations (composite sampling). Samples should be collected at 20-minute intervals over a 3-hour period unless otherwise specified by the CIMP or governing jurisdiction. During dry weather, samples can be collected at any time of the day as composite sampling is not applicable. These samples can be collected as grab samples or by an autosampler that is programmed to collect the samples at the pre-programmed user specified times.

3.5.2 Maintenance Monitoring

Maintenance monitoring is essential for tracking long-term BMP performance and predicting maintenance requirements. Additional monitoring equipment is recommended for the subsurface vaults include water level loggers and soil moisture sensors. For sites where drywells are used in conjunction with the subsurface vault, drywell flowmeters are recommended.

3.5.2.1 Level Logger

A water level logger at the surface of the soil within the subsurface vault can collect data on the ponding depth and ultimately determine the infiltration rate at the surface. This data can be used to determine the performance throughout a rain event and demonstrate any decreases in performance from the start of the rain event to the end. An overall reduction in infiltration could indicate an impending maintenance need allowing staff to predict when maintenance will be required rather than reacting to a visual indicator.

3.5.2.2 Soil Moisture Sensor

A soil moisture sensor strategically placed in a BMP would indicate if the system is performing as designed and identify any potential performance limitations. Soil moisture sensors are required at the sites where the subsurface vault is designed to infiltrate. The observed infiltration rate should be compared to the design infiltration rate at each site. This sensor can be connected to a Supervisory Control and Data Acquisition (SCADA) system, which is configured to monitor the BMP system and send data to the staff by communicating through the cellular network. Collecting data in real time allows maintenance staff to evaluate trends that may indicated when routine or restorative maintenance will be required that cannot be observed in the field. The SCADA system conveniently allows staff to make observations from their desktop, reducing the burden on the field staff and minimizing the number of required field inspections.

3.5.2.3 Drywell Flowmeter

A flow meter at the drywell inlet, after the drywell pretreatment device, will collect data on the infiltration performance of the drywells. Data should be collected at the beginning of system operation to get a baseline flow rate to compare to throughout the life of the drywell. If data shows that the flow rates subside, this can indicate that the pretreatment device requires maintenance.

3.5.3 General Sampling Techniques for Chemical Grab Samples

Monitoring methodology should adhere to the monitoring guidelines as outline in the CIMP. Although the method used to collect water samples varies dependent on the depth, flow, and sampling location, the list below is an overview of sampling techniques that are applicable to all cases.

1. Throughout each sample collection event, the sampler should exercise aseptic techniques to avoid any contamination (i.e., do not touch the inner surfaces or lip edges of the sample bottle or cap).
2. The sampler should use clean, powder-free, nitrile gloves for each site to prevent contamination.
3. When collecting the sample, the sampler should not breathe, sneeze, or cough in the direction of the container.
4. Gloves should be changed if they are soiled, or if the potential for cross-contamination exists from handling sampling materials or samples.
5. While the sample is collected, the bottle lid shall not be placed on the ground.
6. The sampler should not eat or drink during sample collection.
7. The sampler should not smoke during sample collection.
8. Each person on the field crew should wear clean clothing that is free of dirt, grease, or other substances that could contaminate the sampling apparatus or sample bottles.
9. To the extent practical, sampling should not occur near a running vehicle. Vehicles should not be parked within the immediate sample collection area, even non-running vehicles.
10. When the sample is collected, ample air space should be left in the bottle to facilitate mixing by shaking for lab analysis, unless otherwise required by the method.
11. After the sample is collected and the cap is tightly screwed back on the bottle, the time of sampling should be recorded on the field log sheet.
12. Any quality assurance/quality control (QA/QC) samples that are collected should be noted on the field log sheet.
13. Samples should be stored as described in the SAP.
14. Chain of Custody (COC) forms should be filled out as applicable and delivered to the appropriate laboratory as soon as feasible to ensure hold times are met. An example COC is provided in Attachment 8.

To prevent contamination of samples, clean metal sampling techniques using USEPA protocols outlined in USEPA Method 16694 will be used throughout all phases of the water sample collection. The protocol for clean metal sampling, based on USEPA Method 1669, is summarized below:

1. Samples are collected in rigorously pre-cleaned sample bottles with any tubing specially processed to clean sampling standards.
2. At least two persons, wearing clean, powder-free nitrile or latex gloves at all times, are required on a sampling crew.
3. One person, referred to as “dirty hands”, opens only the outer bag of all double-bagged sample bottles.
4. The other person, referred to as “clean hands”, reaches into the outer bag of all double bagged sample bottles.
5. “Clean hands” rinses the bottle at least two times by submerging the bottle, removing the bottle lid, filling the bottle approximately one-third full, replacing the bottle lid, gently shaking, and then emptying the bottle. “Clean hands” then collects the sample by submerging the bottle, removing the lid, filling the bottle, and replacing the bottle cap while the bottle is still submerged. After the sample is collected, the sample bottle is double-bagged in the opposite order from which it was removed from the same double-bagging.

Samplers should put on clean, powder-free gloves whenever something not known to be clean has been touched.

3.5.4 Sample Labeling

Samples must be identified with a unique identification code to ensure that results are properly reported and interpreted and allows the site, sampling location, matrix, sampling equipment and sample type to be distinguished by a data reviewer or user. The format for sample identification codes for this BMP modeling is USGR - AAA - XXXX - ### where:

- USGR indicates that the sample was collected as part of the USGR watershed.
- AAA indicates the unique site ID for each site.
- XXXX identifies if this is a dry weather (DW) or wet weather (WW) monitoring event, and which event in the year it is, numbered sequentially from 01 to 05
- ### identifies the sample number unique to a sample bottle collected for a single event. Sample bottles are numbered sequentially 001 to 999 and will not be repeated within a single event.

The sample containers should be pre-labeled before each sampling event to the extent practicable to simplify field activities for the field crew. The sample labels should include the information shown in **Table 3-3**.

Table 3-3. Sample Bottle Label Information

Program Name	Date	Analytical Requirements
Station ID	Collection Time	Preservation Requirements
Sample ID	Sampling Personnel	Analytical Laboratory

4.0 QA/QC PROTOCOL

Quality assurance and quality control (QA/QC) protocol is necessary for field sampling. The key aspects of quality control associated with field protocols for sample collection and eventual chemical and toxicological analyses, as specified in the CIMP, are as follows:

1. *Field personnel will be thoroughly trained in the proper use of sample collection gear and will be able to distinguish acceptable versus unacceptable water samples in accordance with pre-established criteria.*
2. *Field personnel will be thoroughly trained to recognize and avoid potential sources of sample contamination.*
3. *Sampling gear and utensils which come in direct contact with the sample will be made of non-contaminating materials (e.g. borosilicate glass, high-quality stainless steel and/or Teflon™, according to protocol) and will be thoroughly cleaned between sampling stations according to appropriate cleaning protocol (rinsing thoroughly at minimum).*
4. *Sample containers will be of the recommended type and will be free of contaminants (i.e., pre-cleaned).*
5. *Conditions for sample collection, preservation, and holding times will be followed.*

Field crews will be comprised of two persons per crew, minimum. For safety reasons sampling will occur during daylight hours, when possible. Sampling on weekends and holidays will also be avoided. Other constraints on sampling events include, but are not limited to, lab closures and toxicity testing organism availability. Sampling events should proceed in the following manner:

1. *Before leaving the sampling crew base of operations, confirmation number and type of sample containers as well as the complete equipment list.*
2. *Proceed to the first sampling site.*
3. *Fill-out the general information on the field log sheet.*

4. *Collect the environmental and QA/QC samples indicated on the event summary sheet and store samples appropriately. Using the field log sheet, confirm that all appropriate containers were filled.*
5. *Collect field measurements and observations, and record these on the field log sheet.*
6. *Repeat the procedures in steps 3, 4, and 5 for each of the remaining sampling sites.*
7. *Complete the chain-of-command (COC) forms using the information on the field logs.*
8. *After sample collection is completed, deliver and/or ship sample to appropriate laboratory.*

Specific QA/QC sample details and laboratory QA/QC procedures will be provided in the SAP at the design phase of each project.

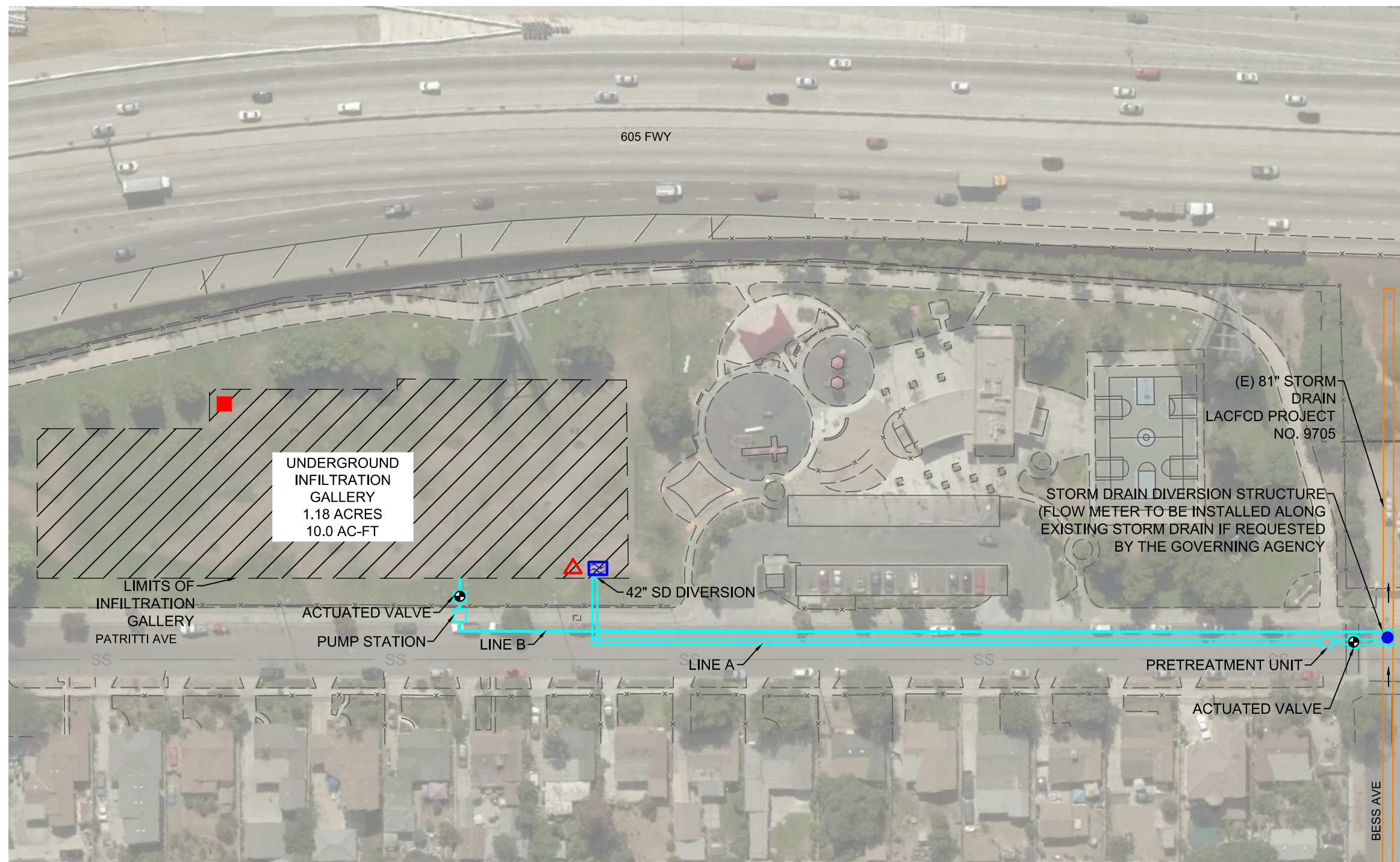
5.0 DATA ANALYSIS








The monitoring methods mentioned in Section 3.5 produce data that is useful in determining the BMP effectiveness and maintenance requirements. The flow sensors and water level loggers can be used to determine stormwater volume calculations. The chemical sampling along with continuous flow data will be used to determine pollutant load calculations. There are multiple computational and statistical techniques appropriate for nonpoint source load estimation which include the following:

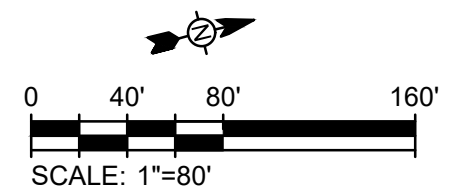
- Numeric integration to compute load as the product of flow and concentration over a sequence of observations;
- Regression to estimate un-sampled concentrations based on flow; and
- Ratio estimators to adjust individual unit loads based on flow conditions at the time of sampling.

Additional data analysis may be required to demonstrate BMP performance and effectiveness. These details will be provided in the final design of the BMP.

ATTACHMENT 1. BARNES PARK CONCEPTUAL MONITORING SCHEMATIC



- LEGEND:**
-  (E) STORM DRAIN
 -  INLET SAMPLE
 -  OUTLET SAMPLE
 -  LEVEL LOGGER
 -  SOIL MOISTURE SENSOR
 -  PROPOSED STORM DRAIN
 -  AUTOMATIC FLOW SENSOR



30% DESIGN - 10/19/2018

 TETRA TECH <small>www.tetrattech.com 3475 E. FOOTHILL BLVD PASADENA, CA 91107 (626) 351-4664</small>	NO.	REVISION	REVISED BY	APPROVED BY	DATE	COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BARNES PARK MULTI-BENEFIT STORMWATER CAPTURE PROJECT SITE PLAN MONITORING SCHEMATIC

ATTACHMENT 8. EXAMPLE CHAIN OF CUSTODY AND FIELD FORMS



GENERAL INFORMATION

Site ID: _____

Sampling Personnel: _____

OBSERVATIONS

Weather: _____

Water Color: _____

In-stream Activity: _____

Water Characteristics (flow type, odor, turbidity, floatables): _____

Other comments (trash, wildlife, recreational uses, homeless activity, etc. Use notes section below if more space is needed): _____

***In-situ* WATER QUALITY MEASUREMENTS**

Time	Temp (°C)	pH	DO (mg/L)	DO (% Sat.)	Electric Conductivity (uS/cm)

COLLECTED WATER QUALITY SAMPLES

Sample ID	Analysis	Time	Volume	Notes
				Field Blank
				Field Duplicate

ADDITIONAL WATER QUALITY SAMPLING NOTES:



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CHAIN OF CUSTODY RECORD

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WECK WKO# _____

CLIENT NAME: Tetra Tech		PROJECT:		ANALYSES REQUESTED							SPECIAL HANDLING	
ADDRESS: 3475 E Foothill Blvd Pasadena, CA 91107		PHONE: FAX: EMAIL: Oliver.Galang@tetrattech.com										
PROJECT MANAGER Oliver Galang		SAMPLER		Total Suspended Solids	Copper (Total and Dissolved)	Lead (Total and Dissolved)	Zinc (Total and Dissolved)	Hardness	E. Coli	<input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48-72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input type="checkbox"/> Rush Extractions 50% <input checked="" type="checkbox"/> 10 - 15 Business Days <input type="checkbox"/> QA/QC Data Package		
Charges will apply for weekends/holidays		Method of Shipment:										

ID# (Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	Cl ₂ Y/N	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.	Total Suspended Solids	Copper (Total and Dissolved)	Lead (Total and Dissolved)	Zinc (Total and Dissolved)	Hardness	E. Coli	COMMENTS
			RW		USGR - AAA - XXXX - ###		X	X	X	X	X		Email copy of COC to project manager.
			RW		USGR - AAA - XXXX - ###							X	

RELINQUISHED BY	DATE / TIME	RECEIVED BY	DATE / TIME	SAMPLE CONDITION: Actual Temperature: Received On Ice Y / N Preserved Y / N Evidence Seals Present Y / N Container Attacked Y / N Preserved at Lab Y / N	SAMPLE TYPE CODE: AQ=Aqueous NA= Non Aqueous SL = Sludge DW = Drinking Water WW = Waste Water RW = Rain Water GW = Ground Water SO = Soil SW = Solid Waste OL = Oil OT = Other Matrix
RELINQUISHED BY	DATE / TIME	RECEIVED BY	DATE / TIME		
RELINQUISHED BY	DATE / TIME	RECEIVED BY	DATE / TIME		

PRESCHEMULED RUSH ANALYSES WILL TAKE PRIORITY OVER UNSCHEDULED RUSH REQUESTS
 Client agrees to Terms & Conditions at: www.wecklabs.com

SPECIAL REQUIREMENTS / BILLING INFORMATION

COC version 042707