REQUEST FOR BID

LANDSCAPE MAINTENANCE SERVICES
VARIOUS LOCATIONS

P.W. 06-22-19

CITY OF ALAMEDA

August 18, 2022

Pre-bid Meeting:	No Pre-bid Meeting for this Project
Bid Opening Date:	Thursday, September 8, 2022
Bids Due by:	2:00 p.m.
Bids Opening Time:	2:01 p.m.
Location:	City Hall West Public Works Department 950 W. Mall Square #110 Alameda, CA 94501

Contact:
Jesse Barajas, Project Manager
City of Alameda
Public Works Department
950 W. Mall Square #110
Alameda, CA 94501
Phone: (510) 747-7900
Email: jbarajas@alamedaca.gov

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I. INTRODUCTION

The City of Alameda ("City") is requesting Bids from qualified Contractors to provide landscape maintenance services, including all irrigation elements, sidewalks and landscape elements within publicly owned land and within the public right-of-way at various locations in Alameda.

A. Background.

The City of Alameda is a charter city with a population of over 75,000. This project is to be compliant with this City of Alameda Request for Bids, and all exhibits, special provisions and plans. The project will include providing landscape maintenance services, including all irrigation elements, sidewalks and landscape elements within publicly owned land and within the public right-of-way at various locations within the City of Alameda.

B. Purpose of the Request.

The City desires to obtain bids from qualified Contractors to perform landscape maintenance services, including all irrigation elements, sidewalks and landscape elements within publicly owned land and within the public right-of-way at various locations in Alameda as identified in Exhibit A (Scope of Work).

II. SCOPE OF SERVICES

Attached as Exhibit A is a list of major work tasks that should be accomplished as part of the scope of work. Please complete the attached **Exhibit B (Bid Proposal)** and return to the City per directions in Section V.

Questions related to this project must be submitted in written format and **must be emailed to both** Jesse Barajas, Project Manager **AND** Mirna Moreno, Senior Clerk at: jbarajas@alamedaca.gov and mmoreno@alamedaca.gov. Questions will be reviewed and response issued via Addenda or email in a timely manner. **The last date to submit written questions is 12 p.m. on August 31, 2022.** Questions received after this date and time will not receive a response.

Only electric blowers are required to maintain the proposed sites.

All work is to be done in conformance with the specifications contained in this Request for Bid document as required by the Public Works Project Manager.

Provider will attend weekly maintenance meetings along with a monthly walk through with the Public Works Project Manager.

Provider will provide detailed landscape maintenance schedule.

Provider will provide approved irrigation schedule during the first month of work period.

Provider will provide weekly GPS reports that tracks work crew while in town.

Provider will provide check-off weekly work sheets that show sites that were maintained during the past week, including "rainy day" work as specific with the agreement.

Equipment will meet all NPDES and CARB emissions mandates and be in good to excellent operating conditions.

Contractor will provide a GPS report at the end of each billing cycle which will accompany the monthly billing. GPS report will identify areas serviced for the month being billed.

Written irrigation inspection reports are due at the weekly meeting.

All correspondence is channeled through the Public Works Project Manager, any special accommodations will incur administrative costs.

All CCI increases are at the discretion of the City Public Works Director.

III. BID FORMAT

All Bids shall include the following minimum information:

A. Proposed Project Schedule.

The contract term is effective October 1, 2022, with work commencing on Monday, October 3, 2022**.** See Exhibit A for listing of locations and frequency of service for each site.

IV. SELECTION PROCESS

A. Qualifications.

All Bids received by the due date will be evaluated by the City and the lowest responsive, responsible bidder will be selected per Administrative Order No. 5. Only information which is received in response to the Request for Bid will be evaluated.

B. Selection Criteria.

The City will select the most qualified Bid in accordance with the City's Administrative Instruction No. 5, which is the lowest responsive, responsible bid. A sample agreement is attached as Exhibit C. The City reserves the right to reject all Bids.

C. Proposed Selection and Project Schedule.

Request for Bid Released:	Thursday, August 18, 2022
Bid Due Date:	Thursday, September 8, 2022
Review by City:	Thursday, September 8, 2022
Contract Out for Signature:	Tuesday, September 13, 2022
Contract & Insurance Received:	Monday, September 19, 2022
Council Awards Agreement:	Wednesday, October 19, 2022

V. BID DUE DATE AND DELIVERY

One sealed Contractor Bid (Exhibit B), including any Addendums, clearly marked with the project name **"LANDSCAPE MAINTENANCE SERVICE VARIOUS LOCATIONS, P.W. 06-22-19",** should be submitted no later than:

2:00 p.m. on Thursday, September 8, 2022

to the address below. All copies received by that time will be date and time stamped. Any Bidder's Proposal received after 2:00 p.m. on this date will not be accepted. Contractor Bidder's Proposal should be addressed to:

Jesse Barajas, Project Manager
City of Alameda
Public Works Department
950 W. Mall Square, Room 110
Alameda, CA 94501

FAXed or Emailed Bids will not be accepted. Hand carried Contractor Bidder's Proposals will be accepted at the above address.

VI. CONDITIONS OF REQUEST

A. General Conditions:

The City reserves the right to cancel or reject all or a portion or portions of the Contractor's Proposal without notice. Further, the City makes no representations that any agreement will be awarded to any organization submitting a Contractor's Proposal. The City reserves the right to reject any and all Contractor's Bid Proposals submitted in response to this request or any addenda thereto.

Any changes to the Request for Bid requirements will be made by written addendum and uploaded onto the City of Alameda's website.

It is the responsibility of the Contractor to check before the bid date that they have all the paperwork to complete the bid. Do not rely upon third party providers of the original Request for Bid to issue all addenda. Contractor shall acknowledge receipt of all addenda on the Bid and those Bids that do not have acknowledgment of all addenda will be considered non-responsive.

B. Liability of Costs and Responsibility:

The City shall not be liable for any costs incurred in response to this Request for Bid. All costs shall be borne by the person or organization responding to the request. The person or organization responding to the request shall hold the City harmless from any and all liability, claim or expense whatsoever incurred by or on behalf of that person or organization. All submitted material becomes the property of the City of Alameda.

The selected organization will be required to assume responsibility for all services offered in the Contractor's Proposal whether or not they possess them within their organization. The selected organization will be the sole point of contact with regard to contractual matters, including payment of any and all charges resulting from the contract.

C. Maintenance Provisions and Specifications:

1. The City of Alameda assumes no responsibility for loss or damage to equipment owned or operated by the Contractor, his agents, or employees.

2. The entire responsibility for any and all injury to the public, to individuals and to property resulting directly or indirectly from the performance of the work hereunder shall rest upon the Contractor who shall indemnify and hold the City free and harmless from and against any and all liability expense, claims, costs, suits and damages arising out of the negligence or work on the part of the Contractor to which the contract is awarded.

3. It is the intention of the City of Alameda to receive the highest quality of workmanship compatible with standard practices.

4. All work shall be performed by experienced personnel directly employed and supervised by the Contractor. The Contractor shall provide management and technical supervision as required to implement the work. The Contractor shall accompany the Public Works Project Manager or designated representative on an inspection tour as needed for evaluation of the work.

5. The Contractor shall be responsible for the skills, methods and actions of his employees and for all work done.

6. The Contractor shall replace at his own expense, any lawn area or other plant material requiring replacement due to negligence on his part in improper maintenance. This requirement is not to be construed as requiring the Contractor to replace plants or entire lawns due to conditions totally beyond his control, but is considered strictly as normal maintenance condition in accordance with accepted practice.

7. The Contractor shall perform the work herein provided for to the satisfaction of the Public Works Project Manager. The Public Works Project Manager will make inspections from time to time to determine the Contractor's conformity with these specifications and the adequacy of the work being performed. The Contractor shall be available for consultation with the Public Works Project Manager as needed.

8. Any unsafe condition in a City facility shall be reported immediately to the Public Works Project Manager or his authorized representative.

9. The Contractor shall at all times furnish and maintain sufficient equipment as necessary to perform the work of this contract. Such equipment shall be subject to the inspection and approval of the Public Works Project Manager or his designated representative.

10. The Contractor may not store equipment in, or have access to, any City storage facilities unless authorized by the Public Works Project Manager or designated representative.

11. It is the Contractor's responsibility to carefully inspect and survey the work site(s) in order to ascertain prior to proposal submittal the peculiar difficulties encountered due to the nature of the work site(s). No adjustments in payment or other contract provisions will be made due to failure on the part of the Contractor to inspect the site(s) and otherwise inform himself as to the peculiar characteristics of the work site(s).

12. A maintenance form must be completed weekly. This form will be provided by the Maintenance Services and Special District / Parks Division.

13. The Public Works Project Manager shall have the authority to suspend the work wholly or in part for such period, as he may deem necessary. Such suspension shall not affect the contract price for such period.

14. The Contractor must have a **valid C-27** landscape license.

15. The Contractor must be equipped with a communication system that allows for reaching staff in the field.

16. The Contractor shall provide an emergency phone number for landscape maintenance repairs, which may occur after normal working hours. The Contractor will be expected to respond, by phone, within one (1) hour when contacted by the City of Alameda.

17. Contractor will dispose of all clippings, trimmings and cuttings at the Alameda County Industries transfer station located at 610 Aladdin Avenue, San Leandro, CA 94577. Hours of operation are Monday through Friday, 8 a.m. to 5 p.m.

D. Operational Details:

1. The Contractor is responsible for providing all supervision, labor, material, equipment and transportation required to maintain the landscape in an attractive condition throughout the year as specified below.

2. The Contractor's representatives should be experienced in landscape maintenance and preferably have an education in ornamental horticulture.

3. The Contractor shall be able to repair or replace damage attributable to minor vandalism, storms, irrigation failure, etc., within seventy-two (72) hours.

4. The Contractor shall also be able to repair and maintain all irrigation equipment including but not limited to valves, controllers, pipelines, low voltage electrical lines, etc., in a timely manner.

5. The Contractor shall provide, at his expense, all necessary equipment, supplies, and material of good quality to fulfill the maintenance specifications at a professional level. The intent is to provide for minor repairs primarily to the irrigation system due to wear or malfunctioning parts, i.e., sprinkler heads, replacing washers, springs, small sections of pipe, etc. The City will pay for parts and equipment replacement due to vandalism or for major repairs of systems and plant replacement that are not related to the Contractor's negligence. All vandalism damage exceeding one hundred dollars ($100.00) must be accompanied by an Alameda Police Department report.

6. The City requires the use of electric leaf blowers during all aspects of landscape maintenance city-wide.

7. Should the City desire to have repairs or plant replacement due to vandalism, the City will pay for parts and plants.

8. General Maintenance and Clean Up

1. All clippings, trimmings, and cuttings shall be promptly removed from the site and disposed of at the Alameda County Industries transfer station located at 610 Aladdin Avenue, San Leandro, CA 94577. Hours of operation are Monday through Friday, 8:00 a.m. to 5:00 p.m.

2. Grass cuttings shall be removed from all walkways and paved areas by vacuuming or blowing onto turf or other method of Contractor's choice on the same day as the cutting.

3. Any settling, washouts or damage due to Contractor's vehicles or equipment shall be filled, graded, replanted, and repaired to original condition.

4. Leaf blowers will only be operated between the hours of 8:00 a.m. to 4:30 p.m., except at City Hall.

5. Leaf blowers are to be used on median range settings unless a particular situation exists where more power is required, i.e., wet grass sticking to surface, extra heavy debris, etc. In these cases the high range may be used, but only intermittently.

6. Leaf blowers shall not be used on designated "spare the air" days.

7. Lawn clippings or debris will be blown back onto the immediate lawn areas, or into piles in the street gutters and removed.

9. Irrigation Repairs

1. Irrigation Heads

i. Head repairs to include all work necessary up to and including two inch (3") PVC tee, nipple/riser, sprinkler body, and nozzles.

ii. Replacement heads shall be Toro heads, 300 and 570 series, or hunter stream spray. Replacements shall match existing system and precipitation rates.

2. Repair of Irrigation Supply Lines

i. Irrigation supply lines vary in size from 3/4" to 3", Sch. 40, on all mains.

ii. Repairs shall be made within seventy-two (72) hours, in a professional manner, according to manufacturer's specifications.

iii. All landscape disturbed during excavation shall be replaced to its original state.

3. Repair of Irrigation Valves

i. All valves shall be checked twice per week. Any malfunction shall be repaired or replaced as soon as possible.

ii. Replacements shall be: Plastic- Hydro /Toro/Rainbird/Hardy; or Brass- Rainbird/Superior.

10. Spraying Weed Abatement. This section pertains to the application of herbicides for the purpose of weed abatement in special areas throughout the City of Alameda. All work must be performed with properly mixed chemicals and by a person with a current qualified applicator certificate/license in Alameda County.

E. Compliance with the City's Integrated Pest Management Policy:

Contractor shall follow the requirements of the City's Integrated Pest Management (IPM) Policy to ensure the City is in compliance with its Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, issued by the San Francisco Bay Regional Water Quality Control Board.

- ❑ Contractor shall use the most current IPM technologies available to ensure the long-term prevention or suppression of pest problems and to minimize negative impacts on the environment, non-target organisms, and human health for the control or management of pests in and around City buildings and facilities, parks and golf courses, urban landscape areas, rights-of-way, and other City properties.
- ❑ Contractor will consider the City IPM Policy's hierarchy of options or alternatives listed below, in the following order before recommending the use of or applying any pesticide on City property: (1)
    a. No controls (e.g. tolerating the pest infestation, use of resistant plant varieties or allowing normal life cycle of weeds);
    b. Physical or mechanical controls (e.g. hand labor, mowing, exclusion);
    c. Cultural controls (e.g. mulching, disking, alternative vegetation) and good housekeeping (e.g. cleaning desk area);
    d. Biological controls (e.g., natural enemies or predators);
    e. Reduced-risk chemical controls (e.g., soaps or oils); and
    f. Other chemical controls.
- ❑ Prior to applying chemical controls Contractor shall complete a checklist for the City's pre-approval that explains why a chemical control is necessary. For annual contracts that require regular application of chemical controls the contractor shall submit one checklist prior to the initiation of the project demonstrating that the hierarchy has been reviewed and no other options exist. Additionally, Contractor shall provide documentation to the City's project manager of the implementation of the IPM techniques hierarchy described in the City's IPM Policy.
- ❑ Contractor shall avoid the use of the following pesticides that threaten water quality, human health and the environment:

a. Acute Toxicity Category I chemicals as identified by the Environmental Protection Agency (EPA);
b. Organophosphate pesticides (e.g., those containing Diazinon, chlorpyrifos or malathion);
c. Pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin), carbamates (e.g., carbaryl), and fipronil; and
d. Copper-based pesticides unless their use is judicious, other approaches and techniques have been considered, and the threat of impact to water quality is prevented.

- ❑ Contractor shall sign the Contractor Verification Form indicating the intent to implement the City's IPM Policy, and return a signed copy to the City's project manager.
- ❑ Contractor shall provide to the City's project manager an annual report of all pesticide usage in support of City operations including pesticide name, active ingredient(s), target pest(s), the total amounts used and the reasons for any increase in use of any pesticide.
- ❑ Contractor shall provide a copy of any current IPM certifications(s) to the City's project manager prior to initiation of the service work.

A copy of the City's IPM Policy may be obtained from the City's project manager and is also on file with the City Clerk.

F. Department of Industrial Relations Compliance and Prevailing Wage Requirements on Public Works Projects.

Effective January 1, 2015, no Contractor or Subcontractor may be listed on a bid proposal for a public works project (submitted after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5 (with the limited exceptions from this requirement for bid purposed only under Labor Code Section 1771.1(a)). Register at https://efiling.dir.ca.gov/PWCR

No Contractor or Subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

The Prime Contractor is required to post job site notices prescribed by regulations. See 8 Calif. Code Regulation §16451(d).

Effective April 1, 2015, All Contractors and Subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner at: https://apps.dir.ca.gov/ecpr/das/altlogin

G. Hours of Labor:

As provided in Article 3 (commencing at § 1810), Chapter 1, Part 7, Division 2 of the Labor Code, eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by Contractor or by any subcontractor on any subcontract under this Agreement, upon the work or upon any part of the work contemplated by this Agreement, is limited and restricted to eight (8) hours during any one calendar day and forty (40) hours during any one calendar week, except as hereinafter provided. Notwithstanding the provision hereinabove set forth, work performed by employees of Contractor in excess of eight (8) hours per day and forty (40) hours during any one week shall be permitted upon this public work, provided that the employees' compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1-1/2) times the basic rate of pay.

Contractor shall pay the City a penalty of Twenty-five Dollars ($25.00) for each worker employed in the execution of this Agreement by Contractor, or by any subcontractor, for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and forty (40) hours in any one (1) calendar week, in violation of the provisions of Article 3 (commencing at § 1810), Chapter 1, Part 7, Division 2 of the Labor Code, unless compensation for the workers so employed by Contractor is not less than one and one-half (1-1/2) times the basic rate of pay for all hours worked in excess of eight (8) hours per day.

Holiday and overtime work, when permitted by law, shall be paid for at a rate of at least one and one-half (1½) times the above specified rate of *per diem* wages, unless otherwise specified. Holidays shall be defined in the Collective Bargaining Contract applicable to each particular craft, classification, or type of worker employed.

H. Apprentices:

Attention is directed to the provisions in Sections 1777.5 and 1777.6 of the Labor Code concerning the employment of apprentices by Contractor or any subcontractor under it on contracts greater than $30,000 or 20 working days. Contractor and any subcontractor under it shall comply with the requirements of Sections 1777.5 and 1777.6 in the employment of apprentices.

Section 1777.5 of the Labor Code requires Contractor or subcontractor employing workers in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of the public works project, and which administers the apprenticeship program in that trade, for a certificate of approval, if they have not previously applied and are covered by the local apprenticeship standards.

Contractor is required to make contributions to funds established for the administration of apprenticeship programs if: (1) Contractor employs registered apprentices or journeymen in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions; or (2) if Contractor is not a signatory to an apprenticeship fund and if

the funds administrator is unable to accept Contractor' required contribution. Contractor or subcontractor shall pay a like amount to the California Apprenticeship Council.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex-officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

I. Labor Discrimination:

No discrimination shall be made in the employment of persons upon public works because of the race, color, sex, religion, age, national origin, sexual orientation or physical disability of such persons and every Contractor for public works violating this section is subject to all the penalties imposed for a violation of the provisions of the Labor Code, and, in particular, Section 1735.

J. Registration of Contractors:

Before submitting bids, contractors shall be licensed in accordance with the provisions of Chapter 9, Division 3, of the Business and Professional Code of the State of California.

K. Standard Contractor Agreement:

A sample Contractor agreement has been provided in the Appendix for the Contractor's review and comment. If a Contractor wishes to take exception to any of the terms and conditions contained in the Contractor agreement, these should be identified specifically and with the Contractor's Proposal; otherwise it will be assumed that the Contractor is willing to enter into the agreement as it is written. Failure to identify contractual issues of dispute can later be the basis for the City disqualifying a Contractor. Any exceptions to terms, conditions, or other requirements must be clearly stated. Otherwise, the City will consider that all items offered are in strict compliance with the Request for Bid, and the successful Contractor will be responsible for compliance. The City will consider such exceptions as part of the evaluation process which may constitute grounds for rejection of the Contractor's Proposal. The Contractor agreement will not be executed by the City without first being signed by the Contractor.

L. Permits and Licenses:

The Contractor shall procure a City of Alameda business license, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work. However, the contractor will be reimbursed for construction permit fees. The estimated cost shown as an allowance in the bid proposal is only for bidding purposes. Payment shall be made for the actual cost of the permit. The cost for a City of Alameda business license is not reimbursable. Each SubContractor shall have a current City of Alameda business license.

The following permit(s) and/or license(s) are required for this project:

1. A **City of Alameda Business License** from the City of Alameda, 2263 Santa Clara Avenue, Finance Department, Room 220, Alameda.
2. A State of California Landscaping Contractor License.

M. Health and Safety Requirements:

Contractor acknowledges that the City shall have the right to impose, at the City's sole discretion, requirements that it deems are necessary to protect the health and safety of the City's employees, residents, and visitors. Contractor agrees to comply with all such requirements, including, but not limited to, mandatory vaccinations, the use of personal protective equipment (e.g. masks), physical distancing, and health screenings. Contractor also agrees to make available to the City, at the City's request, records to demonstrate Contractor's compliance with this Section. [See Certification of Compliance attached.]

N. Contractor's Representative.

The person signing the Contractor's Proposal must be a legal representative of the firm authorized to bind the firm to an agreement in the event of the award.

O. Award of Contract:

The basis of award of contract shall be by the City of Alameda for the lowest and best bid that will best serve the City's need.

The City reserves the right to reject any, any portion, or all bids.

The award, if made, will be made within sixty (60) days after the opening of the bids. All bids will be compared on the basis of the Project Manager's estimate of quantities of work to be done. In the event of a delay the City reserves the right to hold the Bidder to its bid for 90 days from the date the contract is awarded. The agreement will be awarded as a five year agreement. The compensation for years two through five will be adjusted by the Construction Cost Index for the San Francisco Bay Area as reported in the Engineering News Record for the previous calendar year for the trade(s) associated with the services or tasks

P. Execution of Contract:

The contract, in form and content satisfactory to the City, will be awarded at a regular City Council meeting (first and third Tuesdays of each month, except August). The Contractor will be notified of apparent award status and requested to provide the documents necessary to complete the contract process. Required documentation shall include signed copy (wet signed, PDF, or DocuSign) of the contract executed by the Contractor, proof of insurance and if required, payment and performance bonds.

No proposal shall be considered binding upon the City until the execution of the contract. Failure to execute a contract and file acceptable bonds and insurance as provided herein within the time frame outlined above shall be just cause for the annulment of the award.

Attachments:

Exhibit A – Scope of Work
Exhibit B – Bid Proposal
Exhibit C – Standard Contractor Agreement
Exhibit D – Certified Payroll and Prevailing Wages Forms
Exhibit E – Emergency Form
Exhibit F - Integrated Pest Management Policy
Exhibit G – Landscape Site A, Phase 1 Landscape Areas
Exhibit H – Landscape Alameda Landing BioSwales Specs Backbone SWMP_December 2012

EXHIBIT A

SCOPE OF WORK

SCOPE OF WORK

1.1. WORK TO BE DONE. The work to be done consists of furnishing all licensing, all labor, equipment, transportation, materials, monthly reports, weekly meetings along with monthly walk through and supervision necessary to provide complete and continuous management and maintenance of all turf, ground covers, trees, shrubs within the Public Right of Way (streets and medians), city buildings and public park land within the Site A public right of way including the bio-swales that service the Site A neighborhood Park, Seaplane Lagoon Ferry Terminal, Del Monte Streets Extensions (Mosley Street Parkway, Singleton/Mosely Street, Clement Ave, Buena Vista and Sherman Street) entrances and bio-swale infrastructure, and all other work connected thereto as specified below. The work includes the Cross Alameda Trail/Ralph Appezzato Memorial Parkway (CAT/RAMP) pathways and perimeter that begins on the South Western corner of Constitution and continues to Main Street and Ralph Appezzato Memorial Parkway. All work shall be performed in accordance with the attached Tentative Frequency of operations schedule in Section VI.

The Contractor shall provide: 1. Detailed Landscape Maintenance Schedule 2. Approved irrigation schedule during the first month of work period, 3. Weekly GPS reports that tracks work crew while in town, 4. Check-Off Weekly Work Sheets that show sites that were maintained during the past week, including 'Rainy Day Work'.

1.1.1. AREA OF WORK. The area of work consists of maintaining all landscaped areas, including all irrigation elements, sidewalks and landscape elements within publicly owned land and within the public right-of-way of the following streets:

CAT/RAMP Pathways
Site A Public Parkways
Site A Bio-swales
Seaplane Lagoon Ferry Terminal
Del Monte Street Extension/ Entrances, Sidewalks/Parkways, Bio-swales
Harbor Bay Parkway- Maitland Street to Doolittle Driveway, Parkways, Medians
Bay Edge Road – Aughinbaugh Way to Harbor Bay Parkway, Parkways and Medians
Mosley Street Parkway – Extension– Parkway and Bio-swale
Singleton/Mosely Street – Bette Street - Parkway and Bio-swale

1. Maintain the turf area between curb and sidewalk along both sides
2. Maintain the shrubs, ground cover and trees within all medians.
3. Maintain landscaping within and surrounding public bio-swales
4. Maintain all landscape elements graffiti free including benches, light poles
5. Maintain all irrigation infrastructure/elements and manage to NWELO standards.
6. Maintain sidewalk and pathways within the public right of way.
7. Maintain all landscape elements.

2.0 Personnel/Supervision

A. All Included work shall be performed by persons directly employed and supervised by the Contractor. The Contractor shall provide management and technical supervision. A qualified foreman/ Supervisor on site at all times with the ability to direct, make technical recommendations, attend city meetings, respond to emergencies and residents' concerns as well as manager and oversee the implementation of the Landscape Maintenance Schedule along with the irrigation schedule.

B. Subcontractors may be utilized to perform certain specialized functions within this contract and will be directly supervised by Contractor. No subcontract or other assignment hereunder shall be made without prior written consent of City, and when consent is granted it shall not relieve Contractor of any obligation to City hereunder.

C. Recognizable uniformed employees shall be the standard during normal operating hours is subject to the approval of the City as to professional appearance and performance.

D. All work shall be conducted in a manner so as to cause the least possible interference with or annoyance to others.

E. All staff shall be fully qualified and trained on all the equipment and landscape work to properly and safely use all the equipment and tools to expedite all work in a professional manner/level.

F. All equipment will meet California latest CARB emissions and noise regulation outputs.

G. All Equipment will be properly maintained including proper performance, no leaks, all guards in place and mostly new.

2.1 Materials

2.0 Materials shall be of the highest quality available.

A. All chemicals used shall be City approved as per the label application as regulated by EPA government approved and applied in accordance with manufacturer's instructions and government regulations. All chemicals shall be non-corrosive, non-staining, and shall not leave a flammable residue.

B. Horticulture/Agriculture products will follow manufacturer

recommendations along with providing PCA recommendation where applicable and shall have all labels, safety data sheets reviewed and approved by Project Manager.

C. Amendments and fertilizers shall be new batches and applied per the manufacturer or PCA recommendation and reviewed/approved by Project Manager.

3. 0 Turf Care

All turf shall be maintained in accordance with the Frequency of Operations Schedule by the following:

A. Turf shall be mowed to a height of two inches or as appropriate using sharp, adjusted mowing equipment using a rotary mower with a mulching deck and sharp mulching blades mowing above the shoot collar or a seven blade reel mower while managing to avoid turf clumps that dry and leave a poor appearance. Additional passes with the mower shall be performed as necessary to pulverize and eliminate the poor appearance. No grass clippings shall be left on the turf that will not dry up and fall below growing level within 24 hours. Contractor shall trim around sprinkler heads, shrubs and trees as necessary.

B. Turf shall be edged back from paved areas, buildings, walkways and utility fixtures to maintain a neat, attractive appearance.

C. Turf shall be fertilized using sound horticultural management practices, with consideration given to visual appearance. Slow release fertilizer with an analysis of 32-2-4 shall be applied to the turf at the rate of one pound of actual Nitrogen per 1,000 square feet four times per year. Supplemental applications of Calcium Sulfate shall be applied on all turf areas twice/ year per the manufacturer recommendation or PCA or Soil Advisor.

D. Trash, leafs, twigs, and other undesirable materials shall be removed from turf prior to mowing and shall result in a clean well defined mow pattern turf.

E. Post-emergent herbicides shall be used to suppress undesirable weeds and grasses under the supervision of a PCA and State Licensed qualified Applicator following the pre-approval of City representative and implementing the approved Landscape Maintenance Plan. Pest populations shall be monitored by the Contractor. The Contractor is responsible to notify the City of all pest control necessary to maintain plant health, appearance, and general safety. The Contractor shall recommend to City the proper actions to be taken along with suggested timing and cost of the work at time and materials. Work will only be performed upon approval of a separate Work Order at an agreed cost.

F. **Park turf areas shall be aerated one (1) time annually.** The operator shall make two ninety degree passes of all turf areas. Soil plugs resulting from

aeration operations may be allowed to remain on turf but must be ground on same day with the use of mulching deck rotary mower or a seven blade reel mower.

All precautions will be taken to prevent damages to the irrigation system, including: Valve covers, piping, and sprinklers. The contractor shall flag all the irrigation components to avoid damaging and shall verify no damages after aeration by running the system and repairing all damages caused by the operation.

4.0 Ground Cover Care and Flowering Fascicles.

Ground cover shall be maintained in accordance with the Frequency Schedule by the following:

A. Ground covers shall be edged back from paved areas, buildings, walkways and utility fixtures to maintain a neat, natural attractive appearance by trimming at 45 degree along all visible edges. Ground covers shall not be allowed to grow onto shrubs or trees planted in ground cover beds.

B. Ground covers shall be selectively pruned to achieve a natural appearance one (1) time annually to reduce height by approximately 30% and promote health, remove shrub growth, fruiting bodies, senescing growth and promote vigor. Ground cover shall be maintained at a height 12 inches or less.

C. Ground covers shall be fertilized using sound horticultural management practices, consideration given to visual appearance. Fertilizer used on ground covers will have an analysis of 15-9-12 ACL Osmocote Slow Release and shall be applied at a rate of **1** pound of actual nitrogen per 1,000 square feet, annually.

D. Trash, leafs, twigs, surface rocks and other undesirable materials shall be removed from beds.

E. Undesirables materials include but are not limited to: Mammal waste, unsightly/expired flower stocks, all other debris

F. Weed Control shall be maintained so that all areas are reasonably weed free and no obvious weeds are left visible. Weeds shall be controlled with suitable pre- and/or post-emergent herbicides, as well as with selective and/or contact herbicides as approved by the City within the Landscape Maintenance Plan. Hand pulling and/or mechanical removal may also be necessary. (see IPM)

G. Use of snail bait is approved that is granular in size so as to affect non-target small mammals and PCA recommendation.

5.0 Tree and Shrub Care

Trees and shrubs no greater than fifteen (15) feet in height and all tree clearances including 8' over sidewalks and 15' over the streets shall be maintained, in accordance with the Frequency Schedule, ISA Standards, ANSI 300, by the following:

A. Pruning shall be done to select and develop permanent scaffold branches; to eliminate diseased or damaged growth; to eliminate weak branch attachment angles, to reduce wind damage by thinning out the canopy and to encourage a natural growth pattern of each specific variety within space limitations.

B. All included trees and shrubs shall be kept pruned back to clear all roads, drives, walkways and structures towards achieving safety or all pedestrians and vehicles. Pruning shall be done to keep plants clear of all doorways and important windows. Any limbs or branches touching or brushing buildings or other structures shall also be headed back.

C. Major structural pruning of trees and shrubs shall be done when trees are most dormant.

D. Light pruning of trees and shrubs for shape, size, and clearance shall be done as necessary.

E. Trees and shrubs shall be fertilized using sound horticultural management practices, with consideration given to visual appearance. Fertilizer used for tree and shrub areas shall have an analysis of 15-9-12 and shall be applied at a rate of per manufacturer recommendations for Osmocote ICL .

F. Lower branches of young trees shall not be removed but shall be retained in a "tipped back" condition to attain maximum trunk caliper growth until trees are able to stand without artificial support.

G. All pruning cuts are to be made using sound, generally accepted horticultural practices.

H. Trees over fifteen (15) feet in height that require structural pruning is not included but skirting for clearance that may require maintenance for the necessary clearances over pedestrian walks, sitting and other such locations is included for all trees. Pruning needs for trees over fifteen **(**15) feet shall be monitored by the Contractor. The Contractor is responsible to notify the City of all pruning necessary (including removal) to maintain tree health, appearance, and general safety.

I. Sucker growth shall be removed at source soil level.

J. The objective of shrub pruning is the same as for trees: to thin, shape, to

maximize ornamental qualities (i.e., flowers, fruit or berries) and to attain a natural, healthy appearance. Hedges shall be selectively pruned to maintain an even height. Hedges are not to be sheared to a formal appearance but to a natural state.

K. Staking and guying shall be eliminated as rapidly as trees become self-supporting under normal environmental conditions. If still unstable after trunk caliper exceeds four inches (4") or in two years after planting, tree replacement shall be recommended to the City. While in place, stakes and guys shall be inspected and adjusted to prevent girding or rubbing damage to trunk or limbs, as needed. All tree ties and guys shall be loosened to allow tree to flex with the wind to allow for strengthening of the trunk.

L. Cabling, staking or guying new or existing trees is EXCLUDED. If necessary, City may request Contractor to provide a cost estimate for work at Time and Materials. Work will only be performed upon approval of a separate Work Order.

M. A ring of bare earth/ wood bark 16-18 inches in diameter on new trees, greater on larger root flared trees shall be maintained weed and grass free around each tree in turf areas. Trunk damage resulting from mechanical weed control (i.e., weed-whackers) will be grounds for a penalty of $75.00 per incidence or the full replacement value of a replacement tree as like size to be charged to the Contractor.

N. Weed Control shall be maintained so that all areas are reasonably weed free and no obvious weeds are left. Weeds shall be controlled with suitable pre- and/or post-emergent herbicides, as well as with selective and/or contact herbicides. Mechanical or hand pulling may also be necessary.

O. Pest populations shall be monitored by the Contractor. The Contractor is responsible to notify the City of all pest control necessary to maintain plant health, appearance, and general safety. The Contractor shall recommend the proper actions to be taken along with suggested timing of work to the City. Work will be performed upon approval of a separate Work Order and secure a PCA recommendation for all applicable products. (see IPM)

P. Debris and leaf litter shall be removed from beds.

Q. Dead plants and those in a state of decline shall be brought to the City's attention immediately. Contractor agrees to replace all plant materials that decline or die due to negligence of the Contractor at the Contractor's expense. Replacement plants shall be of a size variety and condition acceptable to the City.

6.0 Irrigation

The irrigation system(s) shall be maintained in accordance with the Frequency Schedule by the following:

A. Contractor shall complete preventative maintenance inspect and written reports of all irrigation systems for correct operation and coverage in dry and wet conditions. System shall be adjusted as necessary and the contractor will complete all adjustments and labor on laterals up to the valves, wiring and controllers weekly including monthly reports at no additional cost to the owner; programming controllers using Historical ETo or NEWLO state standards to meet NWELO state mandates.

During the first month of scheduled work all irrigation system shall be inventoried, including controllers, mainline, valves and laterals to determine required irrigation repairs to achieve proper coverage. Proposals to make repairs will be determine and expedited after review of scope of work to bring system up to proper working standards.

B. Extensive repairs shall be reported to City along with estimated costs of the work at time and materials. Work will only be performed upon approval of a separate Work Order at an agreed cost.

C. Accidental damage resulting from Contractor's operation shall be repaired without charge, within one watering period, trees, turf, shrubs or ground cover decline/demise caused by delayed repairs to irrigation system will be replaced at the contractor's cost.

D. Needed repairs resulting from vandalism, accident, animals, normal wear or other cause shall be reported to the City and shall be performed upon approval of a separate Work Order. However, Contractor shall use good judgment to make such immediate repairs as may be required to prevent unnecessary expense, water-waste and/or prevent damage to the landscape. In all cases, a detailed statement of charges will be submitted to the City for payment subject to inspection of said repairs.

E. The sprinkler heads shall be checked, cleaned, adjusted, and trimmed around to ensure proper coverage.

F. All adjustments and settings of automatic controllers shall be made to established frequency and length of watering periods, striving for maximum benefit with minimum water usage while using ETo data to avoid over watering.

G. Watering will be done preferably at night or early morning. Care shall be taken to reduce runoff, pending, or erosion. Overspray onto vehicles, pavement or buildings shall be avoided.

H. Contractor shall check all systems for proper operation on a weekly basis and provide a monthly performance report but making all the necessary repairs as outline herein special attention to the process shall be done in late winter. All lateral lines shall be flushed free of grit and gravel at the same time by removing or opening the last head on each line.

7.0 Paved Areas

Paved areas shall be maintained in accordance with Frequency Schedule by the following:

A. Cracks in sidewalks, curbs, gutters, and other paved areas shall be sprayed to control weeds in accordance with Frequency Schedule.

B. Sidewalks shall be blown free of maintenance and seasonal related debris.

C. Decomposed granite and bark surfaces shall be kept weed free and properly graded to avoid wrought and offsets.

8.0 Integrated Pest Management

A. Contractor shall implement an Integrated Pest Management program, emphasizing a preventive approach to disease and insect problems, maintaining optimum health and vigor for the plants. Whenever possible, the least toxic products available will be used, which will also be consistent with good pest management practices and results.

B. Contractor shall pre-notify client of all pre-approved pest control activities 48 hours prior to application including proper coordination with special requirements including distance to water and child care facilities, with the exception of routine monthly herbicide spraying and snail bait applications.

9.0 General Conditions

A. Contractor shall walk the entire site each month with the Manager or at the Manager convenience, to ensure that all operations are being done in accordance with Frequency Schedule. The City shall be notified when the schedule is changed and provide a written notice as per the Landscape Maintenance Plan. Weekly meetings with project manager when submittal of pertinent work check-off sheets for the current week and previous along with irrigation reports and GPS reports.

B. Any removal and/or replacement of plant material, or extra cleanup of the landscape caused by storm damage, acts of God, or other conditions outside of Contractor's control, will be performed upon approval of a separate Work Order and immediately reported to the project manager. However, the Contractor shall use good judgment in taking necessary immediate actions to prevent or

eliminate safety hazards; a detailed statement of charges will be submitted to the City for payment subject to inspection of said repairs.

C. Contractor shall obtain all licenses and permits required by City, County and State authorities.

D. All clippings or cuttings or other debris collected during Contractor's maintenance operations shall become the Contractor's property and removed from site by the Contractor.

E. City shall be notified immediately of any existing or potential problems and/or safety concerns noticed on site by the Contractor or Contractor's personnel.

F. An emergency service shall be made available on a 24-hour a day, seven-day per week basis.

9.1 Contractor to provide all trained personnel labor using current and acceptable horticulture/manual practices to accomplish the following work: scope of work:

- Fill Water- Tree Bags approximately 123 trees with two bags/tree along CAT/RAMP

- Graffiti Abatement
  Abate all graffiti within the landscape area and on all landscape elements.

- Additional bark to bio-swales areas
  Provide re-cycled bark/wood to replenish the required levels and patting.

- Trash liner rotation
  Provide new trash liners for all the public trash cans.

- Sand bagging
  Provide sand bags to protect local drains from discharging liter into the bay.

- Securing with barricades
  Provide barricades to secure site from public entrance.

10.0 <u>Rainy Days</u>

Contractor will report to work during rainy days and work on assigned rainy day task including the following:

1. Dividing fascicle plants and transplanting
2. Spreading mulch within the planters

3. Collecting debris/liter
4. Clearing landscape drains
5. Clearing/cleaning walkways/ entries and pedestrian paths
6. Shutting active irrigation systems
7. Collecting/clearing large leaf piles
8. Others as assigned

11.0 Deductions

Incomplete work, defective work, work not performed per the work schedules/ GPS information and/or determined by the Project Manager shall have the authority to remedy the deficiencies and to deduct the cost thereof from any monies due to or to become due to the contractor.

Landscape Maintenance Various Locations Schedule

Weekly Sites
2/Month Sites

	Frequency by Month	Weekly	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec		
Item No.	Activity															
A	Parkway\Pathway Maintenance/Medians/Bldg															
	Mow		2	2	4	4	4	4	4	4	4	2	2	2		
	Edge		1	1	2	2	2	2	2	2	2	1	1	1		
	Fertilize-Slow Release				1											
	Leaf/Debris/Trash Removal		4	4	4	4	4	4	4	4	4	4	4	4		
	Irrigation PM & Programming		1	1	1	1	1	1	1	1	1	1	1	1		
	Prune Shrubs size/structure				1		1					1				
	Pre/Post Emergent-Weed Control- As approved				1							1				
	Aerate				1											
	Groundcover detailing				1			1					1			
	Pavement weed control		1	1	1	1	1	1	1	1	1	1	1	1		
	Tree Pedestrian/ Vehicle Clearances				1	1		1	1			1				
	Graffiti Control		1	1	1	1	1	1	1	1	1	1	1	1		
	Monthly Punch-list		1	1	1	1	1	1	1	1	1	1	1	1		
	Tree Watering/Bags		2	2	4	4	4	4	4	4	4	4	2	2		
B	Bio-swales															
	Plant detailing		2	2	2	2	2	2	2	2	2	2	2	2		
	Fertilize				1											
	Leaf/Debris/Trash removal		2	2	2	2	2	2	2	2	2	2	2	2		
	PM Irrigation/Programming				1	1	1	1	1	1	1	1				
	Tree clearances				1			1				1				
	Weed control		2	2	2	2	2	2	2	2	2	2	2	2		
	Graffiti control		1	1	1	1	1	1	1	1	1	1	1	1		
	Post/Pre-emergent Weed Control as approved				1			1				1				
	Plant Divisions/Transplant		1	1	1							1	1	1		
	Supplemental Mulch/Bark											2	2			
	Winterizing											2	2			
	Pavement/Sidewalk Mnt		2	2	2	2	2	2	2	2	2	2	2	2		
C	Concrete Medians															
	Leaf/Debris/Trash		2	2	2	2	2	2	2	2	2	2	2	2		
	Weed Control		2	2	2	2	2	2	2	2	2	2	2	2		
	Graffiti Control		2	2	2	2	2	2	2	2	2	2	2	2		

Description	Frequency per Landscape Schedule			
Weekly Maintenance	Tasks	Cost Per Month	Quantity	Total
CAT/RAMP	Weekly Schedule			
Site A Public Parkways				
Seaplane Lagoon Ferry Terminal				
Buena Vista Avenue Extension Parkway				
Clement Avenue Extension Parkway				
Sherman Street Extension Parkway				
Harbor Way Parkway Maitland – Doolittle Driveway Parkways, Medians				
Bay Edge Road Aughinbaugh Way- Harbor Bay Parkways, Medians				
Mosley Street Parkway - Parkway				
Singleton Street- Parkway				
2/month				
Site A Bioswales				
Seaplane Lagoon Bioswales				
Buena Vista Avenue Bioswales				
Clement Avenue Extension Bioswales				
Sherman Street Bioswales				

Mosley Street Parkway Bioswales				
Singleton/ Mosely Street Bioswales				
Main St and W. Atlantic Avenue Concrete Median				

EXHIBIT B

BIDDER'S PROPOSAL

Specifications and Special Provisions

Filed:

Landscape Maintenance Services
Various Locations
Alameda, California

Proposal to the COUNCIL of the CITY OF ALAMEDA:

The undersigned declares that he has carefully examined the location of the proposed work and the Plans, Specifications, and Special Provisions therefore, referred to herein, and hereby proposes to furnish all labor, materials, machinery, tools and equipment required to perform the work, and to do all the said work, in accordance with said Plans, Specifications and Special Provisions for the unit prices set forth in the following schedule:

Item No.	Approximate Quantity	Items with Unit Prices Written in Words	Unit Price	Total Price

A. WEEKLY-PATHWAY/PARKWAYS/PLANTER STRIP- MAINTENANCE
As outlined in Preliminary Quantities

@ _____ $_____ $_____
Lump Sum

B. 2/MONTH-BIOSWALES/SIDEWALK/CONCRETE MEDIAN- MAINTENANCE
Work as outlined in Preliminary Quantities

@ _____ $_____ $_____
Lump Sum

Item No.	Approximate Quantity	Items with Unit Prices Written in Words	Unit Price	Total Price

C. 2/MONTH-BIOSWALES/SIDEWALK/CONCRETE MEDIAN- MAINTENANCE
Work as outlined in Preliminary Quantities

@ _____ $_____ $_____
Lump Sum

D. WEEKLY-MEDIAN MAINTENANCE
Work as outlined in Preliminary Quantities

@ _____ $_____ $_____
Lump Sum

E. IRRIGATION REPAIRS

1. 300 Heads
Labor/Materials @_____ $_____ $_____
Each Head

2. 40 Irrigation
Line Repairs @_____ $_____ $_____
Each Repair

3. 50 Irrigation
Valve Repairs @_____ $_____ $_____
Each Valve

TOTAL BID: $_____

TOTAL BID WRITTEN IN WORDS:

_____

The undersigned agrees to execute the contract required in said Specifications, to the satisfaction of the Council of the City of Alameda, with the necessary bonds, if any be required, within ten days, not including Sundays or legal holidays, after receiving notice that the contract has been awarded and is ready for signature; and further agrees that, in case of his default in any of the foregoing provisions, the proceeds of any check which may accompany his bid in lieu of a bid bond shall become the property of the City of Alameda as agreed and liquidated damages.

Firm Name (Please Print)_____

Signature of Person on Behalf of Firm _____

Business Address _____

City, State, Zip _____

Dated: _____ Phone No _____

Name Title Address
(Of Officers or Partners)

_____

_____

_____

_____

_____

_____

_____

Incorporated under the laws of the State of _____

Contractor's License No. _____ Expiration Date: _____

DIR No.: _____ Expiration Date: _____

The signature above certifies that the foregoing information given on this document is true and correct under penalty of perjury. (Section 7028.15 California Business and Professionals Code.)

PROPOSED SUBCONTRACTOR FORM

The Bidder shall list the name, address, license number and Department of Industrial Relations number of each subcontractor to whom the Bidder proposes to subcontract portions of the work, as required by the provisions in Section 2-1.054, "Required Listing of Proposed Subcontractors," of the Standard Specifications and Section 2-1.01, "General," for the special provisions.

COMPANY NAME	CA LICENSE NO.	BUSINESS ADDRESS	DESCRIPTION OF WORK	DIR NO.

The bidder's execution on the signature portion of this proposal shall also constitute an endorsement and execution of those certifications which are a part of this proposal)

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

The bidder _____, proposed subcontractor _____, hereby certified that he has ___, has not ___, participated in a previous contract or subcontract subject to the equal opportunity clauses, as required by Executive Orders 10925, 11114, or 11246, and that, where required, he has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all report due under the applicable filling requirements.

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

SECURITY FOR COMPENSATION CERTIFICATE

(Required by Paragraph 1861, California Labor Code)

To: _____

_____

I am aware of the provisions of Section 3700 of the Labor Code of the State of California which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this contract.

_____

_____

_____

(Signature of Bidder)

_____

_____

Business Address

EXHIBIT C

STANDARD CONTRACTOR AGREEMENT

CONSTRUCTION AGREEMENT

THIS CONSTRUCTION AGREEMENT ("**Agreement**") is entered into this _____ day of _____ 2022, by and between the CITY OF ALAMEDA, a municipal corporation ("**the City**"), and **COMPANY**, a (California corporation, LP, GP, sole proprietor/individual) whose address is Address, **(**"**Contractor**"), in reference to the following:

RECITALS:

A. The City is a municipal corporation duly organized and validly existing under the laws of the State of California with the power to carry on its business as it is now being conducted under the statutes of the State of California and the City's Charter.

B. The City is in need of the following services: landscape maintenance services and irrigation repairs at various locations within Alameda. City staff issued an RFB on August 18, 2022, after a submittal period of 20 days received _____ of timely submitted bids, and the bids were opened on September 8, 2022. Staff reviewed the bids and selected the lowest responsive and responsible bidder.

C. Contractor possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement on the terms and conditions described herein.

D. The City and Contractor desire to enter into a five-year agreement for landscape maintenance services and irrigation repairs at various locations within Alameda, upon the terms and conditions herein.

NOW, THEREFORE, in consideration of the forgoing, which are incorporated herein by reference, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. TERM:

The term of this Agreement shall commence on the ____ day of October 2022, and shall terminate on the ____ day of September 2027, unless terminated earlier as set forth herein.

2. SERVICES TO BE PERFORMED:

Contractor agrees, at its own cost and expense, to furnish all labor, tools, equipment, materials, except as otherwise specified, and to do all work strictly in accordance with the Specifications, Special Provisions and Plans, which Specifications, Special Provisions and Plans are hereby referred to and expressly made a part hereof with the same force and effect as if the same were fully incorporated herein. Contractor acknowledges that the work plan included in Exhibit A is tentative and does not commit the City to request Contractor to perform all tasks included therein.

3. COMPENSATION TO CONTRACTOR:

Contractor shall be compensated for services performed pursuant to this Agreement in the amount and manner set forth in Contractor's bid, which is attached hereto as Exhibit A and incorporated herein by this reference. Payment will be made in the same manner that claims of a like character are paid by the City, with checks drawn on the treasury of the City.

Payment will be made by the City in the following manner: On the first day of each month, Contractor shall submit a written estimate of the total amount of work done the previous month. However, the City reserves the right to adjust budget within and between tasks. Pricing and accounting of charges are to be according to the bid packet pricing, unless mutually agreed to in writing.

Payment shall be made for 95% of the value of the work completed as determined by the City. The City shall retain 5% of the value of the work as partial security for the completion of the work by Contractor. Retained amounts shall be paid to Contractor within sixty days of acceptance by the City of the project. Payment shall not be construed as acceptance of defective work. No interest will be paid to Contractor on retained funds.

Compensation for work done under this Agreement, shall not exceed as follows:

Year 1 (October 2022 to September 2023) total compensation shall not exceed $XX
Year 2 (October 2023 to September 2024) total compensation shall not exceed $XX
Year 3 (October 2024 to September 2025) total compensation shall not exceed $XX
Year 4 (October 2025 to September 2026) total compensation shall not exceed $XX
Year 5 (October 2026 to September 2027) total compensation shall not exceed $XX
Total five-year compensation shall not exceed **$XXX,XXX**

Use of contingency shall be for items of work outside the original scope and requires prior written authorization by the City.

Prompt Payment Of Withheld Funds To Subcontractors: The City shall hold retainage from the prime contractor and shall, as determined by the City, make prompt and regular incremental acceptances of portions of the contract work and pay retainage to the prime contractor based on these acceptances. The prime contractor or subcontractor shall return all monies withheld in retention from all subcontractors within 30 days after receiving payment for work satisfactorily completed and accepted by the City, including incremental acceptances of portions of the contract work. Any delay or postponement of payment may take place only for good cause and with the City's prior written approval. Any violation of these provisions shall subject the violating prime contractor to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business Professions Code. This requirement shall not be construed to limit or impair any contractual, administrative or judicial remedies otherwise available to the prime contractor or subcontractor in the event of a dispute involving (a) late payment or nonpayment by the prime contractor, (b) deficient subcontractor performance, or (c) noncompliance by a subcontractor with the contract, including but not limited to remedies under

California Public Contract Code Section 9204. This clause applies to both DBE and non-DBE subcontractors.

4. TIME IS OF THE ESSENCE:

Contractor and the City agree that time is of the essence regarding the performance of this Agreement.

5. STANDARD OF CARE:

Contractor agrees to perform all services and work hereunder in a manner commensurate with the prevailing standards of like professionals in the San Francisco Bay Area and agrees that all services and work shall be performed by qualified and experienced personnel who are not employed by the City nor have any contractual relationship with the City.

6. INDEPENDENT PARTIES:

Contractor hereby declares that it is engaged as an independent business and it agrees to perform its services as an independent contractor. The manner and means of conducting the work are under the control of Contractor, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Contractor's services and work. None of the benefits provided by the City to its employees, including but not limited to unemployment insurance, workers' compensation plans, vacation and sick leave are available from the City to Contractor, its employees, subcontractors, suppliers or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Contractor. Payments of the above items, if required, are the responsibility of Contractor.

7. IMMIGRATION REFORM AND CONTROL ACT (IRCA):

Contractor assumes any and all responsibility for verifying the identity and employment authorization of all of its employees performing work hereunder, pursuant to all applicable IRCA or other federal, or state rules and regulations. Contractor shall indemnify, defend (with counsel acceptable to the City) and hold the City harmless from and against any loss, damage, liability, costs or expenses arising from any noncompliance of this provision by Contractor.

8. NON-DISCRIMINATION:

Consistent with the City's policy and state and federal law that harassment and discrimination are unacceptable employer/employee conduct, neither Contractor nor Contractor's employees, agents, subcontractors or suppliers shall harass or discriminate against any job applicant, City employee, or any person on the basis of any kind of any statutorily (federal, state or local) protected class, including but not limited to race, religious creed, color, national origin, ancestry, disability (both mental and physical), including HIV and AIDS, medical condition (e.g.. cancer), genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, pregnancy, political affiliation, military and veteran status or legitimate

union activities. Contractor agrees that any violations of this provision shall constitute a material breach of this Agreement.

9. HOLD HARMLESS:

To the fullest extent permitted by law, Contractor shall indemnify, defend (with counsel acceptable to the City) and hold harmless the City, its City Council, boards, commissions, officials, employees, agents and volunteers ("Indemnitees") from and against any and all loss, damages, liability, obligations, claims, suits, judgments, costs and expenses whatsoever, including reasonable attorney's fees and costs of litigation ("Claims"), arising from or in any manner connected to Contractor's performance of its obligations under this Agreement or out of the operations conducted by Contractor even if the City is found to have been negligent. If the Claims filed against Indemnitees allege negligence, recklessness or willful misconduct on the part of Contractor, Contractor shall have no right of reimbursement against Indemnitees for the costs of defense even if negligence, recklessness or willful misconduct is not found on the part of Contractor. Contractor shall not have any obligations to indemnify Indemnitees if the loss or damage is found to have resulted solely from the negligence or the willful misconduct of the City. The defense and indemnification obligations of this Agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this Agreement.

As to Claims for professional liability only, Contractor's obligation to defend Indemnitees (as set forth above) is limited as provided in California Civil Code Section 2782.8.

Contractor's obligation to indemnify, defend and hold harmless Indemnities shall expressly survive the expiration or early termination of this Agreement.

10. INSURANCE:

a. On or before the commencement of the terms of this Agreement, Contractor shall furnish City's Risk Manager with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with paragraphs 10.b. (1) through (5) Such certificates, which do not limit Contractor's indemnification, shall also contain substantially the following statement:

> "Should any of the above insurance covered by this certificate be canceled or coverage reduced before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days advance written notice to the City of Alameda, Attention: Risk Manager."

Contractor shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company licensed to offer insurance business in the State of California with a current A.M. Best's rating of no less than A:VII or Standard & Poor's Rating (if rated) of at least BBB unless otherwise acceptable to the City. Endorsements naming the City, its City Council, boards, commissions, officials, employees, agents and volunteers as additional insured shall be submitted with the insurance certificates.

A. COVERAGE:

Contractor shall maintain insurance coverage and limits at least as broad as:

(1) Workers' Compensation:
Statutory coverage as required by the State of California.

(2) Liability:
Commercial general liability coverage in the following minimum limits:

Bodily Injury:	$1,000,000 each occurrence $2,000,000 aggregate - all other
Property Damage:	$1,000,000 each occurrence $2,000,000 aggregate

If submitted, combined single limit policy with per occurrence limits in the amounts of $2,000,000 and aggregate limits in the amounts of $4,000,000 will be considered equivalent to the required minimum limits shown above. Additional Insured Endorsement naming the City, its City Council, boards, commissions, officials, employees, agents, and volunteers is required.

(3) Automotive:
Comprehensive automobile liability coverage (any auto) in the following minimum limits:

Bodily injury:	$1,000,000 each occurrence
Property Damage:	$1,000,000 each occurrence
or	
Combined Single Limit:	$2,000,000 each occurrence

Additional Insured Endorsement naming the City, its City Council, boards, commissions, officials, employees, agents, and volunteers is required.

B. SUBROGATION WAIVER:

Contractor hereby agrees to waive rights of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether the City has received a waiver of subrogation endorsement from the insurer. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Contractor, its employees, agents and subcontractors.

C. FAILURE TO SECURE:

If Contractor at any time during the term hereof should fail to secure or maintain the foregoing insurance, the City shall be permitted to obtain such insurance in Contractor's name or

as an agent of Contractor and shall be compensated by Contractor for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date written notice is received that the premiums have not been paid.

D. ADDITIONAL INSURED:

The City, its City Council, boards, commissions, officials, employees and volunteers shall be named as an additional insured under all insurance coverages, except worker's compensation insurance. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy. The additional insured coverage under the Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance.

E. SUFFICIENCY OF INSURANCE:

Contractor shall furnish the following bonds from a bonding company acceptable to the City's Risk Manager. Faithful Performance Bond and Labor and Material Bond are only required for work over $25,000. Therefore, those estimates that are under $25,000 will not need to budget for the bond premiums and those estimates over $25,000 will need to be sure to budget for the bond premiums.

The insurance limits required by the City are not represented as being sufficient to protect Contractor. Contractor is advised to consult Contractor's insurance broker to determine adequate coverage for Contractor.

11. BONDS:

Contractor shall furnish the following bonds from a bonding company acceptable to the City's Risk Manager:

A. Faithful Performance: A bond in the amount of 100% of the total contract price guaranteeing the faithful performance of this contract, and

B. Labor and Materials: A bond for labor and materials in the amount of 100% of the total contract price.

12. PROHIBITION AGAINST TRANSFERS:

Contractor shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of the City Manager. Any attempt to do so without said consent shall be null and void, and any assignee, sublessee, hypothecate or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, Contractor's claims for money from the City under this Agreement may be assigned to a bank, trust company or other

financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to the City by Contractor.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Contractor, or of the interest of any general partner or joint venturer or syndicate member or cotenant, if Contractor is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Contractor, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the entity.

13. SUBCONTRACTOR APPROVAL:

Unless prior written consent from the City is obtained, only those people and subcontractors whose names are listed in Contractor's bid shall be used in the performance of this Agreement.

Requests for additional subcontracting shall be submitted in writing, describing the scope of work to be subcontracted and the name of the proposed subcontractor. Such request shall set forth the total price or hourly rates used in preparing estimated costs for the subcontractor's services. Approval of the subcontractor may, at the option of the City, be issued in the form of a Work Order.

In the event that Contractor employs subcontractors, such subcontractors shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general and automobile liability insurance in reasonable conformity to the insurance carried by Contractor. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

14. PERMITS AND LICENSES:

Contractor, at its sole expense, shall obtain and maintain during the term of this Agreement, all appropriate permits, certificates and licenses, including a City Business License that may be required in connection with the performance of services and work hereunder.

15. REPORTS:

Each and every report, draft, work product, map, record and other document reproduced, prepared or caused to be prepared by Contractor pursuant to or in connection with this Agreement shall be the exclusive property of the City.

No report, information nor other data given to or prepared or assembled by Contractor pursuant to this Agreement shall be made available to any individual or organization by Contractor without prior approval by the City.

Contractor shall, at such time and in such form as the City may require, furnish reports concerning the status of services and work required under this Agreement.

16. RECORDS:

Contractor shall maintain complete and accurate records with respect to sales, costs, expenses, receipts and other such information required by the City that relate to the performance of services and work under this Agreement.

Contractor shall maintain adequate records of services and work provided in sufficient detail to permit an evaluation of services and work. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Contractor shall provide free access to such books and records to the representatives of the City or its designees at all proper times, and gives the City the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be kept separate from other documents and records and shall be maintained for a period of three (3) years after receipt of final payment.

If supplemental examination or audit of the records is necessary due to concerns raised by the City's preliminary examination or audit of records, and the City's supplemental examination or audit of the records discloses a failure to adhere to appropriate internal financial controls, or other breach of contract or failure to act in good faith, then Contractor shall reimburse the City for all reasonable costs and expenses associated with the supplemental examination or audit.

17. NOTICES:

All notices, demands, requests or approvals to be given under this Agreement shall be given in writing and conclusively shall be deemed served when delivered personally or on the second business day after the deposit thereof in the United States Mail, postage prepaid, registered or certified, addressed as hereinafter provided.

All notices, demands, requests, or approvals from Contractor to the City shall be addressed to the City at:

City of Alameda
Public Works Department
950 W. Mall Sq. #110
Alameda, CA 94501
ATTENTION: Jesse Barajas, Project Manager
Ph: (510) 747-7966 / Fax: (510) 769-6030
Email: jbarajas@alamedaca.gov

All notices, demands, requests, or approvals from the City to Contractor shall be addressed to Contractor at:

[Contractor Name]
[Department]
[Address]
Alameda, CA 94501

ATTENTION; [Title]
Ph: (510) xxx-xxxx / Fax: (510) xxx-xxxx
Email:

18. SAFETY:

Contractor will be solely and completely responsible for conditions of all vehicles owned or operated by Contractor, including the safety of all persons and property during performance of the services and work under this Agreement. This requirement will apply continuously and not be limited to normal working hours. In addition, Contractor will comply with all safety provisions in conformance with U.S. Department of Labor Occupational Safety and Health Act, any equivalent state law, and all other applicable federal, state, county and local laws, ordinances, codes, and any regulations that may be detailed in other parts of the Agreement. Where any of these are in conflict, the more stringent requirements will be followed. Contractor's failure to thoroughly familiarize itself with the aforementioned safety provisions will not relieve it from compliance with the obligations and penalties set forth herein.

Contractor will immediately notify the City's Risk Manager within 24 hours of any incident of death, serious personal injury or substantial property damage that occurs in connection with the performance of this Agreement. Contractor will promptly submit to the City a written report of all incidents that occur in connection with this Agreement. This report must include the following information: (i) name and address of injured or deceased person(s); (ii) name and address of Contractor's employee(s) involved in the incident; (iii) name and address of Contractor's liability insurance carrier; (iv) a detailed description of the incident; and (v) a police report.

19. LAWS TO BE OBSERVED:

Contractor shall comply with all applicable laws, state, federal, and all ordinances, rules and regulations enacted or issued by the City. In addition, Contractor shall keep itself fully informed of all existing and future state and federal laws and all municipal ordinances and regulations of the City which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same.

20. HEALTH AND SAFETY REQUIREMENTS.

Contractor acknowledges that the City shall have the right to impose, at the City's sole discretion, requirements that it deems are necessary to protect the health and safety of the City's employees, residents, and visitors. Contractor agrees to comply with all such requirements, including, but not limited to, mandatory vaccinations, the use of personal protective equipment (e.g. masks), physical distancing, and health screenings. Contractor also agrees to make available to the City, at the City's request, records to demonstrate Contractor's compliance with this Section. [See Certification of Compliance attached.]

21. DEPARTMENT OF INDUSTRIAL RELATIONS COMPLIANCE AND PREVAILING WAGE REQUIREMENTS ON PUBLIC WORKS PROJECTS:

Effective January 1, 2015, no Contractor or Subcontractor may be listed on a bid proposal for a public works project (submitted after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5 (with the limited exceptions from this requirement for bid purposed only under Labor Code Section 1771.1(a)). Register at https://efiling.dir.ca.gov/PWCR

No Contractor or Subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

The Prime Contractor is required to post job site notices prescribed by regulations. See 8 Calif. Code Regulation §16451(d).

Effective April 1, 2015, All Contractors and Subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner at: https://apps.dir.ca.gov/ecpr/das/altlogin

22. HOURS OF LABOR:

As provided in Article 3 (commencing at § 1810), Chapter 1, Part 7, Division 2 of the Labor Code, eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by Contractor or by any subcontractor on any subcontract under this Agreement, upon the work or upon any part of the work contemplated by this Agreement, is limited and restricted to eight (8) hours during any one calendar day and forty (40) hours during any one calendar week, except as hereinafter provided. Notwithstanding the provision hereinabove set forth, work performed by employees of Contractor in excess of eight (8) hours per day and forty (40) hours during any one week shall be permitted upon this public work, provided that the employees' compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1-1/2) times the basic rate of pay.

Contractor shall pay the City a penalty of Twenty-five Dollars ($25.00) for each worker employed in the execution of this Agreement by Contractor, or by any subcontractor, for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and forty (40) hours in any one (1) calendar week, in violation of the provisions of Article 3 (commencing at § 1810), Chapter 1, Part 7, Division 2 of the Labor Code, unless compensation for the workers so employed by Contractor is not less than one and one-half (1-1/2) times the basic rate of pay for all hours worked in excess of eight (8) hours per day.

Holiday and overtime work, when permitted by law, shall be paid for at a rate of at least one and one-half (1½) times the above specified rate of *per diem* wages, unless otherwise

specified. Holidays shall be defined in the Collective Bargaining Contract applicable to each particular craft, classification, or type of worker employed.

23. APPRENTICES:

Attention is directed to the provisions in Sections 1777.5 and 1777.6 of the Labor Code concerning the employment of apprentices by Contractor or any subcontractor under it on contracts greater than $30,000 or 20 working days. Contractor and any subcontractor under it shall comply with the requirements of Sections 1777.5 and 1777.6 in the employment of apprentices.

Section 1777.5 of the Labor Code requires Contractor or subcontractor employing workers in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of the public works project, and which administers the apprenticeship program in that trade, for a certificate of approval, if they have not previously applied and are covered by the local apprenticeship standards.

Contractor is required to make contributions to funds established for the administration of apprenticeship programs if: (1) Contractor employs registered apprentices or journeymen in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions; or (2) if Contractor is not a signatory to an apprenticeship fund and if the funds administrator is unable to accept Contractor' required contribution. Contractor or subcontractor shall pay a like amount to the California Apprenticeship Council.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex-officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

24. LABOR DISCRIMINATION:

No discrimination shall be made in the employment of persons upon public works because of the race, color, sex, religion, age, national origin, sexual orientation or physical disability of such persons and every Contractor for public works violating this section is subject to all the penalties imposed for a violation of the provisions of the Labor Code, and, in particular, Section 1735.

25. REGISTRATION OF CONTRACTORS:

Before submitting bids, contractors shall be licensed in accordance with the provisions of Chapter 9, Division 3, of the Business and Professional Code of the State of California.

26. URBAN RUNOFF MANAGEMENT:

Contractor shall avoid creating excess dust when breaking asphalt or concrete and during excavation and grading. If water is used for dust control, contractor shall use as little as necessary. Contractor shall take all steps necessary to keep wash water out of the streets, gutters and storm drains.

Contractor shall develop and implement erosion and sediment control to prevent pollution of storm drains. Such control includes but is not limited to:

a. Use storm drain inlet protection devices such as sand bag barriers, filter fabric fences, block and gravel filters. (Block storm drain inlets prior to the start of the rainy season (October 15), on site de-watering activities and saw-cutting activities; shovel or vacuum saw-cut slurry and remove from the site).

b. Cover exposed piles of soil or construction material with plastic sheeting. All construction materials must be stored in containers.

c. Sweep and remove all materials from paved surfaces that drain to streets, gutters and storm drains prior to rain as well as at the end of the each work day. At the completion of the project, the street shall be washed and the wash water shall be collected and disposed of offsite in an appropriate location.

d. After breaking old pavement, Contractor shall remove all debris to avoid contact with rainfall or runoff.

e. Contractor shall maintain a clean work area by removing trash, litter, and debris at the end of each workday. Contractor shall also clean up any leaks, drips, and other spills as they occur.

The objective is to ensure that the City and County of Alameda County-Wide Clean Water Program is adequately enforced. These controls should be implemented prior to the start of construction, up-graded as required, maintained during construction phases to provide adequate protection, and removed at the end of construction.

These recommendations are intended to be used in conjunction with the State's Best Management Practices Municipal and Construction Handbooks, local program guidance materials from municipalities, Section 7.1.01 of the Standard Specifications and any other appropriate documents on storm water quality controls for construction.

Failure to comply with this program will result in the issuance of noncompliance notices, citations, project stop orders or fines. The fine for noncompliance of the above program is two hundred and fifty dollars ($250.00) per occurrence per day. The State under the Federal Clean Water Act can also impose a fine on the contractor, pursuant to Cal. Water Code §13385.

27. COMPLIANCE WITH MARSH CRUST ORDINANCE:

Contractor shall perform all excavation work in compliance with the City's Marsh Crust Ordinance as set forth at Section 13-56 of the Municipal Code. Prior to performing any excavation work, Contractor shall verify with the Building Official whether the excavation work is subject to the Marsh Crust Ordinance. Contractor shall apply for and obtain permits from Building Services on projects deemed to be subject to the Marsh Crust Ordinance.

28. COMPLIANCE WITH THE CITY'S INTEGRATED PEST MANAGEMENT POLICY:

The Contractor shall follow the requirements of the City's Integrated Pest Management (IPM) Policy to ensure the City is in compliance with the most-current version of its Municipal Regional Stormwater NPDES Permit, issued by the San Francisco Bay Regional Water Quality Control Board.

- ❑ Contractor shall use the most current IPM technologies available to ensure the long-term prevention or suppression of pest problems and to minimize negative impacts on the environment, non-target organisms, and human health for the control or management of pests in and around City buildings and facilities, parks and golf courses, urban landscape areas, rights-of-way, and other City properties.
- ❑ Contractor will consider the City IPM Policy's hierarchy of options or alternatives listed below, in the following order before recommending the use of or applying any pesticide on City property: (1)
    1. No controls (e.g. tolerating the pest infestation, use of resistant plant varieties or allowing normal life cycle of weeds);
    2. Physical or mechanical controls (e.g. hand labor, mowing, exclusion);
    3. Cultural controls (e.g. mulching, disking, alternative vegetation) and good housekeeping (e.g. cleaning desk area);
    4. Biological controls (e.g., natural enemies or predators); (5)
    5. Reduced-risk chemical controls (e.g., soaps or oils);
    6. Other chemical controls.
- ❑ Prior to applying chemical controls the contractor shall complete a checklist (attached) for the City's pre-approval that explains why a chemical control is necessary. For annual contracts that may require regular application of chemical controls the contractor shall submit one checklist annually prior to the initiation of the project demonstrating that the hierarchy has been reviewed and no other options exist. Additionally, the contractor shall provide documentation to the City's project manager of the implementation of the IPM techniques hierarchy described in the City's IPM Policy.
- ❑ Contractor shall avoid the use of the following pesticides that threaten water quality, human health and the environment:
    1. Acute Toxicity Category I chemicals as identified by the Environmental Protection Agency (EPA)
    2. Organophosphorous pesticides (e.g., those containing Diazinon, chlorpyrifos or malathion[A1])
    3. Pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, metofluthrin, permethrin, and tralomethrin), carbamates (e.g., carbaryl), and fipronil and its degradates
    4. Diamides (chlorantraniliprole and cyantraniliprole), diuron, indoxacarb
    5. Copper-based pesticides unless their use is judicious, other approaches and techniques have been considered, and the threat of impact to water quality is prevented.
- ❑ Contractor shall sign the Contractor Verification Form (attached) indicating the intent

to implement the City's IPM Policy, and return a signed copy to the City's project manager.

- ❑ Contractor shall provide to the City's project manager an annual Report of all pesticide usage in support of City operations including pesticide name, active ingredient(s), target pest(s), the total amounts used and the reasons for any increase in use of any pesticide.
- ❑ Contractor shall provide a copy of any current IPM certifications(s) to the City's project manager prior to initiation of the service work.

A copy of the City's IPM Policy may be obtained from the City's project manager and is also on file with the City Clerk.

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29. PURCHASES OF MINED MATERIALS REQUIREMENT:

Contractor shall ensure that all purchases of mined materials such as construction aggregate, sand and gravel, crushed stone, road base, fill materials, and any other mineral materials must originate from a surface mining operation identified on the AB3098 List per the Surface Mining and Reclamation Act of 1975 (SMARA).

Within five days of award of contract, Contractor shall submit a report to the City which lists the intended suppliers for the above materials and demonstrates that the suppliers are in compliance with the SMARA requirements. The AB3098 List is maintained by the Department of Conservation's Office of Mine Reclamation (OMR) and can be viewed at: www.conservation.ca.gov/OMR/ab_3098_list/index.htm. Note that the list changes periodically and should be reviewed accordingly.

30. TERMINATION:

In the event Contractor fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Contractor shall be deemed in default in the performance of this Agreement. If such default is not cured within a period of two (2) business days after receipt by Contractor from the City of written notice of default, specifying the nature of such default and the steps necessary to cure such default, the City may terminate the Agreement forthwith by giving to Contractor written notice thereof.

The City shall have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) days' prior written notice to Contractor as provided herein. Upon termination of this Agreement, each party shall pay to the other party that portion of compensation specified in this Agreement that is earned and unpaid prior to the effective date of termination.

31. ATTORNEYS' FEES:

In the event of the bringing of any action or suit by a party hereto against the other party by reason of any breach of any covenants, conditions, obligation or provision arising out of this Agreement, the prevailing party shall be entitled to recover from the non-prevailing party all of

its costs and expenses of the action or suit, including reasonable attorneys' fees, experts' fees, all court costs and other costs of action incurred by the prevailing party in connection with the prosecution or defense of such action and enforcing or establishing its rights hereunder (whether or not such action is prosecuted to a judgment). For the purposes of this Agreement, reasonable fees of attorneys of the Alameda City Attorney's office shall be based on the fees regularly charged by private attorneys with the equivalent number of years of experience in the subject matter area of the law for which the services were rendered who practice in Alameda County in law firms with approximately the same number of attorneys as employed by the Alameda City Attorney's Office.

32. PCC SECTION 9204 SUMMARY - CLAIMS SUBMITTED BETWEEN 01-01-2017 AND 01-01-2027:

Notwithstanding anything else to the contrary stated in the Information For Bidders (IFB) or the Contract Documents, all claims, regardless of dollar amount, submitted between January 1, 2017 and January 1, 2027 shall be governed by PCC Section 9204 and this section.

The following provisions and procedures shall apply:

A. For the purposes of this section, the term "Claim", "Contractor", "mediation", "Public Entity" "Public works project" and "Subcontractor" shall have the meaning provided for in PCC Section 9204.

B. Contractor shall submit each Claim (whether for a time extension, payment for money or damages) in writing and in compliance with PCC Section 9204. Contractor must include reasonable documentation to support each claim.

C. Upon receipt of a Claim, the City shall conduct a reasonable review and respond in writing within 45 days of receipt and shall identify in a written statement what portions of the claim are disputed and undisputed. Undisputed portions of the Claim shall be process and paid within 60 days of the written statement. Undisputed amounts not paid in a timely manner shall bear interest at 7% per annum. The City and Contractor may mutually agree to extend the 45 day response time.

D. If the City needs approval from the City Council to provide a written statement, the 45 days may be extended to 3 days following the next duly noticed public meeting pursuant to PCC Section 9204(d)(1)(C).

E. If the City fails to timely respond to a Claim or if Contractor disputes the City's response, Contractor may submit a written demand for an informal meet and confer conference with the City to settle the issues in dispute. The demand must be sent via registered or certified mail, return receipt requested. Upon receipt, the City shall schedule the conference within 30 days.

F. Within 10 business days following the informal meet and confer conference, the City shall submit to Contractor a written statement describing any issues remaining in dispute and that portion which is undisputed. Undisputed portions of the Claim shall be process and paid within

60 days of the written statement. Undisputed amounts not paid in a timely manner shall bear interest at 7% per annum. The issues remaining in dispute shall be submitted to non-binding mediation. If the City and Contractor mutually agree on a mediator, each party shall pay equal portions of all associated costs. If within 10 business days, the City and Contractor cannot agree on a mediator, each party shall select a mediator (paying all costs associated with their selected mediator), and those mediators shall select a qualified neutral third party to mediate the disputed issues. The City and Contractor shall pay equal portions of all associated costs of such third party mediator.

G. Unless otherwise agreed by the City and Contractor, any mediation conducted hereunder shall excuse any further obligation under Public Contract Code Section 20104.4 to mediate after litigation has commenced.

H. The City reserves all rights and remedies that it has pursuant to the Construction Contract, plans and specification, at law or in equity which are not in conflict with PCC 9204.

This Section shall be automatically extended if legislation is lawfully passed which extends the terms of Public Contract Code Section 9204 beyond January 1, 2027.

33. CONFLICT OF LAW:

This Agreement shall be interpreted under, and enforced by the laws of the State of California excepting any choice of law rules which may direct the application of laws of another jurisdiction. The Agreement and obligations of the parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities.) Any suits brought pursuant to this Agreement shall be filed with the courts of the County of Alameda, State of California.

34. ADVERTISEMENT:

Contractor shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters or cards of any kind pertaining to the services performed under this Agreement unless prior written approval has been secured from the City to do otherwise.

35. WAIVER:

A waiver by the City of any breach of any term, covenant, or condition contained herein, shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

36. INTEGRATED CONTRACT:

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the parties hereto, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by written execution signed by both the City and Contractor.

37. INSERTED PROVISIONS:

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either party.

38. CAPTIONS:

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

39. COUNTERPARTS:

This Agreement may be executed in any number of counterparts (including by fax, PDF, DocuSign, or other electronic means), each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

40. SIGNATORY:

By signing this Agreement, each signatory warrants and represents that he/she executed this Agreement in his/her authorized capacity and that by his/her signature on this Agreement, he/she or the entity upon behalf of which he/she acted, executed this Agreement.

41. CONTROLLING AGREEMENT:

In the event of a conflict between the terms and conditions of this Agreement (as amended, supplemented, restated or otherwise modified from time to time) and any other terms and conditions wherever contained, including, without limitation, terms and conditions included within exhibits, the terms and conditions of this Agreement shall control and be primary.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have caused the Agreement to be executed on the day and year first above written.

COMPANY NAME
a (California corporation, LP, GP,
sole proprietor/individual)

_____
(Name)
(Title)

_____
(Name)
(Title)

Contractor License No._____

DIR No._____

CITY OF ALAMEDA,
a municipal corporation

_____
Dirk Brazil
Interim City Manager

RECOMMENDED FOR APPROVAL

_____
Erin Smith
Public Works Department

APPROVED AS TO FORM:
City Attorney

_____
Len Aslanian
Assistant City Attorney

Certification of Compliance
With the City of Alameda's Vaccination Requirement

The City of Alameda ("City") requires all individuals who perform work for the City to be fully vaccinated[1] against COVID-19. All service providers and contractors for the City must sign the following statement certifying compliance with this requirement.

By signing below, I certify that all of our personnel who are performing work for the City are fully vaccinated against COVID-19. I also acknowledge that the City reserves the right to review any relevant records to demonstrate our compliance with this requirement.
I declare under penalty of perjury that the foregoing is true and correct.

[Name of Entity] Date:_____

_____
By: [Name of Authorized Individual]___
Its [Title]_____

[1] For the purposes of this Certification of Compliance, an individual is considered to be fully vaccinated if two weeks have passed since their second dose in a 2-dose series (such as the Pfizer or Moderna vaccines) or if two weeks have passed since receiving their single-dose vaccine (such as Johnson & Johnson's Janssen vaccine).

EXHIBIT D

EMERGENCY FORM

Emergency Form

During the course of the work and/or while the contractor has responsibility for the project, emergencies may arise where it is necessary to repair or replace safety devices, or install additional safety devices, or take preventative measures necessary for public safety. Such corrections as may be necessary are the contractor's responsibility and he, or his representative, will be called upon in such emergencies.

Please fill in the following information and submit it to the Public Works Project Manager.

CONTRACTOR'S NAME_____

CONTRACTOR'S PHONE NUMBER_____

PROJECT SUPERINTENDENT_____

CONTACT IN THE EVENT OF EMERGENCY:_____

Name:_____

Phone Number:_____

In cases where the contractor, or his representative, cannot be contacted or will not take the necessary actions, the City Public Works Department will be notified and the necessary repairs, corrections, or changes will be made. The contractor will be billed for such remedial action. Charges will include the cost of labor at applicable rates, the City's normal overhead factor, the rental of any equipment or safety devices placed during the emergency that are damaged or stolen, or otherwise not returned to the City, will be billed to the contractor.

Scheduled starting date_____

Scheduled completion date_____

Job Name _____

_____

EXHIBIT E

INTEGRATED PEST MANAGEMENT POLICY
WITH
CONTRACTOR VERIFICATION FORM AND CONTRACTOR CHECK LIST

INTEGRATED PEST MANAGEMENT POLICY

I. PURPOSE

This City Policy sets forth the guiding principles for development and implementation of Integrated Pest Management (IPM) practices on all City properties.

II. OBJECTIVES

A. Reduce or minimize pesticide use on municipally owned buildings and landscaping (City Properties) to ensure the City is in compliance with its municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit requirements.

B. Establish the use of Integrated Pest Management in all municipal operations and on all City Properties.

C. Minimize the reliance on pesticides that threaten water quality.

D. Create awareness among City staff of less-toxic pest management techniques.

E. Educate City departments to practice the most appropriate approach to managing pests, including prevention, on City properties.

F. Reduce the adverse impacts to San Francisco Bay water quality due to pesticide usage, particularly from organophosphorous pesticides (chlorpyrifos, diazinon, and malathion), pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin), carbamates (e.g., carbaryl), fipronil and copper-based pesticides.

III. ORGANIZATIONS AFFECTED

A. Public Works Department
B. Recreation and Parks Department
C. Golf Complex
D. Alameda Municipal Power
E. Economic Development Department

IV. POLICY

It is the policy of the City of Alameda to:
A. Comply with Federal requirements for local government to develop and implement an Integrated Pest Management policy or ordinance to address water quality impairment by pesticides, per Section C.9.a. of the Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, from the California Regional Water Quality Control Board, 10/14/09.

B. Adopt and implement a policy requiring the use of Integrated Pest Management techniques in the City's operations, as required for all co-permittees of the Alameda Countywide Clean Water Program.

C. Establish City departmental written standard operating procedures for pesticide use that ensure

implementation of the IPM policy and require municipal employees and contractors working on City property to adhere to IPM standard operating procedures.

D. Support the City of Alameda Municipal Code, Storm Water Management and Discharge Control ordinance, Ordinance No. 2605, by describing procedures by which the City may implement its policy regarding urban runoff.

This City Policy shall not be construed as requiring a department, purchaser or contractor to procure products that do not perform adequately for their intended use, exclude adequate competition, risk the health or safety of workers and citizens, or are not available at a reasonable price in a reasonable period of time.

This City Policy shall not be construed as requiring the City of Alameda, a department, purchaser or contractor to take any action that conflicts with local, state or federal requirements.

V. DEFINITIONS

5.1 *Biological control* - The use of biological technologies to manage unwanted pests. Examples of this type of control include, but are not limited to, the use of pheromone traps or beneficial insect release for control of certain types of weeds or invasive insects in landscapes.

5.2 *Cultural control* - The use of IPM control methods such as grazing, re-vegetation, disking, mulching, proper irrigation, seeding, and landscaping with competitive or tolerant species to manage unwanted weeds, rodents or plant diseases, plus good housekeeping.

5.3 *DPR* - Department of Pesticide Regulations for the State of California's Environmental Protection Agency. DPR, in partnership with the Federal Environmental Protection Agency (EPA) and the County Department of Agriculture, oversees all issues regarding the registration, licensing and enforcement of laws and regulations pertaining to pesticides.

5.4 *Integrated Pest Management (IPM*) - IPM is the strategic approach that focuses on long-term prevention of pests and their damage from reaching unacceptable levels by selecting and applying the most appropriate combination of available pest control methods. These include cultural, mechanical, biological and chemical technologies that are implemented for a given site and pest situation in ways that minimize economic, health and environmental risks.

5.5 *Mechanical controls* - The use of IPM control methods utilizing hand labor or equipment such as mowers, graders, weed-eaters, and chainsaws. Crack and crevice sealants and closing small entryways (i.e., around pipes and conduits) into buildings for insect and rodent management are also mechanical controls.

5.6 *PCA* - Pest Control Advisor is one licensed by the California Department of Pesticide Regulations according to Title 3, Article 5 of the California Code of Regulations. A licensed PCA, who is registered with the County Agricultural Commissioner, provides written pest control recommendations for agricultural pest management, including parks, cemeteries, and rights-of-way.

5.7 *Pesticides* - Defined in Section 12753 of the California Food and Agricultural Code as any spray adjuvant, or any substance, or mixture of substances intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined in Section 12754.5 (of the Food and Agricultural Code), which may infest or be detrimental to vegetation, man,

animals or households, or be present in any agricultural or nonagricultural environment whatsoever. The term pesticide applies to herbicides, insecticides, fungicides, rodenticides and other substances used to control pests. Antimicrobial agents are not included in this definition of pesticides

5.8 *QAL* - Qualified Applicator License is a licensed applicator according to Title 3, Article 3 of the California Code of Regulations. This license allows supervision of applications that may include residential, industrial, institutional, landscape, or rights-of-way sites.

5.9 *QAC* - Qualified Applicator Certificate is a certified applicator of pesticides according to Title 3, Article 3 of the California Code of Regulations. This certificate allows supervision of applications that may include residential, industrial, landscape, or rights-of-way sites.

5.10 *Structural Pest Control Operator (SPCO- Branch I, II or III)* - A licensed applicator for controlling pests that invade buildings and homes according to the requirements of the Structural Pest Control Board of the California Department of Consumer Affairs.

VI. RESPONSIBILITY

6.1 Coordination

6.1.1 This Policy applies to the City Departments with operations subject to this Administrative Regulation. Department Directors, or their designees, shall coordinate implementation of this Administrative Regulation.

6.2 Training

6.2.1 All City employees who within the scope of their duties apply or use pesticides that threaten water quality shall be trained in IPM practices, the City's IPM policy, department IPM standard operating procedures, and as required by State of California Department of Pesticide Regulations rules, the County Agricultural Commissioner, and/or the Structural Pest Control Board and the City's NPDES permit. Training opportunities may also include the Bay-Friendly Landscape Maintenance Training and Qualifications Program and EcoWise Certified. Each Department will maintain records of all training activities (e.g., attendees, course outline, date).

6.2.2 City Staff responsible for pest management on City property will ensure annual training is provided to all employees who within the scope of their duties apply pesticides on:

1. Pesticide Safety,
2. This City Policy on IPM and
3. City department IPM standard operating procedures, appropriate Best Management Practices and Integrated Pest Management Technologies.

6.2.3 Pest Control Advisors and Applicators, pest management contractors, and other "contract for Contractors" serving City properties will be licensed by the State of California Department of Pesticide Regulations (DPR) as a Pest Control Advisor or licensed Qualified Applicator and either IPM-certified or under contract to implement IPM. Contract specifications shall require contractors to implement IPM no later than July 1, 2010.

6.3 Public Education and Outreach

6.3.1 The City's Clean Water Program, in participation with the Alameda Countywide Clean Water Program, will continue with its existing program to encourage people who live, work, and/or attend school in Alameda to:

1. Obtain information on IPM techniques to control pests and minimize pesticide use

2. Use IPM technologies for dealing with pest problems

3. Perform pesticide applications according to the manufacturer's instructions as detailed on the product label, and in accordance with all applicable state and local laws and regulations set forth to protect the environment, the public, and the applicator; and properly dispose of unused pesticides and their containers.

6.3.2 City of Alameda Departments with property leaseholders shall inform property leaseholders of the need to comply with the City Policy on IPM and encourage the use of the most current IPM technologies and Best Management Practices.

6.4 Program Evaluation

6.4.1 Each Department with operations subject to this City Policy shall monitor and evaluate its success implementing this City Policy. This evaluation can include progress in meeting the objectives of this City Policy, and note barriers encountered, recommendations for resolution, cost analysis, and a description of assistance needed to continuously improve staff's ability to meet the City Policy objectives.

6.5 Reporting Requirements

The information outlined below is required for inclusion in the City's NPDES Stormwater Permit Annual Report compiled by the City's Clean Water Program for submittal to the Regional Water Quality Control Board. Each City department, pest management contractor, and/or other appropriately licensed contractors employed by the City to provide city services that involve pesticide application on City properties shall submit by **July 15th** annually to the Public Works Clean Water Program staff:

A. Annual Pesticide Use Summary Report

1. Product name and manufacturer
2. Active ingredient
3. The total quantity of each pesticide used during the prior fiscal year (from July 1 to June 30) in order to provide an accounting of pesticide use at City-owned or operated properties.
4. Target pest(s) for pesticide application(s).
5. Reasons for increases in use of pesticides that threaten water quality, specifically organophosphorous pesticides, pyrethroids, carbaryl, fipronil, and copper-based pesticides.

Annual Pesticide Use Summary Report Forms may be obtained by contacting the Public Works Clean Water Program staff.

B. Annual Training Summary (City departments only)

1. The number of departmental employees who apply pesticides.
2. The number of departmental employees who apply pesticides who have received training in IPM policy and IPM standard operating procedures during the reporting year.

VII. PROCEDURE

7.1 Pesticide Prevention

7.1.1 The City of Alameda shall institute practices that reduce the use of pesticides and result in the purchase of fewer pesticides whenever practicable and cost-effective, but without reducing safety or workplace quality.

7.1.2 The City of Alameda shall direct all employees to implement Good Housekeeping Practices in their workstations, vehicles, break rooms, outdoor work areas, etc., to prevent the conditions that provide a food source and habitat which attract unwanted pests

7.2 Pest Control and Management

7.2.1 The City of Alameda, including all departments and staff herein, and contractors or individuals (QAL, QAC, SPCO) providing pest control services on City property (Applicators) shall follow the City's Integrated Pest Management City Policy and utilize generally accepted IPM Best Management Practices (BMPs) to the maximum extent practicable for the control or management of pests in and around City buildings and facilities, parks and golf courses, urban landscape areas, rights-of-way, and other City properties.

7.2.2 Applicators will use the most current IPM technologies available to ensure the long-term prevention or suppression of pest problems and to minimize negative impacts on the environment, non-target organisms, and human health.

7.2.3 Applicators will consider the options or alternatives listed below in the following order, before recommending the use of or applying any pesticide on City property:

1. No controls (e.g., tolerating the pest infestation, use of resistant plant varieties or allowing normal life cycle of weeds)
2. Physical or mechanical controls (e.g., hand labor, mowing, exclusion)
3. Cultural controls (e.g., mulching, disking, alternative vegetation), good housekeeping (e.g. cleaning desk area)
4. Biological controls (e.g., natural enemies or predators)
5. Reduced-risk chemical controls (e.g., soaps or oils)
6. Other chemical controls

7.3 Pesticide Application

7.3.1 Only City of Alameda employees or appropriate licensed contractors employed by the City who are authorized and trained in pesticide application (i.e., hold PCA, QAL, QAC, or Structural Branch Operator I, II, or III certifications/licenses or individuals working under the supervision of one of the aforementioned certificate/license holders) and who shall implement the City department's IPM standard operating procedures may apply pesticides to or within City property.

7.3.2 City of Alameda employees are not to apply pesticides during municipal operations or on City property that have been purchased at City employee expense. Each City department shall assign a responsible supervisor to identify less-toxic products to be used. If there are no less-toxic products on hand, department employees shall contact the assigned supervisor to be given approved less-toxic pesticides (i.e. Orange Guard, insecticidal soap).

7.3.3 Applicators will select and apply IPM methods that will minimize reliance on pesticides that threaten water quality, human health and the environment.

7.3.4 Existing contracts and New contracts that are entered into with pest management contractors and other appropriately licensed contractors employed to provide services that involve pesticide application at City properties after **June 30, 2010** will include requirements that the contractors follow the requirements of this City Policy on IPM and implement the most current IPM technologies and Best Management Practices.

7.4 Restricted Chemicals

7.4.1 City of Alameda employees and/or contractors employed by the City who are trained to recommend or apply pesticides will not use or promote the use of:

1. Acute Toxicity Category I chemicals as identified by the Environmental Protection Agency

(EPA),
2. Organophosphate pesticides (e.g., those containing Diazinon, chlorpyrifos or malathion)
3. Pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin), carbamates (e.g., carbaryl), fipronil
4. Copper-based pesticides unless:
    a. Their use is judicious,
    b. Other approaches and techniques have been considered, and;
    c. Threat of impact to water-quality is prevented.

7.4.2 Applicators will always avoid applications of pesticides that directly contact water, unless the pesticide is registered under Federal and California law for aquatic use.

7.4.3 Pesticides that are not approved for aquatic use will not be applied to areas immediately adjacent to water bodies where through drift, drainage, or erosion, there is a reasonable possibility of a pesticide being transported into surface water.

7.4.4 Discharges of pollutants from the use of aquatic pesticides to the waters of the United States require coverage under a NPDES permit. Those City employees or appropriately licensed contractors employed by the City who apply pesticides directly to waters of the United States will obtain a NPDES permit from the California State Water Quality Resources Control Board Region 2, prior to making any pesticide applications.

7.5 Best Management Practices (BMPs)

7.5.1 This section includes additional BMPs and control measures not discussed above to protect water quality. These BMPs were previously incorporated into the City of Alameda's Best Management Practices for Pesticides, Herbicides and Fertilizers Usage, utilized by Public Works, Recreation & Parks, Housing Authority and the Golf Complex. An IPM process assists in the determination of whether or not a pesticide application is necessary.

1. Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of pesticides and training of pest control advisors and applicators.
2. Use the most effective, least toxic pesticides that will do the job, provided there is a choice. The agency will take into consideration the LD_{50}, overall risk to the applicator, and impact to the environment (chronic and acute effects).
3. Apply pesticides at the appropriate time to maximize their effectiveness and minimize the likelihood of discharging pesticides in stormwater runoff. Avoid application of pesticides if rain is expected (this does not apply to the use of pre- emergent herbicide applications when required by the label for optimal results.)
4. Employ techniques to minimize off-target application (i.e. spray drift) of pesticides, including consideration of alternative application techniques. For example, when spraying is required, increase drop size, lower application pressure, use surfactants and adjuvants, use wick application, etc.
5. Apply pesticides only when wind speeds are low.
6. Mix and apply only as much material as is necessary for treatment. Calibrate application equipment prior to and during use to ensure desired application rate.
7. Do not mix or load pesticides in application equipment adjacent to a storm drain inlet, culvert, or watercourse.
8. Properly inspect applicator equipment to prevent accidental pesticide leaks, spills and hazards to applicators and the environment.
9. Meet local fire department and Alameda County Agricultural Commissioner storage requirements for pesticide products. Provide secondary containment for liquids if required.
10. Prepare spill kits, store the kits near pesticides, and train employees to use them.

11. Store pesticides and other chemicals indoors in a locked and posted storage unit, as per California Code of Regulations.
12. Store pesticides in labeled containers, as per California Code of Regulations.
13. Rinse empty pesticide/herbicide containers, and empty in the spray, as per California Code of Regulations.
14. Dispose of triple-rinsed empty pesticide containers according to recommendations of the Alameda County Agricultural Commissioner and the manufacturer.
15. Try to find a qualified user for any unwanted pesticides, or return to the manufacturer if unopened. If disposal is required, contact Alameda County's Household Hazard Waste Collection Program at (510) 670-6460 between 8:30 AM and 5:00 PM., Monday through Friday, to make appropriate disposal arrangements, or to recycle the material.
16. If changing pesticides or cleaning spray tanks, use tank rinse water as the product, over a targeted area within the application site.
17. Irrigate slowly to prevent runoff, and do not over-water.

City of Alameda Contractor Verification Form
Implementation of City of Alameda Integrated Pest Management Policy

The City of Alameda (City) is mandated to:

(a) Minimize its reliance on pesticides that threaten water quality, and
(b) Require the effective use of Integrated Pest Management (IPM) in all municipal operations and on all municipal property.

To ensure compliance with this mandate, all City operations need to verifiably implement the practices and policies described in the City's IPM Policy adopted June 15, 2010. A copy of this IPM Policy is included with this form. The implementation of the IPM Policy is applicable to all municipal contractors that provide landscaping, structural pest control, or other pest management services in support of City operations and/or on municipal property.

The undersigning parties acknowledge that all elements of the City's IPM Policy will be implemented throughout the period of contractual services provided to City operations and on municipal property. Specific actions to document this performance shall include:

- ❑ Pest Management Contractor shall provide to City project manager for pre-approval the Pest Management Considerations Checklist.
- ❑ Pest Management Contractor shall avoid the use of the following pesticides that threaten water quality, human health and the environment:
    - o Acute Toxicity Category I chemicals as identified by the Environmental Protection Agency (EPA)
    - o Organophosphate pesticides (e.g., those containing Diazinon, chlorpyrifos or malathion)
    - o Pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin), carbamates (e.g., carbaryl), and fipronil
    - o Copper-based pesticides unless their use is judicious, other approaches and techniques have been considered and the threat of impact to water quality is prevented.
- ❑ Pest Management Contractor shall provide to the City's project manager an annual Report of all pesticide usage in support of City operations including product name and manufacturer, active ingredient(s), target pest(s), the total amounts used and reasons for any increase in use of any pesticide.
- ❑ If the Contractor's on-site personnel are currently IPM certified through either the EcoWise or GreenPro programs, or through another program, the contractor shall provide written evidence of any certifications to the City's project manager.

_____	_____
City Departmental Representative	Contractor Representative
_____	_____
Print Name	Print Name
_____	_____
Date	Date
_____	_____
City Department	City Contractor

City of Alameda Pest Management Contractor Checklist:
Pest Management Options Considerations

Contractor will consider the City IPM Policy's hierarchy of options or alternatives listed below, in the following order before recommending the use of or applying any pesticide on City property. Please provide a written explanation in each section below of why the specific pest management option is not appropriate:

(1) No controls (e.g. tolerating the pest infestation, use of resistant plant varieties or allowing normal life cycle of weeds)

Comment: _____

_____

(2) Physical or mechanical controls (e.g. hand labor, mowing, exclusion)

Comment: _____

_____

(3) Cultural controls (e.g. mulching, disking, alternative vegetation), good housekeeping (e.g. cleaning desk area)

Comment: _____

_____

(4) Biological controls (e.g., natural enemies or predators)

Comment: _____

_____

(5) Reduced-risk chemical controls (e.g., soaps or oils)

Comment: _____

_____

(6) Other chemical controls

Comment: _____

_____

Contractor Representative

_____ _____

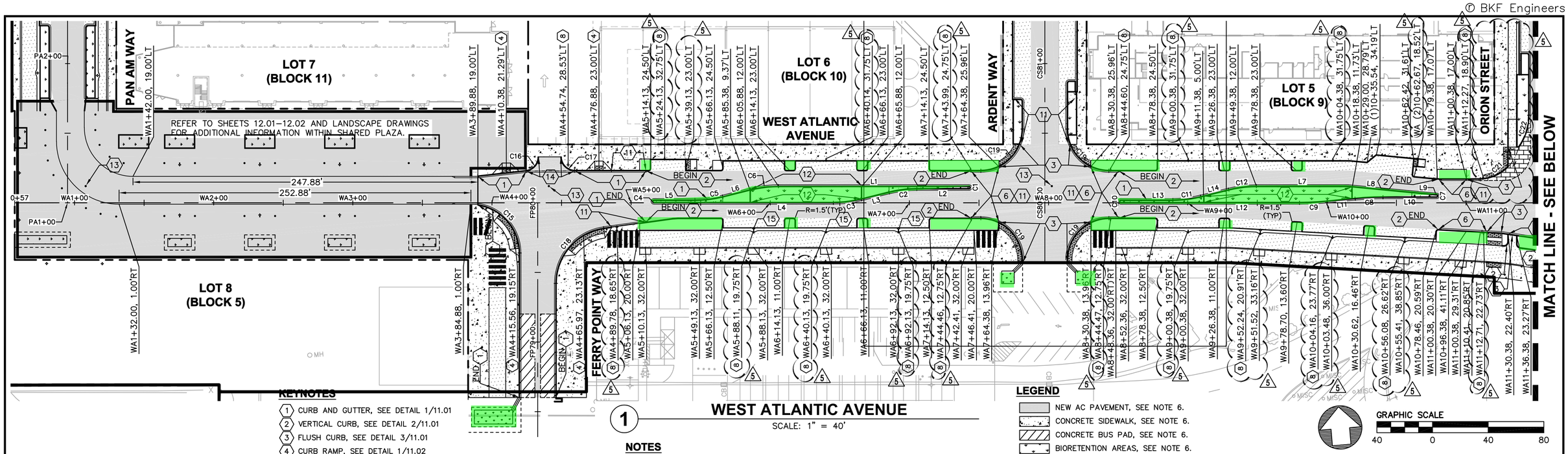
Print Name Date

_____

City Contractor

EXHIBIT F

LANDSCAPE SITE A, PHASE 1
LANDSCAPE AREAS



WEST ATLANTIC AVENUE

1 SCALE: 1" = 40'

GRAPHIC SCALE
40 0 40 80

KEYNOTES

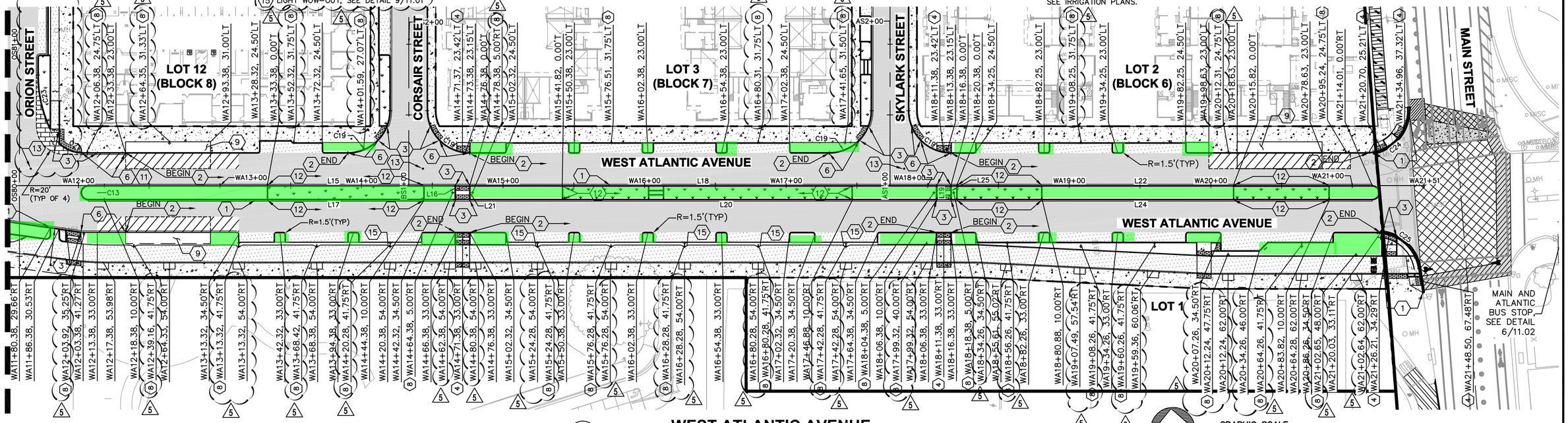
1. CURB AND GUTTER, SEE DETAIL 1/11.01
2. VERTICAL CURB, SEE DETAIL 2/11.01
3. FLUSH CURB, SEE DETAIL 3/11.01
4. CURB RAMP, SEE DETAIL 1/11.02
5. DRIVEWAY, CITY STANDARD, SEE DETAILS 3/11.02 AND 5/11.07
5B. NON–STANDARD FLUSH DRIVEWAY, SEE DETAIL 2/11.02
6. CURB TRANSITION, 0" TO 6"
7. AC BERM, SEE DETAIL 2/11.04
8. STREET LIGHT, SEE STREET LIGHTING PLANS
9. FUTURE BUS STOP LOCATION, SEE DETAIL 1/11.04
10. CHANNEL DRAIN, SEE DETAIL 4/11.06
11. SPILL GUTTER, SEE DETAIL 8/11.01
12. BIORETENTION CURB WITH GUTTER TRANSITION, SEE DETAIL 6/11.01
13. CITY SURVEY MONUMENT, SEE DETAIL 1/11.07 SEE SHEET 2.04 FOR LOCATION
14. DRIVEWAY, SEE DETAIL 5/11.02
15. LIGHT WOW–OUT, SEE DETAIL 9/11.01

NOTES

1. CURVE TABLE AND LINE TABLE PROVIDES FACE OF CURB INFORMATION. FOR LINE AND CURVE TABLES, SEE SHEET 3.05.
2. EXISTING SITE DEMOLITION PER "ALAMEDA POINT PHASE 1 DEMOLITION AND SITE LEVELING PLANS" PREPARED BY BKF ENGINEERS.
3. REFER TO SHEETS 7.01–7.03 FOR STORMWATER MANAGMENT PLAN AND BIORETENTION AREA DETAILS.
4. REFER TO TRAFFIC SIGNAL PLAN SHEET 13.01 FOR ALL TRAFFIC SIGNAL POLE INFORMATION.
5. PROTECT ALL EXISTING FENCES, STRUCTURES, UNDERGROUND UTILITIES (STORM DRAIN, SANITARY SEWER, WATER, GAS & ELECTRIC) UNLESS DESCRIBED AS "TO BE ABANDONED" PER DEMOLITION AND SITE LEVELING PLANS OR OTHERWISE NOTED ON PLANS.
6. REFER TO SHEETS 2.01–2.03 FOR TYPICAL STREET SECTIONS AND PAVING SECTIONS.
7. REFER TO SHEETS 8.01–8.02 FOR SIGNAGE AND STRIPING.
8. BUS PAD LAYOUT AND PAVING SECTION TO BE VERIFIED WITH AC TRANSIT PRIOR TO CONSTRUCTION.
9. FOR STREET BARRIER LOCATIONS, SEE SHEETS 9.01–9.03.
10. FOR BOLLARD LOCATIONS AND DETAILS, SEE LANDSCAPE DRAWINGS.
11. FOR ADDITIONAL INFORMATION NOT SHOWN ON THESE SHEETS, SEE LANDSCAPE DRAWINGS.
12. SEE LANDSCAPE PLANS FOR PAVEMENT/FINISH.

LEGEND

- NEW AC PAVEMENT, SEE NOTE 6.
- CONCRETE SIDEWALK, SEE NOTE 6.
- CONCRETE BUS PAD, SEE NOTE 6.
- BIORETENTION AREAS, SEE NOTE 6.
- LANDSCAPE AREA, SEE LANDSCAPE PLANS
- BIKE/PARKING PAVEMENT, SEE NOTE 6.
- ASPHALT CONCRETE SIDEWALK (2"AC/6"AB), SEE NOTE 6.
- PERVIOUS AC SIDEWALK, SEE NOTE 6.
- AC FILL (MIN 0.2' THICK)
- WEDGE CUT
- AC PLUG, SEE DETAIL 4/11.04
- REMOVE EXISTING PCC PAVING AND REPLACE WITH W. ATLANTIC PAVING SECTION.
- TRUNCATED DOMES, SEE DETAIL 4/11.01
- STREETLIGHT, SEE SHEETS SL1–SL7
- PSC PAVING (7"PCC/6"AB), SEE NOTE 12
- TAN COLORED CONCRETE (DAVIS SANDSTONE OR EQUIVALENT). SEE 2.02 FOR SECTION
- IRR — IRRIGATION SLEEVE (FOR REFERENCE ONLY). SEE IRRIGATION PLANS.



WEST ATLANTIC AVENUE

2 SCALE: 1" = 40'

GRAPHIC SCALE
40 0 40 80

These Record Documents have been prepared based on information provided by others. BKF Engineers has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions that may be incorporated herein as a result.

BKF Engineers

No.	Date	Revisions
1	10/12/18	REVISION 1
2	12/03/18	REVISION 2
3	1/2/18	REVISION 3 (REV2)
4	2/4/19	REV3
5	8/26/19	REV4

REGISTERED PROFESSIONAL ENGINEER — CHRISTOPHER C. WILLS — No. C 60251 — CIVIL — STATE OF CALIFORNIA — 08/26/2019

BKF ENGINEERS / SURVEYORS / PLANNERS
1646 N. CALIFORNIA BLVD
SUITE 400
WALNUT CREEK, CA 94596
PHONE 925/940–2200
FAX 925/940–2299

Date	1/18/17	Scale	AS SHOWN	Job No.	20145170
Design	WC	Drawn	WC	Approved	CM

ALAMEDA POINT PARTNERS, LLC
srmERNST • MADISON MARQUETTE
THOMPSON DORFMAN PARTNERS • TRAMMELL CROW RESIDENTIAL

CITY OF ALAMEDA • CALIFORNIA

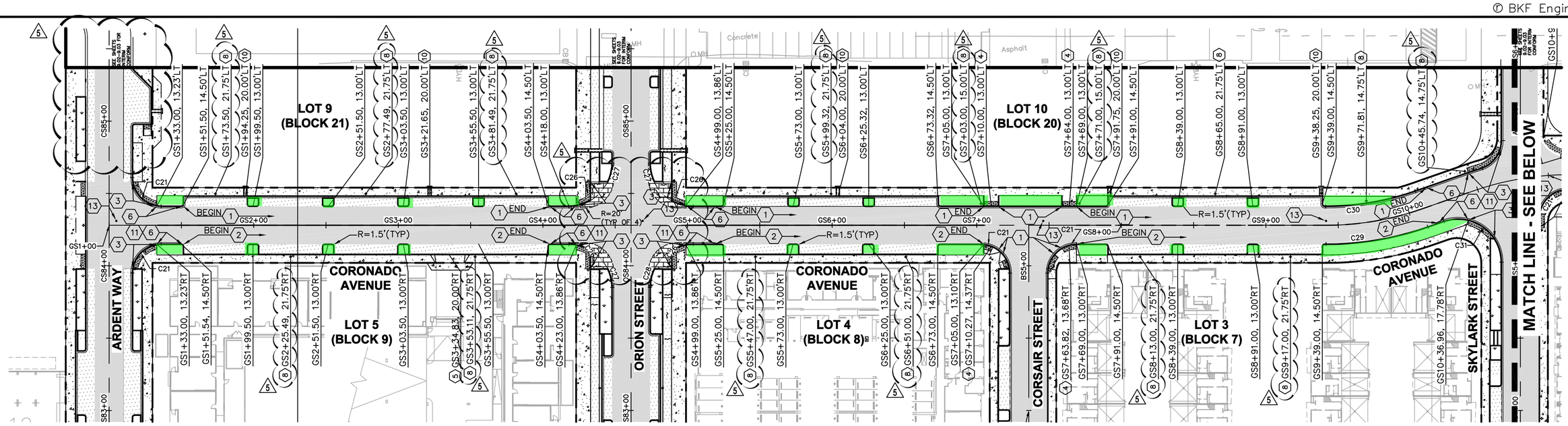
ALAMEDA POINT SITE A - PHASE 1
BACKBONE INFRASTRUCTURE IMPROVEMENTS

HORIZONTAL CONTROL AND PAVING PLAN
WEST ATLANTIC AVENUE

CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

Sheet Number: **3.01**

DRAWING NAME: \\BKF-WC\vol4\2014\145170_Alameda_Pt_Mixed_Use\ENG_BACKBONE\PHASE 01\SHEETS\301_APA1PRHZ.dwg
PLOT DATE: 08-26-19 PLOTTED BY: wood



1 CORONADO AVENUE

SCALE: 1" = 40'

KEYNOTES

1. CURB AND GUTTER, SEE DETAIL 1/11.01
2. VERTICAL CURB, SEE DETAIL 2/11.01
3. FLUSH CURB, SEE DETAIL 3/11.01
4. CURB RAMP, SEE DETAIL 1/11.02
5. DRIVEWAY, CITY STANDARD, SEE DETAILS 3/11.02 AND 5/11.07
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6. CURB TRANSITION, 0" TO 6"
7. AC BERM, SEE DETAIL 2/11.04
8. STREET LIGHT, SEE STREET LIGHTING PLANS
9. FUTURE BUS STOP LOCATION, SEE DETAIL 1/11.04
10. CHANNEL DRAIN, SEE DETAIL 4/11.06
11. SPILL GUTTER, SEE DETAIL 8/11.01
12. BIORETENTION CURB WITH GUTTER TRANSITION, SEE DETAIL 6/11.01
13. CITY SURVEY MONUMENT, SEE DETAIL 1/11.07 SEE SHEET 2.04 FOR LOCATION
14. DRIVEWAY, SEE DETAIL 5/11.02
15. LIGHT WOW-OUT, SEE DETAIL 9/11.01

NOTES

1. CURVE TABLE AND LINE TABLE PROVIDES FACE OF CURB INFORMATION. FOR LINE AND CURVE TABLES, SEE SHEET 3.05.
2. EXISTING SITE DEMOLITION PER "ALAMEDA POINT PHASE 1 DEMOLITION AND SITE LEVELING PLANS" PREPARED BY BKF ENGINEERS.
3. REFER TO SHEETS 7.01-7.03 FOR STORMWATER MANAGMENT PLAN AND BIORETENTION AREA DETAILS.
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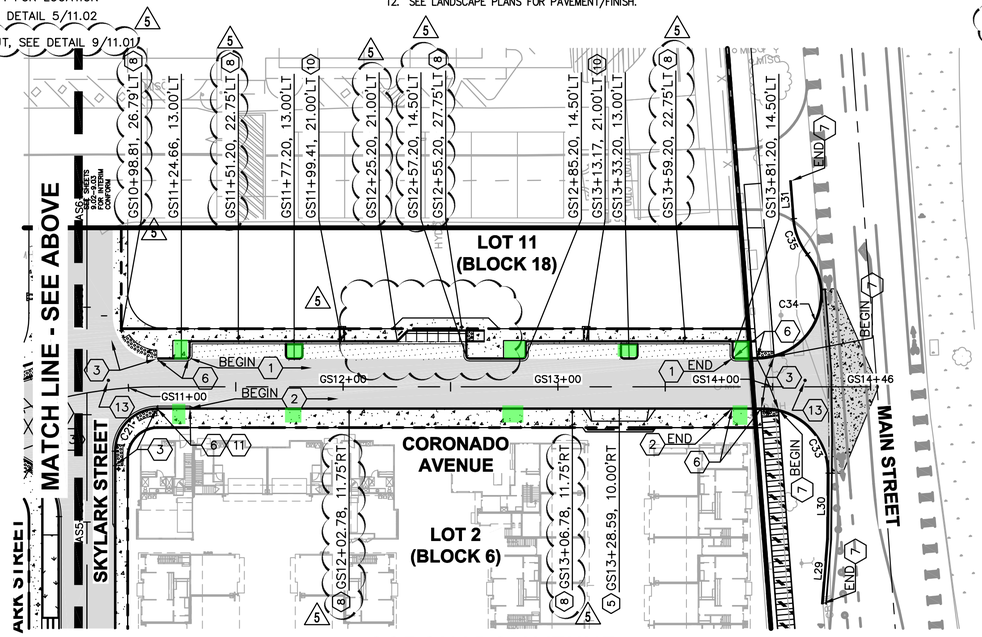
7. REFER TO SHEETS 8.01-8.02 FOR SIGNAGE AND STRIPING.
8. BUS PAD LAYOUT AND PAVING SECTION TO BE VERIFIED WITH AC TRANSIT PRIOR TO CONSTRUCTION.
9. FOR STREET BARRIER LOCATIONS, SEE SHEETS 9.01-9.03.
10. FOR BOLLARD LOCATIONS AND DETAILS, SEE LANDSCAPE DRAWINGS.
11. FOR ADDITIONAL INFORMATION NOT SHOWN ON THESE SHEETS, SEE LANDSCAPE DRAWINGS.
12. SEE LANDSCAPE PLANS FOR PAVEMENT/FINISH.

LEGEND

- NEW AC PAVEMENT, SEE NOTE 6.
- CONCRETE SIDEWALK, SEE NOTE 6.
- CONCRETE BUS PAD, SEE NOTE 6.
- BIORETENTION AREAS, SEE NOTE 6.
- LANDSCAPE AREA, SEE LANDSCAPE PLANS
- BIKE/PARKING PAVEMENT, SEE NOTE 6.
- ASPHALT CONCRETE SIDEWALK (2"AC/6"AB), SEE NOTE 6.
- PERVIOUS AC SIDEWALK, SEE NOTE 6.
- AC FILL (MIN 0.2' THICK)
- WEDGE CUT
- AC PLUG, SEE DETAIL 4/11.04
- REMOVE EXISTING PCC PAVING AND REPLACE WITH W. ATLANTIC PAVING SECTION.
- TRUNCATED DOMES, SEE DETAIL 4/11.01
- STREETLIGHT, SEE SHEETS SL1-SL7
- PCC PAVING (5"PCC/6"AB), SEE NOTE 12.
- TAN COLORED CONCRETE (DAVIS SANDSTONE OR EQUIVALENT). SEE 2.02 FOR SECTION
- IRRIGATION SLEEVE (FOR REFERENCE ONLY). SEE IRRIGATION PLANS.

GRAPHIC SCALE
40 0 40 80



2 CORONADO AVENUE

SCALE: 1" = 40'

GRAPHIC SCALE
40 0 40 80

No.	Date	Revisions
1	10/12/18	REVISION 1
2	12/03/18	REVISION 2
3	1/2/18	REVISION 3 (REV2)
4	2/4/19	REV3
5	8/26/19	REV4

REGISTERED PROFESSIONAL ENGINEER — CHRISTOPHER C. MILLS — No. C 60251 — CIVIL — STATE OF CALIFORNIA — 08/26/2019

BKF ENGINEERS / SURVEYORS / PLANNERS
1646 N. CALIFORNIA BLVD
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WALNUT CREEK, CA 94596
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FAX 925/940-2299

Date	1/18/17	Scale	AS SHOWN	Job No.	20145170
Design	WC	Drawn	WC	Approved	CM

ALAMEDA POINT PARTNERS, LLC
SRMERNST · MADISON MARQUETTE
THOMPSON DORFMAN PARTNERS · TRAMMELL CROW RESIDENTIAL

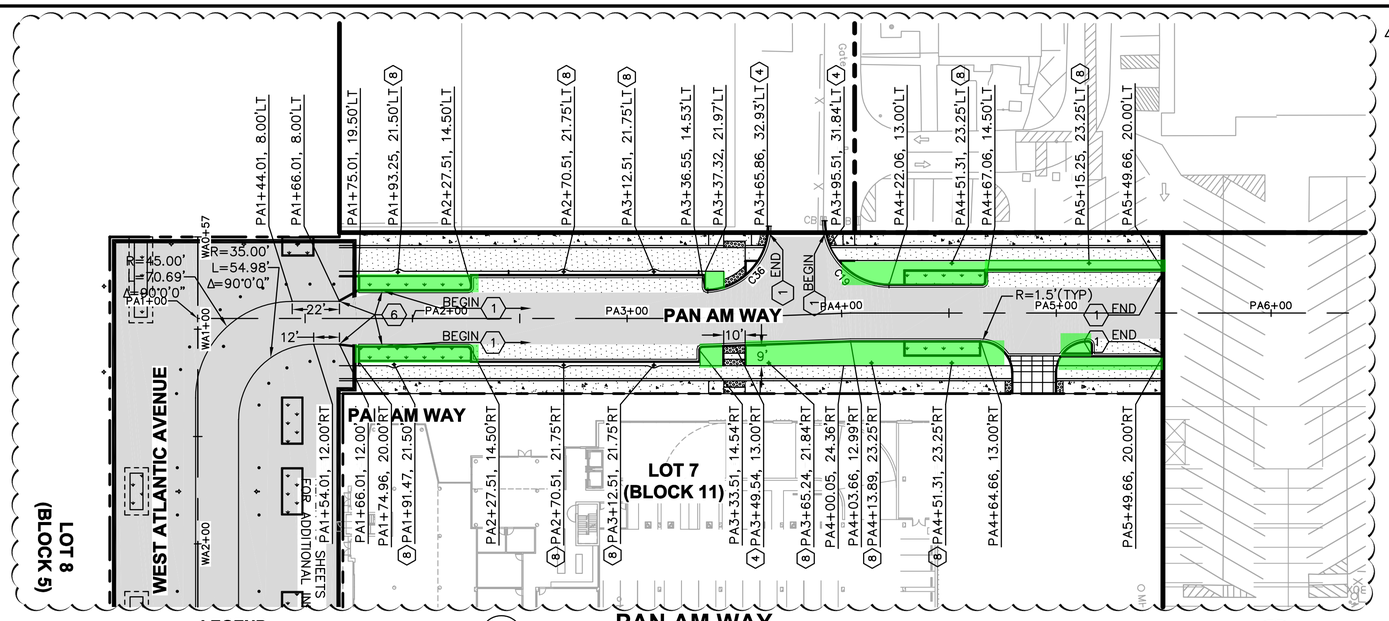
ALAMEDA POINT SITE A - PHASE 1
BACKBONE INFRASTRUCTURE IMPROVEMENTS

HORIZONTAL CONTROL AND PAVING PLAN CORONADO AVENUE

CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

Sheet Number: 3.02

DRAWING NAME: \\BKF-WC\vol4\2014\145170_Alameda_Pt_Mixed_Use\ENG_BACKBONE\PHASE 01\SHEETS\301_APA1PRHZ.dwg
PLOT DATE: 08-26-19 PLOTTED BY: wood



1 PAN AM WAY
SCALE: 1" = 40'

GRAPHIC SCALE
40 0 40 80

KEYNOTES

1. CURB AND GUTTER, SEE DETAIL 1/11.01
2. VERTICAL CURB, SEE DETAIL 2/11.01
3. FLUSH CURB, SEE DETAIL 3/11.01
4. CURB RAMP, SEE DETAIL 1/11.02
5. DRIVEWAY, CITY STANDARD, SEE DETAILS 3/11.02 AND 5/11.07
5B. NON-STANDARD FLUSH DRIVEWAY, SEE DETAIL 2/11.02
6. CURB TRANSITION, 0" TO 6"
7. AC BERM, SEE DETAIL 2/11.04
8. STREET LIGHT, SEE STREET LIGHTING PLANS
9. FUTURE BUS STOP LOCATION, SEE DETAIL 1/11.04
10. CHANNEL DRAIN, SEE DETAIL 4/11.06
11. SPILL GUTTER, SEE DETAIL 8/11.01
12. BIORETENTION CURB WITH GUTTER TRANSITION, SEE DETAIL 6/11.01
13. CITY SURVEY MONUMENT, SEE DETAIL 1/11.07 SEE SHEET 2.04 FOR LOCATION
14. DRIVEWAY, SEE DETAIL 5/11.02
15. LIGHT WOW-OUT, SEE DETAIL 9/11.01

LEGEND

- NEW AC PAVEMENT, SEE NOTE 6.
- CONCRETE SIDEWALK, SEE NOTE 6.
- CONCRETE BUS PAD, SEE NOTE 6.
- BIORETENTION AREAS, SEE NOTE 6.
- LANDSCAPE AREA, SEE LANDSCAPE PLANS
- BIKE/PARKING PAVEMENT, SEE NOTE 6.
- ASPHALT CONCRETE SIDEWALK (2"AC/6"AB), SEE NOTE 6.
- PERVIOUS AC SIDEWALK, SEE NOTE 6.
- AC FILL (MIN 0.2' THICK)
- WEDGE CUT
- AC PLUG, SEE DETAIL 4/11.04
- REMOVE EXISTING PCC PAVING AND REPLACE WITH W. ATLANTIC PAVING SECTION.
- TRUNCATED DOMES, SEE DETAIL 4/11.01
- STREETLIGHT, SEE SHEETS SL1-SL7
- PCC PAVING (7"PCC/6"AB), SEE NOTE 12.
- TAN COLORED CONCRETE (DAVIS SANDSTONE OR EQUIVALENT). SEE 2.02 FOR SECTION
- IRR — IRRIGATION SLEEVE (FOR REFERENCE ONLY). SEE IRRIGATION PLANS.

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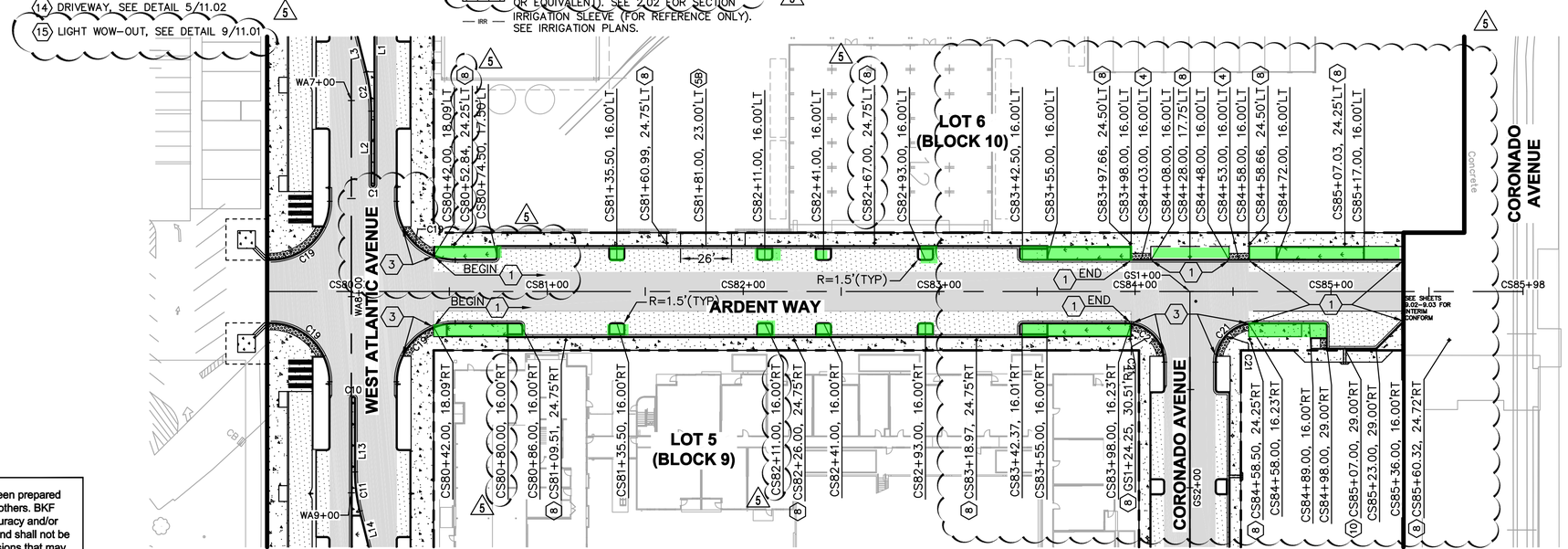
12. SEE LANDSCAPE PLANS FOR PAVEMENT/FINISH.



2 ARDENT WAY
SCALE: 1" = 40'

GRAPHIC SCALE
40 0 40 80

These Record Documents have been prepared based on information provided by others. BKF Engineers has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions that may be incorporated herein as a result.

BKF Engineers

No.	Date	Revisions
1	10/12/18	REVISION 1
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3	1/2/18	REVISION 3 (REV2)
4	2/4/19	REV3
5	8/26/19	REV4

REGISTERED PROFESSIONAL ENGINEER — CHRISTOPHER C. MILLS — No. C 60251 — CIVIL — STATE OF CALIFORNIA
08/30/2019

BKF ENGINEERS / SURVEYORS / PLANNERS
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Design	WC	Drawn	WC	Approved	CM

ALAMEDA POINT PARTNERS, LLC
SRMERNST · MADISON MARQUETTE
THOMPSON DORFMAN PARTNERS · TRAMMELL CROW RESIDENTIAL

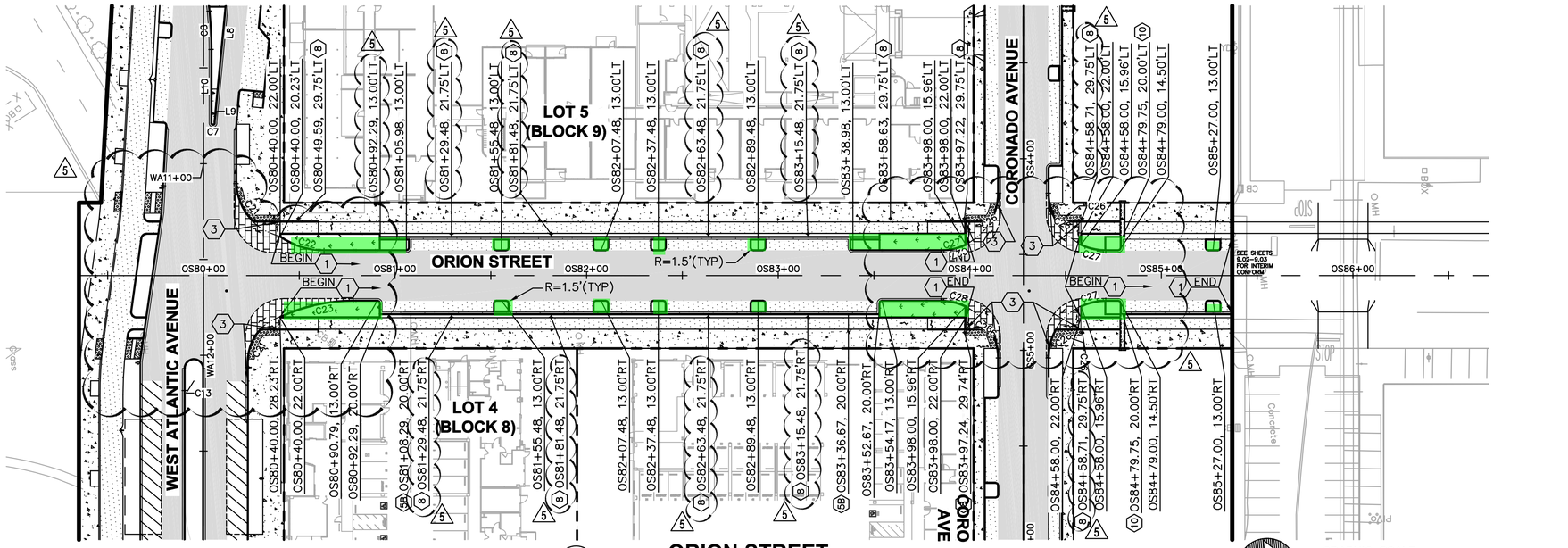
ALAMEDA POINT SITE A - PHASE 1
BACKBONE INFRASTRUCTURE IMPROVEMENTS

HORIZONTAL CONTROL AND PAVING PLAN PAN AM WAY & ARDENT WAY

CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

Sheet Number: 3.03

DRAWING NAME: \\BKF-WC\vol4\2014\145170_Alameda_Pt_Mixed_Use\ENG_BACKBONE\PHASE 01\SHEETS\301_APA1PRHZ.dwg
PLOT DATE: 08-30-19 PLOTTED BY: wood



1 **ORION STREET**
SCALE: 1" = 40'

GRAPHIC SCALE
40 0 40 80

KEYNOTES

1. CURB AND GUTTER, SEE DETAIL 1/11.01
2. VERTICAL CURB, SEE DETAIL 2/11.01
3. FLUSH CURB, SEE DETAIL 3/11.01
4. CURB RAMP, SEE DETAIL 1/11.02
5. DRIVEWAY, CITY STANDARD, SEE DETAILS 3/11.02 AND 5/11.07
5B. NON-STANDARD FLUSH DRIVEWAY, SEE DETAIL 2/11.02
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7. AC BERM, SEE DETAIL 2/11.04
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9. FUTURE BUS STOP LOCATION, SEE DETAIL 1/11.04
10. CHANNEL DRAIN, SEE DETAIL 4/11.06
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14. DRIVEWAY, SEE DETAIL 5/11.02
15. LIGHT WOW-OUT, SEE DETAIL 9/11.01

LEGEND

- NEW AC PAVEMENT, SEE NOTE 6.
- CONCRETE SIDEWALK, SEE NOTE 6.
- CONCRETE BUS PAD, SEE NOTE 6.
- BIORETENTION AREAS, SEE NOTE 6.
- LANDSCAPE AREA, SEE LANDSCAPE PLANS
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- AC PLUG, SEE DETAIL 4/11.04
- REMOVE EXISTING PCC PAVING AND REPLACE WITH W. ATLANTIC PAVING SECTION.
- TRUNCATED DOMES, SEE DETAIL 4/11.01
- STREETLIGHT, SEE SHEETS SL1-SL7
- RCC PAVING (7"PCC/6"AB), SEE NOTE 12.
- TAN COLORED CONCRETE (DAVIS SANDSTONE OR EQUIVALENT). SEE 2.02 FOR SECTION
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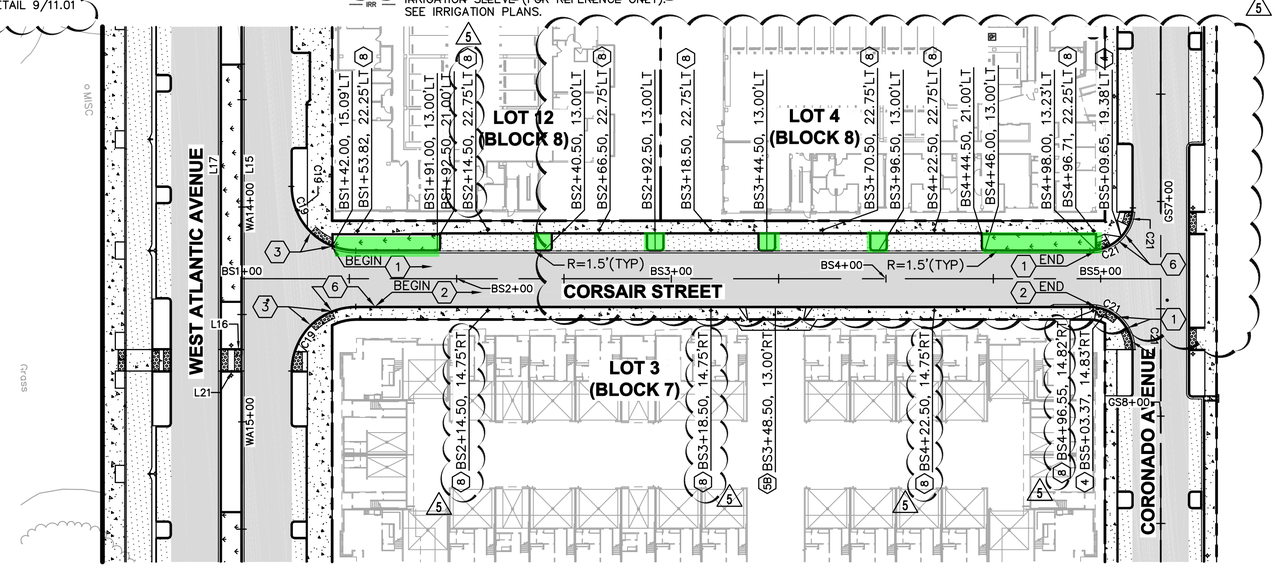
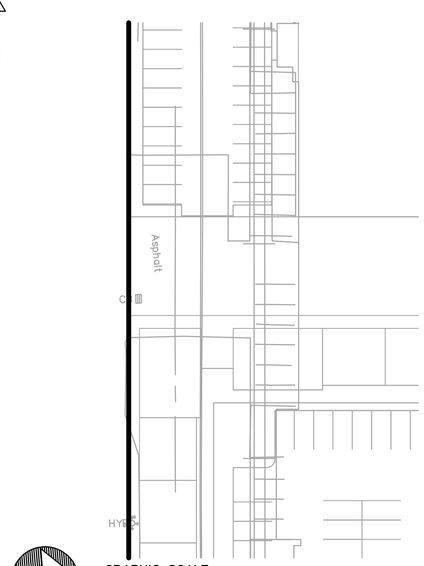


2 **CORSAIR STREET**
SCALE: 1" = 40'



GRAPHIC SCALE
40 0 40 80

No.	Date	Revisions
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3	1/2/18	REVISION 3 (REV2)
4	2/4/19	REV3
5	8/26/19	REV4

REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER C. MILLS No. C 60251 CIVIL STATE OF CALIFORNIA
08/26/2019

BKF ENGINEERS / SURVEYORS / PLANNERS
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PHONE 925/940-2200
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Date	1/18/17	Scale	AS SHOWN	Job No.	20145170
Design	WC	Drawn	WC	Approved	CM

ALAMEDA POINT PARTNERS, LLC
SRMERNST · MADISON MARQUETTE
THOMPSON DORFMAN PARTNERS · TRAMMELL CROW RESIDENTIAL

CITY SEAL OF THE CITY OF ALAMEDA

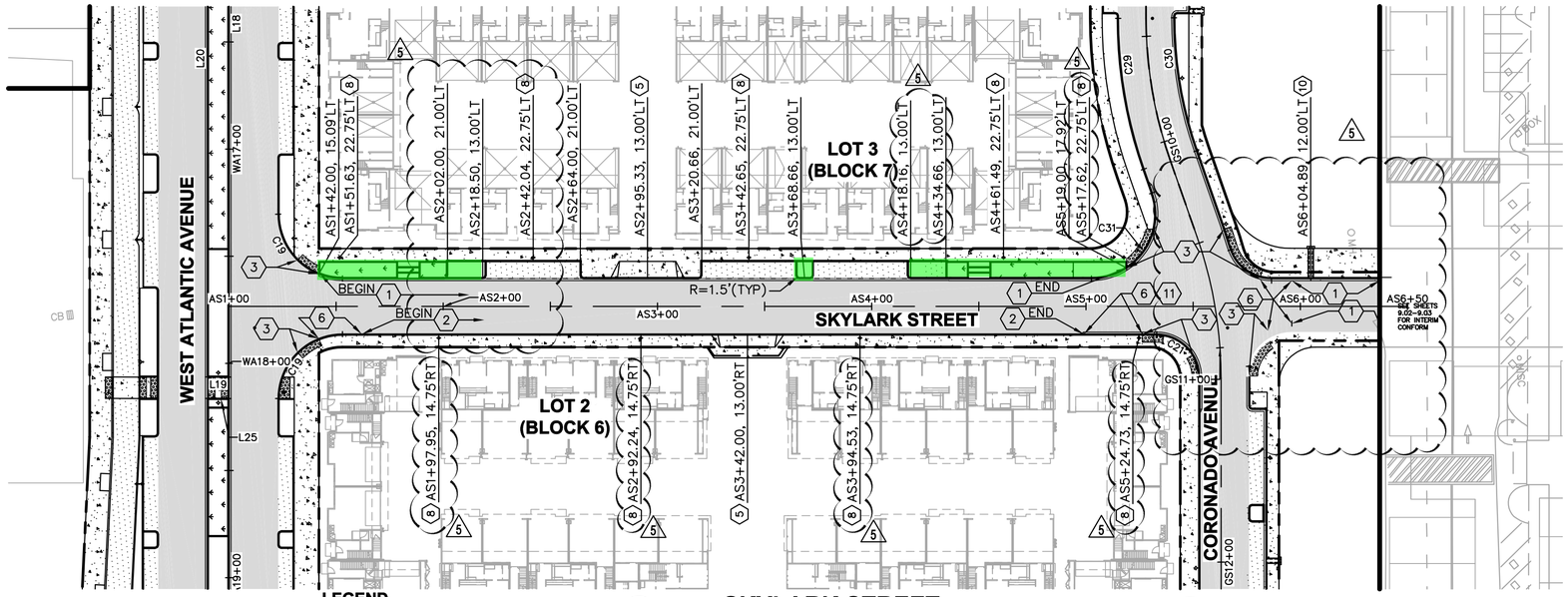
ALAMEDA POINT SITE A - PHASE 1
BACKBONE INFRASTRUCTURE IMPROVEMENTS

HORIZONTAL CONTROL AND PAVING PLAN ORION STREET & CORSAIR STREET

CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

Sheet Number: **3.04**

DRAWING NAME: \\BKF-WC\vol4\2014\145170_Alameda_Pt_Mixed_Use\ENG_BACKBONE\PHASE 01\SHEETS\301_APA1PRHZ.dwg
PLOT DATE: 08-26-19 PLOTTED BY: wood



1 SKYLARK STREET

SCALE: 1" = 40'

GRAPHIC SCALE

40 0 40 80

KEYNOTES

1. CURB AND GUTTER, SEE DETAIL 1/11.01
2. VERTICAL CURB, SEE DETAIL 2/11.01
3. FLUSH CURB, SEE DETAIL 3/11.01
4. CURB RAMP, SEE DETAIL 1/11.02
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9. FUTURE BUS STOP LOCATION, SEE DETAIL 1/11.04
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13. CITY SURVEY MONUMENT, SEE DETAIL 1/11.07 SEE SHEET 2.04 FOR LOCATION
14. DRIVEWAY, SEE DETAIL 5/11.02
15. LIGHT WOW-OUT, SEE DETAIL 9/11.01

LEGEND

- NEW AC PAVEMENT, SEE NOTE 6.
- CONCRETE SIDEWALK, SEE NOTE 6.
- CONCRETE BUS PAD, SEE NOTE 6.
- BIORETENTION AREAS, SEE NOTE 6.
- LANDSCAPE AREA, SEE LANDSCAPE PLANS
- BIKE/PARKING PAVEMENT, SEE NOTE 6.
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- PCC PAVING (7"RCC/6"AB). SEE NOTE 12.
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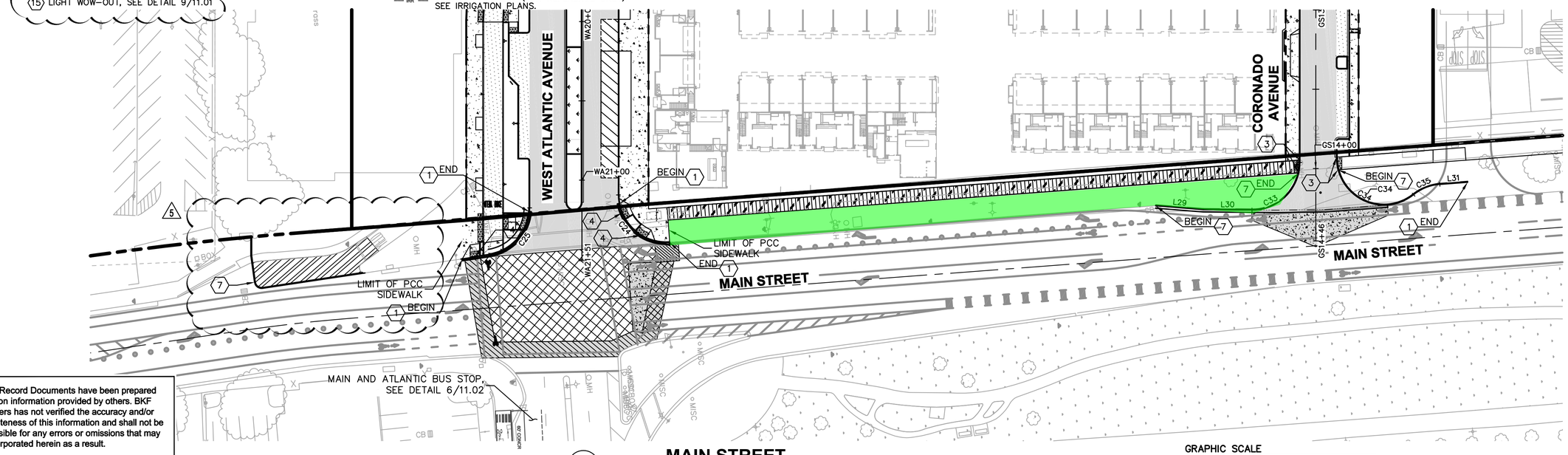
LINE TABLE		
NO.	BEARING	LENGTH
L1	N85°08'27"W	137.00'
L2	N85°08'27"W	37.50'
L3	N80°49'23"E	20.62'
L4	N85°08'27"W	129.00'
L5	N85°08'27"W	29.50'
L6	N80°49'23"E	20.62'
L7	N85°08'27"W	66.14'
L8	N79°39'26"W	62.79'
L9	N85°08'27"W	0.86'
L10	N85°08'27"W	38.50'
L11	N89°08'55"E	20.10'
L12	N85°08'27"W	128.50'
L13	N85°08'27"W	37.50'
L14	N80°49'23"E	20.62'
L15	S85°08'27"E	248.00'
L16	S04°51'33"W	10.00'
L17	N85°08'27"W	248.00'
L18	S85°08'27"E	330.00'
L19	S04°51'33"W	10.00'
L20	N85°08'27"W	330.00'
L21	N04°51'33"E	10.00'
L22	S85°08'27"E	293.62'
L24	N85°08'27"W	293.62'
L25	S04°51'33"W	10.00'
L29	N09°27'10"E	30.14'
L30	N05°21'16"E	30.71'
L31	N00°31'57"E	17.62'

CURVE TABLE			
NO.	DELTA	RADIUS	LENGTH
C1	180°00'00"	1.00'	3.14'
C2	013°59'01"	82.79'	20.21'
C3	013°59'01"	82.79'	20.21'
C4	180°00'00"	1.00'	3.14'
C5	013°59'01"	82.79'	20.21'
C6	013°59'01"	82.79'	20.21'
C7	180°00'00"	1.00'	3.14'
C8	005°42'25"	201.12'	20.03'
C9	005°42'25"	201.12'	20.03'
C10	180°00'00"	1.00'	3.14'
C11	013°59'01"	82.79'	20.21'
C12	013°59'01"	82.79'	20.21'
C15	090°00'00"	35.00'	54.98'
C16	083°36'52"	10.00'	14.59'
C17	090°00'00"	10.00'	15.71'
C18	082°00'00"	40.00'	57.25'
C19	090°00'00"	30.00'	47.12'
C22	034°59'08"	40.00'	24.42'
C23	025°06'05"	90.00'	39.43'
C24	094°30'02"	30.00'	49.48'
C25	081°29'18"	30.00'	42.67'
C26	090°00'00"	15.00'	23.56'
C27	025°40'45"	30.00'	13.45'
C28	025°40'35"	30.00'	13.44'
C29	019°17'26"	213.00'	71.71'
C30	019°21'58"	187.00'	63.21'
C31	109°17'26"	30.00'	57.22'
C33	090°29'43"	30.00'	47.38'
C34	128°41'55"	30.00'	67.39'
C35	034°22'18"	30.00'	18.00'
C36	086°58'59"	30.00'	45.54'



2 MAIN STREET

SCALE: 1" = 40'

GRAPHIC SCALE

40 0 40 80

No.	Date	Revisions
1	10/12/18	REVISION 1
2	12/03/18	REVISION 2
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Date	1/18/17	Scale	AS SHOWN
Design	WC	Drawn	WC
Job No.	20145170	Approved	CM

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THOMPSON DORFMAN PARTNERS · TRAMMELL CROW RESIDENTIAL

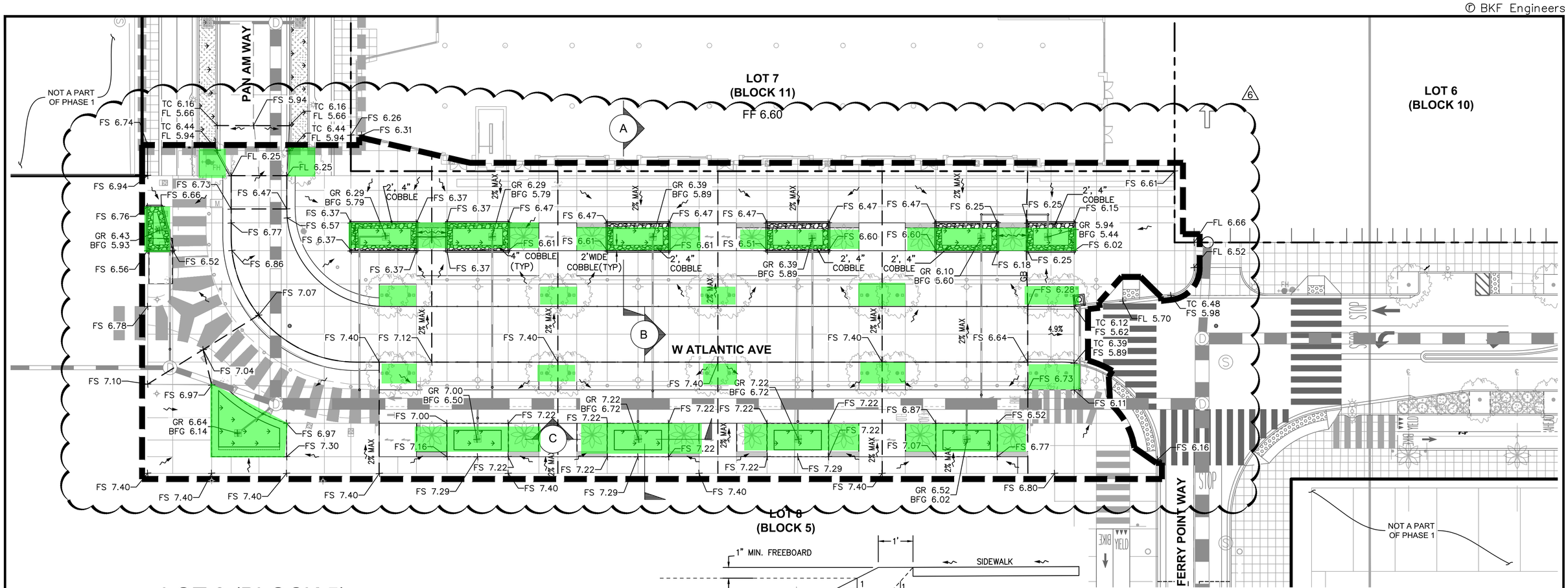
ALAMEDA POINT SITE A - PHASE 1
BACKBONE INFRASTRUCTURE IMPROVEMENTS

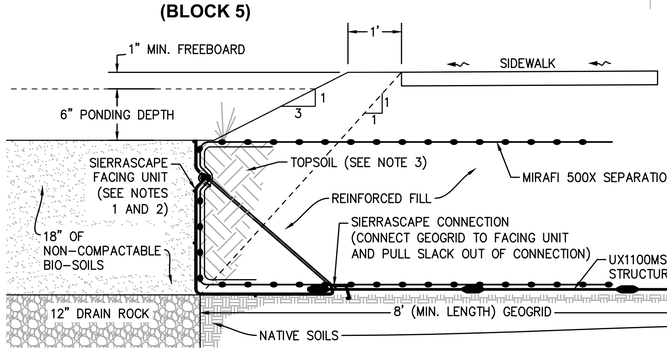
HORIZONTAL CONTROL AND PAVING PLAN SKYLARK STREET & MAIN STREET

CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

Sheet Number: 3.05

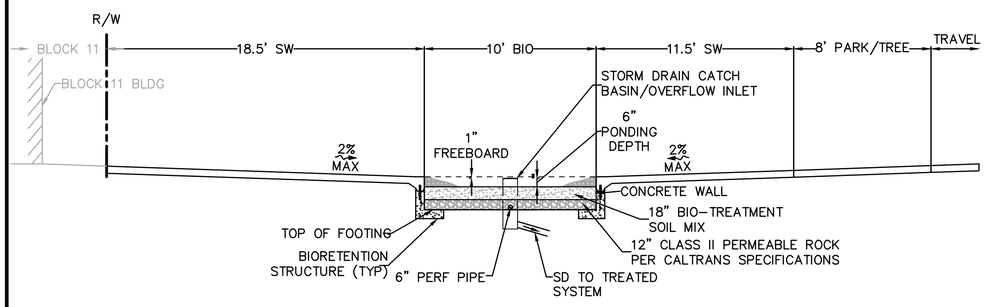
DRAWING NAME: \\BKF-WC\vol4\2014\145170_Alameda_Pt_Mixed_Use\ENG_BACKBONE\PHASE 01\SHEETS\301_APA1PRHZ.dwg
PLOT DATE: 08-26-19 PLOTTED BY: wood



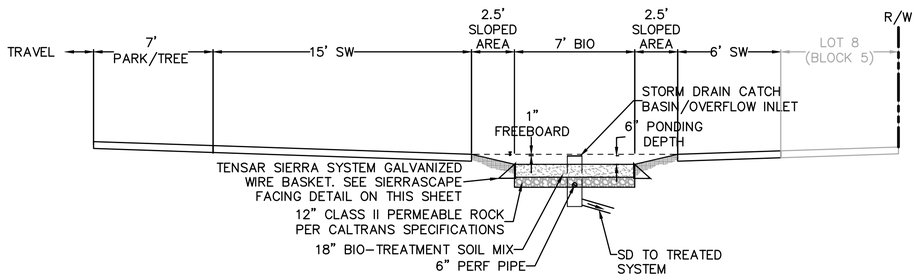


GRAPHIC SCALE
20 0 20 40

LOT 8 (BLOCK 5)

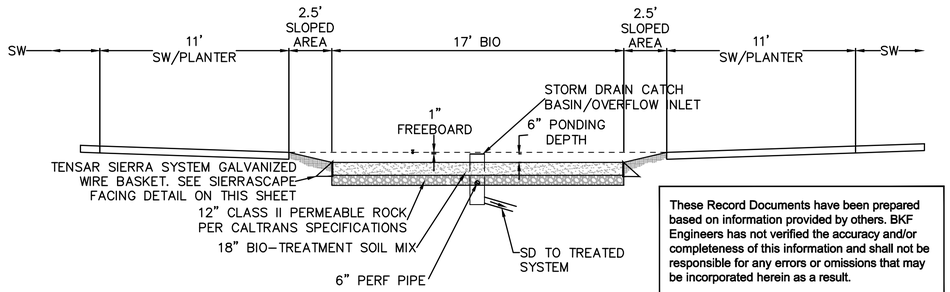


SECTION A
A NTS



SECTION B
B NTS

SIERRASCAPE FACING DETAIL
NTS



SECTION C
C NTS

NOTES:
1. SEE SIERRASCAPE FACING UNIT DETAIL FOR FACING MATERIAL AND DIMENSIONS.
2. ALL FACING UNITS SHALL BE GALVANIZED ASTM 123 AFTER FABRICATION.
3. TOPSOIL SHALL BE LOAMY SAND OR FINER GRADATION WITH 10% – 15% ORGANIC CONTENT OR MATERIAL APPROVED BY A QUALIFIED LANDSCAPE ARCHITECT.
4. REINFORCED FILL SHALL HAVE LESS THAN 15% PASSING #200 SIEVE, PI<6, AND LL<20.
5. VEGETATION TYPE SHALL BE SPECIFIED BY A QUALIFIED LANDSCAPE ARCHITECT.

LEGEND

- LIMIT OF WORK
- RIGHT OF WAY LINE, SEE NOTE 1
- STORM DRAIN LATERAL
- STORM DRAIN PIPE
- STORM DRAIN INLET
- STORM DRAIN MANHOLE
- SANITARY SEWER MANHOLE
- CATCH BASIN
- CURB INLET
- FIRE HYDRANT
- WATER METER

NOTES

1. ALL UTILITIES ARE SHOWN FOR REFERENCE ONLY. REFER TO PLAN AND PROFILE SHEETS 4.01–4.11 AND SHARED PLAZA UTILITY PLAN SHEET 12.02 FOR PROPOSED UTILITY INFORMATION.
2. SHARED PLAZA LAYOUT AND PLANTING ARE SHOWN FOR REFERENCE ONLY. REFER TO LANDSCAPE DRAWINGS FOR FINAL DESIGN OF SHARED PLAZA LAYOUT, FINISHES, AND LANDSCAPING.
3. ALL BLOCK IMPROVEMENTS ARE SHOWN FOR REFERENCE ONLY AND PER SEPARATE PERMIT.

No.	Date	Revisions
1	10/12/18	REVISION 1
2	12/03/18	REVISION 2
3	1/2/18	REVISION 3 (REV2)
4	2/4/19	REV3
5	8/26/19	REV4
6		

REGISTERED PROFESSIONAL ENGINEER — CHRISTOPHER C. MILLS — No. C 60251 — CIVIL — STATE OF CALIFORNIA
11/25/2019

BKF ENGINEERS / SURVEYORS / PLANNERS
1646 N. CALIFORNIA BLVD
SUITE 400
WALNUT CREEK, CA 94596
PHONE 925/940-2200
FAX 925/940-2299

Date	1/18/17	Scale	AS SHOWN	Job No.	20145170
Design	WC	Drawn	WC	Approved	CM

ALAMEDA POINT PARTNERS, LLC
TRAMMELL CROW RESIDENTIAL
CYPRESS EQUITY INVESTMENTS • SRMERNST

ALAMEDA POINT SITE A - PHASE 1
BACKBONE INFRASTRUCTURE IMPROVEMENTS

SHARED PLAZA GRADING PLAN

CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

Sheet Number: 12.01

DRAWING NAME: \\BKF-WC\vol4\2014\145170_alameda_pt_mixed_use\ENG_backbone\SHARED PLAZA\SHEETS\201_APA1SPGR.dwg
PLOT DATE: 11-25-19 PLOTTED BY: ZHEA

EXHIBIT G

LANDSCAPE ALAMEDA LANDING
BIOSWALES SPECS BACKBONE SWMP
DECEMBER 2012

STORM WATER MANAGEMENT PLAN

Alameda Landing
Backbone Infrastructure

City Permit Number: CB12-0730

CITY OF ALAMEDA
ALAMEDA COUNTY
CALIFORNIA

December, 2012

Prepared By:

BKF
ENGINEERS / SURVEYORS / PLANNERS

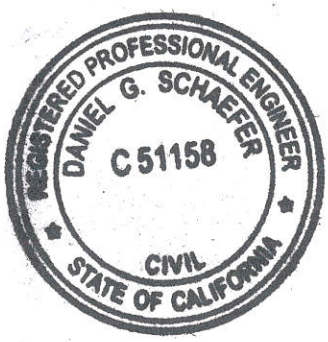
1646 N California Blvd, Suite 400
Walnut Creek, CA 94596
(925) 940-2200

Report prepared for:

Region Water Quality Control Board

Storm Water Management Plan for Alameda Landing Retail Development Phase 1
Alameda, CA

City Permit Number:
BKF Engineers Job No.: 20065092



Daniel Schaefer, P.E., LEED © A.P.
Principal

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Appendix B: Stormwater Treatment Measure Operation and Maintenance
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I. PROJECT SETTING

A. Project Description and Information Summary

Existing Site

The existing site (formerly Fleet Industrial Supply Center (FISC)) is bordered by Stargell Avenue at the south, Mariner Square Loop at the east, existing Coast Guard Housing at the west and the Oakland Estuary at the north (**Figure 1**). At the north the site is generally at elevation 1.5-2.5 adjacent to existing Warehouses 1 and 2. The south elevation is approximately elevation 8.5 at the intersection of Stargell and Fifth Street.

The site receives approximately 19 inches of annual rainfall. The existing site consists of two Naval Air Station support warehouses building 4 and 5 surrounded by pavement and native material stockpiled. The site is roughly 0% impervious and 100% pervious (**Figure 2**). The proposed site will be 96% impervious.

The existing FISC site drains to the north through existing storm drain infrastructure and discharges directly to the Oakland Estuary through an existing outfall to remain. The outfall consists of a weir structure in the Pond connecting to flap gate structure via twin 48-inch siphon pipes; a 72-inch pipe connecting the flap gate to a headwall; and a sheet pile open channel that drains to the estuary.

Project Description

Some of the proposed Backbone Improvements (BBI) includes the following:

1. Proposed streets – Mitchell Ave, Fifth Street
2. Widened existing streets – Stargell Avenue and Mariner Square Loop
3. Utilities – Storm drain, sewer, water and joint trench
4. Traffic signals
5. Bioretention areas
6. Planting areas
7. Street lights

The new backbone infrastructure is approximately 4,400 miles of roadways/utilities or 7.0 acres. The former Alameda Naval Station known as Fleet Industrial Supply Center consist of mainly impervious surfaces (paved roads and buildings); however, all improvements will be removed or demolished per the demolition and leveling construction activities that will be take place per the Alameda Landing contract drawings titled, "Phase 1 Demolition and Site Leveling", prepared by BKF engineers, dated 2/2/2012. As a result of the demolition activities the site will be pervious and leveled. Since we are creating more than 10,000 sf of impervious surface the project is subject to the treatment and flow components referenced in the NPDES permit.

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B. Opportunities and Constraints of Storm Water Management

The Storm Water Management Plan shows the grading and drainage patterns of the BBI, and the methods proposed to remove suspended solids and pollutants from storm water runoff. Treatment of all runoff from the project area is required according to current stormwater C.3 requirements. Storm water treatment requirements are met by implementing bioretention areas throughout the site to treat the proposed improvements.

Opportunities:

The new backbone roads conform to the existing terrain of the site. The public storm drain improvements which will collect the runoff after treatment in roadside bioretention areas and discharge to the existing Oakland Estuary outfall. During non-treatment storm events, runoff will bypass bioretention areas by entering a curb inlet which has a 2" lip at the throat. **(See Figure 6)**

The proposed BBI connects a series of roadside bioretention areas and generally maintains the existing hydrology of the site by directing runoff to the existing Oakland estuary outfall (**Figure 3**). Sidewalks separated from new street by landscape will bypass bioretention areas as they are self treating.

Mariner Square Loop (MSL) is an existing public street in existing public street right-of-way. The Alameda Landing Project is conditioned to improve the public street. Required improvements include the addition of a sidewalk, widening to accommodate bicycle lanes and left turn pockets, and resurfacing/reconstruction to restore its structural integrity. Since MSL is an existing street to which no new traffic lanes are being added, the proposed improvements do not constitute a "Road Project", as defined in section C.3.b.ii.(4) of the MRP, and do not trigger the need for storm water treatment

Constraints:

Infiltration of storm water into the site soils may not be feasible due to low permeability rates reported by the Geotechnical Engineer.

Bioretention areas or Integrated Management Practices (IMPs) with engineered soil are sized to accept stormwater from existing and proposed areas at the bottom of each of the Drainage Management Areas (DMAs).

II. Measures to Limit Imperviousness

A. Pervious Site Improvements

- Roadside Bioretention areas and landscape strips.

- Sidewalks which drain directly to landscape strips.
- Landscape strips which drain directly to bioretention areas.

B. Drainage as a Design Element

- The linear green pedestrian plaza along Fifth Street at the northwesterly portion of the site will integrate Bioretention Areas and meandering paths. Landscape areas drain directly to bioretention areas and are counted as self treating.

- Bioretention Areas treat stormwater by allowing stormwater infiltrate through engineered soil. A perforated pipe collects and conveys the treated subsurface stormwater to outfalls with energy dissipation or storm drain catch basins which drain to the existing watershed.

C. Minimizing Volume of Runoff

- Bioretention areas have been designed and sized per the combination of flow and volume designed criteria indicated on the C.3 Stormwater Technical Guidance handbook.

III. Selection and Primary Design of Storm Water Treatment BMP's

Impervious areas are separated into 43 DMAs. The stormwater runoff from each DMA drains to specific IMPs.

Since the project discharges directly to the Oakland estuary hydrograph modification is not required. Although, the new impervious area has increased, the project's offsite discharge over time does not alter the precondition stormwater peak discharges; therefore, hydrograph modifications do not need to be implemented. Regardless the IMP's were designed for flow control and treatment.

A. General Bioretention Area Characteristics

The bioretention areas are designed to meet the C.3 Stormwater Technical Guidance (Version 3.0) combination of flow and volume design criteria. The bioretention areas are sized such that bioretention area soil mix surface area (not including side slopes) meet the minimum area needed to allow 6 inches of ponding depth for the calculated stormwater inflow volume. The following calculations show a minimum area required to allow for approximately 6" of ponding. The proposed bioretention areas will meet or exceed the calculated required areas as shown in (**Figure 4A**).

The depth of the surface ponding area is sized so that the ponding area functions to retain water prior to it entering the soil at a minimum 5 inches per hour required by MRP provision C.3.c(2)(b)(vi). See (**Figure 4A**). Provision C.3.d of the MRP specifies that treatment measures that use a combination of flow and volume capacity shall be sized to

treat at least 80 percent of the total runoff over the life of the project, using local rainfall. A sizing summary of each bioretention area can be found in **(Figure 4B).**

As an example, the square footage calculation and volume required for the bioretention treatment area of DMA #13.1 is shown in the following steps.

a. Determine **Total C*A (sf)**
   For Pervious area use C=0.10
   For Impervious area use C=0.70
   Total C*A = (0.7 * 1,412) + (0.1 *800) = 1,068

b. Determine **C composite**
   Total C*A / Total area = 1,068/2,212 = 0.48

c. Calculate **Unit Basin Storage Volume**
   This number is calculated using Table 5-2 "Unit Basin Storage Volumes in Inches for 80 Percent Capture Using 48-hour Drawdowns".
   Since the project is located in the city of Alameda the corresponding location is Oakland. Using the C composite obtained from step b interpolate values from table 5-2 to obtain the unit basin storage volume in inches.

   (Composite Runoff coefficient, Unit basin storage volume)

   Since the composite C is 0.48 it falls between these two values (0.25, 0.17) and (0.50, 0.34). After interpolating our adjusted Unit Basin Storage volume is 0.33

   (0.34-.17) / (0.5-.25) = 0.68
   0.68 * (0.50-0.48) = 0.136
   0.34-.136 = 0.33

d. Calculate **Project Mean Annual Precipitation (in)**
   Alameda's Annual Precipitation is 19 inches.
   Value is obtained from The Alameda County Flood Control and Water Conservation District Attachment-6 titled "Mean Annual Precipitation".

   Unit basin Storage Volume * (Alameda Annual Mean Precipitation/Oakland Airport - value obtained from table 5-2)

   0.33 * (19/18.35) = 0.34 inches

e. Calculate **I (in)**
   Project Mean Annual Precipitation / C composite
   0.34 / 0.48 = 0.70 inches

f. Calculate the **Duration, T (hr)**
   I (in) / 0.2 (in/hr)

0.70 / 0.2 = 3.52 hr

g. Estimate **Bioretention Treatment Area**
A preliminary estimate of bioretention area is estimated. The estimated area used in combination with the infiltration rate and storm duration to calculate the required treatment volume (see step i.).

31.87 SF is assumed.

h. Compute **Total V inflow (cf)**
$\frac{(\text{Total C*A}) * (\text{I})}{12} = (1{,}068 * 0.70) / 12 = 62.69$ cf

i. Calculate **Volume Treated (cf)**
Bioretention Treatment Area * Duration T * Infiltration constant

Infiltration constant is 5 in/hr => 0.42 ft/hr

31.87 sf * 3.52 hr * 0.416 ft/hr = 46.75 cf

j. Calculate the **Stored Volume (cf)**
Total Volume Inflow - Volume treated
62.69 cf – 46.75 cf = 15.94 cf

k. Calculate **Required Ponding Depth (ft)**
Stored Volume/ Bioretention Treatment Area

15.94 cf / 31.87 sf = 0.50 ft => 6" required ponding depth

Each bioretention area was designed with the following characteristics:

- Ponding depth is 6 inches minimum. Overflow catch basin shall be 6" from flow line.
- Vegetation selected for viability and to minimize need for fertilizers and pesticides in well-drained soil.
- 18" of engineered biotreatment soil mix per County of Alameda specs. Treatment soil infiltrates at 5 inches per hour.
- 12" class II permeable rock per Caltrans specifications in which perforated pipe is installed.
- 6" Perforated-pipe subdrain connected to storm drainage system.
- Sides of Bioretention Areas can be retained with Vertical/Slotted Curbs or Side slopes that do not exceed 3:1.
- Sloped cobbles for energy dissipation at 18" curb cut inlets will be installed.
- Waterproof liner to be installed at bottom and extend 7 inches up the side of the class II permeable layer.
- Tributary areas which drain to bioretention areas do not exceed 2 acres.

- The project will install purple pipe systems to irrigate the landscaping and bioretention areas. The purple pipe system will be connected to the domestic water system until EBMUD extends recycled water service to the area.

B. Specific descriptions of each DMA and IMP are as follows:

A summary of all proposed, impervious/pervious surface area has been listed in **(Figure 4B)**.

- DMA 1- 6, 14.1, 14, 16-17, 38: Includes drainage from the east half of Fifth Street Road from centerline to flowline. Runoff from these areas discharge into their respective IMP areas which consist of bioretention areas located at low spots. See Figure 4A.

- DMA 7-13.1, 15, 18-19, 40: Includes drainage from the west half of Fifth Street Road from centerline to flowline. Runoff from these areas discharge into their respective IMP areas which consist of bioretention areas located at low spots. See Figure 4A.

- DMA 20-23, 34-37: Includes drainage from the south half of Mitchell Avenue from centerline to flowline. Runoff from these areas discharge into their respective IMP areas which consist of bioretention areas located at low spots. See Figure 4A.

- DMA 24-33, 39: Includes drainage from the north half of Mitchell Avenue from centerline to flowline. Runoff from these areas discharge into their respective IMP areas which consist of bioretention areas located at low spots. See Figure 4A.

- DMA 41-42: Landscape areas within the "linear green" drain directly to bioretention areas and are counted as self-treating.

For road projects, sidewalks which drain directly to vegetated areas are specifically excluded from Provisions C.3.b.ii.(4)(a)-(c). The sidewalk and vegetated areas are not hydrologically separated from the gutter flow therefore these areas are treated the bioretention areas using a factor of 0.1.

IV. Source Control Measures

The following activities occur in areas designated for improvements have potential to allow pollutants to enter runoff:

- Landscape maintenance
- Street sweeping
- Construction/demolition of existing buildings
- Grading

implemented as described in **the Alameda County Integrated Management Practice Summary.**

Table 1. Sources and Source Control BMP's

Potential Source	Permanent BMP's	Operational BMP's
On-site Storm Drain Inlets	• Mark all inlets with the words "No Dumping! Flows to Creek" or similar	• Maintain and periodically repaint or replace inlet markings.
Landscape/outdoor pesticide and fertilizer use.	• Landscaping will be designed to minimize required irrigation and runoff, to promote surface infiltration, and to minimize the use of fertilizers and pesticides that can contribute to storm water pollution. • Plantings for IMP's will be selected to be appropriate to anticipated soil and moisture conditions. • Where possible, pest-resistant plants will be selected, especially for locations adjacent to hardscape. • Plants will be selected appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	• Landscaping to be maintained using minimum or no pesticides. • Person or contractor responsible for landscape maintenance to use IPM principles.
Plazas and sidewalks Facility Cleaning Construction and Demolition of Buildings		• Potential sources shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing shall be collected to prevent entry into the storm drain system. Wash water containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain.

V. Permitting and Code Compliance Issues

There are no known conflicts between the proposed Storm Water Management Plan and Alameda County ordinances or policies. Any conflicts found will be resolved through the design review process or during subsequent permitting.

VI. Construction Plan C.3 Checklist

Table 1. Construction Plan C.3. Checklist

Storm Water Management Plan Reference	BMP Description	Improvement Plan Sheet Number
DMA (1-42)	Bioretention Areas – Detains runoff in a surface reservoir, filters it through plant roots and a biologically active soil mix, and then infiltrates it into the ground.	
Self Treating Areas (43 to 47)	Landscape areas	

VII. Owner's Certification

The selection, sizing, and preliminary design of treatment BMP's and other control measures in the plan meet the requirements of Regional Water Quality Control Board Order R2-2003-0022

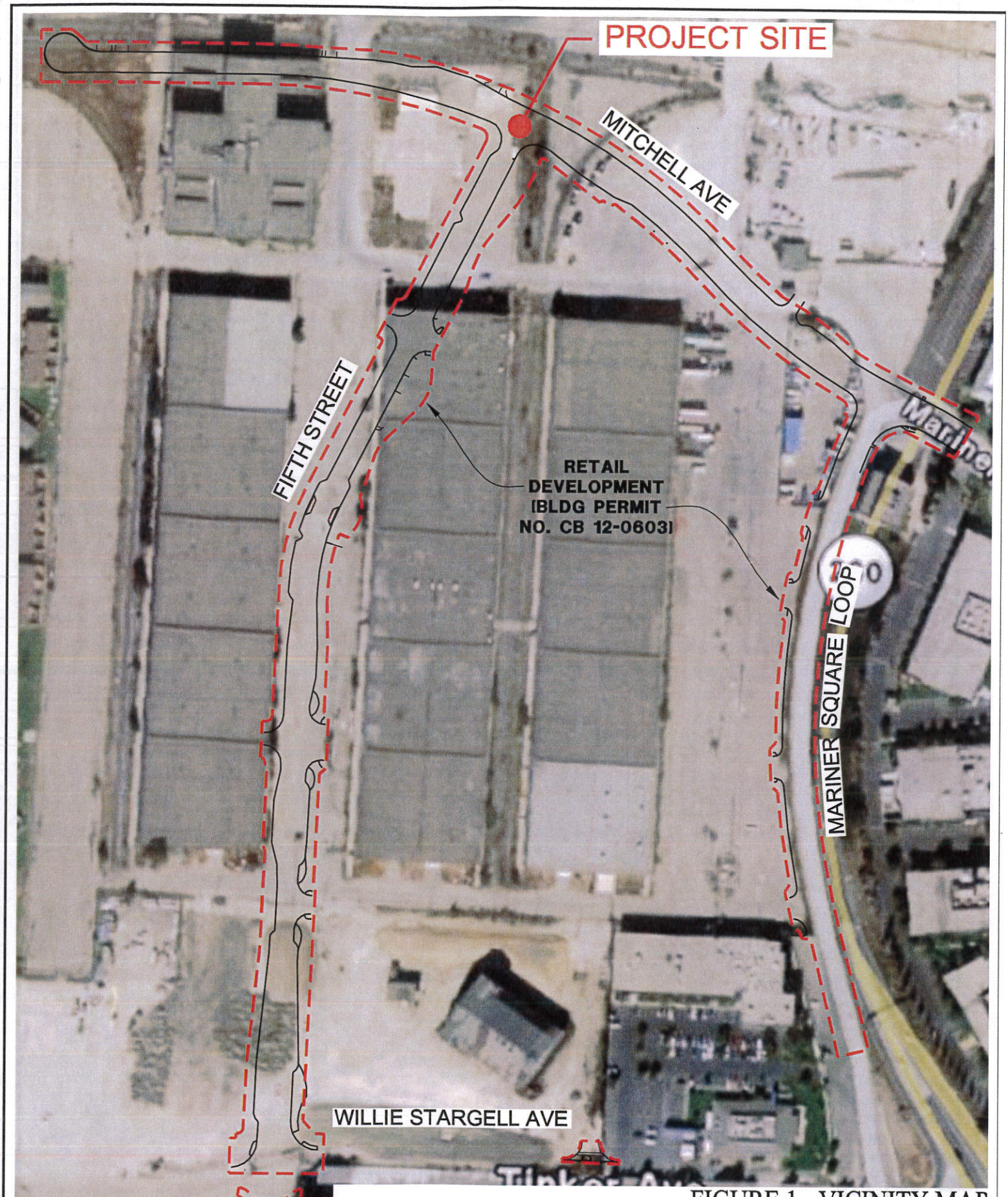

FIGURE 1 - VICINITY MAP
ALAMEDA LANDING BACKBONE INFRASTRUCTURE
CITY OF ALAMEDA

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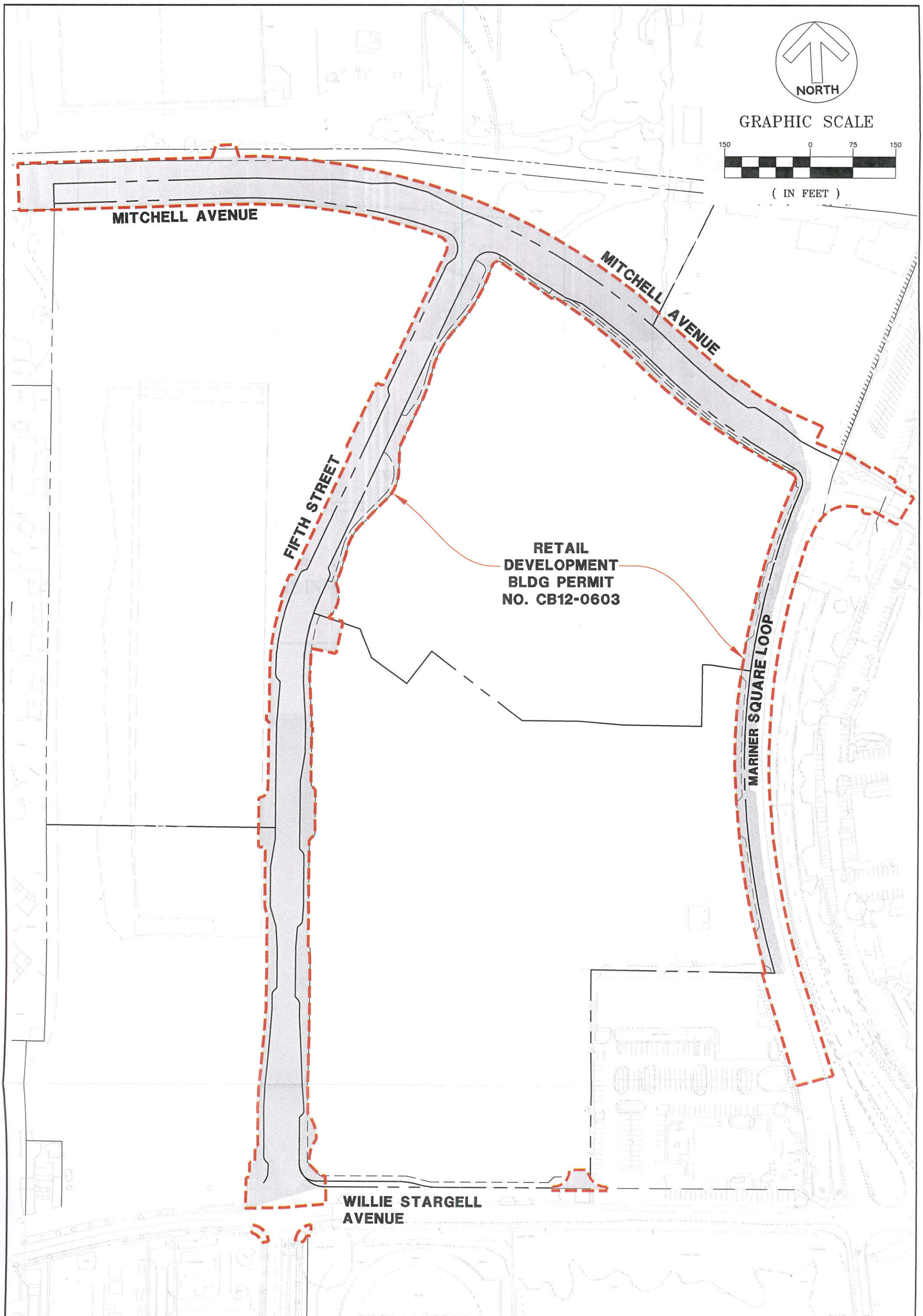

FIGURE 2 - EXISTING IMPERVIOUS/PERVIOUS PLAN
ALAMEDA LANDING BACKBONE INFRASTRUCTURE
CITY OF ALAMEDA

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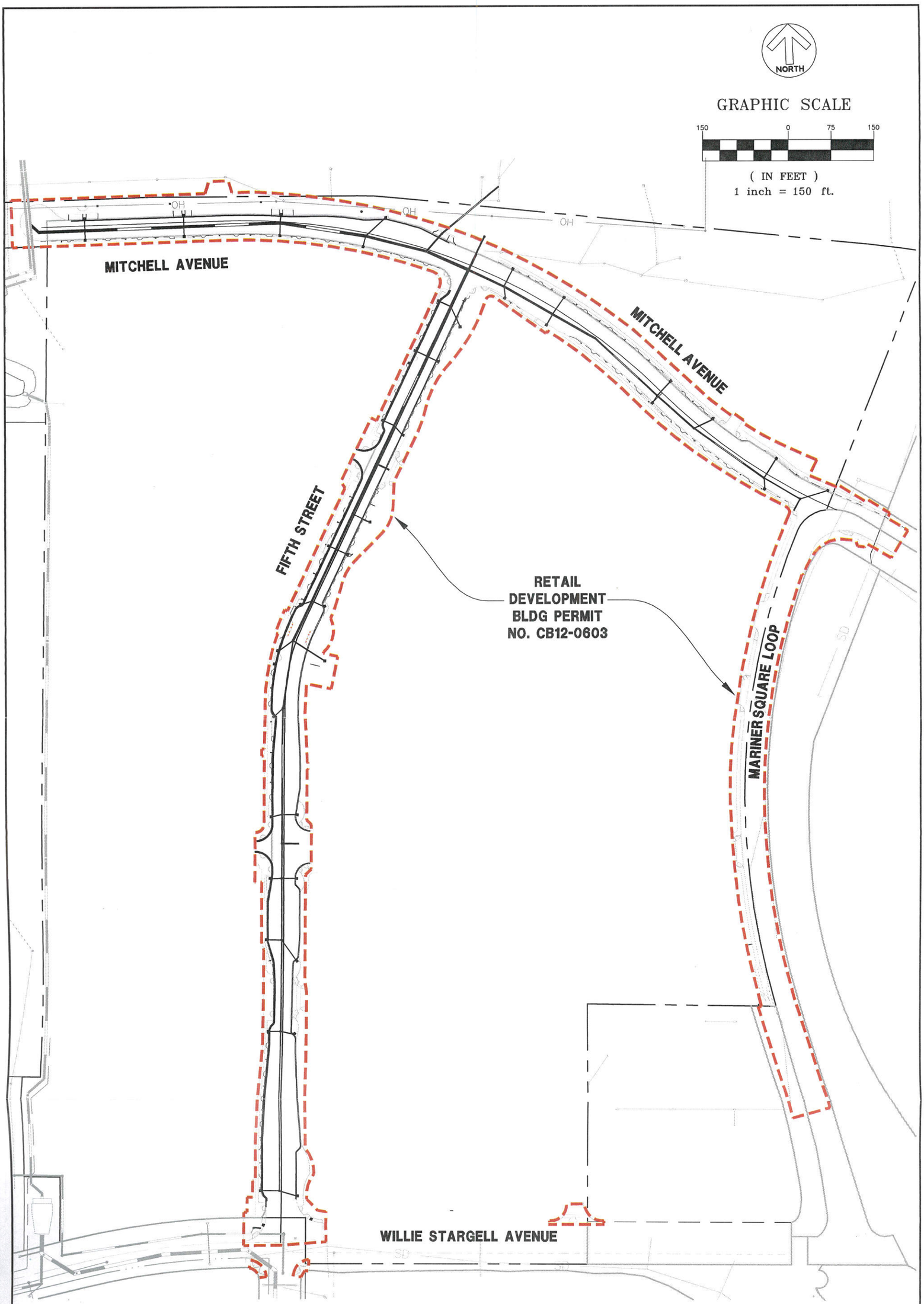

FIGURE 3 PROPOSED CONDITIONS
ALAMEDA LANDING BACKBONE INFRASTRUCTURE
CITY OF ALAMEDA

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LEGEND:

- LIMIT OF WORK
- STORMDRAIN PIPE
- EXISTING STORMDRAIN PIPE

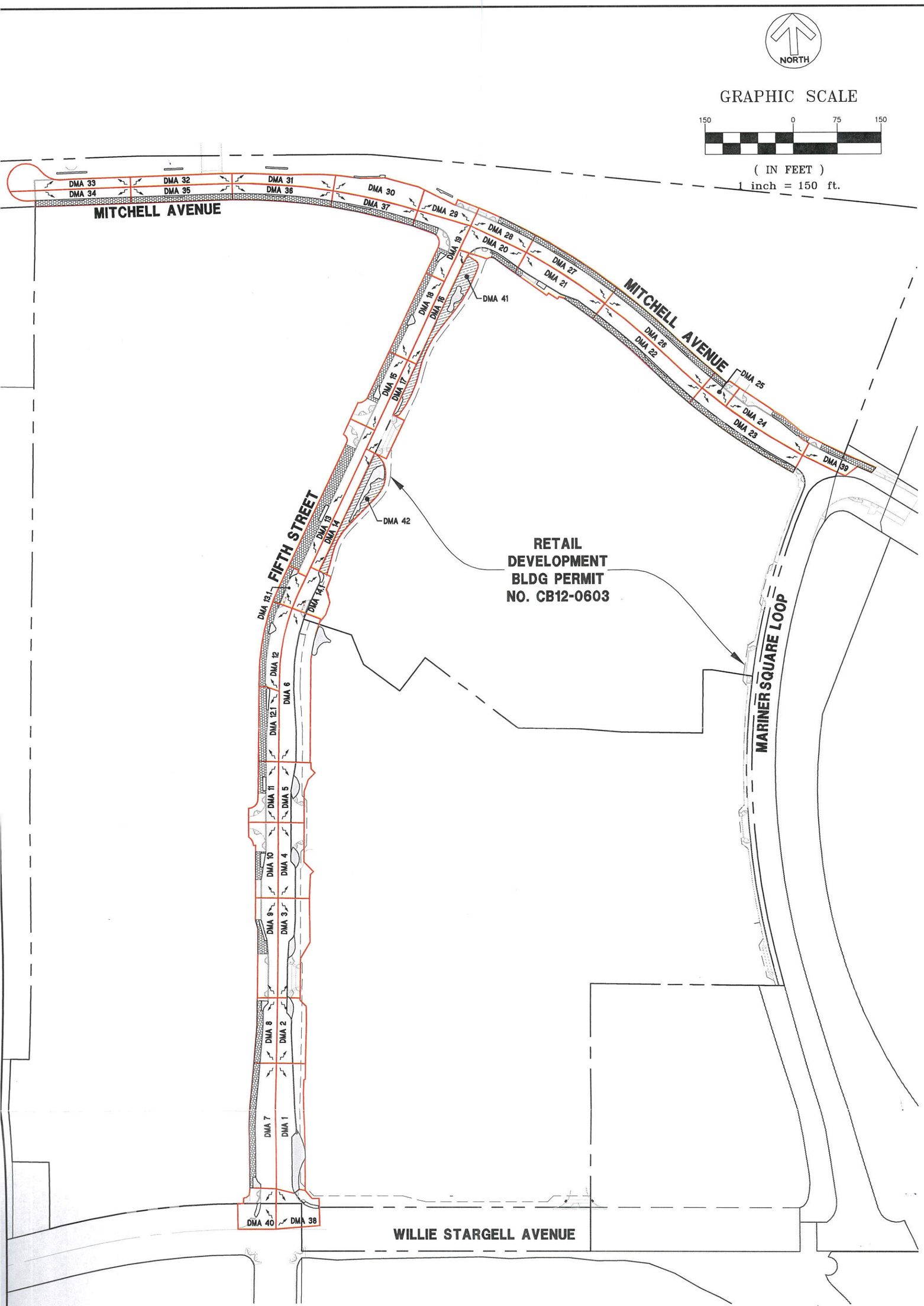

FIGURE 4A - STORMWATER TREATMENT EXHIBIT
ALAMEDA LANDING
CITY OF ALAMEDA

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LEGEND:

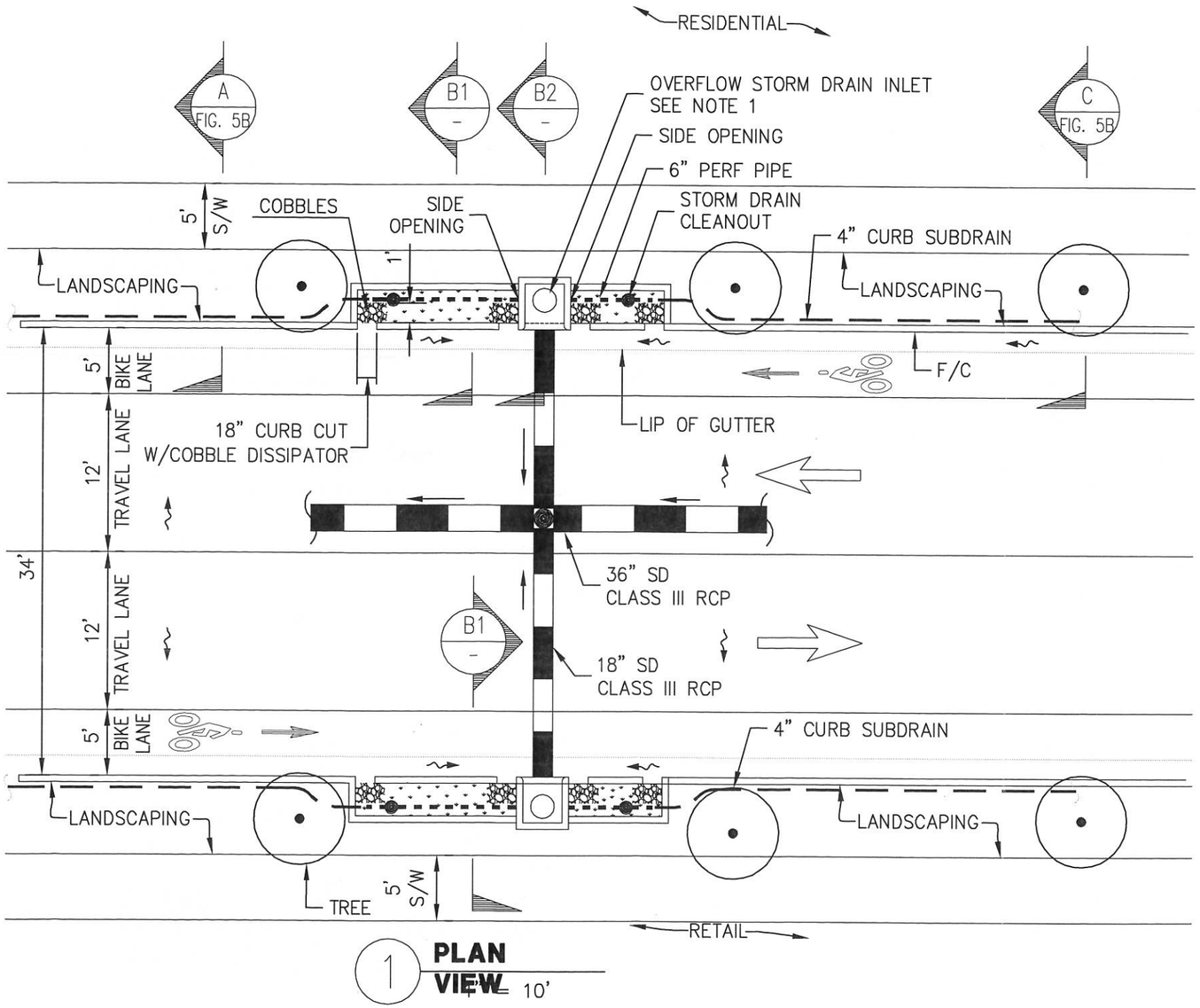
- DRAINAGE MANAGEMENT AREAS (DMA) SEE TABLE ON FIGURE 4B
- INTEGRATED MANAGEMENT PRACTICES (IMP) - BIORETENTION AREAS
- SIDEWALK DRAINING TO LANDSCAPE (SIZING FACTOR = 0.1)
- SELF-TREATING (LANDSCAPE DRAINS DIRECTLY TO BIORETENTION AREAS)

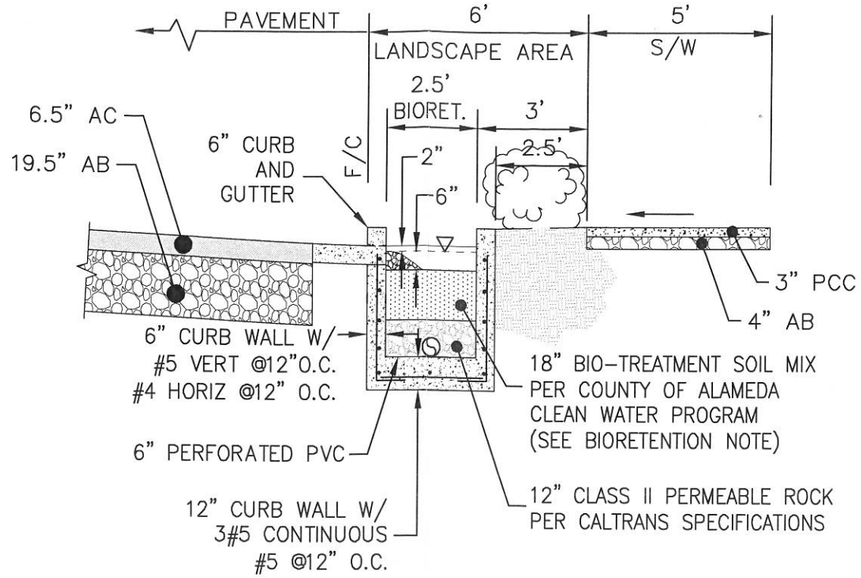
DMA #	TOTAL (SF)	PERVIOUS (SF)	IMPERVIOUS (SF)	BIO-RETENTION (SF) PROVIDED	Total C*A (SF)	C composite	.25-.5	0.5-.75	.75-1	Unit Basin Storage Volume (Table 5-2)	Project Mean Annual Precip. (inches)	I (inch)	Duration, T (hr)	Minimum Bioretention Area	Total V inflow (CF)	Volume treated (CF)	Stored V (CF)	Required depth
1	11045	1663	9382	1663	6733.7	0.61	0.41	0.41	0.40	0.41	0.42	0.70	3.48	200.33	390.91	290.75	100.16	0.50
2	5578	305	5273	305	3721.6	0.67	0.45	0.45	0.44	0.45	0.46	0.69	3.47	110.60	215.14	159.84	55.30	0.50
3	8405	295	8110	295	5706.5	0.68	0.46	0.45	0.45	0.45	0.47	0.69	3.47	169.56	329.63	244.86	84.77	0.50
4	6768	355	6413	355	4524.6	0.67	0.45	0.45	0.44	0.45	0.46	0.69	3.47	134.46	261.54	194.31	67.23	0.50
5	5060	387	4673	387	3309.8	0.65	0.44	0.44	0.43	0.44	0.45	0.69	3.47	98.39	191.51	142.32	49.19	0.50
6	13830	0	13830	680	9681.0	0.70	0.48	0.47	0.47	0.47	0.48	0.69	3.46	287.56	558.48	414.71	143.76	0.50
7	9729	2399	7330	178	5370.9	0.55	0.38	0.37	0.37	0.37	0.39	0.70	3.50	159.94	313.38	233.31	80.07	0.50
8	4081	1293	2788	116	2080.9	0.51	0.35	0.35	0.34	0.35	0.36	0.70	3.52	62.05	121.96	90.91	31.04	0.50
9	6205	814	5391	149	3855.1	0.62	0.42	0.42	0.41	0.42	0.43	0.70	3.48	114.67	223.60	166.27	57.33	0.50
10	6171	647	5524	142	3931.5	0.64	0.43	0.43	0.42	0.43	0.44	0.70	3.48	116.90	227.76	169.31	58.45	0.50
11	4125	734	3391	130	2447.1	0.59	0.40	0.40	0.39	0.40	0.41	0.70	3.49	72.83	142.25	105.84	36.41	0.50
12.1	4440	1953	2487	156	1936.2	0.44	0.30	0.30	0.29	0.30	0.31	0.70	3.52	57.76	113.60	84.72	28.88	0.50
12	5139	1504	3635	151	2694.9	0.52	0.36	0.36	0.35	0.36	0.37	0.70	3.51	80.32	157.69	117.49	40.19	0.50
13	9986	4333	5653	164	4390.4	0.44	0.30	0.30	0.29	0.30	0.31	0.70	3.52	130.97	257.60	192.11	65.49	0.50
13.1	2212	800	1412	105	1068.4	0.48	0.33	0.33	0.32	0.33	0.34	0.70	3.52	31.87	62.69	46.75	15.94	0.50
14	3500	0	3500	982	2450.0	0.70	0.48	0.47	0.47	0.47	0.48	0.69	3.46	72.77	141.34	104.95	36.38	0.50
14.1	3820	101	3719	85	2613.4	0.68	0.47	0.46	0.46	0.46	0.47	0.69	3.46	77.65	150.91	112.09	38.82	0.50
15	5082	1107	3975	146	2893.2	0.57	0.39	0.38	0.38	0.38	0.40	0.70	3.50	86.12	168.54	125.41	43.13	0.50
16	3808	458	3350	458	2390.8	0.63	0.43	0.42	0.42	0.42	0.44	0.70	3.48	71.19	138.60	103.17	35.43	0.50
17	4730	0	4730	150	3311.0	0.70	0.48	0.47	0.47	0.47	0.48	0.69	3.46	98.35	191.00	141.84	49.17	0.50
18	5261	1679	3582	150	2675.3	0.51	0.35	0.35	0.34	0.35	0.36	0.70	3.52	79.77	156.82	116.90	39.91	0.50
19	5380	1057	4323	96	3131.8	0.58	0.40	0.39	0.39	0.39	0.41	0.70	3.49	93.18	182.23	135.55	46.68	0.50
20	4129	484	3645	80	2599.9	0.63	0.43	0.42	0.42	0.42	0.44	0.70	3.48	77.32	150.70	112.04	38.66	0.50
21	6167	812	5355	127	3829.7	0.62	0.42	0.42	0.41	0.42	0.43	0.70	3.48	113.91	222.13	165.17	56.95	0.50
22	7008	1784	5224	115	3835.2	0.55	0.37	0.37	0.36	0.37	0.38	0.70	3.50	114.23	223.88	166.70	57.18	0.50
23	7173	2235	4938	115	3680.1	0.51	0.35	0.35	0.34	0.35	0.36	0.70	3.52	109.72	215.60	160.70	54.90	0.50
24	5967	751	5216	120	3726.3	0.62	0.42	0.42	0.41	0.42	0.43	0.70	3.48	110.83	216.07	160.66	55.41	0.50
25	1778	198	1580	34	1125.8	0.63	0.43	0.43	0.42	0.43	0.44	0.70	3.48	33.48	65.24	48.50	16.74	0.50
26	7022	1792	5230	117	3840.2	0.55	0.37	0.37	0.36	0.37	0.38	0.70	3.50	114.38	224.18	166.93	57.26	0.50
27	5583	1743	3840	88	2862.3	0.51	0.35	0.35	0.34	0.35	0.36	0.70	3.52	85.34	167.70	125.00	42.70	0.50
28	3605	631	2974	75	2144.9	0.59	0.40	0.40	0.39	0.40	0.41	0.70	3.49	63.83	124.67	92.75	31.92	0.50
29	3238	0	3238	70	2266.6	0.70	0.48	0.47	0.47	0.47	0.48	0.69	3.46	67.33	130.76	97.10	33.66	0.50
30	5327	0	5327	130	3728.9	0.70	0.48	0.47	0.47	0.47	0.48	0.69	3.46	110.76	215.11	159.74	55.37	0.50
31	3548	0	3548	95	2483.6	0.70	0.48	0.47	0.47	0.47	0.48	0.69	3.46	73.77	143.27	106.39	36.88	0.50
32	3050	0	3050	95	2135.0	0.70	0.48	0.47	0.47	0.47	0.48	0.69	3.46	63.42	123.16	91.46	31.71	0.50
33	5180	0	5180	130	3626.0	0.70	0.48	0.47	0.47	0.47	0.48	0.69	3.46	107.70	209.18	155.33	53.85	0.50
34	4832	1327	3505	79	2586.2	0.54	0.36	0.36	0.35	0.36	0.38	0.70	3.51	77.05	151.16	112.59	38.57	0.50
35	4533	1473	3060	70	2289.3	0.51	0.34	0.34	0.33	0.34	0.36	0.70	3.52	68.27	134.24	100.09	34.16	0.50
36	4421	1331	3090	69	2296.1	0.52	0.35	0.35	0.34	0.35	0.36	0.70	3.51	68.44	134.43	100.18	34.25	0.50
37	4132	1504	2628	79	1990.0	0.48	0.33	0.33	0.32	0.33	0.34	0.70	3.52	59.36	116.76	87.07	29.69	0.50
38	4385	0	4385	115	3069.5	0.70	0.48	0.47	0.47	0.47	0.48	0.69	3.46	91.17	177.07	131.49	45.58	0.50
39	3285	1046	2239	64	1671.9	0.51	0.35	0.35	0.34	0.35	0.36	0.70	3.52	49.85	98.00	73.05	24.94	0.50
40	8442	4159	4283	124	3414.0	0.40	0.27	0.28	0.26	0.27	0.28	0.70	3.52	101.84	200.31	149.39	50.92	0.50
41	3980	3980	0	SELF - TREATING														
42	3464	3464	0	SELF - TREATING														

SAMPLE CALCULATION

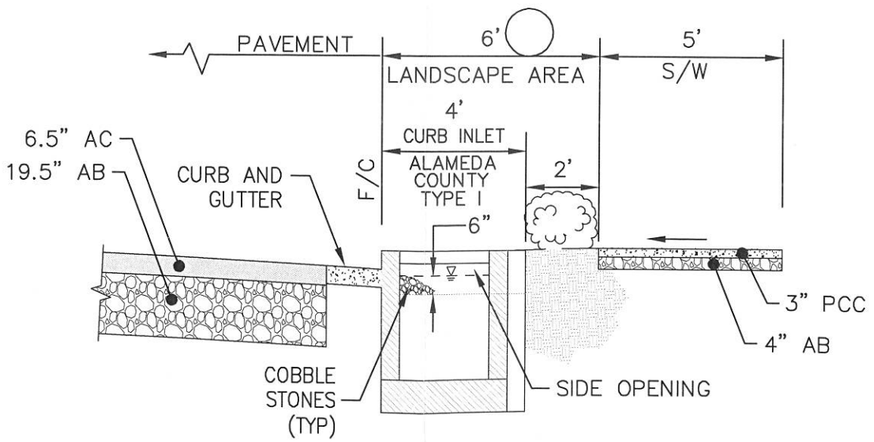
FIGURE 4B - STORMWATER TREATMENT TABLE
ALAMEDA LANDING BACKBONE INFRASTRUCTURE
CITY OF ALAMEDA

RkF





B1 **SECTION B1-B1**
1" = 4'



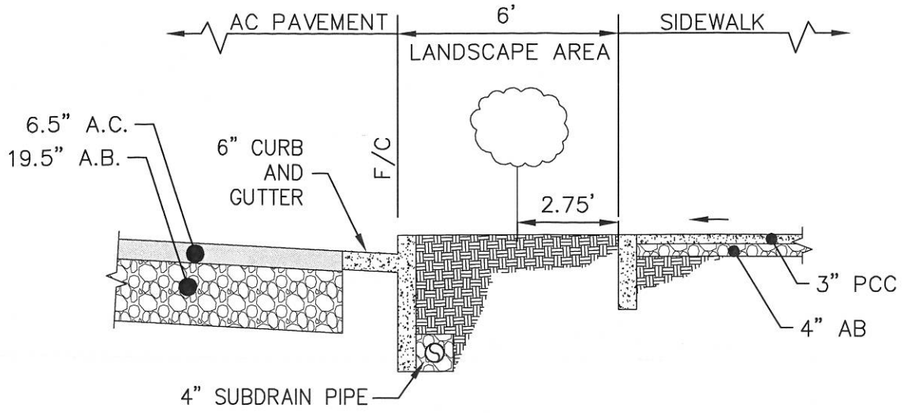
B2 **SECTION B2-B2**
1" = 4'

NOTE

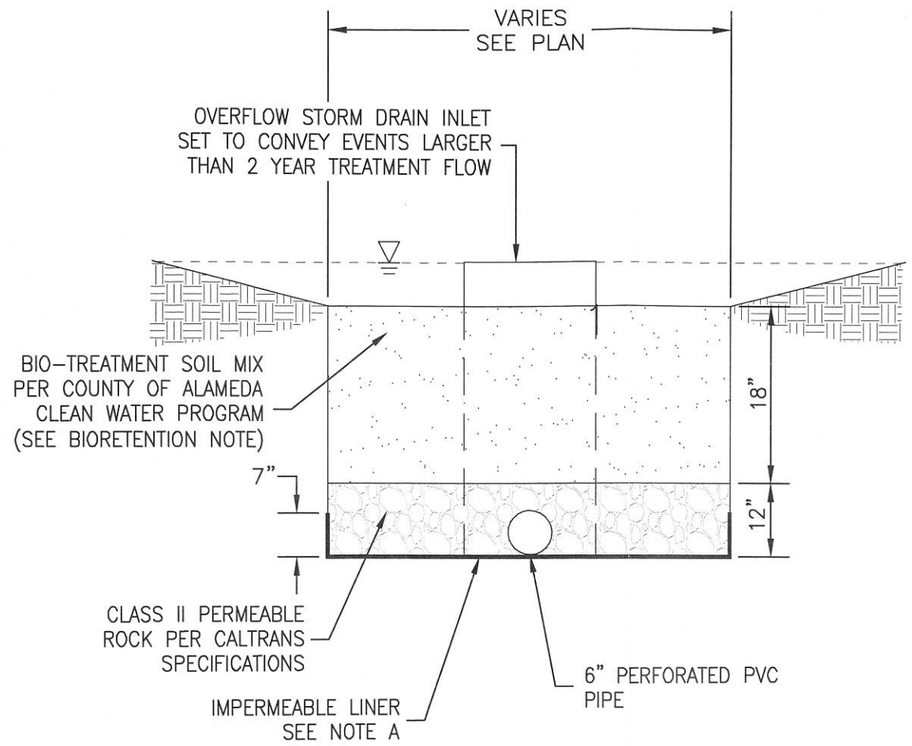
(1) LIP FROM GUTTER FLOWLINE TO CURB INLET THROAT. LOW FLOWS DRAIN THROUGH CURB CUT INTO BIORETENTION. HIGH FLOW IN BIORETENTION POND AND DRAIN INTO SIDE OPENING. CURB INLET PROVIDES EMERGENCY DRAIN IN CURB CUTS ARE BLOCKED.

FIGURE 5A - MITCHELL AVE. TYPICAL BIORETENTION DETAIL
ALAMEDA LANDING BACKBONE INFRASTRUCTURE
CITY OF ALAMEDA

BKF

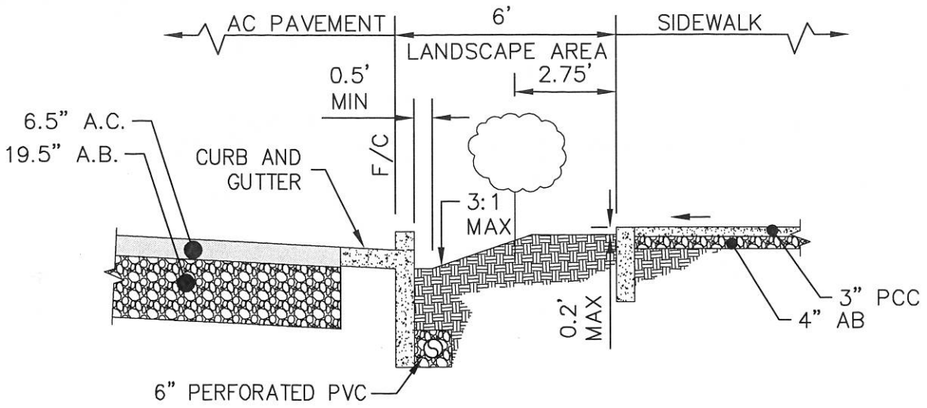


A **SECTION A-A**
1" = 4'



NOTE A:
IMPERMEABLE LINER TO BE USED WHEN BIORETENTION AREA IS NOT STRUCTURALLY SUPPORTED BY CURB WALL.

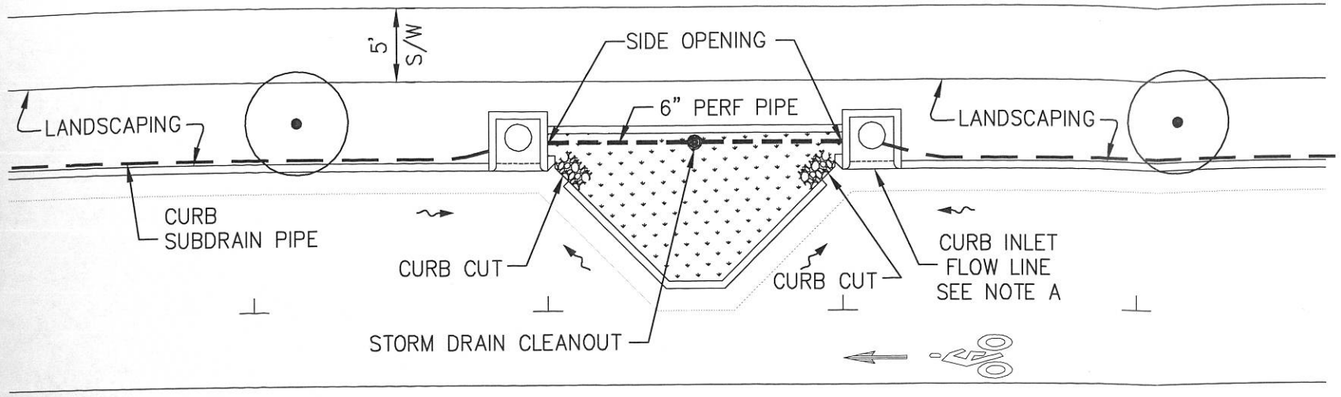
D **BIORETENTION SECTION**
NTS



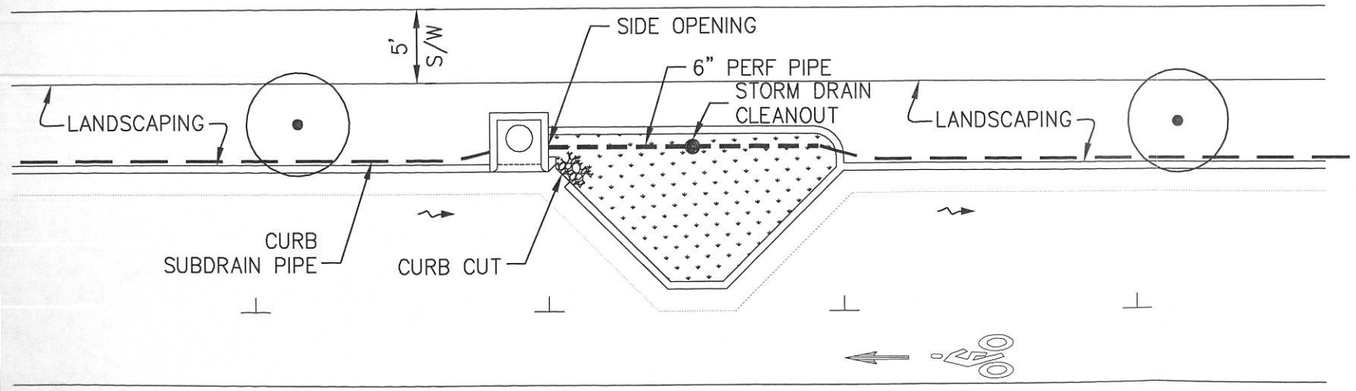
C **SECTION C-C**
1" = 4'

FIGURE 5B - MITCHELL AVE. TYPICAL BIORETENTION DETAIL
ALAMEDA LANDING BACKBONE INFRASTRUCTURE
CITY OF ALAMEDA

BkF



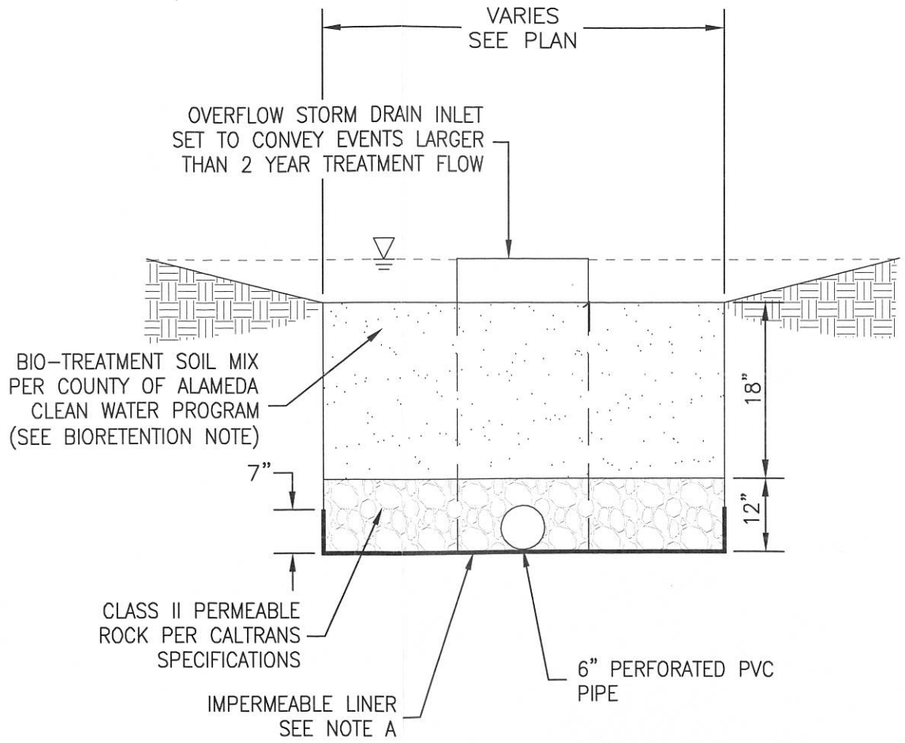
1 **PLAN VIEW**
1" = 10'



2 **PLAN VIEW**
1" = 10'

NOTE

(1) LIP FROM GUTTER FLOWLINE TO CURB INLET THROAT. LOW FLOWS DRAIN THROUGH CURB CUT INTO BIORETENTION. HIGH FLOW IN BIORETENTION POND AND DRAIN INTO SIDE OPENING. CURB INLET PROVIDES EMERGENCY DRAIN IN CURB CUTS ARE BLOCKED.

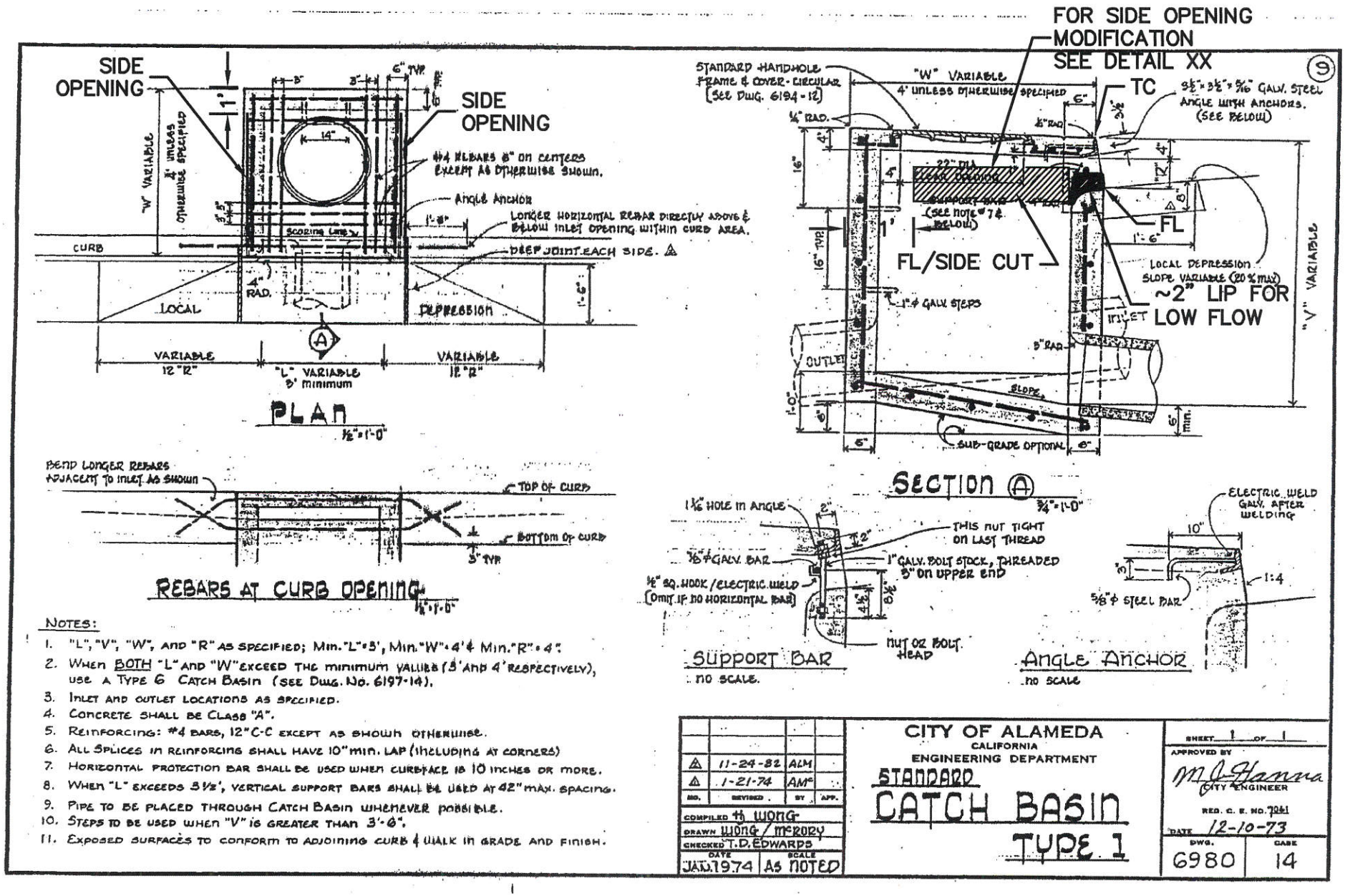


NOTE A:
IMPERMEABLE LINER TO BE USED WHEN BIORETENTION AREA IS NOT STRUCTURALLY SUPPORTED BY CURB WALL.

3 **BIORETENTION SECTION**
NTS

FIGURE 5C - FIFTH STREET BULB OUT BIORETENTION DETAIL
ALAMEDA LANDING
CITY OF ALAMEDA

BkF



NOTES:

1. "L", "V", "W", and "R" as specified; Min. "L" = 5', Min. "W" = 4' & Min. "R" = 4".
2. When BOTH "L" and "W" exceed the minimum values (5' and 4' respectively), use a Type G Catch Basin (See Dwg. No. 6197-14).
3. Inlet and outlet locations as specified.
4. Concrete shall be Class "A".
5. Reinforcing: #4 bars, 12" C-C except as shown otherwise.
6. All splices in reinforcing shall have 10" min. lap (including at corners)
7. Horizontal protection bar shall be used when curbface is 10 inches or more.
8. When "L" exceeds 5½', vertical support bars shall be used at 42" max. spacing.
9. Pipe to be placed through Catch Basin whenever possible.
10. Steps to be used when "V" is greater than 3'-6".
11. Exposed surfaces to conform to adjoining curb & walk in grade and finish.

NO.	REVISED	BY	APP.
⚠	11-24-82	ALM	
⚠	1-21-74	AM[illegible]	

COMPILED TH WONG
DRAWN WONG / McRORY
CHECKED T.D. EDWARDS
DATE JAN. 1974 SCALE AS NOTED

CITY OF ALAMEDA
CALIFORNIA
ENGINEERING DEPARTMENT
STANDARD
CATCH BASIN
TYPE 1

SHEET 1 OF 1
APPROVED BY M. O. Hanna CITY ENGINEER
REG. C. E. NO. 7261
DATE 12-10-73
DWG. 6980
CASE 14

FIGURE 6 - BIORETENTION STORMDRAIN CURB INLET
ALAMEDA LANDING BACKBONE INFRASTRUCTURE
CITY OF ALAMEDA

BkF

Appendix A

Treadwell&Rollo
A LANGAN COMPANY

13 August 2012
Project 731584101

Mr. Bill Kennedy
Catellus Alameda Landing Development, LLC
66 Franklin Street, Suite 200
Oakland, California 94607

Subject: Geotechnical Consultation
Alameda Landing Backbone Infrastructure
Alameda, California

Dear Mr. Kennedy:

This letter presents updated recommendations for the design and construction of the proposed backbone infrastructure (Backbone) improvements at the Alameda Landing Redevelopment project site. We understand that the Backbone improvements consist of extending Mitchell Avenue to the east, 5th Street to the north through the site, and re-constructing and widening Mariners Square Loop. The approximate locations of the proposed Backbone improvements are shown on Figure 1. We recently completed a geotechnical investigation of Mariners Square Loop, and presented the results of our investigation, conclusions and recommendations in our report titled *Geotechnical Evaluation Mariner Square Loop Improvements, Alameda Landing, Alameda, California,* dated 5 July 2012. In addition we have recently completed supplemental subsurface investigations for the planned retail center and residential developments. The approximate locations of the available borings and Cone Penetration Tests (CPTs) performed at the site are shown on Figure 2.

Preliminary recommendations were presented in a report prepared by Treadwell & Rollo Inc. titled *Preliminary Geotechnical Investigation Report Alameda Landing, Alameda California*, dated 21 June 2007. This letter presents updated recommendations for the Backbone improvements considering the results of the recently completed additional field and laboratory testing completed as part of the more recent geotechnical investigations at the site.

1.0 SUBSURFACE CONDITIONS

Available subsurface data indicate the site is blanketed by 4.5 to 23 feet of fill. The fill generally consists of loose to medium dense clayey sand and sand with varying amounts of gravel, and expansive very soft to soft clay and silt. The fill is underlain by about 15 to over 90 feet of weak, compressible Bay Mud. The upper several feet of Bay Mud is generally medium-stiff to stiff, presumably from past desiccation. Layers of loose to medium dense sand have been encountered within the Bay Mud deposit. The approximate thickness of the Bay Mud across the site is presented on Figure 2. The Bay Mud is underlain by Older Marine deposits generally consisting of medium dense to very dense sand with varying amounts of silt and clay, and stiff to very stiff clay interbedded with thin discontinuous silty sand layers to the maximum depth explored [156.0 feet below the existing ground surface (bgs), Elevation -153 feet].

The groundwater level was previously measured in the borings between 2.5 and 12.5 feet bgs, and pore pressure dissipation tests performed indicate that the phreatic surface at the time of the tests ranged from approximately 5 to 11.5 feet bgs. These depths correspond to elevations ranging from about 3.5 and -3.0 feet. Groundwater was encountered in the borings during our supplemental investigations at depths ranging from of 4.5 to 4.75 feet bgs (Elevations 0.5 to -1.2 Feet). Groundwater levels are expected to fluctuate seasonally and with the tides in the nearby channel.

2.0 CONCLUSIONS

The primary geotechnical issues that should be addressed during design are: 1) settlement behavior of new roadways and utilities as the Bay Mud consolidates under the weight of existing and new fill, 2) variable thickness of the Bay Mud, 3) seismic hazards, including the potential for liquefaction-induced settlement, 4) the presence of existing pile foundations, 5) variability and strength of the soil subgrade, and 6) the impact of Bay Mud at shallow depths below the ground surface on site grading and installation of foundations and utilities. Our updated conclusions and recommendations for design and construction of the proposed improvements are presented in the following sections.

2.1 Settlement Considerations

The results of our studies indicate that the primary consolidation of the Bay Mud layer due to the existing fill at the site is essentially complete. We estimate that the ground surface at the site left in its current condition over the next 50 years could settle from less than ½ inch where the Bay Mud layer is 30 feet thick to approximately four inches where the Bay Mud layer is 90 feet thick. This settlement is primarily due to the long term secondary compression of the Bay Mud.

Constructing new structures and/or placement of new fill at the site will begin a new cycle of consolidation of the Bay Mud and resulting ground surface settlement. The amount and rate of consolidation settlement depends upon: 1) the weight of any new fill and/or structural loads, 2) the thickness of the existing fill, 3) the thickness of the Bay Mud deposit (including the dredged Bay Mud fill), 4) the degree to which desiccation has overconsolidated the upper portion of the Bay Mud deposit, and 5) the presence of sand layers within the Bay Mud deposit. These factors vary significantly across the site making it difficult to generalize the amount of total and differential settlement expected beneath improvements. We have estimated settlements for certain conditions and the results are discussed in the following sections.

2.1.1 Settlement from New Fill

New fill placed at the project site will cause additional settlement due to compression of the existing fill above the Bay Mud and consolidation of the Bay Mud layer. Settlement of the existing fill should occur soon after placement of new fill and the magnitude of settlement is generally much less than the settlement due to consolidation of the Bay Mud. Therefore, for the purpose of this discussion, we have ignored the contribution of fill compression to the total settlement.

We have estimated consolidation settlements at the site considering various thicknesses of new fill and existing Bay Mud thicknesses. The results of our settlement analyses are shown in Figures 3 through 6. As shown in these figures the estimated rate and magnitude of settlement vary significantly. Differential settlements due to the new fill can be estimated by using the estimated settlements in Figures 3 through 6 and the Bay mud thicknesses shown on Figure 2.

Our analyses consider the generalized conditions beneath the site, however because of the complexity of the subsurface conditions, and because the data is from widely spaced borings and CPTs, the curves should be considered as approximate. The magnitude of the settlement estimates, however, provides a qualitative indication that significant ground settlement will have to be accommodated during design.

2.1.2 Seismic Hazards

Strong shaking during an earthquake can result in ground failures such as those associated with soil liquefaction,[1] lateral spreading,[2] and cyclic densification.[3] These hazards are discussed in the following paragraphs.

2.1.2.1 Cyclic Densification

Seismically-induced compaction or cyclic densification of non-saturated sand (sand above the groundwater table) caused by earthquake vibrations may result in ground surface settlement. The fill encountered above the groundwater table generally consists of mixtures of sand and clay and is relatively thin. We conclude the granular portion of the existing fill is sufficiently dense and is relatively thin, therefore, we conclude that the risk of cyclic densification is low and if it occurs its contribution to the overall seismically induced-settlement will be small.

2.1.2.2 Liquefaction-Induced Settlement

A report prepared by Tejima & Associates (1989) indicated that liquefaction occurred during the 1989 Loma Prieta Earthquake in localized portions of the Coast Guard Housing (CGH) complex to the west of the Alameda Redevelopment project. Liquefaction was also documented at the Alameda Naval Air Station (NAS). The evidence of liquefaction consisted of ground surface cracking and the formation of sand boils. Sand boils were observed in a landscaped area adjacent to an existing day care center and at the location of a backfilled boring near the day care center. Medium dense fine sand was encountered between depths of 7 and 10 feet in the boring where the sand boil was observed.

Our liquefaction analyses were performed in general accordance with the methodology presented in NCEER and Youd et al. (2001) using data obtained from our CPTs, and laboratory testing. We considered peak ground accelerations (PGA) of 0.36 times gravity (g[4]) in our liquefaction analyses. This PGA corresponds to the 2010 CBC Design Earthquake (DE) for an S_E site classification. Based on the results of our subsurface explorations and laboratory testing programs, we identified layers of loose to medium dense sand with varying amounts of silt that may be susceptible to liquefaction during a strong seismic event.

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1 Liquefaction is a transformation of soil from a solid to a liquefied state during which saturated soil temporarily loses strength resulting from the buildup of excess pore water pressure, especially during earthquake-induced cyclic loading. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits.

2 Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

3 Cyclic densification is a phenomenon in which non-saturated, cohesionless soil is densified by earthquake vibrations, causing ground-surface settlement.

4 g refers to the force of gravity. Gravity is equal to the acceleration of objects under its influence, which at the earth's surface is approximately 32.2 feet per second squared (ft/sec^2).

We used the method developed by Tokimatsu and Seed (1987) to estimate the amount of settlement that can occur based on the CPT results. We estimate liquefaction-induced settlements ranging from approximately 2/3-inch to 5-inches for DE level of ground shaking. In general, the majority of the potentially liquefiable layers are within the existing fill and Bay Mud, or just below the Bay Mud. Improvements and foundations bearing above these layers may lose support and settle. The liquefiable layers encountered below the Bay Mud appear to be relatively thin and discontinuous.

Hazards associated with liquefaction of soil layers relatively close to the ground surface include formation of sand boils, lurch cracking, and loss of bearing capacity for shallow foundations. The potential for these phenomena to occur depends on the thickness of the liquefiable soil layer relative to the thickness of the overlying non-liquefiable material. Ishihara (1985) developed an empirical relation that provides approximate boundaries for liquefaction-induced surface damage for soil profiles consisting of a liquefiable layer overlain by a liquefaction resistant, or protective, surface layer. Using the Ishihara method, we conclude the potential exists for liquefaction-induced ground surface damage to occur at the site when the peak ground acceleration during an earthquake exceeds 0.3g.

2.2 Subgrade Soil Characteristics

Previous Soil Resistance Tests (R-value) have been performed on numerous samples of the existing fill on and adjacent to the site. In tests were performed on samples of the existing fill materials collected within five feet of the existing ground surface. The R-values of the existing fill material tested range from 14 to 71. The higher R-values were obtained from samples of sandy soil near the existing Webster Tube and are not considered representative of the general near surface soil conditions at the site.

2.3 Construction Considerations

Excavation for utilities may be difficult because of the presence of granular fill, weak Bay Mud, and a high groundwater table. We judge excavation cuts will generally not stand vertically. Gently sloping, open cuts and/or shoring will be required. Because of the high groundwater table, dewatering may be required to facilitate utility installation.

In general, the material excavated from utility trenches will be wet and will require considerable drying before it can be reused as compacted fill. Aeration and discing will likely be necessary to dry the material. Trench spoils other than Bay Mud should be spread out on other parts of the site to allow them to dry. From past experience, we conclude it is generally impractical to reuse Bay Mud as trench backfill because of the significant effort required to reduce its moisture content so that compaction can be achieved. Therefore, we recommend that excavated Bay Mud be removed from the site or processed (dried) for use as fill in landscape areas. Moisture conditioned existing granular fill (not Bay Mud) or imported granular material should be used to backfill utility trenches.

Grading in areas where poorly compacted fill or Bay Mud is within a few feet of the existing ground surface is expected to be difficult. Based on our experience; repeated construction traffic on thin fill overlying soft clay generally results in excessive deflections ("pumping") and rutting of the ground surface. Recommended measures for mitigating poor quality subgrade materials, and/or wet weather construction are provided in subsequent sections of this letter.

3.0 RECOMMENDATIONS

3.1 Subgrade Preparation and Fill Placement

Prior to grading, demolition of the former improvements on the site, particularly underground utilities will be required. Former improvements such as pavements, underground utilities, old foundations, or other obstructions should be removed when encountered. An exception are existing pile foundations, which may be cut off at least five feet below: 1) finished grade (top of pavements, or slabs of grade); or 2) the bottom of excavations for new utilities, whichever is deeper. If an excavation extends below the groundwater during demolition activities, the portion of the resulting excavation below the groundwater level should be filled with ¾-inch crushed rock. If fine grained soil (clay or Bay Mud) is exposed at the base of the excavation, it may be necessary to place a geotextile fabric (Mirafi 500X or equivalent) over the base of the excavation prior to placement of the rock to prevent the rock from being pushed into the fine grained soil. Once a firm base is established above the groundwater level, compacted fill can be placed on the crushed rock. A layer of filter fabric, such as Mirafi 140N, should be placed between the crushed rock and compacted fill to reduce the potential fines infiltrating into the voids between the crushed rock particles. If sandy soil is encountered below the groundwater table it may be necessary to wrap the crushed rock in the filter fabric to prevent "piping" of the sandy soil into the voids in the rock, which could result in ground surface settlement.

Where existing utilities underlie areas to receive new improvements, they should be removed or abandoned in-place by filling them with grout. The procedure for in-place abandonment of utilities should be evaluated on a case-by-case basis, and will depend on the locations of existing utilities in relation to the proposed improvements. However, in general, we recommend that existing utilities within four feet of final grades be removed and the resulting excavations properly backfilled. Concrete and asphalt generated by demolition of the existing improvements may be reused as engineered fill provided they are broken into pieces smaller than four inches in maximum diameter with no more than 50 percent of the particles (by dry weight) being larger than two inches and are acceptable from an environmental standpoint. These materials should be mixed with sufficient fine-grained material to minimize the presence of voids.

Areas to receive fill should be stripped of vegetation and organic topsoil. The stripped soil may be stockpiled for later use as fill in landscaped areas; organic topsoil should not be used as compacted fill. The subgrade exposed at the bottoms of the proposed building pad excavations, as well as other portions of the site that will receive new fill or site improvements, should be scarified to a depth of at least eight inches, moisture-conditioned to above optimum moisture content, and compacted to at least 90 percent relative compaction[5]. For pavement areas the upper six inches of the pavement subgrade should be compacted to at least 95 percent relative compaction.

If areas of weak soil are encountered during subgrade preparation and/or grading is performed during wet weather, we recommend these areas be repaired/protected using one of the subgrade repair options presented in Section 3.2 of this report.

---

5 Relative compaction refers to the in-place dry density of soil expressed as a percentage of the maximum dry density of the same material, as determined by the ASTM D1557-07 laboratory compaction procedure.

In general excavated materials, with the exception of Bay Mud, can generally be reused as fill at the site. Any imported fill placed during grading should meet the following criteria:

- be non-hazardous
- be free of organic matter
- contain no rocks or lumps larger than three inches in greatest dimension
- have a low expansion potential (defined by a liquid limit of less than 40 and Plasticity Index lower than 12)
- be non-corrosive
- be approved by the geotechnical engineer.

All fill should be moisture-conditioned to above optimum moisture content, placed in horizontal lifts not exceeding eight inches in loose thickness, and compacted to at least 90 percent relative compaction, except fill placed within proposed pavement areas. In these areas the upper six inches of the soil subgrade and all aggregate base materials should be compacted to at least 95 percent relative compaction. Where used, sand containing less than 10 percent fines (particles passing the No. 200 sieve) should also be compacted to at least 95 percent relative compaction.

Samples of proposed import fill materials should be submitted to the geotechnical engineer for approval at least three business days prior to use at the site. The grading subcontractor should also provide analytical test results or other suitable environmental documentation to the project environmental engineer for approval prior to importing fill to the site.

3.2 Wet Weather Grading and Subgrade Stabilization

This section presents alternatives to mitigate wet and/or weak subgrade soil, or for grading during wet weather. They are:

1) Scarify and aerate the upper 12 to 24 inches of soil to reduce its moisture content so that it can be compacted to meet the compaction requirements. For this alternative, several weeks of dry, warm weather may be required, and up to 12 inches of soil may need to be removed to allow deeper aeration and then placed back and compacted.

2) Mix and compact the upper 12 to 18 inches of the weak soil with lime or high alkali cement whichever is most appropriate for the soil encountered. Typically a minimum of 5 percent (by dry weight) of lime or cement is required to stabilize weak soil. It should be noted that lime- or cement-admixtures will raise the pH of the soil, which could adversely impact plants; therefore, we recommend that the landscape architect be consulted prior to the selection of this subgrade repair alternative.

3) Over excavate the upper 12 to 18 inches of the weak soil, and backfill with a lean concrete backfill.

4) Over excavate the upper 12 to 24 inches of the weak soil, place a geotextile (Mirafi 500X or equivalent) over the sides and bottoms of the over-excavated areas, and place and compact granular fill, such as ½- to ¾-inch crushed rock or Class 2 aggregate base, over the geotextile fabric.

We recommend a non-vibratory roller be used to compact weak and/or wet subgrade soil. The most appropriate alternative will depend on the time of year that site grading commences and how much time is available to allow for drying of the soil as well as the size of the area to be treated.

3.3 Underground Utilities

We anticipate that excavations for utility trenches can be readily made with a backhoe; however, debris may be encountered in the fill. All trenches should conform to the current CAL-OSHA requirements.

The thickness and type of bedding material required for utility conduits will depend on the soil conditions at the utility trench bottom. As a minimum, bedding should have a thickness of at least D/4 (with D equal to the outside pipe diameter) below the bottom of the pipe, and a minimum thickness of four inches. Clean sand, rod mill, or pea gravel bedding material are acceptable for use as bedding materials in shallow trenches above the groundwater level.

In general, soil backfill for utility trenches should be compacted according to the recommendations presented in Section 3.1 except for the upper three feet of utility trench backfill (measured below the top of pavement) should be compacted to at least 95 percent relative compaction per City of Alameda requirements. Jetting and flooding of trench backfill should not be allowed. Special care should be taken when backfilling utility trenches in pavement areas. Poor compaction may cause excessive settlements, resulting in damage to the pavement section.

3.4 Concrete Flatwork

In areas to receive sidewalks or other flatwork, the subgrade should be scarified to a depth of at least 12 inches, moisture-conditioned to above optimum moisture content, and compacted to at least 90 percent relative compaction. Exterior concrete flatwork should be underlain by at least four inches of Class 2 aggregate base compacted to at least 90 percent relative compaction.

3.5 Flexible Pavement Design

The State of California flexible pavement design method was used to develop a pavement section for the roadway widening, where new pavement is planned. The near-surface fill generally consists of sand with varying amounts of silt, clay, and gravel, and sandy clay with varying amounts of silt and gravel. We used a resistance value of 14 for design which is the minimum R-value of the soil samples tested previous investigations. Our updated recommendations for new flexible pavements are presented in Table 1.

TABLE 1
Recommended New Flexible Pavement Sections for Subgrade R-Value of 14

Design TI	Asphalt Concrete (inches)	Class II Aggregate Base (R=78) (inches)	Total Thickness (inches)
7	11.0 (deep lift)	0	11.0
	4.0	14.0	18.0
8	11.5 (deep lift)	0	11.5
	5.0	15.0	20.0
9	13.5 (deep lift)	0	13.5
	5.5	18.0	23.5
10	14.5 (deep lift)	0	14.5
	6.5	19.5	26.0

All pavement materials (asphalt concrete, aggregate base, etc.) should conform to the current State of California (Caltrans) Standard Specifications.

3.6 Drainage and Landscaping

Positive surface drainage should be provided direct surface water away from foundations, and/or towards appropriate collection and disposal facilities. To reduce the potential for water ponding we recommend the ground surface be designed to slope with a surface gradient of at least two percent in unpaved (landscape, unimproved, etc.) areas and one percent in paved (sidewalks, roadways etc.) areas. These preliminary gradients should be checked once final grading plans and anticipated cut/fill thicknesses are known.

To reduce the potential for irrigation water infiltrating below concrete flatwork (sidewalks and patios) or entering the pavement sections (flexible and/or rigid), vertical curbs adjacent to landscaped areas should extend at least six inches below the bottom of the baserock. Where heavily watered areas (lawns and/or unlined storm water retention facilities, etc.) are located adjacent to paved areas, it may also be necessary to install a subdrain behind the curb or within the pavement to intercept excess water.

Drainage below pavements, exterior concrete, or around or below catch basins to collect subsurface or perched groundwater water are not anticipated. If catch basins are to be located below the groundwater additional weight may be required to resist hydrostatic uplift pressures.

4.0 LIMITATIONS

The conclusions and recommendations presented in this report apply to the site and construction conditions as we have described them, and are the result of engineering studies and our interpretations of the existing geotechnical conditions. Actual subsurface conditions may vary. Should conditions substantially differ from those anticipated, some modifications to our conclusions and recommendations may be necessary.

We trust that this letter provides the information you require at this time. If you have any questions, please call.

Sincerely yours,
TREADWELL & ROLLO, A LANGAN COMPANY

Haze M. Rodgers, GE
Senior Project Engineer

REGISTERED PROFESSIONAL ENGINEER
HAZE M. RODGERS
NO. 2818
Exp. 06/30/14
GEOTECHNICAL
STATE OF CALIFORNIA

Richard D. Rodgers, GE
Senior Principal

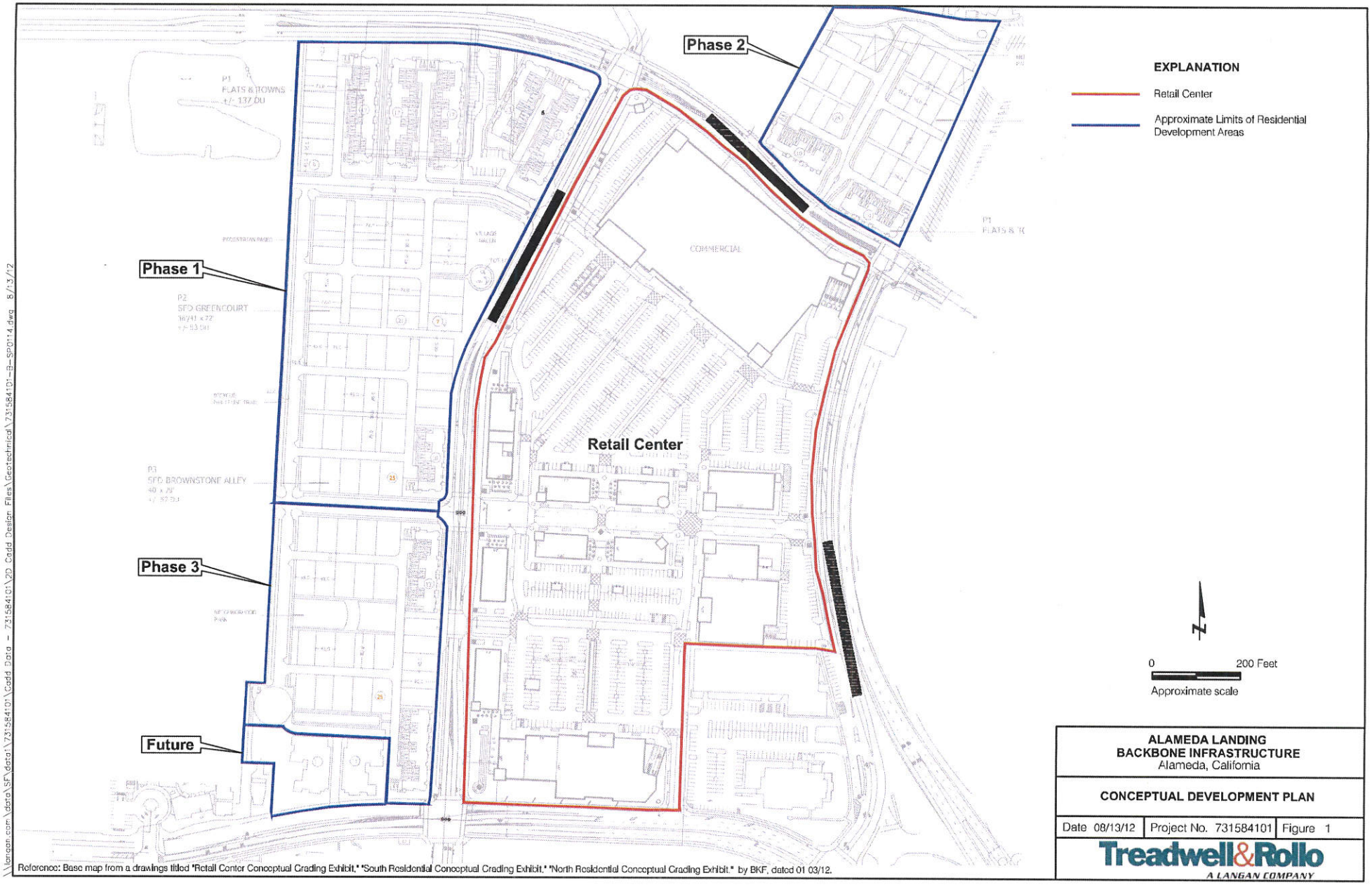
REGISTERED PROFESSIONAL ENGINEER
RICHARD D. RODGERS
NO. 732
EXP 12/31/13
GEOTECHNICAL
STATE OF CALIFORNIA

731584101.13_HMR_Geotechnical Consultation

Attachments:
Figure 1 – Conceptual Development Plan
Figure 2 –Bay Mud Thickness
Figure 3 – Estimated Consolidation Settlement vs. Time 1 foot New Fill
Figure 4 – Estimated Consolidation Settlement vs. Time 2 feet New Fill
Figure 5 – Estimated Consolidation Settlement vs. Time 3 feet New Fill
Figure 6 – Estimated Consolidation Settlement vs. Time 4 feet New Fill

Treadwell&Rollo
A LANGAN COMPANY

FIGURES



Reference: Base map from a drawings titled "Retail Center Conceptual Grading Exhibit," "South Residential Conceptual Grading Exhibit," "North Residential Conceptual Grading Exhibit." by BKF, dated 01 03/12.

ALAMEDA LANDING
BACKBONE INFRASTRUCTURE
Alameda, California

CONCEPTUAL DEVELOPMENT PLAN

Date 08/13/12	Project No. 731584101	Figure 1

Treadwell&Rollo
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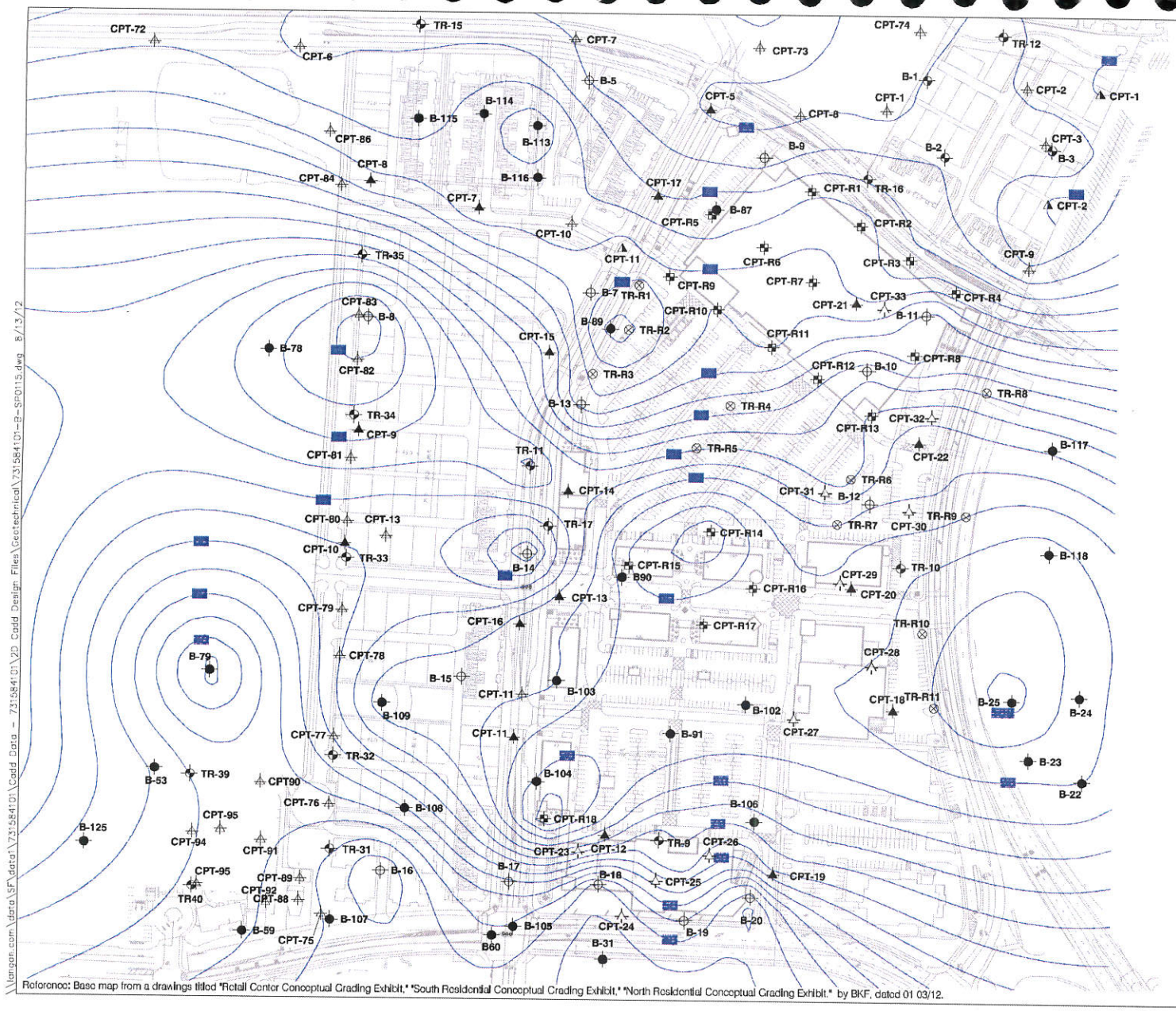

Reference: Base map from a drawings titled "Retail Center Conceptual Grading Exhibit," "South Residential Conceptual Grading Exhibit," "North Residential Conceptual Grading Exhibit," by BKF, dated 01 03/12.

EXPLANATION

- Thickness of Bay Mud Contour (feet)
- **CPT-R1** — Approximate location of cone penetration test for retail development by Treadwell & Rollo, February 2012
- **TR-R1** — Approximate location of boring (10 to 15 feet bgs) by Treadwell & Rollo, February 2012
- **B-1** — Approximate location of previous boring by others
- **TR-1** — Approximate location of boring by Treadwell & Rollo, Inc., March 2000, August 2001, and January to June 2004
- **B-10** — Approximate location of boring by Treadwell & Rollo, Inc., March 2007
- **CPT-1** — Approximate location of cone penetrometer test by Treadwell & Rollo, Inc., March 2000, August 2001, October 2003, and January through June 2004
- **CPT-20** — Approximate location of cone penetrometer test by Treadwell & Rollo, Inc., August 2007
- **CPT-23** — Approximate location of cone penetrometer test by Treadwell & Rollo, Inc., July 2008
- **CPT-1** — Approximate location of cone penetration test by Treadwell & Rollo, February 2012

N

0 200 Feet

Approximate scale

ALAMEDA LANDING
BACKBONE INFRASTRUCTURE
Alameda, California

BAY MUD THICKNESS

Date 08/13/12 | Project No. 731584101 | Figure 2

Treadwell&Rollo
A LANGAN COMPANY

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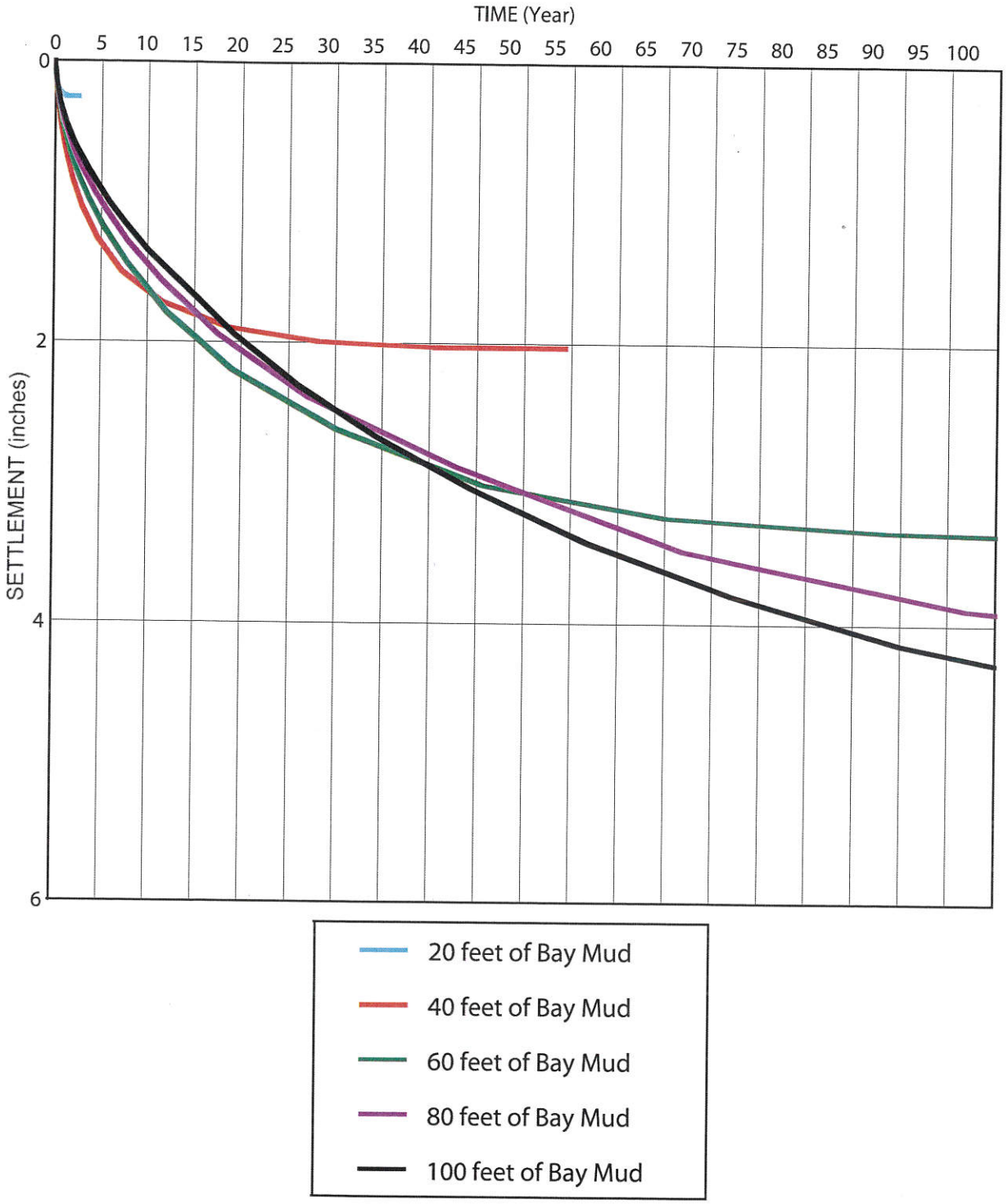

Notes:
1. Settlement curves are based on assumed existing fill thickness of ten feet. Where the existing fill thickness is less than ten feet, settlements will be somewhat larger. Where the existing fill thickness is more than ten feet, settlements will be somewhat smaller.
2. Settlement curves are based on a groundwater level three feet below existing grade.
3. Settlement curves based on average Bay Mud properties at the site. Actual settlement will likely vary from those predicted using the above curves.

ALAMEDA LANDING
BACKBONE INFRASTRUCTURE
Alameda, California

Treadwell&Rollo
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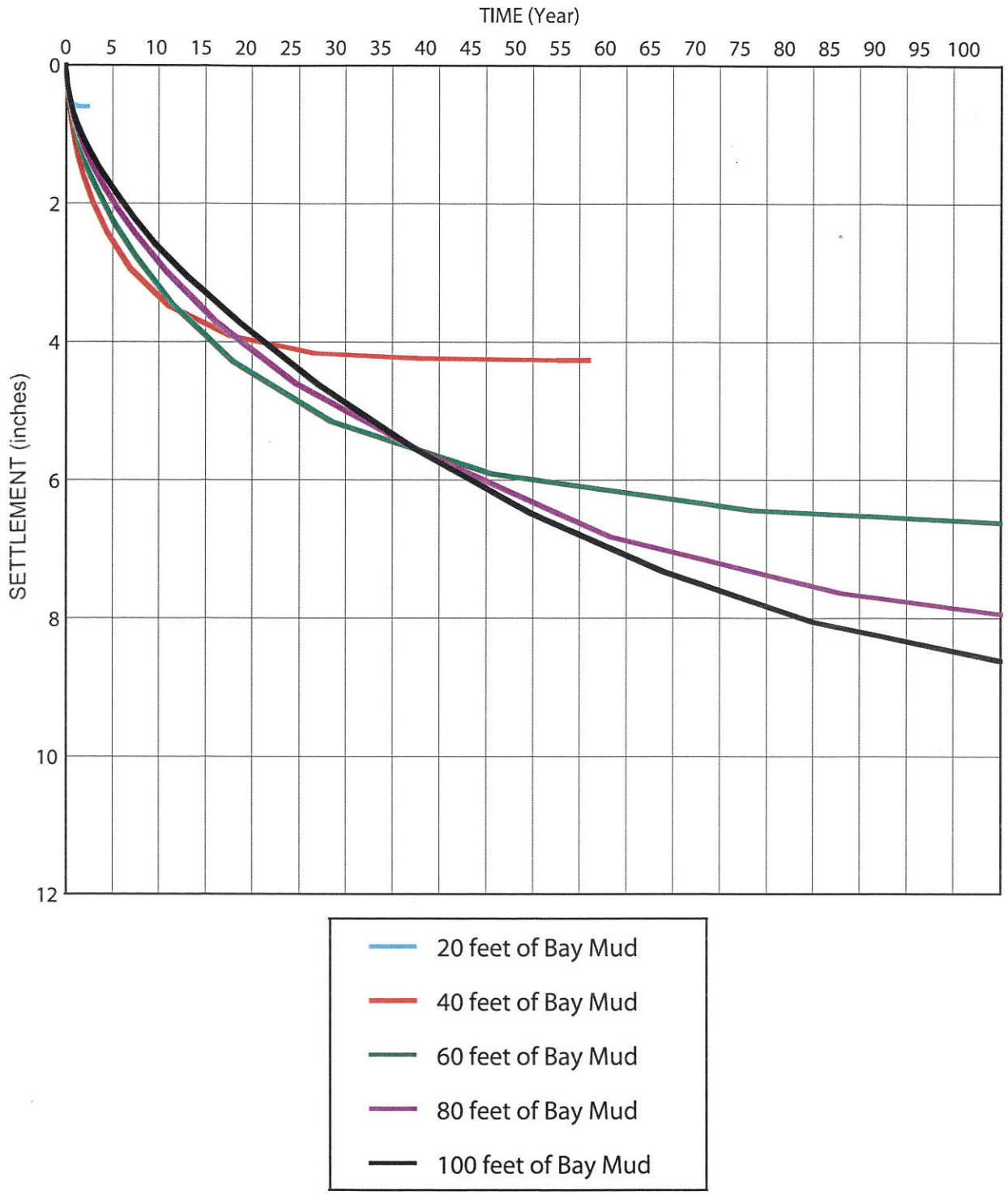
ESTIMATED CONSOLIDATION SETTLEMENT vs. TIME
1 FOOT NEW FILL

Date 08/13/12 | Project No. 731584101 | Figure 3



Notes:
1. Settlement curves are based on assumed existing fill thickness of ten feet. Where the existing fill thickness is less than ten feet, settlements will be somewhat larger. Where the existing fill thickness is more than ten feet, settlements will be somewhat smaller.
2. Settlement curves are based on a groundwater level three feet below existing grade.
3. Settlement curves based on average Bay Mud properties at the site. Actual settlement will likely vary from those predicted using the above curves.

ALAMEDA LANDING
BACKBONE INFRASTRUCTURE
Alameda, California

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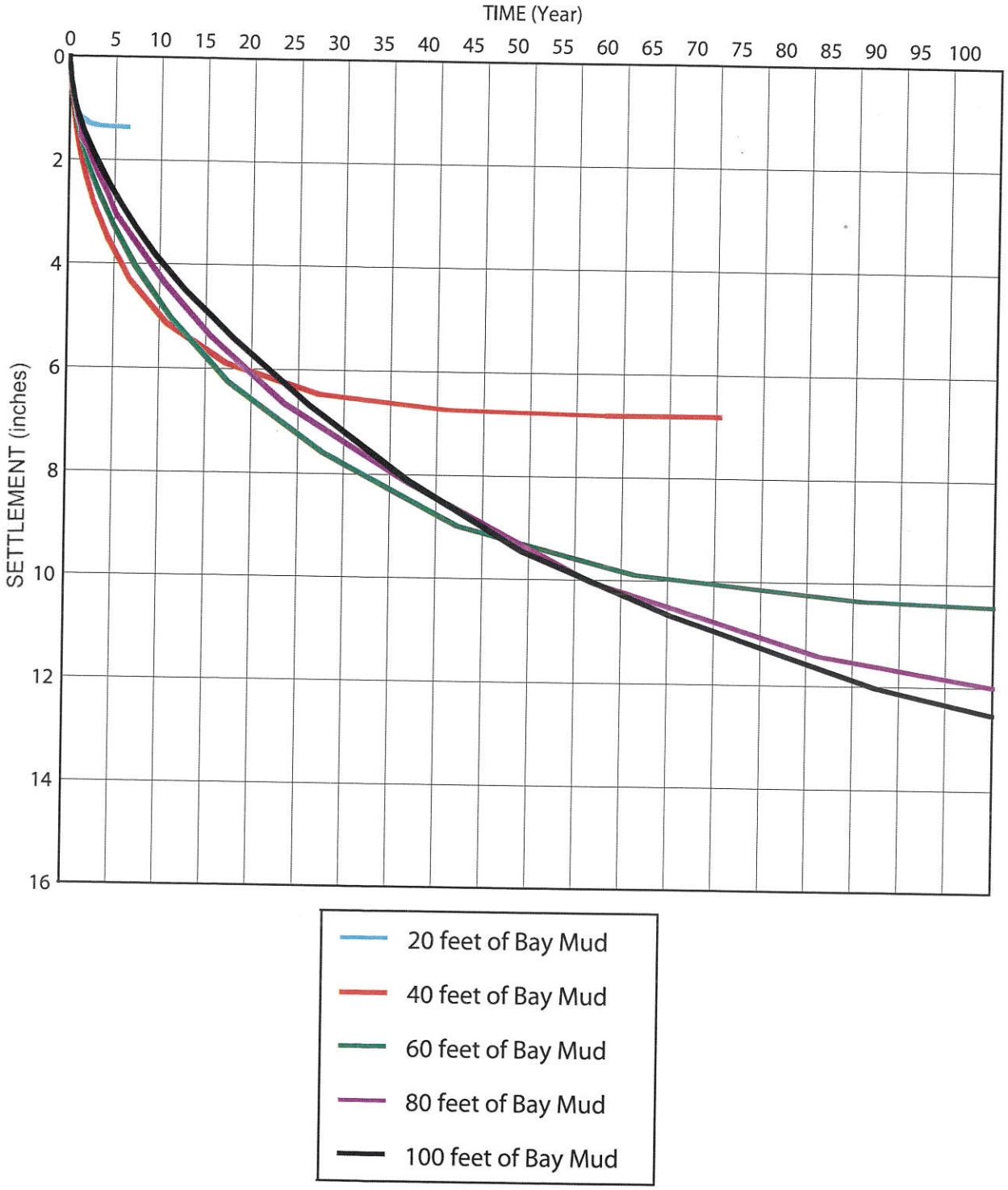
ESTIMATED CONSOLIDATION SETTLEMENT vs. TIME 2 FEET NEW FILL

Date 08/13/12 | Project No. 731584101 | Figure 4



Notes:
1. Settlement curves are based on assumed existing fill thickness of ten feet. Where the existing fill thickness is less than ten feet, settlements will be somewhat larger. Where the existing fill thickness is more than ten feet, settlements will be somewhat smaller.
2. Settlement curves are based on a groundwater level three feet below existing grade.
3. Settlement curves based on average Bay Mud properties at the site. Actual settlement will likely vary from those predicted using the above curves.

ALAMEDA LANDING
BACKBONE INFRASTRUCTURE
Alameda, California

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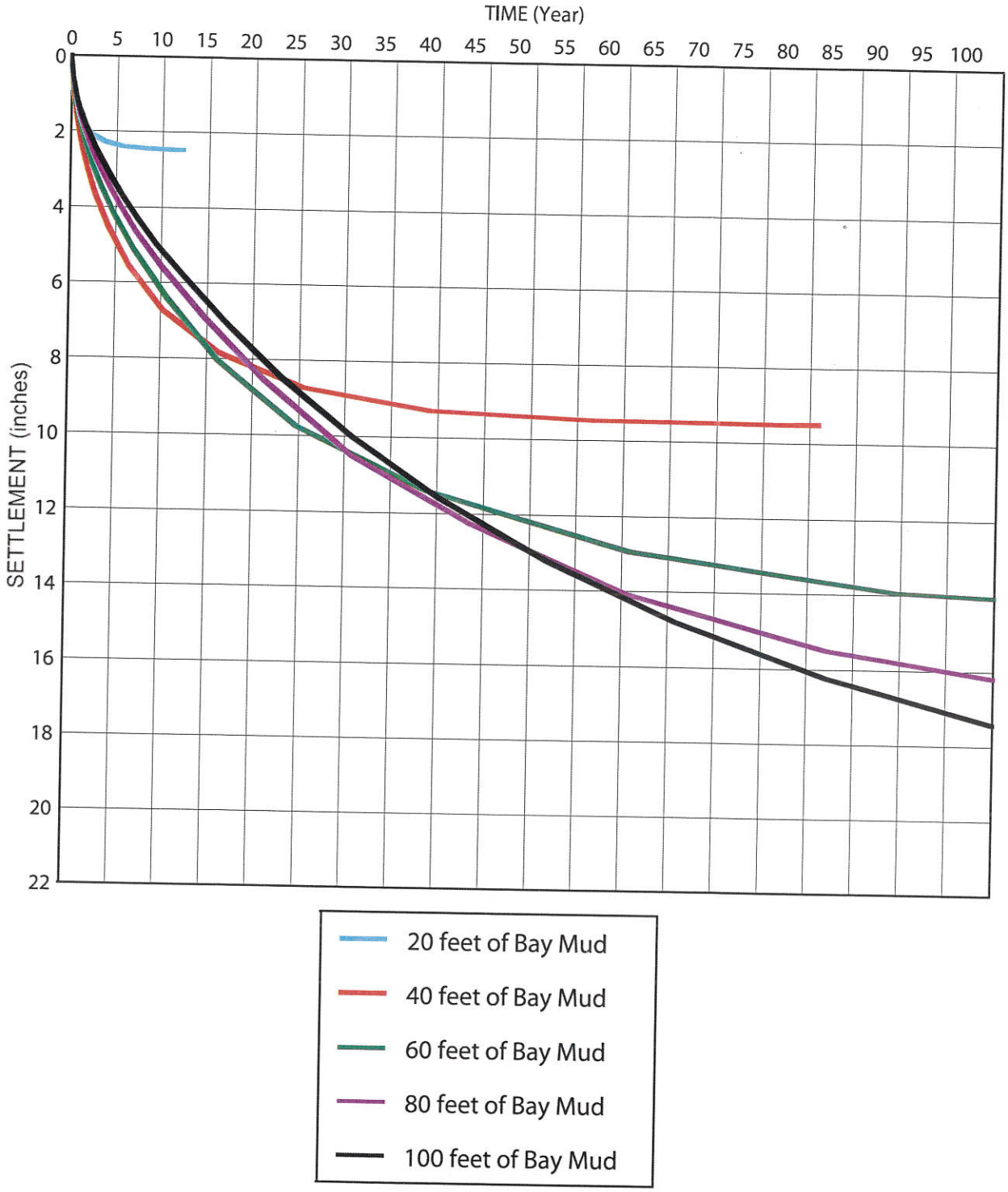
ESTIMATED CONSOLIDATION SETTLEMENT vs. TIME
3 FEET NEW FILL

Date 08/13/12 | Project No. 731584101 | Figure 5



Notes:
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2. Settlement curves are based on a groundwater level three feet below existing grade.
3. Settlement curves based on average Bay Mud properties at the site. Actual settlement will likely vary from those predicted using the above curves.

ALAMEDA LANDING
BACKBONE INFRASTRUCTURE
Alameda, California

Treadwell&Rollo
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ESTIMATED CONSOLIDATION SETTLEMENT vs. TIME
4 FEET NEW FILL

Date 08/13/12 | Project No. 731584101 | Figure 6

Appendix B

Stormwater Treatment Measure Operation and Maintenance

Inspection Report to the The City of Alameda, California

This report and attached Inspection and Maintenance Checklists document the inspection and maintenance conducted for the identified stormwater treatment measure(s) subject to the Maintenance Agreement between the City and the property owner during the annual reporting period indicated below.

I. Property Information:

Property Address or APN: _____

Property Owner: _____

II. Contact Information:

Name of person to contact regarding this report: _____

Phone number of contact person: _____ Email: _____

Address to which correspondence regarding this report should be directed:

_____

_____

III. Reporting Period:

This report, with the attached completed inspection checklists, documents the inspections and maintenance of the identified treatment measures during the time period from _____ to _____

IV. Stormwater Treatment Measure Information:

The following stormwater treatment measures (identified treatment measures) are located on the property identified above and are subject to the Maintenance Agreement:

Identifying Number of Treatment Measure	Type of Treatment Measure	Location of Treatment Measure on the Property
41	Bioretention Area	Roadside

V. Summary of Inspections and Maintenance:

Summarize the following information using the attached Inspection and Maintenance Checklists:

Identifying Number of Treatment Measure	Date of Inspection	Operation and Maintenance Activities Performed and Date(s) Conducted	Additional Comments

VI. Sediment Removal:

Total amount of accumulated sediment removed from the stormwater treatment measure(s) during the reporting period: _____cubic yards.

How was sediment disposed?

- ☐ landfill
- ☐ other location on-site as described in and allowed by the maintenance plan
- ☐ other, explain _____

VII. Inspector Information:

The inspections documented in the attached Inspection and Maintenance Checklists were conducted by the following inspector(s):

Inspector Name and Title	Inspector's Employer and Address

VIII. Certification:

I hereby certify, under penalty of perjury, that the information presented in this report and attachments is true and complete:

_____ _____

Signature of Property Owner or Other Responsible Party Date

_____

Type or Print Name

_____

Company Name

_____

Address

Phone number:_____ Email:_____

Appendix C

Bioretention Area Maintenance Plan for Alameda Landing Backbone Infrastructure

August 2012

Project Address and Cross Streets__

Assessor's Parcel No.: _____

Property Owner: _____ Phone No.:_____

Designated Contact: _____ Phone No.:_____

Mailing Address:_____

The property contains 46 bioretention areas, located as shown in the attached site plan[1].

I. Routine Maintenance Activities

The principal maintenance objective is to prevent sediment buildup and clogging, which reduces pollutant removal efficiency and may lead to bioretention area failure. Routine maintenance activities, and the frequency at which they will be conducted, are shown in Table 1.

Table 1
Routine Maintenance Activities for Bioretention Areas

No.	Maintenance Task	Frequency of Task
1	Remove obstructions, debris and trash from bioretention area and dispose of properly.	Quarterly with 1 inspection occurring prior to rainy season, or as needed after major storm events
2	Inspect bioretention area to ensure that it drains between storms and within five days after rainfall.	Annually during rainy season, or as needed after major storm events
3	Inspect inlets for channels, soil exposure or other evidence of erosion. Clear obstructions and remove sediment.	Quarterly, or as needed after major storm events
4	Remove and replace all dead and diseased vegetation.	Annually prior rainy season
5	Maintain vegetation and the irrigation system. Prune and weed to keep bioretention area neat and orderly in appearance.	Annually prior rainy season
6	Check that mulch is at appropriate depth (3 inches per soil specifications) and replenish as necessary before wet season begins.	Annually prior rainy season
7	Inspect bioretention area using the attached inspection checklist.	Quarterly with 1 inspection occurring prior to rainy season, or as needed after major storm events

II. Prohibitions

The use of pesticides and quick release fertilizers shall be minimized, and the principles of integrated pest management (IPM) followed:

1. Employ non-chemical controls (biological, physical and cultural controls) before using chemicals to treat a pest problem.
2. Prune plants properly and at the appropriate time of year.
3. Provide adequate irrigation for landscape plants. Do not over water.
4. Limit fertilizer use unless soil testing indicates a deficiency. Slow-release or organic fertilizer is preferable. Check with municipality for specific requirements.

[1] Attached site plan must match the site plan exhibit to Maintenance Agreement.

5. Pest control should avoid harming non-target organisms, or negatively affecting air and water quality and public health. Apply chemical controls only when monitoring indicates that preventative and non-chemical methods are not keeping pests below acceptable levels. When pesticides are required, apply the least toxic and the least persistent pesticide that will provide adequate pest control. Do not apply pesticides on a prescheduled basis.
6. Sweep up spilled fertilizer and pesticides. Do not wash away or bury such spills.
7. Do not over apply pesticide. Spray only where the infestation exists. Follow the manufacturer's instructions for mixing and applying materials.
8. Only licensed, trained pesticide applicators shall apply pesticides.
9. Apply pesticides at the appropriate time to maximize their effectiveness and minimize the likelihood of discharging pesticides into runoff. With the exception of pre-emergent pesticides, avoid application if rain is expected.
10. Unwanted/unused pesticides shall be disposed as hazardous waste.

Standing water shall not remain in the treatment measures for more than five days, to prevent mosquito generation. Should any mosquito issues arise, contact the Alameda County Mosquito Abatement District (ACMAD), as needed for assistance. In Albany, contact the Alameda County Vector Control Services District (ACVCSD). Mosquito larvicides shall be applied only when absolutely necessary, as indicated by the ACMAD or ACVCSD, and then only by a licensed professional or contractor. Contact information for ACMAD and ACVCSD is provided below.

III. Vector Control Contacts

Alameda County Mosquito Abatement District
23187 Connecticut St.
Hayward, CA 94545
Phone: (510) 783-7747

Alameda County Vector Control Services District
1131 Harbor Bay Parkway, Ste. 166
Alameda, CA 94502
Phone: (510) 567-6800

IV. Inspections

The attached Bioretention Area Inspection and Maintenance Checklist shall be used to conduct inspections annually or quarterly (or as needed), identify needed maintenance, and record maintenance that is conducted.

Bioretention Area
Inspection and Maintenance Checklist

Property Address:_____ Property Owner: Alameda ~~County~~ (CITY)_____

Treatment Measure No.: _____ Date of Inspection: _____ Type of Inspection: ☐ Quarterly ☐ Pre-Wet Season

☐ After heavy runoff ☐ End of Wet Season

Inspector(s): _____ ☐ Other:_____ ☐ Annually

Defect	Conditions When Maintenance Is Needed	Maintenance Needed? (Y/N)	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)	Results Expected When Maintenance Is Performed
1. Standing Water	When water stands in the bioretention area between storms and does not drain within five days after rainfall.			There should be no areas of standing water once inflow has ceased. Any of the following may apply: sediment or trash blockages removed, improved grade from head to foot of bioretention area, or added underdrains.
2. Trash and Debris Accumulation	Trash and debris accumulated in the bioretention area.			Trash and debris removed from bioretention area and disposed of properly.
3. Sediment	Evidence of sedimentation in bioretention area.			Material removed so that there is no clogging or blockage. Material is disposed of properly.
4. Erosion	Channels have formed around inlets, there are areas of bare soil, and/or other evidence of erosion.			Obstructions and sediment removed so that water flows freely and disperses over a wide area. Obstructions and sediment are disposed of properly.
5. Vegetation	Vegetation is dead, diseased and/or overgrown.			Vegetation is healthy and attractive in appearance.
6. Mulch	Mulch is missing or patchy in appearance. Areas of bare earth are exposed, or mulch layer is less than 3 inches in depth.			All bare earth is covered, except mulch is kept 6 inches away from trunks of trees and shrubs. Mulch is even in appearance, at a depth of 3 inches.
7. Miscellaneous	Any condition not covered above that needs attention in order for the bioretention area to function as designed.			Meet the design specifications.