File ID: 2026-01001 6/23/2026

[Contract] Landscape Maintenance Services of Water Treatment Plants [Published for 10-Day Review 06/11/2026]

File ID: 2026-01001

Location: Citywide

Recommendation: Pass a **Motion** authorizing the City Manager or designee to execute a Non-Professional Services Agreement with Azevedo's Landscape & Maintenance, Inc. (PRC004221) for an initial three-year term with two possible one-year extensions, not to exceed five total years and an amount not-to-exceed $1,000,000.

Contact: Deanne Neighbours, Program Manager, (916) 808-3536, dneighbours@cityofsacramento.org; David Herrmann, Division Manager, (916) 808-6096, dherrmann@cityofsacramento.org; Dalia Fadl, Director, (916) 808-3765, dfadl@cityofsacramento.org; Department of Utilities

Presenter: None

Attachments:
1-Description/Analysis
2-Contract - PRC004221

Description/Analysis
Issue Detail: The Department of Utilities (DOU) has an ongoing need for landscape maintenance services. Staff recommends City Council approve agreement PRC004221 with Azevedo's Landscape Maintenance, Inc. to provide landscape maintenance for three treatment plants: Sacramento River Water Treatment Plant (301 Water Street), E.A. Fairbairn Water Treatment Plant (7501 College Town Drive), and Combined Wastewater Treatment Plant (1391 35th Avenue).

Policy Considerations: City Council approval is required for agreements of $250,000 or more per City Code 3.056.090.

Sacramento City Code Section 4.04.020 and the City Council Rules of Procedure (Chapter 7 Section E.2.d) mandate that unless waived by a 2/3 vote of the City Council, all labor agreements, and all

agreements greater than $1,000,000 shall be made available to the public at least 10 days prior to City Council action. This item was published for 10-day review on June 11, 2026, in compliance with the City Code.

Economic Impacts: None.

Environmental Considerations: Landscape Maintenance activities are exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15301 (Existing Facilities). The activities consist of the operation and maintenance of existing facilities involving no or negligible expansion of use.

Sustainability: The proposed contract is consistent with the 2040 General Plan under policy PFS-3.1 as it pertains to the City of Sacramento (City) continuing to provide reliable water, wastewater, and stormwater drainage utility services.

Commission/Committee Action: Not applicable.

Rationale for Recommendation: On March 19, 2026, DOU issued Request for Bid (RFB) B26141111416 for Landscape Maintenance Services of Water Treatment Plants. The services were publicly advertised on PlanetBids with notifications going out to 559 vendors and 25 self-identifying as prospective bidders. At the time of bid opening by the Sacramento City Clerk, five bids were received and publicly opened on April 08, 2026. Two bidders are located within the City and three are located outside the City in the unincorporated County. All Bids were reviewed by DOU staff and all were determined to be responsive. DOU is proposing to award Azevedo's Landscape & Maintenance, Inc. as the lowest responsive bidder.

Financial Considerations: Funding for the first year of the agreement in the amount of $200,000 is included in the Proposed Fiscal Year 2026/27 Department of Utilities Budget. Funding for future fiscal years shall be subject to funding availability in the adopted budgets for the applicable fiscal year in an amount not to exceed $1,000,000 over the five-year term of the agreement. Purchase orders encumbering funds under this agreement will not be created until needs and funding are identified in the applicable DOU budget (operating, capital, multi-operating, or grants).

There is no General Fund financial impact related to this Agreement.

Local Business Enterprise (LBE): Azevedo's Landscape & Maintenance, Inc. is an LBE.

CONTRACT #: **PRC004221**
CONTRACT NAME: **Landscaping of Water Treatment Plants**
AGREEMENT TERM: 3 years from execution
AUTHORIZED RENEWALS: Two, one-year terms
DEPARTMENT/DIVISION: Utilities / Engineering & Water Resources

PROJECT: N/A
NOT-TO-EXCEED AMOUNT: **$1,000,000**
SOLICITATION: B26141111416
LBE (Y/N): Y
COUNCIL FILE ID: 2026-01001

CITY OF SACRAMENTO

GOODS AND NONPROFESSIONAL SERVICES AGREEMENT

THIS CONTRACT is made at Sacramento, California, by and between the **CITY OF SACRAMENTO,** a charter city and municipal corporation ("CITY"), and

Azevedo's Landscape & Maintenance, Inc.
PO Box 1240 Elk Grove CA, 95759
Phone: (916) 427-5501 / Fax: (916) 683-7060 / E-mail: Office@AzevedosLandscape.com

("Contractor"), as of the Effective Date, as defined below.

The City and Contractor agree as follows:

1. **Effective Date.** This Contract shall be effective beginning **the date it is fully executed by the duly authorized parties** .

2. **Contract Documents.** This Contract includes each of the following documents, which are attached or incorporated by this reference (referred to collectively as the "Contract Documents"):

   Invitation to Bid, Request for Qualifications, or Request for Proposals, and any Addenda
   Exhibit A - Technical Specifications
   Exhibit B – Payment
   Exhibit C – Insurance
   Exhibit D – General Conditions
   Purchase Orders

   If there is a conflict between the terms and conditions of any document prepared or provided by the Contractor and made a part of this Contract and the other terms or conditions of the Contract, the other terms and conditions of the Contract control.

3. **Goods and Services.** Subject to the terms and conditions set forth in this Contract, Contractor shall provide to City the goods, materials, equipment or supplies ("Goods") and the non-professional services ("Services") described in Exhibit A (referred to collectively as "Goods and Services").

   Contractor will not be compensated for goods, materials, equipment, supplies, or non-professional services outside the scope of Exhibit A ("Additional Goods and Services") unless, before providing Additional Goods and Services: (a) Contractor notifies City and City agrees that the Additional Goods and Services are outside the scope of Exhibit A; (b) Contractor estimates the additional compensation required for these Additional Goods and Services; and (c) City, after

notice, approves in writing a Supplemental Contract specifying the Additional Goods and Services and the amount of additional compensation to be paid Contractor.

City will have no obligations whatsoever under this Contract or any Supplemental Contract, unless and until this Contract or any Supplemental Contract is approved by the City as required by the Sacramento City Code. As used in this Contract, the term "Goods and Services" includes both Goods and Services and Additional Goods and Services as applicable.

4. **Payment.** City shall pay Contractor at the times and in the manner set forth in Exhibit B. Contractor shall submit all invoices to City in the manner specified in Exhibit B.

5. **Facilities and Equipment.** Except as set forth below, Contractor shall, at its sole cost and expense, furnish all facilities and equipment required for Contractor to perform this Contract. City shall furnish to Contractor only the facilities and equipment listed below, if any.

Access to City facilities will be provided to perform scope of services.

6. **Insurance.** Contractor shall, at its sole cost and expense, maintain the insurance coverage described in the attached Exhibit C.

7. **General Conditions.** Contractor shall comply with the terms and conditions set forth in the attached Exhibit D.

8. **Non-Discrimination in Employee Benefits.** This Contract may be subject to Sacramento City Code chapter 3.54, Non- Discrimination in Employee Benefits by City Contractors. A summary of the requirements, entitled "Requirements of the Non-Discrimination in Employee Benefits Code (Equal Benefits Ordinance)," can be viewed at:

   https://www.cityofsacramento.org/Finance/Procurement/Contract-Ordinances.

   Contractor acknowledges and represents that Contractor has read and understands the requirements and shall fully comply with all applicable requirements of Sacramento City Code chapter 3.54. If requested by City, Contractor shall promptly provide any documents and information required by City to verify Contractor's compliance.

   Contractor's violation of Sacramento City Code chapter 3.54 constitutes a material breach of this Contract, for which the City may terminate the Contract and pursue all available legal and equitable remedies.

9. **Living Wage.** This Contract may be subject to Sacramento City Code chapter 3.58, Living Wage. A summary of the requirements, entitled "Living Wage Requirements", can be viewed at: https://www.cityofsacramento.org/Finance/Procurement/Contract-Ordinances.
   The Living Wage Ordinance is applicable to certain contracts with the City in an amount of $250,000 or more (either initial value or total value after amendment) or if the total value of all Contractor's contracts with the City is $250,000 or more over a 12-month period.
   Contractor acknowledges and represents that Contractor has read and understands the requirements and shall fully comply with all applicable requirements of Sacramento City Code

chapter 3.58. If requested by City, Contractor shall promptly provide any documents and information required by City to verify Contractor's compliance.

Contractor shall require applicable subcontractors to fully comply with all applicable requirements of Sacramento City Code chapter 3.58 and include these requirements in all subcontracts covered by Sacramento City Code chapter 3.58.

Contractor's violation of Sacramento City Code chapter 3.58 constitutes a material breach of this Contract, for which the City may terminate the Contract and pursue all available legal and equitable remedies.

In addition, for Services that constitute "Public Works" under California Labor Code Section 1720 et seq., if both prevailing wage and living wage requirements apply, Contractor shall pay the higher of the two rates.

10. **Considering Criminal Conviction Information in the Employment Application Process.** This Contract may be subject to the requirements of Sacramento City Code chapter 3.62, Procedures for Considering Criminal Conviction Information in the Employment Application Process. A summary of the requirements, entitled “Ban-The-Box Requirements,” can be viewed at:

https://www.cityofsacramento.org/Finance/Procurement/Contract-Ordinances.

The Ban-The-Box Requirements are applicable to certain contracts with the City in an amount of $250,000 or more (either initial value or total value after amendment) or if the total value of all Contractor's contracts with the City is $250,000 or more over a 12-month period.

Contractor acknowledges and represents that Contractor has read and understands these requirements and shall fully comply with all applicable requirements of Sacramento City Code chapter 3.62. If requested by City, Contractor shall promptly provide any documents and information required by City to verify Contractor's compliance. Contractor shall require applicable subcontractors to fully comply with all applicable requirements of Sacramento City Code chapter 3.62 and include these requirements in all subcontracts covered by Sacramento City Code chapter 3.62.

Contractor's violation of Sacramento City Code chapter 3.62 constitutes a material breach of this Contract, for which the City may terminate the Contract and pursue all available legal and equitable remedies.

11. **Local Business Enterprise Program**. The Local Business Enterprise Program Participation Requirements ("LBE Participation Requirements") are applicable to this Contract. A summary of the requirements, entitled "LBE Participation Requirements," can be viewed at:

https://www.cityofsacramento.org/Finance/Procurement/Contract-Ordinances.

Contractor acknowledges and represents that Contractor has read and understands these requirements and shall fully comply with all applicable requirements of Sacramento City Code chapter 3.64. If requested by City, Contractor shall promptly provide any documents and

information required by City to verify Contractor's compliance. Contractor shall require applicable subcontractors to fully comply with all applicable requirements of Sacramento City Code chapter 3.64 and include these requirements in all subcontracts covered by Sacramento City Code chapter 3.64.

Contractor's violation of Sacramento City Code chapter 3.64 constitutes a material breach of this Contract, for which the City may terminate the Contract and pursue all available legal and equitable remedies.

12. **Authority.** The person signing this Contract for Contractor represents and warrants that he or she has read, understands, and agrees to all the Contract terms and is fully authorized to sign this Contract on behalf of the Contractor and to bind the Contractor to the performance of the Contract's obligations.

[Signature Pages Follow Exhibits]

EXHIBIT A
TECHNICAL SPECIFICATIONS

1. Representatives.

The CITY Representative for this Agreement is:

Combined Water Treatment Plant (CWTP)
Philip Meyer / Supervising Plant Operator
1391 35th Ave Sacramento, CA 95822
Phone: (916) 808-5286 / E-mail: PMeyer@cityofsacramento.org

Demonstration Garden
Lance Eicher / Water Conservation Specialist
5730 24th Street, Building 22 Sacramento, CA 95822
Phone: (916) 808-5619 / E-mail: LEicher@cityofsacramento.org

Sacramento River Water Treatment Plant (SRWTP)
May Turner / Supervising Plant Operator
301 Water Street Sacramento, CA 95811
Phone: (916) 808-5651 / E-mail: mturner1@cityofsacramento.org

E.A. Fairbairn Water Treatment Plant (EAFWTP)
Ryan Palmer / Supervising Plant Operator
7501 College Town Drive Sacramento, CA 95826
Phone: (916) 808-4975 / E-mail: RPalmer@cityofsacramento.org

The CONTRACTOR Representative for this Agreement is:

Azevedo's Landscape & Maintenance, Inc.
John Azevedo / Officer
PO Box 1240 Elk Grove CA, 95759
Phone: (916) 427-5501 / Fax: (916) 683-7060 / E-mail: Office@AzevedosLandscape.com

Unless otherwise provided in this Contract, all Contractor questions and correspondence pertaining to this Contract must be addressed to the City Representative. All City questions and correspondence must be addressed to the Contractor Representative.

2. Scope of Services. Contractor shall provide Goods and Services to City as set forth in Attachment 1 to this Exhibit A.

3. Quantities. The quantities stated in Attachment 1 to this Exhibit A or Exhibit B are only estimates of the City's requirements. Contractor shall furnish Goods and Services at the prices quoted, in accordance with the City's available funds and actual needs as they occur throughout the term of this Contract.

The City is not required to purchase all of the Goods and Services listed, or to expend all available funding reflected in Exhibits A or B.

4. Time of Performance. The Goods and Services described in this Contract shall be provided **for three (3) years . The City may extend this Contract for up to two (2) additional one-year terms, for a maximum five-year term.**Contractor shall provide the Goods and Services in accordance with any schedule in Attachment 1 to this Exhibit A.

5. Delivery and Inspection.

A. Delivery. Unless otherwise stated by the City in writing, delivery of Goods shall be made to the City address set forth in Exhibit A. All shipments are Free on Board (F.O.B.) destination with freight prepaid unless otherwise stated.

Contractor assumes full responsibility for all transportation scheduling and costs, including costs for containers, packing, handling, and insurance. The City reserves the right to request and receive a copy of the freight bill of lading on all purchases shipped F.O.B. prepaid and added.

Time is of the essence in the delivery. If delivery cannot be made as specified in Exhibit A or as otherwise stated by the City, Contractor shall notify the City immediately to request instructions on how to proceed and shall not make delivery before receipt of instructions. Periods of performance may be extended if, in the sole judgment of the City, the cause of delay justifies an extension.

B. Inspections: Goods will be inspected at the destination before acceptance by an authorized representative of the City for workmanship, appearance, proper functioning of all equipment and systems, and conformance to all other requirements of this Contract. The Goods shall be delivered to City free of any liens or encumbrances.

Notwithstanding the requirements for any City inspection and testing at the destination and except where specialized inspections or testing are specified for performance solely by the City, Contractor shall perform or have performed the inspections or tests required to substantiate that all Goods provided under the Contract conform to the drawings, specifications, and other Contract requirements, including, if applicable, the technical requirements for the manufacturer's part number(s) specified.

C. Deficiencies: If deficiencies in the Goods are discovered, Contractor shall correct and redeliver the Goods for re-inspection and acceptance. The period for payment and/or commencement of discount period (if applicable) does not begin until corrective action is complete. The cost of storing rejected Goods and the cost for shipping rejected Goods back to the Contractor or point of origin shall be paid by Contractor.

D. Inspection of Facilities: If requested by the City, Contractor shall provide the City with an inspection tour of Contractor's facilities where any Goods will be designed, manufactured, or assembled by Contractor.

6. **Title/Risk of Loss.** Title, ownership, and risk of loss or damage of the Goods remains with the Contractor until the Goods are delivered to, inspected, and accepted by the City, except when the loss or damage is due to the sole negligence of the City.

EXHIBIT B

PAYMENT

1. **Contractor's Compensation.** The total of all fees paid to the Contractor for the provision of Goods and Services as set forth in Exhibit A, including any authorized reimbursable expenses, shall not exceed the total sum of $ **1,000,000 .** The payments specified in this Exhibit B shall be the only payments made to Contractor unless the City approves a Supplemental Contract.

2. **Pricing.** Contractor shall be paid as set forth in Exhibit A or Attachment 1 to this Exhibit B and any applicable special provisions included in the request for bids or proposals. If there is a conflict between Exhibit A or Exhibit B and the Special Provisions, Exhibit A or Exhibit B controls.

3. **Contractor's Reimbursable Expenses. "**Reimbursable Expenses" are limited to actual expenditures of Contractor for expenses that are necessary for the proper satisfaction of the Contract and are only payable if specifically authorized in advance in writing by the City.

4. **Miscellaneous Charges.** No additional charges will be allowed unless specified in the Contract, including charges for transportation, fuel, containers, packing, or disposal.

5. **Price Adjustments for Goods.** Unless otherwise stated, prices are maximum for the term of the Contract. Price adjustments, if allowed under this Contract, must be requested in writing and accompanied by the required information to substantiate the request for price adjustment, as set forth in the Contract. Any allowable request for price adjustment must be delivered to the City at least 30 days before the adjusted prices become effective. No price adjustment allowable under this Contract will be granted retroactively. The City must also be given the benefit of any decline in prices. If any price increase is granted by the City, the increase shall not be greater than 3% from the prior year.

6. **Purchase Orders.** Unless otherwise stated, a purchase order will be issued to the Contractor on behalf of the City. Purchase orders will cite the quantity of Goods or Services requested, the purchase amount, and time of performance. If the time of performance of this Contract extends beyond the close of the City's fiscal year, another purchase order may be issued. No purchase order supersedes any provision of this Contract. Contractor shall not deliver Goods or provide Services until Contractor receives a purchase order or other written notification by the City.

7. **Payments to Contractor.** Contractor is responsible for supplying all documentation necessary to verify invoices to the City's satisfaction.

   A. Payment terms are NET 30 days, unless the Contractor offers a prompt payment discount that was accepted by the City or as otherwise stated in this Contract. Any prompt payment discounts will be computed from the date of acceptance by the City, or from the date an invoice is received, whichever occurs later.

   B. Invoices must be submitted to either of the addresses specified below.
      (1) Email. Submit email invoices and any attachments to:
      apinvoices@cityofsacramento.org

(2) Postal Mail. If emailing is not an option, mail to:
A/P Processing Center
City of Sacramento
915 I Street, Floor 4
Sacramento, CA 95814-2608

C. All invoices submitted by CONTRACTOR must contain the following information:

(1) Job/Project Name
(2) CITY's current Purchase Order Number
(3) Contractor's Invoice Number
(4) Date of Invoice Issuance
(5) Work Order Number (if applicable)
(6) CITY representative identified on the Purchase Order
(7) Contractor's remit address
(8) Itemized description of items billed under Invoice
(9) Itemized description of all authorized Reimbursable Expenses
(10) Itemized description of all applicable taxes (sales, use, excise, etc.)
(11) Amount of Invoice (itemize all authorized Reimbursable Expenses)
(12) Total Billed to Date under Contract (if applicable)

D. Items must be separated into Goods, Services, and Reimbursable Expenses. All applicable sales, use, excise, or similar taxes, including federal excise tax, must be itemized separately on the invoice. Invoices that do not conform to the format outlined above will be returned to Contractor for correction. City is not responsible for delays in payment to Contractor resulting from Contractor's failure to comply with the invoice format described above.

E. For Goods only, a bill of lading number and weight of shipment will be shown for shipments on the Government Bill of Lading.

F. Unless otherwise specified in this Contract, partial payments will not be made by the City and payment will not be due until the completion of the Goods order. No payment precludes the City's right to inspect. Requests for payment status should be addressed to the City Representative for this Contract.

8. Additional Goods and Services. Additional Goods and Services shall be provided only when a Supplemental Contract authorizing the Additional Goods and Services is approved in writing by the City in accordance with the City's contract amendment procedures. The City reserves the right to perform any Additional Services with its own staff or to retain other contractors to perform the Additional Services.

9. Billing Disputes. The burden of proof shall be on the Contractor to establish the accuracy of its invoices. Upon presentation and verification of the information provided by Contractor, the City will review all records and make a final determination and present its finding to Contractor.

10. Accounting Records of Contractor. During performance of this Contract and for a period of three

years after completion of performance, Contractor shall maintain all accounting and financial records related to this Contract, in accordance with generally accepted accounting practices, including records of Contractor's costs for performance under this Contract and records of Contractor's Reimbursable Expenses. Contractor shall keep and make records available for inspection and audit by representatives of the City upon reasonable written notice.

11. **Sales Tax Requirements.** The City is not exempt from paying sales tax. Sales tax must be shown on the invoice as a separate line item.

12. **Use Tax Requirements.** On out-of-state purchases, Contractor shall list its Use Tax Permit Number (if applicable) on the invoice, which authorizes Contractor to charge and collect California Sales Tax. The Purchase Order will include sales tax, if applicable to the purchase, regardless of whether an out-of-state Contractor collects California State sales tax or not. The City shall pay Use Tax directly to the California Department of Tax and Fee Administration ("CDTFA") if the out-of-state Contractor is not required to collect California Sales Tax. During the performance of this Contract, Contractor, for itself, its assignees and successors in interest, agrees as follows:

A. Use Tax Direct Payment Permit: For all leases and purchases of tangible personal property used to perform the Contract and shipped from outside California, Contractor and any subcontractor(s) leasing or purchasing such tangible personal property shall obtain a Use Tax Direct Payment Permit from the CDTFA in accordance with the applicable CDTFA criteria and requirements.

B. Sellers Permit: For any construction contract and any construction subcontract in the amount of $5,000,000 or more, Contractor and the subcontractor(s) shall obtain sellers permits from the CDTFA and shall register the jobsite as the place of business for the purpose of allocating local sales and use tax to the City. Contractor and its subcontractors shall remit the self-accrued use tax to the CDTFA and shall provide a copy of each remittance to the City.

C. The above provisions apply in all instances unless prohibited by the funding source for the Contract.

13. **Excise Tax Requirements.** The City of Sacramento is exempt from the payment of Federal Excise Tax. An exemption certificate will be submitted to Contractor upon request. If Federal Excise Tax is applicable to the transaction, it must be so stated and excluded from the price.

14. **Tax Payments.** Contractor shall pay, when and as due, any and all taxes incurred as a result of Contractor's compensation hereunder, including estimated taxes, and shall provide CITY with proof of the payment upon request. Contractor hereby agrees to indemnify CITY for any claims, losses, costs, fees, liabilities, damages or injuries suffered by CITY arising out of Contractor's breach of this section.

15. **Public Works Requirements.** *[To be completed by the City Representative:]*

The services provided under this Contract include ***[check one if applicable]***:

_____ Construction work in an amount exceeding $25,000;

_____ Land Surveying, material testing, or inspection services provided for a City construction project during the design, pre-construction, construction, or post-construction phases of the project; or

____X____ Alteration, demolition, repair, or maintenance work in an amount exceeding $15,000.

If any of the lines is checked above, this Contract includes "Public Work" under the California Labor Code and is subject to the following requirements:

A. Payment of Prevailing Wages: Contractor and any subcontractor(s) performing any Public Work shall comply with the provisions of Sacramento City Code section 3.60.040 and applicable provisions of the California Labor Code, which require, among other things, that Contractor and all subcontractors pay not less than the prevailing rate of wages, as determined by the Director of the California Department of Industrial Relations ("DIR") in accordance with California Labor Code section 1773. Contractor and every subcontractor shall maintain payroll records and submit certified payrolls and other labor compliance documentation electronically when and as required by CITY. In addition, Labor Code Section 1771.4 requires the Contractor and any subcontractor performing any Public Work to furnish electronic payroll records directly to the Labor Commissioner. Contractor shall include these requirements in every subcontract.

This Agreement is subject to compliance monitoring and enforcement by the DIR, as specified in California Labor Code section 1771.4. The Contractor and any subcontractor will be subject to withholding and penalties for violation of prevailing wage requirements in accordance with applicable law, including Labor Code Sections 1726, 1741, 1771.5, and 1775, and City Code Section 3.60.040. Questions regarding the City's Labor Compliance Program should be directed to the City Representative.

B. DIR Registration: California Labor Code Section 1725.5 requires the Contractor and all subcontractors performing Public Works services to be currently registered with the DIR, as specified in California Labor Code Section 1725.5. California Labor Code Section 1771.1 provides that a contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal (subject to the requirements of Section 4104 of the California Public Contract Code), or engage in the performance of any contract for Public Work, unless currently registered and qualified to perform Public Work in accordance with California Labor Code Section 1725.5.

Further information can be found on DIR's website at http://www.dir.ca.gov/Public-Works/Contractors.html. The above summary is provided solely for informational purposes and does not in any way affect the Contractor's and subcontractors' obligation to comply in all respects with all other applicable laws and regulations. The Contractor shall disseminate these provisions to all subcontractors.

Before the performance of work by Contractor or any subcontractor(s) under this Contract, Contractor shall furnish Contractor's and any subcontractors' current DIR registration number(s). The Contractor's current DIR registration number and the current DIR registration number of all subcontractors will be listed on the Subcontractor and LBE Participation Verification Form, incorporated herein.

C. Workers' Compensation Certification. In accordance with California Labor Code Section 1861, by signing this Contract, Contractor acknowledges and represents that Contractor is aware of the provisions of section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and that Contractor will comply with the provisions of the Labor Code before commencing performance under this Contract.

D. Apprentices. If this Contract is for the performance of any Public Work, and the amount of the Contract is $30,000 or more, the Contractor and any subcontractors performing any Public Work under this Contract must comply with and be subject to enforcement under, the provisions of Sacramento City Code Section 3.60.050, Section 1777.5 et seq. of the California Labor Code, and implementing regulations set forth in Title 8 of the California Code of Regulations, governing the employment of apprentices. The Contractor and any subcontractors performing Public Work will be subject to penalties for apprenticeship violations in accordance with Labor Code Section 1777.7.

E. Working Hours. If this Contract is for the performance of any Public Work, Contractor and any subcontractors performing any Public Work under this Contract must comply with and be subject to enforcement under, the provisions of Sacramento City Code Section 3.60.040 and California Labor Code Section 1810 et seq., governing the working hours of employees performing Public Work.

F. Failure to Comply with Labor Compliance. If all applicable labor compliance requirements are not met, the City will have the right to withhold or reject a payment request and/or invoice, in whole or in part, without in any way relieving Contractor or its subcontractors of any obligations under this Contract.

G. Subcontractors. The Contractor shall include these provisions A through F in every subcontract or sub-agreement for any subcontractors performing work under this Contract.

EXHIBIT C

INSURANCE

1. **Insurance Requirements**. During the entire term of this Contract, Contractor shall maintain the insurance coverage described in the Insurance Terms below.

   Full compensation for all premiums that Contractor is required to pay for the insurance coverage described herein shall be included in the compensation specified under this Contract. No additional compensation will be provided for Contractor's insurance premiums. Any available insurance proceeds in excess of the specified minimum limits and coverages shall be available to the City.

   If the CONTRACTOR maintains broader coverage and/or higher limits than the minimums shown below, the City requires and shall be entitled to the broader coverage and/or the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

2. **General Liability Minimum Scope and Limits of Insurance Coverage.** Commercial General Liability Insurance is required providing coverage at least as broad as ISO CGL Form 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage, and personal injury, arising out of activities performed by or on behalf of the Contractor and subcontractors, products and completed operations of Contractor and subcontractors, and premises owned, leased, or used by Contractor and subcontractors, with limits of not less than one million dollars ($1,000,000) per occurrence. The policy shall provide contractual liability and products and completed operations coverage for the term of the policy. If a general aggregate limit applies, either the general aggregate limit shall apply separately (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.

   The City, its officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds as respects general liability arising out of: activities performed by or on behalf of Contractor and subcontractors; products and completed operations of Contractor and subcontractors; and premises owned, leased, or used by Contractor and subcontractors.

3. **Automobile Liability Minimum Scope and Limits of Insurance Coverage**. (*Check the applicable provision*.)

   _X_ Automobile Liability Insurance is required providing coverage at least as broad as ISO Form CA 00 01 for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than one million dollars ($1,000,000) per occurrence. The policy shall provide coverage for owned, non-owned and/or hired autos as appropriate to the operations of the Contractor.

   The City, its officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds as respects auto liability.

___ No automobile liability insurance is required, and by signing this Contract, Contractor certifies as follows:

"Contractor certifies that a motor vehicle will not be used in the performance of any work or services under this agreement. If, however, Contractor does transport items under this Contract, or this Contract is amended to require any employees of Contractor to use a vehicle to perform services under the Contract, Contractor understands that it must maintain and provide evidence of Automobile Liability Insurance providing coverage at least as broad as ISO Form CA 00 01 for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than one million dollars ($1,000,000*)* per occurrence. The policy shall provide coverage for owned, non-owned and/or hired autos as appropriate to the operations of the Contractor."

4. **Excess Insurance**. The CONTRACTOR may use Umbrella or Excess Policies to meet the required liability limits. This form of insurance will be acceptable provided that any umbrella or excess policies provide all of the insurance coverages required and meet the other requirements for the primary policies as set forth in this Agreement. Umbrella and/or Excess policies shall be provided on a true "following form" or broader coverage basis, with coverage at least as broad as provided in the underlying primary policy.

Umbrella or excess policies shall contain, or be endorsed to provide that the City, its officials, employees, and volunteers shall be covered as additional insureds, as well as a provision that it will apply on a primary basis for the benefit of the City. Any insurance or self-insurance maintained by City, its officials, employees, or volunteers will be in excess of Contractor's umbrella or excess coverage and will not contribute to it. No insurance or self-insurance maintained by the City that applies to a loss covered herein, whether Primary or Excess, and which also applies to a loss covered hereunder, shall be called upon to contribute to a loss until the Contractor's Primary and Excess liability policies are exhausted.

5. **Workers' Compensation Minimum Scope and Limits of Insurance Coverage.** (*Check the applicable provision*.)

_X_ Workers' Compensation Insurance is required with statutory limits and Employers' Liability Insurance with limits of not less than one million dollars ($1,000,000). The Workers' Compensation policy shall include a waiver of subrogation in favor of the City.

___ No work or services will be performed on or at CITY facilities or CITY Property, therefore a Workers' Compensation waiver of subrogation in favor of the CITY is not required.

___ No Workers' Compensation insurance is required, and by signing this Contract, Contractor certifies as follows:

"Contractor certifies that its business has no employees, and that it does not employ anyone, and is therefore exempt from the legal requirements to provide Workers' Compensation insurance. If, however, Contractor hires any employee during the term of this Contract, Contractor understands that Workers' Compensation with statutory limits

and Employer's Liability Insurance with a limit of not less than one million dollars ($1,000,000) is required. The Workers' Compensation policy will include a waiver of subrogation in favor of the City."

6. **Other Insurance Provisions.** The policies must contain, or be endorsed to contain, the following provisions:
   A. Contractor's insurance coverage, including excess insurance, shall be primary and non-contributory insurance as respects the City, its officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its officials, employees or volunteers will be in excess of Contractor's insurance and will not contribute with it.

   B. Any failure to comply with reporting provisions of the policies will not affect coverage provided to the City, its officials, employees or volunteers.

   C. Coverage shall state that Contractor's insurance applies separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

   D. Contractor shall provide the City with 30 days written notice of cancellation or material change in the policy language or terms.

7. **Waiver of Subrogation.** CONTRACTOR hereby grants to City a waiver of any right to subrogation which any insurer may acquire against the City by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from an insurer.

8. **Acceptability of Insurance**. Insurance must be placed with insurers with a Bests' rating of not less than A:VI. Self-insured retentions, policy terms or other variations that do not comply with the requirements of this Exhibit C must be declared to and approved by the City in writing before execution of this Contract.

9. **Verification of Coverage.**
   A. Contractor shall furnish City with certificates and required endorsements evidencing the insurance required. Certificates of insurance must be signed by an authorized representative of the insurance carrier. Copies of policies shall be delivered to the City Representative on demand.

   B. Contractor shall send all insurance certificates and endorsements, including policy renewals, during the term of this Contract directly to:

      City of Sacramento
      c/o Exigis LLC
      PO Box 947
      Murrieta, CA 92564

C. Certificate Holder must be listed as:

City of Sacramento
c/o Exigis LLC
PO Box 947
Murrieta, CA 92564

D. The City may withdraw its offer of Contract or cancel this Contract if the certificates of insurance and endorsements required have not been provided before execution of this Contract. The City may withhold payments to Contractor and/or cancel the Contract if the insurance is canceled or Contractor otherwise ceases to be insured as required herein.

10. **Subcontractor Insurance Coverage**. Contractor shall require and verify that all subcontractors maintain insurance coverage that meets the minimum scope and limits of insurance coverage specified in this Exhibit C.

EXHIBIT D

GENERAL CONDITIONS

1. Independent Contractor.

A. It is understood and agreed that Contractor (including Contractor's employees) is an independent contractor and that no relationship of employer-employee exists between the parties hereto for any purpose whatsoever. Neither Contractor nor Contractor's assigned personnel will be entitled to any benefits payable to CITY employees. CITY is not required to make any deductions or withholdings from the compensation payable to Contractor under the provisions of this Contract, and Contractor will be issued a Form 1099 for its services hereunder. As an independent contractor, Contractor hereby agrees to indemnify and hold CITY harmless from any and all claims that may be made against CITY based upon any contention by any of Contractor's employees or by any third party, including any state or federal agency, that an employer-employee relationship or a substitute therefor exists for any purpose whatsoever by reason of this Contract or by reason of the nature and/or performance under this Contract.

B. It is further understood and agreed by the parties that Contractor, in the performance of its obligations, is subject to the City's control and direction as to the designation of tasks to be performed and the results to be accomplished under this Contract, but not as to the means, methods, or sequence used by Contractor for accomplishing the results. To the extent that Contractor obtains permission to, and does, use CITY facilities, space, equipment or support services in the performance of this Contract, this use will be at the Contractor's sole discretion based on the Contractor's determination that the use will promote Contractor's efficiency and effectiveness. Except as may be specifically provided elsewhere in this Contract, the CITY does not require that Contractor use CITY facilities, equipment or support services or work in CITY locations in the performance of this Contract. As used in this Contract, "sole discretion" or "sole judgment" means that the party authorized to exercise its discretion or judgment may do so based on an unfettered assessment of its own interests, without considering how its decision affects the other party, and unconstrained by the implied covenant of good faith and fair dealing.

C. If, in the performance of this Contract, any third persons are employed by Contractor, such persons will be entirely and exclusively under the direction, supervision, and control of Contractor. Except as otherwise provided in this Contract, all terms of employment, including hours, wages, working conditions, discipline, hiring, and discharging, or any other terms of employment or requirements of law, shall be determined by Contractor. It is further understood and agreed that Contractor will issue W-2 or 1099 Forms for income and employment tax purposes for all Contractor's assigned personnel and subcontractors.

D. The provisions of this section will survive any expiration or termination of this Contract. Nothing in this Contract creates an exclusive relationship between CITY and Contractor. Contractor may represent, perform services for, or be employed by any additional persons or companies so long as Contractor does not violate the provisions of Section 5, below.

2. **Licenses; Permits, Etc.** Contractor represents and warrants that Contractor has, and shall maintain at all times during the term of this Contract at its sole cost and expense, all licenses, permits, qualifications, and approvals of any nature that are legally required for Contractor to practice its profession or fulfill the terms of this Contract, including a City Business Operations Tax Certificate and any required certification issued by the California Secretary of State.

3. **Time.** Time is of the essence in the performance of this Contract. Contractor shall devote the necessary time and effort to its performance under this Contract. Neither party will be considered in default of this Contract, to the extent that party's performance is prevented or delayed by any cause, present or future, that is beyond the reasonable control of that party.

4. **Contractor Not Agent.** Except as City may specify in writing, Contractor and Contractor's personnel have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor and Contractor's personnel shall have no authority, express or implied, to bind City to any obligations whatsoever.

5. **Conflicts of Interest.** Contractor covenants that neither it, nor any officer or principal of its firm, has or will acquire any interest, directly or indirectly, that would conflict in any manner with the City's interests or that would in any way hinder Contractor's performance under this Contract. Contractor further covenants that in the performance of this Contract, no person having any such interest will be employed by it as an officer, employee, agent or subcontractor, without the City's written consent.

   Contractor agrees to avoid conflicts of interest or the appearance of any conflicts of interest with the City's interests during the performance of this Contract. If Contractor is or employs a former officer or employee of the City, Contractor and any former City officer or employee shall comply with the provisions of Sacramento City Code Section 2.16.090 pertaining to appearances before the City Council or any City department, board, commission, or committee.

6. **Hazardous Substances.** "Hazardous Substances" means any substance, material, waste, or other pollutant or contaminant that is or becomes designated, classified, or regulated as hazardous or toxic under any law, regulation, rule, order, decree, or other governmental requirement now in effect or later enacted. If Contractor is shipping Hazardous Substances, Contractor must supply a Safety Data Sheet ("SDS") with the first shipment of Hazardous Substances to each City location receiving the Hazardous Substances. If the content of an SDS is revised, Contractor must provide a revised SDS to each City location receiving Hazardous Substances.

7. **Confidentiality of City Information.** During performance of this Contract, Contractor may gain access to and use City information regarding inventions, machinery, products, prices, apparatus, costs, discounts, future plans, business affairs, governmental affairs, processes, trade secrets, technical matters, systems, facilities, customer lists, product design, copyright, data, and other vital information (hereafter collectively referred to as "City Information") that are valuable, special and unique assets of the City.

   Contractor agrees to protect all City Information and treat it as strictly confidential, and further agrees that Contractor shall not at any time, either directly or indirectly, divulge, disclose or

communicate in any manner any City Information to any third party without the City's prior written consent.

In addition, Contractor must comply with all City policies governing the use of the CITY network and technology systems, as set forth in applicable provisions of the City of Sacramento Administrative Policy Instructions # 30. A violation by Contractor of this section is a material violation of this Contract and shall justify legal and equitable relief.

8. Contractor Information.

A. City shall have full ownership and control, including ownership of any copyrights, of all information prepared, produced, or provided by Contractor under this Contract. In this Contract, the term "information" means and includes: any and all work product, submittals, reports, plans, specifications, and other deliverables consisting of documents, writings, handwritings, typewriting, printing, photostatting, photographing, computer models, and any other computerized data and every other means of recording any form of information, communications, or representation, including letters, works, pictures, drawings, sounds, or symbols, or any combination thereof. Contractor shall not be responsible for any unauthorized modification or use of such information for other than its intended purpose by City.

B. Contractor shall fully defend, indemnify and hold harmless City, its officers and employees, and each of them, from and against any and all claims, actions, lawsuits or other proceedings alleging that all or any part of the information prepared, produced, or provided by Contractor under this Contract infringes upon any third party's trademark, trade name, copyright, patent or other intellectual property rights. City shall make reasonable efforts to notify Contractor not later than ten days after City is served with any such claim, action, lawsuit or other proceeding. However, City's failure to provide notice within the ten-day period does not relieve Contractor of its obligations hereunder, which survive any termination or expiration of this Contract.

C. All proprietary and other information received from Contractor by City, whether received in connection with Contractor's proposal to City or in connection with Contractor's performance, will be disclosed upon receipt of a request for disclosure, in accordance with the California Public Records Act; provided, however, that, if any information is set apart and clearly marked "trade secret" when it is provided to City, City shall give notice to Contractor of any request for the disclosure of such information. The Contractor will then have five days from the date it receives notice to petition the court for a protective order to prevent the disclosure of the information. The Contractor shall have sole responsibility for defense of the actual "trade secret" designation of such information.

D. The parties understand and agree that any failure by Contractor to respond to the notice provided by City and seek a protective order, in accordance with the provisions of subsection C, above, constitutes a complete waiver by Contractor of any rights regarding the information designated "trade secret" by Contractor, and the information will be disclosed by City in accordance with the Public Records Act.

9. **Notification of Material Changes in Business.** Contractor agrees that if it experiences any material changes in its business, including a reorganization, refinancing, restructuring, leveraged buyout, bankruptcy, name change, or loss of key personnel, it will immediately notify the City of the changes. Contractor also agrees to immediately notify the City of any condition that may jeopardize the scheduled delivery or fulfillment of Contractor's obligations to the City under this Contract.

10. **Standard of Performance.** Contractor shall perform in the manner and according to the standards currently observed by a competent practitioner of Contractor's profession in California and in compliance with all requirements of this Contract. All products that Contractor delivers to City under this Contract must be prepared in a professional manner and conform to the standards of quality normally observed by a person currently practicing in Contractor's profession.

    Contractor shall assign only competent personnel to perform on its behalf under this Contract. Contractor must notify the City in writing of any changes in Contractor's staff assigned to perform under this Contract, before any performance by the new staff member. If the City, in its sole discretion, determines that any person assigned by the Contractor to perform under this Contract is not performing in accordance with the standards required herein, City shall provide notice to Contractor. Contractor shall immediately remove the assigned person upon receipt of the notice.

11. **Performance or Different Terms and Conditions.** The City's subsequent performance will not be construed as either acceptance of additional or different terms and conditions or a counteroffer by the Contractor, nor will the City's subsequent performance be viewed as acceptance of any provision of the Uniform Commercial Code, as adopted by any State, that is contrary to the terms and conditions contained herein. Contractor's performance shall conform to the applicable requirements of the Sacramento City Charter, Sacramento City Code, and all applicable State and Federal laws, and all the requirements of this Contract. The California Commercial Code will apply except as otherwise provided in the Contract.

12. **Emergency/Declared Disaster Requirements.** If an emergency is declared by the City Manager, or if any portion of the City is declared a disaster area by the county, state or federal government, this Contract may be subjected to increased usage. The Contractor shall serve the City during a declared emergency or disaster, subject to the same terms and conditions that apply during non-emergency / non-disaster conditions. The pricing set forth in this Contract will apply, without mark-up, regardless of the circumstances. If the Contractor is unable to fulfill the terms of the Contract because of a disruption in its chain of supply or service, then the Contractor shall provide proof of the disruption. Acceptable forms of proof will include a letter or notice from the Contractor's source stating the reason for the disruption

13. **Term; Suspension; Termination.**

    A. This Contract is effective on the Effective Date and continues in effect until both parties have fully performed their respective obligations under this Contract, unless sooner terminated as provided herein.

    B. City shall have the right at any time to suspend Contractor's performance hereunder, in whole or in part, by giving a written notice of suspension to Contractor. Upon receipt of

such notice, Contractor shall immediately suspend its activities under this Contract, as specified in the notice.

C. The City shall have the right to terminate this Contract at any time by giving a written notice of termination to Contractor. Upon receipt of such notice, Contractor shall immediately cease performance under this Contract as specified in the notice. If the City terminates this Contract:

(1) Contractor shall, not later than five days after receipt of the notice, deliver all information prepared under this Contract to the City.

(2) The City shall pay Contractor the reasonable value of Goods or Services provided by Contractor before termination; provided, however, City shall not in any manner be liable for lost profits that might have been made by Contractor had the Contract not been terminated or had Contractor completed performance required by this Contract. Contractor shall furnish to the City any financial information requested by the City to determine the reasonable value of the Goods or Services provided by Contractor. The foregoing is cumulative and does not affect any right or remedy that City may have in law or equity.

14. Default by Contractor. In case of default by the Contractor, the City reserves the right to procure the Goods or Services from other sources and deduct from any monies due, or that may thereafter become due to the Contractor, the difference between the price named in this Contract and the actual cost to the City to procure from an alternate source. Prices paid by the City will be considered the prevailing market price at the time such purchase is made.

15. Guarantee and Warranty. Contractor assumes design responsibility and warrants the articles to be free from design defect and suitable for the purposes intended by City. If it is determined by the City that the Goods and Services do not meet the minimum requirements of this Contract, the Contractor shall correct the same at Contractor's sole expense.

A. The Contractor agrees that the Goods and Services furnished under this Contract will be covered by the industry standard or better warranty.

B. Contractor further warrants that the Goods and Services furnished under this Contract will be covered by the most favorable commercial warranties the Contractor gives to any customer for the Goods and Services and that the rights and remedies provided herein are in addition to and do not limit any rights afforded to the City at law or equity, or by any other clause of this Contract.

C. Any additional warranties provided by law, including the warranty of merchantability and warranty of fitness for a particular purpose will remain in full force and effect and inure to the City's benefit. City reserves all rights and remedies provided by law for breach of any applicable warranty related to the Goods and Services.

D. City's inspections, approval, acceptance, or payment for all or part of any Goods and

Services will in no way affect City's warranty rights.

16. Indemnity.

A. Indemnity: Contractor shall defend, hold harmless and indemnify CITY, its officers and employees, and each and every one of them, from and against all actions, damages, costs, liabilities, claims, demands, losses, judgments, penalties, costs and expenses of every type and description, whether arising on or off the site of the work or services performed under this Contract, including, any fees and costs reasonably incurred by City's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "Liabilities"), including Liabilities for personal injury or death, damage to personal, real or intellectual property, damage to the environment, contractual or other economic damages, or regulatory penalties, arising out of or in any way connected with performance of or failure to perform this Contract by Contractor, any subcontractor (including lower-tier subcontractors) or agent of Contractor, their respective officers and employees, and anyone else for whose acts or omissions any of them may be liable, whether or not the Liabilities (1) are caused in part by a party indemnified hereunder, or (ii) are litigated, settled or reduced to judgment; provided that the foregoing indemnity does not apply to liability for any damages for death or bodily injury to persons, injury to property, or other loss, damage, or expense, to the extent arising from the active negligence or willful misconduct of, or defects in design furnished by, City, its agents, servants, or independent contractors who are directly responsible to City, except when such agents, servants, or independent contractors are under the supervision and control of Contractor or any subcontractor (including lower-tier subcontractors) or agent of Contractor.

B. Insurance Policies; Intellectual Property Claims: The existence or acceptance by City of any of the insurance policies or coverages described in this Contract does not affect or limit any of City's rights under this section, nor do the limits of any insurance limit the liability of Contractor hereunder. This section will not apply to any intellectual property claims, actions, lawsuits or other proceedings subject to the provisions of section 8.B., above.

C. Survival. The provisions of this section will survive any expiration or termination of this Contract.

17. Funding Availability.

A. This Contract is subject to the budget and fiscal provisions of the Charter and the Sacramento City Code.

B. The City's payment obligation under this Contract will not exceed the amount of funds appropriated and approved for this Contract by the Sacramento City Council.

C. This Section shall govern over any other contrary provision of the Contract.

18. Equal Employment Opportunity. During the performance of this Contract, Contractor, for itself, its assignees and successors in interest, agrees as follows:

A. Compliance With Regulations: Contractor shall comply with all state, local, and federal anti-discrimination laws and regulations, including the Executive Order 11246 entitled "Equal Opportunity in Federal Employment," as amended by Executive Order 11375, 12086, and 13672, and as supplemented in Department of Labor regulations (41 CFR Chapter 60), referred to collectively as the "Regulations."

B. Nondiscrimination: Contractor, with regards to the work performed by it after award and before completion of the work under this Contract, shall not discriminate on the ground of race, color, religion, sex, national origin, age, marital status, physical handicap or sexual orientation in selection and retention of subcontractors, including procurement of materials and leases of equipment. Contractor shall not participate either directly or indirectly in discrimination prohibited by the Regulations.

C. Solicitations for Subcontractors, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiations made by Contractor for work to be performed under any subcontract, including all procurement of materials or equipment, each potential subcontractor or supplier shall be notified by Contractor of Contractor's obligation under this Contract and the Regulations relative to nondiscrimination on the ground of race, color, religion, sex, national origin, age, marital status, physical handicap or sexual orientation.

D. Information and Reports: Contractor shall provide all information and reports required by the Regulations, or by any orders or instructions issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the City to be pertinent to ascertain compliance with the Regulations, orders and instructions. Where any information required of Contractor is in the exclusive possession of another who fails or refuses to furnish this information, Contractor shall so certify to the City, and shall set forth what efforts it has made to obtain the information.

E. Sanctions for Noncompliance: In the event of noncompliance by Contractor with the nondiscrimination provisions of this Contract, the City shall impose any sanctions it determines are appropriate including:

(1) Withholding of payments to Contractor under this Contract until Contractor complies;
(2) Cancellation, termination, or suspension of this Contract, in whole or in part.

F. Incorporation of Provisions: Contractor shall include the provisions of subsections A through E, above, in every subcontract, including procurement of materials and leases of equipment, unless exempted by the Regulations, or by any order or instructions issued pursuant thereto. The City may direct Contractor to take specific actions to enforce these provisions, including sanctions for noncompliance; provided, however, that if Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, Contractor may request that the City join such litigation to protect the City's interests.

19. **Entire Agreement.** This Contract, including all Exhibits and documents referenced herein, contains the entire agreement between the parties and supersedes whatever oral or written understanding they may have had before the execution of this Contract. No alteration to the terms of this Contract shall be valid unless approved in writing by Contractor, and by City, in accordance with applicable provisions of the Sacramento City Code.

20. **Modification of Contract.** The Contractor shall take no direction from any City employee that changes the executed terms and conditions of the Contract, including Exhibit A, or any change that impacts the cost, price, or schedule, before receiving a written, signed modification to the Contract.

21. **Severability.** If a court with jurisdiction rules that any portion of this Contract or its application to any person or circumstance is invalid or unenforceable, the remainder of this Contract will not be affected thereby and will remain valid and enforceable as written, to the greatest extent permitted by law.

22. **Waiver.** Neither the City's acceptance of, or payment for, any Goods or Services, nor any waiver by either party of any default, breach or condition precedent, will be construed as a waiver of any provision of this Contract, nor as a waiver of any other default, breach or condition precedent or any other right hereunder. No waiver will be effective unless it is in writing and signed by the waiving party.

23. **Governing Law.** This Contract shall be governed, construed and enforced in accordance with the laws of the State of California, except that the rule of interpretation in California Civil Code section 1654 will not apply. Venue of any litigation arising out of this Contract will lie exclusively in the state trial court or Federal District Court located in Sacramento County in the State of California, and the parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such courts, and consent to service of process issued by such courts.

24. **Assignment Prohibited.** The expertise and experience of Contractor are material considerations for this Contract. City has a strong interest in the qualifications and capability of the persons and entities that will fulfill the obligations imposed on Contractor under this Agreement. In recognition of this interest, Contractor shall not assign any right or obligation pursuant to this Contract without the written consent of the City. Any attempted or purported assignment without City's written consent shall be void and of no effect.

25. **Binding Effect.** This Contract is binding on the heirs, executors, administrators, successors and assigns of the parties, subject to the provisions of Section 24, above.

26. **Compliance with Laws.** The Contractor shall be responsible for strict compliance with all applicable laws, regulations, court orders and other legal requirements applicable to the work to be accomplished under the Contract, including the California Occupational Safety and Health Act and all applicable safety orders issued by the Division of Occupational Safety and Health, Department of Industrial Relations, State of California, and all applicable requirements of Underwriters Laboratories and the Federal Communication Commission.

27. Debarment Certification

A. Pursuant to 2 CFR, Part 200, and applicable Executive Orders, the City is restricted in its ability to contract with certain parties that are debarred, suspended, or otherwise excluded or ineligible for participating in Federal assistance programs or activities. By signing this Agreement, CONTRACTOR warrants and certifies under penalty of perjury under the laws of the State of California that Contractor, including any owner, partner, director, officer, or principal of the CONTRACTOR, or any person in a position with management responsibility or responsibility for the administration of federal funds:

(1) Is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal or state department/agency;

(2) Has not within a three-year period preceding this certification been convicted of or had a civil judgment rendered against it for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public transaction or contract (federal, state, or local); violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, receiving stolen property, or other criminal felony;

(3) Is not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (b) above; or

(4) Has not, within a three-year period preceding this certification, had one or more public contracts (federal, state, or local) or transactions terminated for cause or default.

(5) Has not been notified, within a three-year period preceding this certification, been notified of any delinquent Federal taxes in an amount that exceeds $3,500 for which the liability remains unsatisfied. Federal taxes are considered delinquent if the tax liability has been finally determined and the taxpayer is delinquent in making payment, as defined in Section 52.209-5 of the Federal Acquisition Regulations.

B. CONTRACTOR further warrants and certifies that it shall not knowingly enter into any transaction with any subcontractor, material supplier, or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from covered transactions by any federal or state department/agency. Any exceptions to the warranties and certifications in this Section must be disclosed to the City.

C. Exceptions will not necessarily result in denial of recommendation for award, but will be considered in determining Contractor's responsibility. Disclosures must indicate to whom exceptions apply, the initiating agency, and dates of action.

D. City will review the Federal Government's System for Award Management Exclusions maintained by the General Services Administration for eligibility, prior to the execution of this Agreement. The CONTRACTOR shall provide immediate written notice to the City if, at any time prior to execution, the CONTRACTOR learns this certification is erroneous or has become erroneous by reason of changed circumstances. If it is later determined that the Contractor's warranties and certification in this Section were erroneous, the City may terminate this Agreement for default.

Attachment 1 to Exhibit A

City of SACRAMENTO

REQUEST FOR BIDS – NON-PROFESSIONAL SERVICES

Request for Bids No.	RFB# B26141111416	
Project Name:	Landscape Maintenance of Water Treatment Plants	
Questions due by:	4/1/2026	2:00 PM PST
Bid Due By:	4/8/2026	2:00 PM PST
Estimated Week of Award Notification:	April 2026	
Estimated Week of Contract Award:	May 2026	

PRE-BID CONFERENCE MEETING

☐ No

☒ Yes, attendance is optional **-OR-** ☐ Yes, attendance is MANDATORY

NOTE: Bids from bidders who do not attend a MANDATORY pre-bid meeting shall be deemed non-responsive.

Date:	March 25, 2026
Time:	Combined Water Treatment Plant: 7:00 AM – 9 AM PDT Sacramento River Water Treatment Plant: 9:30 – 10:30 AM PDT E.A. Fairbairn Water Treatment Plant: 11:00 AM – 12 PM PDT
Location site name:	**MULTIPLE** Combined Water Treatment Plant (CWTP) Sacramento River Water Treatment Plant (SRWTP) E.A. Fairbairn Water Treatment Plant (EAFWTP)
Address:	CWTP: 1395 35th Ave., Sacramento, CA 95822 SRWTP: 301 Water St., Sacramento, CA 95811 EAFWTP: 7501 College Town Dr., Sacramento, CA 95826
Bldg./Floor/Room:	N/A
City:	Sacramento
Link for virtual meeting:	**N/A – In Person**

PUBLIC BID OPENING

☒ Yes ☐ No

Public Bid Openings will be held as soon as practicable after the submission deadline. Prospective bidders are invited to attend the public opening. Details about the public opening are as follows:

Bid Opening Date:	April 8, 2026
Bid Opening Time	2 PM Pacific Daylight Time
Location site name:	**Zoom – Virtual Meeting**
Address:	N/A
Bldg./Floor/Room:	N/A

City:	Sacramento
Link for virtual meeting:	https://cityofsacramento-org.zoom.us/j/93077455918

NOTE:
The City of Sacramento reserves the right to modify the dates and other criteria listed at its sole discretion. Prospective bidders will be notified of any significant changes by addendum issued via the City of Sacramento's online bid portal. All information submitted in or in connection with a bid is submitted under penalty of perjury. The City shall have the right to terminate at any time any Contract awarded pursuant to a bid that contains false information. The return of a signed bid shall constitute a promise to supply in accordance with terms and conditions shown herein. ***All bid submissions become public record.***

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Attachments

Attachment 1 – Bid Signature Page

Attachment 2 – Payment Discount

Attachment 3 – Pricing Schedule

Attachment 4 – Equal Benefits Ordinance Declaration of Compliance

Attachment 5 – Local Business Enterprise 5% Preference Form

Attachment 6 – Local Business Enterprise Participation Requirement

Attachment 7 – Site Performance Schedules and Maps

Attachment 8 – Landscape Maintenance Contractors Licenses, Certificates and Registration Requirements

Attachment 9 – Landscape Maintenance Services General Specifications and Provisions

Attachment 10 – City Agreement Template

1. SCOPE OF SERVICES

1.1 Introduction

The City of Sacramento, Department of Utilities

is soliciting bids to: provide landscape maintenance services for various Department of Utilities locations.

1.2 Scope of Services

Please see Attachment 7 for site maps and performance schedules.

Landscape Practices for Sustainability

Contractor providing landscape service for the City are encouraged to employ sustainable landscape management practices whenever practicable, including but not limited to: integrated pest management, plant material-cycling, low water volume irrigation, composting and use of mulch and compost.

All irrigation shall be in compliance with Landscape Maintenance Services General Specifications and Provisions (LS-20).

The use of any chemicals shall comply with Section 20 of LS-20. Pest and weed management shall comply with sections 15.4, 16.2, and 17.2 of LS-20. Fertilizer applications shall comply with sections 15.3.4, 16.1.1, and 17.1.2 of LS-20. The contractor shall also comply with sections 18.2 (Trash Removal) and 21 (Sustainability).

Lawn mowing shall be done to a minimum height of two (2) inches, using a mulching type mower. Bark mulch may be supplied by the City's Urban Forest from their operations. In this case, the Contractor shall provide the labor only for possible pick up, delivery and spreading of the mulch.

Whenever possible, debris as a result of plant material clean up, weed removal or pruning shall be taken to a recyclable green waste facility.

Replacement plants for existing areas; Contractor shall provide suggestions to minimize waste by choosing species that are appropriate to the micro-climate species that can grow to their natural size in the space allotted them. Native and drought-tolerant plants that require no or minimal watering once established are preferred.

Water Quality Control

These requirements consist of regulations contained in the National Pollution Discharge Elimination System (NPDES) Stormwater Permit issued to the City.

1. **Dust Control**
   The Contractor shall comply with all City and County of Sacramento air pollution control rules, regulations, ordinances and statues which apply to any work performed pursuant to the contract, including any air pollution control rules, regulations, ordinances, and statutes, specified in the Government Code. The contractor shall be responsible for the control of dust within the limits of the project at all times including weekends and holidays in addition to normal working days. The Contractor shall take whatever steps necessary or required by the Project Manager (PM) to eliminate the nuisance of blowing dust without causing sediment, debris or litter to enter the City storm drain system.

2. <u>Erosion, Sediment and Pollution Control</u>

The Contractor shall be responsible for controlling erosion and sedimentation within the limits of the project at all times during the course of construction including evenings, weekends and holidays in addition to normal working days. The Contractor shall prevent sediment and construction debris from entering the City storm drain system.

Contractor shall provide the following erosion, sediment and pollution control Best Management Practices (BMPs) when and where applicable (also see attached details):

1. Filter bags in and Gravel bags around any storm drain inlets which receive runoff from the limits of the construction zone, including storage and staging areas. Alternative storm drain inlet protection BMPs can be used with approval of the Engineer.

2. Covering of material piles and/or gravel berm (or approved equal) around material piles as required to prevent migration of material to gutters or storm drains.

3. Gutter flow lines are to be kept unimpeded and free of soil, debris and construction materials at all times.

4. Stabilized construction entrance at any soil to concrete/asphalt interface used by Contractor vehicles and equipment.

5. Site Cleanup: The Contractor shall keep the project site clean and free of dust, mud, and debris resulting from the Contractor's operations. Daily clean up throughout the project shall be required as the Contractor progresses with the work. Extra precautions and clean up efforts shall be made prior to weekends and holidays.

   Daily or as needed, all paved areas within the limits of the project shall be cleaned and free of sediments, asphalt, concrete and any other construction debris. The Contractor will not be allowed to clean sediment and debris from the street by using water to wash down streets. The streets will not be allowed to be washed only after the streets have been swept and/or vacuumed and inlet protection has been placed at all storm drain inlets to catch any remaining sediments from the streets.

   Spillage of earth, grave, concrete, asphalt, or other materials resulting from hauling operations along or across any public traveled way shall be removed immediately by the Contractor at his expense. If site is not kept sufficiently clean the City will take measures to clean it and back charge the Contractor.

6. Solid Waste Management: Contractor shall maintain a clean construction site. Contractor shall provide designated areas for waste collection. The waste collection areas shall be leak-proof containers with lids or covers. Site trash shall be collected daily and placed in disposal containers. The Contractor shall make arrangements for regular waste collection. The Contractor shall also regularly inspect the waste disposal areas to determine if potential pollutant discharges exist.

7. Material Storage and Delivery Area: Contractor shall provide one central material storage and delivery area (MSDA) for the duration of the project. This area shall be protected such that runoff will not be allowed to leave the MSDA site. The Contractor shall regularly inspect the MSDA site to ensure that any hazardous or non-hazardous materials have not spilled.

8. Spill prevention and Control: Contractor shall be responsible for instructing employees and subcontractors about preventing spills of hazardous materials, including equipment fuel, and controlling spills if they occur. Proper spill control and cleanup materials and procedures shall be kept on site near the storage and equipment fueling areas and updated as materials change on site. Contractor will be held strictly responsible for the prevention, clean-up and consequences of any hazardous material spills.

   Throughout the duration of the project, the Contractor will be required to inspect and maintain, in effective condition, all erosion, sediment and pollution control BMPs before and after each storm event as needed.

   The Contractor shall immediately correct or replace any ineffective BMPs.
   More information about control measures and housekeeping practices can be obtained by referring to the City of Sacramento's Administrative and Technical Procedures Manual for Grading, Erosion and Sediment Control available online.

   The Contractor shall prepare and submit an erosion, sediment and pollution control plan (ESC Plan) for the Project Manager for review. Review of the Contractor's information of these Special Provisions. The submittal shall include a description of all erosion, sediment and pollution control BMPs proposed to be used to prevent sediment and other sources of pollution from entering the City storm drain system as well as a site plan showing their placement. The ESC Plan shall be submitted a minimum of 48 hours prior to start of work. The Contractor will not be allowed to begin work until an accepted ESC Plan is on file with the Project Manager. The erosion, sediment and pollution control plan shall be necessary and re-submitted to the Project Manager.

3. <u>Enforcement</u>

Per City Code Sections 15.88, 13.16 and 1.28 the Contractor shall be subject to Notices of Violation (NOVs) resulting in possible Stop Work Orders and Administrative Penalties of up to $4,999 per day for non-compliance of this section of the Special Provisions.

Per the State's Porter Cologne Water Quality Act, the Contractor shall also be subject to inspection by Staff from the Central Valley Regional Water Quality Control Board who have the authority to issue Notices of Violation (NOVs) and Penalties of up to $10,000 per day for non-compliance. The Contractor shall be liable for any fines issued to the project by the State or Federal for NPDES non-compliance due to Contractor negligence.

The City reserves the right to take corrective action and withhold the City's cost for corrective action from progress payments or final payment against the Contractor of the agreement.

Any fines, including third-party claims, levied against the Agency as a result of Contractor's non-compliance are the Contractor's sole responsibility and will be withheld from progress payments or final payment against the Contractor of the agreement.

2. CURRENT CONDITIONS

2.1 About the City of Sacramento

Founded in 1849, the City of Sacramento is the oldest incorporated city in California and is the capital city of California. It has a population of over 500,000. Sacramento is a progressive City with great pride in its ethnic and cultural diversity, concern for environmental and social issues, and emphasis on quality in the provision of governmental services. Sacramento is a Charter City, which operates under a City Council Manager form of government. It has an annual budget of $1.6 billion and approximately 5,000 full-time equivalent positions.

2.2 Current Project Conditions

Landscaping of each facility is performed on four different agreements with various vendors. The first agreement to maintain the Sacramento River Water Treatment Plant (SRWTP) is performed by California Landscape Associates with a term of three years through June 30, 2026 with a Not to Exceed (NTE) of $249,999. The second agreement for maintenance of the Combined Wastewater Treatment Plant (CWTP) is performed by Azevedo's Landscape Maintenance Inc. with an agreement for three years set to expire on June 30, 2026 with an NTE of $177,320. The third agreement for maintenance of Demonstration Garden (Demo Garden) is performed by Elite Service Experts for a three-year term through June 30, 2027 with a Not to Exceed $245,000. The fourth agreement for maintenance of E. A. Fairbairn Water Treatment Plant (EAFWTP) is also performed by Azevedo's Landscape Maintenance Inc. with an NTE of $117,330 for a three-year term through June 30, 2026.

3. BID SUBMISSION

3.1 Submission Information

All bids shall be clearly and distinctly written without erasure or modification, and properly signed by an authorized party, who shall indicate the capacity in which the signature is executed. All bids must show the full name of the firm bidding and all responses must be written in ink, printed on a typewriter, or computer generated. Bids received after the deadline, or bids submitted in a manner contrary to that prescribed in the bid, shall be deemed non-responsive.

Responses made in pencil will not be considered. Bids must be submitted on the forms included herein as follows:

☐ Submit bids **electronically** through PlanetBids: https://pbsystem.planetbids.com/portal/15300/portal-home
Notification of the bid results will be sent to all bidders through PlanetBids
-or-
☒ Submit **hard copy** bids to:

Office of the City Clerk
915 I St, 5th Fl Clerk's Office
Sacramento, CA 95814

Hard copy bids must be submitted in a sealed envelope or package. Bid submission envelopes/packages shall exhibit the City's bid name and number, and include the vendor's name and address printed on the outside of the envelope/package. The City is not responsible for misaddressed bid submittals.

3.2 Public Opening

☒ Bidders are invited to be present at the opening of bids. The public opening will be held at:
Virtually on Zoom via: https://cityofsacramento-org.zoom.us/j/93077455918), at or after 2:00 P.M. on 4/8/2026
After opening, bids may be inspected in the City Clerk's office.

-or-

☐ A public opening will not be held. Notification of bid results will be sent to all bidders.

3.3 Standard Forms to be Submitted with Bid

The following items are required to be submitted with bid package in order to be considered for contract award:

☒ Attachment 1 - Bid Signature Page
☒ Attachment 2 – Payment Discount
☒ Attachment 3 – Pricing Schedule
☒ Attachment 4 – Equal Benefits Ordinance Declaration of Compliance
☒ Attachment 5 – Local Business Enterprise 5% Preference Form
☒ Attachment 6 – Local Business Enterprise Participation Program Form

3.4 Bid Security

Bid security is: ☐ Required ☒ Not Required

If required, bid security approved by the City must accompany the bid, in the amount of **N/A** % of the total amount of the bid. Bid security can be in the form of a cashier's check, certified check, or a bid bond from a surety company authorized to do business in the State of California. Bid securities will be returned to all except the three lowest bidders within ten days after the opening of all bids. The bid security of the two unsuccessful contractors will be returned after the successful contractor has executed the contract. Bid security of the successful contractor will be returned when the contract is signed and all other contract award requirements have been met.

3.5 Performance Bond

A performance bond is: ☐ Required ☒ Not Required

If required, a performance bond approved by the City must be submitted by the successful bidder within ten days of the notification of the intent to award, in the amount of **N/A** % of the total amount of the bid. The performance bond can be in the form of a cashier's check, certified check, or a bid bond from a surety company authorized to do business in the State of California. Such bond shall be approved as to form by the City Attorney.

3.6 Certificate of Insurance

Successful bidders are REQUIRED to submit the necessary certificate(s) of insurance and endorsements as called for in the contract's General Provisions prior to award of the contract.

3.7 Business Operations Tax Certificate

Chapter 3.08 of the Sacramento City Code requires that anyone conducting business in the City of Sacramento obtain a **Business Operations Tax Certificate** and pay the applicable tax if necessary. Successful bidders will be REQUIRED to show compliance with this requirement prior to award of the contract.

To obtain information about the Business Operation Tax Certificate, contact the City of Sacramento Revenue Division at (916) 808-8500 or visit:
https://www.cityofsacramento.gov/finance/revenue/business-operations-tax

4. APPLICABLE ORDINANCES AND PROGRAMS

4.1 Local Business Enterprise (LBE) Five Percent (5%) Bid Evaluation Preference

☒ The LBE 5% Preference **is applicable** to this Request for Bids if bid is less than $250,000.
-or-
☐ The LBE 5% Preference **is not applicable** to this Request for Bids.
-or-
☐ The LBE 5% Preference **is not applicable** to this Request for Bids as the project is Federally-funded.

For contracts under $250,000, firms that qualify as a local business enterprise (LBE) will receive a 5% preference on all City procurement opportunities. The prime bidder must qualify under the LBE to receive preference points; subcontractors will not be considered. For professional service contracts only, this preference also applies to procurement opportunities of $250,000 or more.

Detailed information about this program can be found in the City's LBE Policy, located at:
https://www.cityofsacramento.gov/finance/procurement/contract-ordinances

4.2 Local Business Enterprise (LBE) Participation Program

☒ The LBE Participation Requirement **is applicable** to this Request for Bids if bid is more than $250,000.
-or-
☐ The LBE Participation Requirement **is not applicable or has been waived** for this Request for Bids.
-or-

☐ The LBE Participation Requirement **is not applicable** for this Request for Bids as the project is Federally-funded.

The LBE Participation Program is applicable to non-professional, professional, and public project/construction contracts $250,000 or more unless waived by the City Manager or the City Manager's designee. This program provides enhanced opportunities for the participation of qualifying business in the City's contracting and procurement activities. A minimum of 5% LBE participation is required. To receive credit for the 5% minimum participation requirement, bidders must either (a) be an LBE, or (b) subcontract with a qualified LBE. Bidders wishing to qualify for this requirement using subcontractors must submit the Subcontractor and Local Business Enterprise Participation Verification Form with their bid.

Detailed information about this program and the Subcontractor and Local Business Enterprise Participation Verification Form can be found at: https://www.cityofsacramento.gov/finance/procurement/contract-ordinances

4.3 SB 1383

☒ Goods/services being requested on this solicitation qualify as Recovered Organic Materials and **will be subject to reporting requirements outlined in SB 1383.**
-or-
☐ SB 1383 requirements are **NOT APPLICABLE** to this solicitation.

Beginning January 1, 2022, SB 1383 requires cities and counties to procure annually a quantity of recovered organic waste products to meet their annual procurement target. These procurement requirements will strengthen California's green, self-sustaining economy. CalRecycle assigns an annual procurement target to each jurisdiction based on its population. Jurisdictions can fulfil their target by procuring any combination of the following recovered organic waste products:

- Compost
- Mulch
- Renewable Energy (Transportation Fuel, Heat, Electricity) from Anerobic Digestion and Electricity from Biomass Conversion.

Full regulatory requirements can be found at:
https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IBB2CD6505B4D11EC976B000D3A7C4BC3&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)

4.4 Sustainable Purchasing Preference

☐ **Preference will be given** to vendors submitting bids for materials that qualify as "sustainable under the City's Sustainable Purchasing Policy. Only applicable to materials totaling $50,000 or less and bid as a separate line item or items.
-or-
☒ Preference **will not be given** to vendors submitting bids for materials that qualify as "sustainable under the City's Sustainable Purchasing Policy.

The City of Sacramento's Sustainable Purchasing Policy can be found at:
https://www.cityofsacramento.gov/content/dam/portal/finance/Procurement/sustainability/Sustainable_Purchasing_Policy_SPP.pdf

4.5 Prevailing Wage

☒ The contracts resulting from this solicitation **will** be subject to Prevailing Wage Rates
-or-
☐ The contracts resulting from this solicitation **will not** be subject to Prevailing Wage Rates

Contracts for "Public Works" as defined in California Labor Code section 1720 including construction work in an amount exceeding $25,000, or, alteration, demolition, repair, or maintenance work in an amount exceeding $15,000, and contracts for janitorial services per City of Sacramento Code section 3.56.070 C., are subject to Prevailing wage.

4.6 Additional Ordinances

Information on additional ordinances may be found at:
https://www.cityofsacramento.gov/finance/procurement/contract-ordinances

The Local Ordinance & Bid Preference Requirements Table outlines which ordinances apply to procurement contracts by type and dollar amount:
https://www.cityofsacramento.gov/content/dam/portal/finance/Procurement/contract-ordinances/Local-Ordinances-and-Bid-Preference-Requirements-Table.pdf

5. BID EVALUATION PROCESS

5.1 Bid Evaluation

a. In determining the amount bid by each bidder, the City shall disregard mathematical errors in addition, subtraction, multiplication, and division that appear obvious on the face of the bid. When such a mathematical error appears on the face of the bid, the City shall have the right to correct such error and to compute the total amount bid by the bidder based on the corrected figure or figures.

b. When an item price is required, and it is inconsistent with the extended price listed for the total quantity requested (item price times estimated quantity needed), the item price shall prevail over the extended price for the item unless, in the sole discretion of the City, such a procedure would be inconsistent with the intent of the bid process. The total paid for each such item of work shall be based upon the item price and not the total extended price.

c. Should the bid contain only a total extended price for the item and the item price is omitted, the City shall determine the item price by dividing the total extended price by the estimated quantity needed, as listed in this RFB.

d. If the bid contains neither the item price nor the price for the item, then it shall be deemed incomplete and the bid shall be disregarded.

e. If prospective bidders are bidding an item “or equal,” the bidders shall list the manufacturer’s name and product number of the item offered in the space provided. If such information is not provided, it will be assumed that the bidder is offering the exact item specified. The City’s decision as to whether an item is an equal to the item specified shall be final.

5.2 Determination of Lowest Responsible Bidder

Sacramento City Code 3.56.020 provides that the lowest responsible bidder shall be determined as follows:

f. In determining whether a bidder is responsible, consideration shall be given to: (i) the quality and performance of the supplies to be provided by the bidder; (ii) the ability, capacity and skill of the bidder to perform the contract or effectuate the transaction; (iii) the ability of the bidder to perform the contract or effectuate the transaction within the time specified, without delay; (iv) the character, integrity, reputation, judgment, experience and efficiency of the bidder; (v) the quality of the bidder's performance on previous purchases by, or contracts with, the City; (vi) the ability of the bidder to provide future maintenance, repair parts and services for the supplies provided.

g. Based on the information provided in the bids, the City Council or the City Manager, as the case may be, shall identify those bids that are subject at the time of bid opening to the City's local sales or use tax under the provisions of Part 1.5 of Division 2 of the California Revenue and Taxation Code and Chapter 3.24 of the City Code. The lowest responsive, responsible bidder shall be determined after the amount of local sales or use tax that would be received by the City is deducted from such bids. This deduction shall be in addition to the application of any bid price preferences authorized by subsection iii., below.

h. The City Council may by resolution, from time to time, adopt programs or procedures for providing bid price preferences, including but not limited to, preferences to promote the participation and utilization

of local business enterprises, energy conservation and sustainability in the City's contracting for supplies and nonprofessional services. The lowest responsible bidder shall be the responsible bidder whose bid price is the lowest after all bid prices are calculated to include any such preferences. The calculation of such preferences shall be in addition to any deduction of sales or use tax required by subsection ii., above.

5.3 Local Business Sales or Use Tax

The lowest responsible bidder shall be determined after the amount of local sales or use tax that would be received by the City is deducted. The current rate at which such local sales or use tax is received by the City is one percent (1%). Therefore, in evaluating bids to determine the lowest responsible bidder, bids that are subject to this tax at the time of opening shall have an amount equal to one percent (1%) of the taxable total deducted from the bids. This deduction shall be in addition to the application of any price preferences or other deductions authorized by the City Code. Such deductions shall be made for bid evaluation purposes only. Contract awards shall reflect the actual prices submitted.

If this RFB is for Goods and Services, respondents must identify all taxable materials on a separate line item(s) from services to receive this price preference.

6. ADMINISTRATIVE REQUIREMENTS

6.1 Bid Forms

Official Electronic copies of this bid document can be obtained only from the City of Sacramento's official online bid portal: https://pbsystem.planetbids.com/portal/15300/portal-home
Any additional information (Addenda, Q&A, etc.) pertaining to this bid will also be found at the above link.

Bid information obtained from third party sources will not be considered official and will not fulfill a bidder's responsibility for all official bid information as posted on our official site at the link above. Documents obtained from such sources may be incomplete, resulting in responses that are rejected as incomplete and/or non-responsive.

6.2 Questions

All questions must be submitted electronically via the City's online bid portal prior to the Q&A Deadline:
https://pbsystem.planetbids.com/portal/15300/portal-home

Written responses to questions will be provided by the City as either an addendum or an email to all prospective bidders via the City's online bid portal.

If a question arises ***after*** the Q&A Deadline – it may be emailed to BFoth@cityofsacramento.org . If the department soliciting the bid determines a response is needed, it shall issue an addendum to the solicitation to re-open the Q&A period to allow the question to be asked and answered via the online bid portal and to allow other prospective bidders to submit additional questions for a limited period of time.

6.3 Alternate Bids

Alternate bids are invalid unless invited and covered by the specifications. Please note, all submissions are subject to rejection when unsolicited alternate bids are submitted.

6.4 Interest in More Than One Bid

No bidder shall knowingly be interested in more than one bid as the principal bidder, as prohibited by City Code Section 3.56.130.

6.5 City's Rights

City reserves the right to take any of the following actions in its absolute discretion:

a. to award in whole or in part.
b. to reject any and all bids.
c. to increase or decrease the quantities as listed.
d. to issue subsequent Requests for Bids (RFB).
e. to approve or disapprove the use of particular subcontractors and/or suppliers.
f. to waive any informalities or minor irregularities, as determined in its sole discretion, in connection with the bids received.
g. to make multiple awards to provide alternate sources to ensure continuity of services.
h. to accept a bidder's signed offer and issue a purchase order directly to the bidder based on the RFB.

6.6 City Code

All applicable provisions of the City Code, including but not limited to the provisions of Chapter 3.56, are applicable to all bids submitted and contracts awarded.

6.7 Equipment

If equipment is bid, it shall be the newest and latest model in current production. Used, re-manufactured, shopworn, demonstrator, prototype of discontinued models are not acceptable unless otherwise stipulated by the City.

6.8 Brand Name or Equivalent

Items may be bid that are equivalent to the item stated in the bid document unless this request for bids states that no alternatives will be accepted. Offers for equivalent items shall state the brand and model number. The bidder may attach appropriate documentation to support their claim of equivalency. The burden of proof and the cost of analysis shall be the responsibility of the bidder. The City is the sole judge as to whether an offered item is equivalent to the requested item and the City's decision shall be final. When equipment must be provided by an original equipment manufacturer to comply with warranty restrictions, the City will not accept equivalent items offered.

6.9 Samples

Samples of items, when requested, shall be furnished to the City free of charge of any kind, including freight or handling charges. Samples of items may be retained for future comparison. Samples may be damaged or destroyed by testing. Samples shall be returned to the bidders only upon request, and at the bidder's cost.

6.10 Payment Terms

Payment terms will be considered as Net 30 unless a cash discount for earlier payment is offered by the bidder. When prompt payment discounts are offered, the calculated discount will be subtracted from the final bid amount and the discounted amount will be used to determine lowest bid. Discounts offered for payment in less than twenty (20) days will not be considered as a basis for award. Payment for services shall be in arrears.

6.12 Mandatory Pre-Bid Conference

If a mandatory pre-bid conference is indicated on the cover of this request for bid, all bidders are required to attend the conference. **Failure to attend this conference will result in rejection of your bid**. If a mandatory Pre-Bid Conference is indicated, bid packages will be made available only through the time and date of the conference. Subsequent addenda, if applicable, will be furnished only to those bidders who attended the Mandatory Pre-Bid Conference.

6.13 Pre-Award Conference

The apparent lowest responsible bidder may be required to attend a pre-award conference at a mutually acceptable time at which requirements of the contract will be reviewed. At that time, samples of forms, reports etc., will be submitted by the contractor for final approval.

6.14 Award by Item or Group

The City reserves the right to increase or decrease quantities listed, make separate awards for any item, line-item or category/group of items to the lowest responsible bidders for such items or category/groups of items.

6.15 Multiple Awards

The City reserves the right to make multiple awards in order to provide for multiple sources, to ensure continuity of supply if meeting the City's requirements within an acceptable time period may exceed the capacity or capability of the primary contractor.

6.16 Contract Award

Within ninety (90) days after bid opening, a contract will be awarded by the City to the lowest responsible bidder(s), subject to the right of the City to reject all bids or waive informalities or minor irregularities, as it may deem proper. The time for awarding a contract may be extended in the sole discretion of the City, if required to evaluate bids or for such other purposes as the City may determine, unless the Bidder objects to such extension in writing with its Bid. The City may accept a Bid offer by issuance of a Notice of Award Letter, Contract and/or a purchase order notifying Bidder of award at any time on or before the 90th day following the day of Bid opening.

6.17 Non-Professional Services Agreement

a. The bidder(s) recommended for award will be required to sign a Non-Professional Services Agreement. A copy of the agreement can be found at the following web address: https://www.cityofsacramento.gov/finance/procurement/standard-agreements

b. Bidders are responsible for **reading and understanding** all of the requirements of the agreement **prior** to submitting their bid. Questions about any portion of the agreement shall be submitted in the manner specified in this bid.

c. In addition, the resulting contract may be subject to three City Ordinances referenced in the agreement. These ordinances shall be reviewed at the following web address: https://www.cityofsacramento.gov/finance/procurement/contract-ordinances

i. Living Wage Requirements for Non-Professional Service Agreements
ii. Requirements of the Non-Discrimination in Employee Benefits Code (EBO).
iii. Ban-the-Box Requirements.

6.18 Emergency/Declared Disaster Requirements

In the event of an emergency or if a City facility is declared a disaster area by the county, state or federal government, the contract resulting from this IFB may be subjected to unusual usage. The selected bidder shall provide service to the City during such an emergency or declared disaster under the same terms and conditions that apply during non-emergency/disaster conditions. If the consultant/vendor/supplier is unable to supply the goods/services under the terms of the contract because of a disruption in its chain of supply or service, then the consultant/vendor/supplier shall provide proof of such disruption which may include, but not be limited to a copy of a letter from the source of supply or service stating reason for the disruption. Additional profit margin as a result of supplying goods/services during an emergency or a declared disaster shall not be permitted.

6.19 Bid Protest

Any bid protests are subject to the City's adopted protest procedure. A copy of the City's protest procedure is available at: https://www.cityofsacramento.gov/finance/procurement/bid-opportunities

6.20 Business Operations Tax Certificate

Sacramento City Code requires that any person or firm conducting business within or with the City of Sacramento obtain a Business Operations Tax Certificate and pay the applicable tax if necessary. Successful Respondent(s) must meet this requirement prior to Award of the Contract.

To obtain information about the Business Operations Tax Certificate, contact the City of Sacramento, Revenue Division, (916) 808-8500.

6.21 Licenses and Permits

By providing a submission in response to this solicitation, the respondent represents and warrants that it has all licenses, permits, qualifications, and approvals required for the Respondent to furnish the Goods and/or Services required by the City. If the respondent is an out-of-state entity, the respondent represents and warranties that it possesses a valid certificate to transact business in the State of California issued by the California Secretary of State.

6.22 Submission Authority

By providing a submission in response to this Solicitation, the bidder certifies that the only persons or parties interested in its submission as principals are those named herein; that its bid is made without collusion with any other individual, firm, or corporation; that it has examined all of the Contract Documents and proposes and agrees that if its Submission is accepted, the Respondent will execute the Contract Documents without amendment and fully perform the Contract; that the Respondent shall furnish all Goods and/or perform all Services specified in the Contract Documents, in the manner and time prescribed, and according to the requirements set forth therein; and that the Respondent shall accept the prices set forth in the Respondent's attached Pricing Schedule.

6.23 Submissions Property of City/Proprietary Bid Material

All documents submitted shall become the property of the City and subject to the State of California Public Records Act. Bidders must identify all copyrighted material, trade secrets or other proprietary information that the bidders claim are exempt from the California Public Records Act.

Bidder hereby warrants and represents that in submitting its Submission, it has not included or disclosed any intellectual property rights of any third party without authorization or license from the respective third party intellectual property rights owner(s). Bidder hereby further warrants and represents that in performing the contract, if awarded, Bidder would not directly or contributorily infringe upon any intellectual property rights of any third party, including without limitation trademarks, copyrights, patents, trade dress, trade secrets, know-how and proprietary information.

If any information or elements of the bid is set apart and clearly marked as “Trade Secret” or “Proprietary” when it is provided to the City, the City will give notice to the Bidder of the request for disclosure to allow the Bidder to seek judicial protection from disclosure.

Failure by the Bidder to take timely steps to seek judicial protection from disclosure shall constitute a complete waiver by the Bidder of any rights regarding the information designated as “Trade Secret” or “Proprietary” and such information may be disclosed by the City pursuant to applicable procedures under the California Public Records Act. Under no circumstances will City have any obligations to seek judicial protection from disclosure for any bids or other materials submitted in response to this RFB.

The City has no liability for any disclosure, unless such disclosure is made in violation of a court order obtained by a Bidder or pertains to materials marked as “Trade Secret” or “Proprietary” for which the City failed to give the above notice.

Bidders are responsible for **reading and understanding** all of the requirements of the agreement **prior** to submitting their bid. Questions about any portion of the agreement shall be submitted in the manner specified in this bid.

6.24 Bid Acceptance

The City cannot accept a bid failing to comply with any of the above requirements.

6.25 Purchase Order

One or more Purchase Orders may be issued to the Contractor on behalf of the City department or division ordering items/services covered in the contract. The Purchase Order will be enclosed with the resulting contract or will be issued shortly thereafter, and will become of the contract. Each Purchase Order will cite a specific dollar value to cover a particular item or specified period of time. If a contract is for a specific period of time and extends beyond the close of the City's fiscal year of June 30th a second purchase order may be issued.

The purchase order does not supersede any provision of the contract. Performance time and dates are determined solely by the contract.

Delivery of material and/or services are not to begin until receipt of the purchase order.

6.26 Cooperative Purchasing

The use of any resulting contract may be extended to other government agencies and to other departments or divisions within the City of Sacramento. It shall be understood that all terms and conditions as specified herein shall apply. The City of Sacramento will not be an agent, partner or representative of any other government agency purchasing through its Contract and is not obligated or liable for such purchases, including, but not limited to, payment for any order placed by any other government agency.

6.27 Taxpayer Identification Certification

Contractor shall file a current version of the Department of the Treasury Internal Revenue Service Form W-9 with the City.

6.28 California Income Tax Withholding Status

Contractor shall certify its California income tax withholding status by filing a current version California Form 590 "Withholding Exemption Certificate" or California Form 587 "Nonresident Withholding Allocation Worksheet" with the City.

ATTACHMENT 7

Site Performance Schedules and Maps

B. TECHNICAL SPECIFICATIONS/PLANS/OTHER REQUIREMENTS

Scope of Work

Landscape Maintenance Service for Areas:

Service Area #1: Sacramento River Water Treatment Plant
301 Water Street
Sacramento, CA 95811

Service Area #2: Sacramento River Water Intake Area
450 Jibboom Street
Sacramento, CA 95811

Service Area #3: Sacramento River Water Treatment Plant (Bannon Street)
334, 350 & 354 Bannon Street
222 & 230 Bannon Street
Sacramento, CA 95811

Scope of Work includes, but is not limited to:

- Mowing and Edging & Blowing off hard surfaces
- Irrigation Systems Maintenance
- Approved Water Techniques for Landscape Plants
- Fertilizer Application
- Trash & Debris Pickup & Removal
- Tree trimming, up to 8' of vertical clearance
- Maintenance of all plant material in good condition with Horticulturally Acceptable Growth and Color
- Maintenance Required to keep Designated Areas in safe, attractive and useable condition
- Immediate reporting of vandalism and/or Safety Hazards to Inspector

In addition to the Specifications and Requirements provided in the Scope of Work and Exhibits, the following requirements and prohibitions apply:

A. All vehicles and equipment entering City facilities must have the company name or logo conspicuously displayed.
B. The names of all employees who will be entering City facilities must be on file with the City.
C. All employees who will be entering City facilities must wear a shirt or hat identifying them as a company employee.
D. The use of any chemicals or fertilizers must first be approved by the City Inspector before each application. Selected Contractor will provide a list of chemicals that will be used and corresponding Safety Data Sheets before use.
E. All sprinkler heads, including pop-ups, must be maintained.
F. No repairs may be initiated without the notification and approval of the inspector and all invoices must CLEARLY describe parts involved, precise location of work, and breakdown of labor.

Minimum Level of Effort

April 1 through September 30	40 hours physical labor on site per week
October 1 through March 31	20 hours physical labor on site per week

Monthly payroll timesheets must be submitted by the 10th day of the following month.

LANDSCAPE PRACTICES FOR SUSTAINABILITY

Contractors providing landscape maintenance service for the City are encouraged to employ sustainable landscape management practices, whenever practicable, including but not limited to, integrated pest management, plant material-cycling, low water volume irrigation, composting and use of mulch and compost.

All irrigation shall be in compliance with the City Water Ordinance, see LS14, for a copy of the ordinance.

Lawn mowing shall be done to a minimum height of two (2) inches, using a mulching type mower.

Whenever possible, debris as a result of plant material clean up, weed removal or pruning shall be taken to a recyclable green waste facility.

Replacement plants for existing areas; Contractor shall provide suggestions to minimize waste by choosing species that are appropriate to the micro-climate species that can grow to their natural size in the space allotted them. Native and drought tolerant plants that require no or minimal watering once established are preferred.

STANDARD WATER QUALITY SPECIFICATIONS

Water Quality Control

These requirements consist of regulations contained in the National Pollution Discharge Elimination System (NPDES) Stormwater Permit issued to the City.

1. Dust Control

The Contractor shall comply with all City and County of Sacramento air pollution control rules, regulations, ordinances, and statutes which apply to any work performed pursuant to the contract, including any air pollution control rules, regulations, ordinances, and statutes, specified in the Government Code. The Contractor shall be responsible for the control of dust within the limits of the project at all times including weekends and holidays in addition to normal working days. The Contractor shall take whatever steps are necessary or required by the Engineer to eliminate the nuisance of blowing dust without causing sediment, debris or litter to enter the City storm drain system.

2. Erosion, Sediment, and Pollution Control

The Contractor shall be responsible for controlling erosion and sedimentation within the limits of the project at all times during the course of construction including evenings, weekends and holidays in addition to normal working days. The Contractor shall prevent sediment and construction debris from entering the City storm drain system.

The Contractor shall provide the following erosion, sediment, and pollution control Best Management Practices (BMPs) when and where applicable (also see attached details):

1. Filter Bags in and Gravel bags around any storm drain inlets which receive runoff from the limits of the construction zone, including storage and staging areas. Alternative storm drain inlet protection BMPs can be used with approval of the Engineer.

2. Covering of material piles and/or gravel berm (or approved equal) around material piles as required to prevent migration of material to gutters or storm drains.

3. Gutter flow lines are to be kept unimpeded and free of soil, debris and construction materials at all times.

4. Stabilized construction entrance at any soil to concrete/asphalt interface used by Contractor vehicles and equipment.

5. Silt fences, fiber rolls or approved equal at any soil to concrete/asphalt interface at which soil may be washed onto the concrete/asphalt.

   Wash water, slurry and sediment from concrete or asphalt saw cutting operations shall not be allowed to enter the City storm drain system, but instead must be collected and disposed of, by the Contractor, in some manner approved by the Engineer.

   The Contractor is required to implement, at a minimum, the following housekeeping practices: site cleanup, solid waste management, material storage and delivery area, concrete waste management, and spill prevention and control.

6. Site Cleanup: The Contractor shall keep the project site clean and free of dust, mud, and debris resulting from the Contractor's operations. Daily clean up throughout the project shall be required as the Contractor progresses with the work. Extra precautions and clean up efforts shall be made prior to weekends and holidays.

   Daily or as needed, all paved areas within the limits of the project shall be cleaned and free of sediments, asphalt, concrete and any other construction debris. The Contractor will not be allowed to clean sediment and debris from the street by using water to wash down streets. The streets will be allowed to be washed only after the streets have been thoroughly swept and/or vacuumed and inlet protection has been placed at all storm drain inlets to catch any remaining sediments from the streets.

   Spillage of earth, gravel, concrete, asphalt, or other materials resulting from hauling operations along or across any public traveled way shall be removed immediately by the Contractor at his expense. If site is not kept sufficiently clean the City will take measures to clean it and back charge the Contractor.

7. Solid Waste Management: Contractor shall maintain a clean construction site. Contractor shall provide designated areas for waste collection. The waste collection areas shall be leak-proof containers with lids or covers. Site trash shall be collected daily and placed in the disposal containers. The Contractor shall make arrangements for regular waste collection. The Contractor shall also regularly inspect the waste disposal areas to determine if potential pollutant discharges exist.

8. Material Storage and Delivery Area: Contractor shall provide one central material storage and delivery area (MSDA) for the duration of the project. This area shall be protected such that runoff will not be allowed to leave the MSDA site. The Contractor shall regularly inspect the MSDA site to ensure that any hazardous or non-hazardous materials have not spilled.

9. Concrete Waste Management: The Contractor shall arrange for concrete wastes to be disposed of off-site or in one designated on-site area. Concrete wastes, including leftover concrete and material from washing out the concrete truck, shall not be disposed or washed into the storm drain system. If a designated on-site area is provided, the site shall be bermed to allow the concrete to dry. The dried concrete waste shall be removed and disposed of properly by the Contractor at his expense.

10. Spill Prevention and Control: The Contractor shall be responsible for instructing employees and sub-contractors about preventing spills of hazardous materials, including equipment fuel, and controlling spills if they occur. Proper spill control and cleanup materials and procedures shall be kept on site near the storage and equipment fueling areas and updated as materials change on site. Contractor will be held strictly responsible for the prevention, clean-up and consequences of any hazardous materials spills.

Throughout the duration of the project the Contractor will be required to inspect and maintain, in effective condition, all erosion, sediment, and pollution control BMPs before and after each storm event and as needed. The contractor shall immediately correct or replace any ineffective BMPs.

More information about control measures and housekeeping practices can be obtained by referring to the City of Sacramento's Administrative and Technical Procedures Manual for Grading, Erosion and Sediment Control available at 1395 35th Avenue, Sacramento, CA 95822.

The Contractor shall prepare and submit an erosion, sediment and pollution control plan (ESC Plan) to the Engineer for review, (*Note to project manager: section number may vary. Revise as needed*.) per Section I, Review of Contractor's Information, of these Special Provisions. The submittal shall include a description of all erosion, sediment and pollution control BMPs proposed to be used to prevent sediment and other sources of pollution from entering the City storm drain system as well as a site plan showing their placement. The ESC Plan shall be submitted a minimum of 48 hours prior to start of the work. The Contractor will not be allowed to begin work until an accepted ESC Plan is on file with the Engineer. The erosion, sediment and pollution control plan shall be updated as necessary and re-submitted to the Engineer.

3. Enforcement

Per City Code Sections 15.88, 13.16 and 1.28, the Contractor shall be subject to Notices of Violation (NOVs) resulting in possible Stop Work Orders and Administrative Penalties of up to $4,999 per day for non-compliance of this section of the Special Provisions.

Per the State's Porter Cologne Water Quality Act, the Contractor shall also be subject to inspection by Staff from the Central Valley Regional Water Quality Control Board who have the authority to issue Notices of Violation (NOVs) and Penalties of up to $10,000 per day for non-compliance. The Contractor shall be liable for any fines issued to the project by the State or Federal Government for NPDES non-compliance due to Contractor negligence.

The City reserves the right to take corrective action and withhold the City's costs for corrective action from progress payments or final payment in accordance with Section 7, Retention of Sums Charged against the Contractor, of the Agreement.

Any fines, including third-party claims, levied against the Agency as a result of Contractor's noncompliance are the Contractor's sole responsibility and will be withheld from progress payments or final payment in accordance with Section 7, Retention of Sums Charged against the Contractor, of the Agreement.
G.

CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES, OPERATIONS AND MAINTENANCE

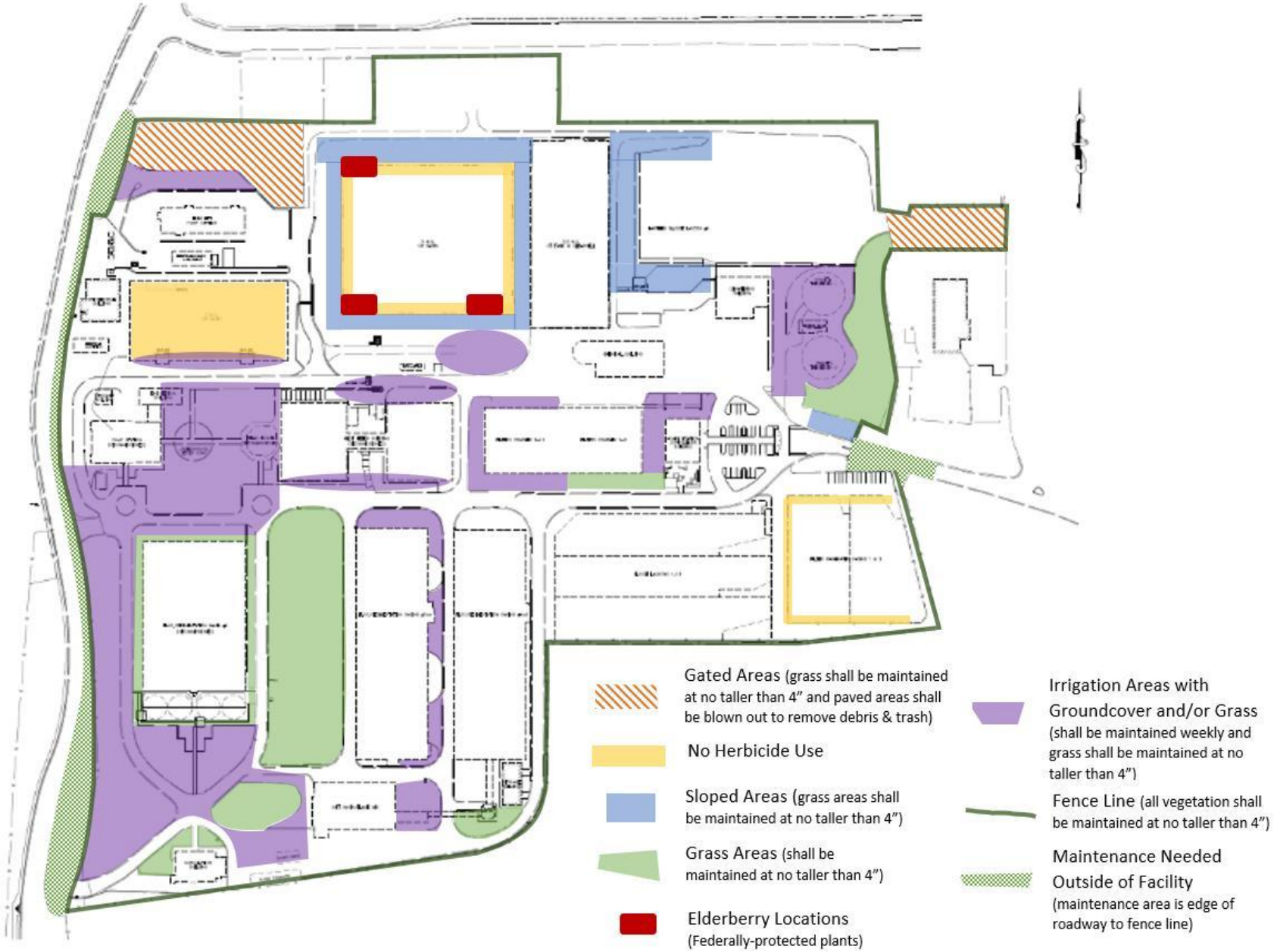
LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

SERVICE AREA #1 **Sacramento River Water Treatment Plant** **AREA** **Sq. Ft.** **Shrubs/GC:** **Sq. Ft.**
SITE NAME: **301 Water Street, Sacramento, CA 95811** **SIZE:** **45** **Total Trees:**
LOCATION: **ACRES:**

SERVICES[a]	DAILY	2X WEEK	WEEKLY	2X MONTH	MONTHLY	QRTRLY	2X YEAR	AS REQD	COMMENTS
SITE SERVICED [b]			X						Removal of any and all debris/trash from site.
									Empty all trash cans. Contractor shall provide and replace all trash bags.
INSP. MEETING					X			X	
IRRIG. SYSTEM[c]									Sprinkler damage shall be identified at time of mowing.
INSPECT & SERVICE			X					X	Damage caused by the Contractor shall be repaired or replaced at the Contractor's expense.
SET ALL TIMERS						X		X	
LAWN [d]									
MOW			X						Remove and dispose of all clippings off-site. No heavy mowers on saturated turf.
FERTILIZER [7]							X		
AERATING								X	
RESEEDING								X	
CHEMICAL EDGE							X		
MECH. EDGE			X						
GROUND COVER (GC) [e,f]									
FERTILIZER [7]							X		
PRUNE								X	Keep all GC pruned away from all access pathways, buildings, and vents.
WINTER MOW								X	
SHRUBS [4,6]									
FERTILIZER [7]							X		
PRUNE								X	Keep all shrubs pruned away from all access pathways, buildings, and vents. 5' clearance from buildings.
CULTIVATE							X		
TREES [4,6]									
FERTILIZER [7]							X	X	
PRUNE							X	X	Prune trees for proper growth: remove suckers & maintain clearances of 8' min. under trees, with 8' above sidewalks and 15' above curbs & parking lots.
LEAF PICKUP			X						Especially during Fall.
WEED CONTROL					X			X	Apply pre-emergent in shrub beds and bare areas.

[a] It is critical that the facility maintains a secure fence line. Therefore, weeds and plants should be removed from fence immediately. Maintenance outside of the main gate will be up to 58’ on the north side of the driveway and to the neighbor’s curb on the south side of the driveway.
[a] Please note each time a site is serviced, all litter/debris shall be removed, trees re-staked as needed, pot holes filled, and pest/weed control scheduled or done. All safety hazards shall be corrected, and visual signs of irrigation problems examined and scheduled for repair. No watering on Mondays and may need to water on an odd/even schedule.
[a] At the start of the contract, Landscaper will check and fix irrigation system to a complete working system, including identifying and correcting line breaks, timer issues, electric control valves and troubleshooting other issues. Identified areas must be quoted and approved prior to starting any work.
[a] Grass shall not exceed 4” in height. Bushy vegetation should be mowed down immediately unless Federally protected. Elderberry plants are federally protected and can be cut down as long as they are less than 1” in diameter at the base. No mechanical equipment use may occur within 20’ of federally protected elderberry plants.
[a] Ground cover includes planter beds, planted areas that may or may not have bark around, and should be pruned so that plants not to exceed 3’ in height.
[a] All Ground Cover, Shrubs, and Trees should be pruned away from all access pathways, including sidewalks, parking lots, curbs, open access stairs; buildings, and vents. Ensure that storm drains and grates are clear of debris and trash. All debris and trash should be blown off of roadways and parking lots.
[7] Contractor shall confirm application with DOU- employee inspector when completed.

Service Area #1: Sacramento River Water Treatment Plant



Elderberry Plants in the winter at SRWTP:







CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES, OPERATIONS AND MAINTENANCE

LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

SERVICE AREA #2	**Sacramento River Water Intake Area**	**AREA**	**30,966 Sq. Ft.**	**Shrubs/GC:**	**22,089 Sq. Ft.**
SITE NAME:	**450 Jibboom St., Sacramento, CA 95811**	**SIZE:**	**0.71**	**Total Trees:**	**30**
LOCATION:		**ACRES:**			

SERVICES	DAILY	2X WEEK	WEEKLY	2X MONTH	MONTHLY	QRTRLY	2X YEAR	AS REQD	COMMENTS
SITE SERVICED [8]			X						**Removal of any and all debris and trash from site, including parking lot. Empty all trash cans. Contractor shall provide and replace all trash bags/liners.**
PARKING LOT					X				Cracks in parking lot to be blown out to remove debris and trash.
INSP. MEETING					X			X	
IRRIG. SYSTEM									Sprinkler damage shall be identified at time of mowing.
INSPECT & SERVICE			X					X	Damage caused by the Contractor shall be repaired or replaced at the Contractor's expense.
SET ALL TIMERS						X		X	
LAWN [9]									Grass should not exceed 4" in height.
MOW			X						Remove and dispose of all clippings off-site. No heavy mowers on saturated turf.
FERTILIZER [12]							X		
AERATING								X	
RESEEDING								X	
CHEMICAL EDGE							X		
MECH. EDGE			X						
GROUND COVER (GC) [10, 11]									
FERTILIZER [12]							X		
PRUNE								X	Keep all GC pruned away from sidewalks, parking lot curbs, buildings, & vents.
WINTER MOW								X	
SHRUBS									
FERTILIZER [12]							X		
PRUNE								X	Keep all shrubs pruned away from sidewalks, parking lot curbs, buildings, & vents.
CULTIVATE							X		
TREES									
FERTILIZER [12]							X	X	
PRUNE							X	X	Prune trees for proper growth: remove suckers & maintain clearances of 8' min. under trees, with 8' above sidewalks and 15' above curbs & parking lots.
LEAF PICKUP			X						Especially during Fall.
WEED CONTROL					X			X	Apply pre-emergent in shrub beds and bare areas.

[8] Please note each time a site is serviced, all litter/debris shall be removed, trees re-staked as needed, pot holes filled, and pest/weed control scheduled or done. All safety hazards shall be corrected, and visual signs of irrigation problems examined and scheduled for repair. No watering on Mondays and may need to water on an odd/even schedule.

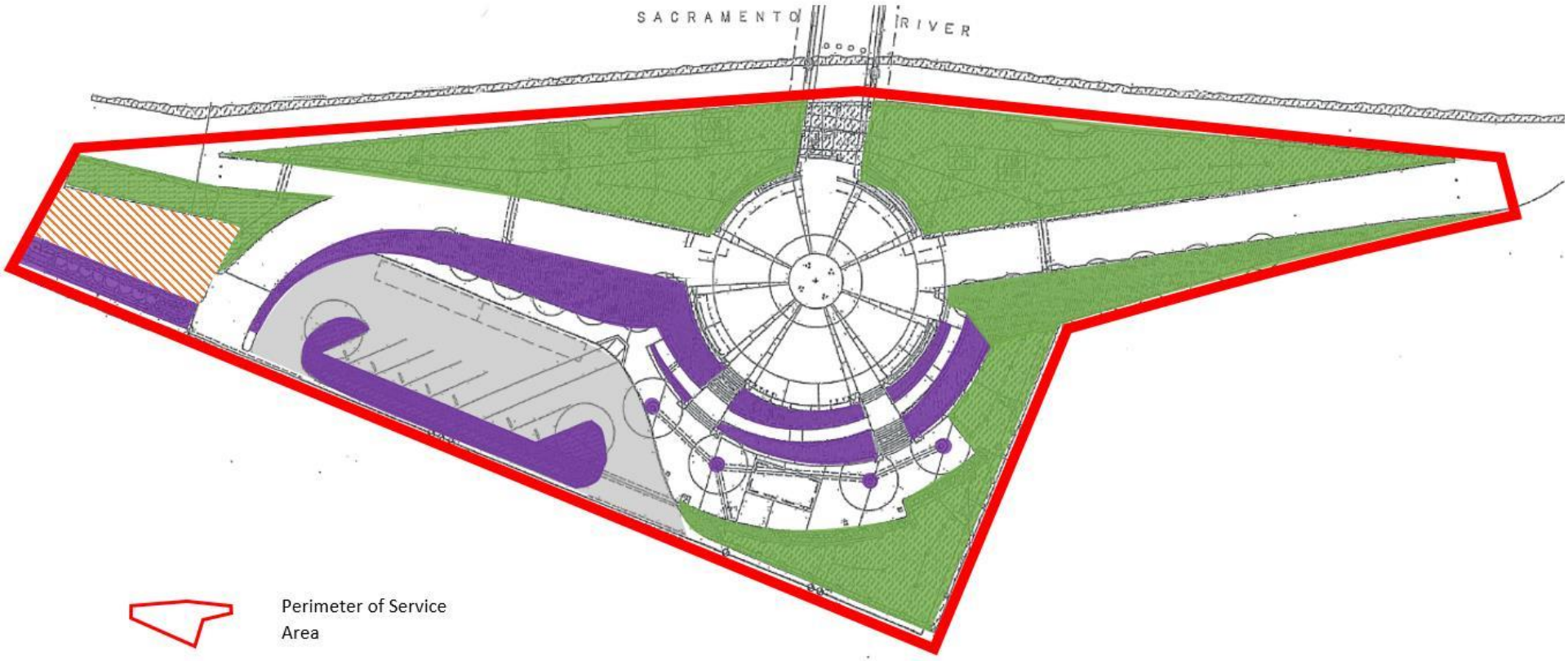
[9] Grass shall not exceed 4" in height. Bushy vegetation should be mowed down immediately unless protected.

[10] Ground cover includes planter beds, planted areas that may or may not have bark around, and should be pruned so that plants not to exceed 3' in height.

[11] All Ground Cover, Shrubs, and Trees should be pruned away from all access pathways, including sidewalks, parking lots, curbs, open access stairs; buildings, and vents. Ensure that storm drains and grates are clear of debris and trash. All debris and trash should be blown off of roadways and parking lots.

[12] Contractor shall confirm application with DOU- employee inspector when completed.

Service Area #2: Sacramento River Water Treatment Plant Intake Area



Perimeter of Service Area

Irrigation/Planter Areas (Trees, Shrubs, Groundcover)

Gated Area (shall be cleaned of debris and trash monthly)

Parking Lot (Cracks in parking lot shall be blown out to remove debris and trash)

Grass Areas (shall be maintained at no taller than 4")

CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES, OPERATIONS AND MAINTENANCE

LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

SERVICE AREA #3

SITE NAME: Sacramento River Water Treatment Plant (Bannon Street)
AREA SIZE: Sq. Ft.
ACRES: 45
Shrubs/GC: Sq. Ft.
Total Trees:

LOCATION: 334, 350, 354 Bannon Street, Sacramento, CA 95811
222, 230 Bannon Street

SERVICES[g]	DAILY	2X WEEK	WEEKLY	2X MONTH	MONTHLY	QRTRLY	2X YEAR	AS REQD	COMMENTS
SITE SERVICED [h]			X						Removal of any and all debris/trash from site.
									Empty all trash cans. Contractor shall provide and replace all trash bags.
INSP. MEETING						X			
IRRIG. SYSTEM[i]									
INSPECT & SERVICE									
SET ALL TIMERS									
LAWN [j]									
MOW			X						Remove and dispose of all clippings off-site. No heavy mowers on saturated turf.
FERTILIZER [7]									
AERATING									
RESEEDING									
CHEMICAL EDGE									
MECH. EDGE									
GROUND COVER (GC) [k,l]									
FERTILIZER [7]									
PRUNE									
WINTER MOW									
SHRUBS [4,6]									
FERTILIZER [7]									
PRUNE								X	Keep all shrubs pruned away from all access pathways, buildings, and vents. 5' clearance from buildings.
CULTIVATE									
TREES [4,6]									
FERTILIZER [7]									
PRUNE								X	Prune trees for proper growth: remove suckers & maintain clearances of 8' min. under trees, with 8' above sidewalks and 15' above curbs & parking lots.

LEAF PICKUP								**X**	Especially during Fall.
WEED CONTROL					**X**				Apply pre-emergent in shrub beds and bare areas.

[a] It is critical that the facility maintains a secure fence line. Therefore, weeds and plants should be removed from fence immediately. Maintenance outside of the main gate will be up to 58' on the north side of the driveway and to the neighbor's curb on the south side of the driveway.

[a] Please note each time a site is serviced, all litter/debris shall be removed, trees re-staked as needed, pot holes filled, and pest/weed control scheduled or done. All safety hazards shall be corrected, and visual signs of irrigation problems examined and scheduled for repair. No watering on Mondays and may need to water on an odd/even schedule.

[a] At the start of the contract, Landscaper will check and fix irrigation system to a complete working system, including identifying and correcting line breaks, timer issues, electric control valves and troubleshooting other issues. Identified areas must be quoted and approved prior to starting any work.

[a] Grass shall not exceed 4" in height. Bushy vegetation should be mowed down immediately unless Federally protected. Elderberry plants are federally protected and can be cut down as long as they are less than 1" in diameter at the base. No mechanical equipment use may occur within 20' of federally protected elderberry plants.

[a] Ground cover includes planter beds, planted areas that may or may not have bark around, and should be pruned so that plants not to exceed 3' in height.

[a] All Ground Cover, Shrubs, and Trees should be pruned away from all access pathways, including sidewalks, parking lots, curbs, open access stairs; buildings, and vents. Ensure that storm drains and grates are clear of debris and trash. All debris and trash should be blown off of roadways and parking lots.

[7] Contractor shall confirm application with DOU- employee inspector when completed.

334 Bannon Street – 12,643 square feet



350 Bannon Street – 11,379 square feet



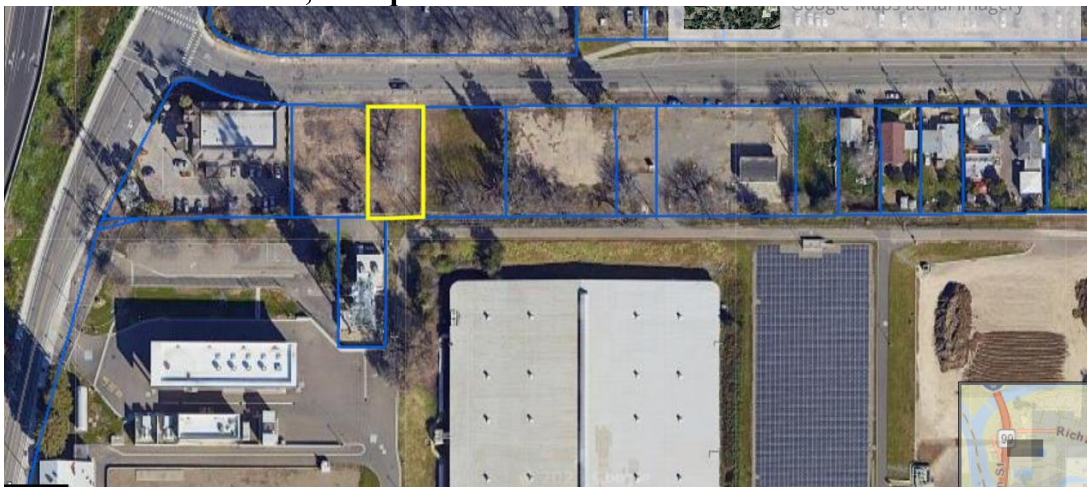
354 Bannon Street – 6,534 square feet



222 Bannon Street – 11,379 square feet – <u>Plan to start services January 2024</u>



230 Bannon Street – 8,276 square feet



CITY OF SACRAMENTO

DEPARTMENT OF UTILITIES, OPERATIONS AND MAINTENANCE

LANDSCAPE MAINTENANCE PERFORMANE SCHEDULE

SERVICE AREA #4

SITE NAME: Sacramento River Water Treatment Plant (Sequoia Pacific Blvd)

LOCATION: 234 Sequoia Pacific Blvd, Sacramento, CA 95811

AREA SIZE: Sq. Ft.

ACRES:

Shrubs/GC: Sq. Ft.

Total Trees:

SERVICES	DAILY	2X WEEK	WEEKLY	2X MONTH	MONTHLY	QRTRLY	2X YEAR	AS REQD	COMMENTS
SITE SERVICED			X						Removal of any and all debris/trash from site.
									Empty all trash cans. Contractor shall provide and replace all trash bags
INSP. MEETING						X			
IRRIG. SYSTEM									
INSPECT AND SERVICE									
SET ALL TIMERS									
LAWN									
MOW			X						Remove and dispose of all clippings off-site. No heavy mowers on saturated turf.
FERTILIZER									
AERATING									
RESEEDING									
CHEMICAL EDGE									
MECH. EDGE									
GROUND COVER (GC)									
FERTILIZER									
PRUNE									
WINTER MOW									
SHRUBS									
FERTILIZER									
PRUNE								X	Keep all shrubs pruned away from all access pathways, buildings, and vents. 5' clearance from the buildings
CULTIVATE									
TREES									
FERTILIZE									
PRUNE								X	Prune trees for proper growth: remove suckers & maintain clearances of 8' min. under trees, with 8' above sidewalks and 15' above curbs & parking lots.
CULTIVATE									
LEAF PICKUP								X	Especially during Fall.
WEED CONTROL					X				Apply pre-emergent in shrub beds and bare areas.

Service area #4

234 Sequoia Pacific Blvd.



CITY OF SACRAMENTO

DEPARTMENT OF UTILITIES, OPERATIONS AND MAINTENANCE

LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

SITE NAME:
LOCATION: 320 Bannon St
Sacramento, CA 95811

AREA SIZE:

ACRES:

Shrubs/GC: TBD

Total Trees: TBD

Minimum Requirements

SERVICES	1X WEEK	2X MONTH	1X MONTH	QRTRLY	2X YEAR	1X YEAR	AS REQD	COMMENTS
SITE SERVICED *			X					Removal of any and all debris/trash from site.
INSP. MEETING				X				
IRRIG. SYSTEM								
LAWN- Backyard								Grass should not exceed 4” in height,
MOW				X				Remove and dispose of all clippings off-site. No heavy mowers on saturated turf.
AERATING								
RESEEDING								
MECH. EDGE								
GROUND COVER								
FERTILIZER								
MULCH								
SHRUBS								
FERTILIZER								
PRUNE							X	Keep all shrubs pruned away from all access pathways, buildings, and vents. 5’ clearance from buildings
CULTIVATE								
TREES								
FERTILIZER								
PRUNE							X	Prune trees for proper growth: remove suckers & maintain clearances of 8’ min. under trees, with 8’ above sidewalks and 15’ above curbs and parking lots.
LEAF PICKUP							X	Especially during Fall
WEED CONTROL			X				X	Apply pre-emergent in shrub beds and bare areas.

*PLEASE NOTE EACH TIME A SITE IS SERVICED, ALL LITTER/DEBRIS SHALL BE REMOVED, TREES RE-STAKED AS NEEDED, POTHOLES FILLED, AND PEST/WEED CONTROL SCHEDULED OR DONE. ALL SAFETY HAZARDS SHALL BE CORRECTED AND VISUAL SIGNS OF IRRIGATION PROBLEMS EXAMINED AND SCHEDULED FOR REPAIR. NO WATERING ON MONDAYS AND MAY NEED TO WATER ON AN ODD/EVEN SCHEDULE.

CITY OF SACRAMENTO

DEPARTMENT OF UTILITIES, OPERATIONS AND MAINTENANCE

LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

SITE NAME:
LOCATION: 320 and 324 Bannon St Sacramento, CA 95811

AREA SIZE:

ACRES:

Shrubs/GC: TBD

Total Trees: TBD

Minimum Requirements

SERVICES	1X WEEK	2X MONTH	1X MONTH	QRTRLY	2X YEAR	1X YEAR	AS REQD	COMMENTS
SITE SERVICED *			X					Removal of any and all debris/trash from site.
INSP. MEETING				X				
IRRIG. SYSTEM								
LAWN- Backyard								Grass should not exceed 4” in height,
MOW				X				Remove and dispose of all clippings off-site. No heavy mowers on saturated turf.
AERATING								
RESEEDING								
MECH. EDGE								
GROUND COVER								
FERTILIZER								
MULCH								
SHRUBS								
FERTILIZER								
PRUNE							X	Keep all shrubs pruned away from all access pathways, buildings, and vents. 5’ clearance from buildings
CULTIVATE								
TREES								
FERTILIZER								
PRUNE							X	Prune trees for proper growth: remove suckers & maintain clearances of 8’ min. under trees, with 8’ above sidewalks and 15’ above curbs and parking lots.
LEAF PICKUP							X	Especially during Fall
WEED CONTROL			X				X	Apply pre-emergent in shrub beds and bare areas.

*PLEASE NOTE EACH TIME A SITE IS SERVICED, ALL LITTER/DEBRIS SHALL BE REMOVED, TREES RE-STAKED AS NEEDED, POTHOLES FILLED, AND PEST/WEED CONTROL SCHEDULED OR DONE. ALL SAFETY HAZARDS SHALL BE CORRECTED AND VISUAL SIGNS OF IRRIGATION PROBLEMS EXAMINED AND SCHEDULED FOR REPAIR. NO WATERING ON MONDAYS AND MAY NEED TO WATER ON AN ODD/EVEN SCHEDULE.

Area 5 and 6 – 320 and 324 Bannon Street, Sacramento CA 95811





Scope of Work

Landscape Maintenance Service:
Combined Wastewater Treatment Plant (CWTP)
1391 35th Avenue, Sacramento, CA 95822

Site Inspector Contact:

CWTP Primary Contact:
Philip Meyer, Supervising Plant Operator
Office (916) 808-5286
Email pmeyer@cityofsacramento.org

CWTP Secondary Contact:
Philip Myers, Senior Plant Operator
Office (916) 808-7087
Email pmyers@cityofsacramento.org

Scope of Work includes, but is not limited to:

- Mowing and Edging & Blowing off hard surfaces
- Irrigation Systems Maintenance
- Approved Water Techniques for Landscape Plants
- Fertilizer Application
- Trash & Debris Pickup & Removal
- Tree trimming, up to 8' of vertical clearance
- Maintenance of all plant material in good condition with Horticulturally Acceptable Growth and Color
- Maintenance Required to keep Designated Areas in safe, attractive and useable condition
- Immediate reporting of vandalism and/or Safety Hazards to Inspector

NOTE: Hot weather may require extra attention for the following areas. Contractor shall make every attempt to minimize runoff while providing extra water.

1. Hill at NE corner of the S. Land Park Drive access/egress gate just inside the plant will most likely require additional water and possible aeration.

2. Fire lane area between 1391 and 1395 buildings will most likely require extra watering.

In addition to the Specifications and Requirements provided in the Scope of Work and Exhibits, the following requirements and prohibitions apply:

A. All vehicles and equipment entering City facilities must have the company name or logo conspicuously displayed.
B. The names of all employees who will be entering City facilities must be on file with the City.
C. All employees who will be entering City facilities must wear a shirt or hat identifying them as a company employee.

D. The use of any chemicals or fertilizers must first be approved by the City Inspector before each application. Selected Contractor will provide a list of chemicals that will be used and corresponding Safety Data Sheets before use.
E. All sprinkler heads, including pop-ups, must be maintained.
F. No repairs may be initiated without the notification and approval of the inspector and all invoices must CLEARLY describe parts involved, precise location of work, and breakdown of labor.

Minimum Level of Effort

April 1 through September 30	40 hours physical labor on site per week
October 1 through March 31	20 hours physical labor on site per week

Monthly payroll timesheets must be submitted by the 10th day of the following month

Combined Wastewater Treatment Plant



CITY OF SACRAMENTO DEPARTMENT OF UTILITIES, OPERATIONS & MAINTENANCE DIVISION

LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

Minimum requirements are shown below. Refer to the City General Specifications and Provisions LS10-1 for additional contrac compliance.

SITE NAME: CWTP | LOCATION: 1391 & 1395 35th Avenue | AREA SIZE: 246,004 s.f./ 5.6 acres

MAINT AREA / SERVICES	LS10-1 Page Ref.	FREQUENCY								COMMENTS
		1X WK	2X MO	1X MO	4X YR	2X YR	1X YR	As Needed	Extra Work	
SITE SERVICED		X						X		Site shall be serviced weekly or as agreed upon with City Inspector
INSP. MEETING				X				X		Contractor shall meet with Inspector once per month or at Inspector's request
OVERALL SITE		X								
Litter/Debris Control	24	X								Remove all litter/debris from site. Contact Inspector for large debris
Leaf Removal	19,24	X						X		Weekly during the Fall. Must follow Leaf Blower restrictions
Safety Hazards	17	X						X		Report any hazards to Inspector
Weed Abatement of Hard Surfaces	23							X		Provide chemical control of weeds for all hard surfaces to include concrete, asphalt, curb, gutter, and sidewalks
IRRIG. SYSTEM										
Maintenance/Testing	28	X		X				X		Weekly inspection, monthly testing & maintenance. Sprinkler damage shall be
Set all Timers	27				X			X		identified at time of mowing. Report repairs to Inspector
Repairs	28								X	Repairs shall be considered unscheduled/extra work as determined by Inspector
										Any damage caused by the Contractor shall be repaired/replaced at their expense
ALL LANDSCAPE										
Pre-Emergent	22,26,27					X				Pre-Emergent to control broadleaf weeds and crabgrass in February and May
Weed Control	20, 27	X						X		Reasonably weed-free; hand/mechanical weeding only, chemicals need Inspector approval
Fertilization	20,26,27					X				Fertilize during active growth periods, which are typically Spring & Fall
TURF/LAWN										Includes landscape areas on S. Land ParkDrive: Lawn next to Montessori parking lot
Mowing	20	X						X		Remove and Dispose of all Clippings Off-site. No heavy mowers on saturated turf
Mechanical Edging	21	X								Where hard concrete edge or curb is present
Chemical Edging	23							X		Where hard concrete edge or curb is not present. Use needs Inspector approval
Aeration	21						X			Winter, cores need not be removed, delete pg 21 section 19.03
Vertical Mow/Dethatch	21								X	Implemented as unscheduled/extra work rate if needed as determined by Inspector
Turf Renovation	22								X	Implemented as unscheduled/extra work rate if needed as determined by Inspector
Non-Irrigated Grasses	21					X		X		Provide mowing and chemical weed control
GROUND COVER										
Mechanical Edging	21	X								Where hard concrete edge or curb is present
Pruning/Trim	27					X		X		Keep all gc pruned away from sidewalks, parking lot curbs, buildings, & vents
Winter Mow								X		
Replacement									X	Implemented as unscheduled/extra work rate if needed as determined by Inspector
SHRUBS/VINES										Includes landscape areas on S. Land Park Drive: Shrubs on west side of road
Pruning/Trim	26					X		X		Keep all shrubs pruned away from sidewalks, parking lot curbs, buildings, & vents
Replacement									X	Implemented as unscheduled/extra work rate if needed as determined by Inspector
TREES										
Pruning/Trim	24						X	X		Prune trees for proper growth structure: Remove suckers & maintain clearances
Staking/Tying	25							X		of 5' min under trees, with 8' above sidewalks and 15' above curbs & parking lots
Repair Work	26								X	Implemented as unscheduled/extra work rate if needed as determined by Inspector

CITY OF SACRAMENTO, DEPARTMENT OF UTILITIES, OPERATIONS & MAINTENANCE DIVISION

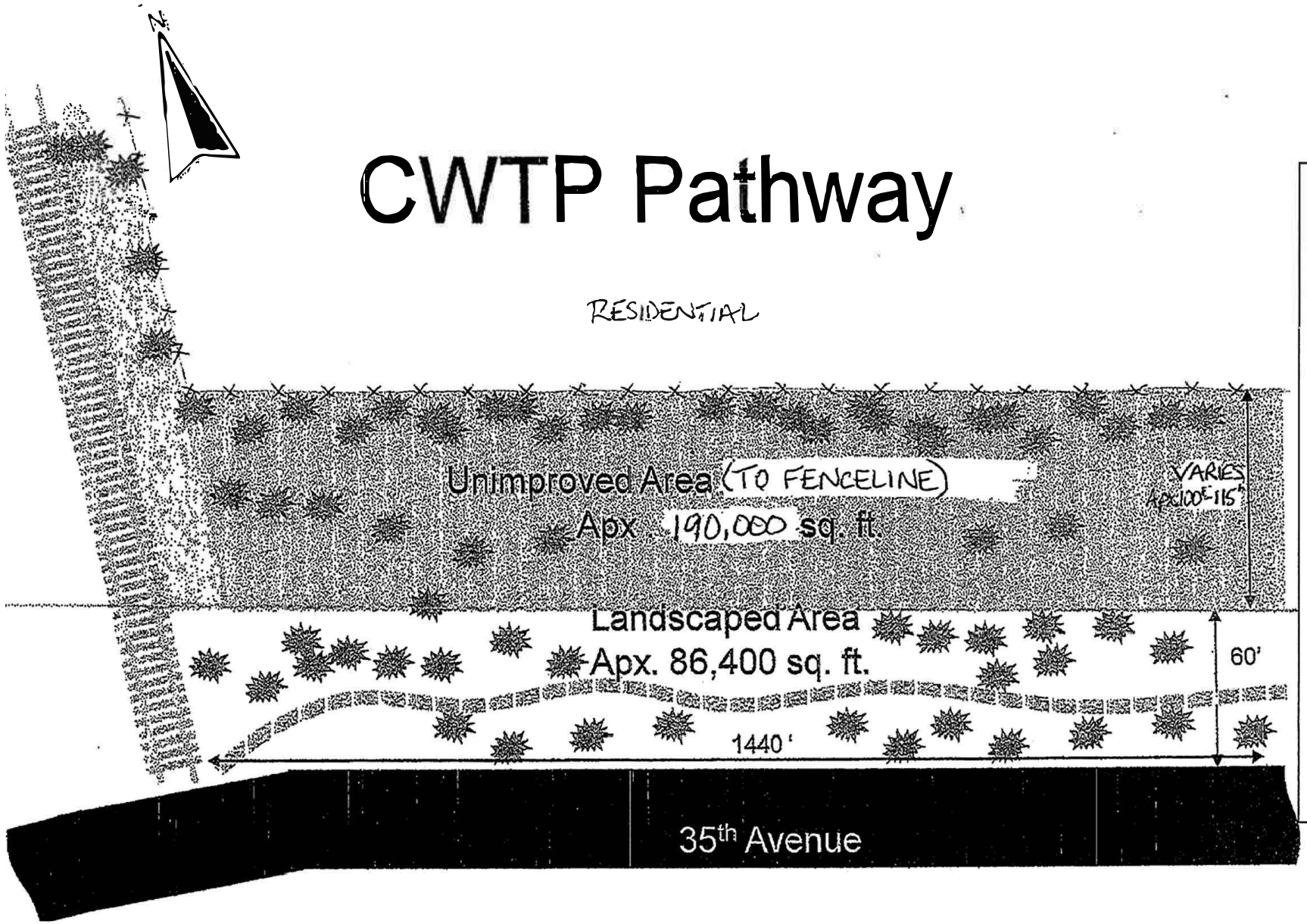
DROUGHT - REDUCED/NO IRRIGATION - LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

Minimum requirements are shown below. Refer to the City General Specifications and Provisions LS10-1 for additional contract compliance.

SITE NAME: CWTP LOCATION: 1391 & 1395 35th Avenue AREA SIZE: 246,004 s.f./ 5.6 acres

MAINT AREA / SERVICES	LS10-1 Page Ref.	FREQUENCY								COMMENTS
		1X WK	2X MO	1X MO	4X YR	2X YR	1X YR	As Needed	Extra Work	
SITE SERVICED		X						X		Site shall be serviced weekly or as agreed upon with City Inspector
INSP. MEETING				X				X		Contractor shall meet with Inspector once per month or at Inspector's request
OVERALL SITE		X								
Litter/Debris Control	24	X								Remove all litter/debris from site. Contact Inspector for large debris
Leaf Removal	19,24	X						X		Weekly during the Fall, Must follow Leaf Blower restrictions
Safety Hazards	17	X						X		Report any hazards to Inspector
Weed Abatement of Hard Surfaces	23							X		Provide chemical control of weeds for all hard surfaces to include concrete, asphalt, curb, gutter, and sidewalks
IRRIG. SYSTEM										
Maintenance/Testing	28	X		X				X		Weekly inspection, monthly testing & maintenance. Sprinkler damage shall be
Set all Timers	27				X			X		identified at time of mowing. Report repairs to Inspector
Repairs	28								X	Repairs shall be considered unscheduled/extra work as determined by Inspector
										Any damage caused by the Contractor shall be repaired/replaced at their expense
ALL LANDSCAPE										
Pre-Emergent	22,26,27					X				Pre-Emergent to control broadleaf weeds and crabgrass in February and May
Weed Control	20, 27	X						X		Reasonably weed-free; hand/mechanical weeding only, chemicals need Inspector approval
Fertilization	20,26,27					X				Fertilize during active growth periods, which are typically Spring & Fall
TURF/LAWN										**Includes landscape areas on S. Land Park Drive: Lawn next to Montessori parking lot**
Mowing	20			X				X		Remove and Dispose of all Clippings Off-site. No heavy mowers on saturated turf
Mechanical Edging	21			X						Where hard concrete edge or curb is present
Chemical Edging	23							X		Where hard concrete edge or curb is not present, Use needs Inspector approval
Aeration	21						X			Winter, cores need not be removed, delete pg 21 section 19.03
Vertical Mow/Dethatch	21								X	Implemented as unscheduled/extra work rate if needed as determined by Inspector
Turf Renovation	22								X	Implemented as unscheduled/extra work rate if needed as determined by Inspector
Non-Irrigated Grasses	21					X		X		Provide mowing and chemical weed control
GROUND COVER										
Mechanical Edging	21			X						Where hard concrete edge or curb is present
Pruning/Trim	27					X		X		Keep all gc pruned away from sidewalks, parking lot curbs, buildings, & vents
Replacement									X	Implemented as unscheduled/extra work rate if needed as determined by Inspector
Winter Mow								X		
SHRUBS/VINES										**Includes landscape areas on S. Land Park Drive: Shrubs on west side of road**
Pruning/Trim	26					X		X		Keep all shrubs pruned away from sidewalks, parking lot curbs, buildings, & vents
Replacement									X	Implemented as unscheduled/extra work rate if needed as determined by Inspector
TREES										
Pruning/Trim	24						X	X		Prune trees for proper growth structure: Remove suckers & maintain clearances
Staking/Tying	25							X		of 5' min under trees, with 8' above sidewalks and 15' above curbs & parking lots
Repair Work	26								X	Implemented as unscheduled/extra work rate if needed as determined by Inspector

CWTP Pathway



Combined Wastewater Treatment Plant
Pathway along 35th Avenue between Plant and Freeport Blvd.

CITY OF SACRAMENTO

DEPARTMENT OF UTILITIES, OPERATIONS AND MAINTENANCE

LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

SITE NAME: **CWTP Pathway**

LOCATION: **N pathway on 35th Avenue east of CWTP towards Freeport Square Shopping Center** **ACRES:** **276,400 s.f. / 6.3 acres**

Minimum Requirements

SERVICES	1X WEEK	2X MONTH	1X MONTH	4X YEAR	2X YEAR	1X YEAR	AS REQD	COMMENTS
SITE SERVICED	X						X	Site shall be serviced weekly or as agreed upon with City Inspector
INSP. MEETING			X				X	Contractor shall meet with inspector once per month or at Inspector's request.
OVERALL SITE	X							
Litter/Debris Control	X						X	Remove all litter/debris from site, contact Inspector for large debris
Leaf Removal	X							Weekly during the Fall, must follow Leaf Blower restrictions
Safety Hazards	X						X	Report any hazards to Inspector
Weed Abatement of Hard Surfaces							X	Provide chemical control of weeds for all hard surfaces including concrete, asphalt, curb, gutter, and sidewalks.
IRRIG. SYSTEM								
Maintenance/Testing	X		X				X	Weekly inspection, monthly testing & maintenance. Sprinkler damage shall be
Set all Timers				X				identified at time of mowing. Report repairs to Inspector.
Repairs							X	Repairs shall be considered as required or as determined by Inspector
UNIMPROVED AREA								
Weed Control				X			X	Provide pre-emergent and hand/mechanical weeding, chemicals need Inspector approval
Litter/Debris Control	X							Check swale and fence line for litter/debris and remove, contact Inspector for large debris
Tree Pruning						X	X	Prune trees for proper growth structure; Remove suckers & maintain clearance of 8' min.
Shrub Pruning					X	X		
Mowing				X				Remove and Dispose of all Clippings Off-site.
ALL LANDSCAPE								
Pre-Emergent					X			Pre-Emergent to control broadleaf weeds and crabgrass in February and May
Weed Control	X						X	Reasonably weed-free; hand/mechanical weeding only, chemicals need Inspector approval.
Fertilization					X			Fertilize during active growth periods, which are typically in Spring & Fall
GROUND COVER (GC)								
Mechanical Edging		X						Where all hard concrete edge or curb is present
Pruning/Trim					X		X	Keep all gc pruned away from sidewalks, parking lot curbs, buildings & vents
Winter Mow							X	
SHRUBS/VINES								
Prune/Trim					X		X	Keep all shrubs pruned away from sidewalks, parking lot curbs, buildings, & vents.
TREES								

Pruning/Trim						X	X	Prune trees for proper growth structure: Remove suckers & maintain clearances of 8’ min.
Staking/Tying							X	Under trees with 8’ above sidewall and 15’ above curbs & parking lots

[1] Please note each time a site is serviced, all litter/debris shall be removed, trees re-staked as needed, pot holes filled, and pest/weed control scheduled or done. All safety hazards shall be corrected and visual signs of irrigation problems examined and scheduled for repair. No watering on Mondays and may need to water on an odd/even schedule.

[2] Unimproved areas require weed control.

CITY OF SACRAMENTO, DEPARTMENT OF UTILITIES, OPERATIONS & MAINTENANCE DIVISION

DROUGHT - REDUCED/NO IRRIGATION - LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

Minimum requirements are shown below. Refer to the City General Specifications and Provisions LS10-1 for additional contract compliance

SITE NAME: CWTP Pathway LOCATION: N pathway on 35th Avenue east of CWTP towards Freeport S(AREA SIZE: 276,400 s.f./ 6.3 acres

MAINT AREA SERVICES	LS10-1 Page Ref.	FREQUENCY 1X WK	2X MO	1 X MO	4X YR	2X YR	1X YR	As Needed	Extra Work	COMMENTS
SITE SERVICED		X						X		Site shall be serviced weekly or as agreed upon with City Inspector
INSP. MEETING				X				X		Contractor shall meet with Inspector once per month or at Inspector's request
OVERALL SITE		X								
Litter/Debris Control	24	X								Remove all litter/debris from site, contact Inspector for large debris
Leaf Removal	19,24	X						X		Weekly during the Fall. Must follow Leaf Blower restrictions
Safety Hazards	17	X						X		Report any hazards to Inspector
Weed Abatement of Hard Surfaces	23							X		Provide chemical control of weeds for all hard surfaces to include concrete, asphalt, curb, gutter, and sidewalks
IRRIG. SYSTEM										
Maintenance/Testing	28	X		X				X		Weekly inspection, monthly testing & maintenance. Sprinkler damage shall be identified at
Set all Timers	27				X			X		time of mowing. Report repairs to Inspector
Repairs	28								X	Repairs shall be considered unscheduled/extra work as determined by Inspector
UNIMPROVED AREA										
Weed Control	20, 27	X						X		Provide pre-emergent and hand/mechanical weeding, chemicals need Inspector approval
Litter/Debris Control	24	X								Check swale and fenceline for litter/debris and remove, contact Inspector for large debris
Tree Pruning	24						X	X		Prune trees for proper growth structure: Remove suckers & maintain clearances of 5' min
Shrub Pruning	21					X		X		Keep all shrubs pruned away from sidewalks, parking lot curbs, buildings, & fences
ALL LANDSCAPE										
Pre-Emergent	22,26,27					X				Pre-Emergent to control broadleaf weeds and crabgrass in February and May
Weed Control	20, 27	X						X		Reasonably weed-free; hand/mechanical weeding only, chemicals need Inspector approval
Fertilization	20,26,27					X				Fertilize during active growth periods, which are typically Spring & Fall
GROUND COVER										
Mechanical Edging	21		X							Where hard concrete edge or curb is present
Pruning/Trim	27					X		X		Keep all gc pruned away from sidewalks, parking lot curbs, buildings, & vents
Replacement									X	Implemented as unscheduled/extra work rate if needed as determined by Inspector
Winter Mow								X		
SHRUBS/VINES										
Pruning/Trim	26					X		X		Keep all shrubs pruned away from sidewalks, parking lot curbs, buildings, & vents
Replacement									X	Implemented as unscheduled/extra work rate if needed as determined by Inspector
TREES										
Pruning/Trim	24						X	X		Prune trees for proper growth structure: Remove suckers & maintain clearances of 5' min
Staking/Tying	25							X		under trees, with 8' above sidewalks and 15' above curbs & parking lots
Repair Work	26								X	Implemented as unscheduled/extra work rate if needed as determined by Inspector

of

4

AREA OF INTEREST

DEMONSTRATION GARDEN AT 391 35TH AVENUE



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1391 35TH AVENUE

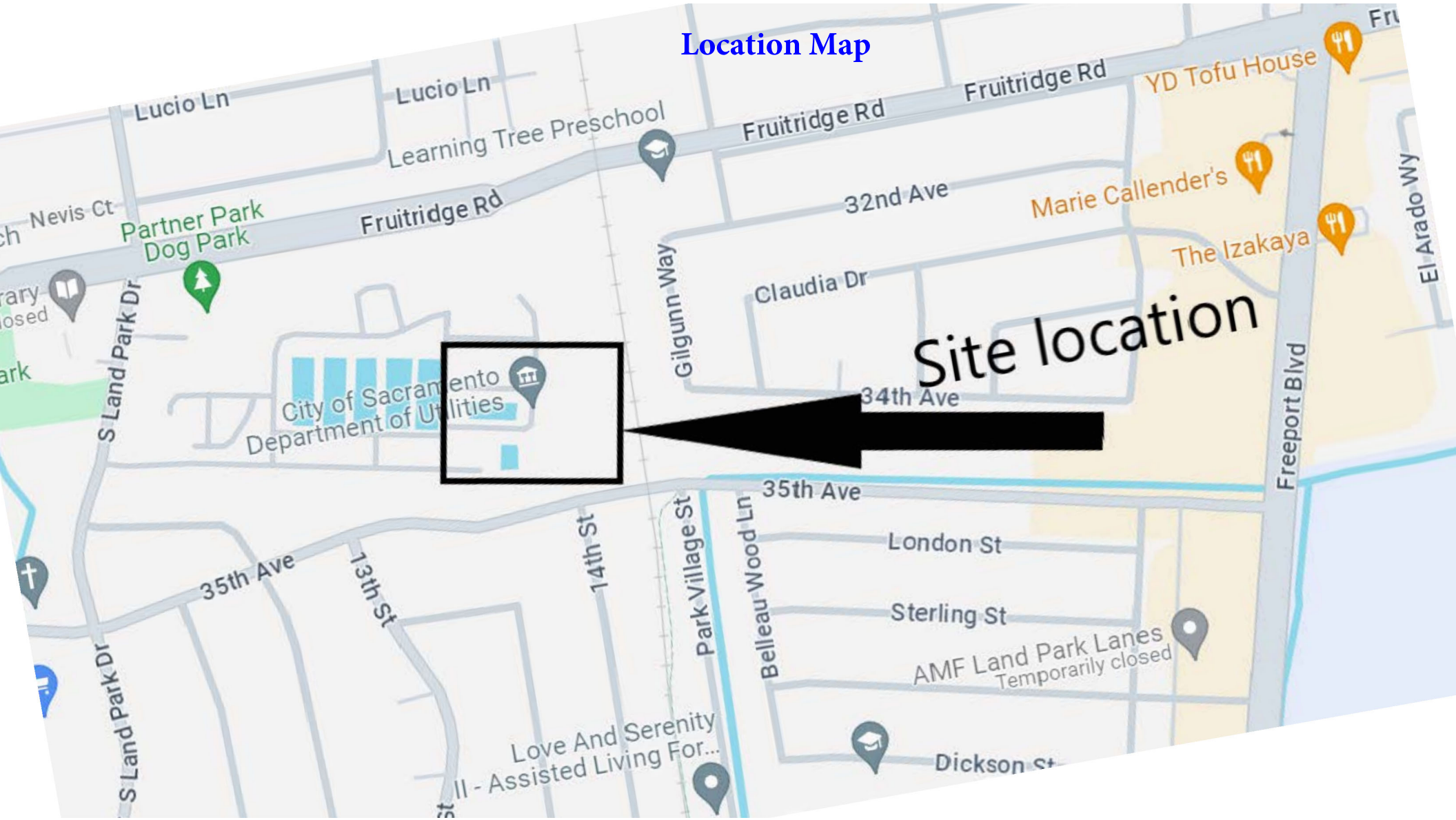
CITY OF SACRAMENTO

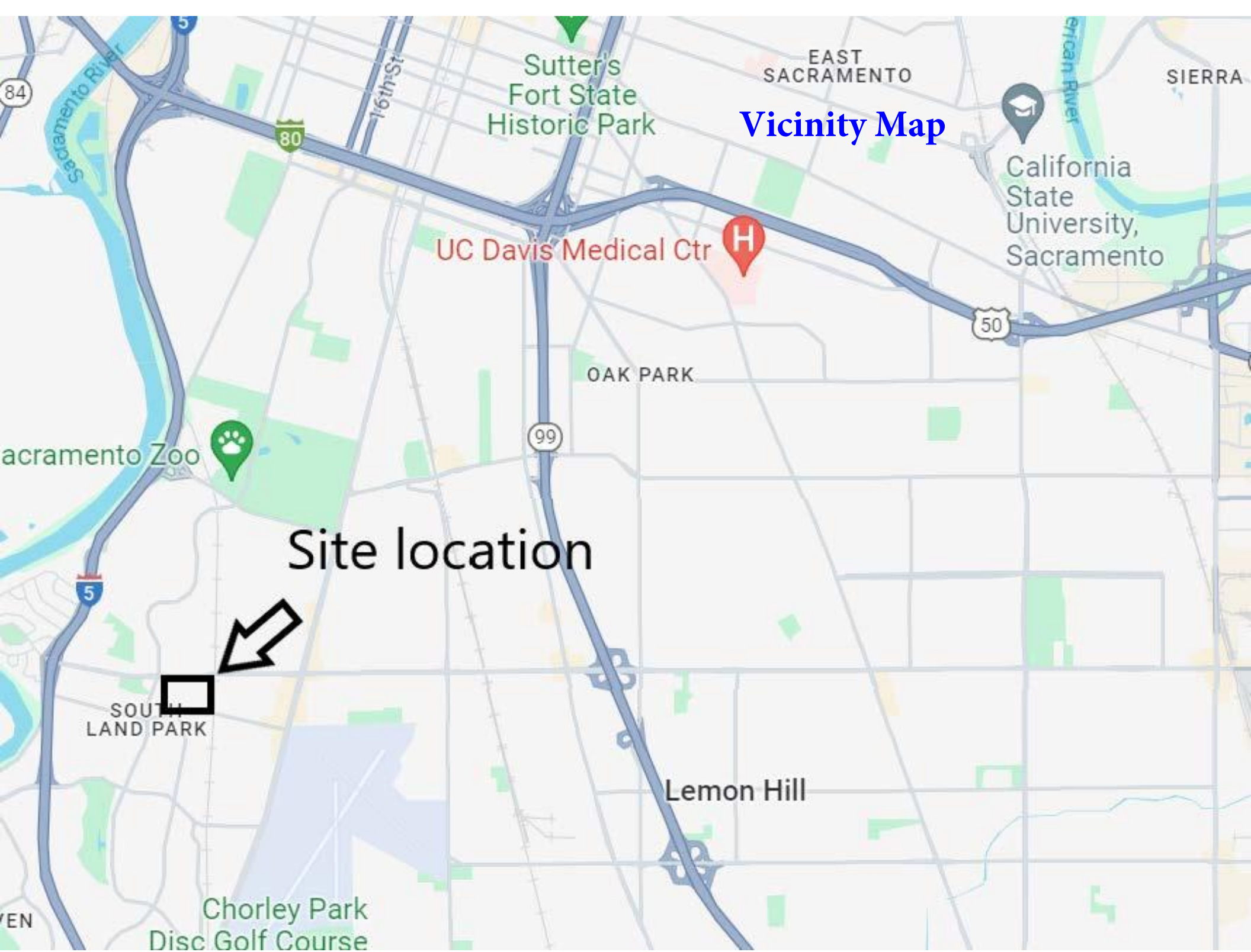
COMBINED WATER TREATMENT PLANT



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Location Map




Vicinity Map
Sutter's Fort State Historic Park
EAST SACRAMENTO
SIERRA
California State University, Sacramento
UC Davis Medical Ctr
OAK PARK
Sacramento Zoo
Site location
SOUTH LAND PARK
Lemon Hill
Chorley Park Disc Golf Course
Sacramento River
16th St
84
80
5
99
50

CITY OF SACRAMENTO

DEPARTMENT OF UTILITIES, OPERATIONS AND MAINTENANCE

LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

SITE NAME: Demonstration Garden | **AREA SIZE:** 39,125 sq. ft | **Shrubs/GC: TBD**

LOCATION: 1395 35th Avenue | **ACRES: 0.9** | **Total Trees: TBD**

Minimum Requirements

SERVICES	1X WEEK	2X MONTH	1X MONTH	QRTRLY	2X YEAR	1X YEAR	AS REQD	COMMENTS
SITE SERVICED [1]	X							
INSP. MEETING			X					Site Inspection performed by Water Conservation Staff
JOINT INSP./SITE MEETING				X				Comprehensive site evaluation with Water Conservation Staff member and Maint. Supervisor/Foreman/Lead.
IRRIG. SYSTEM								
INSPECT & SERVICE					X		X	Seasonal systems check of all sub-surface/Drip irrigation and cleaning of filters.
INSPECT/SET/ADJUST ALL TIMERS				X				
LAWN								
MOW								
Fescue Turf	X							Weekly mowing. Grass height maintained at max. height of 4". Clippings removed from site.
Buffalo Grass					X			Mow/String trim without removing more than 1/3 total height seasonally 1-2 times per year.
WEED CONTROL								
Hand Pull	X						X	
Herbicide				X				Broad spectrum herbicide applied seasonally/as needed.
GRASSY SWALE AND STORMWATER PLANTING								
Inspect Swales for erosion, obstruction, plant coverage, sediment build up Correct as needed.					X		X	Prior to Wet Season and regularly after/during major rain events to clear obstructions, address erosion and maintain proper functionality.
Replant as needed						X		Prior to wet season, replanting for desired density/functionality
GROUND COVER (GC) - KURAPIA								
FERTILIZER						X		In Spring with a complete N-P-K fertilizer at a rate of ½ lb of N per 1000 sf.
MOW				X	X			*Max. of once per month during warm/growing season if needed. No more than 1/3 total height.
WEED CONTROL								
Hand Pull	X						X	

Herbicide			X					Broad spectrum herbicide as needed/seasonal application.
SHRUBS								
FERTILIZER						X		
PRUNE	X*				X		X	*Dead head spent flowers regularly as needed. *Remove die-off for grassy plants regularly as needed. Seasonal pruning for large shrubs and grassy plants for proper growth and clearance.
TREES								
FERTILIZER						X		
PRUNE						X		Annual pruning for proper segmented growth.
LEAF PICKUP	X						X	Throughout all planters/turf areas/DG Pathways and hardscape with emphasis on pedestrian walkways/stairs and Building entries.
WEED CONTROL [2]							X	Regular hand-pulling with spot spraying of Herbicide as needed and quarterly application of herbicide/pre-emergent.
STORM WATER CISTERN								
Check and clean filter				X				Periodically remove debris and sediment from sedimentation basin and surface of filtration basin
Inspect/Service Pump						X		
Tank					X			Exterior review every 6 months to inspect the foundation, tank walls, roof, and tank interior through the inspection hatch
DG WALKWAYS/PATHS	X*				X			*Seasonal clearing of leaves/debris weekly/as needed with Bi-Annual inspections for erosion/loss of compaction. Correct as needed.
PERMEABLE PAVERS/PAVED AREA								
INSPECT	X							Inspect for and keep clear of any leaves/debris/sediment as needed
DEEP SWEEP/VACUUM				X				Seasonally clean area with Sweeper/Vacuum.

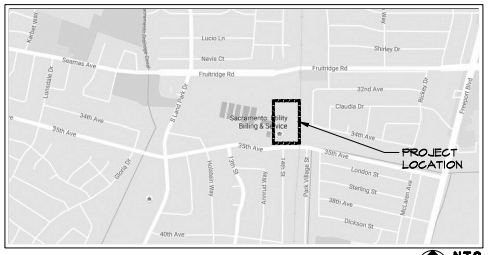
[1] Please note each time a site is serviced, all litter/debris shall be removed, trees re-staked as needed, pot holes filled, and pest/weed control scheduled or done. All safety hazards shall be corrected and visual signs of irrigation problems examined and scheduled for repair. No watering on Mondays and may need to water on an odd/even schedule.

[2] Unimproved areas require weed control.

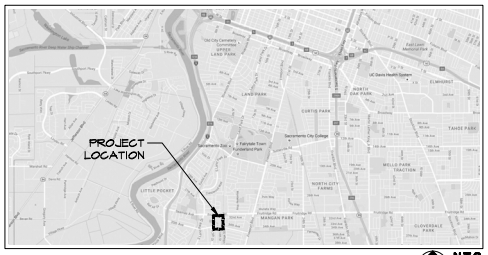
AS_BUILTS
SIERRA VALLEY CONSTRUCTION
2020

DEPARTMENT OF UTILITIES
CITY OF SACRAMENTO, CALIFORNIA
DEMONSTRATION LANDSCAPE GARDEN
1395 35TH AVE
12/11/2018

LOCATION MAP



VICINITY MAP



PREPARED FOR

City of Sacramento
Department of Utilities
1395 35th Ave.
Sacramento, CA 95822

PREPARED BY

LANDSCAPE ARCHITECT
Callander Associates
Landscape Architecture, Inc.
12150 Tributary Point Drive, Suite 140
Gold River, CA 95670
Phone: (916)985-4366

CIVIL ENGINEER
Bennett Engineering
1082 Sunrise Avenue, Suite 100
Roseville, CA 95661
Phone: (916) 783-4100

GENERAL NOTES

1. DESIGN INTENT: THESE DRAWINGS REPRESENT THE GENERAL DESIGN INTENT TO BE IMPLEMENTED ON THE SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING LANDSCAPE ARCHITECT FOR ANY ADDITIONAL CLARIFICATION OR DETAILS NECESSARY TO ACCOMMODATE SITE CONDITIONS OR ARCHITECTURAL DETAILS.

2. CONTRACTOR COORDINATION: EACH CONTRACTOR SHALL COORDINATE AND OTHERWISE INTEGRATE WORK WITH THAT OF OTHERS IN AN EFFICIENT AND TIMELY MANNER SO AS TO PROVIDE THE OWNER WITH A WELL-CONSTRUCTED, EASILY MAINTAINABLE PROJECT. EACH CONTRACTOR SHALL NOTIFY OTHERS AT LEAST TWO WORKING DAYS IN ADVANCE OF COVERING, COMPLETING, OR EXPOSING WORK TO BE INSTALLED BY OTHERS.

3. CONTRACTORS' JOB SITE CONDITIONS: CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR SITE CONDITIONS DURING CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE LANDSCAPE ARCHITECT.

4. COMPOSITE BASE SHEET: THE PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS ARE SUPERIMPOSED ON A BASE SHEET. THIS BASE SHEET IS COMPILED FROM ARCHITECTURAL AND/OR ENGINEERING DOCUMENTS, AND OTHER DATA AS MADE AVAILABLE TO THE LANDSCAPE ARCHITECT. THIS BASE SHEET INFORMATION IS SHOWN IN HALF TONE ON THE PLANS. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR OTHER ERRORS ON THESE DOCUMENTS. THE COMPOSITE BASE SHEET IS PROVIDED AS AN AID ONLY AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS AND INCORPORATING/INTEGRATING ALL CONSTRUCTION AS REQUIRED TO ACCOMMODATE SAME.

   THE BASE SHEET SOURCE FOR THESE DRAWINGS IS: AS-BUILT PLANS, UTILITIES PLAN AND IRRIGATION PLAN FOR THE SACRAMENTO UTILITIES ENGINEERING AND ADMINISTRATION BUILDING, DATED 10/1/98, PREPARED BY LPA

5. UTILITIES: PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES INVOLVED AND REQUESTING A VISUAL VERIFICATION OF THE LOCATIONS OF THEIR UNDERGROUND FACILITIES. THE UTILITY COMPANIES ARE MEMBERS OF THE UNDERGROUND SERVICE ALERT (U.S.A.) ON-CALL PROGRAM. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL NOTIFY MEMBERS OF THE U.S.A. 48 HOURS IN ADVANCE OF PERFORMING EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (800) 642-2444. EXCAVATION IS DEFINED AS BEING 18 OR MORE INCHES IN DEPTH BELOW THE EXISTING SURFACE.

   THE CONTRACTOR IS CAUTIONED THAT ONLY EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATION, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. HOWEVER, THE CONSULTANT CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES, NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH ARE NOT SHOWN ON THESE DRAWINGS.

6. TREE PROTECTION AND MAINTENANCE REQUIREMENTS: ALL TRENCHING WITHIN THE DRIPLINE OF EXISTING TREES TO REMAIN SHALL BE BY HAND, WITH CARE TAKEN NOT TO CUT OR DAMAGE ROOTS OVER 1-INCH DIAMETER. TREES TO REMAIN SHALL BE FENCED WITH TEMPORARY FENCING, SUCH AS STEEL STAKES (MAX. 5 FEET O.C.) WITH WIRE MESH FABRIC (6X6 OPEN), CHAINLINK, OR SIMILAR, HEIGHT TO BE 5 FEET MINIMUM.

SHEET INDEX

SHEET#	SHEET TITLE
CV-1	COVER
DM-1 - DM-4	DEMOLITION PLAN
EC-1 - EC-2	EROSION CONTROL PLAN
GD-1 - GD-4	GRADING & DRAINAGE PLAN
SC-1 - SC-4	SITE CONSTRUCTION PLAN
IR-1 - IR-4	IRRIGATION PLAN
PL-0 - PL-4	PLANTING PLAN
DT-1 - DT-5	CONSTRUCTION DETAILS
C-1	PARKING LOT LAYOUT
C-2	PARKING LOT DETAILS
ADD ALTERNATE #1	
E-001	ELECTRICAL SITE PLAN- EV CHARGING STATION
E-002	ELECTRICAL DETAILS- EV CHARGING STATION

EXISTING CONDITIONS LEGEND

- FENCE
- WATER LINE
- SD — STORM DRAIN LINE
- SS — SANITARY SEWER LINE
- E — ELECTRICAL LINE
- OH — OVERHEAD ELECTRICAL LINE
- SC — SECURITY LINE
- DRAIN INLET
- SEWER MANHOLE
- DRAIN MANHOLE
- EXISTING UTILITY POLE WITH GUY WIRE
- LIGHT
- BOLLARD LIGHT
- IN-GROUND UPLIGHT
- EXISTING TREE
- BENCH

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REGISTERED LANDSCAPE ARCHITECT
Robert E. Bennett, No. 2772
Registration
May 31, 2020
Renewal Date
Date
STATE OF CALIFORNIA

BID SET

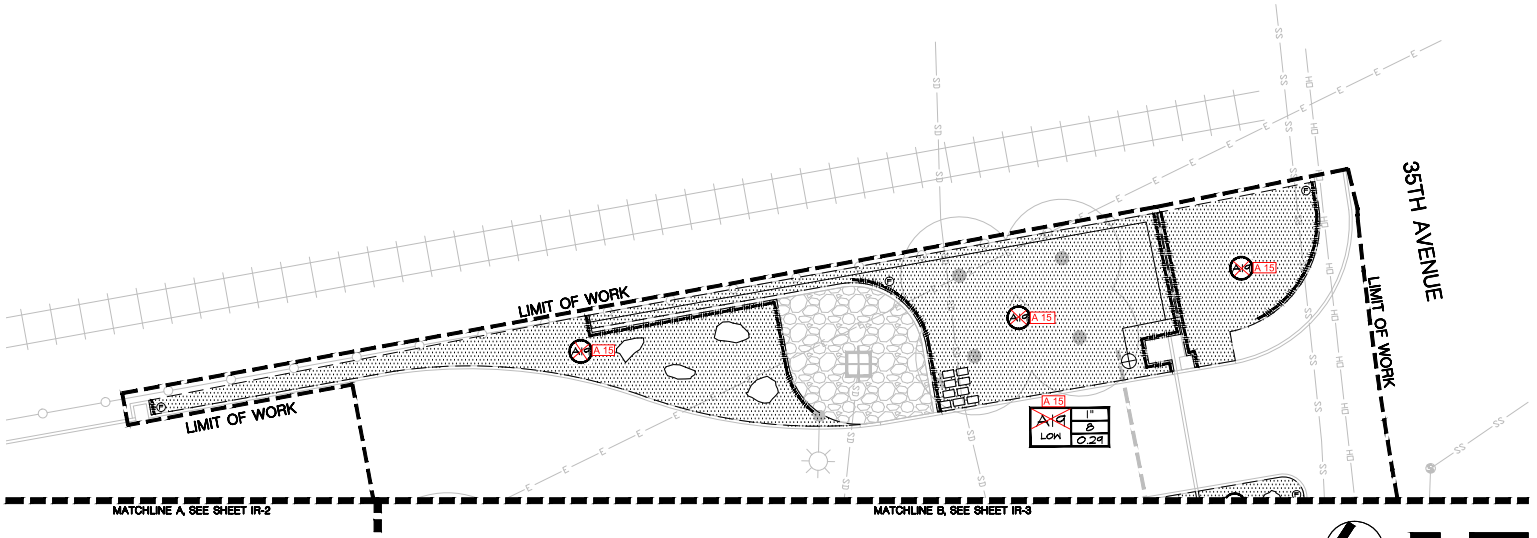
COVER SHEET
DEMONSTRATION LANDSCAPE GARDEN
SACRAMENTO, CA DEPARTMENT OF UTILITIES

Date	12/11/18
Scale	AS SHOWN
Drawn By	BC/IA
Checked	BW
Project No.	16047
Cadd File	16047

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I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

BENJAMIN W. WOODSIDE



IRRIGATION LEGEND

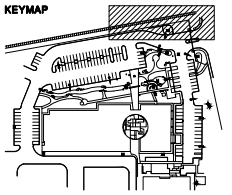
- AT-GRADE IN-LINE DRIP IRRIGATION, HUNTER PLD-04-R WITH A 0.4 GALLON PER HOUR DRIPPER FLOW AND 1'-6" O.C. DRIPPER SPACING. SPACE LATERAL ROWS AT 1'-6" O.C. TYPICAL ALL ZONES UNLESS OTHERWISE INDICATED. 40 PSI. DRIP TUBING SHALL BE PURPLE. INSTALL ON SURFACE AT FINISH GRADE TO AVOID DISTURBING ROOTS OF EXISTING TREES. REVIEW EMITTER LAYOUT WITH MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION: DON FRANKLIN, (916) 849-4437. — 1 DT-5, 3-6 DT-5
- SUBSURFACE IN-LINE DRIP IRRIGATION, HUNTER PLD-04-R WITH A 0.4 GALLON PER HOUR DRIPPER FLOW AND 1'-6" O.C. DRIPPER SPACING. SPACE LATERAL ROWS AT 1'-6" O.C. TYPICAL ALL ZONES UNLESS OTHERWISE INDICATED. 40 PSI. DRIP TUBING SHALL BE PURPLE. INSTALL 3" BELOW FINISH GRADE PRIOR TO PLUG PLANTING. REVIEW EMITTER LAYOUT WITH MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION: DON FRANKLIN, (916) 849-4437. — 2-6 DT-5
- WRAPPED IN-LINE DRIP IRRIGATION, HUNTER PLD-ESD WITH A 0.6 GALLON PER HOUR DRIPPER FLOW AND 1'-0" O.C. DRIPPER SPACING. SPACE LATERAL ROWS AT 1'-2" O.C. TYPICAL ALL ZONES UNLESS OTHERWISE INDICATED. 40 PSI DRIP TUBING SHALL BE PURPLE. INSTALL 4-6" BELOW FINISH GRADE PRIOR TO PLUG PLANTING. REVIEW EMITTER LAYOUT WITH MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION: DON FRANKLIN, (916) 849-4437. — 2-6 DT-5
- SUBSURFACE IN-LINE DRIP IRRIGATION, TORO DL2000 RSP-218-05-E WITH A 0.5 GALLON PER HOUR DRIPPER FLOW AND 1'-6" O.C. DRIPPER SPACING. SPACE LATERAL ROWS AT 1'-6" O.C. TYPICAL ALL ZONES UNLESS OTHERWISE INDICATED. 40 PSI. DRIP TUBING SHALL BE PURPLE. INSTALL 3" BELOW FINISH GRADE PRIOR TO PLUG PLANTING. REVIEW EMITTER LAYOUT WITH MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION: LANCE MATHESON, (916) 622-3262. — 2-6 DT-5
- SUBSURFACE IN-LINE DRIP IRRIGATION, RAINBIRD XFS-P-04-18 WITH A 0.4 GALLON PER HOUR DRIPPER FLOW AND 1'-6" O.C. DRIPPER SPACING. SPACE LATERAL ROWS AT 1'-6" O.C. TYPICAL ALL ZONES UNLESS OTHERWISE INDICATED. 40 PSI. DRIP TUBING SHALL BE PURPLE. INSTALL 3" BELOW FINISH GRADE PRIOR TO PLUG PLANTING. REVIEW EMITTER LAYOUT WITH MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION: JIM WINEBARGER, (760) 258-2118. — 2-6 DT-5
- MPLCS515 / MP3000: TURF ROTARY SPRAY, HUNTER MPLCS515/MP3000 ON HUNTER PRO-SPRAY BODY WITH PURPLE CAP, 35 PSI, SPACING AS SHOWN, ARC AS REQUIRED — 5 DT-4
- DRIP CONTROL ZONE KIT: HUNTER PCZ-101-40 WITH RECLAIMED WATER ID TAG. — 2 DT-4
- REMOTE CONTROL VALVE: HUNTER ICV-101G-R WITH RECLAIMED WATER ID TAG. — 1 DT-4
- EXISTING REMOTE CONTROL VALVE, PROTECT IN PLACE
- EXISTING REMOTE CONTROL VALVE TO BE REMOVED AND RETURNED TO OWNER, CAP MAINLINE AND COIL CONTROL WIRES IN PULL BOX FOR FUTURE USE.

- MVA: MASTER VALVE A, SUPERIOR 3100 MODEL SC1503100 1 1/2" VALVE WITH RECLAIMED WATER ID TAG, NORMALLY OPEN, WIRE TO CONTROLLER A — 9 DT-5
- FSA: FLOW SENSOR A, RAINBIRD FS150B, WIRE TO CONTROLLER A — 8 DT-5
- MVB: MASTER VALVE B, HUNTER ICV-101G-R WITH RECLAIMED WATER ID TAG, NORMALLY CLOSED, WIRE TO CONTROLLER B — 9 DT-5
- FSB: FLOW SENSOR B, HUNTER HFS WITH FCT-100 RECEPTACLE TEE, WIRE TO CONTROLLER B — 8 DT-5
- MASTER VALVE C, HUNTER ICV-101G-R WITH RECLAIMED WATER ID TAG, NORMALLY CLOSED, WIRE TO CONTROLLER C
- A: CONTROLLER A, RAINBIRD ESP-12-LXMEF 12 STATION CONTROLLER WITH FLOW MODULE AND 3G USA CELLULAR CARTRIDGE WITH (2) ESP-LX 12 STATION MODULES FOR A TOTAL OF 36 STATIONS. CONTACT CUR CLEARY, (916) 934-8447 — 7 DT-5
- B: CONTROLLER B, HUNTER I-CORE-PP, 6 STATIONS — 7 DT-5
- C: CONTROLLER C, INCLUDED WITH STORMWATER CISTERN PACKAGE — ALL DT-6
- LATERAL LINE, CLASS 200 PVC PURPLE PIPE, 3/4" SIZE UNLESS OTHERWISE NOTED, 12" MIN. BURIAL
- DRIP HEADER LINE, CLASS 200 PVC PURPLE PIPE, 1" SIZE UNLESS OTHERWISE NOTED
- IRRIGATION MAINLINE, CLASS 200 PVC PURPLE PIPE, 2" — 4 DT-4
- EXISTING MAINLINE
- SLEEVE, SCH 40 PVC, SIZE AS REQUIRED
- IRRIGATION CONTROL/COMMUNICATION WIRES
- E: ELECTRICAL CONDUCTORS, #10 WIRE, IN 1/2" CONDUIT
- GATE VALVE, NIBCO T-113, LINE SIZE
- DRIP IRRIGATION START CONNECTION — 9 DT-4
- F: FLUSH VALVE, HUNTER, INSTALL AT LOW END OF DRIP HEADER LINE — 7 DT-4
- DB: DRIP IRRIGATION DEMONSTRATION BOX — 6 DT-4
- A1: ZONE NUMBER, DRIP IRRIGATION IN THIS AREA TO BE CONNECTED TO DRIP REMOTE CONTROL ZONE KIT WITH CORRESPONDING VALVE NUMBER
- EXISTING VALVE #
  APPROXIMATE GPM THROUGH VALVE
  VALVE SIZE
- VALVE NUMBER
  VALVE SIZE
  APPROX. GPM
  PRECIP. RATE (INCHES PER HOUR)
  WATER USE

IRRIGATION NOTES

1. SPECIFICATIONS: SEE IRRIGATION SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. VERIFICATION: SYSTEM DESIGN IS BASED ON 30 P.S.I. AND 40 G.P.M. AVAILABLE AT DISCHARGE OUTLET OF METER OR OTHER POINT OF CONNECTION. CONTRACTOR SHALL VERIFY SAME AND NOTIFY LANDSCAPE ARCHITECT IF SUCH DATA ADVERSELY AFFECTS THE OPERATION OF THE SYSTEM. SUCH NOTICE SHALL BE MADE IN WRITING AND PRIOR TO COMMENCING ANY IRRIGATION WORK.
3. UTILITIES: CONTRACTOR SHALL VERIFY LOCATION OF ALL ON-SITE UTILITIES. RESTORATION OF DAMAGED UTILITIES SHALL BE MADE AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
4. SCHEMATIC: SYSTEM FEATURES ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY. INSTALL ALL PIPING AND VALVES IN COMMON TRENCHES WHERE FEASIBLE AND INSIDE PLANTING AREAS WHENEVER POSSIBLE. ALL VALVES SHALL BE LOCATED IN GROUNDCOVER OR SHRUB AREAS WHENEVER POSSIBLE.
5. CODES: IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODES AND MANUFACTURER'S SPECIFICATIONS. NOTIFY LANDSCAPE ARCHITECT BY TELEPHONE AND IN WRITING OF ANY CONFLICTS PRIOR TO INSTALLATION.
6. SLEEVING: CONTRACTOR SHALL ADEQUATELY SIZE ALL SLEEVES SHOWN ON PLAN. SLEEVES SHALL BE INSTALLED AT THE NECESSARY DEPTHS PRIOR TO PAVEMENT CONSTRUCTION. SLEEVING SHALL EXTEND 1'-0" FROM EDGE OF PAVEMENT INTO LAWN OR PLANTING AREA, AND SHALL HAVE ENDS CLEARLY MARKED ABOVE GRADE.
7. HEAD ALLOWANCE: CONTRACTOR SHALL ALLOW IN BID PRICE AN AMOUNT SUFFICIENT TO PROVIDE AND INSTALL AN ADDITIONAL 3 SPRINKLER HEADS OF EACH TYPE SPECIFIED ON PLAN TO ACCOMMODATE FIELD CHANGES. THESE HEADS SHALL BE LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT. CONTRACTOR SHALL DELIVER TO THE OWNER ANY UN-USED ADDITIONAL HEADS AT THE END OF THE MAINTENANCE PERIOD.
8. CONTROLLER: INSTALL CONTROLLER 4'-0" ABOVE FLOOR OR FINISHED GRADE (WHERE APPLICABLE) AND FASTEN SECURELY TO WALL. ALL ABOVE-GRADE CONDUIT SHALL BE RIGID STEEL AND SECURELY FASTENED TO STRUCTURE AND TO CONTROLLER.
9. EXISTING IRRIGATION: SHOULD THE EXISTING MAINLINE BREAK OR BE SHUT OFF FOR ANY REASON DURING THE COURSE OF CONSTRUCTION THE CONTRACTOR SHALL HAND WATER ALL TREES, SHRUBS, TURF, AND GROUNDCOVER THAT THE EXISTING IRRIGATION SYSTEM WATERS. THE CONTRACTOR SHALL CONTINUE TO DO SO UNTIL THE IRRIGATION SYSTEM IS OPERABLE.
10. SITE ELCTRICAL: IT IS INTENDED THAT THE SITE ELECTRICAL BE DESIGN-BUILD BY CONTRACTOR. CONTRACTOR TO PROVIDE ELECTRICAL SERVICE AS SHOWN TO IRRIGATION CONTROLLER B AND TO STORMWATER CISTERN. CONTRACTOR SHALL SUBMIT FOR ELECTRICAL PERMIT FOR ALL WORK INVOLVED. REFER TO SITE ELECTRICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL COORDINATE WITH CITY OF SACRAMENTO FOR PRE-CONSTRUCTION WALKTHROUGH, CONTACT JOSEPH GLUVERS, (916) 808-8427.

KEYMAP



BID SET

IRRIGATION PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

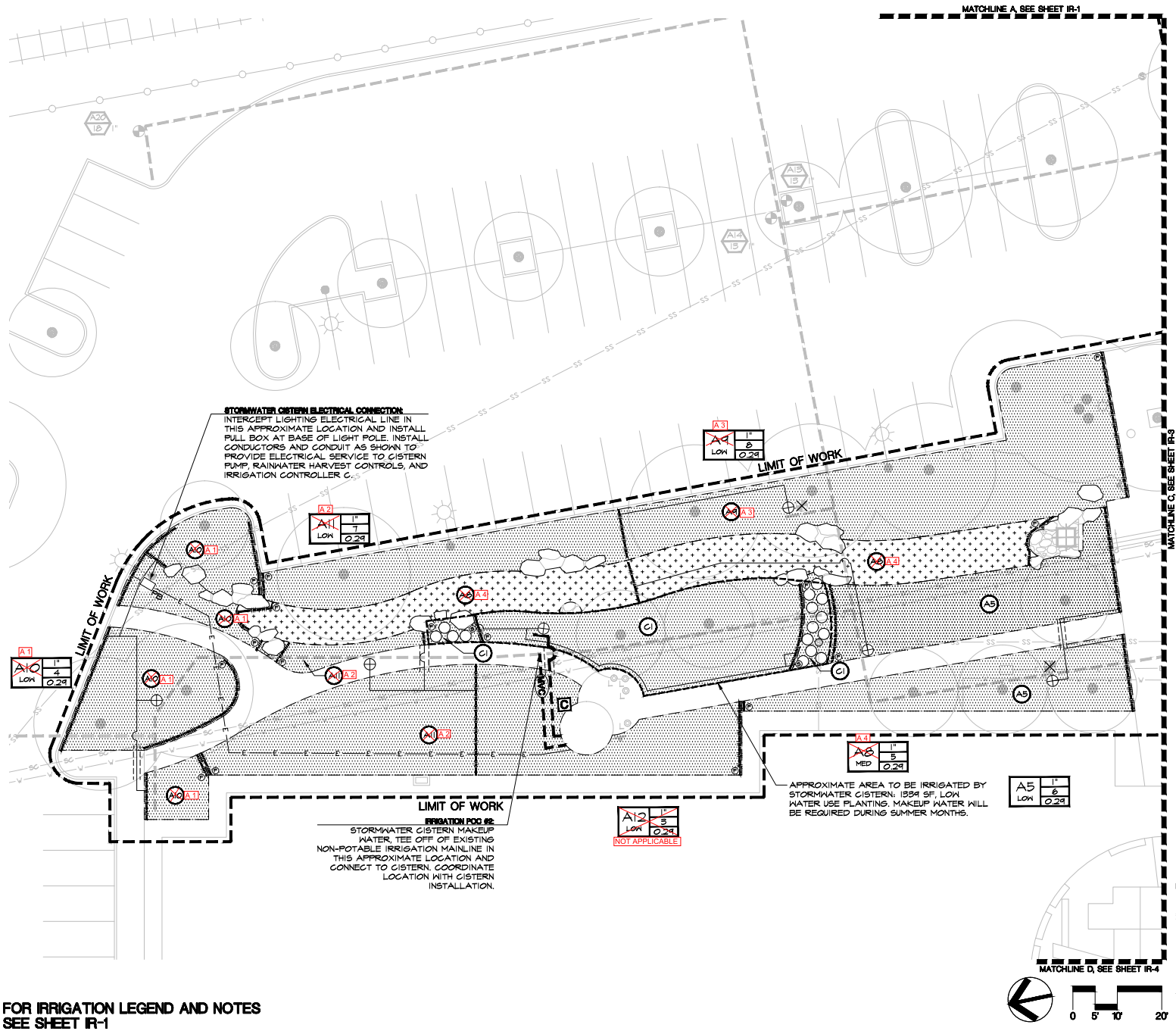
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Revisions

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BENJAMIN W. WOODSIDE, LANDSCAPE ARCHITECT, Registered Professional, May 31, 2020, Renewal Date, STATE OF CALIFORNIA

Date	12/11/18
Scale	AS SHOWN
Drawn By	BC/IA
Checked	BW
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Cadd File	16047
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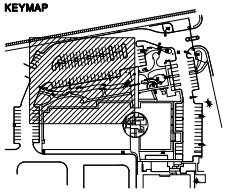


FOR IRRIGATION LEGEND AND NOTES
SEE SHEET IR-1

I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

BENJAMIN W. WOODSIDE

KEYMAP



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IRRIGATION PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

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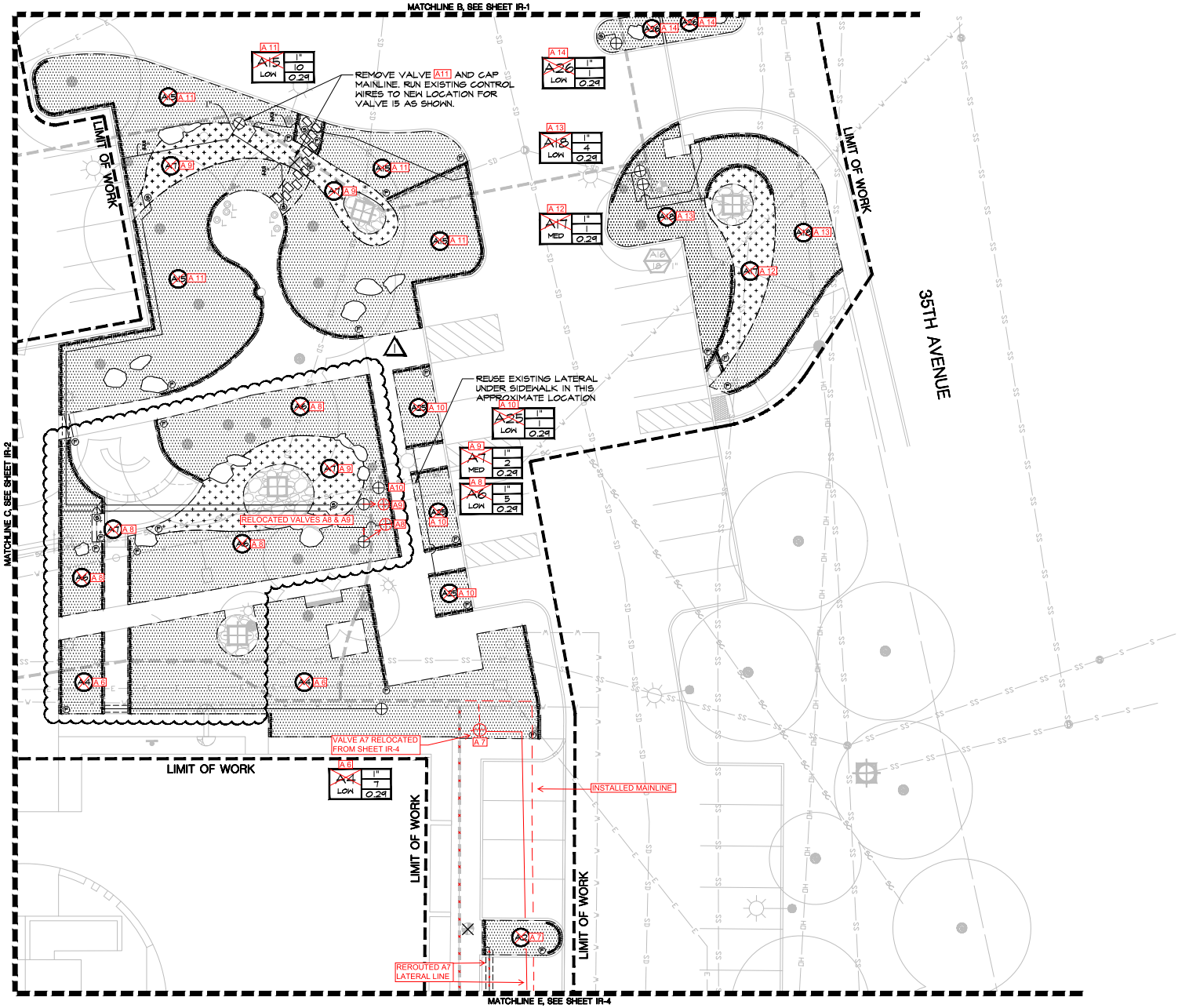
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ASI - OUTDOOR CLASSROOM MODIFICATIONS 8.5.19



FOR IRRIGATION LEGEND AND NOTES
SEE SHEET IR-1

I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

BENJAMIN W. WOODSIDE

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1 Outdoor Classroom
06/01/19

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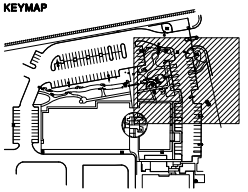
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IRRIGATION PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

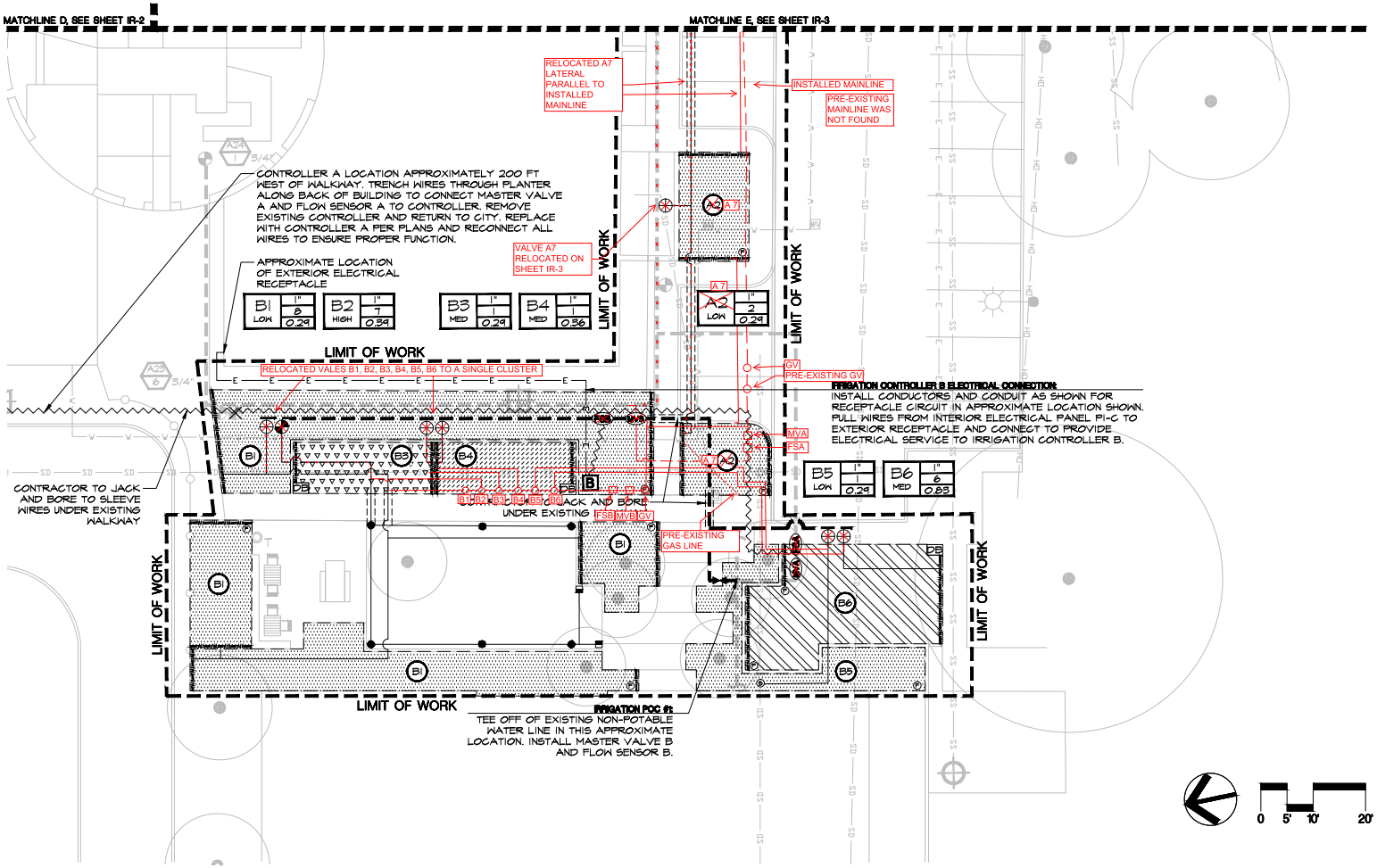
KEYMAP



0 5' 10' 20'

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I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

BENJAMIN W. WOODSIDE

WATER EFFICIENT LANDSCAPE WORKSHEET

REFERENCE EVAPOTRANSPIRATION (ETo) = 51.9 IN/YR

MAXIMUM APPLIED WATER ALLOWANCE (MAWA)

ETo	CONVERSION FACTOR	ETAF	TOTAL LANDSCAPE AREA (LA)	1 - ETAF	SPECIAL LANDSCAPE AREA (SLA)	(ETAF x LA) + ((1-ETAF) x SLA)	MAWA TOTAL
51.9	0.62	0.45	30,615	0.55	0	13,777	443,316

ESTIMATE TOTAL WATER USE (ETWU)

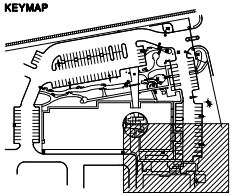
HYDROZONE #/PLANTING DESCRIPTION	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY (IE)	ETAF (PF/IE)	LANDSCAPE AREA (SF)	ETAF x AREA	TOTAL WATER USE
REGULAR LANDSCAPE AREA							
SHRUB/GROUNDCOVER	.2	DRIP	.81	.25	26,356	6,589	212,021
SHRUB/GROUNDCOVER	.5	DRIP	.81	.62	3,659	2,256	8,238
TURF	.8	ROTARY SPRAY	.75	1.07	620	663	21,334
						ETWU TOTAL	241,593
COMPLIANCE: MAWA (443,316) > ETWU (241,593)							

IRRIGATION SCHEDULE

Valve No.	Description	Precip Rate	Irrigation Method	Irrigation Efficiency	Plant Water Use	Plant Factor	Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
A2, A4, A5, A6, A9, A10, A11, A12, A15, A18, A19, A25, A26, B1	Shrubs and Groundcover	0.29	Drip	0.81	Low	0.2	ETo	1.8	3.2	4.7	6.4	7.7	8.4	7.2	5.4	3.7	1.7	0.9	51.9	
							Run Time per Cycle (Minutes)	3	6	10	15	20	24	26	22	17	11	5	3	
							Cycles per Day	1	1	1	2	2	3	3	3	2	1	1	1	
							Days per Month	1	2	3	4	5	6	7	6	5	3	1	1	
							Total Minutes	3	12	30	120	200	432	546	396	170	33	5	3	
							Total Gallons	228	912	2,280	9,120	15,200	32,832	41,496	30,096	12,920	2,508	380	228	148,200
B6	Turf Substitute	0.83	Wrapped Drip	0.81	Low	0.2	Run Time per Cycle (Minutes)	1	2	3	5	7	8	9	8	6	4	2	1	
							Cycles per Day	1	1	1	2	2	3	3	3	2	1	1	1	
							Days per Month	1	2	3	4	5	6	7	6	5	3	1	1	
							Total Minutes	1	4	9	40	70	144	189	144	60	12	2	1	
							Total Gallons	6	24	54	240	420	864	1,134	864	360	72	12	6	4,056
A7, A7, A17, B5	Grass Plugs	0.29	Drip	0.81	Med	0.5	Run Time per Cycle (Minutes)	3	6	10	15	20	24	26	22	17	11	5	3	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	3	5	7	10	12	13	11	8	6	3	1	
							Total Minutes	6	18	100	210	600	1,152	1,352	726	408	132	15	3	
							Total Gallons	54	162	900	1,890	5,400	10,368	12,168	6,534	3,672	1,188	135	27	42,498
B3	Turf Substitute	0.29	SS Drip (Rainbird)	0.81	Med	0.5	Run Time per Cycle (Minutes)	3	6	10	15	20	24	26	22	17	11	5	3	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	3	5	7	10	12	13	11	8	6	3	1	
							Total Minutes	6	18	100	210	600	1,152	1,352	726	408	132	15	3	
							Total Gallons	6	18	100	210	600	1,152	1,352	726	408	132	15	3	4,722
B4	Turf Substitute	0.36	SS Drip (Toro)	0.81	Med	0.5	Run Time per Cycle (Minutes)	3	5	8	12	17	20	22	19	14	10	4	2	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	3	5	7	10	12	13	11	8	6	3	1	
							Total Minutes	6	15	80	168	510	960	1,144	627	336	120	12	2	
							Total Gallons	6	15	80	168	510	960	1,144	627	336	120	12	2	3,980
B2	Turf	0.39	Rotary Spray	0.75	High	0.8	Run Time per Cycle (Minutes)	2	4	8	11	15	18	20	17	13	9	4	2	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	4	7	11	14	17	19	16	12	8	4	2	
							Total Minutes	4	16	112	242	630	1,224	1,520	816	468	144	16	4	
							Total Gallons	28	112	784	1,694	4,410	8,568	10,640	5,712	3,276	1,008	112	28	36,372

FOR IRRIGATION LEGEND AND NOTES SEE SHEET IR-1

KEYMAP



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REGISTERED LANDSCAPE ARCHITECT BENJAMIN W. WOODSIDE No. 5616 May 31, 2020 Renewal Date STATE OF CALIFORNIA

BID SET

IRRIGATION PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

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ASI - OUTDOOR CLASSROOM MODIFICATIONS 8.5.19

PLANT LIST

ABBREV/ SYMB.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WATER USE	QTY
TREES						
ACE BUE	ACER BUERGERIANUM	TRIDENT MAPLE	15 GAL	AS SHOWN	M	7
ARB UNE	ARBUTUS UNEDO	STRAWBERRY TREE	24" BOX	AS SHOWN	L	3
LAG IND	LAGERSTROEMIA INDICA 'NATCHEZ'	CRAPE MYRTLE	24" BOX	AS SHOWN	L	1
PIS CHI	PISTACIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE	15 GAL	AS SHOWN	L	6
QUE DOU	QUERCUS DOUGLASII	BLUE OAK	24" BOX	AS SHOWN	L	1
SHRUBS AND GROUNDCOVER						
	ACHILLEA MILLEFOLIUM 'MOONSHINE'	MOONSHINE YARROW	1 GAL	2'-0"	L	214
AGA BLU	AGAVE 'BLUE GLOW'	BLUE GLOW AGAVE	1 GAL	3'-0"	L	17
ARC DEN	ARCTOSTAPHYLOS DENSIFLORA 'HOWARD MCMINN'	VINE HILL MANZANITA	5 GAL	6'-0"	L	11
ASC SPE	ASCLEPIAS SPECIOSA	SHOWY MILKWEED	1 GAL	2'-0"	L	43
BAC PIL	BACCHARIS PILULARIS 'CENTENNIAL'	CENTENNIAL COYOTE BRUSH	5 GAL	5'-0"	L	107
BER AQU	BERBERIS AQUIFOLIUM VAR. REPENS	CREEPING OREGON GRAPE	1 GAL	4'-0"	L	29
BOU GRA	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLONDE AMBITION GRAMA GRASS	1 GAL	2'-0"	L	233
	BULBINE FRUTESCENS	ORANGE-STALKED BULBINE	1 GAL	3'-0"	L	21
BUP FRT	~~BUPLEURUM FRUTICOSUM~~	~~SHRUBBY HARE'S EAR~~	~~5 GAL~~	~~4'-0"~~	~~L~~	~~94~~
		SUBSTITUTED WITH 5G PHLOMIS FRUTICOSA				
	CALANDRINIA SPECTABILIS	ROCK PURSLANE	1 GAL	2'-0"	L	39
	CAREX DIVULSA	BERKELEY SEDGE	1 GAL	2'-0"	L	339
CEA GRI	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT'	YANKEE POINT CALIFORNIA LILAC	5 GAL	8'-0"	L	12
CHO TEC	CHONDROPETALUM TECTORUM	CAPE RUSH	1 GAL	3'-0"	L	24
	COPROSMA KIRKII	CREEPING COPROSMA	1 GAL	6'-0"	L	72
DAS WHE	DASYLIRION WHEELERI	DESERT SPOON	1 GAL	4'-0"	L	5
DES CES	DESCHAMPSIA CESPITOSA	TUFTED HAIRGRASS	1 GAL	3'-0"	L	22
EPI CAN	EPILOBIUM CANUM	CALIFORNIA FUCHSIA	1 GAL	3'-0"	L	79
ERI FAS	~~ERIOGONUM FASCICULATUM~~	~~CALIFORNIA BUCKWHEAT~~	~~5 GAL~~	~~4'-0"~~	~~L~~	~~94~~
		SUBSTITUTED WITH 1G ERIOGONUM UMBELLATUM				
HES PAR	HESPERALOE PARVIFLORA	CORAL YUCCA	1 GAL	3'-0"	L	16
	~~HEUCHERA 'ROSADA'~~	~~ROSADA CORAL BELLS~~	~~1 GAL~~	~~1'-6"~~	~~L~~	~~87~~
		SUBSTITUTED WITH 1G HEUCHERA BRESSINGHAM				
IRI DOU	IRIS DOUGLASIANA	DOUGLAS IRIS	1 GAL	3'-0"	L	41
	JUNCUS PATENS 'ELK BLUE'	ELK BLUE CALIFORNIA GRAY RUSH	1 GAL	2'-0"	M	127
	LEYMUS CONDENSATUS 'CANYON PRINCE'	CANYON PRINCE WILDRYE	1 GAL	3'-0"	L	168
LUP ALB	~~LUPINUS ALBIFRONS~~	~~SILVER LUPINE~~	~~5 GAL~~	~~4'-0"~~	~~L~~	~~9~~
		SUBSTITUTED WITH 5G LEUCOPHYLUM FRUTSECENS COMPACTA				
MIM AUR	~~MIMULUS AURANTIACUS~~	~~STICKY MONKEYFLOWER~~	~~1 GAL~~	~~3'-0"~~	~~L~~	~~13~~
		SUBSTITUTED WITH 1G GALVEZIA SPECIOSA				
MUH RIG	MUHLENBERGIA RIGENS	DEERGRASS	1 GAL	3'-0"	L	240
PEN HET	PENSTEMON HETEROPHYLLUS 'MARGARITA BOP'	FOOTHILL PENSTEMON	1 GAL	2'-0"	L	47
RHA CAL	RHAMNUS CALIFORNICA	COFFEEBERRY	5 GAL	8'-0"	L	12
RIB VIB	RIBES VIBURNIFOLIUM	EVERGREEN CURRANT	1 GAL	5'-0"	L	22
ROS OFF	ROSMARINUS OFFICINALIS 'ROMAN BEAUTY'	ROMAN BEAUTY ROSEMARY	1 GAL	3'-0"	L	154
SAL CLE	SALVIA CLEVELANDII 'WINIFRED GILMAN'	WINIFRED GILMAN CLEVELAND SAGE	5 GAL	4'-0"	L	12
	SALVIA SPATHACEA	HUMMINGBIRD SAGE	1 GAL	3'-0"	L	24
	SISYRINCHIUM BELLUM	BLUE EYED GRASS	1 GAL	1'-6"	L	34
	~~THYMUS PRAECOX~~	~~MOTHER OF THYME~~	~~1 GAL~~	~~2'-0"~~	~~L~~	~~69~~
		SUBSTITUTED WITH 1G RED CREEPING THYME				

ABBREV/ SYMB.	DESCRIPTION	SIZE	SPACING	WATER USE	QTY
STORMWATER PLANTING MIXES					
	PERENNIAL POLYCULTURE MIXES, PLUG PLANTINGS AVAILABLE FROM HEDGEROW FARMS, (530) 662-6847	1" X 1" X 2.5" PLUGS	2'-0"	L/M	772 SF
	MIX A CAREX PANSA DESCHAMPSIA CESPITOSA ELYMUS GLAUCUS JUNCUS EFFUSUS	% MIX 30% 20% 20% 30%			
	MIX B CAREX PANSA JUNCUS EFFUSUS STIPA PULCHRA	40% 30% 30%			
	NO-MOW SOD, BIOFILTRATION SOD AS AVAILABLE FROM DELTA BLUEGRASS, (800) 651-8873				1255 SF
TURF SUBSTITUTE					
	GROUNDCOVER PLUGS, "KURAPIA" AS AVAILABLE FROM FLORA SOURCE LTD, CONTACT RICKY TAX, (949) 489-1131	PLUGS	1'-6" O.C.	M	729 SF
TURF					
	TURF FROM PLUGS, "UC VERDE BUFFALOGRASS" AS AVAILABLE FROM FLORA SOURCE LTD, CONTACT RICKY TAX, (949) 489-1131	PLUGS	1'-0" O.C.	M	537 SF
	TURF FROM SOD, "90/10 TALL FESCUE," 90% TALL FESCUE, 10% KENTUCKY BLUEGRASS, AS AVAILABLE FROM DELTA BLUEGRASS, (800) 651-8873			H	1035 SF

I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

BENJAMIN W. WOODSIDE

40 YEARS
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Revisions
1 Outdoor Classroom 08/01/19

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LICENSED LANDSCAPE ARCHITECT BENJAMIN W. WOODSIDE No. 5616 May 31, 2020 Renewal Date STATE OF CALIFORNIA

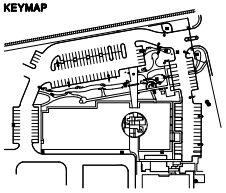
BID SET

PLANTING PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

KEYMAP

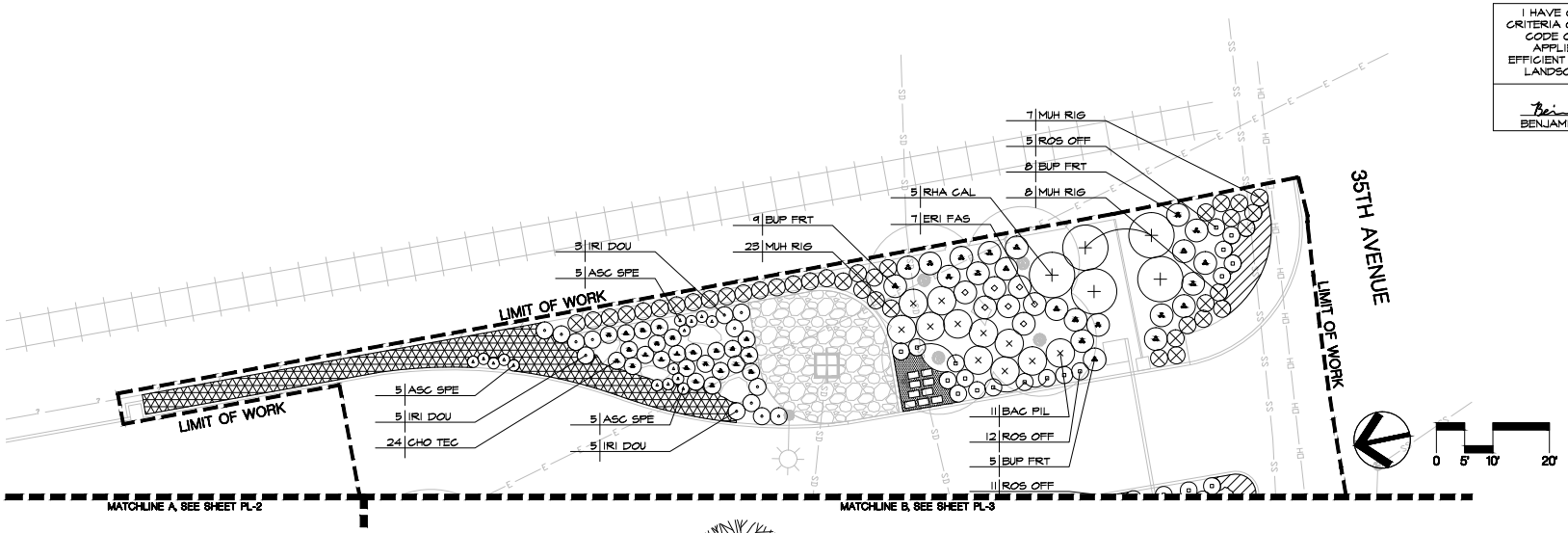


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Project No.	16047
Cadd File	16047
Sheet No.	PL-0
of	34

FOR PLANTING LEGEND AND NOTES SEE SHEET PL-1

I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

BENJAMIN W. WOODSIDE

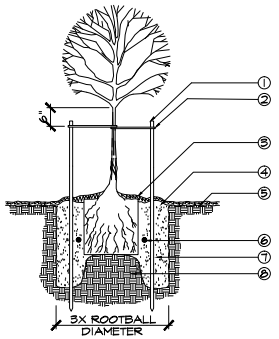


PLANT LEGEND

- EXISTING TREE TO REMAIN
- TREE, 15 GALLON SIZE
- TREE, 24" BOX SIZE
- ROOT BARRIER: DEEP ROOT CORP. #SB18. INSTALL FLUSH WITH INSIDE FACE OF CURB OR PAVING IN LOCATIONS INDICATED. SHOWN ON OUTSIDE OF CURB FOR GRAPHIC PURPOSES ONLY.

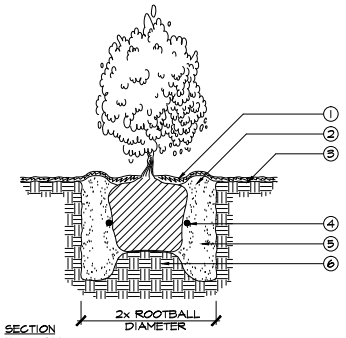
PLANTING NOTES

1. MULCH: INSTALL A UNIFORM 3 INCH COVERING, OF WALK-ON BARK MULCH, 2" AVERAGE INCH PARTICLE SIZE, IN ALL PLANTING AREAS. MATERIAL AVAILABLE FROM REDI-GRO CORP., (916)381-6065.
2. EXISTING PLANT MATERIAL: PROTECT ALL EXISTING PLANT MATERIAL TO REMAIN. CONTRACTOR TO REPAIR ANY DAMAGES INCURRED AS A DIRECT RESULT OF THIS CONTRACT TO THE OWNER'S SATISFACTION AT NO ADDITIONAL COST.
3. GROUNDCOVER: PROVIDE GROUNDCOVER AT INDICATED ON-CENTER SPACING THROUGHOUT ALL PLANTING AREAS. GROUNDCOVER SHALL BE PROVIDED UP TO THE WATERING BASIN OF ALL TREES AND SHRUBS.
4. SOILS TESTING: SEE SPECIFICATIONS FOR TESTING OF TOPSOIL AND AMENDMENTS. IN ADDITION, CONTRACTOR SHALL SUBMIT A FIVE GALLON SAMPLE OF NATIVE TOPSOIL FROM ANY AREAS PREVIOUSLY COVERED BY PAVING, TO SOIL AND PLANT LABORATORY, INC. OF SANTA CLARA, (408) 727-0550, FOR CONTAMINATION TESTING. TESTING REQUIRES FOUR TO FIVE WEEKS. CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR TESTING PRIOR TO CONSTRUCTION.
5. TREE PROTECTION: ALL EXISTING TREES SHALL BE PROTECTED PER CITY OF SACRAMENTO STANDARDS.



1. TREE STAKES: 2"Ø X 8'-0" LODGEPOLE PINE, 2 PER 15 GAL. EAST/ WEST ORIENTATION, CUT STAKES 2" ABOVE HIGHEST RUBBER TRE TIE.
2. RUBBER TREE TIES: 2 PER STAKE. WRAP NO WIRE AROUND TRUNK OR LIMB.
3. MULCH: 2"-4" LAYER.
4. 3" HIGH EARTH WATERING BERM IN PLANTER AREA ONLY.
5. FINISH GRADE. KEEP ROOT CROWN 2" ABOVE FINISH GRADE.
6. PLANT TABS, SEE SPECIFICATIONS.
7. PREPARED BACKFILL. SEE SPECIFICATIONS.
8. EXISTING UNDISTURBED SOIL.

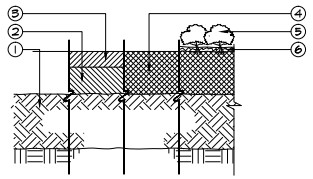
1 PL-1 TREE PLANTING N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL 16047 TREE PLANTING REVISED.DWG



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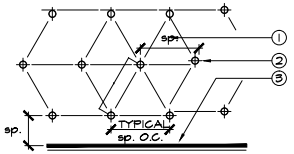
1. 3" LAYER OF APPROVED MULCH.
2. 2" HIGH EARTH MOUND.
3. FINISH GRADE: PLANT ROOT CROWN 1" ABOVE FINISH GRADE.
4. FERTILIZER TABLETS - SEE SPECIFICATIONS.
5. PREPARED BACKFILL. SEE SPECIFICATIONS.
6. PLACE ROOTBALL ON SMALL MOUND OF TAMPED/ FIRM TOPSOIL.

2 PL-1 SHRUB PLANTING N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL



SECTION
NO SCALE

1. RIP OR SCARIFY TOP 12" OF SUBGRADE.
2. ADD 6" OF IMPORTED TOPSOIL. TOPSOIL SHALL BE PHYSICALLY AND CHEMICALLY COMPATIBLE WITH SUBSOIL.
3. ADD AMENDMENTS AND FERTILIZER PER SOILS REPORT.
4. ROTOTILL AMENDMENTS INTO IMPORTED TOPSOIL.
5. PLANT GROUNDCOVER: TRIANGULAR SPACING (SEE PLAN).
6. ADD 3" OF APPROVED MULCH.



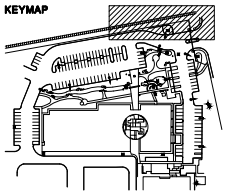
1. GROUNDCOVER SPACING: SEE PLANTING LEGEND.
2. GROUNDCOVER CENTERS.
3. WALL, WALK OR EDGE OF GROUNDCOVER PLANTING.

PLAN
NO SCALE

3 PL-1 TREE PLANTING N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL

FOR PLANT LIST SEE SHEET PL-0

KEYMAP



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PLANTING PLAN
DEMONSTRATION LANDSCAPE GARDEN
SACRAMENTO, CA DEPARTMENT OF UTILITIES

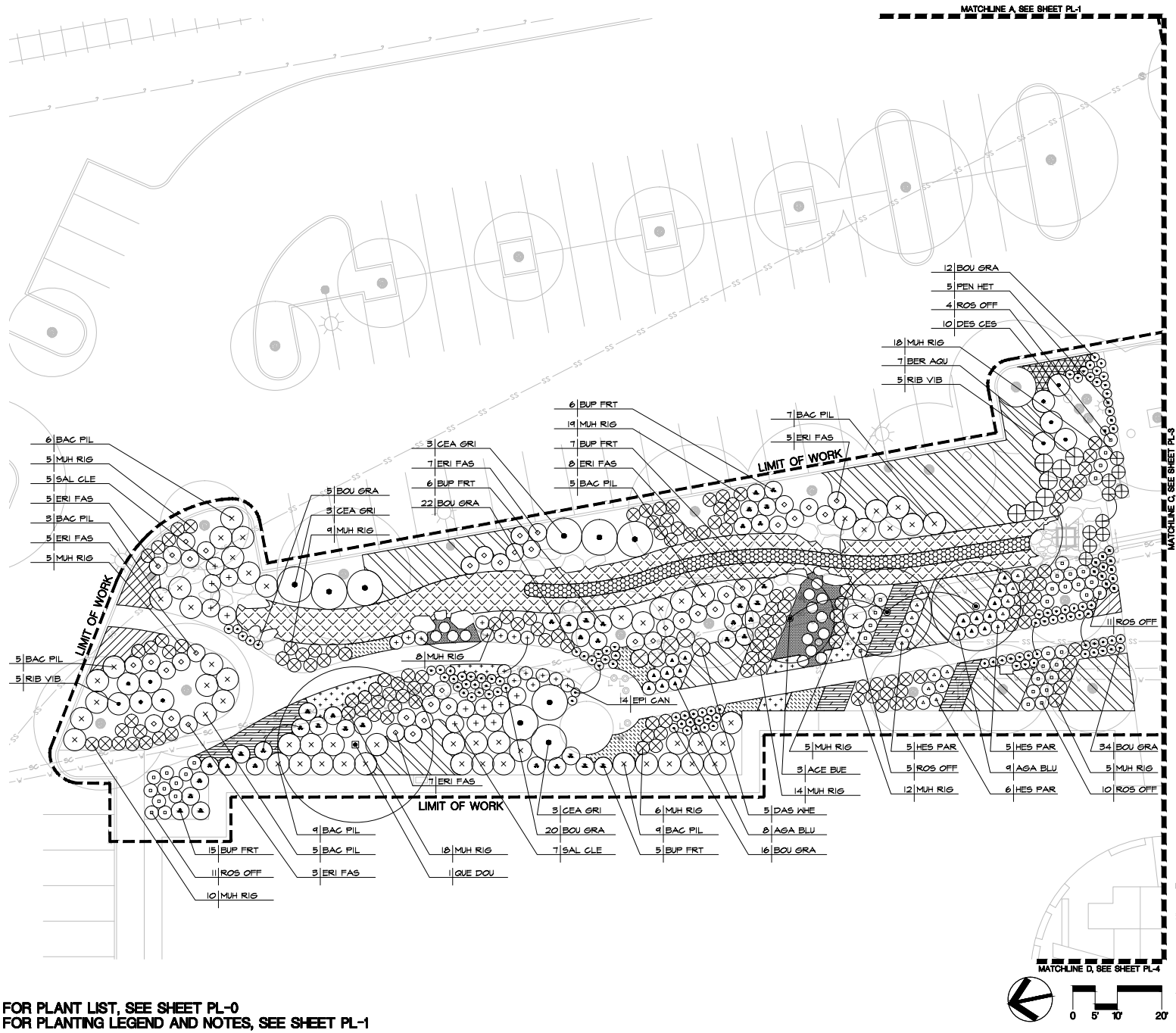
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FOR PLANT LIST, SEE SHEET PL-0
FOR PLANTING LEGEND AND NOTES, SEE SHEET PL-1

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BENJAMIN W. WOODSIDE

KEYMAP

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DEMONSTRATION LANDSCAPE GARDEN

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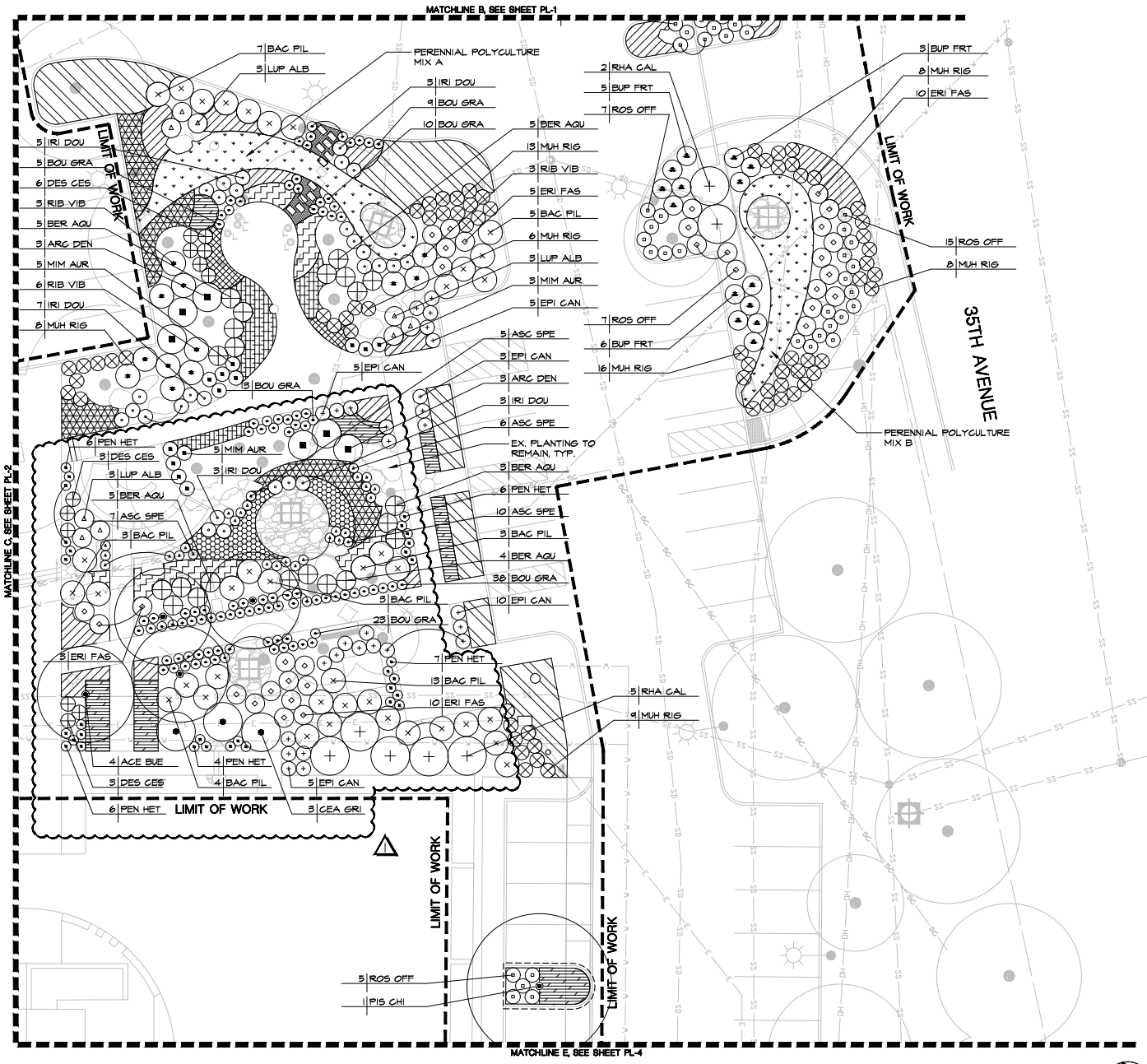
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ASI - OUTDOOR CLASSROOM MODIFICATIONS 8.5.19



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Revisions	
1	Outdoor Classroom
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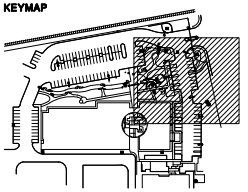
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PLANTING PLAN

DEMONSTRATION LANDSCAPE GARDEN

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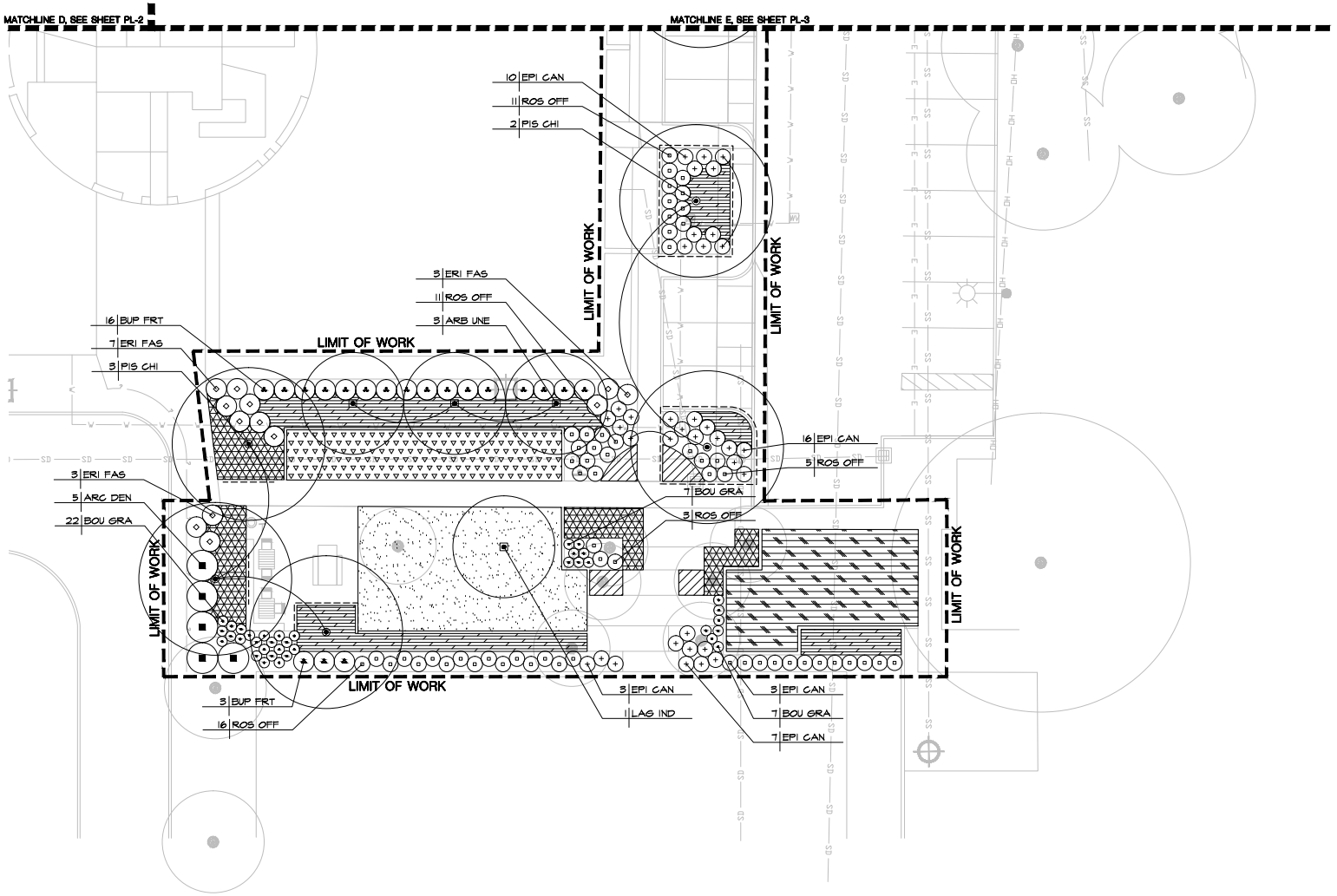
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0 5' 10' 20'

FOR PLANT LIST, SEE SHEET PL-0
FOR PLANTING LEGEND AND NOTES, SEE SHEET PL-1



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BENJAMIN W. WOODSIDE
Registered LANDSCAPE ARCHITECT
May 31, 2020
Renewal Date
STATE OF CALIFORNIA

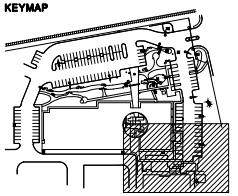
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PLANTING PLAN

DEMONSTRATION LANDSCAPE GARDEN

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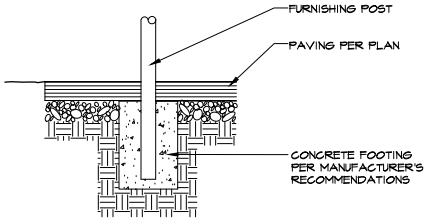
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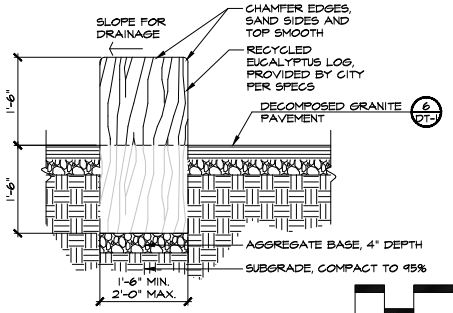
FOR PLANT LIST, SEE SHEET PL-0
FOR PLANTING LEGEND AND NOTES, SEE SHEET PL-1



1 DT-3 IN-GROUND MOUNT SECTION

0 1/2' 1' 2'

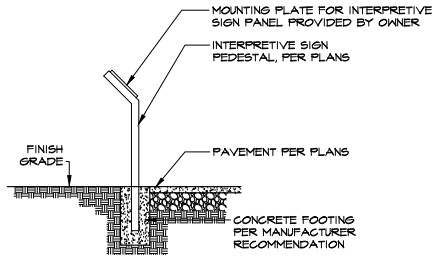
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2 DT-3 LOG STOOL SECTION

0 1/2' 1' 2'

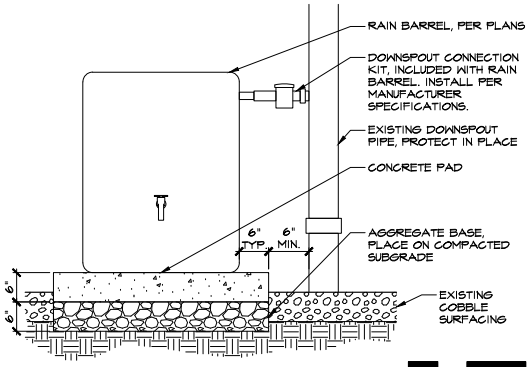
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3 DT-3 SIGN PEDESTAL SECTION

0 1' 2' 4'

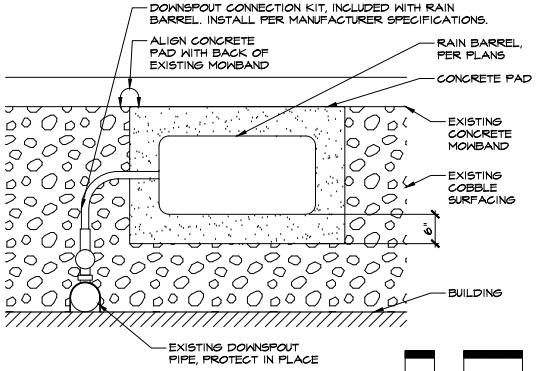
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4 DT-3 RAIN BARREL SECTION

0 1/2' 1' 2'

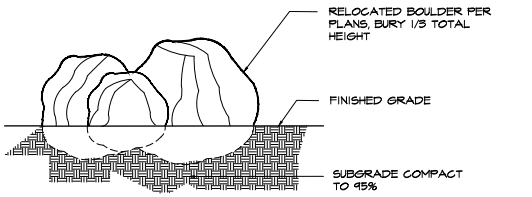
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5 DT-3 RAIN BARREL ENLARGEMENT PLAN

0 1/2' 1' 2'

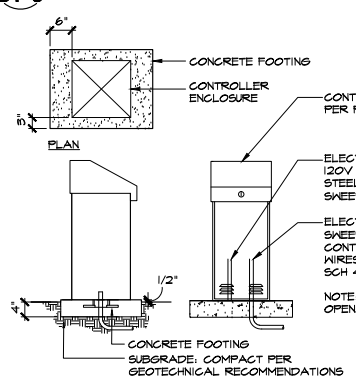
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6 DT-3 BOULDER SECTION

0 1' 2' 4'

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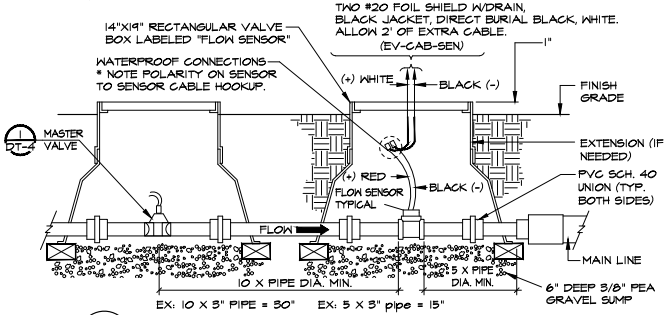


7 DT-3 CONTROLLER SECTION

0 1/2' 1' 2'

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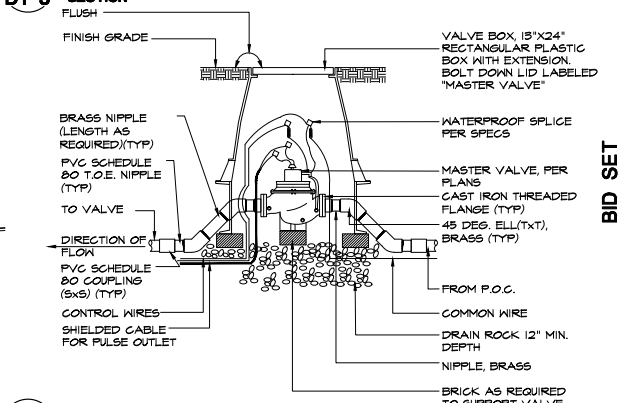
NOTES:
1. CONTRACTOR TO INSTALL PER MANUFACTURER'S DETAIL
2. FLOW SENSOR MUST BE INSTALLED WITH INSERT (TOP) POSITIONED VERTICALLY AND BODY (TEE) POSITIONED HORIZONTALLY.
3. FLOW SENSOR CABLE MUST BE RUN IN 1" PVC CONDUIT FROM FLOW SENSOR TO CONTROLLER ENCLOSURE.



8 DT-3 MASTER VALVE/FLOW SENSOR SECTION

N.T.S.

16047Flow Sensor.dwg



9 DT-3 MASTER VALVE SECTION

N.T.S.

16047_02816mvl.dwg

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CONSTRUCTION DETAILS

DEMONSTRATION LANDSCAPE GARDEN

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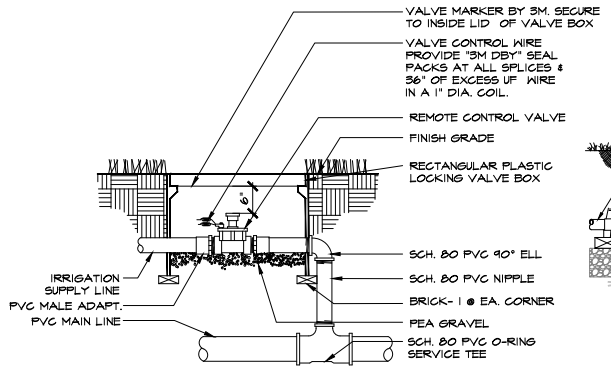
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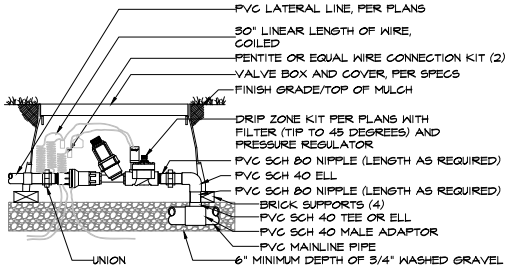
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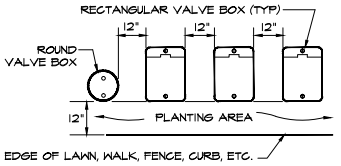
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1 DT-4 REMOTE CONTROL VALVE N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL
16047 REMOTE CONTROL VALVE.DWG

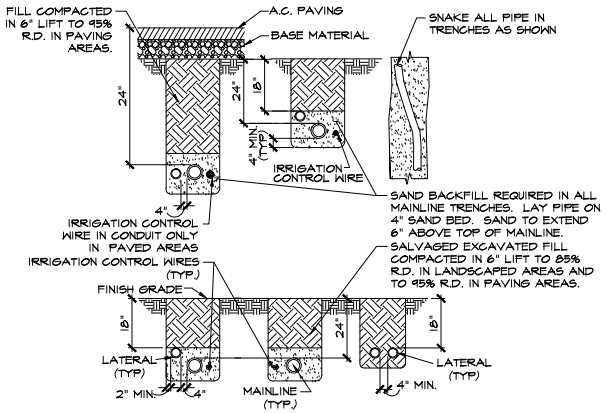


2 DT-4 DRIP CONTROL ZONE KIT N.T.S.
SECTION
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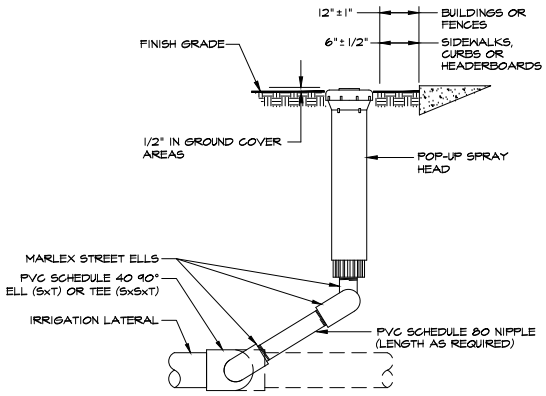


NOTES:
1. CENTER BOXES OVER VALVES.
2. SET BOXES IN GROUND COVER/SHRUB AREA WHERE POSSIBLE.
3. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
4. AVOID HEAVILY COMPACTING SOIL AROUND BOXES TO PREVENT DAMAGING VALVE BOXES.

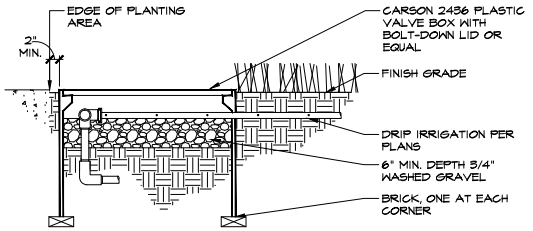
3 DT-4 VALVE BOX LAYOUT N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL
16047 VALVE BOX LAYOUT



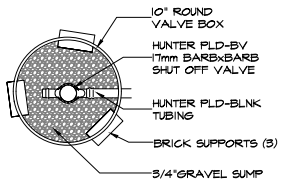
4 DT-4 TRENCHING N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL



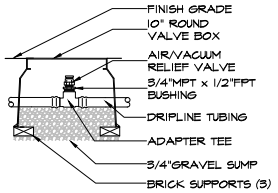
5 DT-4 SPRAY HEAD N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL



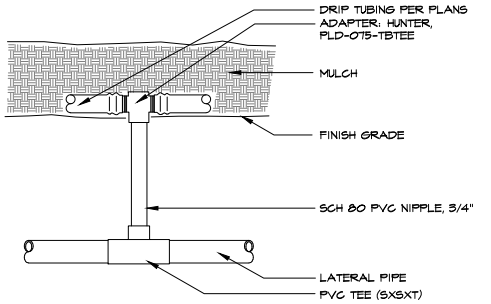
6 DT-4 DRIP DEMONSTRATION BOX N.T.S.
SECTION
0 1/2' 1' 2'
16047DripDemoBox



7 DT-4 DRIP FLUSH VALVE N.T.S.
SECTION



8 DT-4 DRIP AIR RELIEF VALVE N.T.S.
SECTION



9 DT-4 DRIP LIGHT LAYOUT START CONNECTION N.T.S.
SECTION
16047DripStartConnectionB.dwg

BID SET

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Revisions

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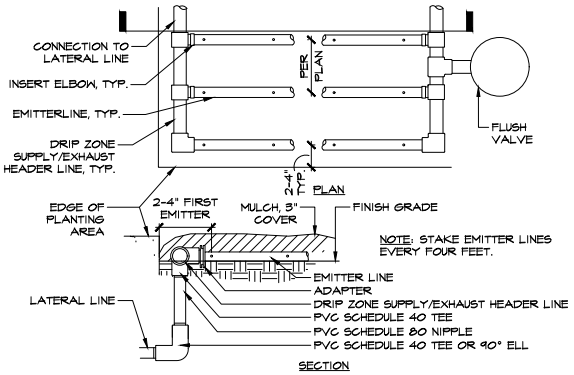
REGISTERED LANDSCAPE ARCHITECT
ROBERT E. CALLANDER
No. 1890
May 31, 2020
Renewal Date
STATE OF CALIFORNIA

CONSTRUCTION DETAILS

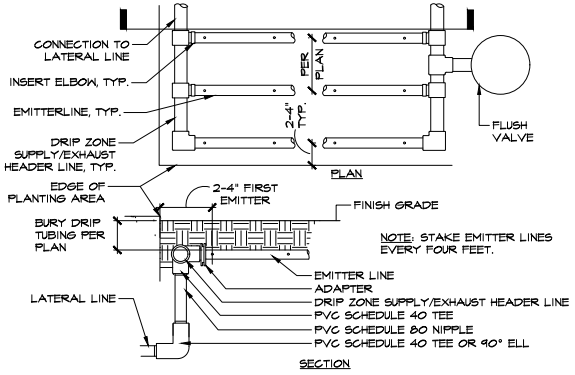
DEMONSTRATION LANDSCAPE GARDEN
SACRAMENTO, CA DEPARTMENT OF UTILITIES

Date	12/11/18
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Drawn By	BC/IA
Checked	BW
Project No.	16047
Cadd File	16047

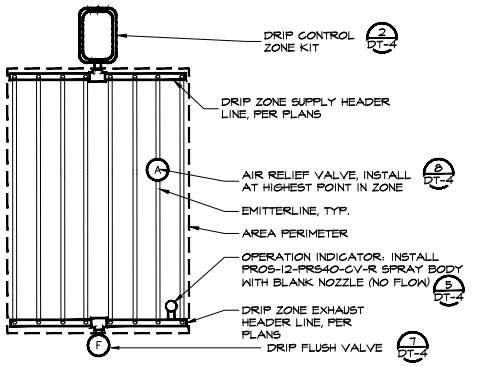
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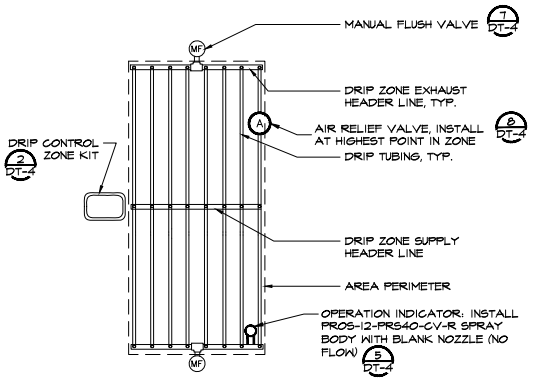
1 DT-5 **DRIP TUBING** PLAN/SECTION N.T.S. 16047 In-Line Drip B.dwg



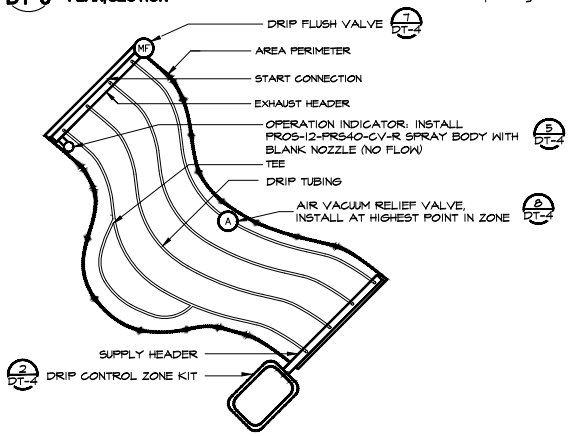
2 DT-5 **SUBSURFACE DRIP TUBING** PLAN/SECTION N.T.S. 16047 Subsurface In-Line Drip B.dwg



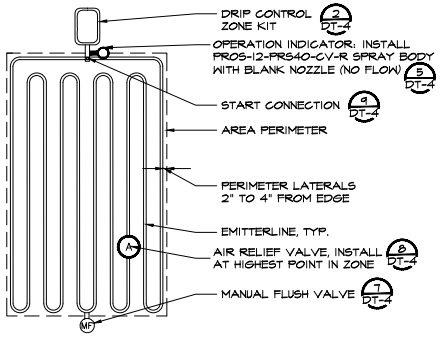
3 DT-5 **DRIP IRRIGATION END FEED LAYOUT** PLAN N.T.S. 16047In-LineDripLayoutEnd Feed1.dwg



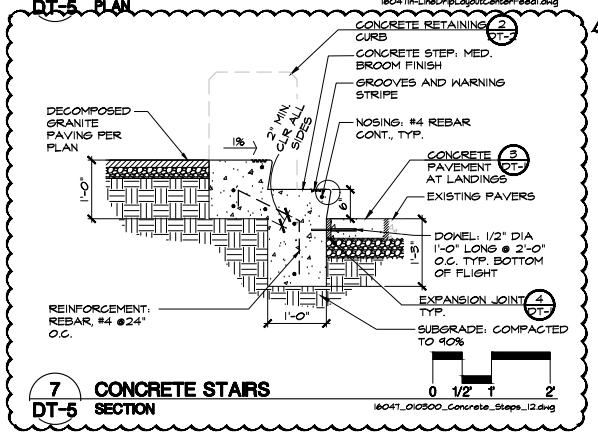
4 DT-5 **DRIP IRRIGATION CENTER FEED LAYOUT** PLAN N.T.S. 16047In-LineDripLayoutCenterFeed1.dwg



5 DT-5 **DRIP IRRIGATION IRREGULAR AREA LAYOUT** PLAN N.T.S.



6 DT-5 **DRIP IRRIGATION LIGHT LAYOUT** PLAN N.T.S. 16047In-LineDripLayoutLight1.dwg



7 DT-5 **CONCRETE STAIRS** SECTION 16047_010300_Concrete_Steps_12.dwg

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Revisions	
1	Outdoor Classroom 08/01/19

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CONSTRUCTION DETAILS

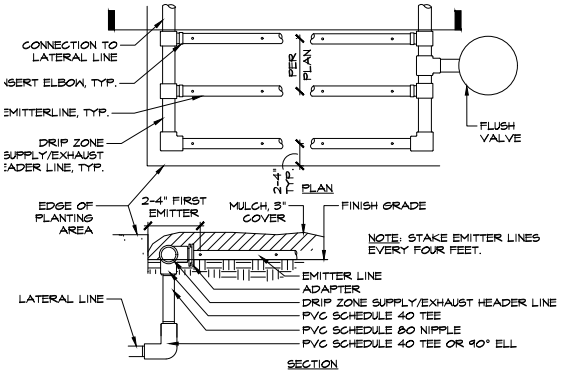
DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

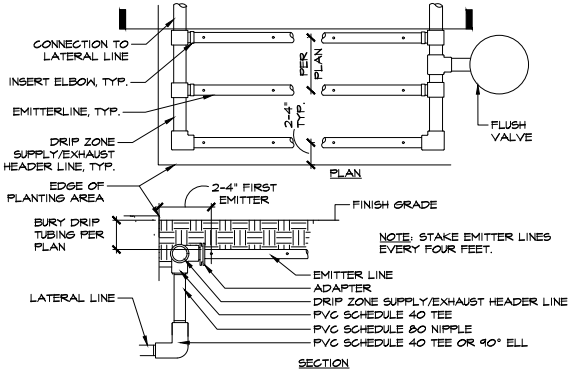
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Project No.	16047
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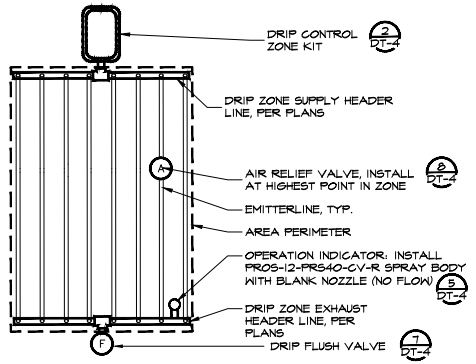
FD 1 - PATHWAY TO PUBLIC RIGHT-OF-WAY 11.12.19



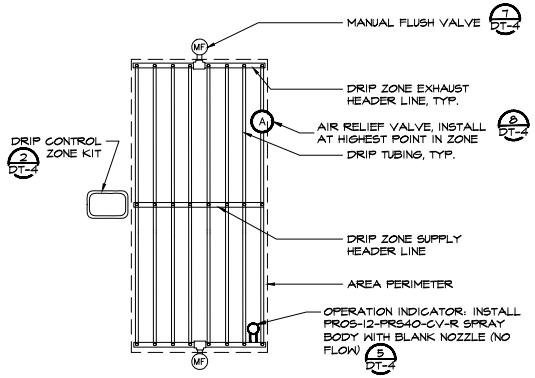
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PLAN/SECTION 16047 In-Line Drip 8.dwg



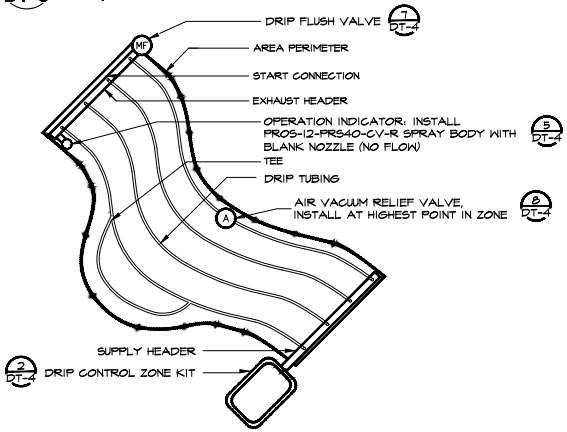
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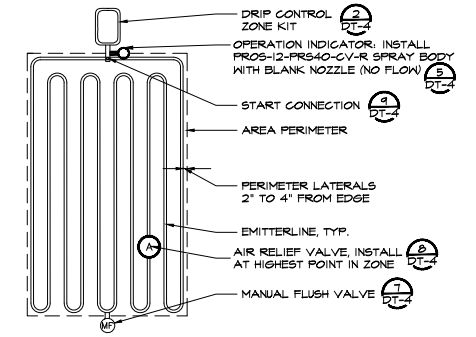
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PLAN 16047In-LineDripLayoutEnd Feed.dwg



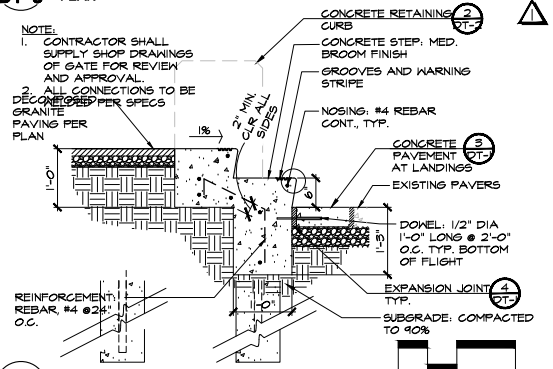
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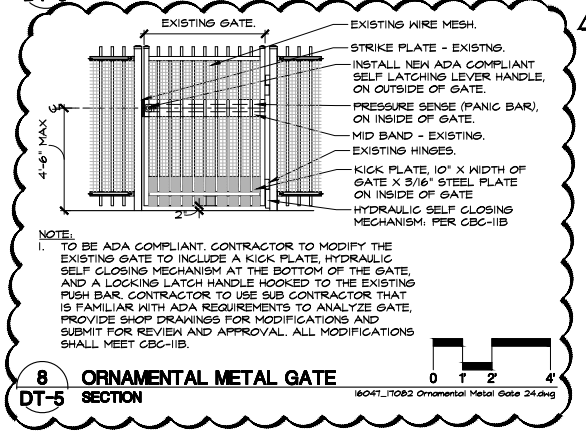
5 DT-5 **DRIP IRRIGATION IRREGULAR AREA LAYOUT** N.T.S.
PLAN



6 DT-5 **DRIP IRRIGATION LIGHT LAYOUT** N.T.S.
PLAN 16047In-LineDripLayoutLight1.dwg



7 DT-5 **CONCRETE STAIRS**
SECTION 16047_010800_Concrete_Steps_12.dwg



8 DT-5 **ORNAMENTAL METAL GATE**
SECTION 16047_17082 Ornamental Metal Gate 24.dwg

BID SET

CONSTRUCTION DETAILS

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

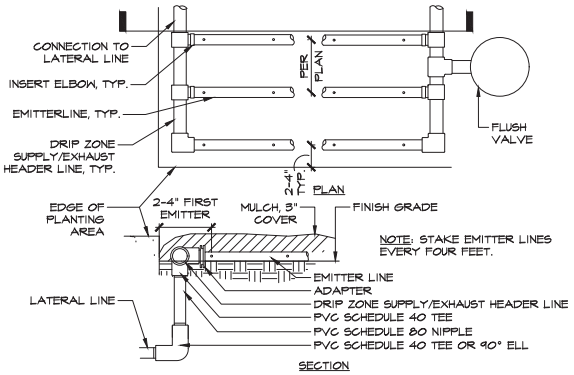
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Revisions
1 Outdoor Classroom 06/01/19
2 ADA Modifications 11/05/19

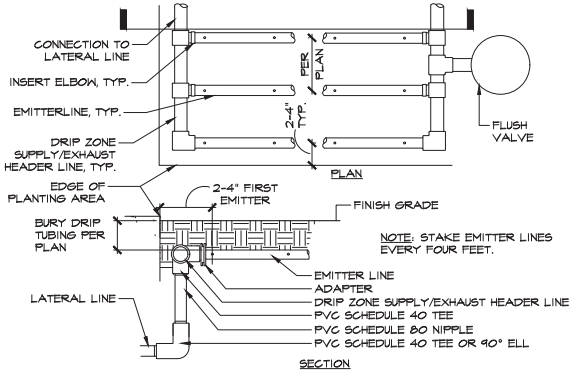
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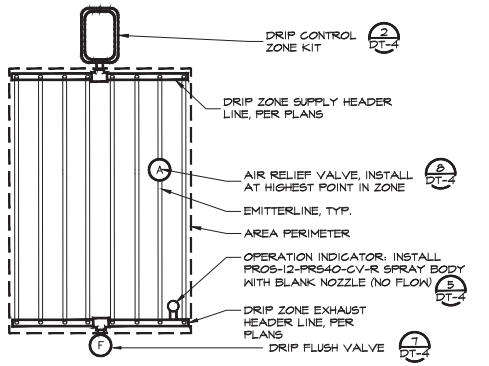
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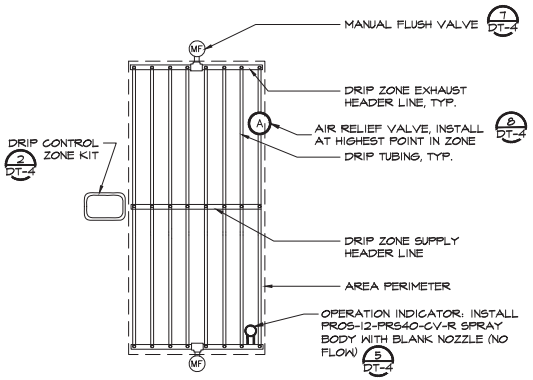
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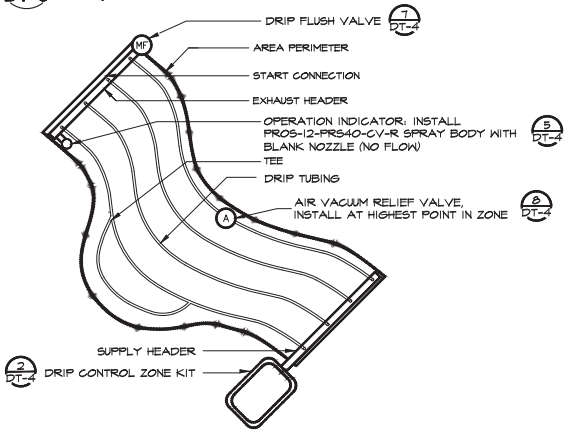
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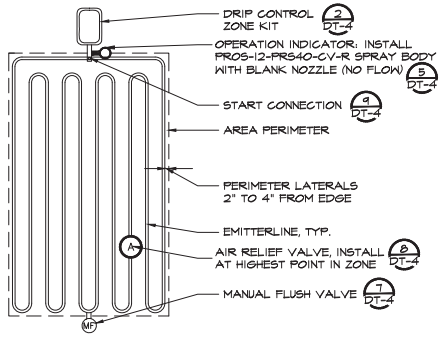
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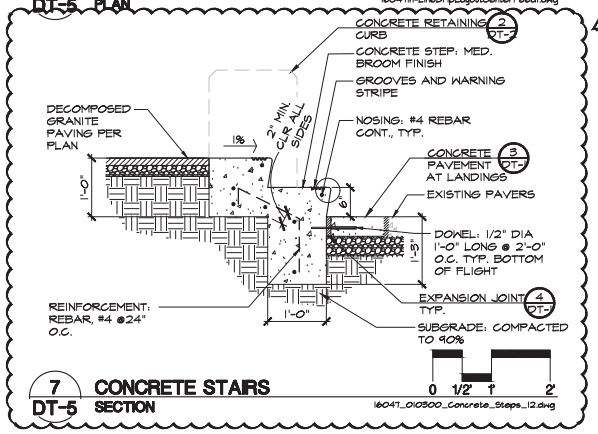
4 DT-5 **DRIP IRRIGATION CENTER FEED LAYOUT** PLAN N.T.S. 16047In-LineDripLayoutCenterFeed1.dwg



5 DT-5 **DRIP IRRIGATION IRREGULAR AREA LAYOUT** PLAN N.T.S.



6 DT-5 **DRIP IRRIGATION LIGHT LAYOUT** PLAN N.T.S. 16047In-LineDripLayoutLight1.dwg



7 DT-5 **CONCRETE STAIRS** SECTION 16047_010300_Concrete_Steps_12.dwg

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Revisions
1 Outdoor Classroom 08/01/19

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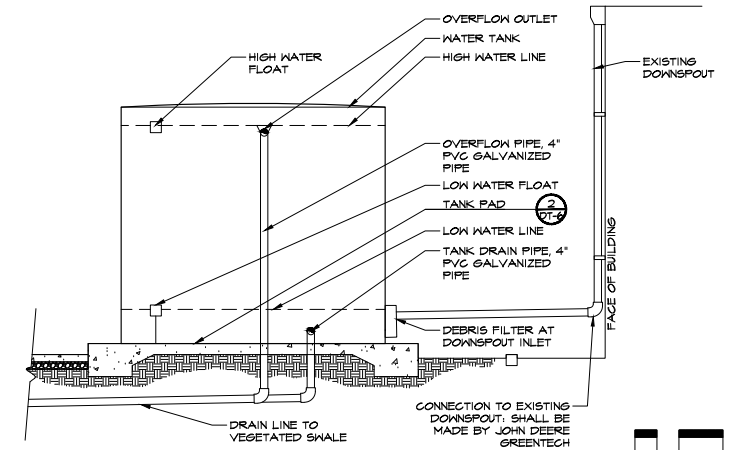
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CONSTRUCTION DETAILS

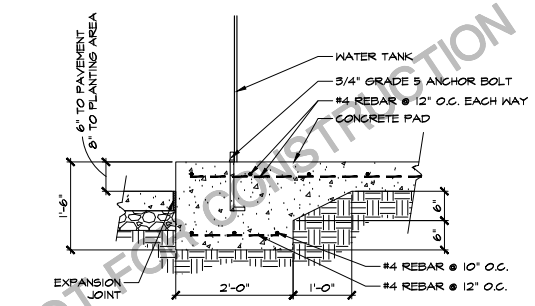
DEMONSTRATION LANDSCAPE GARDEN
SACRAMENTO, CA DEPARTMENT OF UTILITIES

Date	12/11/18
Scale	AS SHOWN
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Project No.	16047
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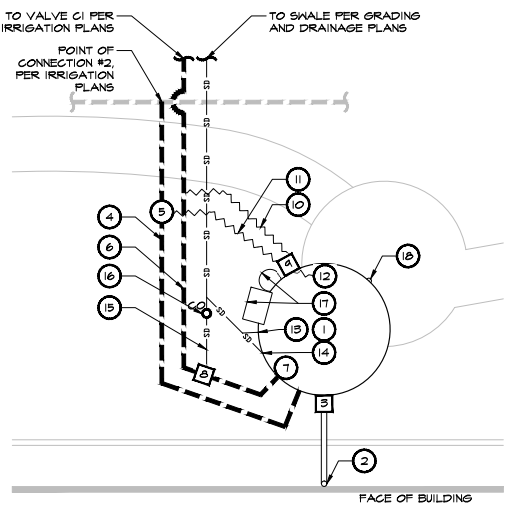
1 DT-6 WATER TANK SECTION



NOTE: DETAIL IS FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL SUBMIT FOR STRUCTURAL DRAWINGS FROM TANK MANUFACTURER FOR FINAL PAD DESIGN.

2 DT-6 TANK PAD SECTION

NOTE: REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION



1. WATER TANK
2. CONNECTION TO BUILDING DOWNSPOUT
3. DEBRIS FILTER
4. MAKE-UP WATER LINE, 2"
5. MASTER VALVE C, PER IRRIGATION PLANS
6. IRRIGATION MAINLINE, 2"
7. BOOSTER PUMP
8. DISC FILTER
9. CONTROLLER 'C' PER IRRIGATION PLANS
10. CONTROL WIRE, EXTEND TO VALVE C1
11. CONTROL WIRE, EXTEND TO MASTER VALVE C
12. LOW WATER FLOAT AND HIGH WATER FLOAT, WIRE TO IRRIGATION CONTROLLER 'C'
13. OVERFLOW DRAIN LINE
14. TANK DRAIN LINE, CONNECT TO EMERGENCY DRAIN VALVE
15. DISC FILTER DRAIN LINE
16. DRAIN LINE CLEANOUT
17. TANK LADDER AND PLATFORM
18. LIQUID LEVEL GAUGE

NOTE: CISTERN AND ASSORTED EQUIPMENT SHALL BE PROVIDED BY THE MANUFACTURER, INSTALLATION TO BE BY INSTALLER MEETING CITY REQUIREMENT.

3 DT-6 STORMWATER CISTERN DIAGRAM SECTION

0 2' 4' 8'
16047_CisternDiagram

40 YEARS
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DEMONSTRATION LANDSCAPE GARDEN

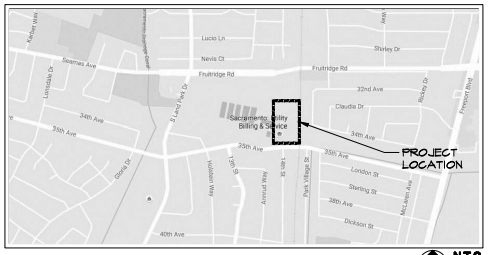
SACRAMENTO, CA DEPARTMENT OF UTILITIES

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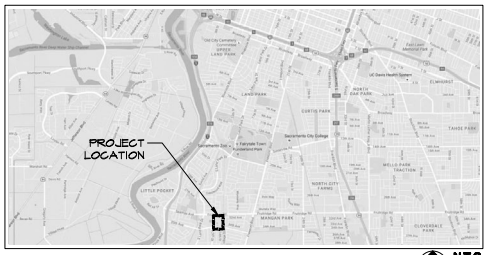
Sheet No. DT-6 of 34

DEPARTMENT OF UTILITIES
CITY OF SACRAMENTO, CALIFORNIA
DEMONSTRATION LANDSCAPE GARDEN
1395 35TH AVE
12/11/2018

LOCATION MAP



VICINITY MAP



PREPARED FOR

City of Sacramento
Department of Utilities
1395 35th Ave.
Sacramento, CA 95822

PREPARED BY

LANDSCAPE ARCHITECT
Callander Associates
Landscape Architecture, Inc.
12150 Tributary Point Drive, Suite 140
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Phone: (916)985-4366

CIVIL ENGINEER
Bennett Engineering
1082 Sunrise Avenue, Suite 100
Roseville, CA 95661
Phone: (916) 783-4100

GENERAL NOTES

1. DESIGN INTENT: THESE DRAWINGS REPRESENT THE GENERAL DESIGN INTENT TO BE IMPLEMENTED ON THE SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING LANDSCAPE ARCHITECT FOR ANY ADDITIONAL CLARIFICATION OR DETAILS NECESSARY TO ACCOMMODATE SITE CONDITIONS OR ARCHITECTURAL DETAILS.

2. CONTRACTOR COORDINATION: EACH CONTRACTOR SHALL COORDINATE AND OTHERWISE INTEGRATE WORK WITH THAT OF OTHERS IN AN EFFICIENT AND TIMELY MANNER SO AS TO PROVIDE THE OWNER WITH A WELL-CONSTRUCTED, EASILY MAINTAINABLE PROJECT. EACH CONTRACTOR SHALL NOTIFY OTHERS AT LEAST TWO WORKING DAYS IN ADVANCE OF COVERING, COMPLETING, OR EXPOSING WORK TO BE INSTALLED BY OTHERS.

3. CONTRACTORS' JOB SITE CONDITIONS: CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR SITE CONDITIONS DURING CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE LANDSCAPE ARCHITECT.

4. COMPOSITE BASE SHEET: THE PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS ARE SUPERIMPOSED ON A BASE SHEET. THIS BASE SHEET IS COMPILED FROM ARCHITECTURAL AND/OR ENGINEERING DOCUMENTS, AND OTHER DATA AS MADE AVAILABLE TO THE LANDSCAPE ARCHITECT. THIS BASE SHEET INFORMATION IS SHOWN IN HALF TONE ON THE PLANS. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR OTHER ERRORS ON THESE DOCUMENTS. THE COMPOSITE BASE SHEET IS PROVIDED AS AN AID ONLY AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS AND INCORPORATING/INTEGRATING ALL CONSTRUCTION AS REQUIRED TO ACCOMMODATE SAME.

   THE BASE SHEET SOURCE FOR THESE DRAWINGS IS: AS-BUILT PLANS, UTILITIES PLAN AND IRRIGATION PLAN FOR THE SACRAMENTO UTILITIES ENGINEERING AND ADMINISTRATION BUILDING, DATED 10/1/98, PREPARED BY LPA

5. UTILITIES: PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES INVOLVED AND REQUESTING A VISUAL VERIFICATION OF THE LOCATIONS OF THEIR UNDERGROUND FACILITIES. THE UTILITY COMPANIES ARE MEMBERS OF THE UNDERGROUND SERVICE ALERT (U.S.A.) ON-CALL PROGRAM. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL NOTIFY MEMBERS OF THE U.S.A. 48 HOURS IN ADVANCE OF PERFORMING EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (800) 642-2444. EXCAVATION IS DEFINED AS BEING 18 OR MORE INCHES IN DEPTH BELOW THE EXISTING SURFACE.

   THE CONTRACTOR IS CAUTIONED THAT ONLY EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATION, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. HOWEVER, THE CONSULTANT CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES, NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH ARE NOT SHOWN ON THESE DRAWINGS.

6. TREE PROTECTION AND MAINTENANCE REQUIREMENTS: ALL TRENCHING WITHIN THE DRIPLINE OF EXISTING TREES TO REMAIN SHALL BE BY HAND, WITH CARE TAKEN NOT TO CUT OR DAMAGE ROOTS OVER 1-INCH DIAMETER. TREES TO REMAIN SHALL BE FENCED WITH TEMPORARY FENCING, SUCH AS STEEL STAKES (MAX. 5 FEET O.C.) WITH WIRE MESH FABRIC (6X6 OPEN), CHAINLINK, OR SIMILAR, HEIGHT TO BE 5 FEET MINIMUM.

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E-001	ELECTRICAL SITE PLAN- EV CHARGING STATION
E-002	ELECTRICAL DETAILS- EV CHARGING STATION

EXISTING CONDITIONS LEGEND

- FENCE
- WATER LINE
- SD — STORM DRAIN LINE
- SS — SANITARY SEWER LINE
- E — ELECTRICAL LINE
- OH — OVERHEAD ELECTRICAL LINE
- SC — SECURITY LINE
- DRAIN INLET
- SEWER MANHOLE
- DRAIN MANHOLE
- EXISTING UTILITY POLE WITH GUY WIRE
- LIGHT
- BOLLARD LIGHT
- IN-GROUND UPLIGHT
- EXISTING TREE
- BENCH

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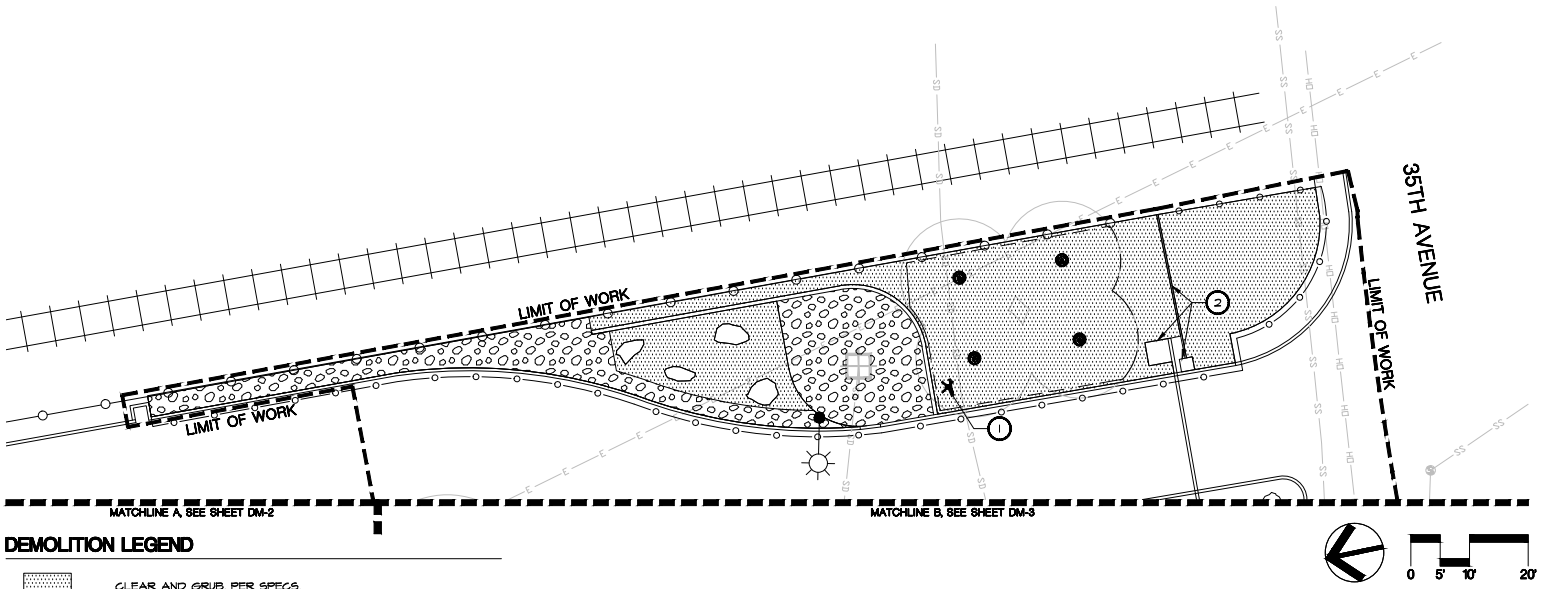
LICENSED LANDSCAPE ARCHITECT — Registration May 31, 2020 — Renewal Date — STATE OF CALIFORNIA

BID SET

COVER SHEET
DEMONSTRATION LANDSCAPE GARDEN
SACRAMENTO, CA DEPARTMENT OF UTILITIES

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DEMOLITION LEGEND

- CLEAR AND GRUB, PER SPECS.
- REMOVE AND DISPOSE OF EXISTING CONCRETE PAVING AND BASE. ASSUME 4 INCH DEPTH TOTAL.
- REMOVE AND CLEAN EXISTING COBBLE, ASSUME 6" DEPTH. SEE SITE CONSTRUCTION PLAN FOR REPLACEMENT. DISPOSE OF EXCESS COBBLE.
- REMOVE AND DISPOSE OF EXISTING TURF PAVERS
- REMOVE AND DISPOSE OF EXISTING CURB OR CONCRETE MOWBAND.
- SIZE — REMOVE AND DISPOSE OF EXISTING TREE, GRIND STUMP 2' BELOW PROPOSED GRADE.
- EXISTING TREE TO REMAIN - PROTECT IN PLACE.
- REMOVE AND DISPOSE OF ITEM.
- TREE PROTECTION FENCING SHALL BE ORANGE CONSTRUCTION FENCING PER SPECS
- TEMPORARY CONSTRUCTION FENCING PER SPECS
- SAWCUT
- T.R. — TO REMAIN
- T.B.R. — TO BE REMOVED
- RELOCATE EXISTING BOULDER AS SHOWN

DEMOLITION KEYNOTES

1. REMOVE AND DISPOSE OF EXISTING INTERPRETIVE SIGN AND ASSOCIATED FOOTINGS
2. EXISTING VEHICULAR GATE, OPERATING MECHANISM AND PILASTERS TO REMAIN, PROTECT IN PLACE
3. EXISTING SHRUBS TO REMAIN, PROTECT IN PLACE
4. REMOVE AND DISPOSE OF CONCRETE CURB, APPROX. 6 LF
5. REMOVE AND DISPOSE OF CONCRETE CURB, APPROX 144 LF
6. SAWCUT AND REMOVE CONCRETE PAVEMENT AS NEEDED FOR INSTALLATION OF TRENCH DRAINS PER GRADING AND DRAINAGE PLANS
7. BRICK SEWER MAIN EXHIBIT AND ASSOCIATED FURNISHINGS, PROTECT IN PLACE
8. REMOVE AND DISPOSE OF SIGN POST AND ASSOCIATED FOOTING, APPROX. 4' HEIGHT
9. EXISTING WATER AIR RELIEF VALVE IN VAULT, PROTECT IN PLACE

DEMOLITION NOTES

1. CLEAR AND GRUB: CONTRACTOR SHALL CLEAR AND GRUB EXISTING VEGETATION, UNLESS OTHERWISE INDICATED, AS REQUIRED FOR THE SITE CONSTRUCTION, IRRIGATION, AND PLANTING OPERATIONS. LIMITS OF CLEARING SHALL BE REVIEWED WITH CITY REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK. STRIP ALL ORGANIC MATTER TO A SUFFICIENT DEPTH TO COMPLETELY REMOVE SUCH MATERIAL.

   REMOVE ALL VISIBLE EXISTING IRRIGATION EQUIPMENT NOT NOTED ON PLANS AS TO REMAIN AND ANY BELOW-GRADE COMPONENTS THAT WOULD INTERFERE WITH THE WORK TO THE LIMIT OF WORK EXCEPT AS SHOWN TO BE MODIFIED.

   ALL DEMOLITION OPERATIONS WITHIN THE DRIP LINE OF TREES SHALL CONFORM TO TREE PROTECTION NOTES.

   EXISTING SITE FURNISHINGS AND IRRIGATION EQUIPMENT TO BE REMOVED SHALL BE RETURNED TO THE CITY.

2. IRRIGATION EQUIPMENT: REMOVE ALL VISIBLE EXISTING IRRIGATION EQUIPMENT AND ANY BELOW-GRADE COMPONENTS, EXCEPT AS NOTED AS TO REMAIN PER IRRIGATION PLANS, THAT WOULD INTERFERE WITH THE WORK DURING TRENCHING AND/OR ROUGH GRADING OPERATIONS.

3. SAWCUTTING: ALL PAVEMENT AND CURB REMOVAL AS SHOWN ON THE PLAN SHALL BE ACCOMPLISHED BY SAWCUTTING.

   SAWCUTS SHALL BE NEAT AND CLEAN AND SHALL PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING FEATURES.

4. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (1-800-642-2444) TWO (2) WORKING DAYS BEFORE WORK IS TO BEGIN. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND IS RESPONSIBLE FOR THEIR PROTECTION. RESTORATION OF DAMAGED UTILITIES SHALL BE MADE AT THE CONTRACTOR'S EXPENSE OF THE SATISFACTION OF THE CITY.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT DRAWINGS FOR ALL UNDERGROUND WORK THROUGHOUT THE COURSE OF CONSTRUCTION.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND FURNISH AND MAINTAIN TEMPORARY SIGNS, BARRICADES AND OTHER FACILITIES TO ADEQUATELY SAFEGUARD THE GENERAL PUBLIC AND WORK, AND TO PROVIDE FOR THE PROPER ROUTING OF PEDESTRIAN TRAFFIC. CONSTRUCTION OPERATIONS SHALL COMPLY WITH THE WORK AREA AND TRAFFIC CONTROL HANDBOOK (N.A.T.C.H.).

7. ALL EXISITING ITEMS ON THE SITE ARE TO BE PROTECTED AND REMAIN IN PLACE UNLESS NOTED OTHERWISE. ALL DAMAGE CAUSED BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE CITY.

8. CONTRACTOR SHALL FIELD VERIFY ALL SITE CONDITIONS RELATING TO THE PROJECT PRIOR TO BUILDING THE PROJECT. REPORT ALL DISCREPANCIES OR INACCURACIES TO THE CITY.

TREE PROTECTION NOTES

1. ALL TREE ROOTS REQUIRING PRUNING SHALL BE CUT CLEAN AND THE TREE AFFECTED MAY REQUIRE SUPPLEMENTAL IRRIGATION/FERTILIZATION AND PRUNING AS A RESULT OF THE ROOT CUTTING.

2. THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE TO EXISTING TREES, I.E. TRUNK WOUNDS, BROKEN LIMBS, POURING OF ANY DELETERIOUS MATERIALS, OR CONCRETE WASHOUT UNDER THE DRIPLINE OF THE TREES. DAMAGES WILL BEE ASSESSED USING THE "GUIDE TO PLANT APPRAISAL" 9TH EDITION, PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE. AN APPRAISAL REPORT PREPARED BY THE CONTRACTOR'S CERTIFIED ARBORIST SHALL BE SUBMITTED TO THE CITY ARBORIST FOR REVIEW AND APPROVAL.

3. PRIOR TO THE START OF DEMOLITION AN ORANGE PLASTIC FENCING (MINIMUM 48" TALL FENCING) SHALL BE INSTALLED AROUND THE EXISTING TREES (AT THE DRIP LINE) WHICH WILL BE AFFECTED BY THE PROPOSED WORK. DIMENSIONS WILL BE CONTINGENT UPON THE TREE SIZE AND SPECIES. THE FENCING SHALL REMAIN IN PLACE FOR THE DURATION OF THE PROJECT EXCEPT FOR THE TEMPORARY REMOVAL REQUIRED TO REPLACE EXISTING CURB, GUTTER, AND SIDEWALK.

4. THE CONTRACTOR SHALL HIRE AN INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) CERTIFIED ARBORIST TO MAKE INSPECTIONS DURING THE PAVING DEMOLITION AND EXCAVATION FOR AGGREGATE BASE. THE ARBORIST SHALL ENSURE THE PROTECTIVE FENCING STAYS IN PLACE AND TO MONITOR TREE HEALTH. THE ARBORIST WILL TAKE ANY REQUIRE ACTION I.E. SUPPLEMENTAL IRRIGATION, FERTILIZATION, SOIL COMPACTION, AND RECOMMEND ANY REMEDIATION TO ENSURE THE HEALTH OF THE TREES IS MAINTAINED.

5. NO EXCAVATION FOR CONCRETE PAVING/AGGREGATE BASE. GRADE CHANGES, STORAGE OF MATERIALS, OR PARKING OF VEHICLES SHALL BE ALLOWED WITHIN THE AREA. BORING OR HAND EXCAVATION FOR AGGREGATE BASE, UTILITIES SHALL BE DONE BY THE CONTRACTOR WITHIN THE TREE DRIPLINE AND SHALL BE UNDER THE SUPERVISION OF THE PROJECT ARBORIST.

6. IF DURING EXCAVATION A TREE ROOT GREATER THAN 2 INCHES IN DIAMETER IS ENCOUNTERED, THEN ALL WORK SHALL STOP IMMEDIATELY UNTIL PROJECT ARBORIST CAN PERFORM AN ON-SITE INSPECTION. ALL ROOTS SHALL BE CUT CLEAN AND THE TREE AFFECTED MAY REQUIRE SUPPLEMENTAL IRRIGATION/FERTILIZATION AND PRUNING AS A RESULT OF ROOT PRUNING.

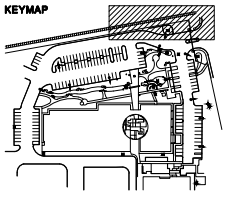
7. PRUNING OF ALL LIMBS AND ROOTS WILL BE ALLOWED ONLY AT THE ARBORIST RECOMMENDATIONS FOR INSTALLATION OF CONCRETE PAVEMENT, AGGREGATE BASE, OR EXCAVATION OF SOIL. ALL ROOT PRUNING SHALL BE DONE UNDER THE FINAL DIRECTION AND SUPERVISION OF THE CITY.

8. IF THE ARBORIST REQUIRES THE CONTRACTOR TO PRUNE AN ENTIRE TREE WHICH HAS NOT BEEN SHOWN ON THE PLANS TO BE PRUNED, THE CONTRACTOR SHALL PROVIDE A PROPOSAL TO THE CITY AND SHALL NOT PROCEED WITH ANY TREE PRUNING PRIOR TO RECEIVING AN APPROVED FIELD ORDER FROM THE CITY.

9. THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE TO EXISTING STREET TREES I.E. TRUNK WOUNDS, BROKEN LIMB, POURING OF ANY DELETERIOUS MATERIALS, OR WASHING OUT CONCRETE UNDER THE DRIP LINE OF THE TREE. DAMAGES WILL BE ASSESSED USING THE "GUIDE TO PLANT APPRAISAL" 9TH EDITION, PUBLISHED BY THE ISA. THE PROJECT ARBORIST WILL SUBMIT A REPORT FOR REVIEW BY THE CITY ARBORIST.

10. EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE WORK DAY BY USING TECHNIQUES SUCH AS COVERING THE ROOTS WITH SOIL, MULCH, OR WET BURLAP.

KEYMAP



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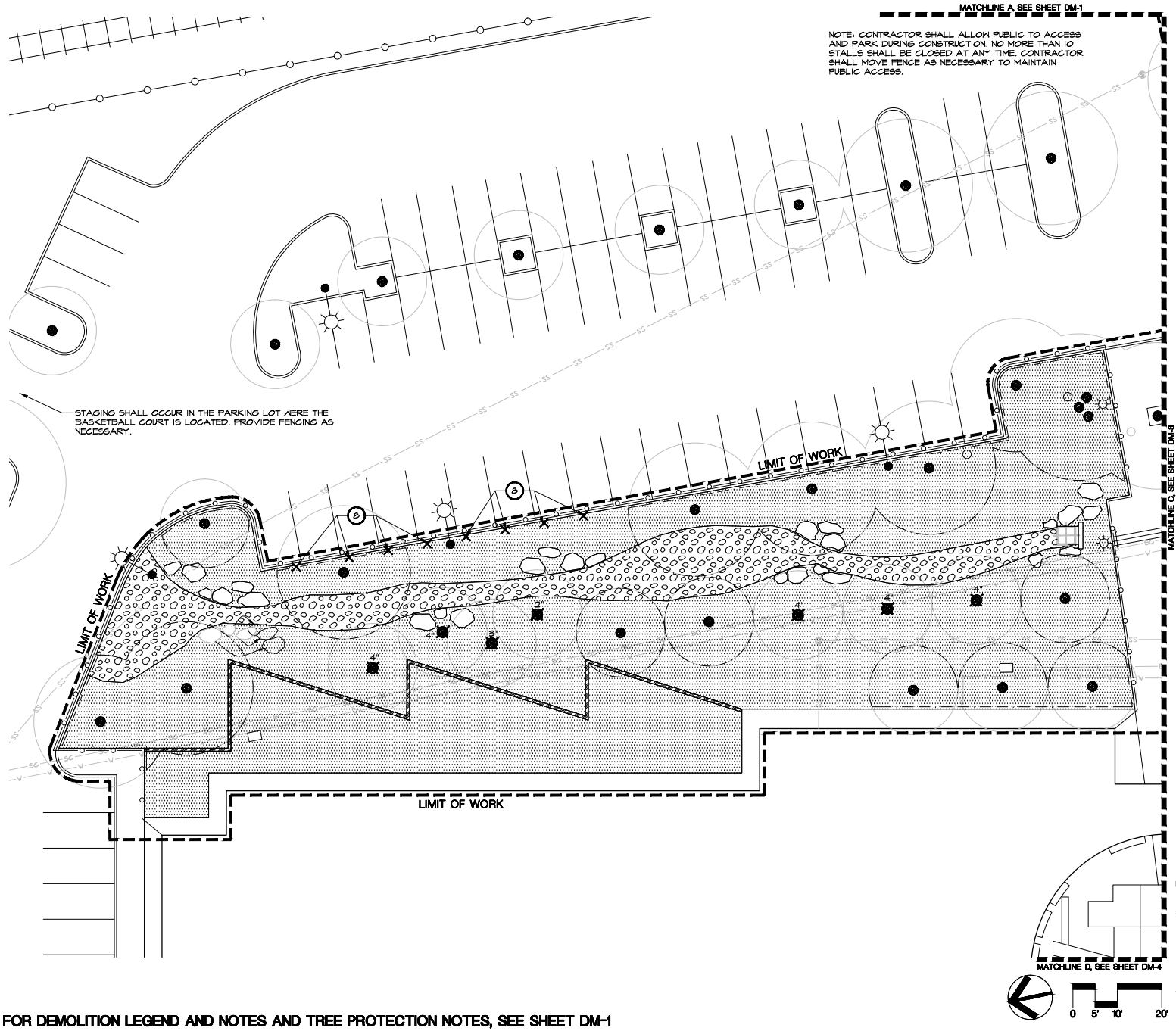
DEMOLITION PLAN

DEMONSTRATION LANDSCAPE GARDEN

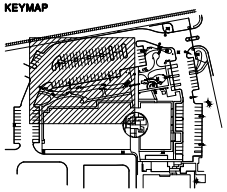
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KEYMAP



FOR DEMOLITION LEGEND AND NOTES AND TREE PROTECTION NOTES, SEE SHEET DM-1

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DEMOLITION PLAN

DEMONSTRATION LANDSCAPE GARDEN

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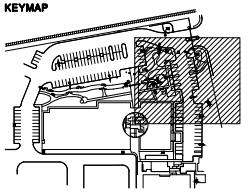
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FOR DEMOLITION LEGEND AND NOTES AND TREE PROTECTION NOTES, SEE SHEET DM-1

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DEMOLITION PLAN

DEMONSTRATION LANDSCAPE GARDEN

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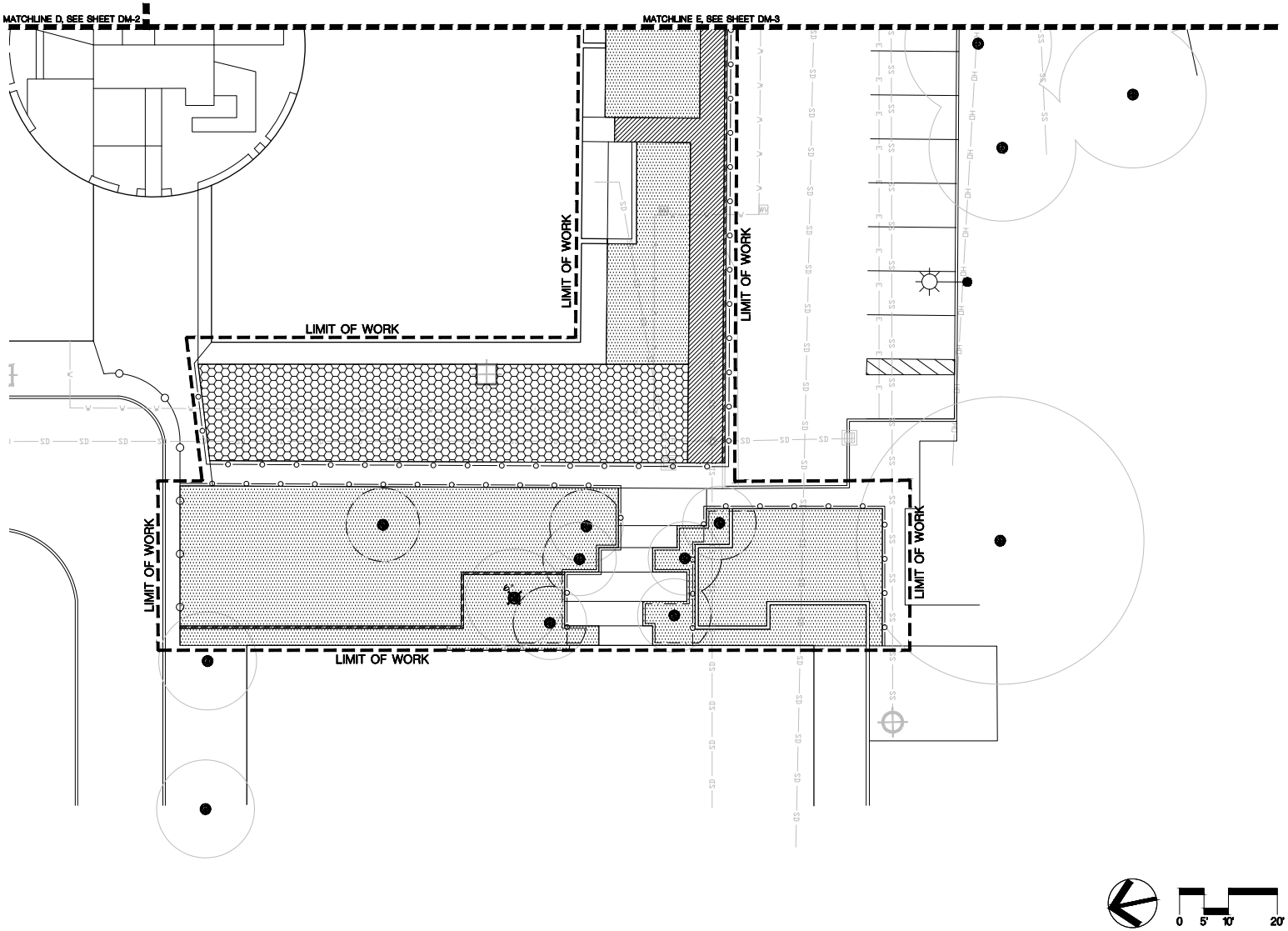
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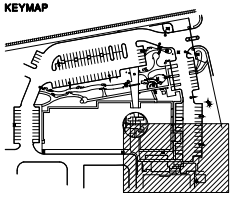
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FOR DEMOLITION LEGEND AND NOTES AND TREE PROTECTION NOTES, SEE SHEET DM-1



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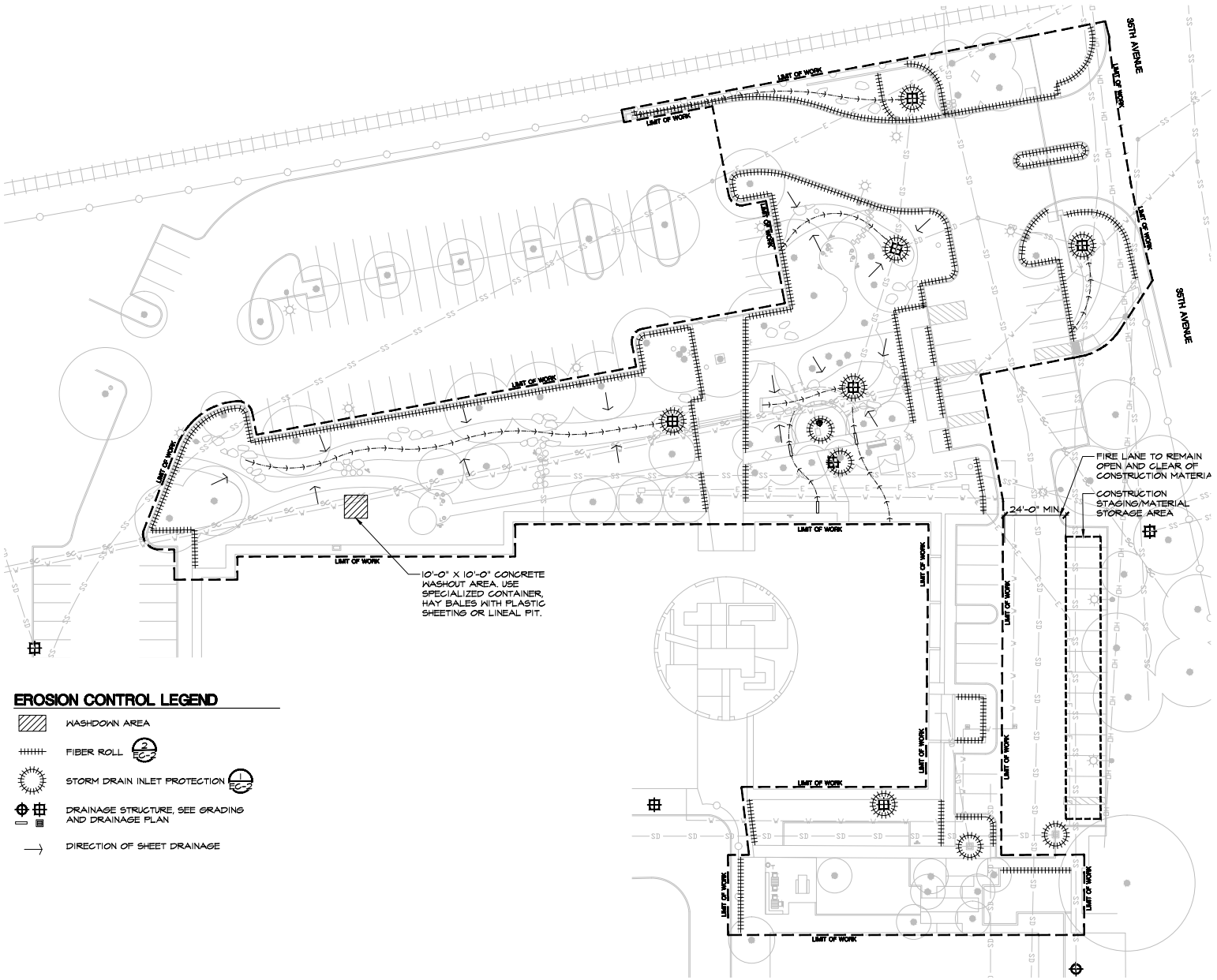
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DEMOLITION PLAN

DEMONSTRATION LANDSCAPE GARDEN
SACRAMENTO, CA DEPARTMENT OF UTILITIES

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EROSION CONTROL LEGEND

- WASHDOWN AREA
- FIBER ROLL (2 / EC-5)
- STORM DRAIN INLET PROTECTION (EC-6)
- DRAINAGE STRUCTURE, SEE GRADING AND DRAINAGE PLAN
- DIRECTION OF SHEET DRAINAGE

FOR EROSION CONTROL NOTES SEE SHEET EC-2

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EROSION CONTROL PLAN

DEMONSTRATION LANDSCAPE GARDEN

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EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL FOLLOW THE GUIDELINES FOR THE CITY OF SACRAMENTO'S "ADMINISTRATIVE AND TECHNICAL PROCEDURES MANUAL FOR GRADING, EROSION AND SEDIMENT CONTROL" FOR THE MEASURES SHOWN OR STATED ON THESE PLANS.
2. BETWEEN OCTOBER 15 AND MAY 15 EROSION CONTROL MEASURES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHENEVER THE FIVE-DAY PROBABILITY OF RAIN EXCEEDS 30%. DURING THE REMAINDER OF THE YEAR, THEY SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHENEVER THE DAILY RAINFALL PROBABILITY EXCEEDS 30%.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF CITY REPRESENTATIVE.
4. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF OR AT THE DIRECTION OF CITY REPRESENTATIVE.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED BEFORE AND AFTER ALL STORMS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
6. CONTRACTOR SHALL MAINTAIN A LOG AT THE SITE OF ALL INSPECTIONS OR MAINTENANCE OF BMPS, AS WELL AS, ANY CORRECTIVE CHANGES TO THE BMPS OR EROSION AND SEDIMENT CONTROL PLAN.
7. IN AREAS WHERE SOIL IS EXPOSED, PROMPT REPLANTING WITH NATIVE COMPATIBLE, DROUGHT-RESISTANT VEGETATION SHALL BE PERFORMED. NO AREAS WILL BE LEFT EXPOSED OVER THE WINTER SEASON.
8. THE CONTRACTOR SHALL INSTALL THE STABILIZED CONSTRUCTION ENTRANCE PRIOR TO COMMENCEMENT OF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCE. THE STABILIZED CONSTRUCTION ENTRANCE SHALL REMAIN IN PLACE UNTIL THE ROAD BASE ROCK COURSE IS COMPLETED.
9. NO SOIL, MORTAR, OR OTHER RESIDUE SHALL BE ALLOWED TO ENTER STREETS, GUTTERS, OR STORM DRAINS. ALL MATERIAL AND WASTE SHALL BE REMOVED FROM THE PROJECT SITE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE SWEPT AT THE END OF EACH WORKING DAY OR AS NECESSARY.
10. CONTRACTOR SHALL IMPLEMENT HOUSEKEEPING PRACTICES AS FOLLOWS UTILIZING THE CONSTRUCTION STAGING AREA AS DEPICTED ON PLAN:

    A. SOLID WASTE MANAGEMENT: PROVIDE DESIGNATED WASTE COLLECTION AREAS AND CONTAINERS. ARRANGE FOR REGULAR REMOVAL AND DISPOSAL. CLEAR SITE OF TRASH INCLUDING ORGANIC DEBRIS, PACKAGING MATERIALS, SCRAP OR SURPLUS BUILDING MATERIALS AND DOMESTIC WASTE DAILY.

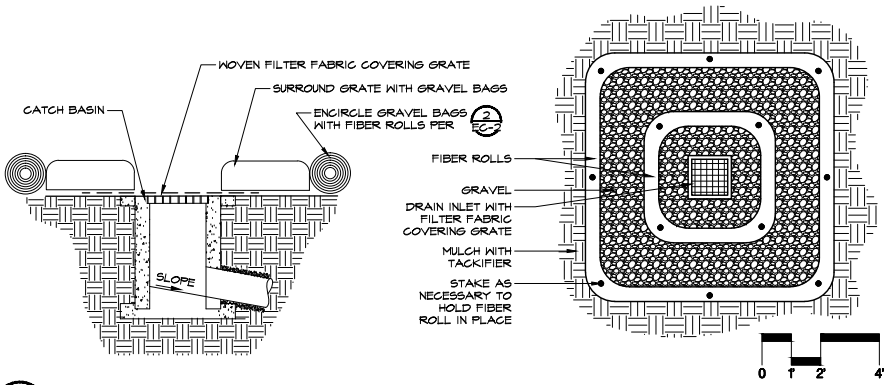
    B. MATERIAL DELIVERY AND STORAGE: PROVIDE A DESIGNATED MATERIAL STORAGE AREA WITH SECONDARY CONTAINMENT SUCH AS BERMING. STORE MATERIAL ON PALLETS AND PROVIDE COVERING FOR SOLUBLE MATERIALS. RELOCATE STORAGE AREA INTO BUILDING SHELL WHEN POSSIBLE. INSPECT AREA WEEKLY.

    C. CONCRETE WASTE: PROVIDE A DESIGNATED AREA FOR A TEMPORARY PIT TO BE USED FOR CONCRETE TRUCK WASH-OUT. DISPOSE OF HARDENED CONCRETE OFFSITE. AT NO TIME SHALL A CONCRETE TRUCK DUMP ITS WASTE AND CLEAN ITS TRUCK INTO THE CITY STORM DRAINS VIA CURB AND GUTTER. INSPECT DAILY TO CONTROL RUNOFF, AND WEEKLY FOR REMOVAL OF HARDENED CONCRETE.

    D. PAINT AND PAINTING SUPPLIES: PROVIDE INSTRUCTION TO EMPLOYEES AND SUBCONTRACTORS REGARDING REDUCTION OF POLLUTANTS INCLUDING MATERIAL STORAGE, USE, AND CLEAN UP. INSPECT SITE WEEKLY FOR EVIDENCE OF IMPROPER DISPOSAL.

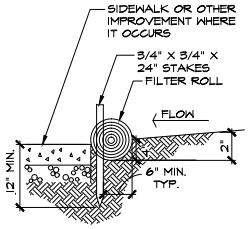
    E. VEHICLE FUELING, MAINTENANCE AND CLEANING: PROVIDE A DESIGNATED FUELING AREA WITH SECONDARY CONTAINMENT SUCH AS BERMING. DO NOT ALLOW MOBILE FUELING OF EQUIPMENT. PROVIDE EQUIPMENT WITH DRIP PANS. RESTRICT ONSITE MAINTENANCE AND CLEANING OF EQUIPMENT TO A MINIMUM. INSPECT AREA WEEKLY.

    F. HAZARDOUS WASTE MANAGEMENT: PREVENT THE DISCHARGE OF POLLUTANTS FROM HAZARDOUS WASTES TO THE DRAINAGE SYSTEM THROUGH PROPER MATERIAL USE, WASTE DISPOSAL AND TRAINING OF EMPLOYEES. HAZARDOUS WASTE PRODUCTS COMMONLY FOUND ON-SITE INCLUDE BUT ARE NOT LIMITED TO PAINTS & SOLVENTS, PETROLEUM PRODUCTS, FERTILIZERS, HERBICIDES & PESTICIDES, SOIL STABILIZATION STABILIZATION PRODUCTS, ASPHALT PRODUCTS AND CONCRETE CURING PRODUCTS.
11. CONTRACTOR SHALL NOT USE EXISTING PARKING LOT OR PATHWAY SYSTEM FOR CONSTRUCTION ACTIVITIES. ALL DAMAGE TO EXISTING FACILITIES WILL BE REPAIRED BY CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.
12. CONTRACTOR SHALL STORE ALL CONSTRUCTION MATERIAL AT ONE DESIGNATED LOCATION WHEN FEASIBLE AND/OR THE SITE HAS BEEN SHUT DOWN FOR WINTER MONTHS. ALL ITEMS WHICH COULD BE POTENTIAL POLLUTANTS SHALL BE COVERED OR IN A WATER TIGHT CONTAINER, AND STORED OFF THE GROUND.



1 EC-2 **INLET PROTECTION**
PLAN/SECTION

16047CatchBasinInletFilter.dwg



2 EC-2 **FIBER ROLL BARRIER**
SECTION

NOTES:

1. FILTER ROLL BARRIER SHALL BE CONSTRUCTED LONG ENOUGH TO EXTEND ACROSS THE EXPECTED FLOW PATH AND AS APPROVED BY QSP.
2. FILTER ROLL (8" TO 12" DIAMETER) SHALL BE PLACED INTO THE KEY TRENCH AND STAKES ON BOTH SIDES OF THE ROLL WITHIN 6 FEET OF EACH END AND THEN EVERY 3' TO 4'. STAKES SHALL BE DRIVEN IN ON ALTERNATING SIDES OF THE ROLL. ADJACENT ROLLS SHALL TIGHTLY ABUT.
3. CLEAR SUBGRADE TO REMOVE ALL LOCAL DEVIATIONS AND LARGE STONES OR DEBRIS THAT WILL INHIBIT CONTACT OF THE FILTER ROLL WITH THE SUBGRADE.
4. PRIOR TO ROLL INSTALLATION, CONSTRUCT A CONCAVE TRENCH 2 INCHES DEEP ALONG THE PROPOSED INSTALLATION ROUTE. FILTER ROLL SHALL BE INSTALLED WHERE INDICATED ON PLANS. THE BOTTOM EDGE OF THE FIBER ROLL SHALL EXTEND TO AND ACROSS THE BOTTOM OF THE TRENCH. THE TRENCH SHALL BE BACKFILLED TO 4 INCHES ABOVE GROUND AND COMPACTED TO BURY AND SECURE THE BOTTOM OF THE FILTER ROLL.
5. CONTRACTOR SHALL MAKE INSPECTIONS WEEKLY DURING THE WET SEASON, MONTHLY DURING THE DRY SEASON AND IMMEDIATELY AFTER EACH RAINFALL TO DETERMINE IF REPAIRS AND SEDIMENT REMOVAL IS REQUIRED. SEDIMENT SHALL BE REMOVED BEFORE IT HAS REACHED ONE THIRD THE HEIGHT OF THE FILTER ROLL BARRIER.

16047 FILTER ROLL BARRIER.dwg

FOR EROSION CONTROL LEGEND AND PLAN SEE SHEET EC-1

40 YEARS
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Revisions

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REGISTERED LANDSCAPE ARCHITECT
Robert E. Callander, Jr.
Registration
May 31, 2020
Renewal Date
Date
STATE OF CALIFORNIA

BID SET

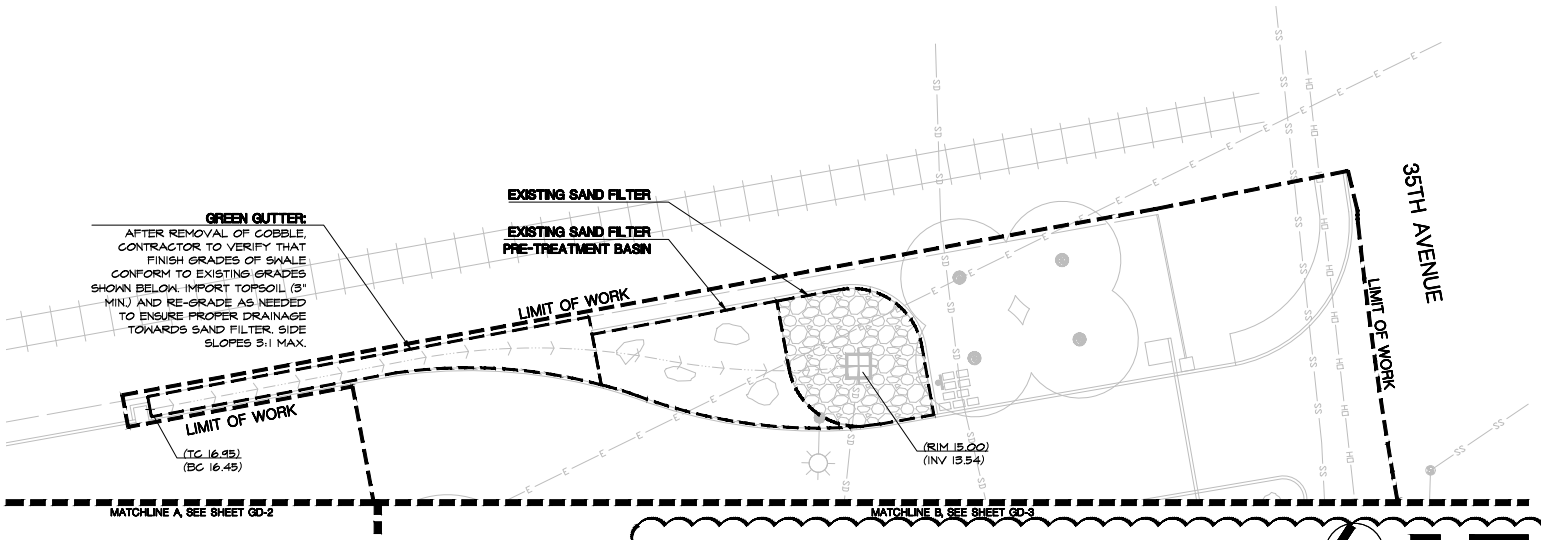
EROSION CONTROL PLAN
DEMONSTRATION LANDSCAPE GARDEN
SACRAMENTO, CA DEPARTMENT OF UTILITIES

Date	12/11/18
Scale	AS SHOWN
Drawn By	BC/IA
Checked	BW
Project No.	16047
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Sheet No. EC-2
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I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE GRADING DESIGN PLAN.

BENJAMIN W. WOODSIDE



GRADING AND DRAINAGE LEGEND

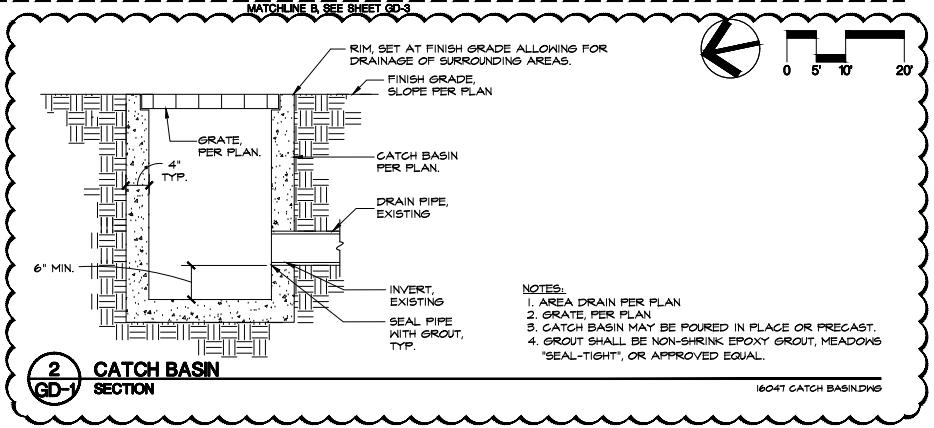
- 21.25 — PROPOSED SPOT ELEVATION
- AREA DRAIN (2/GD-1)
- TRENCH DRAIN, ACO KLASSIKDRAIN KS01 NEUTRAL CHANNEL WITH ADA STEEL GRATE TYPE 445Q, MATCH SLOPE OF ADJACENT PAVEMENT (DT-1)
- SOLID DRAINLINE: 4" PVC, SLOPE AT 2%
- X% — DIRECTION AND PERCENT SLOPE OF SHEET DRAINAGE
- SWALE WITH MIN. 1.5% SLOPE
- RIM 27.00 / INV 21.00 — RIM ELEVATION AT PROPOSED DRAINAGE STRUCTURE / INVERT ELEVATION AT PROPOSED DRAINAGE STRUCTURE
- FLUSH CONDITION
- TS — TOP OF SWALE
- BS — BOTTOM OF SWALE
- TW — TOP OF WALL
- BW — BOTTOM OF WALL
- TC — TOP OF CURB
- BC — BOTTOM OF CURB

EXISTING

- RIM (28.76) / INV (24.09) — RIM ELEVATION AT EXISTING DRAIN INLET / INVERT ELEVATION AT EXISTING DRAIN INLET
- (20.50) — EXISTING SPOT ELEVATION
- CENTERLINE OF EXISTING SWALE
- EXISTING DRAIN INLET
- CATCH BASIN, CHRISTY MODEL NO. U21 WITH CHISTY WELDED STEEL GRATE WITH CROSS BARS, 24" X24" WITH LOCKDOWN BOLTS (2/GD-1) ⚠

GRADING AND DRAINAGE NOTES

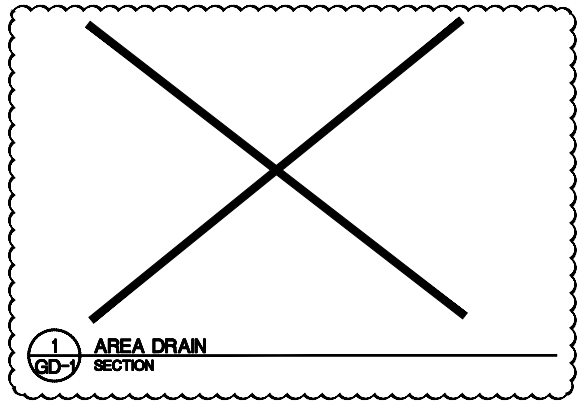
1. GRADING AND DRAINAGE: ALL PROPOSED PAVING, CURBS, WALLS, AND PLANTING AREAS SHALL SMOOTHLY CONFORM TO EXISTING ADJACENT FEATURES TO REMAIN. PROVIDE POSITIVE DRAINAGE ON ALL PAVING AND THROUGHOUT ALL PLANTING AREAS TOWARDS SWALES OR DRAINAGE STRUCTURES. CONTRACTOR SHALL FLOOD PAVED AREAS UPON COMPLETION AND RECONSTRUCT ANY LOW SPOTS AS DIRECTED. SLOPE PAVING 4.9% MAXIMUM WITH A CROSS SLOPE OF 1% MINIMUM TO 2% MAXIMUM.
2. BACKFILL: EXCAVATED MATERIAL NOT SUITABLE FOR BACKFILLING SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE.
3. EROSION CONTROL: CONTRACTOR SHALL PROVIDE JUTE NETTING ON ALL SLOPES 3:1 OR STEEPER PRIOR TO PLANTING.



NOTES:
1. AREA DRAIN PER PLAN
2. GRATE, PER PLAN
3. CATCH BASIN MAY BE POURED IN PLACE OR PRECAST.
4. GROUT SHALL BE NON-SHRINK EPOXY GROUT, MEADOWS "SEAL-TIGHT", OR APPROVED EQUAL.

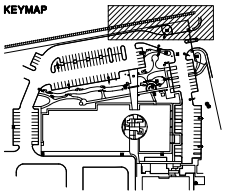
2/GD-1 CATCH BASIN SECTION

16047 CATCH BASIN.DWG



1/GD-1 AREA DRAIN SECTION

KEYMAP



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⚠ Outdoor Classroom
06/01/19

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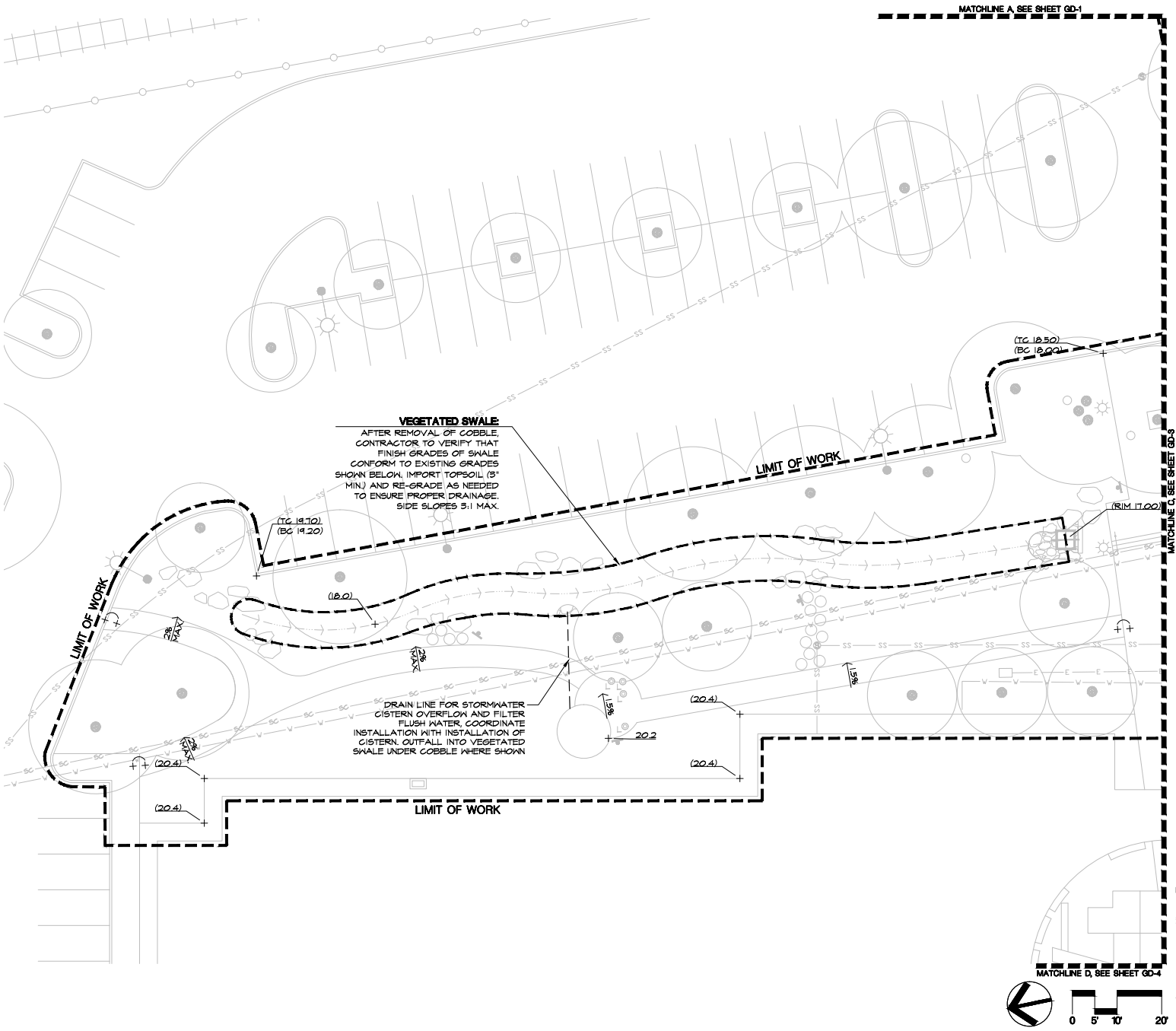
GRADING & DRAINAGE PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

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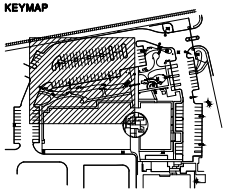
Sheet No. GD-1 of 34



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BENJAMIN W. WOODSIDE

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GRADING & DRAINAGE PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

40 YEARS
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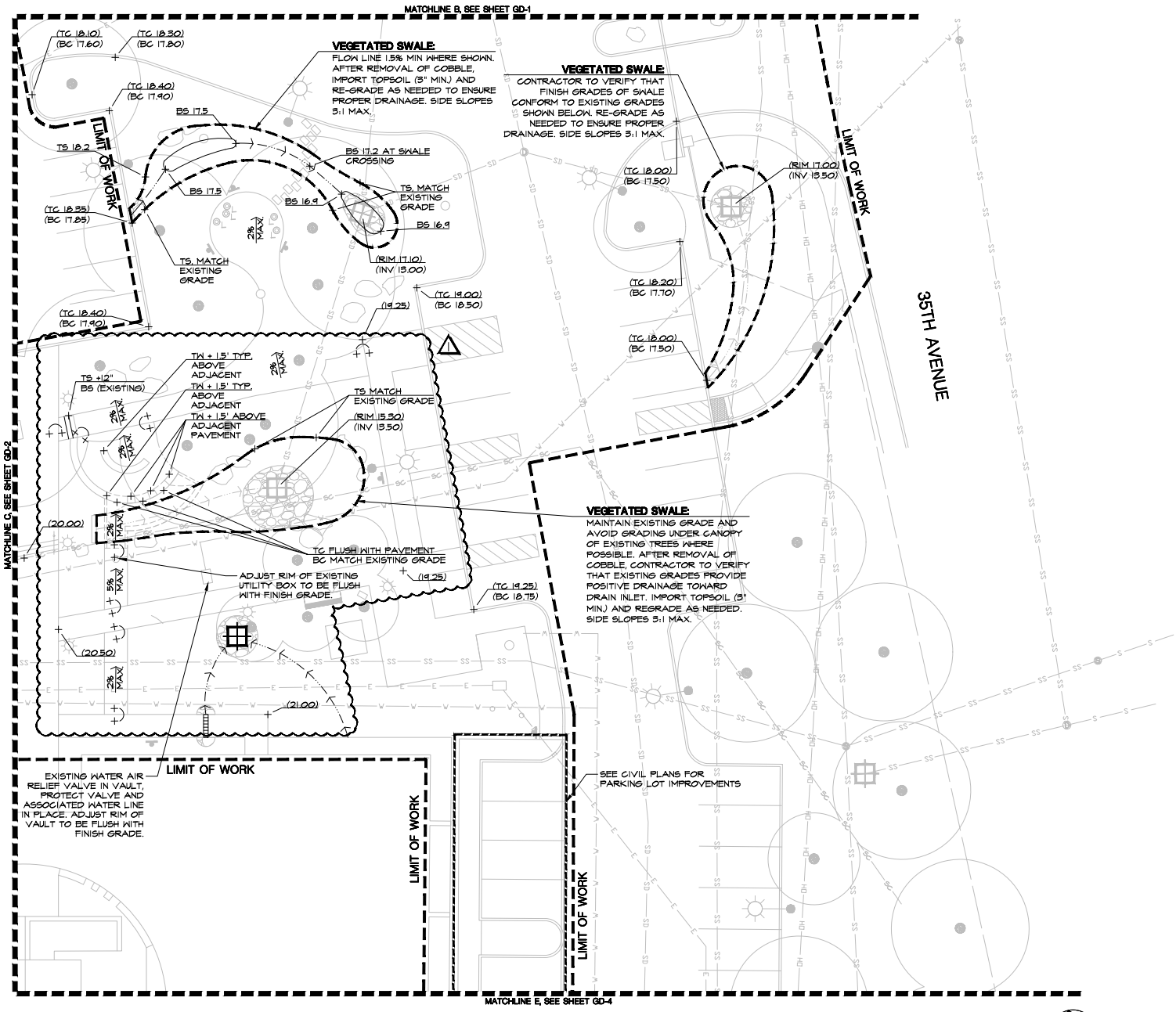
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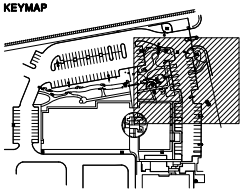
Sheet No. GD-2 of 34



I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE GRADING DESIGN PLAN.

BENJAMIN W. WOODSIDE

KEYMAP



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GRADING & DRAINAGE PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

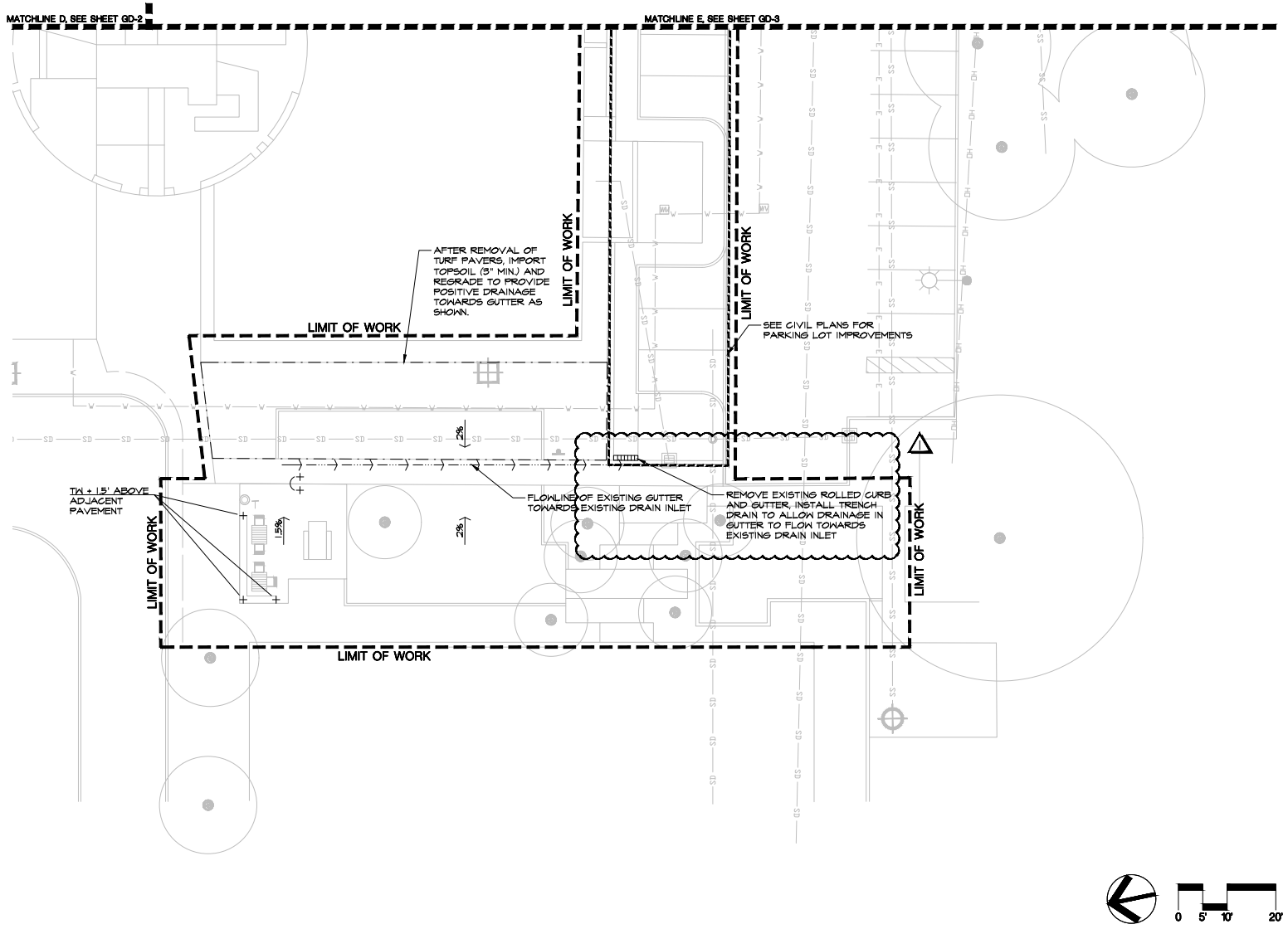
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1	Outdoor Classroom
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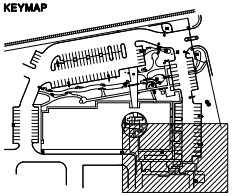


0 5' 10' 20'

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BENJAMIN W. WOODSIDE

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GRADING & DRAINAGE PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

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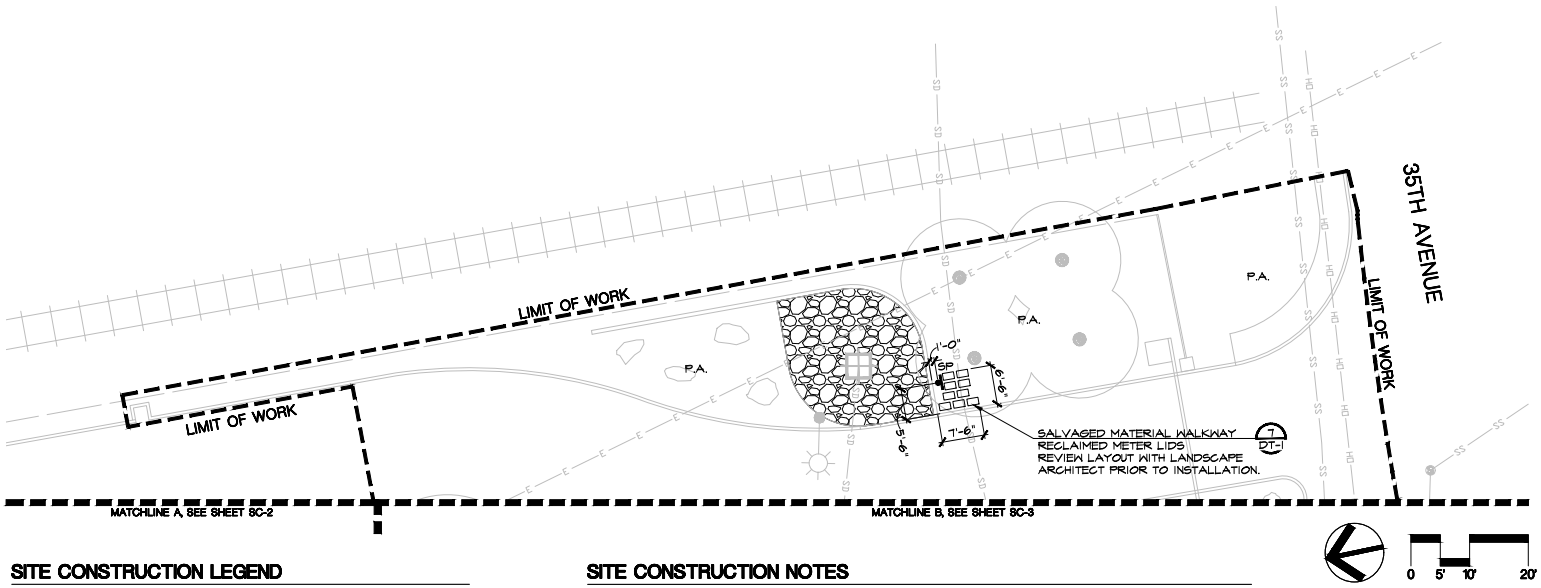
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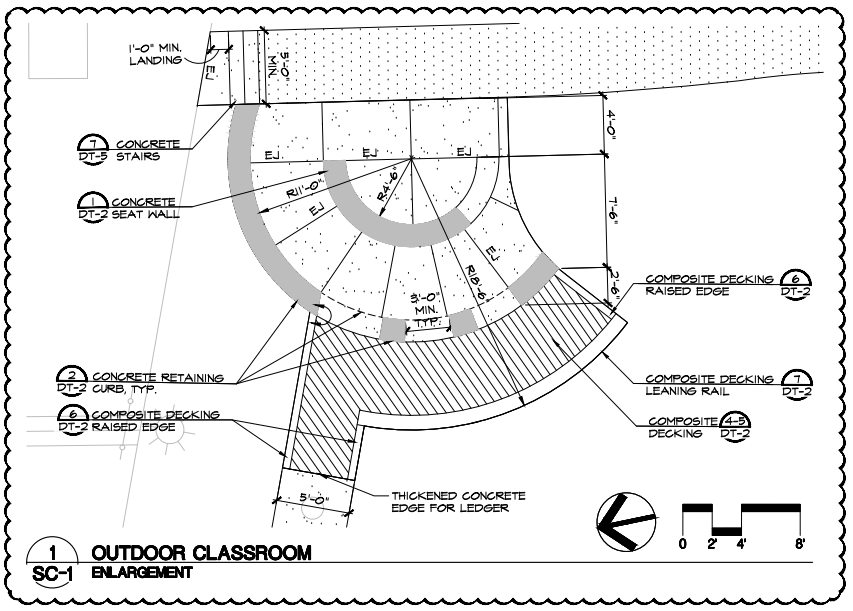


SITE CONSTRUCTION LEGEND

- CONCRETE PAVING
- EXPANSION JOINT, TYP. — 3 DT-1
- SCORE JOINT, TYP. — 4 DT-1
- CEMENT STABILIZED DECOMPOSED GRANITE PAVING — 6 DT-1
- COMPOSITE DECKING — 4-5 DT-2
- REPAIR/REPLACE EXISTING COBBLE — 2 DT-1
- CONCRETE SEAT WALL — 1 DT-2
- HDR — METAL HEADER — 3 DT-2
- PICNIC TABLE, TIMBERFORM PARKWAY ACCESSIBLE PICNIC TABLE, MODEL NO. 2065, RECYCLED PLASTIC SLATS, POWDER COAT COLOR BLACK. QTY: (1). CONTACT JOSH JURGENSEN AT PARK PACIFIC, (916) 217-7275. — 1 DT-3
- CAFE TABLE, TIMBERFORM PARKWAY ACCESSIBLE TABLE, MODEL NO. 2051 WITH NO CHAIRS, RECYCLED PLASTIC SLATS, POWDER COAT COLOR BLACK. QTY: (2). CONTACT JOSH JURGENSEN AT PARK PACIFIC, (916) 217-7275. — 1 DT-3
- CAFE CHAIR, WABASH VALLEY SULLIVAN DINING CHAIR, MODEL NO. SU411BP, POWDER COAT COLOR BLACK. QTY: (5). CONTACT KELLY O'KEEFE WITH DAVID O'KEEFE CO. (510) 558-0140.
- T — TRASH RECEPTACLE, WABASH VALLEY URBANSCAPE FG STYLE 32 GALLON RECEPTACLE WITH LINER, MODEL NO. TG5D331 WITH DOME TOP, METAL SLATS, IN-GROUND MOUNT, POWDER COAT COLOR TEXTURED BLACK. QTY: (1). CONTACT KELLY O'KEEFE WITH DAVID O'KEEFE CO. (510) 558-0140. — 1 DT-3
- LOG STOOL — 2 DT-3
- SP — SINGLE POST SIGN PEDESTAL, FOSSIL INDUSTRIES MODEL SP1212, POWDER COAT BLACK, IN-GROUND MOUNT, AVAILABLE THROUGH FOSSIL INDUSTRIES, (800) 244-9809 — 3 DT-3
- MP — MINI-POST SIGN PEDESTAL, FOSSIL INDUSTRIES MODEL MP24-66, POWDER COAT BLACK, IN-GROUND MOUNT, AVAILABLE THROUGH FOSSIL INDUSTRIES, (800) 244-9809 — 3 DT-3
- RAIN BARREL, GRAF TERRANOVA RESERVOIR TANK, 73-GALLON CAPACITY, COLOR CREAM, INCLUDING DOWNSPOUT CONNECTION KIT. AVAILABLE THROUGH EXACO TRADING COMPANY. — 4-5 DT-3
- RELOCATED BOULDERS, SEE DEMOLITION PLAN FOR DISPOSITION — 1 DT-1
- EXISTING BOULDERS TO REMAIN
- TRENCH DRAIN, PER GRADING AND DRAINAGE PLANS
- P.A. — PLANTING AREA

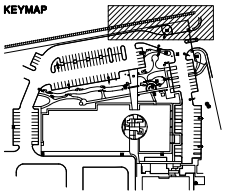
SITE CONSTRUCTION NOTES

1. DIMENSIONS: ALL WRITTEN DIMENSIONS SUPERSEDE SCALED DIMENSIONS. ALL DIMENSIONS ARE TO FACE OF CURB OR WALL, INSIDE EDGE OF CONCRETE FLATWORK/MOWBAND, CENTERLINE OF FENCE, OR CENTERPOINT OF RADIUS.
2. EXPANSION JOINTS: INSTALL EXPANSION JOINTS AS SHOWN ON DRAWINGS, AS WELL AS BETWEEN CONCRETE FLATWORK AND WALLS, CURBS, AND EXISTING FLATWORK OR STRUCTURES.
3. SLEEVING: REFER TO IRRIGATION PLAN FOR REQUIREMENTS OF SLEEVING UNDER PAVEMENT.
4. PROJECT STAKING: ALL PROPOSED SITE FEATURES SHALL BE STAKED IN FIELD FOR REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. ALL CURVES SHALL BE SMOOTH AND CONTINUOUS WITH CAREFULLY MATCHED TANGENTS.



1 SC-1 **OUTDOOR CLASSROOM ENLARGEMENT**

KEYMAP



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SITE CONSTRUCTION PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

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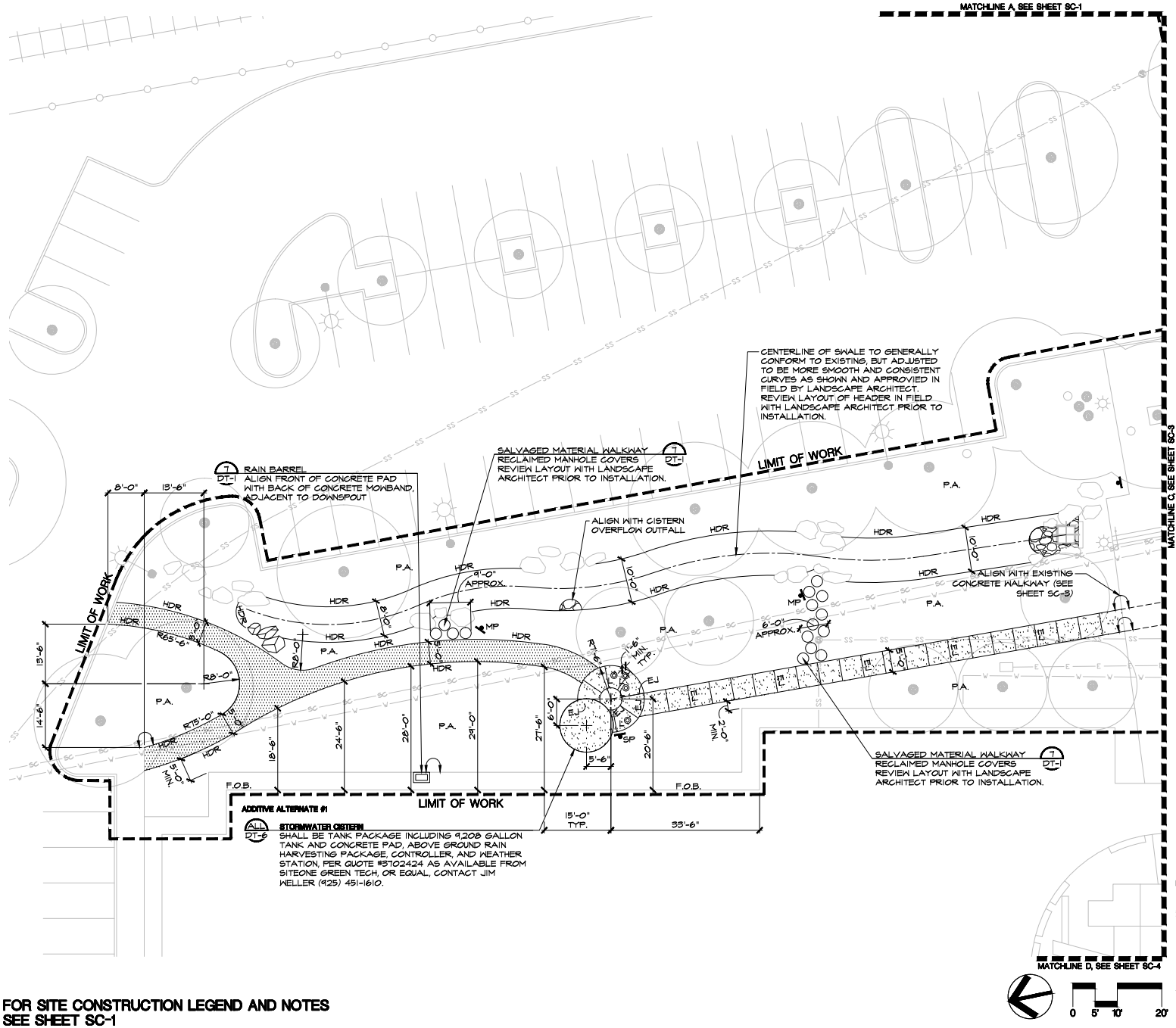
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LICENSED LANDSCAPE ARCHITECT — CHRISTOPHER M. CALLANDER — No. 4666 — May 31, 2020 — Renewal Date — STATE OF CALIFORNIA

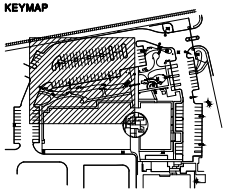
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Sheet No. SC-1 of 34



FOR SITE CONSTRUCTION LEGEND AND NOTES
SEE SHEET SC-1

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SITE CONSTRUCTION PLAN

DEMONSTRATION LANDSCAPE GARDEN

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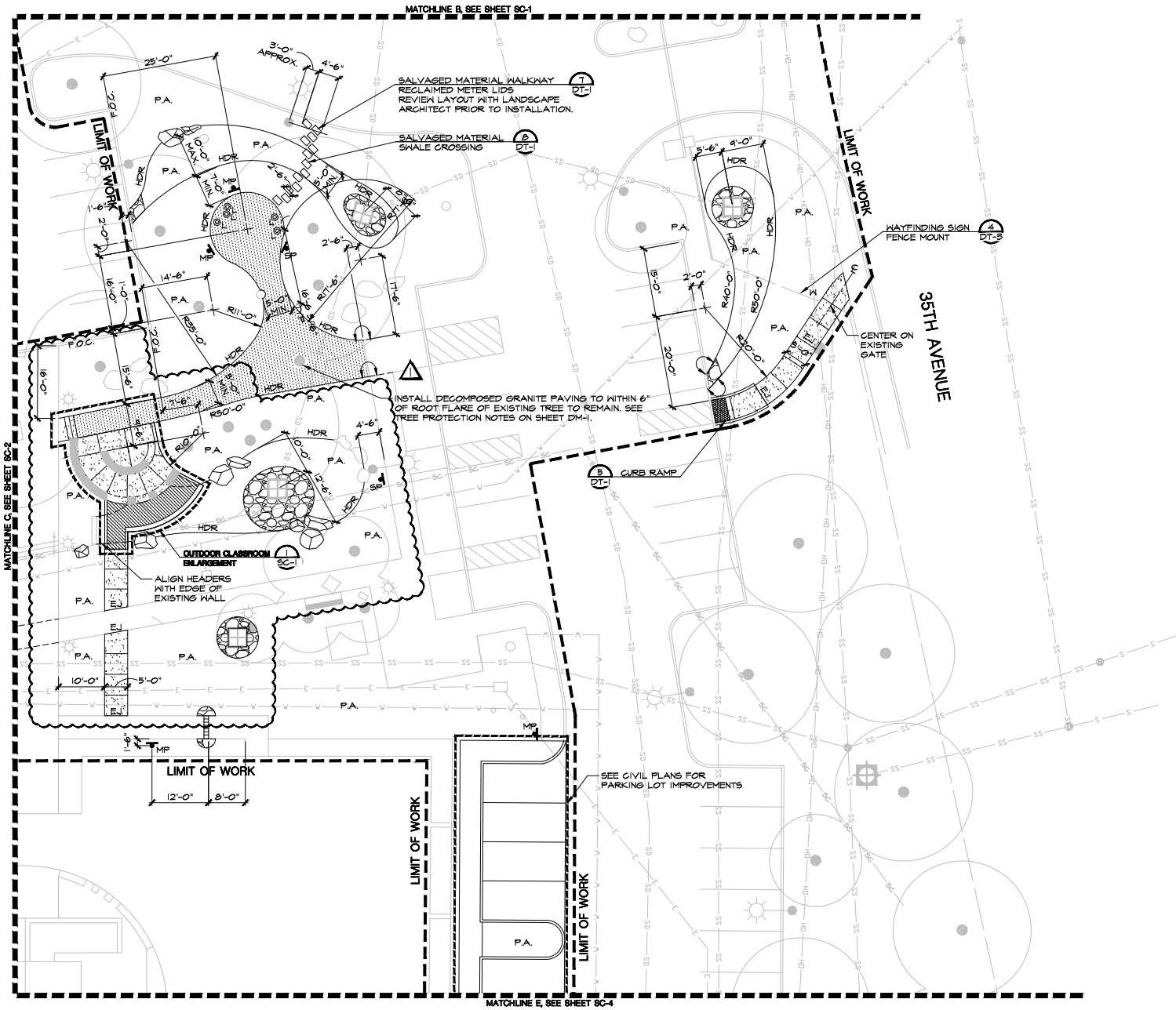
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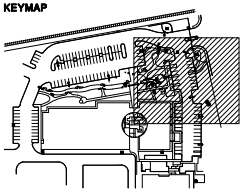
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Sheet No. SC-2 of 34



FOR SITE CONSTRUCTION LEGEND AND NOTES
SEE SHEET SC-1

KEYMAP



0 5' 10' 20'

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SITE CONSTRUCTION PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

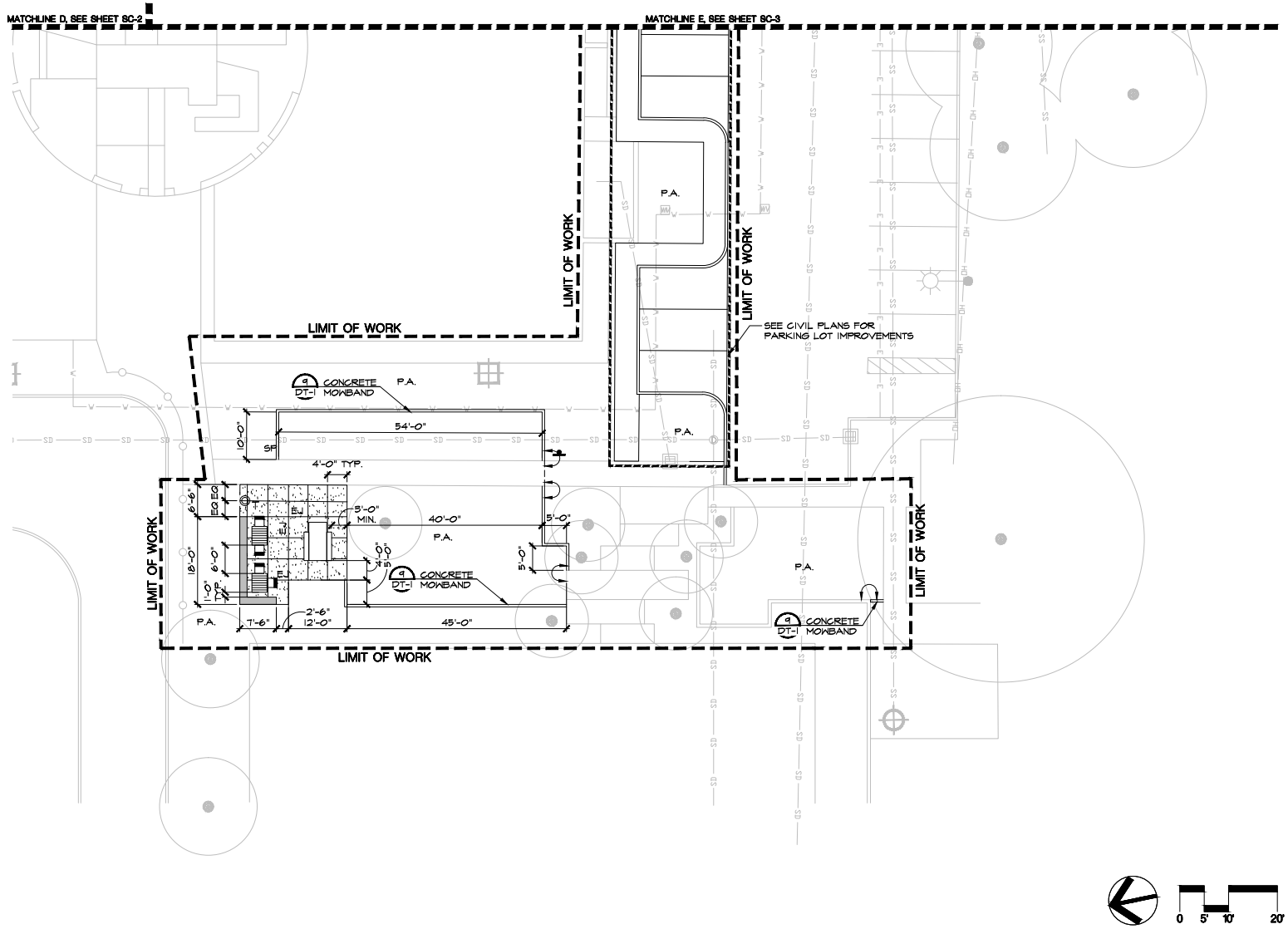
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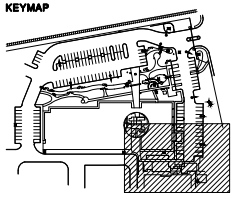
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Sheet No. SC-3 of 34



FOR SITE CONSTRUCTION LEGEND AND NOTES
SEE SHEET SC-1

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SITE CONSTRUCTION PLAN

DEMONSTRATION LANDSCAPE GARDEN

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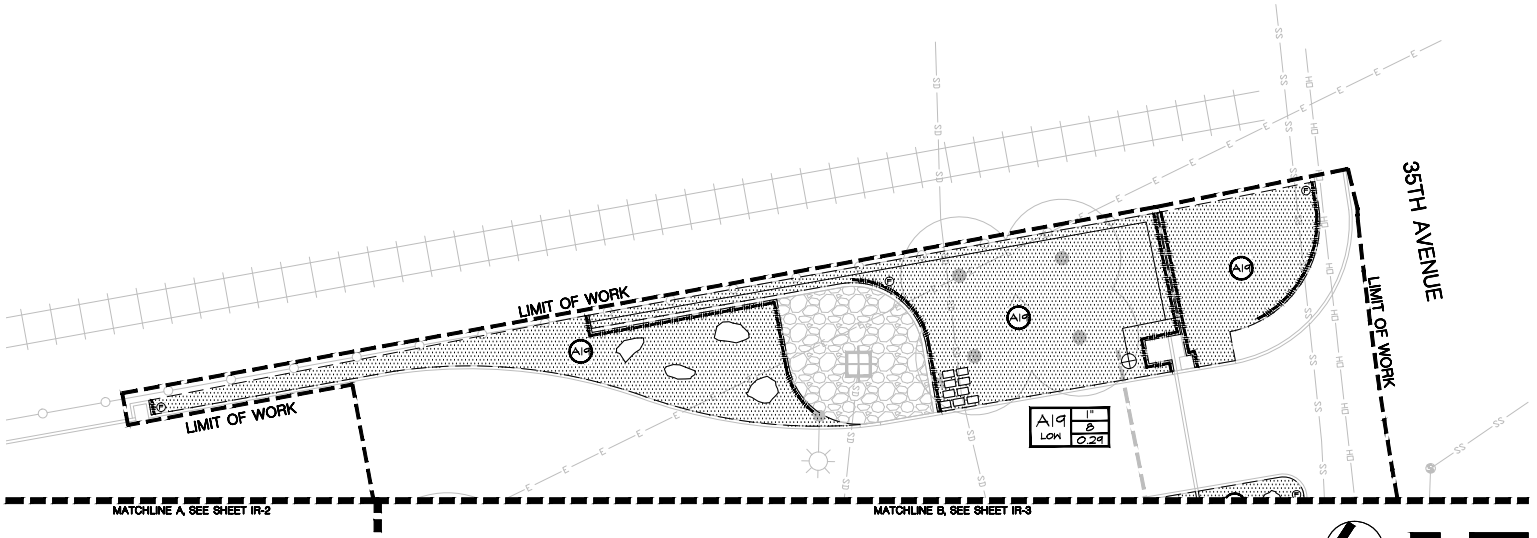
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I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

BENJAMIN W. WOODSIDE



IRRIGATION LEGEND

AT-GRADE IN-LINE DRIP IRRIGATION, HUNTER PLD-04-R WITH A 0.4 GALLON PER HOUR DRIPPER FLOW AND 1'-6" O.C. DRIPPER SPACING. SPACE LATERAL ROWS AT 1'-6" O.C. TYPICAL ALL ZONES UNLESS OTHERWISE INDICATED. 40 PSI. DRIP TUBING SHALL BE PURPLE. INSTALL ON SURFACE AT FINISH GRADE TO AVOID DISTURBING ROOTS OF EXISTING TREES. REVIEW EMITTER LAYOUT WITH MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION: DON FRANKLIN, (916) 849-4437. — 1 DT-5, 3-6 DT-5

SUBSURFACE IN-LINE DRIP IRRIGATION, HUNTER PLD-04-R WITH A 0.4 GALLON PER HOUR DRIPPER FLOW AND 1'-6" O.C. DRIPPER SPACING. SPACE LATERAL ROWS AT 1'-6" O.C. TYPICAL ALL ZONES UNLESS OTHERWISE INDICATED. 40 PSI. DRIP TUBING SHALL BE PURPLE. INSTALL 3" BELOW FINISH GRADE PRIOR TO PLUG PLANTING. REVIEW EMITTER LAYOUT WITH MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION: DON FRANKLIN, (916) 849-4437. — 2-6 DT-5

WRAPPED IN-LINE DRIP IRRIGATION, HUNTER PLD-ESD WITH A 0.6 GALLON PER HOUR DRIPPER FLOW AND 1'-0" O.C. DRIPPER SPACING. SPACE LATERAL ROWS AT 1'-2" O.C. TYPICAL ALL ZONES UNLESS OTHERWISE INDICATED. 40 PSI DRIP TUBING SHALL BE PURPLE. INSTALL 4-6" BELOW FINISH GRADE PRIOR TO PLUG PLANTING. REVIEW EMITTER LAYOUT WITH MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION: DON FRANKLIN, (916) 849-4437. — 2-6 DT-5

SUBSURFACE IN-LINE DRIP IRRIGATION, TORO DL2000 RSP-218-05-E WITH A 0.5 GALLON PER HOUR DRIPPER FLOW AND 1'-6" O.C. DRIPPER SPACING. SPACE LATERAL ROWS AT 1'-6" O.C. TYPICAL ALL ZONES UNLESS OTHERWISE INDICATED. 40 PSI. DRIP TUBING SHALL BE PURPLE. INSTALL 3" BELOW FINISH GRADE PRIOR TO PLUG PLANTING. REVIEW EMITTER LAYOUT WITH MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION: LANCE MATHESON, (916) 622-3262. — 2-6 DT-5

SUBSURFACE IN-LINE DRIP IRRIGATION, RAINBIRD XFS-P-04-18 WITH A 0.4 GALLON PER HOUR DRIPPER FLOW AND 1'-6" O.C. DRIPPER SPACING. SPACE LATERAL ROWS AT 1'-6" O.C. TYPICAL ALL ZONES UNLESS OTHERWISE INDICATED. 40 PSI. DRIP TUBING SHALL BE PURPLE. INSTALL 3" BELOW FINISH GRADE PRIOR TO PLUG PLANTING. REVIEW EMITTER LAYOUT WITH MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION: JIM WINEBARGER, (760) 258-2118. — 2-6 DT-5

MPLCS515 / MP3000 — TURF ROTARY SPRAY, HUNTER MPLCS515/MP3000 ON HUNTER PRO-SPRAY BODY WITH PURPLE CAP, 35 PSI, SPACING AS SHOWN, ARC AS REQUIRED — 5 DT-4

DRIP CONTROL ZONE KIT: HUNTER PCZ-101-40 WITH RECLAIMED WATER ID TAG. — 2 DT-4

REMOTE CONTROL VALVE: HUNTER ICV-101G-R WITH RECLAIMED WATER ID TAG. — 1 DT-4

EXISTING REMOTE CONTROL VALVE, PROTECT IN PLACE

EXISTING REMOTE CONTROL VALVE TO BE REMOVED AND RETURNED TO OWNER, CAP MAINLINE AND COIL CONTROL WIRES IN PULL BOX FOR FUTURE USE.

MVA — MASTER VALVE A, SUPERIOR 3100 MODEL SC1503100 1 1/2" VALVE WITH RECLAIMED WATER ID TAG, NORMALLY OPEN, WIRE TO CONTROLLER A — 9 DT-5

FSA — FLOW SENSOR A, RAINBIRD FS150B, WIRE TO CONTROLLER A — 8 DT-5

MVB — MASTER VALVE B, HUNTER ICV-101G-R WITH RECLAIMED WATER ID TAG, NORMALLY CLOSED, WIRE TO CONTROLLER B — 9 DT-5

FSB — FLOW SENSOR B, HUNTER HFS WITH FCT-100 RECEPTACLE TEE, WIRE TO CONTROLLER B — 8 DT-5

MASTER VALVE C, HUNTER ICV-101G-R WITH RECLAIMED WATER ID TAG, NORMALLY CLOSED, WIRE TO CONTROLLER C

A — CONTROLLER A, RAINBIRD ESP-12-LXMEF 12 STATION CONTROLLER WITH FLOW MODULE AND 3G USA CELLULAR CARTRIDGE WITH (2) ESP-LX 12 STATION MODULES FOR A TOTAL OF 36 STATIONS. CONTACT CUR CLEARY, (916) 934-8447 — 7 DT-5

B — CONTROLLER B, HUNTER I-CORE-PP, 6 STATIONS — 7 DT-5

C — CONTROLLER C, INCLUDED WITH STORMWATER CISTERN PACKAGE — ALL DT-6

LATERAL LINE, CLASS 200 PVC PURPLE PIPE, 3/4" SIZE UNLESS OTHERWISE NOTED, 12" MIN. BURIAL

DRIP HEADER LINE, CLASS 200 PVC PURPLE PIPE, 1" SIZE UNLESS OTHERWISE NOTED

IRRIGATION MAINLINE, CLASS 200 PVC PURPLE PIPE, 2" — 4 DT-4

EXISTING MAINLINE

SLEEVE, SCH 40 PVC, SIZE AS REQUIRED

IRRIGATION CONTROL/COMMUNICATION WIRES

E — ELECTRICAL CONDUCTORS, #10 WIRE, IN 1/2" CONDUIT

GATE VALVE, NIBCO T-113, LINE SIZE

DRIP IRRIGATION START CONNECTION — 9 DT-4

F — FLUSH VALVE, HUNTER, INSTALL AT LOW END OF DRIP HEADER LINE — 7 DT-4

DB — DRIP IRRIGATION DEMONSTRATION BOX — 6 DT-4

A1 — ZONE NUMBER, DRIP IRRIGATION IN THIS AREA TO BE CONNECTED TO DRIP REMOTE CONTROL ZONE KIT WITH CORRESPONDING VALVE NUMBER

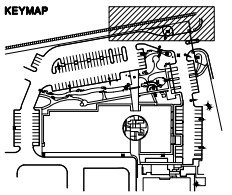
EXISTING VALVE #
APPROXIMATE GPM THROUGH VALVE
VALVE SIZE

VALVE NUMBER
VALVE SIZE
APPROX. GPM
PRECIP. RATE (INCHES PER HOUR)
WATER USE

IRRIGATION NOTES

1. SPECIFICATIONS: SEE IRRIGATION SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. VERIFICATION: SYSTEM DESIGN IS BASED ON 30 P.S.I. AND 40 G.P.M. AVAILABLE AT DISCHARGE OUTLET OF METER OR OTHER POINT OF CONNECTION. CONTRACTOR SHALL VERIFY SAME AND NOTIFY LANDSCAPE ARCHITECT IF SUCH DATA ADVERSELY AFFECTS THE OPERATION OF THE SYSTEM. SUCH NOTICE SHALL BE MADE IN WRITING AND PRIOR TO COMMENCING ANY IRRIGATION WORK.
3. UTILITIES: CONTRACTOR SHALL VERIFY LOCATION OF ALL ON-SITE UTILITIES. RESTORATION OF DAMAGED UTILITIES SHALL BE MADE AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
4. SCHEMATIC: SYSTEM FEATURES ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY. INSTALL ALL PIPING AND VALVES IN COMMON TRENCHES WHERE FEASIBLE AND INSIDE PLANTING AREAS WHENEVER POSSIBLE. ALL VALVES SHALL BE LOCATED IN GROUNDCOVER OR SHRUB AREAS WHENEVER POSSIBLE.
5. CODES: IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODES AND MANUFACTURER'S SPECIFICATIONS. NOTIFY LANDSCAPE ARCHITECT BY TELEPHONE AND IN WRITING OF ANY CONFLICTS PRIOR TO INSTALLATION.
6. SLEEVING: CONTRACTOR SHALL ADEQUATELY SIZE ALL SLEEVES SHOWN ON PLAN. SLEEVES SHALL BE INSTALLED AT THE NECESSARY DEPTHS PRIOR TO PAVEMENT CONSTRUCTION. SLEEVING SHALL EXTEND 1'-0" FROM EDGE OF PAVEMENT INTO LAWN OR PLANTING AREA, AND SHALL HAVE ENDS CLEARLY MARKED ABOVE GRADE.
7. HEAD ALLOWANCE: CONTRACTOR SHALL ALLOW IN BID PRICE AN AMOUNT SUFFICIENT TO PROVIDE AND INSTALL AN ADDITIONAL 3 SPRINKLER HEADS OF EACH TYPE SPECIFIED ON PLAN TO ACCOMMODATE FIELD CHANGES. THESE HEADS SHALL BE LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT. CONTRACTOR SHALL DELIVER TO THE OWNER ANY UN-USED ADDITIONAL HEADS AT THE END OF THE MAINTENANCE PERIOD.
8. CONTROLLER: INSTALL CONTROLLER 4'-0" ABOVE FLOOR OR FINISHED GRADE (WHERE APPLICABLE) AND FASTEN SECURELY TO WALL. ALL ABOVE-GRADE CONDUIT SHALL BE RIGID STEEL AND SECURELY FASTENED TO STRUCTURE AND TO CONTROLLER.
9. EXISTING IRRIGATION: SHOULD THE EXISTING MAINLINE BREAK OR BE SHUT OFF FOR ANY REASON DURING THE COURSE OF CONSTRUCTION THE CONTRACTOR SHALL HAND WATER ALL TREES, SHRUBS, TURF, AND GROUNDCOVER THAT THE EXISTING IRRIGATION SYSTEM WATERS. THE CONTRACTOR SHALL CONTINUE TO DO SO UNTIL THE IRRIGATION SYSTEM IS OPERABLE.
10. SITE ELCTRICAL: IT IS INTENDED THAT THE SITE ELECTRICAL BE DESIGN-BUILD BY CONTRACTOR. CONTRACTOR TO PROVIDE ELECTRICAL SERVICE AS SHOWN TO IRRIGATION CONTROLLER B AND TO STORMWATER CISTERN. CONTRACTOR SHALL SUBMIT FOR ELECTRICAL PERMIT FOR ALL WORK INVOLVED. REFER TO SITE ELECTRICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL COORDINATE WITH CITY OF SACRAMENTO FOR PRE-CONSTRUCTION WALKTHROUGH, CONTACT JOSEPH GLUVERS, (916) 808-8427.

KEYMAP



BID SET

IRRIGATION PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

40 YEARS
Callander Associates
Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366
F 916.985.4391

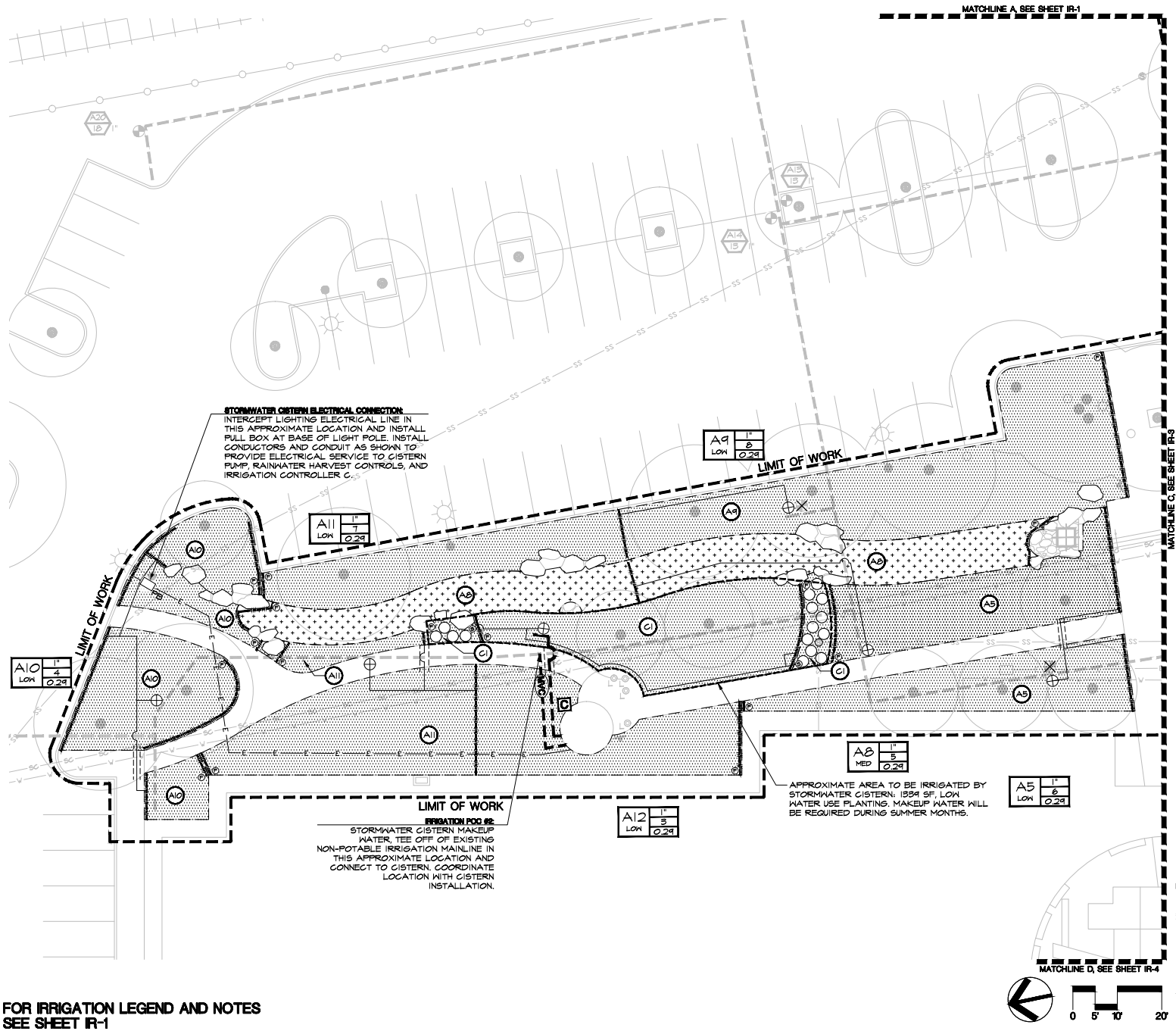
Revisions

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LICENSED LANDSCAPE ARCHITECT — BENJAMIN W. WOODSIDE — Registration — May 31, 2020 — Renewal Date — Date — STATE OF CALIFORNIA

Date	12/11/18
Scale	AS SHOWN
Drawn By	BC/IA
Checked	BW
Project No.	16047
Cadd File	16047

Sheet No. IR-1 of 34

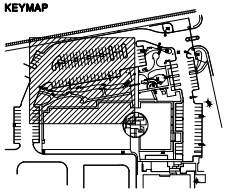


FOR IRRIGATION LEGEND AND NOTES
SEE SHEET IR-1

I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

BENJAMIN W. WOODSIDE

KEYMAP



BID SET

IRRIGATION PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

40 YEARS
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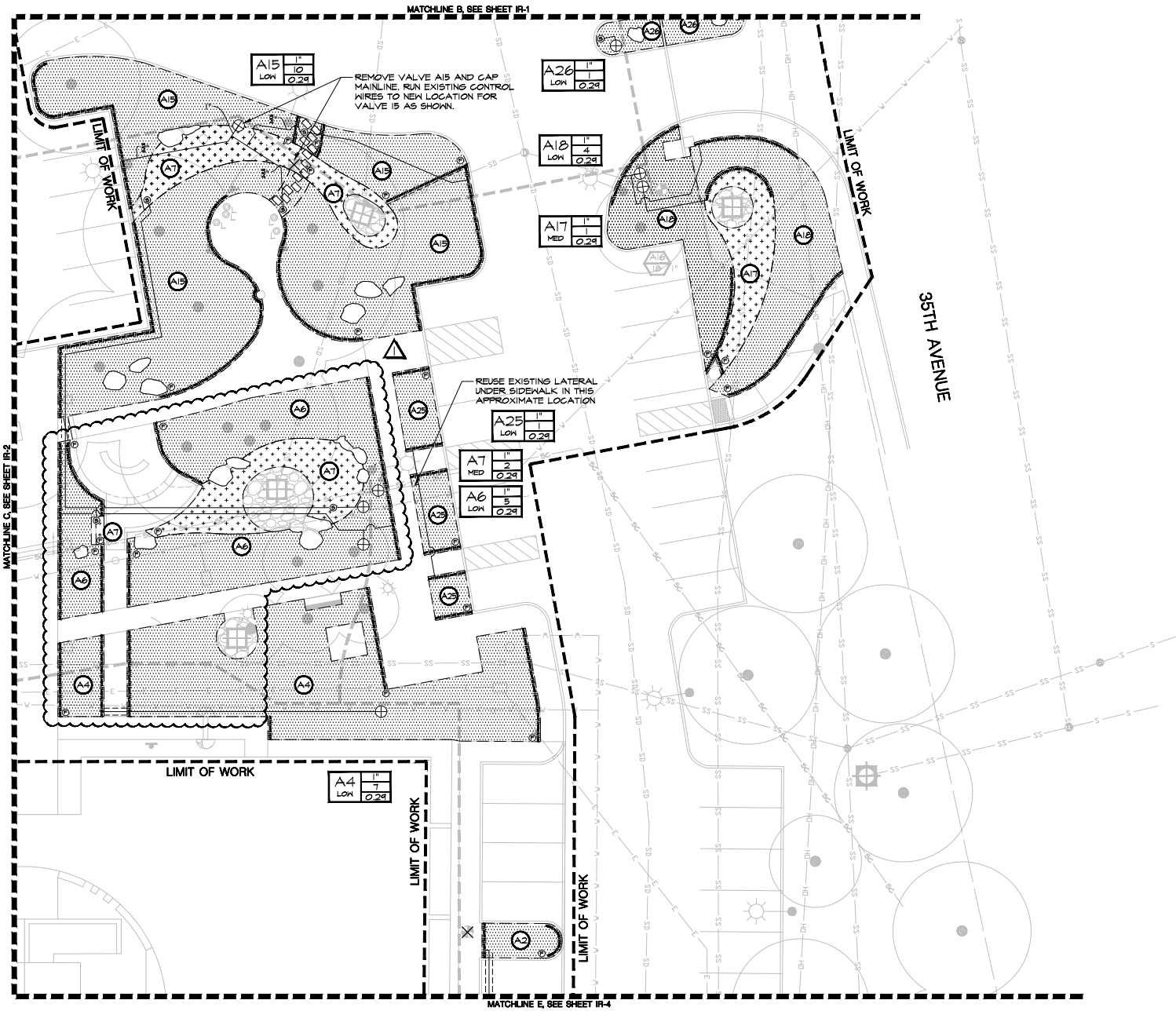
Revisions

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Benjamin W. Woodside
Registered Landscape Architect
May 31, 2020
Renewal Date
Date
STATE OF CALIFORNIA

Date	12/11/18
Scale	AS SHOWN
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Checked	BW
Project No.	16047
Cadd File	16047

Sheet No. IR-2 of 34



FOR IRRIGATION LEGEND AND NOTES
SEE SHEET IR-1

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BENJAMIN W. WOODSIDE

KEYMAP

0 5' 10' 20'

40 YEARS
Callander Associates
Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
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Revisions
1 Outdoor Classroom 06/01/19

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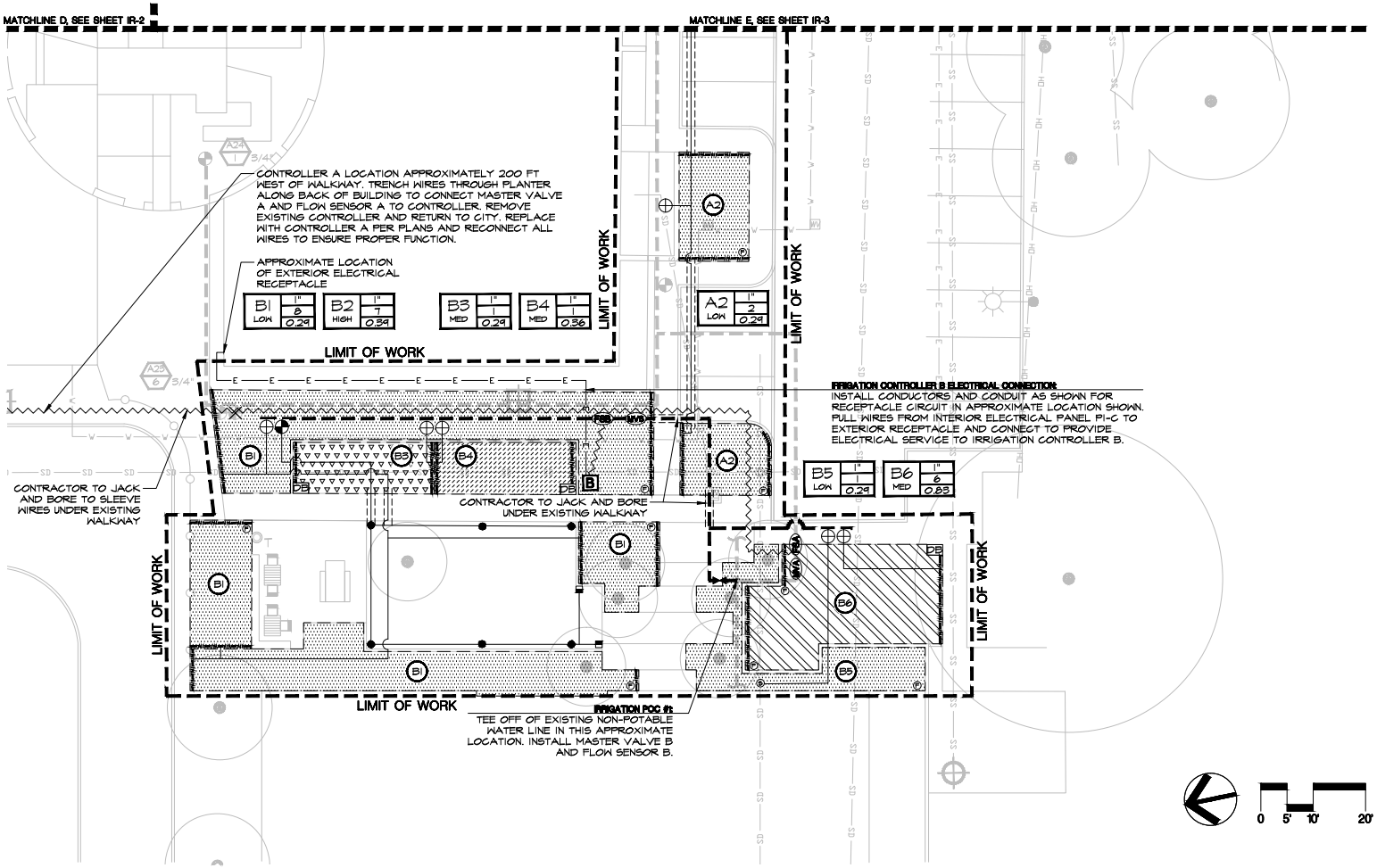
IRRIGATION PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

Date	12/11/18
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BENJAMIN W. WOODSIDE

WATER EFFICIENT LANDSCAPE WORKSHEET

REFERENCE EVAPOTRANSPIRATION (ETo) = 51.9 IN/YR

MAXIMUM APPLIED WATER ALLOWANCE (MAWA)

ETo	CONVERSION FACTOR	ETAF	TOTAL LANDSCAPE AREA (LA)	1 - ETAF	SPECIAL LANDSCAPE AREA (SLA)	(ETAF x LA) + ((1-ETAF) x SLA)	MAWA TOTAL
51.9	0.62	0.45	30,615	0.55	0	13,777	443,316

ESTIMATE TOTAL WATER USE (ETWU)

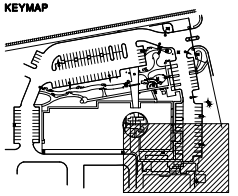
HYDROZONE #/PLANTING DESCRIPTION	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY (IE)	ETAF (PF/IE)	LANDSCAPE AREA (SF)	ETAF x AREA	TOTAL WATER USE
REGULAR LANDSCAPE AREA							
SHRUB/GROUNDCOVER	.2	DRIP	.81	.25	26,356	6,589	212,021
SHRUB/GROUNDCOVER	.5	DRIP	.81	.62	3,659	2,256	8,238
TURF	.8	ROTARY SPRAY	.75	1.07	620	663	21,334
						ETWU TOTAL	241,593
COMPLIANCE: MAWA (443,316) > ETWU (241,593)							

IRRIGATION SCHEDULE

Valve No.	Description	Precip Rate	Irrigation Method	Irrigation Efficiency	Plant Water Use	Plant Factor	Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
A2, A4, A5, A6, A9, A10, A11, A12, A15, A18, A19, A25, A26, B1	Shrubs and Groundcover	0.29	Drip	0.81	Low	0.2	ETo	1.0	1.8	3.2	4.7	6.4	7.7	8.4	7.2	5.4	3.7	1.7	0.9	51.9
							Run Time per Cycle (Minutes)	3	6	10	15	20	24	26	22	17	11	5	3	
							Cycles per Day	1	1	1	2	2	3	3	3	2	1	1	1	
							Days per Month	1	2	3	4	5	6	7	6	5	3	1	1	
							Total Minutes	3	12	30	120	200	432	546	396	170	33	5	3	
							Total Gallons	228	912	2,280	9,120	15,200	32,832	41,496	30,096	12,920	2,508	380	228	148,200
B6	Turf Substitute	0.83	Wrapped Drip	0.81	Low	0.2	Run Time per Cycle (Minutes)	1	2	3	5	7	8	9	8	6	4	2	1	
							Cycles per Day	1	1	1	2	2	3	3	3	2	1	1	1	
							Days per Month	1	2	3	4	5	6	7	6	5	3	1	1	
							Total Minutes	1	4	9	40	70	144	189	144	60	12	2	1	
							Total Gallons	6	24	54	240	420	864	1,134	864	360	72	12	6	4,056
A7, A7, A17, B5	Grass Plugs	0.29	Drip	0.81	Med	0.5	Run Time per Cycle (Minutes)	3	6	10	15	20	24	26	22	17	11	5	3	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	3	5	7	10	12	13	11	8	6	3	1	
							Total Minutes	6	18	100	210	600	1,152	1,352	726	408	132	15	3	
							Total Gallons	54	162	900	1,890	5,400	10,368	12,168	6,534	3,672	1,188	135	27	42,498
B3	Turf Substitute	0.29	SS Drip (Rainbird)	0.81	Med	0.5	Run Time per Cycle (Minutes)	3	6	10	15	20	24	26	22	17	11	5	3	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	3	5	7	10	12	13	11	8	6	3	1	
							Total Minutes	6	18	100	210	600	1,152	1,352	726	408	132	15	3	
							Total Gallons	6	18	100	210	600	1,152	1,352	726	408	132	15	3	4,722
B4	Turf Substitute	0.36	SS Drip (Toro)	0.81	Med	0.5	Run Time per Cycle (Minutes)	3	5	8	12	17	20	22	19	14	10	4	2	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	3	5	7	10	12	13	11	8	6	3	1	
							Total Minutes	6	15	80	168	510	960	1,144	627	336	120	12	2	
							Total Gallons	6	15	80	168	510	960	1,144	627	336	120	12	2	3,980
B2	Turf	0.39	Rotary Spray	0.75	High	0.8	Run Time per Cycle (Minutes)	2	4	8	11	15	18	20	17	13	9	4	2	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	4	7	11	14	17	19	16	12	8	4	2	
							Total Minutes	4	16	112	242	630	1,224	1,520	816	468	144	16	4	
							Total Gallons	28	112	784	1,694	4,410	8,568	10,640	5,712	3,276	1,008	112	28	36,372

FOR IRRIGATION LEGEND AND NOTES SEE SHEET IR-1

KEYMAP



BID SET

IRRIGATION PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

40 YEARS
Callander Associates
Landscape Architecture
12150 Tributary Point Drive
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Revisions

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LICENSED LANDSCAPE ARCHITECT BENJAMIN W. WOODSIDE No. 5616 May 31, 2020 Renewal Date CALIFORNIA

Date	12/11/18
Scale	AS SHOWN
Drawn By	BC/IA
Checked	BW
Project No.	16047
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Sheet No.	IR-4
of	34

PLANT LIST

ABBREV/ SYMB.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WATER USE	QTY
TREES						
ACE BUE	ACER BUERGERIANUM	TRIDENT MAPLE	15 GAL	AS SHOWN	M	7
ARB UNE	ARBUTUS UNEDO	STRAWBERRY TREE	24" BOX	AS SHOWN	L	3
LAG IND	LAGERSTROEMIA INDICA 'NATCHEZ'	CRAPE MYRTLE	24" BOX	AS SHOWN	L	1
PIS CHI	PISTACIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE	15 GAL	AS SHOWN	L	6
QUE DOU	QUERCUS DOUGLASII	BLUE OAK	24" BOX	AS SHOWN	L	1
SHRUBS AND GROUNDCOVER						
	ACHILLEA MILLEFOLIUM 'MOONSHINE'	MOONSHINE YARROW	1 GAL	2'-0"	L	214
AGA BLU	AGAVE 'BLUE GLOW'	BLUE GLOW AGAVE	1 GAL	3'-0"	L	17
ARC DEN	ARCTOSTAPHYLOS DENSIFLORA 'HOWARD MCMINN'	VINE HILL MANZANITA	5 GAL	6'-0"	L	11
ASC SPE	ASCLEPIAS SPECIOSA	SHOWY MILKWEED	1 GAL	2'-0"	L	43
BAC PIL	BACCHARIS PILULARIS 'CENTENNIAL'	CENTENNIAL COYOTE BRUSH	5 GAL	5'-0"	L	107
BER AQU	BERBERIS AQUIFOLIUM VAR. REPENS	CREEPING OREGON GRAPE	1 GAL	4'-0"	L	29
BOU GRA	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLONDE AMBITION GRAMA GRASS	1 GAL	2'-0"	L	283
	BULBINE FRUTESCENS	ORANGE-STALKED BULBINE	1 GAL	3'-0"	L	21
BUP FRT	BUPLEURUM FRUTICOSUM	SHRUBBY HARE'S EAR	5 GAL	4'-0"	L	94
	CALANDRINIA SPECTABILIS	ROCK PURSLANE	1 GAL	2'-0"	L	39
	CAREX DIVULSA	BERKELEY SEDGE	1 GAL	2'-0"	L	339
CEA GRI	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT'	YANKEE POINT CALIFORNIA LILAC	5 GAL	8'-0"	L	12
CHO TEC	CHONDROPETALUM TECTORUM	CAPE RUSH	1 GAL	3'-0"	L	24
	COPROSMA KIRKII	CREEPING COPROSMA	1 GAL	6'-0"	L	72
DAS WHE	DASYLIRION WHEELERI	DESERT SPOON	1 GAL	4'-0"	L	5
DES CES	DESCHAMPSIA CESPITOSA	TUFTED HAIRGRASS	1 GAL	3'-0"	L	22
EPI CAN	EPILOBIUM CANUM	CALIFORNIA FUCHSIA	1 GAL	3'-0"	L	79
ERI FAS	ERIOGONUM FASCICULATUM	CALIFORNIA BUCKWHEAT	5 GAL	4'-0"	L	94
HES PAR	HESPERALOE PARVIFLORA	CORAL YUCCA	1 GAL	3'-0"	L	16
	HEUCHERA 'ROSADA'	ROSADA CORAL BELLS	1 GAL	1'-6"	L	87
IRI DOU	IRIS DOUGLASIANA	DOUGLAS IRIS	1 GAL	3'-0"	L	41
	JUNCUS PATENS 'ELK BLUE'	ELK BLUE CALIFORNIA GRAY RUSH	1 GAL	2'-0"	M	127
	LEYMUS CONDENSATUS 'CANYON PRINCE'	CANYON PRINCE WILDRYE	1 GAL	3'-0"	L	168
LUP ALB	LUPINUS ALBIFRONS	SILVER LUPINE	5 GAL	4'-0"	L	9
MIM AUR	MIMULUS AURANTIACUS	STICKY MONKEYFLOWER	1 GAL	3'-0"	L	13
MUH RIG	MUHLENBERGIA RIGENS	DEERGRASS	1 GAL	3'-0"	L	240
PEN HET	PENSTEMON HETEROPHYLLUS 'MARGARITA BOP'	FOOTHILL PENSTEMON	1 GAL	2'-0"	L	47
RHA CAL	RHAMNUS CALIFORNICA	COFFEEBERRY	5 GAL	8'-0"	L	12
RIB VIB	RIBES VIBURNIFOLIUM	EVERGREEN CURRANT	1 GAL	5'-0"	L	22
ROS OFF	ROSMARINUS OFFICINALIS 'ROMAN BEAUTY'	ROMAN BEAUTY ROSEMARY	1 GAL	3'-0"	L	154
SAL CLE	SALVIA CLEVELANDII 'WINIFRED GILMAN'	WINIFRED GILMAN CLEVELAND SAGE	5 GAL	4'-0"	L	12
	SALVIA SPATHACEA	HUMMINGBIRD SAGE	1 GAL	3'-0"	L	24
	SISYRINCHIUM BELLUM	BLUE EYED GRASS	1 GAL	1'-6"	L	34
	THYMUS PRAECOX	MOTHER OF THYME	1 GAL	2'-0"	L	69

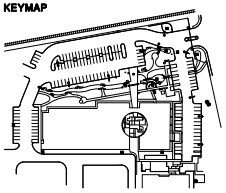
ABBREV/ SYMB.	DESCRIPTION	SIZE	SPACING	WATER USE	QTY
STORMWATER PLANTING MIXES					
	PERENNIAL POLYCULTURE MIXES, PLUG PLANTINGS AVAILABLE FROM HEDGEROW FARMS, (530) 662-6847	1" X 1" X 2.5" PLUGS	2'-0"	L/M	772 SF
	MIX A CAREX PANSA DESCHAMPSIA CESPITOSA ELYMUS GLAUCUS JUNCUS EFFUSUS	% MIX 30% 20% 20% 30%			
	MIX B CAREX PANSA JUNCUS EFFUSUS STIPA PULCHRA	40% 30% 30%			
	NO-MOW SOD, BIOFILTRATION SOD AS AVAILABLE FROM DELTA BLUEGRASS, (800) 651-8873				1255 SF
TURF SUBSTITUTE					
	GROUNDCOVER PLUGS, "KURAPIA" AS AVAILABLE FROM FLORA SOURCE LTD, CONTACT RICKY TAX, (949) 489-1131	PLUGS	1'-6" O.C.	M	729 SF
TURF					
	TURF FROM PLUGS, "UC VERDE BUFFALOGRASS" AS AVAILABLE FROM FLORA SOURCE LTD, CONTACT RICKY TAX, (949) 489-1131	PLUGS	1'-0" O.C.	M	537 SF
	TURF FROM SOD, "90/10 TALL FESCUE," 90% TALL FESCUE, 10% KENTUCKY BLUEGRASS, AS AVAILABLE FROM DELTA BLUEGRASS, (800) 651-8873			H	1035 SF

I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

BENJAMIN W. WOODSIDE

FOR PLANTING LEGEND AND NOTES SEE SHEET PL-1

KEYMAP



BID SET

PLANTING PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

40 YEARS
Callander Associates
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Revisions	
1	Outdoor Classroom
	08/01/19

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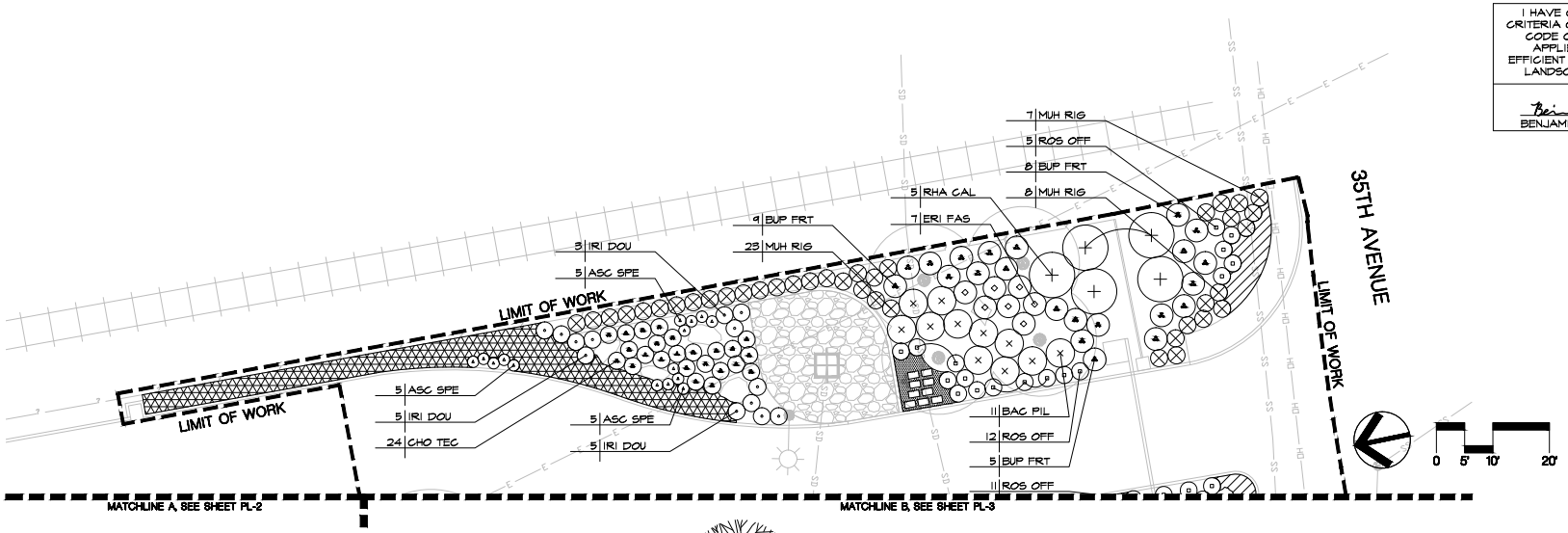
LICENSED LANDSCAPE ARCHITECT
BENJAMIN W. WOODSIDE No. 6062
Registration
May 31, 2020
Renewal Date
STATE OF CALIFORNIA

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Sheet No.
PL-0
of 34

I HAVE COMPLIED WITH THE CRITERIA OF SACRAMENTO CITY CODE CHAPTER 15.92 AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

BENJAMIN W. WOODSIDE

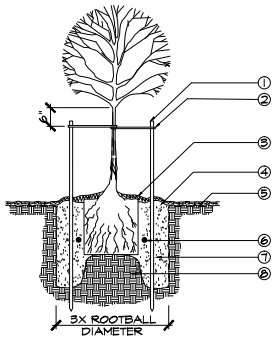


PLANT LEGEND

- EXISTING TREE TO REMAIN
- TREE, 15 GALLON SIZE
- TREE, 24" BOX SIZE
- ROOT BARRIER: DEEP ROOT CORP. #SB18. INSTALL FLUSH WITH INSIDE FACE OF CURB OR PAVING IN LOCATIONS INDICATED. SHOWN ON OUTSIDE OF CURB FOR GRAPHIC PURPOSES ONLY.

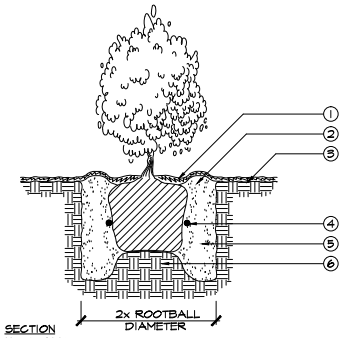
PLANTING NOTES

1. MULCH: INSTALL A UNIFORM 3 INCH COVERING, OF WALK-ON BARK MULCH, 2" AVERAGE INCH PARTICLE SIZE, IN ALL PLANTING AREAS. MATERIAL AVAILABLE FROM REDI-GRO CORP., (916)381-6065.
2. EXISTING PLANT MATERIAL: PROTECT ALL EXISTING PLANT MATERIAL TO REMAIN. CONTRACTOR TO REPAIR ANY DAMAGES INCURRED AS A DIRECT RESULT OF THIS CONTRACT TO THE OWNER'S SATISFACTION AT NO ADDITIONAL COST.
3. GROUNDCOVER: PROVIDE GROUNDCOVER AT INDICATED ON-CENTER SPACING THROUGHOUT ALL PLANTING AREAS. GROUNDCOVER SHALL BE PROVIDED UP TO THE WATERING BASIN OF ALL TREES AND SHRUBS.
4. SOILS TESTING: SEE SPECIFICATIONS FOR TESTING OF TOPSOIL AND AMENDMENTS. IN ADDITION, CONTRACTOR SHALL SUBMIT A FIVE GALLON SAMPLE OF NATIVE TOPSOIL FROM ANY AREAS PREVIOUSLY COVERED BY PAVING, TO SOIL AND PLANT LABORATORY, INC. OF SANTA CLARA, (408) 727-0550, FOR CONTAMINATION TESTING. TESTING REQUIRES FOUR TO FIVE WEEKS. CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR TESTING PRIOR TO CONSTRUCTION.
5. TREE PROTECTION: ALL EXISTING TREES SHALL BE PROTECTED PER CITY OF SACRAMENTO STANDARDS.



1. TREE STAKES: 2"Ø X 8'-0" LODGEPOLE PINE, 2 PER 15 GAL. EAST/ WEST ORIENTATION, CUT STAKES 2" ABOVE HIGHEST RUBBER TRE TIE.
2. RUBBER TREE TIES: 2 PER STAKE. WRAP NO WIRE AROUND TRUNK OR LIMB.
3. MULCH: 2"-4" LAYER.
4. 3" HIGH EARTH WATERING BERM IN PLANTER AREA ONLY.
5. FINISH GRADE. KEEP ROOT CROWN 2" ABOVE FINISH GRADE.
6. PLANT TABS, SEE SPECIFICATIONS.
7. PREPARED BACKFILL. SEE SPECIFICATIONS.
8. EXISTING UNDISTURBED SOIL.

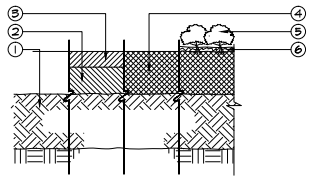
1 PL-1 TREE PLANTING N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL 16047 TREE PLANTING REVISED.DWG



SECTION
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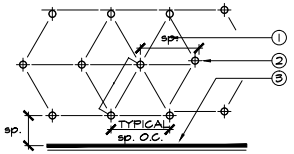
1. 3" LAYER OF APPROVED MULCH.
2. 2" HIGH EARTH MOUND.
3. FINISH GRADE: PLANT ROOT CROWN 1" ABOVE FINISH GRADE.
4. FERTILIZER TABLETS - SEE SPECIFICATIONS.
5. PREPARED BACKFILL. SEE SPECIFICATIONS.
6. PLACE ROOTBALL ON SMALL MOUND OF TAMPED/ FIRM TOPSOIL.

2 PL-1 SHRUB PLANTING N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL



SECTION
NO SCALE

1. RIP OR SCARIFY TOP 12" OF SUBGRADE.
2. ADD 6" OF IMPORTED TOPSOIL. TOPSOIL SHALL BE PHYSICALLY AND CHEMICALLY COMPATIBLE WITH SUBSOIL.
3. ADD AMENDMENTS AND FERTILIZER PER SOILS REPORT.
4. ROTOTILL AMENDMENTS INTO IMPORTED TOPSOIL.
5. PLANT GROUNDCOVER: TRIANGULAR SPACING (SEE PLAN).
6. ADD 3" OF APPROVED MULCH.



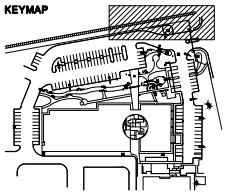
1. GROUNDCOVER SPACING: SEE PLANTING LEGEND.
2. GROUNDCOVER CENTERS.
3. WALL, WALK OR EDGE OF GROUNDCOVER PLANTING.

PLAN
NO SCALE

3 PL-1 TREE PLANTING N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL

FOR PLANT LIST SEE SHEET PL-0

KEYMAP



BID SET

PLANTING PLAN
DEMONSTRATION LANDSCAPE GARDEN
SACRAMENTO, CA DEPARTMENT OF UTILITIES

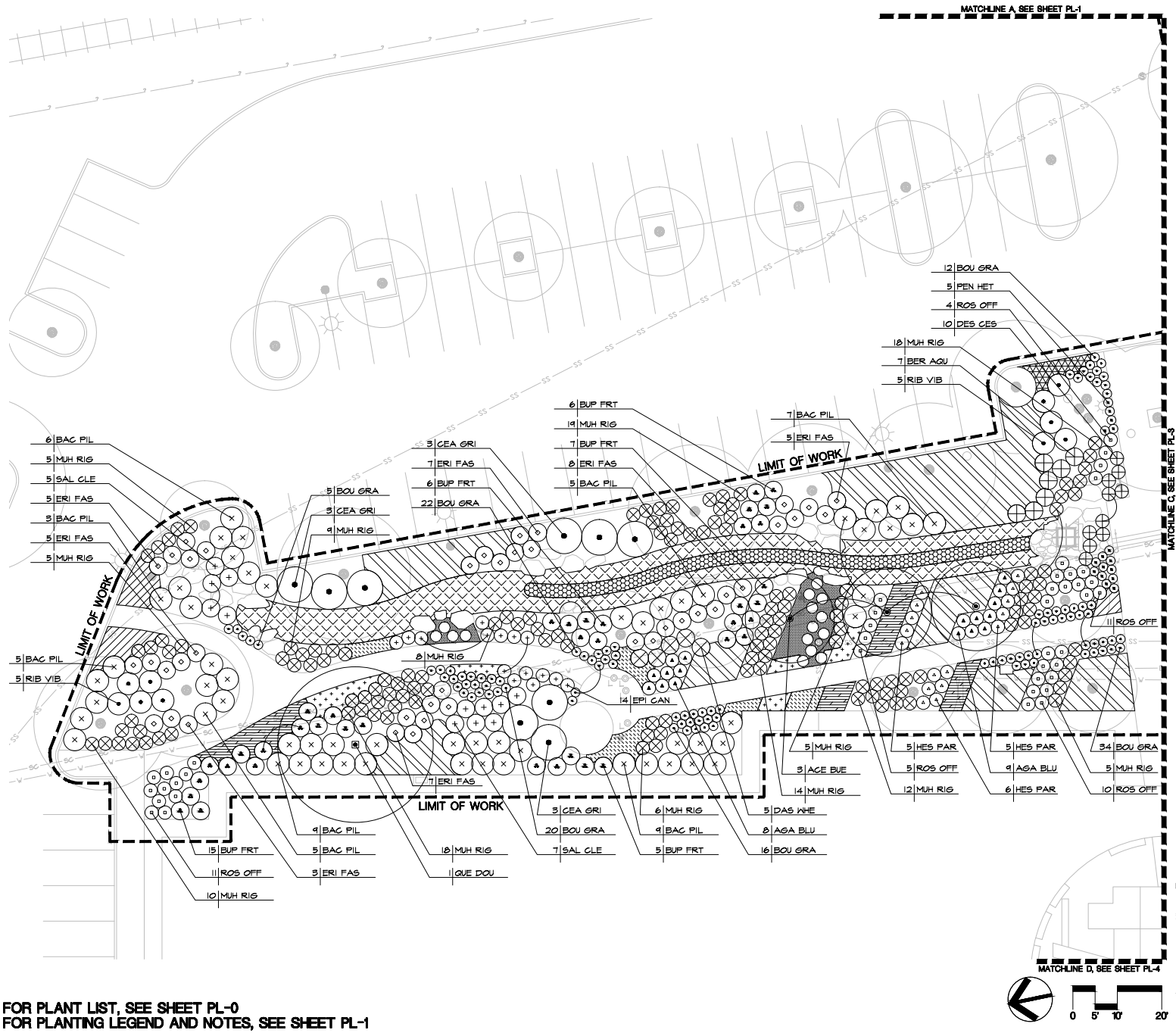
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Gold River CA 95670
T 916.985.4366
F 916.985.4391

Revisions

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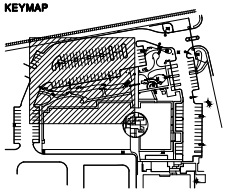


FOR PLANT LIST, SEE SHEET PL-0
FOR PLANTING LEGEND AND NOTES, SEE SHEET PL-1

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BENJAMIN W. WOODSIDE

KEYMAP



BID SET

PLANTING PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

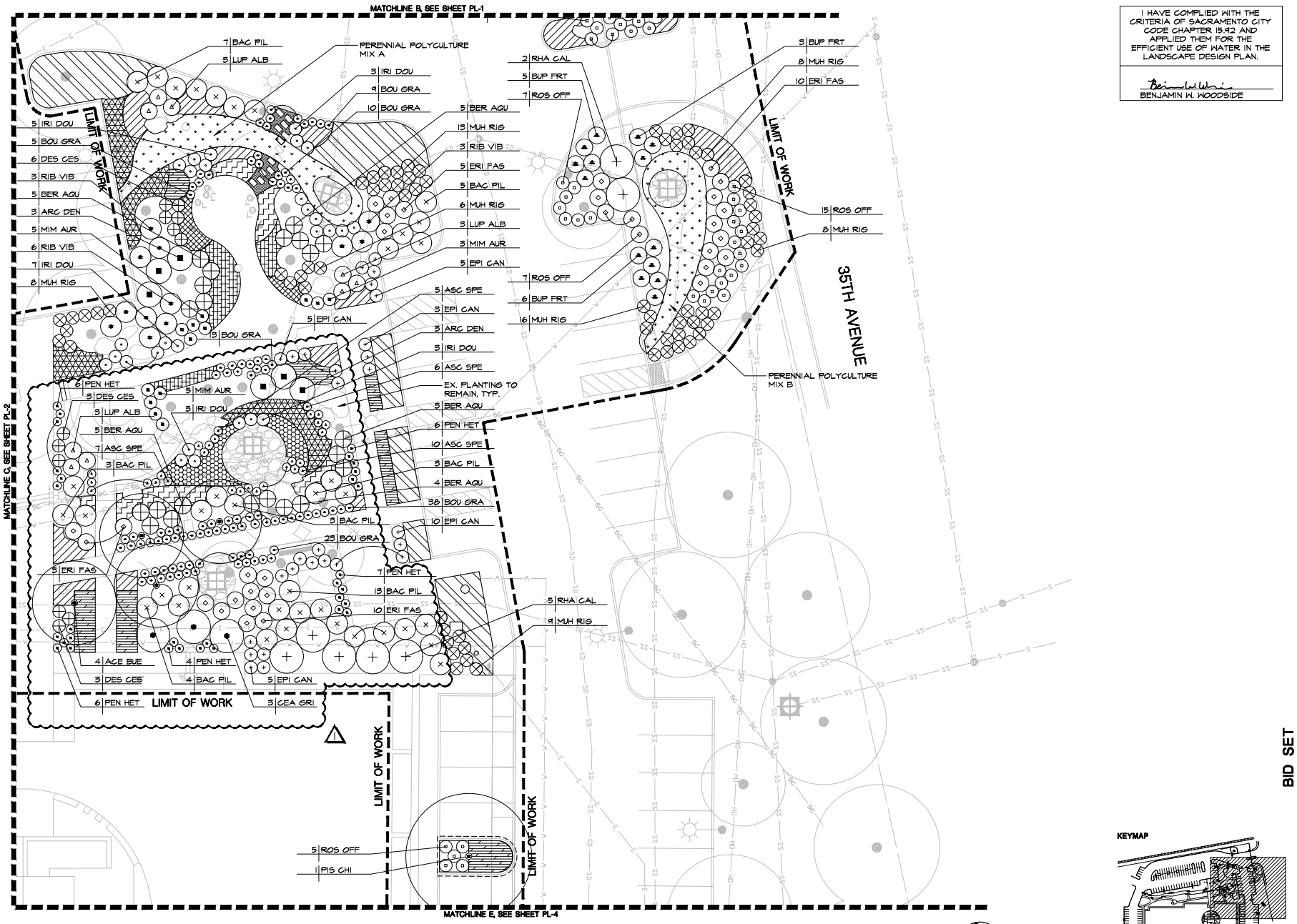
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FOR PLANT LIST, SEE SHEET PL-0
FOR PLANTING LEGEND AND NOTES, SEE SHEET PL-1

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Revisions	
1	Outdoor Classroom
	06/01/19

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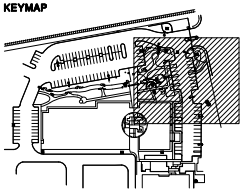
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PLANTING PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

KEYMAP



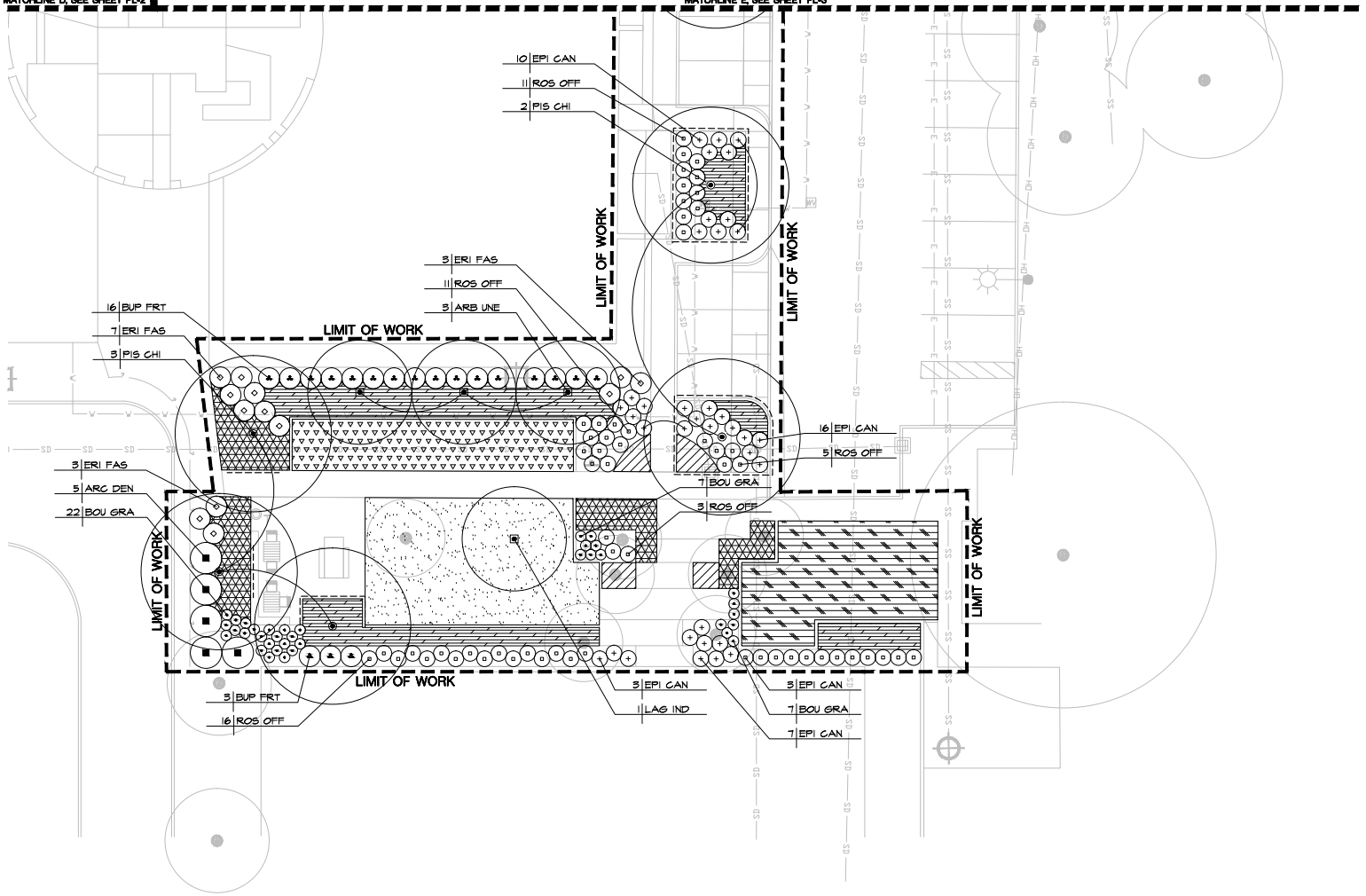
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Date	12/11/18
Scale	AS SHOWN
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Project No.	16047
Cadd File	16047

Sheet No. PL-3 of 34

MATCHLINE D, SEE SHEET PL-2

MATCHLINE E, SEE SHEET PL-3



0 5' 10' 20'

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BENJAMIN W. WOODSIDE
Registered LANDSCAPE ARCHITECT
May 31, 2020
Renewal Date
STATE OF CALIFORNIA

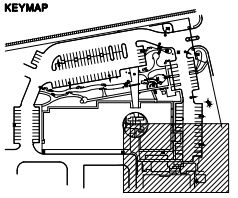
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PLANTING PLAN

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

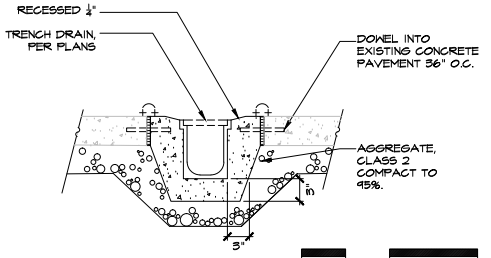
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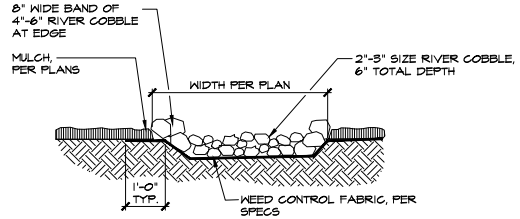
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FOR PLANT LIST, SEE SHEET PL-0
FOR PLANTING LEGEND AND NOTES, SEE SHEET PL-1

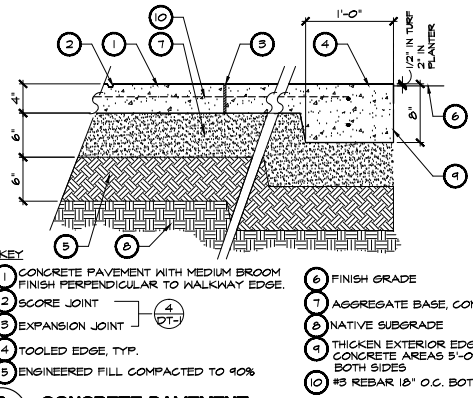


1 DT-1 TRENCH DRAIN SECTION



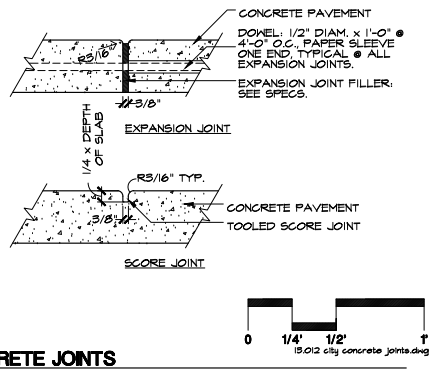
2 DT-1 COBBLE SECTION N.T.S.

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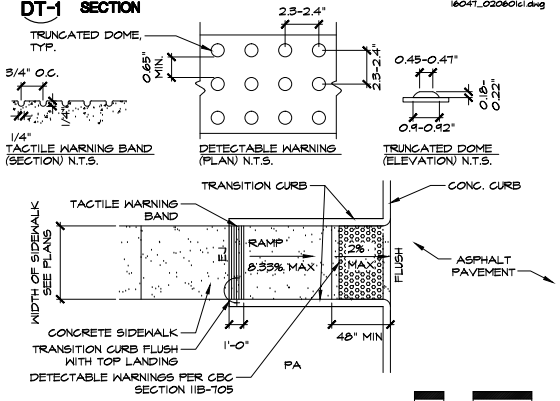


3 DT-1 CONCRETE PAVEMENT CITY OF SACRAMENTO STANDARD DETAIL N.T.S.

16047 city concrete.DWG

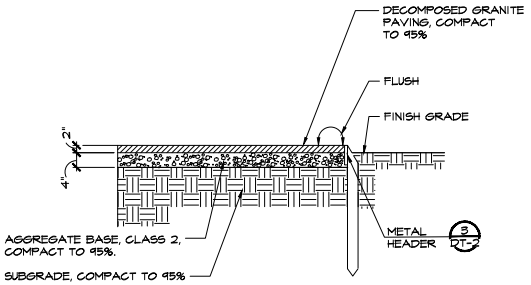


4 DT-1 CONCRETE JOINTS CITY OF SACRAMENTO STANDARD DETAIL



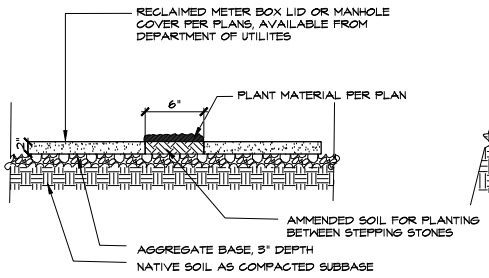
5 DT-1 CURB RAMP PLAN/SECTION

16047CurbRamp.dwg



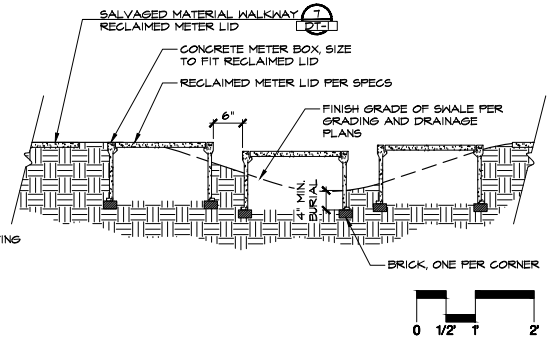
6 DT-1 DECOMPOSED GRANITE PAVEMENT SECTION

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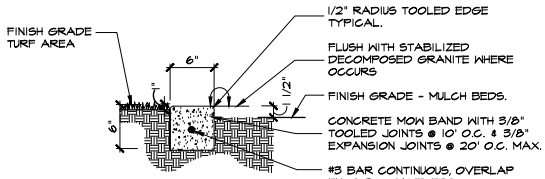
7 DT-1 SALVAGED MATERIALS WALKWAY PLAN AND SECTION

16047_02144stepstone3.dwg



8 DT-1 SALVAGED MATERIALS SWALE CROSSING SECTION

16047SalvMatlSwaleCrossing.dwg



9 DT-1 CONCRETE MOWBAND SECTION

16047 CONCRETE MOWBAND.DWG

BID SET

CONSTRUCTION DETAILS

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

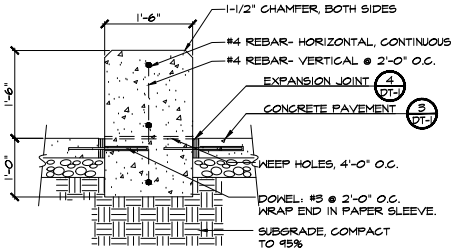
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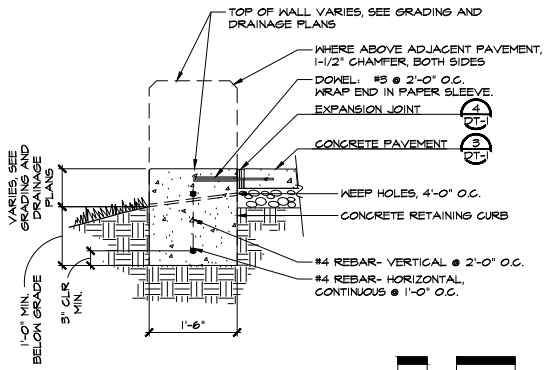
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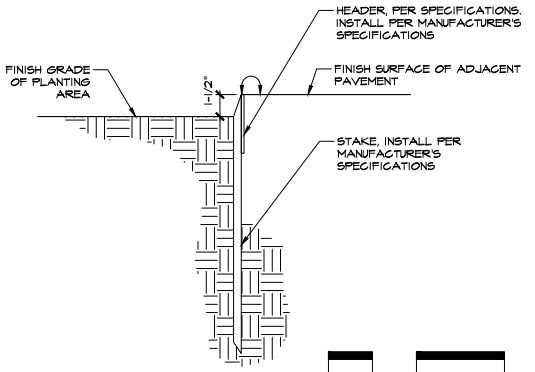
1 DT-2 **CONCRETE SEAT WALL** SECTION



2 DT-2 **CONCRETE RETAINING CURB** SECTION

0 1/2' 1' 2'

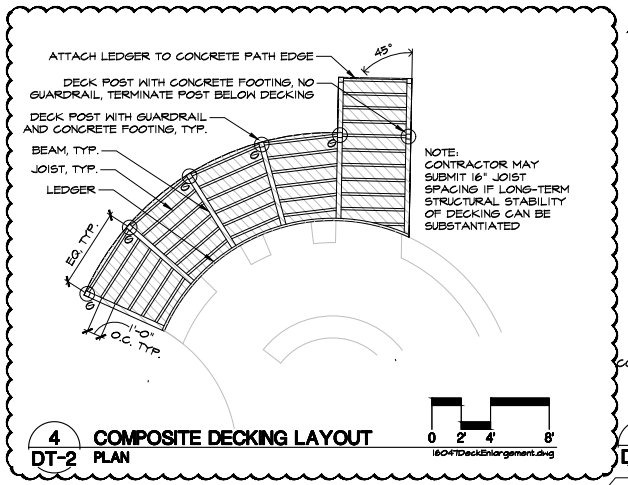
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3 DT-2 **METAL HEADER** SECTION

0 1/4' 1/2' 1'

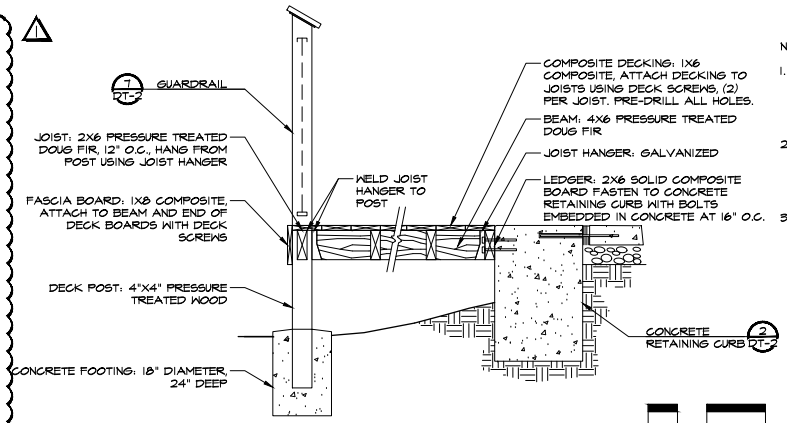
16047MetalHeader.dwg



4 DT-2 **COMPOSITE DECKING LAYOUT** PLAN

0 2' 4' 8'

16047DeckEnlargement.dwg



5 DT-2 **COMPOSITE DECKING** SECTION

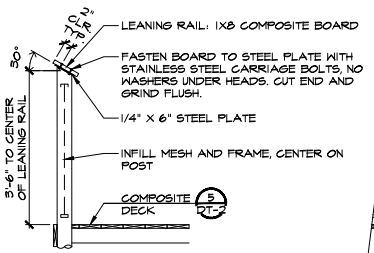
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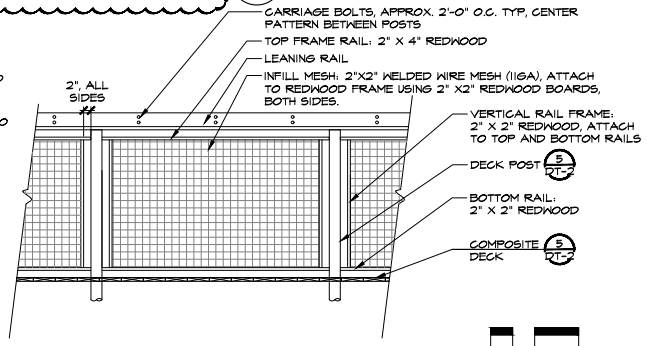
16047_CompositeDecking.dwg

NOTES:

1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OR REDLINE PROPOSED CHANGES TO PLANS AND SUBMIT FOR REVIEW.
2. COMPOSITE SHALL BE TREX ENHANCE COMPOSITE DECKING, 1" SQUARE EDGE BOARDS, COLOR TO BE BEACH DUNE.
3. DECK SCREWS AND FASTENERS SHALL BE PER MANUFACTURER RECOMMENDATIONS, STAINLESS STEEL OR COATED.

NOTES:
1. ALL METAL TO BE POWDER COATED BLACK

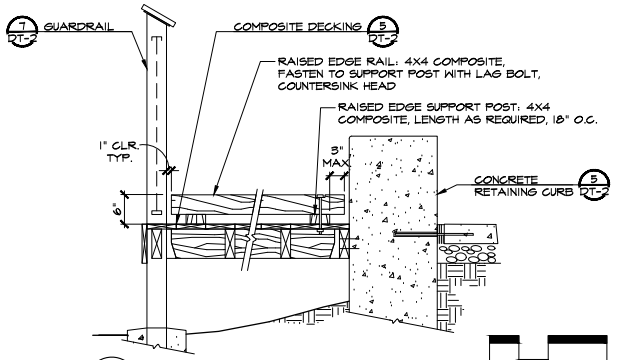




7 DT-2 **COMPOSITE DECKING LEANING RAIL** SECTION

0 1/2' 1' 2'

16047Guardrail.dwg



6 DT-2 **COMPOSITE DECKING RAISED EDGE** SECTION

0 1/2' 1' 2'

16047_CompositeDecking.dwg

BID SET

CONSTRUCTION DETAILS

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

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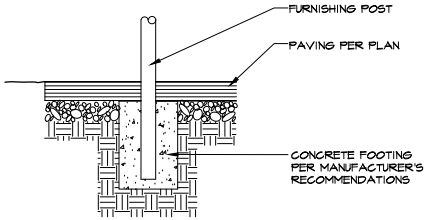
Revisions	
1	Outdoor Classroom
	06/01/19

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LICENSED LANDSCAPE ARCHITECT — Registered Professional — May 31, 2020 Renewal Date — Date — STATE OF CALIFORNIA

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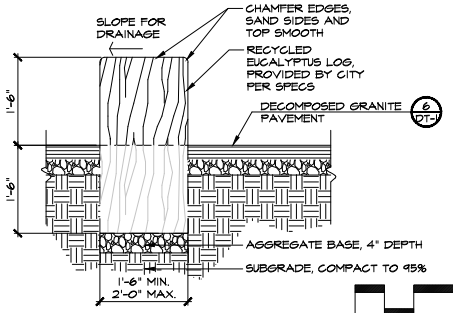
Sheet No. DT-2 of 34



1 DT-3 IN-GROUND MOUNT SECTION

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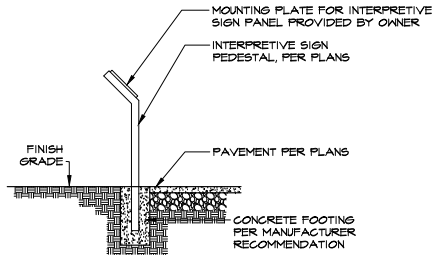
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2 DT-3 LOG STOOL SECTION

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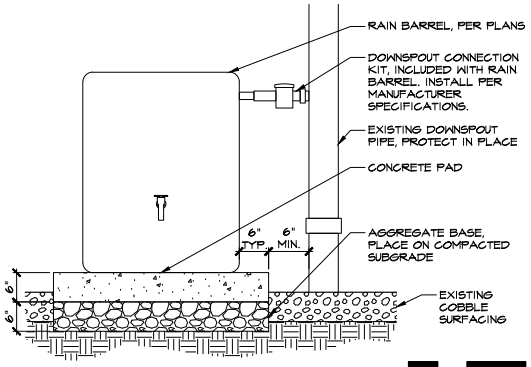
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3 DT-3 SIGN PEDESTAL SECTION

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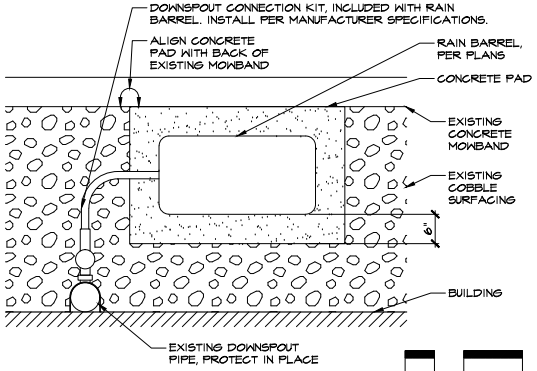
16047_02813intsign.dwg



4 DT-3 RAIN BARREL SECTION

0 1/2' 1' 2'

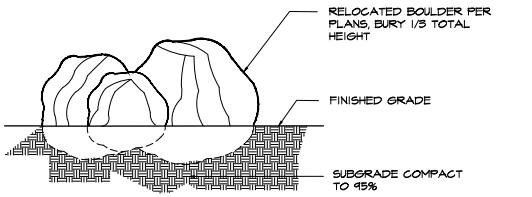
16047_RainBarrel.dwg



5 DT-3 RAIN BARREL ENLARGEMENT PLAN

0 1/2' 1' 2'

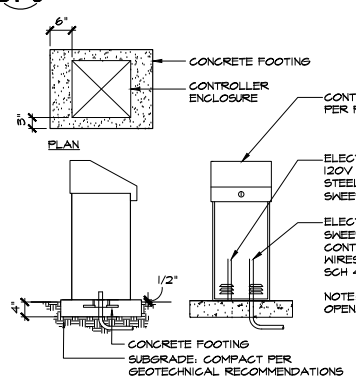
16047_RainBarrelEnlgPlan.dwg



6 DT-3 BOULDER SECTION

0 1' 2' 4'

16047_02816vl2.dwg

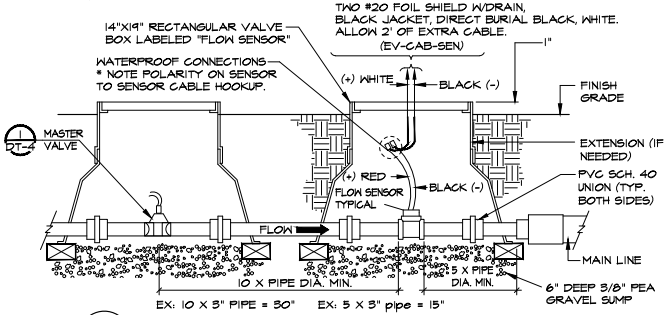


7 DT-3 CONTROLLER SECTION

0 1/2' 1' 2'

16047-02812lrp30.dwg

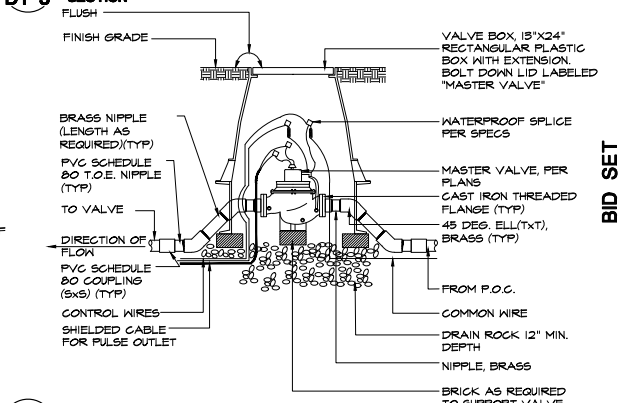
NOTES:
1. CONTRACTOR TO INSTALL PER MANUFACTURER'S DETAIL
2. FLOW SENSOR MUST BE INSTALLED WITH INSERT (TOP) POSITIONED VERTICALLY AND BODY (TEE) POSITIONED HORIZONTALLY.
3. FLOW SENSOR CABLE MUST BE RUN IN 1" PVC CONDUIT FROM FLOW SENSOR TO CONTROLLER ENCLOSURE.



8 DT-3 MASTER VALVE/FLOW SENSOR SECTION

N.T.S.

16047Flow Sensor.dwg



9 DT-3 MASTER VALVE SECTION

N.T.S.

16047_02816mvl.dwg

BID SET

CONSTRUCTION DETAILS

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

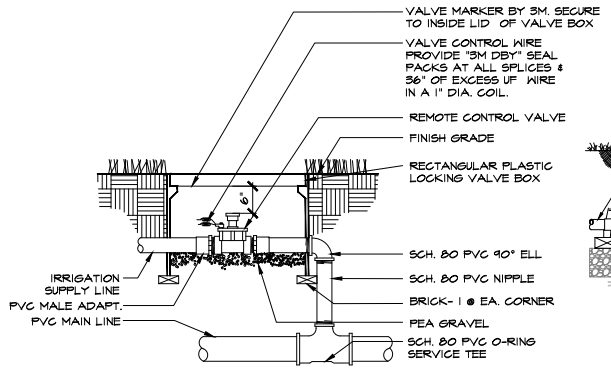
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Gold River CA 95670
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F 916.985.4391

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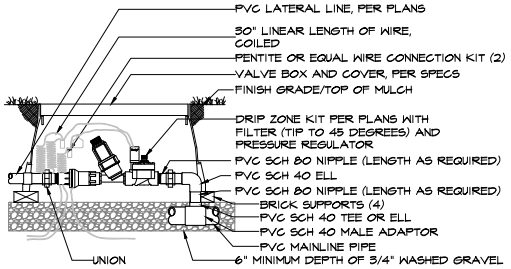
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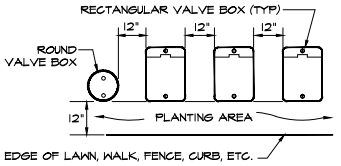
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1 DT-4 REMOTE CONTROL VALVE N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL
16047 REMOTE CONTROL VALVE.DWG

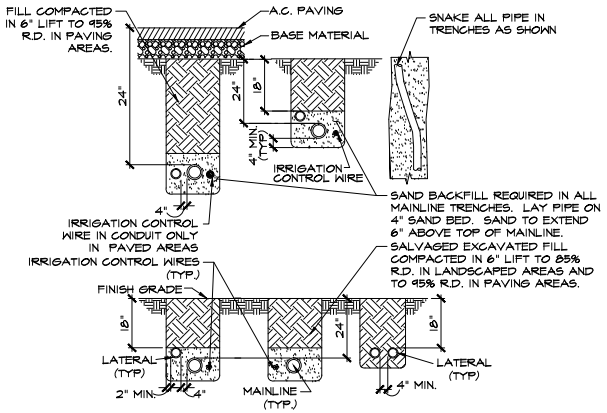


2 DT-4 DRIP CONTROL ZONE KIT N.T.S.
SECTION
16047DripControlZoneKit.dwg

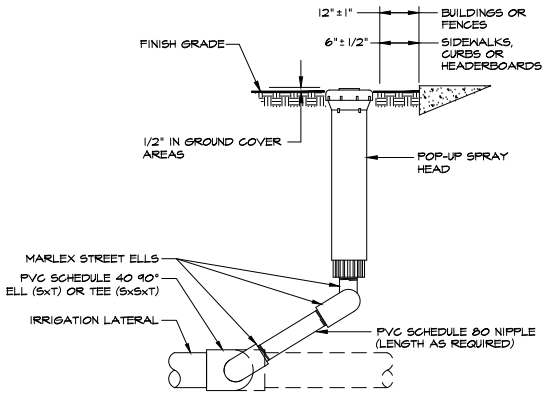


NOTES:
1. CENTER BOXES OVER VALVES.
2. SET BOXES IN GROUND COVER/SHRUB AREA WHERE POSSIBLE.
3. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
4. AVOID HEAVILY COMPACTING SOIL AROUND BOXES TO PREVENT DAMAGING VALVE BOXES.

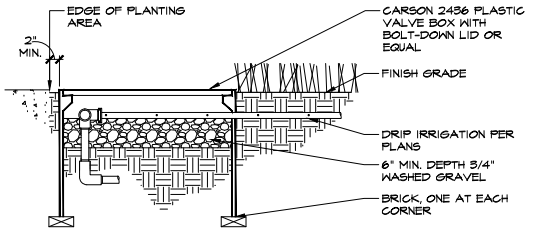
3 DT-4 VALVE BOX LAYOUT N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL
16047 VALVE BOX LAYOUT



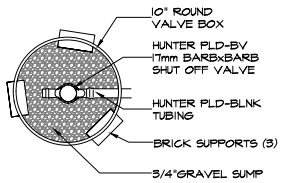
4 DT-4 TRENCHING N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL



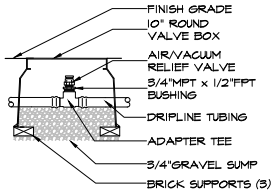
5 DT-4 SPRAY HEAD N.T.S.
CITY OF SACRAMENTO STANDARD DETAIL



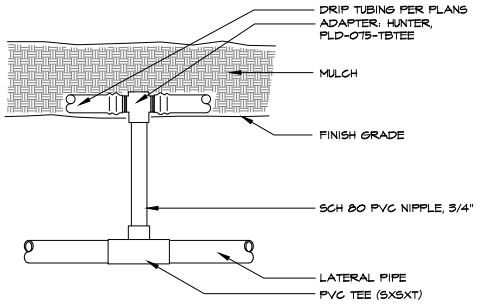
6 DT-4 DRIP DEMONSTRATION BOX N.T.S.
SECTION
0 1/2' 1' 2'
16047DripDemoBox



7 DT-4 DRIP FLUSH VALVE N.T.S.
SECTION



8 DT-4 DRIP AIR RELIEF VALVE N.T.S.
SECTION



9 DT-4 DRIP LIGHT LAYOUT START CONNECTION N.T.S.
SECTION
16047DripStartConnectionB.dwg

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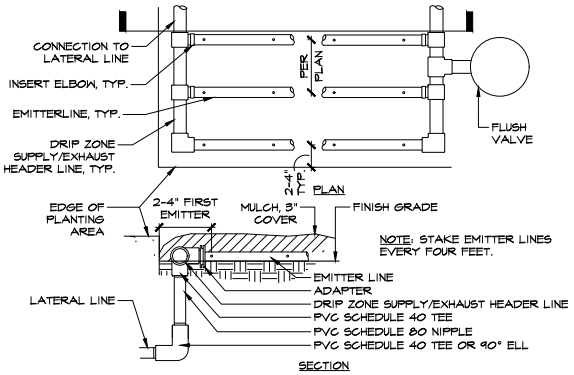
REGISTERED LANDSCAPE ARCHITECT
ROBERT E. CALLANDER
No. 1890
May 31, 2020
Renewal Date
STATE OF CALIFORNIA

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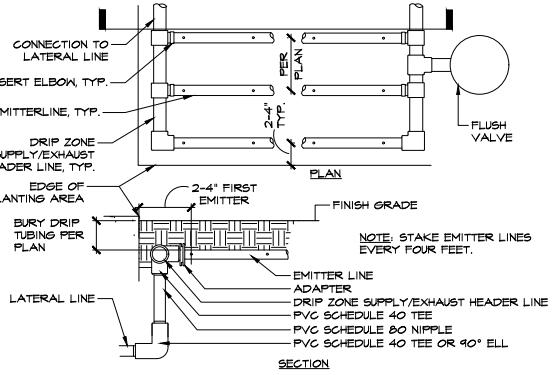
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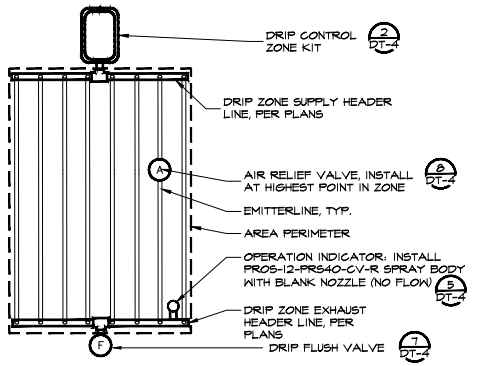
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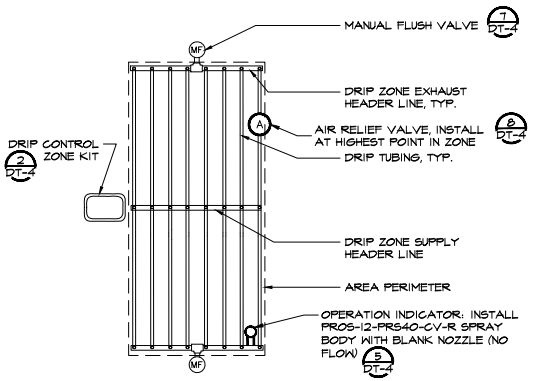
1 DT-5 **DRIP TUBING** PLAN/SECTION — N.T.S. — 16047 In-Line Drip B.dwg



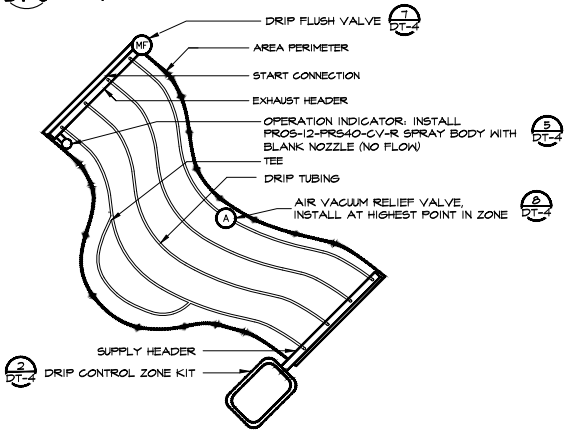
2 DT-5 **SUBSURFACE DRIP TUBING** PLAN/SECTION — N.T.S. — 16047 Subsurface In-Line Drip B.dwg



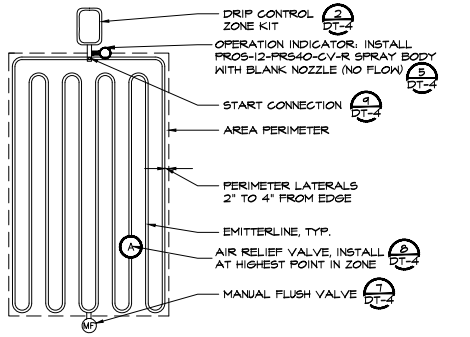
3 DT-5 **DRIP IRRIGATION END FEED LAYOUT** PLAN — N.T.S. — 16047In-LineDripLayoutEnd Feed1.dwg



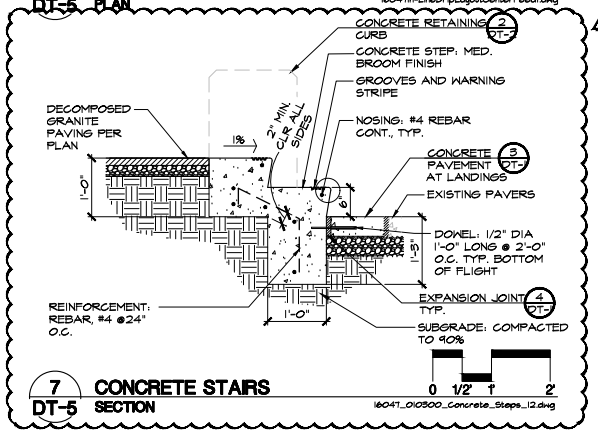
4 DT-5 **DRIP IRRIGATION CENTER FEED LAYOUT** PLAN — N.T.S. — 16047In-LineDripLayoutCenterFeed1.dwg



5 DT-5 **DRIP IRRIGATION IRREGULAR AREA LAYOUT** PLAN — N.T.S.



6 DT-5 **DRIP IRRIGATION LIGHT LAYOUT** PLAN — N.T.S. — 16047In-LineDripLayoutLight1.dwg



7 DT-5 **CONCRETE STAIRS** SECTION — 16047_010300_Concrete_Steps_12.dwg

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Revisions	
1	Outdoor Classroom 08/01/19

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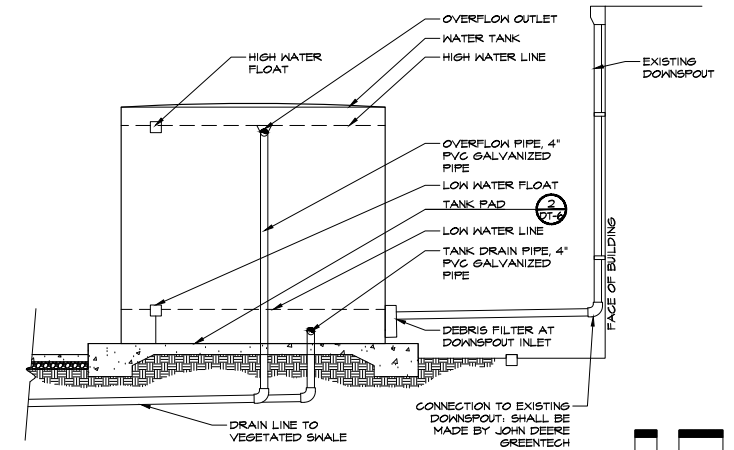
CONSTRUCTION DETAILS

DEMONSTRATION LANDSCAPE GARDEN

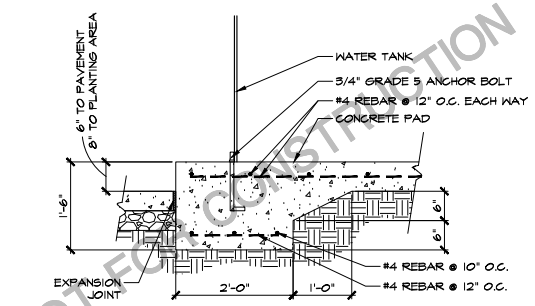
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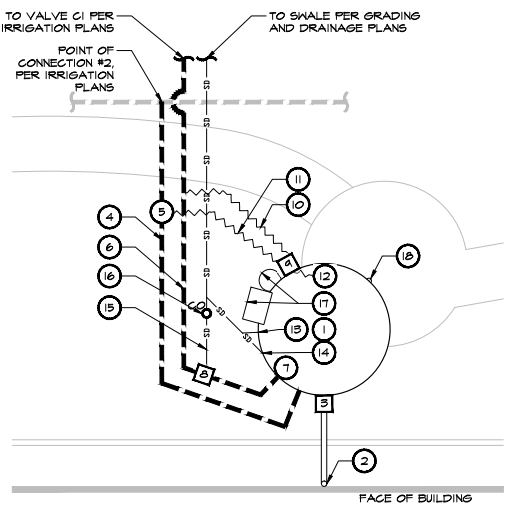
1 DT-6 WATER TANK SECTION



NOTE: DETAIL IS FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL SUBMIT FOR STRUCTURAL DRAWINGS FROM TANK MANUFACTURER FOR FINAL PAD DESIGN.

2 DT-6 TANK PAD SECTION

NOTE: REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION



1. WATER TANK
2. CONNECTION TO BUILDING DOWNSPOUT
3. DEBRIS FILTER
4. MAKE-UP WATER LINE, 2"
5. MASTER VALVE C, PER IRRIGATION PLANS
6. IRRIGATION MAINLINE, 2"
7. BOOSTER PUMP
8. DISC FILTER
9. CONTROLLER 'C' PER IRRIGATION PLANS
10. CONTROL WIRE, EXTEND TO VALVE C1
11. CONTROL WIRE, EXTEND TO MASTER VALVE C
12. LOW WATER FLOAT AND HIGH WATER FLOAT, WIRE TO IRRIGATION CONTROLLER 'C'
13. OVERFLOW DRAIN LINE
14. TANK DRAIN LINE, CONNECT TO EMERGENCY DRAIN VALVE
15. DISC FILTER DRAIN LINE
16. DRAIN LINE CLEANOUT
17. TANK LADDER AND PLATFORM
18. LIQUID LEVEL GAUGE

NOTE: CISTERN AND ASSORTED EQUIPMENT SHALL BE PROVIDED BY THE MANUFACTURER, INSTALLATION TO BE BY INSTALLER MEETING CITY REQUIREMENT.

3 DT-6 STORMWATER CISTERN DIAGRAM SECTION

0 2' 4' 8'
16047_CisternDiagram

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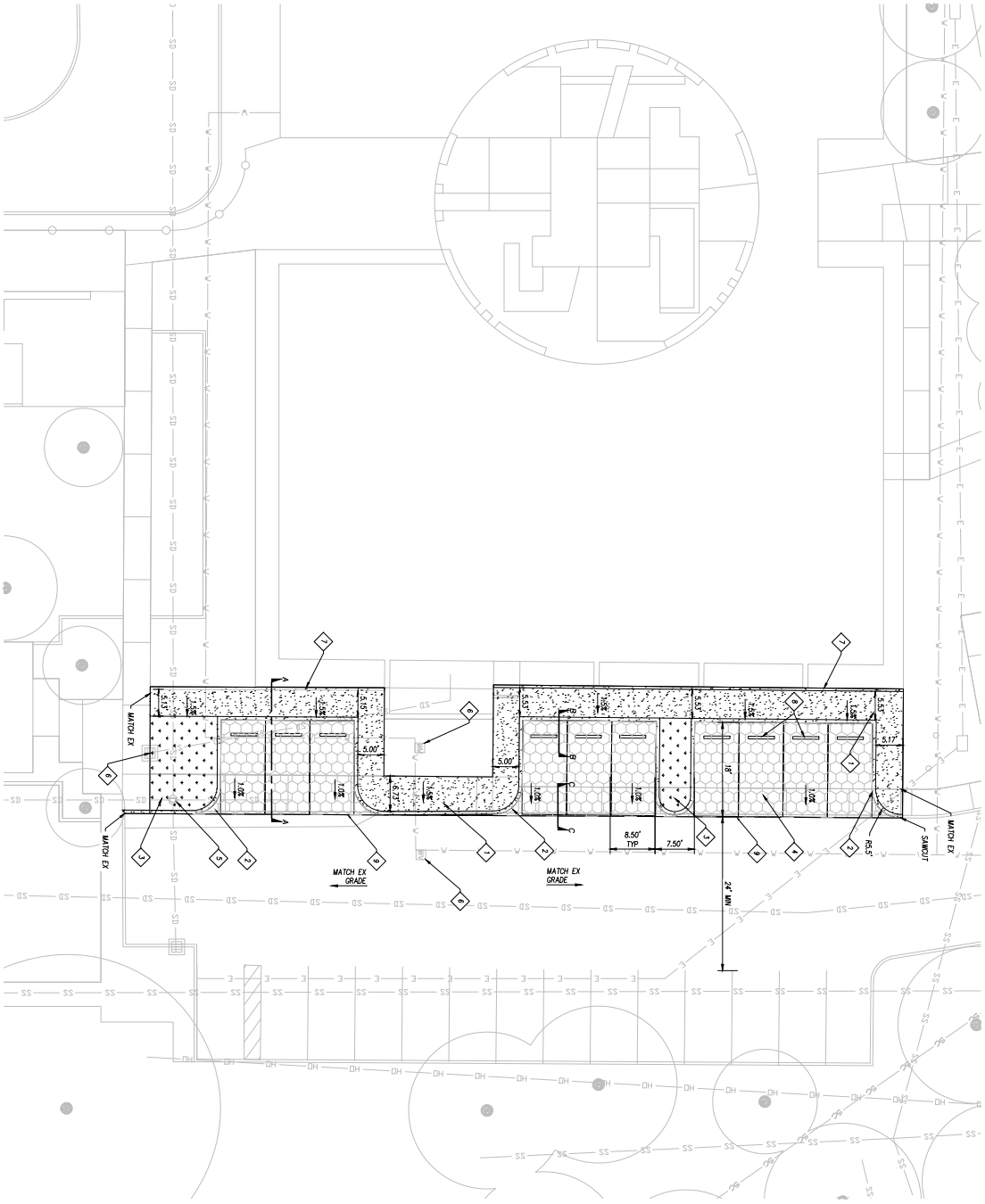
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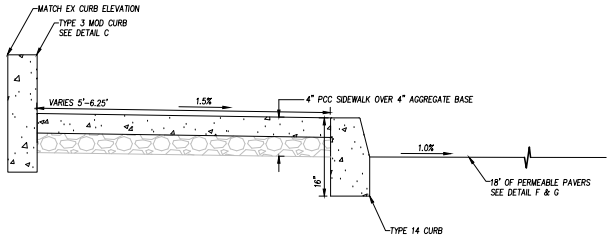
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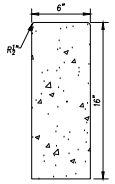
Sheet No. DT-6 of 34


MATCH EX
MATCH EX
MATCH EX GRADE
MATCH EX GRADE
8.50' TYP
7.50'
24' MIN
18'
SAWCUT
MATCH EX
5.00'
5.00'
5.15'
5.53'
5.53'
5.5'
5.17'
6.73'
1.0%
1.0%
1.0%
1.0%
1.0%
1.5%
1.5%
1.5



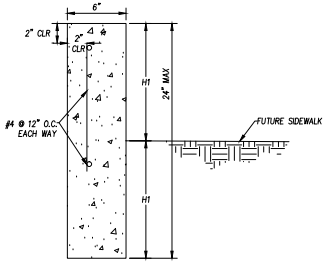
A SIDEWALK DETAIL SECTION A-A

SCALE: NO SCALE



B CONCRETE CUTOFF CURB

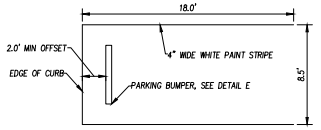
SCALE: NO SCALE



C TYPE 3 MOD CURB

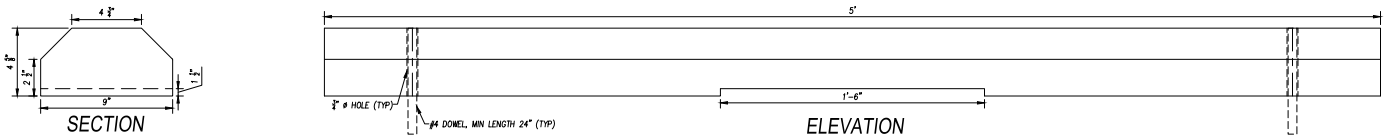
SCALE: NO SCALE

NOTES:
1. H1 = 12" MAX



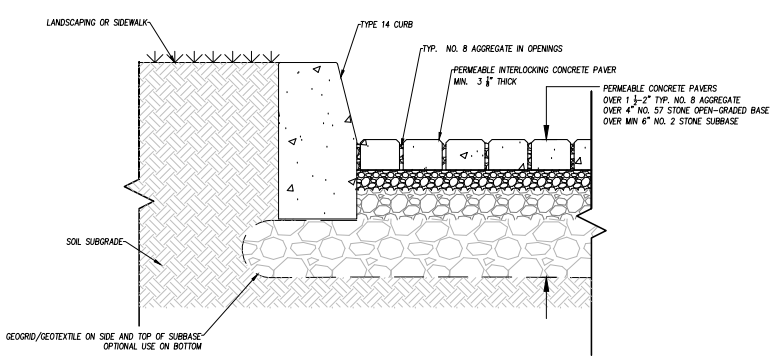
D TYPICAL PARKING STALL

SCALE: NO SCALE



E WHEEL STOP (PRECAST CONCRETE)

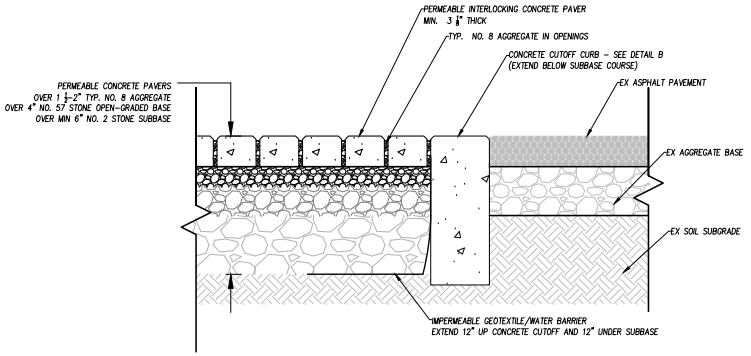
SCALE: NO SCALE



F PAVER ABUTTING CURB SECTION B-B

SCALE: NO SCALE

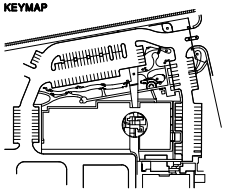
NOTES:
1. NO. 2 STONE SUBBASE THICKNESS VARIES WITH DESIGN.
2. CONSULT ICPI PERMEABILITY INTERLOCKING CONCRETE PAVEMENT MANUAL.



G PAVEMENT TRANSITION SECTION C-C

SCALE: NO SCALE

KEYMAP





100% SUBMITTAL

PARKING LOT DETAILS

DEMONSTRATION LANDSCAPE GARDEN

SACRAMENTO, CA DEPARTMENT OF UTILITIES

Bennett Engineering Services
1082 Sunrise Avenue, Suite 100
Roseville, California 95661
T 916.783.4100
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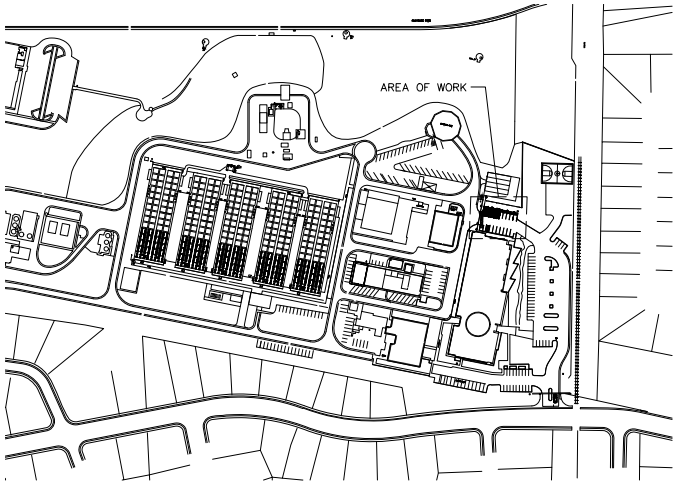
MULTIDISCIPLINARY ADVISORS

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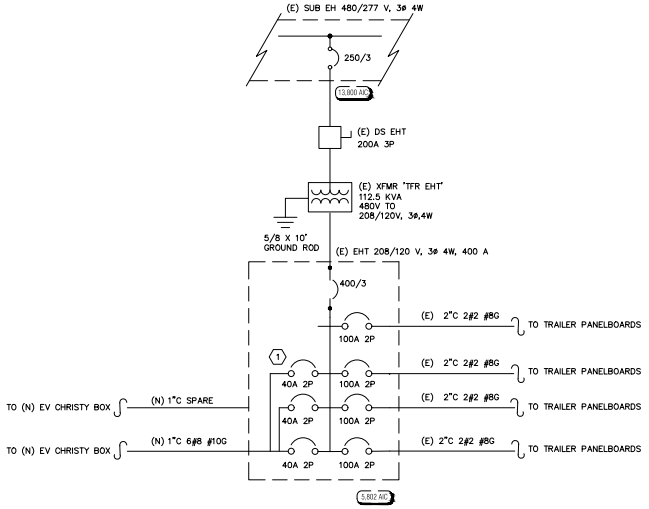
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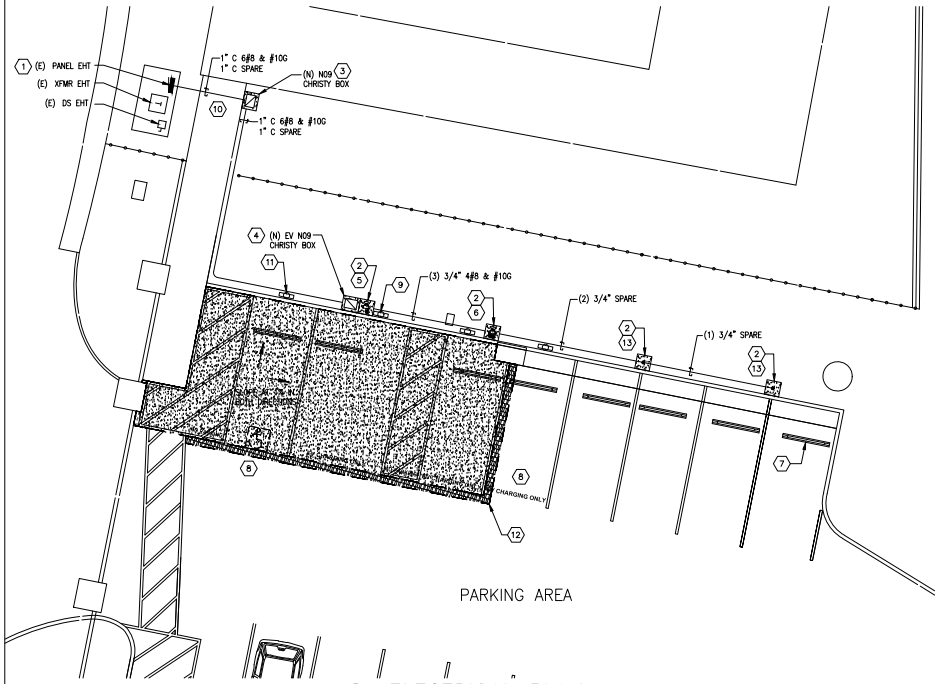
Sheet No. C-2 of 33



1 SITE PLAN
SCALE: 1/150" – 1'



2 SINGLE LINE DIAGRAM
SCALE: N/A



3 ELECTRICAL PLAN
SCALE: 1/8" – 1'

ELECTRICAL LEGEND

ABBREVIATION	DESCRIPTION
A	AMPERES
AFG	ABOVE FINISHED GRADE, TO CENTER OF FIXTURE
BC	BARE COPPER
C	CONDUIT
CU	COPPER
DEMO	DEMOLITION
DN	DOWN
(E)	EXISTING
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
G	GROUND
GFCI OR GFI	GROUND FAULT CIRCUIT INTERRUPTER
HACR	HEATING AIR CONDITIONING & REFRIGERATION
J-BOX	JUNCTION BOX
KVA	KILOVOLT AMPERE
KW	KILOWATT
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPERES
MLO	MAIN LUGS ONLY
MIN	MINIMUM
MSB	MAIN SWITCHBOARD
NL	NIGHT LIGHT, DO NOT SWITCH
POC	POINT OF CONNECTION
POD	POINT OF DISCONNECTION
RSC	RIGID STEEL CONDUIT
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
V	VOLT
WP	WEATHER PROOF

SYMBOL	DESCRIPTION
	FUSED DISCONNECT. FUSE PER EQUIPMENT MANUFACTURERS NAMEPLATE
	DUPLEX RECEPTACLE
	(E) MAIN SWITCHBOARD
	SURFACE MOUNTED PANELBOARD. MOUNT TRIM TOP 6'6" AFF UON.
	AUXILIARY PANEL, MOUNT TRIM TOP 6'6" AFF UON.
	CONDUIT BELOW FLOOR OR GRADE
	CONDUIT RUN CONCEALED IN WALL OR CEILING U.O.N.
	EXISTING CONDUIT, WIRE AND EQUIPMENT
	EXISTING CONDUIT, WIRE AND EQUIPMENT TO BE REMOVED
	HASH MARKS INDICATE NUMBER OF CONDUCTORS, CONDUCTOR ARE #12 AWG U.O.N, NO HASH MARKS=2#12 #12G
	HOME RUN TO PANEL BOARD HASH MARKS = NO. OF CONDUCTORS NO HASH MARKS = 2 #12 IN 3/4" CONDUIT, = ISOLATED GROUND
E2/H	DETAIL REFERENCE, DETAIL NUMBER/SHEET
#	KEY NOTE REFERENCE

GENERAL NOTES

THE ELECTRICAL INSTALLATION FOR THIS PROJECT SHALL CONFORM TO THE LATEST ADOPTED VERSION OF THE CEC, AS WELL AS ALL APPLICABLE LOCAL, AND STATE CODES.

DO NOT USE THIS DRAWING FOR DIMENSIONING. ALL MEASUREMENTS AND DIMENSIONS SHOULD BE FIELD VERIFIED.

ALL NEW ELECTRICAL MATERIAL SHALL BE UL OR CSA LISTED FOR THE SPECIFIC USE.

ALL WIRE TO BE COPPER, THHN/THWN-2 90 DEGREE C RATED.

CONDUIT SHALL BE PVC COATED RIGID STEEL CONDUIT.

KEY NOTES

1. PROVIDE (7) NEW 40A/2POLE, SQUARE D QO BREAKERS, 10KA RATED IN PANEL BOARD EHT FOR NEW ELECTRIC VEHICLE CHARGERS. REFER TO SINGLE LINE #1/E001 AND PANEL SCHEDULE PAGE E002.
2. PROVIDE (4) 24"X24"X24" CONCRETE BASE FOR EV CHARGERS. REFER TO DETAIL #3/E002.
3. PROVIDE NEW N09 CHRISTY BOX WITH BOLT DOWN R-SERIES COVER. BUILD 4" CONCRETE LIP AROUND PERIMETER. PROVIDE 1" CONDUIT FROM PANEL EHT, PULL 6#8 & #10G, AND PROVIDE 1" SPARE FOR FUTURE EV EXPANSION. REFER TO DETAIL #2/E002 AND #4/E002.
4. PROVIDE NEW EV N09 CHRISTY BOX WITH BOLT DOWN R-SERIES COVER. BUILD 4" CONCRETE LIP AROUND PERIMETER. PROVIDE 1" CONDUIT FROM NEW CHRISTY BOX, PULL 6#8 & 10G, AND PROVIDE 1" SPARE CONDUIT FOR FUTURE EV EXPANSION. REFER TO DETAIL #2/E002 AND #4/E002.
5. PROVIDE (1) NEW CHARGEPOINT CT4011-GW1 GATEWAY 6' BOLLARD MOUNTED SINGLE EV CHARGER. PROVIDE 3/4" CONDUIT FROM NEW EV CHRISTY BOX TO CENTER OF EACH EV BASE, AND PULL 2#8 & #10G. REFER TO DETAIL #3/E002 AND #4/E002..
6. PROVIDE (1) NEW CHARGEPOINT CT4025 8' BOLLARD MOUNTED DUAL EV CHARGER. PROVIDE 3/4" CONDUIT FROM NEW EV CHRISTY BOX TO CENTER OF EV BASE, AND PULL 4#8 & #10G. REFER TO DETAIL #3/E002 AND #4/E002.
7. PROVIDE (8) 6' PRECAST WHEELSTOP, JENSEN PRECAST S-72 OR EQUAL. DRILL AND DOWEL INTO EXISTING PAVEMENT FOR ALL NEW PARKING SPACES. REFER TO DETAIL #1/E002.
8. STRIPE NEW PARKING SPACES, NEW 5' WIDE ACCESSIBLE PATH, AND RESTRIPE EXISTING ACCESSIBLE PATH. APPLY "NO PARKING", "EV CHARGING ONLY", AND NEW INTERNATIONAL SYMBOL OF ACCESSIBILITY. REFER TO DETAIL #1/E002.
9. PROVIDE (3) "4 HOUR CHARGING EV PARKING ONLY" SIGNS MOUNTED ON POLES 80" ABOVE PARKING GRADE. REFER TO DETAIL #7/E002. PROVIDE VAN ACCESSIBLE SIGN WHERE APPLICABLE.
10. UNDERMINE EXISTING WALKWAY TO RUN CONDUIT TO NEW PULL BOX. REFER TO DETAIL #4/E002.
11. PROVIDE (1) NEW 70" SQ. INTERNATIONAL SYMBOL OF ACCESSIBILITY POLE MOUNTED SIGN POSTED AT A MINIMUM HEIGHT OF 80 INCHES FROM THE BOTTOM OF THE SIGN TO THE PARKING SPACE FINISH GRADE. REFER TO DETAIL #7/E002.
12. SAW CUT AND REMOVE EXISTING ASPHALT AND CONCRETE BELOW ADA PARKING SPACES, ACCESSIBLE PARKING SPACES, ACCESS AISLE AND EXISTING GUTTER AS SHOWN ON PLANS. PROVIDE 6" OF AB BELOW 6" OF 2500PSI RATED CONCRETE. PROVED WELDED WIRE FABRIC W4.0 x W4.0, 3" FROM EDGE IN ALL DIRECTIONS. PROVIDE 1' DEEP THICKENED EDGE 1' AROUND PERIMETER. PROVIDE ASPHALT TO TRANSITION NEW CONCRETE TO EXISTING ASPHALT WITH A MAXIMUM OF 5% SLOPE IN ANY DIRECTION. REFER TO DETAIL #8/E002.
13. CAP 3/4" SPARE CONDUIT INTO CENTER OF EV BASE FOR FUTURE CHARGER.

ALTERNATE: PROVIDE CHARGEPOINT CT4025 8' BOLLARD MOUNTED DUAL EV CHARGER. PROVIDE 4#8 & #10G BACK TO PANEL EHT AND CONNECT TO (2) 40A "SPARE" BREAKERS. REFER TO DETAIL #3/E002 AND #4/E002. PROVIDE "4 HOUR CHARGING EV PARKING ONLY" SIGNS MOUNTED ON POLES 80" ABOVE PARKING GRADE. REFER TO DETAIL #7/E002. APPLY "EV CHARGING ONLY" TO PARKING SPACES, REFER TO DETAIL #1/E002.

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(916) 808-8337 (Fax)
www.cityofsacramento.org

Approval:

Revisions / Issuances

No.	Description	Date.

Project Name & Location:
CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES
EMPLOYEE EVCS
1391 35TH AVENUE, SACRAMENTO

Public Works

Issue Date:

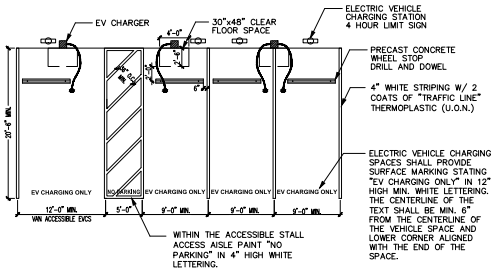
Sheet Title:

ELECTRICAL SITE PLAN

Designed By: B.A	Work Order No:
Drawn By: B.A	Sheet No: E-001
Reviewed By: J.G	1 OF 2
Sheet Scale: AS NOTED	

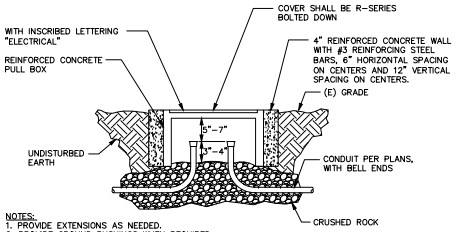
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1 EVCS SURFACE MARKINGS DETAIL

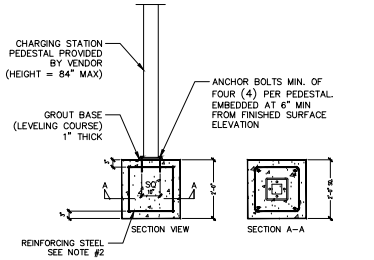
SCALE: NONE



NOTES:
1. PROVIDE EXTENSIONS AS NEEDED.
2. PROVIDE GROUND BUSHINGS WHEN REQUIRED.
3. PROVIDE 6" OF CRUSHED ROCK BELOW THE BOX.
4. INSTALL TOP CO BOX 1/4" ABOVE CONCRETE COLLAR. INSTALL TOP OF CONCRETE COLLAR 2" ABOVE GRADE IN LANDSCAPE AREAS. IN OTHER AREAS VERIFY MOUNTING PRIOR TO INSTALLATION.
5. INSTALL TOP OF CONDUITS 3 TO 4 INCHES ABOVE THE CRUSHED ROCK, AND 5 TO 7 INCHES BELOW THE COVER. (THESE ARE MIN AND MAX DIMENSIONS)
6. PULL BOX AND COVER TO BE CHRISTY TRAFFIC RATED BOX AND LID, B1017, B1324, B1730, B2436 OR B3048 AS REQUIRED OR AS SPECIFIED ON THE PLANS.

2 PULL BOX DETAIL

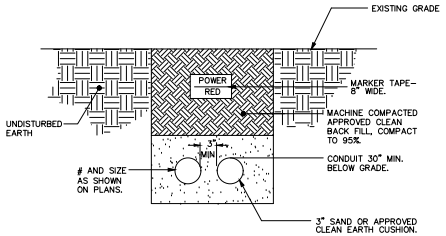
SCALE: N/A



GENERAL NOTES:
1. CONCRETE: MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI. CONCRETE SHALL BE IN COMPLIANCE WITH CHAPTER 1 9A (CONCRETE) OF THE CBC AND ACI 318. CONCRETE SHALL BE PLACED TO PROVIDE POSITIVE DRAINAGE WAY FROM THE FOOTING. NO PONDING IS PERMITTED.
2. REINFORCING STEEL: REINFORCING STEEL SHALL BE #6 (ASTM A615 GR.60) BARS MINIMUM AND SHALL MEET ACI 318, SECTION 7.5
3. ANCHOR BOLTS: ANCHOR BOLTS SHALL BE 1/2" IN DIAMETER AND EQUAL IN ALLOWABLE SERVICE LOAD TO ASTM F1554 GR. 36 HE-HEAD BOLTS ALL BOLTS SHALL BE EMBEDDED TYPE WITH A MINIMUM EMBEDMENT OF 6".

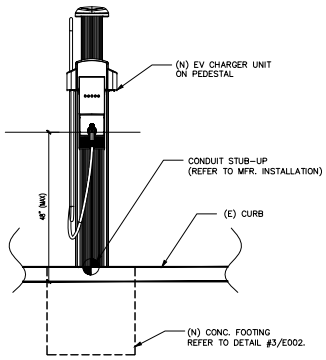
3 EVCS BASE DETAIL

SCALE: N/A



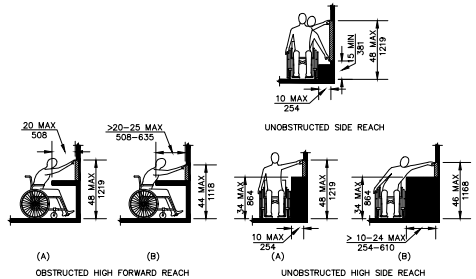
4 TRENCH DETAIL

SCALE: NONE



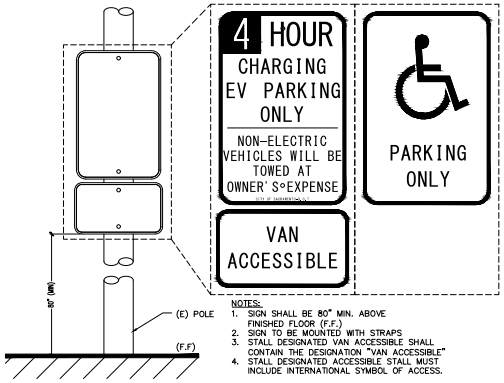
5 CHARGER ELEVATION

SCALE: NONE



6 UNOBSTRUCTED FORWARD / SIDE / HIGH REACH

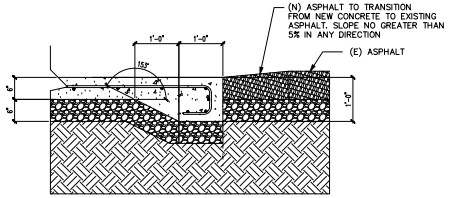
SCALE: N/A



NOTES:
1. SIGN SHALL BE 80" MIN. ABOVE FINISHED FLOOR (F.F.)
2. SIGN TO BE MOUNTED WITH STRAPS
3. STALL DESIGNATED VAN ACCESSIBLE SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE"
4. STALL DESIGNATED ACCESSIBLE STALL MUST INCLUDE INTERNATIONAL SYMBOL OF ACCESS.

7 SIGN DETAIL

SCALE: NONE



8 THICKEND EDGE

SCALE: NONE

LOAD CALCULATION:

THE EXISTING LOAD IS CALCULATED AT 55KW. WITH A PF OF 0.9 = 61KVA OR 170 AMPS AT 208V. THE EXISTING TRANSFORMER AND PANEL EHT ARE SUFFICIENT IN CAPACITY WITH THE ADDITIONAL 75 AMPS PER PHASE AT 208V.

PANEL EHT

120/208 VOLT, 3 PHASE, 4 WIRE		BUS:400 AMPERE
TYPE: NEMA 3R	MOUNTING TRIM: SURFACE	MAIN: 400 CB
LOCATION: SEE DRAWINGS		AIC: 10,000

CKT. NO.	LOAD DESCRIPTION	KVA	CKT BKR	P	PHASE A	PHASE B	PHASE C	CKT BKR	P	KVA	LOAD DESCRIPTION	CKT. NO.
1	PANEL A	9.0	100	2	X			40	2		(N) SPARE	2
3	"	9.0	100	-		X		40	-		"	4
5	PANEL B	9.0	100	2			X	40	2		(N) SPARE	6
7	"	9.0	100	-	X			40	-		"	8
9	PANEL C	9.0	100	2		X		40	2		(N) SPARE	10
11	"	9.0	100	-			X	40	-		"	12
13	PANEL D	3.5	100	2	X			40	2		(N) SPARE	14
15	"	3.5	100	-		X		40	-		"	16
17	(N) EV CHARGER	3.6	40	2			X				SPACE	18
19	"	3.6	40	-	X						"	20
21	(N) EV CHARGER	3.6	40	2		X					"	22
23	"	3.6	40	-			X				"	24
25	(N) EV CHARGER	3.6	40	2	X						"	26
27	"	3.6	40	-		X					"	28
29	SPACE						X				"	30
	TOTAL PHASE A	28.7	KVA		CONNECTED LOAD:			82.6				
	TOTAL PHASE B	28.7	KVA		25% CONTINOUS:			5.4				
	TOTAL PHASE C	25.2	KVA		25% LARGEST MOTOR:			0.0				
					DEMAND LOAD:			88.0				
					AMPERES @ 208V:			244.4				

NOTE:

FUTURE EV WILL REQUIRE PANEL METERING FOR MORE PRECISE LOAD ANALYSIS ON EXISTING PANEL AND TRANSFORMER.

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CITY OF SACRAMENTO
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1391 35TH AVENUE, SACRAMENTO

Public Works

Issue Date:

Sheet Title:

ELECTRICAL DETAILS

Designed By:	Work Order No:
B.A	
Drawn By:	Sheet No:
B.A	E-002
Reviewed By:	
J.G	2 OF 2
Sheet Scale:	
AS NOTED	

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DEMONSTRATION LANDSCAPE GARDEN

MAINTENANCE MANUAL

08/20/2020

City of Sacramento
Department of Utilities
1395 35th Avenue
Sacramento, CA

CALA

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GRASSY SWALE & STORMWATER PLANTINGS

GENERAL:

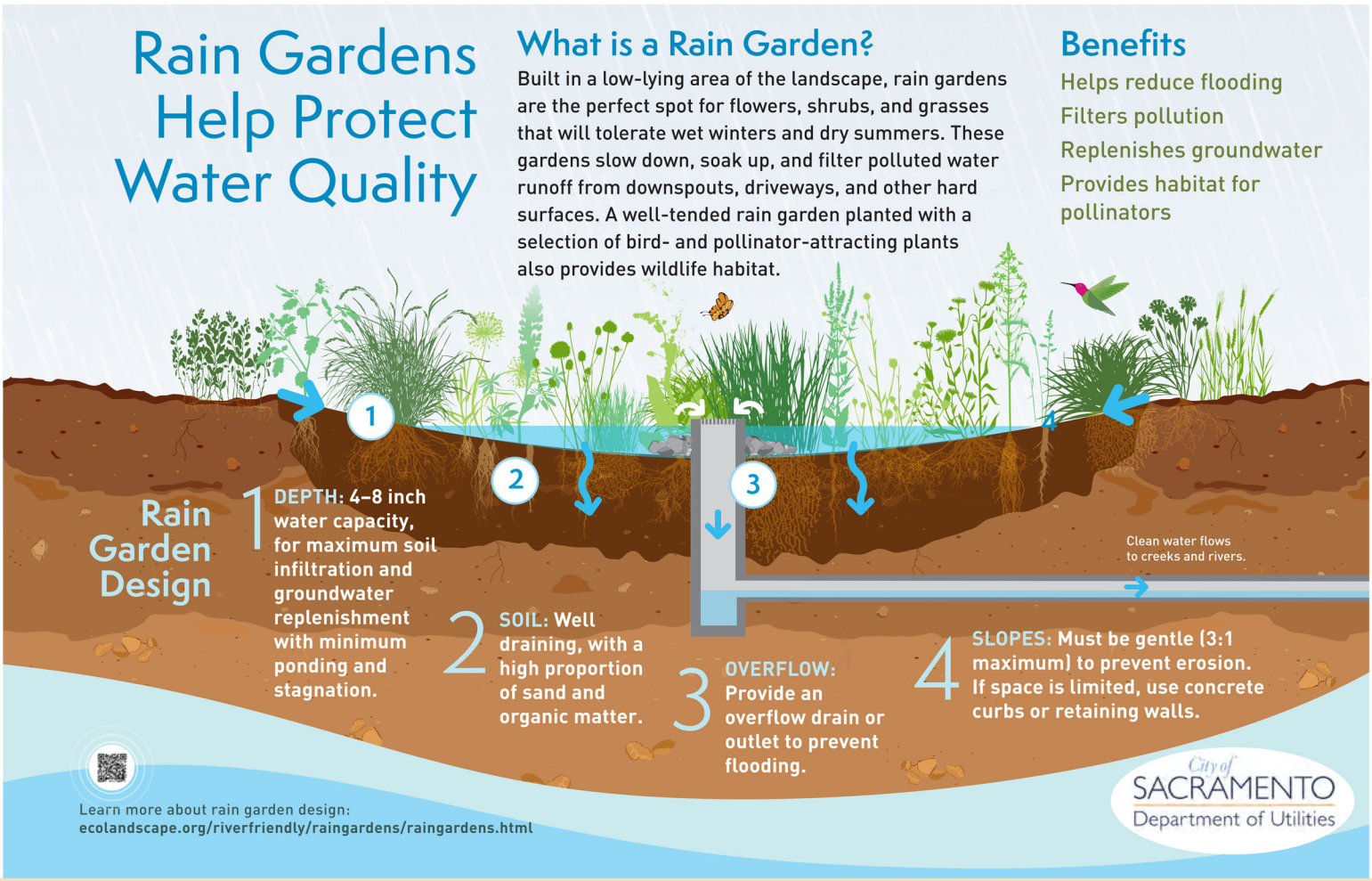
- Recommended watering levels in the Irrigation Controller Schedule (Pg. 11) are a baseline, areas with higher sun exposure or periods of extreme heat may require additional watering
- Inspect swale for obstruction and pools of standing water
- Remove trash and debris from the swale as needed, especially at the outlet
- Remove filter fabric from drain inlet once plants are established
- Use IPM techniques as needed to minimize use of fertilizers, pesticides, and herbicides
- Periodic hand weeding and thinning

PERENNIAL POLYCULTURE MIXES:

- Replant as necessary to achieve desired density (assume 10% loss of initial plantings after first growing season; **approximately 80 SF replacement needed**)
- Weed Bi-weekly in wet season and Bi-monthly in dry season
- Scissor prune in early fall, without removing more than 1/3 of total plant height

NO-MOW SOD:

- Prune 1-2x a year, without removing more than 1/3 of total plant height (string trimmer/weed eater okay, otherwise scissor prune)
- Repair, seed, or re-plant damaged areas immediately



Interpretative Sign 1: Rain Gardens, By CALA for The City of Sacramento Department of Utilities

Table VS-2. Inspection and Maintenance Recommendations for Vegetated Swales

Activity	Schedule
Use integrated pest management (IPM) techniques to minimize use of fertilizers, pesticides and herbicides.	As needed.
Remove trash and debris from the swale (especially at the outlet)	As needed.
Inspect swale for signs of erosion, vegetation damage/coverage, channelization problems, debris build-up and excessive sedimentation in bottom of channel. Correct problems (e.g., remove sediment or stabilize, re-seed eroded areas) as soon as possible.	At least twice annually. Schedule one inspection at the end of the wet season so that summer maintenance can be scheduled to prepare swale for wet season. Additional inspections after periods of heavy runoff are desirable.
Remove sediment in inlet areas, channel, culverts, and outlets whenever flow into the swale is retarded or blocked.	As needed.
Repair ruts or holes in the channel by removing vegetation, adding and tamping suitable soil, and reseeding. Replace damaged vegetation.	As needed.
Inspect swale for obstructions (e.g., debris accumulation, invasive vegetation) and pools of standing water that can provide mosquito breeding habitat. Correct observed problems as soon as possible.	At least twice during the wet season after significant storms. Additional inspections after periods of heavy runoff are desirable.
Reconstruct or replace the control measure when it is no longer functioning properly.	See projected lifespan in Appendix B for informational purposes.

Table from "Sacramento Region Stormwater Quality Design Manual", see Appendix D

LAWN & LAWN SUBSTITUTES

GENERAL:

- Recommended watering levels in the Irrigation Controller Schedule (Pg. 11) are a baseline, this area experiences a lot of reflective heat, periods of extreme heat may require additional watering
- Annual soil analysis of planting areas
- Mower blades need to be sharpened at least 1x/year

KURAPIA:

- Water between 6am and 10am, every other day for the first year (until June 1, 2021), switch to every third day after June 1, 2021
- Fertilize once a year in spring with a complete N-P-K fertilizer at a rate of 1/2 lb. of N per 1000 sf
- Does not require trimming if natural groundcover look is desired. Can be mowed 1xmonth. Never remove more than 1/3rd of top growth

UC VERDE BUFFALOGRASS:

- Water before 6am, every other day for the first year (until June 1, 2021), switch to every third day after June 1, 2021
- Apply 2-3 lbs. of N per 1000 sf annually. Best when divided into 5 fertilizations during the growing season
- Mow to keep height approximately 4"

TALL FESCUE BLEND:

- Water before 6am
- Mow 1x/week to a height of 2-1/2", year round
- Mower blades need to be wiped clean prior to each mowing
- Aerate area once a year during the month of March with a coring tine
- Renovate as necessary to retain healthy, growing condition



UC Verde Buffalograss



Kurapia



Interpretative Sign 2: Water-Wise Turf, By CALA for The City of Sacramento Department of Utilities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TIME EXPENDURE IN HOURS	NO. OF PERSONNEL PER VISIT
THINNING/MOWING														
KURAPIA	Y												0.5	1
BUFFALOGRASS				Q			Q			Q			0.5	1
TALL FESCUE BLEND	W	W	W	W	W	W	W	W	W	W	W	W	0.5	1
FERTILIZATION														
KURAPIA			Y										1	1
BUFFALOGRASS			Y										1	1
TALL FESCUE BLEND			Y										1	1
WEED CONTROL														
HERBICIDE APPLICATION				Q			Q			Q			1	1
HAND WEEDING	BW	BW	BW	BW	BM		BM		BM	BW	BW	BW	1	1
PEST CONTROL														
PESTICIDE APPLICATION				Q			Q			Q			1	1
DEBRIS														
VISUAL INSPECTION	W	W	W	W	W	W	W	W	W	W	W	W	0.5	1
COLLECTION	W	W	W	W	W	W	W	W	W	W	W	W	0.5	1

Table: Inspection and Maintenance Recommendations for Lawn and Lawn Substitutes

NATIVE PLANTS & TREES

GENERAL:

- The soil analysis dated August 30, 2016 indicates a high clay and silt content with a strong potential for issues with slow drainage and high water holding capacity
- If plants are showing signs of stress, check moisture levels of representative plants to establish a need for watering by removing mulch layer around plant, digging approximately 6" into soil to see if it smells musty (over-watering) or is dry (under-watering). Recommended watering levels in the Irrigation Controller Schedule (Pg. 11) are a baseline, let the observed need for watering dictate the frequency of operation of the irrigation system
- Recommended organic fertilizer rates can be reduced to half strength for native plants
- Regularly remove dead material and branches from all plants. No hedge trimming or shearing of native plants
- Existing trees shall be reviewed 1x/year by an arborist for checkup and pruning recommendations

NATIVE PLANTS: FIRST FULL DRY SEASON

- Water deeply 1x every 1-2 weeks (1.5" - 2" of water)
- Supplemental, shallow overhead waterings encouraged in between waterings (3-4x/month)
- Very little initial pruning is required in establishment phase; Fast growing plants can be dead-headed after flowering
- Ceanothus is a good indicator species for signs of over-watering, how do they look?

NATIVE PLANTS: YEAR 2 - ONGOING

- Water deeply 1x per month (1.5" - 2" of water)
- Ideally, CYCLE/SOAK or PULSE 3 days in a row for total of 1.5" - 2" of water
- Supplemental, shallow overhead waterings still encouraged, depending on soil moisture readings
- Deadhead spent flowers
- Remove dead growth as needed, cutting back to live wood
- Baccharis can be coppiced every 3-4 winters

TREES:

- Water deeply to establish moisture to the full depth of the root zone
- Prune, yearly, to develop and enhance permanent scaffold branches that are smaller than the trunk or the branch they are attached to
- Prune to correct damage from wind as needed



Leymus condensatus 'Canyon Prince'



Foreground: Epilobium canum
Back: Grassy swale planting

NATIVE PLANT REPLACEMENT: ASSUME 10% LOSS AFTER FIRST GROWING SEASON

1 GAL REPLACEMENT:
1334 x 10% = ***134 plants***
5 GAL REPLACEMENT:
163 x 10% = ***17 plants***

MULCH REPLACEMENT: ASSUME 50% OF ORIGINAL APPLICATION EVERY 3RD YEAR

26,695 S.F. x .5 = ***13,350 S.F. replaced every 3rd year***



Interperative Sign 3: California Native Planting, By CALA for The City of Sacramento Department of Utilities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TIME EXPENDURE IN HOURS	NO. OF PERSONNEL PER VISIT
PRUNING														
TREES	Y												4	2
SHRUBS				Q			Q			Q			2	2
GROUNDCOVER				Q			Q			Q			2	2
FERTILIZATION														
APPLICATION			Y										8	1
SOILS ANALYSIS			Y										2	1
WEED/PEST CONTROL														
PESTICIDE APPLICATION			Y										4	1
HERBICIDE APPLICATION			Y										4	1
HAND WEEDING	BW	BW	BW	BW	BM		BM		BM	BW	BW	BW		
DEBRIS														
VISUAL INSPECTION	W	W	W	W	W	W	W	W	W	W	W	W	0.5	1
COLLECTION	W	W	W	W	W	W	W	W	W	W	W	W	0.5	1

Y - YEARLY Q - QUARTERLY M - MONTHLY W - WEEKLY BM - BIMONTHLY BW - BIWEEKLY

Table: Inspection and Maintenance Reccomendations for Native Plants and Trees

STORMWATER FACILITIES

STORMWATER CISTERN:

- Never fill the cistern unless all accessory flanges and exterior pipes have adequate support
- Manufacturer recommends performing an exterior review every 6 months to inspect the foundation, tank walls, roof, and tank interior through the inspection hatch - see Appendix C for further instruction
- Water running down building walls (or evidence that water was running down wall) is a sign that downspout maybe clogged, promptly inspect and fix
- WISY filter is to be cleaned every 3 months



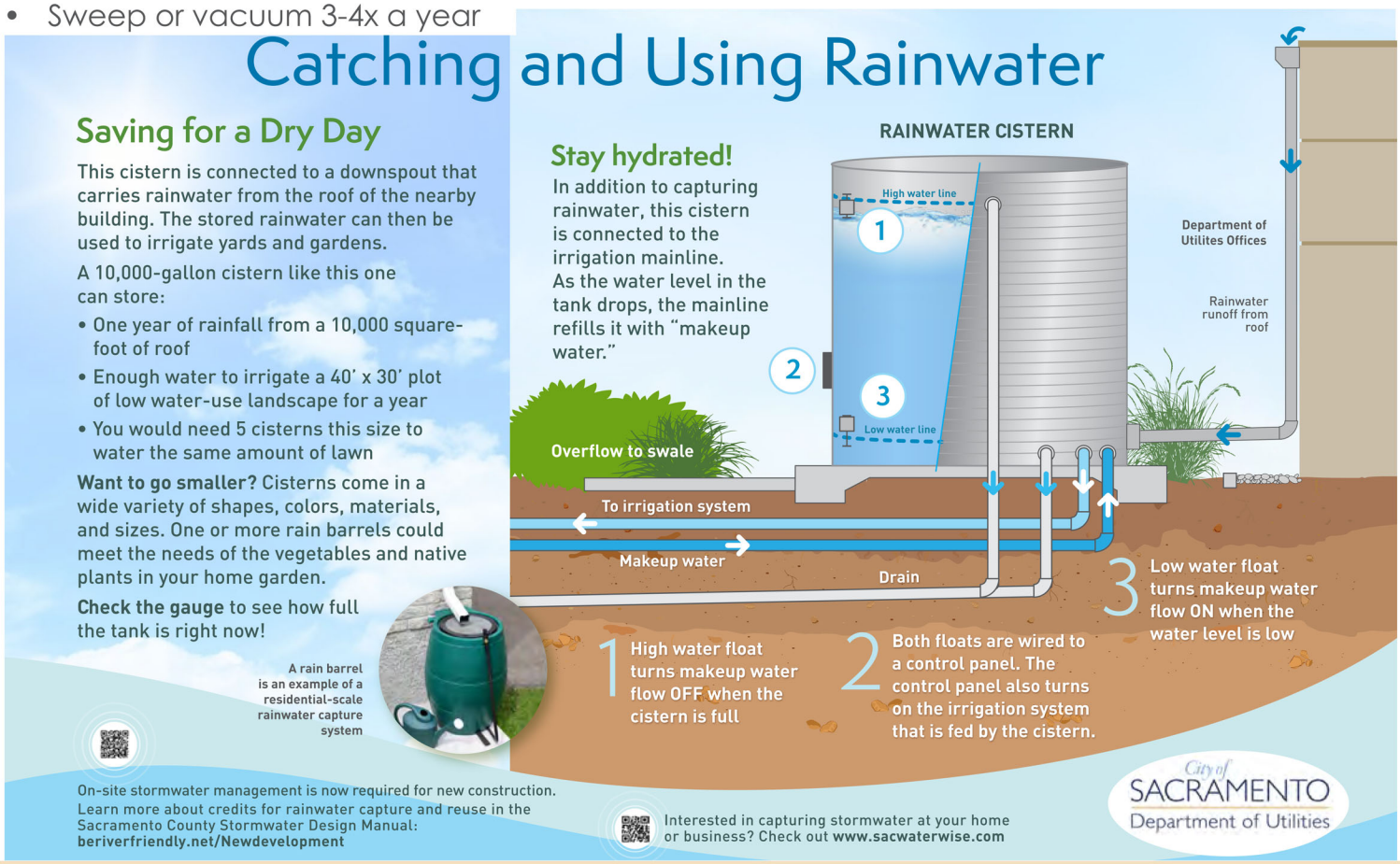
Stormwater Cistern

SAND FILTER:

- Periodically remove debris and sediment from sedimentation basin and surface of filtration basin
- Replace sand layer in filtration basin when filtration capacity is diminished

PERVIOUS CONCRETE PAVERS:

- Regularly inspect the surface and keep it clean and free of leaves, debris, and sediment
- Sweep or vacuum 3-4x a year



Interperative Sign 4: Stormwater Cistern, By CALA for The City of Sacramento Department of Utilities

Table SF-3. Inspection and Maintenance Recommendations for Sand Filters

Activity	Schedule
Remove trash and debris collected in the sedimentation basin inlet area to maintain the inflow capacity of the sand filter and avoid bypassing of the unit.	Before significant storm events during wet season (October 1 – April 30)
Remove cover grates or precast lids on the sedimentation basin and inspect to determine if the system is functioning properly. Inspect for standing water, sediment, grass/vegetative debris, and trash on the trash racks at the outlet pipe or elsewhere in the unit. Schedule removal of observed materials and correct any other observed problems. Sediment removal should be scheduled when the sediment occupies 10 percent of the basin volume.	Inspect quarterly during first year of operation; semiannually after first year of operation Maintain as needed based on observations
Inspect sediment trap (if applicable) and clean when full.	Same as above
Inspect the facility after large rain events to determine whether the facility is draining completely within 48 hours. Look for discoloration of the filter, which may be an indication of clogging.	At least once during the wet season (October 1 – April 30)
If drawdown time exceeds 48 hours, remove top two inches of sand. Restore sand layer depth to 18 inches when overall depth drops to 12 inches.	As required.
Add maintenance recommendations/methods for geotextile fabric, gravel bed, underdrains, as needed.	As needed.
Dispose of sand, gravel, or filter fabric contaminated with petroleum hydrocarbons in accordance with all applicable laws.	As required.
Reconstruct or replace the control measure when it is no longer functioning properly.	See projected lifespan in Appendix B for informational purposes.



↑ *Table from "Sacramento Region Stormwater Quality Design Manual", see Appendix D*

← *Car parked over pervious concrete pavers*



Interpretative Sign 5: Sand Filter, By CALA for The City of Sacramento Department of Utilities

Table PP-2. Inspection and Maintenance Recommendations for Porous Pavement

Surface Maintenance	▪ Keep the surface clean and free of leaves, debris, and sediment, and do not replace or cover it with an impermeable paving surface. ▪ Regularly sweep or vacuum pervious concrete and asphalt, modular block pavement, or cobblestone block pavement (typically three to four times per year). ▪ Do not store loose material such as bark or sand on porous pavement.
Vector Control	▪ Eliminate any standing water at the surface, since that provides an environment for insect larvae. ▪ If sprays are considered, then use a licensed pest controller to apply an approved mosquito larvicide.
Maintenance of Reinforcement Products	▪ Where reinforcement products are used to stabilize grass or gravel, replace individual grid sections when they become damaged.
Manufacturer's Recommendations	▪ For manufactured products, follow manufacturer's maintenance recommendations.
Replacement	▪ Reconstruct or replace when it is no longer functioning properly (see project lifespan in Appendix B for informational purposes).

Table from "Sacramento Region Stormwater Quality Design Manual", see Appendix D

IRRIGATION

GENERAL:

- The soil analysis dated August 30, 2016 indicates a high clay and silt content with a strong potential for issues with slow drainage and high water holding capacity - the irrigation system should be set accordingly
- Valves associated with subsurface drip areas will need to be flushed, along with all drip lines, at least 1x/year at the beginning of the irrigation season

VISUAL INSPECTION/MONITORING:

- Weekly inspection is recommended to look for dead or dying plants, erosion, standing water, and other signs of failure

SYSTEM TESTING:

- Monthly testing of the entire system is recommended
- Check Irrigation Controllers to see that power is still on, the proper time is set for each station, and the backup battery is functioning
- Check Valve Boxes to look for standing water
- Check Mainline and Lateral lines for breakage by looking for erosion

SEASONAL ADJUSTMENT:

- Adjust the watering schedule on the irrigation controller seasonally
- The Irrigation Controller Schedule (Pg. 11) shows the recommended watering schedule for automatic irrigation systems in normal rainfall seasons - adjustments will need to be made depending on moisture test results, periods of excess drought, and prolonged rains.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TIME EXPENDURE IN HOURS	NO. OF PERSONNEL PER VISIT
IRRIGATION														
VISUAL INSPECTION			W	W	W	W	W	W	W	W	W		0.5	1
TEST CLOCK			M	M	M	M	M	M	M	M	M		1	1
SEASONAL ADJUSTMENT			Q				Q				Q		0.5	1
WATER AUDIT			Y										16	2
PRESSURE TESTING										Y			0.5	1
REPAIR			Q				Q				Q			

Y - YEARLY Q - QUARTERLY M - MONTHLY W - WEEKLY BM - BIMONTHLY BW - BIWEEKLY

Table: Inspection and Maintenance Recommendations for Irrigation Systems

IRRIGATION

Valve No.	Description	Precip Rate	Irrigation Method	Irrigation Efficiency	Plant Water Use	Plant Factor	Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
							ETo	1.0	1.8	3.2	4.7	6.4	7.7	8.4	7.2	5.4	3.7	1.7	0.9	51.9
A2, A4, A5, A6, A9, A10, A11, A12, A15, A18, A19, A25, A26, B1	Shrubs and Groundcover	0.29	Drip	0.81	Low	0.2	Run Time per Cycle (Minutes)	3	6	10	15	20	24	26	22	17	11	5	3	
							Cycles per Day	1	1	1	2	2	3	3	3	2	1	1	1	
							Days per Month	1	2	3	4	5	6	7	6	5	3	1	1	
							Total Minutes	3	12	30	120	200	432	546	396	170	33	5	3	
							Total Gallons	228	912	2,280	9,120	15,200	32,832	41,496	30,096	12,920	2,508	380	228	148,200
B6	Turf Substitute	0.83	Wrapped Drip	0.81	Low	0.2	Run Time per Cycle (Minutes)	1	2	3	5	7	8	9	8	6	4	2	1	
							Cycles per Day	1	1	1	2	2	3	3	3	2	1	1	1	
							Days per Month	1	2	3	4	5	6	7	6	5	3	1	1	
							Total Minutes	1	4	9	40	70	144	189	144	60	12	2	1	
							Total Gallons	6	24	54	240	420	864	1,134	864	360	72	12	6	4,056
A7, A7, A17, B5	Grass Plugs	0.29	Drip	0.81	Med	0.5	Run Time per Cycle (Minutes)	3	6	10	15	20	24	26	22	17	11	5	3	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	3	5	7	10	12	13	11	8	6	3	1	
							Total Minutes	6	18	100	210	600	1,152	1,352	726	408	132	15	3	
							Total Gallons	54	162	900	1,890	5,400	10,368	12,168	6,534	3,672	1,188	135	27	42,498
B3	Turf Substitute	0.29	SS Drip (Rainbird)	0.81	Med	0.5	Run Time per Cycle (Minutes)	3	6	10	15	20	24	26	22	17	11	5	3	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	3	5	7	10	12	13	11	8	6	3	1	
							Total Minutes	6	18	100	210	600	1,152	1,352	726	408	132	15	3	
							Total Gallons	6	18	100	210	600	1,152	1,352	726	408	132	15	3	4,722
B4	Turf Substitute	0.36	SS Drip (Toro)	0.81	Med	0.5	Run Time per Cycle (Minutes)	3	5	8	12	17	20	22	19	14	10	4	2	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	3	5	7	10	12	13	11	8	6	3	1	
							Total Minutes	6	15	80	168	510	960	1,144	627	336	120	12	2	
							Total Gallons	6	15	80	168	510	960	1,144	627	336	120	12	2	3,980
B2	Turf	0.39	Rotary Spray	0.75	High	0.8	Run Time per Cycle (Minutes)	2	4	8	11	15	18	20	17	13	9	4	2	
							Cycles per Day	1	1	2	2	3	4	4	3	3	2	1	1	
							Days per Month	2	4	7	11	14	17	19	16	12	8	4	2	
							Total Minutes	4	16	112	242	630	1,224	1,520	816	468	144	16	4	
							Total Gallons	28	112	784	1,694	4,410	8,568	10,640	5,712	3,276	1,008	112	28	36,372

Table: Irrigation Controller Schedule, see Appendix A

CWSI

CONTAIN WATER SYSTEMS INC.

ENGINEERING / CONSTRUCTION / MANUFACTURING
WWW.CONTAINWATERSYSTEMS.COM

CONTAIN WATER SYSTEMS INC. WATER TANK OPERATION MANUAL.

Congratulations on purchasing a Contain Water Systems Inc. water storage tank. We pride ourselves on supplying the highest quality water storage tanks available today.

This user manual will identify the do-s / don'ts of your water storage tank, to ensure your warranty remains intact and that the tank functions to your expectations for many years to come.

Contain Water Systems Inc. Motto is "building relationships as strong as steel" this means we want you to be happy with your water storage tank. Therefore, we encourage you to call us anytime regarding the do's and don'ts for usage with your new water storage tank. 1855-H20-Tank.

Being a new owner of a Contain Water Systems Inc. water tank, you may already know the current status of your water tank warranty activation. If you do not know the current status of your water tank warranty activation please call us anytime. 1855-H20-Tank.

Your warranty is not active if you have not completed the following:

Upon the completion of a water storage tank installation it is required that the client immediately provide water for a leak test inspection. The client is responsible for providing water twice, (if required), in amounts equal (each fill), to 80% of the tanks capacity.

QUOTES@CONTAINWATERSYSTEMS.COM

CONTAIN WATER SYSTEMS

1-855-H2O-TANK

CONTAIN WATER SYSTEMS

If water is not available on the jobsite to complete this leak test inspection than the user has two options too choose from to engage there warranty:

A) Hire Contain Water Systems Inc. to mobilize back to site, (on the next available booking date), to perform this inspection.

B) Our clients are authorized to fill the tanks for the first time on their own and report any problems to Contain Water Systems Inc. upon the completion of filling.

Option A = $2,400.00 USD Remobilization fee. Client must supply the required amount of water (80% of the tanks capacity), into the tank in a period of two days (2 @ 10 hour days). If this is not completed we will charge an additional $1,200.00 per day standby fees. Contain Water Systems Inc. at its sole discretion has the ability to leave the project location permanently and request a second mobilization fee if the tank is not completed its initial fill test after a 3 day period. (3 @ 10 hour days). If a leak, failure or alteration requires attention our service technicians will complete the warrantable work – free of "additional" charges further than the mobilization charges.

Option B = $FREE, however, it is at the complete responsibility of the owner to accept fault for any leaks, failures, damage and or issues. If the tank experiences any failure, leak, damage and or issues Contain Water Systems Inc. will be hired as per standard mobilization rates and time / material costs to correct the issue and re-engage the warranty. If Contain Water Systems Inc. is not onsite for the leak inspection test it is required that the user send Contain Water Systems Inc. 360 degree videos and photos for review prior to and after the leak test inspection. These steps are required to ensure Contain Water Systems Inc. has the opportunity to view the tank digitally prior to engaging the warranty. Contain Water Systems Inc. at its sole discretion can decline and or engage warranty activation with this option based on research of the digital photos provided.

Upon the completion of the tank installation (regardless of water testing), Contain Water Systems Inc. requires a construction sign off completion form is signed and returned to Contain Water Systems Inc. project supervisor. Warranty will not be activated on any tank without receipt and acceptance of a completed construction completion form and leak test inspection.

Please be weary of online companies claiming they can provide service to your tank. Contain Water Systems Inc. has two approved technician companies available. **Aqualine Water Tanks & Pro Tank Installation.** Both companies are the best in the industry and are certified to perform work on Contain Water Systems Inc. tanks. Anyone else working on a Contain Water Systems Inc. water storage tank will effectively and immediately void the warranty.

If any of these terms are not acceptable please contact us 1855-H20-Tank. Any deviations to these terms must be agreed to in writing by senior management of Contain Water Systems Inc. Purchase order inclusions and exclusions do not trump this agreement and this agreement is the final and binding agreement between both the seller and purchaser. Unless otherwise and specifically agreed to in writing by senior management of Contain Water Systems Inc.

It's important to us that your water storage tank perform at its maximum capability and therefore following our guidelines will ensure you have a great experience with our products.

Water Storage Tank - Don'ts:

1) Contact Contain Water Systems Inc. prior to adding any water into the water storage tank after it has been sitting empty for more than 24 hours. 1.855.H20-TANK. Our friendly staff will walk you through inspection steps to ensure a proper fill. There are many weather conditions that can effect a tanks re-fill performance after it's been dry for 24

hours and Contain Water Systems Inc. wants to ensure your water tank is operating at its maximum operating potential each and every time you require it.

2) Don't fill your tank after it's been empty and or for the very first time without having Contain Water Systems Inc. review your tank. Take digital photos (high resolution), 360 degrees outside, inside from the inspection hatch and of the roof from the exterior ladder. Take photos of the tank liner, seams, flanges and foundation. Contain Water Systems Inc. will review these photos and provide advice on tank filing. administration@containwatersystems.com. Contain Water Systems Inc. reserves the right to reject the client from filing the tank without a certified technician onsite if deemed necessary. Failure to comply will result in immediate warranty cancelation and we don't want this to happen to any of our customers.
3) Don't fill your water storage tank unless all your accessory flanges have pipe stand supports. All exterior piping must have adequate support pipes.
4) Don't allow anyone inside your water storage tank. Don't perform and or enter the water storage tank yourself. No tradesman of any nature may enter the tank, puncture the tank walls and or perform work inside the tank without the written permission of Contain Water Systems Inc. Any exterior piping or conveyances must be pre-approved in writing from Contain Water Systems Inc. Any exterior piping and conveyances must be completed in accordance with Contain Water Systems Inc. standard conveyance procedures. Please call Contain Water Systems Inc. to procure these procedures. 1.855.H20-TANK.
5) If Contain Water Systems Inc. approves exterior conveyance plans – Contain Water Systems Inc. holds no liability to tank failures, damage and or leaks incurred by faulty work of a secondary contractor, owner and or person(s) providing the work.

- Improper tightening of the flanges. Please call Contain Water Systems Inc. for instructions. 1.855.h20.tank.
- Excessive wrenching on the sidewalls.
- Bolting into the tank wall, roof, structure and or exterior tank components.

- Liner blowing to the middle of the tank due to leak test inspection delays.
- Foundation Failures: Contain Water Systems Inc. provides a foundation recommendation, however, it is at the sole requirement of the user to confirm the foundation recommendation with a local, licensed engineer whom is professionally engaged in the construction of foundations for large structures. The user is completely responsible for the foundation construction, liabilities and or performances involving the foundation, design, workmanship and warranty.
- Sharp objects, debris in / around the tank during and after installation. The water storage tank liner is an internal sealer that will outlast any storage coating in the industry with normal use, however, if penetrated by debris, rodents and or sharp objects it will fail.
- Improper storage of liquids not included in the water storage tank purchase of sale. Contain Water Systems Inc. engineers water storage tanks. Unless agreed in writing between Contain Water Systems Inc. and the user the tank shall only hold water with a standard specific gravity. If anything is mixed with water and or added to the storage tank (besides water), the warranty is void for the life of the water storage tank.
- No one is allowed inside the water storage tank for any reason and at any time without either A) Written permission from Contain Water Systems Inc. and or B) A certified Contain Water Systems Inc. technician. The user and or any tradesman may not enter the tank or the warranty immediately voids. Contain Water Systems Inc. has a safety line installed inside the tank that will show evidence of tank entrance / exiting.

Contain Water Systems Inc. supplies a multitude of accessory components. Accessory components shall be viewed and approved by the purchaser prior to the purchase of sale. The client is responsible for confirming the code compliancy of said accessories and the client is responsible for confirming the accessory will work as expected. Please contact Contain Water Systems Inc. for further information regarding to tank accessories and code compliances.

Tank accessories & Code Compliances:

Contain Water Systems Inc. does our best to stay abreast of the ever changing codes and compliances in the water storage tank industry, however, due to the fact that we sell all over the world and due to the fact that codes are always changing. Contain Water Systems Inc. will quote out our best understanding of accessories required to meet each specific code compliance, however, it is the user's responsibility to verify everything in the Contain Water Systems Inc. quote as well as engineering package meets local requirements. This responsibility falls (IN FULL) to the user purchasing the tank from Contain Water Systems Inc. Furthermore, Contain Water Systems Inc. quotes, engineering packages and accessories complete a water tank – NOT a water tank system.

Water Tank VS Water Tank System.

A Water Tank is a structural shell designed to meet local seismic zones, geographical requirements and wind / snow loading requirements. A water tank includes an internal liner, pre-liner, roof structure, wall structure, anchor supports, flange fittings and internal accessories. A water tank sold from Contain Water Systems Inc. is not a "Water Tank System".

A Water Tank System is a "water tank" designed to meet specific code compliances through the use of internal and external conveyance systems and accessories.

Code Compliancy items: Contain Water Systems Inc. designs a water storage tank "STRUCTURALLY" designed to meet the application of the applicable code, however, it is the customer's responsibility to ensure the accessories meet the code compliancy and or user expectations.

Contain Water Systems Inc. provides a (structural) code compliant water storage tank – not a water storage system.

EXAMPLE:

Contain Water Systems Inc. is requested to provide a proposal for an NFPA 22 compliant fire protection water storage tank in a cold region. Contain Water Systems Inc. will engineer a structurally compliant water storage tank to meet the design criteria of NFPA 22 (structurally), we will also include an immersion heater, insulation, anti vortex suction flange, overflow flange however, it is the user's responsibility to confirm that the accessories quoted are code specific and operate to the code requirements. This information can be verified through your county inspector, county officer and or local fire marshal. Contain Water Systems Inc. holds no risk and or liability in regards to designing a code compliant tank further than the structural design and engineering of the tank body structure.

IE: NSF 61 / ANSI Potable Water Storage Tanks. Contain Water Systems Inc. will engineer, supply a NSF 61 / ANSI approved liner including a structurally designed tank structure, however, it is the complete responsibility of the client to complete the potable rated system design with the proper conveyances. Contain Water Systems Inc. holds no liability and or risk associated with the storage of potable water for human and or animal and or vegetation consumption. A Contain Water Systems Inc. potable water storage tank is not authorized to be permitted for use of consumption in any means if a proper tank (system), is not incorporated into the design by the user.

Contain Water Systems Inc. recommends performing an exterior review of your water storage tank each 6 months to ensure everything looks as designed.

CHECKLIST:

Foundation and anchors are intact.
No cracks or deficiencies in the foundation.
Tank walls appear to be round and free from abrasion and or damage.
Roof of the tank appears to be intact and free from abrasions and or damage.
Visaual inspection of the tanks interior from the inspection hatch to confirm the liner is intact and that all the clips are secured. No damage has incurred to the liner, no damage has incurred to the interior roof.
Checking your filter baskets, inlet pipes and tank water access ports to ensure they are free of debris.

Lastly, to ensure years of use as the water storage tank is intended for please be sure to perform standard winterization steps.
Drain all water from the tank during the winter months, clear all lines of standing water and or add winterization products to your tank such as heating elements, insulation and or circulating systems to ensure the water in your tank does not freeze.
Please contact Contain Water Systems Inc. prior to performing any work on your water storage tank as to eliminate breaching your warranty and hindering your tanks performance.

Contain Water Systems Inc. Motto is “building relationships as strong as steel” this means we want you to be happy with your water storage tank. Therefore, we encourage you to call us anytime regarding the do’s and don’ts for usage with your new water storage tank. 1855-H20-Tank.



TankTec

PROJECT COMPLETION FORM.

PROJECT ADDRESS:

CLIENT COMPANY NAME:

CLIENT AUTHORIZED REP SIGNATURE:

CLIENT AUTHORIZED REP NAME:

DESCRIPTION OF SERVICES RENDERED:

TANK TEC INSTALLED A MODEL CGS -

TANK TEC INSTALLED (FLANGES):

ADDITIONAL PROJECT NOTES:

For the purpose of this project completion form, Tank Tec is referred to as the "installation company".
The signer of this project completion form, the customer or customers authorized rep, will be referred to as "the authorized signer".

Tank Tec has completed the installation of this water storage tank to the best of its abilities. Tank Tec has installed this water storage tank meeting the full expectations of the authorized signer.

Tank Tec has installed all appurtenances, accessories & materials as promised & in the exacting locations as directed by the authorized signer upon (DAY1-Site Walk Through).
If the final field installation differs from the final purchase order or (ANY) site specific drawings, than the client agrees that the installation completion supersedes all of the above.
Tank Tec water tanks are customizable and all flange locations, quantities & configurations are depicted in the field by the authorized signer upon (DAY1-Site Walk Through).It is at the full discretion & liability of the authorized signer to confirm the final fittings upon construction completion and prior to signing this form.

The authorized signer agrees that the final construction of the tank is in full compliance of all the project requirements, to the signer's satisfaction & within the guidelines requested of the authorized signer.

Tank Tec installation in conjunction with the supplier, supplier hereinafter referred to as CWS, have both informed the client of the required steps for hydro testing. The signer has been informed in the product estimation stages, invoice stages, scheduling stages & now again on the completion stages of this water storage tank project completion.

Tank Tec requires a hydro test (leak test) is performed immediately following the construction completion. It is the client's responsibility to provide water & all exterior tank connection conveyances in conjunction with the Tank Tec project completion. CWS will remain onsite 8 hours following the completion if it's construction to perform a hydro test. NFPA 22 states that a fire tank must re-fill after being completely empty within an 8 hour timeframe, therefore, Tank Tec follows this code with our hydro testing procedures.
If Tank Tec is required to stay onsite longer than 8 hours following its completion, Tank Tec will bill $1,200.00 per each day onsite. (If scheduling is available). If scheduling is not available than Tank Tec teams will need to be re-mobilized to site to perform a hydro test on the next available date. Re-mobilizations are billed @ $1,200.00 per day / $2,400.00 remobilization fee.

Tank Tec tanks supplied by CWS come with a standard 20 year warranty as depicted in the warranty statements available publicly @ www.containwatersystems.com & https://www.containwatersystems.com/terms.php

Tank Tec wants to ensure your water storage tank warranty remains intact from the supplier, therefore, the below items are imperative to keep your water storage tank warranty valid.

- Hydro-testing must ALWAYS be completed by a Tank Tec supervisor.
- **The client must NEVER fill the tank on there own after it's sat empty more than 72 hours**
- **The client is to NEVER enter the water storage tank.**
- **The client is to NEVER authorize a 3rd party (non Tank Tec approved) to enter the water storage tank.**
- **The client is to ALWAYS support pipe flanges with adequate pipe stands.**
- **The client is to NEVER drill into the side of the water storage tank or allow anyone to perform this function.**
- **The client is to NEVER drill, cut, maneuver and or manipulate or change in (anyway) the exterior structure of the water storage tank.**
- **The client is to ALWAYS use backing wrenches when attaching flanges to Tank Tec flanges.**

FURTHER IMPORTANT (DOES & DON'T'S can be found publicly @ www.containwatersystems.com & https://www.containwatersystems.com/terms.php

The authorized signer is completely satisfied with the final installation of the water storage tank. If a hydro test was not completed upon the completion of this form, than the authorized signer agrees he has been informed of all the above.

The authorized signer is satisfied with tank placement(s), appurtenance location(s), assembly location(s), supplied materials & all aspects of the projects full & final completion.

Immediately following payments due in full to Tank Tec, Pro Tank & or the supplier, CWS,
Tank Tec & the supplier will release all liens placed on the project location property. All projects requiring further lien actions due to late and or slow payments will be subject to additional lien fees.

The authorized signer agrees that the work described in the quotes, specifications and or project details are either A) completed in full conformance or B) completed with revisions directed by the authorized signer. The authorized signer terminates all further obligations (IN FULL) from Tank Tec and or its supplier CWS.

THIS FORM MUST BE COMPLETED TO ACTIVATE THE WATER STORAGE TANK WARRANTY

Authorized Signer (printed name):

Authorized Signer (signature):

Date:

Tank Tec Supervisor (printed name):

Tank Tec Supervisor (signature):

Date:



Vortex-Fine-Filter WFF 150 and WFF 100

GB INSTALLATION AND OPERATING INSTRUCTIONS

- **WFF 150 for roof areas of up to 500 m² in moderate climate (5380 sq.ft.)**
- **WFF 100 for roof areas of up to 200 m² in moderate climate (2150 sq.ft.)**
- **Vehicle load-carrying capacity up to 30 t Standard vehicles to DIN 1072/SLW 30**



made in Germany

WISY Rainwater Harvesting

WISY Vortex Fine Filter
WFF 150 and WFF 100

Read these instructions carefully before commencing assembly and installation work and store them in a safe place for future reference.

Content

These installation instructions include the following information relating to:

- Area of application
- Guide to components
- General installation hints
- Outdoor installation
- Indoor installation
- Cleaning the filter insert
- Accessories
- Guarantee

WFF 150





WFF 100

Area of application

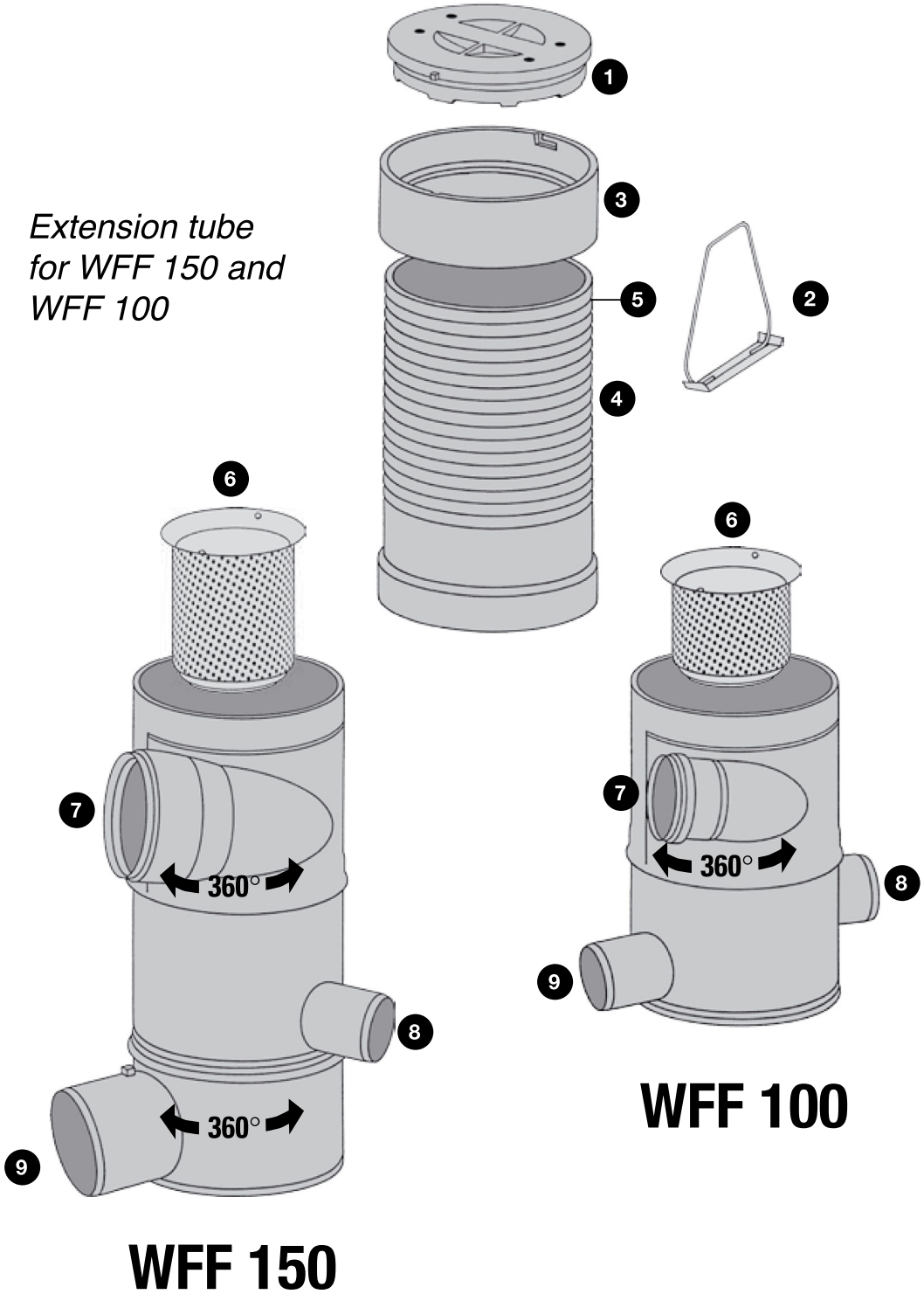
The WISY Vortex Fine Filter (hereafter referred to as “WFF”) is primarily designed for installation below ground. However, it is also suitable for indoor installation.
Please observe the information and warning notices pertaining to indoor installation in the section headed “Indoor installation” in these instructions.

The best roof areas are pitched roofs of slate, clay tiles, concrete tiles or membrane and sheet metal roofs.

It must be taken into account that “green roofs” retain rainwater. We recommend that a pure, mineral-based substrate is installed beneath the growing medium layer of green roofs connected to a rainwater harvesting system. Substances washed out of roofs covered with bitumen felt can discolour the harvested rainwater. Asbestos-cement roofs are not suitable and must be decontaminated before a rainwater harvesting system is connected.

Guide to components

Extension tube for WFF 150 and WFF 100



1 **Housing cover**
with ventilation holes

2 **Lifting handle**
(standard length 30 cm)
of stainless steel

3 **Final ring**
to support cover

4 **Extension tube**

5 **Parallel cutting lines**

6 **Filter insert**
of stainless steel,
- for fine filtering, mesh size 0.28 mm or 0.44 mm

7 **Rainwater inlet**
with bush and seal

8 **Outlet to storage tank**
Filtered water

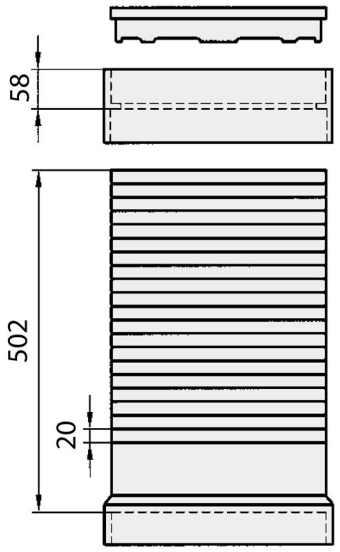
9 **Drain connection**
Dirty water

The filter insert is made of stainless steel.

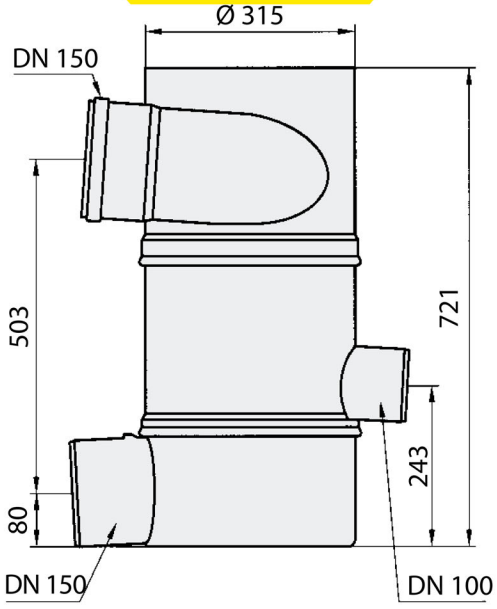
Housing, housing cover and extension tube are made of polypropylene.

DN= Diameter Nominal, internal diameter of a tube

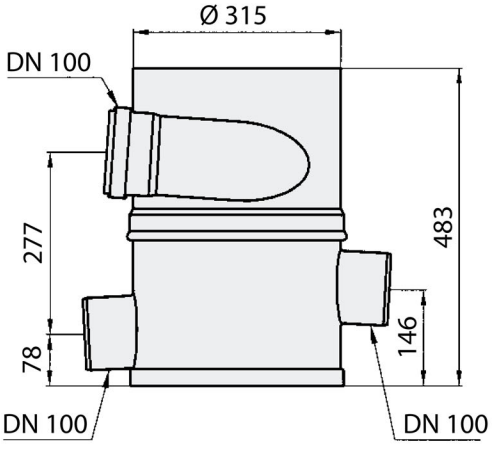
Extension tube



WFF 150



WFF 100



General installation hints

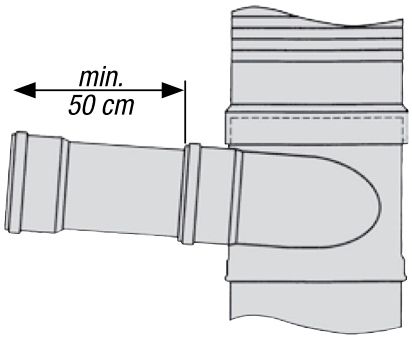
- Installation and connection sizes can be seen in the dimension drawings. When the inspection opening is raised by use of an extension tube, the additional length must be included in the calculation.

- When an extension tube is installed, it can be cut along the grooves to shorten it to the required length.
  IMPORTANT: The final ring (at top) must be firmly bolted to the extension tube in order to provide secure support for the cover.

- Before installing the filter in existing pipework, make sure that there is room to install the rainwater inlet tube at a vertical distance of 50.5 cm (in the case of the WFF-150) and 27 cm (in the case of the WFF-100) from the drain connection.

- The vertical distance between the rainwater inlet tube and the connection to the storage tank must be 34 cm for the WFF-150 and 21 cm for the WFF-100.

- If the installation is completely new, the required installation depths of incoming and outgoing tubes must be calculated. A ***'settling length'*** of at least 50 cm in front of the rainwater inlet must be included in the calculation.



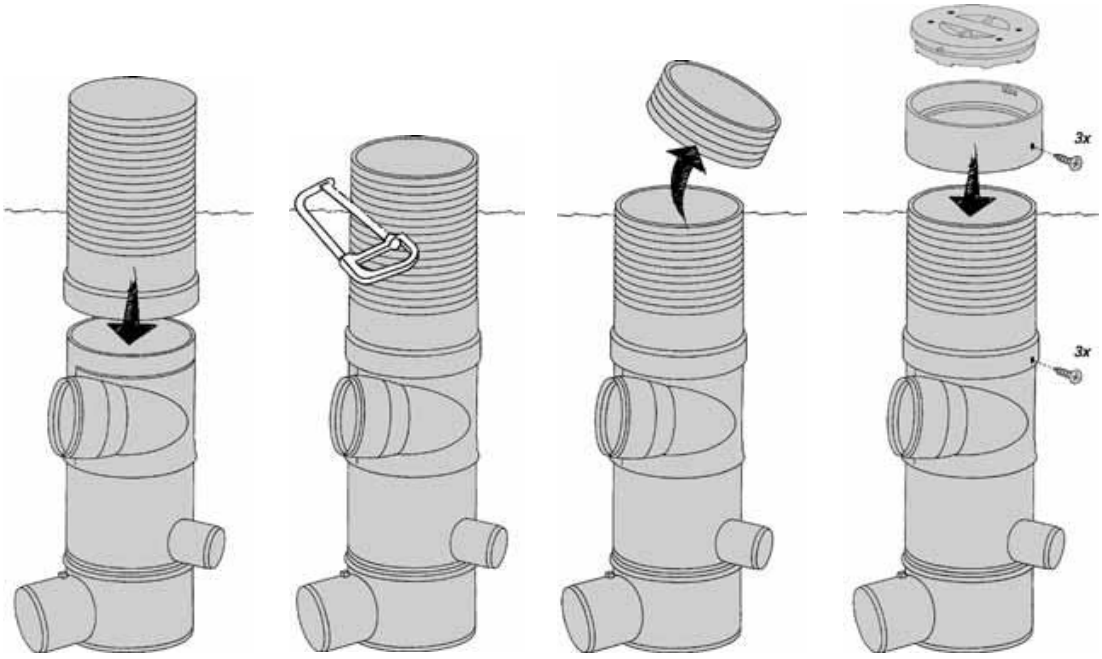
- The nominal size of the drain tube must not be smaller than the nominal size of the rainwater inlet tube in order to avoid any constriction to the WFF cross-section.

- If these installation conditions cannot be fulfilled, the WFF cannot be installed. In this case we recommend the WISY standpipe filter collector for installing into the rainwater downpipe.

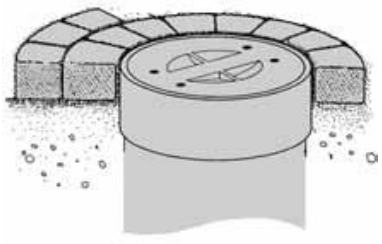
- To ensure that the WFF can withstand the weight of vehicles of up to 30 t (according to ATV test) an appropriately compacted subsoil or concrete slab is required.

Outdoor installation

- Remove the transport packing cardboard from inside the housing.
- Dig a hole of suitable size in the ground.
- Insert the WFF and make the tube connections. Turn the rainwater inlet connection to the required position for this.
  The WFF must be installed exactly vertical (use a spirit level).
  An extension tube can be installed if necessary to make the inspection opening flush with ground level.
- The end of the extension tube with the moulded collar is placed directly on the WFF housing and fastened securely by inserting the



stainless steel bolts supplied through the pre-drilled holes before the WFF is placed in the ground.



The final ring enables the paving to be fitted. To remove the cover resting inside the ring, turn it anti-clockwise to unlock and then lift out.

- The saw slits in the extension tube can be cut (with a jig saw) to make the inspection opening flush with ground level.

Indoor installation

- Please observe the ***safety guidelines*** below regarding the indoor installation of the WFF.

- The ***maximum rainwater inflow*** must not exceed 12.8 l/s for the WFF 150 or 4.2 l/s for the WFF 100. Use the local rainwater data applicable to your area as a basis for calculating the maximum size of connectable collection surface for your region.

- If the WFF rinsing water outlet is connected to a storm drain, the WFF must always be installed above the ***maximum backwash level*** of the storm drain. If the WFF rinsing water outlet is connected to a soakaway, the WFF must always be installed above the maximum backwash level of the soakaway.

- The WFF must be installed ***exactly vertical and stable***. For this reason, it is strongly recommended that the WFF be mounted using the original WISY wall bracket. If other parts are used to secure the WFF, it must be ensured that clamps placed around the WFF housing are installed free of tension and do not subject the WFF housing to deformation pressure.

- The straight tube in front of the rainwater inlet (***'settling length'*** in order to calm down the incoming water) must have a minimum length of 0.5 m. The nominal size and the gradient of this straight tube have to correspond to the nominal size and gradient of the WFF rainwater inlet.

- All ***tube connections*** of the WFF must be made watertight. After installation the tightness of the connections should be tested with maximum water flow. As the inflow of rainwater can cause impulses of mechanical stress on the connections, the tube connections have to be secured against slippage (e.g. by clips).

- Air moisture can condense on the surfaces of the WFF and the tubes at warm indoor temperatures. It is recommended that these parts be insulated against condensation or alternatively that measures be taken to safely drain off the condensate.

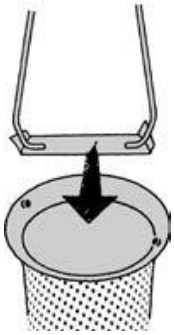


- Depending on the size of the connected collection surface and on specific attributes of individual installations, an excessive volume of rainwater can flow into the filter in the event of extremely heavy rainfall. As a result, rainwater might flow upwards against the WFF cover and escape through the cover. ***If this problem occurs, it is urgently recommended that the housing cover be raised through the installation of a WISY extension tube which is sealed water-tight.*** If there is insufficient space available above the WFF, the vent holes in the cover must be sealed and the cover must be assembled with a water-tight seal.

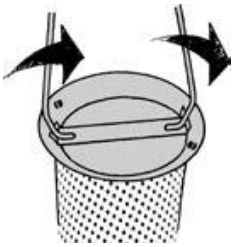
WARNING NOTICE:
The vortex fine filter is not a closed system. In the event of exceptionally heavy rainfall, a defect in the drainage pipes, a blockage in the drainage system, etc., it is possible that water flowing into the filter will escape through the filter inspection opening. We do not accept responsibility for any consequential damage.

Cleaning the filter insert

- Remove the filter insert using the lifting handle supplied (standard length 30 cm).



Set down the lifting handle ...



... turn clockwise under the lugs ...



... and remove

- We recommend that the filter insert be cleaned every three months. Depending on local conditions, it may be necessary to clean the filter insert at shorter intervals, but it may also be possible to extend the cleaning interval to six months. However, the filter insert must always be cleaned at intervals of six months.

- After cleaning the filter insert, make sure that you remove the lifting handle and store it in a safe place outside the filter. The handle will otherwise obstruct the rainwater inflow and reduce the efficiency of the filter.

  Experience has shown that cleaning in a dishwasher is always successful, provided that the filter insert is placed in the same position in the dishwasher as it is in the WFF. Cleaning by hand is also possible with a small brush, hot water and a normal dishwashing liquid. For stubborn soiling of the filter mesh (e.g. through industrial pollution in the neighbourhood) we recommend the use of a high-pressure cleaner.

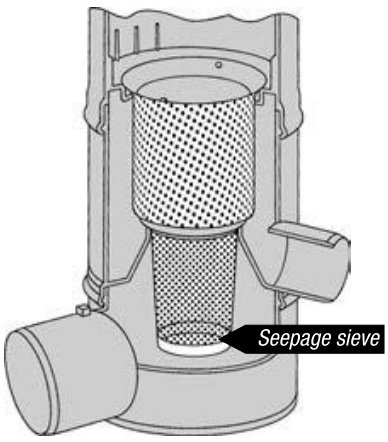
Accessories

● **Extension tube**
The scope of supply of the standard version includes an extension tube. An extension tube is available to raise the inspection opening by up to 56 cm (top edge of final ring). Another tube can easily be attached, but no more than two tubes should be assembled above each other.

● **Lifting handle**
The lifting handle supplied with the standard version is 30 cm in length. Lifting handles of 60 cm or 1 m in length are also available.

● **Wall bracket**
WISY provide a stainless steel wall bracket for internal roof drainage pipes in industrial buildings, or for fixing in shafts. This bracket allows the WFF to be safely secured to a vertical internal wall.

● **Concrete rainwater storage tanks**
WISY supplies a stainless steel wall bracket for attaching the WFF to concrete rainwater storage tanks. A suitable concrete support must be provided to ensure the vehicle loading capacity of the filter.



● **Soakaway sieve (maintenance part)**
If the rinsing water is to be drained into a soakaway system instead of the storm drain, this sieve (mesh size 1.6 mm) is added to the filter insert. It collects coarse dirt particles and as a result it must be inspected, emptied and cleaned more often.
If this essential maintenance is not carried out and water damage occurs as a result of a blocked seepage sieve, we cannot accept any liability.

● **Blind insert**
The blind insert ensures that rainwater flows directly through to the drain. It is inserted in place of the filter insert whenever the storage tank needs to be put out of operation for the purpose of maintenance or cleaning work.

Guarantee

The WFF is carefully manufactured and is subjected to strict quality controls designed to ensure that you receive a premium-quality product.

If defects do arise despite this conscientious quality testing regime, then we will provide you with a replacement. However, this does not apply in cases of damage arising from improper installation or use of force.

The product has been purchased from a specialist retailer authorized by WISY, Germany. WISY provides a 5 year guarantee from the date of purchase from the retailer. WISY will replace defective materials within this period.

AHA018-D/E-V05-24052017 Technische Änderungen vorbehalten /Technical changes reserved

WISY AG
D-63699 Kefenrod, Oberdorfstraße 26
Telefon +49 (0) 60 54-91 21 - 0, Fax +49 (0) 60 54 - 91 21-29
Internet: www.wisy.de • E-Mail: info@wisy.de

GRUNDFOS

MQ

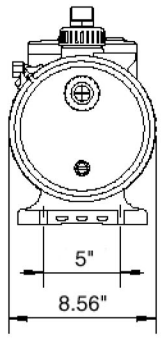
Submittal Data



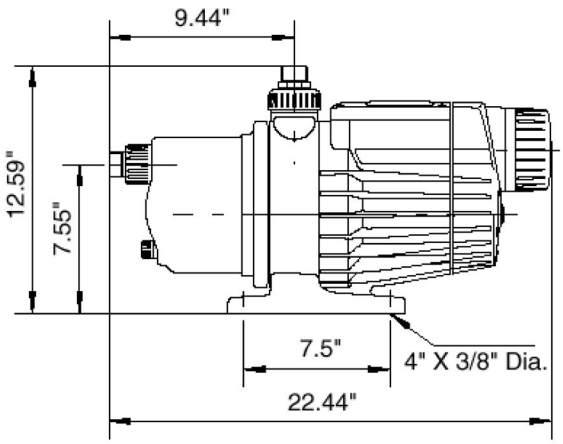
JOB or CUSTOMER:	
ENGINEER:	
CONTRACTOR:	
SUBMITTED BY:	DATE:
APPROVED BY:	DATE:
ORDER NO:	DATE:
SPECIFICATION REF:	

QUANTITY	TAG NO.	MODEL NO.	GPM	FEET	VOLT	PHASE	COMMENTS
						1	
						1	

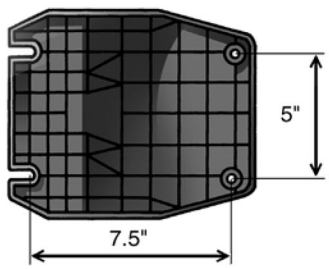
Dimensions



Front View



Side View



Base Dimensions

Suitable Liquids

Potable water, rain water or other clean, thin, non-aggressive liquids not containing solid particles or fibers

Operating Conditions

Max system pressure: 110 psi (7.5 bar)
Max Inlet Pressure: 45 psi (3 bar)
Max suction lift: max. 26 ft (8 m)
Liquid temperature: 32° F to + 95° F
Ambient temperature: 32° F to + 115° F

Technical Data

Voltage: 110-120V, 60 Hz
Enclosure Class: IP54
Insulation Class: B
Noise Level: ≺ 55 dB(A)

Nomenclature

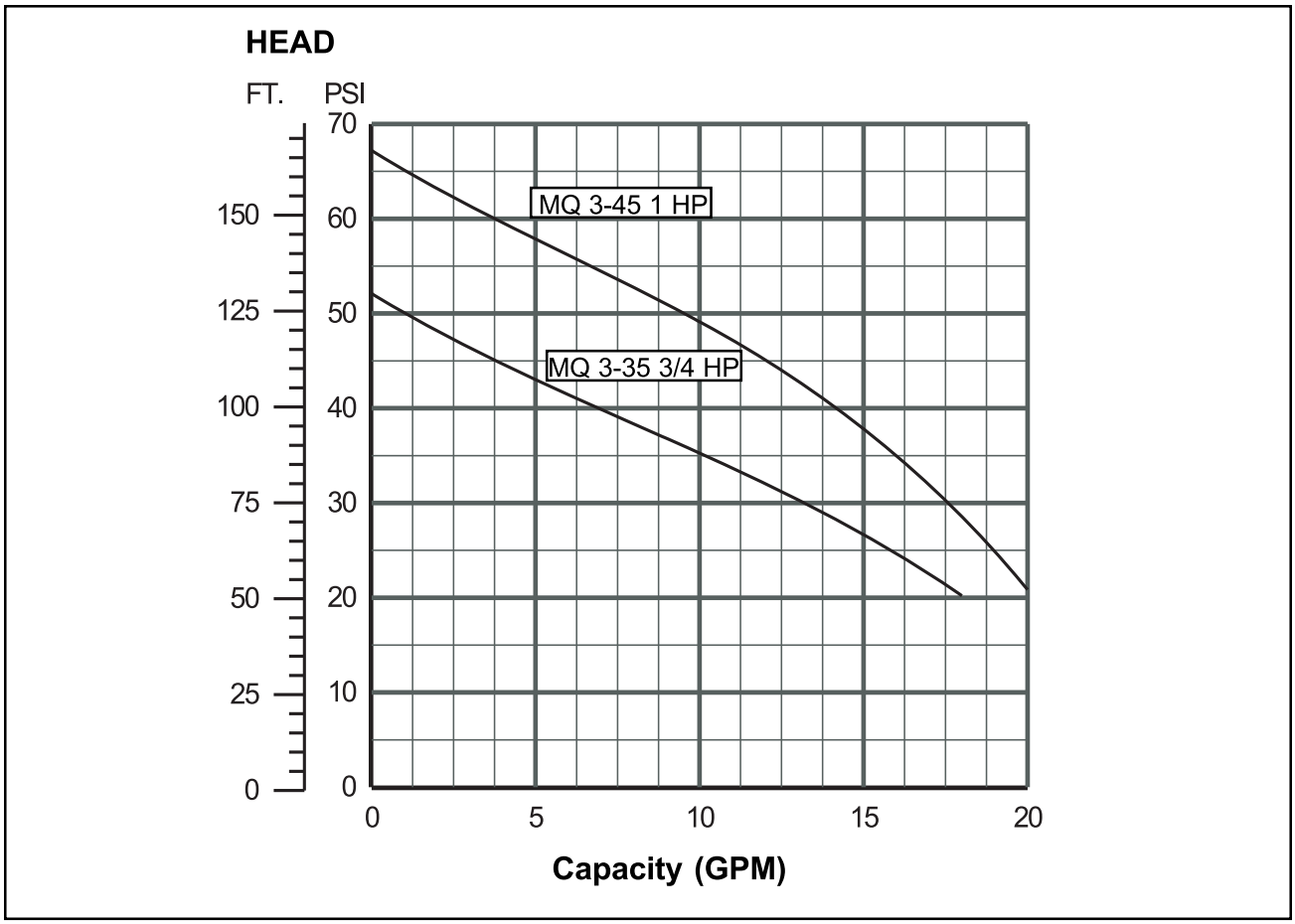
MQ 3 -35 A -O -A BVBP

- Pump type
- Nominal Flow Rate [M3/h]
- Head [m]
- Code for pump version
  A: Standard
- Code for pipework connection
- Code for materials
  A: Standard
- Code for shaft seal

Pump Data and Weights

Pump Type	HP	HP	Input Voltage	Inlet NPT	Discharge NPT	Max. Amps	Ship Weight lbs.
MQ 3-35	3/4	1	110-120	1”	1”	7.2	30
MQ 3-45	1	1	110-120	1”	1”	9.2	30
MQ 3-35	3/4	1	220-240	1”	1”	3.7	30
MQ 3-45	1	1	220-240	1”	1”	4.5	30

Performance Curves



Component	Material
Suction port	POM + 25% glass fiber
Discharge Port	POM + 25% glass fiber
Pressue tank	NR-rubber (diaphram)
Impeller	PPO + 20% glass fiber
Chamber	PPO + 20% glass fiber
Base Plate	POM + 25% glass fiber
Clamp	Stainless steel, DIN W. - Nr 1.4301, AISI 304
Motor cooling sleeve	Stainless steel, DIN W. - Nr 1.4301, AISI 304
Shaft Seal	Carbon/ceramics/NBR rubber
Non-return valve	POM + 25% glass fiber
Shaft	Stainless steel, DIN W.-Nr. 1.4005, AISI 416
Self Priming Valve	PP + 30% glass fiber
Self Priming Part	PPE/PS + 20% glass fiber
Drain plug	POM + 25% glass fiber
Priming plug	POM + 25% glass fiber
Pump sleeve	Stainless steel, W.-Nr. 14301, AISI 304
O-rings	NBR-rubber

GRUNDFOS®
Grundfos Pumps Corporation • 17100 W. 118th Terrace • Olathe, KS 66061
Phone: 913.227.3400 • Fax: 913.227.3500
Canada: Oakville, Ontario • Mexico: Apodaca, N.L.
Visit our website at www.us.grundfos.com

L-MQ-TL-002 | 07/01
PRINTED IN USA

SJE SIGNALMASTER® Control Switch

Mechanically-activated, narrow-angle float switch designed to activate pump control panels and alarms.



This narrow-angle sensing device is used to accurately monitor liquid levels in:

- water
- sewage applications

The SJE SignalMaster® control switch is not sensitive to rotation.

Normally Open Model (high level)
The control switch turns on (closes) when the switch tips slightly **above** horizontal signaling a high level, and turns off (opens) when the switch drops slightly below horizontal.

Normally Closed Model (low level)
The control switch turns on (closes) when the switch tips slightly **below** horizontal signaling a low level, and turns off (opens) when the switch tips slightly above horizontal.

FEATURES

- Mechanically-activated, snap action contacts.
- High impact, corrosion resistant, polypropylene float housing.
- Not sensitive to rotation.
- Control differential of 1.5 inches (4 cm) above or below horizontal.
- Yellow colored cap for easy identification of normally open control switch.
- White colored cap for easy identification of normally closed control switch.
- UL Listed for use in water and sewage.
- CSA Certified.
- Five-year limited warranty.

SSPMA MEMBER · LR54245 · UL LISTED 83N2 · Member of Hydraulic Institute

SPECIFICATIONS

CABLE: flexible 18 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 x 12.3 cm) high impact, corrosion resistant, polypropylene housing for use in sewage and water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 PSI (90 kPa)

ELECTRICAL: 5 amp, 125/250 VAC, 50/60 Hz

NOTE: This switch is not recommended for controlling:

- electric loads less than 100 milliamps, 12 VAC
- non-arcing electric loads

OPTIONS

This switch is available:

- CE certified unit available upon request.
- for normally open (high level) applications or normally closed (low level) applications.
- in standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters (longer lengths available)
- with two mounting options that allow for flexibility in installation:

  Mounting Clamp: for applications where the switch can be attached to a discharge pipe or similar mounting device.

  Externally Weighted: for applications where the switch can be suspended from above.

SJE Rhombus®
PO Box 1708, Detroit Lakes, MN 56502
1-888-DIAL-SJE • 1-218-847-1317
1-218-847-4617 Fax
email: customer.service@sjerhombus.com
www.sjerhombus.com

SEE BACKSIDE FOR ORDERING INFORMATION.

SJE SIGNALMASTER® Control Switch

Mechanically-activated, narrow-angle float switch designed to activate pump control panels and alarms.

ORDERING INFORMATION

Normally Open		Normally Closed		List Price	Shipping Weight
Part#	Description	Part#	Description		
1006042	10SGMPCNO	**1006046**	10SGMPCNC	$36.48	1.04 lbs.
1006050	10SGMWENO	**1006054**	10SGMWENC	$44.70	2.13 lbs.
1006043	15SGMPCNO	**1006047**	15SGMPCNC	$39.92	1.37 lbs.
1006051	15SGMWENO	**1006055**	15SGMWENC	$48.15	2.45 lbs.
1006044	20SGMPCNO	**1006048**	20SGMPCNC	$43.36	1.69 lbs.
1006052	20SGMWENO	**1006056**	20SGMWENC	$51.61	2.70 lbs.
1006045	30SGMPCNO	**1006049**	30SGMPCNC	$50.85	2.34 lbs.
1006053	30SGMWENO	**1006057**	30SGMWENC	$59.05	3.43 lbs.

PC = **P**ipe **C**lamp **WE** = **W**eighted **E**xternally **NO** = **N**ormally **O**pen **NC** = **N**ormally **C**losed
NOTE: Descriptions are grouped by cable length measured in feet (10, 15, 20, 30).

OPTIONS

MOUNTING CLAMP
is standard - deduct optional

PACKAGING
Bagged - standard.
Boxed - optional
Bulk - optional

ADDITIONAL CABLE
Longer cable lengths available. Please call for details.

UL Listed for Water & Sewage

LISTED 83N2 LR54245

SSPMA MEMBER

SPECIFICATIONS

CABLE: flexible 18 gauge, 2 conductor (UL) SJOW, water-resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7 x 12.3 cm), high impact, corrosion resistant polypropylene for use in sewage and water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

ELECTRICAL: 5 amp, 125/250 VAC, 50/60 Hz

This switch is not recommended for controlling:

- electric loads less than 100 milliamps, 12 VAC
- non-arcing electric loads

OTHER INFORMATION

NORMALLY OPEN (high level) OPERATION
The control switch closes (turns on) when the float tips slightly **above** horizontal signaling a high level, and opens (turns off) when the float drops slightly **below** horizontal in water or sewage applications.

NORMALLY CLOSED (low level) OPERATION
The control switch closes (turns on) when the float tips slightly **below** horizontal signaling a low level, and opens (turns off) when the float tips slightly **above** horizontal in water or sewage applications.

Call or fax your order!
1-888-DIAL-SJE (1-888-342-5753) ■ Fax 218-847-4617

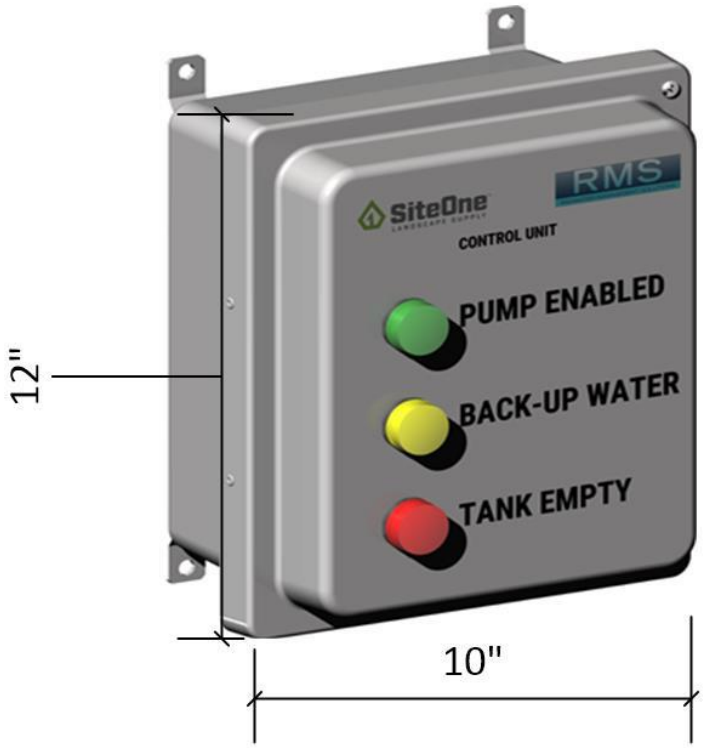
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9500115A-WEB

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RAINWATER MANAGEMENT SOLUTIONS™

RMS RL Series Control Unit



Dimensions:

- 10”W X 6”D X 12”T

Critical Features/Optional Items:

- 230, 208, and 110 volt single/three phase pump start relay coil with 24 volt input
- 110 and 24 Volt AC solenoid relay
- Manual disconnect
- Red, yellow, and green LED display lights
- Nema 3R Enclosure
- Manual Disconnect

Rainwater Management Solutions
1260 W Riverside Drive
Salem, VA 24153
1-866-653-8337

Model #	Description
SO-RL1	110V single phase input and output with 24volt AC solenoid supply
SO-RL2	110V single phase input and output with 110V AC solenoid supply
SO-RL3	208V single phase input and output with 24V AC solenoid supply
SO-RL4	208V single phase input and output with 110V AC solenoid supply
SO-RL5	230V single phase input and output with 24V AC solenoid supply
SO-RL6	230V single phase input and output with 110V AC solenoid supply

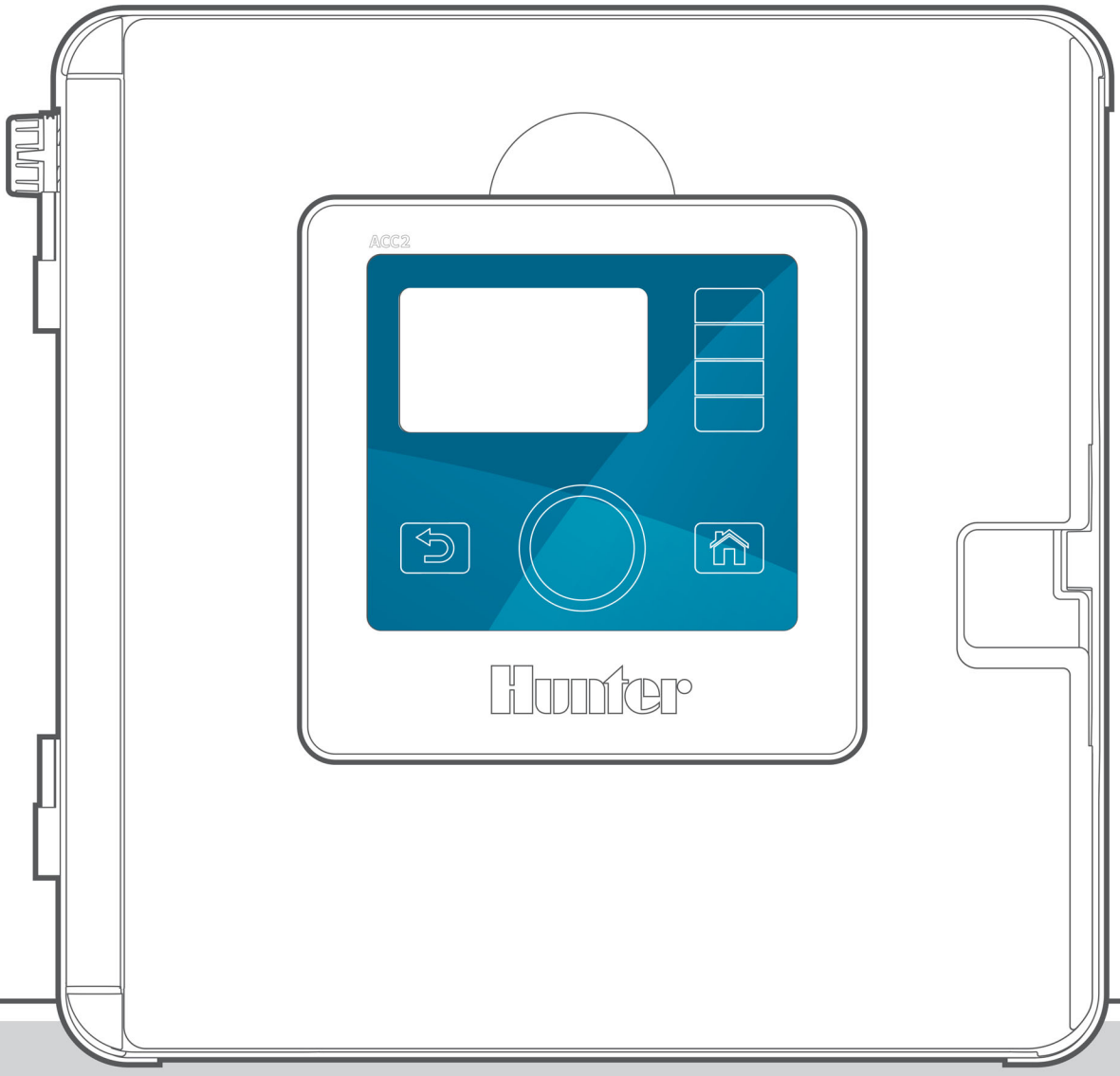
NOTE: For all three phase input and output put V3 at end of model # (for example, SO-RL1V3)

Rainwater Management Solutions
1260 W Riverside Drive
Salem, VA 24153
1-866-653-8337

ACC2

BUILT TO COMMAND

EVEN THE LARGEST PROJECTS

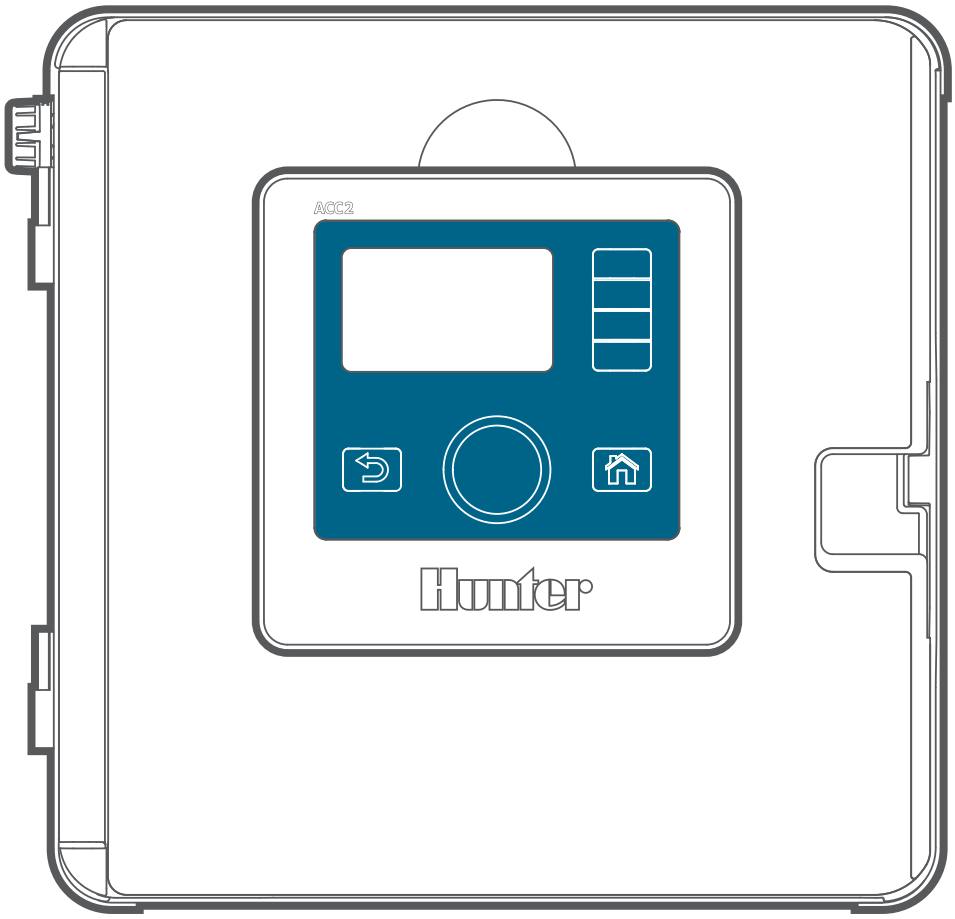


Quick Start Guide

Hunter®

POWERFUL. INTELLIGENT. FLEXIBLE.

THE ACC2 CONTROLLER DELIVERS ADVANCED WATER MANAGEMENT TO MEET THE DEMANDS OF LARGE-SCALE COMMERCIAL PROJECTS.



Troubleshooting

Need more helpful information on your product? Find tips on installation, controller programming and more.

hunter.direct/acc2 1-800-733-2823

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Important Connections and Tips

FACEPACK

"Facepack" is a Hunter term for the enclosed, removable control panel and display assembly. It contains the brain and memory of the controller.

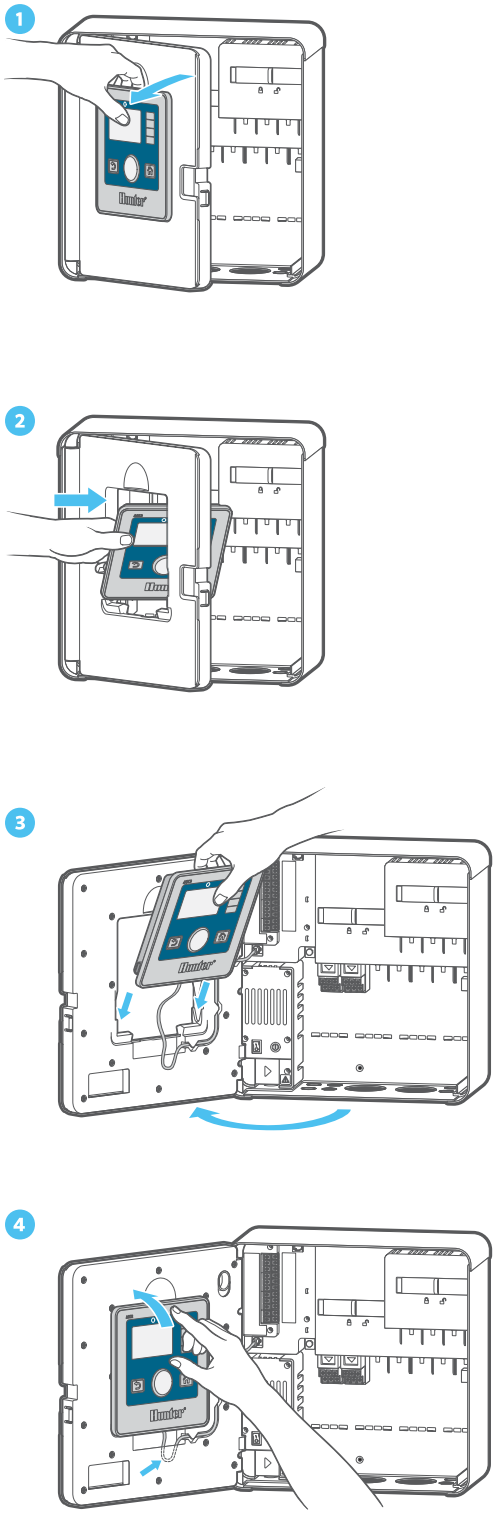
REVERSING THE FACEPACK

The ACC2 facepack and controls can be reversed in the door frame, so they can be operated with the door open while looking at the modules and wiring.

1. Pull the facepack away from the face frame.
2. The facepack is held in place by a magnet.
3. Pass the facepack through face frame.
4. Slide the facepack into the backside of the face frame as shown.
5. Tilt the facepack into position, it will click into place and be held securely by the magnet. Tuck the ribbon cable slack into the provided pocket.

When the facepack detects that it is reversed, it will automatically go to the Diagnostics, Module Info display. It is possible to navigate to any other screen from this display, including programming and manual operations.

> The controller will water automatically with the facepack in either position.



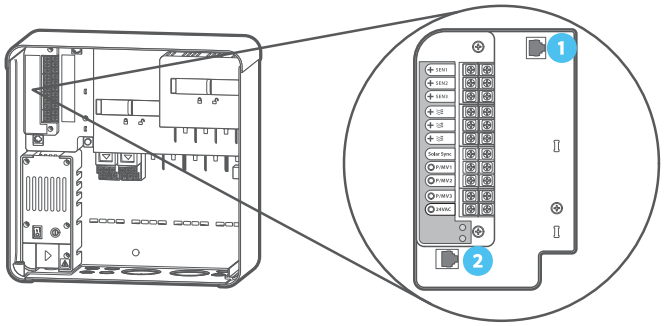
CONNECTING AND DISCONNECTING THE FACEPACK

The facepack cable connection is located just below the light on the Power Supply Board. Turn power to controller off before connecting or disconnecting the facepack.

SYNCPORT™ CONNECTION

The SyncPort connection is a proprietary Hunter connection for external interface devices. It is located near the top of the Power Supply Module.

1	SyncPort
2	Facepack Cable Connection



> Do not attempt to connect the facepack cable to this port. The connector has a protective cover which should be left in place until the connection is needed.

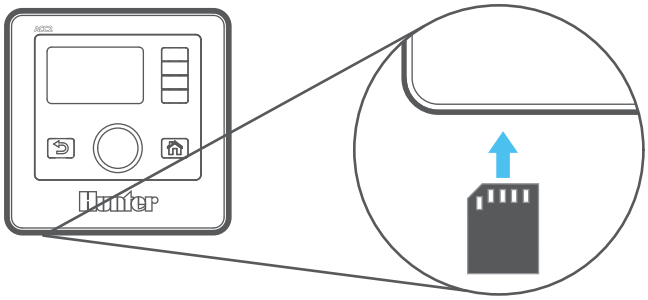
Consult the connecting device's manual for additional instructions regarding SyncPort.

SD CARD READER

The bottom edge of the facepack includes a built-in SD card reader. The controller is supplied with an SD card.

The SD card can:

- Upload updated firmware, saved from email or the HunterIndustries.com web site, to the controller and all its modules.
- Store logs, Easy Retrieve backups, and other information for use later or on another device. *See Advanced Features menu on page 30.*

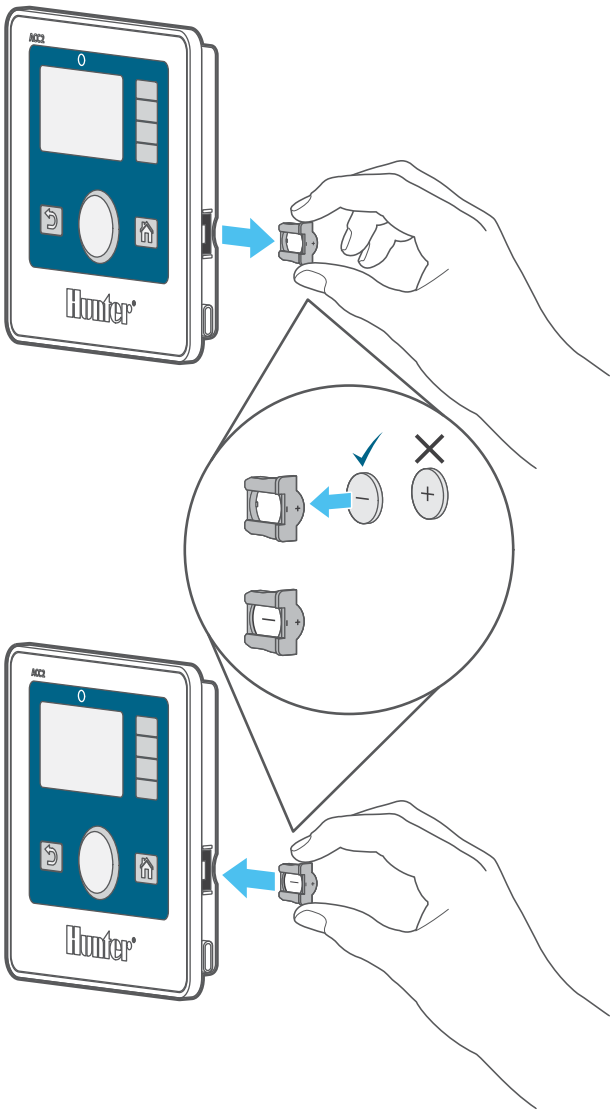


BATTERY

The ACC2 has a replaceable internal lithium battery in the side of the facepack, used to backup time settings (only during power outages). The battery may last the life of the controller, but is easily replaced if necessary.

Use a standard CR2032 replacement if necessary. Take care to place the + side of the battery correctly.

> If power to the controller is left off for extended periods, the battery will be consumed more quickly.



INTERNAL FEATURES

1	Facepack Cable
2	Power Supply Board
3	Earth Ground Lug
4	Slide Locks
5	Flow Expansion Module slot
6	Wire Tie Holders
7	Transformer Fuse
8	Optional Wi-Fi or LAN slot

FACEPACK CABLE

The facepack cable connection is located beneath the status light. It is a standard connector with a locking lever on one side, which must be pressed in to remove the cable.

POWER SUPPLY BOARD REPLACEMENT

The Power Supply Board, in the upper left corner of the cabinet, is a vital component, and includes connections for external sensors, Pump/Master Valve outputs, Common wire connections, and more.

The Power Supply Board is also designed for convenient replacement, if necessary. Three captive screws (#2 Phillips) secure the board. Three modular wiring plugs connect the board to the controller.

EARTH GROUND LUG

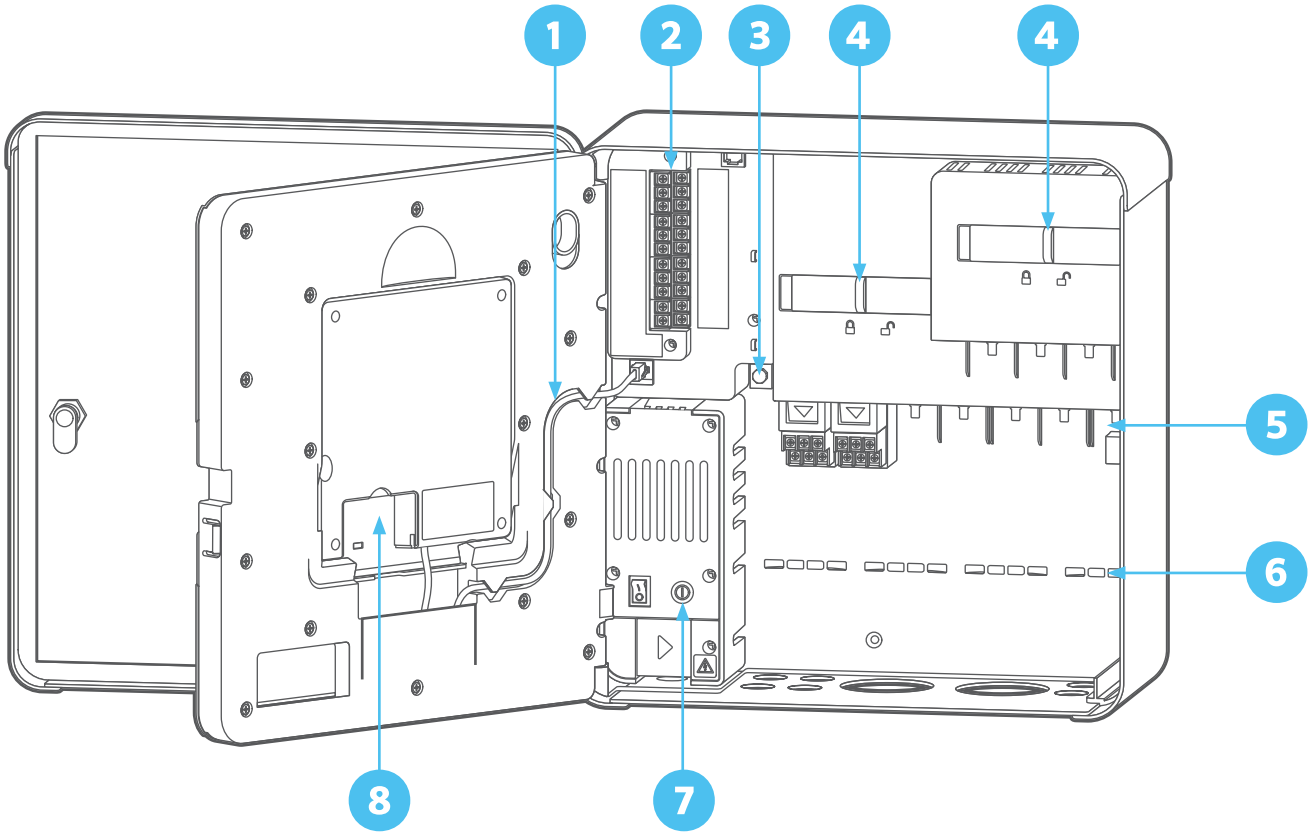
A heavy duty earth ground lug is provided for lightning and surge protection. This connection is for equipment safety only. It should always be connected with heavy copper wire to approved grounding hardware buried in the earth at least 8' (2.5 m) away from the controller.

Generally, earth ground hardware consists of a 8' (2.5 m) copper-clad steel rod driven all the way into earth, or a 8' x 4' (2.5 m x 1.25 m) wide copper plate, or both, or comparable earth grounding hardware as approved by local code.

Do not connect the primary AC power earth ground wire to this lug. ACC2 provides safety ground connection inside the transformer wiring compartment.

SLIDE LOCKS

The upper and lower slide locks secure the output modules in place. When they are open, power is off to the facepack, and an orange indicator is shown. The controller will not operate if a slide lock is open, and the status LED will flash orange to indicate this condition.



FLOW EXPANSION

A2C-F3 flow expansion modules add 3 additional flow inputs to the controller. These modules may only be added to the lower right module slot, one per controller, and it is the only module that will fit in this slot.

The flow expansion module has DC voltage and polarity, and the + or red connection from the flow sensor must be connected correctly to the + (positive) terminals on the module. Finish flow expansion in the Devices, Flow Sensors menu after installing the module.

WIRE TIE HOLDERS

Wire tie holders are molded into the lower back of the wiring compartment to secure field wiring with plastic “zip” ties. This provides a strain relief to keep field wires from pulling downward on the modules, and keeps the inside neat and organized.

Additional wire tie holders are provided near the Power Supply Board for sensor and other connections.

TRANSFORMER FUSE

The transformer uses a replaceable 5 x 20 mm electrical fuse, located next to the convenient on/off switch. Two spare fuses are stored in the bottom rear of the facepack frame.

Replacement fuses shall be glass body 5 x 20 mm 250V, 2A fast blow, commonly available wherever electronics are sold.

OPTIONAL WI-FI OR LAN

The Wi-Fi or LAN slot allows installation of optional communication modules.

Operating the Controls

ACC2 has a simple control panel with unique operating features.

1. The dial is used to rotate through selections and then pushed to select, or to enter information.
2. To the right of the LCD display are 4 “soft” keys. Their functions will change with each menu selection, as shown in the ACC2 display.
3. Back always goes back up a level from the current menu selection.
4. Home will always return you to the Home screen view.

Home screen shows the status of the controller, including anything currently running in the field. When in the Home screen, the bottom soft key is called Main Menu, and this takes you to all programming and setup functions.

From the Main Menu button, you may enter the setup menus for all ACC functions. Turn the dial to view the main menus, and press the dial to select one of them. Then, use the dial to select the items within that menu. Press to select one.

Once you’ve entered a programming screen, use the dial to navigate through all the fields of information. Press to select one, rotate to see the choices or to enter numbers or letters, and press to select.

Press Home at any time to return to the top level, or to navigate to other functions.



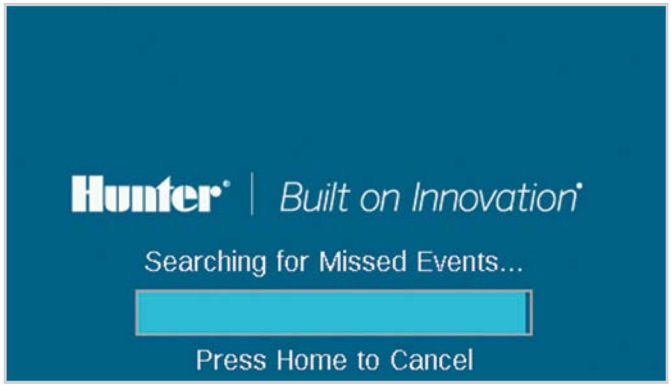
Attention Messages

A new controller installation will begin with at least one or two Attention messages, because the controller has experienced a “power outage” in shipping, and may be discovering new modules. This is normal.

Messages on the screen do not interfere with normal irrigation.

START UP SCREEN

When power is first turned on (either with the power switch, or closing one of the slide locks), the Hunter logo screen appears, and the controller begins searching for any irrigation events it may have missed during a power outage.



This search can be canceled if you are installing or servicing the controller by pressing the Home button on the facepack.

If the controller finishes searching for missed events (about 1 minute), it will resume irrigating where it should be at the current time of day.

In automatic operations, the controller will always perform the search after any power outage. Watering that was missed during the outage will be recorded in the logs, and the watering will resume where it should be at the time of the power restore.

VIEW MESSAGES

A flashing alarm symbol at the bottom of the display indicates that something unusual has been detected. When the symbol is flashing, a soft key will link to View Messages. Press the key to view the most recent messages in the Attention screen.

From the Attention screen, you can View Logs, to get more details about the messages, and/or Clear Messages, to return to the Home screen.

CLEAR MESSAGES

Attention messages in the display can be cleared by pressing the Clear Messages soft key, after pressing View Messages. The message will still be available in the controller's logs.

Attention messages do not prevent watering or normal operation. However, they may announce a condition that can prevent or affect watering.

VIEW LOGS

Press View Logs for more detailed information about each message.

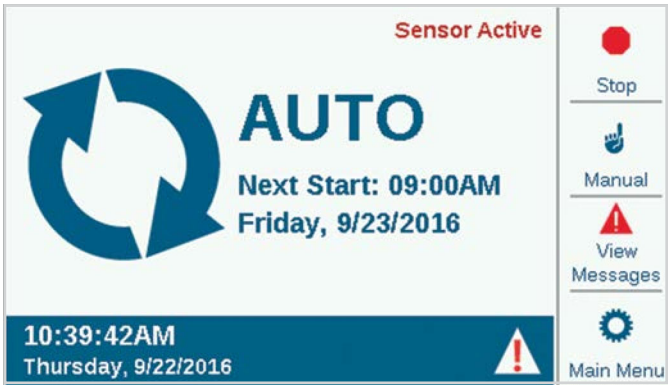
The soft keys will link to the Alarm, Controller, and Station logs when an attention message is displayed. The Filter Logs function will allow you to search for logs on a specific date, or by record number. You can also access logs at any time from the Diagnostics menu.

Home and Activity Screens

The Home screen offers basic information and soft key shortcuts to common functions.

System status is shown in the upper right.

Current date and time are displayed in the bottom left border.



If Solar Sync is installed and enabled (Devices menu), the Solar Sync symbol shows the current adjustment percentage in the lower right of the border.

If the red/white ! triangle symbol flashes in the lower right corner, the controller has detected an important situation. A soft key will change to View Messages, for more information about the condition. The messages screen allows you to clear a message or select View Logs for more details. Messages on the screen do not interfere with normal irrigation.

If sensors are active (alarmed), this is shown in red text in the upper right corner.

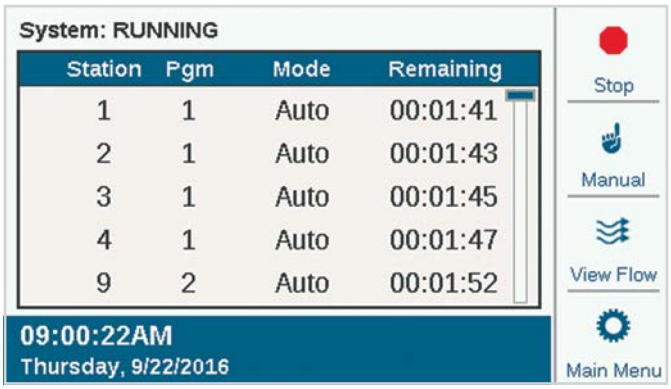


ACTIVITY SCREEN

When the controller is running stations, the Home screen becomes the Activity screen, with additional information and functions.

All running stations are displayed, along with the program that is running them, the mode in which they are running, and the amount of run time remaining on the station.

Individual items may be selected directly from the Activity screen and stopped without affecting other irrigation. *See Selective Stop section on page 14.*

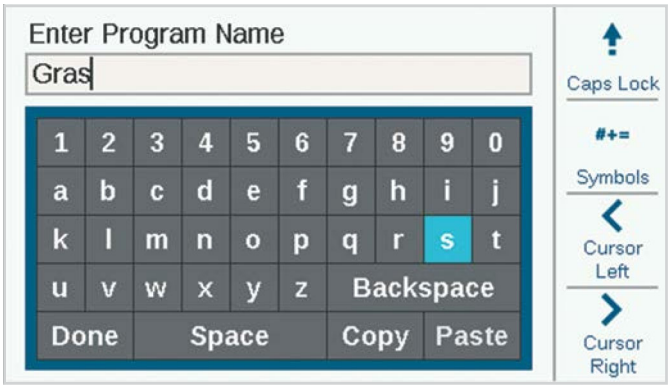


The soft keys normally show Stop, Manual, View Flow (shows current flow if a flow sensor is installed and enabled), and Main Menu. Stop and Manual are described in the Basic Programming section. View Flow is described in detail in the Flow Operations section.

Basic Programming and Setup

NAMES

ACC2 allows items to be named, with an on-screen keyboard that appears in the Name field (or from a mobile device, if the optional Wi-Fi module is installed). Names are useful in large systems, especially in the more advanced Flow Operations.



Select the Name field for any of these components, and a keyboard will appear to enter an alpha-numeric name.

Items that can be named are:

- Programs
- Stations
- Blocks
- Clik Sensors
- MainSafe™ zones
- Flow Zones

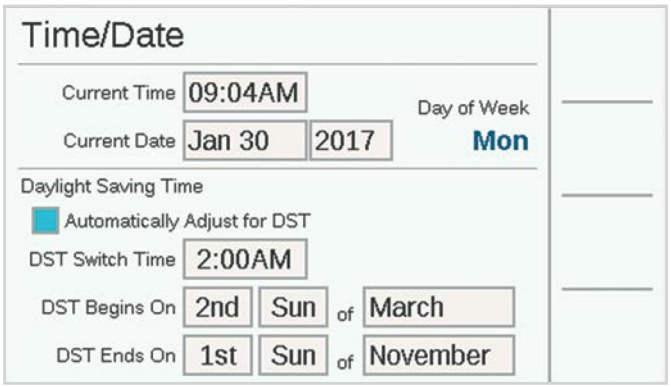
SETTINGS, TIME AND DATE

From the Home screen, press Main Menu, and dial to Settings.

Select Settings, and dial to Regional Settings.

Choose language, time and date formats, and units of measurement. Press Back or Home to exit.

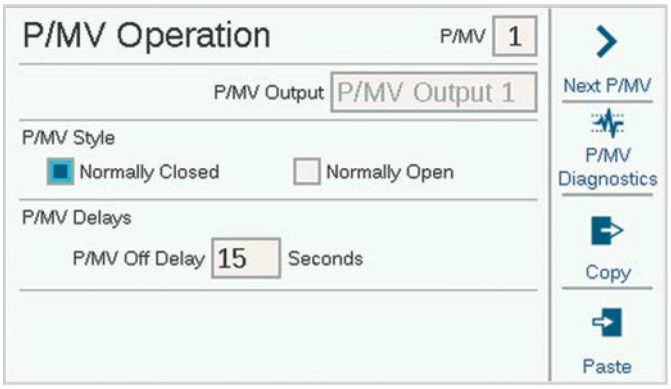
From the Settings menu, choose Time/Date: Set the current time and date, and also Daylight Saving options. Press Back or Home to exit.



PUMP/MASTER VALVE SETUP

From Main Menu, dial to the Stations menu. Set Station P/MV Usage for each station, if necessary.

P/MV outputs 1 through 3 always refer to the output terminals on the Power Supply Board. P/MV outputs 4, 5, and 6 can be assigned to regular station outputs. *See Soft P/MVs on page 12*.

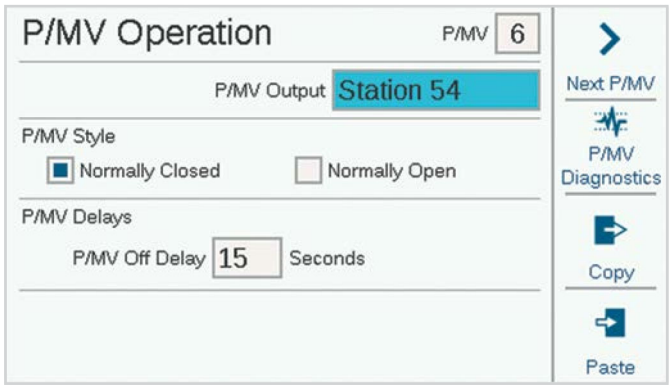


All P/MV outputs are set to Normally Closed operation, but they can be changed to Normally Open functions in the Devices menu. *See P/MV Operation section on page 18*.

The flow settings on this screen are not necessary for basic operations.

SOFT P/MVS (4-6)

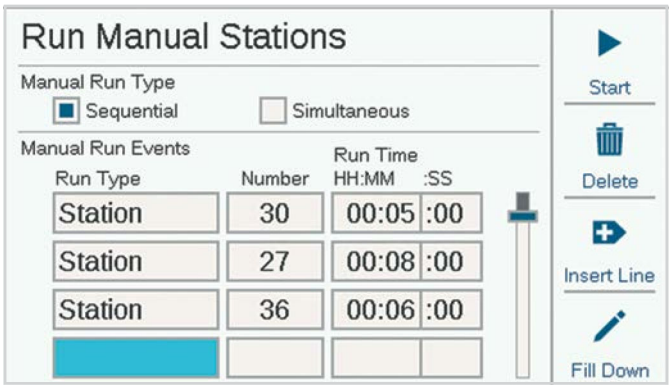
P/MV outputs 4 through 6 will show as “Disabled”, unless you select one of the station outputs to be used as an additional P/MV.



These are called “soft P/MVs”. Once a station is designated as a P/MV, that is its only function, and it must not be included in irrigation programs as a “regular” station.

MANUAL STARTS AND TEST

On the Home screen, the Manual soft key lets you start stations, programs, or a test program. Once you press Manual, there are three choices:



MANUAL STATIONS

Specify one or more stations to run and enter a run time for them. You can also choose to run them simultaneously, rather than sequentially, if you check the Simultaneous box. Press the Start key to start the list.

MANUAL PROGRAM

Select a program number to start, and press the Start key to start it. It is also possible to scroll down to an event in the program, and start the program from that point forward.

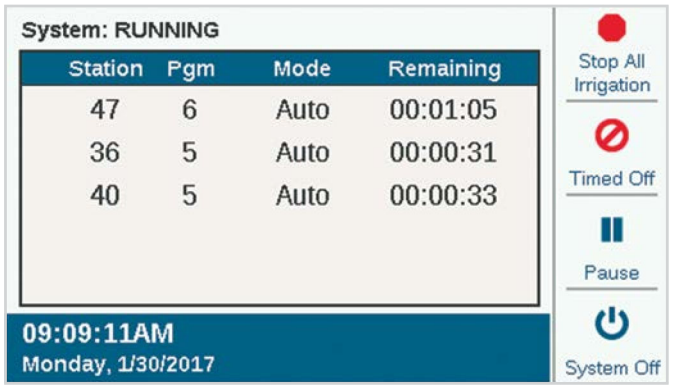
A Manual Station or Program Start will pause any automatic watering until the Manual Program has completed.

TEST PROGRAM

The Test program will run all stations in the controller for the Run Time entered on the screen. It is also possible to specify a station number, and run all remaining stations from that number to the highest numbered station.

STOP COMMANDS

Any running irrigation can be stopped immediately from the Home screen. The top soft key offers the following choices for stopping irrigation:



STOP ALL IRRIGATION

Stops everything that is watering or running immediately. The controller is still in automatic irrigation mode, and will resume watering at the next start time.

TIMED OFF

Like System Off, this stops all stations, and prevents automatic irrigation, but for a specified period of days. When the days have counted down to zero, the controller will resume automatic operations.

PAUSE

Interrupts whatever is currently running, until either Resume is pressed, or 30 minutes have passed. Anything running will be resumed where it left off, and run for its remaining time. When items are paused, the Resume button will appear.

Pause freezes all irrigation, including pending events. When the controller resumes, all remaining events will be pushed back for the amount of time the system was paused. This will cause irrigation to end later than usual.

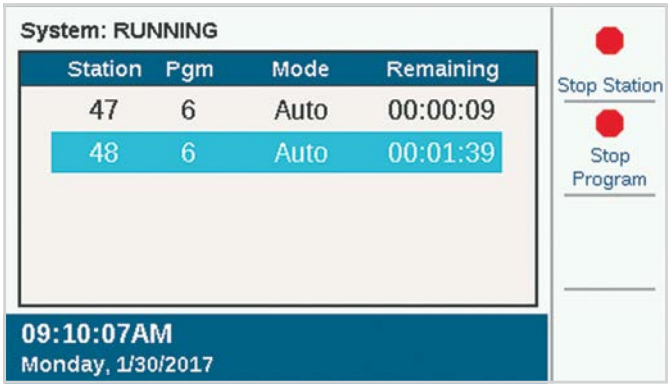
SYSTEM OFF

This turns off all irrigation, and places the controller in permanent Off mode. No automatic irrigation will occur.

STOP COMMANDS (CONTINUED)

SELECTIVE STOP

You can also use the dial to scroll through the list of running stations and programs on the Home screen and click to stop any one of them instead of the entire list. If you highlight an active station, the Stop button will allow you to Stop Station, or Stop Program. Stop Program will stop the entire program that caused the station to run, but allows other programs to keep running.



PROGRAMS

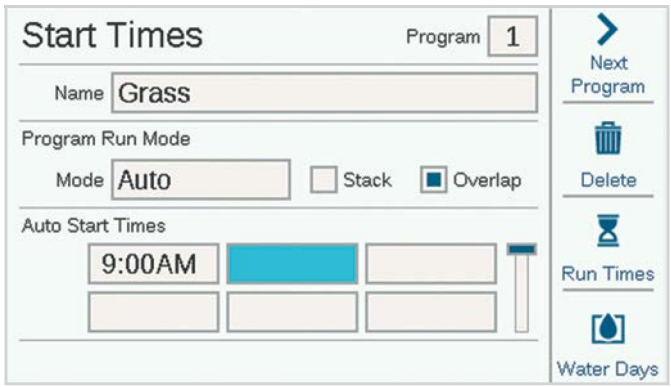
From Main Menu, dial to the Programs menu and select. This is where basic automatic irrigation is set up.

A basic program requires Start Times, Run Times, and Water Days to operate automatically. There are 32 possible automatic irrigation programs, each with up to 10 Start Times.

START TIMES

Verify that you have the correct program number, or select and enter the program you want.

- **Name (optional):** You may enter a name for the program if you wish.
- **Run Mode:** Must be set to Auto to run automatically.
  - Manual Only: does not water automatically, but stores station run times for manual irrigation only. These programs do not have day schedules or start times. They may be changed to Auto mode at any time, if automatic operation is desired.
- **Stack or Overlap:** Stack means the program must run by itself. Overlap means it is allowed to run at the same time as other programs. If a program is stacked, its actual start time may change, if other programs overlap it in time.
- **Auto Start Times:** Enter the time for the program to start. The faster you rotate the dial, the faster the times will change. Each program may have up to 10 start times.



INTELLIGENT CURRENT SENSING

ACC2 has no artificial programming limits preventing overlapping programs and stations. The controller senses how much electrical current is being drawn, and will suspend stations automatically if the combined current threatens the transformer.

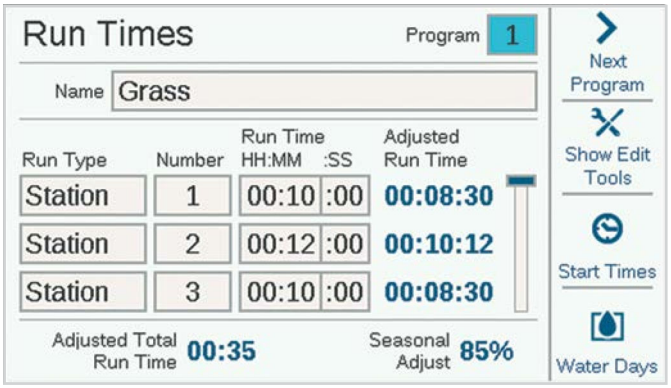
It is also possible to set controller and station limits (Stations, Station Limits) to control how many outputs may operate at once.

A conventionally wired ACC2 may run as many as 14 Hunter solenoids (including any P/MV outputs) simultaneously before suspending additional stations. Environmental factors or higher-draw solenoids may cause the overcurrent protection to activate at lower station counts.

It is possible to view the current draw of each station in the Diagnostics menu.

RUN TIMES

You can access Run Times from the programming menu, or from the soft key shortcuts from the Start Times screen. This allows you to set up an entire program (start times, run times, and water days) from the same menu.



Verify that you are in the correct program, by number or name.

Select the Run Type field, and select Station or Block (“Blocks” are described in detail in the Stations Menu section. Blocks replace “SSGs” in the original ACC). Press the dial to select the type.

Dial to the Number field. Press and dial to select station or block number. Press to enter.

Dial to the Run Time field, press to select, and dial to enter the run time (from 1 minute to 12 hours). You can also enter run times in seconds, by dialing to the: SS field (seconds), which is adjusted separately.

You may continue to enter any station numbers, in any order, in the same way.

Show Edit Tools (Shortcuts): Press the soft key for Show Edit Tools. If you are running stations in numerical order, you can use the soft key for Fill Down. This will automatically add 1 to the previous station number, and copy the run time on the next line. For example, if you entered Station 1, 5 minutes, and then pressed **Fill Down**, it would add Station 2 for 5 minutes on the next line. This is a shortcut for copying sequential run times very quickly.

You can also **Delete** any item from the list. Scroll to the item, and press Delete.

You can also **Insert** an item above any selected line in the list. Scroll to an item, and press Insert Line, and a blank line will appear above it.

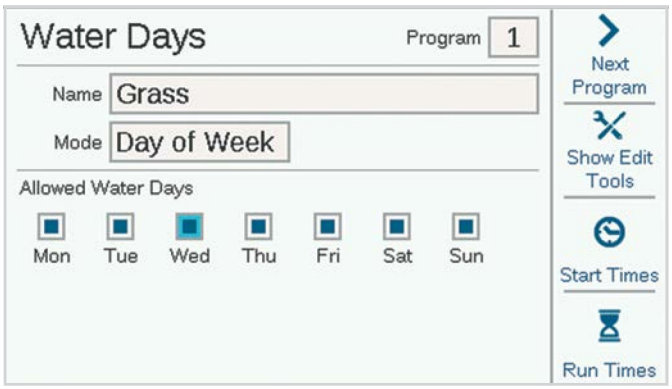
ACC2 can run any station or block in any order. Example: you could insert station 3 between stations 1 and 2. The program would run 1, 3, 2, in that order.

Adjusted Run Times: The Adjusted Run Times show the effects of the current Seasonal Adjust settings on the base run time. If a run time is set to 10 minutes, but Seasonal Adjust is at 50%, the Adjusted Run Time will show 5 minutes. The Seasonal Adjust amount is not changed in this screen, but can be set from the Programs menu, or automatically by a Solar Sync sensor.

When all the Run Times for the program have been set, press Back or Home to exit.

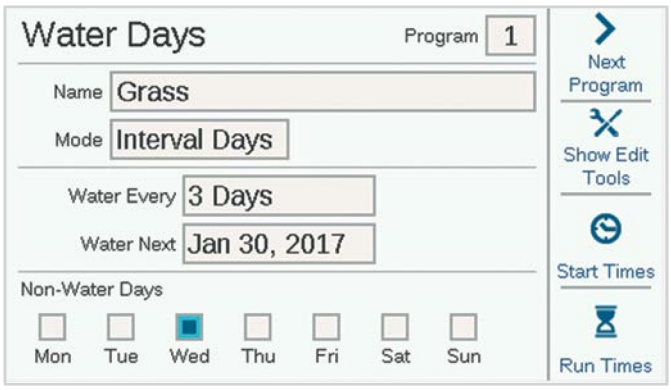
WATER DAYS

Verify you are in the correct program by number or name, and set the days for automatic watering.



Mode selects a type of schedule.

- **Day of Week:** Check the boxes for the days the program should water.
- **Odd/Even:** Water only on odd or even calendar dates, to comply with water restrictions. An optional check box allows skipping the 31st day of the month.
- **Interval:** Water every x number of days, regardless of the day of week. Enter the desired interval days.

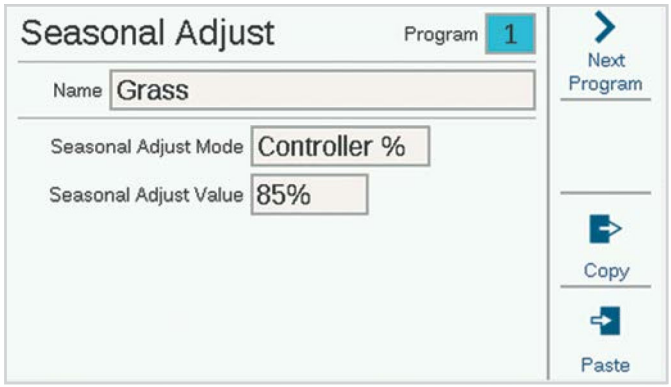


Both Odd/Even and Interval also have Non Water Days, which can set a day (for example, a mowing day) on which watering will never occur, regardless of the schedule.

SEASONAL ADJUST

Programs menu, Seasonal Adjust.

When using Solar Sync, set up at Devices page first, then go to Seasonal Adjust.

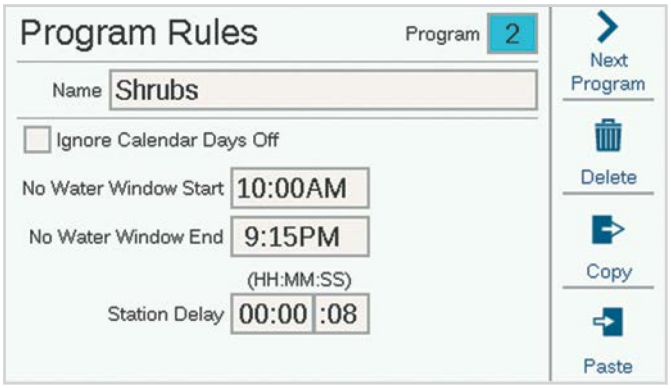


- **Seasonal Adjust Mode:** Set a percentage adjustment to all run times by Controller or Program, or set a Monthly schedule for the controller to follow automatically, or assign the program to Solar Sync automatic adjustment.
- **Controller:** The Seasonal Adjust value will follow whatever has been set for the controller level. All programs set to Controller will receive the same manual adjustment.
- **Program:** The Season Adjust factor entered here will only apply to the selected program, and is not affected by other adjustments.
- **Monthly:** Enter in advance the adjustment value for each month of the year (usually based on historical weather averages). These adjustments take effect automatically on the 1st of each month, and do not change during the month.
- **Solar Sync:** Adjustments are made to the selected program automatically by a Solar Sync sensor attached to the controller. This requires a sensor, and setup at the Devices menu, Setup Solar Sync.

Each Program must have a Seasonal Adjustment set. **Copy** and **Paste** shortcuts permit copying the initial setup, and then pasting it to all similar programs.

PROGRAM RULES

Program Rules customizes each program for special purposes.



IGNORE CALENDAR DAYS OFF

Check the box if the program should be allowed to run on Calendar Days Off that apply to other programs.

NO WATER WINDOW (START AND END)

Enter start and end times for the portion of the day during which automatic irrigation is never allowed. Program will never be allowed to run during this period, although Manual operations will be allowed. If a program is suspended by a No Water Window, it will be logged as an alarm, for corrective action.

STATION DELAY (DELAY BETWEEN STATIONS)

Sets an interval between each station in a program. This can be used for slow-closing valves, recharging pressure tanks, etc. During the delay, the P/MV output will continue running for 15 seconds, unless this is adjusted in the Devices, P/MV Operation screen.

CALENDAR DAYS OFF

Create a list of dates on which the whole controller will not be allowed to run, regardless of Water Day settings. Programs that have been set to Ignore Calendar Days Off in the Program Rules screen will be allowed to run anyway.



PROGRAM SUMMARY

Once a program has start times, run times, and water days, it will run automatically without further setup. To see how the program is configured, select Program Summary from the Programming screen.



The summary will show the total number of programs ready to run for the entire controller.

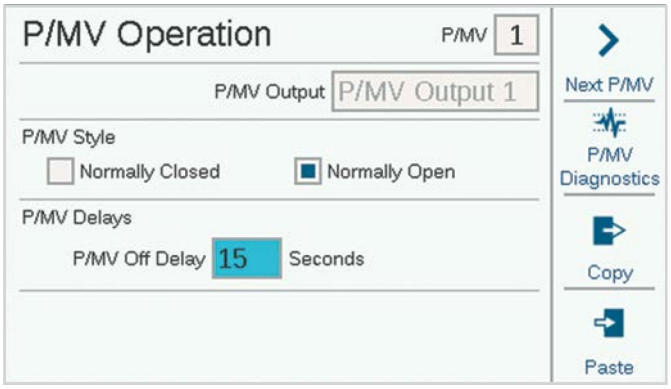
Press the **Programs** soft key to view details for each program.

Press the **Graph** soft key to view a chart of all programs occurring over time. Turn the dial to view the graph up to 7 days in advance.

Non Water Windows and Calendar Days Off options will show on the graph in red as **Water Restrictions**, meaning automatic irrigation cannot occur during those periods.

P/MV OPERATION (PUMP/MASTER VALVE OPERATION)

Dial to the Devices menu, and select P/MV Operation. Each P/MV will be checked for **Normally Closed** operation. This is a station level setting, meaning that the P/MV is activated by stations when they begin to run. The Station Setup menu allows you to set each station for the P/MV outputs it needs to run water.



Normally Open may also be selected, and is discussed further in the Flow Operations section. Normally Open is not a station level setting. The valve is always open until a problem is detected at the Flow Zone, or MainSafe level, when the controller activates the normally-open P/MV to shut the water off.

P/MV Off Delay: This sets how long the P/MV output will remain active after a station stops calling for it (for example, during Delay Between Stations). It is preset to 15 seconds, but can be changed (use caution). Hunter is not responsible for damage to pump components when longer delays are set.

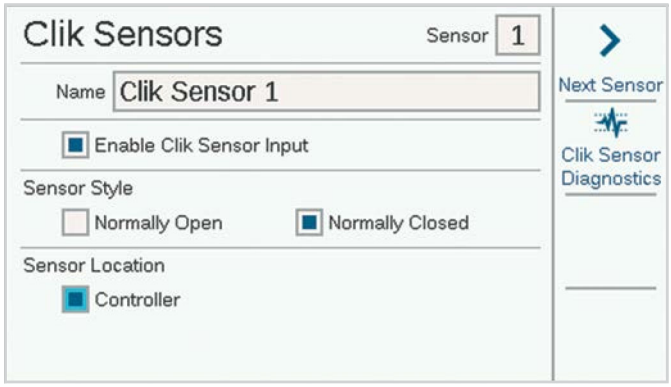
P/MV Diagnostics: Press the soft key for P/MV Diagnostics to view the status and current draw of each active P/MV output. P/MVs that are not running are not shown.

SENSORS

Rain shutoff and other sensors must be setup in the Devices menu.

CLIK SENSORS

Dial to the Devices menu, and select Clik Sensors for basic Hunter “Clik” sensors.



To set up a sensor, click the box for Enable Sensor.

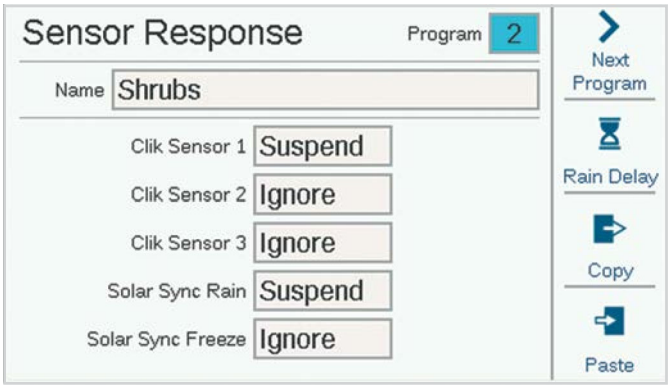
The ACC2 sensor inputs are already configured as Normally Closed, but this can be changed for other types of contact-closure sensor inputs to Normally Open.

It is also possible to enter a name for individual sensors.

SENSOR RESPONSE

Located on the Devices menu, Sensor Response sets which sensors will shut off which programs in basic operations.

The sensor responses are set up for each program, one page at a time. If you want the same responses for multiple programs, set up the responses for the first program, then click the Copy soft key. You can then change the program number and click the Paste soft key to duplicate the settings.



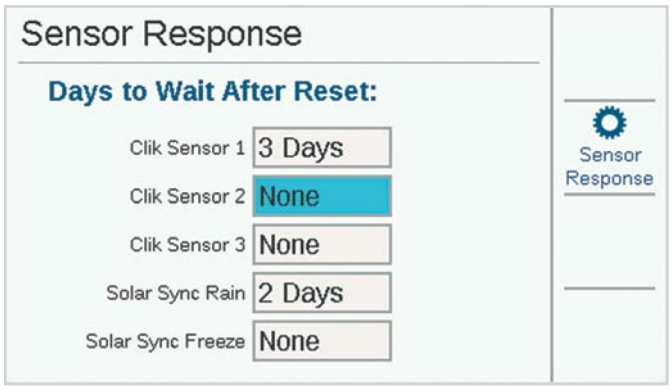
There are three standard Clik sensor inputs on the Power Supply Board. If a Hunter Solar Sync sensor has been configured, there are also settings for Solar Sync Rain and Freeze.

Ignore: Program does not respond to the sensor.

Suspend (recommended): Program suspends watering when sensor is active (alarmed) but keeps track of time. If the sensor returns to normal, the suspended program will resume irrigating where it should be at that time in the schedule. The program will end when it was originally scheduled to end.

Pause (use caution): Program stops where it is, when the sensor is active. If the sensor returns to normal, the program will resume watering where it left off. This will cause the program to end much later than the original schedule.

It is not possible for a program to be set to both Pause and Suspend for different sensors, because they cannot both be active at the same time. If you change a response setting for a sensor, and another sensor for the same program changes automatically, this is by design.



Rain Delay: In the Sensor Response menu, press the soft key for Rain Delay. This optional setting will cause watering to stay off for a set number of days after the sensor activation is over. Select the number of days for watering to stay off for each Clik sensor input.

SOLAR SYNC

After connecting a Solar Sync sensor to the controller, set up operation in the Devices, Solar Sync menu.

- Check the box to Enable Solar Sync.
- Choose the Region and set the Water Adjustment, according to the Solar Sync manual instructions.
- For normal operations, this is all that is necessary. It will take the Solar Sync two or three days to register enough climate data to begin adjusting.



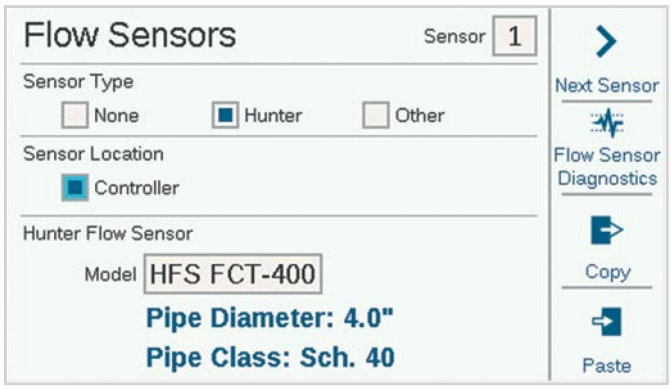
Solar Sync Delay allows a number of days to wait before automatic Solar Sync adjustment goes into effect (to establish new landscape, for example). Enter a number of days (1-250) to wait, and specify the **Adjustment During Delay** percentage to use during the delay period. At the end of the delay, the Solar Sync will begin adjusting automatically for the current climate conditions.

The delay does not interfere with the Solar Sync Rain and Temp functions. They are still able to perform shutdowns on rain or freeze events during this delay.

Complete the setup by setting the programs to use Solar Sync in the Program, Seasonal Adjust menu.

FLOW SENSORS

After connecting one or more flow sensors to the controller, set up operation in the Devices, Flow Sensors menu.



Select the sensor input number to be setup (1-6). The controller has 3 Flow Sensor inputs built in, but 3 more can be added with the A2C-F3 Flow Expansion module.

Check the box for either “Hunter” or “Other” flow meters.

If **Hunter** is checked, move to the Model field and select the Hunter FCT model number for the diameter of the pipe. This is all that is necessary to calibrate the setup.

If **Other** is checked, you must select the Flow Sensor Style and enter the calibration information. Some use K-factor and Offset, and others are Pulse type. Consult the flow meter supplier’s documentation for the correct settings or contact Hunter Technical Support for additional information.

K-Factor and Offset: obtain these values from the flow sensor manual, and enter here.



Pulse type: enter the amount equal to a single pulse.

Enter the information for each flow sensor that is connected to a flow terminal. There are copy and paste soft keys available, if all the meters are the same type and size.

Once this information is entered for each flow sensor input, the controller is ready to read flow. However, each flow sensor must be attached to a Flow Zone (Flow, Flow Zones) before real time monitoring can occur.

Flow Totals may be viewed at the Flow menu.

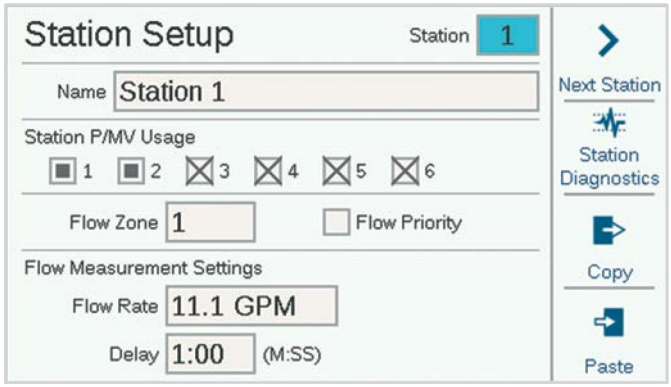
Current flow rates (by sensor) can be read from the Home/ Activity screen with the View Flow soft key.

Flow Monitoring: Additional setup for station level flow monitoring is required in the Flow menu (Flow Zones), and in the Stations, Station Setup menu.

Stations Menu

STATION SETUP

Allows stations to be named. Most other functions are described in more detail in the Flow Operations section.



Station P/MV Usage indicates which normally-closed P/MV outputs the station will activate, whenever it runs.

Station **Flow Zone** assignment (required for Flow Manager and/or Flow Monitoring).

Flow Priority (used in Flow Manager). Check the box to make a station more likely to water earlier in flow management.

Flow Rate: Enter or learn the typical flow for the station. Used in both Flow Manager and Flow Monitor. *See Flow Operations section on page 32.*

Delay: Sets the amount of time the station can run before high or low flows will cause an alarm. Set longer delays for stations that take longer to stabilize flow.

P/MV boxes with the “X” are unavailable, because they are already assigned to other Flow Zones or MainSafe™ zones.

CYCLE & SOAK

Used to control runoff and puddles when soil or slope cannot absorb all irrigation at once.

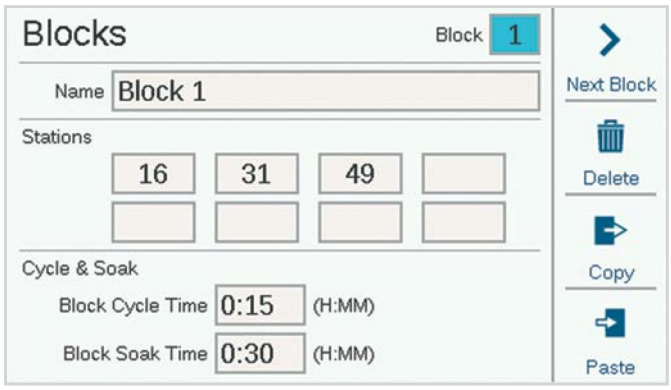
Set the Cycle to the maximum time the station can run at once, before runoff occurs.

Set the Soak to the minimum time the station must wait before applying another cycle. The controller will water other stations during the Soak period. For this reason, Cycle & Soak generally does not extend the overall watering time significantly.

The copy and paste shortcuts allow quick duplication of these settings to stations with similar characteristics.

BLOCKS

A Block is an electronic group of stations that runs at the same time, for the same run time, within a program (Blocks replace “SSGs” in original ACC).



To create a Block, dial to the Stations menu and select Blocks. Enter a name for the Block if you wish.

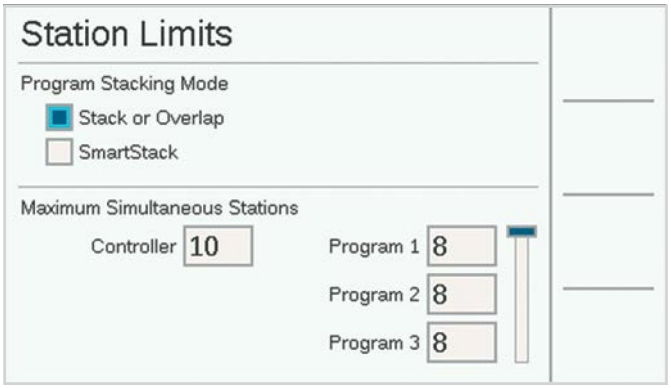
Dial down to the station spaces, click and enter the station numbers that will be in the Block.

Blocks may also have their own Cycle and Soak settings.

- Blocks may have up to 8 stations each.
- There can be up to 64 blocks per controller.
- They can be mixed in a program with individual stations.
- Programs with blocks are not limited in any way by other programs that are running. The controller will not turn on more stations than it can handle, so there are no artificial rules governing the blocks.

STATION LIMITS

Station Limits set how many stations can run at once.



Stack or Overlap means that each program can be manually set to overlap with other programs, or be required to stack. Programs that are set to stack can only run by themselves.

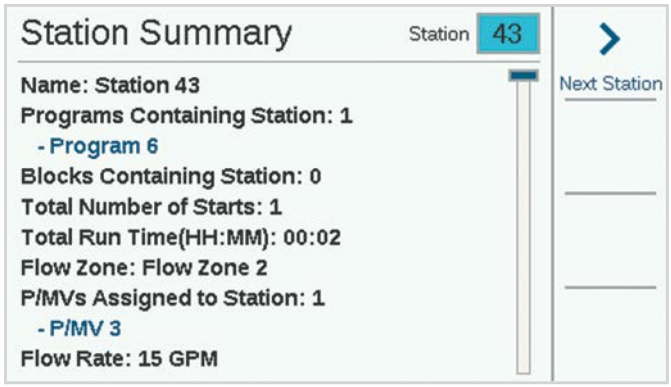
SmartStack specifies a maximum number of programs that are allowed to overlap across the whole controller.

Maximum Simultaneous Stations is the total number of simultaneous stations that can occur for any reason in the entire controller. This is mainly for use with the Flow Manager, but applies to all situations.

If Flow Manager is enabled, the display will also show **Program Limits**. This sets the max number of stations that can run within any one program. This might be used to force irrigation to be spread over a larger number of programs, when Flow Manager is scheduling stations on to reach a flow rate target.

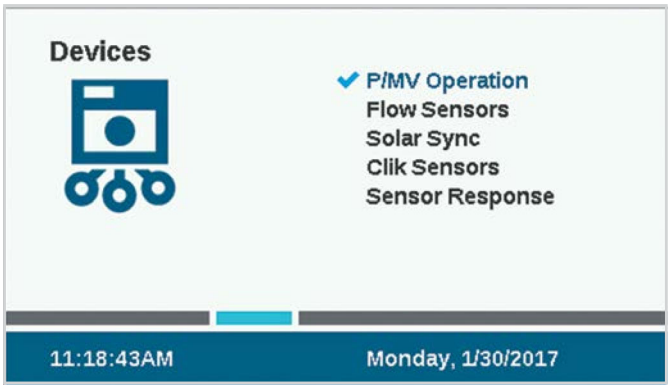
STATION SUMMARY

The Station Summary is a report available for each station showing exactly how it is going to run, based on the current setup and programming. It is a report only, and does not allow changes to be made directly from this screen.



Devices Menu

Devices allows setup of common external devices that the controller can use. The functions in the Devices menu are covered in more detail in other sections.



P/MV OPERATION

Set the Style, Normally Closed or Normally Open, for the Pump/Master Valve outputs.

Pumps should always be set to Normally Closed to prevent damage.

The P/MV Delay sets how long the P/MV will remain active if a station pauses, such as during the delay between stations.

FLOW SENSORS

Flow Sensor setup is covered in detail in the Basic Programming, Sensors, and *Flow Sensors section on page 20*.

SOLAR SYNC

Solar Sync setup is covered in detail in the Basic Programming, Sensors, and *Solar Sync section on page 20*.

CLIK SENSORS

Clik sensor setup is covered in detail in the Basic Programming, Sensors, and *Clik Sensors section on page 18*.

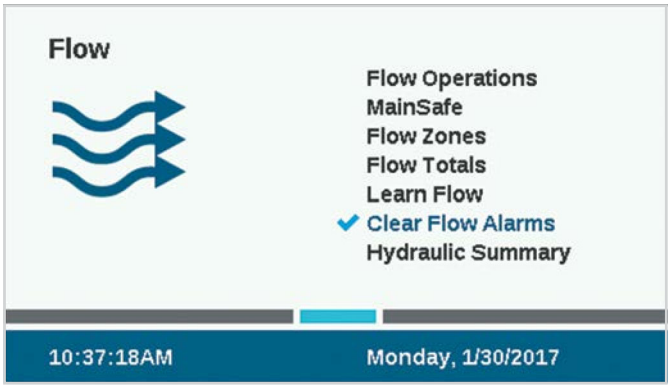
SENSOR RESPONSE

Sensor Response is covered in detail in the Basic Programming, Sensors, and *Flow Sensors section on page 20*.

A sensor response setting is required for any sensor to be able to shut off any program in the controller.

Flow Menu

The flow menu includes all setup for the various flow functions. These are described in detail in the *Flow Operations section on page 32*.



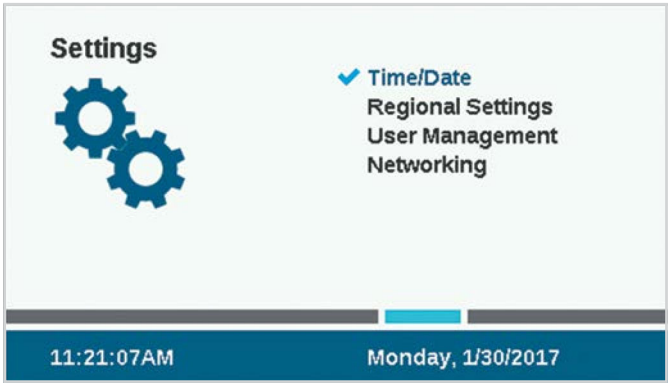
CLEAR FLOW ALARMS

The Clear Flow Alarm function enables a MainSafe or Flow Zone that has had an Overflow alarm to water again. If a Flow Zone or MainSafe flow alarm has occurred, a shortcut key is provided on the Home screen to Clear Flow Alarms.

If the **Alarm Clear Delay** is set to **Manual Only**, a user must manually clear the alarm with this function before it can water again.

If Alarm Clear Delay is set to a time in HH:MM format, the controller can run irrigation in the MainSafe or Flow Zone automatically again, after the time has elapsed.

Settings Menu



TIME/DATE

Sets time and date, see Basic Programming, and *Time/Date section on page 25*.

REGIONAL SETTINGS

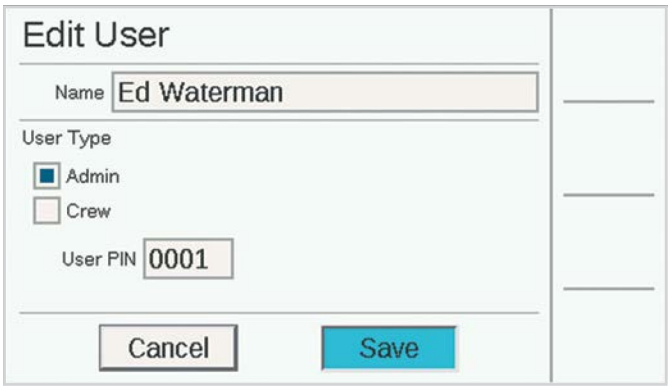
Sets Regional preferences, see *Basic Programming section on page 11*.

USER MANAGEMENT

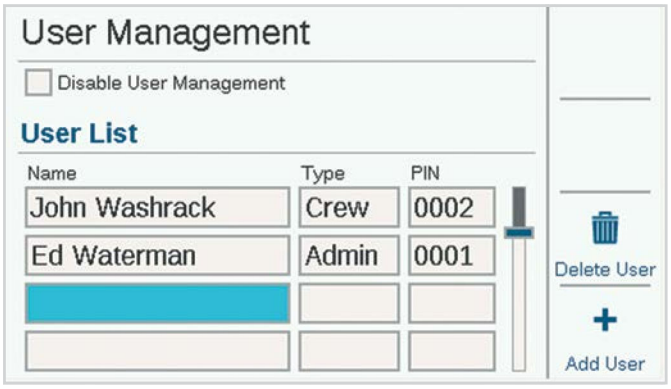
This allows a password to be created for the controller. Users will be required to enter the correct PIN (personal identification number) before operating the controller. If a single PIN is entered at the top, it is required for all users, and provides the same level of access to all.

> If passwords are enabled, and the password is lost or forgotten, you will be locked out of the controller.

Check the box for Enable User Management to create one or more PINs. Once it is checked, only an Admin level user who is successfully logged in may uncheck this box.



It is also possible to define different users, and individual PINs.



There are two levels of authorization, Admin and Crew.

Crew level access allows manual operations and the ability to view programming.

Only **Admins** may modify programming and other settings.

User log-ins are tracked in the Controller Log.

To add a user, press the soft key for Add User. You may then enter the user's name with the keyboard that appears. For each user, select the Type (Admin or Crew), and create a unique PIN for that person.

It is also possible for an Admin to delete users with the Delete User soft key.

Users will be automatically logged off after 30 minutes of inactivity.

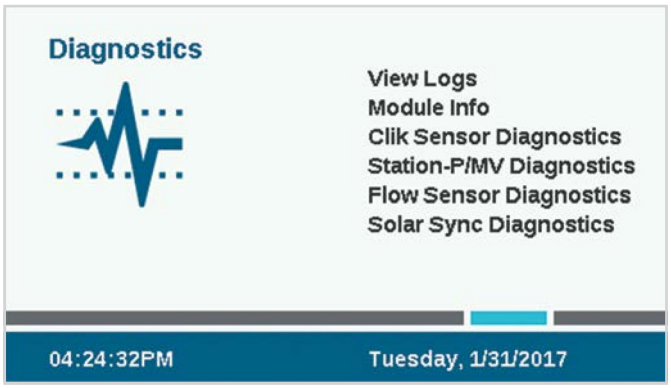
NETWORKING

If the internal Wi-Fi or LAN modules are installed, Networking will display the network settings of these devices.

Wi-Fi Setup: This soft key lets you specify either direct or central communications. Direct connections from a smart mobile device will allow remote control, text entry, and flow reporting within the range of the mobile device.

Network: This option is not currently enabled.

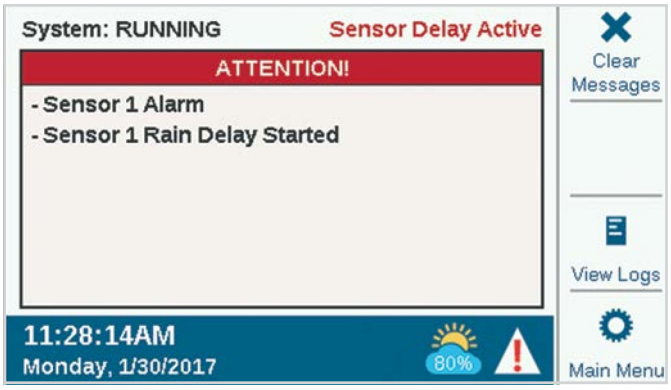
Diagnostics Menu



Attention messages do not interfere with normal automatic irrigation.

All attention messages on the Home screen create logs. The first step to understanding any problem or message is to click the soft key for View Logs, or access the logs from the Diagnostics menu.

Other helpful tools are also located at Diagnostics.



VIEW LOGS

There are 3 types of logs, and a filter function to narrow the number of logs displayed.

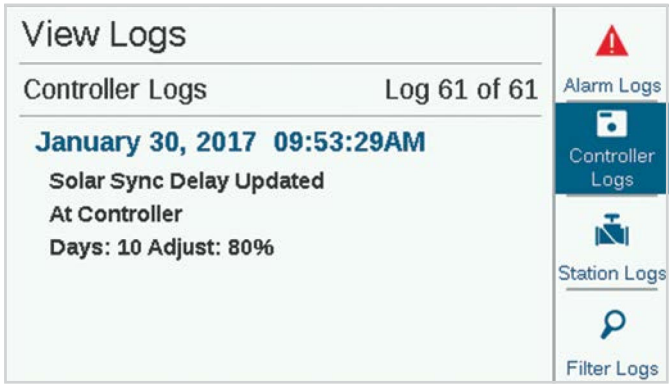
ALARM LOGS

The controller will store up to 250 alarm logs, with date and time, beginning with the most recent alarm. Use the dial to advance forward and backward through the alarm list.



CONTROLLER LOGS

Other significant messages that are not technically alarms are stored in the controller logs (up to 250 events). They are also arranged by date and time, with the most recent log first.



STATION LOGS

Station logs record every single event that occurs in the controller (up to 1500 events), beginning with the most recent. This can be useful for advanced troubleshooting, or to verify that a station actually watered.

FILTER LOGS

This allows any of the three logs to be filtered by date, or by record number.

EXPORT LOGS

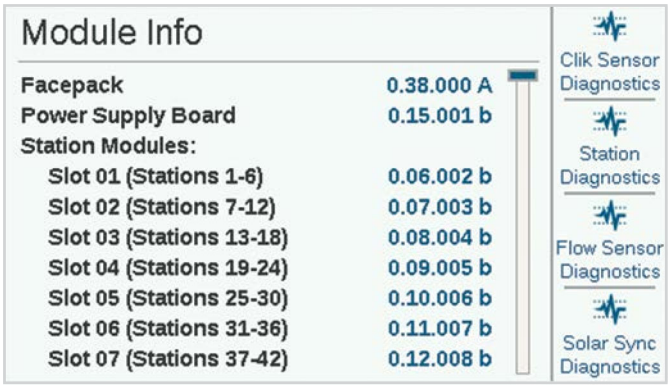
> All logs can be written to the SD card, described in the Advanced Features section. *Advanced Features section on page 30*.

MODULE INFO

Select Module Info to see the current version of all firmware in all modules and components. Module slots or components that are empty or not reporting are shown as Not Present.

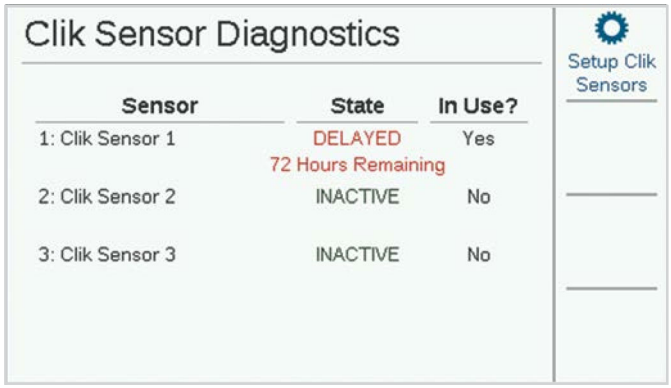
Soft keys allow shortcuts to other diagnostic checks, which are also available directly from the Diagnostics menu.

When the facepack is reversed in the frame, it will automatically go to the Module Info screen. The facepack is still fully operational, and pressing the Home button can access all programming functions when the facepack is reversed. The controller will still run automatically if the facepack is left reversed.



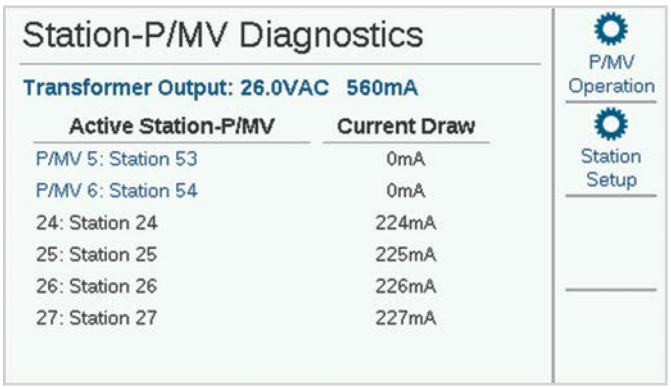
CLIK SENSOR DIAGNOSTICS

- **Sensor:** Shows each sensor and name.
- **State:** Shows the current status of the sensor.
  - **"Inactive"** means the sensor is normal.
  - **"Active"** means the sensor is currently alarmed.
  - **"Delayed"** means the sensor was recently alarmed, and is now inactive, but a Rain Delay is in effect for the sensor.
  - **"Disabled"** means the check box for the sensor (Devices menu) is unchecked, and no responses will be caused by the sensor.
- **In Use?:** Shows whether the sensor is currently set to shut down any programs in the Sensor Response menu.



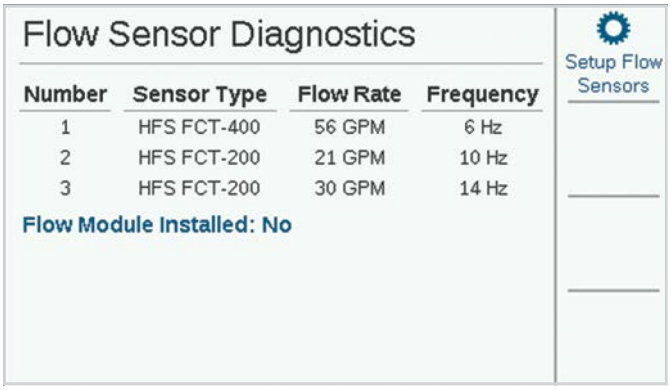
STATION-P/MV DIAGNOSTICS

Shows the electrical current draw in milliamps for all active stations and P/MV outputs.



FLOW SENSOR DIAGNOSTICS

Shows the configuration of each flow sensor and current flow. Frequency shows the click or pulse rate from the sensor, for diagnostic purposes.



SOLAR SYNC DIAGNOSTICS

Shows the last time the Solar Sync sensor communicated, and the current state of its alarm sensors (Rain and Freeze). This soft key is only shown if Solar Sync has been set up in the Devices menu.

The **Test Connection** soft key checks for the presence of a wired sensor, or for the presence of the receiver for a wireless sensor. Test does not initiate communications to the wireless sensor itself, because it is a one-way connection.

Advanced Features



EXPORT LOGS

Logs may be exported in a simple text format to the internal SD card in the facepack if additional help is needed for troubleshooting, or just for record-keeping purposes.

Enter a unique file name by clicking in the File Name box.

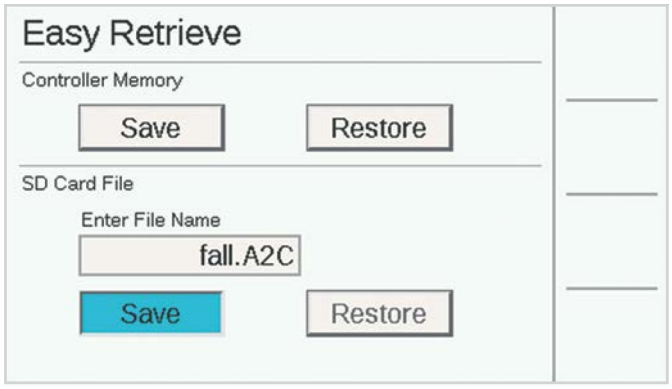
Select the boxes for the types of logs desired.

Select and click the Export Logs button to save the file to the SD card. The card may then be inserted into a computer or other device with SD card reader, and saved or sent to another location.



EASY RETRIEVE

Saves the current controller setup, so that it may be restored to this point at a future date.



Controller Memory: Only one setup may be saved in controller memory, and it will remain unless you make changes and create a new Easy Retrieve backup in the future. You can choose Restore at any time, and it will change the whole controller to the last Easy Retrieve backup.

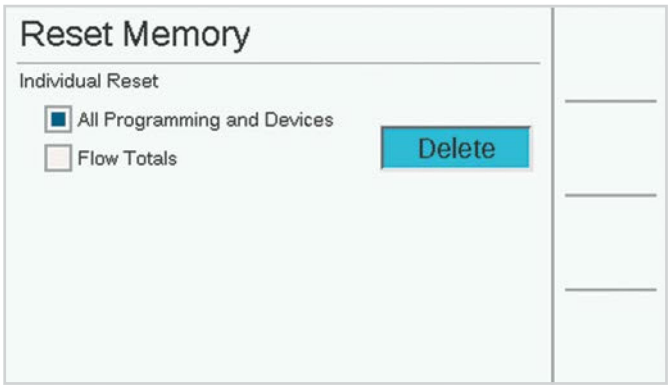
SD Card File: You can also save Easy Retrieve backups to the SD card via the SD card slot in the facepack (to do this, an SD card must be installed). You may also restore from the SD card to any saved Easy Retrieve in the future.

When saving to SD card, you must enter a name for the file. Click to select the File Name, and a keyboard will appear. Enter the name for the file, and choose Done from the keyboard when complete.

Using the SD card and different file names allows you to save as many backups, under different names, as the card will hold. You can restore any one of them from the SD card by entering the correct file name. The SD card cannot display a list of the saved files, so be sure to enter the file name exactly as it is saved on the card.

RESET MEMORY

Sometimes it is preferable to simply erase the controller, to begin again from a clean start. There are several reset options.



All Programming and Devices: Erases all programs and device setups, but keeps the Flow Totals intact.

This will require completely reprogramming all devices, flow setups, and irrigation schedules.

Flow Totals: Clears the flow total history and resets all to 0.

Check the boxes for the items you wish to clear, and press Delete. The controller will ask if you are sure, before erasing data.

FIRMWARE UPDATE

ACC2 can be updated whenever a new version of the operating system or any of the internal modules is released. These updates are usually available from *www.hunterindustries.com*, or are sent via email. It is always advisable to stay current with controller updates.

Copy the update files onto a compatible SD card, and insert in the SD card reader.

Select Firmware Updates from the Settings menu. The controller will detect and display available updates on the card.

Press the soft key for Update, and the files will be copied to the controller. Wait until the automatic reboot is complete, and the controller will be up to date.

Do not turn off power to the controller or facepack once the update has started. Damage may result.

CONDITIONAL RESPONSE

Conditional Response allows active responses to various sensors or other conditions. It can be used to:

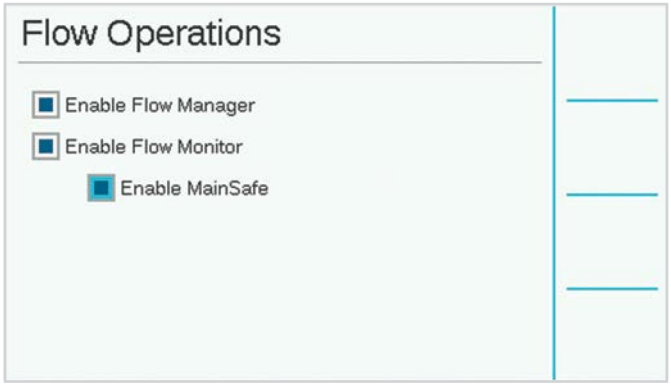
- Start a station, block, or program based on a sensor input
- Switch P/MV outputs based on a switch position
- Activate an external light (SOS) to indicate an alarm in the controller

Read the *Conditional Response section on page 31* before using these features.

Flow Operations

The two major parts of Flow Operations are the Flow Manager, and the Flow Monitor.

Checking either will display a reminder of the steps for setting these features up. Press the soft key for Continue to setup the selected function.



FLOW MANAGER

Flow Manager uses station flow information to run simultaneous stations to reach a flow rate target that is specified by the user. It will turn on as many stations as it can to stay at or near the flow target until there are no more stations to run. This does not require a flow sensor input.

FLOW MONITOR

Flow Monitor verifies that actual flow matches the learned flow for all running stations, and performs diagnostics or shutdowns when alarms occur. **Flow Monitor requires one or more flow sensor inputs** in order to operate, and at least one Master Valve (P/MV) per flow sensor to be effective.

At the Flow menu, check the boxes to **Enable Flow Manager** and/or **Enable Flow Monitor** if desired. Verify that all set up information is exactly correct according to the following steps.

MAINSAFE™

Enable MainSafe has its own check box. MainSafe is a special function for higher level flow monitoring and mainline protection.

> Do not check the MainSafe box until the optional feature is completely understood.

MainSafe requires a separate flow meter and master valve. It is designed to protect longer runs of large diameter mainline pipe that are upstream from the Flow Zones themselves. If a mainline pipe experiences a high flow, or continues to flow when all irrigation is suspended, MainSafe provides a rapid shutdown response to prevent a prolonged serious leak.

MainSafe can also be configured to watch over separate, always-on manual watering pipes, and provide an emergency response if a break occurs.

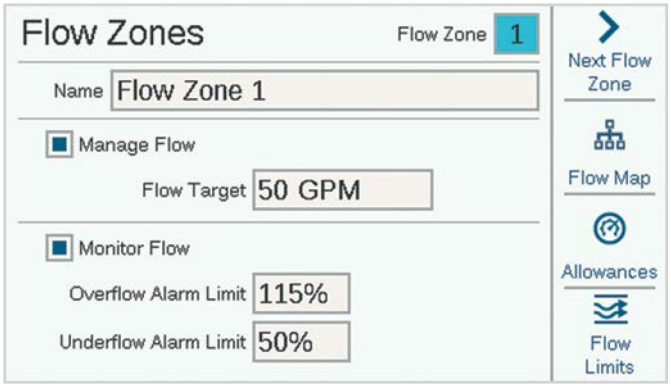
SET UP FLOW MONITOR

The Flow Monitor requires the following information to operate correctly:

- Install and set up a flow sensor (Devices menu).
- Install and set up a P/MV (Devices menu).
- Set up a Flow Zone, and complete all information for the Flow Zone (Flow menu).
- Attach each station to a Flow Zone (Station Setup menu).
- Learn flow for all stations with run times (Flow menu).

FLOW ZONES

A Flow Zone defines a section of pipe and a group of stations attached to that pipe, which is managed as a hydraulic unit. Flow Zones are used for both Flow Manager and Flow Monitor.

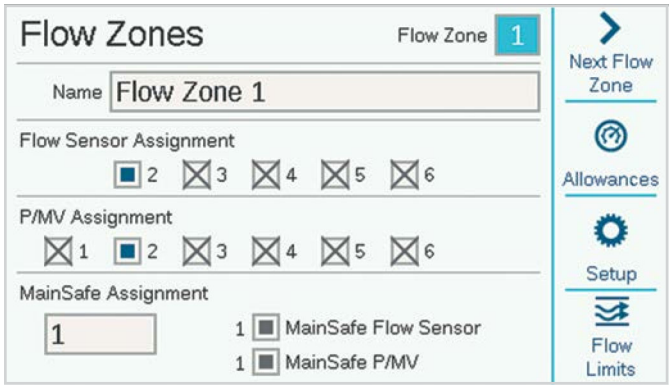


Each Flow Zone has a check box for “Manage Flow” and “Monitor Flow”. To monitor flow, check that box. Then complete the settings and rules for the Flow Zone.

Overflow/Underflow Alarm Limits: ACC2 sets the over and underflow limits for each station’s learned flow at the flow zone level. Enter the maximum and minimum flow percentages you want the Flow Zone to allow for the stations attached to the Flow Zone. If these limits are set too close to 100%, there is a greater chance of false alarms, due to natural fluctuations in the flow.

FLOW MAP

In the Flow Zones menu, press the soft key for Flow Map. This tells the controller how the Flow Zone is connected, and which devices are used in that hydraulic unit. All stations must be downstream from the flow sensors and master valves that are checked here.



Flow Sensor Assignment: Check the box for the Flow Sensor or sensors connected to the Flow Zone.

If an X is in one of the Flow Sensor boxes, the sensor has already been assigned to another Flow Zone, and is not available for this Flow Zone.

If a Flow Sensor number does not appear, it has already been assigned to a MainSafe, and is not available for Flow Zone monitoring.

P/MV Assignment: Check the box for the Master Valve that is installed in line with the flow sensor on this flow zone.

If an X is in one of the P/MV boxes, it has already been assigned to another Flow Zone, and is not available for this Flow Zone.

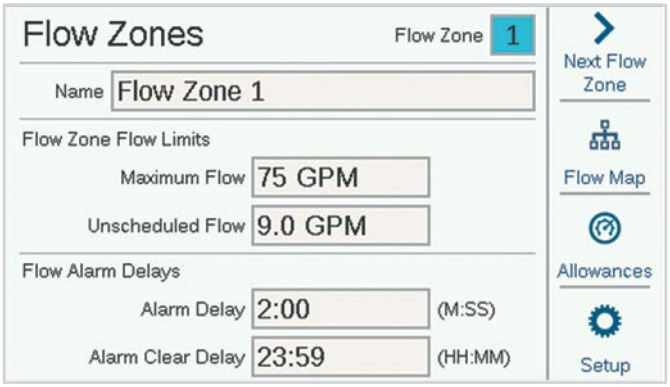
If a P/MV number does not appear, it has already been assigned to a MainSafe, and is not available for Flow Zone monitoring.

MainSafe™ Assignment: If using this optional feature, select the MainSafe zone that is upstream from the Flow Zone. If MainSafe is not being used, leave this set to “None.”

The selected MainSafe flow sensor and P/MV assignments are shown at the bottom of this screen.

FLOW LIMITS

In the Flow Zones menu, press the soft key for Flow Limits.



Maximum Flow: Sets the highest possible flow rate allowed in the Flow Zone for any reason. This should be considerably larger than the maximum flow allowed in normal irrigation (so that it does not alarm before station-level diagnostics can be performed). When the flow sensor detects a flow higher than this, the irrigation will be shut down.

Unscheduled Flow: This is the maximum amount of flow allowed when no stations are actively running. This is only to allow manual watering by hand when the controller is not watering automatically. When the rate is exceeded, the controller will alarm.

If Unscheduled Flow is set to OFF, the controller will not respond to unscheduled flow.

Flow Alarm Delays: Sets an amount of time before the Max or Unscheduled flow rates will cause an alarm, and sets how long the Flow Zone will be shut down.

Alarm Delay: High flows will alarm immediately if this is set to None. Enter a time to allow high flow before it is treated as an alarm. This can prevent false alarms when flow is unstable. Set in M:SS format; the longest delay is 9 minutes, 59 seconds. This can eliminate false alarms from temporary surges in flow.

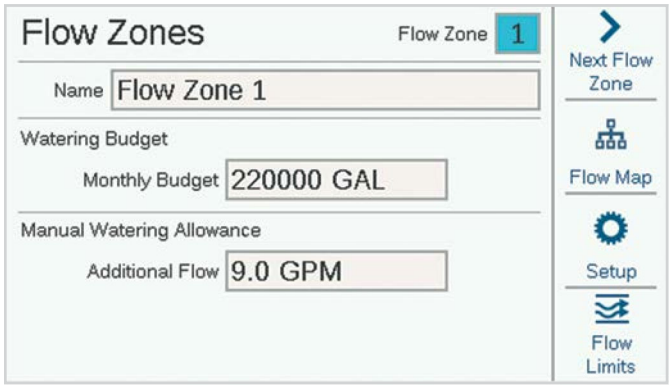
This delay should be longer than the delays for the stations attached to the Flow Zone.

Alarm Clear Delay: Sets the amount of time a Flow Zone will remain shut down before allowing new automatic irrigation attempts. Set in HH:MM format, the longest delay setting is 23 hours, 59 minutes.

If Alarm Clear Delay is set to **Manual Only**, automatic irrigation will never resume after a high flow or unscheduled flow alarm, until it is manually cleared by an operator at the controller. The operator must dial to the Flow menu, select **Clear Flow Alarms**, the Flow Alarms that should be cleared, and click Clear Selected.

FLOW ALLOWANCES

In the Flow Zones menu, press the soft key for **Allowances**.

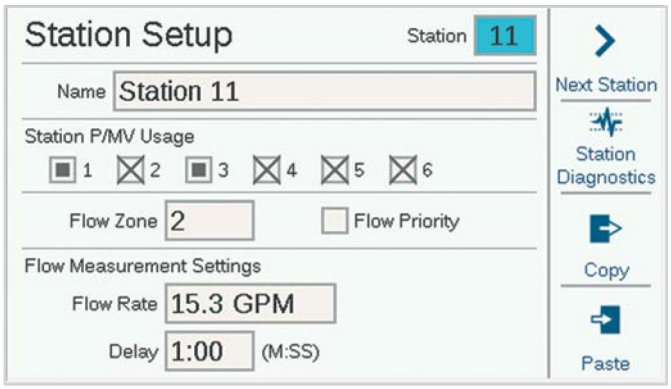


Watering Budget: Enter the total amount of flow that can be allowed in this Flow Zone in the calendar month. If the total flow exceeds the monthly budget, an alarm message will appear on the screen. The controller will not automatically stop watering when this alarm occurs.

Manual Watering Allowance: Sets an additional flow rate amount allowed for manual irrigation. This amount is added to the high flow limit to allow for any manual watering that might occur during automatic irrigation.

STATION SETUP

Dial to the Stations menu, and choose Station Setup. Each station must be assigned to a Flow Zone to complete Flow Monitor operation.



STATION P/MV USAGE

Station P/MV usage may have already been assigned during basic operations set up. If not, the desired P/MV activations may be made here for each station. If some selections are gray and not selectable, the P/MV output has already been assigned to a different function.

FLOW ZONE

This is the critical setting to tell the controller which Flow Zone the station belongs to. In effect, this also tells it which flow sensor will be reading the flow for the station. Flow Monitoring cannot work until all necessary stations have been assigned to a Flow Zone.

FLOW PRIORITY

The priority setting is used for Flow Manager, but is not used for Flow Monitor. It helps the controller decide which stations to run sooner to achieve Flow Targets, in case there is not enough time to complete all irrigation.

FLOW MEASUREMENT SETTINGS

This is how the controller knows what the station should flow under normal conditions. It can either be entered manually, or learned automatically by the controller with a flow sensor.

For Flow Monitor, this should be left blank until the Flow Learning function fills it in automatically.

For Flow Manager, learned flow is the most accurate, but it is also possible to enter the flow rate by hand if the controller is not equipped with flow sensing.

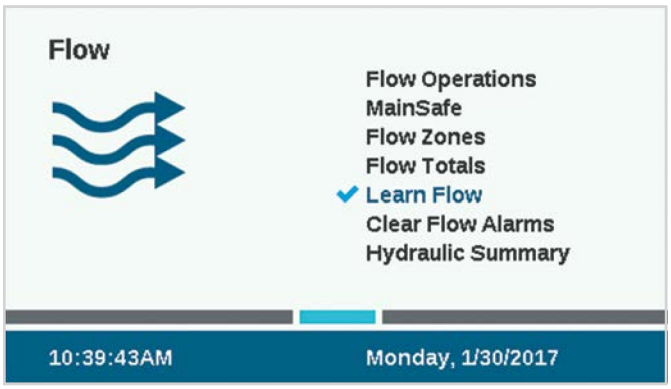
COPY AND PASTE

The copy and paste soft keys can be used to duplicate the upper half of the Station Setup screen for many similar stations on the same Flow Zone. They will copy the P/MV Usage and Flow Zone setting to subsequent stations.

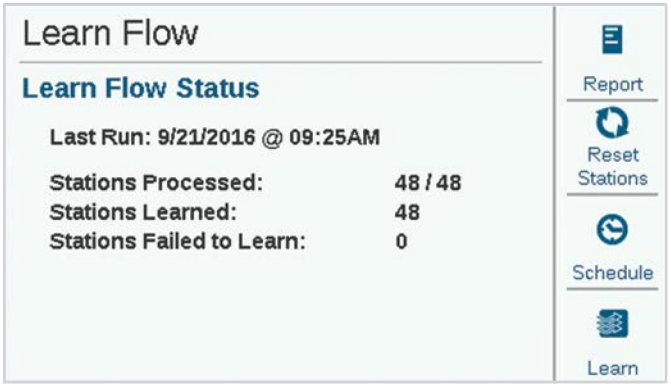
Set up the first station, press the copy button, and then click the Next Station soft key, and Paste. It is easiest to work down one Flow Zone at a time, if multiple Flow Zones are created.

LEARN FLOW

The final step in Flow Monitor setup (unless the MainSafe™ option is enabled) is the actual learning process.



Dial to the **Flow** menu, and select **Learn Flow**. The screen will show the status of the last learn flow attempt, if there was one.



Flow learning will only test stations that already have a Run Time in a program.

Flow learning will cancel all other irrigation, automatic and manual, until the learning is complete. Flow cannot be learned while other stations are running for other reasons.

Press the soft key for **Report** to verify that stations are ready to learn. This will show how many flow sensors are configured, how many stations have run times, and how many already have flow rate data.

If all stations have run times, press the **Learn** soft key. The controller will begin starting stations, one at a time, for up to 5 minutes each, plus the delay time set for the station) to learn the flow. If flow stabilizes sooner, the controller will move to the next station without running the full 5 minutes.

Flow learning can be a lengthy process, depending on how many stations there are, and how stable the flow is.

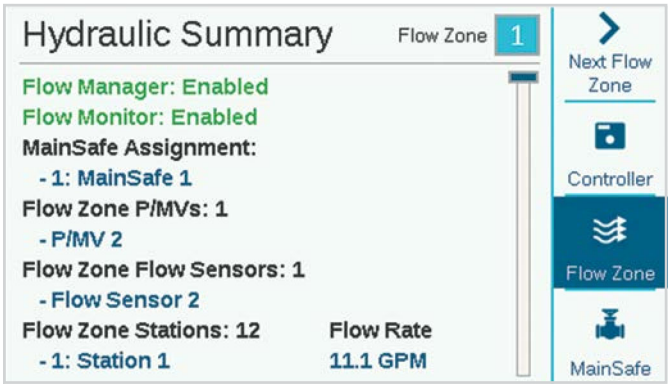
When the learning is complete, the **Learn Flow** screen will summarize how many stations were learned, and how many have failed. Troubleshoot the failed stations (either in setup, or in the field) and try learning again to fill in the failed stations.

SCHEDULE FLOW LEARNING

It is possible to set the controller to Learn Flow automatically at a later time and date. Remember that **flow learning will cancel any other automatic irrigation**, so choose a time and date that are not conflicting with critical irrigation.

HYDRAULIC SUMMARY

Dial to the Flow menu, and select Hydraulic Summary. The Hydraulic Summary is a report of exactly how the controller hydraulics are set up at the moment. It shows the connections of all flow-related objects, from MainSafe zones (if applicable), Flow Zones, Flow Sensors, P/MVs, to individual stations.



Use the soft keys to view by Controller, by Flow Zone, and by MainSafe (if applicable).

This is the easiest way to review the current setup, and see if anything is incorrect or incomplete.

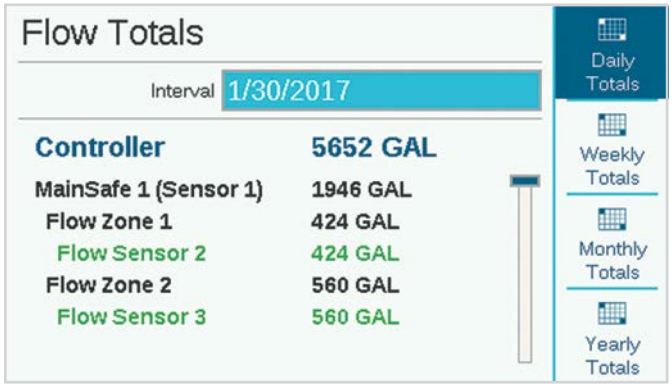
FLOW TOTALS

Flow Totals are total amounts of water consumed over a specified time period. They may also be viewed at different levels, depending on how the controller is configured.

Total Flow is counted by MainSafe (if applicable), by Flow Zone, and by individual flow sensor.

Flow totals can be viewed at any of these levels by clicking soft keys for Day, Week, Month, or Year. Click the Interval field to select a desired date range.

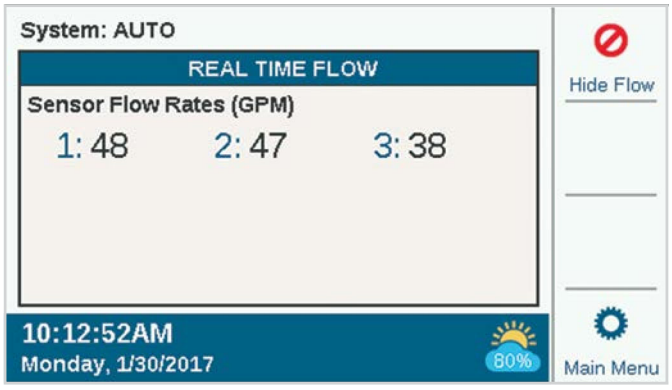
Click in the Interval field to specify the time period to view.



VIEW FLOW

Current flow rate on all sensors can be viewed from the Home/Activity screen at any time. Press the soft key for View Flow to see actual flow on up to 6 flow sensors.

If the controller is equipped with the optional Wi-Fi module, the current flow can also be viewed on a mobile device.

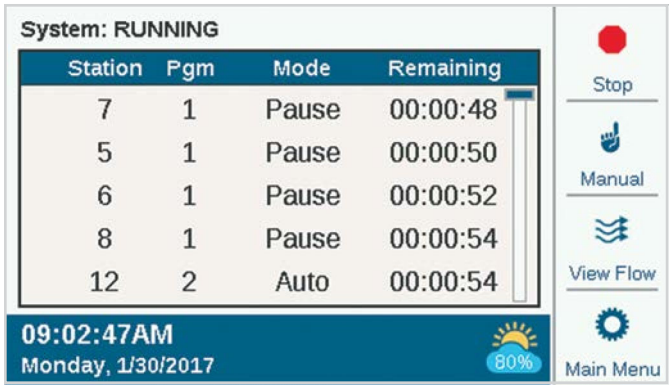


If the View Messages soft key is active, you must clear the messages before the View Flow key appears.

FLOW ALARM HANDLING

When stations are running, the Flow Monitor continuously checks the actual flow from the sensor(s) against the combined learned flow of the stations, including the overflow and underflow percentages allowed in the Flow Zone. It also checks this flow against the higher level Flow Zone limits, and MainSafe™ limits if applicable.

If the total amount caused by running stations is exceeded beyond the permissible station delay periods, the controller pauses all stations (shutting off the P/MV) in the Flow Zone. It waits 60 seconds after the stations are paused, for the flow to drop to near 0.

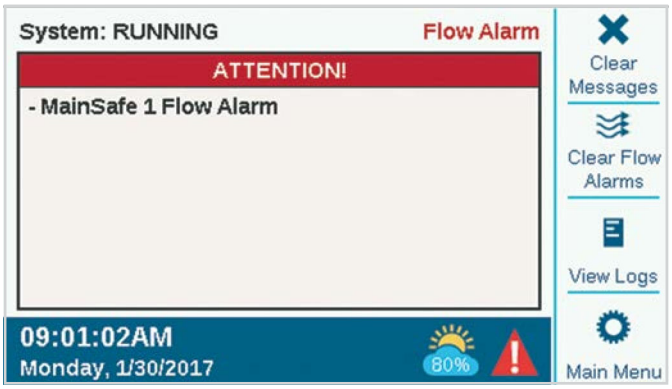


STATION LEVEL ALARMS

If flow does drop to near zero when the Flow Zone is paused, the controller then begins running the stations that were running at the time of the alarm, one by one, to test which station(s) are causing the high flow conditions. The controller will mark failed stations in the logs, and continue irrigating with stations that pass the individual flow tests.

FLOW ZONE OR MAINSAFE™ ALARMS

If flow does not drop substantially during the diagnostic pause period, the controller determines there is a Mainline Overflow, and will not resume irrigating or perform further diagnostics. It will remain shut down for the period specified in the Alarm Clear Delay setting on the Flow Zones screen.



When flow alarms are detected at the Flow Zone or MainSafe level, they can be cleared from the Flow menu, Clear Flow Alarms. A shortcut key is also available to Clear Flow Alarms when these conditions are detected, after View Messages has been selected.

If the actual flow exceeds the Maximum Flow allowance for the Flow Zone, and continues for the time set in the Alarm Delay, the Flow Zone alarms and shuts down without further diagnostics. The same applies to MainSafe zones, if applicable. The controller assumes the overflow condition is the result of a mainline failure, above the station level.

If flow exceeds any Unscheduled Flow allowance when no stations are supposed to be running, and continues for the time set in the Alarm Delay, the Flow Zone and/or MainSafe zone will also be shut down.

SET UP FLOW MANAGER

Flow Manager runs simultaneous stations to reach a programmable flow rate target. It allows the controller to decide which stations to run, to keep total flow as close to the pipe design capacity as possible, and shorten the overall watering time.

Flow Manager does not require a flow sensor, but it must have station flow values to work with. If flow learning via a sensor is not available, approximate values may be entered manually.

Flow Manager does require one or more Flow Zones, and requires stations to be attached to the Flow Zones in order to function. Flow Manager and Flow Monitor can also work at the same time, and use much of the same information in different ways.

Flow Manager requires the following information to operate correctly:

- Set up Flow Zones and set Flow Targets (Flow menu, Flow Zones)
- Attach stations to Flow Zones (Stations, Station Setup)
- Learn or enter station flow rates (Stations, Station Setup)
- Set Controller Program Limits, (Stations, Station Limits menu), if desired.

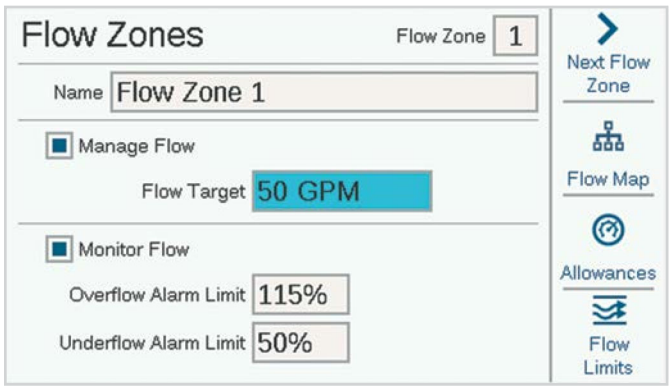
FLOW ZONES

Dial to the Flow menu and select Flow Zones if they have not already been created. The Flow Zone defines a section of pipe and a group of stations attached to that pipe, which is managed as a hydraulic unit.

For Flow Manager, it is only necessary to Enable Flow Management and set the Flow Target. Check the box for **Manage Flow**.

FLOW TARGET

The **Flow Target** box is used to set the flow rate desired for the Flow Zone throughout irrigation. Enter the desired rate of flow that is best for the mainline pipe diameter (recommended at 5 feet per second or 1.5 meters per second) or a preference based on other factors.

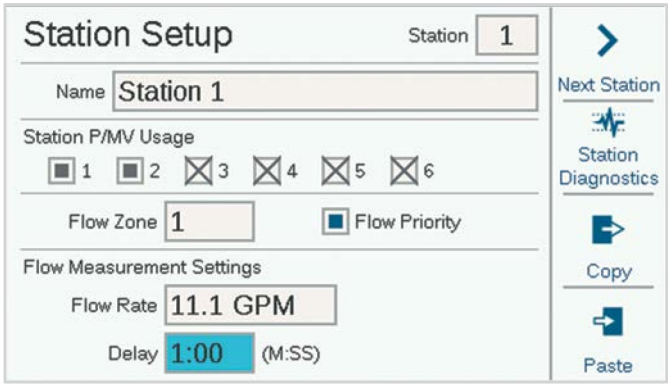


This is the only setting necessary at the Flow Zone menu for the Flow Manager function. Flow Manager will try to run enough simultaneous stations to stay at or near this rate of flow whenever there are programs available to run.

STATION SETUP

Flow Manager requires:

- The station's Flow Zone assignment
- The Flow Priority (checked or not checked)
- The station Flow Rate.



FLOW ZONE

This tells the controller which Flow Zone the station belongs to.

A different flow target can be set for each flow zone. The flow target should be a safe rate of flow (approximately 5 ft/sec or 1.5 m/sec) for the diameter of the mainline pipe in the flow zone.

It is also possible to have Flow Zones that run without Flow Manager, simultaneously with Flow Zones that are being managed.

FLOW PRIORITY

The priority setting helps the controller decide which stations to run sooner to achieve Flow Targets. Stations with the Priority box checked will be considered first, so that less critical stations can occur later in the irrigation.

FLOW RATE

If the system is equipped with a flow sensor, it is best to use the "Learn Flow" function to let the controller fill these values in.

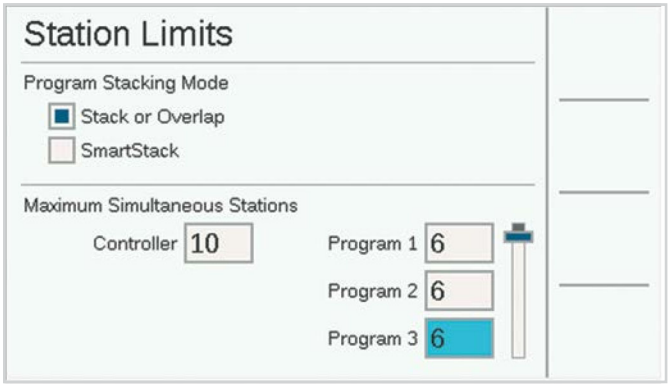
If the system does not have a flow sensor, look up or calculate reasonable flow values for each station, and enter manually for each station.

Note that Copy and Paste do not work with flow rates. They only copy the upper half of the screen, including P/MV and Flow Zone assignments.

STATION LIMITS

Dial to Stations, Station Limits to review or change the number of stations that are allowed to run at once.

It is not necessary to change Station Limits for Flow Manager to operate, but it is possible. These settings can be used to customize the results of flow management.



Maximum Simultaneous Stations sets a hard limit on the number of stations the controller can run at once, regardless of Flow Manager or other settings. The ACC2 conventionally-wired controller can run approximately 14 Hunter solenoids at once, including P/MV outputs. The maximum number of solenoids may vary to other factors.

Enter a Controller number that meets your needs if the default of 10 is not desirable.

If Flow Manager is enabled, a **maximum number of simultaneous stations per program** can also be entered. This can be useful to force the controller to spread irrigation across multiple programs.

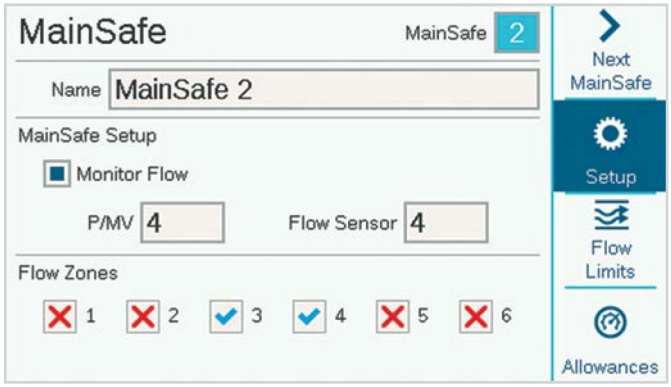
Example: Program 1 runs turf zones, and Program 2 runs Shrub zones. If they are both part of the same flow managed Flow Zone, and you know the Flow Zone can run about 6 zones at once, you could set a limit of “3” on Program 1 and “3” on Program 2. The controller will still flow manage to your target flow, but could only run 3 in either program to get there.

If the Flow Target rates are well below the rates that the Controller and Program station limits would allow, the station limits will never be reached. The controller will decide which stations to run, and in what order.

MAINSAFE™

A MainSafe is an optional level of flow monitoring and protection above the Flow Zone level. It is especially useful when:

- More than one Flow Zone has been configured from the same water supply.
- When there is a long distance between the point of connection and the beginning of the actual Flow Zone(s).
- When separate mainlines are in a constantly charged state for the sole purpose of manual watering.



MainSafe zones generally require their own flow sensor, and their own Master Valve. Often these are Normally Open Master Valves, which only close in the event of an alarm.

To set up a MainSafe, dial to the Flow menu, and select MainSafe.

SETUP SCREEN

Press the soft key for Setup.

This allows the MainSafe to be named (recommended).

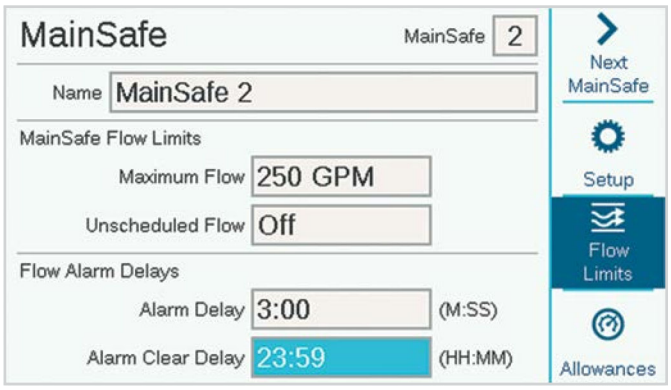
Check the box to enable Monitor Flow.

Assign the P/MV output and Flow Sensor that are assigned to the MainSafe.

The Flow Zones check marks and X's cannot be set here. They show the relationship of this MainSafe to the Flow Zones. These are assigned in the Flow Zones menu, Flow Map screen.

FLOW LIMITS SCREEN

Press the soft key for Flow Limits.



MAXIMUM FLOW

Maximum Flow is an absolute high limit for all flow from the MainSafe level (the water source). If the flow rate exceeds that amount, irrigation will be shut down. It does not matter what stations are running or what the learned flow is.

This should be considerably larger than the maximum flow allowed in normal irrigation in all downstream Flow Zones (so that it does not alarm before station-level and Flow Zone diagnostics can be performed).

UNSCHEDULED FLOW

Unscheduled Flow is any flow that is detected by the flow sensor when no stations are running. A flow rate can be entered here to permit manual watering up to the specified amount, without causing an alarm or shutting off the water. If unscheduled flow is detected over that amount, an alarm will occur.

ALARM DELAY

High flows will alarm immediately if this is set to None, or they will be ignored until they have lasted as long as the time entered here. Set in M:SS format; the longest delay is 9 minutes, 59 seconds. This can eliminate false alarms from temporary surges in flow.

ALARM CLEAR DELAY

Sets the amount of time a MainSafe zone will remain shut down before allowing new automatic irrigation attempts. Set in HH:MM format, the longest delay setting is 23 hours, 59 minutes.

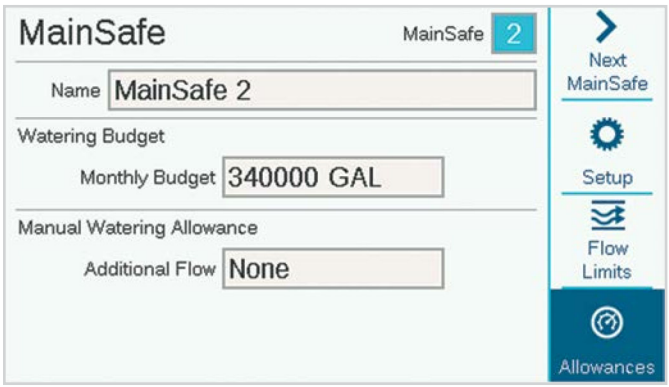
If Alarm Clear Delay is set to **Manual Only**, automatic irrigation will never resume after a high flow or unscheduled flow alarm, until it is manually cleared by an operator at the controller. The operator must dial to the Flow menu, select **Clear Flow Alarms**, the Flow Alarms that should be cleared, and click Clear Selected.

ALARM CLEAR DELAY

Specifies how long the MainSafe zone will remain shut down after a Max Flow or Unscheduled Flow alarm occurs, in hours:minutes. This is set to 23 hours, 59 minutes, but this can be changed to other intervals, or set to Manual Only.

> If Alarm Clear Delay is set to **Manual Only**, the controller will not water again until a user visits the site, and manually clears the flow alarm. This assumes a mainline break has occurred and that no watering should occur until it is repaired.

ALLOWANCES SCREEN



Press the Allowances soft key to set the monthly budget and manual watering allowances.

MONTHLY BUDGET

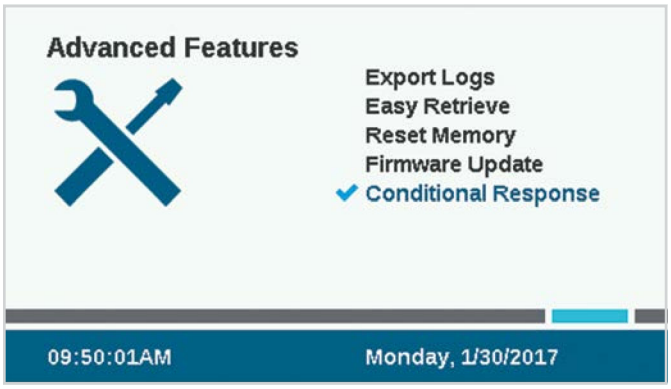
Enter the total amount on the Allowances screen in this MainSafe™ in the calendar month. If the total flow exceeds the monthly budget, an alarm message will appear on the screen. The controller will not automatically stop watering when this alarm occurs.

MANUAL WATERING ALLOWANCE

This is an additional amount of flow that is permitted over all other flow rate limits for manual watering that may occur during automatic irrigation. An alarm will not occur until other limits, plus the amount entered here, have been exceeded.

Conditional Response

Conditional Responses allow a sensor or condition to trigger something to happen. This can be as simple as telling a station to start when a sensor is opened, to much more complex operations such as switching water supplies to a Flow Zone based on a sensor position.



Conditional Responses are written in the form of a statement, which reads “if THIS happens, then do THAT.”

The controller may have up to 35 Conditional Response statements. Some responses may require more than one statement to achieve certain results (such as switching P/MVs).

SOS (STATUS OUTPUT STATION)

An SOS is a dedicated station output that is only used with Conditional Response. The purpose of the SOS is to trigger an external light or other device when the controller is in an alarmed state, so that field personnel can be notified of an alarm without having to open the controller door.

An SOS requires a dedicated station number to operate (any station number may be used). The station will turn on whenever the Conditional Response condition is in effect.

The station output may be used to directly power a 24VAC signal lamp installed in a conduit hole, or used to activate a relay for other purposes.

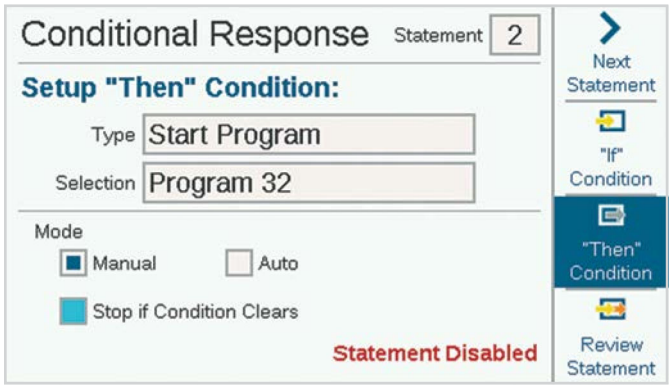
SETUP AN SOS STATION

In the Conditional Response screen, use the “Then” soft key to select a “Start SOS Output” Type.

At Selection, select the unused station you want to designate as the SOS station.

- This station must not be included in any irrigation programs.
- Only one SOS station should be used per controller.
- All other SOS responses should be selected to the same SOS station number.

The SOS station output will be wired directly to the external light or other 24V powered device.



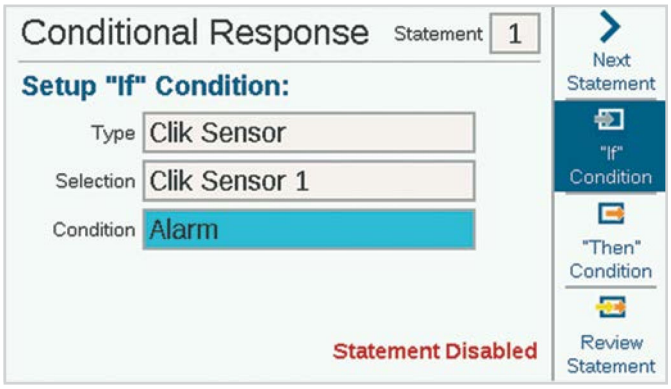
SET UP A CONDITIONAL RESPONSE

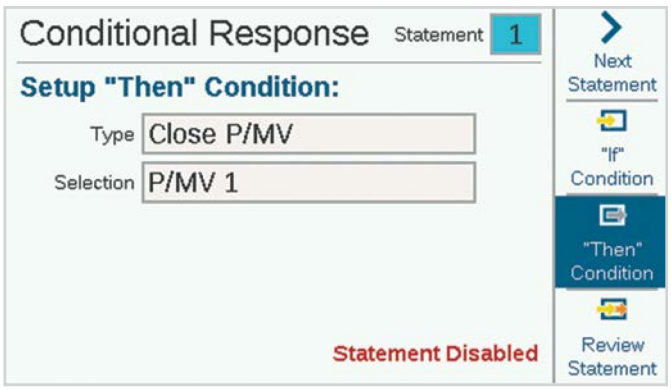
Dial to Advanced Settings and select Conditional Response. Each response has a soft key for the “If” condition, a “Then” condition or action, and “Review Statement” to verify that the complete response will meet the goal.

> You must review the statement and then enable it with the Enable checkbox, for the response to be in effect.

The possible responses depend on the object (Type) chosen in the “If” statement.

- An “If” statement is for a certain type of condition to function as a trigger.
- A “Then” statement is for the action taken as a response to the trigger.





Clik Sensors can use alarms as a trigger. They can also trigger based strictly on their position, Closed or Open, without causing an alarm.

Examples: A Clik could start a program, station, etc. whenever it alarms; or a Clik input could switch between two different Master Valves, based on whether it was open or closed.

Flow Zones and MainSafe zones can use Max Flow rate or Unscheduled Flow as triggers. Flow Zone triggers can be used to start an external alarm indicator, or to close a P/MV.

“Any Alarm”, or just a list of “Critical Alarms”, can be used as triggers, usually to start an external alarm indicator (see SOS).

> You must Review and Enable the statement (check box) before the Conditional Response statement is active.



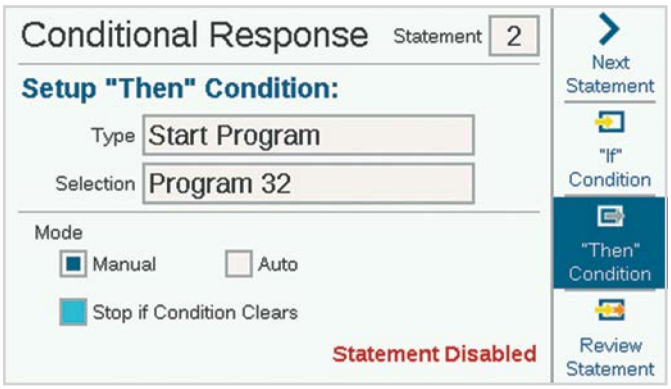
SET UP A CONDITIONAL RESPONSE

Dial to Advanced Settings and select Conditional Response.

"IF" Type	Selection	Condition (Trigger)	"THEN" Actions	Other Rules
Click Sensors	Clik 1 Clik 2 Clik 3	Alarm Open Close	Start Station Start Block Start Program Close P/MV Start SOS	Manual/Auto Stop if Clears Yes/No
Solar Sync	Solar Sync Rain Solar Sync Freeze	Alarm		
Flow Zone	Flow Zone 1-6	Max Flow Unscheduled Flow Mainline Overflow	Start SOS	
Water Source	Water Source 1-6	Max Flow Unscheduled Flow	Start SOS	
Any Alarm	(All Alarms)	Alarm	Close P/MV Start SOS	
Critical Alarm	(Serious Alarms)			

START STATIONS, PROGRAMS, AND BLOCKS

When using Conditional Response to start a station, Block, or program, other options appear below the selection.



MODE

If the Mode is set to **Manual**, the station, Block, or program will run alone, and all other automatic irrigation is stopped until the response is finished.

If the Mode is set to **Auto**, the response will occur without halting other scheduled irrigation. If the system is using Flow Manager, the response may not begin immediately. The responding stations will be fit into the Flow Target, as available, by the Flow Manager.

If **Stop if Condition Clears** is checked, the station, Block, or program will only run while the trigger condition is present. If the condition continues, a station or Block will run for the specified run time, and a program will run once for the duration of the program.

If the box is not checked, the response will continue for the total run time or duration of the program.

SWITCH P/MVS

To enable P/MV switching on sensor input, each station in the affected Flow Zone should be set to call for both P/MV outputs.

When the sensor is alarmed, or changes position, it should then be set to “Close P/MV” for the P/MV that is not wanted. In this way, only 1 P/MV would be active at any given moment, because the stations are calling for both of them, but one is disabled by the sensor input.

Example: There are two points of connection available, one potable water, and one non-potable. Each has its own Master Valve. A float switch is installed to monitor the non-potable level. All stations are set at Station Setup to call for both Master Valves.

When the float switch is closed, it disables the P/MV for the potable water supply, so only non-potable water is used.

When the float switch is open, it disables the P/MV for the non-potable supply, so only potable water is used.

They will not both be disabled at the same time, since only one position can be in effect at a time.

Troubleshooting

Symptom	Solution
Attention messages	Press View Messages, and/or View Logs Continue troubleshooting based on log reports
Non Water Window violation	Review program start time and Non Water Window setup
Won't run programs/stations	Review Program or Station Summary
No display	Make sure facepack cable is connected Make sure both slide locks are closed Make sure power is on to controller Check Power Supply Board status light
Overflow messages	Verify flow limits and delays allow for some variation Check system for leaks and malfunctions
Won't read flow	Check flow sensor wiring Check flow sensor setup
Electrical or module malfunctions	Go to Diagnostics menu, review all components

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Gregory R. Hunter, President of Hunter Industries

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RC-004 US 11/16

TECHNICAL SPECIFICATIONS/PLANS/OTHER REQUIREMENTS

Scope of Work

Landscape Maintenance Service for Areas:

Service Area: 7501 College Town Drive
Sacramento, California 95826

Scope of Work includes, but is not limited to:

- Mowing and Edging & Blowing off hard surfaces
- Irrigation Systems Maintenance
- Approved Water Techniques for Landscape Plants
- Fertilizer Application
- Trash & Debris Pickup & Removal
- Tree trimming, up to 8' of vertical clearance
- Maintenance of all plant material in good condition with Horticulturally Acceptable Growth and Color
- Maintenance Required to keep Designated Areas in safe, attractive and useable condition
- Immediate reporting of vandalism and/or Safety Hazards to Inspector

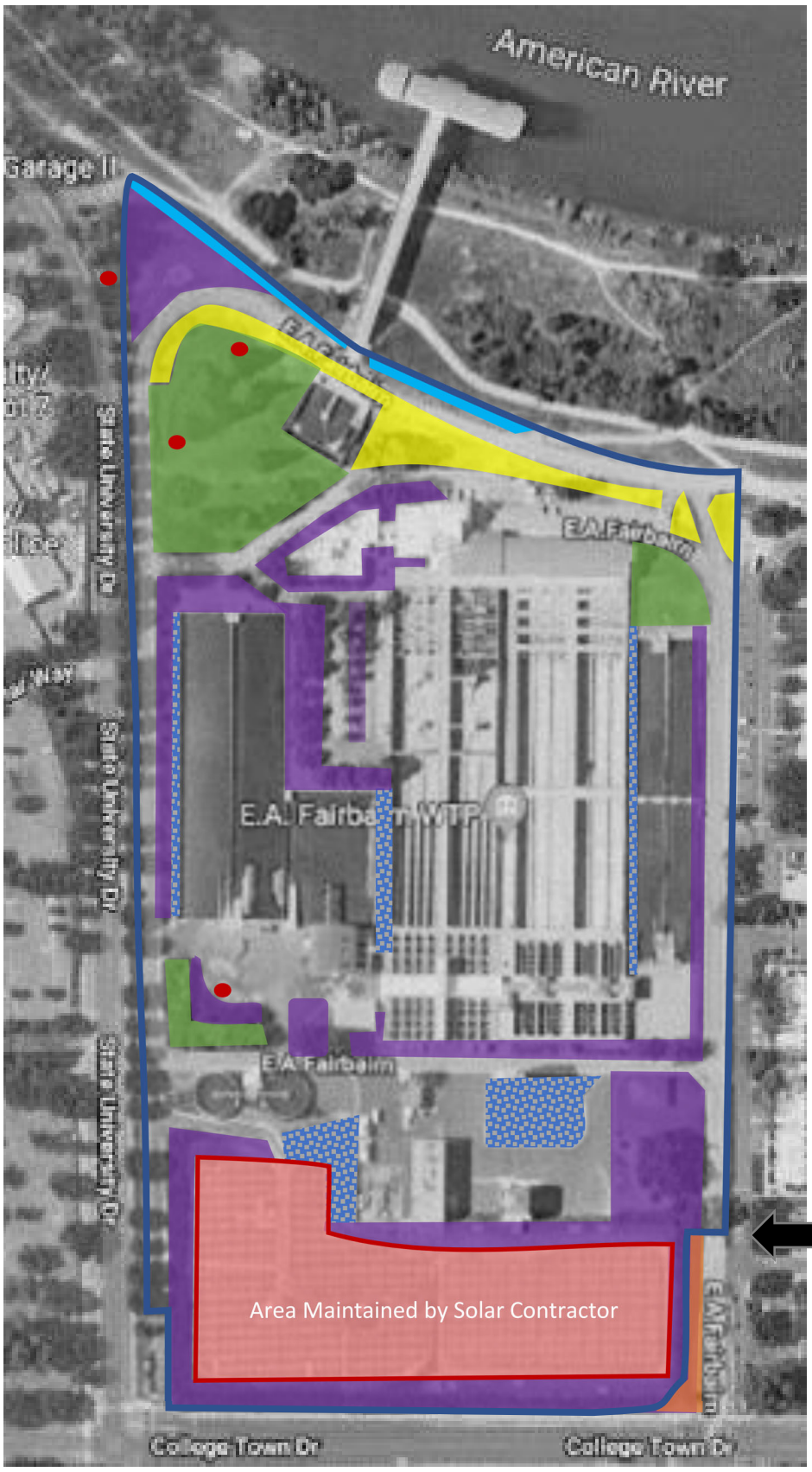
In addition to the Specifications and Requirements provided in the Scope of Work and Exhibits, the following requirements and prohibitions apply:

A. All vehicles and equipment entering City facilities must have the company name or logo conspicuously displayed.
B. The names of all employees who will be entering City facilities must be on file with the City.
C. All employees who will be entering City facilities must wear a shirt or hat identifying them as a company employee.
D. The use of any chemicals or fertilizers must first be approved by the City Inspector before each application. Selected Contractor will provide a list of chemicals that will be used and corresponding Safety Data Sheets before use.
E. All sprinkler heads, including pop-ups, must be maintained.
F. No repairs may be initiated without the notification and approval of the inspector and all invoices must CLEARLY describe parts involved, precise location of work, and breakdown of labor.

Minimum Level of Effort

April 1 through September 30 40 hours physical labor on site per week
October 1 through March 31 20 hours physical labor on site per week

Monthly payroll timesheets must be submitted by the 10th day of the following month.



Key:

N

- Fence Line/Perimeter of Plant
- Landscaped Areas
- Turf
- Gravel/Weed Control Area
- Levee Area – shall meet RD100 Standards
- Area outside the fence line to be maintained (includes bench area on the corner)
- Sloped area maintained by American River Flood Control (No watering, no landscaping)
- Area maintained by Solar Contractor
- Locations of Elderberry Plants (Federally Protected)

Entrance Gate

CITY OF SACRAMENTO

DEPARTMENT OF UTILITIES, WATER DIVISION

LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

SITE NAME: E.A. Fairbairn Water Treatment Plant
LOCATION: 7501 College Town Drive
Sacramento, CA 95826

AREA SIZE: 291,852 Sq. Ft.
ACRES: 6.7

Minimum Requirements

SERVICES [1]	1X WEEK	2X MONTH	1X MONTH	4X YEAR	2X YEAR	1X YEAR	AS NEEDED	COMMENTS
SITE SERVICED [2]	X							Site shall be serviced weekly or as agreed upon with the Project Manager (PM), or designee.
INSP. MEETING			X				X	Contractor shall meet with PM once per month or at the PM's request.
OVERALL SITE								
Litter/Debris Control	X						X	All plants sites plus frontages along Fairbairn Drive and College Town plus front bench areas.
Leaf Removal	X						X	Weekly during the Fall, especially in parking areas. Must follow Leaf Blower restrictions.
Safety Hazards	X						X	Provide chemical control of weeds for all hard surfaces to include concrete, asphalt, curb, gutter, and sidewalks. Same areas as litter/debris control
IRRIG. SYSTEM								
Maintenance/Testing	X		X				X	Weekly inspection, monthly testing & maintenance. Sprinkler damage shall be identified at the time of mowing. Report repairs to PM.
Set all Timers				X			X	
Repairs							X	Repairs shall be considered unscheduled/extra work as determined by PM. Any damage caused by Contractor shall be repaired/replaced at the Contractor's expense.
ALL LANDSCAPE								
Pre-Emergent					X			Pre-Emergent to control broadleaf weeds and crabgrass in February and May.
Weed Control	X						X	Reasonably weed free; hand/mechanical weeding only. Use of chemicals requires approval.
Fertilization								Fertilize during active growth periods, which are typically Spring and Fall.
TURF/LAWN [3]								
Mowing			X				X	Remove and dispose of all clippings off-site. No heavy mowers on saturated turf.
Mechanical Edging			X					Where hard concrete edge or curb is present.
Chemical Edging						X		Where hard concrete edge or curb is not present. Use of chemicals requires prior approval.
Aeration						X		Winter; cores not to be removed.
Vertical Mow/Dethatch							X	Implemented as unscheduled/extra work rate if needed as determined by PM.
Turf Renovation							X	Implemented as unscheduled/extra work rate if needed as determined by PM.
Non-Irrigated Grasses					X		X	Provide mowing and chemical weed control.
GROUND COVER (GC) [4,5]								
Mechanical Edging			X					
Pruning/Trim					X		X	
Replacement							X	Implemented as unscheduled/extra work rate if needed as determined by PM.
Winter Mow							X	
SHRUBS								
Pruning/Trim					X		X	
Replacement							X	Implemented as unscheduled/extra work rate if needed as determined by PM.

CITY OF SACRAMENTO

DEPARTMENT OF UTILITIES, OPERATIONS AND MAINTENANCE

LANDSCAPE MAINTENANCE PERFORMANCE SCHEDULE

SITE NAME: E. A. Fairbairn Water Treatment Plant
LOCATION: 7501 College Town Drive
Sacramento, CA 95826

AREA SIZE: 291,852 Sq. ft.

ACRES: 6.7

Minimum Requirements

SERVICES (cont.)	1X WEEK	2X MONTH	1X MONTH	QRTRLY	2X YEAR	1X YEAR	AS REQD	COMMENTS
TREES [4,5]								Prune trees for proper growth: remove suckers & maintain clearances of 8' min. under trees, with 8' above sidewalks and 15' above curbs & parking lots. Prune trees to ensure a 3-foot clearance from buildings.
Pruning/Trim						X	X	
Staking/Tying							X	
Repair Work							X	Implemented as unscheduled/extra work rate if needed as determined by PM.
UNDERGROUND RESERVOIRS								Gravel covered underground reservoirs.
Hand Weed							X	Lower gravel areas and SE reservoir top.
Mowing & Weed Eating					X			SW reservoir top.
Selective Weed Control							X	All areas and slopes shall be reasonably weed-free. Hand/mechanical wedding only for reservoir tops. Use of chemicals requires PM approval.
FENCE LINES								
Weed Control							X	Chemical weed abatement. Areas shall be reasonably weed-free. Hand/mechanical weeding only for reservoir tops. Use of chemicals requires PM approval
Pruning/Trim – East					X			East fence line from levee to College Town Drive.
Pruning/Trim – West, South, North						X		Keep all shrubs pruned away from sidewalks, parking lot curbs, buildings, and vents. North fence line is the levee area that shall meet RD 1000 Standards and brushes must be less than 2' along the fence line.

*PLEASE NOTE EACH TIME A SITE IS SERVICED, ALL LITTER/DEBRIS SHALL BE REMOVED, TREES RE-STAKED AS NEEDED, POTHOLES FILLED, AND PEST/WEED CONTROL SCHEDULED OR DONE. ALL SAFETY HAZARDS SHALL BE CORRECTED AND VISUAL SIGNS OF IRRIGATION PROBLEMS EXAMINED AND SCHEDULED FOR REPAIR. NO WATERING ON MONDAYS AND MAY NEED TO WATER ON AN ODD/EVEN SCHEDULE.

[1] It is critical that the facility maintains a secure fence line. Therefore, weeds and debris should be removed from fence immediately.
[2] Please note each time a site is serviced, all litter/debris shall be removed, trees re-staked as needed, potholes filled, and pest/weed control scheduled or done. All safety hazards shall be corrected, and visual signs of irrigation problems examined and scheduled for repair.
[3] Grass shall not exceed 4" in height. Bushy vegetation shall be mowed down immediately unless federally protected. Elderberry plants are federally and can be cut down as long as they are less than 1" in diameter at the base. No mechanical equipment use may occur within 20' of federally protected elderberry plants.
[4] Ground cover includes planter beds, planted areas that may or may not have bark around, and should be pruned so that plants do not exceed 3' in height.
[5] All Ground Cover, Shrubs, and Trees should be pruned away from all access pathways, including sidewalks, parking lots, curbs, open access stairs, buildings, and vents. Ensure that storm drains are clear of debris and trash. All debris and trash should be blown off roadways and parking lots.
[6] Use of all portable blowers shall be prohibited when the City of Sacramento's Air Quality Index (AQI) is at 101 or above to stay in compliance with City ordinance 2020-0042 § 1. "Portable blower" means a portable machine that emits a concentrated stream of air and is typically used in landscape maintenance to push, propel, or blow dirt, dust leaves, grass clippings, trimmings, green waste, solid waste, or debris. If an air quality index for downtown Sacramento is not available, the index for the nearest geographical location will apply. The AQI specific to the Sacramento region can be found at https://spareheair.com/sacramento/. Violations of this provision are liable under Sacramento City Code 8.70.030.

ATTACHMENT 9

LANDSCAPE MAINTENANCE SERVICES

GENERAL SPECIFICATIONS AND PROVISIONS

LS20

(April 2020)

City of
SACRAMENTO
Department of Public Works

City of Sacramento
LANDSCAPE MAINTENANCE SERVICES
GENERAL SPECIFICATIONS AND PROVISIONS

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CITY OF SACRAMENTO

LANDSCAPE MAINTENANCE SERVICES GENERAL SPECIFICATIONS AND PROVISIONS LS20

I. GENERAL PROVISIONS

The City of Sacramento's Streetscape Maintenance section provides managerial and contract oversight to contractors maintaining safe, sustainable, and aesthetically pleasing streetscapes that enhance and improve the quality of life in the City of Sacramento.

The following standard outlines the scope of services and responsibilities required of the Contractor but may not be inclusive to the entire scope of services. The specifications outline the quantity and category of work required.

The Nonprofessional Services Agreement (not included here) provides contract requirements such as insurance and licensing standards, code enforcement, hours of work, extra work authorizations, site service specifications, site locations, etc.

SECTION 1. SCOPE OF WORK

Work to be performed comprises general horticultural maintenance, related integrated pest management (IPM) services, the operation of manual and automatic irrigation, clean-up of landscape areas as designated in the attached list of locations and, when necessary, repairs of irrigation systems and replacement of plant materials. Requirements vary by location depending upon the landscaping present.

1.1 The work to be performed shall be by a Landscape Maintenance Contractor, licensed by the State of California with a C27 licensed to do business in the City of Sacramento. Contractor shall have at least two years actual experience in providing landscape maintenance services for large scale commercial and/or governmental agencies. There shall be no subcontracting of any maintenance services or pesticide applications under the Agreement.

1.2 Contractor is solely responsible, without further direction from the Inspector, except as specified herein, to assure all work is being done per specifications. Owner or Superintendent shall inspect every site weekly for maintenance compliance including irrigation related items, regardless of minimum requirements stated on the Maintenance Performance Schedule.

1.3 The installation and care of plant materials will be in accordance with the techniques as defined in the current edition of the "Sunset Western Garden Book". Any plant material installed by contractor shall have a minimum 120-day warranty period. This ensures root establishment, health and proper growth but is not limited to the care of the plant thereafter.

1.4 Contractor shall be aware of and shall comply with all local, County, and State laws and regulations governing landscape maintenance work applicable to individual locations being maintained.

SECTION 2. CONTRACTOR STAFF

Contractor will provide staff able to perform work at the highest standards of horticultural excellence. Key staff shall have current knowledge of best management practices regarding safety, hazardous materials and spill response, plant health, pruning, integrated pest management, pesticide application, and irrigation maintenance and repairs.

2.1 Contractor shall provide a competent full-time management representative available to communicate with the Inspector at all times during normal business hours. The representative must have the authority to represent and act for the Contractor in any matter pertaining to the Agreement. Contractor shall furnish the name and contact information to the Inspector prior to the commencement of the contract and further advise the Inspector of any changes. The representative must be capable of communicating effectively with City staff through the use of the English language, both orally and in writing.

2.2 Contractor shall provide a competent field supervisor on-site during all times that work is being performed. Contractor shall furnish the names of all such supervisors to the Inspector prior to the commencement of the contract and further advise the Inspector of any changes. Contractor's supervisors must be capable of communicating effectively, orally, with City staff through the use of the English language.

2.3 The Contractor shall have at least one full-time City designated employee who can competently work on irrigation systems, including the testing, rebuilding and/or replacement of valves, controllers and pipe and main line breaks. This shall include identifying electrical connectivity and location of valves including full operation, programming, and system control of CalSense Smart controllers.

2.4 The Contractor shall have at least one full-time employee who has a Qualified Applicators' License or Maintenance Gardener Certificate and who is registered at all times with the Sacramento County Agriculture Commissioner. Contractor will check each bid to verify if the License is specified over the Certificate, or if either the license or certificate is acceptable. It is the Contractor's responsibility to keep all licenses, certifications, and registrations current, with copies on file with the City.

2.5 Contractor shall only furnish workers who are competent and skilled for work under this contract. If, in the opinion of the Inspector, an employee of the Contractor is incompetent or disorderly, refuses to perform in accordance with the contract specifications, threatens or uses abusive language while on City property, or is otherwise unsatisfactory, that employee shall be removed from all work under

this contract (s). Contractor shall meet with the Inspector to consider the appropriate course of action with respect to such matters and Contractor shall take reasonable measures under the circumstances to assure the Inspector that the conduct and action of Contractor's employees will not be detrimental to the interest of the City of Sacramento and/or premises.

2.6 The Contractor shall require each of its maintenance employees to wear uniforms with the Contractor's company name, proper shoes and other personal protective equipment required by OSHA and CAL OSHA Regulations. If uniform shirts have buttons, they must be buttoned at all times. No advertisements or logos other than the Contractor's shall be on employee's uniforms. Contractor's employees shall be neat and clean in appearance at the start of each workday.

2.6.1 ANSI-approved safety vests will be worn at all times while working within the City right-of-way.

2.6.2 OSHA Standard 1910.135 requires employers to ensure that each affected employee wear a protective hardhat when working in areas where there is a potential for injury to the head from falling objects. Contractor shall wear a protective hardhat when working with City crews and using heavy equipment and or a potential for head injury is present.

SECTION 3. CONTRACTOR VEHICLES

3.1 Contractor vehicles shall be in good condition and shall have the company name and phone number clearly visible to the public at all times.

3.2 Contractor vehicles will be equipped with all proper warning lights, signage, and other equipment necessary to safely work in the City right-of-way. At any time, Streetscapes can recommend additional safety equipment be added or reduced for working conditions.

SECTION 4. SAFETY

Contractor shall plan and conduct all work in a manner that will safeguard all persons from injury and shall take all precautions required by applicable local, County, State or Federal requirements.

Contractor agrees to accept the sole responsibility for complying at all times with O.S.H.A. and CAL O.S.H.A. Safety Orders, Chapter 12.20 of the Sacramento City Code CLOSURE OF PRIMARY STREETS FOR CONSTRUCTION and the California Manual on Uniform Traffic Control Devices (MUTCD) for lane closures, so as to protect all persons, including employees from foreseeable injury, or damage to property.

4.1 It shall be the Contractor's responsibility to inspect and identify any conditions that render any portion of the maintenance area unsafe, as well as any

unsafe practices occurring thereon. The Inspector shall be notified immediately of any unsafe condition that requires correction. Contractor shall be responsible for making routine corrections such as, but not limited to: filling holes in all turf areas, along curbs, sidewalks, and paving, replacing valve box covers, and vehicular and pedestrian visibility and clearance of trees and shrubs. Contractor shall cooperate fully with City in the investigation of any accidental injury or death occurring in the maintenance area, including a complete written report thereof to the Inspector within five (5) days following the occurrence.

4.2 Contractor shall check concrete areas, sidewalks, curbs, brick and retaining walls, etc. for cracks, crevices, graffiti and deterioration and shall report any deterioration or graffiti to Inspector immediately.

4.3 It shall be the Contractor's responsibility to supply all safety equipment and to educate their employees in the rules of safety. ANSI-Approved safety vests are to be worn at all times while working in the City right-of-way property.

4.4 Work Affecting the Public Right-of-Way.

Contractor acknowledges and agrees that the safety of motorists, pedestrians, and maintenance crews while working along the City's transportation corridors is paramount, and Contractor agrees that during the progress of the work, Contractor shall constantly protect and preserve the safety of the public. Contractor shall not unnecessarily cause inconvenience to the public during the progress of the Work and shall minimize the inconvenience caused by Contractors operations. Such operations include, but are not limited to, work performed on or adjacent to the work site, traffic lane and pedestrian closures and deliveries of material and equipment.

4.4.1 Temporary Traffic Control Requirements

Contractor shall be solely responsible for furnishing, installing and maintaining all advance warning signs and devices necessary to safeguard the general public and the work, and to provide for the proper and safe routing of vehicular and pedestrian traffic during the performance of the work. This requirement shall for the duration of the service or project and shall not be limited to working hours. The use of flagmen, cones, barricades and construction signage shall comply with the current edition of the MUTCD.

4.4.1.1 Work on a median or side of road, with no lane closure:

All work on a median or side of road, including mobile maintenance operations such as litter pick-up or walking with a backpack sprayer, the use of advance warning signage at both ends of the work area is

required and for any oncoming merging traffic entering into your work zone.

Maintenance activities which require time to complete, such as pruning, irrigation testing or repair, mowing or edging will require in addition to the high-rise warning sign, cones shall be placed along the curb, spaced according to the MUTCD.

Use of the standard Streetscape Maintenance temporary traffic control plan is approved.

4.4.2.2 Work on a median or side of road, with lane closure:

Contractor shall submit a traffic control plan showing proposed traffic control measures and detours for vehicles and pedestrians a minimum of ten (10) working days prior to the start of any work that requires the closure of a sidewalk or traffic lane. The traffic control plan shall include the following information pursuant to City Code Chapter 12.20:

- The name and business address of the applicant.
- Supervisor on site, contact phone number.
- Date/Dates of Closure
- Working operation of Closure/Working hours

- A diagram showing:

    - The location of the proposed work area;
    - The location of areas where the public right-of-way will be closed or obstructed; and
    - The placement of traffic control devices necessary to perform the work.

- The proposed phases of traffic control in a narrative format including a description and dates for the beginning and ending of each phase.

4.4.2.2.1 Contractor shall not be allowed to work until a City-approved traffic control plan is on file with the Inspector. If the Inspector determines at any time that actual traffic conditions under the approved plan are not adequate to ensure public safety, the Engineer may require the plan to be immediately modified. If a hazardous condition cannot be eliminated by plan modification, the Inspector may require work under the plan to be stopped, and the plan suspended,

until the safety hazard is remedied. Contractor shall not be entitled to any costs, damages or extension of Contract time arising from any stop work order issued by the Inspector under this Section.

4.4.2.2 Contractor shall provide safe pedestrian and disabled access through or around the construction area at all times. Sidewalk closure shall comply with the "Policy for Sidewalk Closures" established by the City of Sacramento's Department of Public Works pursuant to federal and state disability access laws and regulations. Contractor shall provide access to all existing driveways, adjacent parking areas, and buildings at all times unless other arrangements are made with the property owner and approved by the Inspector. Access for emergency vehicles shall be clear at all times.

4.4.2 All Work within public streets and/or right-of-way shall be done in an expeditious manner so as to cause as little inconvenience to the public as possible. Unless otherwise approved, Contractor shall maintain at least one travel lane in each direction at all times on two-way Primary Streets (defined below), and at least two travel lanes at all times on one-way Primary Streets. The Contractor shall also maintain local property access and access to existing public cross-streets.

4.4.3 On working days, between 6:00 a.m. to 8:30 a.m. and 4:00 p.m. to 6:00 p.m., Contractor shall maintain the number of lanes normally available on all Primary Streets unless otherwise approved in writing by the City Traffic Engineer. In addition to the foregoing, on working days, Contractor shall maintain the number of lanes normally available on J Street between Interstate 5 and 16th Street between the hours of 7:00 a.m. and 6:00 p.m. unless otherwise approved in writing by the City Traffic Engineer. All requests for consideration by the City Traffic Engineer shall be submitted thru the Inspector.

4.4.4 "Primary Streets" are defined as any one of the following streets and its adjacent public sidewalk:

3rd St., between I St. & Broadway	G St., between 3rd St. & Alhambra Blvd.
5th St. between H St. & Broadway	Garden Highway
6th St. between H St. & Q St.	H St.
7th St. between G St. & T St.	Heritage Lane
8th St. between G St. & Broadway	Hornet Dr.
9th St. between G St. & Broadway	Howe Ave.
10th St. between G St. & Broadway	I St. between 3rd St. & 29th St.

11th St. between G St. & Q St.	J St.
12th Ave. between Martin Luther King Blvd. and Sutterville Rd.	Jackson Rd.
12th St. between N 12th St. & W St.	Jibboom St.
13th St. between H St. & L St.	K St. between 15th St. & Alhambra Blvd.
14th St. between G St. & L St.	L St. between 3rd St. & Alhambra Blvd.
15th St. between F St. & Broadway	La Mancha Way
16th St. between N 16th St. & Broadway	La Riviera Dr.
19th St. between G St. & Broadway	Land Park Dr.
21st St. between 4th Ave. & G St.	Mack Rd.
24th St. (Knight Way & Meadowview Rd., W St. & 2nd Ave)	Main Ave. west of Kelton Way
29th St. between D St. & W St.	Marconi Ave.
30th St. between E St. & T St.	Martin Luther King, Jr. Blvd.
34th St. between Folsom Blvd. & Broadway	Marysville Blvd. btwn Del Paso Blvd. & Bell Ave.
43rd Ave. west of South Land Park Dr.	Meadowview Road
47th Ave., city portions between 24th St. & Stockton Blvd.	Munroe St.
55th St.	N St. between 2nd St. & Alhambra Blvd.
65th St. between Folsom Blvd. & Broadway	North 12th St.
65th St. Expressway between Elvas Ave. & south city limit	North 16th St.
Alhambra Blvd. between E St. & Broadway	North B St. between North St. & 16th St.
Alta Arden Expressway	Northgate Blvd.
Alta Valley Way	Norwood Ave.
American River Dr. between Howe Ave. & Munroe St.	P St. btwn 2nd St. & Stockton Blvd.
Arcade Blvd. between Marysville Blvd. & Marconi Ave.	Pocket Road
Arden Way	Point West Way
Azevedo Dr.	Power Inn Rd.

Broadway	Q St., between 2nd St. & Alhambra Blvd.
Bruceville Rd.	Raley Blvd.
Capitol Ave. between 15th St. & Folsom Blvd.	Response Rd.
Carlson Dr.	Richards Blvd.
Center Parkway	Rio Linda Blvd.
Challenge Wy.	Riverside Blvd.
College Town Dr.	Roseville Rd.
Connie Dr. between Roseville Rd. & Marconi Ave.	Royal Oaks Dr.
Cosumnes River Blvd.	San Juan Rd.
Del Paso Blvd., south of Marysville Blvd.	Seamas Ave., east of Riverside Blvd.
E St., between 27th St. & Alhambra Blvd.	South Land Park Dr.
El Camino Ave.	South Watt Ave.
Elder Creek Rd.	Sproule Ave.
Elsie Ave.	Stockton Blvd.
Elvas Ave., between 56th St. & 65th St.	Sunbeam Ave.
Ethan Wy.	Sutterville Rd.
Evergreen St.	T St., between 34th St. & 39th St.
Exposition Blvd.	Truxel Rd.
Fair Oaks Blvd.	University Ave., between Campus Commons Dr. & Fair Oaks Blvd.
Florin Perkins Rd.	Valley Hi Dr., between Franklin Blvd. & Mack Rd.
Florin Rd.	W St., between 3rd St. & 29th St.
Folsom Blvd.	West El Camino Ave.
Franklin Blvd.	Windbridge Dr.
Freeport Blvd.	Winding Way
Fruitridge Rd.	X St., between 3rd St. & Alhambra Blvd.
Greenhaven Dr.	

The above definition of “Primary Streets” may be modified at any time upon

written notice to Contractor by City, as the City Traffic Engineer deems necessary.

4.4.5 Holiday Season Construction Moratorium

During the holiday season, work requiring any lane closure will be suspended on Holiday Season Moratorium Streets (defined below), unless otherwise approved in writing by the City Traffic Engineer. All requests for consideration by the City Traffic Engineer shall be submitted thru the Inspector. As used herein, the term "holiday season" means the period of time beginning Thanksgiving Day and ending on the first regular working day following New Year's Day.

4.4.5.1 No new work that would interfere with traffic during the holiday season shall begin on any Holiday Season Moratorium Streets after November 1. All existing conditions within any Holiday Season Moratorium Streets shall be restored to their original or better condition prior to the start of the holiday season, and all unauthorized steel plates, barricades, and barriers shall be removed from all traffic lanes.

4.4.5.2 Contractor may submit a written request for exemption from the foregoing prohibition to the Inspector, explaining why Contractor should be allowed to work within any Holiday Season Moratorium Streets during the holiday season. The request shall specify the time, date and description of the work to be performed in the Holiday Season Moratorium Streets and the extent of Contractor's proposed lane and/or sidewalk closure. The Inspector will decide whether to forward the request to the Engineer or deny such request, in whole or in part, in the Engineer's sole discretion.

4.4.5.2 "Holiday Season Moratorium Streets" are defined as follows:

12th Ave., between Martin Luther King, Jr. Blvd and Sutterville Rd.
21st St., between 4th Ave. and G St.
24th St., between Knight Wy. and Meadowview Rd. and W St. and 2nd Ave.
55th St., south of Fruitridge Rd.
Alta Arden Expressway
Arden Wy.
Broadway
Challenge Wy.
Del Paso Blvd., south of Marysville Blvd.
El Camino Ave.
Ethan Wy.

Evergreen St.
Exposition Blvd.
Fair Oaks Blvd.
Florin Blvd.
Folsom Blvd.
Franklin Blvd.
Freeport Blvd., within one block of all its side streets, between Broadway and Blair Ave.
Fruitridge Rd., between Rickey Dr. and 59th St.
Greenhaven Dr., between Havenhurst Dr. and Windbridge Dr.
H St.
Heritage Ln.
Howe Ave.
J St.
La Mancha Wy.
Mack Rd.
Marconi Ave.
Marysville Blvd., between Del Paso Boulevard and Bell Avenue
Meadowgate Wy., between Munson Wy. and Franklin Blvd.
Meadowview Rd.
Munson Wy.
Natomas Blvd.
Northgate Blvd.
Point West Wy.
Power Inn Rd.
Response Rd.
Royal Oaks Dr.
San Juan Rd.
Stockton Blvd., and w/in one block of all its side streets from Perry Ave. to the south city limits
Truxel Rd.
Valley Hi Dr. north of Wyndham Wy.
West El Camino Ave.

The above definition of “Holiday Season Moratorium Streets” may be modified at any time upon written notice to Contractor, as the City Traffic Engineer deems necessary.

4.4.5.3 In addition to the above-listed streets, no work shall be performed during the holiday season on any street in the area bound by the American River on the north, the Sacramento River on the west, one block south of Broadway on the south, and 34th Street on the east, without obtaining permission in writing from the City Traffic Engineer. All requests for consideration by the City Traffic Engineer shall be submitted thru the Inspector.

SECTION 5. INSPECTION AND OVERSIGHT

Each streetscapes maintenance contract will be managed by a Streetscapes Maintenance Inspector. The inspector provides the principal contract management and monitoring function and is the primary contact point for communications between the City and the Contractor.

The Inspector will ensure compliance with the contract documents, observing work both during progress and upon completion. The Inspector will make routine independent inspections of all sites maintained by the Contractor, which may or may not be announced and do not require the presence of the Contractor. Inspections shall be both visual and operational. In addition, the Streetscape Maintenance Inspector may call for the Contractor to meet on site for a walkthrough inspection. The Streetscape Maintenance Inspector will schedule such meetings at the discretion of the City.

5.1 Inspection Reports.

The Inspector will prepare a “Landscape Maintenance Inspection Report", with a performance rating. Ratings will reflect work performance of Contractor at the site locations under the terms and conditions of this contract. The inspection report may include comments with recommendations for improvements, but it does not take away the contractor’s responsibility to maintain each site per contract specification and to the satisfaction of the City. Problem areas are to be acted upon promptly and corrective action taken, as applicable.

5.1.1 Inspection reports will be prepared in two copies. The Inspector will establish a schedule for the Contractor to pick up their copy from the Streetscapes Maintenance Office and sign the City’s copy, acknowledging receipt. Failure to retrieve the Contractor’s copy of an inspection report will not relieve the Contractor of their responsibility to correct all noted problem areas in a timely manner.

5.1.2 The inspector will give the contractor an opportunity to correct or replace nonconforming deliverables or services, when this can be accomplished within the required delivery schedule. Correction or replacement will be without additional cost to the city.

5.1.3 The inspector will not consider the services complete until all unacceptable performance has been corrected. The value of the contractor’s non-performance will be deducted from any money due the contractor. The inspector will document in the contract file the basis for any amounts withheld.

5.2 Failure to Perform.

If the Contractor fails to perform in accordance with the terms and conditions of this contract, the Inspector will document the deficiencies on the "Landscape Maintenance Inspection Report" form or via email, which will serve as written notice to the Contractor.

5.2.1 A rating of “Needs Improvement” will require the Contractor to correct the stated deficiency(s) within seven calendar days, or as otherwise specified by Inspector.

5.2.2 A rating of “Unsatisfactory” will require the Contractor to correct the stated deficiency(s) within 48 hours, or as otherwise specified by Inspector. After two consecutive “unsatisfactory” ratings for any area within a contract, a “Failure to Comply” letter may be issued and the equivalent of two week’s maintenance fees will be deducted from the monthly service fee.

5.2.3 A “Failure to Comply” rating represents a final notice. The City may choose to terminate the Agreement, or, at the discretion of the Inspector, may allow the Contractor to correct deficiencies within 24 hours. Failure to correct deficiencies within 24 hours will result in contract termination. The termination may result in the Contractor being considered “Non-Responsible” during subsequent bid evaluations, for a period of up to one year.

5.2.4 A Contractor receiving more than two “Unsatisfactory” ratings within a 90-day time span may be issued a “Failure to Comply” letter. If two “Failure to Comply” letters are issued within a 180-day period, the City may terminate the Agreement. The termination will cause the Contractor to be considered “Non-Responsible” during subsequent bid evaluations, for a period of up to one year.

5.2.5 Any Contractor receiving two “Failure to Comply” letters within a contract year may be considered “Non-Responsible” during subsequent bid evaluations, for a period of up to one year.

SECTION 6. BASIS FOR PAYMENT

The city pays for results only. The inspector will not consider the services complete until all unacceptable performance has been corrected. The value of the contractor’s non-performance will be deducted from any money due the contractor. The inspector will document in the contract file the basis for any amounts withheld.

6.1 The Contractor will submit a monthly invoice for maintenance services rendered. Upon receipt, the Inspector will review the Contractor’s invoices and supporting documentation. Before authorizing payment, The Inspector will ensure the Contractor has adequately demonstrated the satisfactory delivery of services

as agreed to in the Agreement. The Inspector will also verify that rates for the contractor are as stated in the Agreement.

6.2 If the services received are not acceptable or not in accordance with the contract terms, the Inspector will only authorize payment for those services received that are in accordance with the contract terms and conditions. The Inspector may withhold payment for all other charges until the contract terms and conditions have been met.

6.3 In the event of termination, the City shall be responsible only for payment of those services performed and accepted by the City prior to the date of termination; and Contractor may at the City's option, be held liable and assessed for any and all costs associated with repair and/or to bring all contract sites to a state of good repair, to a satisfactory condition, and for the re-procurement of the contract services.

SECTION 7. CONTRACTOR COMMUNICATION

7.1 Contractor shall provide the City with an emergency contact list identifying the names, positions held, and phone numbers of key maintenance personnel, including mobile numbers.

7.1.1 The Contractor shall maintain a 24-hour emergency phone number where they be reached with no more than a fifteen minute delay in call back time. Once notified, contractor shall respond to an emergency within thirty minutes. Failure to respond to the Inspector's call within the fifteen minute time requirement may result in the Inspector calling another contractor to respond to the emergency call. Contractor shall be billed or have monies deducted for the cost of calling another Contractor to respond to the emergency. Non-Emergency telephone calls within reason should be returned as a courtesy no later than 2 business days.

7.1.2 The City emphasizes use of electronic forms to communicate work orders to the Contractor. Contractor is further required to maintain at least one active email address, to receive any correspondence from the Inspector. Contractor is required to regularly check for incoming messages and respond by not later than 12:00 p.m. the next business day.

7.2 Contractor will attend meetings and site inspections, as requested by the Inspector.

SECTION 8. MAINTENANCE SITES AND DESCRIPTIONS

Specific sites are delineated in the Maintenance Performance Schedule of individual contract bid documents.

8.1 It is the Contractor's responsibility to examine all sites to be maintained prior to submitting a bid. The City recommends and encourages a pre-bid drive with the area Inspector to visit locations and gain expectations prior to bidding. The Contractor will be initially accepting each service area in their present physical condition. The submission of a bid or quote shall be conclusive evidence that the Contractor has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of the work to be performed, materials to be furnished, and as to the requirements of the Agreement. No further demands may be made by the Contractor for additional service fees due to the lack of understanding concerning the specifications and scope of work described herein. If the site is not in a state of satisfactory condition at the time of bid award, the Contractor will submit a schedule to bring sites to a satisfactory condition within thirty days.

8.2 The City reserves the right to add, delete, or change sites and/or maintenance services required during the term of a contract. To the extent that any such modifications may alter the specifications in the agreement, the City will evaluate the need to amend the contract. If the changes result in an increase or a reduction in the maintenance costs of the contract, said costs will be adjusted, mutually agreed upon by the City and Contractor, and incorporated into the amendment.

8.3 Thirty days before the expiration of a contract, the Inspector may deem it necessary to conduct an exit pre-inspection in order to assure all sites within the contract are satisfactory and per contract specifications and the contractor will be notified of any deficiencies. The Contractor may be held financially accountable, with a possible deduction or withholding of final payment if contract sites are not in a satisfactory condition at the end of contract. Factors considered will include, but not be limited to, plant health, pruning standards met, proper function of all irrigation systems, and weed and litter/debris accumulation.

SECTION 9. TIME SERVICES RENDERED

The services will be provided as required by the Maintenance Performance Schedule. Specific date(s) will be mutually agreed upon by the Contractor and the Inspector.

9.1 The Contractor shall submit a proposed service schedule for each site within fourteen days after award of the contract.

9.1.1 The schedule must indicate the specific(consecutive)day(s) of the week and approximate hours when each site will be serviced. The schedule will also include the day irrigation testing will be performed and the approximate time irrigation test will be in progress.

9.1.2 Contractor shall conduct the work required in such manner as to cause the least amount of interference to the public. The Contractor shall

conduct weekday operations between the hours of 7:30 a.m. and 4:00 p.m. Services shall not commence on Primary Roadways or adjacent sidewalks until after 8:30am.

9.1.3 The Inspector will review and approve the schedule or request changes. Any modification of the established service schedule is subject to approval by the Inspector.

9.1.3.1 Permanent changes to the Contractor's service schedule shall be in writing and turned into the Inspector at least one week prior to change taking effect.

9.1.3.2 The Inspector shall be notified of any temporary change to the service schedule by no later than 7:30 AM the morning of the scheduled change. Failure to notify Inspector of service day change by 7:30 a.m., may result an unsatisfactory rating for the week.

9.1.4 If a scheduled service day falls on a Federal, State or City holiday, Contractor must provide scheduled service within two days before or after the holiday. Work is to be suspended on the holidays as listed below:

- New Year's Day- operations close by 12pm on January 31st and all day January 1st
- Dr. Martin Luther King Jr. Day- 3rd Monday in January
- President's Day- 3rd Monday in February
- Cesar Chavez Day- March 31st
- Memorial Day- Last Monday in May
- Independence Day- July 4th
- Labor Day- 1st Monday in September
- Veteran's Day- November 11th
- Thanksgiving Day
- Christmas Day- operations close by 12pm on December 24th and all day December 25th

9.1.5 Contractor shall not perform certain operations, particularly during periods of inclement weather, which may destroy or damage ground cover, athletic/turf areas, trees or shrubs. Any debris or litter which collects as a result of inclement weather or flooding, shall be removed upon rain patrol from the servicing Contractor on scheduled service day and during the next scheduled service day. Inclement weather does not release the Contractor's responsibility to provide service during the week as required by the Maintenance Performance Schedule.

9.1.6 In the event of a service delay caused by equipment failure, Contractor shall notify the Inspector immediately. All service will be completed within two days of said failure, unless otherwise approved by the Inspector.

9.1.7 Any failure to provide a scheduled service within the service week, without prior approval from the Inspector, will result in a deduction of payment for not providing a complete service.

9.2 Contractor shall perform the required maintenance services between the hours of 7:30 a.m. and 4:00 p.m., Monday through Friday. On Primary Streets, the hours shall be 8:30 a.m. and 3:30 p.m. Contractor may request to work on Saturdays only with prior approval of Inspector. Saturday work will not be authorized for unsatisfactory performance or failure to deliver complete service on scheduled day.

SECTION 10. REPAIRS AND EXTRA WORK

10.1 The Inspector may authorize the Contractor to perform additional work, including but not limited to, repairs and replacements when the need for such work arises. Should such repairs or replacements be necessary as a result of Contractor's negligence, Contractor will be responsible for completing such repairs or replacing damaged property at no additional cost to the City.

10.2 Contractor may not change the regular service schedule or work force to do unscheduled/extra work unless authorized by the Inspector.

10.3 In order to be considered for repair maintenance work projects, both in and outside of their contracted sites, the Contractor must maintain their contracted maintenance sites in a manner that meets or exceeds City Standards for landscape maintenance. In all cases, standards will be determined by the Inspector.

10.4 Should a lane closure be required for repair maintenance work; cost of permit and equipment shall be detailed in the estimate. No percentage mark-up shall be added to equipment rental fees. Notwithstanding the above authorization, when a condition exists wherein there is imminent danger of injury to the public or damage to property, the Inspector may verbally authorize the work to be performed upon receiving a verbal estimate from the Contractor.

10.5 All repair work shall commence on the specified date established through communication with your area inspector and Contractor shall proceed diligently to complete said work within the time allotted. All replacements of plant material or irrigation components shall be the same like and kind as what is missing or needed to be replaced, unless authorized by the Inspector. Upon request, Contractor shall submit highlighted copies of receipts for materials purchased. Receipts shall be

turned in with Contractors invoice for said repair and replacements.

10.6 Inspector shall authorize in writing, any additional maintenance repairs, prior to work being done. Contractor will submit a written quote, on a city approved "Repair Work Request form" detailing materials and labor charges used for maintenance repairs. When applicable, a USA ticket number, copy of ticket and dates shall be provided in writing to the inspector. The Inspector will generate a work order number which will authorize the Contractor to proceed with the work and to then submit an invoice for work performed. All invoices submitted must include:

- Invoice Number (not to be re-used/duplicated in series)
- Contract Name and Site Name
- Valid Purchase Order Number
- Work Order Number
- Description of Work Performed
- Valid date on invoice reflecting date sent to City for payment

SECTION 11. DAMAGE CAUSED BY CONTRACTOR

11.1 Any damage to either the City or private property which was caused by the Contractor shall be repaired or replaced at the Contractor's expense and to the City's satisfaction. Damages may be the result of, but not limited to:

11.1.1 Power equipment damage to trees, shrubs, turf and sprinklers.

11.1.2 Pruning methods not consistent with City specifications.

11.1.3 Over-watering or under-watering of plant materials.

11.1.4 Failure to make irrigation inspections, adjustments and repairs within schedules specified.

11.1.5 Chemical overspray or leaching, or lack of chemical control.

11.1.6 Failure to report or allow plant material to decline to a state of poor appearance as deemed by the Streetscapes team.

11.2 All repairs or replacements shall be completed in accordance with the following maintenance practices:

11.2.1 Trees - Minor damage such as bark loss from impact of mowing equipment shall be checked by the City Inspector. If in the Inspector's judgment the damage is such that it will stunt or weaken growth, the tree will be removed and replaced at Contractor's expense as calculated by the City's Urban Forester.

11.2.2 Shrubs - Minor damage may be corrected by appropriate pruning. Major damage shall be corrected by removal of the damaged shrub and replacement to comply with the specific instructions of the Inspector. It will be under the direction of the Streetscapes team on the severity of the damage.

11.2.3 Chemicals - All plant damage resulting from chemical operation, either spray-drift or lateral-leaching, shall be corrected in accordance with the aforementioned maintenance practices and the soil reconditioned to ensure its ability to support plant life.

11.2.4 Irrigation Parts – All Irrigation parts shall be repaired and replaced with same brand of like type and kind or as approved by the Inspector.

SECTION 12. INTERFERENCE WITH PUBLIC USE

Contractor shall not interfere with the public use of the City property and shall conduct its operations as to offer the least possible obstruction and inconvenience to the public or disruption to the peace and quiet of the area within which the services are performed. Should services be limited, it is the duty of the Contractor to report interferences to the Inspector.

12.1 Contractor shall not post signs or advertising material upon any work site, unless prior approval is obtained from the Inspector.

12.2 Contractor shall remove all advertisements and election signs from the work site, including utility poles and trees, regardless of size or type, each time site is serviced. Contact Inspector regarding wood signs installed in the ground by developers to advertise house sales prior to removal.

SECTION 13. LICENSING AND CERTIFICATIONS

13.1 All maintenance and repair services shall be performed by a licensed Landscape Maintenance Contractor. At a minimum, the Contractor must possess the following licenses and certifications:

- State of California C27 – Landscaping Contractor License
- State of California Department of Pesticide Regulation Qualified Applicator License.
- State of California Agricultural Pest Control Business License
- City of Sacramento Business Operations Tax Certificate

- State of California Department of Industrial Regulations Public Works Contractor Registration

Additional licenses and/or certificates may be required by the City, as specified in individual contract documents.

13.2 Contractor shall maintain all required licenses and certificates throughout the duration of the contract. Failure to maintain required licenses and certificates may result in suspension of work and/or termination of the contract, at the City's discretion.

SECTION 14. KEY CONTROL

Contractor shall be responsible for the proper use and safekeeping of all keys issued by the City under an Agreement. Lost or stolen keys shall be reported immediately to the Inspector. Contractor shall reimburse the City for the cost of replacing keys and/or the re-keying of all keyed alike locks. Upon expiration or termination of the Agreement, all keys received by the Contractor shall be accounted for and returned to the City.

CITY OF SACRAMENTO

LANDSCAPE MAINTENANCE SERVICES GENERAL SPECIFICATIONS AND PROVISIONS LS20

II. LANDSCAPE MAINTENANCE SPECIFICATIONS

City contractors provide landscape maintenance on medians, at special district-funded streetscape locations, and at public facilities and parking lots on a contractual basis, using best management practices. Scheduled maintenance includes mowing; edging; weeding; debris and litter control; pesticide and fertilizer applications; mulching; and plant pruning, removal, and replacement along with bi-monthly irrigation system testing and adjustment. Irrigation systems are maintained to provide maximum coverage and water conservation, in accordance with the City of Sacramento Water Ordinance and industry guidelines. In addition, plantings and irrigation components are repaired or replaced in the case of auto accidents, vandalism, and other unforeseen causes.

Contractors are encouraged to employ sustainable landscape management practices, whenever practicable, including, but not limited to, integrated pest management, plant material debris recycling, low water volume irrigation, composting, and use of mulch and compost.

SECTION 15. TURF MAINTENANCE

15.1 Turf Mowing

Mowing operations shall be performed in a manner that ensures a smooth surface appearance throughout the year.

15.1.1. All turf will be mowed with professional quality mulching mower equipment. Pricing assumes that bagging and removing clippings will be required only when excessive leaf debris is present, turf is too long to mulch, or when moisture conditions are too high to allow effective mulching without substantial clumping of turf debris.

15.1.2. Prior to each mowing, remove all litter and debris from lawn areas. Formal turf areas shall be mowed per the schedule below and maintained at a height of no less than two inches (2”) and no more than four inches (4”). Coordinate mowing schedules with the Inspector. Maintain a uniform lawn height, free from scalping. Where feasible, or as requested, alternate mowing direction with every mowing. Precautions shall be taken to prevent rutting, damage to trees, shrubs and sprinklers.

15.1.2.1 Hard fescue areas will be mowed two times per year, or as specified per site, and all clippings will be removed from site and disposed of at an appropriate landfill.

15.1.2.2 Non-irrigated native grass areas will be mowed three times per year, or as directed by the Inspector per the site performance pages.

15.1.3. The Inspector and Contractor will evaluate and determine any areas that require bagging and removal of clippings on a regular year-around basis.

15.1.4. Contractor is responsible for any damages incurred as a result of mower damage to turf, irrigation components, trees and shrubs and must repair or replace any such damage at no cost to City. Ten (10) foot clearance maintained around tree wells are encouraged to minimize such damage.

15.1.5. Clippings will be swept or blown from hardscapes after each mowing. Sweeping is encouraged when feasible or as directed by City Staff.

15.2 Turf Edging and Trimming

15.2.1. Mechanically trim all landscape turf edges with each mowing. Edges include all formal lawn perimeters and tree wells in lawn areas. Clean debris from hardscapes and non-turf landscape areas, remove larger debris.

15.2.2. Trim all formal lawn areas that cannot be reached by a mower. Areas to be trimmed include any lawn adjacent to poles, signs, bollards, trees, utility boxes, walls and all other obstacles. Perform trimming to the same height as mowing. Clean debris from hardscapes and non-turf landscape areas, remove larger debris.

15.2.3. Contractor is responsible for any damages incurred as a result of trimmer and edger damage to trees and shrubs and must repair or replace any such damage at no cost to City. Properly maintained tree wells are encouraged to minimize such damage.

15.3 Turf Fertilization

15.3.1 Use applications of slow release fertilizers that are a complete pellet type, with appropriate amounts of nitrogen, phosphorous, potassium and trace elements during the growing season of March through September. Use cool season fertilizer October through February. All such applications must be approved and verified by the Inspector. No use of a combo weed, and feed is allowed.

15.3.2 The Contractor shall provide an annual fertilization schedule, listing proposed materials of a minimum mid-range quality, application rates and application times to the Inspector. The Contractor shall notify Inspector twenty four hours in advance of the actual fertilizer application.

15.3.3 Contractor shall include copies of receipts for purchase of fertilizer applied with the next monthly invoice. Failure to submit receipts may result in a deduction in payment for the application and reapplication.

15.3.4 Contractor shall only apply fertilizer when the soil is sufficiently wet to immobilize the fertilizer and prevent run off. Fines can be issued for environmental impacts to our waterways. With advance written request to the City Inspector, contractor may apply manual irrigation to ensure penetration if needed. Contractor must remain on-site and monitor surface flow.

15.4 Turf Weed, Pest, and Disease Control

15.4.1 Use cultural methods (mulch mow, fertilize, aerate, irrigate) to minimize weed cover on all turf. When necessary, selective weed killers will be used to maintain a weed-free appearance. Turf pre-emergent applications shall be applied between February and May to control broadleaf weeds and crabgrass as weather allows. Use of an additional broadleaf herbicide application may be required by the Inspector if additional weed control is needed. Extreme caution shall be used to avoid damaging any other plants when selective weed killers are used.

15.4.1.1 Hard fescue areas shall also be maintained to present a weed-free appearance. Weeds shall not be allowed to exceed four inches (4”) in height. Contractor shall use a pre-emergent weed control method upon notification to the Inspector. Contractor may use other chemical controls for weeds, insects, and fungus, with approval of the Inspector. Contractor shall be required to hand pull weeds upon direction of the Inspector.

15.4.2 Monitor all turf areas for infestation harmful insects. Use cultural and mechanical means for control, including reducing irrigation in fall, fertilizing to outgrow damage, and aerating in spring to reduce larvae population. Apply pesticides only to specific areas where insect infestations have been identified by the Contractor and pose significant risks to the health and appearance of turf. Use health and environmental hazard information to choose most effective and least hazardous product.

15.5 Turf Aeration

Turf aeration is included as part of the contracted maintenance service, as specified in the Maintenance Performance Schedule.

15.5.1 Aeration of all turf areas shall be done by using a device that removes cores to a depth not less than two inches (2”) and not more than

six inch (6”) spacing and shall be done three days prior to fertilizer application.

15.5.2 All cores shall be removed from the turf and disposed of off-site or thoroughly pulverized within twenty-four hours after aerating.

15.6 Turf Renovation

15.6.1 Vertical mowing, or mechanical thatch removal, may be included as part of the contracted maintenance service, as specified in the Maintenance Performance Schedule or a quote may be solicited by the City as extra work. Specific requirements will be included in the request for quote/bid.

15.6.2 Over-seeding may be included as part of the contracted maintenance service, as specified in the Maintenance Performance Schedule or a quote may be solicited by the City as extra work. Specific requirements will be included in the request for quote/bid.

SECTION 16. TREE, SHRUB, AND VINE MAINTENANCE

15.1 Fertilization

Trees, shrubs, and vines shall be fertilized, according to the Maintenance Performance Schedule, with a complete, pellet type fertilizer, with appropriate amounts of nitrogen, phosphorus, potassium and trace elements and approved by the Inspector.

15.1.1 Contractor shall only apply fertilizer when the soil is sufficiently wet to immobilize the fertilizer and prevent run off. Fines can be issued for environmental impacts to our waterways. With advance written request to the City Inspector, contractor may apply manual irrigation to ensure penetration if needed. Contractor must remain on-site and monitor surface flow.

16.2 Weed, Pest, and Disease Control

16.2.1. Use cultural methods (mulch, proper pruning, and proper irrigation) to encourage plant health and growth and discourage weeds. Keep planter beds and tree wells free of weeds and debris on a rotational basis, weekly throughout the year by hand pulling or other mechanical means. Entire site shall be weeded by hand or mechanical weeding methods that remove the roots at least once monthly. Ground covers are

to be trimmed as often as necessary, so they are kept back a minimum of six (6) inches of sprinklers, walkways or outside any of the planters.

16.2.2 Pre-emergent and herbicides shall be used to control weeds in all landscaped areas. Contact the Inspector with any alternative methods of weed control to reduce chemical applications. Contractor is responsible for watering methods and staying consistent with water conservation restrictions.

16.2.3. Control of major disease and insect infestations for trees, shrubs and ground covers is not a part of the contract work and is considered an Additional Service. Regularly monitor all plant material and immediately notify the Inspector of any need for such control. Contractor is responsible for any damage to plant material incurred as a result of failure to immediately notify Inspector of correctable disease and/or insect problems, and Contractor must replace any such damaged plant material at no additional cost to City.

16.3 Pruning

16.3.1. Trees are maintained by staff and contractors of the City's Urban Forestry Section.

16.3.1.1 Broken, hanging branches that pose a hazard to the public below fourteen (14) feet shall be removed immediately by Contractor. If broken and hanging limbs are above fourteen (14) feet Contractor shall notify the Inspector immediately. Small tree limbs and hangers posing danger to the public shall be reported immediately so they can be reported to the City Urban Forestry section for removal.

16.3.2 Pruning of shrubs, and vines must only be performed by trained personnel in accordance with accepted horticultural practices. Prune to enhance the natural growth and shape of plant materials and intended function of the planting. The site is intended and shall have the palate kept separated as to not allow plants to grow into one another. Shearing is only permitted for formal hedges. Prune back branches as needed when interfering with walks, buildings, signage, fire control utilities, site lighting, security/safety visibility, and vehicular circulation. Irrigation heads should always be allowed to properly pop up and irrigate landscape properly at all times. Prune dead and broken branches quarterly and more frequently as required.

16.3.2.1 Prune hedges and shrubs from top to bottom. Height shall not exceed 8 feet (8') and shall vary upon Inspectors request based upon site conditions. Prune one year of growth back from curb, sidewalk, or below top of fences and walls.

16.3.2.2 Remove all dead, diseased and unsightly branches from shrubs on medians. Remove all vines or other growth as it develops within the shrubs/hedge. Any runners that start to climb buildings, shrubs or trees shall be pruned out of these areas. Vines that cover sound walls are not to be removed unless directed to do so by Inspector. All dead shrubs shall be removed. Notify Inspector prior to removal.

16.3.2.3 Restrict growth of hedges and shrubs to areas behind curbs and walkways and within planter beds by trimming. On medians, shrubs shall be maintained below twenty-four (24) to thirty-six (36) inches, as measured from the roadway, at all times for visibility and safety or lower if specified in the Performance Schedule. Measurements shall be determined from Traffic Engineering tables and directed by Inspector. All pruning cuts shall be smooth, leaving no stubs exposed. Ragged or chewed appearance is not acceptable.

16.3.2.4 Vines along walls shall be kept twelve inches (12”) below the top of wall and pruned towards wall as to prevent vine separation from the wall. All pillar and end caps and fixed signs on wall shall be kept clear and pruned for clear appearance at all times.

16.3.2.5 Pruning Frequency: Four to six times per year, or more often, as needed, dependent upon the growth patterns of the plant species and location in question.

16.3.2.6 Contractor shall prune all plants on a site within a two- week period, or as authorized by the Inspector. Contractor shall not exceed one month to complete all pruning operations for the contracted maintenance area once started, unless extended by the Inspector.

SECTION 17. GROUNDCOVER MAINTENANCE

17.1. Fertilization

Groundcover shall be fertilized, according to the Maintenance Performance Schedule, with a complete, pellet type fertilizer, with appropriate amounts of nitrogen, phosphorus, potassium and trace elements and approved and verified by the Inspector.

17.1.2 Contractor shall only apply fertilizer when the soil is sufficiently wet to immobilize the fertilizer and prevent run off. Fines can be issued for environmental impacts to our waterways. With advance written request to the City Inspector, contractor may apply manual irrigation to ensure penetration if needed. Contractor must remain on-site and monitor surface flow.

17.2 Weed, Pest, and Disease Control

17.2.1 Use cultural methods (mulch, proper pruning, and proper irrigation) to encourage plant health and growth and discourage weeds. Keep planter beds and tree wells free of weeds and debris on a regular basis, weekly throughout the year by hand pulling or other mechanical means. Entire site shall be weeded by hand or mechanical weeding methods that remove the roots at least once monthly.

17.2.2 Pre-emergent and herbicides shall be used to control weeds in all landscaped areas. Contact the Inspector with any alternative methods of weed control to reduce chemical applications.

17.2.3. Control of major disease and insect infestations for trees, shrubs and ground covers is not a part of the contract work and is considered an Additional Service. Regularly monitor all plant material and immediately notify the Inspector of any need for such control. Contractor is responsible for any damage to plant material incurred as a result of failure to immediately notify Inspector of correctable disease and/or insect problems, and Contractor must replace any such damaged plant material at no additional cost to City. Minor infestation and measures to control is part of the contractor responsibility. Contractor shall have the ability to identify and monitor/treat such pest such as spider mites, beetles, ants and black widow in irrigation assets and plant assets, etc.

17.3 Pruning

17.3.1 Ground covers are to be trimmed to maintain a 3” clearance from back of walk and/or curbing at all times. They are not to meet or grow over walkways or outside any of the planter curb lines. Ground cover shall be clearly pruned away from irrigation heads for proper coverage and function. All utility, irrigation and other boxes/lids are to be cleared around and exposed for accessibility at all times.

17.3.2 Prune ground cover a minimum three (3) times a year to maintain at an even/ level and consistent height. Cut long branches down to the main growing height of the plant.

SECTION 18. GENERAL AREA MAINTENANCE

All areas shall be kept free of all litter and landscape debris. Contractor shall inspect all landscape and remove all litter and debris in concurrence with the scheduled service day.

18.1 Landscape Debris Removal

Any accumulation of leaves and fallen branches, such as under plants, along curbs and next to fences/walls shall be removed and disposed of each time a site is serviced. Some sites may require additional service during leaf season, or as directed by the Inspector at no additional cost to the City.

18.2 Trash Removal

All trash, including paper, glass, and other accumulated rubbish from landscaping beds, turf areas, and next to fences/walls will be collected and removed each time a site is serviced, including periods of inclement weather. This is to include all hardscape islands within contract and the turn lane pockets.

18.3 Disposal of Trash and Debris

All trash and landscape debris collected as a result of Contractor's operations shall be removed from the maintenance sites immediately following such operations and is to be properly disposed of in an appropriate landfill.

18.3.1 Biodegradable landscape debris, including turf clippings (limited to only those times when mulch mowing is not possible), leaves, branches, annuals, dead plant material, etc.) should only be disposed of in green waste or yard refuse recycling facilities. Acceptable sites include topsoil producing facilities and/or other facilities, which utilize yard waste for landscape purposes. No biodegradable material should be disposed of as garbage, except noxious weed debris.

18.3.2 Trash and landscape debris will not be disposed of in neighboring residential or commercial receptacles or bins, or left in the roadway.

18.3.3 The Contractor is solely responsible for the cost of transportation and dumping fees associated with disposal.

18.3.4 It shall be the Contractors responsibility to properly train employees who will work within the City of Sacramento's Right-of-Way to properly dispose of *bio*-hazardous waste materials *according to standard set forth in the City of Sacramento Injury Illness Prevention Program*. Items related *to the*

conditions of this contract include but are not limited to, clean-up of displacement camps as well as excessive trash removal. *Additionally, the* proper extraction and disposal of *all* hypodermic needles *are to be placed into a properly labeled sharps containers and disposed of according to the guidelines described in the California Code of Regulations (CCR) Title 8, Section 5193, Bloodborne Pathogens. All* soiled items, *which may or may not contain bodily fluids, feces and/or other items* as evaluated by the Inspector, *shall be disposed of in a manner that is compliant with Cal/OSHA* guidelines. *All workers who have the potential of exposure to blood or other potentially contaminated materials are covered under this standard. These materials include but are not limited to:*

- *Blood*
- *Feces*
- *Vomit*
- *Semen*
- *Vaginal Secretions*
- *Cerebrospinal Fluid*
- *Synovial Fluid*
- *Pleural Fluid*
- *Pericardial Fluid*
- *Amniotic Fluids*
- *Any bodily fluid contaminated with blood*
- *Unfixed Human Tissue*
- *Unfixed Human Organs, etc.*

18.4 Sidewalks, Gutters, and Other Paved Areas

18.5.1 Sidewalks, gutters, and paved areas shall be cleaned of dirt or soil that might be washed from adjacent slopes or planted areas as required and shall be kept free of all tree generated debris such as leaves, cones, seed pods and limbs.

18.5.2 All plant growth shall be prevented in any cracks, in curbs, or in street gutters. Edging will be accomplished to prevent encroachment onto sidewalks.

18.5.3 All street gutters shall be kept free of leaves on a weekly basis

18.5.4 Contractor shall report any hazardous sidewalk condition (i.e., raised lip, cracking) to the Inspector.

18.6 Leaf Blower Operation

Blowing of debris from sidewalks, hardscapes, or landscape areas into the street gutters or into streets is prohibited. The City can at any time restrict or forbid a Contractor from using blowers and update ordinances that must be followed. Any

use of portable gasoline-powered leaf blowers must conform to the following restrictions and upon direction Contractor may be requested by Inspector to eliminate use of blowers on site:

18.6.1 Use of portable gasoline-powered leaf blowers within 200 feet of any residential property is restricted to the hours of 9:00 a.m. to 6: p.m., Monday through Saturday and 10:00 a.m. to 4: p.m., on Sunday and holidays.

18.6.2 Portable gasoline-powered leaf blowers cannot exceed 70 dBA when used within 200 feet of any residential property and may require mufflers or other modifications to meet the 70 dBA limit. Blowers purchased after November 15, 1995 cannot exceed 65 dB's when used within 200 feet of any residential property.

18.6.3 Use of portable gasoline-powered leaf blowers more than 200 feet from any residential property is not restricted.

SECTION 19. IRRIGATION

19.1 General Irrigation Systems Operation

19.1.1 Contractor is responsible for providing a staff completely trained and familiarized with the setup, monitoring and maintenance of the irrigation system at Contracted sites.

19.1.2 Contractor is responsible for understanding the capacities and capabilities of the irrigation system and ensuring that system modifications do not cause landscape water demand to exceed the hydraulic capacity of the system.

19.1.3 Contractor will establish appropriate time intervals for each valve zone in the irrigation systems and adjust during the operating season as necessary.

19.1.3.1 All irrigation system operation will comply with the Sacramento City Code, Chapter 13.04, Article XI, Outdoor Water Conservation.

19.1.3.1.1 Irrigation systems must be programmed to conform to the odd/even days for watering. Sites north of Interstate 80 Freeway are considered odd numbered addresses and will be watered on Tuesdays and Saturdays. South of the Hwy 80 Freeway are considered even numbered addresses and will be watered on Wednesday, and Sunday.

No watering is allowed on Mondays. (Or as directed by City Staff with current conservation guidelines being followed.)

19.1.3.1.1 Operate systems only during night hours. Daytime operation is permitted only when inspecting or testing the system, after fertilizer application, for new installations and during extreme temperatures. Except for system inspection and testing, any daytime operation must be authorized by the Inspector.

19.1.3.2 Adjustments should be based on local evapo-transpiration (ET) data whenever possible.

19.1.3.3 Run times shall be sufficient to allow for saturation of the root zone without run off. This may require “cycle and soak” scheduling in spray zones. (Shorter more frequent cycles) Allow adequate run times in drip irrigation zones.

19.1.4 Contractor will manage all irrigation systems for peak efficiency and water conservation. Check for proper water application rates by inspecting soil moisture and health of plant materials on a weekly basis. Adjust the irrigation frequencies as required to correct over or under watering.

19.1.5 Contractor shall manage irrigation schedules so that irrigation is applied more deeply, but less frequently, rather than small amounts on a daily basis.

19.1.6 Contractor and the Inspector will work in collaboration during water supply shortages and under drought conditions to develop an irrigation strategy that best preserves and protects the site’s landscape investment.

19.2 Irrigation System Monitoring

Contractor is to check each locations meter and reduced pressure backflow for leaks or irregularities and report to area inspector promptly if a problem is suspected. Irrigation system monitoring, and inspections will include the following:

19.2.1 A visual inspection of all irrigated landscape areas each time a site is serviced to identify potential leaks as evidenced by water related plant stress, surface water or erosion, broken or damaged equipment, and paved surfaces or building walls/windows affected by irrigation spray.

19.2.2 An operational test of all irrigation valve zones by the controller, bi-weekly year round, to identify coverage problems, misdirected nozzles, broken or damaged equipment, hard-scape or building overspray, pressure problems, and system leaks. Failure to test irrigation may result in an unsatisfactory or failure to comply rating.

19.2.2.1 Within three business days after completing the biweekly or requested irrigation test, Contractor shall submit a written report to the Inspector, including general findings, needed repairs and renovations, and any recommendations. The report may be submitted in person or via email.

19.3. Irrigation System Contract Maintenance

19.3.1 Run-off of water from irrigation systems into or onto streets, sidewalks, stairs, or gutters is not permitted. Immediately make adjustments, repairs, or replacements required to correct the source of the run-off. 311 after hours calls are subject to deduction of payment on monthly billing. Contractor will receive written notice of the call and cost associations.

19.3.2 Clean and adjust heads, nozzles and valves as required. Clean drip irrigation valve strainers as required. Properly prune plantings and remove sod and debris affecting head performance from all zones. Properly prune plantings and sod or debris affecting access to valves, and reset/raise valve boxes, which have settled during the winter shutdown months.

19.3.3 Prior to winter weather but later than November 15, or as requested by City staff, deactivate the irrigation systems. Testing the system shall occur monthly to look for irregularities, damages, and possible concerns in the system. This is also to exercise valves, controllers and pumps if applicable. (all shall be deactivated upon leaving the site(s).)

19.3.4 Flush out lateral lines and adjust heads and nozzles at the beginning of each operating season, not later than March 15th. Activate the irrigation systems in the spring or as directed by the Inspector.

19.3.5 The inside of irrigation controllers, RP cages, and booster pump enclosure shall be cleaned once every six months for spiders, mice, webs and debris. Booster pump filters shall be cleaned or replaced, with Inspector approval, every six months.

19.4. Irrigation System Repair and Renovation

19.4.1 Contractor shall provide 24-hour-per-day, 7-days-a-week emergency response capability to immediately replace or repair broken, damaged or inoperable irrigation components which pose damage or safety hazards to persons or property.

19.4.2 For all other irrigation system component repair or replacement work, prepare quotes for labor and materials, based upon the approved Pricing Schedule.

19.4.3 All repairs to the system shall be identical to the original installation, unless approved otherwise in advance by the Inspector. If a change to the installation will result in lower future maintenance costs, less frequent breakage, or an increase in public safety, request authorization to make the change from the Inspector.

19.4.4 Replacement of system components shall be the same manufacturer and model as original equipment, or better as authorized by Inspector.

19.4.5 Contractor will carry and maintain a supply of irrigation components, with the exception of valves, such as sprinklers and solenoids, each time site is serviced.

SECTION 20. USE OF CHEMICALS

20.1 General

20.1.1 All work involving the use of chemicals shall be in compliance with all Federal, State and County laws. The Contractor shall hold a current State of California Agricultural Pest Control Business License and employ a holder of a current State Qualified Applicators License, and must remain registered with the Sacramento County Agricultural Commissioner.

20.1.2 Contractor will make every effort to promote Integrated Pest Management (IPM) practices in the use of chemicals, management of weeds and pest in the contract area. Contact Inspector with any major problems of weed or pest infestations.

20.1.3.1 Pest Control Advisor site recommendations for each chemical or combination of chemicals for each site must be turned in to the Inspector no later than February 1 of each calendar year, or twenty-one (21) calendar days after any contract is awarded and at no additional cost to City. Should an unforeseen chemical

application be necessary, a Pest Control Advisor's recommendation shall be submitted to the Inspector (14) days prior to its use.

20.1.3.2 All chemical applications shall be done with extreme care to avoid any hazard to any person or pet or damage to property in the area. All spraying shall be done when air currents are still to limit drift to six (6) inches. (Or winds not to exceed 5 M. P. H.)

20.1.3.3 At the end of each month, the Contractor shall submit copies of a City authorized chemical use report, such as the State of California Monthly Summary to the Inspector's office. The report shall include the Manufacturer and Name of Product Applied, the Total Product Used, the Number of Applications, Code, the Site Treated and the Acres/Square Foot Treated. Failure to submit this form will result in delay of payment.

20.1.3.4 Records of all operations stating dates, times, methods of application, chemical formulations, applicator's names, and weather conditions shall be made and retained in an active file for a minimum of two (2) years by the Contractor. These records must be available for review upon request from the Inspector, County, State or Federal Officers.

20.1.3.5 All chemicals requiring a special permit for use must be registered with the County Agricultural Commissioner's office and a permit obtained with a copy to the City. A Pest Control Advisor's recommendation must be on file with the Inspector prior to use of special permit chemicals and authorized by Inspector.

20.1.3.6 It is the Contractors responsibility to post all public and property owner notices and adhere to County regulatory notices prior to any applications. City of Sacramento is not responsible for public notification and will not participate in the notice process. The Contractor shall follow all state and County guidelines inclusive of remaining on site until area treated is dry.

20.2 Chemical Edging

20.2.1 Where trees and shrubs occur in turf areas, all grass growth shall be limited to at least three (3) feet from the trunk of trees and away from the drip line of shrubs by use of approved chemicals.

20.2.2 Linear chemical edging of turf boundaries shall be performed in a manner that ensures a defined turf edge and limits its encroachment into beds or across boundaries where it is impractical to edge mechanically. Chemical edging of turf boundaries shall not exceed four inches (4") in width

along curbs and sidewalks. Sites where chemical edging is acceptable will be identified on the Maintenance Performance Schedule.

19.2.2.1 All linear chemical edging and/or detailing must be approved by the Inspector prior to its use.

20.2.3 Chemical detailing of sprinkler heads (to provide maximum water coverage), valve boxes, meter boxes, and similar small obstacles in turf areas shall be performed in a manner that ensures operability, ease of location and/or a clean appearance and shall not exceed a six inch (6") clearance, or as otherwise specified.

20.3 Chemical Weed Abatement

20.3.1 Chemical weed abatement shall be used in and around areas such as planters, areas adjacent to buildings, trees, fence lines, etc. Prior to chemical application, all weeds over four inches (4") tall shall be cut to proper mowing height.

20.3.1.1 Use of a colored marker dye can be requested by Inspector for confirmation of herbicide application.

20.3.1.2 Spot treat with a portable sprayer or wick wand using an effective herbicide applying per manufacturer's recommendation.

20.3.1.3 Weeds treated with a contact weed chemical shall be applied according to manufacturer's recommendations. If kill is not complete, a second application shall be applied.

20.3.1.4 Weeds treated using a systemic chemical shall be left in place per manufacturer's recommendation. If kill is not complete by the time specified in the manufacturer's recommendation a second application shall be applied.

20.3.5 All dead weeds must be removed within seven (7) days of application.

20.3.6 Chemical application starts at the gutter expansion joint, goes to the opposite expansion joint on medians or across the sidewalk to the sound wall. Unimproved fields shall start at the gutter expansion joint, include the sidewalk and cover four feet (4') past back of walk, or to the nearest fence line.

SECTION 21. SUSTAINABILITY

Contractors providing landscape maintenance service for the City are encouraged to employ sustainable landscape management practices, whenever practicable, including but not limited to, integrated pest management, plant material-cycling, low water volume irrigation, composting and use of mulch and compost.

21.1 All irrigation shall be in compliance with Sacramento City Code, Chapter 13.04, Article XI, Outdoor Water Conservation, and landscape industry best practices for water conservation.

21.2 Mulching type mowers will be used for turf mowing.

21.3 Bark mulch may be supplied by the City's Urban Forest from their operations. In this case, the Contractor shall provide the labor only for possible pick up, delivery and spreading of the mulch.

21.4 Whenever possible, debris as a result of plant material clean up, weed removal or pruning shall be taken to a recyclable green waste facility.

21.5 When selecting replacement plants for existing areas, Contractor shall provide suggestions to minimize waste by choosing species that are appropriate to the micro-climate species that can grow to their natural size in the space allotted them. Native and drought tolerant plants that require no or minimal watering once established are preferred.

21.6 The Contractor further agrees that its products used in the course of this agreement do not contain any items, ingredients or components prohibited under the City's Sustainable Purchasing Policy.

Attachment 1 to Exhibit B

City of SACRAMENTO

REQUEST FOR BIDS – NON-PROFESSIONAL SERVICES

Request for Bids No.	RFB# B26141111416	
Project Name:	Landscape Maintenance of Water Treatment Plants	
Questions due by:	4/1/2026	2:00 PM PST
Bid Due By:	4/8/2026	2:00 PM PST
Estimated Week of Award Notification:	April 2026	
Estimated Week of Contract Award:	May 2026	

PRE-BID CONFERENCE MEETING

☐ No

☒ Yes, attendance is optional **-OR-** ☐ Yes, attendance is MANDATORY

NOTE: Bids from bidders who do not attend a MANDATORY pre-bid meeting shall be deemed non-responsive.

Date:	March 25, 2026
Time:	Combined Water Treatment Plant: 7:00 AM – 9 AM PDT Sacramento River Water Treatment Plant: 9:30 – 10:30 AM PDT E.A. Fairbairn Water Treatment Plant: 11:00 AM – 12 PM PDT
Location site name:	**MULTIPLE** Combined Water Treatment Plant (CWTP) Sacramento River Water Treatment Plant (SRWTP) E.A. Fairbairn Water Treatment Plant (EAFWTP)
Address:	CWTP: 1395 35th Ave., Sacramento, CA 95822 SRWTP: 301 Water St., Sacramento, CA 95811 EAFWTP: 7501 College Town Dr., Sacramento, CA 95826
Bldg./Floor/Room:	N/A
City:	Sacramento
Link for virtual meeting:	**N/A – In Person**

PUBLIC BID OPENING

☒ Yes ☐ No

Public Bid Openings will be held as soon as practicable after the submission deadline. Prospective bidders are invited to attend the public opening. Details about the public opening are as follows:

Bid Opening Date:	April 8, 2026
Bid Opening Time	2 PM Pacific Daylight Time
Location site name:	**Zoom – Virtual Meeting**
Address:	N/A
Bldg./Floor/Room:	N/A

ATTACHMENT 1

BID SIGNATURE PAGE

BID NO. B26141111416

FOR SERVICES/SUPPLIES: LANDSCAPE MAINTENANCE OF WATER TREATMENT PLANTS

To the City of Sacramento:

The undersigned bidder (hereafter referred to as the "bidder" or the "Contractor") submits the attached bid, and certifies as follows: that the only persons or parties interested in this bid as principals are those named herein as bidder; that this bid is made without collusion with any other person, firm, or corporation; that in submitting this bid the bidder has examined all of the Contract Documents identified below; that the bidder proposes and agrees that if this bid is accepted, the bidder will execute and fully perform the contract for which bids are called; that the bidder shall perform all the work and/or furnish all the materials specified in the Contract Documents, in the manner and time therein prescribed, and according to the requirements as therein set forth; and that the bidder shall take in full payment therefore, the prices set forth in the attached Pricing Schedule.

CONTRACT DOCUMENTS

Performance of and payment for the contract for which bids are called shall be subject to all terms and conditions of the Invitation for Bid, the Bid Instructions and Requirements, the Bid, the Pricing Schedule(s), the Items Requiring Bidder Response, the Required Submittals, the General Conditions, General Provisions and any Addenda, Amendments, Special Provisions, Specifications, Plans, or other requirements applicable to performance of the work and/or furnishing the materials specified herein. Such documents referred to herein as the "Contract Documents," are fully incorporated herein by this reference and are collectively referred to as the "Contract." By submitting this Bid, the Contractor agrees to fully perform each and every provision of the Contract, provided that City awards the Contract to the Contractor, and provided further that City shall have no obligation hereunder unless and until such award is made. Contractor shall not make any changes to this form without City's written approval, and any changes made without such approval shall be void.

To Be Filled Out By Bidder

NAME OF CONTRACTOR: AZEVEDO'S LANDSCAPE & MAINTENANCE, INC.

ADDRESS: PO BOX 1240 ELK GROVE CA 95759

PHONE #: 916-427-5501 FAX #: 916-683-7060 E-MAIL: Office@AzevedosLandscape.com

STATE TAX I.D. #: C3275620 FED. TAX I.D. #: 27-2280268

City of Sacramento Business Operation Tax Certificate #: 52758
(Contract award will not be processed without a valid and current Certificate Number.)

TYPE OF BUSINESS ENTITY *(check one)*:

_____ Individual/Sole Proprietor _____ Partnership
__X__ Corporation _____ Limited Liability Company
_____ Other (*please specify:* _____)

BY: (signature of authorized person) John Azevedo

PRINT NAME: JOHN AZEVEDO

TITLE: OFFICER

Note: All information submitted in or in connection with a bid is submitted under penalty of perjury. The City shall have the right to terminate at any time any contract awarded pursuant to a bid that contains false information.

ATTACHMENT 2 **PAYMENT DISCOUNT**

PAYMENT DISCOUNT:

Will you offer a prompt payment discount? Yes [ ] or No [X] (Net 30 days)

If Yes, the Payment Discount is _____% for payment within _____ calendar days, which will be computed from the date delivery is made and is accepted by the City, or the date a proper invoice is received, whichever is later.

When prompt payment discounts are offered, the calculated discount will be subtracted from the final bid amount and the discounted amount will be used to determine lowest bid. Discounts offered for payment in less than twenty (20) days will not be considered as a basis for award.

ATTACHMENT 3

PRICING SCHEDULE

CITY OF SACRAMENTO
LANDSCAPE MAINTENANCE PRICING SCHEDULE
LANDSCAPE MAINTENANCE SERVICES FOR AREA:
Service Areas for various Department of Utilities Facilities

AREA	ITEM	1st-YEAR MONTHLY	1st-YEAR YEARLY	2nd-YEAR MONTHLY	2nd-YEAR YEARLY	3rd YEAR MONTHLY	3rd YEAR YEARLY
1	Sacramento River Water Treatment Plant (SRWTP)	$3,130.00	$37,560.00	$3,190.00	$38,280.00	$3,250.00	$39,000.00
~~A~~	~~Sacramento River Intake Area~~	~~$1,550.00~~	~~$18,600.00~~	~~$1,580.00~~	~~$18,960.00~~	~~$1,610.00~~	~~$19,320.00~~
B	Bannon Street Properties – 222,230,320,324,334,350,354 Bannon St	$120.00	$1,440.00	$125.00	$1,500.00	$130.00	$1,560.00
C	234 Sequoia Pacific Blvd	$120.00	$1,440.00	$125.00	$1,500.00	$130.00	$1,560.00
2	Combined Wastewater Treatment Plant (CWTP)	$1,750.00	$21,000.00	$1,785.00	$21,420.00	$1,820.00	$21,840.00
A	Mobile Office Area	$150.00	$1,800.00	$150.00	$1,800.00	$150.00	$1,800.00
B	CWTP Pathway – Unimproved area from 35th Ave from Plant towards Freeport Blvd	$590.00	$7,080.00	$600.00	$7,200.00	$615.00	$7,380.00
3	Demonstration Garden	$1,150.00	$13,800.00	$1,175.00	$14,100.00	$1,195.00	$14,340.00
4	E.A. Fairbairn Water Treatment Plant (EAFWTP)	$2,900.00	$34,800.00	$2,960.00	$35,520.00	$3,015.00	$36,180.00
	All Landscape Areas TOTAL	$11,460.00	$137,520.00	$11,690.00	$140,280.00	$11,915.00	$142,980.00
	COMBINED YEARLY TOTAL FROM ALL THREE YEARS						
	FINAL BID TOTAL (Combined yearly total from all three years + repair crew rates)	See attached crew rate sheet - Include this total in 3 years of crew rates					$452,580.00

Date: 4/1/2026	Company:	Signature: John Azevedo	AZEVEDO'S LANDSCAPE & MAINTENANCE, INC.

Area 1A (struck through) is being excluded from this agreement as it is being managed by Youth, Parks, and Community Enrichment Department

REPAIR CREW RATES

Contractor is to furnish the City of Sacramento, hourly rates for repairs and maintenance work, in accordance with the following specifications and provisions.

All repair work shall have prior written authorization from the City. Repair work is requested on an as-needed basis and the Contractor is not guaranteed all such work in areas where Contractor is currently providing landscape services to the City. The amount of time each repair job may take is subject to negotiation with the City. Rates offered below would be a major determinant in whether repair work will be furnished by the Contractor providing contract services in the same area. Should repair work not be provided by the Contractor, said Contractor may be required to coordinate with the City and another Contractor of the City's choosing in order to complete repairs.

NOTE: THE ESTIMATED HOURS AND DOLLAR AMOUNT SHOWN BELOW ARE FOR BID EVALUATION PURPOSES ONLY AND DO NOT REPRESENT WHAT THE CONTRACTOR MAY OR MAY NOT EARN THROUGH REPAIR WORK.

80 hours x General Gardening Crew rate (*ITEM # 1)* = $ 5600.00

50 hours x Specialty Irrigation Rate (*ITEM # 2*) = $ 5000.00

$7,000 x Percentage Markup (*ITEM # 4)* = $ 0 *AMOUNT OF MARK UP ONLY*

(TOTAL) $ 10600.00

ENTER THREE TIMES TOTAL ABOVE ON THE PRICING SCHEDULE PAGE ON BID LINE TITLED "REPAIR CREW COSTS FOR THREE YEARS"

The hourly crew rate quoted shall include all Contractor costs for wages, insurance, overhead and equipment. Fees for materials shall include Contractors lowest / best purchase price, plus tax and markup.

ITEM # 1 - GENERAL GARDENING CREW RATE (Service based on a two-person crew)

Provide general gardening services, as required, i.e. plant and tree replacement, special cleanups, special pruning $ 70.00 per hour

ITEM # 2 - SPECIALTY IRRIGATION RATE (Service based on a two-person crew, Irrigation Technician & Helper)

Provide irrigation repair for valves, solenoids, controllers, lateral and main line breaks and sprinkler replacement. If a helper is required, one half of the General Gardening crew rate will be used.

$ 100.00 per hour

ITEM # 3 - PORTAL TO PORTAL CALLS

Emergency service calls during regular operating hours, Mon. - Fri. from 7 a. m. to 4 p. m., other than same day Contractor is regularly scheduled to be on the job site.
(RATE IS TO NOT EXCEED 1 AND ½ TIMES TECHNICIAN RATE) $ 100.00 per call

ITEM # 4 - PERCENT OF MARKUP ON MATERIALS

Percentage increase over the best/lowest cost, including Contractor discounts, paid by Contractor for materials approved for replacement or installation (Must not exceed 5%).

0 %

PERCENTAGE MARKUP SHALL NOT BE USED FOR DUMP FEES, EQUIPMENT RENTALS OR ANY OTHER NON-MATERIAL ITEMS.

AFTER HOURS--ON CALL SERVICES---as described in the above Item-- No. 2. Irrigation overtime rate shall be computed at 1 and 1/2 times the Technician hourly rate listed above.

ATTACHMENT 4 **EQUAL BENEFITS ORDINANCE DECLARATION OF COMPLIANCE**

Name of Contractor: AZEVEDO'S LANDSCAPE & MAINTENANCE, INC.
Address: PO BOX 1240 ELK GROVE CA 95759
The above-named Contractor ("Contractor") hereby declares and agrees as follows:

1. Contractor has read and understands the Requirements of the Non-Discrimination In Employee Benefits Code (the "Requirements") attached hereto in Section IV.

2. As a condition of receiving this Contract, Contractor agrees to fully comply with the Requirements, as well as any additional requirements that may be specified in the City of Sacramento's Non-Discrimination In Employee Benefits Code codified at Chapter 3.54 of the Sacramento City Code (the "Ordinance").

3. Contractor understands, to the extent that such benefits are not preempted or prohibited by federal or state law, employee benefits covered by the Ordinance are any of the following:

   a. Bereavement Leave
   b. Disability, life, and other types of insurance c. Family medical leave
   d. Health benefits
   e. Membership or membership discounts f. Moving expenses
   g. Pension and retirement benefits
   h. Vacation
   i. Travel benefits
   j. Any other benefit offered to employees

   Contractor agrees that if Contractor offers any of the above-listed employee benefits, Contractor will offer those benefits, without discrimination between employees with spouses and employees with domestic partners, and without discrimination between the spouses and domestic partners of such employees.

4. Contractor understands that Contractor will not be considered to be discriminating in the provision or application of employee benefits under the following conditions or circumstances:

   a. If the actual cost of providing a benefit to a domestic partner or spouse exceeds the cost of providing the same benefit to a spouse or domestic partner of an employee, Contractor will not be required to provide the benefit, nor shall it be deemed discriminatory, if Contractor requires the employee to pay the monetary difference in order to provide the benefit to the domestic partner or to the spouse.

   b. If Contractor is unable to provide a certain benefit, despite taking reasonable measures to do so, if Contractor provides the employee with a cash equivalent Contractor will not be deemed to be discriminating in the application of that benefit.

   c. If Contractor provides employee benefits neither to employee's spouses nor to employee's domestic partners.

   d. If Contractor provides employee benefits to employees on a basis unrelated to marital or domestic partner status.

   e. If Contractor submits written evidence of making reasonable efforts to end discrimination in employee benefits by implementing policies that will be enacted before the first effective date after the first open enrollment process following the date this Contract is executed by the City of Sacramento ("City"). Contractor understands that any delay in the implementation of such policies may not exceed one (1) year from the date this Contract is executed by the City, and applies only to those employee benefits for which an open enrollment process is applicable.

   f. Until administrative steps can be taken to incorporate nondiscrimination in employee benefits. The time allotted for these administrative steps will apply only to those employee benefits for which administrative steps are necessary and may not exceed three (3) months from the date this Contract is executed by the City.

g. Until the expiration of a current collective bargaining agreement(s) if employee benefits are governed by such collective bargaining agreement(s).

h. Contractor takes all reasonable measures to end discrimination in employee benefits by either requesting that the union(s) involved agree to reopen the agreement(s) in order for Contractor to take whatever steps are necessary to end discrimination in employee benefits or by ending discrimination in employee benefits without reopening the collective bargaining agreement(s).

i. In the event Contractor cannot end discrimination in employee benefits despite taking all reasonable measures to do so, Contractor provides a cash equivalent to eligible employees for whom employee benefits, are not available. Unless otherwise authorized in writing by the City Manager, Contractor understands this cash equivalent must begin at the time the union(s) refuses to allow the collective bargaining agreement(s) to be reopened or not longer than three (3) months after the date this Contract is executed by the City.

5. Contractor understands that failure to comply with the provisions of Section 4(a) through 4(i), above, will subject Contractor to possible suspension and/or termination of this Contract for cause; repayment of any or all of the Contract amount disbursed by the City; debarment for future Contracts until all penalties and restitution have been paid in full and/or for up to two (2) years; and/or the imposition of a penalty, payable to the City, in the sum of $50.00 for each employee, for each calendar day during which the employee was discriminated against in violation of the provisions of the Ordinance.

6. Contractor understands and agrees to provide notice to each current employee and, within ten (10) days of hire, to each new employee, of their rights under the Ordinance. Contractor further agrees to maintain a copy of each such letter provided, in an appropriate file for inspection by authorized representatives of the City. Contractor also agrees to prominently display a poster informing each employee of these rights.

7. Contractor understands that Contractor has the right to request a waiver of, or exemption from, the provisions of the Ordinance by submitting a written request to the City's Procurement Services Division prior to Contract award, which request shall identify the provision(s) of the Ordinance authorizing such waiver or exemption and the factual basis for such waiver or exemption. The City shall determine in its sole discretion whether to approve any such request.

8. Contractor agrees to defend, indemnify and hold harmless, the City, its officers and employees, against any claims, actions, damages, costs (including reasonable attorney fees), or other liabilities of any kind arising from any violation of the Requirements or of the Ordinance by Contractor.

The undersigned declares under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that he or she is authorized to bind the Contractor to the provisions of this Declaration.

Signature:	John Azevedo		
Printed Name:	JOHN AZEVEDO		
Title:	OFFICER	**Date:**	4/1/2026

ATTACHMENT 5 Local Business Enterprise (LBE)

5% LBE Preference Program

Note: Only prime bidders should provide responses to the following items, as only prime bidders can qualify for the 5% preference.

LBE FIVE PERCENT (5%) PREFERNCE

For contracts under $250,000, firms that qualify as an LBE will receive a 5% preference on all City procurement opportunities. For professional service contracts only, this preference also applies to procurement opportunities of $250,000 or more.

A bid or quotation submitted by a firm that qualifies as an LBE will receive a 5% bid evaluation preference for the purpose of determining the lowest responsible bidder. This means that, for bid evaluation purposes, the total price bid by an LBE shall be reduced by 5%. However, this reduction only applies for bid evaluation purposes, and the resulting contract or purchase order will reflect the actual amount bid by the LBE.

Local Business Enterprise means a business enterprise, including but not limited to, a sole proprietorship, partnership, limited liability company, corporation, or other business entity that has a legitimate business presence in the city or unincorporated county of Sacramento. Evidence of legitimate business presence in the city or unincorporated county of Sacramento shall include:

1. Having a current City of Sacramento Business Operation Tax or County of Sacramento Business License for at least twelve (12) consecutive months prior to submission of the bid; and
2. Having either of the following types of offices or workspace operating legally within the city or unincorporated county of Sacramento for at least twelve (12) consecutive months prior to submission of bid:
    a. The LBE's principal business office or workspace; or
    b. The LBE's regional, branch, or satellite office with at least one full-time employee located in the city or unincorporated county* of Sacramento.

Local Business Enterprise (LBE)

Is the firm submitting the bid qualified as a local business enterprise? Check the appropriate box below:

☑ **YES** – the prime bidder submitting the bid is qualified as a local business enterprise.

☐ **NO** – the prime bidder submitting the bid is not qualified as a local business enterprise.

If the response to the above is YES:
Provide the City of Sacramento Business Operation Tax Certificate Number and/or County of Sacramento Business License Number:
52758

If the response to the above is YES, a current copy of the City of Sacramento Business Tax Certificate and/or County of Sacramento Business License must be provided upon request.

If the response to the above is YES, provide business office or workspace address*:
3240 51st Ave
Sacramento, CA 95823

* Unincorporated area" generally refers to the part of a county that is not part of any city. The unincorporated area of Sacramento County ***does not include*** the cities of Citrus Heights, Elk Grove, Folsom, Galt, Isleton, or Rancho Cordova. (See https://www.saccounty.gov/Government/Pages/CitieswithintheCounty.aspx).

**Address must be a physical address for the basis of location. This excludes P.O. Box addresses, etc.

Detailed information about the LBE 5% Preference Program can be found at:
https://www.cityofsacramento.gov/finance/procurement/contract-ordinances

ATTACHMENT 6

Local Business Enterprise (LBE)

LBE Participation Program

Note: Bidders must provide responses to the following items. Failure to provide a response to each of the items in this section may be grounds for rejection of the bid.

LBE FIVE PERCENT (5%) PARTICIPATION REQUIREMENT

On April 3, 2012, the Sacramento City Council adopted a Local Business Enterprise (LBE) Preference Program to provide enhanced opportunities for the participation of local business enterprises (LBEs) in the City's contracting and procurement activities. On November 19, 2013, the City Council increased the LBE Preference and authorized City departments to require minimum LBE participation levels in individual contracts. Under City Code section 3.64.020, when the bid specifications for a city contract establish a minimum participation level for LBEs, no bidder on the contract shall be considered responsive unless its bid meets the minimum LBE participation level required by the bid specifications.

The City has established a minimum 5% participation level for LBEs on this contract. Pursuant to City Code section 3.64.020, no bidder on this contract shall be considered responsive unless its bid meets or exceeds this minimum participation level. To qualify for this requirement, bidders must either (a) be an LBE or (b) subcontract with a qualified LBE.

All information about this program can be found at: https://www.cityofsacramento.gov/finance/procurement/contract-ordinances

Local Business Enterprise means a business enterprise, including but not limited to, a sole proprietorship, partnership, limited liability company, corporation, or other business entity that has a legitimate business presence in the city or unincorporated county of Sacramento. Evidence of legitimate business presence in the city or unincorporated county of Sacramento shall include:

1. Having a current City of Sacramento Business Operation Tax or County of Sacramento Business License for at least twelve (12) consecutive months prior to submission of the bid; and
2. Having either of the following types of offices or workspace operating legally within the city or unincorporated county of Sacramento for at least twelve (12) consecutive months prior to submission of bid:
    a. The LBE's principal business office or workspace; or
    b. The LBE's regional, branch, or satellite office with at least one full-time employee located in the city or unincorporated county of Sacramento.

Local Business Enterprise (LBE)

Does the bid satisfy the local business enterprise participation requirement? Check the appropriate box below:

☑ **YES** – the prime bidder submitting the bid is qualified as a local business enterprise.

☐ **SUBCONTRACTING** – the prime bidder is utilizing subcontractors or sub-tier suppliers who qualify as local business enterprises for more than 5% of the work. **

☐ **NO** – the prime bidder and the subcontractors or sub-tier suppliers are not qualified as a local business enterprise.

If the response to the above is YES:
Provide the City of Sacramento Business Operation Tax Certificate Number and/or County of Sacramento Business License Number:
52758

And provide business office or workspace address (must be physical address for the basis of location – this excludes PO Boxes, etc):
3240 51st Ave
Sacramento, CA 95823

* Unincorporated area" generally refers to the part of a county that is not part of any city. The unincorporated area of Sacramento County ***does not include*** the cities of Citrus Heights, Elk Grove, Folsom, Galt, Isleton, or Rancho Cordova. (See https://www.saccounty.gov/Government/Pages/CitieswithintheCounty.aspx).

If utilizing subcontractors or suppliers to satisfy the minimum five percent (5%) LBE requirements, the **Subcontractor and Local Business Enterprise Participation Form found at https://www.cityofsacramento.gov/finance/procurement/contract-ordinances must be submitted with your bid.

SIGNATURES

The parties have signed this Contract, effective as of the day and year first stated above.

CONTRACTOR

Under penalty of perjury, I certify that the information provided here is correct.

Signature: John Azevedo
John Azevedo (May 27, 2026 15:21:48 PDT)

Title: Officer

Additional Signature (if required):

Title:

CITY OF SACRAMENTO

A Municipal Corporation

APPROVED AS TO FORM:

Signature: Michael Voss

Title: Senior Deputy City Attorney

Reviewed By:

Signature:

Title:

Approved By:

Signature:

Title:

Additional Signature (if required):

Title: