



12/10/2021

Jan Blackford  
Ann Baker Landscape Architecture  
625 2nd St., Suite 110  
Petaluma CA 94952

**Re: 1317 Butterfield Rd, San Anselmo**  
**Project #: 2021-80; APN: 176-162-07; Service #: 21823**  
**WATER CONSERVATION ORDINANCE 430**

Landscape Plan Compliance Letter

Dear Jan:

The landscape plans submitted to Marin Water for Ordinance 430 review have passed. It is the landscape architect's or the owner's agent's responsibility to ensure that the installing contractor is supplied with a copy of Marin Water's **stamped and approved** landscape plans prior to installation.

Upon completion of the project the landscape architect or agent must submit the required Certificate of Completion form and irrigation audit results to the Water Conservation Department. A final inspection will then be scheduled to verify field compliance with the ordinance. A copy of the stamped landscape plans must be onsite during construction.

Any changes to the stamped approved landscape plans must be approved by Marin Water prior to installation.

**Because of the emergency drought in Marin, Marin Water strongly encourages that all customers refrain from installing any new landscaping during the current drought conditions. Operating outdoor irrigation systems will no longer be allowed after December 1, 2021. This prohibition will last until May 31, 2022. Spot watering by hand is exempt.**

Please check Marin Water Rules at <https://www.marinwater.org/waterrules> for details and updates.

If you have questions, please call me at 415-945-1138

A handwritten signature in black ink that reads "Sergio Paganelli".

Sergio Paganelli  
Water Efficiency Specialist II

Cc: Joseph Eischens, MW  
Nole Studley, MW

Water Use for Service Number: 21823 @ 0.08 AF  
Maximum Flow Rate: 4 GPM

**Project Datasheet**

***District use only***

Project Number: \_\_\_\_\_

Water Entitlement: \_\_\_\_\_

***Please provide the following information:***

Project Name: \_\_\_\_\_

Assessor Parcel Number(s): \_\_\_\_\_

Site Address: \_\_\_\_\_

Meter Numbers (if existing, as found on the meter cap):  
\_\_\_\_\_

***Owner Information***

Name: \_\_\_\_\_

Business Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Email: \_\_\_\_\_

Phone Number: \_\_\_\_\_

***Landscape Architect or Agent***

Name: \_\_\_\_\_

Business Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Email: \_\_\_\_\_

Phone Number: \_\_\_\_\_

***Project Description***

Maximum operational flow requirement (gallons per minute): \_\_\_\_\_

Will there be any plantings in previously unplanted areas?     YES     NO

## Pre-installation Landscape Checklist

All items on this checklist are required in order to be in compliance with the Water Conservation Code. Please complete the checklist and return it with your landscape plans.

### Engineering

- A meter can provide water only to the specific parcel with which it is associated. One meter cannot irrigate multiple parcels.
- All irrigation plans must identify property to be served by parcel number and address.
- Irrigation plan must include the location of all irrigation equipment for the purpose of identifying possible conflicts with district water lines and facilities.
- All irrigation plans must show parcel lines and street names.
- Call out on the irrigation plan the existing water meter location and meter number that will serve the area, or indicate "new meter" if appropriate.
- Please complete the following Meter Location Table:

<b>Meters</b> (enter "NEW" or enter the existing meter number, if existing)	<b>Location</b> (ex. Along Main Street, 5 feet right of mailbox)	<b>Sheet No.</b> (ex. L.1.2)

- For new meters, select the appropriate size of the meter in accordance with the district's specifications (meter size based on maximum flow of the irrigation system):

Meter Size (inches)	Maximum Flow Allowed (GPM)
$\frac{5}{8} \times \frac{3}{4}$	20
$\frac{3}{4}$	30
1	50
$1 \frac{1}{2}$	100
2	160

*For questions concerning these requirements, please call 415-945-1531.*

**Backflow Prevention**

All irrigation systems shall have backflow protection installed as follows:

- An irrigation system having a dedicated water service shall have a reduced pressure principle assembly equal in size to the meter, installed at the water meter per [MMWD backflow installation standards](#).
- Irrigation systems whose point-of-connection is from a consumer's domestic water service line, shall properly install atmospheric vacuum breaker(s), a pressure vacuum breaker or a reduced pressure principal backflow prevention device or assembly. This backflow protection must be installed at the point of connection to the domestic service line. All backflow preventers must be installed as required by the California Plumbing Code. Testable backflow preventers must be tested after installation and the report submitted to the Cross-Connection Control (Backflow and Reclamation) Group within seven days of testing.
- There shall be no valves, meters, connections or other items except a pressure reducing valve installed between the point of connection and the backflow preventer.
- The backflow preventer shall be no more than three (3) feet from the irrigation point of connection.
- Installation of backflow protection shall conform to the district's standard installation criteria.
- Irrigation plan must list the type, manufacturer, model and size of backflow to be used, the location where the backflow is to be installed, and an installation detail.
- Freeze and/or vandalism protection shall be by means of a manufactured enclosure or blanket.

*For questions regarding Backflow Prevention, please call 415-945-1559.*

**Recycled Water** NOT CURRENTLY PROPOSED OR REQUIRED

- The district will determine if recycled water is required. Any project fronting a recycled water main shall be designed to accommodate recycled water. Currently recycled water mains are located in the greater Terra Linda and Marinwood areas of northern San Rafael.
- Projects located in other areas of the district will be evaluated on a case-by-case basis for the future availability of recycled water.
- Refer to the recycled water information sheet and the recycled water irrigation notes.

*For questions regarding recycled water availability and/or design requirements, please call 415-945-1558.*

**Water Features** N/A NONE

- Recirculating water systems shall be used for water features.
- Recycled water shall be used when available and approved for use onsite.
- Surface area of a water feature shall be included in a high water use hydrozone area of the water budget calculation.

**Water Conservation**

- Fill out the project datasheet.
- Complete Maximum Applied Water Allowance (MAWA) & Estimated Total Water Use (ETWU) [worksheet](#) for each MMWD meter. The ETWU shall not exceed the MAWA.

Submit a [grading plan](#). The grading design will minimize soil erosion, runoff, and water waste. The grading plan must clearly and accurately identify:

- Height of finished graded slopes, drainage patterns, pad elevations, and finished grade.

*It is highly recommended that, when site conditions allow, project applicants consider grading so that all irrigation and normal rainfall remains within the property lines and does not drain on to non-permeable hardscape.*

Submit a [landscape planting plan](#) that complies with the following:

*General:*

- Identify and depict: new and existing trees, shrubs, groundcovers, turf and any other planting areas; property lines, new and existing building footprints, streets, driveways, sidewalks and other hardscape features; pools, fountains, and other water features.

*Plant Selection and Hydrozoning:*

- Provide a list of plants by botanical name and common name, plant quantities and mature plant sizes.
- Provide hydrozone and summary tables identifying project landscape areas (page 9).
- Plants with similar water use needs (see [WUCOLS](#)) shall be grouped together in distinct hydrozones and the distinct hydrozones shall be irrigated with separate valves.
- Low and moderate water use plants can be mixed, but the entire hydrozone will be classified as moderate water use for MAWA calculations.
- High water use plants shall not be mixed with low or moderate water use plants.
- All non-turf plants shall be selected, spaced, and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site.
- Invasive plants as listed by the [MMWD invasive plant list](#) are prohibited.

*Turf: N/A NO TURF*

- Turf shall not be planted on sloped areas which exceed a slope of one (1) foot vertical elevation change for every ten (10) feet of horizontal length.
- Turf is prohibited in areas less than ten (10) feet wide, unless adjacent to a parking strip and used to enter and exit vehicles.
- Turf and other high water use plants shall not be allowed in the following conditions: street medians, traffic islands, planter strips, and bulbouts of any size.

*Soils and Mulch:*

- A minimum of 8 inches of non-mechanically compacted soil shall be available for water absorption and root growth in planted areas.
- Incorporate compost or natural fertilizer into the soil to a minimum depth of 8 inches at a minimum rate of 6 cubic yards per 1000 square feet or per specific amendment recommendations from a soils laboratory report.
- A minimum 3 inch layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, and direct seeding applications.

*Other:*

- Fire Safe Landscape Practices. The requirements in this chapter are intended to support and be in compliance with all local and state requirements related to Fire Safe Landscaping practices, including, but not limited to, requirements for [Wildlife Urban Interface](#) zones as specified by local authority (see [map](#)).
- Identify location and installation details of any applicable stormwater best management practices that encourage on-site retention and infiltration of stormwater. Appropriate stormwater best management practices are encouraged in the landscape design.

Submit an *irrigation design plan* that complies with the following:

*General:*

- Identify and depict property lines, new and existing building footprints, streets, driveways, sidewalks and other hardscape features.
- Clearly identify and depict the location of all irrigation equipment for the purpose of identifying possible conflicts with district water lines and facilities including pipes, irrigation valves and backflow prevention devices.
- Provide a water use table on the irrigation plan (see the MAWA/ETWU [worksheet](#)).

*Point of Connection and Valves:*

- Identify and depict the water meter serving the irrigation system and label as “New” or with the existing meter number and identify and depict the irrigation point of connection.
- High-flow sensor(s) that can detect high-flow conditions and have the capability to shut off the irrigation system are required for all landscapes of 5000 square feet or larger.
- Isolation valves shall be installed at the point-of-connection and before each valve or valve manifold.
- Designate the area irrigated by each valve and provide the station number, flow rate, precipitation rate, and design operating pressure for each station.

*Hydrozoning:*

- Each valve shall irrigate a hydrozone with similar site, slope, sun exposure and soil condition.
- A single valve shall not irrigate hydrozones that mix high water use plants with moderate or low water use plants.
- Trees shall be placed on separate irrigation valves except when planted in turf areas.

*Water Use Efficiency and System Performance:*

- High-efficiency controllers, weather-based or other sensor-based self-adjusting irrigation controllers shall be required.
- Rain sensors shall be installed for each irrigation controller.
- Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produce no runoff or overspray.
- Point source irrigation is required in mulched planting areas or where plant height at maturity will affect the uniformity of an overhead system.
- Sprinkler heads, rotors and other emission devices on a valve shall have matched precipitation rates.
- Head-to-head coverage is required unless otherwise directed by the manufacturer's specifications.
- Wherever overhead irrigation is located directly adjacent to hardscape areas, where runoff water flows into the curb and gutter, all spray heads shall be setback a minimum of 24" from hardscape edges.
- Slopes greater than 15% shall not be irrigated with an irrigation system with a precipitation rate exceeding 0.75 inches per hour (or lower if appropriate for site conditions as determined by the district).
- Check valves shall be installed to prevent low-head drainage.
- Swing joints or other pipe protection components are required on above-ground irrigation piping.
- Pressure regulation and/or booster pumps shall be installed so that all components of the irrigation system operate at the manufacturer's recommended optimal pressure.
- Irrigation system shall be designed to prevent runoff or overspray onto non-targeted areas.

*Dedicated Irrigation Meter and Sub-meter:*

The following projects shall have either a district landscape water service meter or a private sub-meter. Check only one that applies, if applicable:

- A district landscape water service meter is required for all new landscapes, other than single-family and two-unit residential landscapes, for which the irrigated area is equal to or greater than 1,000 square feet.
- A private sub-meter shall be required for all rehabilitated landscapes equal to or greater than 2,500 square feet.

NOTE: TOTAL LANDSCAPE AREA IS 2470 SF.  
TOTAL IRRIGATED AREA IS 2695 SF AS AREA  
OF TREE IRRIGATION IS COUNTED TWICE.

*Other:*

- Identify any applicable rain harvesting, graywater, or catchment technologies (e.g. rain gardens, cisterns, etc.). Applicants are encouraged to employ alternative irrigation techniques as appropriate and where permitted by law.



## Certificate of Completion

This certificate is filled out by the project applicant, landscape architect and landscape contractor upon completion of the landscape project.

### Part 1. Project Information Sheet

Date:	MMWD Project Number:	
Project Name:	Project Address:	
Name of Project Applicant:	Telephone No.:	
	Fax No.:	
Title:	Email Address:	
Company:	Street Address:	
City:	State:	ZIP Code:

"I/we certify that I/we have received copies of all the documents within the Landscape Documentation Package and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

\_\_\_\_\_  
Property Owner Signature

\_\_\_\_\_  
Date

### Part 2. Landscape Architect and Landscape Contractor/Installer

Landscape Architect Name:	Telephone No.:	
	Fax No:	
Title:	Email Address:	
License No. or Certification No.:	Street Address:	
Company:	City:	
	State:	ZIP Code:

Landscape Contractor Name:	Telephone No.:	
	Fax No:	
Title:	Email Address:	
License No. or Certification No.:	Street Address:	
Company:	City:	
	State:	ZIP Code:

"I/we certify that the work has been completed in accordance with the ordinance and that the landscape planting and irrigation installation conform to the criteria and specifications of the approved Landscape Documentation Package. Additionally, a landscape audit and irrigation maintenance schedule have been completed and are attached to this certificate showing that the system meets the efficiency requirements used in the Maximum Applied Water Allowance calculation".

\_\_\_\_\_  
Landscape Architect Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Landscape Contractor Signature

\_\_\_\_\_  
Date

## Irrigation Audit Report

This audit is required by Title 13 of the district code and shall be turned in with the *Certificate of Completion* form. The irrigation audit must document the following:

- 1) Operating pressure of the irrigation system.
- 2) Distribution uniformity of overhead irrigation stations.
- 3) Precipitation rate of overhead irrigation stations.
- 4) Report of any overspray or broken irrigation equipment.
- 5) Irrigation schedule including:
  - A) Plant establishment irrigation schedule.
  - B) Regular irrigation schedule by month including: plant type, root depth, soil type, slope factor, shade factor, irrigation interval (days per week), irrigation runtimes, number of start times per irrigation day, gallons per minute for each valve, precipitation rate, distribution uniformity and monthly estimated water use calculations.
  - C) An irrigation maintenance schedule that includes: Routine inspections, adjustment and repairs to the irrigation system, aerating and dethatching turf areas, replenishing mulch, fertilizing, pruning and weeding.

**492.3: PROJECT INFORMATION**

DATE: SEPTEMBER 21, 2021  
 (APPLICANT TO PROVIDE DATE WHEN SUBMITTED TO AGENCY)

PROJECT APPLICANT: SLEEPY HOLLOW COMMUNITY CENTER

PROJECT ADDRESS: 1317 BUTTERFIELD RD. SAN ANSELMO, CA 94960

AGGREGATE LANDSCAPE AREA (SF): ± 2,470

PROJECT TYPE: COMMERCIAL

WATER SUPPLY TYPE (POTABLE/RECYCLED/WELL): POTABLE

LOCAL WATER PURVEYOR: MARIN

**LANDSCAPE DESIGN INTENT**

THE LANDSCAPE DESIGN COMPLIES WITH THE WATER EFFICIENT LANDSCAPE ORDINANCE. THE ENTIRE PLANT PALETTE IS A DIVERSE GROUP OF LOW-MAINTENANCE, REDUCED WATER-USE AND CLIMATE ADAPTED SPECIES.

PLANTS ARE GROUPED IN HYDROZONES BASED ON SIMILAR WATER NEEDS AND EXPOSURES.

**IRRIGATION DESIGN INTENT**

THE IRRIGATION SYSTEM IS DESIGNED TO COMPLY WITH MWELo, THE STATE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE.

IT IS DESIGNED TO REDUCE WATER USE TO THE LOWEST PRACTICAL AMOUNT. IT IS DESIGNED TO PREVENT RUNOFF, LOW HEAD DRAINAGE AND OVERSPRAY. SEPARATE VALVES ARE USED TO IRRIGATE EACH HYDROZONE. THE SYSTEM INCORPORATES HIGH QUALITY, HEAVY DUTY, WATER CONSERVING EQUIPMENT. BACKFLOW PROTECTION WILL BE PROVIDED AT THE POINT OF CONNECTION. A SMART CONTROLLER PROVIDES EVAPOTRANSPIRATION SENSOR DATA FOR SCHEDULING.

**492.5: SOIL MANAGEMENT & SOIL REPORT**

- PER WELO 492.5 (2)(B) NO SIGNIFICANT MASS GRADING IS PLANNED.
- CONTRACTOR SHALL TEST SOIL AND PROVIDE SOIL ANALYSIS REPORT TO DESIGNER AND OWNER AFTER CONSTRUCTION IS COMPLETE AND BEFORE PLANTING IS INSTALLED.
- CONDUCT SOIL SAMPLING IN ACCORDANCE WITH ALL LABORATORY PROTOCOLS.
- THE SOIL TEST REPORT BY AN ACCREDITED SOILS LAB SHALL INCLUDE: SOIL TEXTURE, INFILTRATION RATE, PH, TOTAL SOLUBLE SALTS, SODIUM, PERCENT ORGANIC MATTER AND RECOMMENDATIONS FOR OMRI CERTIFIED AMENDMENTS AND SOIL CONDITIONERS.
- CONTRACTOR SHALL SUBMIT DOCUMENTATION VERIFYING IMPLEMENTATION OF SOIL ANALYSIS REPORT RECOMMENDATIONS TO THE LOCAL AGENCY WITH CERTIFICATE OF COMPLETION.
- COMPOST: PER THE WATER EFFICIENT LANDSCAPE ORDINANCE: ADD A MINIMUM OF SIX (6) CUBIC YARDS OF COMPOST PER 1,000 SQUARE FEET OF LANDSCAPE AREA.
- SOIL PREPARATION: TOP DRESS PLANTING AREAS WITH A MINIMUM OF 6 CY COMPOST PER 1000 SF FOR THE ENTIRE PLANTING AREA. CULTIVATE THE SOIL WITH A DIGGING FORK TO A DEPTH OF 8". DO NOT TILL. TILLING DAMAGES SOIL STRUCTURE AND RELEASES CARBON INTO THE ATMOSPHERE.
- MOISTURE CONTENT: DO NOT WORK ON OR AROUND THE SOIL WHEN THE MOISTURE CONTENT IS SO GREAT THAT COMPACTION WILL OCCUR. NOR WHEN IT IS SO DRY DUST WILL FORM OR WHEN SOIL CLODS WILL NOT BREAK READILY. APPLY WATER IF NECESSARY TO BRING SOIL TO OPTIMUM MOISTURE CONTENT TO COMPLETE THE SPECIFIED WORK.
- MULCH: PER THE WATER EFFICIENT LANDSCAPE ORDINANCE, A MINIMUM 3-INCH LAYER OF ORGANIC MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES, EXCEPT 1) IN NATIVE GRASS AREAS, 2) IN THE 0-5' NON COMBUSTIBLE ZONE IN A FIREWISE LANDSCAPE WHERE PLANS INDICATE A GRAVEL MULCH. MULCH REDUCES EVAPORATION, SUPPRESSES WEEDS, MODERATE SOIL TEMPERATURE AND PREVENTS SOIL EROSION. DO NOT USE NON BIODEGRADABLE WEED CLOTH FABRICS - THEY ARE DAMAGING TO THE SOIL.

**GENERAL SPECIFICATIONS**

**REQUESTS FOR INFORMATION**

- Use the RFI process to clarify questions about materials and installation processes during the bidding and construction process.
- All RFIs must be submitted by the Contractor.
- Landscape Architect responses to RFIs are not to be considered as Pricing Order or Pricing Directive, nor will they authorize changes in Contract Sum or Price. These changes must be documented through the General Contractor Change Order process and approved prior to commencing any additional work.

**PROJECT COORDINATION**

- Landscape Contractor will attend weekly on site meetings with the General Contractor and/or LA.
- Landscape Contractor will inform the General Contractor of issues that arise during construction and prepare RFIs, Submittals and/or request Landscape Architect Construction Observation site visits as needed during the construction process and as required by these Specifications to complete the work as intended by the Construction Documents.
- Close out procedures: Landscape Contractor will follow close-out procedures which will generally consist of the following steps: i) a Substantial Completion walk through with Landscape Architect, ii) comply with Landscape Architect's punch list of items needing to be completed or corrected, iii) accompany Landscape Architect on final inspection, iv) comply with Landscape Architect's instructions for completion of final punch list items if any after inspection of work.

**SUBMITTAL REQUIREMENTS**

- Transmit each submittal to General Contractor for distribution to the landscape architect or owners representative with approved submittal form. Sequentially number the transmittal forms.
- All submittals must be submitted a minimum of 10 working days prior to their scheduled use on the project to allow for review, any corrections as required and approval.

- Within 15 days after effective date of Owner-Contractor Agreement, submit complete list of major products proposed for use, with name, manufacturer, trade name and model number for each product.
- Submit all Product Data for similar groups of products bound together with a title sheet. For example all irrigation products in one packet, all soil amendments in one packet, all paving materials in one packet.
- Substitution Requests must be submitted on separate forms, clearly labeled, and approved prior to use.
- Samples/Color Samples: Samples of the specified product options, color or finish must be reviewed on site by Landscape Architect 10 working days prior to their scheduled use.
- Shop Drawings: prepare shop drawings as required per construction element. Submit Shop Drawings 10 working days before planned installation or construction of that item. Use a qualified draftsman using CAD or hand drafting.
- Manufacturer's Instructions: when specified in individual sections, submit Manufacturer's printed specifications or instructions for review 10 working days prior to their scheduled use for review and approval.
- Manufacturer's Certificates: When specified in specification Sections or when requested, submit manufacturer's certificate to Landscape Architect for review.
- Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

**QUALITY CONTROL**

- Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship to produce Work of specified quality.
- Comply fully with manufacturer's instructions, including each step in sequence.
- Should manufacturer's instructions conflict with Contract Documents, request clarification from Landscape Architect before proceeding.
- Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- Perform work by persons qualified to produce workmanship of specified quality.

- Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

**FIELD SAMPLES**

- Prepare field samples at the site as required by individual Sections for review.
- Rejected field samples shall be redone until acceptance.
- Field samples will be used to finalize selection of materials and processes. Do not order affected materials and equipment related to the field sample until the field sample is approved.
- Prepare field sample in approved location prior to start of Work requiring the sample. Allow 7 days for review after completion of sample.
- Acceptable samples represent a quality level for the work.

**MOCKUPS**

- When required by individual Section, construct mockup using the same materials, methods and techniques to be used in constructing the actual work.
- Construct mockups in approved location prior to start of Work requiring mockup. Allow 7 days for review after completion of mock up.
- Mock up shall demonstrate suitability of proposed materials, methods, techniques, finishes and workmanship.
- Approved mockup shall be used as a standard for judging completed work.
- Maintain mockups in good condition during construction. Do not demolish or remove from the site unless so directed.
- Accepted mockups may be incorporated into the Work.

**Maximum Applied Water Allowance**

Enter Zip Code **94960** 40.03 Residential? **No**

**Enter Project Information**

Project Name: **Sleepy Hollow Community Center Firewise Demonstration Garden**  
 Address: **1317 Butterfield Road**  
 Meter Number: **21823**  
 Location/Sheet No.: **L-3.0**  
 Date: **11/11/21**

**Maximum Applied Water Allowance (MAWA)**

Landscaped Area: **2,695** sqft  
 Special Landscaped Area: **0** sqft  
 MAWA = **40** units

**Estimated Total Water Use (ETWU)**

Low water use plant: **2,260** sqft  
 Moderate water use plant: **435** sqft  
 High water use plant: **0** sqft

Efficiency Factor: **0.85**

% of Total Landscape Irrigated with Drip	Irrigation Efficiency Factor
0-33%	select 0.75
34-66%	select 0.80
67-100%	select 0.85

ETWU = **37** units

**Water Use Table**

ETWU	Gallons:	Units:	AF:
	27,676	37	0.08
Baseline Period	Jan/Feb	Mar/Apr	May/June
Baseline Units	1	2	8
			Jul/Aug
			11
			Sep/Oct
			10
			Nov/Dec
			5

1 unit or CCF (hundred cubic feet) = 748 gallons; 1 AF = 435.6 units  
 For more information please contact 415.945.1497 or see our website at MarinWater.org 6/16

**SHEET INDEX**

- L-0.0 MWELo COMPLIANCE DOCUMENTATION
- L-1.0 LANDSCAPE LAYOUT PLAN
- L-1.1 LANDSCAPE DETAILS
- L-2.0 LANDSCAPE PLANTING PLAN
- L-3.0 IRRIGATION PLAN
- L-3.1 IRRIGATION DETAILS
- L-3.2 IRRIGATION SPECIFICATIONS
- C-4.0 CIVIL GRADING PLAN (THIS GRADING PLAN COMPLIES WITH THE STATE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE)



**LANDSCAPE WELO DOCUMENTATION PACKAGE**

- L0.0 WELO COMPLIANCE DOCUMENTATION
- L1.0 LANDSCAPE DESIGN PLAN (INCLUDES ALL LANDSCAPE AND PLANTING SHEETS)
- L2.0 IRRIGATION DESIGN PLAN (INCLUDES ALL IRRIGATION SHEETS)
- GRADING DESIGN PLAN BY CIVIL, SEE PROJECT PACKAGE

NOTE THAT THIS LIST IS FOR WELO COMPLIANCE ONLY AND IS NOT THE SAME AS THE SHEET LIST IN THE CD PACKAGE

**PHASE 1: PRE-CONSTRUCTION SIGNATURES**

**492.3: LANDSCAPE WELO DOCUMENTATION PACKAGE**

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

APPLICANT SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

**492.6: LANDSCAPE DESIGN PLAN**

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

*[Signature]* \_\_\_\_\_ DATE **OCTOBER 14, 2021**

SIGNATURE \* \_\_\_\_\_ DATE \_\_\_\_\_  
 \*LICENSED LANDSCAPE ARCHITECT, LICENSED LANDSCAPE CONTRACTOR OR OTHER AUTHORIZED PERSON

**492.7: IRRIGATION DESIGN PLAN**

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM ACCORDINGLY FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

*[Signature]* \_\_\_\_\_ DATE **OCTOBER 14, 2021**

SIGNATURE \* \_\_\_\_\_ DATE \_\_\_\_\_  
 \*LICENSED LANDSCAPE ARCHITECT, CERTIFIED IRRIGATION DESIGNER, LICENSED LANDSCAPE CONTRACTOR, OR OTHER PERSON AUTHORIZED TO DESIGN AN IRRIGATION SYSTEM

**PHASE 2: POST-CONSTRUCTION SIGNATURES & ATTACHMENTS:**

**492.9: CERTIFICATE OF COMPLETION**

I CERTIFY THAT THE LANDSCAPE HAS BEEN INSTALLED PER THE APPROVED LANDSCAPE DOCUMENTATION PACKAGE.

SIGNATURE \* \_\_\_\_\_ DATE \_\_\_\_\_  
 \*SIGNER OF THE LANDSCAPE DESIGN PLAN, THE SIGNER OF THE IRRIGATION DESIGN PLAN OR THE LICENSED LANDSCAPE CONTRACTOR

ATTACH APPENDIX C

**492.10: IRRIGATION SCHEDULING**

ATTACH PARAMETERS FOR SETTING THE IRRIGATION SCHEDULE ON CONTROLLER.

**492.11: MAINTENANCE**

ATTACH SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE

**492.12: IRRIGATION AUDIT**

LOCAL AGENCY OR THIRD PARTY CERTIFIED IRRIGATION AUDITOR SHALL PERFORM AUDIT. ATTACH LANDSCAPE IRRIGATION AUDIT REPORT.

**492.5: SOIL MANAGEMENT REPORT**

ATTACH SOIL ANALYSIS REPORT

ATTACH DOCUMENTATION VERIFYING IMPLEMENTATION OF RECOMMENDATIONS FROM SOIL ANALYSIS REPORT

**AGENCY STAMP**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



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APN 176-162-07

SLEEPY HOLLOW COMMUNITY CENTER  
 FIREWISE DEMONSTRATION GARDEN  
 1317 BUTTERFIELD RD.  
 SAN ANSELMO, CA 94960

SHEET TITLE:

MWELo  
 COMPLIANCE  
 DOCUMENTATION

DATE:

NOVEMBER 04, 2021: <sup>1</sup>

NOVEMBER 11, 2021: <sup>2</sup>

L-0.0

SHEET  
 OF

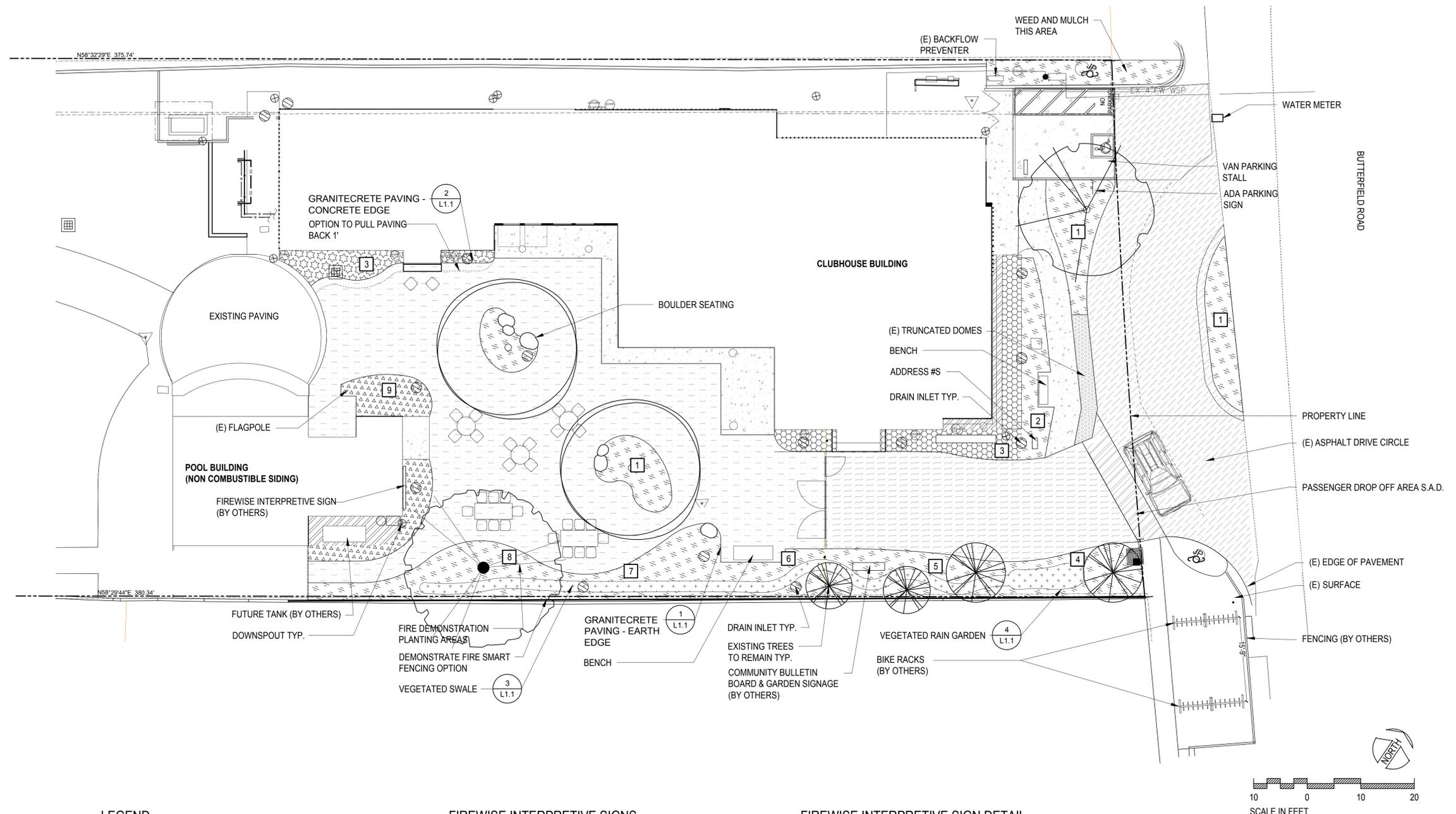


**ABLA**

ANN BAKER LANDSCAPE ARCHITECTURE  
625 2ND ST., STE 110  
PETALUMA, CA 94952  
TEL.: (510) 926-2557  
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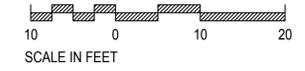
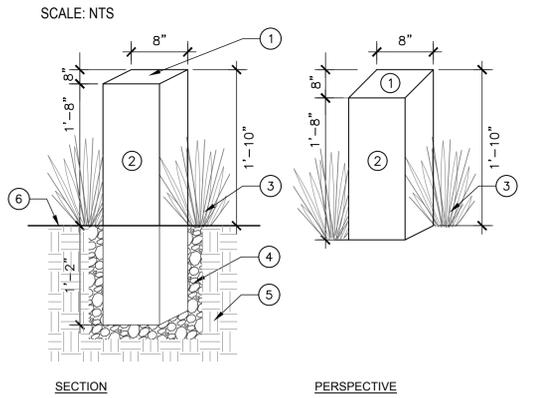
**LEGEND**

- 3" MULCH FINES
- 1" DECORATIVE GRAVEL OVER 2" CRUSHED GRANITECRETE #1 GREY
- 2" DECORATIVE GRAVEL #1 GREY
- 2" DECORATIVE GRAVEL #2 COLOR
- COMPOST MULCH
- PLANTED RAIN GARDEN AND SWALE
- (E) ASPHALT PAVING
- (E) CONCRETE PEDESTRIAN
- (E) CONCRETE VEHICULAR
- (E) GRANITECRETE VEHICULAR
- (E) GRANITECRETE PEDESTRIAN

**FIREWISE INTERPRETIVE SIGNS**

- 1 ISLANDS OF PLANTING
- 2 SHRUBS DISTANCED FROM BUILDINGS AND TREES
- 3 5' NON COMBUSTABLE ZONE
- 4 RAIN GARDENS AND SWALES IMPROVE SOIL MOISTURE, NON COMBUSTABLE
- 5 NO FUEL LADDERS NEAR TREES
- 6 CLEAN AND GREEN
- 7 HORIZONTAL SPACING
- 8 VERTICAL SPACING
- 9 NON COMBUSTABLE BUILDING SIDING

**FIREWISE INTERPRETIVE SIGN DETAIL**



SLEEPY HOLLOW COMMUNITY CENTER  
FIREWISE DEMONSTRATION GARDEN  
1317 BUTTERFIELD RD.  
SAN ANSELMO, CA 94960

SHEET TITLE:  
LANDSCAPE  
LAYOUT PLAN

DATE:  
OCTOBER 14, 2021

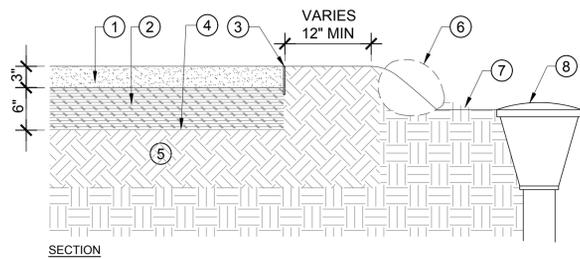


Plan Review Ordinance #: 430  
Approval Date: 12/10/2021  
Project #: 2021-80  
Reviewer: Sergio Paganeli

L-1.0

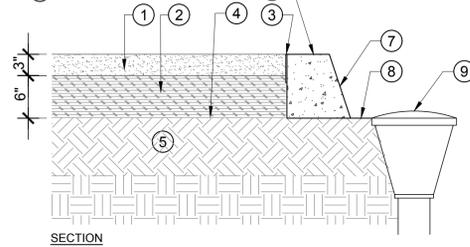
SHEET  
OF

- ① 3" GRANITECRETE: 2 BAG MIX COMPACTED 88% - 92%
- ② 6" CALTRANS CLASS 2 PERMEABLE MATERIAL, COMPACT TO 88% - 92% TO RETAIN PERMEABILITY
- ③ 3/16" x 4" STEEL EDGER OR APPROVED EQUAL: COLOR BLACK
- ④ SLOPE SUBGRADE AWAY FROM BUILDINGS AS REQUIRED BY CIVIL ENGINEER
- ⑤ UPPER 8" OF SUBGRADE COMPACTED TO AT LEAST 95% RELATIVE COMPACTION
- ⑥ OPTIONAL BOULDER
- ⑦ 2% SLOPE OR LESS
- ⑧ DRAIN INLET

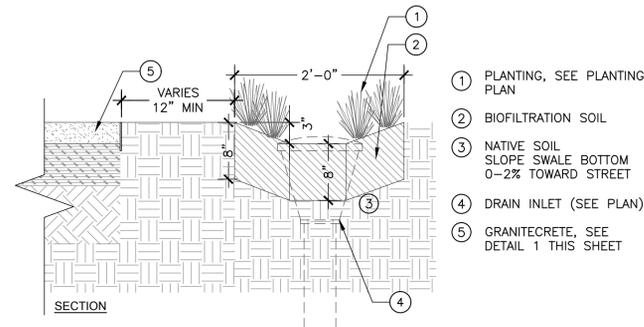


**1 GRANITECRETE PAVING - EARTH EDGE**  
SCALE: 1"=1'-0"

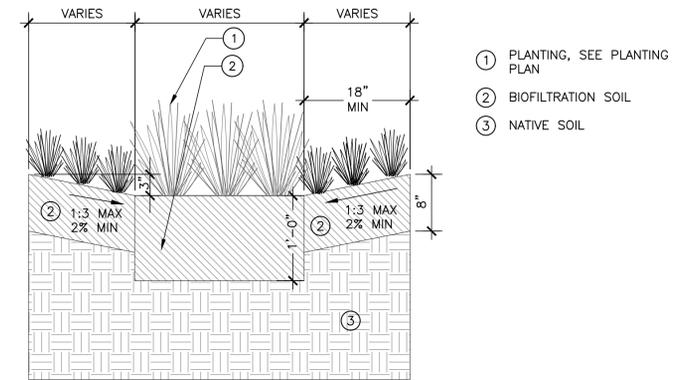
- ① 3" GRANITECRETE: 2 BAG MIX COMPACTED 88% - 92%
- ② 6" CALTRANS CLASS 2 PERMEABLE MATERIAL, COMPACT TO 88% - 92% TO RETAIN PERMEABILITY
- ③ 3/16" x 4" STEEL EDGER OR APPROVED EQUAL: COLOR BLACK
- ④ SLOPE SUBGRADE AWAY FROM BUILDINGS AS REQUIRED BY CIVIL ENGINEER
- ⑤ UPPER 8" OF SUBGRADE COMPACTED TO AT LEAST 95% RELATIVE COMPACTION
- ⑥ CONCRETE BORDER, APPLY DECORATIVE GRAVEL TO FINISH SURFACE
- ⑦ BATTER AS NEEDED
- ⑧ 3" MINIMUM DISTANCE SLOPING 0-2%
- ⑨ DRAIN INLET



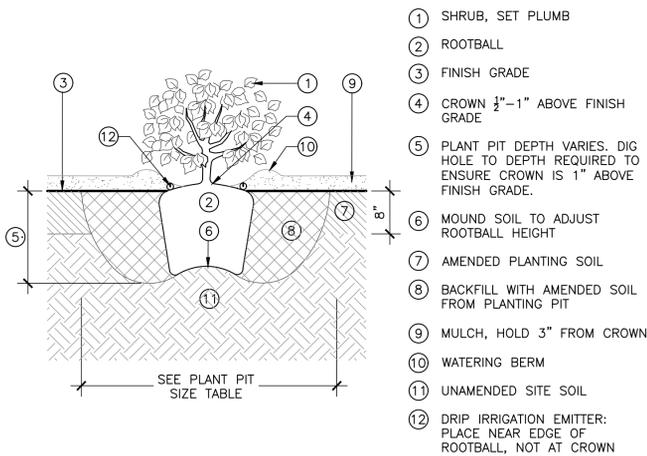
**2 GRANITECRETE PAVING - CONCRETE EDGE**  
SCALE: 1"=1'-0"



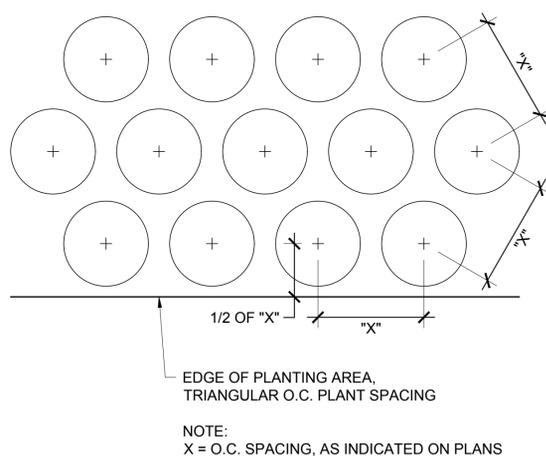
**3 VEGETATED SWALE**  
SCALE: 1"=1'-0"



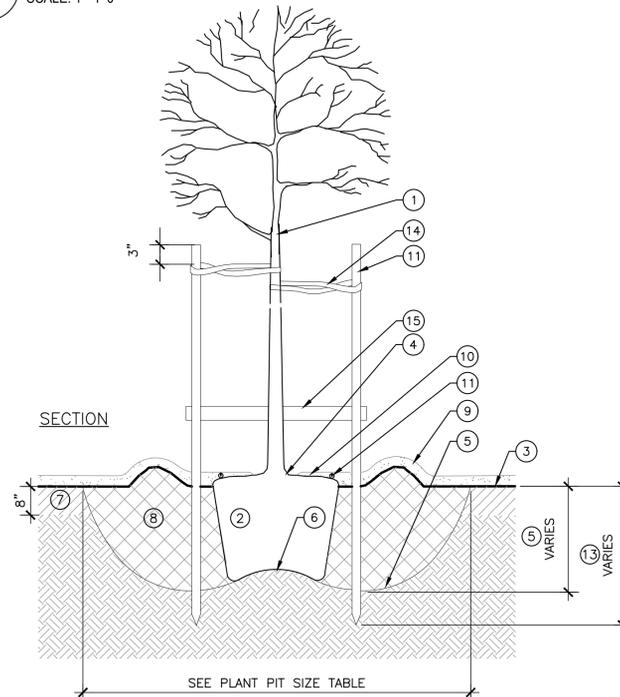
**4 VEGETATED RAIN GARDEN**  
SCALE: 1"=1'-0"



**5 SHRUB PLANTING**  
SCALE: NTS



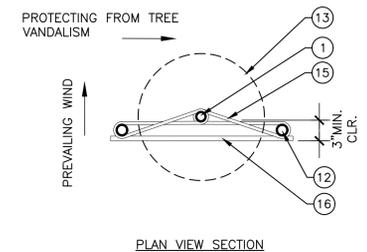
**6 GROUNDCOVER TRIANGULAR SPACING**  
SCALE: 1/4" = 1'-0"



**7 TREE PLANTING AND STAKING ON-GRADE**  
SCALE: NTS

**TREE PLANTING:**

- ① TREE, SET PLUMB
- ② ROOTBALL
- ③ FINISH GRADE
- ④ CROWN
- ⑤ PLANT PIT DEPTH VARIES. DIG HOLE TO DEPTH REQUIRED TO ENSURE CROWN IS 2-3" ABOVE FINISH GRADE. SCARIFY SIDES.
- ⑥ MOUND AND TAMP SOIL TO ADJUST ROOTBALL HEIGHT AND PREVENT SETTLING.
- ⑦ AMENDED SITE SOIL
- ⑧ BACKFILL WITH SOIL FROM PLANTING PIT
- ⑨ WATERING BERM
- ⑩ MULCH, HOLD 4" FROM TRUNK
- ⑪ DRIP IRRIGATION EMITTER: PLACE NEAR EDGE OF ROOTBALL, NOT AT CROWN.



**TREE STAKING:**

- ⑫ TREE STAKES (2) - HEIGHT AS REQUIRED TO SUPPORT TREE SET PLUMB, DO NOT PENETRATE ROOTBALL.
- ⑬ OUTLINE OF ROOTBALL
- ⑭ STAKE DEPTH AS REQUIRED TO SUPPORT TREE
- ⑮ TREE TIES, (3) LOOPS IN FIGURE 8 AROUND TREE & STAKES AS SHOWN. SCREW TO STAKES - 2 SCREWS PER STAKE
- ⑯ 1" X 3" CROSSTIE

**PLANTING SPECIFICATIONS**

- GENERAL CONDITIONS:**
1. LANDSCAPE CONTRACTOR WILL PROVIDE AMENDMENTS AND PREPARATION AS DESCRIBED IN THE CONTRACT DOCUMENTS. ALL AMENDMENTS, FERTILIZERS AND WEED ABATEMENT MEASURES SHALL COMPLY WITH ORGANIC CERTIFICATION.
  2. LANDSCAPE CONTRACTOR TO COMPLY WITH ALL BAY FRIENDLY LANDSCAPE GUIDING PRINCIPLES AND MMWD PERMIT REQUIREMENTS AND REGULATIONS. SEE L-0.0 SECTION 495.2 SOIL MANAGEMENT.

**SUBMITTALS/QUALITY CONTROL:**

1. SUBMIT: COMPOST SAMPLE, DECORATIVE GRAVEL #1 AND #2 SAMPLES, MULCH SAMPLE. MULCH AND COMPOST MUST BE FREE OF PATHOGENS, SWEET SMELLING NOT SOUR OR ANAEROBIC SMELLING.
2. WITHIN 15 DAYS OF CONSTRUCTION START DATE SUBMIT PLANT PURCHASE LIST IDENTIFYING ALL PLANT VENDORS AND PURCHASING OR RESERVING PLANTS. SCIENTIFIC NAMES ARE REQUIRED. VARIETAL SELECTIONS MUST BE IDENTIFIED AND APPROVED BY LA. TREES WILL BE SOURCED BY LANDSCAPE CONTRACTOR, PHOTOS WILL BE SENT TO LA PRIOR TO DELIVERY. ONCE ON SITE, TREES MUST BE APPROVED BY LA PRIOR TO INSTALLATION. SELECT TREES WITH A SYMMETRICAL FORM AS TYPICAL FOR THE SPECIES/CULTIVAR; TRUNK DIAMETER AND TAPER SUFFICIENT THAT THE TREE WILL REMAIN VERTICAL WITHOUT THE SUPPORT OF A STAKE.
3. PLANTS: SUPPLY WELL-SHAPED, VIGOROUS PLANTS THAT ARE TYPICAL OF THE SPECIES, DROUGHT TOLERANT, SUITED TO THE SOIL AND ENVIRONMENTAL CONDITIONS AT THE SITE.
4. PLANTS: ALL PLANT MATERIAL MUST BE ACCEPTED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT PLANT MATERIAL IN POOR GROWING CONDITION, WITH POOR FORM OR WITH POORLY FORMED ROOT MATERIAL. RECOMMENDED NURSERIES: SUNCREST NURSERIES, WATSONVILLE, CA; EMERISA GARDENS, SANTA ROSA, CA; CAL FLORA NURSERY, FULTON, CA (N. SANTA ROSA)

**PRODUCTS:**

1. COMPOST: "ALL GREEN COMPOST". SOILS PLUS, STAGE COACH RD, SONOMA (707)996-3400 OR SUBMIT SUBSTITUTION FOR APPROVAL

2. MULCHES:
  - A. "MULCH FINES" - SOILS PLUS, STAGECOACH RD., SONOMA (707)996-3400.
  - B. DECORATIVE GRAVEL #1 70% PEA GRAVEL, 30% MEXICAN PEBBLES 1/4" - 3/4", PUT MEXICAN PEBBLES ON TOP.
  - C. DECORATIVE GRAVEL #2 COLOR: 3/8" "TRINITY" ROUND GRAVEL

**SOIL PREPARATION**

1. SOIL PREPARATION: APPLY SOIL AMENDMENTS AT A RATE OF 6CY COMPOST PER 1000 SF. CULTIVATE USING DIGGING FORK INTO TOP 8" OF ALL PLANTING AREAS.
2. PLANTING HOLE AMENDMENTS: IN ADDITION TO THE SOIL AMENDMENTS ABOVE, LANDSCAPE CONTRACTOR WILL PLACE ONE MYCORRHIZAE PACKET FOR EACH TREE AND SHRUB INTO PLANTING HOLE.
3. LANDSCAPE CONTRACTOR TO COMPLY WITH ALL CONDITIONS AND WATER USE EXPECTATIONS SET BY THE BAY FRIENDLY STANDARDS AND MMWD PERMIT REQUIREMENTS.

**PLANTING**

1. CONTRACTOR WILL LAYOUT PLANTS AS SHOWN IN PROJECT DRAWINGS FOR LA APPROVAL PRIOR TO PLANTING. NOTIFY LA 72 HOURS PRIOR TO DATE REQUESTED FOR PLANTING LAYOUT REVIEW. LA WILL FIELD ADJUST LAYOUT.
2. PLANTING BY CLCA STANDARDS AND BAY FRIENDLY LANDSCAPING BEST MANAGEMENT PRACTICES. SCARIFY ROOTS OF PLANTS THAT ARE BOUND UP OR CIRCLING CONTAINER EDGE.
3. PLANTINGS OF NATIVE AND DROUGHT ADAPTED SPECIES WILL BE SLIGHTLY PROUD (~1/2-FOR 1G, 1" FOR 5G) OF FINISH GRADE BRING SOIL UP TO COVER ALL SIDES OF ROOT BALL.
4. TREES WILL BE STAKED WITH TWO STAKES AND APPROVED TIES.

**MULCHING**

1. ALL LANDSCAPE AREAS WILL BE COVERED WITH A MINIMUM OF 3" OF MULCH, ORGANIC MATERIAL OR GRAVEL AS SHOWN ON L-1.0.
2. PLANT CROWNS WILL BE KEPT FREE OF MULCH FOR A RADIUS OF 3" AROUND PLANT CROWN AND 4" RADIUS AROUND TREE CROWN.

3. MULCH MUST BE SWEET SMELLING, SOUR (ANAEROBIC) PRODUCTS WILL BE REJECTED.
4. INSURE MULCH IS FREE OF SUDDEN OAK DEATH SPORES AND OTHER DISEASE OR TOXIC CONTAMINANTS.

**MAINTENANCE AND PLANT ESTABLISHMENT PERIOD**

1. CONTRACTOR WILL MAINTAIN ALL PLANTINGS FOR 90 DAYS AFTER OWNER/LA APPROVAL OF SUBSTANTIAL COMPLETION.
2. MAINTENANCE WILL INCLUDE: IRRIGATION SYSTEM INSPECTION AND MAINTENANCE, MOWING, PRUNING, MULCHING, AND WEEDING OF ALL PLANTS AND PLANTING AREAS ON THE PROJECT.
3. ALL PLANTS THAT FAIL DURING WARRANTY OR APPEAR SICKLY OR WILTED WILL BE REPLACED WITHIN 2 WEEKS DURING MAINTENANCE PERIOD WITH LA APPROVED PLANT MATERIAL.

**WARRANTY AND REPLACEMENT**

1. ALL PLANTINGS SHALL BE WARRANTIED BY LANDSCAPE CONTRACTOR FOR A 3 MONTH PERIOD.
2. AT THE END OF WARRANTY PERIOD, LA & CONTRACTOR WILL REVIEW SITE AND LIST REQUIRED PLANT REPLACEMENTS. CONTRACTOR WILL PLANT THEM WITHIN TWO WEEKS OF NOTIFICATION.
3. CONTRACTOR WILL SEND OWNER/LANDSCAPE ARCHITECT PHOTOGRAPHS OF REPLACEMENT PLANTS PRIOR TO PLANTING FOR APPROVAL.
4. ALL FAILED PLANTINGS MUST BE REPLACED PRIOR TO THE CLOSING OF THE CONTRACT AND FINAL PAYMENT.



**ABLA**

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SLEEPY HOLLOW COMMUNITY CENTER  
FIREWISE DEMONSTRATION GARDEN

1317 BUTTERFIELD RD.,  
SAN ANSELMO, CA 94960

SHEET TITLE:

LANDSCAPE  
DETAILS

DATE:  
OCTOBER 14, 2021

L-1.1



Plan Review Ordinance #: 430  
Approval Date: 12/10/2021  
Project #: 2021-80  
Reviewer: Sergio Paganelli

SHEET  
OF



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SLEEPY HOLLOW COMMUNITY CENTER  
FIREWISE DEMONSTRATION GARDEN

1317 BUTTERFIELD RD.,  
SAN ANSELMO, CA 94960

SHEET TITLE:  
LANDSCAPE  
PLANTING PLAN

DATE:  
OCTOBER 14, 2021

SHEET  
OF



Plan Review Ordinance #: 430  
Approval Date: 12/10/2021  
Project #: 2021-80  
Reviewer: Sergio Paganelli

L-2.0

**TREE LEGEND**

BOTANICAL NAME	(COMMON NAME)	CONT.	SIZE (W X H)	QTY
ACER MACROPHYLLUM	BIG LEAF MAPLE	24"	30'X60'	EX
NYSSA SYLVATICA	TUPELO	36"	25'X40'	EX
ARBUTUS MARINA	STRAWBERRY TREE	24"	35'X40'	1
CAREX TUMULICOLA	FOOTHILL SEDGE	1G	24" O.C.	47
FEUJOA SELLOWIANA (STANDARD)	PINEAPPLE GUAVA	15G	15' X 15'	1

**PLANTING LEGEND**

AREA	BOTANICAL NAME	(COMMON NAME)	CONT.	SIZE/DIST.	QTY
<b>FRONT ENTRY &amp; PARKWAY ISLANDS- LOW WATER (445 SF)</b>					
○	SALVIA 'DANCING DOLLS'	DANCING DOLLS SAGE	1G	4" O.C.	4
○	SALVIA CHAMAEDRYOIDES	BLUE SAGE	1G	4" O.C.	3
○	KNIPHOFIA 'TAWNY KING'	RED HOT POKER	1G	5" O.C.	4
○	SALVIA 'LITTLE KISS'	LITTLE KISS SAGE	1G	2" O.C.	10
○	AEONIUM 'PSEUDOTABULIFORME'	GREEN PLATTERS	1G	24" O.C.	9
○	CAREX TUMULICOLA	FOOTHILL SEDGE	1G	24" O.C.	47
○	SISYRINCHIUM BELLUM 'ARROYO DE LA CRUZ'	BLUE EYED GRASS	1G	12" O.C.	34
○	JUNCUS PATENS	BLUE RUSH	1G	3" O.C.	4
○	PENSTEMON HETEROPHYLLUS	FOOTHILL PENST	4"	16" O.C.	10
○	'BLUE SPRINGS' OR 'MARGARITA BOP'				
○	ECHEVERIA IMBRICATA	HENS AND CHICKS	4"	18" O.C.	35
○	MUHLENBERGIA DUBIA	PINK MUHLY GRASS	1G	3" O.C.	7
○	ACHILLEA PINK ISLAND FORM	PINK ISLAND YARROW	1G	3" O.C.	12
○	EPILOBIUM CALIF. 'MARIN PINK'	MARIN PINK CA FUSCHIA	1G	3" O.C.	3
○	GAILLARDIA ARISTATA 'GRANADA'	BLANKETFLOWER	1G	18" O.C.	12
○	SEDUM PACHYCLADOS IN DECORATIVE GRAVEL		4"	CLUSTER	16

NOTE: SEED ESCHSCHOLZIA CALIFORNICA, CALIFORNIA POPPY 1/2 LB  
SEED OPEN AREAS BETWEEN PLANTS AND MULCH W/ NITROLIZED SAW DUST OR WEEED FREE STRAW.

**FIRE LANE - LOW WATER (705 SF)**

○	HELIANTHEMUM 'BEN NEVIS'	SUNROSE	1G	24" O.C.	11
○	SEMPERVIVUM 'SPRING BEAUTY'	SP. BEAUTY HOUSELEEK	1G	14" O.C.	18
○	HETEROTHECA SESSLIFLORA 'SAN BRUNO MT.'		1G	30" O.C.	6
○	SYMPHORICARPUS MOLLIS	CREeping SNOWBERRY	1G	24" O.C.	8
○	ECHEVERIA IMBRICATA	HENS N CHICKS	4"	18" O.C.	9
○	SUB = DUDLEYA TRASKIA	SB LIVEFOREVER			
○	CAREX TUMULICOLA	BERKELEY SEDGE	1G	18" O.C.	37
○	ANIGOZANTHOS 'AMBER VELVET'	KANGAROO PAWS	1G	3" O.C.	8
○	AEONIUM 'PSEUDOTABULIFORME'	GREEN PLATTERS	1G	24" O.C.	4
○	SALVIA CHAMAEDRYOIDES	BLUE SAGE	1G	4" O.C.	2
○	SOLIDAGO RUGOSA 'FIREWORKS'	GOLDENROD	1G	3" O.C.	4
○	JUNCUS PATENS	BLUE RUSH	1G	3" O.C.	5
○	AQUILEGIA EXIMIA SUB A. FORMOSA	SERPENTINE COLUMBINE 4"	1G	18" O.C.	10
○	ACHILLEA 'MOONSHINE	MOONSHINE YARROW	1G	3" O.C.	3
○	PENSTEMON HETEROPHYLLUS	FOOTHILL PENST	4"	16" O.C.	6

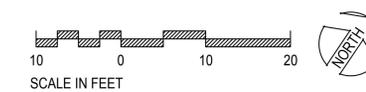
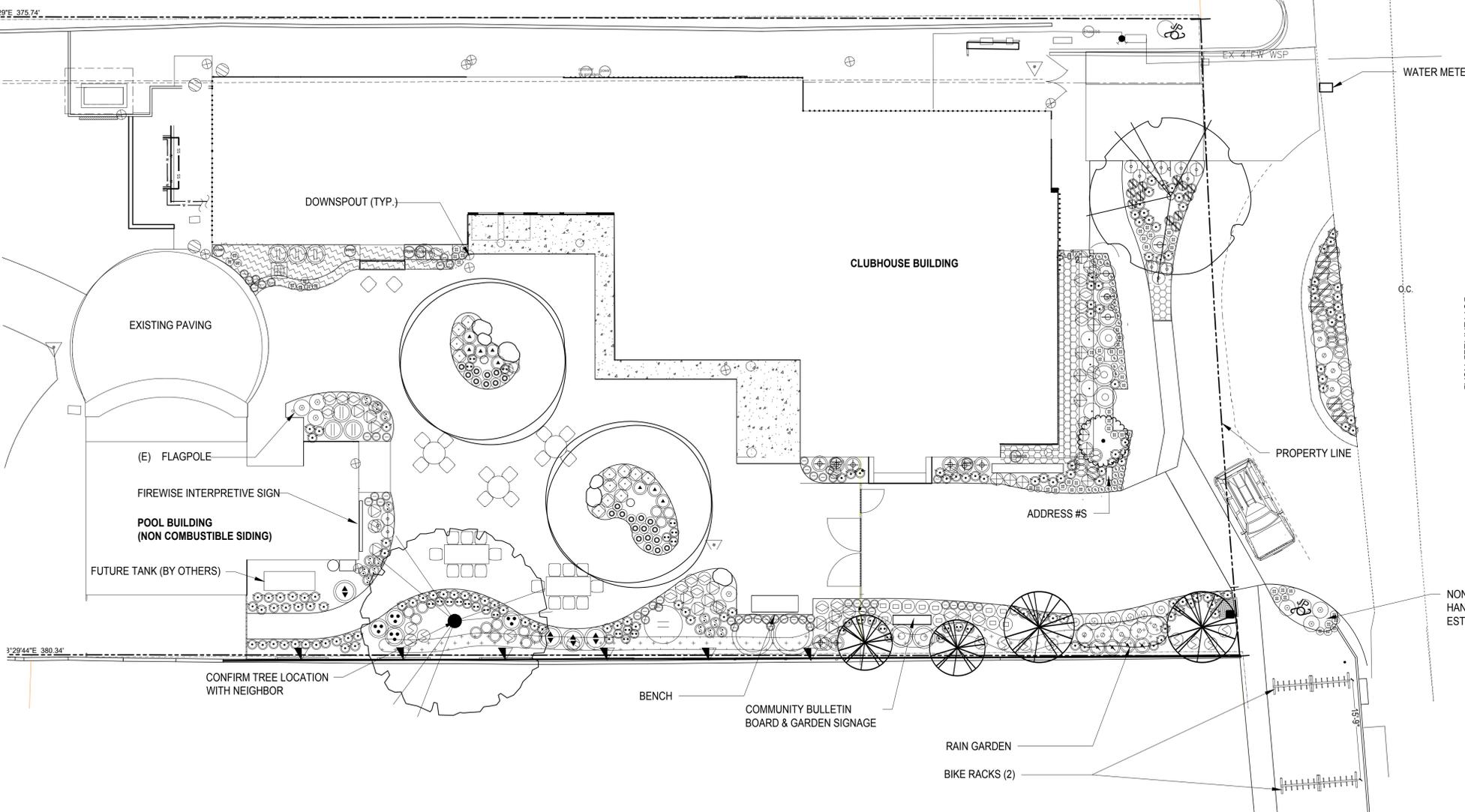
**PLANTING ISLANDS - MEDIUM WATER (210 SF)**

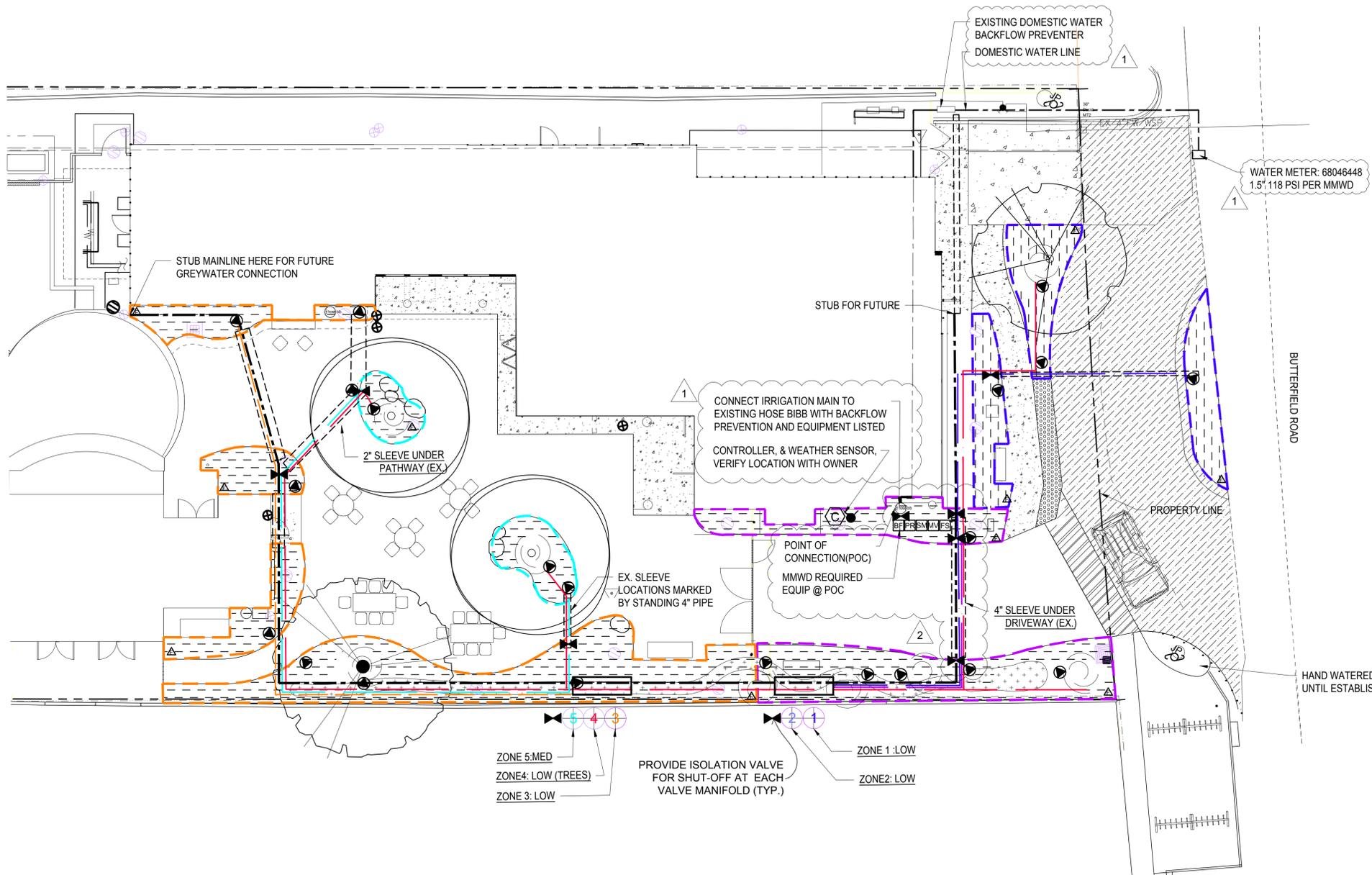
○	CAREX PANSA	COASTAL SEDGE	4"	12" O.C.	24
○	HEUCHERA 'LILIAN'S PINK'	CORAL BELLS 4"	1G	2" O.C.	8
○	AQUILEGIA EXIMIA SUB A. FORMOSA	SERPENTINE COLUMBINE 4"	1G	18" O.C.	7
○	SALVIA SPATHACEA	HUMMINGBIRD SAGE	1G	3" O.C.	13
○	IRIS 'CANYON SNOW'	WHITE PCH IRIS	1G	18" O.C.	4

**COURTYARD BORDERS - LOW WATER (1110 SF)**

○	RHAMNUS CALIF. 'MOUND SAN BRUNO'	COFFEEBERRY	5G	6" O.C.	2
○	IRIS 'CANYON SNOW'	CANYON SNOW PACIFIC IRIS 1G	1G	2" O.C.	10
○	AQUILEGIA EXIMIA SUB A. FORMOSA	SERPENTINE COLUMBINE 4"	1G	18" O.C.	12
○	ALYOCYNE HUEGELII 'SANTA CRUZ'	BLUE HIBISCUS	5G	7" O.C.	1
○	ACHILLEA 'MOONSHINE	MOONSHINE YARROW	1G	3" O.C.	10
○	SEMPERVIVUM 'SPRING BEAUTY'	SPRING BEAUTY H. LEEKS	1G	14" O.C.	35
○	SATUREJA DOUGLASII	YERBA BUENA	1G	3" O.C.	4
○	TEUCRIUM FRUTICANS 'AZUREUM'	BUSH GERMANDER	5G	4" O.C.	4
○	HESPERALOE PARVIFLORA	RED YUCCA	1G	3" O.C.	7
○	ECHEVERIA IMBRICATA	HENS CHICKS/	4"	18" O.C.	13
○	OR DUDLEYA PALMERI	LIVEFOREVER			
○	GAURA LINDHEIMERI 'SISKIYOU SNOW'	GAURA	1G	30" O.C.	14
○	EPILOBIUM 'MARIN PINK'	CALIF. FUSCHIA	1G	3" O.C.	4
○	SALVIA 'LITTLE KISS'	LITTLE KISS SAGE	1G	2" O.C.	3
○	SYMPHORICARPUS MOLLIS	CREeping SNOWBERRY	1G	PER PLAN	4
○	PENSTEMON HETEROPHYLLUS	FOOTHILL PENST	4"	16" O.C.	9
○	MANDAVILLA LAXA CHILEAN JASMINE VINE AND THUNBERGIA ALATA 'WHITE HALOPER PLAN				3 EACH
○	DWARF SISYRINCHIUM BELLUM 'ROCKY PT.' (12)	HEUCHERA SANGUINEA 'FIREFLY' (12)			
○	SEDUM SUNSPARKLER 'FIRECRACKER' (10)	DUDLEYA PALMEIRI (8)	DUDLEYA PULVERULENTA - CHALK DUDLEYA (6)		

LAYOUT BY LA ON SITE. ALL 4" MATERIAL.





IRRIGATION LEGEND				
SYMBOL	COMPONENT	MANUFACTURER	MODEL	NOTES / SIZE / COLOR
W	WATER METER-EX		SEE CIVIL PLANS	DEDICATED IRRIGATION METER
C	CONTROLLER	HUNTER	ICORE	6 STATION EXT. WALL MOUNT WITH LOCKING CABINET
☼	WEATHER SENSOR	HUNTER	SOLAR SYNC WSS-SEN	
PR	PRESSURE REDUCER	WATTS	LFN	SYSTEM REQUIRES: 15-50 PSI
BF	BACKFLOW PREVENTER	WILKINS	975 XL 3/4"	LEAD FREE, INCLUDE BLANKET & LOCKED CAGE
SM	SUBMETER	BADGER	3/4"	METER SIZE
MV	MASTER VALVE	HUNTER	ICV1012G	1"
FS	FLOW SENSOR	HUNTER	HC100FLOW	WITH FLOW SENSOR WIRE
⏏	GATE VALVE	NIBCO	T-113	LINE SIZE
DRIP IRRIGATION ZONE TO INCLUDE:				
DRIP IRRIGATION CONTROL VALVE ASSEMBLY TO INCLUDE:				
⊕	REMOTE CONTROL VALVE FILTER & PRESSURE REGULATOR	HUNTER	ICZ10140LF DRIP KIT	
⬇	TRANSITION TO DRIP ZONE			SEE DETAIL
⚠	DRIP FLUSHOUT			SEE DETAIL
==	SLEEVE		PVC SCH 40	SIZE: 1.5X COMBINED SIZE OF ENCLOSED PIPES
—	MAINLINE		PVC SCH 40 WITH SCH PURPLE PIPE 40 SOLVENT WELD FITTINGS ALL PURPLE PIPE	PIPE SIZE: 1" (21-32 GPM) PURPLE PIPE FOR FUTURE GREYWATER
---	LATERAL PIPE		PVC SCH 40 WITH SCH 40 SOLVENT WELD FITTINGS	PIPE SIZE: 0-6 GPM: 3/4" PURPLE PIPE FOR FUTURE GREYWATER COLORS INDICATE ZONES
DRIP IRRIGATION				
—	INLINE EMITTER TUBING	NETAFIM	TECHLINE CV, 17MM	0.4 GPH EMITTERS. EMITTER SPACING: 12 INCHES ROW SPACING: 12 INCHES
—	HYDROZONE			
SYMBOLS FOR COMPONENTS ARE LARGER THAN ACTUAL SIZE AND MAY BE SHOWN IN PAVED AREAS FOR GRAPHIC CLARITY. COORDINATE LOCATION OF EQUIPMENT WITH PLUMBER.				
ALL PIPE RUNS UNDER PAVING ARE IN SLEEVES, INSTALL SLEEVES PRIOR TO POURING CONCRETE				

IRRIGATION ZONE TABLE					
VALVE #	IRRIGATION TYPE	WATER USE	VALVE	PLAN SF	GPM
1	INLINE DRIP	LOW	1	445 SF	1.39
2	INLINE DRIP	LOW	2	705 SF	1.48
3	INLINE DRIP	LOW	3	1110 SF	3.45
4	TREES	LOW	4	225 LF	.7
5	INLINE DRIP	MED	5	210 SF	.65

CLAY SOIL: DO NOT EXCEED 1600 SF / 3 GPM PER SUBZONE. IF TOTAL AREA OF ZONE EXCEEDS 3500 SF, ADD A VALVE.  
 LOAM SOIL: DO NOT EXCEED 1100 SF / 3 GPM PER SUBZONE. IF TOTAL AREA OF ZONE EXCEEDS 2200 SF, ADD A VALVE.  
 TREES: DO NOT EXCEED 200 LF PER SUBZONE

SUMMARY OF HYDROZONE		
HYDROZONE	AREA	% OF LANDSCAPE AREA
LOW	2,260 SF	84%
MED	435 SF	16%
HIGH	0 SF	0%
TOTAL	2,695 SF	100%

THE IRRIGATION SYSTEM IS INTENDED TO BE GRAYWATER READY. THE COMMUNITY CENTER MAY DEVELOP A FUTURE PERMITTED PROJECT TO RECYCLE SHOWER GRAYWATER INTO THE LANDSCAPE. THE FOLLOWING IS REQUIRED: ANY PIPE USED FOR GRAYWATER OR FUTURE GRAYWATER PROJECTS MUST ADHERE TO CHAPTER 15 OF CA PLUMBING CODE REGARDING THE INSTALLATION AND MAINTENANCE OF GRAYWATER SYSTEMS. THIS INCLUDES PIPE INSPECTIONS BEFORE BURIAL OF THE PIPE BY MARIN WATER RECLAMATION AND BACKFLOW GROUP. (415) 945-1488. KEEP WRITTEN RECORDS AND PHOTOGRAPHS OF INSPECTION.

- NOTES:
- CONTRACTOR TO CONDUCT PRESSURE TEST. CONFIRM DESIGN PRESSURE AVAILABLE BETWEEN 15-50 PSI. INSTALL PRESSURE REDUCING VALVE PRIOR TO BACKFLOW DEVICE IF NEEDED.
  - IRRIGATION LAYOUT IS DIAGRAMMATIC. FIELD ADJUST LOCATION OF LINES TO AVOID TREE ROOTS, UTILITIES AND OTHER EX. ELEMENTS TO REMAIN.
  - CALL UTILITY LOCATIONS SERVICES BEFORE DIGGING.
  - PLANS ARE IN COMPLIANCE WITH MWEL. INSTALLATION MUST FOLLOW PLANS AND BE APPROVED BY IRRIGATION AUDIT. AUDIT PROVIDED BY CONTRACTOR.
  - WATER PRESSURE PER MMWD = 118 PSI, METER 1.5" LATERAL SIZE 1.5", LATERAL LENGTH TO METER 15'-6", MAIN 8".
  - FOR REFERENCE: MMWD WATER EFFICIENCY DEPARTMENT LANDSCAPE PLAN CHECK (415)945-1497.
  - AS PER MARIN WATER GUIDELINES, NO HOSE BIBBS SHALL BE INSTALLED ON DEDICATED IRRIGATION SYSTEMS. QUICK COUPLERS ARE OK.



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APN 176-162-07

SLEEPY HOLLOW COMMUNITY CENTER  
 FIREWISE DEMONSTRATION GARDEN  
 1317 BUTTERFIELD RD.  
 SAN ANSELMO, CA 94960

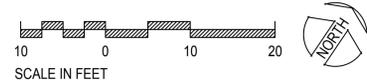
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 IRRIGATION  
 PLAN

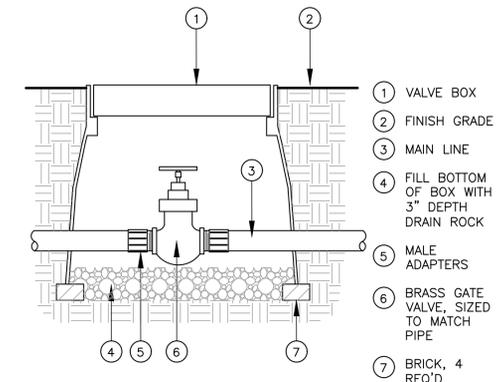
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 PERMIT PLAN CHECK

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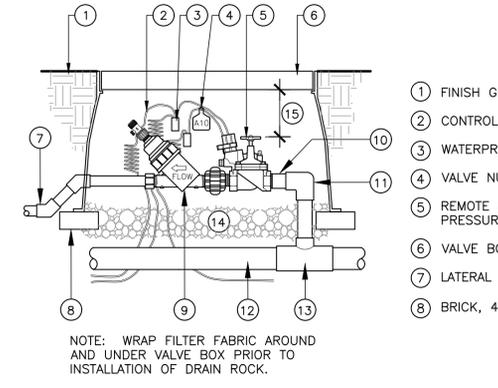
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 OF

MARIN WATER  
 Plan Review Ordinance #: 430  
 Approval Date: 12/10/2021  
 Project #: 2021-80  
 Reviewer: Sergio Paganelli

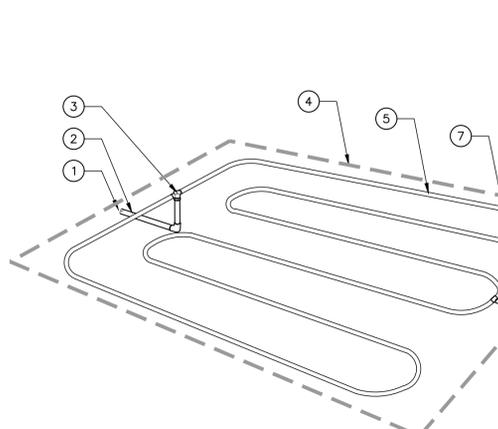




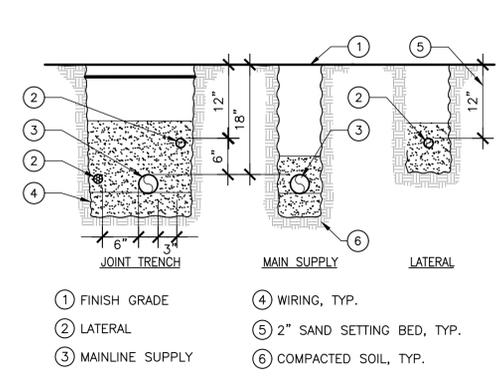
**1 GATE VALVE**  
SCALE: N.T.S.



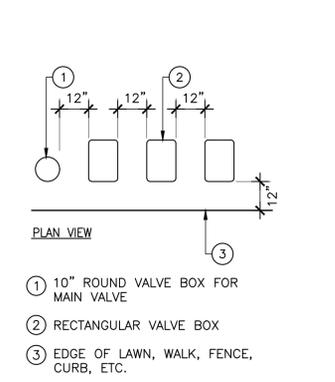
**5 REMOTE CONTROL VALVE - DRIP**  
SCALE: N.T.S.



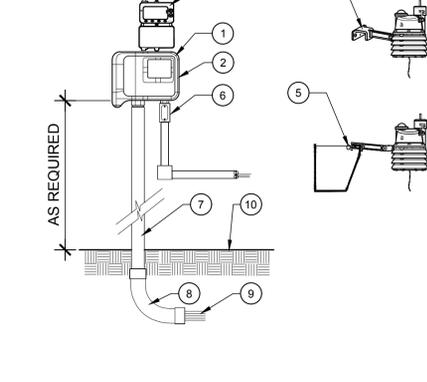
**9 DRIP SUB-ZONE LAYOUT - SINGLE LINE**  
SCALE: N.T.S.



**2 IRRIGATION TRENCHING**  
SCALE: N.T.S.



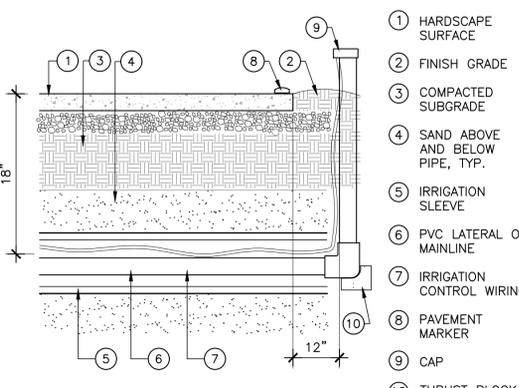
**3 VALVE BOX LAYOUT**  
SCALE: N.T.S.



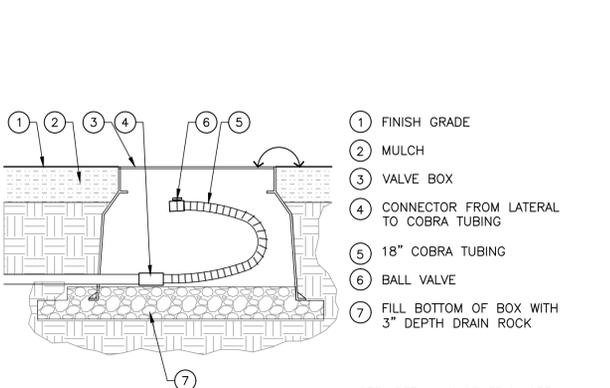
**4 SMART CONTROLLER**  
SCALE: N.T.S.

- 1 CONTROLLER MOUNTED ON EXTERIOR WALL WITH LCD SCREEN AT EYE LEVEL
- 2 HARDWIRE CONTROLLER TO GROUND 110 VAC POWER SOURCE
- 3 WEATHER SENSOR RECEIVER MODULE
- 4 WEATHER SENSOR MOUNTED OUTDOORS ON FLAT SURFACE USING SCREWS.
- 5 WEATHER SENSOR MOUNTED ON A RAIN GUTTER USING GUTTERMOUNT
- 6 1/2" UL APPROVED ELECTRICAL CONDUIT, RING NUT AND JUNCTION BOX FOR 120v AC ELECTRICAL POWER
- 7 PVC SCHEDULE 40 CONTROL WIRE CONDUIT (SIZE AS REQUIRED).
- 8 PVC SWEEP ELL (PROTECTING LOW VOLTAGE CONTROL WIRES TO THE ELECTRIC VALVES).
- 9 CONTROL WIRES TO ELECTRIC VALVES
- 10 FINISH GRADE

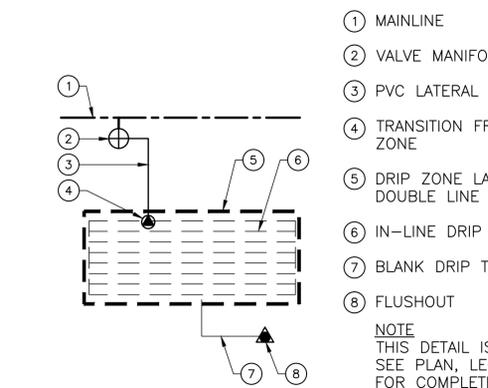
NOTES:  
 1. OWNER'S REPRESENTATIVE TO VERIFY LOCATION IN FIELD.  
 2. ALL ELECTRICAL WORK MUST CONFORM TO LOCAL CODES.  
 3. REFER TO PRODUCT LITERATURE FOR ADDITIONAL INSTALLATION REQUIREMENTS.  
 4. WEATHER SENSOR MUST BE FULLY OPEN TO SKY NOT SHADED BY TREES OR EAVES.



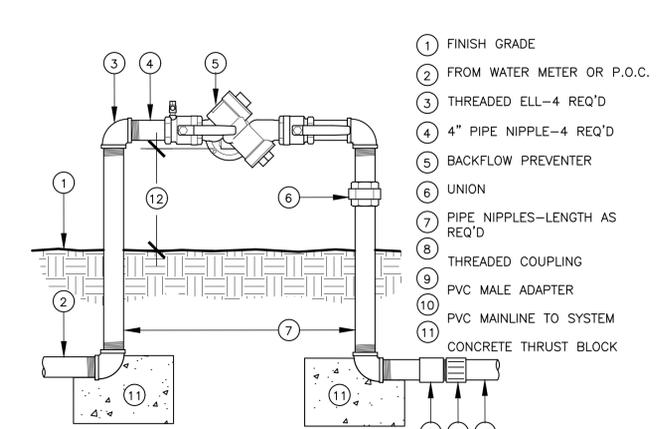
**6 IRRIGATION SLEEVING**  
SCALE: N.T.S.



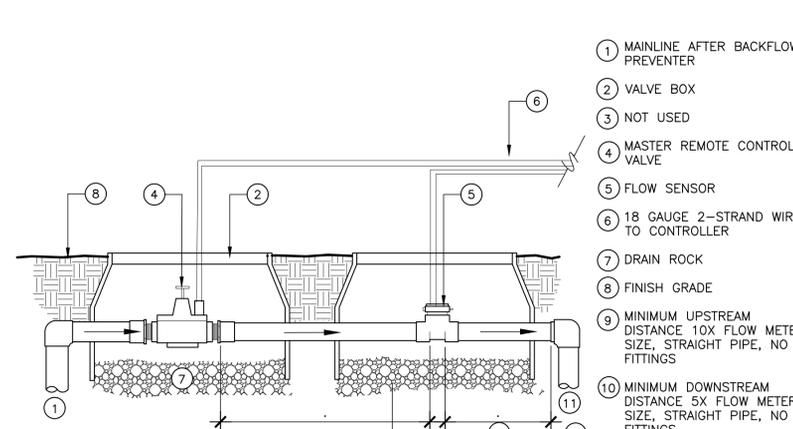
**7 DRIP FLUSH VALVE**  
SCALE: N.T.S.



**8 DRIP LAYOUT**  
SCALE: N.T.S.



**10 BACKFLOW PREVENTER**  
SCALE: N.T.S.



**11 EQUIPMENT AT POC**  
SCALE: N.T.S.

- 1 MAINLINE AFTER BACKFLOW PREVENTER
- 2 VALVE BOX
- 3 NOT USED
- 4 MASTER REMOTE CONTROL VALVE
- 5 FLOW SENSOR
- 6 18 GAUGE 2-STRAND WIRE TO CONTROLLER
- 7 DRAIN ROCK
- 8 FINISH GRADE
- 9 MINIMUM UPSTREAM DISTANCE 10X FLOW METER SIZE, STRAIGHT PIPE, NO FITTINGS
- 10 MINIMUM DOWNSTREAM DISTANCE 5X FLOW METER SIZE, STRAIGHT PIPE, NO FITTINGS
- 11 MAINLINE TO SYSTEM

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**IRRIGATION NOTES & SPECIFICATIONS**

**GENERAL CONDITIONS:**

1. INSTALLATION TO BE BY CONTRACTOR WITH A VALID CURRENT CALIFORNIA C-27 LICENSE.
2. COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS.
3. THE IRRIGATION PLAN IS DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE COMPLETED. IRRIGATION EQUIPMENT OR PIPING MAY BE SHOWN IN PAVED AREAS FOR GRAPHIC CLARITY. OBTAIN APPROVAL OF LAYOUT FROM OWNER'S REPRESENTATIVE PRIOR TO FINAL INSTALLATION.
4. VERIFY LOCATION OF SUBSURFACE UTILITIES, PIPES AND STRUCTURES. NOTIFY THE OWNER'S REPRESENTATIVE SHOULD UTILITIES OR OTHER WORK NOT SHOWN ON THE PLANS BE FOUND DURING EXCAVATIONS.
5. CAREFULLY INVESTIGATE EXISTING FIELD CONDITIONS AND NOTIFY OWNER'S REPRESENTATIVE OF ANY POTENTIAL CONFLICT WITH DESIGN.
6. TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING SITE CONDITIONS.
7. COORDINATE WORK WITH OTHER TRADES TO AVOID CONFLICTS IN CONSTRUCTION SEQUENCE AND EQUIPMENT INSTALLATION.
8. KEEP ALL AREAS OF WORK CLEAN, SAFE AND ORDERLY AT ALL TIMES. CLEAN UP AND REMOVE ALL DEBRIS FROM WORK AREA DAILY.

**SUBMITTALS**

1. WITHIN 15 DAYS OF NOTICE TO PROCEED SUBMIT CUT SHEETS OF ALL MATERIALS AND PRODUCTS SPECIFIED ON THE DRAWINGS.
2. INCLUDE ALL SUBMITTALS IN A SINGLE PACKAGE FOR A SINGLE REVIEW.
3. SUBSTITUTIONS MUST BE APPROVED PRIOR TO INSTALLATION BY LANDSCAPE ARCHITECT VIA THE SUBMITTAL PROCESS.

**PRODUCTS:**

1. PROVIDE NEW PRODUCTS IN PERFECT CONDITION.
2. AS SPECIFIED ON DRAWINGS.
3. CONFORM TO ASTM STANDARDS: A53, D1784, D1785, D2564, D2241, D2282, D2235, D2464, & D2466 FOR, BUT NOT LIMITED TO, PIPE INSTALLATION, PVC COMPOUNDS, SCH 40 & 80 PVC PIPE INSTALLATION, PVC SOLVENT CEMENT, THREADED PVC, AND ABS PIPE INSTALLATION AND FITTINGS.
4. TEFLON TAPE: FOR PVC MALE THREADS.
5. SOLVENT FOR PVC PIPE: ASTM D2564, GRAY.
6. COPPER SOLDER: ALLOY GRADE SN95 OR SN94 TO MEET ASTM B32. FLUX: TYPE 1.
7. RECTOR SEAL NO.5 FOR GAVANIZED STEEL, IRON, BRASS OR COPPER PIPE.
8. COMMON AND CONTROL WIRE: U.L. APPROVED FOR DIRECT BURIAL, COPPER, AWG-UF 600 VOLT NO.14 MINIMUM SIZE. USE SAME COLOR FOR ALL COMMON WIRE. USE DIFFERENT COLORS FOR COMMON AND CONTROL WIRES.
9. SPLICING MATERIALS: PACKAGED KIT APPROVED FOR UNDERGROUND USE SUCH AS GEL-TITE KING SILICONE-FILLED SAFETY CONNECTOR, KIN ONE-STEP CONNECTOR, SPEARS DRY SPLICE DS 100 WITH DS 300 SEALANT OR EQUIVALENT.
10. VALVE BOXES: HEAVY DUTY PLASTIC WITH BLACK, LOCKABLE LIDS, CARSON, PLYMOUTH OR EQUIVALENT. SIZE FOR CONTROL VALVES: 14"x19"; FOR GATE VALVES 10-INCHES ROUND, UNLESS OTHERWISE NOTED ON DRAWINGS.
11. KEYS: PROVIDE TWO SETS FOR CONTROLLER CABINET. FOR QUICK COUPLING VALVES PROVIDE MINIMUM ON KEY AND MATCHING HOSE SWIVEL FOR EVERY FIVE QUICK COUPLERS INSTALLED.
12. CHECK VALVES: BUILT INTO HEADS & EMITTERS BY MANUFACTURER.
13. CHECK VALVES: INSTALL CHECK VALVES ON LATERAL LINES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE. ENSURE THAT IN-LINE DRIP TUBING HAS CHECK VALVES EMBEDDED INTO EMITTERS.

**EXECUTION:**

1. IRRIGATION SYSTEM DEMAND IS 6 GPM. CONFIRM GPM AT POINT OF CONNECTION PRIOR TO START OF WORK.
2. CONFIRM STATIC PRESSURE AT THE POINT OF CONNECTION PRIOR TO START OF WORK. IF STATIC PRESSURE IS LOWER THAN 55 PSI INSTALL BOOSTER PUMP, IF STATIC PRESSURE IS HIGHER THAN 75 PSI, INSTALL A WILKINS #600 PRESSURE REGULATOR UPSTREAM OF BACKFLOW PREVENTER. ADJUST OUTLET PRESSURE TO 55 PSI OR MANUFACTURER'S OPTIMAL PSI FOR INLINE DRIP TUBING & VALVE OPERATION.
3. MAKE IRRIGATION POINT OF CONNECTION AS INDICATED ON PLAN AND COORDINATE WITH OTHER WORK & TRADES AS REQUIRED. EXACT LOCATION OF BACKFLOW PREVENTER TO BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
4. INSTALL A DEDICATED IRRIGATION SUB WATER METER.
5. EXACT LOCATION OF CONTROLLER TO BE APPROVED BY OWNER'S REPRESENTATIVE. ENSURE 120 VOLT A.C. ELECTRICAL SUPPLY IS PROVIDED FOR IN IMMEDIATE VICINITY. MAKE FINAL 120 VOLT ELECTRICAL CONNECTIONS. USE EMT METAL CONDUIT FOR INDOOR INSTALLATIONS, AND LIQUID-TITE CONDUIT FOR OUTDOOR INSTALLATIONS. INSTALL AS DETAILED AND PER MANUFACTURER'S INSTRUCTIONS. GROUND CONTROLLER AND CONFORM TO LOCAL CODES.
6. MOUNT WEATHER SENSOR ON EXTERIOR WALL OR GUTTER WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED RAINFALL. INSTALL PER MANUFACTURERS INSTRUCTIONS.
7. PROVIDE LEAD-FREE BACKFLOW PREVENTER. LOCATE EXISTING BACKFLOW. CHECK & TEST. REPLACE IF NECESSARY.
8. PERFORM ANNUAL TEST OF BACKFLOW PREVENTER BY CERTIFIED

**BACKFLOW TECHNICIAN**

9. INSTALL GATE VALVES UPSTREAM OF BACKFLOW PREVENTER AT POC, AT BRANCHES OF MAINLINE, AT BOTH ENDS OF SLEEVES, AT EACH VALVE ASSEMBLY GROUP AND AS NEEDED.
10. ENSURE THAT ALL COMPONENTS ARE CONNECTED AND OPERATIONAL.
11. PROVIDE PVC SCH 40 SLEEVES FOR ALL PIPING AND WIRE UNDER PAVING. INSTALL SLEEVES PRIOR TO INSTALLING PAVING BASE OR FINISH SURFACE MATERIAL. COORDINATE WITH CONCRETE CONTRACTOR.
12. ENSURE THAT SLEEVING SIZE IS A MINIMUM OF TWO TIMES THE AGGREGATE DIAMETER OF ALL PIPES CONTAINED WITH SLEEVE.
13. EXACT LOCATIONS OF EQUIPMENT AND VALVE BOXES TO BE APPROVED BY LANDSCAPE ARCHITECT
14. IN PLANTING AREAS INSTALL PIPE AND WIRE IN BED OF CLEAN SAND SURROUNDING PIPE 6" ON ALL SIDES.
15. PIPE COVER: INSTALL WELL-GRADED SAND AND GRAVEL TO 6" OVER THE TOP OF THE LINES. COMPACT TO AT LEAST 90 PERCENT RELATIVE COMPACTION WITH VIBRATORY EQUIPMENT PRIOR TO PLACING SUBSEQUENT BACKFILL MATERIALS.
16. PIPE SIZE: 0-6 GPM:3/4" PIPE; 7-12 GPM: 1" PIPE; 13-20 GPM: 1.25" PIPE; 21-32 GPM: 1.5" PIPE
17. INSTALL ALL PLASTIC PIPING IN TRENCHES IN A SERPENTINE MANNER.
18. ENSURE ADEQUATE PIPE SIZE TO PROVIDE REQUIRED FLOW.
19. TREE BUBBLERS OR INLINE DRIP TO BE PLACED AT EDGE OF ROOTBALL, NOT AT TRUNK.
20. INSTALL ALL WIRING IN ACCORDANCE WITH ALL APPLICABLE CODES.
21. USE COPPER WIRE WITH U.L. APPROVAL FOR DIRECT BURIAL IN GROUND. USE WHITE INSULATING JACKET FOR COMMON GROUND WIRE. USE INSULATING JACKET OF COLOR OTHER THAN WHITE FOR CONTROL WIRE. TAPE AND BUNDLE WIRING AT 10 FOOT INTERVALS.
22. INSTALL SPARE CONTROL WIRE OF A DIFFERENT COLOR ALONG THE ENTIRE MAIN LINE. NOTE THE SPARE CONTROL WIRE IN EACH CONTROL BOX. LOOP 36" OF EXCESS WIRE INTO EACH VALVE BOX.
23. MAKE SPLICES ONLY IN VALVE BOXES, WITH 3M-DBY SEAL PACKS.
24. CHECK VALVES: INSTALL CHECK VALVES ON LATERAL LINES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.
25. ENSURE THAT ALL EQUIPMENT IS SIZED CORRECTLY BASED ON EXISTING SITE CONDITIONS AND HYDRAULICS.

**DRIP INSTALLATION:**

1. MAXIMUM LENGTH OF DRIP TUBING IS 250' IN ANY DIRECTION FROM WATER SOURCE.
2. DIVIDE DRIP ZONES INTO SUBZONES OF 3 GPM MAX. CONNECT WITH SOLID TUBING.
3. USE PVC OR APPROVED PRE-MANUFACTURED HEADERS AND FOOTERS IN ZONES THAT ARE LARGER THAN 7 GPM
4. INSTALL DRIP TUBING PERPENDICULAR TO SLOPES.
5. IN PLANTING AREAS INSTALL DRIP TUBING ABOVE COMPOST AND BELOW MULCH.
6. INSTALL DRIP TUBING IN GRID PATTERN AS SHOWN IN DETAIL
7. LAY TUBING LOOSELY TO ALLOW FOR HEAT EXPANSION AND TO AVOID KINKS. DO NOT PULL TAUT.
8. CURVE TUBING AS NEEDED TO MINIMIZE FITTINGS AND TO MAKE CONNECTIONS AT PERPENDICULAR RATHER THAN ACUTE ANGLES.
9. ENSURE THAT FITTINGS ARE SECURE.
10. USE FITTINGS FROM SAME MANUFACTURER AS TUBING.
11. DO NOT USE SMALL DIAMETER DISTRIBUTION TUBING.
12. DO NOT INSTALL POST MANUFACTURED EMITTER BUTTONS INTO TUBING.
14. STAKE DRIP TUBING IN PLACE @ 2 FT O.C. MAX.
15. REVIEW DRIP LAYOUT WITH OWNER'S REPRESENTATIVE PRIOR TO COVERING WITH MULCH.
16. INSTALL FLUSHOUT AT HYDRAULIC OPPOSITE SIDE FROM DRIP TRANSITION POINT.
17. USE BLANK TUBING TO EXTEND FLUSHOUT TO ACCESSIBLE LOCATION.

**SYSTEM FLUSHOUT:**

1. OPEN ALL LINE ENDS AND FLUSH THOROUGHLY BEFORE MAKING FINAL CONNECTIONS.
2. FLUSH MAINLINES AFTER INSTALLING RISERS AND PRIOR TO INSTALLING OR RECONNECTING TO VALVES.
3. FLUSH LATERALS AFTER INSTALLING RISERS AND PRIOR TO INSTALLING HEADS.

**CONSTRUCTION OBSERVATION:**

1. COORDINATE THE FOLLOWING TESTS AND FIELD OBSERVATIONS WITH LANDSCAPE ARCHITECT. ENSURE 3 DAYS MIN NOTICE. OBTAIN APPROVAL PRIOR TO PROCEEDING. PROVIDE RESULTS TO OWNER'S REP.
  - A. LAYOUT OF EQUIPMENT AND PIPES.
  - B. PRESSURE TEST PRIOR TO BACKFILLING. COORDINATE WITH LANDSCAPE ARCHITECT. ENSURE 3 DAYS MIN NOTICE PRIOR TO SCHEDULING FIELD OBSERVATION. PROVIDE RESULTS TO OWNER'S REP.
  - C. FILL ALL EXCAVATIONS WITH COMPACTED BACKFILL. IN TWO MECHANICALLY COMPACTED LIFTS. REPAIR ALL SETTLED TRENCHES. PERFORM COVERAGE TEST. COORDINATE WITH LANDSCAPE ARCHITECT. ENSURE 3 DAYS MIN NOTICE PRIOR TO SCHEDULING FIELD OBSERVATION.
  - E. OPERATION TEST: DEMONSTRATE THAT CONTROLLER OPERATES STATIONS AS PROGRAMMED. DEMONSTRATE THAT HOSEBIBBS OPERATE SEPARATELY FROM REMOTE CONTROL VALVE STATIONS AND THEY DO NOT ACTIVATE FLOW SENSOR TO SHUT SYSTEM OFF.
  - F. ADJUST NOZZLES & EMITTERS AS NEEDED TO PROVIDE FULL COVERAGE AND TO AVOID OVERSPRAY OR RUNOFF.

**POST INSTALLATION:**

1. USE CYCLE & SOAK TO MAINTAIN EVENLY WETTED PLANTING AREAS WITHOUT RUNOFF TO A DEPTH OF 12 INCHES UNTIL TREES ARE ESTABLISHED. DO NOT CREATE SATURATED CONDITIONS. ALLOW TO DRAIN BEFORE RE-WETTING.
2. AFTER COMPLETION, PROVIDE AS-BUILT PLAN 11X17 LAMINATED.
3. PROVIDE LAMINATED CONTROLLER SCHEDULE.
4. SCHEDULE THE ZONES TO RUN AT A VERY LOW FREQUENCY AND LONG DURATION TO PROVIDE DEEP WATERING FOR THE TREES. ADJUST SCHEDULE PER WEATHER AND SEASON.
5. SCHEDULE THE SAME ZONES TO RUN AT A HIGH FREQUENCY AND SHORT DURATION TO ESTABLISH THE NEW SHRUBS. ADJUST THE SCHEDULE AS THE SHRUBS BECOME ESTABLISHED AND PER WEATHER AND SEASON.
6. THE DESIGN INTENT IS TO PROVIDE THE MINIMUM AMOUNT OF WATER TO SUSTAIN HEALTHY PLANT GROWTH AND TO AVOID RUN-OFF.
7. IRRIGATION AUDIT: CONDUCT IRRIGATION AUDIT BY CERTIFIED THIRD PARTY IRRIGATION AUDITOR.
8. MAINTENANCE: READ THE SUB-METER AND REPORT THE LANDSCAPE WATER USE TO THE OWNER EACH MONTH.
9. ENSURE THAT CONTROLLER SCHEDULE IS ADJUSTED SEASONALLY AT A MINIMUM .
10. RUN SYSTEM, CHECK FOR LEAKS AND REPAIR THEM.

**SPECIAL WARRANTY**

1. THE ENTIRE IRRIGATION SYSTEM SHALL BE UNCONDITIONALLY GUARANTEED BY THE CONTRACTOR AS TO MATERIAL AND WORKMANSHIP (INCLUDING SETTLEMENT OF BACKFILL) FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL ACCEPTANCE OF WORK.
2. IF WITHIN ONE YEAR FROM THE DATE OF COMPLETION, SETTLEMENT OCCURS AND ADJUSTMENTS IN PIPES, VALVES, OR HARDSCAPE IS NECESSARY TO BRING THE SYSTEM OR HARDSCAPE TO THE PROPER LEVEL OF THE PERMANENT GRADES, THE CONTRACTOR, AS PART OF THE WORK UNDER THEIR CONTRACT, SHALL MAKE ALL ADJUSTMENTS WITHOUT EXTRA COST TO THE OWNER, INCLUDING THE COMPLETE RESTORATION OF ALL DAMAGED PLANTING, HARDSCAPE OR OTHER IMPROVEMENTS OF ANY KIND.
3. SHOULD ANY OPERATIONAL DIFFICULTIES IN CONNECTION WITH THE IRRIGATION SYSTEM DEVELOP WITHIN THE ONE YEAR GUARANTEE PERIOD WHICH IN THE OPINION OF THE OWNER IS DUE TO INFERIOR MATERIAL OR WORKMANSHIP, SAID DIFFICULTIES SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST TO OWNER, INCLUDING ANY AND ALL OTHER DAMAGE CAUSED BY SUCH DEFECTS.
4. SERVICE BY THE CONTRACTOR: THE CONTRACTOR SHALL SERVICE THE SYSTEM AT THE OWNER'S REQUEST DURING THE GUARANTEE PERIOD AND SHALL BE PAID FOR WORK PERFORMED WHICH IS NOT COVERED BY THE GUARANTEE. IF REQUESTED BY THE OWNER, THE CONTRACTOR WILL FURNISH THE OWNER WITH A SCHEDULE OF SERVICE FEES.
5. THE OWNER RESERVES THE RIGHT TO MAKE TEMPORARY REPAIRS AS REQUIRED.
6. THE WARRANTY FOR THE IRRIGATION SYSTEM SHALL BE MADE IN ACCORDANCE WITH THE FOLLOWING FORM.
7. A COPY OF THE WARRANTY FORM SHALL BE INCLUDED IN THE OPERATIONS AND MAINTENANCE MANUAL.
8. THE WARRANTY FORM SHALL BE RETYPED ONTO THE CONTRACTOR'S LETTERHEAD AND CONTAIN THE FOLLOWING INFORMATION.

**WARRANTY FOR IRRIGATION SYSTEM**

1. WE HEREBY WARRANT THAT THE IRRIGATION SYSTEM WE HAVE FURNISHED AND INSTALLED IS FREE FROM DEFECTS IN MATERIALS AND WORK QUALITY, AND THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATION. WE AGREE TO REPAIR OR REPLACE ANY DEFECTS IN MATERIAL OR WORK QUALITY THAT MAY DEVELOP DURING THE PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE AT NO ADDITIONAL COST TO THE OWNER, EXCEPT THOSE THAT MAY BE CAUSED BY ORDINARY WEAR AND TEAR, UNUSUAL ABUSE OR NEGLIGENCE. WE ALSO AGREE TO REPAIR OR REPLACE ANY DAMAGE RESULTING FROM THE REPAIRING OR REPLACING OF SUCH DEFECTS AT NO ADDITIONAL COST TO THE OWNER. WE SHALL MAKE SUCH REPAIRS OR REPLACEMENTS WITHIN A REASONABLE TIME, AS DETERMINED BY THE OWNER, AFTER RECEIPT OF WRITTEN NOTICE. IN THE EVENT OF OUR FAILURE TO MAKE SUCH REPAIRS OR REPLACEMENTS WITHIN A REASONABLE TIME AFTER RECEIPT OF WRITTEN NOTICE FROM OWNER, WE AUTHORIZE THE OWNER TO PROCEED TO HAVE SAID REPAIRS OR REPLACEMENTS MADE AT OUR EXPENSE, AND WE WILL PAY THE COSTS AND CHARGES THEREFORE UPON DEMAND.

PROJECT: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ PHONE NO.: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

WARRANTIED BY: \_\_\_\_\_

DATE OF ACCEPTANCE: \_\_\_\_\_ BY: \_\_\_\_\_



**ABLA**

ANN BAKER LANDSCAPE ARCHITECTURE  
625 2ND ST., STE 110  
PETALUMA, CA 94952  
TEL: (510) 926-2557  
EMAIL: landarches@gmail.com



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**SLEEPY HOLLOW COMMUNITY CENTER  
FIREWISE DEMONSTRATION GARDEN**

1317 BUTTERFIELD RD.,  
SAN ANSELMO, CA 94960

SHEET TITLE:

**IRRIGATION  
SPECIFICATIONS**

DATE:  
OCTOBER 14, 2021



Plan Review Ordinance #: 430  
Approval Date: 12/10/2021  
Project #: 2021-80  
Reviewer: Sergio Paganelli

**L-3.2**

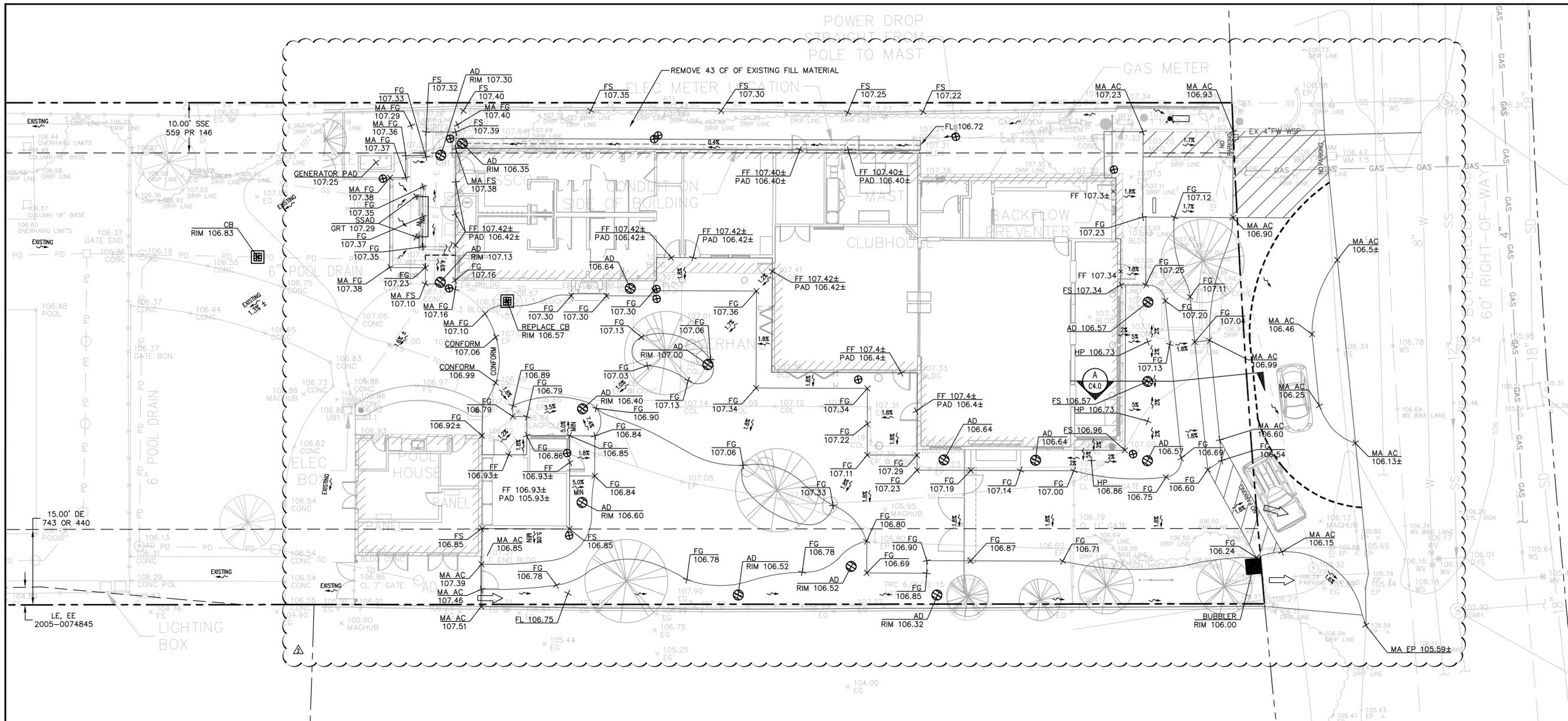
SHEET  
OF

SLEEPY HOLLOW  
COMMUNITY  
CENTER

1317 BUTTERFIELD RD.  
SAN ANSELMO, CA 94960  
APN: 176-162-007



**BKF ENGINEERS**  
255 SHORELINE DRIVE  
SUITE 200  
REDWOOD CITY, CA 94065  
(650) 482-6300  
www.bkf.com



**NOTES:**

- TOTAL AREA DISTURBED = 6,387 SF
- FLOOD ZONE "X": AREAS DETERMINED BY FEMA TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- THIS PLAN ASSUMES FLUSH ENTRANCES AND A SLAB FOUNDATION.
- FOR WALKWAYS AND ALL ACCESSIBLE AREAS CROSS SLOPES SHALL NOT EXCEED 2% GRADE.
- THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING STREETS, SURROUNDING LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS AND SIDEWALKS, GRADING, ETC. AND TO AVOID ABRUPT OR APPARENT CHANGES.
- REFER TO ARCHITECTURAL PLANS FOR BUILDING DETAILS.
- IF, DURING CONSTRUCTION, ARCHAEOLOGICAL OR NATIVE AMERICAN REMAINS OR ARTIFACTS ARE ENCOUNTERED, THE CONTRACTOR SHALL HALT CONSTRUCTION IN THE VICINITY AND SHALL NOTIFY THE PROJECT OWNER.
- DESIGN ENGINEER/ARCHITECT SHALL CERTIFY TO THE COUNTY IN WRITING UPON THE COMPLETION OF WORK THAT ALL GRADING AND DRAINAGE IMPROVEMENTS WERE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND FIELD DIRECTION.
- LANDSCAPING ADJACENT TO THE BUILDING SHALL BE SLOPED AT 5% MIN. AWAY FROM THE BUILDING FOR AT LEAST 10'.
- GRADES SHOWN ARE AT THE SURFACE. PERMEABLE PAVEMENT SUBGRADE SHALL BE LEVEL TO NO MORE THAN 2% AND SLOPE AWAY FROM BUILDINGS TOWARD THE PERFORATED SUBDRAIN, EXCEPT SLOPE SUBGRADE OF PERMEABLE PAVEMENT AT 5% MINIMUM AWAY FROM THE BUILDING PERIMETER WITHIN 10' OF THE BUILDING.

**LEGEND:**

- PROPERTY LINE
- GRADE BREAK LINE
- EASEMENT LINE
- ~ FLOW DIRECTION
- ➔ OVERLAND RELEASE

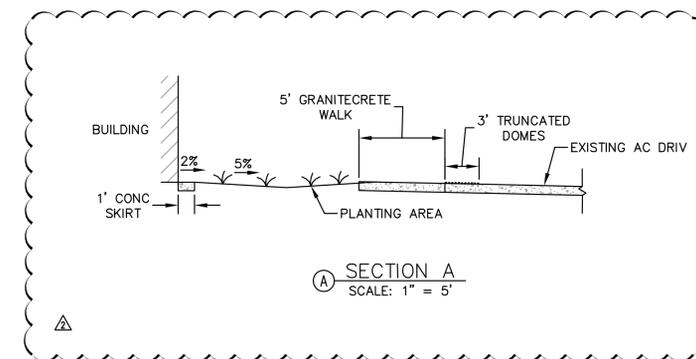
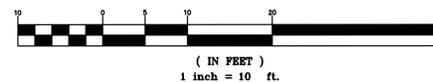
**ABBREVIATIONS:**

- AC ASPHALT CONCRETE
- BW BOTTOM OF WALL
- CONC CONCRETE
- EP EDGE OF PAVEMENT
- FF FINISH FLOOR
- FG FINISH GRADE
- FL FLOW LINE
- FS FINISH SURFACE
- HP HIGH POINT
- MA MATCH
- TB TOP OF BERM
- TW TOP OF WALL
- PAD PAD ELEVATION

**GRADING QUANTITIES:**

	CUT	FILL
TOTAL	13 CY	8 CY
EXPORT	5 CY	

**GRAPHIC SCALE**



THIS GRADING PLAN COMPLIES WITH THE MMWD AND MWEO REQUIREMENTS

Revisions:

No.	Date	Revision
1	6-26-2020	Plan Check Corrections/Revision 1
2	5-14-2021	Site Changes



Sheet Description:

**GRADING PLAN**

Scale	AS SHOWN
Drawn	AD
Checked	RP, ESS
Date	12-18-2019
Project#	20135091

**C4.0**