Exhibit B

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EXHIBIT B
DRAFT RESOLUTION

Before the Zoning Administrator in and for the County of Monterey, State of California

In the matter of the application of:
WALSH (PLN170042)
RESOLUTION NO. ----
Resolution by the Monterey County Zoning Administrator:

1) Considering the Addendum with the Santa Lucia Preserve Project EIR No. 94-005 pursuant to Section 15164 of the CEQA Guidelines; and
2) Approving the Combined Development Permit consisting of:
    a) An Administrative Permit and Design Approval to allow construction of a 4,100 square foot single family dwelling with a 600 square foot attached garage, a 600 square foot detached guesthouse, and a 170 square foot detached pool house;
    b) An Administrative Permit and Design Approval to allow construction of a 1,000 square foot detached accessory dwelling unit; and
    c) A Tree Removal Permit to allow removal of one (1) 9-inch and one (1) 22-inch oak tree.

[PLN170042, Walsh, 4 Vuelo De Las Palomas, Carmel, Greater Monterey Peninsula Area Plan (APN: 239-041-014-000)]

The Walsh application (PLN170042) came on for public hearing before the Monterey County Zoning Administrator on August 31, 2017. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, the Zoning Administrator finds and decides as follows:

FINDINGS AND EVIDENCE

1. **FINDING:** **CONSISTENCY** – The Project, as conditioned, is consistent with the applicable plans and policies which designate this area as appropriate for development.

EVIDENCE: a) During the course of review of this application, the project has been reviewed for consistency with the text, policies, and regulations in:
- 2010 Monterey County General Plan;
- Greater Monterey Peninsula Plan;
- Monterey County Zoning Ordinance (Title 21);

No conflicts were found to exist. No communications were received

during the course of review of the project indicating any inconsistencies with the text, policies, and regulations in these documents.

b) The property is located at 4 Vuelo De Las Palomas, Carmel (Assessor's Parcel Number 239-041-014-000), Greater Monterey Peninsula Area Plan. The parcel is zoned "RC/40-D-S" or Resource Conservation, 40 acres per unit, Design Control and Site Plan Review District, which allows the establishment of residential uses. The project is for the construction of a single family dwelling, guesthouse, pool house, and accessory dwelling unit. Therefore, the project is an allowed land use for this site.

c) Development in a Site Plan Review District ("S"). The purpose of the S District is to provide regulations for review of development in areas with the potential to adversely affect or be adversely affected by natural resources or site constraints. In accordance with Section 21.45 of Title 21, the location of the proposed development is at the top of a knoll, containing the least amount of vegetated area and void of any slopes in excess of 30%. Site improvements will require the removal of one 9-inch coast live oak located at the northern portion of the dwelling and a 4-inch madrone at the southern end of the accessory dwelling unit.

d) Development in a Design Review District ("D"). The purposed of the D District is to require design review to assure protection of the public viewshed, neighborhood character, and visual integrity. The subject property is not located within the public viewshed, thus protection measures for scenic resources do not apply. The proposed structures are located at the top of a knoll, containing the least amount of vegetated area and void of any slopes in excess of 30%. The architectural style is contemporary with a low profile, shallow pitched roof, and large roof overhangs. Exterior materials include a mix of colors and textures consisting of: off-white standing seam metal roof and facias, dark brown aluminum doors and windows, grey stained douglas fir soffits and decking, grey-stained cedar shiplap horizontal siding, and mixed-grey horizontal ledge-stacked stone walls. The exterior lighting plan is consistent with County regulations and includes fixtures that are downlit and shielded. The landscape plans are consistent with the native environment and includes planting of Coast live oaks, native grasses, and shrubs. Overall, staff has found the design, location, colors, and materials to be appropriate for and consistent with the area.

e) Tree Removal. Site improvements will require the removal of one 9-inch coast live oak located at the northern portion of the dwelling and a 4-inch madrone at the southern end of the accessory dwelling unit. In addition, the pool deck is proposed to surround a 22-inch coast live oak. The project meets the finding for tree removal (Finding No. 5).

f) The proposed project was not reviewed by a Land Use Advisory Committee (LUAC) because there is no LUAC assigned to the project area. However, on May 18, 2017, the project was reviewed and supported by the Santa Lucia Preserve Design Review Board, who approved the project with no comments or required modifications.

g) The project planner conducted a site inspection on May 12, 2017 to verify that the project on the subject parcel conforms to the plans listed above.

h) The application, project plans, and related support materials submitted by the project applicant to Monterey County RMA-Planning for the proposed development found in Project File PLN170042.

2. **FINDING:** **SITE SUITABILITY –** The site is physically suitable for the use proposed.

EVIDENCE:

a) The project has been reviewed for site suitability by the following departments and agencies: RMA- Planning, Monterey County Regional Fire Protection District, RMA-Public Works, RMA-Environmental Services, Environmental Health Bureau, and Water Resources Agency. There has been no indication from these departments/agencies that the site is not suitable for the proposed development. Conditions recommended have been incorporated.

b) Staff identified potential impacts to trees, soil, and fire hazards. The following reports have been prepared:
   - "Construction Impact Analysis" (LIB170194) prepared by Maureen Hamb-WCISA Certified Arborist, Santa Cruz, CA, May 2017.
   - "Tree Resource Evaluation" (LIB170185) prepared by Maureen Hamb-WCISA Certified Arborist, Santa Cruz, CA, February 2017.
   - "Geotechnical Investigation and Percolation Investigation" (LIB170184) prepared by Soil Surveys Group Inc., Salinas, CA, January 23, 2017.
   - "Fuel Management Plan" (LIB170187) prepared by Carol L. Rice, Fire Ecologist, Carmel, CA, March 31, 2017.

   The above-mentioned technical reports by outside consultants indicated that there are no physical or environmental constraints that would indicate that the site is not suitable for the use proposed. County staff has independently reviewed these reports and concurs with their conclusions.

c) Staff conducted a site inspection on May 12, 2017 to verify that the site is suitable for this use.

d) The application, project plans, and related support materials submitted by the project applicant to the Monterey County RMA - Planning for the proposed development found in Project File PLN170042.

3. **FINDING:** **HEALTH AND SAFETY -** The establishment, maintenance, or operation of the project applied for will not under the circumstances of this particular case be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.

EVIDENCE:

a) The project was reviewed by the RMA - Planning, Monterey County Regional Fire Protection District, Public Works, Environmental Health Bureau, and Water Resources Agency. The respective agencies have recommended conditions, where appropriate, to ensure that the project will not have an adverse effect on the health, safety, and welfare of persons either residing or working in the neighborhood.

b) Necessary public facilities will be provided. Potable water service will

be provided by the Santa Lucia Community Services District. Wastewater service will be provided by an onsite wastewater system.

c) Staff conducted a site inspection on May 12, 2017 to verify that the site is suitable for this use.

d) The application, project plans, and related support materials submitted by the project applicant to the Monterey County RMA - Planning for the proposed development found in Project File PLN170042.

4. **FINDING:** **NO VIOLATIONS -** The subject property is in compliance with all rules and regulations pertaining to zoning uses, subdivision, and any other applicable provisions of the County's zoning ordinance. No violations exist on the property.

EVIDENCE:

a) Staff reviewed Monterey County RMA - Planning and Building Services Department records and is not aware of any violations existing on subject property.

b) Staff conducted a site inspection on May 12, 2017 and researched County records to assess if any violation exists on the subject property.

c) The application, plans and supporting materials submitted by the project applicant to Monterey County RMA-Planning for the proposed development are found in Project File PLN1700742.

5. **FINDING:** **SANTA LUCIA PRESERVE SUBDIVISION (PHASE A, B & C): TREE REMOVAL** – The project is consistent with all tree removal conditions pursuant to Use Permit PC94067 (Resolution No. 96-060) for the Santa Lucia Preserve Subdivision.

EVIDENCE:

a) The project proposes the removal of one protected 9-inch oak tree and the potential for the development to cause the decline of one protected 22-inch oak tree. The February 18, 1994 Santa Lucia Preserve Forest Management Plan (FMP), prepared by Ralph Osterling, approved as a part of the subdivision indicated the property was not assessed for tree removal in the. The subject property is identified as Lot 143 of Phase A and according to the FMP, and zero trees were assessed for removal.

b) The project requires an addendum to the Santa Lucia Preserve EIR. Although the tree removal amount proposed exceeds what was approved for the lot, it is consistent with what was analyzed in the Santa Lucia Preserve EIR (Resolution No. 94-005).

c) Tree replacement will be at a ratio of 3:1 for non-landmark and 5:1 for landmark trees. The removal of 2 trees will be replaced by 10 trees [Condition No. 24 in Use Permit PC94067 (Resolution No. 96-060)].

d) Tree protection and maintenance measures found in the Santa Lucia Forest Management Plan have been applied as conditions to the project [Condition No. 135 in Use Permit PC94067 (Resolution No. 96-060)].

e) The project is consistent with Section 21.64.260 of the Monterey County Zoning Ordinance, Title 21, in that the project was sited to require the least amount of tree removal under the circumstance and avoids adverse environmental impacts. The project arborist, Maureen Hamb-WCISA Certified Arborist, concludes that even with careful siting of the structures, the tree removal cannot be avoided with the number of structures proposed. Tree replacement consistent with the SLP Use Permit was also recommended and this replacement will

mitigate any potential direct or cumulative environmental impact.

6. **FINDING:** **CEQA (Addendum): -** An Addendum to a previously certified EIR was prepared pursuant to Code of Regulations, Title 14, Section 15164 to reflect changes or additions in the project that do not cause substantial changes or new information that would require major revisions to the adopted EIR.

EVIDENCE:

a) The Santa Lucia Preserve (SLP) Final Environmental Impact Report was certified on February 6, 1996, by Board of Supervisors Resolution No. 96-059. A Combined Development Permit (PC94067), Resolution 96-060, that was approved and amended (Resolution 97-036, approved April 16, 1997), implemented the EIR and Forest Management Plan, prepared by Ralph Osterling Consultants, Inc. (incorporated in the SLP Resource Management Plan). Mitigation measures were included as conditions of approved Santa Lucia Preserve Subdivision Phases A-C. The Combined Development Permit consisted of a Vesting Tentative Subdivision Map, Major Use Permits for Tree Removal, and Development on Slopes in Excess of 30%; among other components. The environmental impacts were addressed within the Santa Lucia Final Environmental Impact Report, EIR#94-005, Resolution 96-059. The approved Combined Development Permit included a Use Permit for the removal of 1,480 trees (451 trees for home sites and 1,029 trees for driveway construction). One of the parcels created by the final map for Phase A of the subdivision (Lot 143) is the subject site. Pursuant to Section 15162 of the CEQA Guidelines, no subsequent EIR shall be prepared if there are no substantial changes proposed in the project, no changes to circumstances under which the project was undertaken, and there is no new information of substantial importance not known at time that would require major revisions to the previously certified EIR. In this case, no new information has been presented to warrant further environmental review. The proposed structures are located within the designated homeland boundary and has been designed to minimize the amount of tree removal and maintain the natural aesthetic qualities of the site.

b) Pursuant to Section 15164 of the CEQA Guidelines, some changes or additions to the project are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. Therefore, an Addendum to the Santa Lucia Preserve project EIR was prepared (attached as **Exhibit C** to the August 31, 2017, Staff Report to the Zoning Administrator) and reflects the County's independent judgment and analysis.

c) The amount of trees identified for removal in the FMP was not intended to be inclusive. Subsequent development projects exceeding the allotted amount of tree removal are consistent with what was analyzed in the FMP if the project complies with the mitigations/conditions to minimize tree removal and include replacement so there is no net loss. Based on the estimated tree removal, mitigation measures were developed to reduce impacts caused by soil erosion, water quality degradation, and noise pollution and ecological impacts upon biological or ecological systems, air movement, or wildlife habitat. These mitigations were

adopted as conditions and require tree replacement (Condition No. 24 of PC94067) and compliance with the tree removal protection and maintenance (Condition No. 135 of PC94067) contained in the FMP. Condition No. 5 has been incorporated to ensure replanting occurs, consistent with PC94067 Condition No. 24. Condition No. 6 requires tree protection measures, in accordance with the Tree Preservation Specifications outlined in the Construction Impact Analysis, to be in place prior to construction or tree removal, consistent with Condition No. 135 of PC94067.

7. **FINDING:** **APPEALABILITY -** The decision on this project may be appealed to the Planning Commission.

EVIDENCE: Section 21.80.040.B of the Monterey County Zoning Ordinance states that the proposed project is appealable to the Planning Commission.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Zoning Administrator does hereby:

1. Consider the Addendum with the Santa Lucia Preserve Project EIR No. 94-005 pursuant to Section 15164 of the CEQA Guidelines; and
2. Approve the Combined Development Permit consisting of:
    a) An Administrative Permit and Design Approval to allow construction of a 4,100 square foot single family dwelling with a 600 square foot attached garage, a 600 square foot detached guesthouse, and a 170 square foot detached pool house;
    b) An Administrative Permit and Design Approval to allow construction of a 1,000 square foot detached accessory dwelling unit; and
    c) A Tree Removal Permit to allow removal of one (1) 9-inch and one (1) 22-inch oak tree;

All in general conformance with the attached sketch and subject to the 14 conditions**,** all being attached hereto and incorporated herein by reference.

PASSED AND ADOPTED this 31 day of August, 2017.

_____

Mike Novo, Zoning Administrator

COPY OF THIS DECISION MAILED TO APPLICANT ON

THIS APPLICATION IS APPEALABLE TO THE PLANNING COMMISSION.

IF ANYONE WISHES TO APPEAL THIS DECISION, AN APPEAL FORM MUST BE COMPLETED AND SUBMITTED TO THE SECRETARY OF THE PLANNING COMMISSION ALONG WITH THE APPROPRIATE FILING FEE ON OR BEFORE

This decision, if this is the final administrative decision, is subject to judicial review pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6. Any Petition for Writ of Mandate must be filed with the Court no later than the 90th day following the date on which this decision becomes final.

NOTES

1. You will need a building permit and must comply with the Monterey County Building Ordinance in every respect.

   Additionally, the Zoning Ordinance provides that no building permit shall be issued, nor any use conducted, otherwise than in accordance with the conditions and terms of the permit granted or until ten days after the mailing of notice of the granting of the permit by the appropriate authority, or after granting of the permit by the Board of Supervisors in the event of appeal.

   Do not start any construction or occupy any building until you have obtained the necessary permits and use clearances from Monterey County RMA-Planning and RMA-Building Services Department office in Salinas.

2. This permit expires 3 years after the above date of granting thereof unless construction or use is started within this period.

Form Rev. 5-14-2014

Monterey County RMA Planning

DRAFT Conditions of Approval/Implementation Plan/Mitigation Monitoring and Reporting Plan

PLN170042

1. PD001 - SPECIFIC USES ONLY

Responsible Department: RMA-Planning

Condition/Mitigation Monitoring Measure: This Administrative Permit and Design Approval (PLN170042) allows construction of a 4,700 square foot one-story single family dwelling, a 600 square foot guest house, and a pool with a 120 square foot pool house; Administrative Permit and Design Approval to allow construction of an Accessory Dwelling Unit; and an Administrative Tree Removal permit to allow the removal of a 9-inch and one 11-inch Oak tree. The project includes grading of approximately 1,350 cubic yards of cut and 80 cubic yards of fill. The property is located at 4 Vuelo De Las Palomas, Carmel (Assessor's Parcel Number 239-041-014-000), Greater Monterrey Peninsula Area Plan.This permit was approved in accordance with County ordinances and land use regulations subject to the terms and conditions described in the project file. Neither the uses nor the construction allowed by this permit shall commence unless and until all of the conditions of this permit are met to the satisfaction of the Director of RMA - Planning. Any use or construction not in substantial conformance with the terms and conditions of this permit is a violation of County regulations and may result in modification or revocation of this permit and subsequent legal action. No use or construction other than that specified by this permit is allowed unless additional permits are approved by the appropriate authorities. To the extent that the County has delegated any condition compliance or mitigation monitoring to the Monterey County Water Resources Agency, the Water Resources Agency shall provide all information requested by the County and the County shall bear ultimate responsibility to ensure that conditions and mitigation measures are properly fulfilled. (RMA - Planning)

Compliance or Monitoring Action to be Performed: The Owner/Applicant shall adhere to conditions and uses specified in the permit on an ongoing basis unless otherwise stated.

2. PD002 - NOTICE PERMIT APPROVAL

Responsible Department: RMA-Planning

Condition/Mitigation Monitoring Measure: The applicant shall record a Permit Approval Notice. This notice shall state:
"An Administrative Permit and Design Approval (Resolution Number ***) was approved by RMA-Director of Planning for Assessor's Parcel Number 239-041-014-000 on August 31, 2017. The permit was granted subject to 14 conditions of approval which run with the land. A copy of the permit is on file with Monterey County RMA - Planning."

Proof of recordation of this notice shall be furnished to the Director of RMA - Planning prior to issuance of grading and building permits, Certificates of Compliance, or commencement of use, whichever occurs first and as applicable. (RMA - Planning)

Compliance or Monitoring Action to be Performed: Prior to the issuance of grading and building permits, certificates of compliance, or commencement of use, whichever occurs first and as applicable, the Owner/Applicant shall provide proof of recordation of this notice to the RMA - Planning.

3. PD003(A) - CULTURAL RESOURCES NEGATIVE ARCHAEOLOGICAL REPORT

Responsible Department: RMA-Planning

Condition/Mitigation Monitoring Measure: If, during the course of construction, cultural, archaeological, historical or paleontological resources are uncovered at the site (surface or subsurface resources) work shall be halted immediately within 50 meters (165 feet) of the find until a qualified professional archaeologist can evaluate it. Monterey County RMA - Planning and a qualified archaeologist (i.e., an archaeologist registered with the Register of Professional Archaeologists) shall be immediately contacted by the responsible individual present on-site. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for recovery.
(RMA - Planning)

Compliance or Monitoring Action to be Performed: The Owner/Applicant shall adhere to this condition on an on-going basis.

Prior to the issuance of grading or building permits and/or prior to the recordation of the final/parcel map, whichever occurs first, the Owner/Applicant shall include requirements of this condition as a note on all grading and building plans. The note shall state "Stop work within 50 meters (165 feet) of uncovered resource and contact Monterey County RMA - Planning and a qualified archaeologist immediately if cultural, archaeological, historical or paleontological resources are uncovered."

When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery.

4. PD006(A) - CONDITION COMPLIANCE FEE

Responsible Department: RMA-Planning

Condition/Mitigation Monitoring Measure: The Owner/Applicant shall pay the Condition Compliance fee, as set forth in the fee schedule adopted by the Board of Supervisors, for the staff time required to satisfy conditions of approval. The fee in effect at the time of payment shall be paid prior to clearing any conditions of approval.

Compliance or Monitoring Action to be Performed: Prior to clearance of conditions, the Owner/Applicant shall pay the Condition Compliance fee, as set forth in the fee schedule adopted by the Board of Supervisors.

5. PD048 - TREE REPLACEMENT/RELOCATION

Responsible Department: RMA-Planning

Condition/Mitigation Monitoring Measure: Within 60 days of permit approval, the applicant shall replace and or relocate each tree approved for removal as follows:
- Replacement ratio: 3 to 1

Replacement tree(s) shall be located within the same general location as the tree being removed. (RMA - Planning)

Compliance or Monitoring Action to be Performed: The Owner/Applicant shall submit evidence of tree replacement to RMA-Planning for review and approval. Evidence shall be a receipt for the purchase of the replacement tree(s) and photos of the replacement tree(s) being planted.

Six months after the planting of the replacement tree(s), the Owner/Applicant shall submit evidence demonstrating that the replacement tree(s) are in a healthy, growing condition.

One year after the planting of the replacement tree(s), the Owner/Applicant shall submit a letter prepared by a County-approved tree consultant reporting on the health of the replacement tree(s) and whether or not the tree replacement was successful or if follow-up remediation measures or additional permits are required.

6. PD049 - TREE AND ROOT PROTECTION

Responsible Department: RMA-Planning

Condition/Mitigation Monitoring Measure: Prior to beginning any tree removal, trees which are located close to trees approved for removal shall be protected from inadvertent damage from equipment or tree removal activity by fencing off the canopy drip-lines and/or critical root zones (whichever is greater) with protective materials. Any tree protection measures recommended by a County-approved tree consultant, in addition to the standard condition, shall be implemented. (RMA - Planning)

Compliance or Monitoring Action to be Performed: Prior to construction or tree removal, the Owner/Applicant/Tree Removal Contractor submit evidence of tree protection to RMA-Planning for review and approval. Grading and Building plans shall include the Tree Preservation Specifications as outlined in the May 2017 Arborist Report by Maureen Hamb (File No. LIB170194)

After construction or tree removal, the Owner/Applicant/Tree Removal Contractor shall submit photos of the trees on the property to RMA-Planning to document that the tree protection has been successful or if follow-up remediation measures or additional permits are required.

7. PD050 - RAPTOR/MIGRATORY BIRD NESTING

Responsible Department: RMA-Planning

Condition/Mitigation Monitoring Measure: Any tree removal activity that occurs during the typical bird nesting season (February 22-August 1), the County of Monterey shall require that the project applicant retain a County qualified biologist to perform a nest survey in order to determine if any active raptor or migratory bird nests occur within the project site or within 300 feet of proposed tree removal activity. During the typical nesting season, the survey shall be conducted no more than 30 days prior to ground disturbance or tree removal. If nesting birds are found on the project site, an appropriate buffer plan shall be established by the project biologist. (RMA - Planning)

Compliance or Monitoring Action to be Performed: No more than 30 days prior to ground disturbance or tree removal, the Owner/Applicant/Tree Removal Contractor shall submit to RMA-Planning a nest survey prepare by a County qualified biologist to determine if any active raptor or migratory bird nests occur within the project site or immediate vicinity.

8. EROSION CONTROL PLAN

Responsible Department: Environmental Services

Condition/Mitigation Monitoring Measure: The applicant shall submit an Erosion Control Plan in conformance with the requirements of Monterey County Code Chapter 16.12. The Erosion Control Plan shall include a construction entrance, concrete washout, stockpile area(s), material storage area(s), portable sanitation facilities and waste collection area(s), as applicable. (RMA-Environmental Services)

Compliance or Monitoring Action to be Performed: Prior to issuance of any grading or building permits, the applicant shall submit an Erosion Control Plan to RMA-Environmental Services for review and approval.

9. GEOTECHNICAL CERTIFICATION

Responsible Department: Environmental Services

Condition/Mitigation Monitoring Measure: The applicant shall provide certification from a licensed practitioner that all development has been constructed in accordance with the recommendations in the project Geotechnical Investigation. (RMA- Environmental Services)

Compliance or Monitoring Action to be Performed: Prior to final inspection, the owner/applicant shall provide RMA-Environmental Services a letter from a licensed practitioner.

10. GRADING PLAN

Responsible Department: Environmental Services

Condition/Mitigation Monitoring Measure: The applicant shall submit a Grading Plan incorporating the recommendations from the project Geotechnical Investigation prepared by Soils Surveys Group Inc. The Grading Plan shall include contour intervals and cross-sections that identify the existing grade, proposed grade, and the extent of any proposed excavation and/or fill. The Grading Plan shall include the geotechnical inspection schedule that identifies when the inspections will be completed, who will conduct the inspection (i.e., PG, PE, and/or Special Inspector), a description of the required inspection, inspector name, and the completion date. The applicant shall also provide certification from the licensed practitioner that the Grading Plan incorporates their geotechnical recommendations. (RMA-Environmental Services)

Compliance or Monitoring Action to be Performed: Prior to issuance of any grading or building permits, the applicant shall submit a Grading Plan to RMA-Environmental Services for review and approval.

Prior to issuance of any grading or building permits, the applicant shall submit certification from a licensed practitioner that they have reviewed the Grading Plan for conformance with the geotechnical recommendations.

11. INSPECTION-DURING ACTIVE CONSTRUCTION

Responsible Department: Environmental Services

Condition/Mitigation Monitoring Measure: The applicant shall schedule an inspection with RMA-Environmental Services to inspect drainage device installation, review the maintenance and effectiveness of BMPs installed, and to verify that pollutants of concern are not discharged from the site. At the time of the inspection, the applicant shall provide certification that all necessary geotechnical inspections have been completed to that point. This inspection requirement shall be noted on the Erosion Control Plan. (RMA – Environmental Services)

Compliance or Monitoring Action to be Performed: During construction, the applicant shall schedule an inspection with RMA-Environmental Services.

12. INSPECTION-FOLLOWING ACTIVE CONSTRUCTION

Responsible Department: Environmental Services

Condition/Mitigation Monitoring Measure: The applicant shall schedule an inspection with RMA-Environmental Services to ensure all disturbed areas have been stabilized and all temporary erosion and sediment control measures that are no longer needed have been removed. This inspection requirement shall be noted on the Erosion Control Plan. (RMA – Environmental Services)

Compliance or Monitoring Action to be Performed: Prior to final inspection, the owner/applicant shall schedule an inspection with RMA-Environmental Services.

13. INSPECTION-PRIOR TO LAND DISTURBANCE

Responsible Department: Environmental Services

Condition/Mitigation Monitoring Measure: The applicant shall schedule an inspection with RMA-Environmental Services to ensure all necessary sediment controls are in place and the project is compliant with Monterey County regulations. This inspection requirement shall be noted on the Erosion Control Plan. (RMA – Environmental Services)

Compliance or Monitoring Action to be Performed: Prior to commencement of any land disturbance, the owner/applicant shall schedule an inspection with RMA-Environmental Services.

14. WR001 - DRAINAGE PLAN

Responsible Department: Water Resources Agency

Condition/Mitigation Monitoring Measure: The applicant shall provide a drainage plan, prepared by a registered civil engineer or licensed architect, to mitigate on-site and off-site impacts from impervious surface stormwater runoff. The plan shall include stormwater dispersion facilities. Drainage improvements shall be constructed in accordance with plans approved by the Water Resources Agency. (Water Resources Agency)

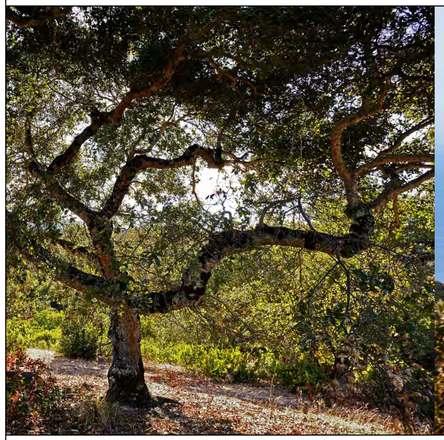
Compliance or Monitoring Action to be Performed: Prior to issuance of any construction permit, the owner/applicant shall submit a drainage plan with the construction permit application.

The Building Services Department will route a plan set to the Water Resources Agency for review and approval.

St. Sure-Walsh Residence

Santa Lucia Preserve Lot 143, Carmel Valley, California

April 14, 2017
County Planning Submission



PROJECT DATA SUMMARY TABLE

PARCEL SIZE:	6.37 ACRES (277,477 SF)
LAND USE:	RC/40-D-S
LOT COVERAGE:	(MAX. ALLOWABLE = 25%)
BUILDINGS	6,470 SF / 277,477 SF = 2%
HARDSCAPE	7,225 SF / 277,477 SF = 3%
TOTAL	13,695 SF / 277,477 SF = 5%
PROPOSED SQUARE FOOTAGE:	
MAIN HOUSE	4,700 SF
CARETAKERS	1,000 SF
GUESTHOUSE	600 SF
POOL HOUSE	170 SF
TOTAL	6,470 SF
EARTHWORK ESTIMATE:	
CUT	1,350 CY
FILL	80 CY
EXPORT	1270 CY

PROPOSED TREE REMOVAL:
(1) 9" MULTI-OAK

PROPOSED PARKING:
(2) GUEST PARKING SPACES
(2) ENCLOSED GARAGE SPACES

DRAWING LIST

A0.0 COVER
A0.1 OVERALL SITE PLAN

C0.1 CIVIL COVER SHEET
C0.1 PARCEL SURVEY
C1.1 GRADING & DRAINAGE PLAN
C2.1 SEPTIC PLAN

L1.0 CONCEPT LANDSCAPE PLAN
L3.0 PLANTING PLAN
L4.0 IRRIGATION PLAN
L4.1 IRRIGATION DETAILS
L4.2 IRRIGATION DETAILS
L4.3 IRRIGATION DRIP DETAILS
L4.4 IRRIGATION DETAILS
L4.5 IRRIGATION NOTES
L4.6 MWELO CALCS
L5.0 LIGHTING PLAN
L5.1 LIGHTING SPECIFICATIONS

A2.0 OVERALL FLOOR PLAN
A2.1 MAIN HOUSE & CARETAKER'S FLOOR PLANS
A2.2 GUESTHOUSE & POOLHOUSE FLOOR PLANS

A3.1 ELEVATIONS - MAIN HOUSE
A3.2 ELEVATIONS - MAIN HOUSE
A3.3 ELEVATIONS - CARETAKER'S, GUESTHOUSE, & POOLHOUSE

A4.0 EXTERIOR MATERIAL PALETTE

CMP CONSTRUCTION MANAGEMENT PLAN

Whitson Engineers
CIVIL ENGINEERING LAND SURVEYING
PROJECT MANAGEMENT

9699 Blue Larkspur Lane, Suite 105
Monterey, CA 93940
831.649.5225

Contact: Richard Webster, rweber@whitsonengineers.com

bernard trainer + associates
LANDSCAPE ARCHITECTURE

537 Houston St.
Monterey, CA 93940
831.655.1414

Contact: Ben Langford, ben@bernardtrainer.com

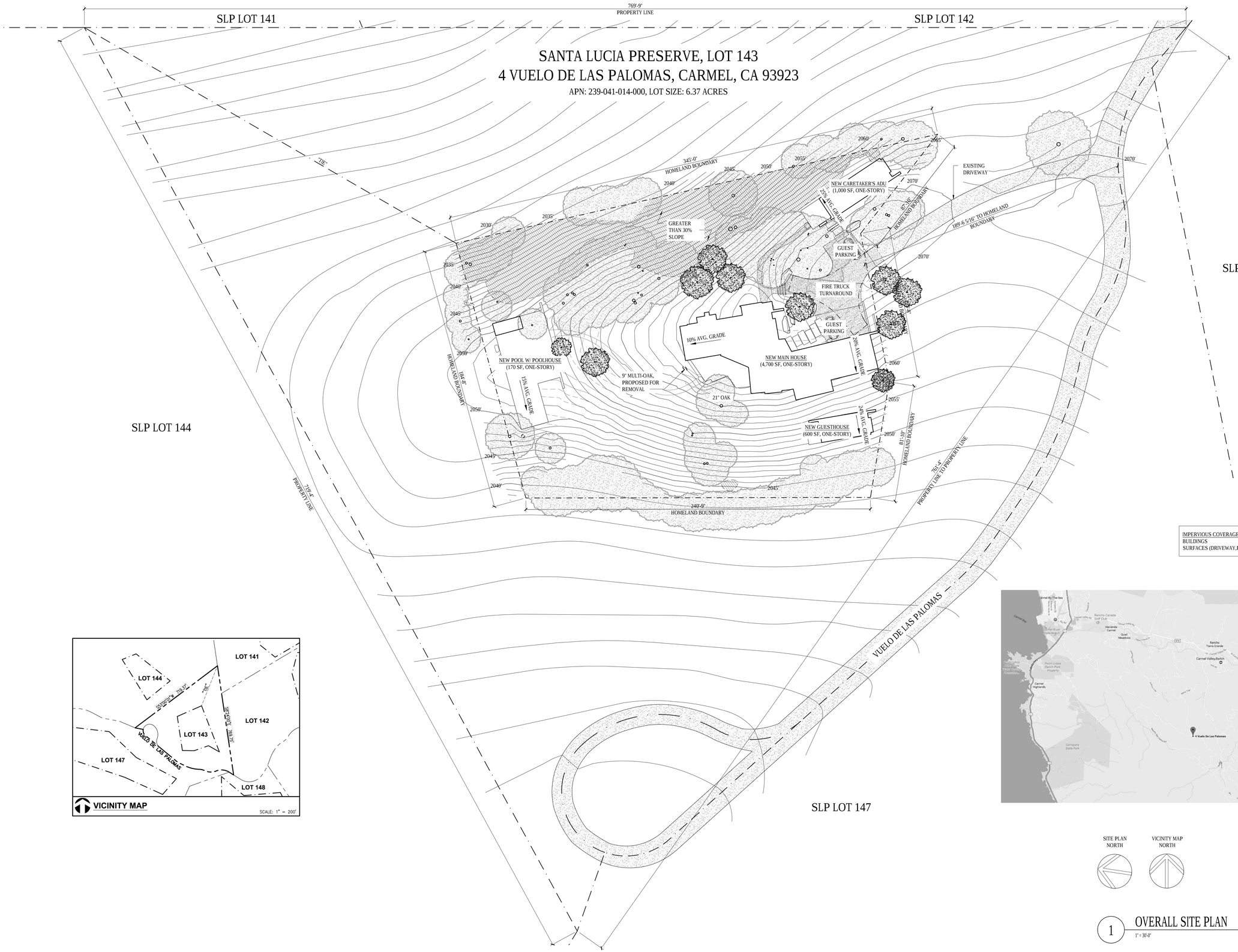
Bohlin Cywinski Jackson
Architecture Planning Interior Design

49 Geary Street, Suite 300
San Francisco, CA 94108
415.989.2100

Contact: Chris Moore, cmoore@bcj.com

SANTA LUCIA PRESERVE, LOT 143
4 VUELO DE LAS PALOMAS, CARMEL, CA 93923

APN: 239-041-014-000, LOT SIZE: 6.37 ACRES



IMPERVIOUS COVERAGE CALCULATIONS	
BUILDINGS	6,470 SF
SURFACES (DRIVEWAY,PATHS, POOL, DECKS)	7,225 SF

VICINITY MAP

0 1/2 1 MILE 2 MILES

SITE PLAN NORTH

VICINITY MAP NORTH

LEGEND

SLOPE GREATER THAN 30%

1 OVERALL SITE PLAN

1" = 30'-0"

REVISION NUMBER	DESCRIPTION	DATE

Bohlin Cywinski Jackson
Architecture Planning Interior Design
49 Geary Street, Suite 300
San Francisco, CA 94108
415.989.2100

St. Sure-Walsh Residence
Santa Lucia Preserve Lot 143
4 Vuelo de las Palomas, Carmel, California 93923

PLANNING SUBMISSION

14 APRIL 2017	DATE
16514A	BCJ PROJECT NO.
1" = 30'-0"	SCALE
DY	DRAWN BY
CM	CHECKED BY
OVERALL SITE PLAN	
A0.1	SHEET NUMBER

GENERAL

1. CONSTRUCTION CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL(S) HARMLESS FROM ANY AND ALL LIABILITY, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL(S).
2. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH:
   A. ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, ORDINANCES, AND RULES, INCLUDING WITHOUT LIMITATION:
      CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIVE CODE (CAL–OSHA)
      CALIFORNIA CODE 4216 – PROTECTION OF UNDERGROUND INFRASTRUCTURE
   B. THE 2016 CALIFORNIA BUILDING STANDARDS CODE (CCR TITLE 24), WITH AMENDMENTS ADOPTED BY THE JURISDICTION HAVING AUTHORITY
   C. CALIFORNIA EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
   D. THE PROJECT PLANS AND SPECIFICATIONS
   E. THE 2015 EDITION OF "STANDARD SPECIFICATIONS," STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS), AS AMENDED BY THE MOST CURRENT "REVISED STANDARD SPECIFICATIONS". THE "STANDARD SPECIFICATIONS" AND "REVISED STANDARD SPECIFICATIONS" CAN BE DOWNLOADED FOR FREE FROM http://www.dot.ca.gov/hq/esc/oe/construction_standards.html
   F. THE 2010 EDITION OF "STANDARD PLANS," STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS), AS AMENDED BY THE MOST CURRENT "REVISED STANDARD PLANS". THE "STANDARD PLANS" AND "REVISED STANDARD PLANS" CAN BE DOWNLOADED FOR FREE FROM http://www.dot.ca.gov/hq/esc/oe/construction_standards.html
3. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL CURRENTLY APPLICABLE SAFETY LAWS OF ALL APPLICABLE JURISDICTIONAL BODIES. FOR INFORMATION REGARDING THIS PROVISION, THE CONTRACTOR IS DIRECTED TO CONTACT STATE OF CALIFORNIA, DIVISION OF OCCUPATIONAL SAFETY AND HEALTH, SALINAS, CALIFORNIA AT PHONE (831) 443–3050.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, SAFETY DEVICES AND CONTROL OF TRAFFIC WITHIN THE CONSTRUCTION AREA.
5. INTENTION OF GRADING: CONSTRUCTION OF ONE NEW SINGLE FAMILY RESIDENCE, GUEST HOME AND ASSOCIATED SITE WORK.
6. PROPERTY IS NOT SUBJECT TO INUNDATION OR 100 YEAR FLOOD LEVELS.
7. ESTIMATED START: TBD , ESTIMATED COMPLETION: TBD.
8. SEE ARCHITECTURAL/LANDSCAPE PLANS AND/OR THE PROJECT ARBORIST'S REPORT FOR TREE PROTECTION AND REMOVAL REQUIREMENTS.
9. IF, DURING THE COURSE OF CONSTRUCTION, CULTURAL, ARCHAEOLOGICAL, HISTORICAL OR PALEONTOLOGICAL RESOURCES ARE UNCOVERED AT THE SITE (SURFACE OR SUBSURFACE RESOURCES) WORK SHALL BE HALTED IMMEDIATELY WITHIN 50 METERS (165 FEET) OF THE FIND UNTIL A QUALIFIED PROFESSIONAL ARCHEOLOGIST CAN EVALUATE IT. MONTEREY COUNTY RMA – PLANNING AND A QUALIFIED ARCHAEOLOGIST (I.E. AN ARCHAEOLOGIST REGISTERED WITH THE REGISTER OF PROFESSIONAL ARCHAEOLOGISTS) SHALL BE IMMEDIATELY CONTACTED BY THE RESPONSIBLE INDIVIDUAL PRESENT ON–SITE. WHEN CONTACTED, THE PROJECT PLANNER AND THE ARCHAEOLOGIST SHALL IMMEDIATELY VISIT THE SITE TO DETERMINE THE EXTENT OF THE RESOURCES AND TO DEVELOP PROPER MITIGATION MEASURES REQUIRED FOR RECOVERY.

EARTHWORK AND AREA OF DISTURBANCE SUMMARY

C = 1350 CY

F = 80 CY

EXPORT = 1270 CY

ESTIMATED AREA OF DISTURBANCE = 0.42 AC

1. THE QUANTITIES PRESENTED ABOVE ARE ESTIMATES ONLY, BASED ON THE DIFFERENCE BETWEEN EXISTING GRADE AND SUBGRADE ELEVATIONS AND FINISHED GRADE AND SUBGRADE ELEVATIONS, AS SHOWN ON THE PLANS, AND ARE NOT ADJUSTED FOR CHANGES IN VOLUME DUE TO CHANGES IN SOIL DENSITY.
2. OVER–EXCAVATION IS NOT INCLUDED IN THE ABOVE ESTIMATE. CLEARING AND STRIPPING AND REMOVAL OF AC AND PCC PAVEMENTS ARE NOT INCLUDED IN THE ABOVE ESTIMATES. SITE SPOILS SUCH AS FROM UTILITY TRENCHING, FOUNDATIONS, ETC. ARE NOT INCLUDED IN ABOVE ESTIMATES.
3. THESE QUANTITIES SHALL BE USED FOR BONDING AND PERMIT PURPOSES ONLY. CONTRACTOR SHALL MAKE HIS/HER OWN SITE VISIT AND QUANTITY TAKE–OFFS AND SHALL BID ACCORDINGLY.
4. EARTHWORK VALUES SHOULD BE REEVALUATED DURING THE EARLY STAGES OF SITE GRADING. CONTRACTOR SHALL BE RESPONSIBLE FOR CALCULATING FINAL EARTHWORK QUANTITIES TO HIS/HER SATISFACTION PRIOR TO START OF GRADING OPERATIONS.

SURVEY AND EXISTING CONDITIONS

1. TOPOGRAPHY WAS PREPARED BY WHITSON ENGINEERS ON MARCH 23,24, AND 26
2. BENCHMARK: MAG NAIL (ASSUMED DATUM) ELEVATION = 2,071.00'
3. ALL "MATCH" OR "JOIN" CALLOUTS ON THE PLANS SHALL BE FIELD VERIFIED FOR EXACT LOCATION AND ELEVATION PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER IN THE CASE OF ANY FIELD DISCREPANCY.
4. PAD ELEVATIONS SHALL BE CERTIFIED TO 0.1 FEET, PRIOR TO DIGGING ANY FOOTINGS OR SCHEDULING ANY INSPECTIONS. (MONTEREY COUNTY)
5. THE CONSTRUCTION CONTRACTOR SHALL MAINTAIN A CURRENT, COMPLETE, AND ACCURATE RECORD OF ALL DEVIATIONS FROM THE WORK PROPOSED IN THESE PLANS AND SPECIFICATIONS, AND A RECORD DRAWING SET SHALL BE PREPARED AND PROVIDED TO THE ENGINEER AT THE COMPLETION OF WORK. CHANGES SHALL NOT BE MADE WITHOUT THE PRIOR WRITTEN APPROVAL OF THE DESIGN ENGINEER.
6. THE EXISTENCE, LOCATION AND ELEVATION OF ANY UNDERGROUND FACILITIES ARE SHOWN ON THESE PLANS IN A GENERAL WAY ONLY. NOT ALL UTILITIES MAY BE SHOWN. IT IS MANDATORY THAT THE CONTRACTOR EXPOSE AND VERIFY THE TOP AND BOTTOM OF ALL UTILITIES PRIOR TO ANY WORK ON SYSTEMS WHICH MAY BE AFFECTED BY THE EXISTING UTILITY'S LOCATION. IT IS THE RESPONSIBILITY AND DUTY OF THE CONTRACTOR TO MAKE THE FINAL DETERMINATION AS TO THE EXISTENCE, LOCATION AND ELEVATION OF ALL UTILITIES AND TO BRING ANY DISCREPANCY TO THE ATTENTION OF THE ARCHITECT.
7. BOUNDARY INFORMATION SHOWN IS FROM RECORD DATA. A BOUNDARY SURVEY WAS NOT PERFORMED AS A PART OF THIS WORK. THERE MAY BE EASEMENTS OR OTHER RIGHTS, RECORDED OR UNRECORDED, AFFECTING THE SUBJECT PROPERTY WHICH ARE NOT SHOWN HEREON.

PLANNING REVIEW ONLY
NOT FOR CONSTRUCTION

GRADING AND DRAINAGE

1. SITE GRADING AND EARTHWORK SHALL BE PERFORMED IN CONFORMANCE WITH THE PROJECT GEOTECHNICAL REPORT ENTITLED:
   GEOTECHNICAL AND PERCOLATION INVESTIGATION FOR LOT 143 SANTA LUCIA PRESERVE BY: SOIL SURVEYS GROUP INC., DATED JANUARY 23, 2017, PROJECT NO. 6767
2. ONSITE GRADING AND EARTHWORK, SITE PREPARATION, EXCAVATION, TRENCHING AND COMPACTION SHALL BE OBSERVED AND TESTED BY THE GEOTECHNICAL ENGINEER DESIGNATED BY THE OWNER. ALL GRADING AND EARTHWORK SHALL BE DONE TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
3. SPECIAL INSPECTIONS BY A SPECIAL INSPECTOR, ARE REQUIRED DURING FILL PLACEMENT AND THAT PROPER MATERIALS AND PROCEDURES ARE USED IN ACCORDANCE WITH THE PROVISIONS OF THE APPROVED GEOTECHNICAL REPORT.
4. SHOULD THE RESULTS OF ANY COMPACTION TEST FAIL TO MEET THE MINIMUM REQUIRED DENSITY AS SPECIFIED ON THESE PLANS OR IN THE GEOTECHNICAL REPORT, THE DEFICIENCY SHALL BE CORRECTED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER AT THE CONTRACTOR'S EXPENSE. THE EXPENSE OF RETESTING SUCH AREAS SHALL ALSO BE BORNE BY THE CONTRACTOR, AT NO COST TO THE OWNER.
5. NOTIFY THE GEOTECHNICAL ENGINEER AT LEAST FIVE (5) WORKING DAYS PRIOR TO ANY GRADING OR FOUNDATION EXCAVATION.
6. ALL SOILS UTILIZED FOR FILL PURPOSES SHALL BE APPROVED BY THE SOILS ENGINEER BEFORE COMMENCEMENT OF GRADING OPERATIONS. IMPORTED SOILS SHALL BE APPROVED BY THE SOILS ENGINEER BEFORE BEING BROUGHT TO THE SITE.
7. EXCAVATION FOR ANY PURPOSE SHALL NOT REMOVE LATERAL SUPPORT FROM ANY FOUNDATION WITHOUT FIRST UNDERPINNING OR PROTECTING THE FOUNDATION AGAINST SETTLEMENT OR LATERAL TRANSLATION. THE EXCAVATION OUTSIDE THE FOUNDATION SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ORGANIC MATERIAL, CONSTRUCTION DEBRIS, COBBLES AND BOULDERS OR WITH A CONTROLLED LOW–STRENGTH MATERIAL (CLSM). THE BACKFILL SHALL BE PLACED IN LIFTS AND COMPACTED IN A MANNER THAT DOES NOT DAMAGE THE FOUNDATION OR THE WATERPROOFING OR DAMPPROOFING MATERIAL. EXCEPTION: CLSM NEED NOT BE COMPACTED (REF. 2013 CBC 1804.1–1804.2)
8. IMPERVIOUS SURFACES ADJACENT TO STRUCTURES SHALL SLOPE A MINIMUM OF 2% AWAY FROM THE STRUCTURE FOR A MINIMUM DISTANCE OF 10 FEET, UNLESS OTHERWISE SHOWN. LANDSCAPE AREAS ADJACENT TO STRUCTURES SHALL SLOPE A MINIMUM OF 5% AWAY FROM THE STRUCTURE FOR A MINIMUM DISTANCE OF 10 FEET, UNLESS OTHERWISE SHOWN. (REF. 2013 CBC 1804.3)
9. RELATIVE COMPACTION SHALL BE EXPRESSED AS A PERCENTAGE OF THE MAXIMUM DRY DENSITY OF THE MATERIAL AS DETERMINED BY ASTM TEST D–1557. IN–PLACE DENSITY TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM TESTS D–1556 AND D–6938.
10. GROUND SURFACE SHALL BE PREPARED TO RECEIVE FILL BY REMOVING STRUCTURES, OBSTRUCTIONS, TREES SHOWN TO BE REMOVED, VEGETATION, ORGANIC–LADEN TOPSOIL, LARGE ROOTS, DEBRIS, AND OTHER DELETERIOUS MATERIALS. BURIED SUBSURFACE OBJECTS ENCOUNTERED, OR VOIDS CREATED DURING SITE PREPARATION SHALL BE CALLED TO THE ATTENTION OF THE GEOTECHNICAL ENGINEER.
11. SURPLUS EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE SITE IN A LEGAL MANNER.
12. SUBGRADE PREPARATION AND ENGINEERED FILL THAT SUPPORTS FOOTINGS, SLABS, PAVEMENTS, AND FLATWORK SHALL EXTEND AT LEAST 5 FEET BEYOND THE LIMITS OF PROPOSED IMPROVEMENTS.
13. FOOTINGS LOCATED ADJACENT TO OTHER FOOTINGS OR RETAINING WALLS SHALL HAVE THEIR BEARING SURFACES FOUNDED BELOW A 1:1 (H:V) LINE PROJECTED UPWARD FROM THE BOTTOM EDGE OF THE ADJACENT FOOTING, WALL, OR UTILITY TRENCH.
14. FOLLOWING CLEARING AND STRIPPING, EXPOSED SUBGRADES IN AREAS TO RECEIVE ENGINEERED FILL, STRUCTURES, PAVEMENTS, CONCRETE SLABS, OR OTHER IMPROVEMENTS SHALL BE SCARIFIED TO A DEPTH OF 12 INCHES, MOISTURE CONDITIONED, AND UNIFORMLY COMPACTED TO AT LEAST 90% RELATIVE COMPACTION.
15. THE GEOTECHNICAL ENGINEER SHALL INSPECT ALL SURFACES TO RECEIVE FILL PRIOR TO THE PLACEMENT OF ANY FILL.
16. ENGINEERED FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS, MOISTURE CONDITIONED, AND COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DRY DENSITY.
17. CUT/FILL SLOPES SHALL BE NO STEEPER THAN THREE HORIZONTAL TO ONE VERTICAL (3H:1V) UNLESS OTHERWISE APPROVED AT THE TIME OF GRADING BY THE GEOTECHNICAL ENGINEER.
18. WHERE EXISTING GRADE IS AT A SLOPE OF 10H:1V (10%) OR STEEPER AND THE DEPTH OF THE FILL EXCEEDS 5 FEET, BENCHING SHALL BE PROVIDED. A TOE KEY SHALL BE CUT A MINIMUM DEPTH OF 2 FEET INTO UNDISTURBED SOILS TO THE INSIDE OF THE FILL'S TOE. THIS KEY SHALL BE A MINIMUM OF 12 FEET WIDE AND SLOPE AT NO LESS THAN 2% INTO THE SLOPE. AS THE FILL ADVANCES UP–SLOPE, BENCHES AT LEAST 3 FEET WIDE, OR TWICE THE WIDTH OF THE COMPACTION EQUIPMENT, WHICHEVER IS WIDER, SHALL BE SCARIFIED INTO THE FILL/UNDISTURBED SOIL INTERFACE.
19. ENGINEERED FILL IN BUILDING AREAS, STRUCTURAL BACKFILL, AND THE UPPER 12" BELOW FLATWORK AND PAVEMENT SHALL BE COMPACTED TO A MINIMUM OF 95% OF ITS MAXIMUM DRY DENSITY.
20. ALL RE–COMPACTED AND ENGINEERED FILL SOILS SHALL BE COMPACTED WITHIN 2 PERCENT OF THE LABORATORY OPTIMUM MOISTURE CONTENT FOR THE SOIL.
21. ON–SITE NON–ORGANIC SOIL IS GENERALLY ACCEPTABLE FOR USE AS ENGINEERED FILL. NATIVE SOIL USED AS ENGINEERED FILL SHALL MEET THE FOLLOWING REQUIREMENTS:
    - SOIL SHALL BE FREE OF ORGANICS, DEBRIS, AND OTHER DELETRIOUS MATERIALS.
    - ROCK OVER 6 INCHES IN ITS MAXIMUM DIMENSION MAY NOT BE USED IN AN ENGINEERED FILL.
21. IMPORTED SOIL USED AS GENERAL ENGINEERED FILL SHALL MEET THE FOLLOWING REQUIREMENTS:
    - SOIL SHALL BE FREE OF ORGANIC AND DELETERIOUS MATERIALS, OR RECYCLED MATERIALS SUCH AS ASPHALTIC CONCRETE, CONCRETE, BRICK, ETC.
    - SOIL SHALL NOT CONTAIN ANY ROCKS OR CLODS OVER 4 INCHES IN MAXIMUM DIMENSION, AND SHALL NOT CONTAIN OVER 15 PERCENT BY WEIGHT ROCKS LARGER THAN 2 INCHES
    - SOIL SHALL BE GRANULAR, HAVING A PLASTICITY INDEX OF LESS THAN 15, AND NOT MORE THAN 20 PERCENT BY WEIGHT PASSING THE #200 SEIVE
    - SOIL SHALL HAVE SUFFICIENT BINDER TO ALLOW EXCAVATIONS TO STAND WITHOUT CAVING
    - THE PORTION FINER THAN THE NO. 200 SIEVE SHALL NOT CONTAIN ANY EXPANSIVE CLAYS.
22. IN THE EVENT THAT ANY UNUSUAL CONDITIONS ARE ENCOUNTERED DURING GRADING OPERATIONS WHICH ARE NOT COVERED BY THE SOIL INVESTIGATION OR SPECIFICATIONS, THE SOILS ENGINEER SHALL BE IMMEDIATELY NOTIFIED SUCH THAT ADDITIONAL RECOMMENDATIONS MAY BE MADE.
23. A LETTER SHALL BE SUBMITTED FROM A LICENSED SURVEYOR CERTIFYING THAT PAD ELEVATIONS ARE WITHIN 0.1 FEET OF ELEVATIONS STATED ON APPROVED PLANS, PRIOR TO DIGGING ANY FOOTINGS OR SCHEDULING ANY INSPECTIONS.
24. A "FINAL SOILS LETTER" FROM THE GEOTECHNICAL ENGINEER STATING THAT ALL EARTHWORK COMPLETED WAS IN ACCORDANCE WITH THE RECOMMENDATIONS STATED IN THE GEOTECHNICAL REPORT SHALL BE SUBMITTED PRIOR TO FINAL INSPECTION.
25. EXPORT SOIL SHALL BE TRANSPORTED TO A LEGAL DUMP OR TO A PERMITTED SITE APPROVED BY THE COUNTY. CONTRACTOR SHALL NOTIFY GRADING OFFICIAL OF PROPOSED HAUL ROUTE.

LEGEND

Symbol	Description
100	GROUND CONTOUR
	SUBJECT PROPERTY LINE
	ADJACENT PROPERTY LINE
	HOMELAND BOUNDARY
	EASEMENT LINE
	CENTER LINE
100	CONTROL POINT
BM	BENCHMARK
F3P LS0000	FOUND 3/4" IRON PIPE, TAGGED AS NOTED
CUM BM#301	FOUND CONCRETE UNDERGROUND MONUMENT, MARKED AS NOTED
BH–1	BORE HOLE / BORING LOCATION
+ 928.30	SPOT GRADE
12" OAK	TREE WITH CRITICAL ROOT ZONE
	STUMP OR SNAG (DEAD)
	TREE DRIP LINE
	DRAINAGE PATH
	CREEK/RIVER FLOW
100.00	WATER SURFACE ELEVATION
	FLOW LINE AREA OF 30% OR GREATER SLOPE
	SIGN
OH	OVERHEAD UTILITY LINE(S)
E	UNDERGROUND ELECTRIC LINE
UP	UTILITY POLE SHOWING ARMS AND GUY WIRE
LT	LIGHT, ELECTROLIER
TS	TRAFFIC SIGNAL
G	GAS LINE
GV ICV	GAS VALVE, IRRIGATION CONTROL VALVE
12" SD	STORM DRAIN LINE
SDMH RIM: 00.00 INV: 00.00	STORM DRAIN MANHOLE
	STORM DRAIN INLET
DS	DOWNSPOUT WITH 4–6" ROCK COBBLE AT OUTFALL
SS	SANITARY SEWER LINE (GRAVITY)
SSFM	SANITARY SEWER FORCE MAIN
SSMH RIM: 00.00 INV: 00.00	SANITARY SEWER MANHOLE
SSCO	CLEANOUT
T	UNDERGROUND TELEPHONE LINE
W	WATER LINE
	WELL
WV	WATER VALVE
PIV	POST INDICATOR VALVE
FDC	FIRE DEPARTMENT CONNECTION
FH	FIRE HYDRANT
HB	HOSE BIB
BFP	BACKFLOW PREVENTION DEVICE
	UTILITY VAULT
1541.00 TOW	TOP OF WALL ELEVATION

ABBREVIATIONS

±	PLUS OR MINUS; APPROX
@	AT
AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
AD	AREA DRAIN
APPROX	APPROXIMATE
ASB	AGGREGATE SUBBASE
BC	BEGIN CURVE
BVC	BEGIN VERTICAL CURVE
BVCE	BVC ELEVATION
BVCS	BVC STATION
BS	BOTTOM OF STAIR
BW	BACK OF WALK
C&G	CURB AND GUTTER
CATV	CABLE TV
CGSW	CURB, GUTTER AND SIDEWALK
℄	CENTERLINE
CL	CLASS
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CONST	CONSTRUCT
CONT	CONTINUOUS
DEMO	DEMOLISH AND DISPOSE OF
D.G.	DECOMPOSED GRANITE
DI	DRAIN INLET
DIA	DIAMETER
DS	DOWNSPOUT
(E)	EXISTING
EC	END CURVE
EG	EXISTING GRADE
EJ	EXPANSION JOINT
ELEC	ELECTRIC
ELEV	ELEVATION
EQ.	EQUAL
ETW	EDGE OF TRAVELED WAY
EVC	END VERTICAL CURVE
EVCE	EVC ELEVATION
EVCS	EVC STATION
E.W.	EACH WAY
EX	EXISTING
FC	FACE OF CURB
FF	FINISHED FLOOR
FG	FINISHED GRADE
FL	FLOWLINE
FR	FIRE RISER
FS	FINISHED SURFACE
GB	GRADE BREAK
GBE	GB ELEVATION
GBS	GB STATION
GM	GAS METER
GRT	GRATE
GV	GAS VALVE/VAULT
HP	HIGH POINT
HORIZ.	HORIZONTAL
INV	INVERT
JP	JOINT UTILITY POLE
LDG	LANDING
LF	LINEAR FEET
LFF	LOWER FINISH FLOOR
LP	LOW POINT
LT	LEFT
MATCH	MATCH EXISTING GRADE
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
N.I.C.	NOT IN CONTRACT (BY OTHERS)
O.W.	ON CENTER
OG	ORIGINAL GROUND
P.A.	PLANTER AREA
PB	PULL BOX
PC	POINT OF CURVATURE
P.O.C.	POINT OF CONNECTION
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
R.C.	RELATIVE COMPACTION
RWL	RAIN WATER LEADER
SD	STORM DRAIN
SL	STREET LIGHT
SS	SANITARY SEWER
STA	STATION
SW	SIDEWALK
TBM	TEMPORARY BENCH MARK
TC	TOP OF CURB
TFC	TOP OF FLUSH CURB
TG	TOP OF GRATE
TS	TOP OF STAIR / TRAFFIC SIGNAL
TW	TOP OF WALL
TYP	TYPICAL
UFF	UPPER FINISH FLOOR
UG	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
UP	UTILITY POLE
UNKN	UNKNOWN
VAR	VARIES
VERT.	VERTICAL
W	WATER
WM	WATER METER
WV	WATER VALVE

SITE ADDRESS & APN

SANTA LUCIA PRESERVE LOT 143
4 VUELO DE LAS PALOMAS
CARMEL–BY–THE–SEA, CA 93923

APN: 239–041–014

ARCHITECT

BOHLIN CYWINSKI JACKSON
49 GEARY STREET, SUITE 300
SAN FRANCISCO, CA 94108

TEL: (415) 989–2100

CIVIL ENGINEER/SURVEYOR

WHITSON ENGINEERS
9699 BLUE LARKSPUR LANE, STE 105
MONTEREY, CA 93940

TEL. (831) 649–5225

GEOTECHNICAL ENGINEER

SOIL SURVEYS GROUP, INC.
103 CHURCH STREET
SALINAS, CA 93901

TEL:(831) 757–2172

CONTRACTOR

STOCKER & ALLAIRE
21 MANDEVILLE COURT
MONTEREY, CA 93940

TEL:(831) 375–1890

LANDSCAPE ARCHITECT

BERNARD TRAINOR + ASSOCIATES
537 HOUSTON ST
MONTEREY, CA 93940

TEL: (831) 655–1414

VICINITY MAP

SCALE: N.T.S.

CIVIL SHEET INDEX

C0.1 CIVIL COVER SHEET
C1.1 SITE GRADING AND DRAINAGE PLAN
C2.1 SEPTIC PLAN
C3.1 TEMPORARY WATER POLLUTION CONTROL (EROSION AND SEDIMENT CONTROL PLAN)

SPECIAL TESTS AND INSPECTION SCHEDULE

THE FOLLOWING ITEMS SHALL BE INSPECTED. "SPECIAL INSPECTION" SHALL CONFORM TO 2013 CBC 1704.7. SPECIAL INSPECTION AGENCIES AND/OR INDIVIDUALS SHALL BE RETAINED BY THE OWNER AND APPROVED BY THE BUILDING OFFICIAL PRIOR TO ANY WORK. FOR MATERIAL TESTING REQUIREMENTS, SEE SPECIFICATIONS AND/OR GENERAL NOTES. TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE BUILDING OFFICIAL AND ENGINEER.

ITEM	REQ.	REMARKS	INSPECTOR NAME	START DATE	END DATE
FOUNDATION EXCAVATIONS	YES	BY SOIL ENGINEER / PERIODIC			
SUBGRADE /FINISH GRADE PREPARATION	YES	BY SOIL ENGINEER / PERIODIC			
CLASSIFICATION/TESTING FILL MATERIAL	YES	BY SOIL ENGINEER / PERIODIC			
OBSERVATION OF FILL MATERIAL/COMPACTION	YES	BY SOIL ENGINEER / CONTINUOUS			
FOUNDATION	YES	BY SOIL ENGINEER / PERIODIC VERIFICATION - MATERIALS BELOW FOOTING/ACHEIVE BEARING CAPACITY			
MASONRY & CONCRETE CONSTRUCTION	YES	TO BE DETERMINED / PERIODIC			
REINFORCING STEEL CONSTRUCTION	YES	TO BE DETERMINED / PERIODIC			

SOILS ENGINEER TO PROVIDE OBSERVATION DURING GRADING AND FOUNDATION PHASE OF CONSTRUCTION.

REVISIONS:			
NO.	BY:	DATE:	DESCRIPTION:

DATE: 4/14/17
SCALE:
ENGR. SJ
JOB NO.: 3472.00

REGISTERED PROFESSIONAL ENGINEER RICHARD P. WEBER No. 55219 CIVIL STATE OF CALIFORNIA

WHITSON ENGINEERS
9699 Blue Larkspur Lane ▪ Suite 105 ▪ Monterey, CA 93940
831 649-5225 ▪ Fax 831 373-5065
CIVIL ENGINEERING ▪ LAND SURVEYING ▪ PROJECT MANAGEMENT

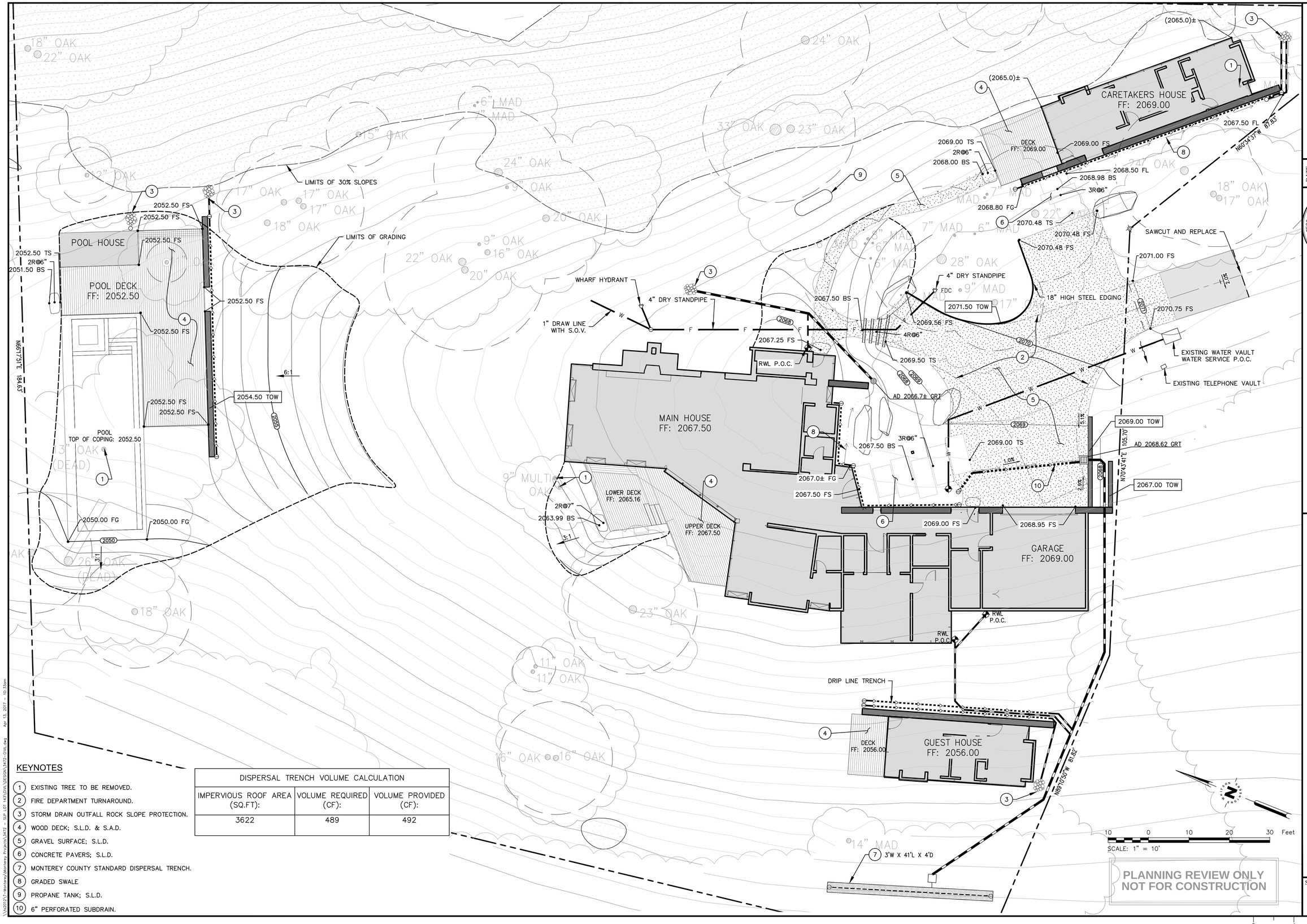
SLP 143- ST. SURE
MONTEREY COUNTY CALIFORNIA
APN 239-041-014

CIVIL COVER SHEET

SHEET C0.1 OF 4

\\fs01\T–Monterey\Monterey Projects\3472 – SLP LOT 143\DWG\DESIGN\3472–CIVIL.dwg Apr 13, 2017 – 10:32am

0 1 2 INCHES 3



KEYNOTES

1. EXISTING TREE TO BE REMOVED.
2. FIRE DEPARTMENT TURNAROUND.
3. STORM DRAIN OUTFALL ROCK SLOPE PROTECTION.
4. WOOD DECK; S.L.D. & S.A.D.
5. GRAVEL SURFACE; S.L.D.
6. CONCRETE PAVERS; S.L.D.
7. MONTEREY COUNTY STANDARD DISPERSAL TRENCH.
8. GRADED SWALE
9. PROPANE TANK; S.L.D.
10. 6" PERFORATED SUBDRAIN.

DISPERSAL TRENCH VOLUME CALCULATION		
IMPERVIOUS ROOF AREA (SQ.FT):	VOLUME REQUIRED (CF):	VOLUME PROVIDED (CF):
3622	489	492

REVISIONS:

NO.	BY:	DATE:	DESCRIPTION:

DATE: 4/14/17
SCALE: 1"=10'
ENGR: SJ
JOB NO: 3472.00

REGISTERED PROFESSIONAL ENGINEER RICHARD P. WEBER No. 55219 CIVIL STATE OF CALIFORNIA

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9699 Blue Larkspur Lane ▪ Suite 105 ▪ Monterey, CA 93940
831 649-5225 ▪ Fax 831 373-5065
CIVIL ENGINEERING ▪ LAND SURVEYING ▪ PROJECT MANAGEMENT

MONTEREY COUNTY CALIFORNIA

SLP 143- ST. SURE

GRADING AND DRAINAGE PLAN

APN 239-041-014

SHEET C1.1 OF 4

\\fs2012\T-Monterey\Monterey Projects\3472 - SLP LOT 143\DWG\DESIGN\3472-CIVIL.dwg Apr 13, 2017 - 10:33am

SEPTIC SYSTEM NOTES AND SPECIFICATIONS:

1. **CODES AND STANDARDS:** ALL WORK SHALL BE IN CONFORMANCE WITH:

1.1. 2013 CALIFORNIA PLUMBING CODE

1.2. MONTEREY COUNTY SEWAGE DISPOSAL ORDINANCE #04055

2. **SANITARY SEWER PIPE:** 4" SOLVENT–WELD ABS, OR 4" SOLVENT–WELD OR RUBBER GASKETED PVC PIPE WITH WATERTIGHT JOINTS, CONFORMING TO ONE OF THE FOLLOWING: ASTM D–2661; ASTM D–1785, SCH 40; ASTM D–3034, SCH 35; OR ASTM D–2729. PIPE SHALL BE PLACED AT 2% OR GREATER SLOPE.

3. **PERFORATED PIPE:** SOLVENT WELD PERFORATED PVC PIPE CONFORMING TO ONE OF THE FOLLOWING: ASTM D–1785, SCH 40; ASTM D–3034, SDR 35 OR SDR 25; OR ASTM D–2729; OR SOLVENT WELD PERFORATED ABS PIPE CONFORMING TO ASTM D–2661, SCH 40. PERFORATION PATTERN SHALL CONFORM TO AASHTO M–27 OR ASTM D–2729.

4. **DIVERSION VALVE:** 4"–DIA PVC VALVE WITH THREADED FEMALE SOCKETS DESIGNED FOR DIVERSION OF FLOWS TO SEPTIC FIELDS, AND OPERATED THROUGH A VERTICAL RISER USING A STANDARD WATER METER KEY. "BULL RUN VALVE" OR APPROVED EQUAL. VALVE RISER SHALL BE OF SAME MATERIAL AS SANITARY SEWER PIPE. IN PLANTER AREAS RISER SHALL TERMINATE 4" ABOVE THE SURFACE WITH WATER–TIGHT THREADED CLEANOUT PLUG. IN VEHICULAR AREAS, TERMINATE CLEANOUT PLUG IN A CHRISTY G03 TRAFFIC–RATED VALVE BOX, OR APPROVED EQUAL. INSTALL VALVE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND MONTEREY COUNTY SEWAGE DISPOSAL ORDINANCE #04055.

5. **DISTRIBUTION BOX:** PRECAST CONCRETE BOX WITH FLOWS EQUILIZED TO EACH OUTLET BY MEANS APPROVED BY AUTHORITY HAVING JURISDICTION. BOX SHALL BE 12"X12" OR LARGER (INSIDE DIMENSIONS), AND SHALL EXTEND TO THE SURFACE. BOX SHALL BE PLACED ON MIN. 4"–THICK CAST–IN–PLACE CONCRETE BASE, IF BASE IS NOT INTEGRAL WITH PRECAST BOX. BOX AND LID SHALL BE HS–20 VEHICLE LOAD RATED IF LOCATED IN VEHICULAR AREA. CONNECTIONS TO PIPES SHALL BE MADE USING FLEXIBLE CONNECTORS CONFORMING TO ASTM C–1644.

6. **SEPTIC TANK:** PRECAST CONCRETE SEPTIC TANK SHALL CONFORM TO MONTEREY COUNTY REQUIREMENTS, SHALL BE UPC CERTIFIED, AND SHALL CONFORM TO IAPMO/ANSI Z1000–2007. TANK, RISERS, AND LIDS SHALL BE HS–20 VEHICLE LOAD RATED IF LOCATED IN VEHICULAR AREA, OR RATED FOR A MINIMUM OF 500 PSF IF LOCATED OUTSIDE VEHICULAR AREAS, AND SOIL COVER IS 3 FEET OR LESS. CONNECTIONS TO PIPES SHALL BE MADE USING FLEXIBLE CONNECTORS CONFORMING TO ASTM C–1644. PRECAST SECTION JOINTS SHALL BE SEALED USING JOINT SEALANT OR GASKETS SUPPLIED BY MANUFACTURER. TANK AND APPURTENANCES SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. A TWO–WAY SEWER LINE CLEANOUT, WITH RISER TO THE SURFACE, LOCATED TWO FEET FROM THE INLET END OF THE SEPTIC TANK SHALL BE INSTALLED UNLESS MANHOLE RISERS TO THE SURFACE ARE OTHERWISE PROVIDED. INLINE EFFLUENT FILTERS SHALL BE INSTALLED. EFFLUENT FILTERS SHALL BE APPROVED BY THE MONTEREY COUNTY ENVIRONMENTAL HEALTH DEPARTMENT.

7. LEACH FIELDS SHALL MEET ALL MONTEREY COUNTY SETBACK REQUIREMENTS.

8. PROVIDE CLEANOUTS ON SANITARY SEWER LINES AT EACH AGGREGATE HORIZONTAL CHANGE IN DIRECTION EXCEEDING 135° AND AT INTERVALS NOT EXCEEDING 100'.

9. SS EJECTOR PUMP AND FORCE MAINS SHALL BE DESIGN/BUILD.

SEPTIC SYSTEM DESIGN CRITERIA:

NUMBER OF BEDROOMS = MAIN HOUSE(2) + CARETAKER HOUSE (2) + GUEST HOUSE (1)

REQUIRED SEPTIC TANK SIZE = 2,000 GAL (6 PERSONS)

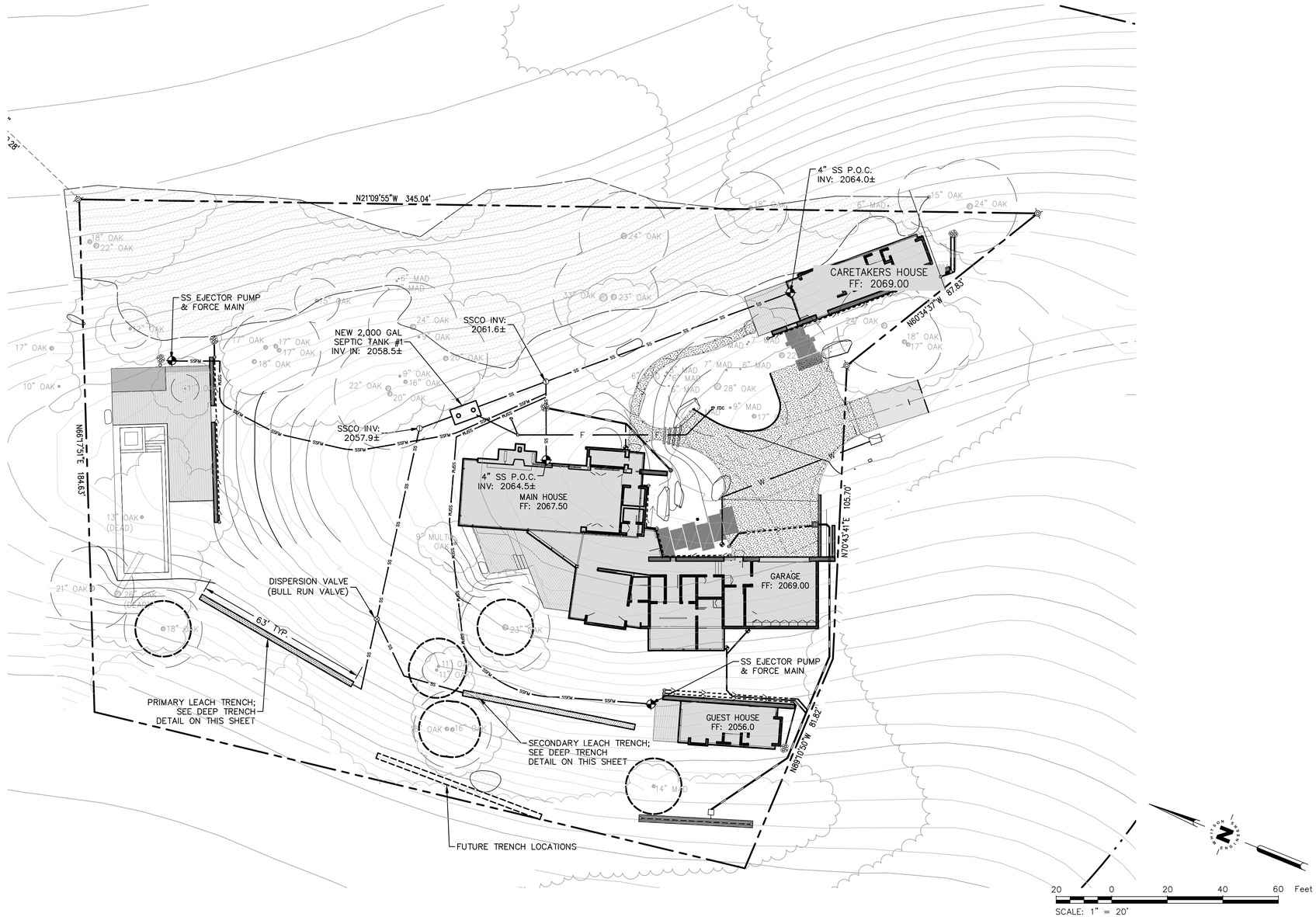
NUMBER OF PERSONS = 6

REQUIRED SEEPAGE AREA= 6 PERSONS X 75 GPD/PERSON / (3/10 GPD/SF)
= 1,500 SF

PROVIDED SEEPAGE AREA = 2 SIDEWALLS X 12' X 63'
= 1,512 SF

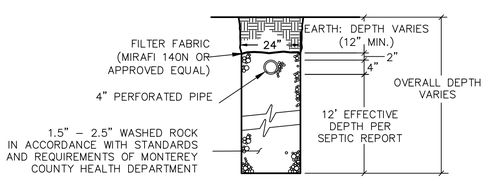
PROVIDED SECONDARY SEEPAGE AREA = SAME AS PRIMARY

FUTURE SEEPAGE AREA = SAME AS PRIMARY

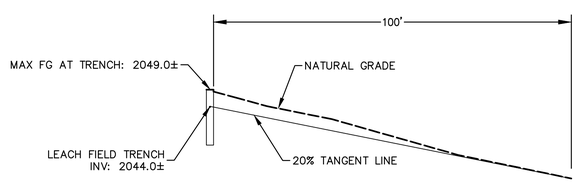


SEPTIC SYSTEM LEGEND:

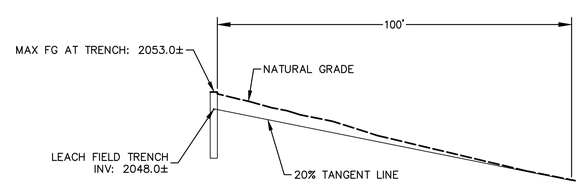
	SEPTIC TANK
	DIVERSION VALVE
	DISTRIBUTION BOX
	CLEANOUT
— SS —	4" SANITARY SEWER
	DEEP TRENCH
	FUTURE TRENCH
	SETBACK



A / C2.1 **LEACH FIELD TRENCH**
SCALE: NONE



1 / C2.1 **PRIMARY LEACH TRENCH**
SCALE: 1"=20'



2 / C2.1 **SECONDARY LEACH TRENCH**
SCALE: 1"=20'

PLANNING REVIEW ONLY
NOT FOR CONSTRUCTION

REVISIONS:

NO.	BY:	DATE:	DESCRIPTION:

DATE: 4/14/17
SCALE: 1"=20'
ENGR. SJ
JOB NO.: 3472.00

REGISTERED PROFESSIONAL ENGINEER RICHARD P. WEBER No. 55219 CIVIL STATE OF CALIFORNIA

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SLP 143- ST. SURE
MONTEREY COUNTY CALIFORNIA
APN 239-041-014

SEPTIC PLAN

SHEET C2.1 OF 4

\\192.172.1—Monterey\Monterey Projects\3472 – SLP LOT 143\CIVIL\DESIGN\3472–CIVIL.dwg Apr 13, 2017 – 10:34am

WATER POLLUTION CONTROL PLAN

1. ESTIMATED TOTAL DISTURBED AREA: 0.42 AC. THIS PLAN SHALL BE USED IN CONJUNCTION WITH THE PROJECT SWPPP.
2. BEST MANAGEMENT PRACTICES (BMPs) (MATERIALS AND THEIR INSTALLATION) SHALL CONFORM TO ONE OF THE FOLLOWING:
   - 2.1. THE 2011 EDITION OF THE CALTRANS STORM WATER QUALITY HANDBOOK / CONSTRUCTION SITE BMP MANUAL. THE HANDBOOK MAY BE DOWNLOADED FOR FREE AT http://www.dot.ca.gov/hq/construc/stormwater/documents/SWPPP_Prep_ManualJune2011.pdf
   - 2.2. THE 2011 EDITION OF THE CALIFORNIA STORMWATER BMP HANDBOOK PROMULGATED BY THE CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA). THE HANDBOOK MAY BE DOWNLOADED FOR A FEE FROM THE CASQA WEBSITE AT http://www.cabmphandbooks.com/
3. THE BMPs SHOWN ON THIS WATER POLLUTION CONTROL PLAN SHALL BE ADJUSTED OR SUPPLEMENTED AS REQUIRED TO PROTECT WATER QUALITY AND/OR AS DIRECTED BY THE ENGINEER OR JURISDICTION HAVING AUTHORITY.
4. THIS PLAN IS INTENDED TO BE USED FOR INTERIM WATER POLLUTION CONTROL ONLY AND IS NOT TO BE USED FOR FINAL ELEVATIONS OR PERMANENT IMPROVEMENTS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING BMPs PRIOR TO, DURING, AND AFTER STORM EVENTS, AND SHALL PROMPTLY CORRECT ANY DEFICIENCIES NOTED.
6. ALL PAVED AREAS SHALL BE KEPT CLEAN OF SOIL AND DEBRIS. REGULAR STREET SWEEPING IS REQUIRED. ADDITIONAL STREET SWEEPING MAY BE REQUIRED BY THE ARCHITECT/ENGINEER OR JURISDICTION HAVING AUTHORITY.
7. REASONABLE CARE SHALL BE TAKEN WHEN HAULING ANY EARTH, SAND, GRAVEL, STONE, DEBRIS, PAPER OR ANY OTHER SUBSTANCE OVER ANY PUBLIC STREET, ALLEY OR OTHER PUBLIC PLACE. ANY MATERIAL THAT IS TO BE HAULED OFF-SITE SHALL BE COVERED. SHOULD ANY BLOW, SPILL, OR TRACK OVER AND UPON SAID PUBLIC OR ADJACENT PRIVATE PROPERTY, IMMEDIATE REMEDY SHALL OCCUR.
8. KEEP ADDITIONAL EROSION AND SEDIMENT CONTROL SUPPLIES ON SITE IN CASE IMMEDIATE REPAIRS OR MODIFICATIONS ARE REQUIRED. THESE SUPPLIES MAY INCLUDE ADDITIONAL SLIT FENCING, FILTER FABRIC, HAY BALES, JUTE NETTING, BAGS AND TARPS.
9. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH.
10. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY FEDERAL, STATE, AND LOCAL AGENCY REQUIREMENTS.
11. PROVIDE TEMPORARY "EFFECTIVE SOIL COVER" ON ALL INACTIVE DISTURBED AREAS (AREAS WHICH HAVE NOT BEEN DISTURBED FOR AT LEAST 14 DAYS) PRIOR TO INSTALLATION OF FINAL LANDSCAPING, IF REQUIRED DUE TO PROJECT SCHEDULING.
12. PROVIDE WIND EROSION CONTROL AT ALL TIMES IN ACCORDANCE WITH BEST MANAGEMENT PRACTICE WE-1.
13. LIMIT THE USE OF PLASTIC MATERIALS WHEN MORE SUSTAINABLE, ENVIRONMENTALLY FRIENDLY ALTERNATIVES EXIST. WHERE PLASTIC MATERIALS ARE DEEMED NECESSARY, CONSIDER THE USE OF PLASTIC MATERIALS RESISTANT TO SOLAR DEGRADATION AND WHICH MAY BE RE-USED.
14. ESTABLISH AND MAINTAIN EFFECTIVE PERIMETER CONTROLS AND STABILIZE ALL CONSTRUCTION ENTRANCES AND EXITS TO SUFFICIENTLY CONTROL EROSION AND SEDIMENT DISCHARGES FROM THE SITE.
    - PROVIDE SILT FENCE AT CONSTRUCTION SITE PERIMETER WHERE RUNOFF LEAVES THE CONSTRUCTION SITE.
    - PROVIDE INLET PROTECTION AT ALL DRAIN INLETS.
15. ALL GRADING SHALL CONFORM TO THE MONTEREY COUNTY GRADING ORDINANCE #2535, EROSION CONTROL ORDINANCE #2806, AND CALIFORNIA BUILDING CODE.
16. PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE, THE OWNER/APPLICANT SHALL SCHEDULE AN INSPECTION WITH RMA-ENVIRONMENTAL SERVICES TO ENSURE ALL NECESSARY SEDIMENT CONTROLS ARE IN PLACE AND THE PROJECT IS COMPLIANT WITH MONTEREY COUNTY GRADING AND EROSION CONTROL REGULATIONS.
17. DURING CONSTRUCTION THE OWNER/APPLICANT SHALL SCHEDULE AN INSPECTION WITH RMA-ENVIRONMENTAL SERVICES TO UPDATE COMPACTION TEST RECORDS, INSPECT DRAINAGE DEVICE INSTALLATION, REVIEW THE MAINTENANCE AND EFFECTIVENESS OF BMPS INSTALLED, AS WELL AS, TO VERIFY THAT POLLUTANTS OF CONCERN ARE NOT DISCHARGED FROM THE SITE.
18. PRIOR TO FINAL INSPECTION, THE OWNER/APPLICANT SHALL SCHEDULE AN INSPECTION WITH RMA-ENVIRONMENTAL SERVICES TO CONDUCT A FINAL GRADING INSPECTION, COLLECT FINAL GEOTECHNICAL LETTER OF CONFORMANCE, ENSURE THAT ALL DISTURBED AREAS HAVE BEEN STABILIZED AND THAT ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES THAT ARE NO LONGER NEEDED HAVE BEEN REMOVED.
19. ALL OR PART OF THE CONSTRUCTION OF THIS PROJECT IS EXPECTED TO OCCUR DURING THE WINTER SEASON (OCTOBER 15TH THROUGH APRIL 15TH).
20. IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND THE PERMITTEE TO ENSURE THAT EROSION DOES NOT OCCUR FROM AN ACTIVITY DURING OR AFTER PROJECT CONSTRUCTION. ADDITIONAL MEASURES, BEYOND THOSE SPECIFIED, MAY BE REQUIRED AS DEEMED NECESSARY TO CONTROL ACCELERATED EROSION. (MCC 16.12.100)

QSD / QSP SCOPE OF WORK

THE SWPPP HAS BEEN PREPARED BY THE OWNER'S CIVIL ENGINEER. ONE ORIGINAL "FIELD COPY" SWPPP WILL BE PROVIDED TO THE CONTRACTOR BY THE OWNER, IN ADDITION TO ELECTRONIC (PDF) FILES.

THE CONTRACTOR SHALL:

1. SERVE AS THE QUALIFIED SWPPP PRACTITIONER (QSP), AND ALSO THE QUALIFIED SWPPP DEVELOPER (QSD) IF QSD SERVICES ARE REQUIRED DURING CONSTRUCTION
2. TRAIN ITS EMPLOYEES AND SUBCONTRACTORS AS REQUIRED BY THE CONSTRUCTION GENERAL PERMIT
3. MAINTAIN THE FIELD COPY SWPPP BINDER
4. PERFORM ALL STORM WATER INSPECTIONS, SAMPLING AND ANALYSIS
5. IMPLEMENT THE RAIN EVENT ACTION PLANS (REAPS)
6. PROVIDE A SPILL RESPONSE PLAN (TYPICALLY PART OF THE CONTRACTOR'S IIPP)
7. PROVIDE A STORMWATER ANNUAL REPORT TO THE OWNER EACH YEAR, AND PRIOR TO PROJECT COMPLETION
8. PROVIDE NOTICE OF TERMINATION DOCUMENTATION TO THE OWNER AT PROJECT COMPLETION
9. SERVE AS DATA SUBMITTER FOR THE OWNER FOR ON-LINE SUBMITTALS THROUGH THE STATE'S WEBSITE (SMARTS)
10. ASSIST THE OWNER IN COORDINATING WITH THE REGIONAL WATER QUALITY CONTROL BOARD AND STATE WATER RESOURCES CONTROL BOARD, AS NEEDED
11. IMPLEMENT ALL BEST MANAGEMENT PRACTICES (BMPS) AS NECESSARY TO PROTECT WATER QUALITY, AS REQUIRED BY THE CONSTRUCTION GENERAL PERMIT, AND AS OUTLINED IN THE PROJECT SWPPP (ALSO SEE SHEETS 40 AND 41)
12. PAY FOR NON-STORMWATER TESTING, IF REQUIRED DUE TO LEAKS OR SPILLS.
13. BE RESPONSIBLE FOR ANY FINES IMPOSED FOR FAILURE TO COMPLY WITH THE CONSTRUCTION GENERAL PERMIT OR OTHER LAWS, REGULATIONS, OR REQUIREMENTS OF THE VARIOUS JURISDICTIONS HAVING AUTHORITY.

GENERAL REQUIREMENTS

ACTUAL GRADING SHALL BEGIN WITHIN 30 DAYS OF VEGETATION REMOVAL OR THE AREA SHALL BE PLANTED TO CONTROL EROSION. VEGETATION REMOVAL BETWEEN OCTOBER 15TH AND APRIL 15TH SHALL NOT PRECEDE SUBSEQUENT GRADING OR CONSTRUCTION ACTIVITIES BY MORE THAN 15 DAYS.

1. THE FOLLOWING PROVISIONS SHALL APPLY BETWEEN OCTOBER 1 AND APRIL 30.
   - A. DISTURBED SURFACES NOT INVOLVED IN THE IMMEDIATE OPERATIONS MUST BE PROTECTED BY APPLYING STRAW MULCH AT 2000 LBS. PER ACRE AND ANCHORED BY TRACK-WALKING TO PREVENT MOVEMENT DURING WATER FLOW.
   - B. RUNOFF FROM THE SITE SHALL BE DETAINED OR FILTERED BY BERMS, VEGETATED FILTER STRIPS AND/OR CATCH BASINS TO PREVENT THE ESCAPE OF SEDIMENT FROM THE SITE. THESE DRAINAGE CONTROLS MUST BE MAINTAINED BY THE CONTRACTOR AS NECESSARY TO ACHIEVE THEIR PURPOSE THROUGHOUT THE LIFE OF THE PROJECT. SEE THIS SHEET FOR EROSION CONTROL PLAN AND EROSION CONTROL DETAILS.
   - C. EROSION CONTROL MEASURES SHALL BE IN PLACE AT THE END OF EACH DAY'S WORK.
   - D. THE BUILDING INSPECTOR SHALL STOP OPERATIONS DURING PERIODS OF INCLEMENT WEATHER IF HE DETERMINES THAT EROSION PROBLEMS ARE NOT BEING CONTROLLED ADEQUATELY.
   - E. CUT AND FILL SLOPES SHALL BE PLANTED WITH AN SEED MIX APPROVED BY THE LANDSCAPE ARCHITECT. AMOUNT OF SEED AND FERTILIZER SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
2. ALL SURFACES EXPOSED OR EXPECTED TO BE EXPOSED DURING GRADING ACTIVITIES SHALL BE PREPARED AND MAINTAINED THROUGH THE LENGTH OF THE ENTIRE PROJECT TO PROTECT AGAINST EROSION.
3. AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION, THE CONTRACTOR, WHEN HE OR HIS SUBCONTRACTORS ARE OPERATING EQUIPMENT ON THE SITE, SHALL PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE BY WATERING AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFINE DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE DONE BY DUST FROM HIS OR HER SUBCONTRACTOR.

OBSERVATION AND MAINTENANCE

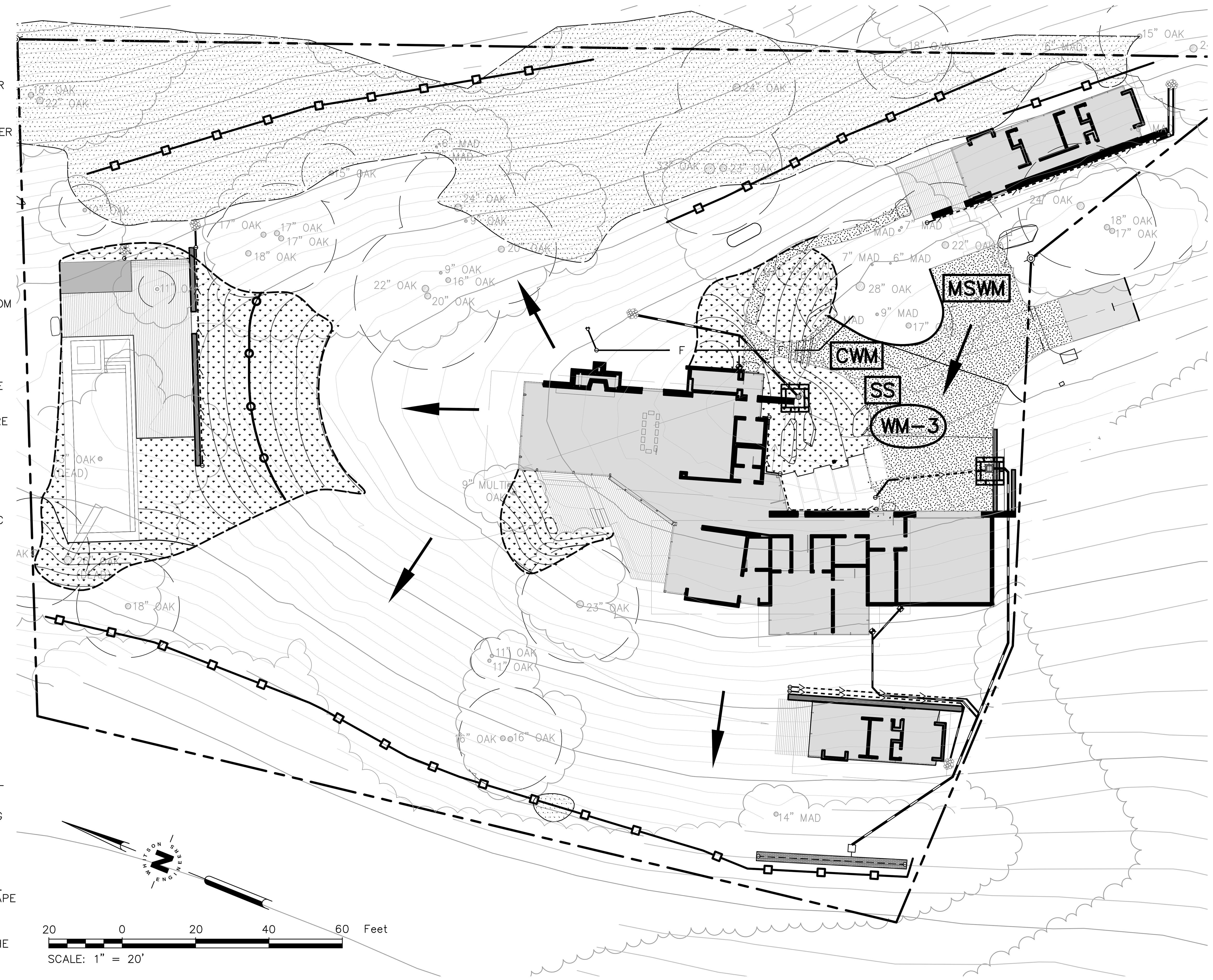
1. VISUALLY OBSERVE AND MAINTAIN BEST MANAGEMENT PRACTICES (BMPs) AS FOLLOWS:
   - A. WEEKLY, AND
   - B. WITHIN 48 HOURS PRIOR TO EACH STORM EVENT, AND
   - C. WITHIN 48 HOURS AFTER EACH STORM EVENT.
   - D. DAILY DURING STORM EVENTS
2. REPAIR DAMAGED BMPs WITHIN 48 HOURS OF OBSERVATION.
3. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL BMPs BEFORE SEDIMENT HAS ACCUMULATED TO A DEPTH OF ONE THIRD THE HEIGHT OF THE SEDIMENT BARRIER OR SUMP, IF NOT OTHERWISE SPECIFIED IN THE SPECIAL PROVISIONS OR BY THE BMP SUPPLIER OR MANUFACTURER.
4. TRASH AND DEBRIS SHALL BE REMOVED FROM BMPs DURING SCHEDULED INSPECTIONS.
5. REMOVED SEDIMENT SHALL BE PLACED AT AN APPROVED LOCATION AND IN SUCH A MANNER THAT IT WILL NOT ERODE, OR SHALL BE DISPOSED OF OFF-SITE.
6. REPAIR RILLS AND GULLIES BY RE-GRADING AND THEN TRACKWALKING PERPINDICULAR TO THE SLOPE. PROVIDE TEMPORARY SOIL COVER IF NECESSARY.

NON-STORM WATER DISCHARGES

1. NON-STORM WATER DISCHARGES INCLUDE A WIDE VARIETY OF SOURCES, INCLUDING IMPROPER DUMPING, SPILLS, OR LEAKAGE FROM STORAGE TANKS OR TRANSFER AREAS. NON-STORM WATER DISCHARGES MAY CONTRIBUTE SIGNIFICANT POLLUTANT LOADS TO RECEIVING WATERS, AND AS SUCH ARE PROHIBITED.
2. MEASURES TO CONTROL SPILLS, LEAKAGE, AND DUMPING, AND TO PREVENT ILLICIT CONNECTIONS DURING CONSTRUCTION, MUST BE TAKEN.
3. HOWEVER, CERTAIN NON-STORM WATER DISCHARGES MAY BE AUTHORIZED FOR THE COMPLETION OF CONSTRUCTION. AUTHORIZED NON-STORM WATER DISCHARGES MAY INCLUDE THOSE FROM DECHLORINATED POTABLE WATER SOURCES SUCH AS:
   - FIRE HYDRANT FLUSHING,
   - IRRIGATION OF VEGETATIVE EROSION CONTROL MEASURES,
   - PIPE FLUSHING AND TESTING,
   - WATER TO CONTROL DUST,
   - UNCONTAMINATED GROUND WATER FROM DEWATERING,
   - OTHER DISCHARGES NOT SUBJECT TO A SEPARATE GENERAL NPDES PERMIT ADOPTED BY A REGIONAL WATER BOARD.
4. THE DISCHARGE OF NON-STORM WATER IS AUTHORIZED UNDER THE FOLLOWING CONDITIONS:
   - THE DISCHARGE DOES NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD
   - THE DISCHARGE DOES NOT VIOLATE ANY OTHER PROVISION OF THE GENERAL PERMIT
   - THE DISCHARGE IS NOT PROHIBITED BY THE APPLICABLE BASIN PLAN
   - THE DISCHARGER HAS INCLUDED AND IMPLEMENTED SPECIFIC BMPS REQUIRED BY THE GENERAL PERMIT TO PREVENT OR REDUCE THE CONTACT OF THE NONSTORM WATER DISCHARGE WITH CONSTRUCTION MATERIALS OR EQUIPMENT
   - THE DISCHARGE DOES NOT CONTAIN TOXIC CONSTITUENTS IN TOXIC AMOUNTS OR (OTHER) SIGNIFICANT QUANTITIES OF POLLUTANTS
   - THE DISCHARGE IS MONITORED
5. IF ANY OF THE ABOVE CONDITIONS ARE NOT SATISFIED, THE DISCHARGE IS NOT AUTHORIZED.

EMPLOYEE TRAINING

1. STORM WATER POLLUTION PREVENTION TRAINING SHALL BE PROVIDED AT THE BEGINNING OF CONSTRUCTION AND REGULARLY DURING CONSTRUCTION FOR ALL EMPLOYEES WORKING ON THE JOB SITE. TRAINING SHALL BE PROVIDED BY THE CONTRACTOR'S WATER POLLUTION CONTROL MANAGER. TOPICS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
   - SPILL PREVENTION AND RESPONSE;
   - LOCATIONS AND FUNCTIONS OF SEDIMENT/EROSION CONTROL DEVICES;
   - GOOD HOUSEKEEPING;
   - FINES AND PENALTIES;
   - MATERIAL MANAGEMENT PRACTICES.



LEGEND

SYMBOL	CALTRANS BMP #	CALTRANS STD. PLAN	DESCRIPTION
	SS-9	–	EARTH DIKES, DRAINAGE SWALES AND LINED DITCHES
	SC-1, SC-5, SC-6	T51, T56, T60, T66	LINEAR SEDIMENT BARRIER: FIBER ROLLS, SILT FENCE, OR COMPOST SOCK (CONTRACTOR'S OPTION)
	SC-1	T51, T60	SILT FENCE
~~SC-7~~	SC-7	–	STREET SWEEPING
	SC-10	–	INLET PROTECTION
CWM	WM-8	T61, T62, T63, T64	CONCRETE WASTE MANAGEMENT (WASHOUT) AREA
	SS-3, SS-4, SS-5, SS-6, SS-7, SS-8	T59 –	SOIL STABILIZATION (PROVIDE ON ALL DISTURBED SOILS) TEMPORARY STABILIZATION PER CIVIL PLANS PERMANENT STABILIZATION PER LANDSCAPE DWGS
	TC-1, TC-3	T58	STABILIZED CONSTRUCTION ENTRANCE/EXIT OR TIRE WASH
MSWM	WM-1	–	MATERIAL STORAGE AND WASTE MANAGEMENT AREA
WM-3	WM-3	T53	TEMPORARY STOCKPILES
SS	WM-9	–	SANITARY FACILITIES
	–	–	DIRECTION OF DRAINAGE

PLANNING REVIEW ONLY
NOT FOR CONSTRUCTION

REVISIONS:

NO.	BY:	DATE:	DESCRIPTION:
1			

DATE: 4/14/17
SCALE: 1"=20'
ENGR. SJ
JOB NO.: 3472.00

REGISTERED PROFESSIONAL ENGINEER ★ RICHARD P. WEBER No. 55219 CIVIL ★ STATE OF CALIFORNIA

WE WHITSON ENGINEERS
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SLP 143- ST. SURE

MONTEREY COUNTY CALIFORNIA

TEMPORARY EROSION CONTROL PLAN

APN 239-041-014

SHEET **C3.1** OF 4

0 1 2 INCHES 3

\\fs2012\T-Monterey\Monterey Projects\3472 - SLP LOT 143\CIVIL\DESIGN\3472-CIVIL.dwg Apr 13, 2017 - 10:35am

1A GRAVEL PAVING - VEHICULAR
1B GRAVEL PAVING - PEDESTRIAN
2 FLAGSTONE
3 CONCRETE PAVING
4 TIMBER DECKING
5 TIMBER DECKING (BY ARCHITECT)
6 TIMBER STEPS
7 CONCRETE LANDSCAPE WALLS
8 STEEL EDGE TO 18"H
9 POOL
10 CONCRETE FIREPIT
11 LANDSCAPE BOULDERS
12 STONE WATER FEATURE
PROPOSED TREES TO BE REMOVED

NOTES:

- Please refer to the Arborist report for trees to be removed + tree protective fencing with tree preservation notes.

- Please refer to the Civil plans for proposed contours, grading and drainage + septic information.

NORTH

0' 8' 16' 32'

bernard trainor + associates
LANDSCAPE ARCHITECTURE

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Monterey, CA 93940

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fax: 831.655.3462

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PRELIMINARY COORDINATION-
NOT FOR CONSTRUCTION

PROJECT NAME
St. Sure-Walsh Residence

SLP Lot 143
Carmel, CA

APN: 239-041-014

ISSUE SET
Monterey County Submittal

ISSUE DATE
04.14.2017

PREVIOUS ISSUE

REV.	DESCRIPTION	DATE

DRAWING TITLE
Site Plan

SCALE: 1/16"=1'-0"
DRAWN BY: VS

SHEET NUMBER
L1.0

PLANT LEGEND

Symbol	Quantity	Botanical Name	Common Name	Container Size
TREES:				
	10	Quercus agrifolia	Coast Live Oak	48"-72" Box
RESTORATION LIST:				
	20%	Agrostis pallens	Seashore Bent Grass	seed
	20%	Danthonia californica	California Oatgrass	seed
	10%	Eschscholzia californica	California Poppy	seed
	25%	Festuca idahoensis	Idaho Fescue	seed
	20%	Koeleria macrantha	Junegrass	seed
	5%	Lupinus nanus	Sky Lupine	seed
SHRUBS				
	44	Chondropetalum elephantinum	Large Cape Rush	5 gal
	142	Muhlenbergia rigens	Deer Grass	1 gal

PLANTING NOTES

1. All areas of the property shall be treated and managed to eliminate, as reasonably possible, invasive plant materials.

2. Contractor shall be responsible for making themselves familiar with all underground utilities, pipes, and structures. Contractor shall take responsibility for any cost incurred due to damage of said utilities.

3. Contractor shall not willfully proceed with construction as designed when it is obvious that unknown obstructions and/or grade differences exist in planting areas. Such conditions shall be immediately brought to the attention of the Construction Manager.

4. Contractor shall be responsible for any coordination with subcontractors as required to accomplish planting operations.

5. Contractor shall submit a random soil samples from the site to a qualified soil testing lab for a horticultural suitability test and amendment recommendations. After amending topsoil to a depth of 8" (and in accordance with soil test recommendations), grade all areas smooth with no localized depressions or humps exceeding 1". Insufficient or unsuitable existing soil shall be augmented or replaced with topsoil as approved by the Landscape Architect.

6. All plant material shall be approved by Landscape Architect prior to installation.

7. Contractor to complete all soil amending, finish grading and removal of any and all construction debris from the planting areas before the laying out of approved plant material.

8. Contractor shall layout all plants in their containers as per this Plan and receive approval from Landscape Architect prior to installation.

9. Contractor shall notify Construction Manager + Landscape Architect 48 hours prior to commencement of work to coordinate project inspection schedules.

10. Any plant substitutions must be approved by the Landscape Architect for approval or alternate choices.

11. All plants shall be healthy, pest and disease free, free of girdling roots and well established in the container.

12. Mycorrhizal inoculate organic fertilizer shall be applied during planting as per manufacturers recommendations. Use "Green Diamond Mykos Start Pro" (4-2-2 organic fertilizer) or approved equal.

13. Trees shall be located a minimum of 4 ft. from walls, overheads, walks, headers and other trees within the project, unless shown otherwise.

14. No plant shall be planted with rootballs or planting pits in a dry condition.

15. Water all plants by handheld hose with watering wand attachment immediately after planting (no water 'jetting'). No plant should be out of it's container more than twenty minutes before being planted and watered. Contractor shall be responsible for irrigating all new plantings until the entire project has been completed and accepted by the Owner.

16. Contractor is responsible to apply sufficient but not excess irrigation to all new plantings to ensure healthy plant establishment.

17. Backfill mix shall consist of 1/3 imported organic compost and 2/3 amended site soil.

18. Immediately after excavation of plant pits, test drainage of pits by filling with water. Give written notification of conditions permitting the retention of water in pits for more that (3) hours. Contractor shall submit to Owner and Landscape Architect for acceptance a written proposal and cost estimate for the correction of poor drainage conditions before proceeding with planting.

19. All newly planted container plants and trees shall receive watering basins 3 times the size of the root ball upon planting, unless otherwise shown on drawings.

20. Planting areas shall receive a 2" layer of mulch, unless noted otherwise. Verify specification with Landscape Architect.

21. Mulch shall be kept at a maximum depth of 2" deep near the plant crowns and trunks, and not extend higher than 1/8" onto the crown or trunk of any newly planted plant or tree.

22. All plant material shown on the Planting Plan is subject to the adverse effects of Nature including, but not limited to, fire, earthquake, flooding, freeze, drought, erosion and foraging predators. The Landscape Architect cannot, and does not, guarantee or imply warranty that specified plants will survive these Acts of Nature. All plants specified satisfy the general climatic conditions set forth by the U.S. Department of Agriculture and the Sunset Western Garden Book.

IRRIGATION NOTE:

- Trees, Shrubs and Groundcovers to receive drip irrigation. Hydroseed Mix to receive temporary spray irrigation.

FUEL MANAGEMENT PLAN:

ATTACHED SEPERATELY, PREPARED BY:

Carol L. Rice
Fire Ecologist

CarolIrice@AOL.com
(510) 502-4737
(925) 944-5282 Office

NORTH

0' 8' 16' 32'

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PRELIMINARY COORDINATION-
NOT FOR CONSTRUCTION

PROJECT NAME
St. Sure-Walsh Residence

SLP Lot 143
Carmel, CA

APN: 239-041-014

ISSUE SET
Monterey County Submittal

ISSUE DATE
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PREVIOUS ISSUE
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SCALE: 1/16"=1'-0"
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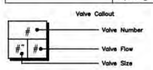
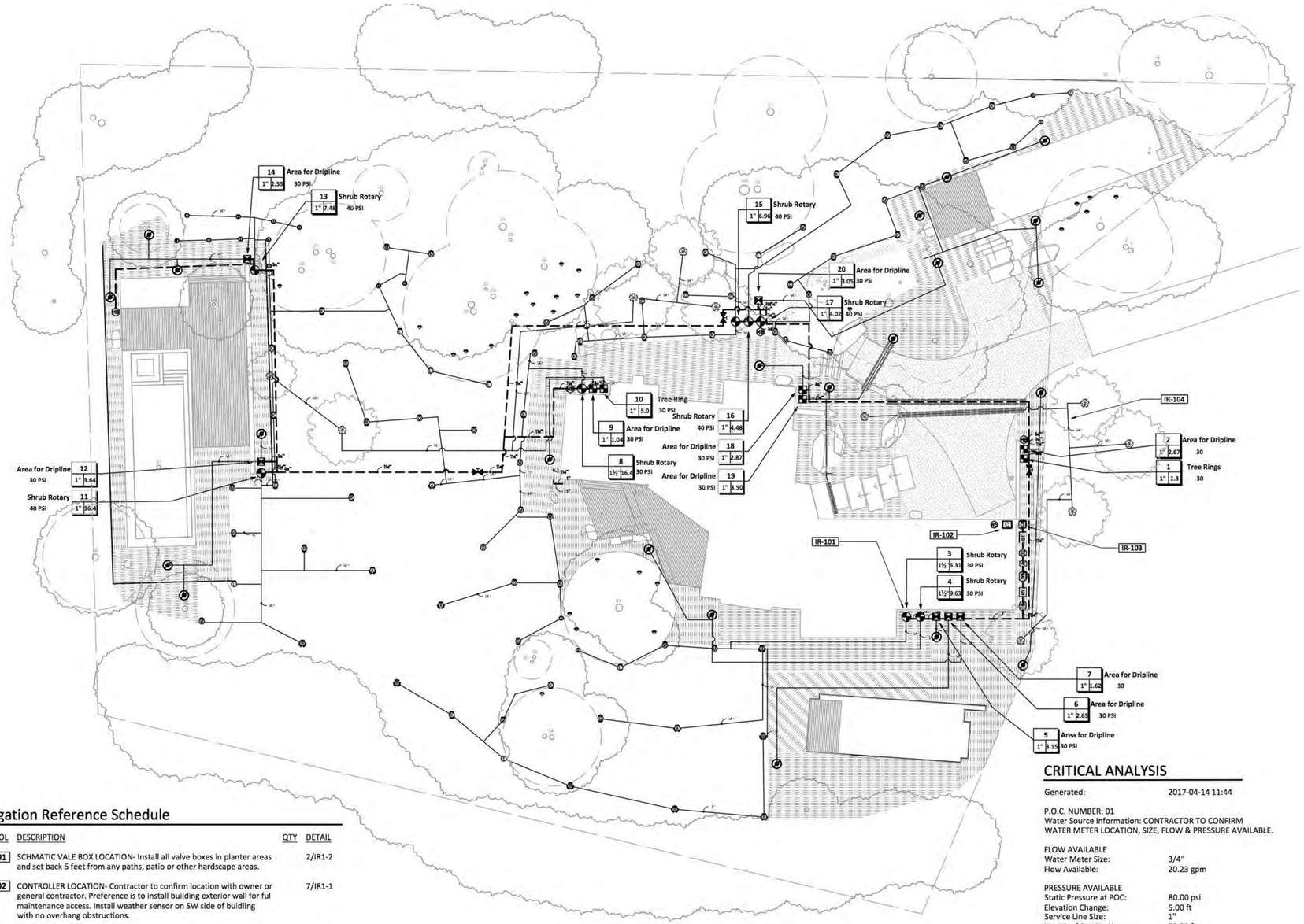
IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI	
M L O	Hunter MP1000 RAIN BIRD 1812-SAM-PRS-P45 Shrub Rotator, 12" pop-up with check valve, pressure regulated to 45 psi MP Rotator nozzle . M=Maroon adj arc 90 to 210, L=Light Blue 210 to 270 arc, O=Olive 360 arc on SAM-PRS-45 BODY	40	
M G K	Hunter MP2000 RAIN BIRD 1812 SAM-PRS-45 BODY Shrub Rotator, 12" pop-up with check valve, pressure regulated to 45 psi MP Rotator nozzle. K=Black adj arc 90-210, G=Green adj arc 210-270, R=Red 360 arc on SAM-PRS-45 BODY	40	
Y A A	Hunter MP3000 RAIN BIRD 1812 SAM-PRS-45 BODY Shrub Rotator, 12" pop-up with check valve, pressure regulated to 45 psi MP Rotator nozzle.B=Blue adj arc 90-210, Y=Yellow adj arc 210-270, A=Gray 360 arc on PRS40 body.	40	
OR ADJ / OR 360	Hunter MP800SR RAIN BIRD 1812 SAM-PRS-45 BODY Shrub Rotator, 12" pop-up with check valve, pressure regulated to 45 psi MP Rotator nozzle. OR = Orange adj arc 90 to 210. SAM-PRS-45 BODY	40	
T	Hunter MP Corner RAIN BIRD 1812 SAM-PRS-45 BODY Shrub Rotator, 12" (30.48 cm) pop-up with factory installed check valve, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle. T=Turquoise adj arc 45-105 on PRS40 body.	40	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION		DETAIL
	Rain Bird LFV-100 1" Low Flow DV Drip Kit. Install in Carson 1724 Valve Box. Max 2 per box. Paint lid to match mulch.		1/IR1-3
	Rain Bird XCZ-100-PRB-LC 1" PGA Valve, with 1" Pressure Regulating 40psi Basket Filter. 5gpm to 20gpm. Install 1 per Carson 1724 valve box. Paint lid to match mulsch or top dress.		2/IR1-3
	Pipe Transition Point PVC to 1/2" poly pipe transition point.		8/IR1-3
	Drip Tree Ring - 3 each rings Tree Drip Ring Toro RGP-212 .53 GPH. Install per detail. Install 4 each Rootwell 318C evenly around the root ball. Contact Imperial Sprinkler 925-667-2190		9/IR1-3
0.5 1.0 2.0	Toro T-DPC-DC Emitter Drip emitter Single Outlet Emitter. Self-Flushing, Pressure Compensating, with Color-Coded Dust Cap. 0.5GPH=Blue; 1.0GPH=Black; 2.0GPH=Red. 2 per 1 gallon plant 3 per 5 gallon plant Bury all 1/2" drip line 4" and all 1/4" drip line 2" below finish grade. 3" mulch over finish grade.		7/IR1-3
	Area to Receive Dripline Toro RGP-218 (24) Sub-Surface Pressure Compensating Landscape Dripline with ROOTGUARD technology. 0.53GPH emitters at 18.0" O.C. Dripline laterals spaced at 24.0" apart, with emitters offset for triangular pattern.		4/IR1-3
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION		DETAIL
	Toro P220-26-O GLOBE Electric, 1", 1-1/2", 2" and 3" Plastic In-Line Remote Control Valve. Equipped to withstand pressure up to 220 PSI. Filter screen on 2" and 3" models. Standard Solenoid. Globe Body Style.		1/IR1-2
	Nibco T-113 Brass Shut off valve Class 125 bronze gate manual control valve with wheel handle, same size as mainline pipe diameter at valve location. Size Range - 1" - 3"		3/IR1-1
	Buckner-Superior B400 Bent Nose Garden Valve. 3/4" x 1/2" Female NPT Hose Bibb, Red Brass.		4/IR1-2
	Matco-Norca 770S PVC White Ball Valve for Sch 40 and Sch 80 Pipe, solvent slip ends with "T" Handle, same size as mainline. 1/2" to 4". Install in Carson valve box per detail		5/IR1-2
MV	Buckner-Superior 3100 1" Normally Open Brass Master Valve that Provides Dirty Water Protection. Install in Carson 1419 Valve Box. Paint lid to match mulch or gravel. Set up at controller.		4/IR1-2
A	Air Relief Valve Air Releif Valve. Netafim 1" MPT. Model Guardian 65ARIA100. Install in high point in mainline, place in Carson 10" round valve box.		6/IR1-2
BF	Zurn 375 1" Reduced Pressure Principle Assembly & VIT Back Flow Cage Model SBC-XXCR with frost blanket. Size to match backflow preventer dimensions.		2/IR1-1
C	Hunter IC-3000-M Modular Controller, 30 stations, Outdoor Model, Metal Cabinet. With four ICM-600 modules included. Install on exterior wall for full maintenance access.		7/IR1-1
WS	Hunter WSS Solar Sync Wireless Solar Sync, rain freeze sensor with outdoor interface, connects to Hunter PCC, Pro-C, and I-Core Controllers, install as noted. Includes 10 year lithium battery and rubber module cover, and gutter mount bracket. Place on SW side of building in full sun.		7/IR1-1
FS	Creative Sensor Technology FSI-T10-001 1" PVC tee type flow sensor w/socket ends. 2 wire digital output compatible w/all irrigation controllers. Flow range: .86-52 GPM. Install Paige P7171D twisted pair communication wire in 3/4" sch 80 conduit from flow sensor to controller. Set up flow sensor at controller. Contact Toro for assistance.		5/IR1-1
Wh	Landscape Water Meter Rain Bird Water Meter Model FM075B. Brass Landscape Water Meter 5/8". Flow 0.50-30 GPM. Install in Carson 1419 Valve Box.		6/IR1-1
#OR	Water Meter 3/4" CONTRACTOR TO CONFIRM WATER METER LOCATION, SIZE, FLOW & PRESSURE AVAILABLE.		1/IR1-1
	Irrigation Lateral Line: PVC Class 200 SDR 21 Install all lateral lines a minimum of 12" below grade, 12" under all walkways and a minimum of 24" under driveways.		9/IR1-1
	Irrigation Mainline: PVC Schedule 40 Install all main lines a minimum of 18" below grade, 18" under all walkways and a minimum of 36" under driveways.		8/IR1-1
	Pipe Sleeve: CPVC Schedule 40 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall be 2x size of insert pipe. Extend sleeves 18 inches beyond edges of paving or construction.		8/IR1-1





Irrigation Reference Schedule

SYMBOL	DESCRIPTION	QTY	DETAIL
IR-101	SCHMATIC VALE BOX LOCATION- Install all valve boxes in planter areas and set back 5 feet from any paths, patio or other hardscape areas.		2/IR1-2
IR-102	CONTROLLER LOCATION- Contractor to confirm location with owner or general contractor. Preference is to install building exterior wall for ful maintenance access. Install weather sensor on SW side of buidling with no overhang obstructions.		7/IR1-1
IR-103	POINT OF CONNECTION- Contractor to confirm POC location, size of water meter, static pressure and flows available. If location is different indicate on as built plans. If meter size or static pressure available is under 50 psi notify Landscape Architect prior to proceeding with irrigation.		1/IR1-1
IR-104	HOMELAND BOUNDARY - All irrigation outside homeland boundary is temporary and must be installed on grade.		

CRITICAL ANALYSIS

Generated:	2017-04-14 11:44

P.O.C. NUMBER: 01
Water Source Information: CONTRACTOR TO CONFIRM WATER METER LOCATION, SIZE, FLOW & PRESSURE AVAILABLE.

FLOW AVAILABLE	
Water Meter Size:	3/4"
Flow Available:	20.23 gpm

PRESSURE AVAILABLE	
Static Pressure at POC:	80.00 psi
Elevation Change:	5.00 ft
Service Line Size:	1"
Length of Service Line:	20.00 ft
Pressure Available:	76.00 psi

DESIGN ANALYSIS	
Maximum Station Flow:	16.40 gpm
Flow Available at POC:	20.23 gpm
Residual Flow Available:	3.83 gpm

Critical Station:	8
Design Pressure:	40.00 psi
Friction Loss:	3.09 psi
Fittings Loss:	0.30 psi
Elevation Loss:	0.00 psi
Loss through Valve:	3.90 psi
Pressure Req. at Critical Station:	47.29 psi
Loss for Fittings:	0.65 psi
Loss for Main Line:	6.50 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	14.00 psi
Loss for Master Valve:	1.81 psi
Loss for Water Meter:	4.34 psi
Critical Station Pressure at POC:	74.59 psi
Pressure Available:	76.00 psi
Residual Pressure Available:	1.41 psi

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IRRIGATION NOTES:

POINT OF CONNECTION (P.O.C).

1. CONNECT IRRIGATION MAINLINE TO MAIN WATER SUPPLY (SEE CIVIL OR ARCHITECTURAL DRAWINGS FOR LOCATION). LANDSCAPE CONTRACTOR TO VERIFY LOCATION, SIZE, FLOW AND PRESSURES AVAILABLE AND TO NOTIFY LANDSCAPE ARCHITECT OF ANY NECESSARY CHANGES NEEDED TO BE MADE SO THAT THE IRRIGATION SYSTEM PERFORMS TO AN IRRIGATION EFFICIENCY OF A MINIMUM OF 81 PERCENT.
2. SYSTEM MAXIMUM OPERATING PRESSURES. 80 PSI (AT P.O.C) INSTALL PRESSURE REDUCER IF PRESSURES EXCEED EQUIPMENT MANUFACTURERS SUGGESTED MAXIMUM OPERATING PRESSURES.
3. SYSTEM MINIMUM OPERATING PRESSURES. 40 PSI (AT P.O.C)

TEMPORARY TREE IRRIGATION.

TREES OUTSIDE HOMELAND BOUNDARY SHALL HAVE TEMPORARY IRRIGATION INSTALLED. INSTALL ALL IRRIGATION ABOVE GRADE FOR EASY REMOVAL ONCE TREES ARE ESTABLISHED.

IRRIGATING AROUND EXISTING TREES.

ANY IRRIGATION (MAINLINE OR LATERALS) WITH IN DRIP LINES OF EXISTING TREES SHALL BE FIELD APPROVED BY CONSULTING ARBORIST AND OR LANDSCAPE ARCHITECT PRIOR TO ANY TRENCHING WORK COMMENCES. HAND TRENCH AND OR FOLLOW ALL ARBORISTS/LANDSCAPE ARCHITECTS RECOMMENDATIONS.

DO NOT STACK OR STORE ANY MATERIALS, EQUIPMENT OR MACHINERY UNDER DRIP LINE OF EXISTING TREES.

ALL IRRIGATION IS FOR LANDSCAPE ESTABLISHMENT PURPOSES ONLY AND OR FOR SUPPLEMENTAL IRRIGATION DURING EXTREMELY DRY SEASON.

MWELO NOTES

CERTIFICATION OF COMPLETION REQUIREMENTS

UPON COMPLETION OF LANDSCAPE AND IRRIGATION INSTALLATION THE LANDSCAPE CONTRACTOR SHALL SUBMIT THE FOLLOWING AS REQUIRED BY CALIFORNIA MODEL WATER EFFICIENT LANDSCAPE ORDINANCE. (MWELO)

1. PROJECT INFORMATION SHEET.
2. CERTIFICATION FROM LANDSCAPE ARCHITECT FOR INSTALLATION ACCORDING TO THE APPROVED LANDSCAPE DOCUMENTATION PACKAGE.
3. SOIL MANAGEMENT REPORT AND RECEIPTS FOR SOIL IMPROVE PRODUCTS.
4. LANDSCAPE MAINTENANCE MANAGEMENT REPORT.
5. IRRIGATION MAINTENANCE MANAGEMENT REPORT.
6. IRRIGATION SCHEDULE FOR NEW AND ESTABLISHED PLANT MATERIALS
7. IRRIGATION AUDIT REPORT INDICATING SITE IRRIGATION EFFICIENCY, IRRIGATION DISTRIBUTION UNIFORMITY, ALL INSTALLED EQUIPMENT COMPLIES WITH APPROVED MWELO GUIDELINES.
8. CERTIFICATE OF COMPLETION (COC) FORM.

CONTACT LOCAL ENFORCING AGENCY FOR APPROVED SUBMITTAL FORMS AND PROCEDURES.

"I HAVE FOLLOWED THE DESIGN CRITERIA OF THE MODEL WATER EFFICIENT
LANDSCAPE ORDINANCE AND APPLIED THEM TO THIS DESIGN."
ANDREW BOLT 4/14/2017

PROJECT NAME
St. Sure-Walsh Residence

SLP Lot 143
Carmel, CA

APN: 239-041-014

ISSUE SET
Monterey County Submittal

ISSUE DATE
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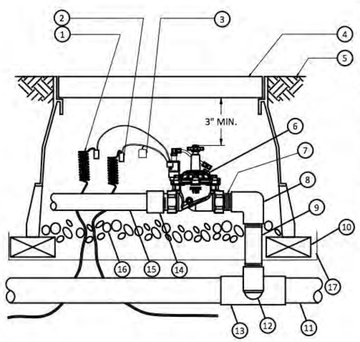
DRAWING TITLE
Irrigation Plan

SCALE: 1/16"=1'-0"
DRAWN BY: AB

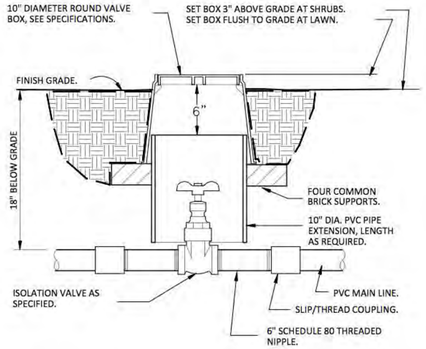
SHEET NUMBER
L4.0



1. 30-INCH LINEAR LENGTH WIRE, COILED
2. WATERPROOF CONNECTION 3M DBYR
3. CHRISTY ID TAG
4. VALVE BOX WITH COVER
5. FINISH GRADE/TOP OF MULCH
6. CONTROL VALVE: SUPERIOR 3200 SERIES VALVE
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL
9. PVC SCH 80 NIPPLE (AS REQ'D LENGTH)
10. BRICK (1 OF 4)
11. PVC MAINLINE PIPE
12. SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
13. PVC SCH 40 TEE OR ELL
14. PVC SCH 40 MALE ADAPTER
15. PVC LATERAL PIPE
16. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
17. WIRE MESH

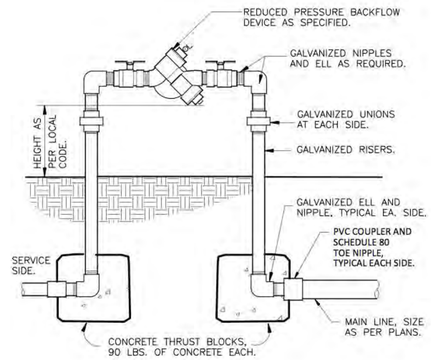
4 BUCKNER SUPERIOR N/C 3200 MASTER VALVE

NTS — AB–IR–VAL–08



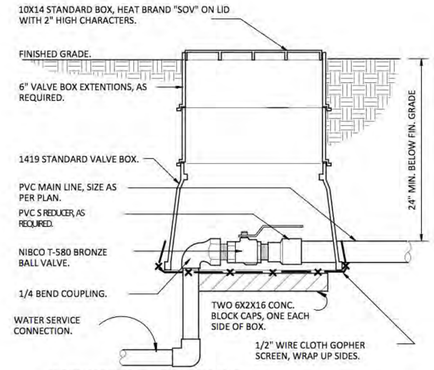
3 BRASS ISOLATION VALVE

1 1/2" = 1'–0" — AB–IR–VAL–02



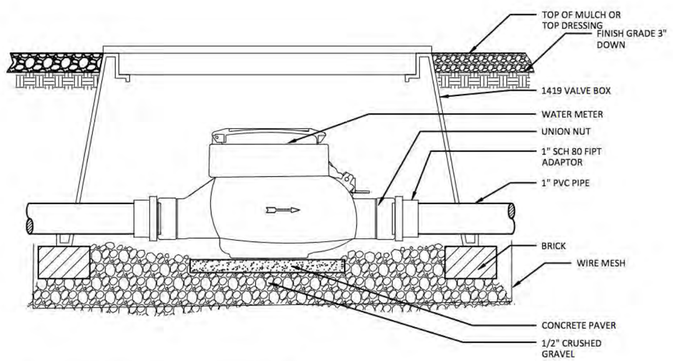
2 REDUCED PRESSURE BACKFLOW DEVICE

1" = 1'–0" — AB–IR–BAC–03



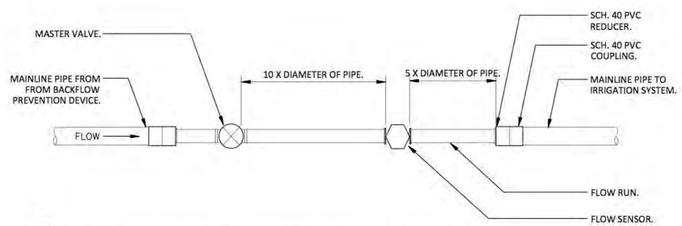
1 WATER SERVICE CONNECTION

NTS — AB–IR–BAC–10



6 LANDSCAPE WATER METER

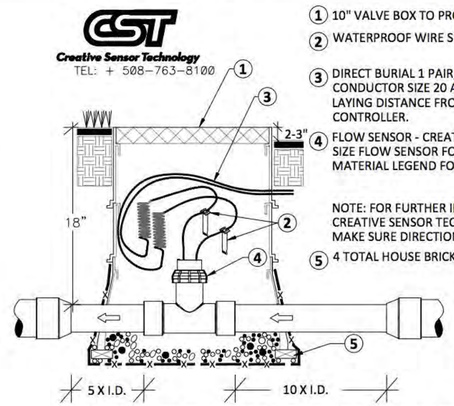
1" = 1" — AB–IR–VAL–WATMET–01



NOTES:
1- FLOW SENSOR SHALL BE OF MAKE AND MODEL AS RECOMMENDED BY THE CONTROLLER MANUFACTURER.
2- FLOW SENSOR WIRE SHALL BE PER MANUFACTURER'S SPECIFICATIONS.
3- MASTER VALVE WIRE SHALL BE DIRECT BURIAL 14 AWG WIRE (OR LARGER). COLOR: BLACK.
4- ALL WIRE RUNS SHALL BE CONTINUOUS WITHOUT ANY SPLICES.
5- SEE MASTER VALVE DETAIL AND FLOW SENSOR DETAIL FOR FURTHER INFORMATION.
6- FLOW RUN PIPE SHALL BE REDUCED DOWN ONE (1) PIPE SIZE AS INDICATED.
EXAMPLE
3" MAINLINE = 2-1/2" FLOW RUN
2-1/2" MAINLINE = 2" FLOW RUN
2" MAINLINE = 1-1/2" FLOW RUN

5 MASTER VALVE AND FLOW SENSOR LAYOUT

DO NOT SCALE — AB–IR–VAL–57



1. 10" VALVE BOX TO PROVIDE ACCESS.
2. WATERPROOF WIRE SPLICE, 3M DBYR OR EQUIVALENT.
3. DIRECT BURIAL 1 PAIR, TWISTED SHIELDED CABLE MINIMUM CONDUCTOR SIZE 20 AWG. DO NOT EXCEED 2,000 FEET IN LAYING DISTANCE FROM FLOW SENSOR TO IRRIGATION CONTROLLER.
4. FLOW SENSOR - CREATIVE SENSOR TECHNOLOGY SERIES FSI-TXX. SIZE FLOW SENSOR FOR GPM REQUIREMENTS OF SYSTEM. SEE MATERIAL LEGEND FOR SIZE SPECIFIED.

NOTE: FOR FURTHER INSTALLATION INSTRUCTIONS REVIEW CREATIVE SENSOR TECHNOLOGY INSTALLATION LITERATURE. MAKE SURE DIRECTION ARROW POINTS IN DIRECTION OF FLOW.

5. 4 TOTAL HOUSE BRICKS FOR SUPPORT

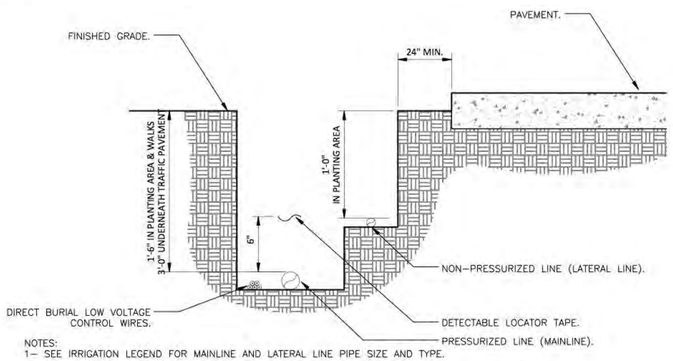
SIZING CHART:

MODEL#	SIZE	OPERATING RANGE-GPM
FSI–T10	1"	0.8 – 50
FSI–T10	1 1/2"	1.8 –108
FSI–T10	2"	2.8 –170

INSTALL TEE ON PIPE WITH AT LEAST 10 PIPE DIAMETERS OF STRAIGHT PIPE UPSTREAM AND 5 PIPE DIAMETERS OF STRAIGHT PIPE DOWNSTREAM OF THE SENSOR.

5 CST TEE MOUNT FLOW SENSOR INSTALLATION

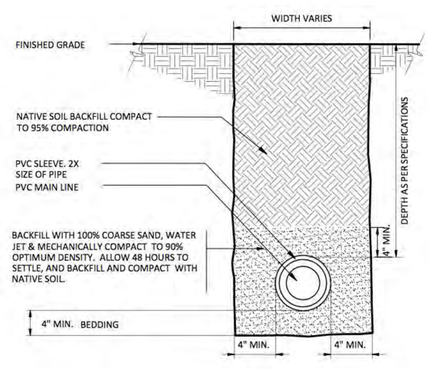
N.T.S. — AB–IR–FLO–06



NOTES:
1– SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2– DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT IF REQUIRED.
3– 2–WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
4– DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

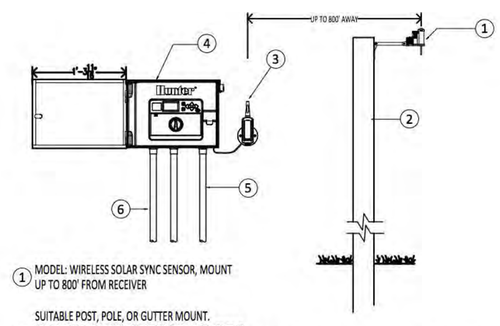
9 IRRIGATION TRENCHING

1 1/2" = 1'–0" — AB–IR–BAC–08



8 MAINLINE & SLEEVING

1 1/2" = 1'–0" — AB–IR–BAC–07



1. MODEL: WIRELESS SOLAR SYNC SENSOR, MOUNT UP TO 800' FROM RECEIVER
2. SUITABLE POST, POLE, OR GUTTER MOUNT. MOUNT IN LOCATION WHERE SENSOR CAN RECEIVE FULL SUN, IS OPEN TO RAINFALL AND OUT OF SPRINKLER SPRAY PATTERN
3. MODEL: SOLAR SYNC MODULE MOUNT LESS THAN 6' AWAY FROM CONTROLLER.
4. HUNTER I-CORE CONTROLLER METAL CABINET
5. VALVE CONTROL WIRE CONDUIT
6. POWER SOURCE

7 HUNTER ICORE-METAL CABINET

NTS — AB–IR–IRR–18

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PRELIMINARY COORDINATION-
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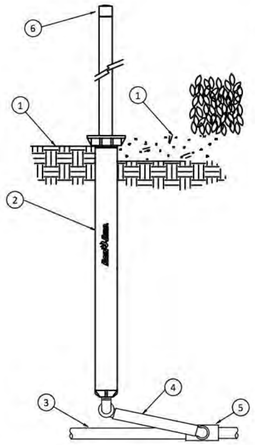
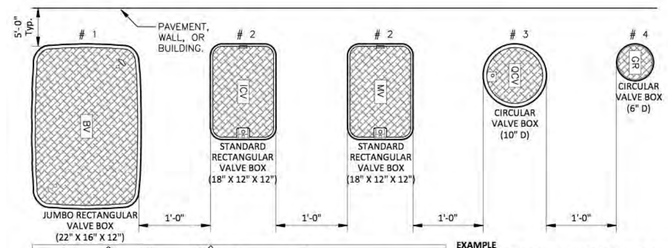
SHEET NUMBER
L4.1



1. FINISH GRADE/TOP OF MULCH
2. POP-UP SPRAY SPRINKLER: RAIN BIRD RD-012. SET 3" ABOVE GRADE IN MULCH AREA. SET 24" FROM NON PERMEABLE SURFACES.
3. PVC LATERAL PIPE
4. SWING ASSEMBLY: RAIN BIRD MODEL SA 6050
5. PVC SCH 40 TEE OR ELL
6. APPROVED SPECIFIED NOZZLE

3 RAIN BIRD RD-12 SAM-PRS POP UP

NTS AB–IR–SPR–03



Water type	Controller	Designation	Box size	Lid Color	IDENTIFICATION GUIDE	
PW	A	MV	# 2	Match top dress	Master valve	
PW	A	FS	# 2	Match top dress	Flow sensor	
PW	A	HM	# 2	Match top dress	Hydrometer	
PW	A	BV	# 2	Match top dress	Ball valve 3" or less	
PW	A	BV	# 1	Match top dress	Ball valve 4" or more	
PW	A	GV	# 2	Match top dress	Gate valve	
PW	A	ARV	# 2	Match top dress	Air release valve	
PW	A	QCV	# 3	Match top dress	Quick coupler valve	
PW	A	RCV	# 2	Match top dress	Remote control valve	
PW	A	MS	# 2	Match top dress	Moisture sensor	
PW	A	GR	# 4	Match top dress	Grounding rod	
PW	A	SB	# 3	Match top dress	Splice box	
PW	A	FC	# 3	Match top dress	Future connection	

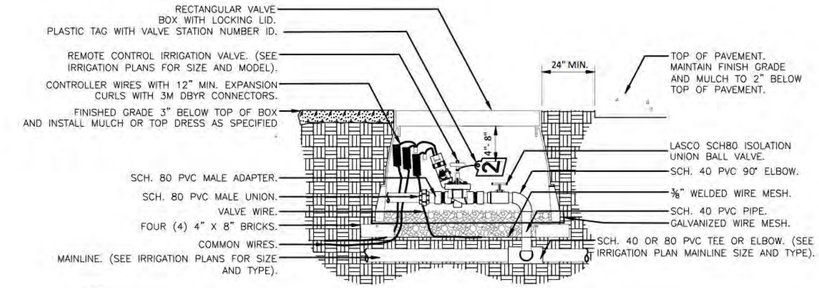
EXAMPLE
POTABLE WATER SYSTEM ON CONTROLLER 'A', REMOTE CONTROL VALVE STATION # 3. (ALL NON POTABLE SHALL BE PURPLE)

NOTES:

1- LOCK ALL VALVE BOXES WITH BOLT PROVIDED
2- VALVE BOXES SHALL BE LABELED BY HOT IRON BRANDING OR BRASS NUMBER TAG
3- LOCATE VALVE ASSEMBLIES IN PLANTING OR TURF AREA.
4- VALVE LOCATIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
5- VALVE BOXES SHALL BE CENTERED ABOVE VALVE ASSEMBLIES TO FACILITATE ACCESS AND MAINTENANCE.
6- VALVE BOXES SHALL BE FLUSH WITH TURF OR 3" ABOVE GRADE FOR MULCH INSTALLATION.
7- VALVE BOXES SHALL BE SET PARALLEL TO EACH OTHER AND PERPENDICULAR TO THE EDGE OF PAVEMENT.
8- SEE OTHER IRRIGATION DETAILS FOR FURTHER INFORMATION.

2 RESIDENTIAL VALVE BOX LAYOUT

DO NOT SCALE AB–IR–VAL–10

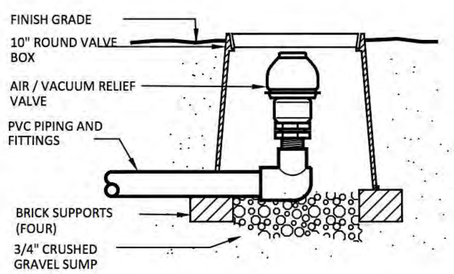


NOTE:

1– LOCATE VALVE BOX WITHIN 24" OF PAVEMENT EDGE IN PLANTING AREA WHERE EASILY ACCESSIBLE WHENEVER POSSIBLE.
2– COMMON WIRE AND CONTROLLER WIRE SHALL BE DIRECT BURIAL 14 AWG OR LARGER. COLOR: COMMON (WHITE), CONTROLLER WIRE FOR TURF (BLUE), AND CONTROLLER WIRE FOR SHRUBS (RED). (SEE SPECIFICATIONS FOR 2–WIRE CONTROLLERS).
3– ALL WIRE RUNS SHALL BE CONTINUOUS WITHOUT ANY SPLICES UNLESS APPROVED BY THE OWNER'S REPRESENTATIVE. SEE SPLICE BOX DETAIL. WIRE CONNECTIONS SHALL BE MADE USING DBR/Y–6 CONNECTORS OR APPROVED EQUAL.
4–VALVE BOX SHALL BE WRAPPED WITH MIN. 3 MIL THICK PLASTIC AND SECURE IT USING DUCT TAPE OR ELECTRICAL TAPE.
5– MAINLINES 4" OR LARGER SHALL USE SADDLES AT THE CONNECTIONS POINTS TO THE IRRIGATION VALVE. (SEE SPECIFICATIONS FOR IRRIGATIONS SADDLES).
6– ALL SCH. 80 PVC TO SCH. 40 PVC THREADED CONNECTIONS SHALL BE MADE USING TEFLON TAPE.
7– VALVE BOXES SHALL BE LOCATED IN PLANTING AREAS.
8– ALL VALVE BOXES SHOULD BE COLOUR TO MATCH SURROUNDING LANDSCAPE. GREEN IN TURF, BLACK IN BLACK MULCH, TAN IN GOLD GRAVEL OR DG AND/OR PAINTED TO MATCH.

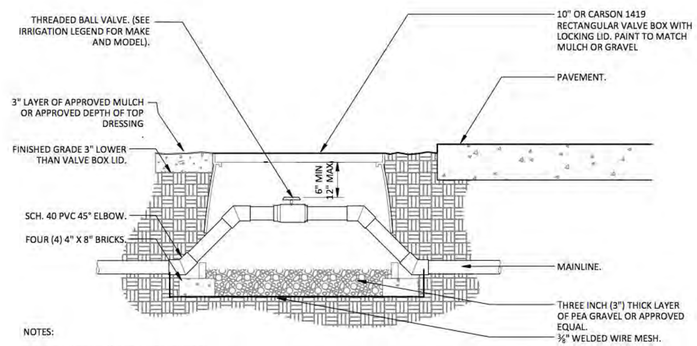
1 REMOTE CONTROL VALVE

1 1/2" = 1'–0" AB–IR–VAL–62



6 HIGH PRESSURE AIR RELIEF VALVE

1" = 1" AB–IR–BAC–09



NOTES:

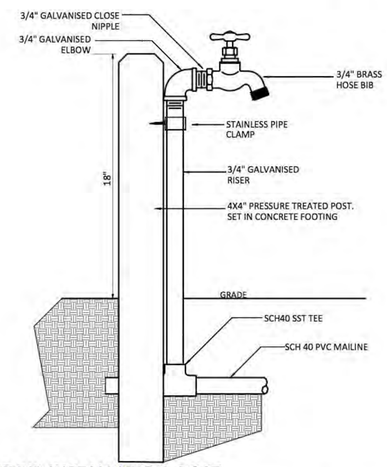
1- LOCATE VALVE BOXES IN PLANTING AREAS.

2- WRAP VALVE BOX WITH A MINIMUM OF 3 MIL THICK PLASTIC AND SECURE IT USING DUCT TAPE OR ELECTRICAL TAPE.

3- ALL CHANGES IN ELEVATION SHALL BE MADE USING SCH. 40 PVC 45° ELBOWS.

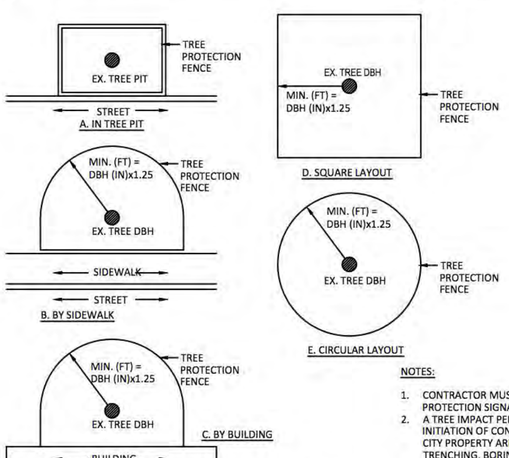
5 PVC ISOLATION BALL VALVE

1 1/2" = 1'–0" AB–IR–VAL–60



4 HOSE BIB INSTALLATION_POST

NTS AB–IR–VAL–QC_H–01

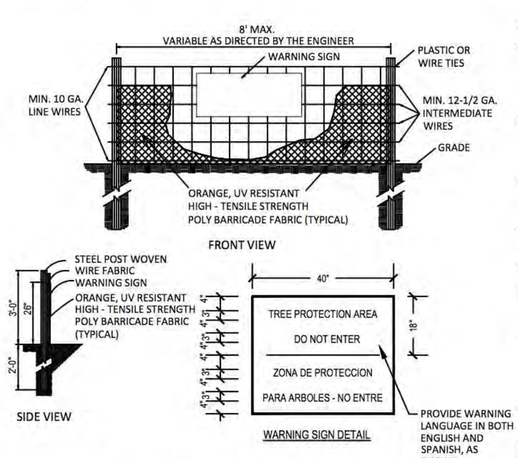


NOTES:

1. CONTRACTOR MUST PROVIDE AND INSTALL TREE PROTECTION SIGNAGE.
2. A TREE IMPACT PERMIT IS REQUIRED PRIOR TO INITIATION OF CONSTRUCTION IF ANY TREES ON CITY PROPERTY ARE TO BE IMPACTED BY PRUNING, TRENCHING, BORING, REMOVAL, PAVING, PLANTING, ETC.

9 TREE PROTECTION FENCE LAYOUT

NTS AB–IR–TRE1–03

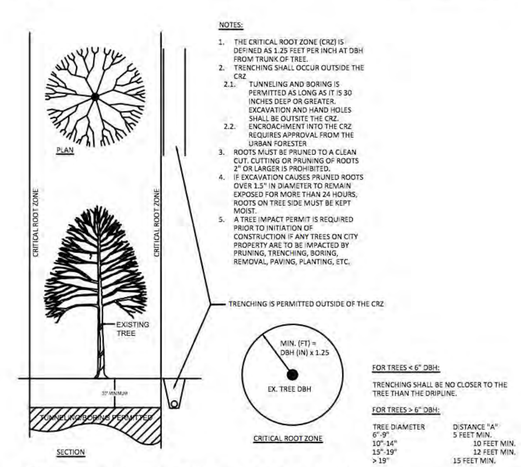


NOTES:

1. TREE PROTECTION FENCING MUST BE INSTALLED AT A MINIMUM RADIUS OF THE CRITICAL ROOT ZONE (CRZ) OF TREES. (CRZ DEFINED AS RADIUS x 1.25' (FT) PER INCH AT DBH FROM TRUNK OF TREE, SEE TREE PROTECTION FENCE LAYOUT DETAIL)
2. IF CONSTRUCTION OCCURS WITHIN THE CRZ AT LEAST 12" OF MULCH AND/OR LOGGING MATTS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.
3. THE TREE PROTECTION FENCING MUST NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
4. THERE WILL BE ZERO TOLERANCE FOR STORING OR PARKING VEHICLES, SUPPLIES, OR EQUIPMENT UNDER PROTECTED TREES.
5. IMPACT PROTECTION DEVICES MUST BE REMOVED AFTER CONSTRUCTION.
6. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS SHOWN.
7. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
8. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT.
9. A TREE IMPACT PERMIT IS REQUIRED.
10. ADHERE TO STANDARDS IN THE CITY TREE MANUAL.

8 TREE PROTECTION FENCING

NTS AB–IR–TRE1–02



NOTES:

1. THE CRITICAL ROOT ZONE (CRZ) IS DEFINED AS 1.25 FEET PER INCH AT DBH FROM TRUNK OF TREE.
2. TRENCHING SHALL OCCUR OUTSIDE THE CRZ
   2.1. TUNNELING AND BORING IS PERMITTED AS LONG AS IT IS 30 INCHES DEEP OR GREATER. EXCAVATION AND HAND HOLES SHALL BE OUTSITE THE CRZ.
   2.2. ENCROACHMENT INTO THE CRZ REQUIRES APPROVAL FROM THE URBAN FORESTER
3. ROOTS MUST BE PRUNED TO A CLEAN CUT. CUTTING OR PRUNING OF ROOTS 2" OR LARGER IS PROHIBITED.
4. IF EXCAVATION CAUSES PRUNED ROOTS OVER 1.5" IN DIAMETER TO REMAIN EXPOSED FOR MORE THAN 24 HOURS, ROOTS ON TREE SIDE MUST BE KEPT MOIST.
5. A TREE IMPACT PERMIT IS REQUIRED PRIOR TO INITIATION OF CONSTRUCTION IF ANY TREES ON CITY PROPERTY ARE TO BE IMPACTED BY PRUNING, TRENCHING, BORING, REMOVAL, PAVING, PLANTING, ETC.

FOR TREES < 6" DBH:

TRENCHING SHALL BE NO CLOSER TO THE TREE THAN THE DRIPLINE.

FOR TREES > 6" DBH:

TREE DIAMETER	DISTANCE "A"
6"-9"	5 FEET MIN.
10"-14"	10 FEET MIN.
15"-19"	12 FEET MIN.
> 19"	15 FEET MIN.

7 TRENCHIING AROUND EXISTING TREES

NTS AB–IR–TRE1–01

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PRELIMINARY COORDINATION-
NOT FOR CONSTRUCTION

PROJECT NAME
St. Sure-Walsh Residence

SLP Lot 143
Carmel, CA

APN: 239-041-014

ISSUE SET
Monterey County Submittal

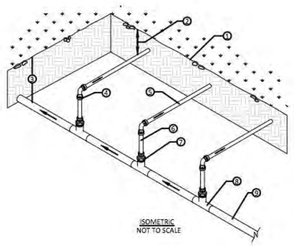
ISSUE DATE
04.14.2017

PREVIOUS ISSUE
REV. DESCRIPTION DATE

DRAWING TITLE
Irrigation details

SCALE: n/a
DRAWN BY: AB

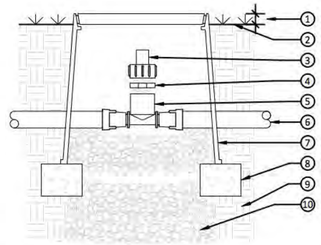
SHEET NUMBER
L4.2



1. FINISH GRADE.
2. DEPTH OF TUBING PER SPECIFICATIONS
3. DEPTH OF PVC SUPPLY MANIFOLD PER - 12"
4. TORO LOC-EZE TEE.
5. DRIPLINE LATERAL
6. POLY TUBING, LENGTH AS NECESSARY.
7. TORO LOC-EZE X 1/2" MTP ADAPTER (FAM16).
8. PVC TEE (SxSxT) WITH 1/2" FPT OUTLET.
9. PVC SUPPLY MANIFOLD FROM DRIP ZONE KIT.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.
4. CONTRACTOR'S NOTE: CONSULT MANUFACTURER FOR INSTALLATION RECOMMENDATIONS

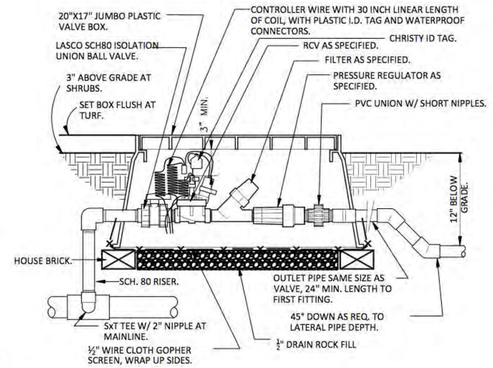
4 DRIP END FEED HEADER
MANIFOLD END FEED
1" = 1'-0" AB-IR-DRI-06



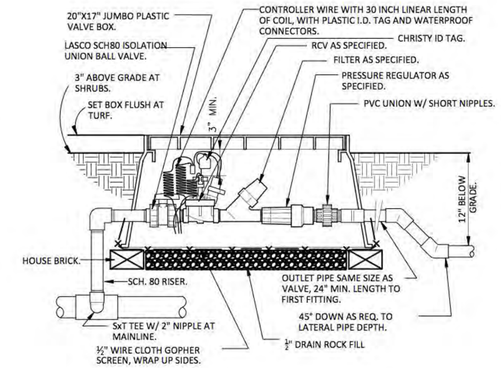
LEGEND
1. 3" ABOVE FINISH GRADE.
2. FINISH GRADE.
3. TORO DL2000 FLUSH VALVE (FCH-H-FIPT).
4. PVC SCH 40 REDUCING NIPPLE, 3/4"-1/2" (TxT).
5. TORO LOC-EZE X 1/2" FPT TEE (FTF16).
6. DRIP TUBING
7. 6" ROUND PLASTIC VALVE BOX .
8. BRICK SUPPORTS
9. NATIVE SOIL PER SPECIFICATIONS.
10. PEA GRAVEL SUMP (6" x 18").

NOTES:
1. USE ONE FLUSH VALVE FOR EVERY 7 GPM PER ZONE. LOCATE AT LOW POINTS. FLUSH RATE IS 0.8 GPM. FLUSH PRESSURE IS 2 PSI. REFER TO TORO PUBLICATION #ALT111 FOR SPECIFICATIONS.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. DO NOT SCALE DRAWING.

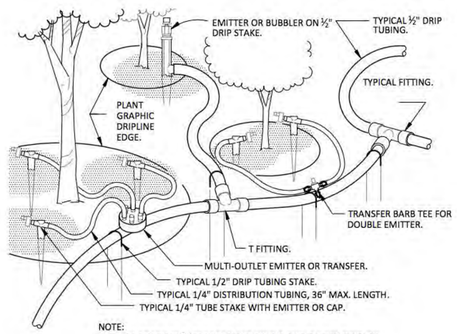
3 TORO DRIP FLUSH VALVE
1" = 1" AB-IR-DRI-18



2 1" DRIP VALVE/FILTER/REGULATOR
1 1/2" = 1'-0" AB-IR-DRI-30

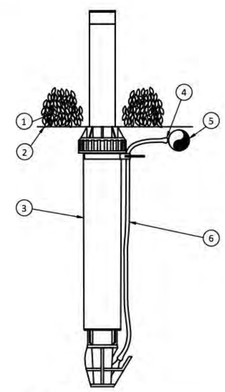


1 3/4" DRIP VALVE/FILTER/REGULATOR
1 1/2" = 1'-0" AB-IR-DRI-32



NOTE:
1. PLACE EMITTERS ½ BETWEEN THE TRUNK AND OUTTER DRIPLINE.
2. EVENLY SPACE EMITTERS AROUND PLANT.
3. STAKE THE DRIP TUBING AT EACH TEE, ELL, COUPLER, AT EACH EMITTER OR TRANSFER, AND AT 6'-0" MAX O.C.
4. PLACE 3 EMITTERS PER ONE GALLON, 5 PER FIVE GALLON & 8 PER FIFTEEN GALLON PLANT

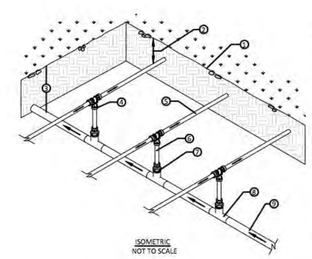
7 TYPICAL DRIP TUBING
1 1/2" = 1'-0" AB-IR-DRI-24



1. PLANT MATERIAL
2. TOP OF MULCH (3" LAYER) OR TOP DRESSING
3. MICRO-SPRAY POP-UP INDICATOR: RAIN BIRD XERI-POP XP-600X
4. ¼" BARB TRANSFER CONNECTOR:
5. ½" POLYETHYLENE TUBING:
6. ¼" DISTRIBUTION TUBING: RAIN BIRD XQ TUBING (LENGTH AS REQUIRED)

NOTE:
1. INSTALL RAIN BIRD DRIP INDICATOR AT ALL END OF DRIP ZONE SYSTEM SO THAT USER CAN DETERMINE ZONE LIMITS AND ZONE OPERATING PRESSURES.

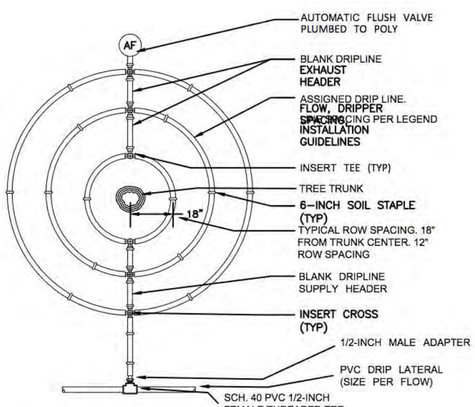
6 6" POP UP DRIP INDICATOR
RAIN BIRD OPERATION INDICATOR
1" = 1'-0" AB-IR-DRI-01



1. FINISH GRADE.
2. DEPTH OF TUBING PER SPECIFICATIONS.
3. DEPTH OF PVC SUPPLY MANIFOLD -12"
4. TORO LOC-EZE TEE.
5. DRIPLINE LATERAL.
6. POLY TUBING LENGTH AS NECESSARY.
7. TORO LOC-EZE X 1/2" MTP ADAPTER (FAM16).
8. PVC TEE (SxSxT) WITH 1/2" FPT OUTLET.
9. PVC SUPPLY MANIFOLD FROM DRIP ZONE KIT.

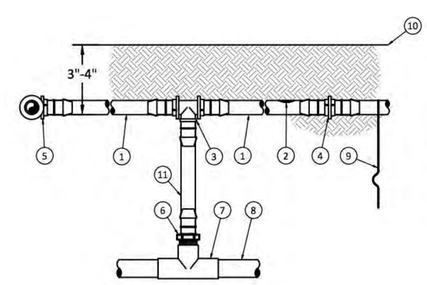
NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.
4. CONTRACTOR'S NOTE: CONSULT MANUFACTURER FOR INSTALLATION RECOMMENDATIONS

5 CENTER FEED DRIP HEADER
MANIFOLD CENTER FEED
1" = 1'-0" AB-IR-DRI-07



NOTES TO INSTALLER:
1. INSTALL FIRST DRIP LINE LOOP 18-INCHES FROM CENTER OF TREE TRUNK. INSTALL EACH ADDITIONAL LOOP 12" APART.
2. INSTALL DRIP LINE ON SURFACE TO MAXIMUM OF 6-INCHES BELOW GRADE, STAPLE IN PLACE PER MANUFACTURER'S RECOMMENDATIONS, BACKFILL AND SPREAD SURFACE TREATMENT AS DIRECTED BY OTHERS.
3. INSTALL DRIP LINE IN ACCORDANCE WITH MANUFACTURERS INSTALLATION GUIDELINES.
4. DRIP RINGS MUST BE 0.9 GPH 12" O.C EMITTER SPACING
5. TOTAL FLOW OF
   2 DRIP RINGS IS 6 GPH (1.44"/H)
   3 DRIP RINGS IS 18 GPH (1.44"/H)
   4 DRIP RINGS IS 24 GPH (1.44"/H)

9 DRIP LINE TREE RING DETAIL
1" = 1" AB-IR-TRE-21



1. ON-SURFACE DRIPLINE:
2. INLINE DRIP EMITTER OUTLET, SEE IRRIGATION LEGEND FOR DRIPLINE OUTLET SPACING.
3. BARB TEE
4. BARB COUPLING
5. BARB ELBOW
6. BARB MALE ADAPTER
7. PVC TEE SxSxT
8. PVC LATERAL SUPPLY HEADER
9. TIE DOWN STAKE:
10. FINISH GRADE
11. BLANK TUBING LENGTH AS REQUIRED

NOTES:
1. PLACE TIE DOWN STAKES EVERY TWO FEET IN SAND, THREE FEET IN LOAM, AND FOUR FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

8 DRIP LINE RISER DETAIL
3/4" = 1'-0" AB-IR-DRI-13

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PRELIMINARY COORDINATION-
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PROJECT NAME
St. Sure-Walsh Residence

SLP Lot 143
Carmel, CA

APN: 239-041-014

ISSUE SET
Monterey County Submittal

ISSUE DATE
04.14.2017

PREVIOUS ISSUE
REV. DESCRIPTION DATE

DRAWING TITLE
Irrigation drip details

SCALE: n/a
DRAWN BY: AB

SHEET NUMBER
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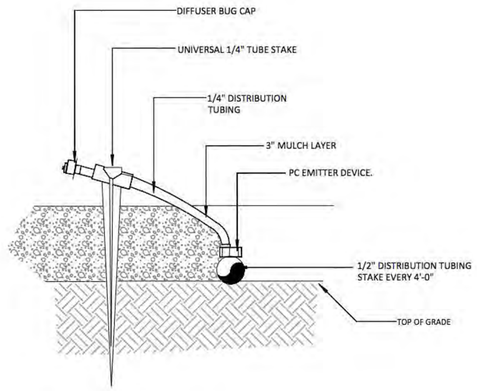


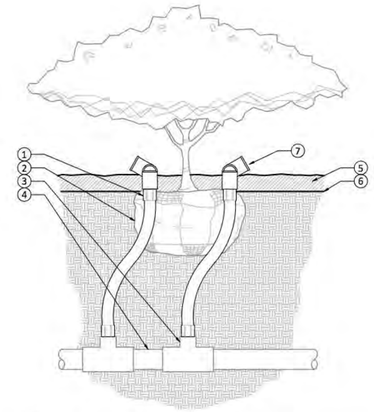
NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.

3 DRIP EMITTER DEVICE INSTALLATION

NTS — AB–IR–DRI–15

LEGEND:

1. IRRIGATION HOSE - IH-12-XX-CV
2. SHRUB ROOT BALL
3. 1/ 2" FPT CONNECTION FROM LATERAL
4. LATERAL PIPE AS PER PLAN
5. 3" MULCH
6. FINISHED GRADE
7. LOW FLOW BUBBLER ON MARLEX 90. QTY PER IR-1 PLAN



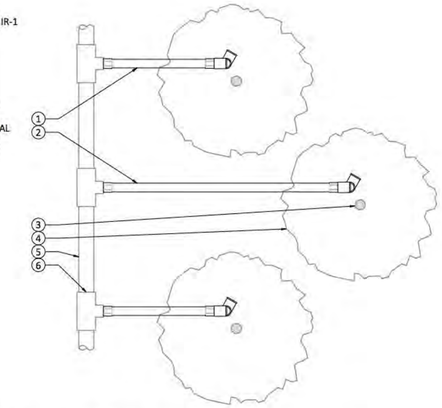
2 IH RISER W/ PVC SUBSURFACE TO SURFACE BUBBLER

NTS — AB–IR–BUB–06

LEGEND:

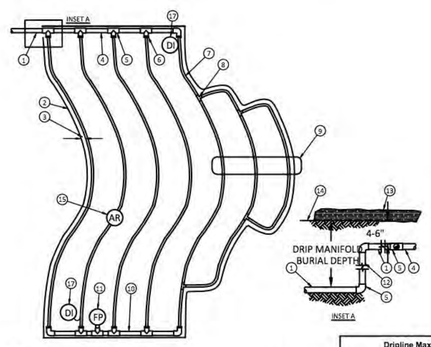
1. IRRIGATION HOSE - IH-12-XX-CV. SEE IR-1 PLAN FOR QUANTITY PER PLANT
2. IRRIGATION HOSE - IH-24-XX-CV
3. PLANT TRUNK
4. PLANT MATURE CANOPY
5. LATERAL PIPE AS PER PLAN, BURY 8"
6. 1/ 2" FPT CONNECTION FROM LATERAL

NOTE: SEE LEGEND FOR QUANTITY OF BUBBLERS PER PLANT.



1 IH RISER AT WITH BUBBLER ON PVC

NTS — AB–IR–BUB–04



NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. INSTALL AIR RELIEF VALVE AT HIGH POINTS IN DRIP LATERAL.
4. WHEN USING BARBED INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

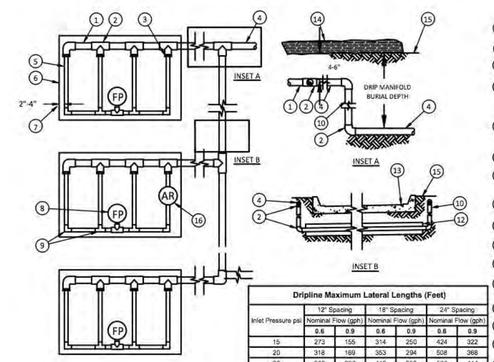
Dripline Maximum Lateral Lengths (Feet)

Inlet Pressure psi	12" Spacing		18" Spacing		24" Spacing	
	Nominal Flow (gph)		Nominal Flow (gph)		Nominal Flow (gph)	
	0.6	0.9	0.6	0.9	0.6	0.9
15	273	155	314	250	424	322
20	318	169	353	294	508	368
30	360	230	413	350	586	414
40	395	255	465	402	652	474
50	417	285	528	420	720	488
60	460	290	596	455	780	514

1. PVC SUPPLY PIPE FROM CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
2. PERIMETER OF AREA
3. PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
4. PVC SUPPLY MANIFOLD
5. PVC SCH 40 TEE OR EL (TYPICAL)
6. BARB X MALE FITTING
7. SUB-SURFACE DRIPLINE: SEE IRRIGATION LEGEND FOR SPECIFICATION
8. BARB X BARB INSERT TEE
9. TOTAL LENGTH OF SELECTED DRIPLINE SHOULD NOT EXCEED LENGTH SHOWN IN TABLE
10. PVC FLUSH HEADER
11. FLUSH POINT: SEE DETAILS FOR FLUSH POINT INSTALLATION
12. PVC RISER PIPE
13. TURF OR MULCH
14. FINISH GRADE
15. ½" AIR RELIEF VALVE: RAIN BIRD MODEL: SEE DETAILS FOR AIR RELIEF INSTALLATION
16. DRIP INDICATOR

5 DRIP LAYOUT IN ODD SHAPED PLANTER

3/4" = 1'–0" — AB–IR–DRI–09



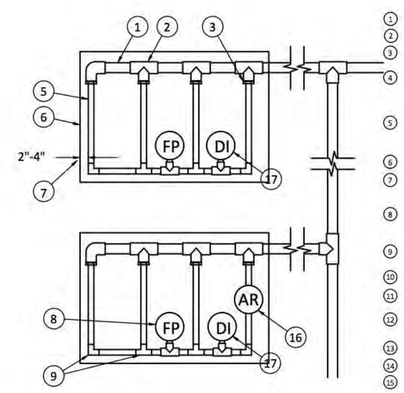
Dripline Maximum Lateral Lengths (Feet)

Inlet Pressure psi	12" Spacing		18" Spacing		24" Spacing	
	Nominal Flow (gph)		Nominal Flow (gph)		Nominal Flow (gph)	
	0.6	0.9	0.6	0.9	0.6	0.9
15	273	155	314	250	424	322
20	318	169	353	294	508	368
30	360	230	413	350	586	414
40	395	255	465	402	652	474
50	417	285	528	420	720	488
60	460	290	596	455	780	514

1. PVC SUPPLY HEADER
2. PVC SCH 40 TEE OR EL (TYPICAL)
3. BARB X MALE FITTING:
4. PVC DRIP MANIFOLD FROM CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
5. SUB-SURFACE DRIPLINE: SEE IRRIGATION LEGEND FOR SPECIFICATIONS
6. PERIMETER OF AREA
7. PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
8. FLUSH POINT (TYPICAL) - SEE DETAILS FOR FLUSH POINT INSTALLATION
9. BARB X BARB INSERT TEE OR ELBOW:
10. PVC RISER PIPE
11. PVC SUPPLY MANIFOLD
12. PVC SCH 40 SLEEVE PIPE SIZED TWICE THE SIZE OF MANIFOLD PIPE SIZE
13. PAVEMENT AND CURB
14. TURF OR MULCH
15. FINISH GRADE
16. ½" AIR RELIEF VALVE:

4 DRIP IRRIGATION IN PLANTER LAYOUT

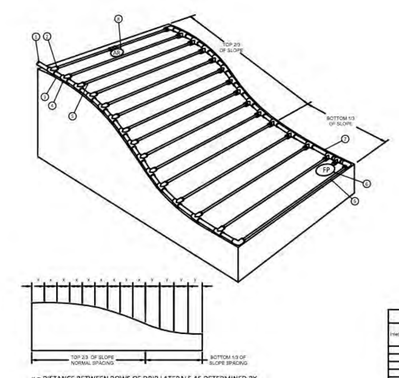
NTS — AB–IR–DRI–08



1. PVC SUPPLY HEADER
2. PVC SCH 40 TEE OR EL (TYPICAL)
3. BARB X MALE FITTING:
4. PVC DRIP MANIFOLD FROM MOCONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
5. SUB-SURFACE DRIPLINE: SEE IRRIGATION LEGEND FOR SPECIFICATIONS
6. PERIMETER OF AREA
7. PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
8. FLUSH POINT (TYPICAL) - SEE DETAILS FOR FLUSH POINT INSTALLATION
9. BARB X BARB INSERT TEE OR ELBOW
10. PVC RISER PIPE
11. PVC SUPPLY MANIFOLD
12. PVC SCH 40 SLEEVE PIPE SIZED TWICE THE SIZE OF MANIFOLD PIPE SIZE
13. PAVEMENT AND CURB
14. TURF OR MULCH
15. FINISH GRADE
16. ½" AIR RELIEF VALVE
17. DRIP INDICATOR

7 DRIP HEADER DETAIL

NTS — AB–IR–DRI–02



x = DISTANCE BETWEEN ROWS OF DRIP LATERALS AS DETERMINED BY PLANT AND SOIL TYPE. SEE NOTE 1.
y = INCREASED DISTANCE BETWEEN ROWS OF DRIP LATERALS AS DETERMINED BY PLANT AND SOIL TYPE. SEE NOTE 1.

1. PVC DRIP MANIFOLD FROM CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
2. BARB X MALE FITTING
3. PVC SUPPLY HEADER
4. PVC SCH 40 TEE OR EL (TYPICAL)
5. SUB-SURFACE DRIPLINE: SEE IRRIGATION LEGEND FOR TYPE.
6. FLUSH POINT: SEE DETAILS AND IRRIGATION LAYOUT PLAN FOR FLUSH POINT INSTALLATION
7. PVC FLUSH HEADER
8. ½" AIR RELIEF VALVE: RAIN BIRD MODEL: DETAILS FOR AIR RELIEF INSTALLATION

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. DISTANCE BETWEEN LATERAL ROWS FOR BOTTOM 1/3 OF SLOPE TO BE SPACED GREATER THAN OPTIMAL ROW DISTANCE.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
3. WHEN ELEVATION CHANGE EXCEEDS 8 FEET IT IS RECOMMENDED THAT A NEW DRIPLINE ZONE BE CREATED.
4. INSTALL AIR RELIEF VALVE AT HIGH POINTS IN DRIP LATERAL.
5. WHEN USING BARBED FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.
6. WHEN IRRIGATING BIO RETENTION BASINS DRIP SPACING ON SLOPE TO BE 6" APART, INCREASING TO 12" AT BOTTOM OF SLOPE. SEE IRRIGATION LAYOUT PLAN FOR BIO RETENTION STORM WATER BASINS LAYOUT.

XFS Dripline Maximum Lateral Lengths (Feet)

Inlet Pressure psi	12" Spacing		18" Spacing		24" Spacing	
	Nominal Flow (gph)		Nominal Flow (gph)		Nominal Flow (gph)	
	0.6	0.9	0.6	0.9	0.6	0.9
15	273	155	314	250	424	322
20	318	169	353	294	508	368
30	360	230	413	350	586	414
40	395	255	465	402	652	474
50	417	285	528	420	720	488
60	460	290	596	455	780	514

6 DRIP INSTALLATION ON SLOPE & BIO DET STORM WATER BASINS

3/8" = 1'–0"

PROJECT NAME
St. Sure-Walsh Residence

SLP Lot 143
Carmel, CA

APN: 239-041-014

ISSUE SET
Monterey County Submittal

ISSUE DATE
04.14.2017

PREVIOUS ISSUE
REV. DESCRIPTION DATE

DRAWING TITLE
Irrigation details

SCALE: n/a
DRAWN BY: AB

SHEET NUMBER
L4.4

1.1 SITE CONDITIONS

A. It is the responsibility of the Contractor to be aware of all surface and sub-surface conditions, and to notify the Owner's Representative, in writing, of any circumstances that would negatively impact the installation of the work. Do not proceed with work until unsatisfactory conditions have been corrected.

1.2 DELIVERY, STORAGE, AND HANDLING

A. All materials and equipment shall be stored properly and protected as required by the Contractor. The Contractor shall be entirely responsible for damages or loss by weather or other cause to work under the contract. Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of the work.

B. Deliver the products to the job site in their original unopened container with labels intact and legible at time of use.

C. Store in accordance with the manufacturers' recommendations.

1.3 PROTECTION

A. The Contractor shall continuously maintain adequate protection of all their work from damage, destruction, or loss, and shall protect the owner's property from damage arising in connection with this contract. Contractor shall make good any such damage, destruction, loss or injury. Contractor shall adequately protect adjacent property as provided by law and the contract documents.

B. The Contractor shall maintain sufficient safeguards, such as railings, temporary walks, lights, etc., against the occurrence of accidents, injuries or damage to any person or property resulting from their work, and shall alone be responsible for the same if such occurs.

C. All existing paving, structures, equipment or plant material shall be protected at all times, including the irrigation system related to plants, from damage by workers and equipment. The Contractor shall follow all protection requirements including plant protection provision of the general contract documents. All damages shall be repaired or replaced at the Contractor's expense. Repairs and or replacement shall be to the satisfaction of the Owner's Representative, including the selection of a Contractor to undertake the repair or maintenance. Repairs shall be at no cost to the owner.

D. For trees damaged to the point where they will not be expected to survive or which are severely disfigured and that are too large to replace, the cost of damages shall be as determined by the Owner's arborist using accepted tree value evaluation methods.

F. The Contractor shall refrain from trenching within the drip line of any existing tree that is to remain. The Owner's Representative may require the Contractor to relocate proposed irrigation work, bore lines beneath roots or use air spade technology to dig trenches through and under the root system to avoid damage to existing tree root areas.

1.4 EXCAVATING AROUND UTILITIES

A. Contractor shall carefully examine the civil, record, and survey drawings to become familiar with the existing underground conditions before digging.

1. Do not begin any excavation until all underground utilities have been located and marked.
2. Determine location of underground utilities and perform work in a manner that will avoid possible damage. Hand excavate, as required. Maintain stakes and or markings set by others until parties concerned mutually agree to their removal.

B. Notification of Local Utility Locator Service, is required for all excavation around utilities. The Contractor is responsible for knowing the location and avoiding utilities that are not covered by the Local Utility Locator Service.

C. Section 4216/4217 of the government code requires a dig-alert identification number be issued before a "permit to excavate" will be valid. For your dig-alert identification number call underground service alert toll free 1-800-422-4133 two working days before beginning construction.

1.5 POINT OF CONNECTION

A. The electrical power sources shall be provided by the General Contractor's licensed electrical Contractor per governing codes at the location shown on the drawings. The Irrigation Contractor will connect the power to provided junction box or grounded plug receptacle.

B. The point of connection of the irrigation system to its potable and or non-potable water sources, including the main shutoff valve and backflow preventer shall be provided by the General Contractor's licensed plumbing Contractor per governing codes at the location shown on the drawings. The minimum size and water pressure of the pressurized line will be as noted on the irrigation drawing.

1.6 TEMPORARY UTILITIES

A. All temporary piping, wiring, meters, panels and other related appurtenances required between source of supply and point of use shall be provided by the Contractor and coordinated with the Owner's Representative. Existing utilities may be used with the written permission of the owner.

1.7 CUTTING, PATCHING, TRENCHING AND DIGGING

A. The Contractor shall do all cutting, fitting, trenching or patching of their work that may be required to make its several parts come together as shown upon, or implied by, the drawings and specifications for the completed project.

B. Digging and trenching operations shall be suspended when the soil moisture is above field capacity.

1.8 As built RECORD set of DRAWINGS

A. Immediately upon the installation of any buried pipe or equipment, the Contractor shall indicate on the progress record drawings the locations of said pipe or equipment. The progress record drawings shall be made available at any time for review by the Owner's Representative.

B. Before final acceptance of work, the Contractor shall provide an as built record set of drawings showing the irrigation system work as built. The drawings shall be transmitted to the Owner's Representative in paper format and as a pdf file of each document on compact disk or flash drive. The drawings shall include all information shown on the original contract document and revised to reflect all changes in the work. The drawings shall include the following additional information

1. All valves shall be numbered by station and corresponding numbers shall be shown on the as built record set of drawings.
2. All main line pipe or irrigation equipment including sleeves, valves, controllers, irrigation wire runs which deviate from the mainline location, backflow preventers, remote control valves, grounding rods, shut-off valves, rain sensors, wire splice locations, and quick coupling valves shall be located by two (2) measured dimensions, to the nearest one-half foot. Dimensions shall be given from permanent objects such as buildings, sidewalks, curbs, walls, structures and driveways. All changes in direction and depth of main line pipe shall be noted exactly as installed. Dimensions for pipes shall be shown at no greater than a 50 ft. maximum interval.
3. As built record set of drawings shall be signed and dated by the Contractor attesting to and certifying the accuracy of the as built record set of drawings. As built record set of drawings shall have "As Built Record Set of Drawings", company name, address, phone number and the name of the person who created the drawing and the contact name (if different).
4. The Owner shall make the original contract drawing files available to the Contractor.

1.9 CONTROLLER CHARTS:

A. Provide one controller chart for each automatic controller installed.

1. On the inside surface of the cover of each automatic controller, prepare and mount a color-coded chart showing the valves, main line, and systems serviced by that particular controller. All valves shall be numbered to match the operation schedule and the drawings. Only those areas controlled by that controller shall be shown. This chart shall be a plot plan, entire or partial, showing building, walks, roads and walls. The plan, reduced as necessary and legible in all details, shall be made to a size that will fit into the controller cover. This print shall be approved by the Owner's Representative and shall be protected in laminated in a plastic cover and be secured to the inside back of the controller cabinet door.
2. The controller chart shall be completed and approved prior to acceptance of the work.

1.10 Testing

A. Provide all required system testing with written reports as described in part 3.

1.11 OPERATION AND MAINTENANCE MANUALS AND GUARANTEES

A. Prepare and deliver to the Owner's Representative within ten calendar days prior to completion of construction, two 3-ring hard cover binders containing the following information:

1. Index sheet stating Contractor's address and telephone number, list of equipment with name and addresses of local manufacturers' representatives.
2. Catalog and parts sheets on all material and equipment.
3. Guarantee statement. The start of the guarantee period shall be the date the irrigation system is accepted by the Owner.
4. Complete operating and maintenance instruction for all major equipment.
5. Irrigation product manufacturers warrantees.

B. In addition to the above-mentioned maintenance manuals, provide the Owner's maintenance personnel with instructions for maintaining major equipment and show evidence in writing to the Owner's Representative at the conclusion of the project that this has been rendered.

PART 2 – PRODUCTS

2.1 MATERIALS GENERAL

A. All materials shall be of standard, approved and first grade quality and shall be new and in perfect condition when installed and accepted.

B. All controllers, valves, and heads as per irrigation legend shall be manufactured by the following manufacturer(s) (or approved equal).

C. See the parts schedule on the drawings IR-1 for specific components and manufacturers.

D. Approval of any items or substitutions indicates only that the product(s) apparently meet the requirements of the drawings and specifications on the basis of the information or samples submitted. The Contractor shall be responsible for the performance of substituted items. If the substitution proves to be unsatisfactory or not compatible with other parts of the system, the Contractor shall replace said items with the originally specified items, including all necessary work and modifications to replace the items, at no cost to the owner.

2.2 PIPING MATERIAL

A. Individual types of pipe and fittings supplied are to be of compatible manufacturer unless otherwise approved. Pipe sizes shown are nominal inside diameter unless otherwise noted.

B. Plastic pipe:

1. All pipe shall be free of blisters, internal striations, cracks, or any other defects or imperfections. The pipe shall be continuously and permanently marked with the following information: manufacturer's name or trade mark, size, class and type of pipe pressure rating, quality control identifications, date of extrusion, and National Sanitation Foundation (NSF) rating.
2. Pressure main line for piping upstream of remote control valves and quick coupling valves:
   a. Pipe smaller than 2 inch diameter shall be plastic pipe for use with solvent weld or threaded fittings. Shall be manufactured rigid virgin polyvinyl chloride (PVC) 1220, Type 1, Grade 2 conforming to ASTM D 1785, designated as Schedule 40.
   b. Pipe 2 - 3 inch diameter shall be manufactured rigid virgin polyvinyl chloride (PVC), Type 1, Grade 2 conforming to ASTM D 1785, designated as bell gasket Class 315.
   c. Pipe larger than 3 inch diameter shall be manufactured rigid virgin polyvinyl chloride (PVC), Type 1, Grade 2 conforming to ASTM D 1785, designated as bell gasket Class 200 PVC.
3. Non_pressure lateral line for piping downstream of remote control valves: plastic pipe for use with solvent weld or threaded fittings. Shall be manufactured rigid virgin polyvinyl chloride PVC 1220 (type 1, grade 2) conforming to ASTM d 1785, designated as Class 200, 3/4 minimum size.

C. Galvanized pipe shall be used for above ground connections to, backflow prevention device assemblies, hose bibs, and booster pumps and as shown on the plans and details.

1. Pipe shall be hot dip galvanized continuous welded, seamless, Schedule 40 conforming to applicable current ASTM standards.

2.3 FITTINGS AND CONNECTIONS:

A. Polyvinyl chloride pipe fittings and connections: Type II, Grade 1, Schedule 40, high impact molded fittings, manufactured from virgin compounds as specified for piping tapered socket or molded thread type, suitable for either solvent weld or screwed connections. Machine threaded fittings and plastic saddle and flange fittings are not acceptable. Furnish fittings permanently marked with following information: nominal pipe size, type and schedule of material, and National Sanitation Foundation (NSF) seal of approval. PVC fittings shall conform to ASTM D2464 and D2466.

B. Brass pipe fittings, unions and connections: standard 125 pound class 85% red brass fittings and connections, IPS threaded.

C. PVC Schedule 80 threaded risers and nipples: Type I, grade 1, Schedule 80, high impact molded, manufactured from virgin compounds as specified for piping and conforming to ASTM D-2464. Threaded ends shall be molded threads only. Machined threads are not acceptable.

D. Galvanized pipe fittings shall be galvanized malleable iron ground joint Schedule 40 conforming to applicable current ASTM standards.

2.4 VALVES AND CONTROLLERS

A. Irrigation controllers:

1. Remote control valves shall be connected to controller in numerical sequence as shown on the drawings.
2. Controller shall be tested with complete electrical connections. The Contractor shall be responsible for temporary power to the controller for operation and testing purposes.
3. Connections to control wiring shall be made within the pedestal of the controller. All wire shall follow the pressure main insofar as possible.
4. Electrical wiring shall be in a rigid gray PVC plastic conduit from controller to electrical outlet. The electrical Contractor shall be responsible for installing all wiring to the controller, in order to complete this installation. A disconnect switch shall be included.

B. Wiring:

1. Low Voltage Control wiring between controller and electrical valves shall be installed in the same trench as the main line where practical. The wire shall be bundled and secured to the lower quadrant of the trench at 10 foot intervals with plastic electrical tape.
2. When the control wiring cannot be installed in the same main line trench it shall be installed a minimum of 18 inches below finish grade and a bright colored plastic ribbon with suitable markings shall be installed in the trench 6 inches below grade directly over the wire.
3. An expansion loop shall be provided every 500 feet in a box and inside each valve box. Expansion loop shall be formed by wrapping wire at least eight (8) times around a ¾ inch pipe and withdrawing pipe.
4. Provide one control wire to service each valve in system.
5. Provide 3 common wire(s) per controller.
6. Run two (2) spare #14_1 wires from controller along entire main line to last electric remote control valve on each and every leg of main line. Label spare wires at controller and wire stub to be located in a box.
7. All control wire splices not occurring at control valve shall be installed in a separate splice valve box.
8. Wire markers (sealed, 1 inch to 3 inch square) are to identify control wires at valves and at terminal strips of controller. At the terminal strip mark each wire clearly indicting valve circuit number.

C. High voltage

1. Shall be of type as required by local codes and ordinances.
2. Shall be of proper size to accommodate needs of equipment it is to serve.

D. Valve boxes:

1. Install one valve box for each type of valve installed as per the details.
2. Gravel sump shall be installed after compaction of all trenches. Final portion of gravel shall be placed inside valve box after valve is backfilled and compacted.
3. Label valve number with a Christy ID Tag and or controller letter and valve number on top of valve box lid using a method approved by the Owners Representative.
4. Valve box lids to be painted same colour as landscape top dress.

E. Tracer wire:

1. Tracer wire shall be installed with non_metallic plastic irrigation main lines where controller wires are not buried in the same trench as the main line.
2. The tracer wire shall be placed on the bottom of the trench under the vertical projection of the pipe with spliced joints soldered and covered with insulation type tape.
3. Tracer wire shall be of a color not used for valve wiring. Terminate wire in a valve box. Provide enough length of wire to make a loop and attach wire marker with the designation "tracer wire".

F. Drip Installation:

1. Where needed clamp fittings with Oetiker clamps or approved equal when operating pressure exceeds specific drip tubing fitting requirements.
2. When installing drip tubing, install soil staples as listed below:
   a. Sandy Soil - One staple every two (2') feet and two (2) staples on each change of direction (tee, elbow, or cross).
   b. Loam Soil - One staple every three (3') feet and two (2) staples on each change of direction (tee, elbow, or cross).
   c. Clay Soil - One staple every four (4') feet and two (2) staples on each change of direction (tee, elbow, or cross).
3. Cap or plug all openings as soon as lines have been installed to prevent the intrusion of materials that would obstruct the pipe. Leave in place until removal is necessary for completion of installation.
4. Thoroughly flush all water lines before installing valves and other hydrants.
5. Install 3 emitter devices per 1 gallon plant, 4 emitter devices per 5 gallon plant & 6 emitter devices per 15 gallon plant.
6. Place emitter devices evenly around plant root ball and on edge of root ball and backfill soil. DO NOT place emitter at crown of plant.
7. Follow emitter flow rate schedule as per Irrigation legend.
8. Contractor is responsible for installing all devices (flush valves, air relief valves and drip indicators) as per plan specifications and manufacturer recommendations.
9. Bury all drip lines min 4" below finish grade or as directed in details or irrigation legend.

2.5 SOLVENT CEMENTS AND THREAD LUBRICANT

A. Solvent cements shall comply with ASTM D2564. Socket joints shall be made per recommended procedures for joining PVC plastic pipe and fittings with PVC solvent cement and primer by the pipe and fitting manufacturer and procedures outlined in the appendix of ASTM D2564.

B. Thread lubricant shall be Teflon ribbon-type, or approved equal, suitable for threaded installations as per manufacturer's recommendations.

C. Pipe Joint Compound (Pipe dope) shall be used on all galvanized threaded connections. Pipe Joint Compound is a white colored, non-separating thread sealant compound designed to seal threaded connections against leakage due to internal pressure. It shall contain PTFE (Polytetrafluoroethylene) to permit a tighter assembly with lower torque, secure permanent sealing of all threaded connections and allow for easy disassembly without stripping or damaging threads.

2.6 BACKFLOW PREVENTION DEVICES

A. The backflow prevention device shall be certified to NSF/ANSI 372 shall be ASSE Listed 1013, rated to 180 degree F, and supplied with full port ball valves.

B. The main body and access covers shall be low lead bronze (ASTM B 584)

C. The seat ring and all internal polymers shall be NSF Listed Noryl and the seat disc elastomers shall be silicone.

D. Backflow Preventer shall be as indicated on the drawings.

2.7 REMOTE CONTROL VALVES

A. Remote control valves shall be electrically operated, single seat, normally closed configuration, equipped with flow control adjustment and capability for manual operation.

B. Valves shall be actuated by a normally closed low wattage solenoid using 24 volts, 50/60 cycle solenoid power requirement. Solenoid shall be epoxy encased. A union shall be installed on the discharge end.

C. Remote control valves shall be wired to controller in same numerical sequence as indicated on drawings.

D. Remote control valves shall be as indicated on the drawings.

2.8 MASTER CONTROL VALVES

A. Master Control Valve shall be compatible with the irrigation controller.

B. Master control valves shall be as indicated on the drawings.

2.9 FLOW SENSOR

A. Flow sensor shall be compatible with the irrigation controller.

B. Flow sensor shall be as indicated on the drawings.

2.10 HYDROMETER

A. Hydrometer shall be compatible with the irrigation controller.

B. Hydrometer shall be as indicated on the drawings.

2.11 QUICK COUPLER VALVES

A. Quick coupler valves shall be a one or two piece, heavy-duty brass construction with a working pressure of 150 PSI with a built in flow control and a self_closing valve.

B. Quick coupler shall be equipped with locking red brass cap covered with durable yellow thermo-plastic rubber cover. Key size shall be compatible with quick coupler and of same manufacturer.

C. Quick coupler valves shall be as indicated on the drawings.

2.12 SPRINKLER HEADS

A. All sprinkler heads shall be as indicated on the drawings.

B. Riser nipples for all sprinkler heads shall be the same size as the riser opening in the sprinkler body and fabricated as shown on the drawings.

C. All sprinkler heads must be set 24" away from non permeable surfaces where water may drain off site.

2.13 AUTOMATIC CONTROLLER

A. Controller shall be housed in a sturdy, locking, weather_resistant case, furnished for maximum exterior protection.

B. Controller shall be equipped with evapo-transpiration (ET) sensor, which adjusts the controller programming based on local climatic conditions. The sensor shall also have a rain sensing shut-off switch, wind sensing shut off switch, and freeze sensing shut-off of switch.

1. If a moisture sensor is used in lieu of an evapo-transpiration sensor an additional sensor, which has a rain-sensing shut-off switch, wind sensing shut-off switch, and freeze sensing shut-off switch shall be provided.

C. Automatic controller shall be as indicated on the drawings.

2.14 CONTROLLER DECODERS

A. All decoders shall be per the controller manufacturer's specifications.

B. Decoder model number shall be as shown on the drawings.

C. All decoders to be grounded along the two wire path as per distances recommended by the manufacturers.

D. Grounding rods and/or plates to be installed as per ASIC recommendations.

E. All valves and decoders must be identified with Christy ID Tags.

2.14 ELECTRICAL CONTROL WIRING

A. **Low voltage**

1. The electrical control wire shall be direct burial type UF, no. 14 AWG, solid, single conductor, copper wire UL approved or larger, if required to operate system as designed.
2. For 2-Wire controllers all irrigation wire for the controller, flow sensor, master valve, hydrometer, remote control valves and moisture sensors shall be per the controller manufacturer's specifications and recommendations.
3. Color code wires to each valve. Common wire shall be white.
4. If multiple controllers are being utilized, and wire paths of different controllers cross each other, both common and control wires from each controller to be of different colors.
5. Control wire splices: Splices are when required shall be placed in splice boxes.
6. Wire connections shall be 3M DBYR or per the controller manufacturer's specifications and recommendations.

B. **High voltage**

1. Shall be of type as required by local codes and ordinances.
2. Shall be of proper size to accommodate needs of equipment it is to serve.

2.15 VALVE BOXES AND MATERIALS

A. Valve boxes: valve boxes shall be Carson or Rain Bird locking and constructed of ABS (acrylonitrile butadiene styrene) plastic, green in color in turf areas, black in color in mulch areas, with rigid base and sides and shall be supplied with bolt lock cover secured with stainless steel bolts. Cover shall be identified as shown on drawings. Provide box extensions as required. Install all valve boxes at top of mulch or top of turf level and not at finish grade.

1. Master valves, flow sensors, remote control irrigation valves, gate valves, and ball valves 3 inch or less in size shall use a 14 inch x 19 inch x 12 inch rectangular box.
2. All drip control zone kits/drip valves shall be placed in a 13 inch x 24 inch x 12 inch rectangular valve box.
3. Quick coupler valves, wire splices, and grounding rods shall use a 10 inch circular box.
4. All drip flush valves shall use a 10 inch circular box, all air relied valves shall use a 8 inch round valve box

2.16 CONCRETE THRUST BLOCKS

A. Concrete thrust blocks shall be sized per the pipe manufactures requirement or as indicated on the drawings.

2.17 VALVE IDENTIFICATION TAGS

A. Valve Identification Tags shall be 2.25 inch x 2.65 inch polyurethane. Color: potable water; yellow / Non-potable water; purple. Tags shall be permanently attached to each remote control valve with tamper proof seals as indicated on the drawings.

2.18 MAIN LINE LOCATOR TAPE

A. 3 - inch wide plastic detectable locator tape.

2.19 MAIN LINE AND LATERAL LINE BEDDING SAND

A. Sand shall consist of natural or manufactured granular material, free of organic material, mica, loam, clay or other substances not suitable for the intended purpose.

B. Sand shall be masonry sand ASTM C 144 or coarse concrete sand, ASTM C 33.

2.20 INSTALLATION OF EQUIPMENT

A. **General:**

1. All equipment shall be installed to meet all installation requirements of the product manufacturer. In the event that the manufactures requirements cannot be implemented due to particular condition at the site or with other parts of the design, obtain the Owner's Representative's written authorization and approval for any modifications.
2. Install all equipment at the approximately at the location(s) and as designated and detailed on the drawings. Verify all locations with the Owner's Representative.
3. Install all valves within a valve box of sufficient size to accommodate the installation and servicing of the equipment. Group valves together where practical and locate in shrub planting areas.
4. All sprinkler irrigation systems that are using water from potable water systems shall require backflow prevention. All backflow prevention devices shall meet and be installed in accordance with requirements set forth by local codes and the health department.

B. **Pressure regulator:**

1. Set regulator for required PSI so as not to exceed 60 psi or as directed.

C. Check Valve:

1. Install check valves approximately at the locations necessary to prevent low head run off.

D. **Remote control valves:**

1. Install one remote control valve per valve box on all commercial projects and no more than two valves on all residential projects.
2. Remote control valve manifolds and quick coupler valves shall be separate allowing use of a quick coupler with all remote control valves shut off.
3. Install boxes no farther than 12 inches from edge of paving and perpendicular to edge of paving and parallel to each other. Allow 12 inches clearance between adjacent valve boxes.

E. **Quick coupler valve:**

1. Install each quick coupler valve in its own valve box.
2. Install thrust blocks on quick couplers.
3. Place no closer than 12 inches to adjacent paving.
4. Install 18 inches off set from main line.
5. Install all quick couplers as per details.

3.0 ADJUSTMENT AND COVERAGE TEST

A. Adjustment:

1. The Contractor shall flush and adjust all sprinkler heads, valves and all other equipment to ascertain that they function according to the manufacturer's data.
2. Adjust all sprinkler heads not to over spray onto walks, roadways and buildings when under maximum operating pressure and during times of normal prevailing winds.

B. Coverage test:

1. The Contractor shall perform the coverage test in the presence of the Owner's Representative after all sprinkler heads have been installed, flushed and adjusted. Each section is tested to demonstrate uniform and adequate coverage of the planting areas serviced.
2. Any systems that require adjustments for full and even coverage shall be done by the Contractor prior to final acceptance at the direction of the Owner's Representative at no additional cost. Adjustments may also include realignment of pipes, addition of extra heads, and changes in nozzle type or size.
3. The Contractor at no additional cost shall immediately correct all unauthorized changes or improper installation practices. The entire irrigation system shall be operating properly with written approval of the installation by the Owner's representative prior to beginning any planting operations
4. An irrigation audit must be performed by a CLIA certified professional prior to the completion and hand over of this project. Contact Andrew Bolt at 2019-404-1746 to schedule the irrigation audit.

3.1 PERMITS AND REGULATIONS

1. The Contractor shall obtain and pay for all permits related to this section of the work unless previously excluded under provision of the contract or general conditions. The Contractor shall comply with all laws and MWELO ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a conflict exists between permit requirements and the work outlined in the contract documents, the Contractor shall promptly notify the Owner's Representative in writing including a description of any necessary changes and changes to the contract price resulting from changes in the work.
2. Wherever references are made to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards and codes current on the effective date of this contract shall apply, unless otherwise expressly set forth.

In case of conflict among any referenced standards or codes or between any referenced standards and codes and the specifications, the more r restrictive standard shall apply or Owner's Representative shall determine which shall govern.

bernard trainor + associates
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PRELIMINARY COORDINATION-
NOT FOR CONSTRUCTION

PROJECT NAME
St. Sure-Walsh Residence

SLP Lot 143
Carmel, CA

APN: 239-041-014

ISSUE SET
Monterey County Submittal

ISSUE DATE
04.14.2017

PREVIOUS ISSUE
REV. DESCRIPTION DATE

DRAWING TITLE
Irrigation notes

SCALE: n/a
DRAWN BY: AB

SHEET NUMBER
L4.5

Irrigation/Watering Responsibility

- It is the responsibility of the Maintenance Contractor to operate the irrigation system in an efficient manner and to minimize water waste. It is the Maintenance Contractor's responsibility to adjust the system to apply water in accordance with plant requirements based on weather, soil, and site conditions. The irrigation program shall be scheduled to minimize water waste through runoff, excessive irrigation run times, utilize CYCLE SOAK scheduling when applicable. It is the responsibility of the Maintenance Contractor to operate the irrigation system based on local municipal guidelines.

Irrigation Activation

- Activate irrigation system in spring (or when weather permits). Charge mainline in February or March to check for leaks and/or malfunctioning valves.
- Turn on backflow preventers, open gate valves and activate booster pumps if installed.
- Set the irrigation controller to RUN MODE and verify that all programs are activated and set up to be run in Self Adjusted mode.
- Site verification and adjustments. This includes turning on each zone, monitoring for leaks or malfunctioning parts, cutting grass away from sprinkler heads and adjusting sprinklers for proper arc and maximum efficiency.
- Verify that drip irrigation is functional and that distribution tubing has not been cut or broken during non operational period.
- Service, clean and adjust and weather sensor system. This is critical for ALL self adjusting controllers.
- If applicable service irrigation booster pump, this need to be completed by the manufacturers certified technician.

Irrigation Monitoring/Landscape Watering

- Check the ET/Weather Based self adjusting system programming, Flow Sensor and Master Valve operation and programming; adjust as required to ensure proper operation.
- ALL Backflow Prevention Devices are to be maintained as per Local city or county codes.
- All turf areas shall be monitored to determine the need for supplemental irrigation. Frequency and duration of each watering will be dependent on local weather conditions. To determine the need for watering, Landscape Maintenance Contractor shall use a soil probe to examine the first 6-12" of the soil profile. If the soil is cool, damp and holds its shape, watering is not necessary. Plant material roots should be encourage to root as deep as possible, this is accomplished by deep root watering, longer irrigation run times and utilizing CYLCE SOAK method. Frequent shallow irrigation scheduling is ineffective and will only promote shallow rooting and require excessive water waste.

  Groundcover and shrub beds shall be watered using an automatic irrigation system. The entire groundcover/shrub bed shall be soaked to a depth to maximize healthy plant root growth. Irrigation run time to be based on irrigation device precipitation rate (not flow rate) and plant material irrigation demand. (Use WUCOLS reference for plant owatering needs). In the event of establishing plants, or compromised soil profile, watering frequencies may be adjusted.
- Establish time settings and intervals of irrigation water application for each valve of all irrigation zones. Make adjustments when necessary to correspond to variable watering requirements. Check for coverage and plugged emission/nozzle devices. Clean devices and adjust devices while maintaining the system in proper working order.
- ALL automatic controllers will be programmed to apply water during hours as permitted by local town, city or county ordinances.

- Irrigation System Repair

  - Cleaning and adjusting the sprinklers heads are the Maintenance Contractor's responsibility. Repair and/or replacement of any vandalized or malfunctioning component beyond Maintenance Contractor's control is the responsibility of the Owner/Agent. Any damage caused by Maintenance Contractor will be repaired by Maintenance Contractor at no cost to the Owner/Agent.
  - All irrigation repaired or replaced MUST be in accordance with the original irrigation design, local city or county guidelines and must provide the maximum efficiency as possible so as NOT to waste water.
  - ALL Drip systems are to be manually flushed a minimum one time per year and filters to be cleaned on a regular basis.
  - All damaged and repaired pipe MUST be flushed of all debris. Maintenance Contractor to guarantee full operational and efficient performance of repaired systems.
  - Repairs to Backflow Prevention Devices must be conducted by a trained certified backflow technician.
  - It is recommended that ALL irrigation maintenance and repair be performed by California Licensed and/or Certified contractor. Not maintaining irrigation systems in an efficient manner will result in plant and landscape degradation and additional maintenance costs.

- Irrigation System Winterization

  - Where applicable, shut off and drain irrigation system(s) at the end of the irrigation season. Turn off all main supply valves, open all manual drain valves, and bleed valves on backflow prevention devices. Perform winterization prior to November 1st.

IRRIGATION MAINTENANCE

Job Name: WALS RES

Date: 4/14/2017

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ETo) 46.1 | Project Type: Residential | 0.55

Rain Fall (Inches) | Usable Rain Fall (Inches): 0

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]	Gallons Per Minute GPM	% Landscape Area
Zone# Regular Landscape Areas									
1 TREES	0.3	Drip	0.81	0.37	800	296	8469	2.7	3.60%
2 NATIVE GRASSES	0.2	Drip	0.81	0.25	809	200	5709	1.3	3.64%
3 NATIVE GRASSES	0.2	Rotary Nozzle	0.75	0.27	1122	299	8552	6.3	5.05%
4 NATIVE GRASSES	0.2	Rotary Nozzle	0.75	0.27	2.48	1	19	9.6	0.01%
5 NATIVE GRASSES	0.2	Drip	0.81	0.25	1014	250	7156	3.2	4.57%
6 NATIVE GRASSES	0.2	Drip	0.81	0.25	854	211	6027	2.7	3.85%
7 NATIVE GRASSES	0.2	Drip	0.81	0.25	520	128	3670	1.6	2.34%
8 NATIVE GRASSES	0.2	Rotary Nozzle	0.75	0.27	3418	911	26052	16.4	15.39%
9 NATIVE GRASSES	0.2	Drip	0.81	0.25	336	83	2371	1.0	1.51%
10 TREES	0.3	Drip	0.81	0.37	1200	444	12703	5.0	5.40%
11 NATIVE GRASSES	0.2	Rotary Nozzle	0.75	0.27	2984	796	22744	16.4	13.44%
12 NATIVE GRASSES	0.2	Drip	0.81	0.25	1172	289	8271	3.6	5.28%
13 NATIVE GRASSES	0.2	Rotary Nozzle	0.75	0.27	284	76	2165	7.5	1.28%
14 NATIVE GRASSES	0.3	Drip	0.81	0.37	370	137	3917	2.6	1.67%
15 NATIVE GRASSES	0.2	Rotary Nozzle	0.75	0.27	1169	312	8910	7.0	5.26%
16 NATIVE GRASSES	0.2	Rotary Nozzle	0.75	0.27	3843	1025	29291	4.5	17.30%
17 NATIVE GRASSES	0.2	Rotary Nozzle	0.75	0.27	433	115	3300	4.0	1.95%
18 NATIVE GRASSES	0.3	Drip	0.81	0.37	926	342	9803	4.5	4.17%
19 NATIVE GRASSES	0.3	Drip	0.81	0.37	317	117	3356	3.0	1.43%
20 NATIVE GRASSES	0.3	Drip	0.81	0.37	637	236	6743	3.1	2.87%
21			0.75	0.00		0	0		0.00%
22			0.75	0.00		0	0		0.00%
				Totals	22210	6271	179226	105.8	100.00%
Special Landscape Areas									
				1		0	0		0.00%
				1		0	0		0.00%
				1		0	0		0.00%
				1		0	0		0.00%
				Totals	0	0	0		
							ETWU Total	179226	
							Maximum Allowed Water Allowance (MAWA)[e]	349151	

[redacted]

[a] Hydrozone # / Planting Description e.g.
1.) Front lawn
2.) Low water use planting
3.) Medium water use planting

[b] Irrigation Method
1.) Overhead Spray
2.) Drip

[c] Irrigation Efficiency
1.) 0.75 for Overhead Spray
2.) 0.81 for Drip

[d] ETWU (Annual Gallons Required) =
Eto x 0.62 x ETAF x Area
Where 0.62 is a conversion factor to change acre-inches per acre per year to gallons per square foot per year

[e] MAWA (Annual Gallons Allowed) =
(Eto-EPPT)X (0.62) [(ETAF x LA) + (1-ETAF) x SLA)]
Where 0.62 is a conversion factor to change acre-inches per acre per year to gallons per square foot per year, LA is the total regular landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is 0.55 for residential areas and 0.45 for non-residential areas

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	6271
Total Area	22210
Average ETAF	0.28

All Landscape Areas

Total ETAF x Area	6271
Total Area	22210
Average ETAF	0.28

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

ETWU ACRE FEET	0.550025
MAWA ACRE FEET	1.071505
% ETWU OF MAWA	0.51

SUMMARY HYDROZONE	
HYDROZONE	AREA SQ FEET
HIGH WATER USE	
MODERATE WATER USE	
LOW WATER USE	179226

0.45 Non Residential
0.55 Residential
0.81 Drip
0.81 Bubblers
0.81 Micro Spray
0.75 Spray
0.75 Rotary Nozzle
0.75 Rotor

MWELO CALCULATIONS

EMITTER COUNT FOR 1" VALVE

GPM	GPH	GPH	GPM
0.25	15	0.5	0.01
0.5	30	1	0.02
1	60	5	0.08
2	120	7	0.12
4	240	10	0.17
6	360	12	0.2
8	480	18	0.3
10	600	24	0.4
		30	0.5
		60	1

DEVICES / 1" VALVE	FLOW GPM
1700	14.2
850	14.2
180	15.0
100	11.7
90	15.0
75	15.0
50	15.0
37	14.8
30	15.0
15	15.0

1" VALVE BASED ON 15 GPM MAX

DRIP LINE CHART

GPH	GPM	SPACING	SQUARE FOOTAGE	FLOW GPM	PRECIP RATE
0.27	0.0045	12x12	100	0.44	0.42
0.27	0.0045	12x18	100	0.29	0.28
0.27	0.0045	12x24	100	0.22	0.21
0.27	0.0045	18x18	100	0.19	0.19
0.27	0.0045	18x24	100	0.13	0.14
0.27	0.0045	24x24	100	0.11	0.1
0.4	0.066	12x12	100	0.65	0.64
0.4	0.066	12x18	100	0.43	0.43
0.4	0.066	12x24	100	0.33	0.32
0.4	0.066	18x18	100	0.29	0.29
0.4	0.066	18x24	100	0.20	0.21
0.4	0.066	24x24	100	0.16	0.16
0.6	0.01	12X12	100	0.99	0.96
0.6	0.01	12X18	100	0.66	0.64
0.6	0.01	12X24	100	0.50	0.48
0.6	0.01	18X18	100	0.44	0.43
0.6	0.01	18X24	100	0.33	0.32
0.6	0.01	24x24	100	0.25	0.24
0.9	0.015	12X12	100	1.48	1.44
0.9	0.015	12X18	100	0.99	0.96
0.9	0.015	12X24	100	0.75	0.72
0.9	0.015	18X18	100	0.66	0.64
0.9	0.015	18X24	100	0.50	0.48
0.9	0.015	24X24	100	0.38	0.36

INLINE FORMULA
PR= 231.1 x Emitter Flow /Emitter Spacing x Row Spacing

DRIP PRECIPITATION RATES

GPH	GPM	Wr	Cr	# Devices	WA	Precip Rate
1	0.017	1	1	1	3.1	0.51
2	0.033	1.5	1	1	7.1	0.45
5	0.083	2	1	1	12.6	0.64
7	0.117	2.5	1	1	19.6	0.57
10	0.167	3	1	1	28.3	0.57
12	0.2	3.5	1	1	38.5	0.50
18	0.3	4	1	1	50.2	0.58
24	0.4	4.5	1	1	63.6	0.61
30	0.5	5	1	1	78.5	0.61
60	1	7	1	1	153.9	0.63

WETTED AREA OF SOIL TYPES

SOIL TYPE	Cr (FT)	SOIL TYPE	Cr (FT)
CLAY	1.0	LOAM	0.7
CLAY LOAM	1.0	LOAMY SAND	0.4
COURSE SAND	0.2	SANDY LOAM	0.6
FINE SAND	0.3	SILT LOAM	0.9

LEGEND

Cr	Soil Coefficient
TWr	Total Wetted Area
WA	Wetted Area

BASIC INTAKE RATE

SOIL TYPE	BASIC INFILTRATION RATE
SANDY	Less than 1.5"/hr
SANDY LOAM	.75 - 1.25"/hr
LOAM	.75"/hr
CLAY LOAM	.40"/hr
CLAY	.20"/hr

TREE RINGS 12" O.C EMITTER SPACING. MIN 3 RINGS PER TREE

RADIUS	TOTAL LF	FLOW RATE	TOTAL FLOW	PRECIP RATE
12"	6'	0.6 GPH	3 GPH	0.96"/HR
24"	13'	0.6 GPH	7 GPH	0.96"/HR
36"	19'	0.6 GPH	11 GPH	0.96"/HR
48"	25'	0.6 GPH	14 GPH	0.96"/HR
12"	6'	0.9 GPH	4.5 GPH	1.44"/HR
24"	13'	0.9 GPH	11 GPH	1.44"/HR
36"	19'	0.9 GPH	17 GPH	1.44"/HR
48"	25'	0.9 GPH	22 GPH	1.44"/HR

Formula A	96.25 x GPH / 60 /Wetted Area*Cr
Formula B	1.605 x GPH / Wetted Area *Cr

ESTABLISHED PLANT IRRIGATION SCHEDULE

CLIENT: WALSH RES | July Eto: 4.30 | Site Annual Eto: 36 | Avg Plant Factor Et: 0.2

Controller: HUNTER | ICORE | ET SOURCE | SOLAR SYNC | Soil Type: CLAY LOAM | 0.4 | % Site Irrigation Effic: 0.83

Zone #	Program	Plant Type	Plant Factor	ET Plant Factor	Plant Factor x Eto	Root Depth "	Shade Factor	Density Factor	Irrigation Type	Inches Precip Rate	% Dist Unif	Irri Water Requirement Inches	Total Period Run Time	Valve Cycle Time	Cycles	Totals Days Per July	Zone GPM	Total GPM	Total Run Days/Yr	Total Gallons/Yr
1	A	Tree	Low High	0.3	1.3	18	1	1	Inline Drip	0.96	0.9	0.33	22	22	1	4	2.7	60	26	1,574.61
2	B	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	1.3	26	26	673.91
3	C	Grasses	Low Medium	0.2	0.9	12	1	1	Rotator	0.65	0.7	0.29	28	14	2	4	6.3	179	26	4,651.14
4	C	Grasses	Low Medium	0.2	0.9	12	1	1	Rotator	0.65	0.7	0.29	28	14	2	4	9.6	272	26	7,087.46
5	B	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	3.2	64	26	1,658.84
6	B	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	2.7	54	26	1,399.65
7	B	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	1.6	32	26	829.42
8	C	Grasses	Low Medium	0.2	0.9	12	1	1	Rotator	0.65	0.7	0.29	28	14	2	4	16.4	465	26	12,107.74
9	B	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	1	20	26	518.39
10	A	Tree	Low High	0.3	1.3	18	1	1	Inline Drip	0.96	0.9	0.33	22	22	1	4	5	112	26	2,915.94
11	C	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	16.4	326	26	8,501.58
12	B	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	3.6	72	26	1,866.20
13	C	Grasses	Low Medium	0.2	0.9	12	1	1	Rotator	0.65	0.7	0.29	28	14	2	4	7.5	213	26	5,537.08
14	B	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	2.6	52	26	1,347.81
15	C	Grasses	Low Medium	0.2	0.9	12	1	1	Rotator	0.65	0.7	0.29	28	14	2	4	4	113	26	2,953.11
16	C	Grasses	Low Medium	0.2	0.9	12	1	1	Rotator	0.65	0.7	0.29	28	14	2	4	4	113	26	2,953.11
17	C	Grasses	Low Medium	0.2	0.9	12	1	1	Rotator	0.65	0.7	0.29	28	14	2	4	4	113	26	2,953.11
18	B	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	4.5	90	26	2,332.75
19	B	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	3	60	26	1,555.17
20	B	Grasses	Low Medium	0.2	0.9	12	1	1	Inline Drip	0.72	0.9	0.22	20	10	2	4	3.1	62	26	1,607.01
21																				
22																				
									Average Site % DU		0.83		193	Total Run Time Mins						

Estimated Total Water Use: Gallons 65,623.31

IRRIGATION DAYS

JANUARY	FEBRUARY	MARCH	APIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL DAYS
0	1	2	2	3	4	4	3	3	2	2	0	26

Program	Landscape Type	Cycles	Cycle Times		Soak Time	Total Soak Time
A	TREES	1	44	MINS	0	0
B	GRASSES-DRIP	2	231	MINS	20	200
C	GRASSES-ROTARY NOZZLES	2	191	MINS	20	160
D				MINS		
E				MINS		
F				MINS		

Notes

CONTRACTOR TO SET UP CYCLE SOAK ON ALL SCHEDULES OR MULTIPLE START TIMES. THIS WILL ELIMINATE PUDDLING OR RUN OFF. RUN MULTIPLE START TIME TO ACCOMPLISH WATER WINDOW RESTRICTIONS. IT OS THE OPERATORS RESPONSIBILITY TO MANAGE THIS SITE SO AS NOT TO EXCEED THE ESTIMATED. TOTAL WATER USE ETWU

NOTES: This irrigation schedule is set up as a base guide only, contractor must adjust irrigation controller so as to irrigate based on plants needs and not to exceed the ETWU usage. Set irrigation controller to maximise Cycle Soak through programming.We are not responsible for overseeing controller scheduling.

RUN TIM E FORMULA = 60 X ET X Kc/PRXEA

60 = MINUTES
ET = EVAPOTRANSPIRATION (DAILY)
Kc PLANT COEFFICIENCY
PR = PRECIPITATION RATE
EA = APPLICATION EFFICIENCY

IRRIGATION SCHEDULE

bernard trainor + associates
LANDSCAPE ARCHITECTURE

537 Houston St
Monterey, CA 93940

tel: 831.655.1414
fax: 831.655.3462

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LIC # 1012730 IA CERT # 57436

PRELIMINARY COORDINATION-
NOT FOR CONSTRUCTION

PROJECT NAME
St. Sure-Walsh Residence

SLP Lot 143
Carmel, CA

APN: 239-041-014

ISSUE SET
Monterey County Submittal

ISSUE DATE
04.14.2017

PREVIOUS ISSUE
REV. DESCRIPTION DATE

DRAWING TITLE
MWELO calcs

SCALE: n/a
DRAWN BY: AB

SHEET NUMBER
L4.6

bernard trainor + associates
LANDSCAPE ARCHITECTURE

537 Houston St
Monterey, CA 93940

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PRELIMINARY COORDINATION-
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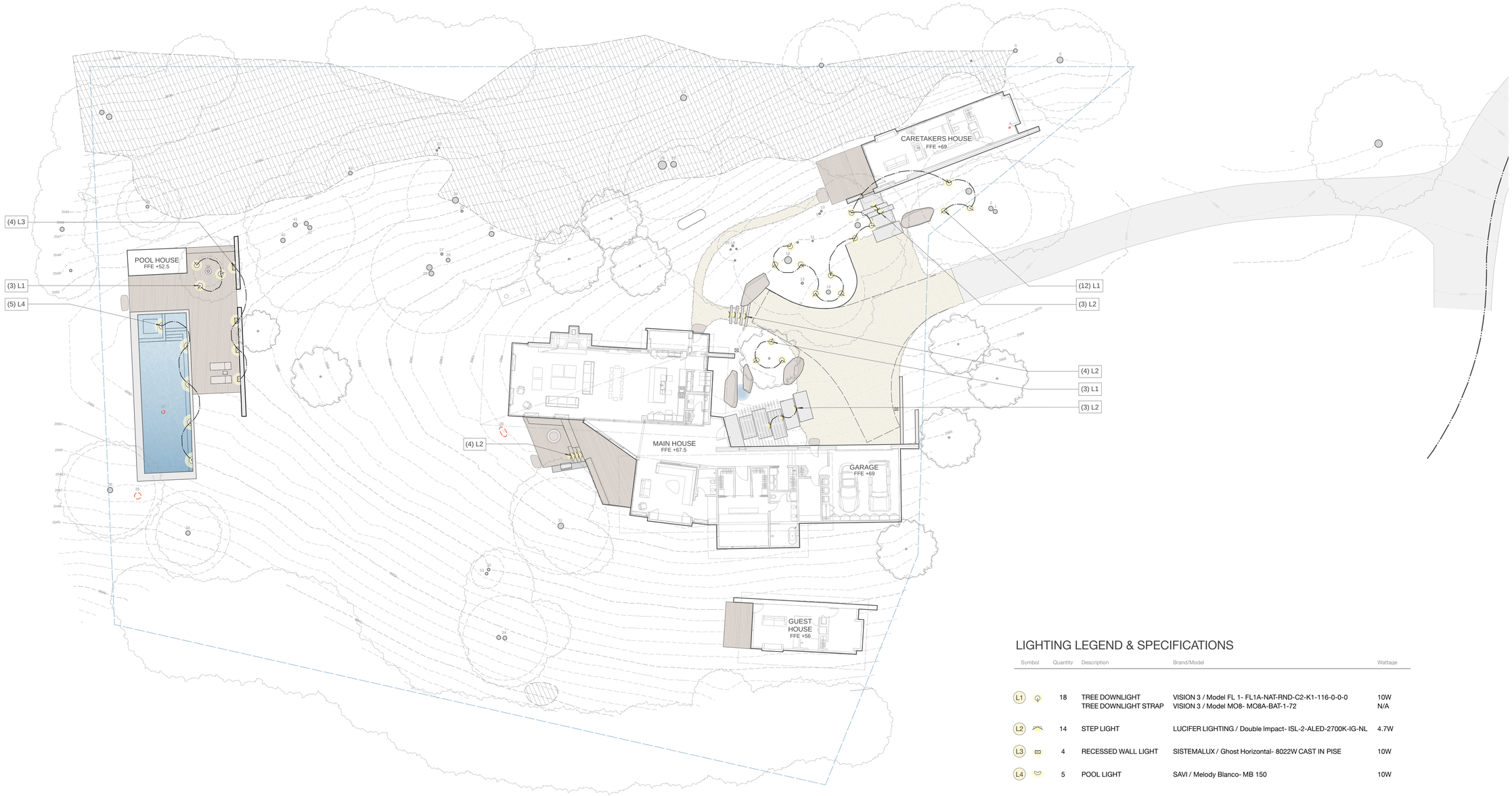
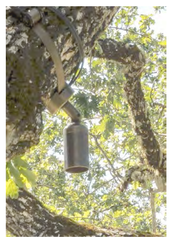


LIGHTING LEGEND & SPECIFICATIONS

Symbol	Quantity	Description	Brand/Model	Wattage
L1	18	TREE DOWNLIGHT TREE DOWNLIGHT STRAP	VISION 3 / Model FL 1- FL1A-NAT-RND-C2-K1-116-0-0-0 VISION 3 / Model MO8- MO8A-BAT-1-72	10W N/A
L2	14	STEP LIGHT	LUCIFER LIGHTING / Double Impact- ISL-2-ALED-2700K-IG-NL	4.7W
L3	4	RECESSED WALL LIGHT	SISTEMALUX / Ghost Horizontal- 8022W CAST IN PISE	10W
L4	5	POOL LIGHT	SAVI / Melody Blanco- MB 150	10W

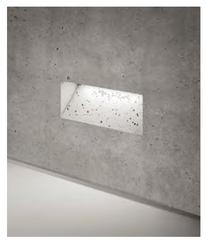
EXTERIOR LIGHT FIXTURE IMAGES:

L1 TREE DOWNLIGHT + TREE STRAP



L2 STEP LIGHT

L3 RECESSED WALL LIGHT



L4 POOL LIGHT

EXTERIOR LIGHTING NOTES

1. Lights to be controlled with switches. Switch location and type T.B.D.
2. Light source shall not be visible from off-site premises.
3. The lighting plan is diagrammatic and intended to show general fixture location and type. Exact location of fixtures and transformers shall be verified on site with Landscape Architect.
4. Contractor shall coordinate with General Contractor and Electrical Contractor for installation of conduit, sleeving, switching locations and junction boxes during other phases of work.
5. All fixtures to be installed per manufacturer's specifications.

NORTH

0' 8' 16' 32'

PROJECT NAME
St. Sure-Walsh Residence

SLP Lot 143
Carmel, CA

APN: 239-041-014

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ISSUE DATE
04.14.2017

PREVIOUS ISSUE
REV. DESCRIPTION DATE

DRAWING TITLE
Lighting Plan

SCALE: 1/16"=1'-0"
DRAWN BY: VS

SHEET NUMBER
L5.0

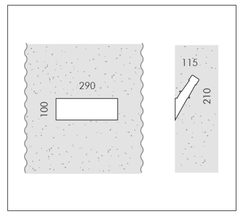
L3 (4) RECESSED WALL LIGHTS- SIMES LIGHTING- GHOST HORIZONTAL- 8022W CAST IN PISE

SIMES
luce per l'architettura

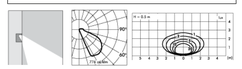
SISTEMALUX
A DIFFERENT VISION OF LIGHT

TECHNICAL DATA SHEET ART. C.8022W - GHOST HORIZONTAL

LAST UPDATE 11/02/2017



MODULES LED 3000K 230V 880lm CRI 80
Rated luminaire luminous flux: 286lm
Rated input power: 10W
Luminaire efficacy: 29lm/W
Electronic ballast 220÷230V 50-60Hz



IP 65 A A+ A++

PRODUCT TYPE
Wall mounted luminaire. IP rating IP 65

MATERIAL CHARACTERISTICS
Ghost is a lighting void that is obtained from a polypropilene housing anchored to the retaining panels before pouring the concrete. Ghost is composed of two elements: the housing and the lighting element. The housing is in polypropylene and it consists of two complementary parts: - A jig , which forms the housing, and is extracted together with the retaining panel after completing the casting and removing the anchor screws; - The housing that remains embedded inside the casting and houses the lighting element. (The housing is supplied with bolts, locking system and stickers to be applied on the outside of the retaining panels so to secure a perfect alignment for multiple installations of each housing when pouring the concrete). The lighting element in die cast aluminum is anchored to the casing through proper screws and it remains completely hided into the void. Mechanical resistance of diffuser IK 06

MAINTENANCE
This product is manufactured on site during the concrete casting of the wall with hand crafted procedures; therefore, small imperfections caused by the low accurance of the casting, subsidence of the concrete surface, actual and future cracks, colour ripples and variations over time, will be deliberately present and they are a feature of the concrete, proving the hand-made manufacturing procedure.
LIGHTING PERFORMANCE
Toughened glass diffuser. LOR --

WIRING
Supplied with a pre-wired 0.3m H05RN-F cable. Isolation: CLASS I . Available colours: Cast cement. Weight: 1.3 Kg Glow Wire test: --
L.E.D circuit included.

GHOST PATENT PENDING, REGISTERED DESIGN

This luminaire contains built-in LED modules with energy class: A, A+, A++. The LED modules cannot be changed in the luminaire (Regulation UE 874/2012).

LED circuit boards are engineered accordingly to actual Lumen Maintenance regulation (LM80) and Technical Memorandum (TM21) where uniformity and quality of light is 50.000 hours referred to L70 B20 Ta 25°C.
Lifecycle refers to LED circuit boards only, all others components of the luminaire are excluded.

Exclusive distributor for USA
Sistemalux Inc. - 9320 Saint Laurent, Montréal (Qc) - Canada QC H2N 1N7 - Tel.: +1 (514) 523-1339 - Fax: +1 (514) 525-6107 http://www.sistemalux.com - newinfo@sistemalux.com

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We reserve the right to change specifications without prior written notice.

L1 (18) TREE DOWNLIGHT STRAP- VISION 3- MO8- MO8A-BAT-1-72

Job: Approval: Type:

VISION·3 LIGHTING

Tree Mount Option **MODEL MO8**
1" Strap, Round Canopy, Tree Mount Option

Specifications:

Canopy: Machined from 6061-T6 aluminum, C36000 brass, or 304 stainless steel. Contains a Ø13/16" mounting hole and a Ø5/8" wiring hole. Up to three canopies can be mounted on a single strap (the number of canopies that can be safely supported varies by fixture type and material. Contact a Vision3 lighting CSR for allowable combinations). Two side slots allow canopy to slide on strap for easy adjustment during installation.

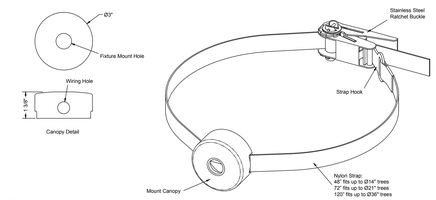
Strap: 48", 72" & 120" long strap assembly consists of a 1" wide, olive green nylon strap stitched to a steel flat hook. Steel hook is coated with Bronze Textured TGIC thermo set polyester powder coat paint, applied over a corrosion resistant chromate finish. 48" strap assembly fits up to 14" diameter trees. 72" strap assembly fits up to 21" diameter trees. 120" strap assembly fits up to 36" diameter trees. (Contact factory for larger applications.) Note: Strap should be loosened periodically to fit tree as it grows. Allow for future tree growth when considering strap requirements.

Buckle: 304 stainless steel ratcheting buckle is corrosion resistant and is coated with Bronze Textured TGIC thermo set polyester powder coat paint. Ratchet allows easy adjustment of strap. Strap hook clips to buckle, allowing easy installation and removal.

Finish: TGIC thermo set polyester powder coat paint available in 14 standard colors. On aluminum model, finish is applied over a corrosion resistant, hexavalent chromium free, RoHS compliant coating. Aluminum model available in one additional metal finish: Clear Anodized. Brass model available in three additional metal finishes: Natural, Polished, and Aged. Stainless steel model available in three additional metal finishes: Natural, Polished, and Brushed.

Electrical: For use with low voltage lighting fixtures only. Requires the use of a remote transformer.

Certification: CSA tested & certified to US and Canadian safety standards for wet location landscape use.



Ordering Information:

MO8A — BAT — 1 — 72

Model	Finish	Canopy Qty.[1]	Strap Length
MO8A - Aluminum	BL - Black	1 - One Canopy	48 - 48" Tree Strap
MO8B - Brass	BLT - Textured Black	2 - Two Canopies	72 - 72" Tree Strap
MO8S - Stainless	BN - Bronze	3 - Three Canopies[1]	120 - 120" Tree Strap
	BNT - Textured Bronze		
	BAT - Textured Bark		
	WI - White		
	GRT - Textured Green		
	SI - Silver		
	GY - Grey		
	BE - Beige		
	GNT - Textured Granite		
	SAT - Textured Sand		
	PAT - Textured Patina		
	EAT - Textured Earth		
	CLA - Clear Anodized (MO8A only)		
	NAT - Natural (MO8B & MO8S only)		
	POL - Polished (MO8B & MO8S only)		
	AGE - Aged (MO8B only)		
	BRU - Brushed (MO8S only)		

Notes:
1. The number of canopies that can be safely supported varies by fixture type and material. Contact a Vision3 lighting CSR for allowable combinations.
2. 3 - Three Canopies' option not available with MO8B or MO8S.
3. Specifications, certifications, and ordering information are subject to change. Please check website for latest specification sheets.

Example: **MO8A - BNT - 1 - 48**

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revision 10/15/12

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LANDSCAPE ARCHITECTURE

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fax: 831.655.3462

www.bernardtrainor.com

PRELIMINARY COORDINATION-
NOT FOR CONSTRUCTION

PROJECT NAME
St. Sure-Walsh Residence

SLP Lot 143
Carmel, CA

APN: 239-041-014

ISSUE SET
Monterey County Submittal

ISSUE DATE
04.14.2017

PREVIOUS ISSUE

REV.	DESCRIPTION	DATE

DRAWING TITLE
Lighting Specifications

SCALE: 1/16"=1'-0"
DRAWN BY: VS

SHEET NUMBER
L5.1

L4 (5) POOL LIGHTS- SAVI- MELODY BLANCO- MB 150

Melody Blanco

white light nicheless underwater LED light fixture

"Brightest White LED Light ever"
"Illuminate up to 18' x 36' pool with a single light"

Features & Benefits

- No Control Box Needed!
  Wire as many lights as you like, only limited by the size of your transformer (each Melody Blanco uses only 10 Watts!)
- No Niche
- No Grounding
- No Bonding
- Wire direct to 12 VAC low voltage circuit
- Installs into 1½" fittings*
- 4x Brighter than RGB LED white light!
- Over 900 Lumens!
- EASY Installation

Technical Specifications

- 180° Beam Spread
- 10 Watts standard
- .83 Amps
- 100 - 150 ft. cord

Installation Requirements

- .4" Minimum below waterline
- *14" minimum length of 1.5" diameter PVC behind wall fitting. Reduce to a 1" diameter conduit for the cable run to the transformer.

ORDERING INFORMATION

PART NUMBER	DESCRIPTION	PRICE
MB-100	12V Pool Light, Note with 100' cord	$424.88
MB-150	12V Pool Light, Note with 150' cord	$477.43
SVLKEYPL	Lens Key	$44.56
RECOMMENDED TRANSFORMER	PX100 / PX300 – SEE PAGE 20 FOR ORDERING INFORMATION	

L2 (14) STEP LIGHTS- LUCIFER LIGHTING- DOUBLE IMPACT- ISL-2-ALED-2700K-IG-NL

DOUBLE-IMPACT®

ISL-2-ALED

ISL-2-ALED
RECESSED LUMINAIRE

DESCRIPTION

A General
Regressed LED with rectangular aperture for glare-free, energy efficient, path and step lighting; suitable for dry or wet, interior or exterior applications.

B Special Features
Dimmable 4.7W AC LED (dimming by power supply); LED/heat sink module is field replaceable.

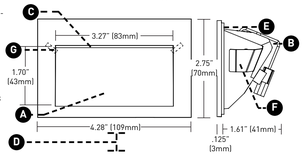
C Effects Devices
Provided with sealed polycarbonate linear diffusion lens; consult factory for availability of color gels which may achieve custom color temperatures.

D Installation Guidelines
Optimum 18" (457mm) above walking surface; 60" (1.5m) on-center.

E Gasket
Foam gasket provided. Required for IP65 wet location applications only.

F Retention
Torsion spring clips secure fitting into back box, mounting plate or appropriately sized cut-out.

G Locking
Specify '-L' to include tamper resistant discreetly hidden set screw. Required for IP65 wet location applications.



TECHNICAL

CONSTRUCTION
Cast 316 stainless steel or bronze depending on finish

ELECTRICAL
Luminaire requires factory supplied 12-volt AC power supply. May be integral to back box or remote. Secondary run lengths vary depending on power supply specified. See page 3 for available options and wiring requirements.

MOUNTING
See pages 2 & 3 for various mounting accessories.

LED
Proprietary 4.7 watt nominal AC LED, 80+ CRI, 2 SDCM, in color temperatures of 2700K, 3000K, 3500K & 4000K, plus Blue and Amber, 150 delivered lumens (32.3 lm/watt). Average rated life of 50,000+ hours.

LISTING
TUV listed for dry/damp [IP54 rated] and wet locations [IP65 rated]; CE marked; Dark-Sky approved; Patent No. US D606,228 S.

WARRANTY
Five year warranty on LED lamp module and driver. One year warranty on all other Lucifer Lighting provided system components. Consult website for full warranty terms and conditions.

ORDERING INFORMATION (fitting)

Example: ISL-2-ALED-3K-NBR-NL

ISL-2-ALED — 2700K — IG — NL

SERIES	COLOR TEMP	FINISH	LOCKING
ISL-2-ALED	2.7K 2700K	W White Powdercoat	NL Non-Locking (IP54)
	3K 3000K	B Black Powdercoat	L Locking* (IP65)
	3.5K 3500K	C Chrome	
	4K 4000K	IG Industrial Gray	
	BL Blue	NBR Natural Bronze	
	AM Amber	SS Brushed Stainless Steel	
	CK Custom Color (Gel)	BR Brushed Bronze	
		ABR Architectural Bronze Powdercoat	
		BRP Polished Oil-Rubbed Bronze Plate	
		BRM Matte Oil-Rubbed Bronze Plate	
		MG Metallic Gray Powdercoat	

* NOTE: Locking version required for IP65 wet location applications.

	80+ CRI
Lumen Package	432 lm
Power Consumption	4.7 watts
LED Source lm/w	91.9 lm/w
Fixture Delivered Output	150 lm
Fixture lm/w	32.3 lm/w

LUCIFER LIGHTING COMPANY
(04/2015)

luciferlighting.com

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As part of its policy of continuous research and product development, the company reserves the right to change or withdraw specifications without prior notice.

3750 IH35 North
San Antonio, Texas 78219
[Phs] +1-210-227-7329
[FAX] +1-210-227-4967

L1 (18) TREE DOWNLIGHTS- VISION 3- FL1- FL1A-NAT-RND-C2-K1-116-0-0-0

Job: Approval: Type:

VISION·3 LIGHTING

Rear Mount MR16 Flood **MODEL FL1**
12V, 50W Max., MR16 Halogen
12-24V, 10W or 12V, 12.5W LED

Specifications:

Body: Machined 6061-T6 aluminum, C36000 brass, or 304 stainless steel body with 18-8 stainless steel hardware.

Knuckle: Machined 6061-T6 aluminum, C36000 brass, or 304 stainless steel mounting knuckle with a 1/2" NPS threaded male fitting allows a full range of mounting positions. Double taper design (U.S. Patent #6,966,679) allows fixture to hold position during aiming and ensures a solid lock when tightened. Integral high temperature silicone O-ring prevents leaking between housing and knuckle. LED models have a molded silicone wire seal to prevent water entry at knuckle. Available Rotate and Lock option (U.S. Patent #7,108,405 & #7,458,552) allows for full 360° horizontal aiming and locking.

Cap: Machined cap locks in place with one 18-8 stainless steel set screw, and is sealed to the body with a high temperature silicone O-ring. Round C2 & C4 caps have drain holes for water drainage from top of lens. Square caps feature removable and field interchangeable cutoffs with 'flow-through' design for 360º drainage with no light leak. 'Flush Lens' cap styles incorporate a stepped lens to reduce the collection of water and debris on the lens.

Finish: TGIC thermo set polyester powder coat paint available in 14 standard colors. On aluminum model, finish is applied over a corrosion resistant, hexavalent chromium free, RoHS compliant coating. Aluminum model available in one additional metal finish: Clear Anodized. Brass model available in three additional metal finishes: Natural, Polished, and Aged. Stainless steel model available in three additional metal finishes: Natural, Polished, and Brushed.

Socket: GY-6.35 porcelain socket with 600V, 250°C, PTFE coated 18 ga leads.

Lens: Tempered, clear lens, secured to cap with a high temperature, UV curing, silicone adhesive.

Lamps:
- 12 Volt bi-pin MR16 halogen up to 50 Watts (maximum allowable wattage depends on model and application. See **Certification** heading).
- 12-24 Volt AC/DC, 10W LED with High/Low switch for 35W & 20W halogen equivalent outputs. Requires up to 13W at startup, which must be allowed for during system design.
- 12 Volt AC/DC, 12.5W LED with push button selection of 4 outputs (50W, 35W, 20W & 12W halogen equivalent). Requires up to 15W at startup, which must be allowed for during system design.

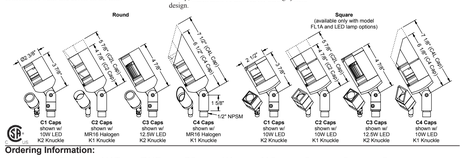
Buckle: 304 stainless steel ratcheting buckle is corrosion resistant and is coated with Bronze Textured TGIC thermo set polyester powder coat paint. Ratchet allows easy adjustment of strap. Strap hook clips to buckle, allowing easy installation and removal.

Finish: TGIC thermo set polyester powder coat paint available in 14 standard colors. On aluminum model, finish is applied over a corrosion resistant, hexavalent chromium free, RoHS compliant coating. Aluminum Transformer and Dimmer Compatibility List), and patented LEDSense® thermal management.

Certification: CSA tested & certified to US and Canadian safety standards for the following applications :

Wet location landscape use (UL1838):
FL1A - 50W Max. MR16 Halogen lamp.
FL1B - 35W Max. MR16 Halogen lamp.
FL1S - 20W Max. MR16 Halogen lamp.
Wet location wall mount use (UL1598):
FL1A - 50W Max. MR16 Halogen lamp.
FL1B - 20W Max. MR16 Halogen lamp.
FL1S - 20W Max. MR16 Halogen lamp.
Wet location ceiling mount use (UL1598):
FL1A - 20W Max. MR16 Halogen lamp.
FL1B - 20W Max. MR16 Halogen lamp.
FL1S - 20W Max. MR16 Halogen lamp.

10W LED & 12.5 LED can be used in all models and applications.
All ratings subject to change without notice. See web site or contact V3 for most current info.



Ordering Information:

FL1A — NAT — RND — C2 — K1 — 116 — 0 — 0 — 0

Model	Finish	Shape	Cap Style	Knuckle	Lamp[5,6,7]	Lens Accy[8]	Filter[8]	Louver[8]
FL1A - Aluminum	BLT - Textured Black	RND - Round	Standard Lens:	K1 - Standard[1]	MR16 Halogen[2]:	0 - None	0 - None	0 - None
FL1B - Brass[1]	BNT - Textured Bronze	SQ - Square	C1 - Flush	K2 - Rotate & Lock[1]	0 - None	L1 - Spread	F1 - Red	H1 - Honeycomb
FL1S - Stainless[1]	BAT - Textured Bark		C2 - Regress Lens		01 - ESX, 20W, 12°	L2 - Linear	F2 - Blue	
	GRT - Textured Green		C2L - Regress Lens, Long		02 - BAB, 20W, 40°	L3 - Softening	F3 - Light Blue	
	GNT - Textured Granite		C3 - Regress Lamp		03 - FRB, 35W, 12°		F4 - Green	
	SAT - Textured Sand		C4 - 45° Angled		04 - FRA, 35W, 23°		F5 - Amber	
	PAT - Textured Patina		C4L - 45° Angled, Long		05 - FMW, 35W, 40°		F6 - Pink	
	EAT - Textured Earth		Flush Lens:		09 - EXT, 50W, 13°		F7 - Mercury Vapor	
	CLA - Clear Anodized (FL1A only)		C1F - Flush		10 - EXZ, 50W, 20°			
	NAT - Natural (FL1B & FL1S only)		C2F - Regress Lens		11 - EXN, 50W, 40°			
	POL - Polished (FL1B & FL1S only)		C2LF - Regress Lens, Long		12 - FNV, 50W, 60°			
	AGE - Aged (FL1B only)		C3F - Regress Lamp					
	BRU - Brushed (FL1S only)		C4F - 45° Angled					
			C4LF - 45° Angled, Long					

Lamp[5,6,7] LED[4,5]:
110 - 10W, 3000K, 12° [1]
111 - 10W, 3000K, 21° [1]
118 - 10W, 3000K, 41° [1]
119 - 12.5W, 3000K, 10° [7]
120 - 12.5W, 3000K, 34° [7]
121 - 12.5W, 3000K, 60° [7]

Notes:
1. SQ shape available with model FL1A and LED lamps only
2. Allowable wattage depends on model and application. See **Certification** heading above.
3. K1 knuckle is protected under U.S. Patent #6,966,679. K2 knuckle is further protected under U.S. Patent #7,108,405 & #7,458,552.
4. Only power LED with magnetic or V3 approved electronic transformers (contact V3 for transformer compatibility info).
5. Other color temperatures available as a special order.
6. Only two lens accessories can be used with 10W LED.
7. 12.5W LED can only be used with C2L, C2LF, C3, C3F, C4L & C4LF cap styles.
8. Specifications, certifications, and ordering information are subject to change. Please check website for latest specification sheets.

Example: **FL1B - AGE - RND - C3 - K2 - 02 - 0 - F2 - H1**

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revision 7/10/15

ELEV 2065'-0"
LOWEST NATURAL GRADE
USED TO CALCULATE AVERAGE
NATURAL GRADE AT CARETAKER'S,
SEE EXTERIOR ELEVATIONS

NEW (1) STORY 1,000 SF
CARETAKER'S HOUSE

ELEV 2069'-0"
HIGHEST NATURAL GRADE
USED TO CALCULATE AVERAGE
NATURAL GRADE AT CARETAKER'S,
SEE EXTERIOR ELEVATIONS

EXISTING DRIVEWAY

ELEV 2049'-0"
LOWEST NATURAL GRADE
USED TO CALCULATE
AVERAGE NATURAL GRADE
AT POOLHOUSE, SEE
EXTERIOR ELEVATIONS

NEW POOL W/ (1) STORY
POOLHOUSE

ELEV 2052'-0"
HIGHEST NATURAL GRADE
USED TO CALCULATE AVERAGE
NATURAL GRADE AT POOLHOUSE,
SEE EXTERIOR ELEVATIONS

ELEV 2069'-6"
HIGHEST NATURAL GRADE USED TO CALCULATE
AVERAGE NATURAL GRADE AT MAIN HOUSE,
SEE EXTERIOR ELEVATIONS

FIRETRUCK TURNAROUND,
SEE DIAGRAMS

17
A2.2

NEW (1) STORY 4,700 SF MAIN
HOUSE W/ (2) CAR GARAGE

ELEV 2060'-0"
LOWEST NATURAL GRADE
USED TO CALCULATE AVERAGE
NATURAL GRADE AT MAIN HOUSE,
SEE EXTERIOR ELEVATIONS

ELEV 2056'-0"
HIGHEST NATURAL GRADE USED TO CALCULATE
AVERAGE NATURAL GRADE AT GUESTHOUSE,
SEE EXTERIOR ELEVATIONS

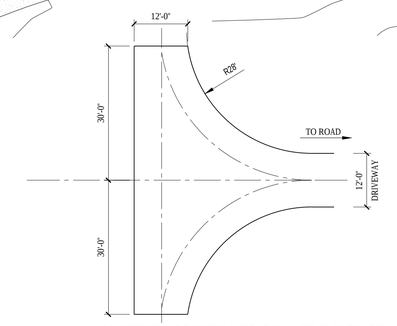
1
A2.2

1
A2.1

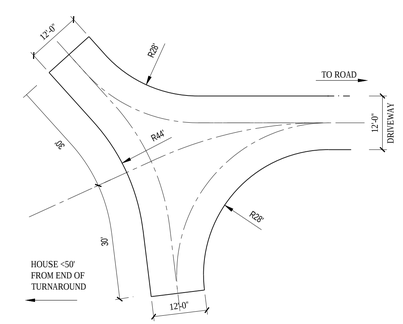
NEW (1) STORY 600 SF
GUESTHOUSE

ELEV 2051'-0"
LOWEST NATURAL GRADE
USED TO CALCULATE AVERAGE
NATURAL GRADE AT GUESTHOUSE,
SEE EXTERIOR ELEVATIONS

HOMELAND BOUNDARY



MONTEREY COUNTY REGIONAL FIRE DISRICT -
DRIVEWAY TURNAROUND (60' "T")



PROPOSED - MODIFIED 60' "T" TURNAROUND

VUELO DE LAS PALOMAS

NORTH

1 OVERALL FLOOR PLAN
1/16" = 1'-0"

REVISION NUMBER	DESCRIPTION	DATE

Bohlin Cywinski Jackson
Architecture Planning Interior Design
49 Geary Street, Suite 300
San Francisco, CA 94108
415.989.2100

St. Sure-Walsh Residence
Santa Lucia Preserve Lot L43
4 Vuelo de las Palomas, Carmel, California 93923

PLANNING SUBMISSION

14 APRIL 2017
DATE

16514A
BCJ PROJECT NO.

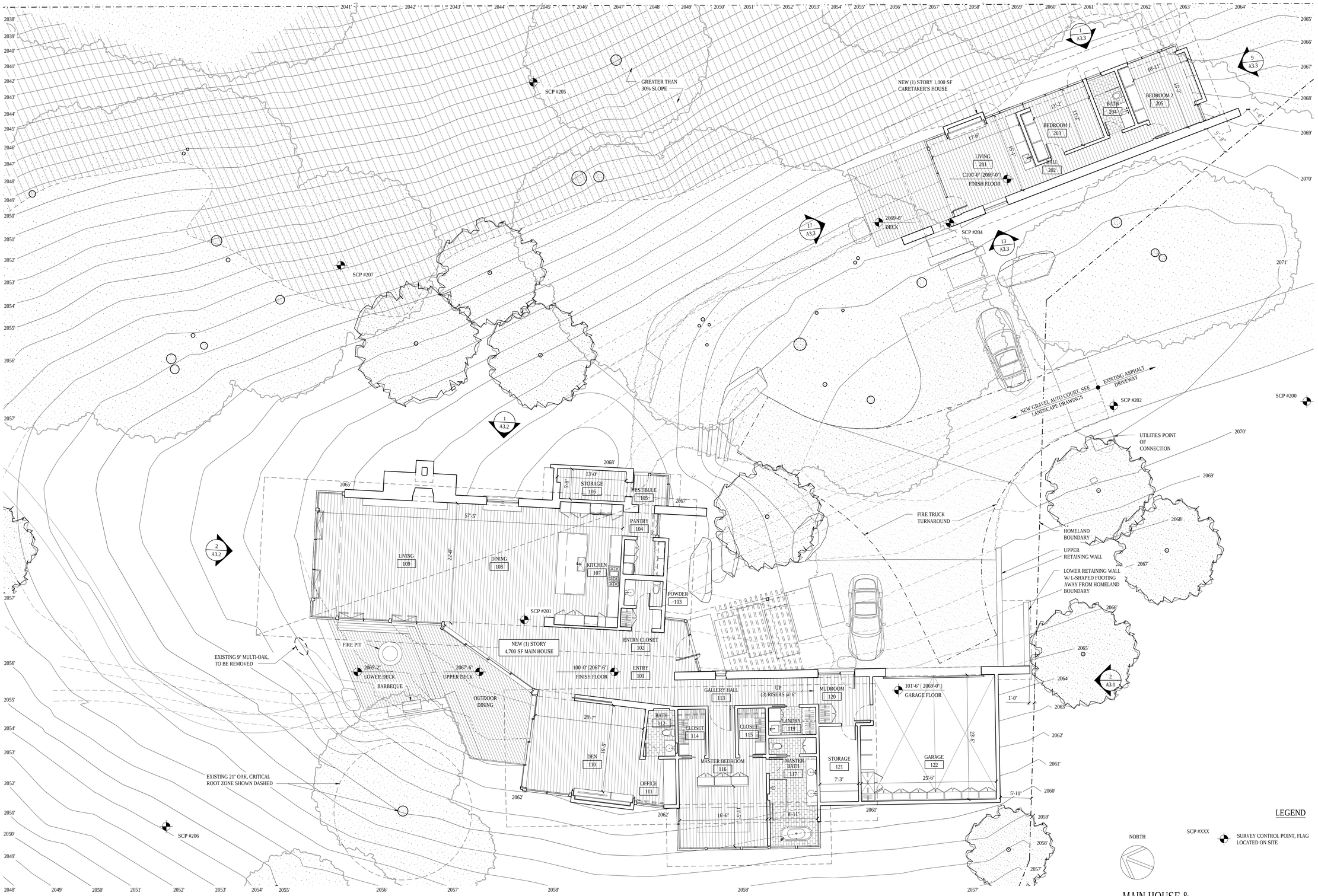
1/16" = 1'-0"
SCALE

DY
DRAWN BY

CM
CHECKED BY

OVERALL
FLOOR PLAN

A2.0
SHEET NUMBER



1 MAIN HOUSE & CARETAKER'S FLOOR PLANS

1/8" = 1'-0"

REVISION NUMBER	DESCRIPTION	DATE

Bohlin Cywinski Jackson
Architecture Planning Interior Design
49 Geary Street, Suite 300
San Francisco, CA 94108
415.989.2100

St. Sure-Walsh Residence
Santa Lucia Preserve Lot 143
4 Volto de las Palomas, Carmel, California 93923

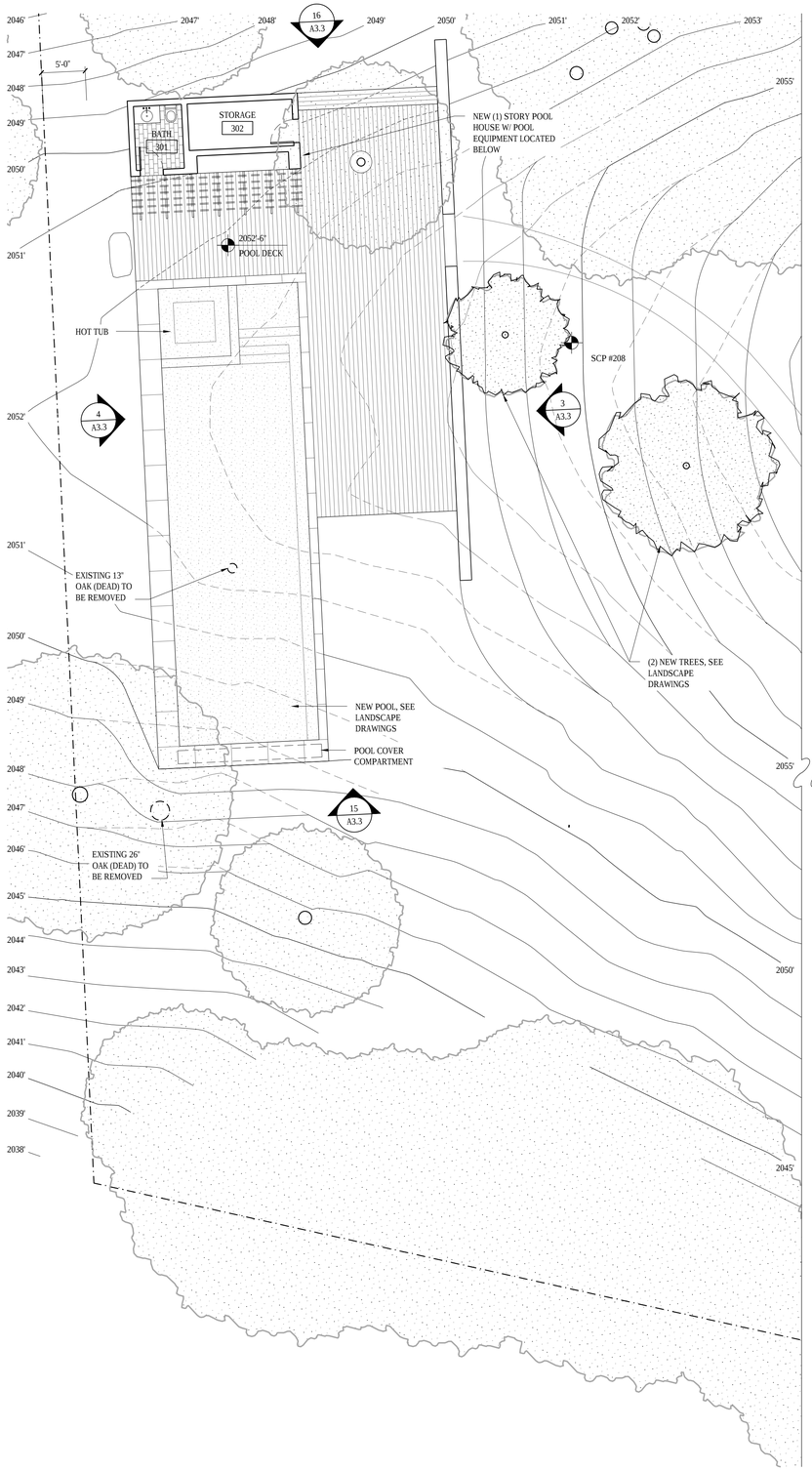
PLANNING SUBMISSION

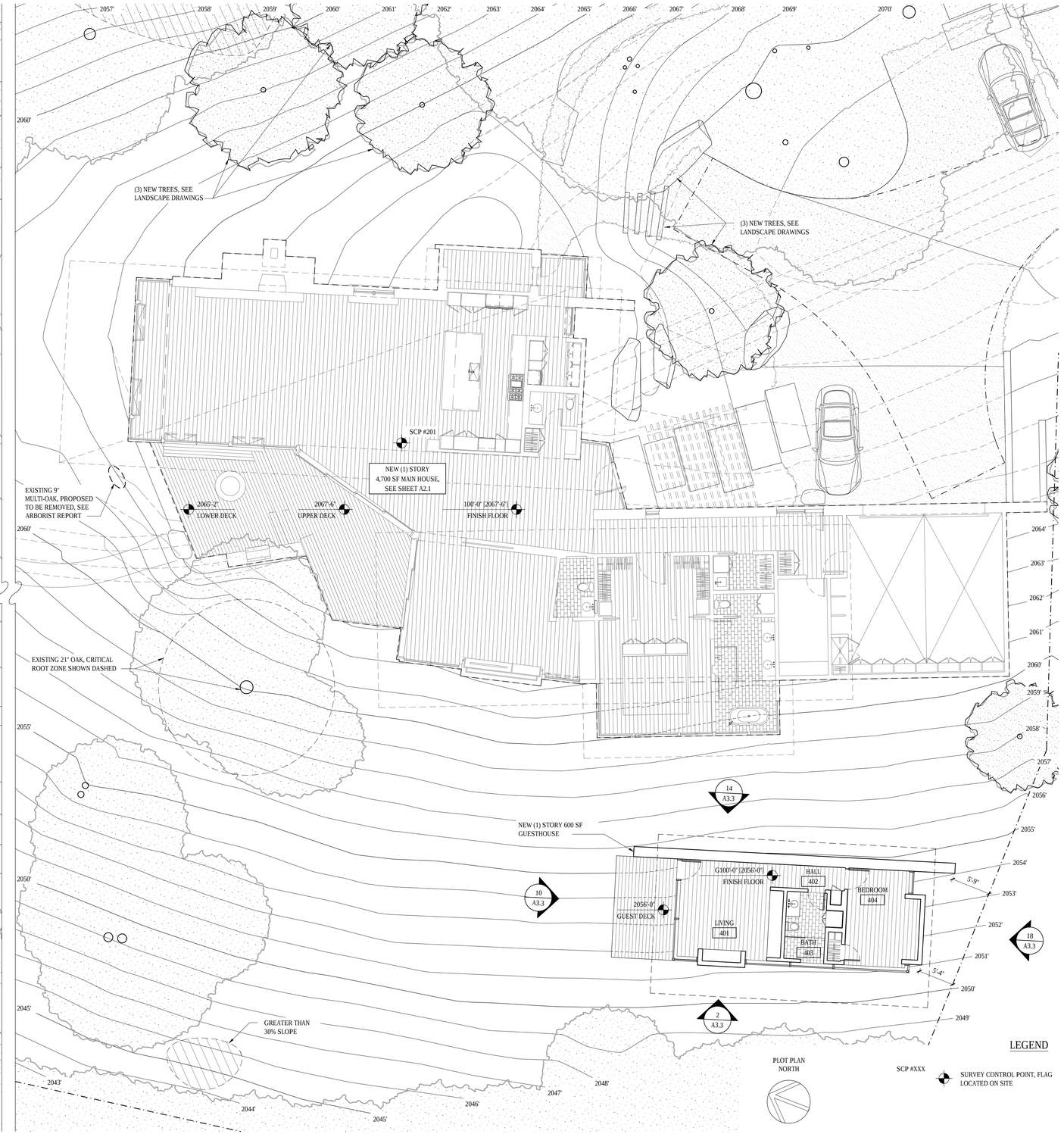
14 APRIL 2017	DATE
16514A	BCJ PROJECT NO.
1/8" = 1'-0"	SCALE
DY	CM
DRAWN BY	CHECKED BY

MAIN HOUSE & CARETAKER'S FLOOR PLANS

A2.1

SHEET NUMBER





LEGEND

17 POOLHOUSE FLOOR PLAN
1/8"=1'-0"

1 GUESTHOUSE FLOOR PLAN
1/8"=1'-0"

REVISION NUMBER	DESCRIPTION	DATE

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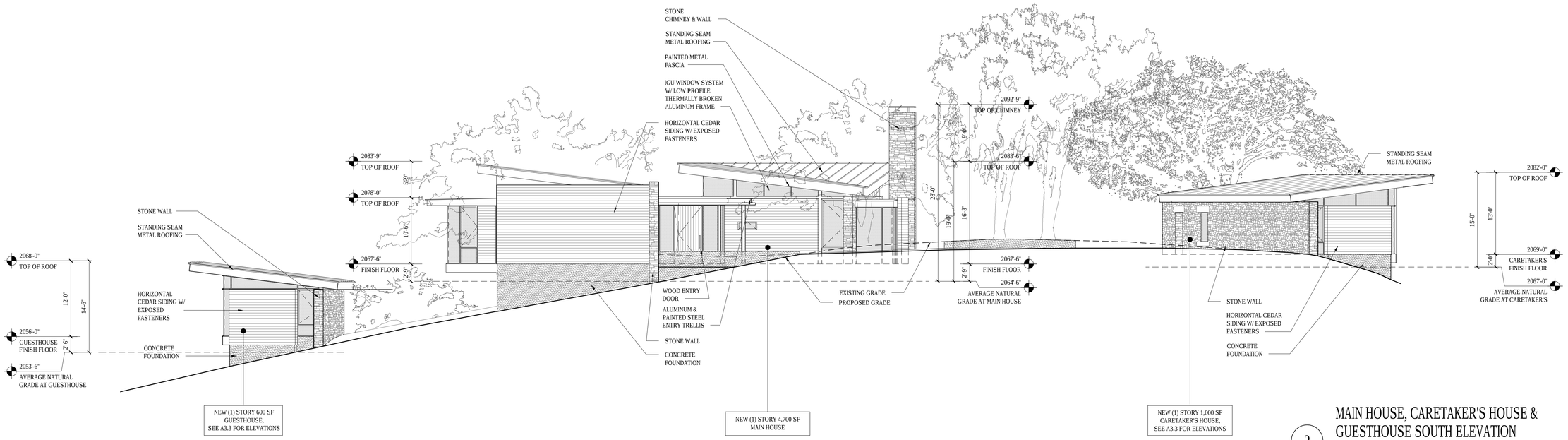
Santa Lucia Preserve Lot 143
4 Vuelo de las Palomas, Carmel, California 93923

PLANNING SUBMISSION

DATE	14 APRIL 2017
BCJ PROJECT NO.	16514A
SCALE	1/8" = 1'-0"
DRAWN BY	DY
CHECKED BY	CM

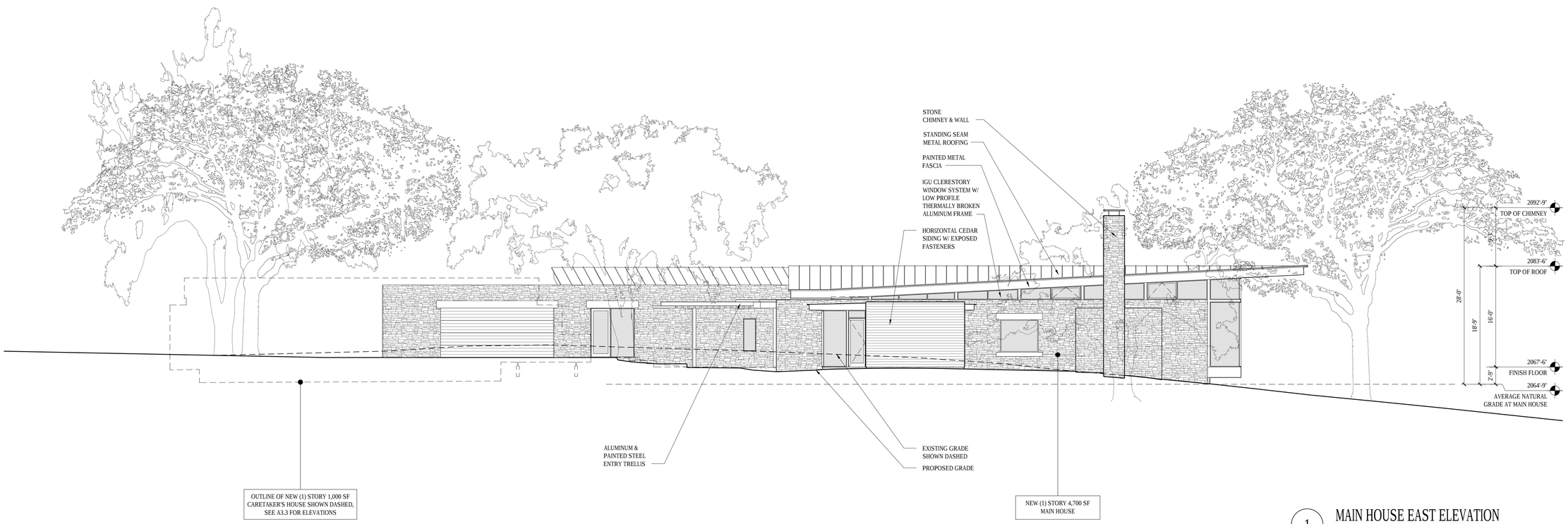
GUESTHOUSE & POOLHOUSE FLOOR PLANS

SHEET NUMBER A2.2



2 MAIN HOUSE, CARETAKER'S HOUSE & GUESTHOUSE SOUTH ELEVATION

1/8"=1'-0"



1 MAIN HOUSE EAST ELEVATION

1/8"=1'-0"

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Architecture Planning Interior Design
49 Geary Street, Suite 300
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PLANNING SUBMISSION

14 APRIL 2017
DATE

16514A
BCJ PROJECT NO.

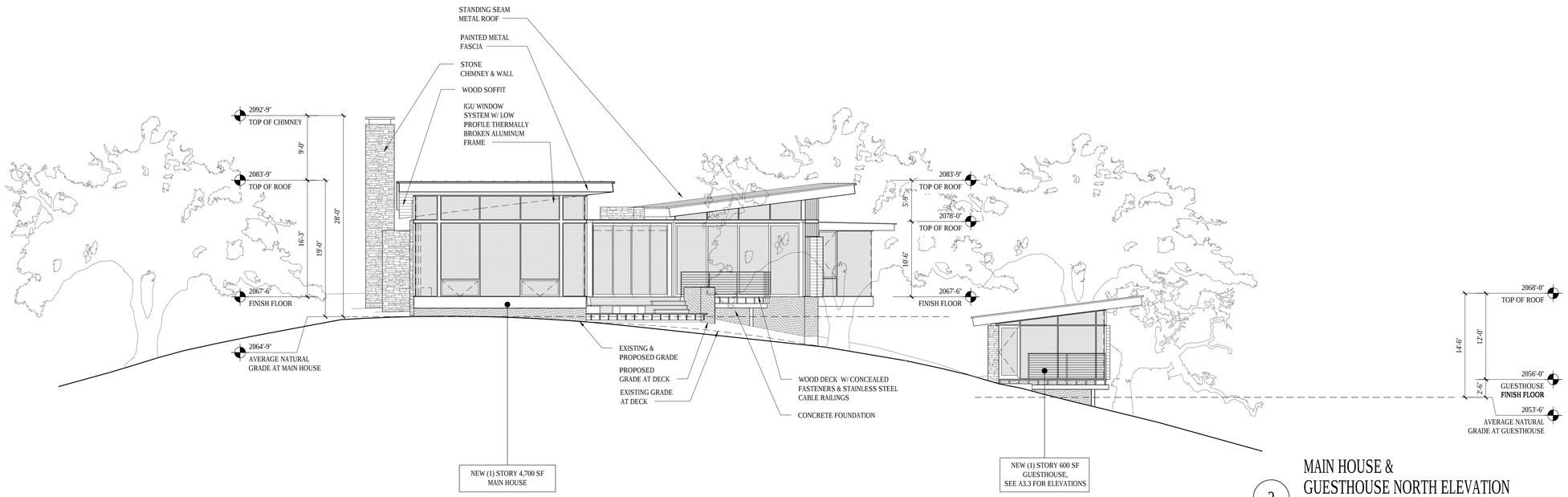
1/8" = 1'-0"
SCALE

BCJ
DRAWN BY

BCJ
CHECKED BY

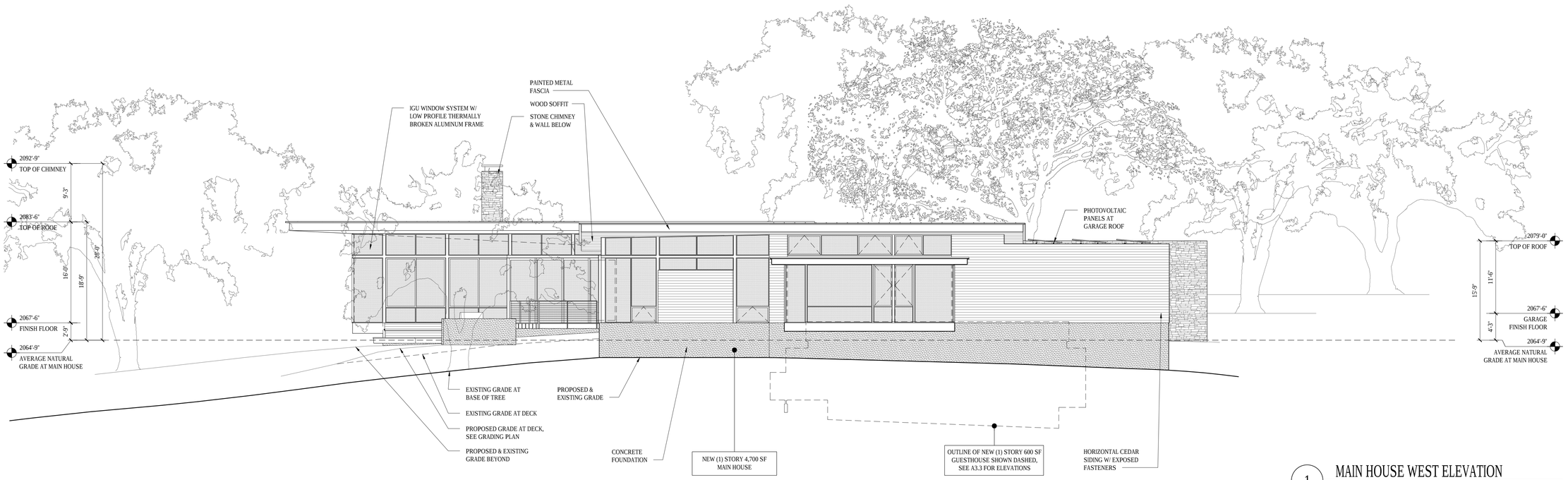
ELEVATIONS - MAIN HOUSE

A3.1
SHEET NUMBER



1 MAIN HOUSE WEST ELEVATION

1/8"=1'-0"



2 MAIN HOUSE & GUESTHOUSE NORTH ELEVATION

1/8"=1'-0"

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Architecture Planning Interior Design
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16514A
BCJ PROJECT NO.

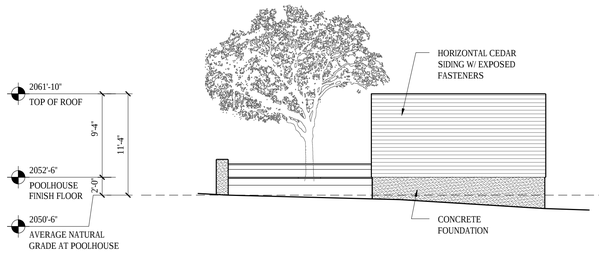
1/8" = 1'-0"
SCALE

BCJ
DRAWN BY

BCJ
CHECKED BY

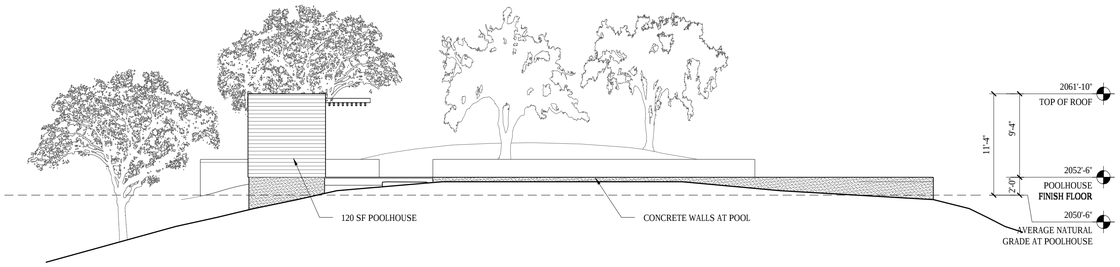
ELEVATIONS - MAIN HOUSE

A3.2
SHEET NUMBER



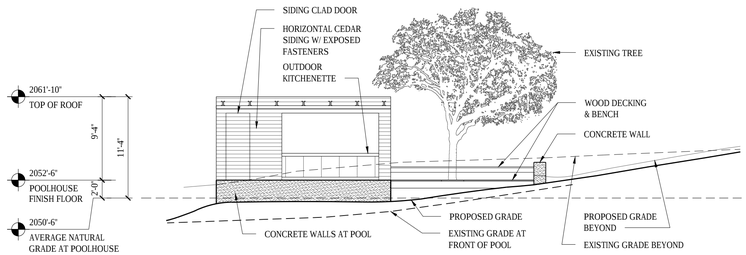
16 POOLHOUSE EAST ELEVATION

1/8"=1'-0"



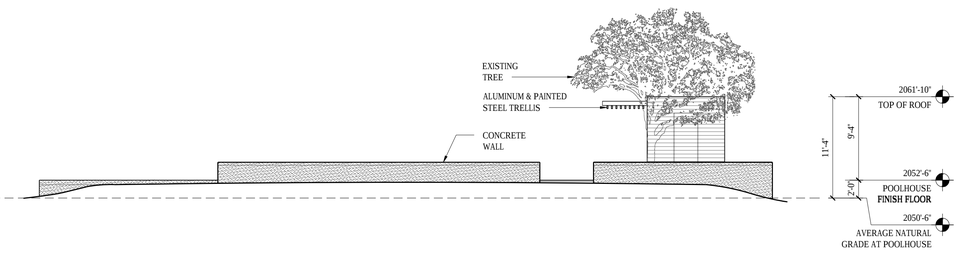
4 POOLHOUSE NORTH ELEVATION

1/8"=1'-0"



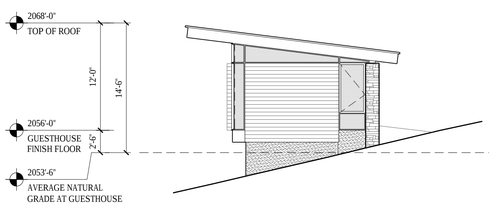
15 POOLHOUSE WEST ELEVATION

1/8"=1'-0"



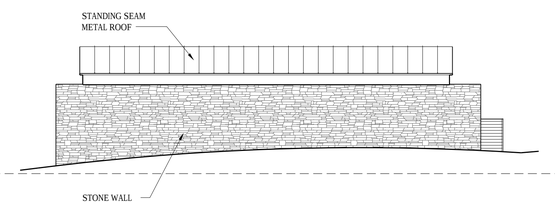
3 POOLHOUSE SOUTH ELEVATION

1/8"=1'-0"



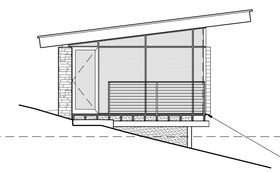
18 GUESTHOUSE SOUTH ELEVATION

1/8"=1'-0"



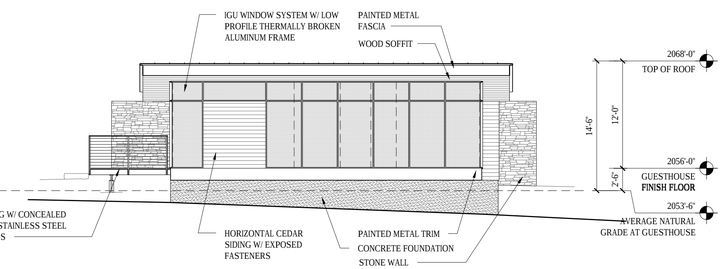
14 GUESTHOUSE EAST ELEVATION

1/8"=1'-0"



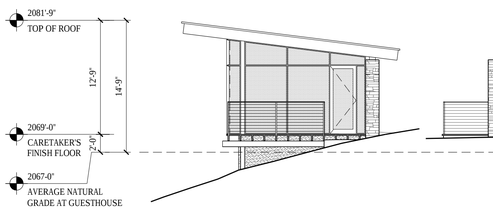
10 GUESTHOUSE NORTH ELEVATION

1/8"=1'-0"



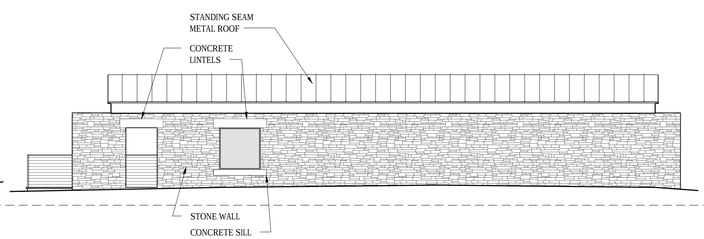
2 GUESTHOUSE WEST ELEVATION

1/8"=1'-0"



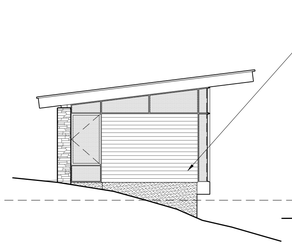
17 CARETAKER'S NORTH ELEVATION

1/8"=1'-0"



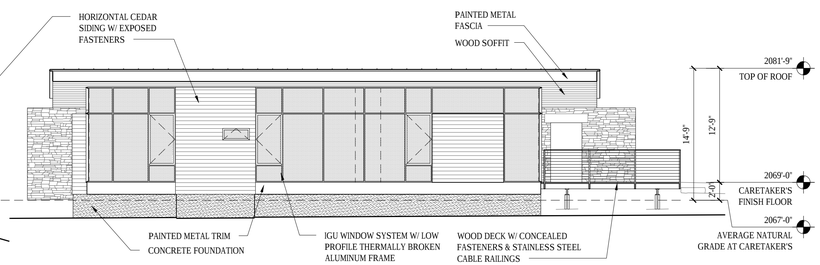
13 CARETAKER'S WEST ELEVATION

1/8"=1'-0"



9 CARETAKER'S SOUTH ELEVATION

1/8"=1'-0"



1 CARETAKER'S EAST ELEVATION

1/8"=1'-0"

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St. Sure-Walsh Residence
Santa Lucia Preserve Lot 143
4 Vuelo de las Palomas, Carmel, California 93923

PLANNING SUBMISSION

14 APRIL 2017	DATE
16514A	BCJ PROJECT NO.
1/8" = 1'-0"	SCALE
BCJ	DRAWN BY
BCJ	CHECKED BY

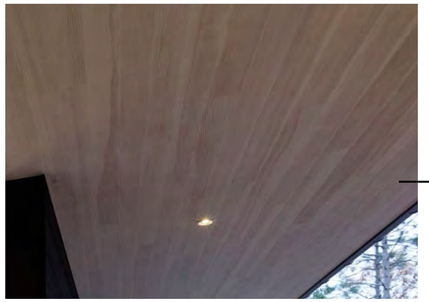
ELEVATIONS - CARETAKER'S, GUESTHOUSE, & POOLHOUSE

A3.3

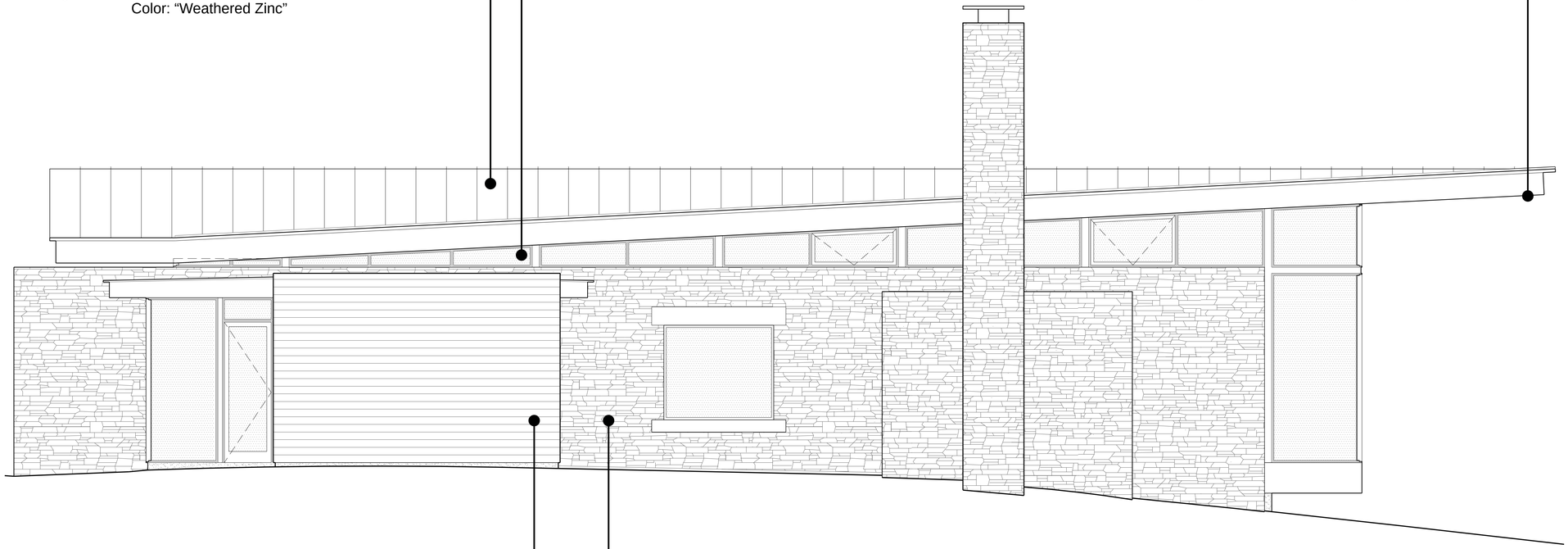
SHEET NUMBER

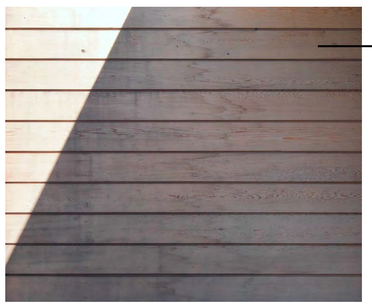
Roofing/Fascias: Standing Seam Painted Metal,
Color: “Weathered Zinc”

Doors & Windows: Dark Bronze Powder-coated Aluminum



Soffits: Doug Fir Wood T&G Decking w/ Grey Stain





Wood Siding: Cedar Shiplap w/ Grey Stain

Stone Walls: Grey Idaho Quartzite, Dry-stack Ledge Pattern

REVISION NUMBER	DESCRIPTION	DATE

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415.989.2100

St. Sure-Walsh Residence
Santa Lucia Preserve Lot 143
4 Valle de las Palomas, Carmel, California 93923

PLANNING SUBMISSION

DATE: 14 APRIL 2017

BCJ PROJECT NO.: 16514A

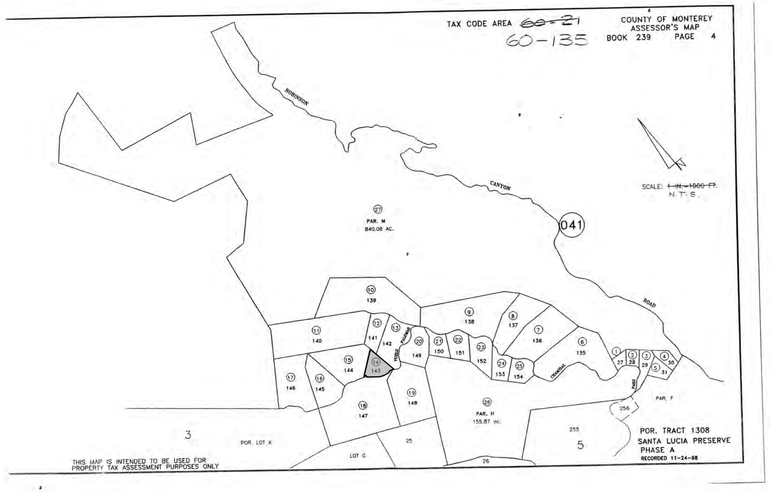
SCALE: -

DRAWN BY: CM

CHECKED BY: CM

EXTERIOR
MATERIAL PALETTE

SHEET NUMBER: A4.0



SITE MAP

VICINITY MAP

CONSTRUCTION NOTES

1. ALL WORK SHALL TAKE PLACE DURING DAYLIGHT HOURS, MONDAY - FRIDAY, 8 AM TO 5PM
2. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE PER DAY, FREQUENCY SHOULD BE BASED UPON THE TYPE OF OPERATION, SOIL, AND WIND EXPOSURE
3. ALL GRADING ACTIVITIES SHALL BE HALTED DURING PERIODS OF HIGH WINDS (15 MPH).
4. HAUL TRUCKS SHALL MAINTAIN 2 - FEET FREEBOARD AND BE COVERED.
5. COVER INACTIVE STORAGE PILES.
6. THE SIGNED PERMITS AND THE APPROVED CONSTRUCTION PLANS SHALL BE MAINTAINED IN A CONSPICUOUS LOCATION AT THE CONSTRUCTION JOB SITE AT ALL TIMES, AND THAT COPIES ARE AVAILABLE FOR AGENCY REVIEW UPON REQUEST. ALL PERSONS INVOLVED WITH THE CONSTRUCTION SHALL BE BRIEFED ON THE CONTENT AND MEANING OF THE PERMITS AND THE APPROVED CONSTRUCTION PLANS, AND THE PUBLIC REVIEW REQUIREMENTS APPLICABLE TO THEM, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
7. EQUIPMENT WASHING, REFUELING AND SERVICING SHALL TAKE PLACE ONLY ONSITE. APPROPRIATE BEST MANAGEMENT PRACTICES SHALL BE USED TO ENSURE THAT NO SPILLS OF PETROLEUM PRODUCTS OR OTHER CHEMICALS TAKE PLACE DURING THESE ACTIVITIES. SEE THE EROSION CONTROL PLAN FOR FURTHER SPECIFICATIONS.
8. THE CONSTRUCTION SITE SHALL MAINTAIN GOOD CONSTRUCTION SITE HOUSEKEEPING CONTROLS AND PROCEDURES (E.G.: CLEANUP ALL LEAKS, DRIPS, AND OTHER SPILLS IMMEDIATELY; KEEP MATERIALS COVERED AND OUT OF THE RAIN, INCLUDING COVERING EXPOSED PILES OF SOILS AND WASTES, DISPOSE OF ALL WASTES PROPERLY, PLACE TRASH RECEPTACLES ON SITE FOR THAT PURPOSE, AND COVER OPEN TRASH RECEPTACLES DURING WET WEATHER).
9. ALL EROSION AND SEDIMENT CONTROLS SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AS WELL AS AT THE END OF EACH WORKDAY. AT A MINIMUM, SILT FENCES, OR EQUIVALENT APPARATUS, SHALL BE INSTALLED AT THE PERIMETER OF THE CONSTRUCTION SITE TO PREVENT CONSTRUCTION-RELATED RUNOFF AND/ OR SEDIMENT FROM LEAVING THE SITE.

CONSTRUCTION COORDINATOR

CONTRACTOR SHALL PROVIDE A CONSTRUCTION COORDINATOR THAT CAN BE CONTACTED DURING CONSTRUCTION, SHOULD QUESTIONS ARISE DURING CONSTRUCTION (IN CASE OF BOTH REGULAR INQUIRES AND IN EMERGENCIES). THEIR CONTACT INFORMATION (INCLUDING THEIR ADDRESS AND 24-HOUR PHONE NUMBERS) SHALL BE CONSPICUOUSLY POSTED AT THE JOB SITE IN A MANNER THAT THE CONTACT INFORMATION IS READILY VISIBLE FROM PUBLIC VIEWING AREAS. THE POSTING SHALL INDICATE THAT THE CONSTRUCTION COORDINATOR SHOULD BE CONTACTED TO ANSWER ANY QUESTIONS THAT ARISE DURING CONSTRUCTION (IN CASE OF BOTH REGULAR INQUIRES AND IN EMERGENCIES). THE CONSTRUCTION COORDINATOR SHALL RECORD THE NAME, PHONE NUMBER AND NATURE OF ALL COMPLAINTS AND TAKE REMEDIAL ACTION, IF NECESSARY, WITHIN 24 HRS OF RECEIPT OF THE COMPLAINT OR INQUIRY.

CONSTRUCTION ACTIVITY DESCRIPTION

DURATION: JULY 2017 - DECEMBER 2018

MONDAY THRU FRIDAY 8AM - 5PM

10 WORKERS
4 REGULAR PICKUP TRUCKS

80% RECYCLE RATE FOR LUMBER.

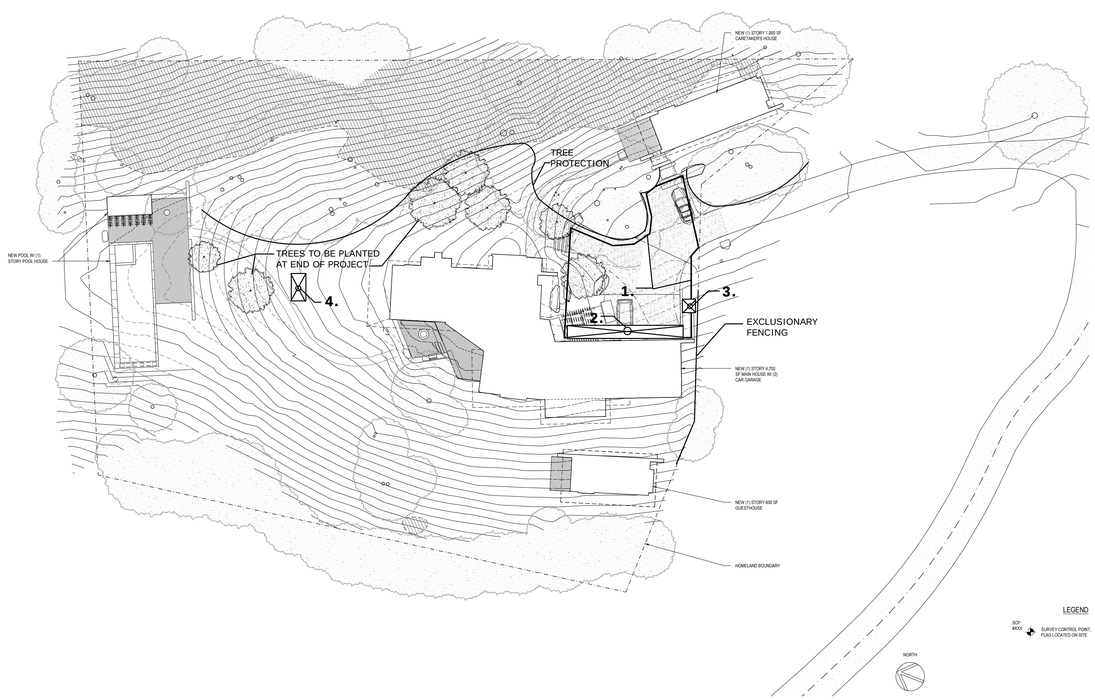
TRASH AND UNRECYCLED DEBRIS ARE COLLECTED ON SITE IN A PORTABLE TRAILER AND REMOVED BY TOWING BEHIND A REGULAR PICKUP TRUCK ONCE A MONTH TO THE MARINA LANDFILL.

AREA 1: LIMITED VEHICULAR PARKING, WORK CREWS WILL PARK IN THE PARKING LOT AT THE ENTRY GATE. CREWS WILL BE DRIVEN TO THE SITE IN A WORK VAN.

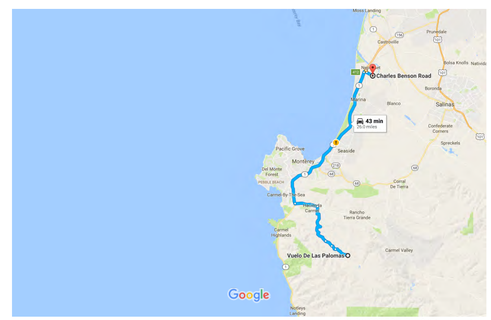
THIS WILL ALSO BE USED FOR MATERIAL DELIVERY. DELIVERY TRUCKS WILL BACK DOWN THE DRIVEWAY AND OFF-LOAD IN THE DESIGNATED VEHICULAR PARKING.

AREA 2: MATERIAL STOCKPILE
AREA 3: PORTA POTTY
AREA 4: JOB SHACK AND MOCK-UP

GRADING: 1350 cy CUT
80 cy FILL
1270 cy EXPORT



PARKING AND MATERIAL STOCKPILE LOCATION



Vuelo De Las Palomas
Carmel-By-The-Sea, CA 93923

Take Rancho San Carlos Rd and Carmel Valley Rd to CA-1 N — 24 min (9.5 mi)

1. Head west on Vuelo De Las Palomas toward Vuelo De Las Palomas 2 — 466 ft
2. Turn left onto Vuelo De Las Palomas 2 — 1.4 mi
3. Vuelo De Las Palomas 2 turns slightly left and becomes Cantera Run — 0.6 mi
4. Turn right to stay on Cantera Run — 0.8 mi
5. Turn right onto Rancho San Carlos Rd — 4.5 mi
   Restricted usage road
6. Turn left onto Carmel Valley Rd — 2.1 mi

Follow CA-1 N to Del Monte Blvd. Take exit 412 from CA-1 N — 16 min (15.6 mi)

7. Use any lane to turn right onto CA-1 N — 15.4 mi
8. Take exit 412 for Del Monte Blvd — 0.3 mi

Drive to Charles Benson Rd — 2 min (0.9 mi)

9. Turn right onto Del Monte Blvd — 0.2 mi
10. Turn left onto Charles Benson Rd — 0.7 mi
    Restricted usage road

Charles Benson Rd
Salinas, CA 93908

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

TRUCK HAULING ROUTE

Stocker & Allaire
General Contractors, Inc.
Lic: # 504797
21 Mandeville Court Monterey, CA 93940
831.375.1890 Fax 831.375.1480

CONSTRUCTION MANAGEMENT PLAN

DATE : APRIL 19, 2017
SCALE : AS SHOWN

ST. SURE/WALSH RESIDENCE

C M P