



Council Agenda Report

To: Mayor Pierson and the Honorable Members of the City Council

Prepared by: David Eng, Assistant Planner

Reviewed by: Bonnie Blue, Planning Director

Approved by: Reva Feldman, City Manager

Date prepared: July 30, 2020 Meeting date: August 10, 2020

Subject: Consolidated Coastal Development Permit for the Replacement of a Failed Onsite Wastewater Treatment System and New Seawall Improvements

RECOMMENDED ACTION: Adopt Resolution No. 20-42 (Attachment 1) authorizing the processing of a consolidated coastal development permit (CDP) by the California Coastal Commission (CCC) for the replacement of a failed onsite wastewater treatment system (OWTS) and associated development for an existing single-family residence at 19830 Pacific Coast Highway; and authorizing staff to prepare a letter addressed to the CCC to grant them the authority to process the consolidated CDP (H&E Holdings, LLC).

FISCAL IMPACT: There is no fiscal impact associated with the recommended action.

WORK PLAN: This item is not included in the Adopted Work Plan for Fiscal Year 2020-2021. Processing this application is part of normal staff operations.

DISCUSSION: In 2005, the City of Malibu recorded a Notice of Violation on the property for a failed OWTS. The current owners purchased the property in November 2018. Following an inspection of the property in June 2020, the Building Official determined it was necessary to immediately abate the hazardous sanitation issues. The proposed project will restore the dwelling's habitability, and help prevent the intrusion of sea water under the dwelling and from the OWTS and leach fields. The failed OWTS is located in part seaward and in part landward of the mean high tide line (MHTL), as would the proposed replacement OWTS and associated work. As the City has jurisdiction landward of the MHTL and the CCC has jurisdiction seaward of the MHTL, the project site falls within the City and CCC jurisdictions. As the City cannot process CDPs for items seaward of the MHTL, the applicant has requested that the City Council authorize the CCC to process a

consolidated CDP to replace a failed OWTS and associated work rather than to have a dual processing situation in which CDPs would be processed separately by the City and the CCC. Should the City Council authorize the consolidated permit, the CCC would be solely responsible for the process and issuance of the project CDP, including the portion in the City. The Coastal Act does not allow a consolidation process in which the CCC yields its permitting authority to the City; it only allows for a jurisdiction to yield permitting authority to the CCC.

Proposed Project

The subject parcel is developed with a single-family residence with an attached two-car garage. The project will replace a failed OWTS with a new OWTS. The project as currently proposed involves underpinning of the north wall of the residence and garage in the sections that abut the new tank, distribution box, and leach field, waterproofing the existing garage and flooring in the sections that abut the proposed leachfield, and installing a new mechanical ventilation system for the garage. Additionally, the project proposes a new concrete bag slope protection wall¹ below the residence to serve as a seawall for the existing dwelling, which is partially located seaward of the MHTL.

Consolidated CDP

Typically, the City would process an administrative CDP for replacement of a OWTS provided the work is located within its jurisdiction. However, because the project site extends seaward of the MHTL, the CCC and the California State Lands Commission (CSLC) hold jurisdiction that prevents the City from approving the seaward part of the project. Based on CSLC's review of 1928 and 2015 MHTL surveys, approximately 475 square feet of the proposed concrete bag seawall appear to be located seaward of the 10-foot MHTL setback. The code requires that new development maintains a 10-foot setback from the most landward MHTL and encroachment into the 10-foot setback requires a variance (Figure 1).

¹ Large bags filled with concrete and stacked to form a wall.

Figure 1- Site Plan and Mean High Tide Line²



Source: Illustration based on project plans and Eagleview

Approximately 189 square feet of the proposed concrete bag devices will be located seaward of the most landward MHTL to accommodate existing piles.

Pursuant to Section 30601.3 of the California Coastal Act, staff recommends the Council approve the submittal of a consolidated permit application to the CCC. Section 30601.3 provides as follows:

- a. Notwithstanding Section 30519, the Commission [California Coastal Commission] may process and act upon a consolidated coastal development permit application if both of the following criteria are satisfied:
 - 1. A proposed project requires a coastal development permit from both a local government with a certified local coastal program and the commission.

² Work depicted is located beneath the existing dwelling. Areas of work landward of the mean high tide line are within the permit jurisdiction of the City of Malibu. Areas of work seaward of the mean high tide line are within the permit jurisdiction of the California Coastal Commission.

2. The applicant, the appropriate local government and the commission, which may agree through its executive director, consent to consolidate the permit action, provided that public participation is not substantially impaired by that review consolidation.
- b. The standard of review for a consolidated coastal development permit application submitted pursuant to subdivision (a) shall follow Chapter 3 (commencing with Section 30200), with the appropriate local coastal program used as guidance.

Per subsection (a)1 above, the City must determine that the proposed project requires a CDP from the City and the CCC. Staff has determined that is a CDP is required from both the City and CCC considering the project site spans landward and seaward of the most landward MHTL.

Per subsection (a)2 above, the City must find that public participation will not be substantially impaired by the decision to consolidate the permit review. Applications to replace failed OWTSS are traditionally approved under administrative CDP applications and rarely draw public participation. It is not expected that a consolidated action would impair public participation. The applicant has submitted to the City an application and other documents and plans for the proposed project which are available for public review at the City. Furthermore, during the CCC's processing of the CDP application, members of the public may participate in the CCC's decision-making process by attending public hearings or by making their views known to the CCC prior to public hearings. The CCC will mail notices of public hearings to the owners and occupants of properties within 100 feet of the proposed development and other persons and agencies with interest in the project, and require a notice of application to be posted at the development site. Prior to each meeting, CCC staff collects and analyzes information pertinent to meeting agenda items and prepares written staff reports with recommendations for CCC action. These staff reports are available for public review by contacting the South Central Coast CCC office in Ventura. The CCC meetings provide an opportunity for the Commissioners to take public testimony and to make permit, planning, and other policy decisions.

As a result, the proposed consolidated CDP to the CCC is consistent with Section 30601.3 of the California Coastal Act.

OUTCOME: If the City Council consents to a consolidated CDP, staff will prepare a letter to the CCC authorizing the applicant to submit for a consolidated CDP. If City Council denies the request, staff will require the submittal and processing of a CDP for City approval and a separate CDP to be processed by the CCC.

ATTACHMENTS:

1. Resolution No. 20-42
2. Applicant Letter Requesting Consolidated CDP
3. Project Plans
4. Applicant Correspondence to City Council
5. Public Hearing Notice

RESOLUTION NO. 20-42

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MALIBU AUTHORIZING THE PROCESSING OF A CONSOLIDATED COASTAL DEVELOPMENT PERMIT BY THE CALIFORNIA COASTAL COMMISSION FOR THE REPLACEMENT OF A FAILED ONSITE WASTEWATER TREATMENT SYSTEM AND ASSOCIATED DEVELOPMENT FOR AN EXISTING SINGLE-FAMILY RESIDENCE AT 19830 PACIFIC COAST HIGHWAY; AND AUTHORIZING STAFF TO PREPARE A LETTER ADDRESSED TO THE CALIFORNIA COASTAL COMMISSION TO GRANT THEM THE AUTHORITY TO PROCESS THE CONSOLIDATED COASTAL DEVELOPMENT (H&E HOLDINGS, LLC)

SECTION 1. Recitals.

A. On October 23, 2014, an application for Coastal Development Permit (CDP) No. 14-062 was submitted to the Planning Department by applicant Rob Brown, on behalf of property owner Mike Ferrone. Since November 2018, the property is owned by H&E Holdings, LLC. The project proposes replacing a failed onsite wastewater treatment system (OWTS) with a new OWTS and related construction. A portion of the subject property, between Pacific Coast Highway and the mean high tide line (MHTL), is within the City's jurisdiction. A portion of the project is located seaward of the MHTL with the California State Lands Commission (CSLC) jurisdiction and California Coastal Commission (CCC) permitting jurisdiction.

B. In July 2020, the applicant submitted a written request for the City's consent to have the CCC process a consolidated CDP for the entire project to be processed in a single application under the authority of the CCC.

C. On July 30, 2020, a Notice of City Council Public Hearing for the City Council's consideration of authorization of a consolidated CDP was mailed to interested parties and all property owners and occupants within a 500-foot radius of the proposed project area.

D. On August 10, 2020, the City Council reviewed the submitted request and materials, reviewed and considered the agenda report, public testimony, and all related information.

SECTION 2. City Council Findings.

A. A consolidated CDP would avoid unnecessary and duplicative processing as a substantial portion of the project will occur within the jurisdiction of the CCC.

B. Public participation will not be substantially impaired by a consolidated review because: 1) the CCC will hold a noticed public hearing on the CDP application; and 2) the CCC will provide public notification of the public hearing when the CDP for the proposed project will be considered.

SECTION 3. Consent for Consolidated Coastal Development Permit.

Pursuant to Public Resources Code Section 30601.3, the City Council hereby consents to the processing of a consolidated CDP for the replacement of a failed OWTS and new concrete bag seawall and associated development.

SECTION 4. The City Clerk shall certify the adoption of this resolution.

PASSED, APPROVED, AND ADOPTED this 10th day of August 2020.

MIKKE PIERSON, Mayor

ATTEST:

HEATHER GLASER, City Clerk
(seal)

APPROVED AS TO FORM:

THIS DOCUMENT HAS BEEN REVIEWED
BY THE CITY ATTORNEY'S OFFICE

CHRISTI HOGIN, City Attorney

ATTACHMENT 2

Applicant Letter Requesting Consolidated Coastal Development Permit

Will be distributed under separate cover.

EPD CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

REVISION DATES (DESIGN STAGE ONLY)

ONSITE WASTEWATER TREATMENT SYSTEM WITH LEACH FIELD DISPERSAL

FOR

19830 PACIFIC COAST HIGHWAY MALIBU, CA 90265

PREPARED FOR:

ELIZABETH BOYAJIAN
1720 E. WASHINGTON BOULEVARD
PASADENA, CA 91104

PREPARED BY:

EPD CONSULTANTS, INC.
20722 MAIN STREET
CARSON, CA 90745
TEL. (310) 241-6565

GENERAL NOTES

1. WHEN APPLICABLE, WORK SHOWN HEREON SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," LATEST EDITION AND SUPPLEMENTS, THE UNIFORM BUILDING CODE (EXCAVATION AND GRADING), AND LOCAL ORDINANCES AS APPLICABLE.
2. THE RECOMMENDATIONS OF THE FOLLOWING PLANS & REPORTS:

DAVID C. WEISS STRUCTURAL ENGINEER & ASSOCIATES, INC.:

1. COASTAL ENGINEERING REPORT, DATED MARCH 4, 2014;
2. CONCRETE BAG SLOPE PROTECTION WALL PLANS, DATED APRIL 1, 2014;
3. COASTAL ENGINEERING REPORT, DATED OCTOBER 1, 2014;
4. PRELIMINARY SHORING PLAN, RECEIVED NOVEMBER 23, 2015;
5. STRUCTURAL ENGINEER'S CERTIFICATION FOR REDUCTION IN SETBACKS TO BUILDINGS AND STRUCTURES, DATED DECEMBER 22, 2016;
6. UPDATE OF COASTAL ENGINEERING REPORT, DATED JUNE 17, 2017;
7. RESPONSE TO CITY OF MALIBU GEOTECHNICAL REVIEW, DATED JUNE 22, 2017;
8. SHORING PLANS, RECEIVED NOVEMBER 26, 2019.

EPD CONSULTANTS, INC.:

1. PRELIMINARY ENGINEERING FEASIBILITY REPORT, DATED JULY 21, 2014;
2. TEMPORARY EXCAVATION PLAN/ SECTION DETAILS FOR OWS REVISION 1, DATED MARCH 10, 2016;
3. ADDENDUM I ENGINEERING REPORT, DATED APRIL 15, 2016;
4. ADDENDUM II ENGINEERING REPORT, DATED OCTOBER 7, 2016;
5. TEMPORARY EXCAVATION PLAN REVISION 3, DATED NOVEMBER 3, 2017;
6. ADDENDUM III ENGINEERING REPORT, DATED NOVEMBER 6, 2017;
7. ADDENDUM IV ENGINEERING FEASIBILITY REPORT, DATED NOVEMBER 27, 2019;
8. FINAL ENGINEERING REPORT, DATED FEBRUARY 20, 2020.

KOVACS-BYER-ROBERTSON INC.:

1. LIMITED GEOLOGIC AND SOILS ENGINEERING EXPLORATION, DATED APRIL 21, 1983.

LAND & AIR SURVEYING:

1. ARCHITECTURAL SURVEY, DATED AUGUST 20, 2013.

NATIONAL FLOOD INSURANCE PROGRAM:

1. FLOOD INSURANCE RATE MAP (FIRM) NUMBER 06037C1561F PANEL 1561 OF 2350, EFFECTIVE DATE SEPTEMBER 26, 2008.

ROBERTSON GEOTECHNICAL INC.:

1. LIMITED ENGINEERING EXPLORATION, DATED JANUARY 7, 2014;
2. ADDENDUM ENGINEERING GEOLOGIC AND GEOTECHNICAL ENGINEERING REPORT, DATED APRIL 5, 2016;
3. ADDENDUM II ENGINEERING GEOLOGIC AND GEOTECHNICAL ENGINEERING REPORT, DATED NOVEMBER 16, 2016;
4. ADDENDUM III ENGINEERING GEOLOGIC AND GEOTECHNICAL ENGINEERING REPORT, DATED APRIL 4, 2016.

SOIL LABWORKS LLC:

1. LABORATORY TESTING, DATED DECEMBER 6, 2013.

L&D ENGINEERING, INC.:

1. VENTILATION REPORT FOR THE PROPOSED PASSIVE VENTILATION OF THE ONSITE OWTS, DATED FEBRUARY 3, 2017

ROSELL SURVEYING AND MAPPING, INC.:

1. SURVEY, DATED JANUARY 18, 2019.

CITY OF MALIBU:

1. ENVIRONMENTAL HEALTH CONFORMANCE REVIEW, DATED FEBRUARY 12, 2018;
2. COASTAL ENGINEERING REVIEW SHEET APPROVAL, DATED MAY 24, 2018.

GEOCONCEPTS, INC.:

1. SHORING LETTER, DATED DECEMBER 2, 2019.

SHALL BE MADE A PART OF THESE PLANS.

3. EXISTING TOPOGRAPHY SHOWN HEREON WAS PROVIDED BY THE OWNER.
4. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
5. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS FOR GRADING, DRAINAGE AND UNDERGROUND UTILITIES INCLUDING LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AT CROSSINGS WITH PROPOSED UNDERGROUND UTILITIES. IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITIONS HAVE BEEN EVALUATED.
6. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
7. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NONE ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
8. THE EXISTENCE, LOCATION AND CHARACTERISTICS OF UNDERGROUND UTILITY INFORMATION SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM A REVIEW OF AVAILABLE RECORD DATA. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. IF AT ANY TIME DURING GRADING OPERATIONS, ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, GRADING IN THAT AREA WILL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED.
10. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION OF MATERIAL TO AND FROM THE SITE.
11. ALL FILL SOILS OR SOILS DISTURBED OR OVEREXCAVATED DURING CONSTRUCTION SHALL BE COMPACTED PER THE REQUIREMENTS OF THE SOILS REPORT BUT NOT LESS THAN 90% MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. SOIL COMPACTION TEST D-1557.
12. THE CONTRACTOR SHALL OBTAIN AN O.S.H.A. PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE FIVE FEET OR DEEPER.
13. ALL STORM DRAIN AND SANITARY SEWER PIPE, FITTINGS AND JOINTS SHALL BE POLYVINYL CHLORIDE SDR 35 IN ACCORDANCE WITH SECTION 207-17 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED.
14. ALL WATER LINES SHALL BE POLYVINYL CHLORIDE CLASS 150 AND SHALL MEET THE REQUIREMENTS OF AWWA C900 PVC PRESSURE PIPE, UNLESS OTHERWISE NOTED.
15. THRUST BLOCKS SHALL BE INSTALLED AT WATERLINE HORIZONTAL AND VERTICAL BENDS, TEES, CAPPED ENDS AND REDUCERS ACCORDING TO THE STANDARD PLAN METRIC 508-1 THRUST BLOCKS FOR PLASTIC PIPE.
16. THE CONTRACTOR SHALL REPLACE ALL EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION TO MATCH EXISTING, INCLUDING PERMANENT TRENCH RESURFACING.
17. THE CONTRACTOR SHALL BE AWARE OF ALL OVERHEAD LINES AT ALL TIMES, SO AS NOT TO DISTURB THEM.
18. WATER SHALL BE PROVIDED ONSITE AND USED TO CONTROL DUST DURING CONSTRUCTION OPERATIONS.
19. THE CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS FROM THE APPROPRIATE LOCAL REGULATOR FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
20. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, INCLUDING NPDES, FROM THE APPROPRIATE JURISDICTIONAL AGENCIES FOR DISCHARGE OF GROUNDWATER THAT MAY BE NECESSARY TO ACCOMPLISH EXCAVATIONS SHOWN ON THESE PLANS.
21. THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL CONSTRUCTION SURVEYING THAT MAY BE REQUIRED. ALL CONSTRUCTION STAKING, AS REQUIRED, SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR. THE WORK SHALL BE CERTIFIED IN WRITING AS TO LINE AND GRADE PER APPROVED PLANS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
22. THE DRAWINGS AND SPECIFICATIONS BY THE ENGINEER REPRESENT THE

- COMPLETED CONSTRUCTION. ALL BRACING, TEMPORARY SUPPORTS, SHORING, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. OBSERVATION VISITS TO THE JOB SITE BY THE ENGINEER SHALL NOT INCLUDE INSPECTION OF CONSTRUCTION METHODS AND SAFETY CONDITIONS AT THE WORK SITE. THESE VISITS SHALL NOT BE CONSTRUED AS CONTINUOUS AND DETAILED INSPECTIONS. ALL PIPING ABOVE-GRADE FOR THE PUMPS AND EQUIPMENT, AND PIPING MANIFOLDS, SHALL BE STRUCTURALLY SUPPORTED BY ADEQUATE PIPE SUPPORTS OR HANGERS, PER LOCAL CODES AND ORDINANCES.
23. ALL PIPE AND CONDUIT TRENCH BACKFILL, MATERIAL, AND COMPACTION SHALL CONFORM TO LOCAL STANDARDS. BORING OR TUNNELING UNDER EXISTING IMPROVEMENTS IS NOT ALLOWED. NO OPEN EXCAVATIONS SHALL BE ALLOWED OVERNIGHT. BEFORE THE END OF EVERY WORK DAY, THE CONTRACTOR SHALL BACKFILL OR PLATE OVER ALL OPEN EXCAVATIONS, TO THE SATISFACTION AND APPROVAL OF THE OWNER AND/OR ENGINEER.
 25. ALL PIPING SHALL BE COMPLETELY CONCEALED, WHEREVER POSSIBLE. ANY EXPOSED PVC PIPE AND FITTINGS SHALL BE ULTRAVIOLET-RESISTANT (UVR-PVC) OR SHALL BE PAINTED, SUBJECT TO APPROVAL OF THE ENGINEER.
 26. ALL PUMPS, VAULTS, VALVE BOXES, OTHER STRUCTURES, PIPELINES, ETC., MUST BE INSTALLED OUTSIDE OF THE UTILITY EASEMENTS, AND OUTSIDE OF ANY OTHER PROHIBITED EASEMENTS AND AREAS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME KNOWLEDGEABLE OF, AND TO COMPLETELY UNDERSTAND, THESE EASEMENTS AND AREAS, AND TO AVOID CONSTRUCTION THEREIN, AS POSSIBLE. FOR THE SAKE OF CLARITY IN THESE DESIGN PLANS, PUMPS, VAULTS, VALVE BOXES, PIPELINES, ETC., MAY NOT ALL BE SHOWN OUTSIDE OF THE EASEMENTS, AS SUCH DEPICTIONS ARE SCHEMATIC ONLY.
 27. ALL PIPING LOCATIONS SHOWN ON THESE DESIGN PLANS ARE SCHEMATIC ONLY, AND ARE SUBJECT TO MINOR RELOCATION(S). PIPELINE CIRCUITRY/LAYOUT (BRANCHING), HOWEVER, SHALL BE EXACTLY AS PER THE PLANS. PIPELINES SHOULD BE INSTALLED IN THE MOST DIRECT ROUTE(S) POSSIBLE: FROM INTAKES TO PUMPS, AND FROM PUMPS TO DISCHARGE POINTS. A COPY OF AS-BUILT CONDITIONS SHALL BE MAINTAINED ON THE JOB SITE, AND SHALL BE DELIVERED TO THE OWNER AND TO THE ENGINEER WHENEVER REQUESTED, AND WHEN CONSTRUCTION IS COMPLETED; FOR APPROVAL.
 28. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
 29. PIPING SHALL BE INSTALLED IN TRENCHES IN THE MOST UNIFORM GRADE AS IS POSSIBLE, AND SHALL HAVE NO LOCAL HIGH OR LOW POINTS.
 30. HORIZONTAL PIPE RUNS SHALL HAVE 18" MINIMUM COVER WHEN UNDER PAVED SURFACES AND 24" MINIMUM COVER OTHERWISE.
 31. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, AT (800) 227-2260, AT LEAST TWO WORKING DAYS BEFORE ANY DIGGING. NOTE THAT THE USA CENTER ONLY NOTIFIES THOSE UTILITIES BELONGING TO THE CENTER. THERE MAY BE OTHER UTILITIES PRESENT AT THE WORK SITE. THE CENTER WILL INFORM YOU OF WHOM THEY WILL NOTIFY.
 32. ALL WORK SPECIFIED HEREIN SHALL, AT ALL TIMES, COMPLY WITH ALL APPLICABLE CURRENT BUILDING CODES, PLUMBING CODES, ELECTRICAL CODES, ADA REQUIREMENTS, AND WITH ALL LOCAL REGULATIONS AND ORDINANCES. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE UNIFORM BUILDING CODE (UBC) AS TO DESIGN AND CONSTRUCTION, AND THE CURRENT CBC AND CCR TITLE 24 PERTAINING TO "DISABLED ACCESS REGULATIONS."
 33. ANY INCIDENTAL INSTALLATION PROCEDURE, MATERIAL, OR EQUIPMENT NOT MENTIONED IN THESE CONSTRUCTION DOCUMENTS, INCLUDING THE PLANS AND SPECIFICATIONS, WHICH MAY BE NECESSARY FOR COMPLETION AND SATISFACTORY OPERATION OF THE DESIGN OR SYSTEM, SHALL BE FURNISHED AND INSTALLED, AS BASED ON THE INDUSTRY STANDARDS; AS SHOWN OR PROVIDED FOR IN THE CONSTRUCTION DOCUMENTS.
 34. INTERPRETATION OF THE DESIGN DOCUMENTS, INCLUDING PLANS AND SPECIFICATIONS, SHALL BE MADE BY THE AUTHOR, ARCHITECT, OR ENGINEER OF RECORD OF THE RESPECTIVE DOCUMENT. SUCH INTERPRETATION(S) SHALL BE CONSIDERED FINAL. ANY POSSIBLE AMBIGUITY SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR PRIOR TO SUBMITTING FORMAL BIDS. ALL CLARIFICATIONS SHALL BE PREPARED IN WRITING BY THE ARCHITECT OR ENGINEER OF RECORD PRIOR TO BIDDING. THE CONTRACTOR SHALL ACCEPT THE INTERPRETATION(S) OF THE ARCHITECT OR ENGINEER OF RECORD AS THE CORRECT AND FINAL INTERPRETATION(S).
 35. ALL OMISSIONS, DISCREPANCIES, ERRORS, AND CONFLICTS IN THE DRAWINGS INTENT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER, THE OWNER, AND ITS DESIGNATED REPRESENTATIVE(S) BEFORE PROCEEDING WITH WORK.
 36. THESE CONSTRUCTION DOCUMENTS, INCLUDING ALL PLANS, NOTES, DETAILS,

- AND SPECIFICATIONS, ARE INTENDED TO FACILITATE THE CONTRACTOR, BY PROVIDING GENERAL GUIDELINES OF THE DESIGN INTENT. IT IS THE GOAL OF THE DOCUMENTS THAT CONSTRUCTION WORK BE COMPLETED WITHOUT CHANGE ORDERS. ALL QUANTITIES SHOWN IN THE DOCUMENTS ARE ESTIMATES ONLY, AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL SUPPLY ALL MATERIALS, LABOR, AND EQUIPMENT IN ORDER TO FULFILL THE DESIGN INTENT.
37. THE CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY PROTECTIVE FENCING FOR OPEN TRENCH EXCAVATION AND AS REQUIRED IN WORK AREAS FOR PEDESTRIAN AND VEHICULAR SAFETY, TO SECURE EQUIPMENT AND PERSONNEL FROM PUBLIC AT ALL TIMES FOR JOBSITE SECURITY. NEW OR USED MATERIAL MAY BE FURNISHED.
 38. THE CONTRACTOR SHALL PROVIDE AND INSTALL SIGNAGE TO PROVIDE DIRECTIONAL, IDENTIFICATION, AND CONTACT INFORMATION TO CONSTRUCTION PERSONNEL AND PUBLIC.
 39. EPD CONSULTANTS, INC. ASSUMES NO LIABILITY, REAL OR ALLEGED, REGARDING THE ACCURACY OF THE TOPOGRAPHIC INFORMATION SHOWN.
 40. THE CONTRACTOR SHALL BE APPROPRIATELY LICENSED WITH THE STATE OF CALIFORNIA TO PERFORM THE WORK OUTLINED IN THESE PLANS. NO WORK IS TO PROCEED WITHOUT OBTAINING A VALID PERMIT FROM THE LOCAL DEPARTMENT OF ENVIRONMENTAL HEALTH. SHOULD A SUBCONTRACTOR BE UTILIZED IN ORDER TO MEET THE EXPERIENCE REQUIREMENT, QUALIFYING SUBCONTRACTOR SHALL BE REQUIRED TO MAINTAIN PERSONNEL IN A RESPONSIBLE SUPERVISORY POSITION AT ALL TIMES.
 41. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT; EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
 42. SANITARY WASTEWATER AND PROCESS WASTEWATER SYSTEMS TO OBSERVE ALL SETBACKS REQUIRED BY THE CITY & DEPARTMENT OF ENVIRONMENTAL HEALTH.
 43. NO VEHICULAR TRAFFIC, CUTS OR FILLS TO OCCUR WITHIN THE BOUNDARY OF CONSTRUCTION FENCING, CONSTRUCTION FENCING TO REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION PROJECT. INCLUSIVE OF WORK OUTSIDE OF THE SCOPE OF THIS PROJECT
 44. ENGINEERS REQUIRED SUBMITTALS PRIOR TO ORDERING OWS SHALL BE AS FOLLOWS: (A) GRAVITY FLOW LINE FROM STRUCTURES TO INVERT/DEPTH OF SEPTIC TANK(S). (B) PIPING AND APPURTENANCES. (C) TANKS AND APPURTENANCES. (D) SOIL AMENDMENTS. (E) TREATMENT SYSTEM & PUMPS. (F) CONTROL PANEL. (G) A WRITTEN REPORT OF THE HYDROSTATIC AND LEAKAGE TEST PROCEDURE AND RESULTS. (H) WATER TABLE ANALYSIS TO WAIVE TANK ANCHOR REQUIREMENT; (I) FILTER FABRIC. (J) GEOLOGIC OBSERVATION MEMORANDUM OF LEACH FIELD INSTALLATION.
 45. ENGINEER REQUIRED INSPECTIONS:
(A) SYSTEM DESIGNER (EPD) TO CONDUCT PERIODIC INSPECTIONS, INCLUDING AT A MINIMUM VERIFICATION OF STAKED SITE LAYOUT, OBSERVATION OF INSTALLED OWS COMPONENTS, DISPERSAL SYSTEM AND ALL PIPING PRIOR TO BURIAL, AND SYSTEM STARTUP. IF SYSTEM DESIGNER DOES NOT OBSERVE THE CONSTRUCTION, ALL LIABILITY IS RELEASED TO THE INSTALLER.
(B) PRIOR TO ORDERING THE OWS COMPONENTS, A PRE- CONSTRUCTION MEETING SHALL TAKE PLACE AT THE JOBSITE TO DETERMINE ALL FINAL ELEVATIONS AND LOCATIONS OF ALL OWS COMPONENTS.
(C) THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE AND APPROVE THE INSTALLATION OF THE LEACH FIELD AND TREATMENT SYSTEM TANK AND PROVIDE THE CITY INSPECTOR WITH A FIELD MEMORANDUM(S) DOCUMENTING AND VERIFYING THAT THE OWS WAS INSTALLED PER THE APPROVED OWS PLANS.

DRAWING INDEX

SHT. No.	DESCRIPTION
G-1	TITLE SHEET AND NOTES
W1.01	ONSITE WASTEWATER SYSTEM (OWS) SITE PLAN
W1.02	OWS REDUCTION IN SETBACK PLAN
W1.03	PROCESS PIPING SCHEMATIC FLOW DIAGRAM
W2.01	SYSTEM DETAILS
W2.02	TRAFFIC SLAB DETAILS
W2.03	SYSTEM DETAILS
W2.04	CROSS-SECTION A-A' & B-B'
W2.05	OWS EROSION CONTROL PLAN

VICINITY MAP



CONSULTANT

SURVEYOR:

ROSELL SURVEYING AND MAPPING, INC.:
20951 BROOKHURST STREET, SUITE 101
HUNTINGTON BEACH, CA 92646
TEL. 714.934.4500

GEOLOGIST:

GEOCONCEPTS, INC.
14428 HAMLIN STREET, #200
VAN NUYS, CA 91401
TEL. 818.994.8895

GEOTECHNICAL ENGINEER:

ROBERTSON GEOTECHNICAL, INC.
2500 TOWNSGATE ROAD, SUITE E
WESTLAKE VILLAGE, CA 91361
TEL. 805.373.0057

STRUCTURAL ENGINEER:

DAVID C. WEISS STRUCTURAL ENGINEER & ASSOCIATES, INC.
20812 VENTURA BOULEVARD, SUITE 200
WOODLAND HILLS, CA 91346
TEL. 818.227.8040

MANUFACTURER:

MICROSEPTIC
C/O GREEN TECHNOLOGY SOLUTIONS, INC.
ATTN: KEVIN GREEN
23352 MADERO, SUITE C
MISSION VIEJO, CA 92691
TEL. 949.305.0651



DATE	BY
6/20/19	CL
10/21/19	CL
11/27/19	CB
2/20/20	CL

NO.	REVISIONS:
6	REVISE LEACH FIELD
7	REVISE TANK LOCATION
8	NEW STRUCTURAL PLANS
9	PLAN CHECK SUBMITTAL



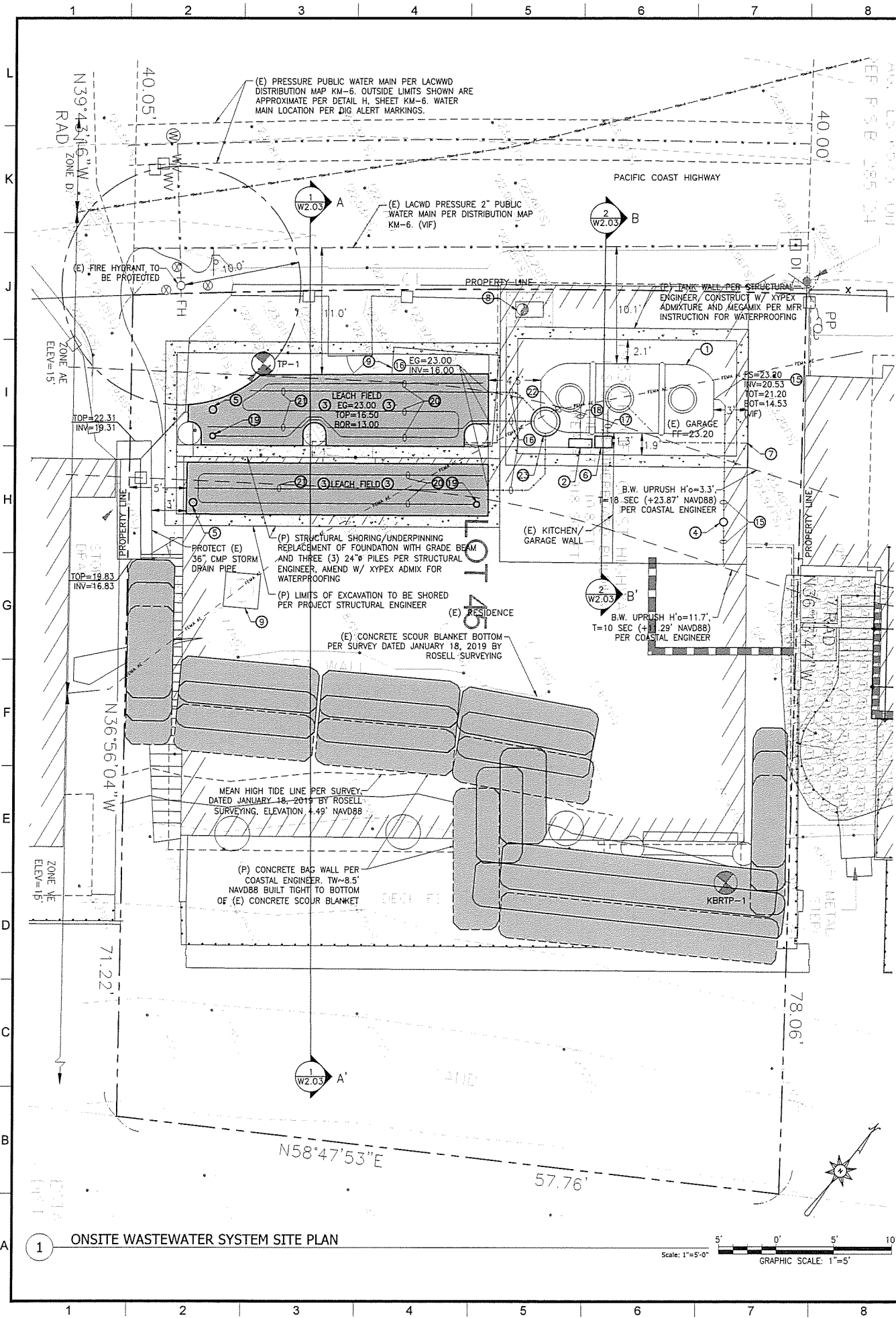
All design, ideas, arrangements and plans indicated by these drawings and specifications are the property and copyright of the Engineer and shall neither be used on any other work nor be disclosed to any other person for any use whatsoever without written permission. Written dimensions shall take precedence over scaled dimensions and shall be the basis for any dispute. Any discrepancy shall be brought to the attention of the Engineer prior to the commencement of work.

TITLE SHEET & NOTES			
SHEET TITLE:			
PROJECT:	ONSITE WASTEWATER SYSTEM		
ADDRESS:	19830 PACIFIC COAST HIGHWAY MALIBU, CA 90265		
DATE	SCALE	DRAWN BY	
7/18/14	AS SHOWN	CL	

PROJECT NO.
A529
DRAWING NO.

G-1

EPD CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARED OF THESE PLANS.



- KEY:**
- PROPERTY LINE
 - (E) BUILDING FOOTPRINT
 - (E) OVERHANG
 - (E) WATER MAIN
 - (P) SS PIPES (GRAVITY)
 - (P) SS PIPES (PRESSURE)
 - (P) SS PIPES (VENTILATION)
 - (P) SS PIPES (VENTILATION-MECH)
 - (P) SS PIPES (ELECTRICAL)
 - (P) LEACH FIELD
 - APPROX. LIMITS OF (P) CONCRETE BAG WALL PER COASTAL ENGINEER
 - APPROX. LOCATION OF TEST PIT (TP-1) PER ROBERTSON GEOTECHNICAL INC. GEOLOGIC MAP, DATED JANUARY 7, 2014
 - APPROX. LOCATION OF TEST PIT (KBRTIP-1) PER KOVACS-BYER-ROBERTSON (1983)

- THESE PLANS ARE ACCURATE FOR PROPOSED ONSITE WASTEWATER SYSTEM (OWS) ONLY.
- SURVEY PROVIDED BY ROSELL SURVEYING AND MAPPING, INC., DATED JANUARY 18, 2019. ELEVATIONS ARE APPROXIMATE PER THE REFERENCED PLANS AND PROVIDED IN NAVD88 DATUM.
- ALL (E) SEPTIC SYSTEM COMPONENTS SHALL BE ABANDONED, REMOVED OR DEMOLISHED AS NECESSARY BY THE CONTRACTOR PER THE MPC. SEE THE OWS SITE PLAN PER DETAIL 1 ON SHEET W0.01. ALL (E) SEPTIC COMPONENTS ARE APPROX. LOCATIONS PER THE SURVEY PROVIDED BY ROSELL SURVEYING AND MAPPING, INC., DATED JANUARY 18, 2019. REMOVAL OF ALL EXISTING SEPTIC SYSTEM COMPONENTS SHALL FOLLOW ASTM D1557 AND BE EXECUTED IN ACCORDANCE WITH APPLICABLE OSHA AND CAL/OSHA STANDARDS. PRIOR TO COMMENCING WORK TO ABANDON, REMOVE, OR REPLACE EXISTING OWS COMPONENTS AN "OWS ABANDONMENT PERMIT" SHALL BE OBTAINED FROM THE CITY OF MALIBU. ALL WORK PERFORMED IN THE OWS ABANDONMENT, REMOVAL, OR REPLACEMENT AREA SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL AND OCCUPATIONAL SAFETY AND HEALTH REQUIREMENTS. THE OBTAINMENT OF ANY SUCH REQUIRED PERMITS OR APPROVALS FOR THIS SCOPE OF WORK SHALL BE THE RESPONSIBILITY OF THE APPLICANT AND THEIR AGENTS.
- TEST PITS (TP-X) APPROXIMATE PER ROBERTSON GEOTECHNICAL INC. TEST PITS (KBRTIP-1) APPROXIMATE PER KOVACS-BYER-ROBERTSON (1983).
- CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF PROJECT FINAL FULL SIZE PLANS & SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE FINAL FULL SIZE PLANS & SPECIFICATIONS FROM THE SYSTEM ENGINEER PRIOR TO PROCEEDING WITH WORK.

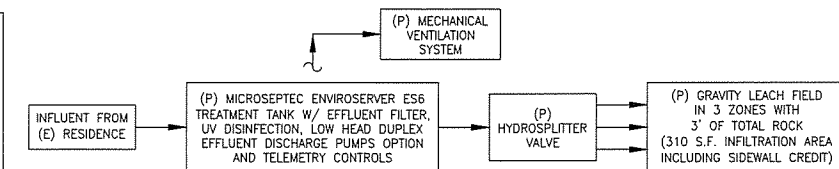
3 ONSITE WASTEWATER SYSTEM GENERAL NOTES

Scale: N.T.S.

SPECIAL PUBLIC WORKS & GEOLOGY NOTES:

- REFER TO OWS EROSION CONTROL PLAN ON SHEET W2.05.
- EXPORTED SOILS FROM A SITE SHALL BE TAKEN TO THE COUNTY LANDFILL OR TO A SITE WITH AN ACTIVE GRADING PERMIT AND THE ABILITY TO ACCEPT THE MATERIAL IN COMPLIANCE WITH SECTION 8.3 OF THE MALIBU LOCAL IMPLEMENTATION PLAN.
- THE USE OF PLASTIC SAND OR GRAVEL BAGS IS NOW PROHIBITED IN THE CITY OF MALIBU. BURLAP BAGS ARE TO BE USED IN PLACE OF SAND OR GRAVEL BAGS.
- THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE AND APPROVE THE INSTALLATION OF THE LEACH FIELD AND PROVIDE THE CITY INSPECTOR WITH A FIELD MEMORANDUM(S) DOCUMENTING AND VERIFYING THAT THE LEACH LINES WERE INSTALLED PER THE APPROVED OWS PLANS.
- THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE ALL EXCAVATIONS PRIOR TO PLACEMENT OF BACKFILL TO ENSURE THAT ALL ENCOUNTERED GEOLOGIC CONDITIONS DO NOT DIFFER FROM THOSE ENCOUNTERED DURING THE ORIGINAL EXPLORATORY WORK AND TO ENSURE THAT SUITABLE SOIL DEPOSITS UNDERLIE THE LEACH FIELD. THE PROJECT ENGINEERING GEOLOGIST NEEDS TO PROVIDE THE CITY INSPECTOR WITH A FIELD MEMORANDUM(S) DOCUMENTING THE OBSERVATIONS.

ABBREVIATIONS:			
(E)	EXISTING	OWS	OWS WASTEWATER SYSTEM
(P)	PROPOSED	R&R	REMOVAL AND REPLACEMENT
BOR	BOTTOM OF ROCK		
BOT	BOTTOM OF TANK		
EG	EXISTING GRADE	SF	SQUARE FEET
FF	FINISHED FLOOR	TOP	TOP OF TANK
FH	FIRE HYDRANT	TOR	TOP OF ROCK
FS	FINISHED SURFACE	TOT	TOP OF TANK
FT	FEET	VIF	VERIFY IN FIELD
INV	INVERT		
LACWD	LOS ANGELES COUNTY WATER WORKS DISTRICT		



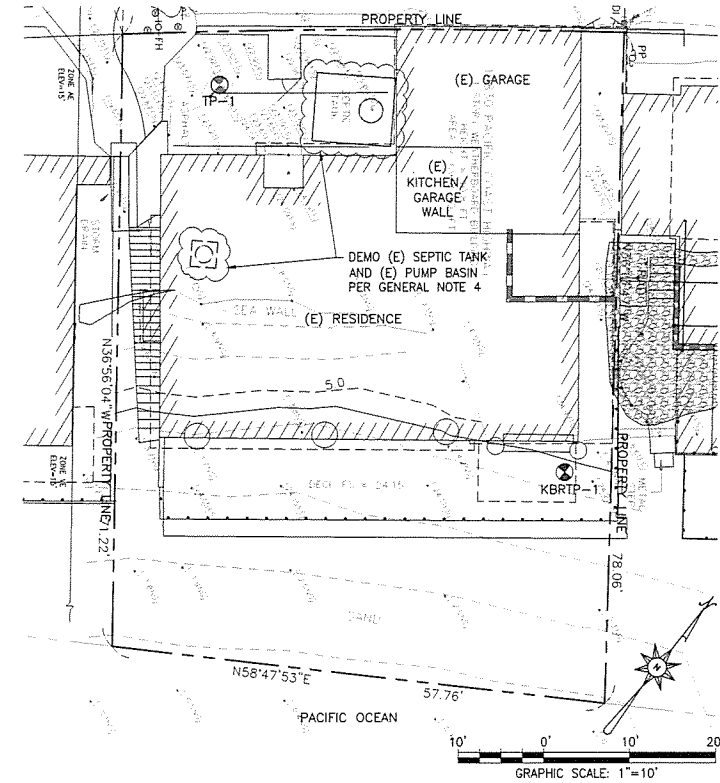
4 ONSITE WASTEWATER SYSTEM PROCESS FLOW SCHEMATIC

Scale: N.T.S.

- (P) MICROSEPTIC ENVIROSERVER ES6/UV/2PK-CO/T1000; TREATMENT TANK HOUSED IN A 2,493-GALLON FRP TANK PROVIDED BY THE MFR W/ EFFLUENT FILTER, UV DISINFECTION, LOW HEAD DUPLEX EFFLUENT DISCHARGE PUMPS OPTION AND TELEMETRY CONTROLS. THE TREATMENT TANK SHALL BE CONSTRUCTED WITH (3) 24\"/>

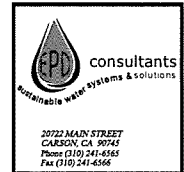
5 ONSITE WASTEWATER SYSTEM KEYNOTES

Scale: N.T.S.

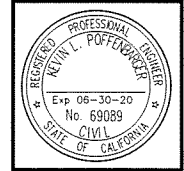


6 EXISTING ONSITE WASTEWATER SYSTEM DEMOLITION PLAN

Scale: 1\"/>



NO.	REVISIONS	DATE	BY	CL
6	REVISE LEACH FIELD	6/20/19	CL	
7	REVISE TANK LOCATION	10/21/19	CL	
8	NEW STRUCTURAL PLANS	11/27/19	CB	
9	PLAN CHECK SUBMITTAL	2/20/20	CL	

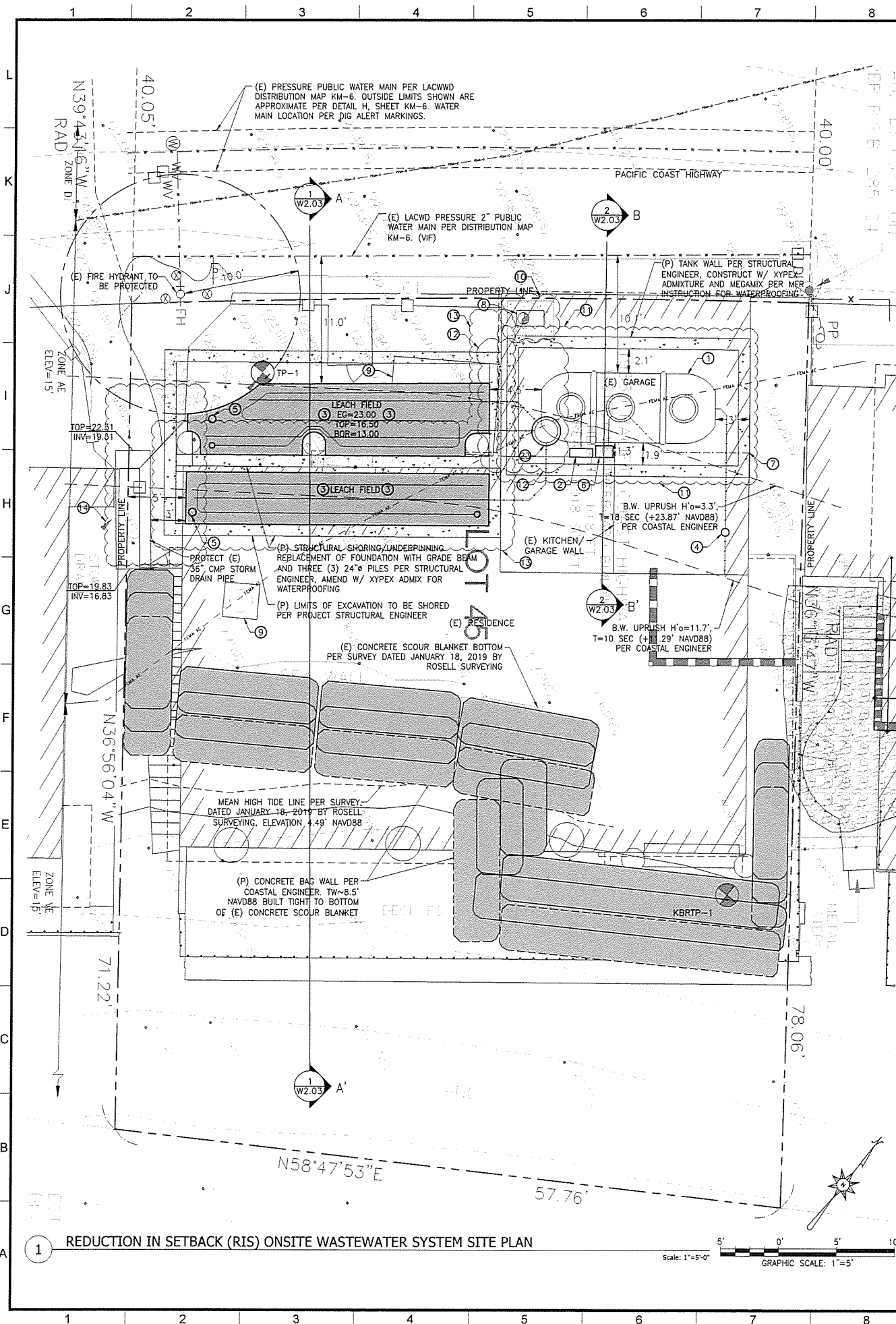


All design, ideas, arrangements and plans indicated by these drawings and specifications are the property of and copyright of the Engineer and shall neither be used on any other work nor be disclosed to any other person for any use whatsoever without written permission. Written dimensions shall take precedence over scaled dimensions and shall be verified at the job site. Any dimensional discrepancy shall be brought to the attention of the Engineer prior to the commencement of work.

SHEET TITLE:	ONSITE WASTEWATER SYSTEM (OWS) SITE PLAN & DEMOLITION PLAN
PROJECT:	ONSITE WASTEWATER SYSTEM
ADDRESS:	19830 PACIFIC COAST HIGHWAY MALIBU, CA 90265
DATE:	7/18/14
SCALE:	AS SHOWN
DRAWN BY:	CL

PROJECT NO. A529
DRAWING NO. W1.01

REVISION DATES (DESIGN STAGE ONLY)
EIR CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR OR Liable FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS.
ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARED OF THESE PLANS.



- KEY:**
- PROPERTY LINE
 - (E) BUILDING FOOTPRINT
 - (E) OVERHANG
 - (E) WATER MAIN
 - (P) SS PIPES (GRAVITY)
 - (P) SS PIPES (PRESSURE)
 - (P) SS PIPES (VENTILATION)
 - (P) SS PIPES (VENTILATION-MECH)
 - (P) SS PIPES (ELECTRICAL)
 - (P) LEACH FIELD
 - APPROX. LIMITS OF (P) CONCRETE BAG WALL PER COASTAL ENGINEER
 - (P) REDUCTION IN SETBACK
 - APPROX. LOCATION OF TEST PIT (TP-1) PER ROBERTSON GEOTECHNICAL INC. GEOLOGIC MAP, DATED JANUARY 7, 2014
 - APPROX. LOCATION OF TEST PIT (KBRT-1) PER KOVACS-BYER-ROBERTSON (1983)

TOTAL BEDROOMS: 2
TOTAL DRAINAGE FIXTURE UNITS: 34

1 BEDROOM @ 300 GPD/BED = 300 GPD
1 BEDROOM @ 150 GPD/BED = 150 GPD

PEAK DESIGN DAILY FLOWRATE: 450 GPD
AVERAGE DESIGN DAILY FLOWRATE: 300 GPD
WASTE STRENGTH OF SEPTIC TANK EFFLUENT: 200mg/L OR LESS

MIN. SEPTIC TANK CAPACITY PER MMC TABLE 15.42.070 = 2,000 GALLONS
(BASED UPON DFU COUNT ONLY)

DISPERSAL CALCULATIONS:

MIN. SEPTIC TANK CAPACITY PER MPC TABLE H201.1(1) = 750 GALLONS
(BASED UPON BEDROOM COUNT ONLY)

MIN. LEACH FIELD AREA REQUIRED PER MPC TABLE H201.1(3) = 282 S.F.
(BEACH SAND - FINE SAND CATEGORY SOILS)

EFFLUENT DISPERSAL = GRAVITY LEACH FIELD IN 3 ZONES WITH 3' OF TOTAL ROCK (310 S.F. INFILTRATION AREA INCLUDING SIDEWALL CREDIT)

PEAK DESIGN EFFLUENT LOADING RATE = 1.45 GPD/SF
AVG DESIGN EFFLUENT LOADING RATE = 0.97 GPD/SF

2 SYSTEM CALCULATIONS

Scale: N.T.S

PROPRIETARY MANUFACTURER NOTES:
1. ALL PROPRIETARY SPECIFICATIONS ARE "OR EQUAL" SUBJECT TO WRITTEN APPROVAL OF SUBMITTAL BY ENGINEER.

REDUCTION IN SETBACK NOTE:
SEE CROSS SECTION A-A' AND B-B' PER DETAIL 1 AND 2 ON SHEET W2.03 FOR FURTHER DETAILS.

CITY OF MALIBU MUNICIPAL CODE - MMC TABLE 15.42.030(E) - REQUIRED REDUCTION IN SETBACK CERTIFICATIONS				
KEYNOTE	OWS COMPONENT	SITE ELEMENT	CODE SETBACK REQUIREMENT	ACTUAL SETBACK
10	SEPTIC TREATMENT TANK	(E) STRUCTURE	5.0 FEET	0.0 FEET
11	SEPTIC TREATMENT TANK	(E) FOUNDATIONS-GARAGE SLAB	5.0 FEET	1.3 FEET
12	SEPTIC TREATMENT TANK	(P) LEACH FIELD	5.0 FEET	4.5 FEET
13	LEACH FIELD	(E) FOUNDATIONS-RESIDENCE	8.0 FEET	0.5 FEET
14	LEACH FIELD	(E) FOUNDATIONS-GARAGE	8.0 FEET	1.0 FEET
15	LEACH FIELD	(E) PUBLIC STORM DRAIN	50.0 FEET	3.0 FEET

NOTE:
THE (P) REDUCTION IN SETBACKS LISTED IN THE ABOVE TABLE ARE BEING PROVIDED FOR ALL DESIGN CONSULTANTS ON THE PROJECT TEAM FOR COORDINATION AND PREPARATION OF THE REDUCTION IN SETBACK CERTIFICATION LETTERS AND PLANS REQUIRED BY THE CITY OF MALIBU. THE REQUIRED REDUCTION IN SETBACK CERTIFICATIONS SHALL BE PREPARED BY THE PROJECT WATERPROOFING ENGINEER, STRUCTURAL ENGINEER, SOILS ENGINEER AND MECHANICAL ENGINEER AS NECESSARY. REDUCTION IN SETBACK CERTIFICATIONS FROM ALL CONSULTANTS DETAILING ALL STRUCTURAL AND WATERPROOFING MITIGATION MEASURES HAVE NOT BEEN COMPLETED AND AWAIT THE CONCLUSIONS OF THESE PLANS AND SHALL BE SUBMITTED IN CONJUNCTION WITH THESE PLANS. REFER TO KEYNOTES 10, 11, 12, 13 & 14 PER DETAIL 1 AND 4 THIS SHEET.

3 REDUCTION IN SETBACK CERTIFICATIONS

Scale: N.T.S

- (P) MICROSEPTIC ENVIROSERVER ES6/UV/2PK-CO/T100H TREATMENT TANK HOUSED IN A 2,493-GALLON FRP TANK PROVIDED BY THE MFR W/ EFFLUENT FILTER, UV DISINFECTION, LOW HEAD DUPLEX EFFLUENT DISCHARGE PUMPS OPTION AND TELEMETRY CONTROLS. THE TREATMENT TANK SHALL BE CONSTRUCTED WITH (3) 24\"/>
- (P) MICROSEPTIC TELEMETRY CONTROL PANEL. REQUIRES POWER TO PANEL AND DEDICATED IP ADDRESS. INTERNET CONNECTION TO BE VERIFIED BY THE MFR. LICENSED ELECTRICIAN TO DETERMINE NUMBER AND SIZING OF WIRES.
- (P) GRAVITY LEACH FIELD IN 3 ZONES WITH 3' OF TOTAL ROCK (310 S.F. INFILTRATION AREA INCLUDING SIDEWALL CREDIT). LEACH FIELD SHALL BE INSTALLED IN BEACH SAND DEPOSITS/ENGINEER APPROVED SAND FILL. THE CONTRACTOR SHALL REMOVE ALL ARTIFICIAL FILL AND NON-BEACH SAND CATEGORY SOILS IN THE FOLLOWING MANNER: (A) WITHIN A 5-FT HORIZONTAL DISTANCE FROM THE LEACH FIELD DISPERSAL AREA, (B) 1-FT MINIMUM VERTICAL DISTANCE INTO BEACH SAND OR TO THE BOTTOM OF THE LEACH FIELD, WHICHEVER IS DETERMINED TO BE GREATER IN DEPTH. ALL ARTIFICIAL FILL AND NON-BEACH SAND CATEGORY SOILS SHALL BE REPLACED W/ CLEAN DOUBLE WASHED SAND PER THE PLANS AND SPECIFICATIONS. GEOLOGIST TO PROVIDE FIELD OBSERVATION. AIR COIL SYSTEM FLUSH LINE UNDER ROCK.
- (P) GRAVITY CLEANOUT TO GRADE (COTG). SEE DETAIL 1 ON SHEET W2.03.
- (P) LEACH FIELD INSPECTION PORT IN ENCLOSURE TO GRADE. SEE DETAIL 2 ON SHEET W2.03.
- (P) MICROSEPTIC HIBLOW HP-120LL AIR COMPRESSOR IN ABOVE GROUND ENCLOSURE PER MFR.
- (P) ENVIROSERVER ES6 AIR VENT. PROVIDE 3\"/>
- (P) SUPPLEMENTAL MECHANICAL VENTILATION SYSTEM TO MITIGATE TREATMENT TANK IN GARAGE, PER SEPARATE PLAN AND PERMIT.
- APPROX. LOCATION OF (E) SEPTIC SYSTEM COMPONENTS INCLUDING SEPTIC TANK, PUMP BASIN AND CLEANOUT PER SURVEY PROVIDED BY ROSELL SURVEYING AND MAPPING, INC., DATED JANUARY 18, 2019. REFER TO GENERAL NOTE 3 ON SHEET W1.01.
- REDUCTION IN SETBACK FOR ALL PORTIONS OF THE (P) SEPTIC TREATMENT TANK SITUATED LESS THAN 5-FT FROM THE (E) GARAGE STRUCTURE CONSTRUCTED ABOVE PER MMC TABLE 15.42.030(E). IT IS UNDERSTOOD BY THIS OFFICE THAT THE REDUCED SETBACKS WILL BE MITIGATED WITH A SUPPLEMENTAL MECHANICAL VENTILATION SYSTEM DESIGNED BY OTHERS. THE MECHANICAL ENGINEER SHALL PROVIDE VENTILATION FROM THE EXHAUST REGISTER AND DUCT INSIDE THE RESIDENCE GARAGE TRANSITIONED THROUGH THE STRUCTURE UP TO THE ROOF WITH EXHAUST FAN ON THE ROOF PER MPC. REFER TO DETAIL 3 ON THIS SHEET.

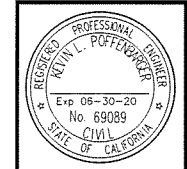
4 ONSITE WASTEWATER SYSTEM KEYNOTES

Scale: N.T.S

- REDUCTION IN SETBACK FOR ALL PORTIONS OF THE (P) SEPTIC TREATMENT TANK SITUATED LESS THAN 5-FT FROM THE (E) FOUNDATIONS OF THE GARAGE STRUCTURE AND SLAB PER MMC TABLE 15.42.030(E). IT IS UNDERSTOOD BY THIS OFFICE THAT THE REDUCED SETBACKS WILL BE MITIGATED WITH THE INSTALLATION OF THE (P) WATERPROOF PERMANENT TANK BLOCK WALL AND WATERPROOF H-10 TRAFFIC RATED SLAB FOR THE GARAGE BOTH INSTALLED WITH XYPEX WATERPROOFING ADMIXTURE OR APPROVED EQUAL. THE (E) GARAGE FOUNDATIONS, (P) TANK WALL AND SLAB FOR THE GARAGE ARE TO BE CONSTRUCTED SO THAT NO EXTERNAL LOAD IS PLACED UPON THE (P) SEPTIC TREATMENT TANK AND SO THAT SEPTIC TREATMENT TANK MAINTENANCE CAN BE MADE AVAILABLE. REFER TO DETAIL 3 ON THIS SHEET.
- REDUCTION IN SETBACK FOR ALL PORTIONS OF THE (P) LEACH FIELD SITUATED LESS THAN 5-FT FROM THE (P) SEPTIC TREATMENT TANK PER MMC TABLE 15.42.030(E). IT IS UNDERSTOOD BY THIS OFFICE THAT THE REDUCED SETBACKS WILL BE MITIGATED WITH THE INSTALLATION OF THE (P) WATERPROOF PERMANENT TANK BLOCK WALL. THE (P) TANK WALL IS TO BE CONSTRUCTED SO THAT NO EXTERNAL LOADS ARE PLACED UPON THE (P) LEACH FIELD AND SEPTIC TREATMENT TANK AND SO THAT MAINTENANCE CAN BE MADE AVAILABLE TO THE OWS COMPONENTS. REFER TO DETAIL 3 ON THIS SHEET.
- REDUCTION IN SETBACK FOR ALL PORTIONS OF THE (P) LEACH FIELD SITUATED LESS THAN 8-FT FROM THE (E) FOUNDATIONS OF THE RESIDENCE AND GARAGE STRUCTURES PER MMC TABLE 15.42.030(E). IT IS UNDERSTOOD BY THIS OFFICE THAT THE REDUCED SETBACKS WILL BE MITIGATED WITH THE INSTALLATION OF THE (P) WATERPROOF PERMANENT TANK BLOCK WALL AND SHORING. THE (P) TANK WALL AND SHORING ARE TO BE CONSTRUCTED SO THAT NO EXTERNAL LOADS ARE PLACED UPON THE (P) LEACH FIELD AND SO THAT LEACH FIELD MAINTENANCE CAN BE MADE AVAILABLE. REFER TO DETAIL 3 ON THIS SHEET.
- REDUCTION IN SETBACK FOR A PUBLICLY OWNED STORM DRAINAGE PIPE THAT RUNS ACROSS A PROPERTY RENDERING IT IMPOSSIBLE TO MEET THE MINIMUM HORIZONTAL SETBACK (50-FT) FROM THE PROPOSED LEACH FIELD. PER CITY OF MALIBU LOP/UP THE EFFLUENT DISPERSAL SYSTEM IS ALLOWED TO BE LOCATED WITHIN 50-FT OF THE PIPES PROVIDED THAT THE PIPES ARE POSITIONED VERTICALLY HIGHER THAN THE TOP OF THE EFFLUENT DISPERSAL SYSTEM. BASED ON THE STORM DRAIN ELEVATIONS PER THE SURVEY PROVIDED BY ROSELL SURVEYING AND MAPPING, INC., DATED JANUARY 18, 2019 AND THE BOTTOM OF THE (P) LEACH FIELD, THIS PROJECT IS IN COMPLIANCE WITH THE REQUIREMENT. EPOXY LINE STORM DRAINAGE PIPE AS REQUIRED. REFER TO DETAIL 3 ON THIS SHEET.
- (P) ORENCO HYDROSPITTER VALVE MODEL HSA150-03-10 INSTALLED IN ORENCO HSRR2424 ENCLOSURE W/ 24\"/>



NO.	DATE	BY	REVISIONS
6	6/20/19	CL	REVISE LEACH FIELD
7	10/21/19	CL	REVISE TANK LOCATION
8	11/27/19	CB	NEW STRUCTURAL PLANS
9	2/20/20	CL	PLAN CHECK SUBMITTAL



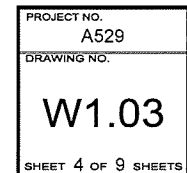
All design, ideas, arrangements and plans indicated by these drawings and specifications are the property and copyright of the Engineer and shall neither be used on any other work nor be disclosed to any other person for any use whatsoever without written permission. Written dimensions shall take precedence over scaled dimensions and shall be subject to the Engineer's interpretation. Any discrepancy shall be brought to the attention of the Engineer prior to the commencement of work.

SHEET TITLE:	ONSITE WASTEWATER SYSTEM (OWS) REDUCTION IN SETBACK PLAN
PROJECT:	ONSITE WASTEWATER SYSTEM
ADDRESS:	19830 PACIFIC COAST HIGHWAY MALIBU, CA 90266
DATE:	7/18/14
DRAWN BY:	CL
SCALE:	AS SHOWN

PROJECT NO. A529
DRAWING NO.

W1.02

SHEET 3 OF 9 SHEETS



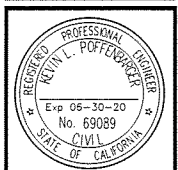
EPD CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARED BY THESE PLANS.

REVISIONS (NOTES DESIGN STAGE ONLY)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16



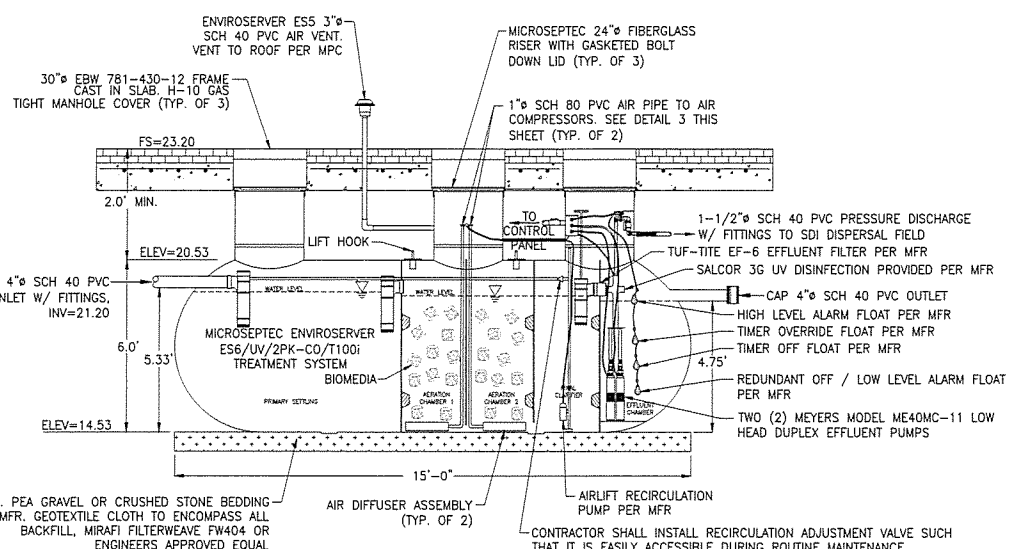
NO.	REVISIONS	DATE	BY
6	REVISE LEACH FIELD	6/20/19	CL
7	REVISE TANK LOCATION	10/21/19	CL
8	NEW STRUCTURAL PLANS	11/27/19	CB
9	PLAN CHECK SUBMITTAL	3/5/20	CL



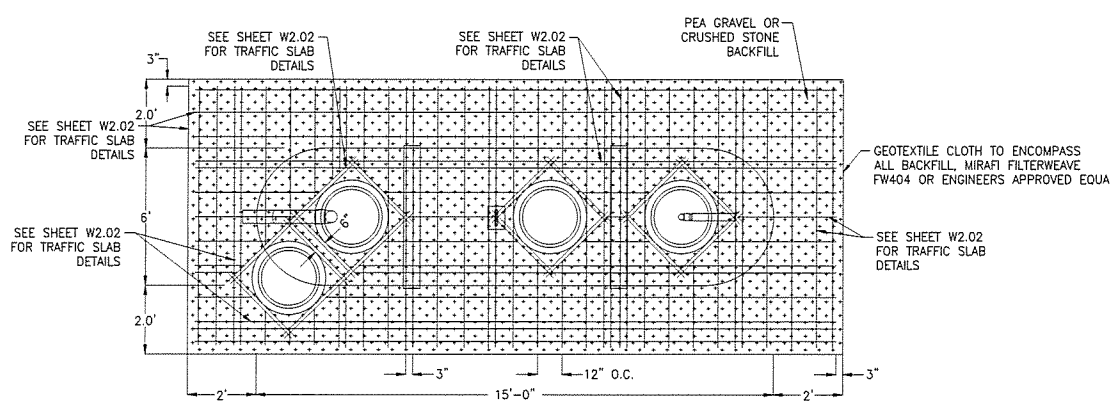
All design, ideas, arrangements and plans indicated by these drawings and specifications are the property and copyright of the Engineer and shall neither be used on any other work nor be disclosed to any other person for any use whatsoever without written permission. Written dimensions shall take precedence over scaled dimensions and shall be verified at the job site. Any dimensional discrepancy shall be brought to the attention of the Engineer prior to the commencement of work.

SHEET TITLE:	SYSTEM DETAILS
PROJECT:	ONSITE WASTEWATER SYSTEM
ADDRESS:	19830 PACIFIC COAST HIGHWAY MALIBU, CA 90265
DATE:	7/18/14
SCALE:	AS SHOWN
DRAWN BY:	CL

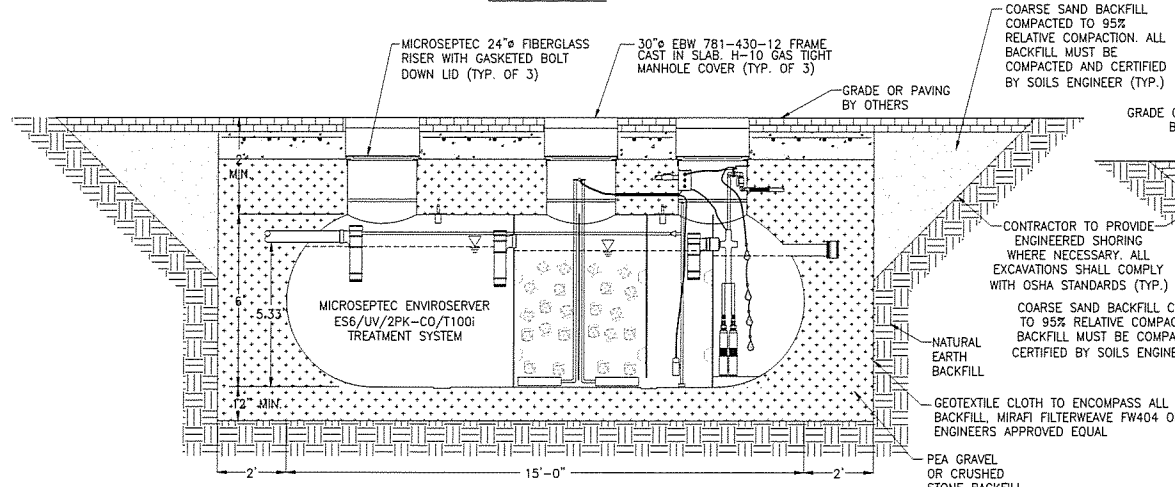
PROJECT NO.	A529
DRAWING NO.	W2.01
SHEET 5 OF 9 SHEETS	



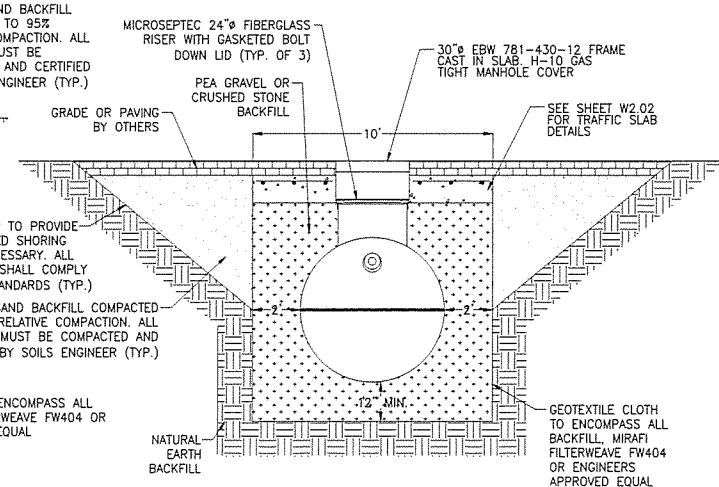
TANK SECTION VIEW



TANK PLAN VIEW



TANK ELEVATION VIEW



TANK TYPICAL TRANSVERSE SECTION

PROPRIETARY MANUFACTURER NOTES:
1. ALL PROPRIETARY SPECIFICATIONS ARE "OR EQUAL" SUBJECT TO WRITTEN APPROVAL OF SUBMITTAL BY ENGINEER.

SPECIAL NOTE:
1. SOILS ENGINEER TO DETERMINE IF ANCHORS AND/OR TIE DOWN STRAPS (NOT SHOWN) ARE NECESSARY. SEE TANK NOTE E THIS SHEET.

NOTES:
1. REFER TO TANK NOTES, DETAIL 2 THIS SHEET.
2. REFER TO ELECTRICAL NOTES, DETAIL 2 ON SHEET W1.03.
3. REFER TO GENERAL NOTES 43 & 44 ON SHEET G-1.
4. REFER TO CONSTRUCTION NOTES DETAIL 6 ON SHEET W2.03.
5. REFER TO ALL TRAFFIC SLAB NOTES ON SHEET W2.02.

- A TANKS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND CERTIFIED BY MANUFACTURER AND/OR CONTRACTOR. IN-TANK TREATMENT SYSTEM COMPONENTS TO BE DELIVERED TO JOBSITE COMPLETELY ASSEMBLED BY MANUFACTURER.
- B CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FROM TANK MANUFACTURER DETAILING TANK PENETRATIONS, BRACKETS, & OTHER APPURTENANCES PRIOR TO TANK CONSTRUCTION.
- C IF THE SOIL HAS LESS THAN 750 LBS./SQ.FT. COHESION AS CALCULATED FROM AN UNCONFINED COMPRESSION TEST; OR IN SOILS HAVING AN ULTIMATE BEARING CAPACITY OF LESS THAN 3,500 LBS./SQ. FT.; OR WHERE SOIL WILL NOT MAINTAIN A VERTICAL WALL, THE EXCAVATION MUST ALLOW A MINIMUM SPACE EQUAL TO HALF THE DIAMETER OF THE TANK BETWEEN THE SIDE AND THE ENDCAP OF THE TANK, AND THE EXCAVATION WALL TO ENHANCE LATERAL RESISTANCE.
- D A REINFORCED CONCRETE SLAB MAY BE REQUIRED UNDER THE TANK AS A FOUNDATION IN THE EXCAVATION WHERE THE BOTTOM IS UNSTABLE. ASPHALT AND CONCRETE SLABS MUST EXTEND A MINIMUM OF 12" BEYOND THE TANK IN ALL DIRECTIONS.
- E TANKS SHALL BE ANCHORED PER MANUFACTURER'S RECOMMENDATIONS IN INSTALLATIONS IN WHICH THE TANK COULD BE EXPOSED TO WATER. SITES SHALL BE THOROUGHLY EVALUATED FOR THE POTENTIAL OF A RISE IN THE LOCAL WATER TABLE OR OF TRAPPED WATER BY THE SOILS ENGINEER. CONTRACTOR AND SOILS ENGINEER SHALL PROVIDE EVALUATION TO SYSTEM DESIGNER FOR REVIEW.
- F CONTRACTOR TO NOTIFY MANUFACTURER'S REPRESENTATIVE OF SYSTEM STARTUP WITH A MINIMUM OF TWO BUSINESS DAYS ADVANCE NOTICE AND ONLY AFTER TELEPHONE SERVICE HAS BEEN PROVIDED TO CONTROL PANEL.
- G EFFLUENT FILTER IS SPECIFIED PER THESE PLANS. EFFLUENT FILTER TO BE PROVIDED PRE-INSTALLED BY MANUFACTURER.
- H THE DESIGNED TANK BURY DEPTH PER MANUFACTURER. ANY TANK BURIED BEYOND RANGE NEEDS TO BE ANALYZED BY A CIVIL/GEOTECHNICAL ENGINEER AND VERIFIED BY THE DESIGNER AND MANUFACTURER.
- I ACCESS RISERS AND COVERS SHALL BE GAS-TIGHT, SHALL BE SET/GLUED IN FIELD BY CONTRACTOR AND WATER TESTED AFTER INSTALLATION IN ACCORDANCE WITH CONSTRUCTION SPECIFICATIONS AND IN THE PRESENCE OF ENGINEER, OWNER, OR OWNER'S AGENT. LIDS SHALL BE LOCKING AND MARKED "SEWER".
- J IF THERE IS AN UNATTACHED RISER OVER AN ACCESS OPENING, IT MUST NOT TRANSMIT LOAD FROM THE ASPHALT OR CONCRETE SLAB TO THE TANK. A MINIMUM SPACE OF 6" MUST EXIST BETWEEN THE BOTTOM OF THE RISER AND THE TOP OF THE TANK.
- K IF THERE IS AN ATTACHED RISER ON AN ACCESS OPENING, IT MUST NOT TRANSMIT LOAD FROM THE ASPHALT OR CONCRETE SLAB TO THE TANK. A MINIMUM SPACE OF 3" MUST EXIST BETWEEN THE RISER OR SUMP AND THE SLAB.
- L TANKS SUBJECT TO TRAFFIC LOADS (H-20 LOADS) MUST HAVE A COVER DEPTH OF AT LEAST 18" OF BACKFILL (36" FOR 12' TANKS) PLUS 6" OF REINFORCED CONCRETE OR 9" OF ASPHALT. TANKS NOT SUBJECT TO TRAFFIC LOADS MUST HAVE A COVER DEPTH OF AT LEAST 24" OF BACKFILL (48" FOR 12' TANKS) OR 12" OF BACKFILL (36" FOR 12' TANKS) PLUS 4" OF REINFORCED CONCRETE OR 6" OF ASPHALT.
- M ALL PENETRATIONS THROUGH TANK AND ACCESS RISERS SHALL BE GAS AND WATERTIGHT. INSTALLER SHALL USE EPOXY, GROMMETS, OR OTHER APPROVED METHODS.
- N EACH CONDUIT RUN TO CONTROL PANEL SHALL BE INSTALLED WITH TWO (2) CONDUIT SEALS (O-Z/GEDNEY CAT NO EYA-125), ONE (1) EACH AT CONTROL PANEL AND SPLICE BOX.
- O A 24-HOUR WATERTIGHT TEST SHALL BE CONDUCTED ON ALL WASTEWATER STRUCTURES PER CONSTRUCTION SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR WATER TESTING THE CONCRETE TANKS ONCE THE TANKS INSTALLATION HAS BEEN COMPLETED AND ALLOWED TO SET OVERNIGHT. WATER TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM C1227.9.2. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CLEAN WATER FOR THE TESTING, FILLING THE TANKS, AND PUMPING THE TANKS DRY ONCE TESTING IS COMPLETE.
- P TANKS SHALL BE INSTALLED WITH A MINIMUM OF 12" OF COMPACTED PEA GRAVEL AND/OR CRUSHED STONE BEDDING. SELECT FILL SHALL BE USED IF BACKFILLING AROUND TANKS. NATIVE MATERIAL MAY BE USED IF APPROVED BY THE DESIGN ENGINEER.
- Q CONTRACTOR IS RESPONSIBLE FOR SUPPLYING AND INSTALLING ALL EXTERIOR PIPING PER INSTALLATION DRAWINGS.
- R ALL ELECTRICAL WORK IS THE RESPONSIBILITY OF THE CONTRACTOR'S LICENSED ELECTRICIAN AND IS NOT PROVIDED BY MANUFACTURER. SYSTEM CONTROLLER SHOULD BE INSTALLED IN A HEATED BUILDING WHERE AN AMBIENT TEMPERATURE RANGE OF 60 TO 90° F IS MAINTAINED. IF THE CONTROL PANEL MUST BE LOCATED OUTSIDE AND FREEZING TEMPERATURES ARE ANTICIPATED, NOTIFY MANUFACTURER SO A HEATER MAY BE INSTALLED WITHIN THE ENCLOSURE.
- S CONTRACTOR IS RESPONSIBLE FOR INSTALLING A DEDICATED "UNBLOCKED" ANALOG PHONE LINE TO THE PROCESSOR CONTROL PANEL FOR THE AUTODIALER/MODEM. PHONE LINE MUST BE INSTALLED AND WORKING IN ORDER TO HAVE ANY WORK PERFORMED UNDER WARRANTY. ANY WORK PERFORMED ON THE SYSTEM WITHOUT THE INSTALLATION OF THE PHONE LINE SHALL BE AT THE SOLE EXPENSE OF THE OWNER.

2 TANK NOTES

Scale: N.T.S.

Scale: N.T.S.

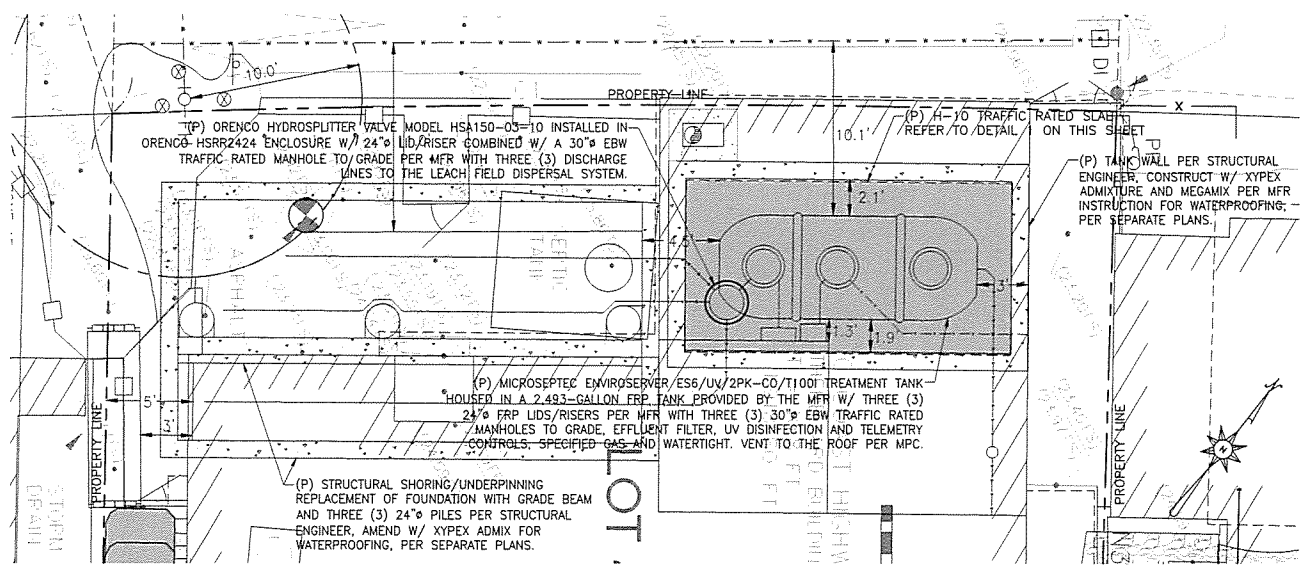
REVISIONS (DESIGN STAGE ONLY)

NO.	DATE	BY	REVISION
1	7/18/14	AS SHOWN	SCALE
2	7/18/14	CL	DRAWN BY
3	7/18/14	CL	DATE
4	7/18/14	CL	PROJECT
5	7/18/14	CL	SHEET TITLE

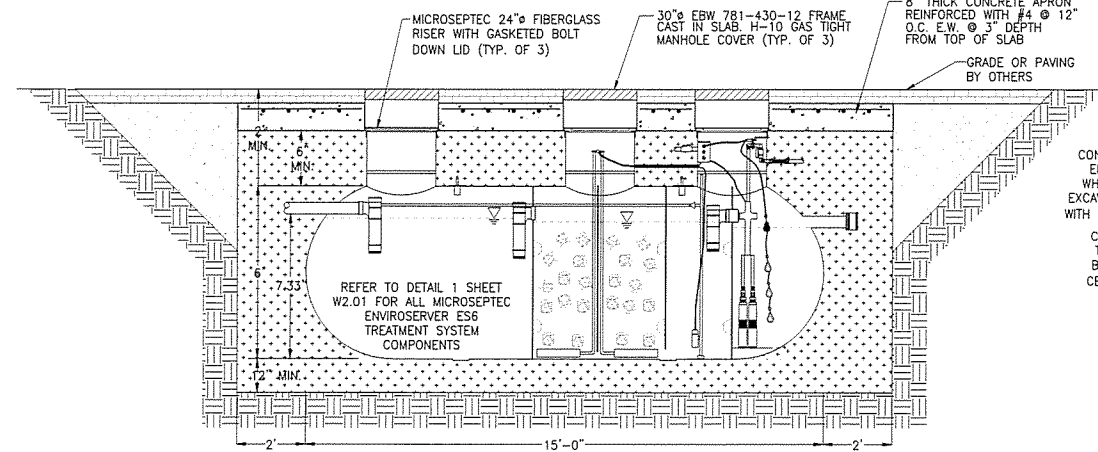
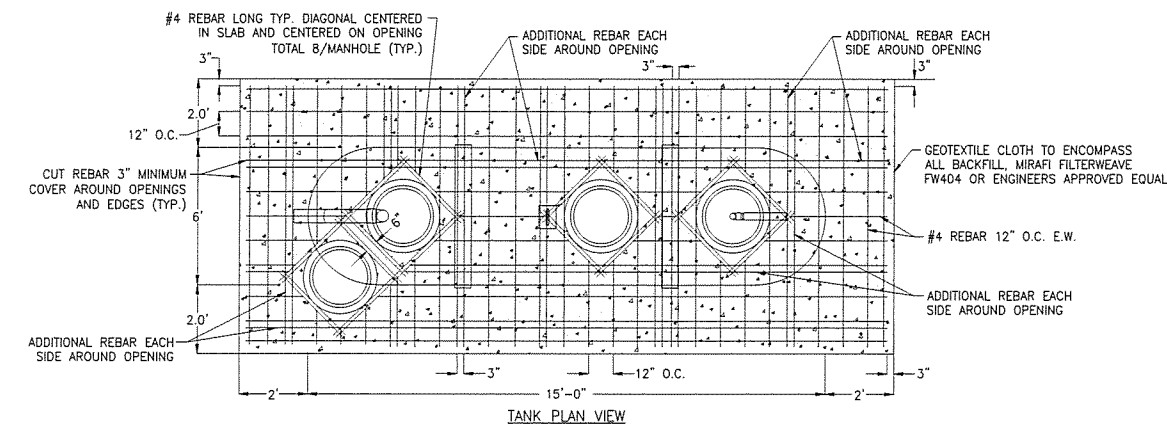
EPD CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARED OF THESE PLANS.

KEY:

PROPERTY LINE

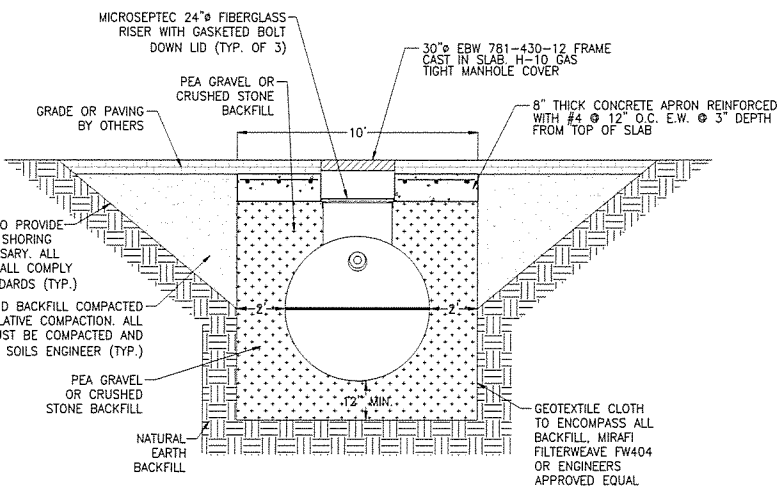


3 ONSITE WASTEWATER SYSTEM SITE PLAN



TRAFFIC SLAB ELEVATION VIEW

1 H-10 TRAFFIC RATED SLAB FOR MICROSEPTIC ENVIROSERVER ES6 TREATMENT TANK DETAIL



TANK TYPICAL TRANSVERSE SECTION

CONCRETE

1. CONCRETE SPECIFICATIONS: THE CONCRETE STRENGTHS SHOWN IN THE TABLE BELOW ARE THE MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS. THE AGGREGATE (AGG) SHOWN IS THE MAXIMUM SIZE. THE SLUMP IS THE MAXIMUM ALLOWABLE SLUMP PRIOR TO ADDING WATER - REDUCING ADMIXTURES. THE WATER / CEMENT RATIO (W/C) IS THE MAXIMUM RATIO.

ITEM	28 DAY STRENGTH F'c (PSI)	MAX. SIZE AGGREGATE	MAX. SLUMP	DENSITY
ALL CONCRETE	4,500	3/4"	4"	150 PCF

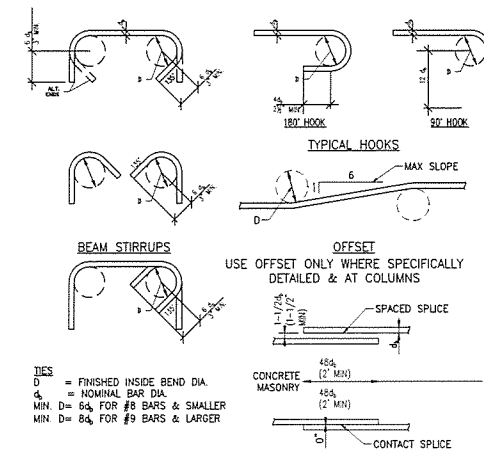
NOTE: A HIGHER GRADE OF CONCRETE MAY BE SUBSTITUTED FOR THOSE SHOWN ABOVE BUT WILL BE SUBJECT TO CODE REQUIREMENTS OF THE HIGHER GRADE.

- CEMENT SHALL CONFORM TO ASTM C150, TYPE II AND V. CEMENT U.N.O. CALCIUM CHLORIDE SHALL NOT BE USED IN THE CONCRETE MIX. FINE.
- TYPICAL CONCRETE COVERAGE OF REINFORCING:.....3"
- CONCRETE CAST AGAINST EARTH.....#6 AND LARGER.....2"
- CONCRETE CAST AGAINST WEATHER.....#5 AND SMALLER.....2 1/2"

4. PLACEMENT OF CONCRETE SHALL CONFORM WITH THE REQUIREMENTS OF ACI 301.
5. CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19 OF THE CALIFORNIA BUILDING CODE AND TO THE PROVISIONS OF ACI 318, LATEST EDITION.
6. AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C 33.
7. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY AND APPROVED BY THE ENGINEER. MIX DESIGN METHOD FIELD EXPERIENCE OR TRIAL MIXTURES IN ACCORDANCE WITH ACI 318 SECTION 5.3 SHALL BE USED TO PROPORTION CONCRETE.
8. WHERE CONCRETE IS PLACED AGAINST EXISTING CONCRETE SURFACES, THE EXISTING CONCRETE SURFACES SHALL BE THOROUGHLY CLEANED AND ROUGHENED TO A MINIMUM AMPLITUDE OF 1/4 INCH. A CONCRETE BONDING AGENT SHALL BE APPLIED TO THE EXISTING CONCRETE SURFACE.
9. THE WATER CEMENT RATIO SHALL NOT EXCEED 0.45.
10. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C94.
11. SUBMIT MIX DESIGN FOR APPROVAL BEFORE CONCRETE IS PLACED. THE MIX DESIGN SHALL BE PREPARED BY AN APPROVED TESTING LABORATORY AND SIGNED BY THE MANUFACTURER'S LICENSED REGISTERED CIVIL OR STRUCTURAL ENGINEER. ALL MIXES THAT INCLUDE FLY ASH SHALL BE TYPE "F" ONLY AND BE ACCOMPANIED BY HISTORICAL TEST DATA WHEN SUBMITTED FOR APPROVAL.
12. FORM WORK SHALL COMPLY WITH STANDARD PUBLICATION ACI(347) AND THE PROJECT SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAILING, CARE, PLACEMENT AND REMOVAL OF THE FORM WORK AND SHORES. NO STAKES, STEEL OR WOOD WILL BE PERMITTED IN ANY CONCRETE POUR. SUSPEND FORMS FROM ABOVE THE POUR.
13. ALL CONCRETE SHALL BE CURED BY KEEPING CONTINUOUSLY WET FOR 7 DAYS AFTER POURING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CURING OF CONCRETE.
14. PIPES, DUCTS, SLEEVES, CHASES, ETC. SHALL NOT BE PLACED IN SLABS, BEAMS, OR WALLS UNLESS SPECIFICALLY SHOWN OR NOTED ON PLANS. CONTRACTOR SHALL OBTAIN APPROVAL FOR INSTALLATION OF ANY ADDITIONAL PIPES, DUCTS, ETC. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR LOCATIONS OF ALL PIPES, DUCTS, CHASES, ETC. ALL SLEEVES NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL BE LOCATED BY THE TRADES INVOLVED AND SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.

REINFORCING STEEL

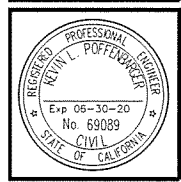
1. REINFORCING STEEL SHALL CONFORM TO ASTM 615, GRADE 60, U.N.O. ALL DETAILING OF REINFORCING SHALL CONFORM TO THE REQUIREMENTS OF ACI 318.
2. CONTRACTOR SHALL USE CHAIRS OR OTHER SUPPORT DEVICES RECOMMENDED BY THE CRSI TO SUPPORT THE REINFORCING BARS OR WELDED WIRE MESH PRIOR TO PLACING CONCRETE.
3. REINFORCING STEEL, ANCHOR BOLTS, DOWELS, AND WALL TIES SHALL BE SECURED IN POSITION AND INSPECTED BY THE BUILDING INSPECTOR PRIOR TO POURING OF ANY CONCRETE OR GROUTING MASONRY.
4. ALL WELDS SHALL BE DONE IN AN APPROVED SHOP IN ACCORDANCE WITH AWS D1.1-94. ALL FIELD WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER AND BE CONTINUOUSLY INSPECTED BY AN APPROVED DEPUTY INSPECTOR.
5. WELDING SHALL BE DONE BY ELECTRIC SHIELDED ARC PROCESS USING E-70XX ELECTRODES.
6. STRUCTURAL STEEL NOT ENCASED IN CONCRETE SHALL BE PAINTED WITH ONE COAT OF ZINC CHROMATE OR GALVANIZED.
7. CLEAR DISTANCE BETWEEN PARALLEL REINFORCEMENT IN A LAYER SHALL NOT BE LESS THAN 1-1/2 TIMES THE NOMINAL DIAMETER OF THE REINFORCEMENT, OR 1-1/3 TIMES THE MAXIMUM SIZE AGGREGATE, NOR LESS THAN 1-1/2".



2 TYP. REINF. CAR BENDS & LAP SPLICES



NO.	DATE	BY	REVISIONS
6	6/20/19	CL	REVISE LEACH FIELD
7	10/21/19	CL	REVISE TANK LOCATION
8	11/27/19	CB	NEW STRUCTURAL PLANS
9	3/5/20	CL	PLAN CHECK SUBMITTAL



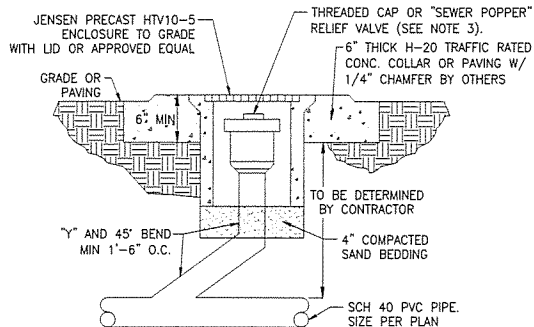
All design, ideas, arrangements and plans indicated by these drawings and specifications are the property of and copyright of the Engineer and shall neither be used on any other work nor be disclosed to any other person for any use whatsoever without written permission. Written dimensions shall take precedence over scaled dimensions and shall be verified at the job site. Any dimensional discrepancy shall be brought to the attention of the Engineer prior to the commencement of work.

SHEET TITLE:	TRAFFIC SLAB DETAILS
PROJECT:	ONSITE WASTEWATER SYSTEM
ADDRESS:	19830 PACIFIC COAST HIGHWAY MALIBU, CA 90265
DATE:	7/18/14
SCALE:	AS SHOWN
DRAWN BY:	CL

PROJECT NO.	A529
DRAWING NO.	W2.02
SHEET 6 OF 9 SHEETS	

REVISIONS (DESIGN STAGE ONLY)

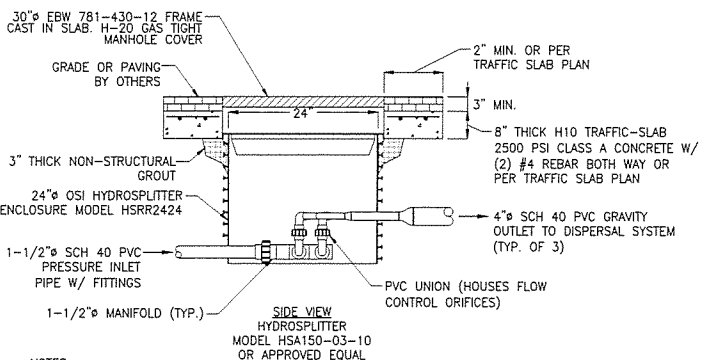
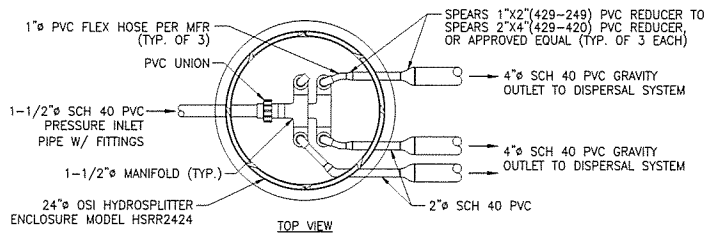
EPD CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR OR Liable FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARED OF THESE PLANS.



- NOTES:
1. CONTRACTOR SHALL INSTALL CLEANOUTS ONE PER EVERY 100' OF TOTAL DEVELOPED PIPE LENGTH, OR AS NECESSARY PER LOCAL CODE.
 2. CLEANOUT TO BE CONSTRUCTED SUCH THAT THE SURFACE LOAD WILL NOT BE TRANSFERRED TO THE DRAIN LINE. IF CLEANOUT IS LOCATED IN NON-TRAFFIC AREA, CONTRACTOR MAY INSTALL WITH NON-TRAFFIC RATED ENCLOSURE WITH ENGINEER'S APPROVAL.
 3. AS REQUIRED, REPLACE CAP/PLUG WITH JONES STEPHENS CORPORATION "SEWER" POPPER CLEANOUT AND RELIEF VALVE (PART NO. S62-304) OR EQUAL.

1 GRAVITY CLEANOUT TYPICAL DETAIL

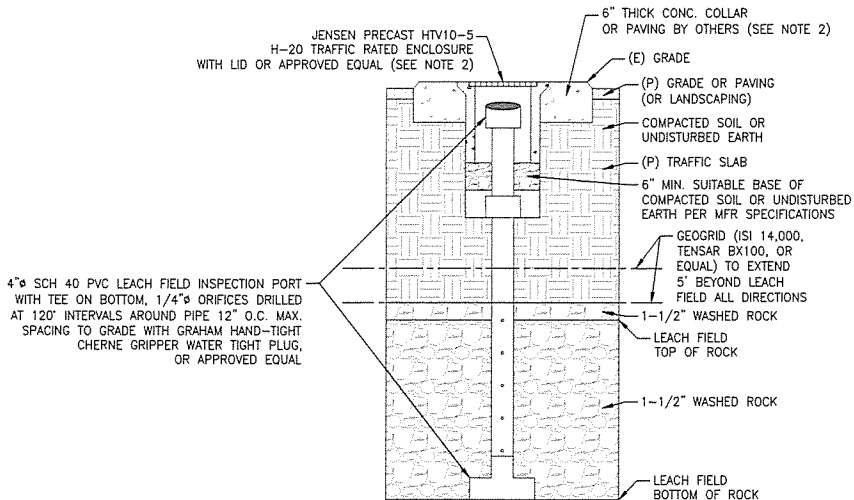
Scale: N.T.S.



- NOTES:
1. CONTRACTOR SHALL FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT ORENCO SOLUTIONS, INC.
 2. HYDROSPLITTER SHALL BE CONSTRUCTED SUCH THAT THE SURFACE LOAD WILL NOT BE TRANSFERRED TO THE DRAIN LINES.

4 HYDROSPLITTER DETAIL

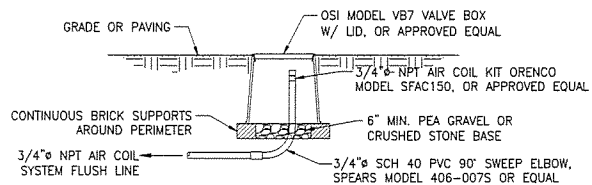
Scale: N.T.S.



- NOTES:
1. CONTRACTOR TO FOLLOW ALL MANUFACTURER'S RECOMMENDED INSTALLATION INSTRUCTIONS.
 2. IF INSPECTION PORT ENCLOSURE IS LOCATED IN NON-TRAFFIC AREA (MORE THAN 5'-FT FROM EDGE OF PAVING), CONTRACTOR MAY SUBSTITUTE ALTERNATIVE NON-TRAFFIC VALVE ENCLOSURE AS ENGINEER APPROVED EQUAL.

2 LEACH FIELD INSPECTION PORT DETAIL

SCALE: N.T.S.



- NOTE:
1. CONTRACTOR SHALL FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT ORENCO SOLUTIONS, INC.

3 AIR COIL SYSTEM FLUSH VALVE DETAIL

Scale: N.T.S.

- (A) THE PROJECT GEOLOGIST SHALL OBSERVE ALL LEACH BED EXCAVATIONS PRIOR TO PLACEMENT OF SAND AND ROCK TO ENSURE THAT ENCOUNTERED GEOLOGIC CONDITIONS DO NOT DIFFER FROM THOSE ENCOUNTERED DURING THE ORIGINAL EXPLORATORY WORK. THE PROJECT CONTRACTOR SHALL OBTAIN A FIELD OBSERVATION MEMORANDUM FROM THE PROJECT GEOLOGIST DOCUMENTING THE OBSERVATION, AND PROVIDE A RECORD COPY TO EPD CONSULTANTS, INC. FOR REVIEW AND APPROVAL.
- (B) ALL SMEARED OR COMPACTED SURFACES SHOULD BE RAKED TO A DEPTH OF 1" AND LOOSE MATERIALS SHALL BE REMOVED BEFORE GRAVEL IS PLACED IN THE TRENCH.
- (C) THE PIPE, LAID IN TRENCH OF SUFFICIENT WIDTH AND DEPTH, SHOULD BE SURROUNDED BY CLEAN GRADED GRAVEL/ROCK, BROKEN HARD BURNED CLAY BRICK, OR SIMILAR FILTERING MATERIAL. THE MATERIAL MAY RANGE IN SIZE FROM 3/4" TO 2-1/2". CINDERS, BROKEN SHELLS, OR SIMILAR MATERIALS ARE NOT RECOMMENDED BECAUSE THEY ARE USUALLY TOO FINE AND MAY LEAD TO PREMATURE CLOGGING. THE MATERIAL SHOULD EXTEND FROM AT LEAST 2' ABOVE THE TOP OF THE PIPE TO AT LEAST 12" BELOW THE BOTTOM OF THE PIPE.
- (D) THE PERVIOUS BARRIER WILL BE UNTREATED BUILDING PAPER, STRAW, OR SIMILAR POROUS MATERIAL TO PREVENT THE CLOSURE OF THE VOIDS WITH EARTH BACKFILL.
- (E) EVAPOTRANSPIRATION IS OFTEN AN IMPORTANT FACTOR IN THE OPERATION OF HORIZONTAL ABSORPTION SYSTEMS; THEREFORE, AN IMPERVIOUS COVERING SHOULD NOT BE USED SINCE IT WOULD INTERFERE WITH EVAPOTRANSPIRATION AT THE SURFACE.
- (F) THE TOP OF THE NEW ABSORPTION TRENCH SHOULD BE HAND TAMPED AND SHOULD BE OVERLAPPED WITH ABOUT 4" TO 6" OF EARTH. UNLESS THIS IS DONE, THE TOP OF THE TRENCH MAY SETTLE TO A POINT LOWER THAN THE SURFACE OF ADJACENT GROUND. THIS WILL CAUSE THE COLLECTION OF STORM WATER IN THE TRENCH, WHICH CAN LEAD TO PREMATURE SATURATION OF THE ABSORPTION FIELD AND POSSIBLY A COMPLETE WASHOUT OF THE TRENCH. MACHINE TAPPING OR HYDRAULIC BACKFILLING OF THE TRENCH SHOULD BE PROHIBITED.
- (G) A HEAVY VEHICLE WOULD READILY CRUSH THE TILE IN A SHALLOW ABSORPTION FIELD. FOR THIS REASON, HEAVY MACHINERY SHOULD BE EXCLUDED FROM THE DISPOSAL AREAS UNLESS SPECIAL PROVISIONS ARE MADE TO SUPPORT THE WEIGHT. ALL MACHINE GRADING SHOULD BE DONE BEFORE THIS FIELD IS LAID.
- (H) CLOGGING (DUE TO ROOTS) OCCURS MOSTLY IN LINES WITH INSUFFICIENT GRAVEL UNDER THE TILE. ROOT PROBLEMS MAY BE PREVENTED BEST BY USING A LIBERAL AMOUNT OF GRAVEL AND STONE AROUND THE TILE. IN GENERAL, TRENCHES CONSTRUCTED WITHIN 10' OF LARGE TREES OR DENSE SHRUBBERY SHOULD HAVE AT LEAST 18" OF CRUSHED STONE OR GRAVEL BENEATH THE TILE.
- (I) WHEN THE DISPOSAL FIELDS ARE INSTALLED IN SLOPING GROUND, THE MINIMUM HORIZONTAL DISTANCE BETWEEN ANY PART OF THE LEACHING SYSTEM AND GROUND SURFACE SHALL BE AT LEAST 15'.
- (J) WHERE THE SLOPING GROUND IS USED FOR THE DISPOSAL AREA, IT IS USUALLY NECESSARY TO CONSTRUCT A SMALL TEMPORARY DIKE OR SURFACE WATER DIVERSION, DITCH, OF WHICH SHOULD BE KEPT FREE OF OBSTRUCTIONS UNTIL THE FIELD BECOMES WELL COVERED WITH VEGETATION. THE LEACH LINES SHOULD BE PLACED AT AN AREA WITH SLOPES LESS THAN 30%.
- (K) THE USE OF THE FILLED AREA MUST BE RESTRICTED TO ACTIVITIES, OF WHICH WILL NOT CONTRIBUTE TO THE COMPACTION OF THE SOIL WITH THE CONSEQUENT REDUCTION IN SOIL AERATION.
- (L) DURING CONSTRUCTION ALL NON-BEACH SAND CATEGORY SOILS SHALL BE REMOVED BY THE CONTRACTOR AS DETAILED IN THE LEACH FIELD DISPERSAL AREA, AND REPLACED WITH CLEAN DOUBLE WASHED SAND PER THE PLANS AND SPECIFICATIONS. THIS IS SUBJECT TO FIELD VERIFICATION AND WRITTEN APPROVAL BY THE SYSTEM ENGINEER. ALL REPLACEMENT SAND SHALL BE CLEAN DOUBLE WASHED AND CONFORM TO PORTLAND CEMENT CONCRETE SAND, PER STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC "GREENBOOK"), LATEST EDITION. COMPACTED MATERIAL SHALL BE PER THE SOILS REPORT BUT NOT LESS THAN 90% OF THE MODIFIED STANDARD PROCTOR MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. SOIL COMPACTION TEST D-1557.

5 SUPPLEMENTAL LEACH BED CONSTRUCTION NOTES

Scale: N.T.S.

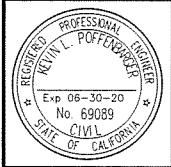
- (A) CONTRACTOR TO VERIFY EXACT LOCATION OF PROPERTY LINES.
- (B) ALL DIMENSIONS AND ELEVATIONS SHALL BE FIELD-VERIFIED BY CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING DESIGNER IN WRITING IN THE EVENT OBSERVED DIMENSIONS DIFFER FROM DIMENSIONS SHOWN ON THE ONSITE WASTEWATER TREATMENT SYSTEM PLANS.
- (C) ANY CHANGES IN PLANS OR SPECIFICATIONS SHALL BE MADE ONLY WITH THE WRITTEN AUTHORIZATION OF SYSTEM DESIGNER.
- (D) ALL EXCAVATIONS SHALL COMPLY WITH OSHA STANDARDS.
- (E) IF APPLICABLE, A REGISTERED GEOTECHNICAL ENGINEER, UNDER THE DIRECTION OF THE OWNER, SHALL DETERMINE IF THE WASTEWATER LOADING RATE WILL CAUSE THE EXISTING SLOPE TO BECOME UNSTABLE.
- (F) ALL ONSITE WASTEWATER TREATMENT SYSTEM COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT UNIFORM PLUMBING CODE, INCLUDING BUT NOT LIMITED TO VENTING OF SYSTEM COMPONENTS AND INSTALLING OF CLEANOUTS.
- (G) LICENSED ELECTRICIAN SHALL VERIFY CONDUCTOR AND CONDUIT SIZES PRIOR TO SYSTEM INSTALLATION USING MANUFACTURER'S PUBLISHED FULL LOAD AMPS (FLA) FOR CONDUCTOR SHALL BE SIZED PER LATEST NATIONAL ELECTRIC CODE.
- (H) ALL ELECTRICAL EQUIPMENT AND APPURTENANCES RELATED TO ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH LATEST NATIONAL ELECTRIC CODE, LOCAL UTILITY COMPANY REGULATIONS AND ALL STATE AND MUNICIPAL CODES AND ORDINANCES. ALL EQUIPMENT SHALL BE UNDERWRITER LABORATORY (UL) LISTED.
- (I) AS NECESSARY AND UPON COMPLETION OF INSTALLATION, CONTRACTOR TO THOROUGHLY FLUSH ALL PIPELINES TO REMOVE ANY DIRT, SCALE, OR OTHER MATERIAL.
- (J) PRIOR TO SYSTEM STARTUP, CONTRACTOR TO PRESSURE TEST ALL LINES, INCLUDING AIR VENTS (USE STIRRED VALVES FOR EASY READINGS). PRESSURE TESTING TO BE CONDUCTED IN THE PRESENCE OF OWNER OR SYSTEM DESIGNER.
- (K) SYSTEM DESIGNER TO BE NOTIFIED PRIOR TO COMMENCEMENT OF WORK.
- (L) SYSTEM DESIGNER OR AUTHORIZED AGENT TO CONDUCT PERIODIC INSPECTIONS, INCLUDING AT A MINIMUM VERIFICATION OF STAKED SITE LAYOUT, OBSERVATION OF INSTALLED PIPING PRIOR TO BURIAL, AND SYSTEM STARTUP. IF SYSTEM DESIGNER DOES NOT OBSERVE THE CONSTRUCTION, ALL LIABILITY IS RELEASED TO THE INSTALLER.
- (M) CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF PROJECT SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE FINAL PROJECT SPECIFICATIONS FROM THE SYSTEM DESIGNER PRIOR TO PROCEEDING WITH WORK.
- (N) CONTRACTOR SHALL PROVIDE A COMPLETE WORKING SYSTEM, & WARRANT ALL MATERIALS FREE FROM DEFECTS FOR A PERIOD NOT LESS THAN 1 YEAR.
- (O) THESE PLANS ACCURATE FOR ONSITE WASTEWATER TREATMENT SYSTEM ONLY.
- (P) EXISTING SEPTIC SYSTEM COMPONENTS REQUIRING REMOVAL (IF APPLICABLE) SHALL BE ABANDONED PER UPC.
- (Q) ALL PLUMBING FIXTURES SHALL BE LOW-FLOW.
- (R) CONTRACTOR SHALL VERIFY LOCATION OF PRESSURE PUBLIC WATER MAIN PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND MAINTAIN ALL APPLICABLE SETBACKS PER UPC.

6 CONSTRUCTION NOTES

Scale: N.T.S.



NO.	REVISIONS:	DATE:	BY:
6	REVISE LEACH FIELD	6/20/19	CL
7	REVISE TANK LOCATION	10/21/19	CL
8	NEW STRUCTURAL PLANS	11/27/19	CB
9	PLAN CHECK SUBMITTAL	3/5/20	CL



All design, ideas, arrangements and plans indicated by these drawings and specifications are the property and copyright of the Engineer and shall neither be used on any other work nor be disclosed to any other person for any use whatsoever without written permission. Written dimensions shall take precedence over scaled dimensions and shall be verified at the job site. Any dimensional discrepancy shall be brought to the attention of the Engineer prior to the commencement of work.

SHEET TITLE:	SYSTEM DETAILS
PROJECT:	ONSITE WASTEWATER SYSTEM
ADDRESS:	19830 PACIFIC COAST HIGHWAY MALIBU, CA 90265
DATE:	7/18/14
SCALE:	AS SHOWN
DRAWN BY:	CL

PROJECT NO.	A529
DRAWING NO.	W2.03
SHEET 7 OF 9 SHEETS	

REVISIONS (REDESIGN ONLY)
EPD CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR OR Liable FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS.
ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARED OF THESE PLANS

LEGEND:

(E) EXISTING	ARTIFICIAL FILL (Af)
(P) PROPOSED	EARTH
AF- ARTIFICIAL FILL	3/8" PEA GRAVEL
BOR BOTTOM OF ROCK	1-1/2"-2" WASHED ROCK (TYP)
EG EXISTING GRADE	CLEAN DOUBLE WASHED SAND
FF FINISHED FLOOR	BEACH DEPOSITS (Obs)
FG FINISHED GRADE	CONCRETE
FS FINISHED SURFACE	
GW GROUNDWATER	
MHT MEAN HIGH TIDE	
P PROPERTY LINE	
R&R REMOVAL & REPLACEMENT	
TOP TOP OF PIPE	
TOR TOP OF ROCK	
Obs BEACH DEPOSITS	
VIF VERIFY IN FIELD	

SOILS NOTE:

THE PROJECT ENGINEERING GEOLOGIST SHALL OBSERVE AND APPROVE THE INSTALLATION OF THE LEACHFIELD AND TREATMENT SYSTEM TANK AND PROVIDE THE CITY INSPECTOR WITH A FIELD MEMORANDUM(S) DOCUMENTING AND VERIFYING THAT THE OWTS WAS INSTALLED PER THE APPROVED OWTS PLANS.

GENERAL NOTES:

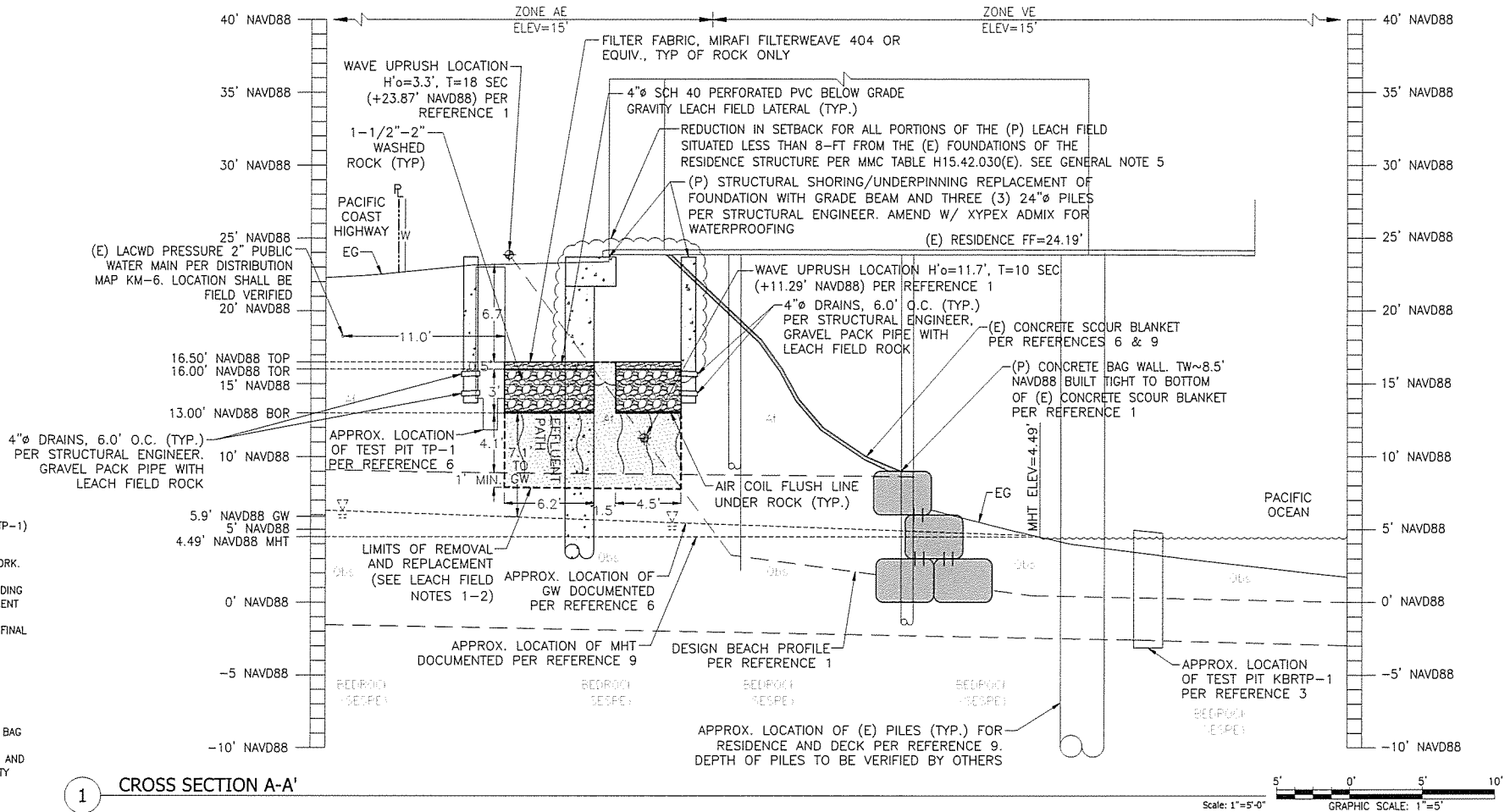
- THESE PLANS ACCURATE FOR PROPOSED ONSITE WASTEWATER SYSTEM (OWS) ONLY.
- SURVEY PROVIDED BY ROSELL SURVEYING AND MAPPING, INC., DATED JANUARY 18, 2019. ELEVATIONS ARE APPROXIMATE PER THE REFERENCED PLANS AND PROVIDED IN NAVD88 DATUM.
- TEST PIT (TP-1) APPROXIMATE LOCATION PER ROBERTSON GEOTECHNICAL INC. GEOLOGIC MAP, DATED JANUARY 7, 2014. TEST PIT (KBTRP-1) PER KOVACS-BYER-ROBERTSON (1983).
- CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF PROJECT FINAL FULL SIZE PLANS & SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE FINAL FULL SIZE PLANS & SPECIFICATIONS FROM THE SYSTEM ENGINEER PRIOR TO PROCEEDING WITH WORK.
- THE PROJECT WATERPROOFING ENGINEER, STRUCTURAL ENGINEER, SOILS ENGINEER AND MECHANICAL ENGINEER TO PROVIDE RECOMMENDATIONS AND DESIGN DETAILS FOR UPGRADES TO THE (E) FOUNDATIONS OF THE RESIDENCE AND GARAGE STRUCTURES (INCLUDING STRUCTURE ABOVE), GARAGE SLAB AND (E) STORM DRAIN FOR ALL REDUCTION IN SETBACKS LESS THAN 5'-FT FROM (P) SEPTIC TREATMENT TANK AND 8'-FT FROM (P) LEACH FIELD PER MMC TABLE 15.42.030(E). CONTRACTOR SHALL ENSURE ALL WATERPROOFING, STRUCTURAL, WASTEWATER, SOILS AND MECHANICAL ENGINEERING RECOMMENDATIONS ARE FOLLOWED INCLUDING BUT NOT LIMITED TO WATERPROOFING, FINAL WATERPROOFING, STRUCTURAL, SOILS AND MECHANICAL ENGINEERING PLANS AND REDUCTIONS IN SETBACK LETTERS HAVE NOT BEEN COMPLETED AND AWAIT THE CONCLUSIONS OF THESE PLANS. REFER TO KEYNOTES 10, 11, 12, 13 & 14 PER DETAIL 4, SHEET W1.02.

REFERENCES:

- DAVID C. WEISS STRUCTURAL ENGINEER & ASSOCIATES, INC.: (A) COASTAL ENGINEERING REPORT, DATED MARCH 4, 2014; (B) CONCRETE BAG SLOPE PROTECTION WALL PLANS, DATED APRIL 1, 2014; (C) COASTAL ENGINEERING REPORT, DATED OCTOBER 1, 2014; (D) PRELIMINARY SHORING PLAN, RECEIVED NOVEMBER 23, 2015; (E) STRUCTURAL ENGINEER'S CERTIFICATION FOR REDUCTION IN SETBACKS TO BUILDINGS AND STRUCTURES, DATED DECEMBER 22, 2016; (F) UPDATE OF COASTAL ENGINEERING REPORT, DATED JUNE 17, 2017; (G) RESPONSE TO CITY OF MALIBU GEOTECHNICAL REVIEW, DATED JUNE 22, 2017; (H) SHORING PLANS, RECEIVED NOVEMBER 26, 2019.
- EPD CONSULTANTS, INC.: (A) PRELIMINARY ENGINEERING FEASIBILITY REPORT, DATED JULY 21, 2014; (B) TEMPORARY EXCAVATION PLAN/ SECTION DETAILS FOR OWS REVISION 1, DATED MARCH 10, 2016; (C) ADDENDUM I ENGINEERING REPORT, DATED APRIL 15, 2016; (D) ADDENDUM II ENGINEERING REPORT, DATED OCTOBER 7, 2016; (E) TEMPORARY EXCAVATION PLAN REVISION 3, DATED NOVEMBER 3, 2017; (F) ADDENDUM III ENGINEERING REPORT, DATED NOVEMBER 6, 2017; (G) ADDENDUM IV ENGINEERING FEASIBILITY REPORT, DATED NOVEMBER 27, 2019; (H) FINAL ENGINEERING REPORT, DATED FEBRUARY 20, 2020.
- KOVACS-BYER-ROBERTSON INC.: LIMITED GEOLOGIC AND SOILS ENGINEERING EXPLORATION, DATED APRIL 21, 1983.
- LAND & AIR SURVEYING: ARCHITECTURAL SURVEY, DATED AUGUST 20, 2013.
- NATIONAL FLOOD INSURANCE PROGRAM: FLOOD INSURANCE RATE MAP (FIRM) NUMBER 06037C1561F PANEL 1561 OF 2350, EFFECTIVE DATE SEPTEMBER 26, 2008.
- ROBERTSON GEOTECHNICAL INC.: (A) LIMITED ENGINEERING EXPLORATION, DATED JANUARY 7, 2014; (B) ADDENDUM ENGINEERING GEOLOGIC AND GEOTECHNICAL ENGINEERING REPORT, DATED APRIL 5, 2016; (C) ADDENDUM II ENGINEERING GEOLOGIC AND GEOTECHNICAL ENGINEERING REPORT, DATED NOVEMBER 16, 2016; (D) ADDENDUM III ENGINEERING GEOLOGIC AND GEOTECHNICAL ENGINEERING REPORT, DATED APRIL 4, 2016.
- SOIL LABWORKS LLC: LABORATORY TESTING, DATED DECEMBER 6, 2013.
- L&D ENGINEERING, INC.: VENTILATION REPORT FOR THE PROPOSED PASSIVE VENTILATION OF THE ONSITE OWTS, DATED FEBRUARY 3, 2017.
- ROSELL SURVEYING AND MAPPING, INC.: SURVEY, DATED JANUARY 18, 2019.
- CITY OF MALIBU: (A) ENVIRONMENTAL HEALTH CONFORMANCE REVIEW, DATED FEBRUARY 12, 2018; (B) COASTAL ENGINEERING REVIEW SHEET APPROVAL, DATED MAY 24, 2018.
- GEOCONCEPTS, INC.: SHORING LETTER, DATED DECEMBER 2, 2019.

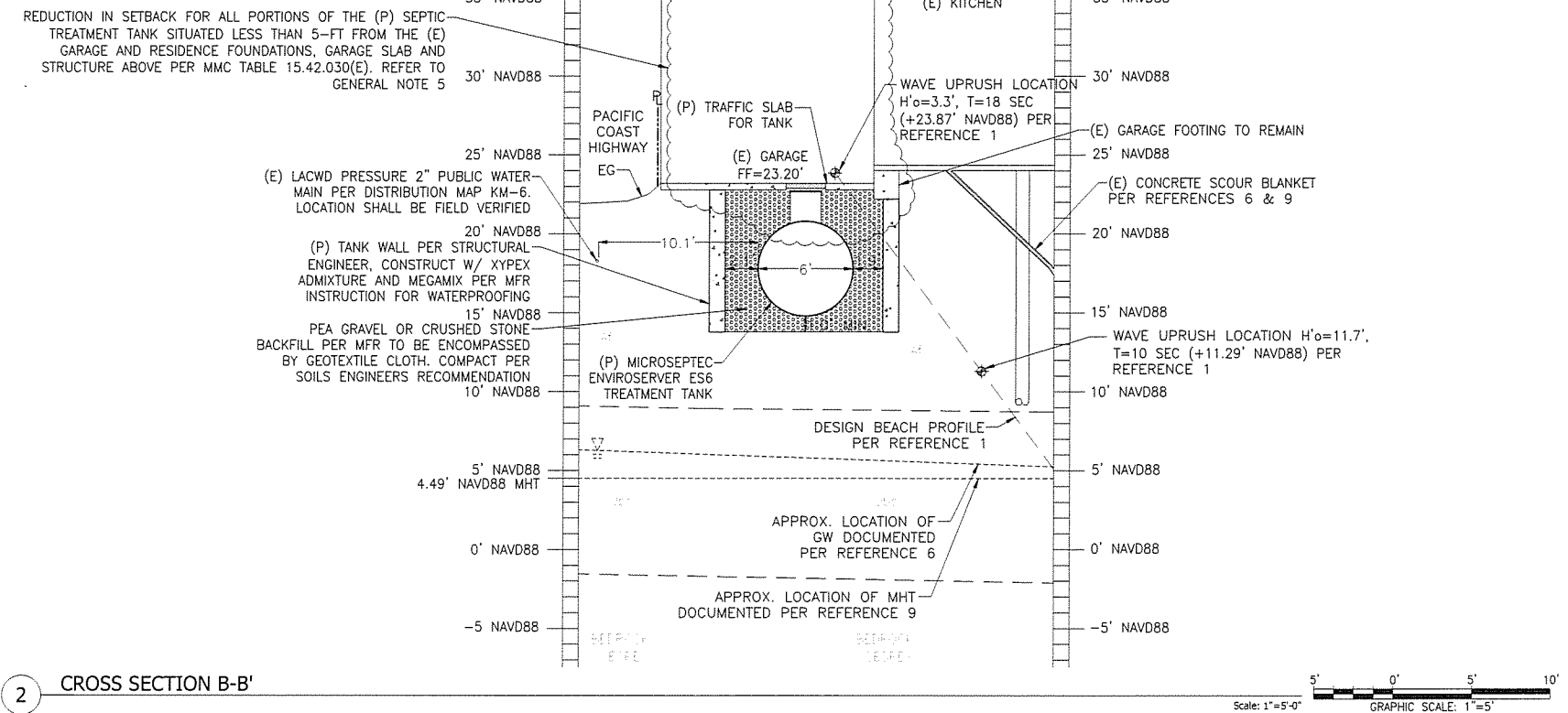
LEACH FIELD NOTES:

- CONTRACTOR TO MEET ON JOBSITE W/ GEOLOGIST & ENGINEER PRIOR TO COMMENCEMENT OF WORK. GEOLOGIST TO PROVIDE FIELD OBSERVATION MEMO DOCUMENTING ALL WORK. GEOLOGIST TO VERIFY BOTTOM OF ALL EXCAVATIONS TO DETERMINE IF ADDITIONAL REMOVAL AND REPLACEMENT IS NECESSARY.
- DURING CONSTRUCTION, ALL ARTIFICIAL FILL AND NON-BEACH SAND CATEGORY SOILS SHALL BE REMOVED BY THE CONTRACTOR IN THE FOLLOWING MANNER: (A) WITHIN 5'-FT HORIZONTAL DISTANCE FROM THE LEACH FIELD DISPERSAL AREA AND (B) 1'-FT MINIMUM VERTICAL DISTANCE INTO BEACH SAND OR TO THE BOTTOM OF THE LEACH FIELD, WHICHEVER IS DETERMINED TO BE GREATER IN DEPTH. ALL ARTIFICIAL FILL AND NON-BEACH SAND CATEGORY SOILS SHALL BE REPLACED WITH CLEAN DOUBLE WASHED SAND PER THE PLANS AND SPECIFICATIONS. THIS IS SUBJECT TO FIELD VERIFICATION AND WRITTEN APPROVAL BY SYSTEM ENGINEER. ALL REPLACEMENT SAND SHALL BE CLEAN DOUBLE WASHED AND CONFORM TO PORTLAND CEMENT CONCRETE SAND, PER STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC "GREENBOOK"), LATEST EDITION. COMPACTED MATERIAL SHALL BE PER THE SOILS REPORT BUT NOT LESS THAN 90% OF THE MODIFIED STANDARD PROCTOR MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. SOIL COMPACTION TEST D-1557. CONTRACTOR SHALL PROVIDE SUBMITTAL TO ENGINEER OF PROPOSED REPLACEMENT SAND AND GEOLOGIST SHALL OBSERVE ALL EXCAVATIONS PRIOR TO PLACEMENT OF SAND OR GRAVEL TO ENSURE ENCOUNTERED GEOLOGIC CONDITIONS DO NOT DIFFER FROM THOSE ENCOUNTERED DURING THE ORIGINAL EXPLORATORY WORK AND TO ENSURE THAT TERRACE DEPOSITS UNDERLIE THE LEACH FIELD. THE CONTRACTOR SHALL OBTAIN A FIELD OBSERVATION MEMO FROM THE GEOLOGIST DOCUMENTING ALL WORK.
- THE SPACE ABOVE ANY SEPTIC TANK RISER, PRESENT OR FUTURE DISPERSAL FIELD, OR OTHER SYSTEM COMPONENT SHALL HAVE A MINIMUM OF THE FOLLOWING:
 - 6'-0" VERTICAL CLEARANCE TO THE BOTTOM OF ANY STRUCTURAL ELEMENT;
 - 4'-0" VERTICAL CLEARANCE TO THE BOTTOM OF ANY STRUCTURAL BEAMS PROVIDED THEY ARE SPACED NOT LESS THAN 4'-0" ON CENTER HORIZONTALLY CENTER TO CENTER;
 - THE REQUIRED VERTICAL CLEARANCE SHALL BE MAINTAINED OVER ALL SYSTEM COMPONENTS AND SHALL EXTEND HORIZONTALLY TO THE OPEN OCEAN SIDE OF THE BUILDING WITH NO OBSTRUCTIONS OTHER THAN A LEGALLY PERMITTED SHORELINE PROTECTION DEVICE (IF REQUIRED).
- UNOBSTRUCTED OPENINGS TO THE OUTSIDE AIRSPACE SHALL BE PROVIDED ON AT LEAST TWO (2) SIDES ABOVE AND ADJACENT TO EACH PORTION OF THE ONSITE WASTEWATER TREATMENT SYSTEM. THE MINIMUM UNOBSTRUCTED CLEARANCE TO THE OUTSIDE AIRSPACE SHALL NOT BE NOT LESS THAN 4'-0" IN ANY DIMENSION WITH NO ENCROACHMENTS.



1

CROSS SECTION A-A'

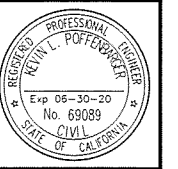


2

CROSS SECTION B-B'



REV.	DATE	BY	REVISIONS
6	6/20/19	CL	REVISE LEACH FIELD
7	10/21/19	CL	REVISE TANK LOCATION
8	11/27/19	CB	NEW STRUCTURAL PLANS
9	3/5/20	CL	PLAN CHECK SUBMITTAL



All design, ideas, arrangements and plans indicated by these drawings and specifications are the property and copyright of the Engineer and shall neither be used on any other work nor be disclosed to any other person for any use whatsoever without written permission. Written dimensions shall take precedence over scaled dimensions and shall be verified at the job site. Any dimensional discrepancy shall be brought to the attention of the Engineer prior to the commencement of work.

SHEET TITLE:	CROSS SECTIONS A-A' AND B-B'
PROJECT:	ONSITE WASTEWATER SYSTEM
ADDRESS:	19830 PACIFIC COAST HIGHWAY, MALIBU, CA 90265
DATE:	7/18/14
SCALE:	AS SHOWN
DRAWN BY:	CL

PROJECT NO.
A529
DRAWING NO.

W2.04

ERD CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS.
ALL CHANGES TO THESE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARED BY THESE PLANS.
REVISIONS/NOTES (DESIGN STAGE ONLY)

EROSION CONTROL NOTES:

1. THIS PLAN IS ACCURATE FOR OWS EROSION CONTROL ONLY.
2. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORMWATER FROM THE PROJECT SITE AT ALL TIMES. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
3. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
4. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
5. NON-STORM WATER RUNOFF FROM EQUIPMENT AND VEHICLE WASHING AND ANY OTHER ACTIVITY SHALL BE CONTAINED AT THE PROJECT SITE.
6. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
7. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
8. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
9. ANY SLOPES WITH DISTURBED SOILS OR DENUDE OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
10. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. THE CONTRACTOR IS CAUTIONED THAT ONLY EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. HOWEVER, THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES, OR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH ARE NOT SHOWN ON THESE DRAWINGS.
11. IN THE EVENT THAT THE SUBSURFACE OR LATENT PHYSICAL CONDITIONS ARE FOUND MATERIALLY DIFFERENT FROM THOSE INDICATED IN THESE DOCUMENTS, AND DIFFERING MATERIALLY FROM THOSE ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN THE CHARACTER OF WORK COVERED IN THESE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROMPTLY, AND BEFORE SUCH CONDITIONS ARE DISTURBED, NOTIFY THE ENGINEER IN WRITING OF SUCH CHANGED CONDITIONS IN THE EVENT THAT THE SUBSURFACE OR LATENT PHYSICAL CONDITIONS ARE FOUND MATERIALLY DIFFERENT FROM THOSE INDICATED IN THESE DOCUMENTS, AND DIFFERING MATERIALLY FROM THOSE ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN THE CHARACTER OF WORK COVERED IN THESE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROMPTLY, AND BEFORE SUCH CONDITIONS ARE DISTURBED, NOTIFY THE ENGINEER IN WRITING OF SUCH CHANGED CONDITIONS.

STORMWATER POLLUTION PREVENTION PLAN NOTES:

1. IN CASE OF EMERGENCY, CALL KEVIN POTTENBARGER AT TELEPHONE NO. 310-241-6565.
2. NOI SHOULD BE FILED BY PROJECT CONTRACTOR PRIOR TO COMMENCEMENT OF WORK.
3. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (NOV 1 TO APR 15).
4. NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.
5. EROSION CONTROL DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL.
6. STOCKPILED MATERIALS SHALL BE PLACED TO BE ACCESSIBLE BY VEHICLE DURING PERIODS OF PRECIPITATION AND PROTECTED FROM PRECIPITATION AND RUNOFF AT THE END OF EACH WORKING DAY.
7. ALL REMOVABLE EROSION PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY.
8. AFTER A RAINSTORM ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERMS, TRAPS AND BASINS.
9. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE TO BE DIRECTED TOWARD DESILTING FACILITIES AS SHOWN ON THIS PLAN.
10. CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
11. ISSUANCE OF A GRADING PERMIT DOES NOT ELIMINATE THE NEED FOR PERMITS FROM OTHER AGENCIES WITH REGULATORY RESPONSIBILITIES FOR CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE WORK AUTHORIZED ON THIS PLAN. THE ARCHITECT SHALL PROVIDE ALL PERMITS TO CONTRACTOR.
12. EROSION CONTROL MEASURE AND PLANTING SHALL BE INSTALLED AND MAINTAINED AS SOON AS PRACTICAL, IN AREAS NOT SUBJECTED TO FREQUENT TRAFFIC.
13. ALL EROSION CONTROL, SEDIMENT TRAPS, SEDIMENT BASINS, SILT FENCES, SANDBAG BARRIERS AND OTHER STORM WATER AND/OR EROSION CONTROL FEATURES SHALL BE INSPECTED BY CONTRACTOR, ON A WEEKLY BASIS, CLEANED, AND MAINTAINED TO ENSURE THESE FEATURES FUNCTION AS DESIGNED.
14. CONTRACTOR SHALL FOLLOW THE SWPPP FOR ADDITIONAL BMP'S REQUIREMENTS.
15. THE UNDERSIGNED CIVIL ENGINEER SHALL INSPECT THE EROSION CONTROL WORK AND ENSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS.
16. CONTRACTOR TO PROVIDE SLOPE PROTECTION FOR ALL SLOPES DURING CONSTRUCTION BY IMPLEMENTING THE FOLLOWING BMPs: EC2 - PRESERVATION OF EXISTING VEGETATION; EC3 - HYDRAULIC MULCH; EC4 - HYDROSEEDING; EC5 - SOIL BINDERS; EC6 - STRAW MULCH; EC7 - GEOTEXTILES & MATS; EC8 - WOOD MULCHING; EC14 - COMPOST BLANKETS; EC15 - SOIL PRESERVATION/ROUGHENING; EC16 - NON-VEGETATED STABILIZATION.
17. CONTRACTOR TO PROVIDE DUST CONTROL FOR MANAGEMENT OF FUGITIVE DUST DURING EXTENDED PERIODS WITHOUT RAIN.

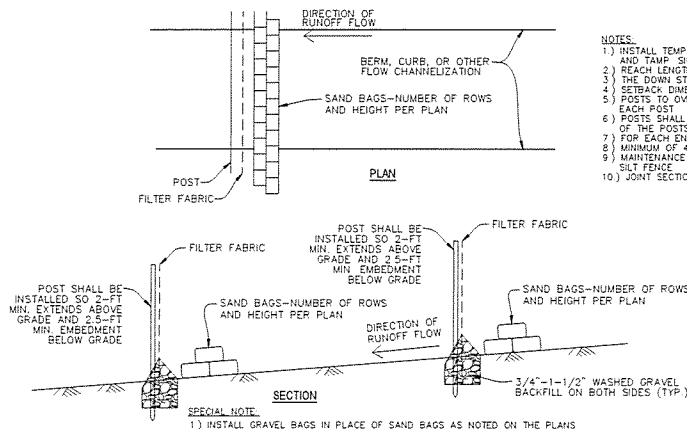
EROSION CONTROL	NON-STORMWATER MANAGEMENT	TEMPORARY SEDIMENT CONTROL	WIND EROSION CONTROL
EC1 - SCHEDULING	NS - 1 WATER CONSERVATION PRACTICES	SE1 - SILT FENCE	WE1 - WIND EROSION CONTROL
EC2 - PRESERVATION OF EXISTING VEGETATION	NS - 2 DENATURING OPERATIONS	SE2 - SEDIMENT BASIN	
EC3 - HYDRAULIC MULCH	NS - 3 PAVING AND GRINDING OPERATIONS	SE3 - SEDIMENT TRAP	
EC4 - HYDROSEEDING	NS - 4 TEMPORARY STREAM CROSSING	SE4 - CHECK DAM	WM - 1 MATERIAL DELIVERY AND STORAGE
EC5 - SOIL BINDERS	NS - 5 CLEAR WATER DIVERSION	SE5 - FIBER ROLLS	WM - 2 MATERIAL USE
EC6 - STRAW MULCH	NS - 6 ILLUIC CONNECTION/DISCHARGE	SE6 - GRAVEL BAG BERM	WM - 3 STOCKPILE MANAGEMENT
EC7 - GEOTEXTILES & MATS	NS - 7 POTABLE WATER/IRRIGATION	SE7 - STREET SWEEPING AND VACUUMING	WM - 4 SPILL PREVENTION AND CONTROL
EC8 - WOOD MULCHING	NS - 8 VEHICLE EQUIPMENT CLEANING	SE8 - SANDBAG BARRIER	WM - 5 SOLID WASTE MANAGEMENT
EC9 - EARTH DIKES AND DRAINAGES SWALES	NS - 9 VEHICLE EQUIPMENT FUELING	SE9 - STRAW BALE BARRIER	WM - 6 HAZARDOUS WASTE MANAGEMENT
EC10 - VELOCITY DISSIPATION DEVICES	NS - 10 VEHICLE AND EQUIPMENT MAINTENANCE	SE10 - STORM DRAIN INLET PROTECTION	WM - 7 CONTAMINATION SOIL MANAGEMENT
EC11 - SLOPE DRAINS	NS - 11 FILL DRAINING OPERATIONS	SE11 - ACTIVE TREATMENT SYSTEMS	WM - 8 CONCRETE WASTE MANAGEMENT
EC12 - STREAMBANK STABILIZATION	NS - 12 CONCRETE CURING	SE12 - TEMPORARY SILT DIKE	WM - 9 SANITARY/SEPTIC WASTE MANAGEMENT
EC13 - RESERVED	NS - 13 CONCRETE FINISHING	SE13 - COMPOST SOCKS & BERMS	WM - 10 LIQUID WASTE MANAGEMENT
EC14 - COMPOST BLANKETS	NS - 14 MATERIAL AND EQUIPMENT USE	SE14 - BIOPILER BAGS	
EC15 - SOIL PRESERVATION/ROUGHENING	NS - 15 DEMOLITION ADJACENT TO WATER		
EC16 - NON-VEGETATED STABILIZATION	NS - 16 TEMPORARY BATCH PLANTS		

NOTE: CONTRACTOR TO PROVIDE INLET PROTECTION FOR ALL (E) STORM DRAINS. SEE DETAIL 3 ON SHEET EC-3.

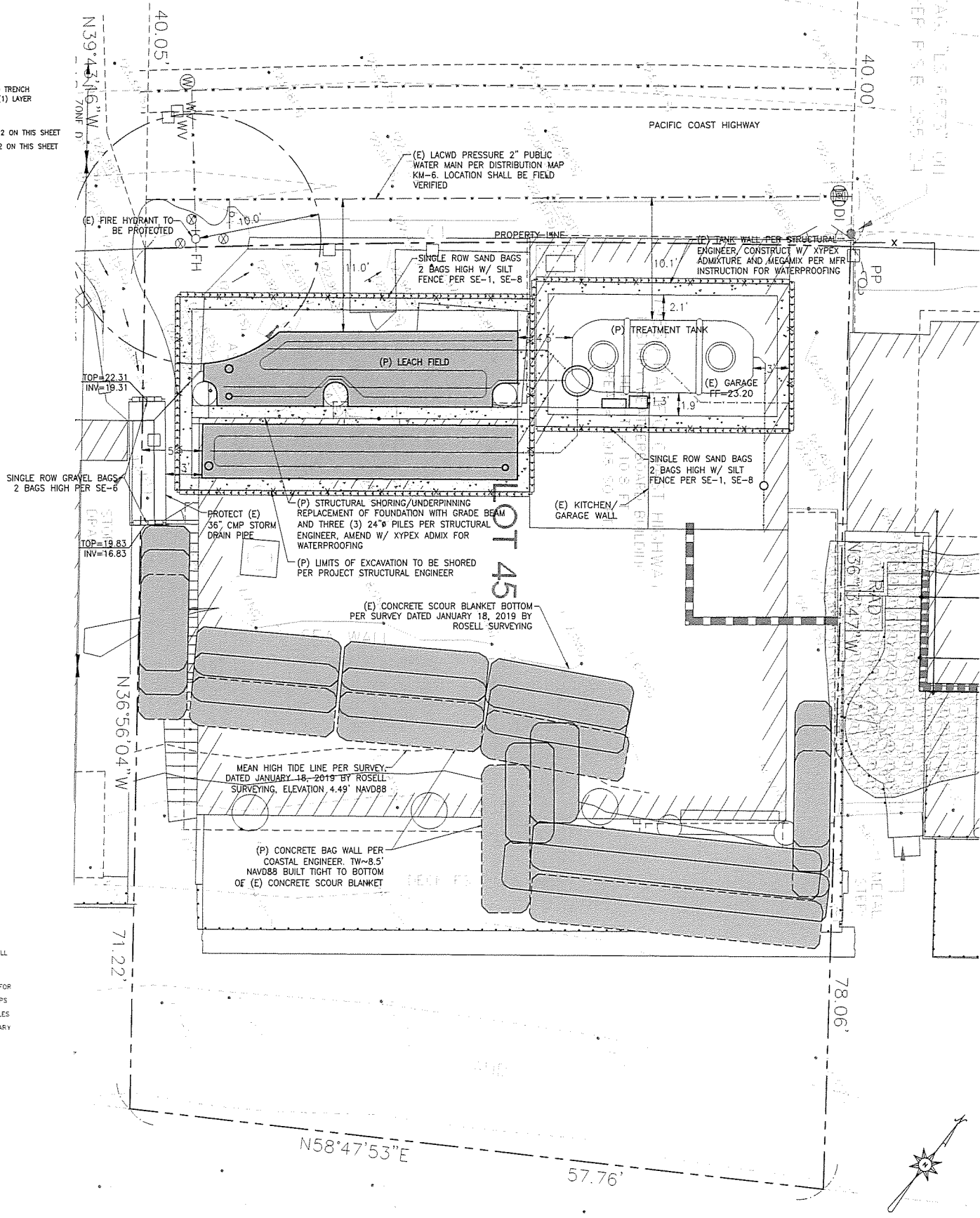
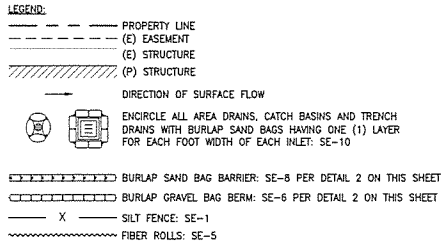
SPECIAL NOTE: THE USE OF PLASTIC SAND OR GRAVEL BAGS IS NOW PROHIBITED IN THE CITY OF MALIBU. BURLAP BAGS ARE TO BE USED IN PLACE OF SAND OR GRAVEL BAGS.

NOTES:

- 1) INSTALL TEMPORARY SILT FENCE BY FIRST DIGGING TRENCH, DRIVING POSTS, PLACING AND SECURING FABRIC THEN BACKFILL AND TAMP. SILT FENCE NOT REQUIRED IN DRIVEWAY.
- 2) REACH LENGTH NOT TO EXCEED 500 FEET.
- 3) THE DOWN STREAM END OF THE TEMPORARY SILT FENCE SHALL HAVE THE LAST 8' ANGLED UP SLOPE.
- 4) SETBACK DIMENSIONS MAY VARY TO FIT FIELD CONDITIONS.
- 5) POSTS TO OVERLAP AND FENCE FABRIC TO FOLD AROUND EACH POST ONE FULL TURN. SECURE FABRIC WITH 4 STAPLES FOR EACH POST.
- 6) POSTS SHALL BE DRIVEN TIGHTLY TOGETHER TO PREVENT POTENTIAL FLOW-THROUGH OF SEDIMENT AT THE JOINT THE TOPS OF THE POSTS SHALL BE SECURED TO EACH OTHER WITH WIRE.
- 7) FOR EACH END POST, FENCE FABRIC SHALL BE FOLDED AROUND TWO POSTS ONE FULL TURN AND SECURED WITH 4 STAPLES.
- 8) MINIMUM OF 4 STAPLES SHALL BE INSTALLED PER POST DIMENSIONS SHOWN ARE TYPICAL.
- 9) MAINTENANCE GREENINGS SHALL BE CONSTRUCTED IN A MANNER TO ENSURE THAT SEDIMENT IS RETAINED BY THE TEMPORARY SILT FENCE.
- 10) JOINT SECTIONS SHALL NOT BE PLACED AT SUMP LOCATIONS.



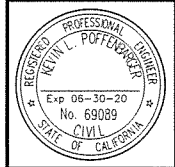
2 SILT FENCE AND SAND BAG BARRIER DETAIL



1 ONSITE WASTEWATER SYSTEM EROSION CONTROL PLAN



NO.	REVISIONS	DATE	BY
6	REVISE LEACH FIELD	6/20/19	CL
7	REVISE TANK LOCATION	10/21/19	CL
8	NEW STRUCTURAL PLANS	11/27/19	CB
9	PLAN CHECK SUBMITTAL	2/20/20	CL



All design, ideas, arrangements and plans indicated by these drawings and specifications are the property and copyright of the Engineer and shall neither be used on any other work nor be disclosed to any other person for any use whatsoever without written permission. Written dimensions shall take precedence over scaled dimensions and shall be verified at the job site. Any dimensional discrepancy shall be brought to the attention of the Engineer prior to the commencement of work.

SHEET TITLE:	ONSITE WASTEWATER SYSTEM (OWS) EROSION CONTROL PLAN
PROJECT:	ONSITE WASTEWATER SYSTEM
ADDRESS:	19830 PACIFIC COAST HIGHWAY MALIBU, CA 90265
DATE:	7/18/14
SCALE:	AS SHOWN
DRAWN BY:	CL

PROJECT NO.	A529
DRAWING NO.	W2.05
SHEET	9 OF 9 SHEETS

MARISSA M. COUGHLAN
CONSULTANTS, INC.
23823 Malibu Road, Ste. 50-461
Malibu, Ca 90265
marissa@mmcccpr.com

City of Malibu
23825 Stuart Ranch Road
Malibu, Ca 90265

July 21, 2020

Re: New AWTs, Concrete Bag Bulkhead,
Pile Repair & Storm Drain Repair
19830 Pacific Coast Hwy
Malibu, Ca 90265
APN: 4449-008-007

To Whom It May Concern:

On November 1, 2018, my clients Mr. & Mrs. Joe Boyajian purchased the above-referenced property. Shortly thereafter, it came to their attention that there were outstanding items to be completed on the proposed new AWTs, bulkhead, pile repair and storm drain repair. There was a temporary tank on the front deck of the structure. They were led to believe by the sellers' Estate they had approvals and could move forward with the construction. They were new to our community and had no knowledge of the City requirements or process.

My clients had received limited information from the seller's Estate regarding the property. After their review and with what they received, they reached out to the professionals who had worked on the project in the past. They found that the previous owner had not completed the review and approval process. Mr. Ferrone had put the process on hold with the design consultants. Mr. David Weiss (David Weiss and Associates) provided the coastal engineering design, bulkhead and shoring while Kevin Poffenbarger (EPD) provided the design of the system.

Mr & Mrs. Boyajian reached out to those consultants to attempt to complete the reviews & approvals. I was brought in to the project to provide assistance at the end of 2018. At the beginning of 2019, I began working with the two consultants and the City of Malibu and Waterworks 29 to make sure the project design was current and was in conformance with the previous submittals and the compliance with the regulations.

New AWTS, Concrete Bag Bulkhead,
Pile Repair & Storm Drain Repair
19830 Pacific Coast Hwy
Malibu, Ca 90265
APN: 4449-008-007

July 21, 2020
Page Two

We discussed and reviewed any possible options for the bulkhead design (the only portion in State Lands area). After intensive meetings and discussions with Mr. Weiss it was determined that the proposed project is the best environmental alternative based on the underlying physical reality of the beach and parcel and that there were no feasible alternatives. We concur that had there been any viable other ways to proceed we would have modified the design. We also did not want to impact any Coastal resources which would be part of an alternative if one had existed. The City staff critically looks at all submittals and this was no different. To propose any other option who have detrimental impacts on coastal resources even if they could physical be accomplished. The proposed system is on the most landward side of the parcel and the design and location of the bulkhead is to protect that system.

To continue, I also reached out to Kelly Connor of the State Lands Commission. Through numerous conversations and correspondence, it was determined that only a "portion" of the bulkhead as proposed encroaches into the State Lands area and has been approved by the SLC and he sent me a copy of the map (attached hereto). The approval of the bulkhead location had been approved under previous property ownership but the lease fees to the State had never been paid.

After explaining this to the new owners, they immediately paid the past due to fees to the State. I was in process to convert the lease title. The property is bound by the lease. Attached as an exhibit is an email from Kelly Connor of SLC dated of Feb 2020 (email SLC attached) clearing indicating construction could begin from their standpoint. I was waiting for further instruction of Kelly Connor (SLC) went Covid 19 struck and will be prepared to complete the name change upon his request and instruction.

To address the current ownership concerns, based on what they found out after our investigation and subsequent reviews and approvals, they have provided and our paying for a maintenance and pumping schedule and inspection of the tank which had not been done under previous ownership. The temporary tank sits on the landward side deck near the entry to the residence.

Since the full review and approvals by the City, the new owners have also completed an Operating Permit Application, the City has required (and has it its' custody) all necessary signed documents by the current owners and check for fees for recording of the Maintenance Covenant and Future Field Expansion Covenant. They had previously recorded a Compliance Agreement.

After the delays which emanated under previous ownership, I met with our engineers at the site to review the current circumstances impacting the health and safety of the site and residence. I contacted the City of Malibu Department of Building and Safety who inspected the site and agreed that there is an

New AWTS, Concrete Bag Bulkhead,
Pile Repair & Storm Drain Repair
19830 Pacific Coast Hwy
Malibu, Ca 90265
APN: 4449-008-007

July 21, 2020
Page Three

immediate and imperative need for the installation of the approved system, bulkhead and all repairs from a Health and Safety standpoint. There is no way to bifurcate the bulkhead installation (SLC approved location) from the installation of the new septic system.

Ownership and their consultants have worked aggressively and diligently within less than one and a half years to review, discuss and complete the process to provide the all necessary work for permit issuance on the proposed development so the owners can legally and comfortably use their residence. Their only wish since the status discovery is to quickly correct any issues, comply with with the applicable Codes and Regulations so they can safely and happily occupy the home they are occupying and paying for.

Sincerely,

Marissa M. Coughlan Consultants, Inc.



Marissa M. Coughlan

Attachment: 2

Cc: David C. Weiss

Kevin Poffenbarger (EPD

Mark Barrett (Geoconcepts)

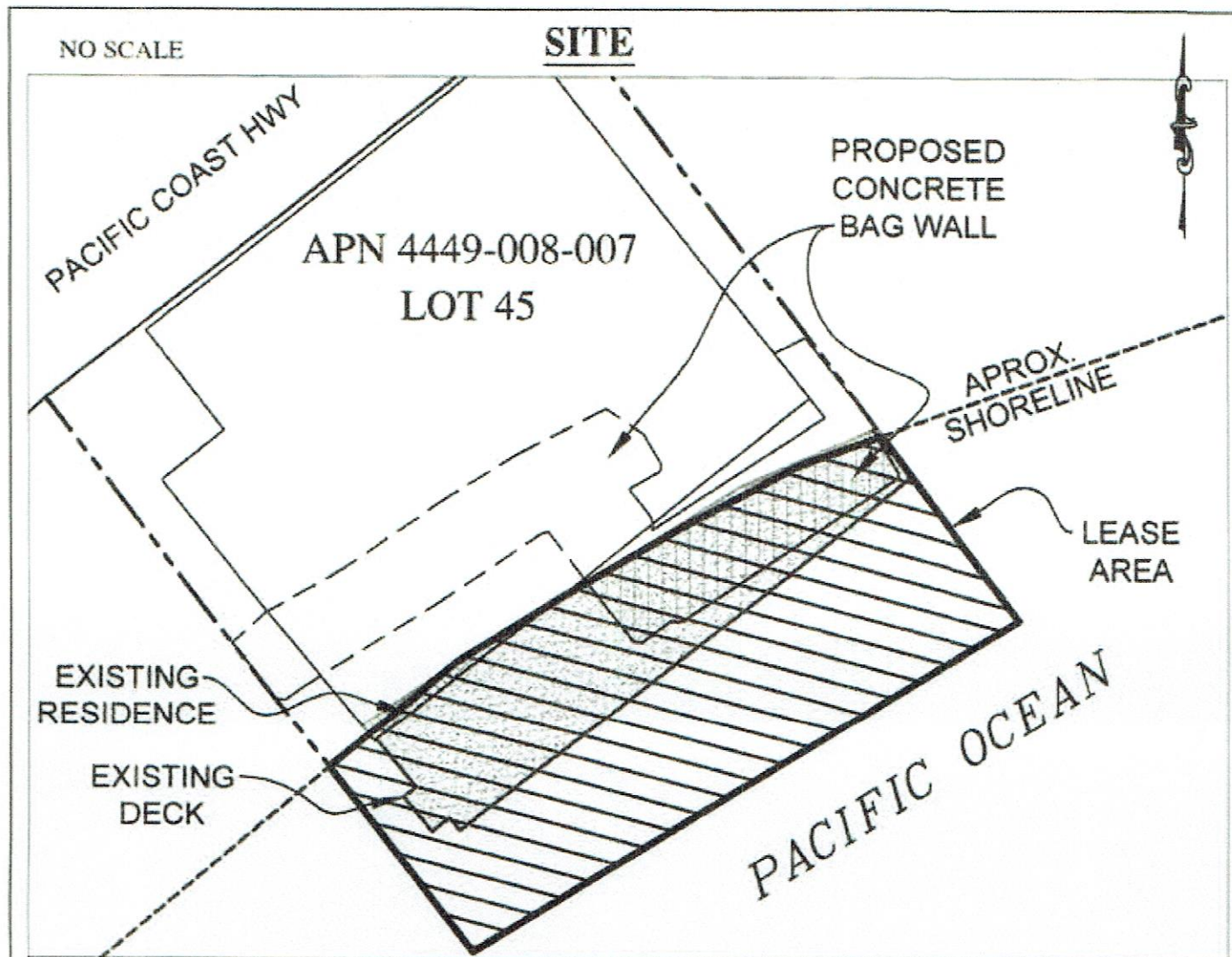
From: Connor_Kelly@SLC
To: [Marissa Coughlan](#)
Subject: RE: 19830 PCH
Date: Friday, February 14, 2020 10:57:12 AM

Hi Marissa,

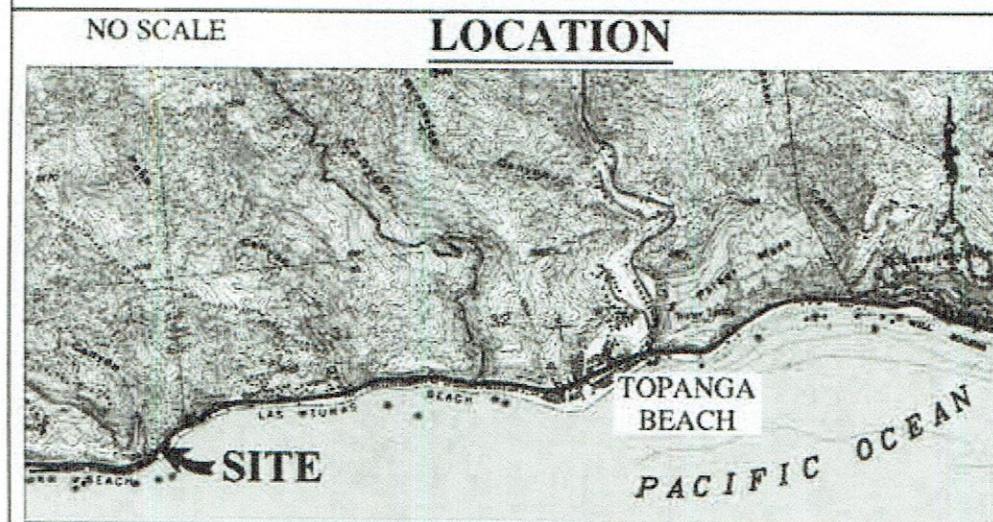
I am glad to see that the Boyajians have paid the rent, however, we will need to get a new lease under their name. To do this, we require the Boyajian's to submit an application. Typically, I would say we could do an assignment of the existing lease, but the Ferrone Trustees (previous owners) are unlikely to respond to sign it over. Hence, a new lease would most likely be the best and easiest way forward. I am still waiting on Brian to wrap up the execution of the existing lease, as I hope that this could be proof enough for the City to issue the required permits without further delay. Then the application for the new lease could be worked on concurrently with the project.

Thank you,
Kelly

ATTACHMENT 1



19830 PACIFIC COAST HWY., MALIBU, CA.



MAP SOURCE: USGS QUAD

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

Exhibit B

W 26863

MICHAEL FERRONE TRUST

APN 4449-008-007

GENERAL LEASE -
PROTECTIVE STRUCTURE &
RESIDENTIAL USE
LOS ANGELES COUNTY



RGB 01/03/16

ATTACHMENT 2

**NOTICE OF PUBLIC HEARING
CITY OF MALIBU
CITY COUNCIL**

The Malibu City Council will hold a public hearing on **MONDAY, August 10, 2020, at 6:30 p.m.** on the project identified below. **This meeting will be held via teleconference only in order to reduce the risk of spreading COVID-19 and pursuant to the Governor's Executive Orders N-25-20 and N-29-20 and the County of Los Angeles Public Health Officer's Safer at Home Order (revised July 14, 2020). All votes taken during this teleconference meeting will be by roll call vote, and the vote will be publicly reported.**

How to View the Meeting: No physical location from which members of the public may observe the meeting and offer public comment will be provided. Please view the meeting, which will be live streamed at <https://malibucity.org/video> and <https://malibucity.org/VirtualMeeting>.

How to Participate Before the Meeting: Members of the public are encouraged to submit email correspondence to citycouncil@malibucity.org before the meeting begins.

How To Participate During The Meeting: Members of the public may also speak during the meeting through the Zoom application. You must first sign up to speak before the item you would like to speak on has been called by the Mayor and then you must be present in the Zoom conference to be recognized.

Please visit <https://malibucity.org/VirtualMeeting> and follow the directions for signing up to speak and downloading the Zoom application.

REQUEST TO CONSOLIDATE COASTAL DEVELOPMENT PERMIT – The Council will consider adopting a resolution to consent to the processing of a consolidated coastal development permit by the California Coastal Commission for the replacement of a failed onsite wastewater treatment system and associated development for an existing single-family residence

Location:	19830 Pacific Coast Highway
APN:	4449-008-007
Zoning:	Single-Family Medium Density
Applicant:	Marissa M. Coughlan Consultants, Inc.
Owner:	H and E Holdings, LLC
Application Filed:	October 23, 2014
Case Planner:	David Eng, Assistant Planner (310) 456-2489, extension 372 deng@malibucity.org

The applicant submitted a written request for the City's consent to have the California Coastal Commission process a consolidated coastal development permit for the entire project to be processed in a single application under the authority of the California Coastal Commission. A portion of the subject property, between Pacific Coast Highway and the mean high tide line is within the City's jurisdiction. A portion of the project is located seaward of the mean high tide line with the California State Lands Commission jurisdiction and California Coastal Commission permitting jurisdiction.

A written staff report will be available at or before the hearing for the projects. All persons wishing to address the Council regarding these matters will be afforded an opportunity in accordance with the Council's procedures.

Copies of all related documents can be reviewed by any interested person by contacting the Case Planner during regular business hours. Oral and written comments may be presented to the City Council at any time prior to the beginning of the public hearing.

IF YOU CHALLENGE THE CITY'S ACTION IN COURT, YOU MAY BE LIMITED TO RAISING ONLY THOSE ISSUES YOU OR SOMEONE ELSE RAISED AT THE PUBLIC HEARING DESCRIBED IN THIS NOTICE, OR IN WRITTEN CORRESPONDENCE DELIVERED TO THE CITY, AT OR PRIOR TO THE PUBLIC HEARING.

Bonnie Blue, Planning Director

Publish Date: July 30, 2020