CALIFORNIA COASTAL COMMISSION
NORTH CENTRAL COAST DISTRICT
455 MARKET STREET, SUITE 300
SAN FRANCISCO, CA 94105
PHONE: (415) 904-5260
FAX: (415) 904-5400
WEB: WWW.COASTAL.CA.GOV

F13b

2-22-0792 (MUNRO SFD)

FEBRUARY 10, 2023

EXHIBITS

161 SEADRIFT – LOCATION MAP

MARIN COUNTY

161 SEADRIFT – SITE PHOTOS
MARIN COUNTY

Source: Coastal Records Project, 2019

MUNRO RESIDENCE

STINSON BEACH

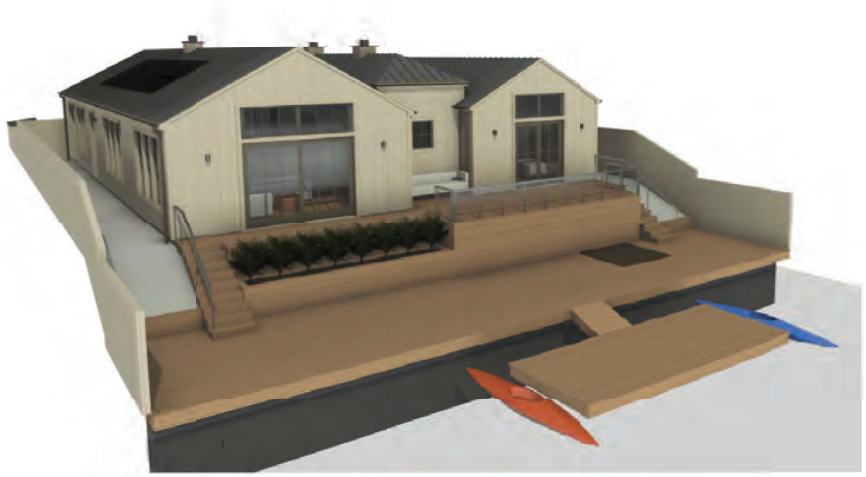

Exhibit 3
2-22-0792
Page 1 of 8

CHAMBERS + CHAMBERS ARCHITECTS

420 MILLER AVENUE MILL VALLEY, CA 94941
DIRECT: 415.381.8326 MAIN: 415.381.8300
BARBARA@CHAMBERSANDCHAMBERS.COM
WWW.CHAMBERSANDCHAMBERS.COM

MUNRO RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CA 94970

AP# 195-041-22

DATE: 9/13/22 ISSUE: C.D.P.

COVER SHEET

A0.0

VICINITY MAP

PROJECT INFORMATION

GENERAL INFORMATION

ZONING:	C-R'S'P'S-1.4
APN:	195-041-22
LOT AREA:	7,500 SQ. FT.

PROJECT-RELATED	ALLOWED	EXISTING	PROPOSED
PROPERTY INFORMATION:			
MAIN LEVEL	-	2,260 SF	2,230 SF
GARAGE (540 SF NOT INCLUDED IN F.A.R.)	-	410 SF	0 SF
JADU (NOT INCLUDED IN F.A.R.)	JADU: 500 SF	N/A	495 SF
TOTAL	-	2,670 SF	2,725 SF
TOTAL COUNTED IN F.A.R. (30%)	2,250 SF	2,290 SF (31%)	2,230 SF (30%)
SETBACKS:			
FRONT	25' - 0"	26' - 9"	25' - 0"
SIDE - EAST	6' - 0"	5' - 6"	6' - 0"
SIDE - WEST	6' - 0"	6' - 1"	6' - 0"
REAR	100' - 0" FROM FRONT PL.	87' - 2"	91' - 10"
ADDITIONAL INFORMATION:			
HEIGHT	28.29' NAVD	23.3' NAVD	28.0' NAVD
PARKING	2	2	2

PROJECT DESCRIPTION

- DEMOLITION OF EXISTING HOUSE, GARAGE, AND DECK.
- CONSTRUCTION OF A NEW HOUSE, ATTACHED JUNIOR ADU, DECK AND FLOATING DOCK.
- NEW SEPTIC SYSTEM.
- NEW LANDSCAPING.

CONTACT INFORMATION

OWNER
JULIE MUNRO
161 SEADRIFT ROAD
STINSON BEACH, CA 94970
(415) 847-6499

ARCHITECT
BARBARA CHAMBERS
CHAMBERS + CHAMBERS ARCHITECTS
420 MILLER AVENUE
MILL VALLEY, CA 94941
(415) 381-8326

LANDSCAPE ARCHITECT
HONEY KEARNS
LEHUA GARDENS, INC.
770 EAST BLITHEDALE #263
MILL VALLEY, CA 94941
(415) 613-5042

SEPTIC ENGINEER
NOADIAH ECKMAN
ECKMAN ENVIRONMENTAL DESIGN, INC.
100 SHORELINE HIGHWAY
BUILDING 'B', SUITE 6100
(510) 390-3892

SURVEYOR
STANLEY GRAY
MERIDIAN SURVEYING ENGINEERING, INC.
777 GRAND AVENUE #202
SAN RAFAEL, CA 94901
(415) 456-6450

SHEET INDEX

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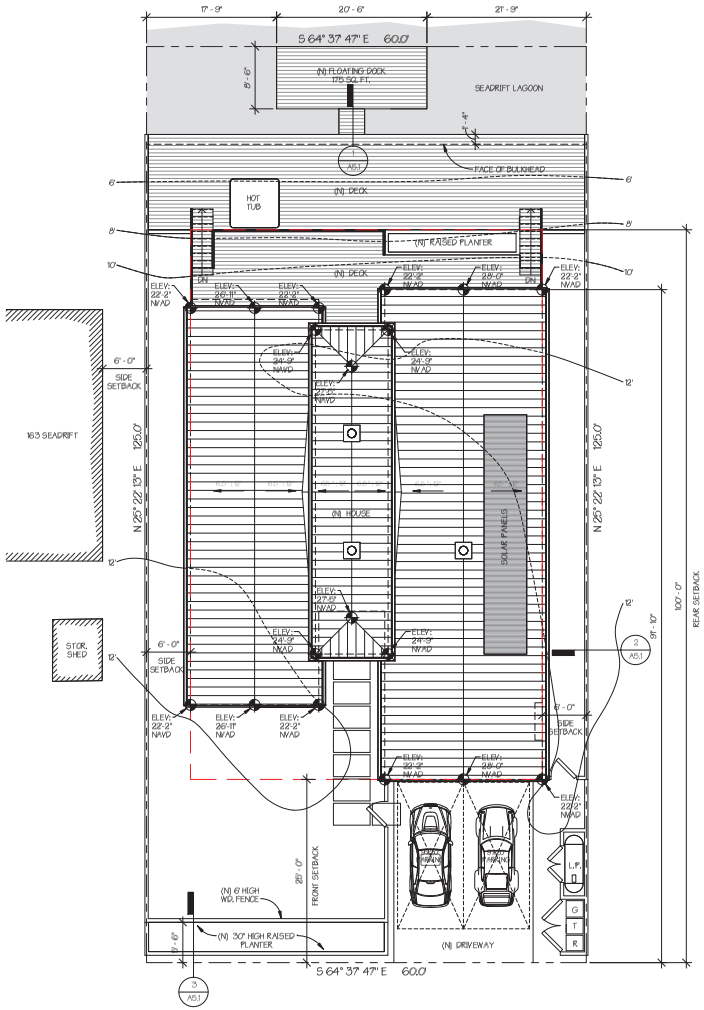
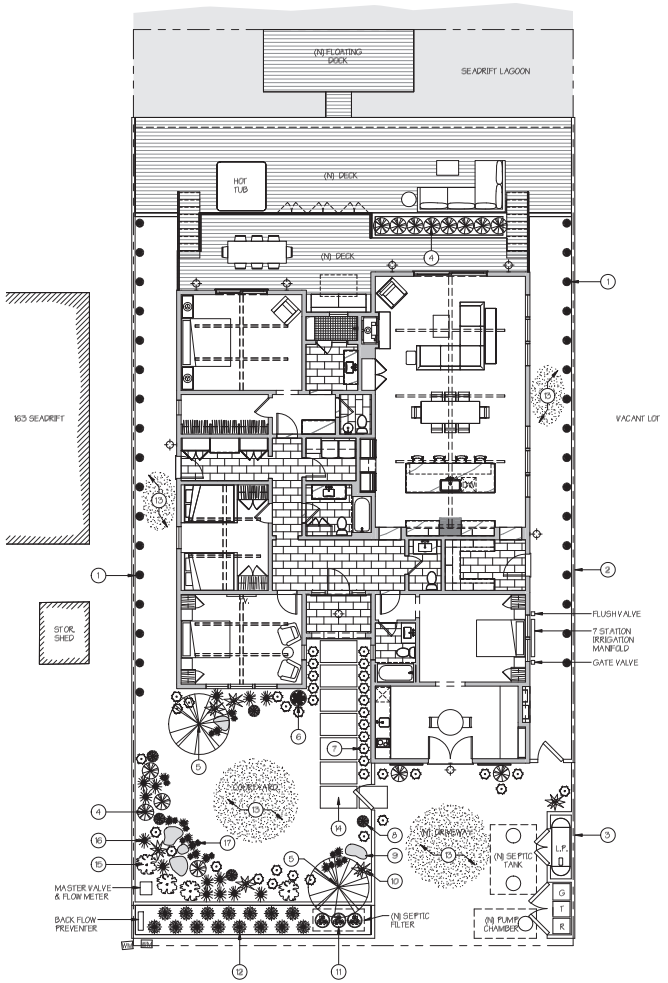


2 A1.0 SITE / ROOF PLAN 1/8" = 1'-0"

NORTH



1 A1.0 LANDSCAPE PLAN 1/8" = 1'-0"

NORTH

LANDSCAPE NOTES

1. STAR JASMINE VINES ALONG EAST & WEST FENCE LINE.
2. NEW 6' HIGH CEDAR FENCE.
3. NEW 4' HIGH CEDAR FENCE AND ENCLOSURES.
4. (8) DWARF OLIVE SHRUBS "LITTLE OLLIE".
5. OLIVE TREE (NON-FRUITING).
6. LEMON TREE IN POT.
7. LOMANDRA "SHORTY".
8. ARTEMESIA "POWIS CASTLE"
9. SANDSTONE BOULDERS.
10. AGAVE "RAY OF LIGHT".
11. PLANTERS WITH SUCCULENTS SITTING ON TOP OF FILTER BOX.
12. LOMANDRA "PLATINUM BEAUTY".
13. SAND COLORED PEA GRAVEL.
14. CONCRETE PAVERS.
15. GREVILLEA "MOONLIGHT".
16. PERUVIAN FEATHER GRASS "STIPA ICHU".
17. ECHEVERIA "IMBRICATA".

EXTERIOR LIGHTING KEY

WALL MOUNDED EXTERIOR LIGHTING FIXTURE - KICHLER LIGHTING - CYLINDER w/ 11W LED BULB, 350 LUMENS 3000K DARK SKY COMPLIANT

CEILING MOUNTED EXTERIOR LIGHTING FIXTURE - RESTORATION HARDWARE CONDORCET PENDANT w/ 9W LED BULB, 800 LUMENS 2700K

Exhibit 3
CDP-22-0792
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CHAMBERS + CHAMBERS ARCHITECTURE
420 MILLER AVENUE MILL VALLEY, CA 94941
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MUNRO RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CA 94970

APN# 195-041-22

DATE: 9/13/22
ISSUE: C.D.P.

SITE PLAN / LANDSCAPE PLAN

A1.0

9/12/2022 2:13:27 PM

AERIAL PHOTO

8

7

6

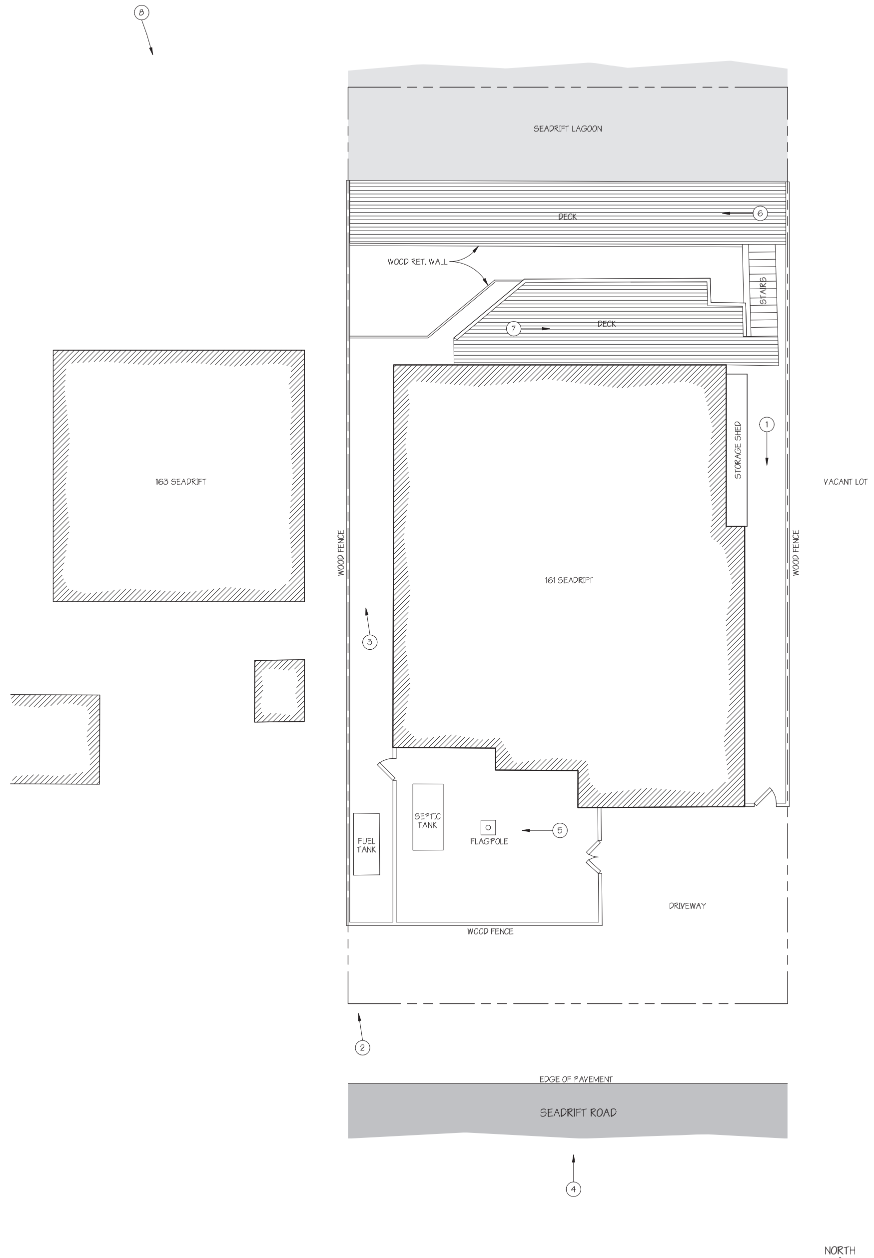
5

4

3

2

1



1 A1.1 EXISTING SITE PLAN
1/8" = 1'-0"

Exhibit 3
2-22-0792
Page 3 of 8

CHAMBERS + CHAMBERS
ARCHITECTS

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MUNRO RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CA 94970

AP# 195-041-22

DATE: 9/13/22
ISSUE: C.D.P.

SITE PHOTOS

A1.1

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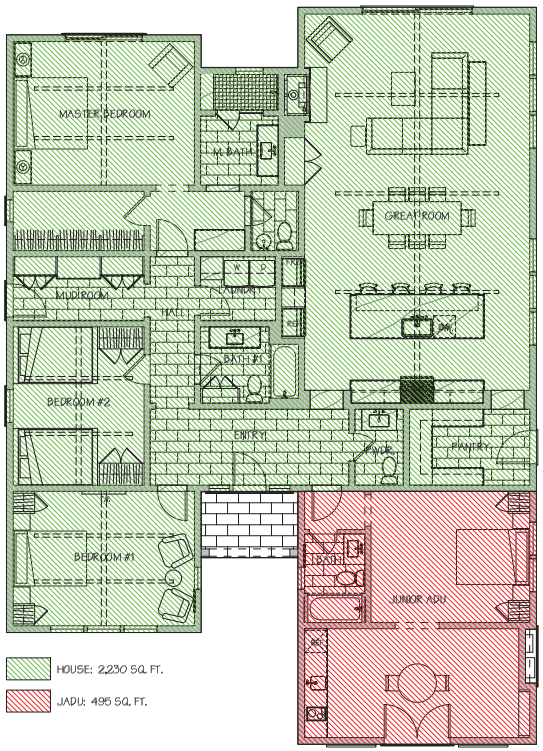
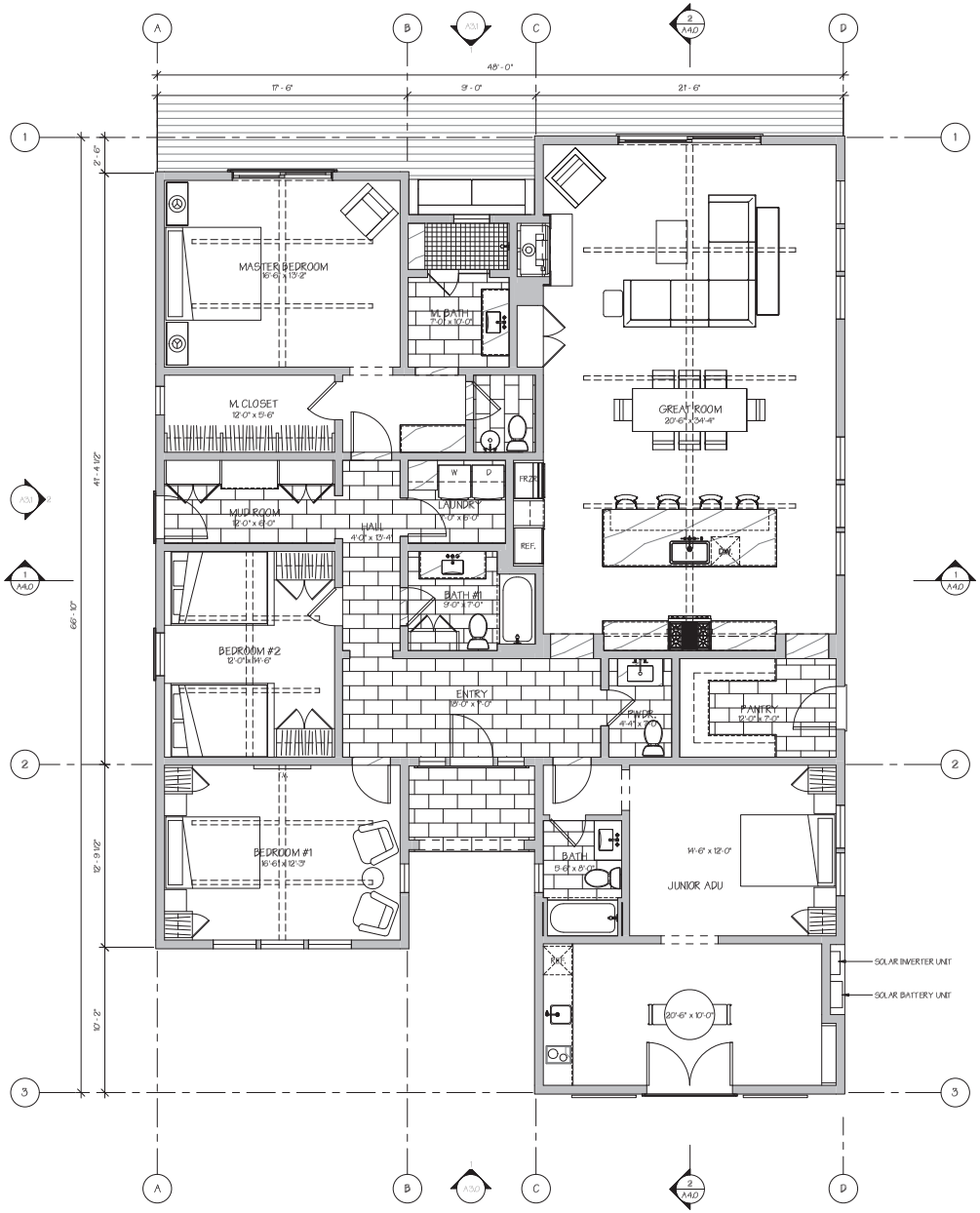


2 A2.0 MAIN FLOOR AREA CALCULATIONS
3/16" = 1'-0"

NORTH



1 A2.0 MAIN FLOOR PLAN
1/4" = 1'-0"

NORTH

Exhibit 3
22-0792
Page 4 of 8

CHAMBERS + CHAMBERS ARCHITECTURE

420 MILLER AVENUE MILL VALLEY, CA 94941
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MUNRO RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CA 94970

AP# 195-041-22

DATE: 9/13/22 ISSUE: C.D.P.

MAIN FLOOR PLAN, AREA DIAGRAM

A2.0

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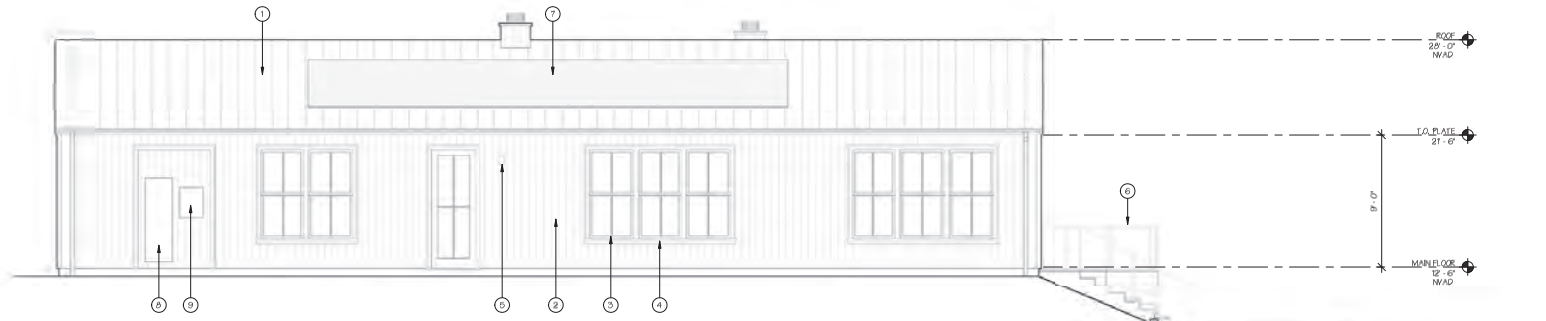

2 / A3.0 EAST ELEVATION
1/4" = 1'-0"

1 / A3.0 SOUTH ELEVATION
1/4" = 1'-0"

ELEVATION NOTES

1. STANDING SEAM METAL ROOF - COLOR: STORM GREY
2. VERTICAL STAINED CEDAR WOOD SIDING.
3. CLAD WINDOWS AND DOORS.
4. STAINED CEDAR TRIM.
5. EXTERIOR LIGHTING - SHIELDED AND DIRECTED DOWNWARD, MOUNTED @ 7'-0" U.O.N.
6. METAL GUARDRAIL WITH GLASS PANELS.
7. SOLAR PANELS.
8. SOLAR BATTERY UNIT.
9. SOLAR INVERTER UNIT.

Exhibit 3
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CHAMBERS + CHAMBERS ARCHITECTURE

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MUNRO RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CA 94970

AP# 195-041-22

DATE: 9/13/22
ISSUE: C.D.P.

ELEVATIONS

A3.0

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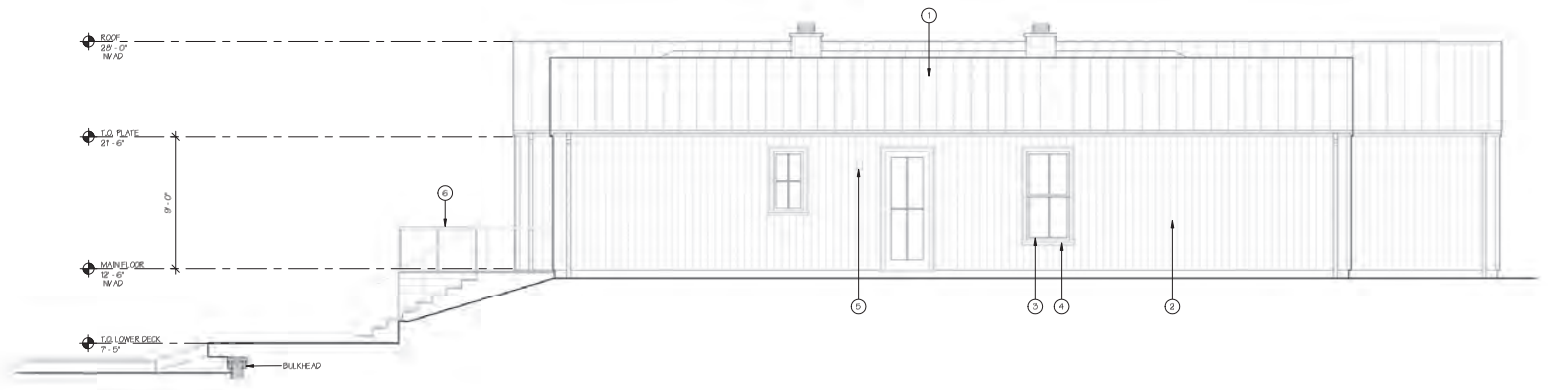

2 / A3.1 WEST ELEVATION
1/4" = 1'-0"

1 / A3.1 NORTH ELEVATION
1/4" = 1'-0"

ELEVATION NOTES

1. STANDING SEAM METAL ROOF - COLOR: STORM GREY
2. VERTICAL STAINED CEDAR WOOD SIDING.
3. CLAD WINDOWS AND DOORS.
4. STAINED CEDAR TRIM.
5. EXTERIOR LIGHTING - SHIELDED AND DIRECTED DOWNWARD, MOUNTED @ 7'-0" U.O.N.
6. METAL GUARDRAIL WITH GLASS PANELS.
7. SOLAR PANELS.
8. SOLAR BATTERY UNIT.
9. SOLAR INVERTER UNIT.

Exhibit 3
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CHAMBERS + CHAMBERS ARCHITECTURE
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MUNRO RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CA 94970

APN# 195-041-22

DATE: 9/13/22 ISSUE: C.D.P.

ELEVATIONS

A3.1

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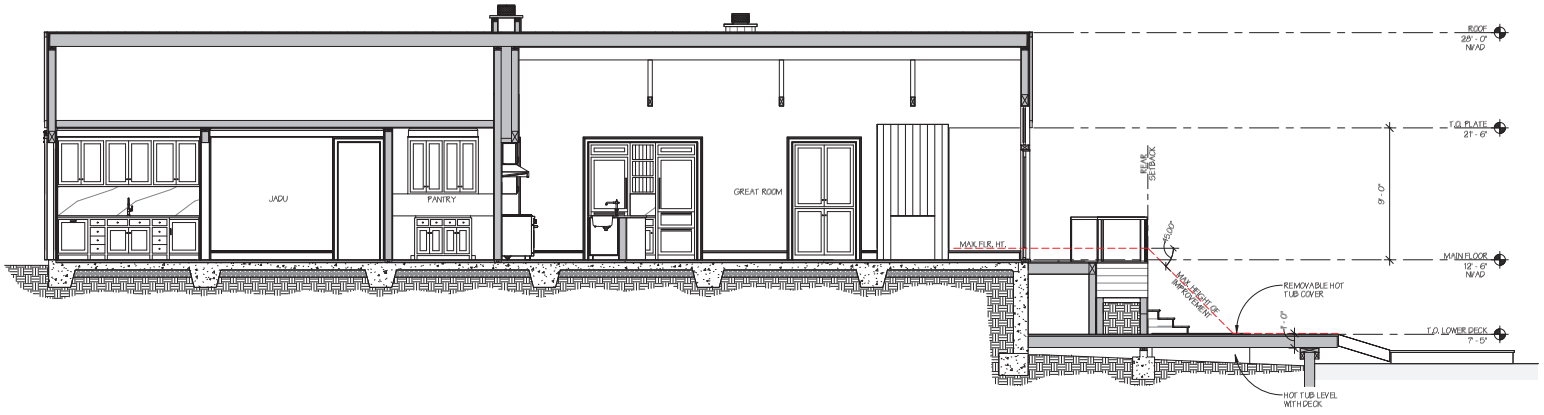
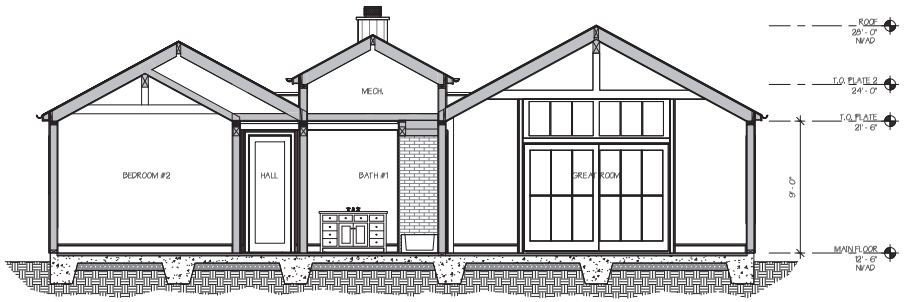


2 A4.0 SECTION 1
1/4" = 1'-0"



1 A4.0 SECTION 2
1/4" = 1'-0"

Exhibit 3
22-0792
Page 7 of 8

CHAMBERS + CHAMBERS
ARCHITECTURE
420 MILLER AVENUE MILL VALLEY CA 94941
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WWW.CHAMBERSANDCHAMBERS.COM

MUNRO RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CA 94970

APN# 195-041-22

DATE: 9/13/22
ISSUE: C.D.P.

SECTIONS

A4.0

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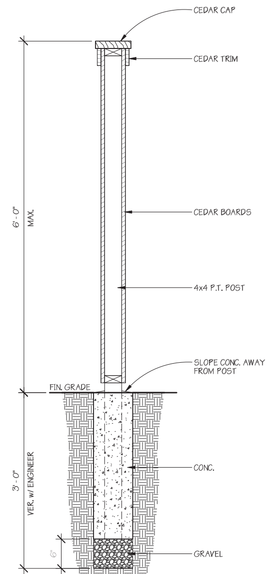
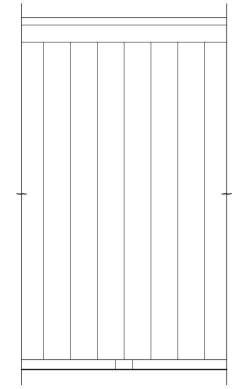
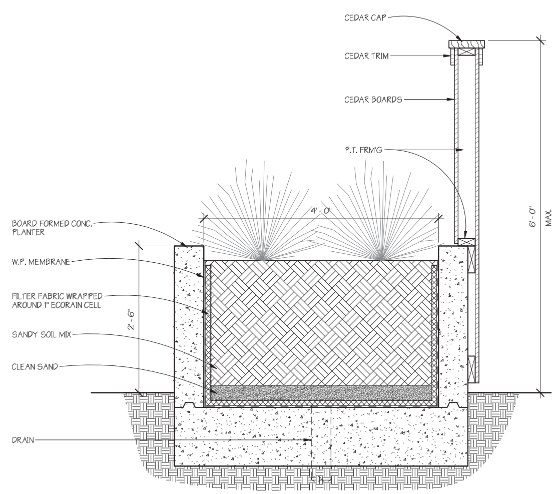


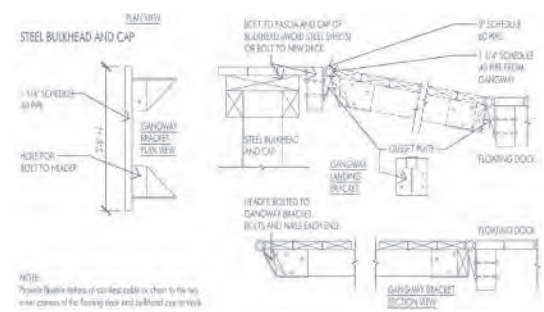
2 FENCE DETAIL
A5.1 1" = 1'-0"



ELEVATION DETAIL



3 CONCRETE PLANTER
A5.1 1" = 1'-0"



1 BULKHEAD ATTACHMENT / GANGWAY DETAIL
A5.1 N.T.S.

Exhibit 3
2-22-0792
Page 8 of 8

CHAMBERS + CHAMBERS ARCHITECTS
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MUNRO RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CA 94970

AP# 195-041-22

DATE: 9/13/22 ISSUE: C.D.P.

DETAILS

A5.1

9/12/2022 2:13:36 PM

Exhibit A
2-22-0792
Page 1 of 4

GENERAL NOTES

(1) ALL DISTANCES: (RECORD) = MEASURED, UNLESS OTHERWISE NOTED.
(2) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL THE UTILITIES MARKED BY THE RESPECTIVE UTILITY COMPANY PRIOR TO CONSTRUCTION.
(3) PRIOR TO ANY DIGGING, CALL U.S.A. (1-800-642-2444) AT LEAST 48 HOURS IN ADVANCE TO HAVE EXISTING UNDERGROUND UTILITIES MARKED.
(4) GROUND CONDITIONS SHOWN HEREON REFLECT CONDITIONS ON THE DATE OF THE SURVEY.
(5) ENCROACHMENT UPON AND BY THE ADJOINING PRIVATE PROPERTY(IES) ARE HEREBY NOTED AND IT SHALL BE THE RESPONSIBILITY SOLELY OF THE PROPERTY OWNERS INVOLVED TO RESOLVE ANY ISSUE WHICH MAY ARISE THEREFROM.
(6) THIS MAP WAS PREPARED FOR THE EXCLUSIVE USE OF MS MUNRO AND THEIR ARCHITECT/ENGINEER, USE BY ANY OTHER PARTY FOR ANY PURPOSE WHATSOEVER IS PROHIBITED.
(7) ROOF/EAVE ELEVATIONS WERE TAKEN AT HIGHEST RELEVANT POINT(S) VISIBLE FROM THE GROUND.
(8) ONLY ACCESSIBLE SURFACE UTILITIES VISIBLE ON THE DATE OF THIS SURVEY ARE SHOWN. THIS SURVEY DOES NOT SHOW THE LOCATION OF, OR ENCROACHMENTS BY, SUBSURFACE UTILITIES, FOOTING FOUNDATIONS AND/OR BASEMENTS OF BUILDINGS. ALL USERS ARE ADVISED TO CONTRACT SEPARATELY WITH AN UNDERGROUND UTILITY LOCATION COMPANY AND TO REVIEW PUBLIC, QUASI-PUBLIC AND GIS UTILITY DATA SOURCES IF THEY WANT MORE INFORMATION.

BASIS OF SURVEY

OLD REPUBLIC TITLE COMPANY PRELIMINARY REPORT ORDER NO. 0457013618-RB, 591 REDWOOD HWY., SUITE 3150, MILL VALLEY, CA 94941. DATED APRIL 18, 2016. (TEL: 415-388-8740, FAX: 415-383-0416)

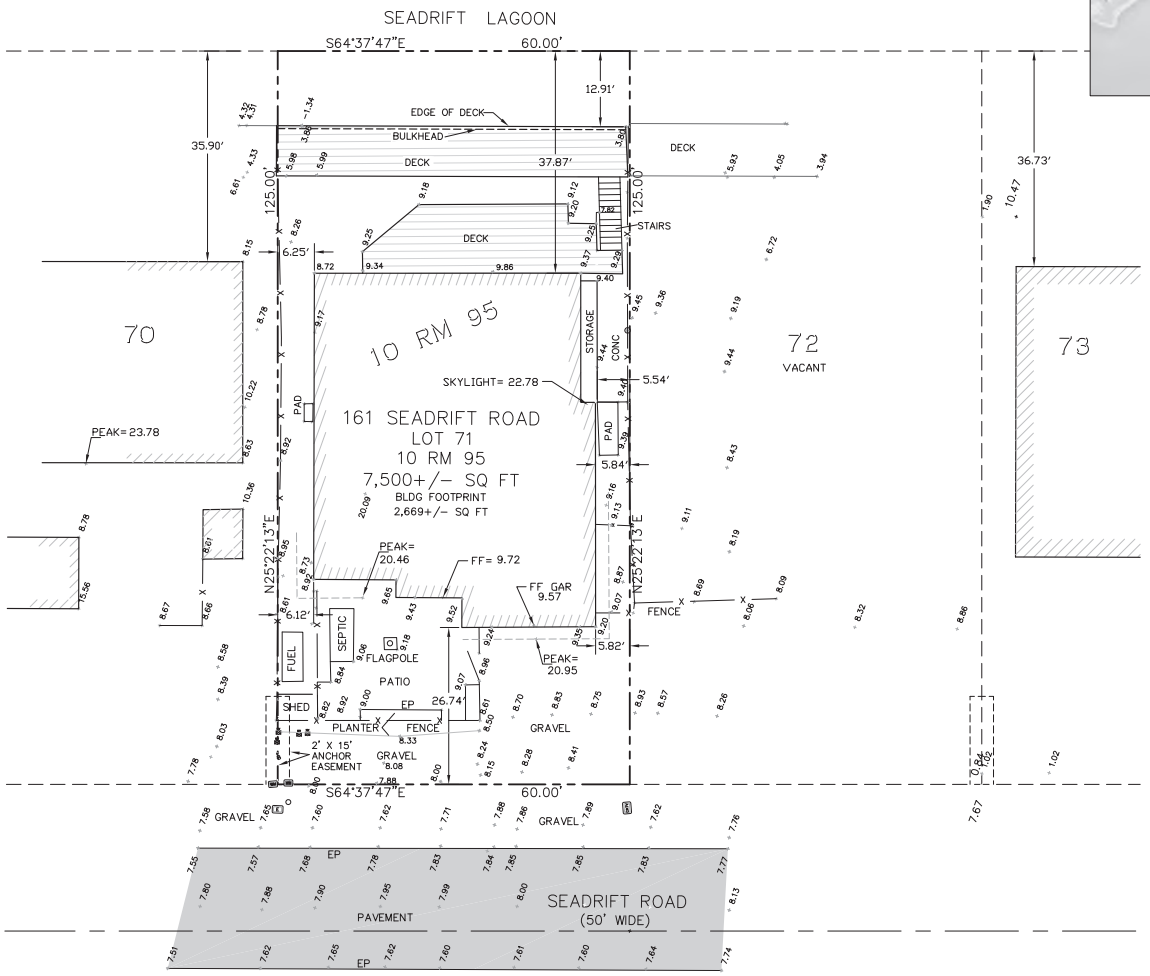
MAP REFERENCES

MAP OF SEADRIFT LAGOON SUBD, NO. ONE, FILED IN BOOK 10 OF MAPS, AT PAGE 95, OFFICIAL RECORDS MARIN COUNTY.

BASIS OF ELEVATION

RIM OF STANDARD MONUMENT LID IN SEADRIFT ROAD BETWEEN 157 AND 159 SEADRIFT ROAD.
ELEVATION = 7.99 (NGVD1929)
NOTE: THE MONUMENT RIM ELEVATION WAS SURVEYED PRIOR TO THE SEADRIFT ROAD REPAVEMENT AND SUBSEQUENT RIM ADJUSTMENT. CURRENT RIM ELEVATIONS ARE NO LONGER VALID BENCHMARKS.
TO OBTAIN NAVD88 ADD 2.84' TO ALL VALUES

VICINITY MAP N.T.S.



LEGEND

AC	ASPHALT
BKC	BACK OF CURB
BKW	BACK OF WALK
BLD	BUILDING
CL	CENTERLINE
CLR	CLEAR
CO	CLEANOUT
CONC	CONCRETE
COR	CORNER
DWY	DRIVEWAY
EC	EDGE OF CONCRETE
EL	ELEVATION
EP	EDGE OF PAVEMENT
FD	FOUND
FF	FINISHED FLOOR
FL	FLOWLINE
GB	GRADE BREAK
INV	INVERT
MH	MANHOLE
POC	POINT ON CURVE
POL	POINT ON LINE
SW	SIDEWALK
TFC	TOP FACE OF CURB
TBM	TEMPORARY BENCHMARK
(TYP.)	TYPICAL
UNK	UNKNOWN
VLT	VAULT
	PROPERTY LINE
	CENTERLINE
	EASEMENT LINE
	FLOWLINE
X	FENCE
	TIE
	ADJOINER LINE

SITE SURVEY

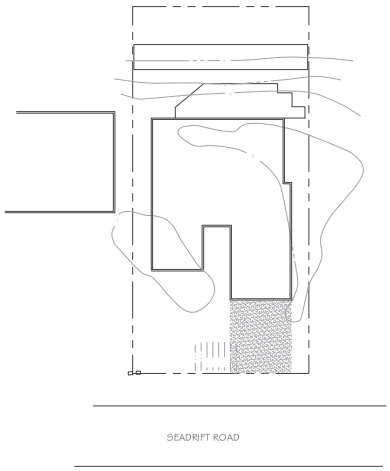
LANDS OF POWER
DN. 99-0701704
ALSO BEING LOT 71
10 RM 95
OFFICIAL RECORDS OF MARIN COUNTY
PREPARED AT THE REQUEST OF
JULIE MUNRO
APN 195-014-22

MARIN COUNTY — CALIFORNIA
MAY — 2016

MERIDIAN SURVEYING ENGINEERING, INC.
2958 VAN NESS AVENUE
SAN FRANCISCO, CA 94109
(415) 440-4131
777 GRAND AVENUE, #202
SAN RAFAEL, CA 94901
(415) 456-5450

SURVEY BY:	EW	PROJECT NO.:	16024
DRAWN:	RK	REVISION DATE:	05/17/2016
APPROVED:	STG	SHEET	1 OF 1
FILE NAME:	05062016		
SURVEY DATE:	05/06/2016		

PROPERTY BOUNDARIES (1" = 20')

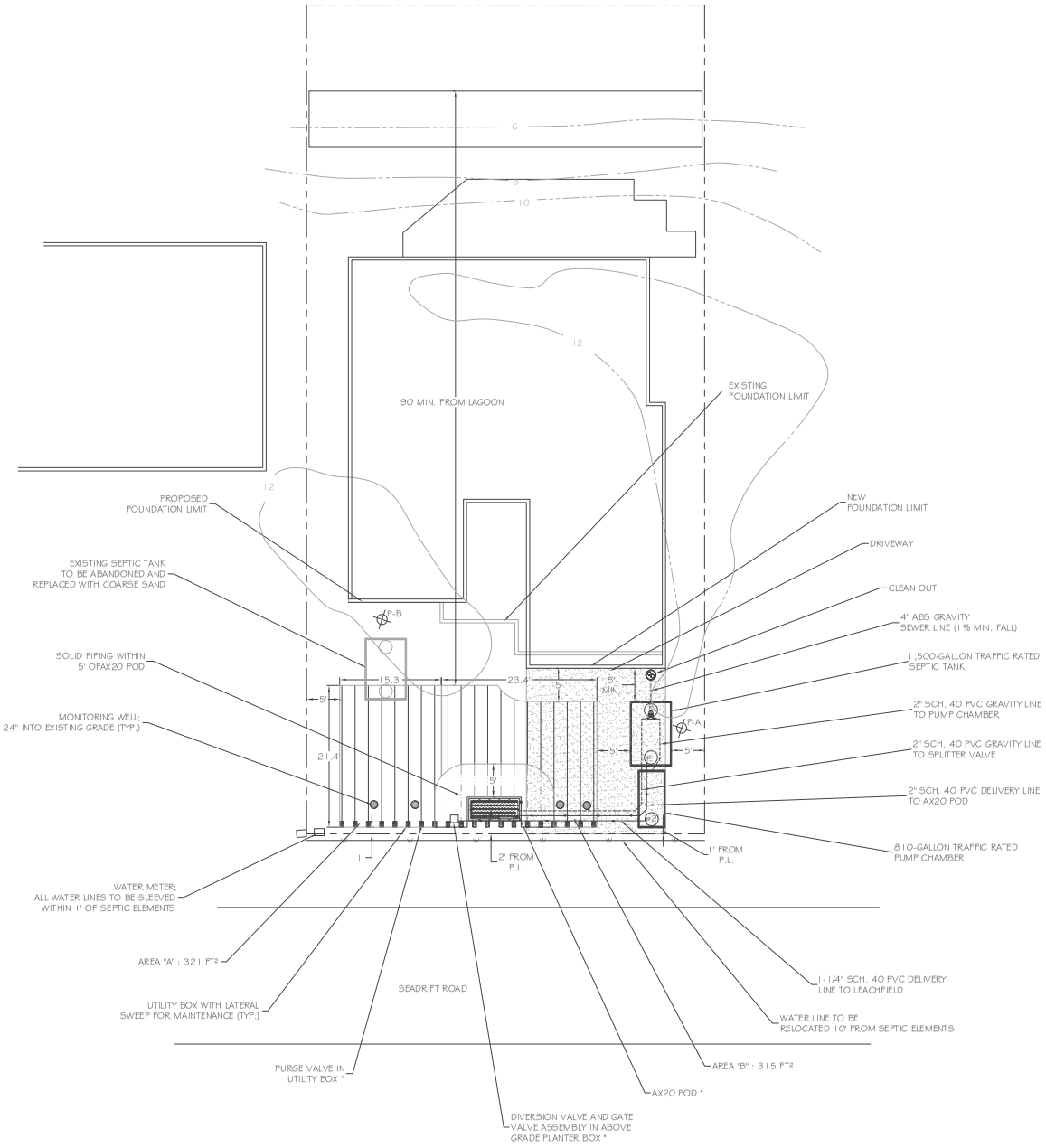


LEGEND

- Soil Profile Trench
- Percolation Test
- Check Valve
- Monitoring Well
- Clean Out
- Gravity Line
- Pressure Line

NOTES

* Survey provided by owner. EED assumes no responsibility.
* 450 GPD System
* Purge valve, AX20 Pod, and Gate valve assembly to be located in raised planter box built by owner.



0' 8' 4' 16'
SCALE: 1" = 8'

Exhibit 4

2-22-0792

Page 2 of 4

WATER DISCHARGE 450 GPD
ON-SITE WASTEWATER SYSTEM
SITE PLAN

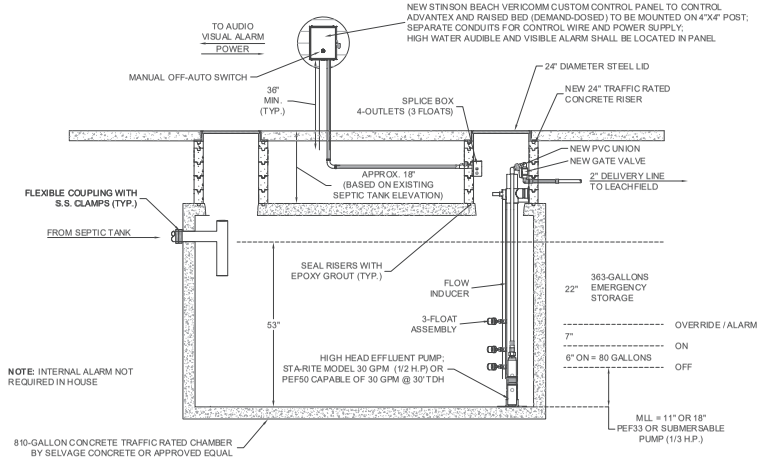
MONRU RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CALIFORNIA

DATE / REV.	03 - 15 - 2022 / A
SCALE/SIZE	1" = 8' / ARCH D
SHEET	1 OF 3

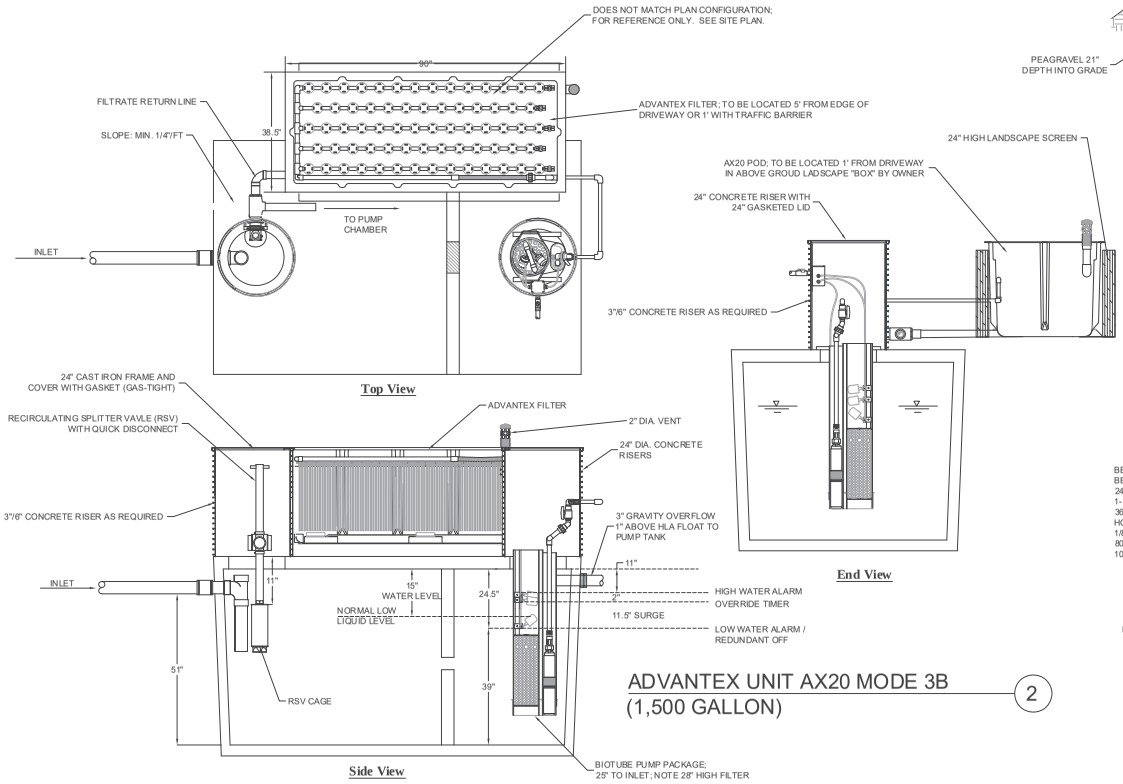
JOB No. 1914-22

RICHARD S. ECKMAN No. 7486

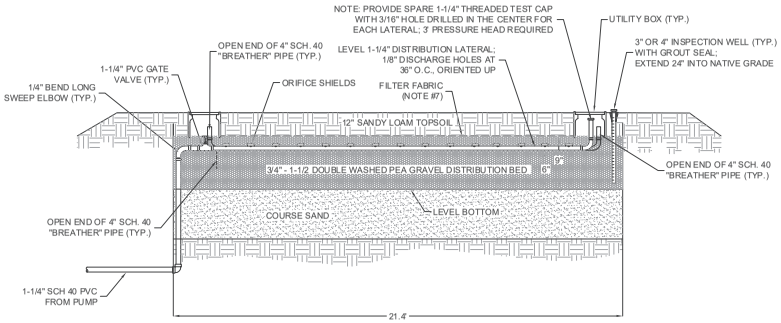
eckman environmental designs, inc
100 Shoreline Highway
Bld B, Suite B100
Mill Valley, CA 94941
510.380.3982



810-GALLON CONCRETE TRAFFIC RATED PUMP CHAMBER WITH EFFLUENT PUMPING SYSTEM (16.5 GAL/IN) 1

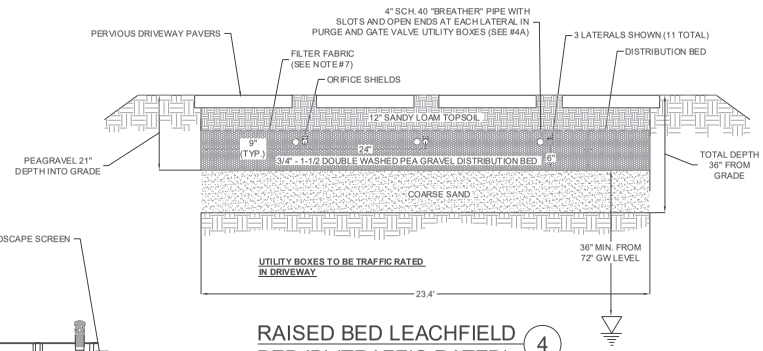


ADVANTEX UNIT AX20 MODE 3B (1,500 GALLON) 2



RAISED BED LEACHFIELD BED 'A' 3

LONG CROSS SECTION



RAISED BED LEACHFIELD BED 'B' (TRAFFIC RATED) 4

CROSS SECTION

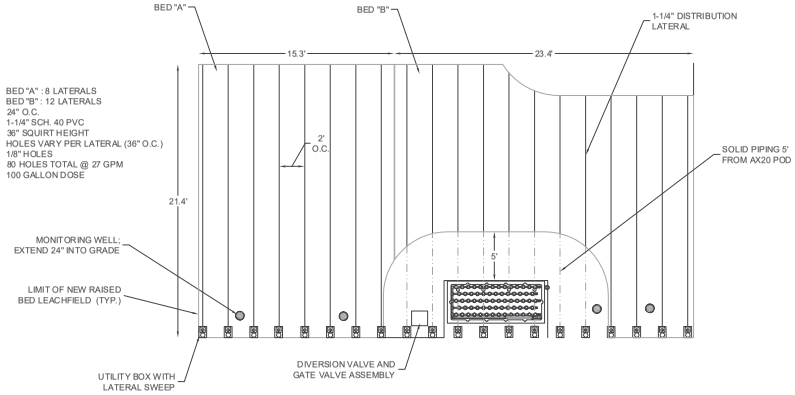


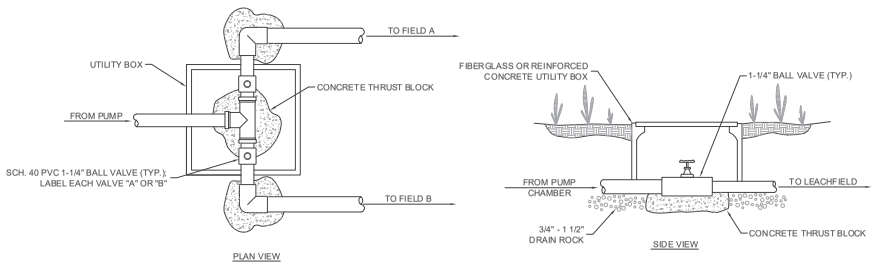
Exhibit 4
2-22-0792
Page 3 of 4

ON-SITE WASTEWATER SYSTEM PLAN
CONSTRUCTION DETAILS

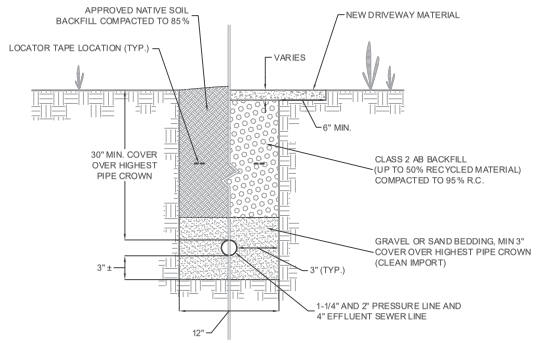
MONRU RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CALIFORNIA

DATE / REV.	CAL. SIZE	SHEET
03 - 15 - 2022 / A	NO4 / ARCHD	2 OF 3

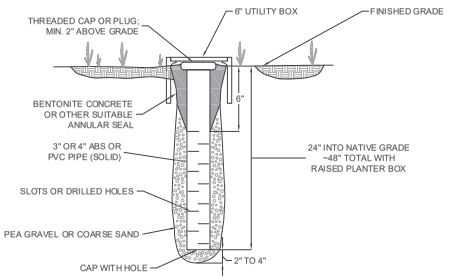
eckman environmental designs, inc
100 Shoreline Highway
Bld B, Suite B100
Mill Valley, CA 94941
510.390.3992



DIVERSION VALVE TO LEACHFIELD 6



SINGLE PIPE TRENCH TYPE 1 7



MONITORING WELL 8

CONSTRUCTION SPECIFICATIONS

GENERAL

1. Plan Changes. Changes in plans or specifications shall be made only after consultation with and approval of the designer.

2. Property Lines. Property lines shown on drawing are approximate. The owner has had the property boundaries marked by a licensed surveyor.

3. Construction Inspection. Construction inspection by the Designer shall be required at checkpoints as outlined in the attached Construction Inspection Schedule. It shall be the responsibility of the contractor to call for the required inspections, and to provide at least 48-hours advance notification of the Design Engineer and Stinson Beach Water District.

MATERIALS

4. General. All construction materials shall be approved by the designer prior to their placement.

5. Gravel. Shall be cleaned and double washed.

6. Distribution Piping. All piping for the delivery and pressure distribution network shall be Schedule 40 PVC and have a minimum pressure rating of 150 psi unless otherwise specified. All joints shall be solvent-cement socket type conforming to ASTM D-2672.

   Perforations for the pressure distribution network shall be drilled in a straight line along the invert of the pipe according to the hole diameter and spacing as shown on the plans or as modified by the designer. Clean all drilling burrs from the inside and outside of the pipe prior to installation.

7. Filter Fabric. Filter fabric shall be Mirafi 140N or approved equal. Filter fabric shall be handled and installed in accordance with manufacturer's recommendations. Borders of fabric shall be overlapped 12 to 18 inches. Any torn or damaged sections of fabric shall be covered with additional pieces of filter fabric sufficient to meet the above overlapping requirement.

8. Effluent Filter. Contractor shall use Orenco Company Effluent Screen, Model #FTI0418-A, or approved equal.

9. Septic Tank. A 1,500-gallon concrete traffic-rated septic tank shall be used for septic tank shown on the plans. Septic tanks shall be water tight construction and certified as such. Field testing of septic tank integrity shall be required. Selvage Tanks 707-542-2762.

10. Pump Chamber. A 810-gallon concrete traffic-rated septic tank shown on the plans. The pump chamber shall be of watertight construction and certified as such. Field-testing of the chamber shall be required. Selvage Tanks 707-542-2762.

11. Pump. The pump is to be STA-RITE 30 gpm or PEF50 (1/2 h.p.) for 30 gpm @ 30' tdh for leach field. Distributed by Bob Bartley 707-279-2304.

12. Control Panel. Contractor shall use Vericomm Stinson control panel for Advantex and demand dose raised bed, or equal, to control both pumps. AX20 to be time-dosed and leachfield to be demand-dose.

13. Access Risers. Watertight and gas tight access risers shall be installed.

14. Sand. The tank backfill in leachfield area shall meet the following criteria:

Sieve Size	Percent Passing
#4	100
#8	70-90
#16	40-60
#30	25-35
#50	2-5
#60	0

D10	>0.400mm
D60	=1.4mm
UC	=3.0-4.0

The sand shall be analyzed by wet-sieve analysis using ASTM method C-117 or equivalent. Prior to placement of sand, the District shall be provided with a certified copy of the conforming sieve analysis. The pea gravel in the gravel bed shall be clean, double-washed, and free of fines and at least 6" deep.

CONSTRUCTION

15. Installation. All installation work shall be in accordance with applicable Marin County Regulations.

16. Location of Disposal Field. Location shown is approximate, subject to adjustment in the field by the Contractor according to building constraints and noted setback requirements. Trenches shall be installed on contour.

17. Septic Tank and Pump Chamber Location. Location for the septic tank and pump chamber is approximate, subject to adjustment in the field by the contractor according to building constraints and noted setback requirements. They shall be located and installed to be free from vehicle traffic and protected against entry of surface runoff. Any portion of existing field that is excavated shall be disposed of at proper landfill.

18. Septic Tank/Pump Chamber Leak Test. The new septic tank and new pump chamber shall be required to be certified as watertight. Field testing of tanks shall be required and conducted as follows:

    Designer to visually inspect tank prior to conducting leak test. Fill tank and pump chamber so water level is 2 inches ± above tank/access riser joints. Note depth of water and re-measure not less than one hour later. Any water level drop shall be considered to be an indicator of a leaking tank; a tank shall be repaired or replaced to the satisfaction of the engineer.

19. Electrical.
    - High water audio and visual alarm IS required within the house.
    - All electrical work shall conform to procedures and codes of Marin County Building Department.

    Effluent Pump: The pump shall be of the size and type to accommodate the intended use and shall include the following:

    a. A "Hand-off-auto" (HOA) switch.
    b. An audio and visible alarm and necessary sump water sensing device to indicate a"high water" condition.
    c. Float switches shall be anchored to a suitable float tree for controlling the starting and stopping of pump operation.
    d. The pump intake shall be set a minimum of 4 inches above the sump bottom.

    Sump:

    a. Access shall be provided by a minimum 24-inch diameter opening;
    b. All pipes and/or electrical conduits through the sump shall be either precast into the sump or sealed with gas-tight compression connectors.

    Electrical Features: The following electrical features shall be provided:

    a. An outdoor-type control box containing fused disconnect and motor protection switch.
    b. The control box may be mounted on the building served if located within 30 feet and within direct view of the sump, otherwise the control box shall be mounted on a pipe stand or wooden post.
    c. Electrical conduit shall be PVC. Separate conduits shall be provided for control wire and power supply. Separate circuits with individual breakers at the main panel shall be provided for the control panel/alarm and pump.

20. Pressure Pipe Network.

- All pressure pipe shall be Schedule 40 PVC or approved equal.
- All joints shall be glued with solvent cement.
- Distribution pipe shall be laid level with a maximum permissible slope of three (3) inches in 100 feet.
- Hydraulic testing shall be conducted in the presence of the Designer to determine any leaks in the system and to check the discharge head and pump operation.
- A concrete thrust block shall be installed at all pipe bends of 45° or greater in all pressure lines from the pump to leachfield.

21. Clearing and Grubbing Limits. All disposal sites will be cleared and grubbed. These areas will be cleared and grubbed only after the Designer has observed and approved the Contractors staking of the clearing limits, to ensure that no more clearing and grubbing is done than necessary.

TANK INSTALLATION

1. EXCAVATION:

   Trench shall be excavated to provide 12 - 14 inches of clearance around sides of tank to allow for the removal of lifting equipment.

   Recommended coverage over tank is a maximum of 36 inches.

   The trench bottom should be level compacted soil.

2. BACKFILL:

   Backfill used may be the local virgin soil and be free of large rocks, or other suitable backfill can be used, i.e. sand, pea gravel, and etc.

   In the case of high water table areas the tank should be filled with water to prevent tank from floating.

   It is recommended that heavy equipment not be operated over any tank systems that are not certified as traffic rated.

   It is required that Water Testing be done only AFTER back filling completely around tanks to within two inches below the outlet (see item #5 - c. below).

3. QUALITY CONTROL:

   Our Tanks are IAPMO Certified and meet the highest standards for manufactured concrete tanks. Selvage Concrete Products, Inc. On site inspections are performed by IAPMO as required to assure they meet those Standards.

   Before shipping each concrete tank is inspected to assure the tank is correctly sealed, and is properly label as per IAPMO specifications.

   Each concrete tank is supplied with required fittings for the inlet and outlet. The four-inch inlet and outlet connections are inspected to assure the connecting pipes maybe connected in a water tight manner.

   When installing cribbing, or sleeves on septic tanks, the directions for installations and precautions regarding cribbing, or sleeves around the manhole must be in compliance as per the manufacture's recommendations for the product used, i.e., Orenco Systems, Polylok Products, and etc.

4. WATER TESTING:

   The Installing Contractor is responsible for on site Water Pressure Testing each concrete tank as per IAPMO specification and/or the local ordinance requirements in their area.

5. WARRANTY:

   a. Selvage Concrete Products, Inc. guarantees that our concrete tanks meet all requirements of the Uniform Plumbing Codes and IAPMO™ specifications for design structural criteria and are suitable for residential septic tank use.

   b. Selvage Concrete Products, Inc. concrete tanks are warranted for a period of ten (10) years from the date of manufacturing against manufacturer defects.

   c. Tanks are required to be backfilled completely around the tank BEFORE Water Testing. Backfill should be to within two inches below the outlet and compacted. Backfill may be local virgin soil, free of large rocks, or other suitable backfill can be used i.e. sand, pea gravel, etc.

   d. The water level during testing should NOT be filled higher than TWO INCHES high into risers, cribbing, or sleeves. (Please call us at (707) 542-2762 if you have any questions or concerns about this process)

   e. Selvage Concrete Products, Inc. guarantees that, when properly water tested and only if the tank does not pass the water test, Selvage Concrete Products, Inc. will come on site to inspect the tank at their option, and will repair or replace the tank to assure it will pass the water test.

   f. The Warranty, including the option to repair or replace the tank will not be honored if above installation and Water Testing requirements are not followed.

RECOMMENDED CONSTRUCTION INSPECTION SCHEDULE

In accordance with requirements of Stinson Beach Water District, the following construction activities will be inspected by the Designer and Water District staff.

INSPECTION #1

On-site preconstruction conference to discuss project with contractor;

Staking of septic tank and pump chamber,

Staking and layout of disposal area and AX20 pod; and

Review/approval of material and leachfield rip.

INSPECTION #2

Excavation of leach field; and

Septic Tank and Pump Chamber water tightness test.

INSPECTION #3

Assembly of distribution network; and,

Testing of pumps and distribution system.

INSPECTION #4

Alarm and float settings;

Filter Fabric and cover fill placement;

Final grading for any necessary drainage and erosion control; and,

General site clean-up.

Exhibit 4
2-22-0792
Page 44 of 44

JOB NO.	1914-22
DATE / REV.	03 - 15 - 2022 / A
SCALE	NONE
SIZE	ARCHD
SHEET	2 OF 2

ON-SITE WASTEWATER SYSTEM PLAN
CONSTRUCTION DETAILS

MONRU RESIDENCE
161 SEADRIFT ROAD
STINSON BEACH, CALIFORNIA

KOADIAH S. EGKMAN No. 7486

eckman environmental designs, inc
100 Shoreline Highway
Bld B, Suite B100
Mill Valley, CA 94941
510.380.3992

National Flood Hazard Layer FIRMette

FEMA

122°39'49"W 37°54'35"N

122°39'11"W 37°54'7"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/6/2023 at 12:39 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Exhibit 5
22-20792
Page 1 of 1

Supplement to Project Description

Coastal Development Permit Application Number: 2-22-0792

Applicant Name(s): Julie Monroe

Barbara Chambers (Designated Representative)

Please be advised that the proposed project description for the above-identified coastal development permit application includes the following safeguards, best management practices, mitigation measures, actions, and procedures for the protection of coastal water quality:

1. **Responsibilities for Use of Preservative-Treated Wood for Piles and Over-water Structures.** The applicant shall comply with the following best management practices for the use of preservative-treated wood ("treated wood") in over-water structures:

   A. The wood preservative selected for use shall minimize the impact on coastal water quality and the aquatic environment.

   B. Preservative-treated Douglas fir piles shall only be used for repair and replacement, or to visibly blend, and/or structurally integrate with, existing over-water structures.

   C. Decking shall consist of wood-alternative materials or AZCA-preserved lumber sealed with a penetrating coating. Alternatives to preserved woods, such as concrete, steel, fiberglass, or naturally decay resistant wood species, shall be prioritized over the use of chemically-treated wood.

   D. All treated wood piles, and, where feasible, treated wood structural members, shall be wrapped in, or coated with, water-tight, UV resistant material to prevent leaching of wood-preservative chemicals into the water column, and to prolong the life of the piles and structural timbers. For piles, protection shall extend two feet below the mudline and two feet above OHW, at a minimum, and wrappings shall be secured with corrosive resistant banding or self-tapping screws. Coatings and/or sealants used shall be products that are inert after they have cured and dried. No coal-tar sealants or coal tar-treated wood shall be used unless coated or wrapped with an inert material or product to isolate it from the marine environment.

   E. Design features, such as a protective wearing surfaces or bumpers, shall be installed on fender piles and floating dock pilings, where appropriate, to resist abrasion and preserve the pile-wrap or coating.

   F. The amount of preservative used for treating piles shall be the minimum specified by the American Wood Protection Associate to effectively protect the piles. Wood treated to the standards for a higher Use Category (i.e., with a higher preservative retention level) than is necessary for that component shall not be used.

G. Treated wood and treated wood debris shall be stored a minimum of 50 feet from coastal waters, drainage courses, and storm drain inlets. The treated wood and treated wood debris shall be stored on impervious pavement or an impervious tarp, and covered during rain events.

H. If treated wood is sanded or sawcut during demolition, installation, or maintenance, all sawdust and debris generated shall be contained and removed.

I. In order to minimize water quality impacts, piles installations shall prioritize driven or hammered methods. If a water-jetting method is utilized, silt curtains shall be installed in the work area to contain turbidity where coastal resources, such as benthic communities or eelgrass, may be at risk.

2. Responsibilities for Use of Coatings, Construction and Repair of Bulkheads and Over-water Structures. The applicant shall comply with the following best management practices for the use of corrosion coatings, and repair of bulkheads and over-water structures:

A. Coatings and sealants shall be composed of products that are inert after they have cured and dried. Fusion Bonded Epoxy, HDPE, and polyurea products are recommended. No coal tar-based sealants shall be used unless they are themselves coated or wrapped with an inert product to isolate them from the marine environment.

B. Installation and application of epoxy, resin, or cementitious grout/fill shall be conducted when predicted weather and ocean conditions allow effective control and full containment and will remain dry until cured, in order to prevent any leaching of uncured treatment materials into coastal waters. It is preferable to perform the work in dry conditions (low tide) or off-site in a controlled-environment manufacturing facility, wherever feasible.

C. All cleaning and preparation of surfaces shall use wet vacuum techniques, containment booms or heavy mesh containment netting so that any debris, chips, dust, dirt, and fine particles are collected and disposed of in a location where they will not enter coastal waters.

D. Preparation of corroded concrete by chipping, v-notching, or demolition shall be conducted while using a wet vacuum or similar technique so that any debris, dust, and fine particles are collected and disposed of in a location where they will not enter coastal waters. Dip nets shall be on-site and used to retrieve debris if it accidentally falls into the water.

E. Methods to contain any leaks or spills of treatment materials during application shall be planned in advance, and any necessary equipment or supplies shall be readily accessible onsite. Any leaks or spills of anti-corrosion coatings, epoxy fillers, and waterproofing sealants shall be immediately cleaned up.

F. All pressure-injection and gravity-feed applications of epoxy, resin, or cementitious materials shall be closely monitored visually to ensure that these materials do not leak or spill into coastal waters during application.

G. Coatings and waterproofing sealants used in the field shall be carefully applied by brush or roller to limit application to the immediate surfaces intended for protection, and to prevent drips or spills into coastal waters.

H. All anti-corrosion coatings, epoxy fillers, and waterproofing sealants shall be properly stored and contained so that these products will not leak or spill, or otherwise enter the coastal environment.

I. Piles installations shall prioritize driven or hammered methods, if feasible, in order to minimize water quality impacts. If a water-jetting method is utilized, silt curtains shall be installed in the work area to contain turbidity where coastal resources, such as benthic communities or eelgrass, may be at risk.

3. Responsibilities for Building Concrete Foundations: Piles and Bulkheads. The applicant shall comply with the following best management practices for constructing poured-in-place piles or constructing concrete foundations underwater:

A. Dewatering the work area for concrete foundation work using a caisson or other barrier shall be prioritized. The site shall remain dewatered until the concrete is sufficiently cured to prevent any significant increase in the pH of adjacent waters.

B. If dewatering is not feasible, the tremie method may be used to construct concrete structures in-water or underwater. This method uses forms to receive wet concrete under water by inserting a plastic pipe down to the bottom of the form and pumping concrete into the form so that the water is displaced towards the top of the form. Displaced waters shall be pumped off and collected in a holding tank. The collected waters shall then be tested for pH. If the pH is greater than 8.5, the water shall be neutralized with sulfuric acid until the pH is between 8.5 and 6.5. This pH-balanced water can then be returned to the sea if allowed by Fish and Game Code, or disposed of offsite per legal requirements. Solids that settle out during the pH balancing process shall not be discharged to the marine environment and must be disposed of offsite per legal requirements.

4. Construction Plan. A Construction Plan shall be provided to the Executive Director that identifies the specific location of all construction areas, all staging areas, all storage areas, all construction access corridors (to the construction sites and staging areas), and all public pedestrian access corridors in site plan view. The Construction Plan shall, at a minimum, include the follow required criteria specified via conspicuous written notes within the Plan:

A. All areas within which construction activities and/or staging are to take place shall be minimized to the maximum extent feasible in order to minimize construction encroachment on the tidelands and to have the least impact on public access and the marine environment.

B. The Plan shall specify all construction methods to be used, including all methods to be used to keep the construction areas separated from beach and other public recreational use areas and shall include a final construction schedule.

C. All erosion control/water quality best management practices to be implemented during construction and their location shall be noted. For the land side of a construction site, silt fences, or equivalent measures, shall be installed at the site perimeter to prevent construction-related runoff and/or sediment from entering coastal waters. For the water side of a construction site, turbidity curtains shall be used to contain sediment where coastal resources, such as benthic communities or eelgrass, may be at risk.

D. Floating booms shall be used to contain debris if discharged into coastal waters, and any debris discharged will be removed as soon as possible but no later than the end of each day.

E. Unless specifically authorized, all work shall take place during daylight hours and lighting of tidelands and water areas is prohibited.

F. Construction work or equipment operations below the mean high water line shall be minimized to the absolute extent feasible, and, where possible, limited to times when tidal waters have receded from the authorized work areas.

G. All construction materials shall be properly stored and contained so that these products will not spill or otherwise enter the coastal environment.

H. Construction (including but not limited to construction activities, and materials and/or equipment storage) shall be prohibited outside of the defined construction, staging, and storage areas.

I. Equipment washing, refueling, and/or servicing shall not take place on the tidelands or over-water structures to eliminate the possibility that pollutants may enter coastal waters.

J. Bulkhead and over-water construction projects that will use heavy equipment for more than 30 days, shall use biodegradable hydraulic fluid and biodiesel as an alternative to petroleum products.

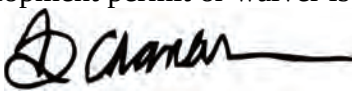
K. The construction site shall maintain good construction site housekeeping controls and procedures (e.g., clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain (including covering exposed piles of soil and wastes); dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; remove all construction debris from the tidelands).

L. A construction coordinator shall be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and their contact information (i.e., address, phone numbers, etc.) including, at a minimum, a telephone number that will be made available 24 hours a day for the duration of construction, shall be conspicuously posted at the job site where such contact information is readily visible from public viewing areas, along with indication that the construction coordinator should be contacted in the case of questions regarding the construction (in case of both regular inquiries and emergencies). The construction coordinator shall record the name, phone number, and nature of all complaints received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry.

M. A copy of the approved Construction Plan shall be kept at the construction job site at all times and all persons involved with the construction shall be briefed on its content and meaning prior to commencement of construction.

N. The Coastal Commission's District Office shall be notified at least 3 working days in advance of commencement of construction, and immediately upon completion of construction.

All construction shall be undertaken in accordance with the approved Construction Plan. Any proposed changes to the approved Construction Plan shall be reported to the Executive Director. No changes to the approved Construction Plan shall occur without a coastal development permit or waiver unless the Executive Director determines that no coastal development permit or waiver is necessary.



1/10/2023

Signature of Applicant or Applicant's Designated Representative — Date

Signature of Co-Applicant (if any) or Co-Applicant's Designated Representative — Date

Signature of Co-Applicant (if any) or Co-Applicant's Designated Representative — Date