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

F13a

A-2-MAR-21-0048 (GRONEMAN/SIBLEY SFD)

FEBRUARY 10, 2023

EXHIBITS

EXHIBIT 1: PROJECT LOCATION

EXHIBIT 2 – SITE PHOTOS

(Source: Coastal Records Project, 2019)

Image at left: View up the bluff face to proposed residence site. *(Source: Huffman-Broadway Group, Biological Site Assessment for 183 Sunset Way, Marin County, dated October 29, 2019)*

Image at right: View of site looking towards Muir Beach midway down the bluff. *(Source: Huffman-Broadway Group, Biological Site Assessment for 183 Sunset Way, Marin County, dated October 29, 2019)*

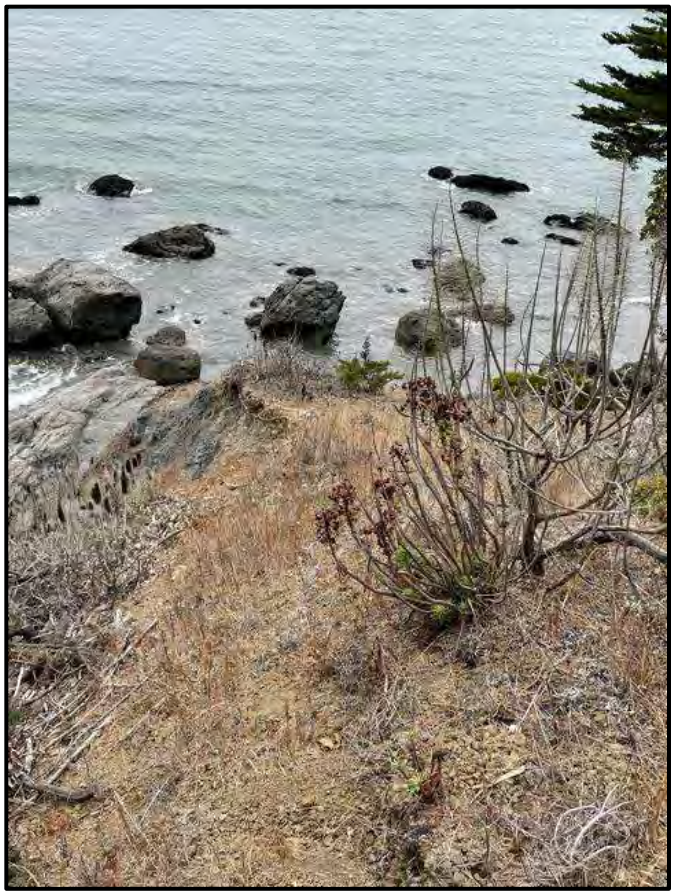

Image at left: View looking down from proposed residence site. *(Source: Huffman-Broadway Group, Biological Site Assessment for 183 Sunset Way, Marin County, dated October 29, 2019)*

Image at right: View of site from small beach at foot of bluff with rock revetment pictured. *(Source: Commission staff visit, August 22, 2022)*

EXHIBIT 3
EXISTING ARMORING ON AND ADJACENT TO SITE

EXISTING ARMORING ON AND ADJACENT TO SITE

Source: CCC staff visit to beach below subject parcel bluff, August 22, 2022.

PROJECT DIRECTORY

Owners	Brett and Graham Groneman 183 Sunset Way Muir Beach, CA. 94965 415.717.1505
Architect	Michael Heacock, Architect	LEED AP CA License No. C32092 129 Miller Ave., Suite 623, Mill Valley CA 94941 415-845-5328 mh@MichaelHeacock.com
Surveyor	Meridian Surveying and Engineering Inc. 777 Grand Avenue #202 San Rafael, CA 94901 415.456.5450 nathan@meridiansurvey.com
Civil	Michael Tarnoff Engineering 1442 A Walnut Street, #428 Berkeley CA 94709 415.279.9996 michael@tarnoffengineering.com
Biological	Huffman-Broadway Group, Inc. 828 Mission Avenue San Rafael CA 94901 415.925.2009 gdeghi@h-bgroup.com
Geotechnical	Miller Pacific Engineering Group Mike Jewett 504 Redwood Blvd., Suite 220 Novato, CA 94947 415.382.3444 MJewett@millerpac.com
Septic	CSW/Stuber-Stroeh Engineering Group, Inc. Rich Souza 45 Leveroni Court Novato, CA 94949 415.883.0850 richs@cswst2.com

PROJECT DATA

APN:	199-235-66			
Lot Size:	18,372			SF
Zoning:	C-RA-B2			
WUI:	YES			
Flood Zone:	A			
Construction Type:	VB			
Occupancy	R3			
Slope:	60%			
Area Calculations	**Req./Allowed**	**Existing**	**Proposed**	
House Upper Floor		0	1,000	SF
House Lower Floor		0	1,190	SF
Subtotal (conditioned)	5,511	0	2,190	SF
Garage	480	0	430.5	SF
Storage (unconditioned)		0	209	SF
Gross Floor Area	6,791	0	2,869.5	SF
Gross Floor Area Ratio	30%	0%	16%	
Setbacks	**Req./Allowed**	**Existing**	**Proposed**	
House (Front)	20'0"	NA	68'-6"	
House Side (East)	10'0"	NA	18'-0"	
House Side (West)	10'0"	NA	10'-0"	
Rear	20% of Lot Depth/25'0" Max	NA	103'-6"	
Garage (Front)	3'-0"	NA	3'-0"	
Garage Side (East)	3'-0"	NA	6'-1"	
Garage Side (West)	3'-0"	NA	7'-8"	
Environmental Health	50'0" from unstable land form			
	100'0" from water body			
CWP	100'0" from wetlands	NA		
CA Coastal Commision	Jurisdiction within 20' mold seaward feet			
LCP	Within 150'0" from from bluffing see Geological report			
Height:	25'0"	NA		SF
Cut			400	CY
Fill			0	CY
Import/Off-Haul			399	CY
Impervious		0	2,926	SF
Pervious		18,372	15,844	SF
On-Site Parking:	2	0	2	

PROJECT DESCRIPTION

NEW TWO STORY SINGLE FAMILY RESIDENCE AND DETACHED GARAGE

SEPARATE PERMIT ITEMS

SEPTIC SYSTEM
ENCROACHMENT PERMIT - DRIVEWAY
FIRE SPRINKLERS

BUILDING CODES

2019 CBC / CALIFORNIA RESIDENTIAL CODE
2019 CALIFORNIA ELECTRICAL CODE
2019 CALIFORNIA PLUMBING CODE
2019 CALIFORNIA MECHANICAL CODE
2019 CALIFORNIA ENERGY CODE
2019 CALGREEN
WILDLAND URBAN INTERFACE
COUNTY OF MARIN MUNICIPAL CODE

SHEET INDEX

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GRONEMAN RESIDENCE
183 SUNSET WAY
MUIR BEACH, CA 94965

APN 199-235-66

LICENSED ARCHITECT
MICHAEL HEACOCK
C-32092
EXP. 08/31/21
STATE OF CALIFORNIA

PLANNING REVIEW

Revision Description	Date
PLANNING SUBMITTAL	12/07/2020
EHS SUBMITTAL	12/07/2020
PLANNING REVISION	02/17/2021

COVER SHEET

A000

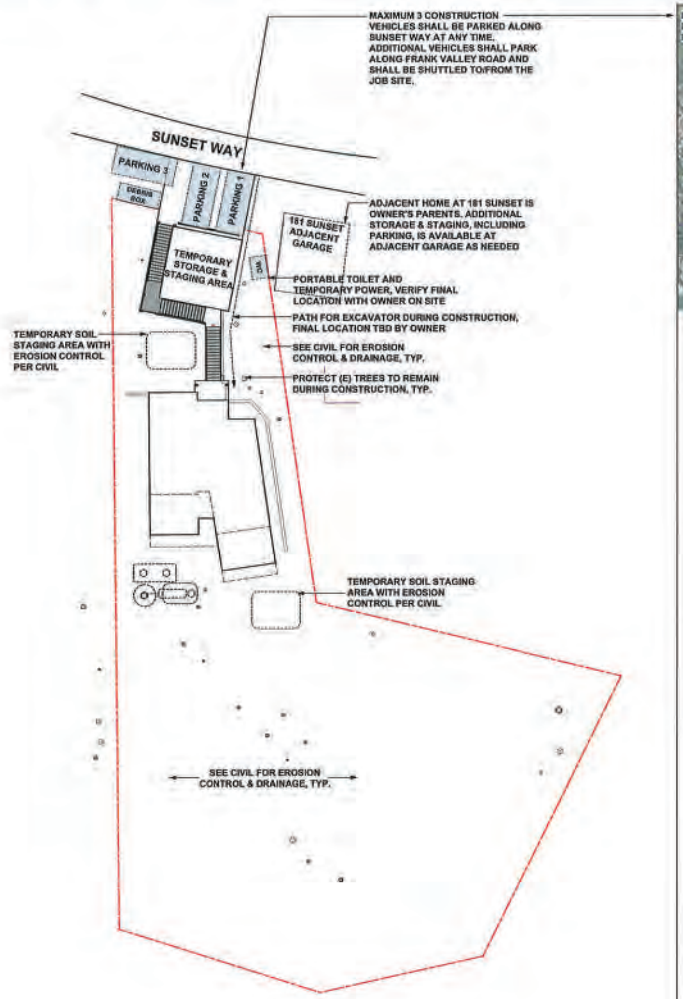
Sheet

Scale: AS NOTED

DZA ATTACHMENT 6

183 SUNSET WAY, MUIR BEACH
MICHAEL HEACOCK ARCHITECTS

415-845-5326



CMP SITE MAP

CONSTRUCTION TRAFFIC / TRUCK ROUTE

FROM US101 TO 183 SUNSET AVE, MUIR BEACH, CA 94965

FROM 183 SUNSET AVE, MUIR BEACH, CA 94965 TO US101

CONSTRUCTION WASTE MANAGEMENT PLAN

1. The Contractor shall investigate and document local options for diversion (recycling, reuse) of all anticipated major constituents of the project waste stream, including cardboard packaging and household recyclables (beverage containers).
2. The Contractor shall document the diversion rate for construction waste. Record the diversion rate for land clearing and/or demolition, if applicable, separately from the rate for the new construction of the project.
3. The Contractor shall reduce or divert from landfills and incineration waste generated from new construction by a minimum of 75% as measured by weight or volume.

WASTE DIVERSION/LANDFILL LOG

Report Period: _____ to _____

Material/Item	Quantity (lbs)	Reused, Salvaged, Recycled, or Disposed	Destination	Date	Notes

CONSTRUCTION MANAGEMENT PLAN

CMP SIGNAGE:
PROVIDE A 24" X 36" WEATHERPROOF SIGN AT THE JOB SITE LOCATED SO AS TO BE CLEARLY READABLE FROM THE PUBLIC RIGHT-OF-WAY.

PRE-CONSTRUCTION MEETING:
A PRE-CONSTRUCTION MEETING SHALL BE REQUIRED PRIOR TO THE START OF ANY SITE WORK AND/OR THE ISSUANCE OF A BUILDING OR GRADING PERMIT. SCHEDULING THE MEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. REQUIRED ATTENDANCE SHALL BE COUNTY STAFF, THE PROPERTY OWNER, GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS. THE PURPOSE OF THE MEETING WILL BE TO REVIEW THE CMP AND ALL OTHER CONSTRUCTION MANAGEMENT REQUIREMENTS. THE REQUIRED CMP SIGN SHALL BE AVAILABLE FOR REVIEW BY THE COUNTY AT THE PRE-CONSTRUCTION MEETING.

CONSTRUCTION HOURS:
7 AM TO 6 PM MONDAY THROUGH FRIDAY, AND 9 AM TO 5 PM ON SATURDAYS, CONSTRUCTION WORK IS NOT ALLOWED ON SUNDAYS AND HOLIDAYS. LOUD NOISE-GENERATING CONSTRUCTION-RELATED EQUIPMENT CAN BE MAINTAINED, OPERATED, OR SERVICED 8AM-5PM WEEKDAYS ONLY

DELIVERIES AND OFF-HAUL
(INCLUDING EQUIPMENT, MATERIALS, REMOVAL OF SOIL, REFUSE OR DEMOLITION DEBRIS) FOR SITES IN IMPACTED NEIGHBORHOODS IS LIMITED TO WEEKDAYS BETWEEN THE HOURS OF 9:30AM AND 3:00PM. ALL DRIVERS SHALL BE ADVISED OF THE DESIGNATED PROJECT TRUCK ROUTE, INCLUDING APPROVED TURNAROUND LOCATIONS, PRIOR TO ANY DELIVERIES OR MATERIAL REMOVAL.

ROAD AND OR LANE CLOSURES:
ROAD CLOSURES SHALL ONLY BE PERMITTED BY THE DEPARTMENT OF PUBLIC WORKS (DPW). APPLICANTS SHALL APPLY TO DPW WELL ENOUGH IN ADVANCE TO PROCESS THE REQUEST. APPLICANT SHALL PROVIDE SIGNAGE A MINIMUM OF 48 HOURS NOTICE IN ADVANCE OF THE PROPOSED DATE. COPIES OF THESE PERMITS MUST BE MAINTAINED AT THE JOB SITE FOR THE DURATION OF THE CLOSURE. NOTICE SHALL INCLUDE DATE(S) AND DURATION OF PROPOSED CLOSURE, THE TRAFFIC CONTROL PLAN, AS WELL AS ANY DETOURS THAT MAY BE AVAILABLE. EVIDENCE OF SUCH WRITTEN NOTIFICATION TO AFFECTED RESIDENTS AND PROPERTY OWNERS SHALL BE PROVIDED TO DPW.

WORKER AUTO PARKING SPACE LOCATIONS/CONSTRUCTION PARKING:
ALL WORKER VEHICLES MUST BE PARKED AT TO JOB SITE OR CARPOOL. IDENTIFY ALL OFF-SITE WORKER PARKING LOCATIONS, AND CARPOOL PICK-UP AND DROP-OFF LOCATIONS. VEHICLE PARKING IN THE PUBLIC RIGHT-OF-WAY AT OR NEAR THE JOB WORK SITE WILL REQUIRE A PARKING PLACARD FROM

ENFORCEMENT:
IT SHALL BE THE RESPONSIBILITY OF THE PROJECT APPLICANT OR THEIR DESIGNATED REPRESENTATIVE TO ADVISE THE COUNTY OF ANY MODIFICATIONS TO THE CMP, TO NOTIFY THE NEIGHBORING PROTERTY OWNERS OF MODIFICATIONS TO THE CMP AND TO POST ANY MODIFICATIONS OF THE CMP ON THE JOB SITE SIGN

FIRST OFFENSE VIOLATION of ANY PORTION OF THE APPROVED CMP OR OTHER APPLICABLE CONSTRUCTION MANAGEMENT REQUIREMENTS WILL BE ADDRESSED BY A WRITTEN WARNING FROM THE COUNTY, ANY FURTHER SUBSEQUENT VIOLATIONS WILL BE ADDRESSED BY A "STOP WORK ORDER."

ANY MODIFICATIONS TO THE CMP MUST BE APPROVED BY THE DPW.

GENERAL CONTRACTOR:

ARCHITECT:
MICHAEL HEACOCK, ARCHITECTS
129 MILLER AVE., SUITE 623
MILL VALLEY, CA 94941
PH. (415) 845-5326
mh@MichaelHeacock.com

EMERGENCY CONTACT:
GRAHAM GRONEMAN
PH. (413) 717-1505

COUNTY OF MARIN CODE ENFORCEMENT OFFICE:
PH. (415) 473-7880

CONSTRUCTION SCHEDULE REV. 03/2021

MOBILIZATION	MAY 2021
SEPTIC INSTALL	JUNE 2021
EXCAVATION, GRADING & UNDERGROUND	AUGUST 2021
FOUNDATION	SEPTEMBER 2021
FRAMING	OCTOBER 2021
ROUGH PLUMBING, SPRINKLER, HVAC & ELECTRICAL	NOVEMBER 2021
ROOFING, FLASHING & WATERPROOFING	NOVEMBER 2021
WINDOWS & DOORS	DECEMBER 2021
INSULATION	JANUARY 2022
SHEETROCK	FEBRUARY 2022
CABINETRY	FEBRUARY 2022
FINISH PLUMBING, SPRINKLER, HVAC & ELECTRICAL	MARCH 2022
FINISH CARPENTRY	MARCH 2022
SUBSTANTIAL COMPLETION	APRIL 2022
OCCUPANCY	MAY 2022

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APN 199-235-66

LICENSED ARCHITECT MICHAEL HEACOCK C-32681 RENEWAL 08/31/2021 STATE OF CALIFORNIA

PLANNING REVIEW

Revision Description	Date
PLANNING SUBMITTAL	10/07/2020
EHS SUBMITTAL	12/07/2020
PLANNING REVISION	02/17/2021

CONSTRUCTION MANAGEMENT PLAN

Sheet A001

Date:

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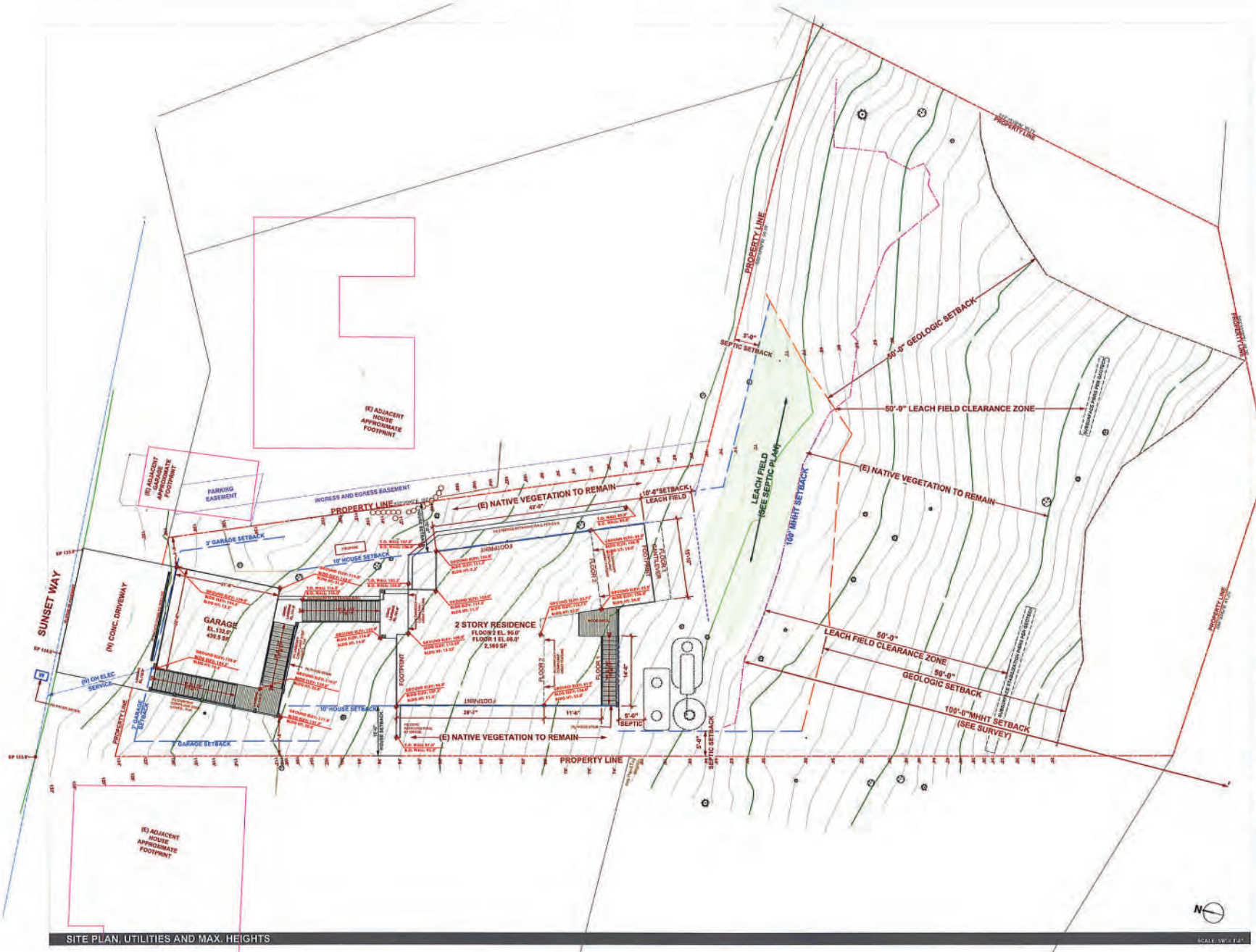

SITE PLAN, UTILITIES AND MAX. HEIGHTS

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C-32082
RENEWAL 08/31/2021
STATE OF CALIFORNIA

PLANNING REVIEW

Revision Description	Date
PLANNING SUBMITTAL	12/07/2020
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PLANNING REVISION	02/12/2021

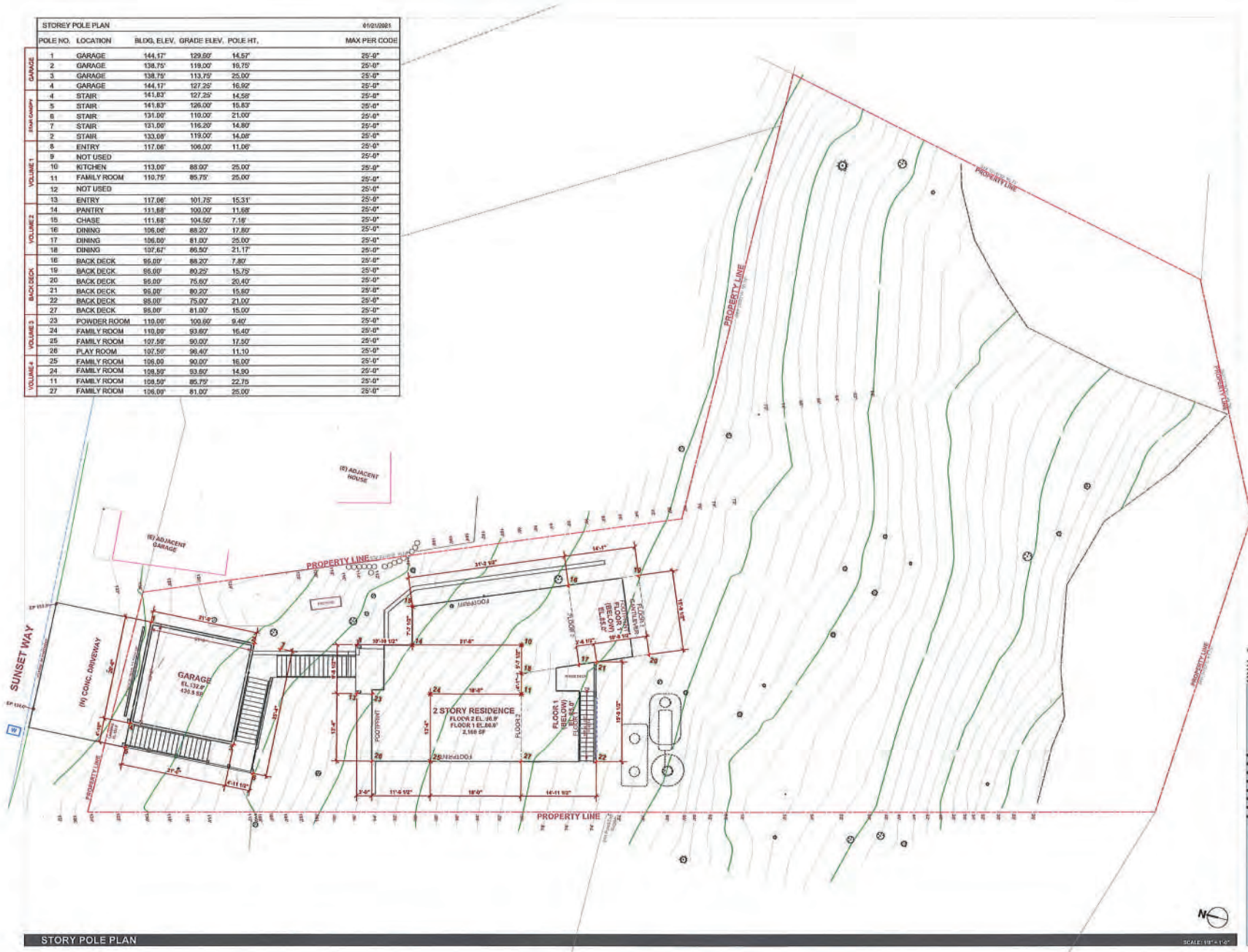
SITE PLAN
UTILITIES & MAX. HEIGHTS

Sheet A100

Scale: 1/4" = 1'-0"

A-2-MAR-21-0048 Exhibit 4
Page 3 of 9

STOREY POLE PLAN					01/21/2021
	POLE NO.	LOCATION	BLDG. ELEV.	GRADE ELEV.	POLE HT.	MAX PER CODE
GARAGE	1	GARAGE	144.17'	129.60'	14.57'	25'-0"
	2	GARAGE	138.75'	119.00'	19.75'	25'-0"
	3	GARAGE	138.75'	113.75'	25.00'	25'-0"
	4	GARAGE	144.17'	127.25'	16.92'	25'-0"
STAIR CANOPY	4	STAIR	141.83'	127.25'	14.58'	25'-0"
	5	STAIR	141.83'	126.00'	15.83'	25'-0"
	6	STAIR	131.00'	110.00'	21.00'	25'-0"
	7	STAIR	131.00'	116.20'	14.80'	25'-0"
	2	STAIR	133.08'	119.00'	14.08'	25'-0"
VOLUME 1	8	ENTRY	117.08'	106.00'	11.06'	25'-0"
	9	NOT USED				25'-0"
	10	KITCHEN	113.00'	88.00'	25.00'	25'-0"
	11	FAMILY ROOM	110.75'	85.75'	25.00'	25'-0"
	12	NOT USED				25'-0"
VOLUME 2	13	ENTRY	117.06'	101.75'	15.31'	25'-0"
	14	PANTRY	111.88'	100.00'	11.88'	25'-0"
	15	CHASE	111.88'	104.50'	7.18'	25'-0"
	16	DINING	106.00'	88.20'	17.80'	25'-0"
	17	DINING	106.00'	81.00'	25.00'	25'-0"
	18	DINING	107.67'	86.50'	21.17'	25'-0"
BACK DECK	16	BACK DECK	96.00'	88.20'	7.80'	25'-0"
	19	BACK DECK	96.00'	80.25'	15.75'	25'-0"
	20	BACK DECK	96.00'	75.60'	20.40'	25'-0"
	21	BACK DECK	96.00'	80.20'	15.80'	25'-0"
	22	BACK DECK	96.00'	75.00'	21.00'	25'-0"
	27	BACK DECK	96.00'	81.00'	15.00'	25'-0"
VOLUME 3	23	POWDER ROOM	110.00'	100.60'	9.40'	25'-0"
	24	FAMILY ROOM	110.00'	93.60'	16.40'	25'-0"
	25	FAMILY ROOM	107.50'	90.00'	17.50'	25'-0"
	26	PLAY ROOM	107.50'	96.40'	11.10	25'-0"
VOLUME 4	25	FAMILY ROOM	106.00	90.00'	16.00'	25'-0"
	24	FAMILY ROOM	108.50'	93.60'	14.90	25'-0"
	11	FAMILY ROOM	108.50'	85.75'	22.75	25'-0"
	27	FAMILY ROOM	106.00'	81.00'	25.00'	25'-0"



STORY POLE PLAN

SCALE: 1/8" = 1'-0"

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STATE OF CALIFORNIA

PLANNING REVIEW

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EHS SUBMITTAL	12/07/2020
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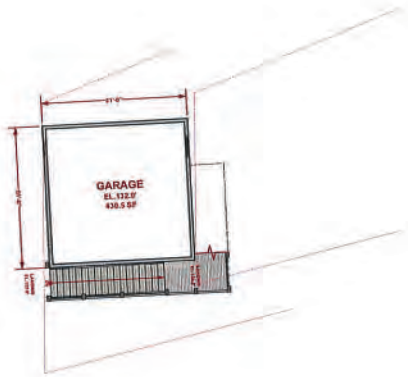
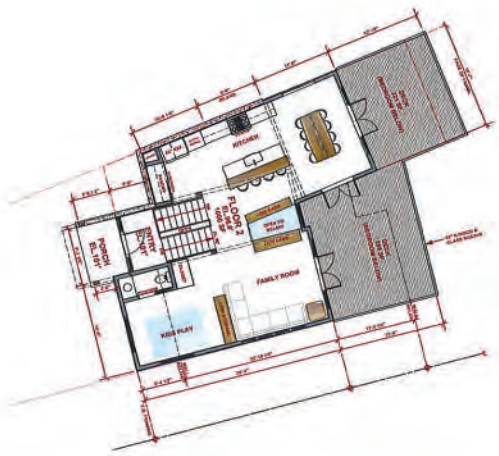
STORY POLE PLAN

Sheet A101

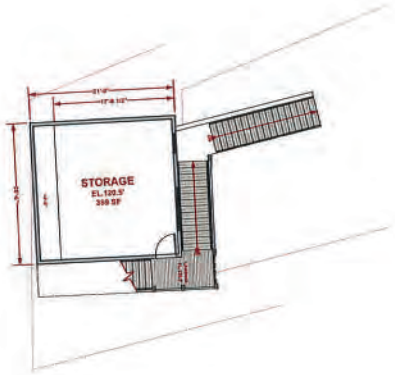
Scale: 1/8" = 1'-0"



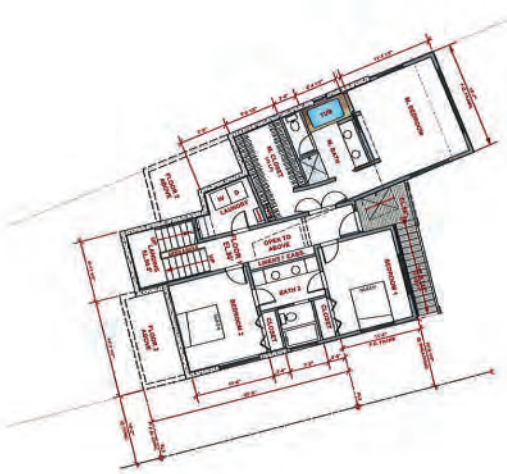
4 NEW GARAGE FLOOR PLAN



2 NEW UPPER FLOOR PLAN



3 NEW STORAGE FLOOR PLAN



1 NEW LOWER FLOOR PLAN

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STATE OF CALIFORNIA

PLANNING REVIEW

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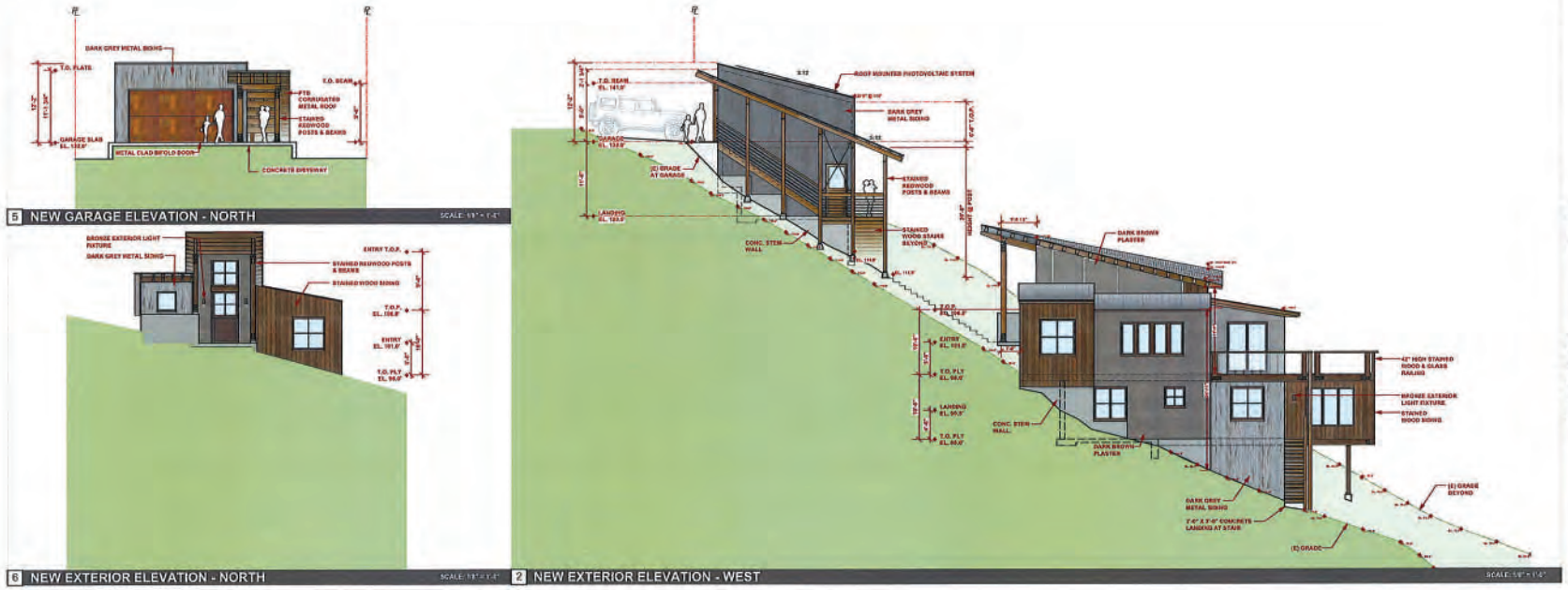
PLANNING REVISION	03/17/2021

FLOOR PLANS

Sheet A200

Scale: 1/8" = 1'-0"



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RENEWAL 08/31/21
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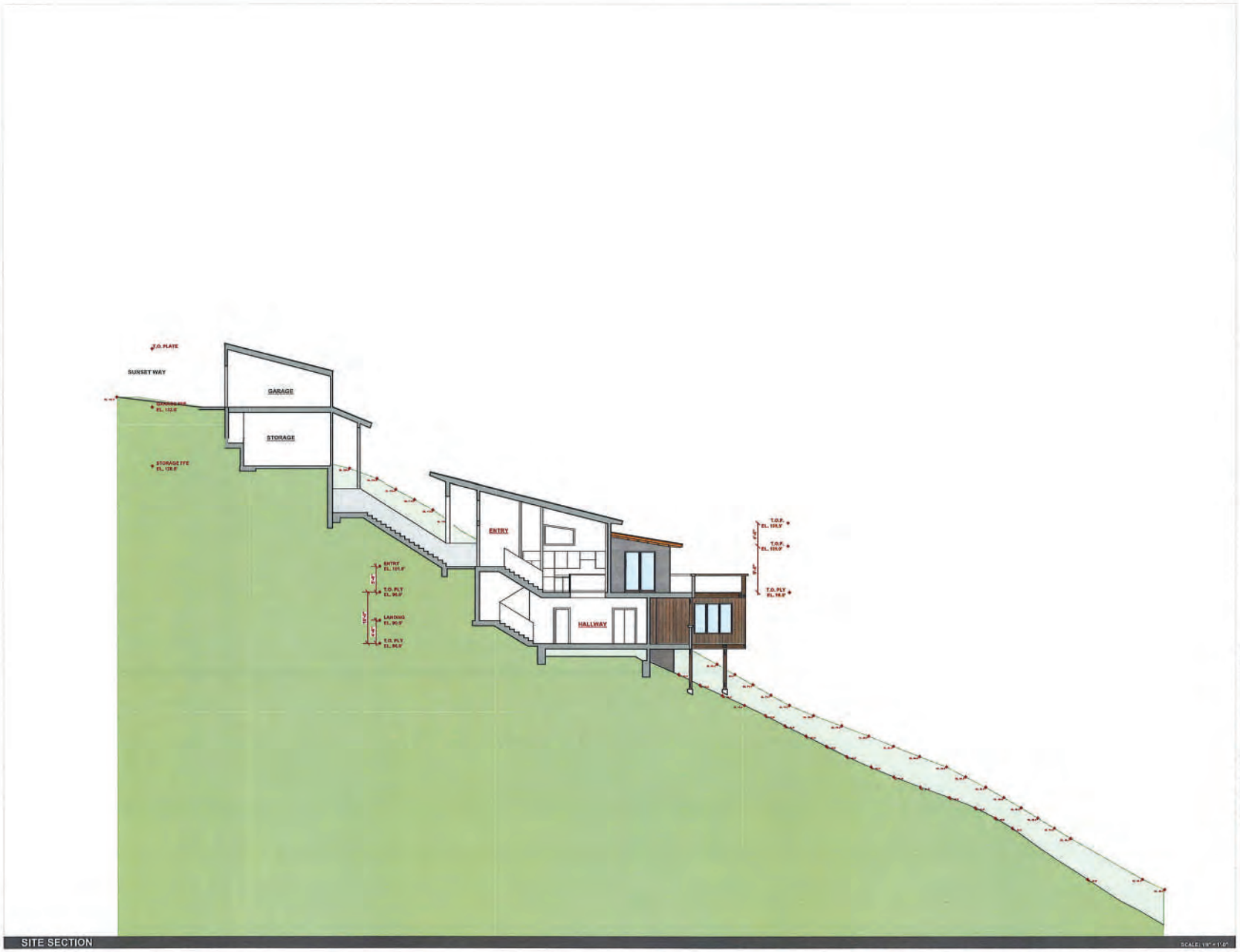
EXTERIOR ELEVATIONS

Sheet A300

Scale 1/8" = 1'-0"



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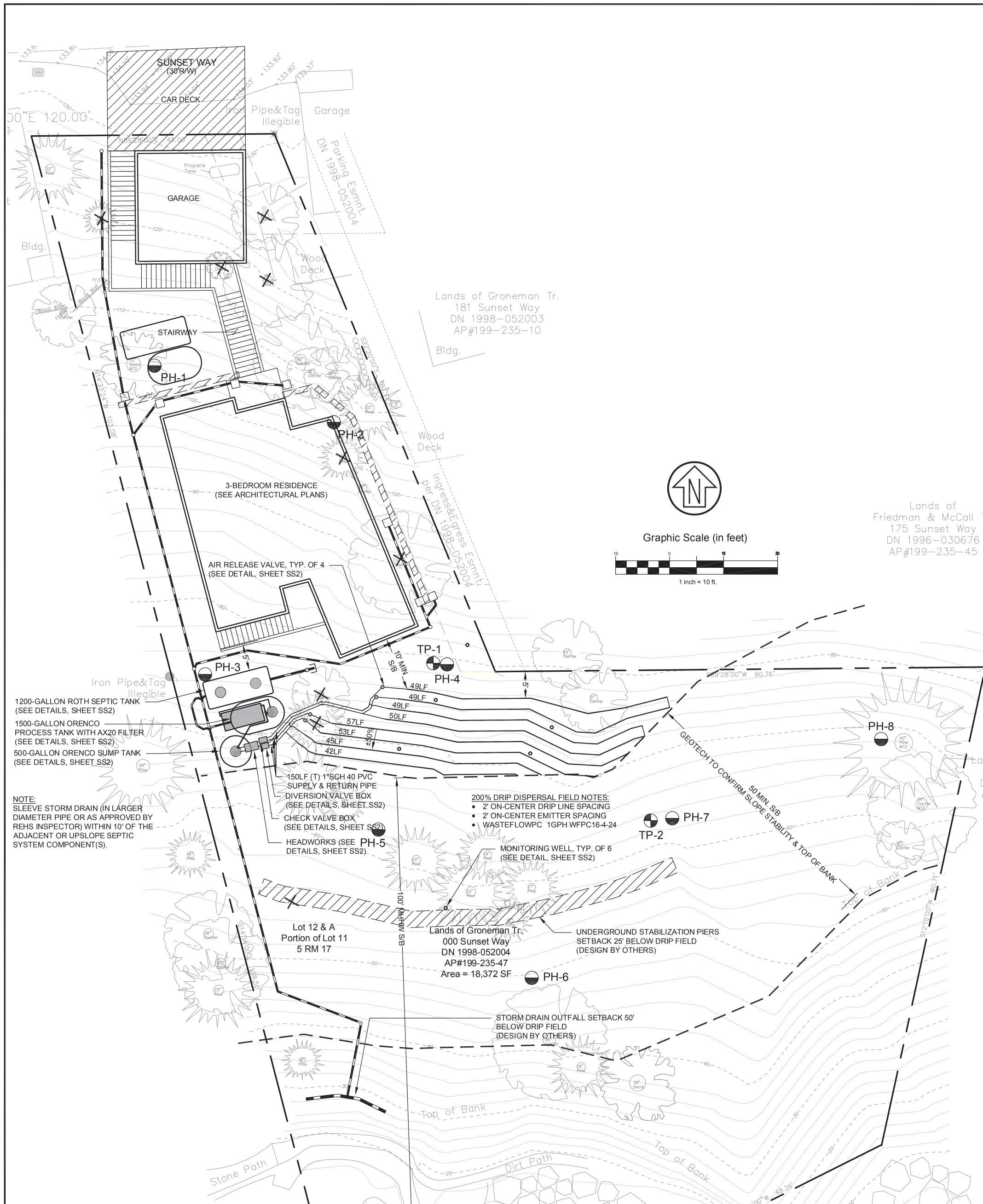
PLANNING REVIEW

Revision Description	Date
PLANNING SUBMITTAL	12/07/2020
EHS SUBMITTAL	12/07/2020
PLANNING REVISION	02/17/2021

SITE SECTION

Sheet **A400**

Scale: 1/8" = 1'-0"



SITE PLAN

PERCOLATION TEST RESULTS

PERCOLATION HOLE	DEPTH	DIAMETER	ADJ. RATE (MPI)
1	16"	6"	1.33
2	24"	6"	2.86
3	14"	6"	2.61
4	18"	6"	1.00
5	24"	6"	3.53
6	24"	6"	2.73
7	14"	6"	3.53
8	14"	6"	1.25

SETBACK SCHEDULE

SITE FEATURE	SETBACK TO SEPTIC TANK	SETBACK TO DRAINFIELD
BUILDING	5'	10'
ADJOINING PROP. LINE	5'	5'
DOWNSLOPE PROP. LINE	5'	25'
UNSTABLE LANDFORM	50'	50'
EDGE OF DRAINFIELD PIPE	5'	-
CUT, EMBANKMENT, OR NATURAL BLUFF	10'	4 x H (*)
DOMESTIC WATER LINE	10'	10'
MEAN HIGHER HIGH WATER (MHHW)	50'	100'

* Distance (H) in feet equals four times the vertical height of the cut, embankment, or bluff

DRIP LINE LATERAL SCHEDULE

PRIMARY FIELD

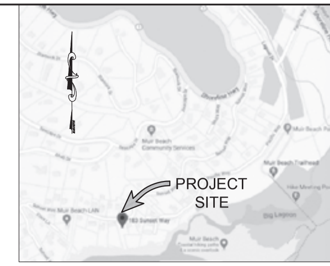
DRIP LINE DIAMETER	LF	# OF EMITTERS
1/2"	50	25
1/2"	49	24
1/2"	49	24
1/2"	49	24
TOTAL =	197	97

SECONDARY FIELD

DRIP LINE DIAMETER	LF	# OF EMITTERS
1/2"	57	28
1/2"	53	26
1/2"	45	22
1/2"	42	21
TOTAL =	197	97

GENERAL SEPTIC NOTES

1. THIS MAP MAKES NO WARRANTY WHATSOEVER THAT UTILITIES, EITHER SURFACE OR SUBSURFACE, DO OR DO NOT EXIST. PRIOR TO SITE PLANNING AND/OR CONSTRUCTION ACTIVITIES, IT IS RECOMMENDED THAT THE SERVICES OF A UTILITY LOCATION PROFESSIONAL BE UTILIZED TO ASCERTAIN THE PRECISE LOCATION OF ANY UTILITY, WHETHER SHOWN OR NOT SHOWN HEREON.
2. TOPOGRAPHIC MAP IS BASED ON FIELD SURVEY BY OTHERS.
3. SEPTIC IMPROVEMENTS AND FUTURE BUILDING IMPROVEMENTS SHALL CONFORM TO COUNTY SETBACK REQUIREMENTS FOR A CLASS I SYSTEM. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROPERTY, UTILITIES, AND EASEMENT LINE LOCATIONS PRIOR TO CONSTRUCTION.
4. WHERE EVER POSSIBLE, SEPARATION FROM THE DISPERSAL/LEACH LINE TO AN EXISTING TREE SHALL BE MAXIMIZED BY EITHER INCREASING THE LINE ON-CENTER SEPARATION OR USING A TIGHT LINE NEAR THE BASE OF THE TREE. WHEN EXCAVATING AROUND THE BASE OF THE TREE, USE OF HAND-HELD TOOLS IS RECOMMENDED. ROOTS INSIDE THE TRENCH SHALL BE CUT WITH A SAW. WHEN CUTTING 2-INCH DIAMETER OR GREATER ROOTS, CONSULT AN ARBORIST REGARDING THE POSSIBILITY FOR SAVING THE TREE.
5. CONTRACTOR SHALL BE RESPONSIBLE TO RELOCATE EXISTING UTILITIES, AS NEEDED, AROUND THE DISPERSAL FIELD AREA TO MEET COUNTY SETBACK REQUIREMENTS.
6. CONTRACTOR SHALL DETERMINE THE BUILDING SEWER LATERAL ELEVATION PRIOR TO SETTING THE SEPTIC TANKS. ANY PROBLEMS CONNECTING TO THE BUILDING SEWER LATERAL SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION AT THE 1ST CONSTRUCTION OBSERVATION.



VICINITY MAP

EROSION CONTROL NOTES

1. Perform erosion prevention and sediment control in accordance with the latest edition of Appendix Chapter 33 of the California Building Code, applicable County standards, codes and ordinances, and Section 20 of the Caltrans Standard Specifications
2. The approved plans shall conform with the erosion prevention and sediment control best management practices contained in the latest editions of the following publications or an equivalent best management practice:

   Erosion and Sediment Control Field Manual by the San Francisco Bay Regional Water Quality Control Board. Manual of Standards for Erosion & Sediment Control measures by the Association of Bay Area Governments. Construction site best management practices manual by Caltrans. Stormwater Best Management Practice handbook by the California Stormwater Quality Association.
3. If discrepancies occur between these notes, material referenced herein or manufacturer's recommendations, then the most protective shall apply.
4. The Owner is responsible for obtaining and complying with the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 waste discharge requirements for discharges of storm water runoff associated with construction activity disturbing land equal to or greater than once acre. Construction activities include but are not limited to clearing, grading, excavation, stockpiling, and reconstruction of existing facilities involving removal and replacement.
5. Preservation of existing vegetation shall occur to the maximum extent practicable.
6. The Owner is responsible for preventing storm water pollution generated from the construction site year round. The owner must implement an effective combination of erosion prevenetion and sediment control on all disturbed areas during the rainy season (October 15 - April 15).
7. Erosion prevention and sediment control measures shall be inspected by the owner before and after storms producing at least 1 inch of precipitation in a 24 hour period to ensure measures are functioning properly. Erosion prevention and sediment control measures that have failed or are no longer effective shall be promptly replaced. Erosion prevention and sediment control measures shall be maintained until disturbed areas are stabilized.
8. Changes to the erosion prevention and sediment control plan may be made to respond to field conditions. Changes shall be noted on the plan when made.
9. Discharges of potential pollutants from construction sites shall be prevented using source controls to the maximum extent practicable. Potential pollutants include but are not limited to: sediment, trash, nutrients, pathogens, petroleum hydrocarbons, metals, concrete, cement, asphalt, lime, paint, stains, glues, wood products, pesticides, herbicides, chemicals, hazardous waste, sanitary waste, vehicle or equipment wash water and chlorinated water.
10. Entrance(s) to the construction site shall be maintained in a condition that will prevent tracking or flowing of potential pollutants offsite. Potential pollutants deposited on paved areas within the county right-of-way, such as roadways and sidewalks, shall be properly disposed of at the end of each working day or more frequently as necessary.
11. Exposed slopes shall be protected by using erosion prevention measures to the maximim extent practicable, such as establising 70% vegetation coverage, hydroseeding, straw mulch, geotextiles, plastic covers, blankets or mats.
12. Whenever it is not possible to utilize erosion prevention measures, exposed slopes shall employ sediment control devices, such as fiber rolls and silt fences, fiber rolls and silt fences shall be trenched and dkeyed into the soil and installed on contour. Silt fences shall be installed approximately 2 to 5 feet from to of slope.
13. The Owner shall protect storm drain inlets from potential pollutants until drainage conveyance systems are functional and construction has been completed.
14. Soil and material stockpiles shall be properly protected to minimize sediment and pollutant transport from the construction site.

U.S.A. NOTIFICATION SERVICE

CALL BEFORE YOU DIG 800-642-2444

Rev	Date	Description	Designed	Drawn	Checked
A	08/05/21	REVISED STABILIZATION PIER 25' BELOW FIELD	RJS	RJS	RJS

CSW | ST2

Cotton/Stuber-Stroeh Engineering Group, Inc.

183 Sunset Way

GRONEMAN SEPTIC (315 GPD)

CLASS I - ALTERNATIVE SEPTIC SYSTEM DESIGN

A.P.N. 199-235-66

Town Of: Muir Beach

County Of: Marin

State Of: California

Prepared Under the Direction of:

REGISTERED PROFESSIONAL ENGINEER RICHARD J. SOUZA No. 47822 CIVIL STATE OF CALIFORNIA

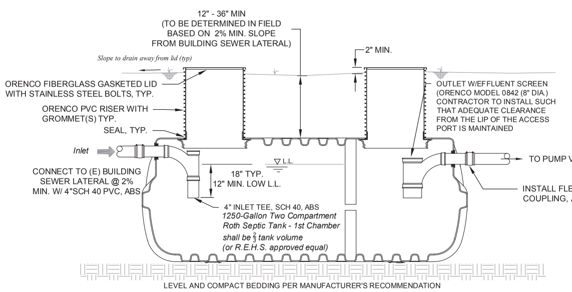
Sheet: SS1

Scale:	As Shown
Date:	June 18, 2021
Project Number:	1920095
Plan File:	

A-2-MAR-21-0048

Exhibit 4

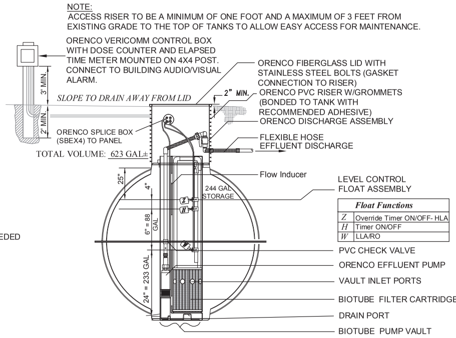
Page 8 of 9



12" - 36" MIN
(TO BE DETERMINED IN FIELD
BASED ON 2% MIN. SLOPE
FROM BUILDING SEWER LATERAL)
Slope to drain away from lid (typ)
2" MIN.
ORENCO FIBERGLASS GASKETED LID
WITH STAINLESS STEEL BOLTS, TYP.
ORENCO PVC RISER WITH
GROMMET(S) TYP.
SEAL, TYP.
Inlet
CONNECT TO (E) BUILDING
SEWER LATERAL @ 2%
MIN. W/ 4"SCH 40 PVC, ABS
18" TYP.
12" MIN. LOW L.L.
4" INLET TEE, SCH 40, ABS
1250-Gallon Two Compartment
Roth Septic Tank - 1st Chamber
(or R.E.H.S. approved equal)
OUTLET W/EFFLUENT SCREEN
(ORENCO MODEL 0842 (8" DIA.)
CONTRACTOR TO INSTALL SUCH
THAT ADEQUATE CLEARANCE
FROM THE LIP OF THE ACCESS
PORT IS MAINTAINED
TO PUMP VAULT
INSTALL FLEXIBLE
COUPLING, AS NEEDED
LEVEL AND COMPACT BEDDING PER MANUFACTURER'S RECOMMENDATION

SEPTIC TANK SECTION DETAIL

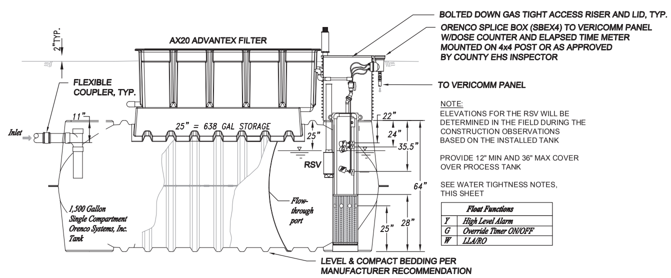
N.T.S.



NOTE:
ACCESS RISER TO BE A MINIMUM OF ONE FOOT AND A MAXIMUM OF 3 FEET FROM
EXISTING GRADE TO THE TOP OF TANKS TO ALLOW EASY ACCESS FOR MAINTENANCE.
ORENCO VERICOMM CONTROL BOX
WITH DOSE COUNTER AND ELAPSED
TIME METER MOUNTED ON 4X4 POST.
CONNECT TO BUILDING AUDIO/VISUAL
ALARM.
3' MIN.
SLOPE TO DRAIN AWAY FROM LID
2' MIN.
ORENCO SPLICE BOX
(SBEX4) TO PANEL
TOTAL VOLUME: 623 GAL±
ORENCO FIBERGLASS LID WITH
STAINLESS STEEL BOLTS (GASKET
CONNECTION TO RISER)
ORENCO PVC RISER W/GROMMETS
(BONDED TO TANK WITH
RECOMMENDED ADHESIVE)
ORENCO DISCHARGE ASSEMBLY
FLEXIBLE HOSE
EFFLUENT DISCHARGE
Flow Inducer
244 GAL STORAGE
24" = 233 GAL
LEVEL CONTROL
FLOAT ASSEMBLY
Float Functions
Z Override Timer ON/OFF- HLA
H Timer ON/OFF
W LLA/RO
PVC CHECK VALVE
ORENCO EFFLUENT PUMP
VAULT INLET PORTS
BIOTUBE FILTER CARTRIDGE
DRAIN PORT
BIOTUBE PUMP VAULT

SUMP TANK SECTION DETAIL

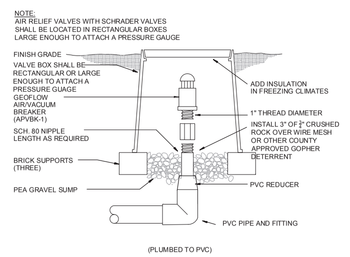
N.T.S.



BOLTED DOWN GAS TIGHT ACCESS RISER AND LID, TYP.
ORENCO SPLICE BOX (SBEX4) TO VERICOMM PANEL
W/DOSE COUNTER AND ELAPSED TIME METER
MOUNTED ON 4x4 POST OR AS APPROVED
BY COUNTY EHS INSPECTOR
AX20 ADVANTEX FILTER
2" TYP.
FLEXIBLE
COUPLER, TYP.
TO VERICOMM PANEL
Inlet
25" = 638 GAL STORAGE
RSV
1,500 Gallon
Single Compartment
Orenco Systems, Inc.
Tank
Flow-through port
NOTE:
ELEVATIONS FOR THE RSV WILL BE
DETERMINED IN THE FIELD DURING THE
CONSTRUCTION OBSERVATIONS
BASED ON THE INSTALLED TANK
PROVIDE 12" MIN AND 36" MAX COVER
OVER PROCESS TANK
SEE WATER TIGHTNESS NOTES,
THIS SHEET
Float Functions
Y High Level Alarm
G Override Timer ON/OFF
W LLA/RO
LEVEL & COMPACT BEDDING PER
MANUFACTURER RECOMMENDATION

RECIRCULATING FILTER & SEPTIC TANK

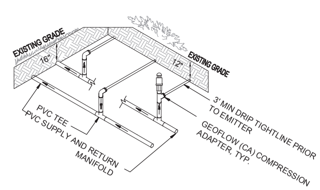
N.T.S.



NOTE:
AIR RELIEF VALVES WITH SCHRADER VALVES
SHALL BE LOCATED IN RECTANGULAR BOXES
LARGE ENOUGH TO ATTACH A PRESSURE GAUGE
FINISH GRADE
VALVE BOX SHALL BE
RECTANGULAR OR LARGE
ENOUGH TO ATTACH A
PRESSURE GAUGE
GEOFLOW
AIR/VACUUM
BREAKER
(APVBK-1)
SCH. 80 NIPPLE
LENGTH AS REQUIRED
BRICK SUPPORTS
(THREE)
PEA GRAVEL SUMP
ADD INSULATION
IN FREEZING CLIMATES
1" THREAD DIAMETER
OR OTHER COUNTY
APPROVED GOPHER
DETERRENT
PVC REDUCER
PVC PIPE AND FITTING
(PLUMBED TO PVC)

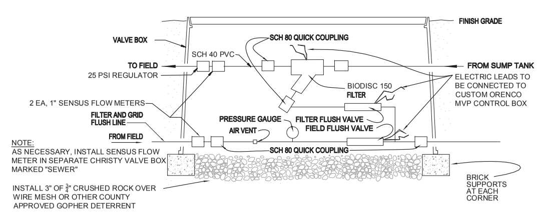
GEOFLOW 1" AIR/VACUUM BREAKER

N.T.S.



GEOFLOW END FEED / FLUSH MANIFOLD

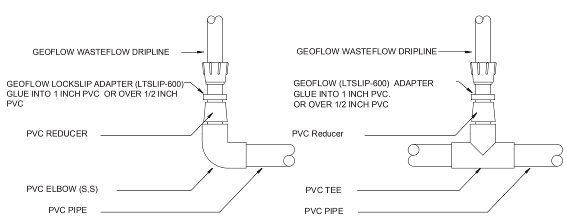
NTS



FINISH GRADE
VALVE BOX
SCH 80 QUICK COUPLING
SCH 40 PVC
TO FIELD
25 PSI REGULATOR
FROM SUMP TANK
ELECTRIC LEADS TO
BE CONNECTED TO
CUSTOM ORENCO
MVP CONTROL BOX
BIODISC 150
FILTER
2 EA. 1" SENSUS FLOW METERS
FILTER AND GRID
FLUSH LINE
PRESSURE GAUGE
AIR VENT
FILTER FLUSH VALVE
FIELD FLUSH VALVE
FROM FIELD
SCH 80 QUICK COUPLING
NOTE:
AS NECESSARY, INSTALL SENSUS FLOW
METER IN SEPARATE CHRISTY VALVE BOX
MARKED "SEWER"
BRICK
SUPPORTS
AT EACH
CORNER

GEOFLOW AUTOMATIC HEADWORKS

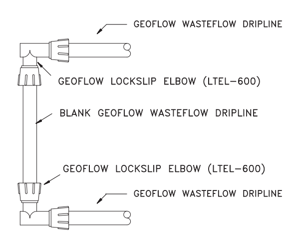
N.T.S.



GEOFLOW WASTEFLOW DRIPLINE
GEOFLOW LOCKSLIP ADAPTER (LTSLIP-600)
GLUE INTO 1 INCH PVC OR OVER 1/2 INCH
PVC
PVC REDUCER
PVC ELBOW (S,S)
PVC PIPE
GEOFLOW WASTEFLOW DRIPLINE
GEOFLOW (LTSLIP-600) ADAPTER
GLUE INTO 1 INCH PVC.
OR OVER 1/2 INCH PVC
PVC Reducer
PVC TEE
PVC PIPE

GEOFLOW MANIFOLD CONNECTION (PVC TO ADAPTER)

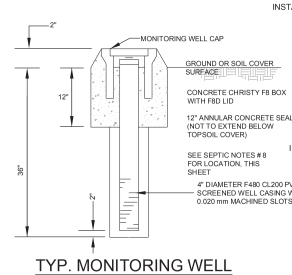
N.T.S.



(AS APPLICABLE)

GEOFLOW LOCKSLIP ELBOW LOOP

N.T.S.



MONITORING WELL CAP
GROUND OR SOIL COVER
SURFACE
CONCRETE CHRISTY F8 BOX
WITH F8D LID
12" ANNULAR CONCRETE SEAL
(NOT TO EXTEND BELOW
TOPSOIL COVER)
SEE SEPTIC NOTES # 8
FOR LOCATION, THIS
SHEET
4" DIAMETER F480 CL200 PVC
SCREENED WELL CASING W/
0.020 mm MACHINED SLOTS
12"
36"

TYP. MONITORING WELL

N.T.S.

GENERAL NOTES

1. PUMPS: All pump shall be of the size and type to accommodate the intended use and shall include the following:
   - A "Hand-Off-Auto" (HOA) switch.
   - An audio and visible alarm and necessary sump water sensing device
   - Orenco electrical float switches for starting and stopping to indicate a "high water" condition
   - All pumps to be set per plan or the manufacturer's mimimum liquid level
2. PROCESS AND SUMP TANKS:
   - The process tank shall provide storage for a minimum of 24 hours based on the design flow + dose. As shown in the section detail, this sheet, the minimum storage capacity is exceeded.
   - Float elevations for Process and Sump tank are based on Selvage precast and Orenco fiberglass tanks, respectively.
   - The Contractor shall notify the Design Engineer for changes in float elevation resulting in a change of tank(s).
   - Access shall be provided by a minimum 24-inch manhole riser.
   - Access lids shall be installed 2 inches minimum above the finished grade.
   - All pipes and/or electrical conduits through the sump shall be either precast into the sump or sealed with gas-tight compression connectors.
3. ELECTRICAL FEATURES: The following electrical features shall be provided:
   - Vericomm or approved equivalent panel with dose counter and elapsed time meter to control discharge & recirculation pump and audio/visuam alarm. Control panel should be outdoor type control box containing fused disconnect and motor protection switch.
   - The control box shall be mounted on the building served if located within 20 feet of the sump. Otherwise the control boxes shall be mounted on a pipe stand or wooden post 3' minimum above existing grade.
   - Electrical conduit shall be PVC. Separate conduits shall be provided for control wire and power supply.
   - Dedicate separate electrical circuit for alarm and control panel. Circuit breaker at main panel to be larger than circuit breaker at control panel.
   - Contractor to consult with an Orenco electrical engineer and contractor prior to installation of Orenco control panel to obtain proper specifications.
   - An Orenco push buttion Audio/Visual alarm, operated by the control panel's high level alarm, shall be installed within the habitable space of the Residential Building.
4. PERMITS: Aside from an individual sewage disposal system permit, an electrical permit for the pump installation will be necessary for the Building Inspection Department.
5. DRIP DISPERSAL FIELD:
   - Install Geoflow wasteflow PC 1 gph subsurface drip line laterals @ 12" depth.
   - Emitter spacing = 24" and drip line spacing = 24" min. on-center.
   - Pressure @ beginning of drip fields shall be 30 psi with less than 10% pressure change in the drip field.
   - All drip line shall be installed on contour.
   - Install per Geoflow guidelines.

ADVANTEX UNIT TIMER SETTINGS

NORMAL SETTINGS - 30 SECONDS ON - 19.50 MINUTES OFF
OVERRIDE SETTINGS - 30 SECONDS ON - 9.50 MINUTES OFF

ADVANTEX TREATMENT SYSTEM MODE 1A

PVC SPLICE BOX, 3 CORD GRIPS
DISCHARGE ASSEMBLY
FLOAT SWITCH ASSEMBLY
P300512 - EFFLUENT PUMP; 1/2 Hp, 230 V
60 Hz, 10' LEAD
VERICOMM CONTROL PANEL, 230 V
RECIRC SPLITTER VALVE
AX20 - ADVANTEX FILTER w/VENT ASSEMBLY, 20 SQ. FT.

PUMP REQUIREMENTS:

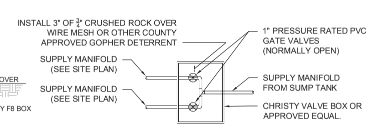
TDH = 113 FT.
Q = 10 GPM
DOSE VOLUME = 33 GALLONS
FLUSH TIME = 3 MIN EVERY 100 DOSES
DISCHARGE PUMP SETTINGS
PUMP "ON" = 10 MINUTES
PUMP "OFF" = 60 MINUTES
PUMP "ON" OVERRIDE = 10 MINUTES
PUMP "OFF" OVERRIDE = 30 MINUTES

RECOMMENDED PUMP TYPE:

OSI SERIES MODEL P2005 PUMP (DISCHARGE)
(230 VOLTS, 0.5 HP, 1Ø) OR AN APPROVED EQUIVALENT
OSI SERIES MODEL P3005 PUMP (RECIRCULATION)
(230 VOLTS, 1/2 HP, 1Ø) OR AN APPROVED EQUIVALENT

RECOMMENDED CONTROL PANEL:

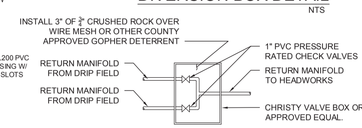
ORENCO VERICOMM CONTROL PANEL, 230V



INSTALL 3" OF 3/4" CRUSHED ROCK OVER
WIRE MESH OR OTHER COUNTY
APPROVED GOPHER DETERRENT
SUPPLY MANIFOLD
(SEE SITE PLAN)
SUPPLY MANIFOLD
(SEE SITE PLAN)
1" PRESSURE RATED PVC
GATE VALVES
(NORMALLY OPEN)
SUPPLY MANIFOLD
FROM SUMP TANK
CHRISTY VALVE BOX OR
APPROVED EQUAL.

DIVERSION BOX DETAIL

NTS



INSTALL 3" OF 3/4" CRUSHED ROCK OVER
WIRE MESH OR OTHER COUNTY
APPROVED GOPHER DETERRENT
RETURN MANIFOLD
FROM DRIP FIELD
RETURN MANIFOLD
FROM DRIP FIELD
1" PVC PRESSURE
RATED CHECK VALVES
RETURN MANIFOLD
TO HEADWORKS
CHRISTY VALVE BOX OR
APPROVED EQUAL.

CHECK VALVE BOX DETAIL

NTS

SEPTIC NOTES:

1. All work shall be in conformance with the County of Marin's most recent regulations for design and construction of individual sewage disposal system.
2. All sewer connections shall be in accordance with the most recent edition of the Uniform Plumbing Code.
3. Sewer line from building to septic tank shall be 4" minimum schedule 40 P.V.C. or an approved equivalent. Minimum slope from building to tank shall be 2%. Clean-out to be installed at least 5 feet from building. All other piping from septic tank to drip lines shall be schedule 40 P.V.C piping.
4. No work shall be performed during the wet season and all excavation shall be performed when soil conditions are dry or upon approval of the Engineer.
5. All tanks shall be watertight and tested for any leakage. If there are leaks, the interior seams shall be sealed with thoroseal. Fiberglass tanks shall be approved by the county Sanitarian prior to installation.
6. The Contractor shall notify the Engineer and Health Officer a minimum of 48 hours prior to construction and observation of the system. The Engineer shall observe the system at critical construction phases as follows and shall be used as steps for the contractor to install the system:

   a) Stake out location of all drip lines along contour.
   b) Excavate trenches. Trench bottom shall be level with no more than 3 inch drop in 100 feet of length. Any smeared sidewalls shall be scarified and the loose material removed from the bottom.
   c) Upon completion of observation, seal or glue all joints
   d) Backfill remaining trenches with native soil.
7. Six monitoring wells shall be located around the proposed drip field to be constructed as shown per plan.
8. Monitoring wells shall be installed as shown on site plan (sheet SS1) and detail (this sheet) with the following requirements:
   Two (2) monitoring wells shall be installed in each drip field (total of 4)
   One (1) monitoring well shall be installed 15 feet up gradient of drip fields
   One (1) monitoring well shall be installed 20 feet down gradient of drip fields
9. Erosion protection in the drip field shall be required upon completion of installation and observed by the Engineer. See Erosion Control Notes, Sheet SS1.
10. Contractor not to over-excavate the delivery line trench. Maximum depth for delivery line shall be 24 inches.
11. All plumbing fixtures shall be low use type, i.e., toilets (1.6 gallons/flush), shower heads (2.0 GPM). All faucets to have areators installed.
12. All drainage (i.e. downspouts, area drains, ect.) to drain away from the septic system via a drainage system.
13. The known locations of utilities shown on these plans are approximate only and it is the contractor's responsibility to verify locations and depths with appropriate agencies or by excavation. Any conflicts with utilities contact design engineer. Repair and replace any damaged utilities including but not limited to Water, PG&E, Propane and cable.

OPERATION AND MAINTENANCE NOTES:

1. Inspect septic tank annually for leakeage and scum buildup.
2. If sludge buildup in septic tank is 6" or greater, have tank pumped.
3. Minimize the use of garbage disposal unit by composting or packaging scrap to trash.
4. Minimize pouring grease down drain.
5. Minimize discharge of paper products, i.e. cigarettes, disposable diapers, sanitary napkins and tissues.
6. Do not dispose of oils, paint and thinner down waste lines.
7. Minimize liquid load by repairing leaking fixtures and washing clothes with full loads.
8. Drain surface water away from leachfield area.
9. It is not recommended to install a sprinkler system over a septic system. However, if a sprinkler system is installed within the flow path of the septic system, regular observation of the irrigation system should be performed otherwise failing sprinkler heads, valves, etc. can cause significant problems with the septic system.
10. Owner shall obtain an Operational Permit
    a. For observing, testing and sampling.
    b. For placing and removing of test devices.
    c. For evaluation and monitoring of the Grantor's sewage disposal system

CONSTRUCTION OBSERVATION SCHEDULE

The Contractor shall notify the Engineer and County of Marin Environmental Heath Specialist (REHS) a minimum of 48 hours prior to construction and observation of the system. Additional County of Marin fees can be required after 1 site observations. The Engineer and the REHS shall observe the system at critical construction phases as follows:

1. Pre-construction observation where the following items shall be verified:
   a. Imminent weather conditions are such that they will not create unsuitable soil conditions during installation
   b. Layout and staking or marking of all components of the system
   c. Review and approval of the source of materials to be used
2. Interim observation(s)
   d. Installation of all pretreatment components
   e. Drip field installation and functioning of all drip components
   f. Function and setting of all control devices
   g. Connections of all piping and related components
   h. Water tightness test of all connections and tanks
   i. A hydraulic inspection of the system shall be scheduled with the design engineer. All drip lines and fittings shall be exposed, unless EHS staff has approved another method of inspection.
3. Start up observation
   j. Start up inspection shall be scheduled with the design engineer, service provider, and EHS staff.
   k. All construction elements are in general conformance with the approved plans and specifications
   l. Final soil cover over the subsurface drip dispersal field
   m. System controls are hardwired to permanent power and all floats, pumps and alarms tested
   n. Letter from the designer that the system has been installed and is operating in conformance with the design specifications shall be provided
   o. The septic system sump pump electrical system installation conformance certification shall be completed, signed by the installing contractor and returned to the Department.

Rev	Date	Description	Designed	Drawn	Checked

CSW | ST2
CSW/Stuber-Stroeh Engineering Group, Inc.
Civil · Structural Engineering · Surveying · Mapping · Environmental · Planning · Land Planning · Construction Management

A-2-MAR-21-0048
Exhibit 4
Page 9 of 9

GRONEMAN SEPTIC (315 GPD)

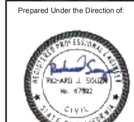
DETAIL & NOTE SHEET

A.P.N. 199-235-66

183 Sunset Way

Town Of
Muir Beach
County Of
Marin
State Of
California

Prepared Under the Direction of:



Sheet
SS2

Scale:	As Shown
Date:	June 18, 2021
Project Number:	1920095
Plan File:	

MARIN COUNTY
COMMUNITY DEVELOPMENT AGENCY

TOM K. LAI, DIRECTOR

NOTICE OF FINAL LOCAL (DEPUTY ZONING ADMINISTRATOR) DECISION

Pursuant to Coastal Act Section 30603(d), Coastal Commission Regulations Section 13571, and LCP Policy and/or Implementation Plan.

June 4, 2021

California Coastal Commission
45 Fremont Street, #2000
San Francisco, CA 94105

Attention: Coastal Planner

Applicant's Name:	**Eric & Madeline Groneman**
Coastal Permit Number:	Coastal Permit [P2989]
Assessor's Parcel Number:	199-235-66
Project Location:	183 Sunset Way, Muir Beach
Determination:	Approved (Resolution of the May 27, 2021 Deputy Zoning Administrator hearing is attached specifying action.)
Decision Date:	May 27, 2021
County Appeal Period:	Five (5) Working Days

Local review is now complete.

This permit IS appealable to the California Coastal Commission (see Marin County Code Section 22.56.080 attached); please initiate the California Coastal Commission appeal period.

Any correspondence concerning this matter should be directed to Michelle Levenson, Planner at (415) 473-3615.

Sincerely,

Michelle Levenson
Planner

Attachment1- Resolution

The establishment, maintenance or conducting of the use will not, under the particular case, be detrimental to the health, safety, morals, comfort, convenience or welfare of persons residing or working in the neighborhood of such use and will not, under the circumstances of the particular case be detrimental to the public welfare or injurious to property or improvements in the neighborhood.

The detached accessory structure proposed with the project consists of a garage and a storage area. Because the garage portion of the structure is consistent with Marin County Interim Zoning Code Sections 22.72.055I and 22.70.060I for parking structures, discretionary approval for the garage portion of the structure is not required. However, because the storage portion of the structure is located within a required front setback, Use Permit approval is required to allow this portion of the structure in the proposed location.

The storage area would be located below the portion of the garage used for parking and would not be visible from Sunset Way. By enclosing the space beneath the garage, a more attractive profile of the structure would be provided and a potential fire hazard would be prevented. Due to the location and design of the storage area, the project would not be detrimental to the public welfare or injurious to property or improvements in the neighborhood.

SECTION II: ACTION

NOW THEREFORE, BE IT RESOLVED that the project described in condition of approval 1 is authorized by the Marin County Planning Commission and is subject to the conditions of project approval.

This decision certifies the proposed project's conformance with the requirements of the Marin County Development Code and in no way affects the requirements of any other County, State, Federal, or local agency that regulates development. In addition to a Building Permit, additional permits and/or approvals may be required from the Department of Public Works, the appropriate Fire Protection Agency, the Environmental Health Services Division, water and sewer providers, Federal and State agencies.

SECTION III: CONDITIONS OF PROJECT APPROVAL

NOW, THEREFORE, BE IT RESOLVED that the Marin County Planning Commission hereby approves the Groneman Coastal Permit and Use Permit subject to the conditions as specified below:

CDA-Planning Division

1. This Coastal Permit and Use Permit approval authorizes the construction of a new, 2,160-square-foot single family residence, a 369-square-foot detached accessory structure (storage area located below a proposed garage) and associated septic system on a vacant lot in Muir Beach. The 2,959 square feet of development shall result in a 13.77-percent floor area ratio on the 18,372 square foot lot. The residence shall reach a maximum height of 25 feet and the portion of the detached accessory structure where the storage area is located shall reach a maximum height of 12 feet as measured from surrounding grade. The structures shall maintain the following setbacks: (1) single family residence-41 feet from the north, front property line; over 100 feet from the south, rear property line, and 10 feet from the east, side and west side property lines; and (2) detached accessory structure-3 feet from the north, front property line;

over 100 feet from the south; rear property line, 6 feet from the east, side property lines; and 14 feet from the west, side property line. A total of 13 trees shall be removed with the project, of which 8 are in poor health.

2. Plans submitted for a Building Permit shall substantially conform to plans identified as Exhibit A, entitled "Groneman Residence" consisting of 34 sheets and prepared by Michael Heacock Architects., received in final form on March 5, 2021, and on file with the Marin County Community Development Agency, except as modified by the conditions listed herein.

   a. The applicant shall provide height verification of the single-family residence prior to close-in inspection.

   b. The project shall conform to the Planning Division's "Uniformly Applied Conditions 2021" with respect to all of the standard conditions of approval as well as the following special conditions: 2, 3, 8, 12, and 17.

SECTION IV: VESTING

NOW THEREFORE, BE IT RESOLVED that unless conditions of approval establish a different time limit or an extension to vest has been granted, any permit or entitlement not vested within two years of the date of the approval shall expire and become void. The permit shall not be deemed vested until the permit holder has actually obtained any required Building Permit or other construction permit and has substantially completed improvements in accordance with the approved permits, or has actually commenced the allowed use on the subject property, in compliance with the conditions of approval.

SECTION V: APPEAL RIGHTS

NOW, THEREFORE, BE IT RESOLVED that this decision is final unless appealed to the Marin County Planning Commission. A Petition for Appeal and the required fee must be mailed to the Community Development Agency, Planning Division, Room 308, Civic Center, San Rafael, and postmarked no later than five business days from the date of this decision (June 3, 2021).

SECTION VI: ADOPTION

ADOPTED at a regular meeting of the Planning Commission of the County of Marin, State of California, on the 27th of May 2021.

IMMANUEL BEREKET
DEPUTY ZONING ADMINISTRATOR

Attest:

Michele Reed
Deputy Zoning Administrator Secretary

MARIN COUNTY UNIFORMLY APPLIED CONDITIONS
FOR PROJECTS SUBJECT TO DISCRETIONARY PLANNING PERMITS

2021

STANDARD CONDITIONS

1. The applicant/owner shall pay any deferred Planning Division fees as well as any fees required for mitigation monitoring or condition compliance review before vesting or final inspection of the approved project, as determined by the Director.

2. The applicant/owner shall defend, indemnify, and hold harmless the County of Marin and its agents, officers, attorneys, or employees from any claim, action, or proceeding, against the County or its agents, officers, attorneys, or employees, to attack, set aside, void, or annul an approval of this application, for which action is brought within the applicable statute of limitations. The County of Marin shall promptly notify the applicant/owner of any claim, action, or proceeding that is served upon the County of Marin, and shall cooperate fully in the defense.

3. Exterior lighting for the approved development shall be located and shielded to avoid casting glare into the night sky or onto nearby properties, unless such lighting is necessary for safety purposes.

4. Building Permit applications shall substantially conform to the project that was approved by the planning permit. All Building Permit submittals shall be accompanied by an itemized list of any changes from the project approved by the planning permit. The list shall detail the changes and indicate where the changes are shown in the plan set. Construction involving modifications that do not substantially conform to the approved project, as determined by the Community Development Agency staff, may be required to be halted until proper authorization for the modifications is obtained by the applicant.

SPECIAL CONDITIONS

1. BEFORE ISSUANCE OF A BUILDING PERMIT, the applicant shall submit a signed Statement of Conformance prepared by a certified or licensed landscape design professional indicating that the landscape plan complies with the State of California's Model Water Efficient Landscape Ordinance and that a copy of the Landscape Documentation Package has been filed with the Community Development Agency.

2. BEFORE ISSUANCE OF A BUILDING PERMIT, the applicant shall mark or call out the approved building setbacks on the Building Permit plans indicating the minimum distance of the building from the nearest property line or access easement at the closest point and any of the following features applicable to the project site: required tree protection zones, Wetland Conservation Areas, or Stream Conservation Areas.

3. BEFORE ISSUANCE OF A BUILDING PERMIT, the applicant shall revise the plans to depict the location and type of all exterior lighting for review and approval of the Community Development Agency staff. Exterior lighting visible from off-site shall consist of low-wattage fixtures, and shall be directed downward and shielded to prevent adverse lighting impacts to the night sky or on nearby properties. Exceptions to this standard may be allowed by the Community Development Agency staff if the exterior lighting would not create night-time illumination levels that are incompatible with the surrounding community character and would not shine on nearby properties.

4. BEFORE ISSUANCE OF A BUILDING PERMIT, the applicant shall record a Waiver of Public Liability holding the County of Marin, other governmental agencies, and the public harmless related to losses experienced due to geologic and hydrologic conditions and other natural hazards.

5. BEFORE ISSUANCE OF A BUILDING PERMIT, the applicant shall submit written confirmation that the property owner has recorded the "Disclosure Statement Concerning Agricultural Activities," as required by Section 23.03.050 of the Marin County Code.

6. BEFORE ISSUANCE OF A BUILDING PERMIT for any of the work identified in the project approval, the applicant shall install 3-foot high temporary construction fencing demarcating established tree protection zones for all protected trees that are not being removed in the vicinity of any area of grading, construction, materials storage, soil stockpiling, or other construction activity. The applicant shall submit a copy of the temporary fencing plan and site photographs confirming installation of the fencing to the Community Development Agency. Acceptable limits of the tree protection zones shall be the dripline of the branches or a radius surrounding the tree of one foot for each one inch diameter at breast height (4.5 feet above grade) of the tree trunk. The fencing is intended to protect existing vegetation during construction and shall remain until all construction activity is complete. If encroachment into the tree protection zone is necessary for development purposes, additional tree protection measures shall be identified by a licensed arborist, forester, or botanist, and the tree specialist shall periodically monitor the construction activities to evaluate whether the measures are being properly followed. A report with the additional measures shall be submitted for review and approval by the Planning Division before any encroachment into a tree protection zone occurs.

7. BEFORE FINAL INSPECTION, if encroachments into a tree protection zone have been approved, then the tree specialist shall submit a letter to the Planning Division verifying that the additional tree protection measures were properly implemented during construction activities.

8. BEFORE ISSUANCE OF A BUILDING PERMIT, temporary construction fencing shall be installed on the subject property at edge of the Wetland Conservation Area and/or Stream Conservation Area, as applicable to the site. The applicant shall submit a copy of the temporary fencing plan and site photographs confirming installation of the fencing to the Community Development Agency. The construction fencing shall remain until all construction activity is complete. No parking of vehicles, grading, materials/equipment storage, soil stockpiling, or other construction activity is allowed within the protected area. If encroachment into the protected area is necessary for development purposes, additional protection measures shall be identified by a qualified biologist and the biologist shall periodically monitor the construction activities to evaluate whether the measures are being properly followed. A

report with the additional measures shall be submitted for review and approval by the Planning Division before any encroachment into a protected area occurs.

9. BEFORE FINAL INSPECTION, if encroachments into a protected area have been approved, then the biologist shall submit a letter to the Planning Division verifying that the additional protection measures were properly implemented during construction activities.

10. BEFORE ISSUANCE OF A BUILDING PERMIT, the applicant must provide written evidence that all appropriate permits and authorizations have been secured for this project from the Bay Conservation and Development Commission, the California Department of Fish and Game, the Regional Water Quality Control Board, the California Coastal Commission, the California State Lands Commission, the Bay Area Air Quality Management District, and/or the United States Army Corps of Engineers.

11. BEFORE CLOSE-IN INSPECTION, the applicant shall have a licensed land surveyor or civil engineer with proper surveying certification prepare and submit written (stamped) Floor Elevation Certification to the Planning Division confirming that the building's finished floor elevation conforms to the floor elevation that is shown on the approved Building Permit plans, based on a benchmark that is noted on the plans.

12. BEFORE FINAL INSPECTION, the project shall substantially conform to the requirements for exterior materials and colors, as approved herein. Approved materials and colors shall substantially conform to the materials and colors samples shown in "Exhibit A" unless modified by the conditions of approval. The exterior materials or colors shall conform to any modifications required by the conditions of approval. All flashing, metalwork, and trim shall be treated or painted an appropriately subdued, non-reflective color.

13. BEFORE FINAL INSPECTION, the applicant shall install all approved landscaping that is required for the following purposes: (1) screening the project from the surrounding area; (2) replacing trees or other vegetation removed for the project; (3) implementing best management practices for drainage control; and, (4) enhancing the natural landscape or mitigating environmental impacts. If irrigation is necessary for landscaping, then an automatic drip irrigation system shall be installed. The species and size of those trees and plants installed for the project shall be clearly labeled in the field for inspection.

14. BEFORE FINAL INSPECTION, the applicant shall submit a Certificate of Completion prepared by a certified or licensed landscape design professional confirming that the installed landscaping complies with the State of California's Model Water Efficient Landscape Ordinance and the Landscape Documentation Package on file with the Community Development Agency.

15. BEFORE FINAL INSPECTION, the applicant shall submit written verification from a landscape design professional that all the approved and required landscaping has been completed and that any necessary irrigation has been installed.

16. BEFORE FINAL INSPECTION, utilities to serve the approved development shall be placed underground except where the Director determines that the cost of undergrounding would be so prohibitive as to deny utility service to the development.

17. BEFORE FINAL INSPECTION, the applicant shall call for a Community Development Agency staff inspection of approved landscaping, building materials and colors, lighting and

compliance with conditions of project approval at least five business days before the anticipated completion of the project. Failure to pass inspection will result in withholding of the Final Inspection approval and imposition of hourly fees for subsequent reinspections.

CODE ENFORCEMENT CONDITIONS

1. Within 30 days of this decision, the applicant must submit a Building Permit application to legalize the development. Requests for an extension to this timeline must be submitted in writing to the Community Development Agency staff and may be granted for good cause, such as delays beyond the applicant's control.

2. Within 60 days of this decision, a Building Permit for all approved work must be obtained. Requests for an extension to this timeline must be submitted in writing to the Community Development Agency staff and may be granted for good cause, such as delays beyond the applicant's control.

3. Within 120 days of this decision, the applicant must complete the approved construction and receive approval of a final inspection by the Building and Safety Division. Requests for an extension to this timeline must be submitted in writing to the Community Development Agency staff and may be granted for good cause, such as delays beyond the applicant's control.

INTERDEPARTMENTAL TRANSMITTAL
MARIN COUNTY ENVIRONMENTAL HEALTH SERVICES
ROOM 236, 473-6907

			TYPE OF DOCUMENT
DATE:	**January 14, 2021**		DESIGN REVIEW
TO:	**Michelle Leveson, Senior Planner**		LAND DIVISION
FROM:	**Gwendolyn Baert, Senior REHS**	X	**USE PERMIT**
RE:	**Groneman Coastal and Use Permit**		VARIANCE
	Project ID P2989		MASTER PLAN
AP#:	**199-235-66**	X	**COASTAL PERMIT**
ADDRESS:	**183 Sunset Way, Muir Beach**		LOT LINE ADJ.
			OTHER

THIS APPLICATION HAS BEEN REVIEWED FOR THE FOLLOWING ITEMS:

WATER	X	**SEWAGE**		SOLID WASTE
POOLS		HOUSING		FOOD ESTABLISHMENT

THIS APPLICATION IS FOUND TO BE:

FIND IT COMPLETE.

FIND IT INCOMPLETE UNTIL THE ITEMS LISTED BELOW HAVE BEEN SUBMITTED.

X **FIND IT ACCEPTABLE AS PRESENTED, WITH THE FOLLOWING CONDITIONS.**

RECOMMEND DENIAL FOR THE REASONS LISTED BELOW.

The applicant has submitted a set of septic plans that demonstrate the viability of a 3-bedroom design. The plans appear acceptable with the following conditions:

- The two lots will need to be merged, the house and the septic system must be on the same lot.
- Prior to building permit approval, the plans for grading and drainage will need to be reviewed and approved by EHS.
- Prior to building permit approval, the plans for the stabilization walls below the septic system will need to be reviewed and approved by EHS. These walls are recommended by the project geologist as a means of stabilizing the site and are required as approval of the septic system.

CivicKnit

P.O. Box 81
Forest Knolls, CA 94933
steve@civicknit.com
415.307.1370

November 30, 2021

Julia Koppman-Norton
California Coastal Commission
455 Market St Suite 300
San Francisco, CA 94105

RE: 183 Sunset Way, Muir Beach Coastal Development Permit for a S-F residence

Ms. Koppman-Norton,

As you requested, we are providing information in response to the issues raised in the staff report for the September 9, 2021 Coastal Commission meeting (Attachment 1), at which time the Commission found Substantial Issue with Marin County's May 27, 2021 approval of a Coastal Development Permit (CDP) and Use Permit for a single-family residence, free-standing garage with storage below and an on-site septic system on an infill lot identified as 183 Sunset Way, Muir Beach.

The information in this submittal responds to issues cited in the July 1, 2021 appeal of the County's decision by two Coastal Commissioners (Appeal A-2-MAR-21-0048)(Attachment 2). We also address additional issues identified in the Staff Report for the Commission's September 9th Substantial Issue hearing (Attachment 3).

Given the infill nature of this project and its similarity to earlier CDP approvals in Muir Beach where the Commission found No Substantial Issue, our review found that the County's CDP approval was consistent with its LCP and the Coastal Act. Most importantly, all technical information and prior Commission actions demonstrate that the entire site does not meet the definition of a "bluff". In addition, after obtaining the Commission's 1985 CDP files permitting the existing rock revetment at the shoreline, which staff did not review prior to the Substantial Issue hearing, it is apparent that 183 Sunset Way owners were not any part of that work. The owners will cooperate with enforcement actions but there is no nexus for slowing consideration of their application.

Given that the Commission has required a De Novo review, the applicants are working with Marin County staff to explore modifications that can expand the bluff retreat zone. In addition, the Project Geotechnical Engineer has refined its bluff retreat analysis to reflect LCP and Coastal Act policies without reliance on the existing rock revetment at the shoreline. (Attachment 4)

After you and your colleagues have reviewed this information, we request the opportunity to meet at the earliest opportunity to discuss next steps and to identify an expeditious timeline for getting on the Commission's agenda.

Sincerely,

Steve Kinsey

Attachments:

Attachment 1- Applicant's response to identified De Novo review issues
Attachment 2- Appeal Reasons identified in the Commissioner Appeal Form
Attachment 3- CCC staff report identifying additional Coastal Act Consistency Issues
Attachment 4- Miller-Pacific Engineering's memorandum calculating bluff retreat rates based on OPC Sea Level Rise estimates to confirm development will not require armoring during its economic life
Attachment 5- Revised Site Plan illustrating Miller-Pacific's revised Bluff Retreat estimate

ATTACHMENT 1

Applicant's response to identified De Novo review issues

November 30, 2021

183 Sunset Way, Muir Beach, CA

This document provides information in response to the concerns raised by the two Coastal Commissioners who appealed Marin County's CDP approval as well as additional issues raised in the Coastal Commission's Substantial Issue staff report.

The July 1, 2021 appeal of the County's decision (Appeal A-2-MAR-21-0048) cited several questions of consistency with Marin County's Local Coastal Program (LCP) and the Coastal Act (Attachment 2) including:

- whether the entire site should be deemed a bluff
- whether it relies on unpermitted armoring at the toe of the bluff
- whether the proposed development's bluff setbacks would be sufficient to provide safety and security without needing shoreline armoring during its economic life
- whether the residence's foundation design exceeds safety and stability requirements
- whether piers to provide safety and stability for the septic system constitute armoring

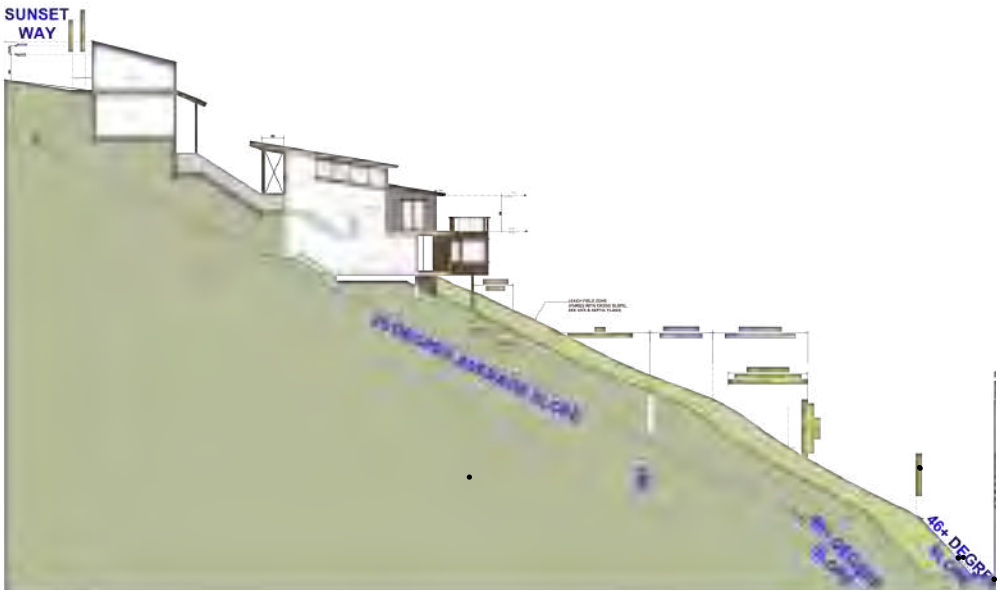
The Staff Report for the Commission's September 9th Substantial Issue hearing (Attachment 3), raised the following additional issues:

- impacts to sand supply
- public access, and
- visual resources.

A- The entire site is not a bluff.

The Commissioner's "Reasons for the Appeal" memo incorrectly characterized the property's slope, stating, "the entire site appears to extend from Sunset Way down to the beach at a roughly 45 degree angle". A similar assertion was made in the staff report for the SI hearing. Yet, to date, no Commission staff have visited the site to visually observe the bluff's extent.

This scaled north-south section, based on a field-based topographic site survey, demonstrates a clear break between the 46 degree (102%) slope of the bluff and the 26 degree (57%) average slope of the remainder of the site.



Miller-Pacific Geotechnical staff performed field reconnaissance and geologic testing and confirmed this in their August, 30, 2021 letter to the Commission, stating, "slopes extend from Sunset Way at the top of the site to the edge of the coastal bluff near the bottom." (See Ex A-3 of CCC 's 9/9/21 Substantial Issue Correspondence file)

Bluff Defintion

The *California Code of Regulations, Title 14, §13577 (h)* defines the term bluff as follows:

> The upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the bluff is rounded away from the face of the bluff as a result of erosional processes related to the presence of the steep bluff face, the bluff line or edge shall be defined as that point nearest the bluff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the bluff. In a case where there is a steplike feature at the top of the bluff face, the landward edge of the topmost riser shall be taken to be the bluff edge. The termini of the bluff line, or edge along the seaward face of the bluff, shall be defined as a point reached by bisecting the angle formed by a line coinciding with the general trend of the bluff line along the seaward face of the bluff, and a line coinciding with the general trend of the bluff line along the inland facing portion of the bluff. (*Emphasis added by highlight*)

This is identical to the definition provided in Marin County's *Implementation Plan*, approved by the Commission on February 6, 2019. Based on these "bluff" definitions, the entire site should not be characterized as a bluff.

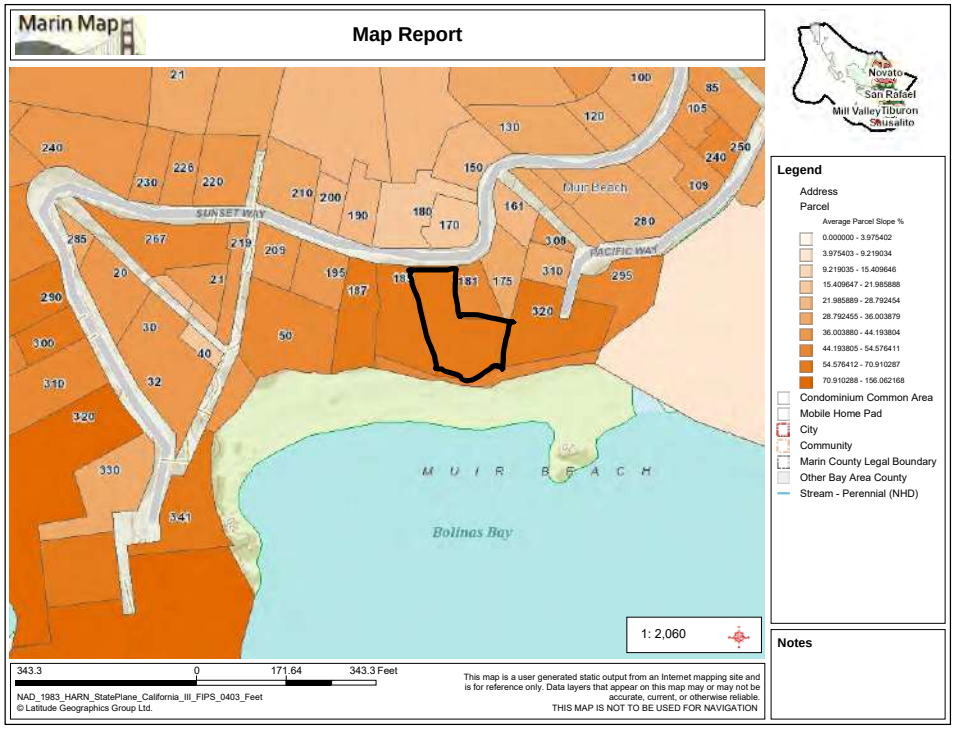
Prior Commission Actions in Muir Beach

The Coastal Commission has previously approved projects on the steep slopes of Muir Beach without characterizing them as a "bluff".

- In 1977, the Commission heard an appeal of a shoreline project at 50 Cove Lane, three properties north of the site (Appeal 512-77). The site had slopes greater than 50%, with previously documented grading and landslides. The geotechnical engineer's report recommended cast-in-place reinforced concrete piers extending four feet into bedrock, except in the steep upslope area, where a concrete retaining wall was recommended. The appellant described historic bluff retreat to be a rate of 1 inch per year. The

Commission denied the appeal and issued Permit 242-77.

- The In 2009, the Commission also rejected a a Substantial Issue appeal for a residence at 9 Charlottes' Way (Appeal A-2 MAR-09-001), a site described as having slopes ranging between 50-140%.
- In 2009, the Commission also rejected a Substantial Issue appeal for a residence at 9 Ahab Way *(Appeal A-2-MAR-09-010)*, a lot described as having slopes of 21-51%. The Commission also stated that appeal did not raise issues of regional or statewide significance.



183 Sunset Way is highlighted by black border

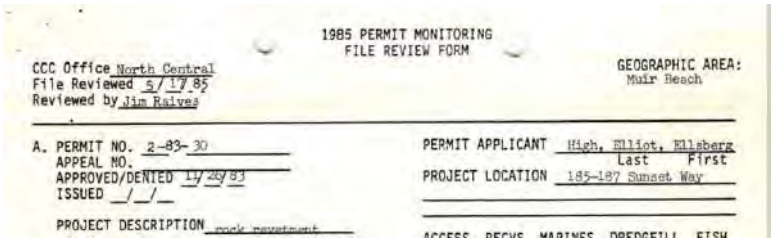
A review of the Marin Map slope analysis of Muir Beach illustrates that the 183 Sunset Way site slope is similar to other developed areas in Muir Beach, and less steep than some.

Based on the Project geotechnical engineer's field survey of slopes, the Commission's definition of "bluff", prior Commission actions on steep slopes in Muir Beach, and the prevailing nature of existing development on steep slopes in Muir Beach, it would be prejudicial to characterize the entire parcel as a bluff.

B- 183 Sunset Way has never participated in permitting, placing, or maintaining armoring

Prior to issuance of the Substantial Issue report, Commission staff did not review existing Commission files related to shoreline armoring across 183 Sunset Way's southern boundary though the applicant requested that they do so. After Commission action on September 9, 2021, the applicant received files for the 1985 rip-rap CDP application.

After reviewing the files, they confirm that neither the current or any prior owners of 183 Sunset Way were ever party to the revetment application, which was originally associated with 185-189 Sunset Way and subsequently amended to exclude the 189 property (now 50 Cove Lane).



1985 PERMIT MONITORING
FILE REVIEW FORM

CCC Office North Central
File Reviewed 5/17/85
Reviewed by Jim Raives

GEOGRAPHIC AREA:
Muir Beach

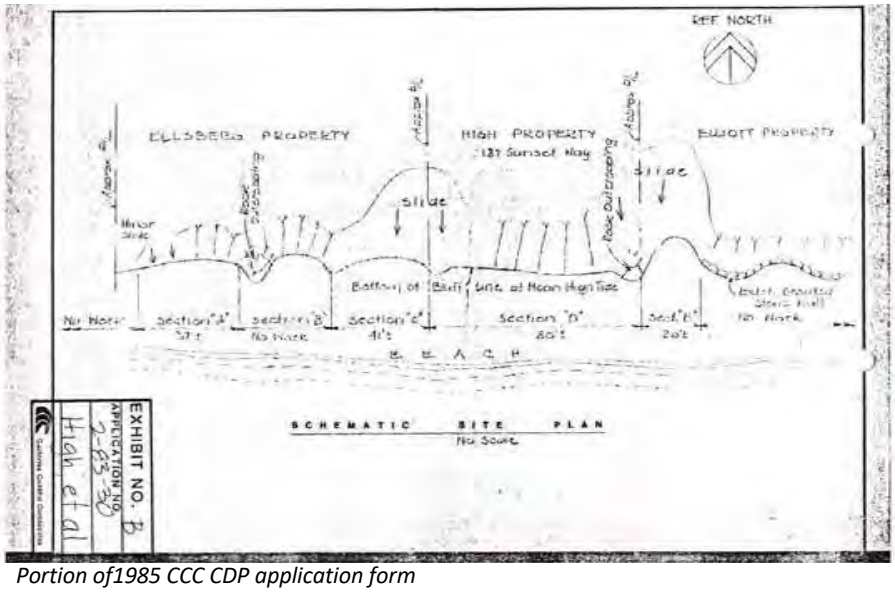
A. PERMIT NO. 2-83-30
APPEAL NO.
APPROVED/DENIED 11/20/83
ISSUED __/__/__

PERMIT APPLICANT High, Elliot, Ellsberg
Last First

PROJECT LOCATION 185-187 Sunset Way

PROJECT DESCRIPTION rock revetment

Portion of 1985 CCC CDP application form



Portion of1985 CCC CDP application form

The current parcel that makes up "183 Sunset" (199-235-66) was created from the merger of 1922 bellow beach subdivision lots199-235-47 and 199-235-48. Neither were ever apart of the shoreline armament permit (CDP 2-83-30).

Portion of1985 CDP application form indicating which parcels were part of the original application (Outline added11/21)

The applicant does not object to future Commission actions addressing armoring on and below their property by current owners associated with its history. However, there is no nexus between the earlier permit, current enforcement issues and their CDP application for 183 Sunset Way.

Given that no prior or current owner of 183 Sunset Way was part of the existing shoreline armoring permit and does not rely on the rip-rap for safety and stability of their development, its existence should not impede this application.

C- The Project does **not rely on existing shoreline armoring now or in the future to provide safety and stability over the development's economic life**

Commission staff challenged the Geotechnical Engineer's estimated annual 6-inch per year bluff retreat rate because it relied on the existing shoreline armoring, inconsistent with Coastal Act Sections 30235 and 30253 and not permitted by Marin's LCP.

The applicant's approved Marin County CDP application included two separate Miller Pacific engineering reviews, dated November 21, 2019 and August 20,2021. The reports were based on available, published geologic mapping and geotechnical reference information, as well as knowledge gained during an October 16, 2019 site visit to observe existing conditions, map site geology, and evaluate geologic hazards

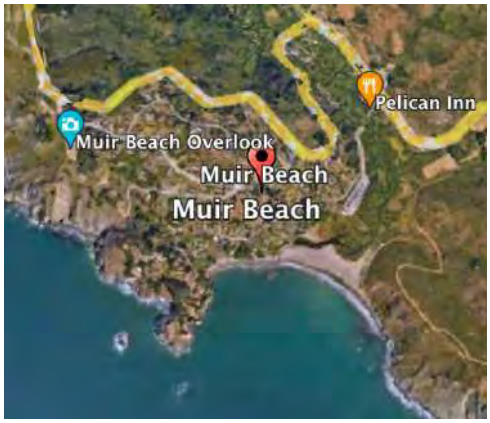
Miller-Pacific's August 30,2021 letter (CCC SI Correspondence Exhibit A-3), stated that the project would be feasible from a geotechnical perspective, subject to recommendations and criteria for use in project design. Aside from one small slide mapped at the toe of the bluff in the southwestern property corner, none of the slides appeared to be the result of bluff instability, scour, or undermining. It also confirmed that rip-rap would not be necessary to provide safety and stability throughout the economic life of the development.

The C. J. Hapke, D. Reid and K.R. Green 2007 report entitled "*Vectorized Cliff Edge of Central California Derived from 1998/2002 Lidar Source Data* indicated the average retreat rate at about 19.6-inches per year between Point Bonita and Tomales Point, but noted that the average was affected by high rates along some shoreline stretches. For example, the retreat rate along the south-facing cliffs of Point Reyes headlands was estimated to be 6.2 feet annually!

Miller-Pacific's revised calculation of 9.5"/ yr. was determined from images spanning the 1958-1982 period. Notably, adjacent areas in Muir Beach measured between 10-14" annual retreat over that same period, confirming that the site has a lower than average rate of retreat.

The Commission required an updated geologic and geotechnical evaluation, consistent with Ocean Protection Council (OPC) "high emissions" sea level rise standards, to demonstrate that the development can remain safe from coastal hazards for its economic lifetime without armoring.

Miller Pacific staff reviewed their prior Phase 1 and Phase 2 reports, the CCC 2018 Sea Level Rise Guidance report, and the 2018 OPC State of California Sea-Level Rise Guidance document in preparing their new analysis (Attachment 4). The evaluation is based on keeping the structure 81 feet from the existing bluff edge.



Cove's configuration reduces retreat rates.

The revised analysis increases the estimated retreat rate from 6 inches to 9.5 inches per year, based on no effect from existing armoring. With that change, the residence would remain more than 49 feet in excess of the minimum 32 foot estimated retreat without reliance on existing or future armoring during the useful economic life of 40 years, as set forth in Marin's LCP. The septic dispersal field would be 29 feet beyond the estimated bluff retreat after 40 years, based on the OPC 2018 Sea Level Rise High Emission scenario .

Miller Pacific Engineering concluded that the proposed development at 183 Sunset Way would be secure and stabile during its anticipated economic life without the need for armoring, making it consistent with the Coastal Act Sections 30235 and 30253.

D- The Residence's Foundation Design is a normal and standard means of complying with Ca. Building Code and Coastal Act Standards

The CCC staff report asserted, "these foundation elements are not normal and typical construction, but rather are extraordinary measures that are being used in place of an effective setback". That is not an accurate statement.

The purpose of the drilled pier foundation system is to provide adequate lateral support under seismic conditions, and also transfer building loads to weathered bedrock underlying the surface soils. Miller Pacific staff responded in their August 30, 2021 letter (Exhibit A-3 of SI Correspondence) that the proposed foundation system is not extraordinary, but representative of typical hillside construction throughout California, especially following the widespread adoption and advancement of modern seismic design standards over the last 20 years.

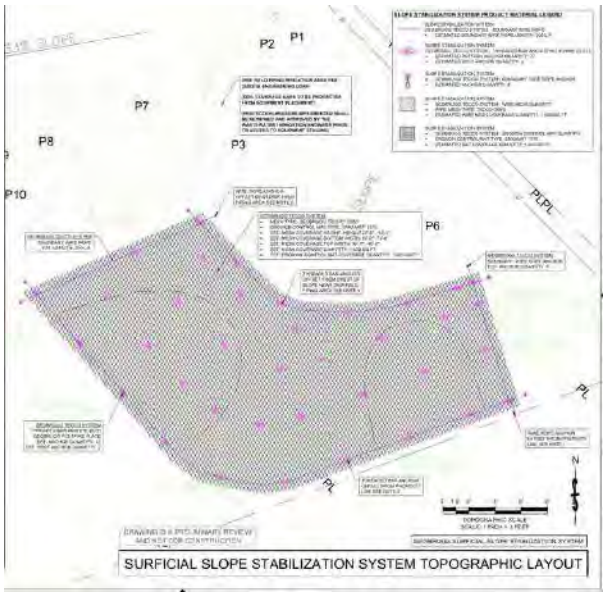
In addition, setting the uphill portion of the project into the grade is necessary to stay within Marin County's maximum height requirements and is consistent with the County's Single-family Residential Design guidelines, which state on page 36, "

> *Split pads, stepped footings, or pier and grade beam foundations should be used where geotechnically feasible to permit the structure to "step" to conform to the site's topography. Large single-form structures are discouraged. Buildings should be cut into the hillside to reduce effective visual bulk. Excavate underground or use below grade rooms to reduce effective bulk and to provide energy efficient and environmentally-desirable spaces.*

Given subsurface geologic conditions and typical hillside foundation technologies, the design as proposed should be permitted.

E- Septic- The subsurface slope stabilization piers will not function as a shoreline protective device supporting the bluff during the 40-year useful life of the septic system

Marin County EHS required subsurface stabilization piers to be placed 25' downslope from the septic system to prevent the failure of saturated soils during extreme weather events. The Coastal staff indicated that it considers that solution might function as a bluff protection device during the economic life of the system.



While the applicant's geotechnical engineer disputes that characterization, CSW-ST2, the wastewater engineer, has received conditional permission from Marin County EHS, to replace the piers with a heavy-duty steel mesh. This technique was approved by EHS after review with Coastal staff for a different residential Class 1 septic system in the coastal zone (22667 State Route 1, Marshall, CA.) within the past year; no appeal.

While the applicant does not accept the characterization that the downslope soil stabilization piers constitute a shoreline protection device, they will accept a steel mesh technology previously approved in Marin's coastal zone as an alternative.

F- This Project does not create adverse public view or access impacts.
A significant consequence of Coastal staff not visiting the site prior to preparing its Substantial Issue recommendation is the assertion that the Project would impact the scenic and visual qualities of the coast and public access along it. The Project is located on an infill site within the nearly built-out Muir Beach community. It is fronted on the shoreline side by a large stand of trees that will remain, further reducing visual impact when viewed from below.

What little may be seen when viewing the site from nearby public locations will be integral with the well-established pattern of the Muir Beach community.

Shoreline access is not impeded in any way by the development. Currently, daily tides limit access to the portion of the shore known as Little Beach. At high tides, visitors traverse a route across the rocks on a parcel owned by others, lying between the Project site and the beach.

There is no basis to assert impacts to coastal views or access.

End of Attachment 1

ATTACHMENT 2

Appeal Reasons identified in the Commissioner Appeal Form

Exhibit 5 of September 9, 2021 Staff report

Appeal Reasons

Marin County approved a coastal permit to construct a new 2,160 square-foot single family residence, 430 square-foot garage, 369 square-foot storage structure, septic system, and related residential development, all on steep bluffs and all fronted by new proposed shoreline armoring, as well as existing unpermitted armoring seaward of that, at 183 Sunset Way in Muir Beach in Marin County. The County's approval raises issues of consistency with LCP provisions related to development on steep bluffs along an eroding shoreline above the beach.

Specifically, the LCP requires that new development be set back from coastal blufftop edges a sufficient distance to ensure that such development is safe, stable, and won't be threatened by coastal hazards within its expected economic lifetime, and such setbacks are required to be of a sufficient distance to eliminate the need for shoreline armoring, all as measured over at least the development's expected economic life. In addition, the LCP has additional mitigation measure requirements in steep slope/landslide areas such as this.

In this case, the County identified a blufftop edge that appears to actually be a position on the bluff face, and measured setbacks from that point. However, it is not clear that the 'edge' is anything more than a point on the face of the bluff, including as the entire site appears to extend from Sunset Way down to the beach at a roughly 45 degree angle, and thus all of the proposed development may actually be seaward of the blufftop edge here. In addition, the project includes a substantial foundation system (carving the new structures into the bluff), as well as new armoring and a reliance on unpermitted armoring, to establish safety and stability for the development over time.

None of this appears to be LCP consistent, and raises concerns about LCP conformance as it relates to coastal hazards, landform alteration, public views, public access, and related shoreline and beach area coastal resources. These issues and concerns warrant further Commission review and deliberations.

ATTACHMENT 3

CCC staff report- Additional Coastal Act Consistency Issues

Summary of Appeal Contentions- p. 9 of SI staff report

The appeal contends that the County-approved project raises questions of consistency with the Marin County LCP and the public access policies of the Coastal Act related to coastal hazards, related shoreline and beach area coastal resource protections, public access, landform alteration, and visual resources. Specifically, the appeal contends that the approved development appears to be located seaward of the blufftop edge, to be partially below grade and set into the bluff itself via a significant foundation system, and to rely on shoreline armoring for safety and stability, all of which leads to coastal resource issues and concerns associated with beaches, bluffs, and public views. For all of these reasons, the appeal suggests that the Commission needs to further evaluate these issues to ensure LCP and Coastal Act conformance. See full appeal contentions in **Exhibit 5**.

ATTACHMENT 4

Miller-Pacific Engineering's letter confirming development will not require armoring during its economic life based on OPC "High Emissions" Sea Level Rise estimates

November 23, 2021 File: 2944.001eltr.doc

Mr. Graham Groneman
c/o CivicKnit
P.O. Box 81
Forest Knolls, California 94933

Attn: Mr. Steve Kinsey

Re: Updated Bluff Retreat Rate Evaluation
183 Sunset Way (APN 199-235-47 and -48) Muir Beach, California

Introduction

As requested following our recent communication, this letter summarizes our geotechnical response to issues raised by California Coastal Commission staff in regards to your proposed residential development at 183 Sunset Way in Muir Beach, California.

Project Background

The proposed project generally includes construction of a new multi-story residence on a steep slope below Sunset Way. A new drip-type septic system is planned downslope of the residence for wastewater treatment and dispersal.

We previously performed a Geotechnical Investigation and provided design recommendations and criteria in our report dated August 20, 2020. Subsequently, we clarified our bluff retreat analysis and reviewed several iterations of project plans as summarized in letters dated June 30 and July 1, 2021. Following County approval of the project and CCC "Substantial Issue" determination, we provided further clarification and response to comments in support of your appeal (Appeal A-2-MAR-210048).

The purpose of this letter is to summarize supplemental/updated geologic analysis for calculation of bluff retreat rates absent existing rip-rap armoring in accordance with current applicable Coastal Act and Local Coastal Program (LCP) policies.

Bluff Retreat Rate Calculation

Our previous Investigation report summarized our review of literature, historic data, and historic aerial photographs that was utilized to determine historic retreat rates. As summarized therein, an average historic retreat rate of about 7.2-inches per year is likely skewed by the placement of rip-rap armoring at the toe of the slope in 1986.

In order to evaluate bluff retreat at the site under exposure to natural, un-armored conditions, we reviewed historic aerial photographs from 1958 and 1982, supplied by Photoscience of Emeryville, California. Each photograph was scaled and geo-located to allow accurate location and measurement of observed features. Figures 1 and 2 show the interpreted bluff edge location in 1958 and 1982, respectively. Based on these locations, we measured total retreat of between 8- and 30-feet a varying points along the shoreline, for an average total retreat of 19- feet. Over a time period spanning 24 years, this equates to an annual average (un-armored) retreat rate of 9.5-inches per year. Notably, this is relatively consistent with measurements taken from adjacent areas as discussed in our previous Investigation.

RETREAT RATE 24 years/19-feet = 0.79-feet = **9.5-inches/year**
Therefore, for a 40-year design life, we recommend a minimum setback for new structures of

32-feet from the edge of the bluff.
SETBACK 40 years X 9.5-inches/year = 380 inches = **32-feet**

Sea Level Rise Consideration

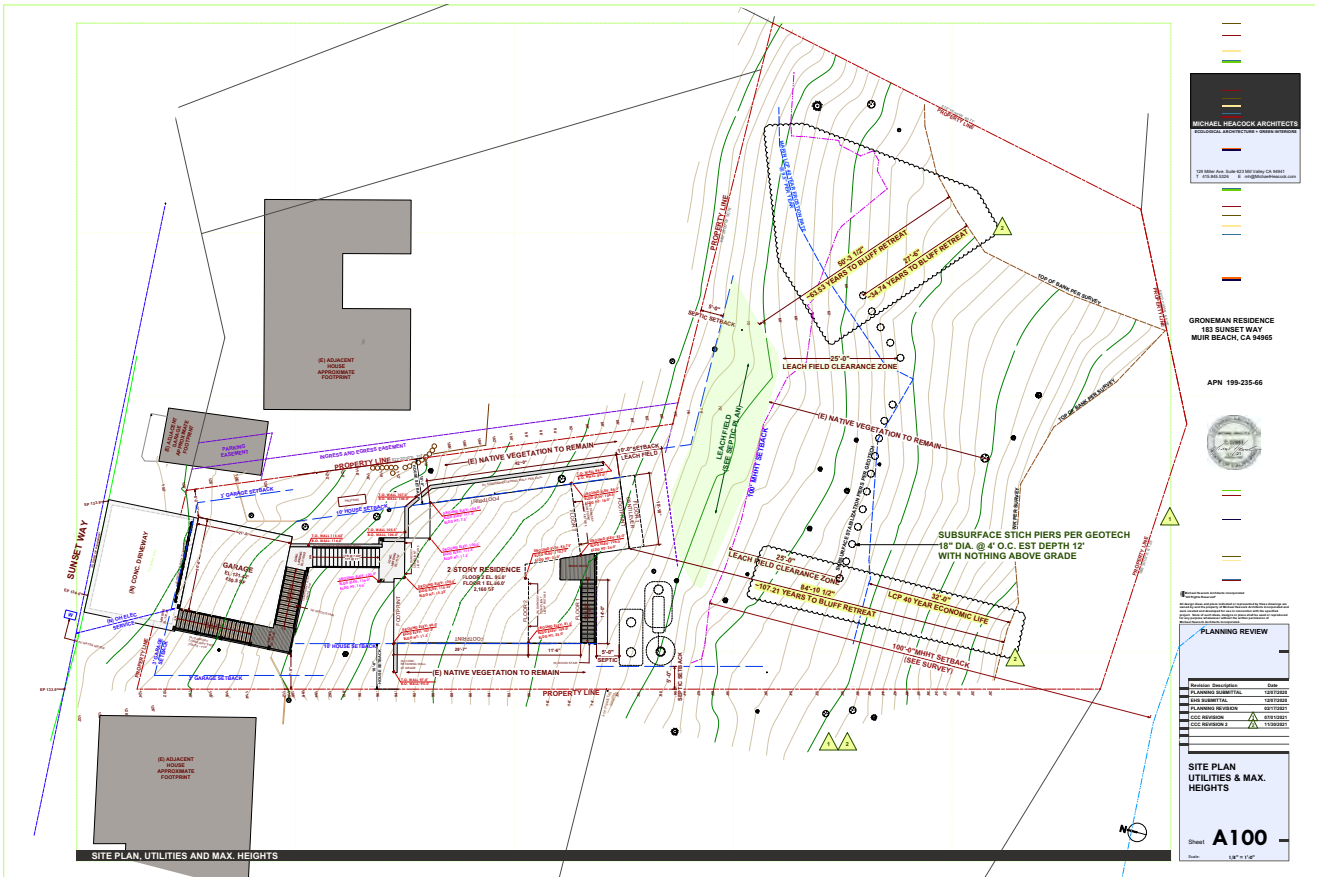
We have considered future Sea Level Rise (SLR) estimates developed by the California Ocean Protection Council (OPC) as required by the Coastal Act. As documented in OPC's 2018 State of California Sea-Level Rise Guidance document, and conservatively assuming "high emissions" scenarios continue through 2060, there is a 3% chance that SLR will meet or exceed 2-feet by 2060, and a 0.2% chance that SLR meets or exceeds 3-feet. Given that the lower 15- to 20-vertical feet of the bluff face is underlain by similar Franciscan bedrock, we do not anticipate SLR will have any substantial effect on bluff retreat rates or overall stability. We trust that this letter presents the information you require at this time. Should there be any questions or concerns regarding our review, please do not hesitate to contact us.

Very truly yours,
MILLER PACIFIC ENGINEERING GROUP

Mike Jewett
Engineering Geologist No. 2610 (Expires 1/31/21)

ATTACHMENT 5

Architect's revised Site Plan showing Miller-Pacific's revised Bluff Retreat estimate



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CALIFORNIA COASTAL COMMISSION
455 MARKET STREET, SUITE 228
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400

January 19, 2023

BLUFF EDGE MEMORANDUM

To: Honora Montano, Coastal Program Analyst

From: Joseph Street, Ph.D., P.G., Staff Geologist

Re: 183 Sunset Way, Muir Beach (Groneman Property), Appeal No. A-2-MAR-21-0048

The purpose of this memorandum is to evaluate the position of the bluff edge, as defined by the Marin County Local Coastal Program (LCP) and the Coastal Commission's regulations (Cal. Code Reg. Title 14, §13577(h)), on the subject property. To this end, I have reviewed the following documents provided by the applicant:

1) Miller Pacific Engineering Group, 2019, "Geologic and Geotechnical Feasibility Evaluation, Proposed Residential Development, 183 Sunset Way (APN 199-235-47 and -48), Muir Beach, California", dated November 21, 2019, signed by M. Jewett and S. Stephens.
2) Miller Pacific Engineering Group, 2020, "Geotechnical Investigation, New Single-Family Residence and Associated Improvements, 183 Sunset Way (APN 199-235-47 and -48), Muir Beach, California", dated August 20, 2020, signed by M. Jewett and S. Stephens.
3) Miller Pacific Engineering Group, 2021, "Response to California Coastal Commission Staff Report, Substantial Issue Determination, Appeal Number A-2-MAR-21-0048, 183 Sunset Way (APN 199-235-47 and -48), Muir Beach, California", dated August 20, 2020, signed by M. Jewett and S. Stephens.

I have also consulted oblique aerial photographs of the site provided by the California Coastal Records Project (https://www.californiacoastline.org) and topographic contour and slope data provided by Marin County (https://gis.marinpublic.com/arcgis/rest/services; https://www.marinmap.org/dnn/DataServices/2019LIDAROrthos.aspx). In addition, I visited the beach below the property on August 22, 2022.

Site Description

As described in Refs. (1 – 3) and shown in **Figs. 1** and **2** (attached), the subject property consists of a relatively steep, south-facing slope on the seaward side of Sunset Way, in the community of Muir Beach. The slope rises from beach level to an elevation of approximately +130 ft above mean sea level (MSL) at the road. The slope is composed primarily of Franciscan Complex "mélange", including blocks of relatively resistant graywacke sandstone embedded in a highly sheared and weathered, relatively weak shale and sandstone matrix. Both rock types are exposed at the toe of the slope. The Franciscan bedrock is overlain by a 4- to 7-foot thick layer of colluvial soils and, on the

upper slope, sandy fill likely placed during the construction of Sunset Way. Notably, the geologic investigations (Refs. 1, 2) identified the scar and debris pile of a 60-ft wide, 100-ft long shallow landslide in the central part of the slope, at least one smaller slide farther down the slope and evidence of surficial erosion due to runoff.

As shown in cross-section (**Figs**. **2**, **4**), the upper bluff slope is inclined at approximately 2:1 (horizontal:vertical, h:v), or about 25° - 30°, with local variations. Marine erosion at the base of the bluff has resulted in steeper slopes, ranging from about 1:1 (h:v, ~45°) to near vertical in places. Much of the lower bluff face on the property has been protected with riprap and a constructed "tidepool" seawall. Above Sunset Way the slope becomes more gentle, with an average slope of about 6:1 (h:v), or 10°.

Bluff Edge Definition

The certified Marin County LCP defines "bluff edge" as follows:

> **Bluff Edge.** The upper termination of a bluff, cliff, or sea cliff. In cases where the top edge of the bluff is rounded away from the face of the bluff as a result of erosional processes related to the presence of the steep bluff face, the bluff line or edge shall be defined as that point nearest the bluff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the bluff. In a case where there is a steplike feature at the top of the bluff face, the landward edge of the topmost riser shall be taken to be the bluff edge … Bluff edges typically retreat landward due to coastal erosion, landslides, development of gullies, or by grading (cut). In areas where the bluff top or bluff face has been cut or notched by grading, the bluff edge shall be the landward most position of either the current or historic bluff edge. In areas where fill has been placed near or over the historic bluff edge, the original natural bluff edge, even if buried beneath fill, shall be taken to be the bluff edge. **(LCP IP Definitions, page 146)**

The LCP definition follows the definition contained in the Coastal Commission's regulations (Cal. Code Reg. Title 14, §13577(h)), but includes additional language providing direction on how to treat anthropogenic landform modifications (i.e., cut and fill) when determining the bluff edge. In addition to defining the bluff edge, Section 13577(h) also provides a definition of a "coastal bluff":

> … Coastal bluff shall mean:
>
> (1) those bluffs, the toe of which is now or was historically (generally within the last 200 years) subject to marine erosion; and
>
> (2) those bluffs, the toe of which is not now or was not historically subject to marine erosion, but the toe of which lies within an area otherwise identified in Public Resources Code Section 30603(a)(1) or (a)(2).[1]

The toe of the bluff at the subject site experiences active marine erosion and terminates direct on a beach, and thus clearly qualifies as a coastal bluff. However, it is important to emphasize that the Commission defines a coastal bluff not exclusively based on the presence of marine erosion, but also based on a landform's proximity to the coast and/or to important coastal resources. The delineation of the coastal bluff edge is pertinent not only to geologic hazards concerns but also to the potential for development to affect other protected resources, including visual/scenic quality, coastal landforms, and sensitive habitats.

[1] Areas identified in Coastal Act Section 30603(a)(1) and (2) include those within 300 feet of a beach or the mean high tide line, within 100 feet of a wetland, estuary or stream, etc.

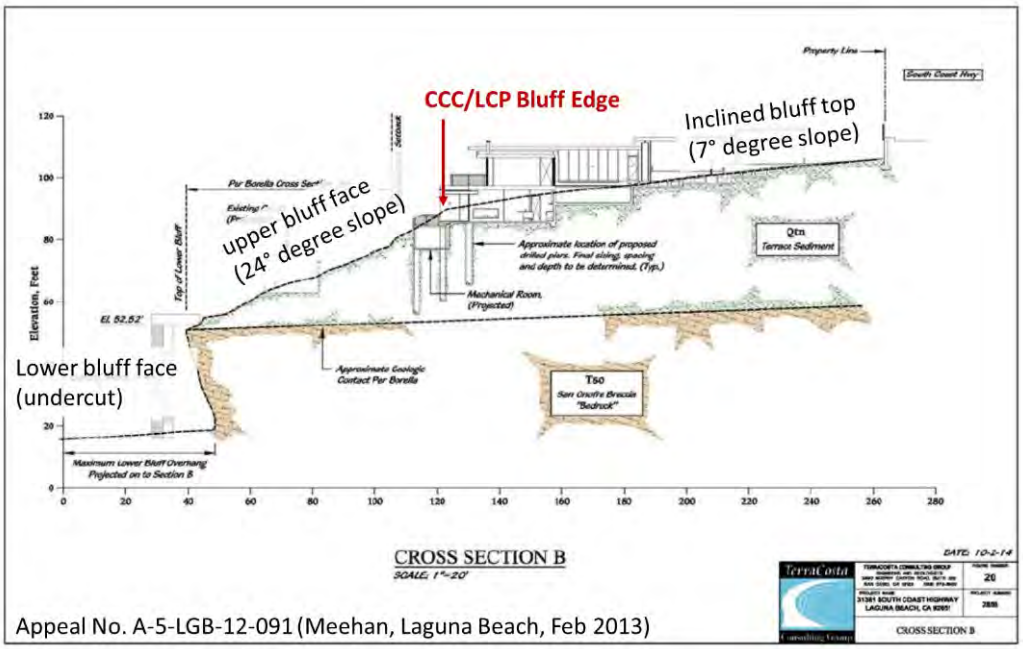


Figure 3: Cross-section of a composite coastal bluff with steep lower sea cliff (composed of resistant rock) and more gently-sloping upper bluff (composed of terrace deposits).

In numerous previous determinations, the Commission has interpreted the Section 13577(h) and similar definitions in LCPs to mean that a coastal bluff encompasses the entire slope between an upland area and the beach or shore, not just the steepest portion of the slope or the part of the slope experiencing marine erosion. Many coastal bluffs consist of a steep lower bluff, or sea cliff, where marine erosion is occurring, as well as a more gently sloping upper bluff where subaerial erosion processes also contribute to the bluff profile. An example of one such coastal bluff is shown in **Fig. 3**, above. The location of the Commission-determined bluff edge is indicated at the top of the upper bluff slope. In this example, at a location where the bluff top itself is inclined, the bluff edge is the point beyond which the downward gradient exceeds the general gradient of the bluff top.

Bluff Edge Determination & Discussion

At the subject site, applying the LCP and Commission bluff edge definitions is complicated by the nature of the coastal landform. The project site is located on an arm of the coastal mountains where it intersects the coast, and lacks the level "bluff top" (often an uplifted marine terrace) characteristic of many coastal locations. Nonetheless, as shown in **Figs. 4** and **5** (below), the inclination of the local landform increases substantially moving seaward across the site, with a major change in slope ("slope break") occurring just seaward of Sunset Way.

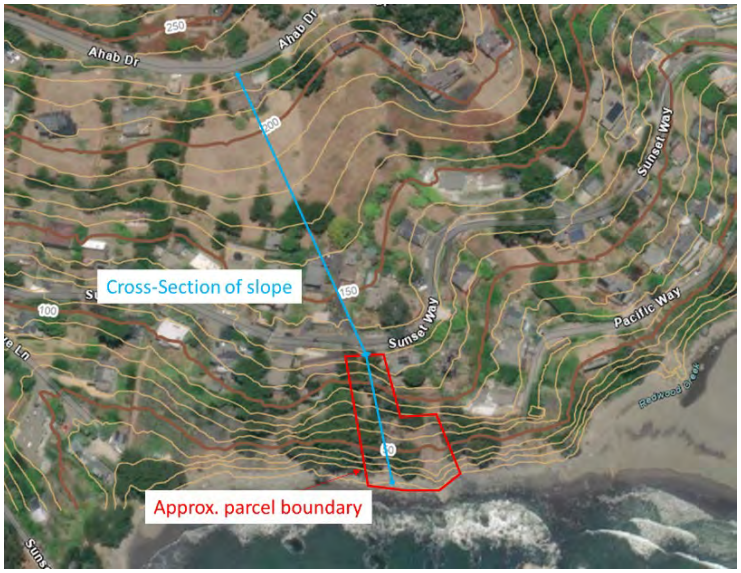
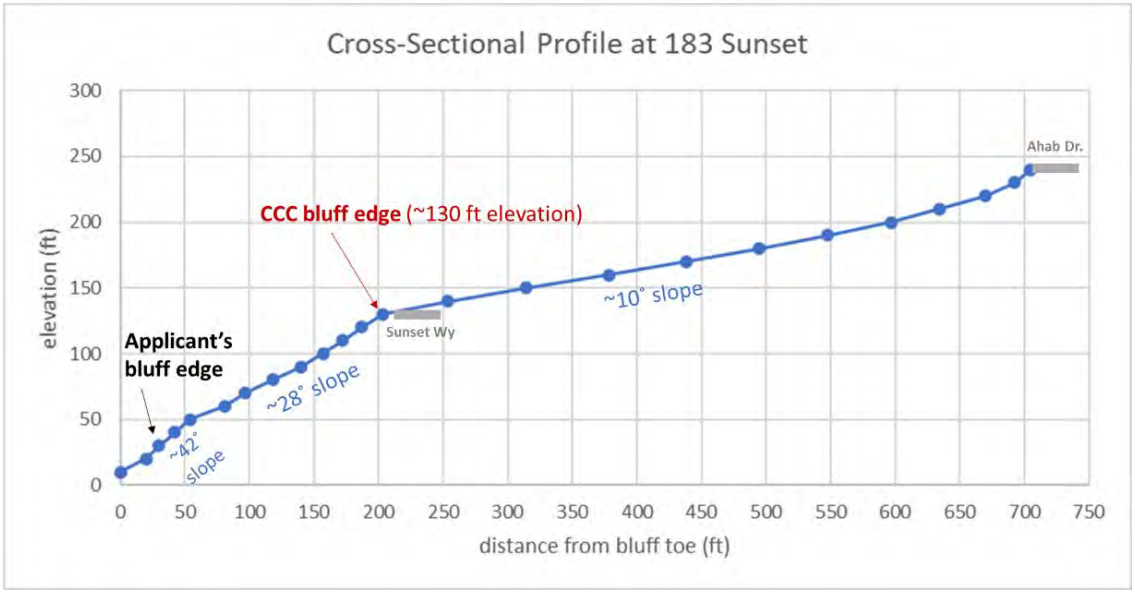


Figure 4 (left). Aerial image of project area with topographic contours. Contour spacing decreases seaward of Sunset Wy., indicating steeper slopes. (Source: https://gis.marinpublic.com/arcgis/rest/services)

Figure 5 (below)**:** Cross-sectional profile of the coastal bluff at the project site based on topographic contours shown in Fig. 4.

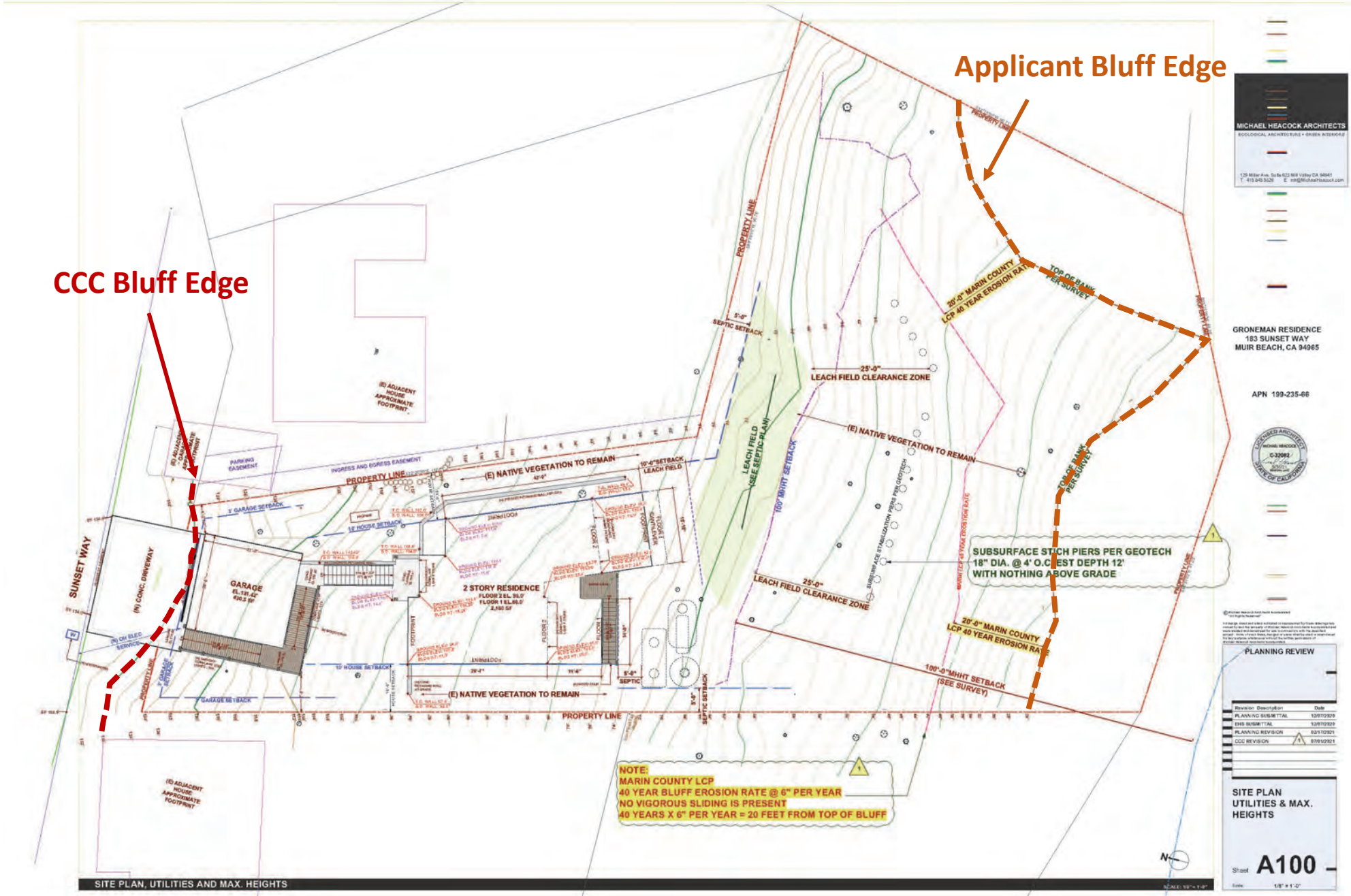


The applicant's geologic reports (Refs. 1, 2) identify the bluff edge as the top of the steep lower portion of the bluff, at elevations ranging from +26 – 34 ft MSL across most of the site and increasing to +56 ft MSL on the southeastern flank (**Figs. 1, 2**). This bluff edge line appears to correspond to an erosional scarp associated with recent marine erosion of the bluff toe, and as such is important for the evaluation of potential bluff retreat over the life of the proposed project. However, the applicant's bluff edge delineation does not account for the long upper bluff slope that comprises most of the property (the upper ~100 feet of elevation), nor its relatively steep inclination (~2:1 h:v), which, beginning just seaward of Sunset Way, significantly exceeds that of the gentler slope inland of the road (~6:1 h:v). In the context of the larger local landform, there is a *second* significant slope break, inland and uphill of the applicant's bluff edge line, that represents the point "beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff", per the Commission and County bluff edge definitions. In my judgement, this upper slope break, at approximately +132 ft elevation,

best represents the bluff edge as defined in Section 13577(h) of the Commission's regulations. Applying the LCP bluff edge definition, the bluff edge determination also should account for prior grading and discount any fill that has been placed near or over historic/natural bluff edge. According to Ref. (1), several feet of fill was placed along the downslope edge of Sunset Way, and it is likely that the grading of the road also altered the natural topography at or near the original bluff edge. Without knowing the exact landform modifications that took place, it is difficult to identify the "original" or "natural" bluff edge, and I recommend the use of the existing 132 ft elevation contour, as shown in the applicant's site plan, as the bluff edge reflecting current topography.

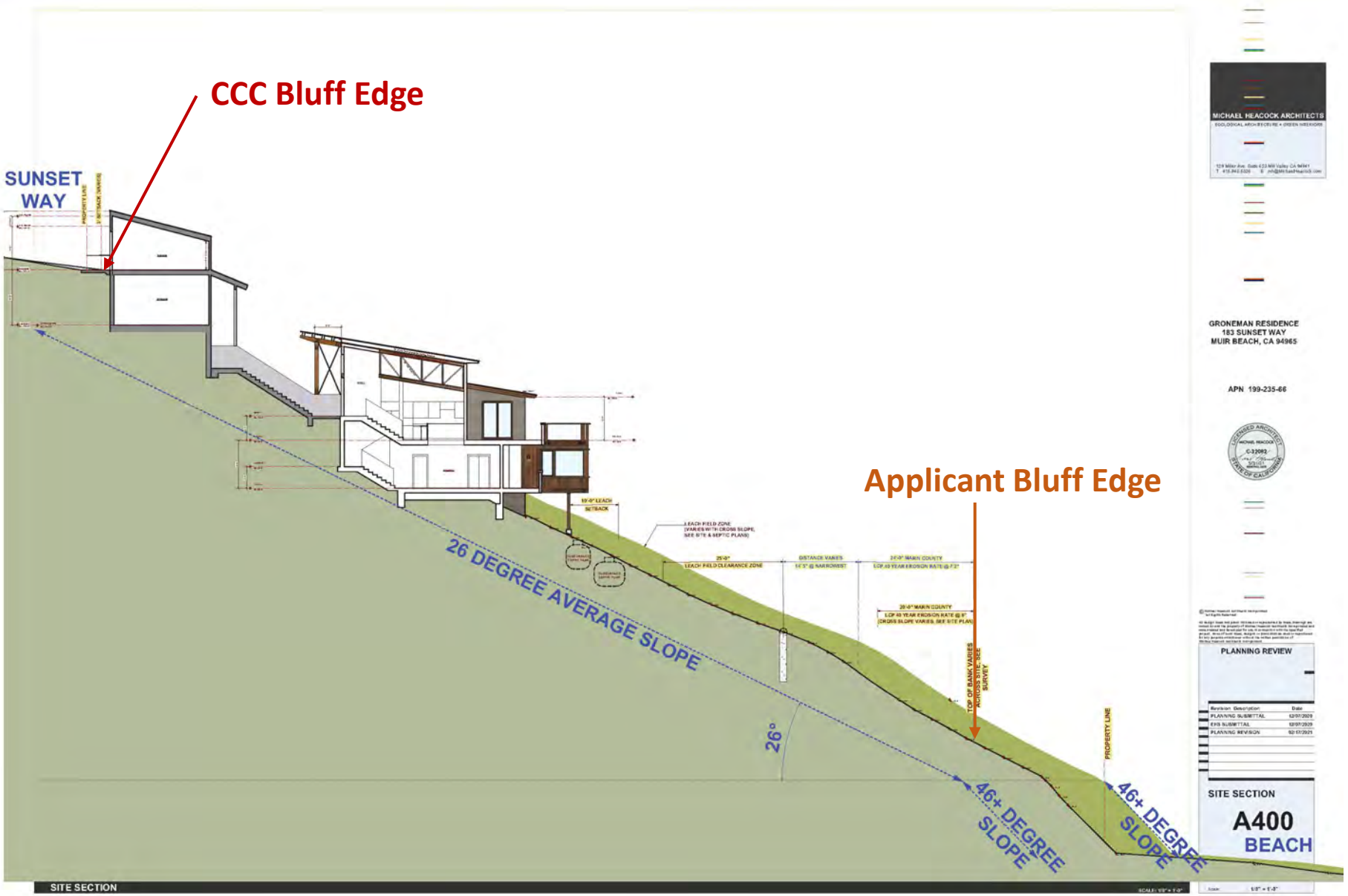
As laid out in the LCP and Section 13577(h), the topographic criterion I have used to define the bluff edge ("that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff") is to apply in cases where the bluff edge is "rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face". The bluff profile at the subject site lacks a single, abrupt transition point from a relatively level surface to a steep cliff face; rather, the transition occurs gradually, through several smaller changes in slope. This condition is consistent with a bluff edge that is "rounded away" from the cliff face. Moreover, the relatively steep gradient of the slope below Sunset Way appears to be maintained by a combination of marine (wave attack at the bluff toe) and subaerial erosion processes (landsliding, surface water flow, etc.). Based on the site observations of Refs. (1) and (2) and my own site visit, erosion at the bluff toe appears to have triggered several modest slides and surficial failures on the lower portion of the upper slope, and it is likely similar or larger slope erosion events triggered by marine erosion have occurred in the past. In my estimation, the relatively steep upper bluff slope occupied by the subject property has likely been shaped by recurrent shallow landslides over time, and is the result, at least partially, of erosional processes related to the presence of the steeper portion of the lower bluff.

Figure 1 – Site Plan with Bluff Edges



(modified from Micheal Heacock Architects, 2021)

Figure 2 – Site Cross-section with Bluff Edges



(modified from Micheal Heacock Architects, 2021)