PRINTED: 8/26/25, 12:23 PM

GENERAL NOTES

1. ALL WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE LOCAL BUILDING CODES AND REGULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR PERMITS APPLICABLE TO SPECIFIC TRADES OR SUBCONTRACTORS.
2. CONTRACTOR WILL HAVE EXAMINED THE PREMISES AND SITE SO AS TO COMPARE THEM WITH THE DRAWINGS AND WILL HAVE SATISFIED SELF AS TO THE CONDITION OF EXISTING WORK AND ADJACENT PROPERTY PRIOR TO SUBMISSION OF BID. NO ALLOWANCES WILL SUBSEQUENTLY BE MADE ON BEHALF OF THE CONTRACTOR BY REASON OF ANY OMISSION ON THEIR PART TO INCLUDE THE COSTS OF ALL ITEMS OF WORK, EITHER LABOR OR MATERIALS, WHETHER THEY ARE OR ARE NOT ESPECIALLY OR PARTICULARLY SHOWN OR NOTED BUT WHICH ARE IMPLIED OR REQUIRED TO ATTAIN THE COMPLETED CONDITIONS PROPOSED IN THE DRAWINGS.
3. ALL SUBCONTRACTORS SHALL INSPECT THE SITE AND SHALL CONVEY ANY QUESTIONS REGARDING DESIGN INTENT AND SCOPE OF WORK TO THE GENERAL CONTRACTOR WHO SHALL REPORT TO THE ARCHITECT PRIOR TO SUBMITTING BID AND PRIOR TO COMMENCING WORK.
4. CONTRACTOR SHALL COORDINATE THE WORK OF THE VARIOUS TRADES AND SUBCONTRACTORS AND SHALL BE RESPONSIBLE FOR ANY ACTS, OMISSIONS, OR ERRORS OF THE SUBCONTRACTORS AND OF PERSONS DIRECTLY OR INDIRECTLY EMPLOYED BY THEM.
5. CONTRACTOR TO ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS INCLUDING SAFETY OF PERSONS AND PROPERTY FOR THE DURATION OF THE PROJECT.
6. CONTRACTOR TO CONFORM TO HOMEOWNERS ASSOCIATION RULES AND GUIDELINES.
7. CONTRACTOR TO NOTIFY ARCHITECT IMMEDIATELY AND PRIOR TO ORDERING OF ALL LONG LEAD ITEMS AND OF APPROXIMATE DELIVERY DATES.
8. ALL CONSTRUCTION MATERIALS AND SUPPLIES TO BE STORED, HANDLED, AND INSTALLED ACCORDING TO MANUFACTURERS' RECOMMENDATIONS.
9. IF ERRORS OR OMISSIONS ARE FOUND IN THE DRAWINGS THEY SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
10. DRAWINGS SCHEMATICALLY INDICATE NEW CONSTRUCTION. THE CONTRACTOR SHOULD ANTICIPATE, BASED ON EXPERIENCE, A REASONABLE NUMBER OF ADJUSTMENTS TO BE NECESSARY TO MEET THE DESIGN OBJECTIVES AND SHOULD CONSIDER SUCH ADJUSTMENTS AS INCLUDED IN THE SCOPE OF WORK.
11. WHEN SPECIFIC FEATURES OF CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS OR CALLED FOR IN THE GENERAL NOTES, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS SIMILAR CONDITIONS.
12. ALL DIMENSIONS TO BE TAKEN FROM NUMERIC DESIGNATIONS ONLY; DIMENSIONS ARE NOT TO BE SCALED OFF DRAWINGS.
13. THESE NOTES TO APPLY TO ALL DRAWINGS AND GOVERN UNLESS MORE SPECIFIC REQUIREMENTS ARE INDICATED APPLICABLE TO PARTICULAR DIVISIONS OF THE WORK. SEE SPECIFICATIONS AND GENERAL NOTES IN THE SUBSECTIONS OF THESE DRAWINGS.
15. CAULK AND SEAL OPENINGS IN BUILDING EXTERIOR 1/8" OR GREATER TO PREVENT AIR INFILTRATION.
17. ALL WALL FRAMING SHALL BE 2x4 @ 16" O.C. MINIMUM. U.O.N.
18. ALL GYPSUM BOARD SHALL BE 5/8" THICK, TYPE "X", U.O.N.
19. ALL GYPSUM AND/OR PLASTER SURFACES SHALL BE SMOOTH, CONTINUOUS, FREE OF IMPERFECTIONS, AND WITH NO VISIBLE JOINTS, U.O.N.
20. STRUCTURAL WOOD MEMBERS ADJACENT TO CONCRETE ARE TO BE PRESSURE TREATED DOUGLAS FIR.

ABBREVIATIONS

&	AND
∠	ANGLE
@	AT
Ø	DIAMETER
#	NUMBER
(D)	DEMOLISH
(E)	EXISTING
(N)	NEW
(R)	REPLACE IN KIND
A.B.	ANCHOR BOLT
ABV.	ABOVE
ADJ.	ADJACENT
A.F.F.	ABOVE FINISH FLOOR
AGGR.	AGGREGATE
ALN.	ALIGN
ALUM.	ALUMINUM
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
AV.	AUDIO VISUAL
BD.	BOARD
BET.	BETWEEN
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.O.	BOTTOM OF
B.O.W.	BOTTOM OF WALL
B.U.R.	BUILT-UP ROOFING
CAB.	CABINET
CEM.	CEMENT
CER.	CERAMIC
CLG.	CEILING
CLKG.	CAULKING
CLR.	CLEAR
C.M.U.	CONC. MASONRY UNIT
CL	CENTER LINE
C.O.	CENTER OF
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
DBL.	DOUBLE
DTL.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DN	DOWN
DR.	DOOR
DS.	DOWNSPOUT
DWG.	DRAWING
DWR.	DRAWER
E.	EAST
EA.	EACH
ELEC.	ELECTRICAL
ELEV.	ELEVATION
ENCL.	ENCLOSURE
EQ.	EQUAL
EQUIP.	EQUIPMENT
EXT.	EXTERIOR
F.C.	FINISH CEILING
F.D.	FLOOR DRAIN
F.F. & E.	FURNITURE, FIXTURE & EQUIP.
F.F.	FINISH FLOOR
FIN.	FINISH
FLR.	FLOOR
FLUOR.	FLUORESCENT
FIXT.	FIXTURE
F.O.	FACE OF
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.S.	FACE OF STUD
FNDN.	FOUNDATION
FT.	FOOT OR FEET
FTG.	FOOTING
FURR.	FURRING
GALV.	GALVANIZED
GA.	GAGE
G.F.I.C.	GROUND FAULT INTERCEPTOR CIRCUIT
GL.	GLASS
GR.	GRADE
GRND.	GROUND
GSM.	GALVANIZED SHEET METAL
GYP.	GYPSUM
H.B.	HOSE BIB
H.C.	HOLLOW CORE
HDWD.	HARDWOOD
HDWR.	HARDWARE
HT.	HEIGHT
HORIZ.	HORIZONTAL
HR.	HOUR
IN.	INCH OR INCHES.
INSUL.	INSULATION
INT.	INTERIOR
LAM.	LAMINATE
LAV.	LAVATORY
L.O.	LINE OF
LT.	LIGHT
MAX.	MAXIMUM
MED. CAB.	MEDICINE CABINET
MECH.	MECHANICAL
MEMB.	MEMBRANE
MTL.	METAL
MTD.	MOUNTED
MFR.	MANUFACTURER
MIN.	MINIMUM
MIR.	MIRROR
MISC.	MISCELLANEOUS
N.	NORTH
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O/	OVER
O.A.	OVERALL
O.A.E.	OR APPROVED EQUAL
OBS.	OBSCURE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OPNG.	OPENING
OPP.	OPPOSITE
O.R.B.	OIL RUBBED BRONZE
P.G.	PAINT GRADE
PL.	PLATE
PLAM.	PLASTIC LAMINATE
PLYWD.	PLYWOOD
PR.	PAIR
PL	PROPERTY LINE
P.T.	PRESSURE TREATED
PTD.	PAINTED
R.	RISER
RAD.	RADIUS
R.D.	ROOF DRAIN
REC.	RECOMMENDATION
RDWD.	REDWOOD
REF.	REFERENCE
REFR.	REFRIGERATOR
REINF.	REINFORCED
REQ.	REQUIRED
RESIL.	RESILIENT
R.L.	RAIN LEADER
RM.	ROOM
R.O.	ROUGH OPENING
S.	SOUTH
S.C.	SOLID CORE
SCHED.	SCHEDULE
SD	SMOKE DETECTOR
SECT.	SECTION
S.G.	STAIN GRADE
SHR.	SHOWER
SHT.	SHEET
SIM.	SIMILAR
SL.	SLOPE
S.L.D.	SEE LANDSCAPE DRAWINGS
S.O.G.	SLAB ON GRADE
SPEC.	SPECIFICATION
SQ.	SQUARE
S.S.D.	SEE STRUCTURAL DRAWINGS
S.S.	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
STOR.	STORAGE
STRUC.	STRUCTURAL
SYM.	SYMMETRICAL
T.	TREAD
T.B.	TOWEL BAR
TEL.	TELEPHONE
T.&G.	TONGUE AND GROVE
THK.	THICK
TMPR.	TEMPERED
T.O.	TOP OF
T.O.P.	TOP OF PAVEMENT
T.O.W.	TOP OF WALL
T.P.H.	TOILET PAPER HOLDER
T.S.	TUBULAR STEEL
T.V.	TELEVISION
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
V.C.T.	VINYL COMPOSITION TILE
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
W.	WEST
W/	WITH
WD.	WOOD
W/O	WITHOUT
W.P.	WATERPROOFING
WT.	WEIGHT

SYMBOL

1 AX.X	DRAWING/DETAIL NUMBER DRAWING OR DETAIL SHEET
1 AX.X	SECTION/ ELEVATION NUMBER BUILDING SECTION SHEET
1 AX.X	INTERIOR ELEVATION NUMBER INTERIOR ELEVATION SHEET
000	DOOR TAG
000	WINDOW TAG
1	GENERAL SCHEDULE TAG
1	REVISION TAG
A-A	WALL TYPE TAG, SEE LEGEND A820
	WORKPOINT OR DATUM
	THRESHOLD
	MATCHLINE
	ALIGN
	HIDDEN ABOVE
	HIDDEN BELOW
	WALKLINE ON STAIRS
	PROPERTY LINE
	SETBACK
	DOOR/WINDOW OPERATION
	CENTER LINE
	BREAK LINE

WALL TYPES

NOTE:
2. SEE SHEET A820 FOR FINISH ASSEMBLIES

DEMO WALLS

DEMOLISHED WALL

EXISTING WALLS

EXISTING WALL

NEW GENERIC WALLS

NEW WALL

NEW EXTERIOR WALLS

W-A: WOOD WUI - GYP. BD.
V-A: WOOD RAIN SCREEN - GYP. BD.
U-A ADHERED MASONRY - GYP.
T-A: ANCHORED MASONRY - GYP. BD.
S-F: STUCCO - TILE
S-A: STUCCO - GYP. BD.
R-A: CONCRETE - GYP. BD.

NEW INTERIOR WALLS

G-A: WOOD PANEL - GYP. B.D
F-A: TILE OR STONE - GYP. BD.
E-A: WATER PROOF PLASTER - GYP. BD.
D-D: VENEER PLASTER & GYP. BD. BOTH SIDES
D-A: VENEER PLASTER & GYP. BD. - GYP. BD.
C-B: DBL. GYP. BD. ON RC CHANNELS - GYP. BD.
B-B: DBL. GYP. BD. BOTH SIDES
A-A: GYP. BD. TWO SIDES
A: GYP. BD. ONE SIDE, FURRING
B-B: DBL. GYP. BD. BOTH SIDES, 2 HR RATED SEE DTL. 2/ A940
A-A: GYP. BD. TWO SIDES, 1 HR RATED SEE DTL. 1/A940

MATERIAL LEGEND

STRUCT. CONCRETE
NON-STRUCT. CONCRETE
CEMENTATIOUS TOPPING SLAB
FINISH WOOD
BATT INSULATION
RIGID FOAM INSULATION
SPRAY FOAM INSULATION
CUT MASONRY OR STONE
EARTH NEW / BACK FILL
EARTH EXISTING
ROCK OR GRAVEL
SAND
CEMENT PLASTER (STUCCO)
GYP. BED
PLYWOOD
ENGINEERED WOOD FLOORING
GLASS
SOUND MAT
CORK
DRAIN MAT
TILE W.P. AND CLEAVAGE MEMBRANE
FLUID APPLIED ROOF MEMBRANE, POST APPLIED FOUNDATION W.P., DOOR PAN FLASHING
PRE-APPLIED W.P. FOUNDATION MEMBRANE
MULTI PLY ROOF
FLUID APPLIED AIR BARRIER
FLUID APPLIED FLASHING
WOOD FRAMING LUMBER
WOOD BLOCKING

PROJECT TEAM

ARCHITECT:
BUTLER ARMSDEN ARCHITECTS
1420 SUTTER ST., FIRST FLOOR
SAN FRANCISCO, CA 94109
T 415-674-5554
E INFO@BUTLERARMSDEN.COM

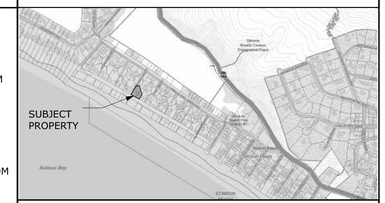
SURVEYOR:
MERIDIAN SURVEYING ENGINEERING, INC.
777 GRAND AVENUE #202
SAN RAFAEL, CA 94901
T 415-456-5450
E STAN@MERIDIANSURVEY.COM

GEOTECHNICAL ENGINEER:
MILLER PACIFIC ENGINEERING GROUP
504 REDWOOD BLVD, SUITE 220
NOVATO, CA 94947
T 415-382-3444
E RCANFIELD@MILLERPAC.COM

SEPTIC ENGINEER:
AYS ENGINEERING GROUP, INC.
P.O. BOX 5693
PETALUMA, CA 94955
T 707-763-6620
E TROY@AYSENGINEERING.COM

BIOLOGIST:
WRA, INC.
2169-G EAST FRANCISCO BLVD.
SAN RAFAEL, CA 94901
T 415-871-3717
E LAZAROTTI@WRA-CA.COM

VICINITY MAP



PROJECT DATA

ADDRESS:	9 RAFAEL PATIO, STINSON BEACH, CA 94970
APN:	195-065-06
ZONING:	C-VSP-2
OCCUPANCY:	R3
CONSTRUCTION TYPE:	V-B
FLOOD ZONE:	VE
BASE FLOOD ELEVATION:	+21'-0" NAVD 88

AREA CALCULATIONS:	CONDITIONED	UNCONDITIONED
FIRST FLOOR AREA:		
RESIDENCE	245 SQ.FT.	-
GARAGE	-	529 SQ.FT.
SECOND FLOOR AREA:		
RESIDENCE	3,048 SQ.FT.	-
DECKS	-	1,590 SQ.FT.
TOTAL FLOOR AREA:	**3,293 SQ.FT.**	2,048 SQ.FT.
BUILDING AREA:	5,341 SQ.FT.	

DEVELOPMENT STANDARDS:	REQUIRED	EXISTING	PROPOSED
BUILDING HEIGHT: (ABOVE NATURAL GRADE)	25'-0" MAX.	±13'-6"	±24'-10"
SETBACKS:			
FRONT	N/A	55'-10"	82'-9"
REAR	N/A	12'-4"	20'-3"
WEST SIDE	N/A	26'-7"	15'-0"
EAST SIDE	N/A	42'-6"	15'-0"
LOT AREA:	N/A	15,000 SQ.FT.	15,000 SQ.FT.
LOT COVERAGE:	N/A	2,620 SQ.FT.	4,541 SQ.FT.
F.A.R.	N/A	2,033 SQ.FT. (.136)	3,293 SQ.FT. (.219)

CODES

2022 CA RESIDENTIAL CODE
2022 CA ENERGY CODE
2022 CA ELECTRICAL CODE
2022 CA MECHANICAL CODE
2022 CA PLUMBING CODE
MARIN COUNTY CODE

SCOPE OF WORK

REMOVE EXISTING SINGLE FAMILY RESIDENCE. NEW FEMA COMPLIANT SINGLE FAMILY HOME WITH 3 BEDROOMS, 4 1/2 BATHS, DETACHED TWO CAR GARAGE, AND TWO MAIN DECKS. NEW SEPTIC SYSTEM FOR PROPOSED HOME. REPAIR EXISTING WOOD PROPERTY LINE FENCES TO THE NORTH AND EAST. LANDSCAPING W/ NATIVE DROUGHT TOLERANT PLANTS AND PERMEABLE HARDSCAPE.

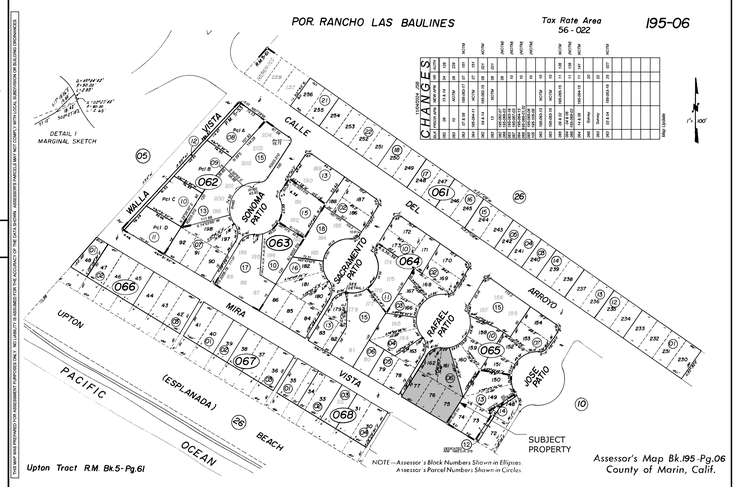
DEMOLITION NOTES

1. ALL DEMOLITION WORK TO BE CONDUCTED IN SUCH A MANNER AS TO PROTECT ADJACENT PROPERTY AND LANDSCAPE PLANTING TO REMAIN.
2. ASBESTOS CONTAINING MATERIALS IN EXISTING BUILDINGS TO BE IDENTIFIED AND REMOVED IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.
3. LEAD PAINTED MATERIALS IN EXISTING BUILDINGS TO BE IDENTIFIED AND REMOVED IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.
4. DEMOLISH ALL REDUNDANT HVAC EQUIPMENT, INCLUDING PIPING, DUCTWORK, RADIANT PANELS, AND BASEBOARD HEATERS. SAVE AND CATALOGUE DECORATIVE GRILLES FOR STORAGE AND RE-USE.
5. DEMOLISH REDUNDANT PLUMBING IN WALL OR FLOOR CAVITIES OPENED FOR CONSTRUCTION.
6. DEMOLISH ALL ABANDONED INTERIOR ELECTRICAL THROUGHOUT.
7. DEMOLISH ALL WINDOW COVERINGS AND RELATED HARDWARE,. REMOVE WINDOW HARDWARE, U.O.N.
8. AT DOORS TO BE DEMOLISHED OR REMOVED, REMOVE DOOR, HARDWARE, AND FRAME, U.O.N. AND SAVE FOR RE-USE.
9. DEMOLISH ALL FLOOR FINISHES, INCLUDING CARPET, VINYL, AND TILE. WOOD FLOORS TO REMAIN, U.O.N. PROTECT DURING CONSTRUCTION.
10. DEMOLISH ALL ABANDONED GAS LINES TO MAIN POINT OF ENTRY, U.O.N.
11. CONTRACTOR TO VERIFY BEARING AND NON-BEARING STATUS OF EXISTING CONSTRUCTION TO BE DEMOLISHED BEFORE PROCEEDING WITH WORK.

WUI NOTES

1. WUI COMPLIANCE REQUIREMENT: THIS PROJECT IS LOCATED IN A DESIGNATED WILDLAND-URBAN INTERFACE FIRE AREA AND SHALL COMPLY WITH ALL PROVISIONS OF CBC CHAPTER 7A. [CBC §701A.3, §701A.3.1]
2. ROOFING REQUIREMENTS: ALL ROOF ASSEMBLIES SHALL BE CLASS A, TESTED PER ASTM E108 OR UL 790, AND INSTALLED PER LISTING AND MANUFACTURER'S INSTRUCTIONS. [CBC §705A.1]
3. ROOF COVERING DETAILS: WHERE ROOF COVERINGS CREATE AN AIRSPACE OVER A COMBUSTIBLE DECK, INSTALL A 72 LB ASTM D3909 CAP SHEET OVER THE DECK. BIRD STOPS AND MUDDED RIDGE CAPS ARE REQUIRED TO PREVENT EMBER INTRUSION. [CBC §705A.2]
4. ROOF GUTTERS: GUTTERS SHALL BE PROVIDED WITH MEANS TO PREVENT ACCUMULATION OF LEAVES AND DEBRIS. [CBC §705A.4]
5. ATTIC AND CRAWL SPACE VENTILATION: VENTILATION OPENINGS SHALL BE COVERED WITH CORROSION-RESISTANT, NONCOMBUSTIBLE METAL MESH WITH 1/16" TO 1/8" OPENINGS, OR BE LISTED EMBER-RESISTANT VENTS TESTED TO ASTM E2886. [CBC §706A.2.1, §706A.3, §706A.3.2]
6. EXTERIOR WALL COVERINGS: EXTERIOR WALLS SHALL BE CLAD IN ONE OF THE FOLLOWING: NONCOMBUSTIBLE MATERIAL, IGNITION-RESISTANT MATERIAL, FIRE-RETARDANT-TREATED WOOD (FRTW) LABELED FOR EXTERIOR USE, OR MATERIAL COMPLYING WITH SFM STANDARD 12-7A-1 OR LISTED ON THE SFM WUI PRODUCTS LISTING FOR EXTERIOR WALL SIDING [CBC §707A.3, §707A.3.1] REFER TO: SFM WUI PRODUCT LISTING FOR EXTERIOR SIDING
7. EAVE, SOFFIT & PORCH CEILING PROTECTION: EXPOSED UNDERSIDES OF EAVES AND PORCH CEILINGS MUST COMPLY WITH IGNITION-RESISTANT CONSTRUCTION METHODS, SUCH AS USE OF TYPE X GYPSUM BOARD, NONCOMBUSTIBLE MATERIAL, OR APPROVED TESTED ASSEMBLIES. [CBC §707A.6, §707A.7]
8. UNDERSIDE OF FLOOR PROJECTIONS: CANTILEVERED FLOORS MUST BE PROTECTED USING ONE OF THE APPROVED IGNITION-RESISTANT OR NONCOMBUSTIBLE ASSEMBLIES PER CBC 707A.8. [CBC §707A.8]
9. UNDERFLOOR AREAS: ELEVATED OR OVERHANGING UNDERFLOOR AREAS SHALL BE ENCLOSED TO GRADE OR PROTECTED WITH APPROVED WUI-COMPLIANT ASSEMBLIES. [CBC §707A.9]
10. EXTERIOR GLAZING: ALL EXTERIOR WINDOWS, GLAZED DOORS, AND SKYLIGHTS SHALL COMPLY WITH WUI STANDARDS, INCLUDING ONE TEMPERED PANE, FIRE-RATED GLASS, GLASS BLOCK, OR TESTING TO SFM STANDARD 12-7A-2. [CBC §708A.2.1]
11. OPERABLE SKYLIGHT PROTECTION: OPERABLE SKYLIGHTS SHALL INCLUDE A NONCOMBUSTIBLE SCREEN WITH OPENINGS NO GREATER THAN 1/8". [CBC §708A.2.2]
12. DECKING MATERIALS: DECKING SURFACES, STAIR TREADS, AND LANDINGS SHALL BE CONSTRUCTED OF: IGNITION-RESISTANT MATERIALS, NONCOMBUSTIBLE MATERIALS, FIRE-RETARDANT-TREATED WOOD LABELED FOR EXTERIOR USE, TESTED DECKING ASSEMBLIES PER SFM STANDARD 12-7A-4, MATERIALS SHALL BE INSTALLED PER APPROVED LISTING OR RECOGNIZED STANDARD. [CBC §709A.3] REFER TO: SFM WUI PRODUCT LISTING FOR DECKING
13. VEGETATION MANAGEMENT: PRIOR TO FINAL APPROVAL, SITE VEGETATION SHALL COMPLY WITH CALIFORNIA FIRE CODE §4906 AND PUBLIC RESOURCES CODE §4291 OR GOVERNMENT CODE §51182: [CBC §701A.5]. MAINTAIN DEFENSIBLE SPACE PER LOCAL JURISDICTION REQUIREMENTS.

ASSESSOR'S MAP



SHEET INDEX

SHEET	NAME	DESIGN REVIEW
A000	TITLE SHEET	X
A010	FLOOR AREA CALCULATIONS	X
A020	NEIGHBORHOOD CONTEXT	X
A030	PROPOSED MATERIAL BOARD	X
A031	EXTERIOR RENDERINGS	X
A110	SURVEY	X
A111	SURVEY	X
A120	EXISTING & DEMOLITION SITE PLAN	X
A130	PROPOSED SITE PLAN	X
A210	PROPOSED FIRST FLOOR PLAN	X
A211	PROPOSED SECOND FLOOR PLAN	X
A212	PROPOSED ROOF PLAN	X
A310	PROPOSED EXTERIOR ELEVATIONS	X
A311	PROPOSED EXTERIOR ELEVATIONS	X
A320	PROPOSED SECTIONS	X
L110	LANDSCAPE/EXT. LIGHTING PLAN FIRST FLOOR	X
L111	LANDSCAPE/EXT. LIGHTING PLAN SECOND FLOOR	X
L120	LANDSCAPE SPECIFICATION	X
L210	GRADING, DRAINAGE, & EROSION CONTROL	X
L211	STORMWATER & EROSION CONTROL NOTES	X
S1	SEPTIC SYSTEM LAYOUT PLAN	X
S2	SEPTIC SYSTEM DETAILS	X

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

TITLE SHEET

A000

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 Current 9RafaelPatio/2410_Current_9RafaelPatio_V28

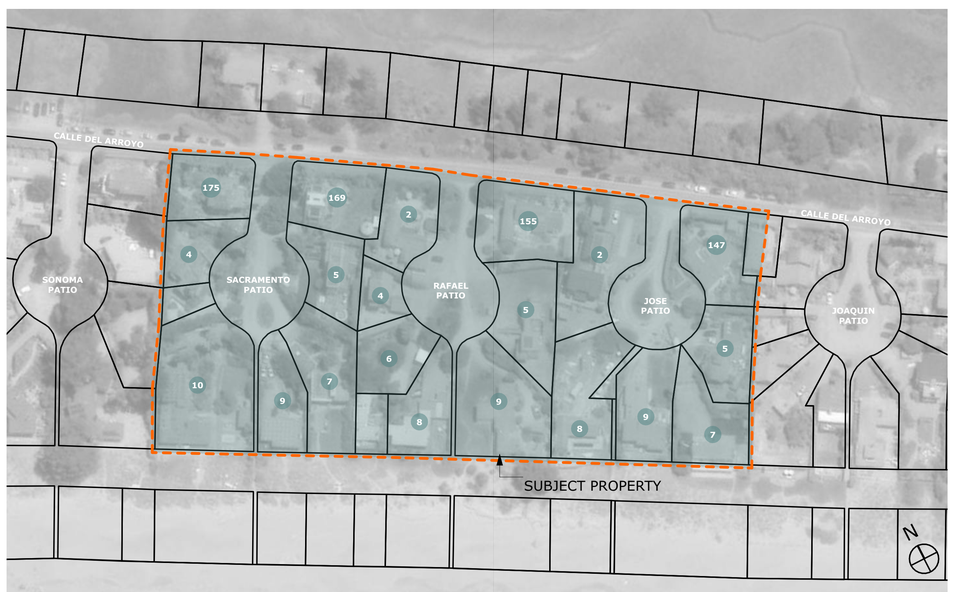
PRINTED:8/25/25, 6:13 PM

NEIGHBORHOOD FAR STUDY

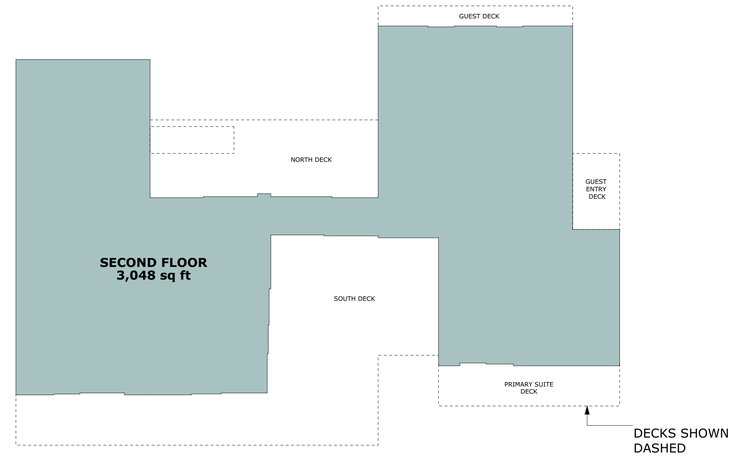
ADDRESS	PARCEL #	TOTAL FLOOR AREA (sqft)	TOTAL LOT AREA (sqft)	FAR (%)	NOTES
RAFAEL PATIO					
9 RAFAEL PATIO	195-065-06	3293	15000	22.0	PROPOSED (NOT INCLUDED IN CALCS)
8 RAFAEL PATIO	195-065-05	1915	8999	21.3	DIRECT NEIGHBOR, OCEANFRONT
6 RAFAEL PATIO	195-064-06	988	3005	32.9	OCEANFRONT
4 RAFAEL PATIO	195-064-03	1060	4791	22.1	
2 RAFAEL PATIO	195-064-02	1206	7710	15.6	
155 CALLE DEL ARROYO	195-065-15	2212	10410	21.2	
5 RAFAEL PATIO	195-065-10	1076	9104	11.8	DIRECT NEIGHBOR
JOSE PATIO					
7 JOSE PATIO	195-102-12	2832	8930	31.7	OCEANFRONT
9 JOSE PATIO	195-102-16	1463	8276	17.7	OCEANFRONT
8 JOSE PATIO	195-065-13	1267	12316	10.3	DIRECT NEIGHBOR, OCEANFRONT
2 JOSE PATIO	195-065-07	2522	11325	22.3	
147 CALLE DEL ARROYO	195-102-15	1208	8822	13.7	
5 JOSE PATIO	195-102-17	1292	8015	16.1	
SACRAMENTO PATIO					
7 SACRAMENTO PATIO	195-064-15	1833	8537	21.5	OCEANFRONT
9 SACRAMENTO PATIO	195-064-13	1620	6926	23.4	OCEANFRONT
10 SACRAMENTO PATIO	195-063-16	2896	18259	15.9	OCEANFRONT
4 SACRAMENTO PATIO	195-063-18	2984	6403	46.6	
175 CALLE DEL ARROYO	195-063-02	1927	8145	23.7	
169 CALLE DEL ARROYO	195-064-10	2026	8973	22.6	
5 SACRAMENTO PATIO	195-064-11	2227	7492	29.7	

MIN FAR	10.3
MAX FAR	46.6
AVG FAR	**22.1**
AVG OCEANFRONT FAR	**21.8**
STDEV	8.6

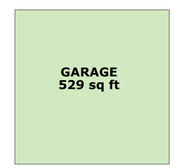
1 NEIGHBORHOOD FAR CALCULATIONS

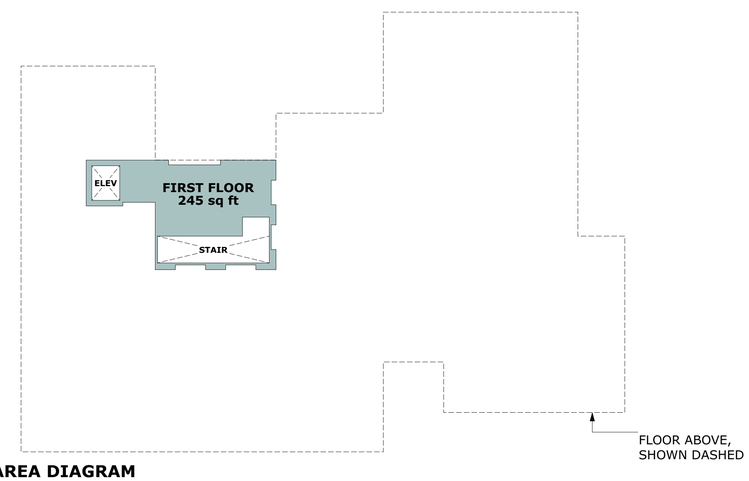


1 FAR STUDY AREA



SECOND FLOOR AREA DIAGRAM





FIRST FLOOR AREA DIAGRAM

AREA CALCULATIONS:

ZONE:	AREA (SQ.FT.)	NOTES
GARAGE:	529	540 SQ.FT. EXCLUDED FROM F.A.R. PER MARIN COUNTY M.C., SECTION 22.130.030
FIRST FLOOR:	245* (C)	
SECOND FLOOR:	3,293* (C)	
SOUTH DECK:	954	
NORTH DECK:	341	
GUEST DECK:	88	
GUEST ENTRY DECK	79	
PRIMARY SUITE DECK:	165	
TOTAL CONDITIONED AREA:	**3,293**	
TOTAL UNCONDITIONED AREA:	529	
TOTAL DECK AREA:	1,627	
LOT SIZE:	15,000	
F.A.R.:	**3,293 (.22)**	PER MARIN COUNTY M.C., SECTION 22.02.285I

* (C) - CONDITIONED AREA

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT FEDERICO ENGEL No. C-32207 Ren. 1/31/2027 STATE OF CALIFORNIA

FLOOR AREA CALCULATIONS

A010

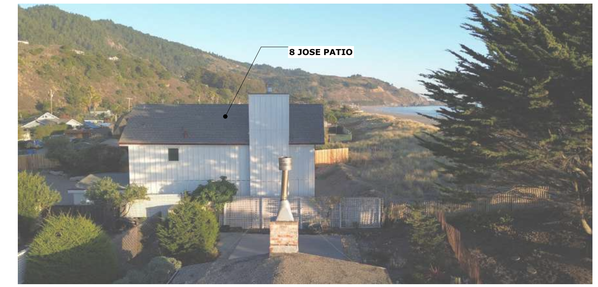
BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM

7 AERIAL VIEW NORTH

6 AERIAL VIEW SOUTH

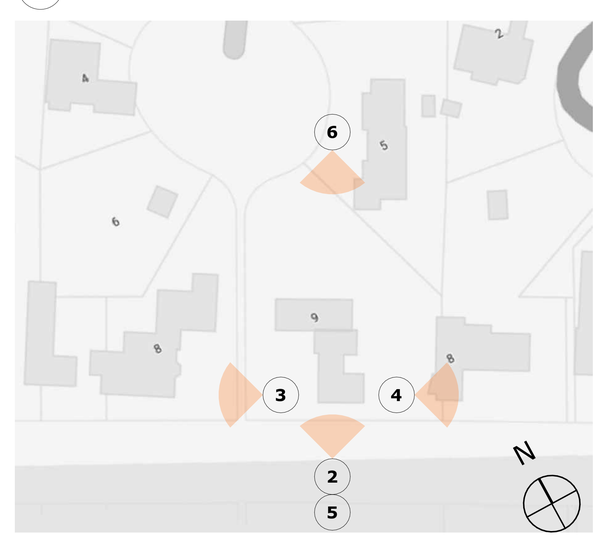
5 AERIAL VIEW NORTH



4 VIEW EAST OF ADJACENT NEIGHBOR

3 VIEW WEST OF ADJACENT NEIGHBOR

2 VIEW NORTH OF SUBJECT PROPERTY



1 PHOTO MAP

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

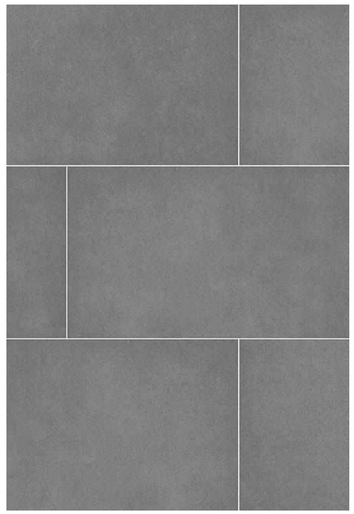
NEIGHBORHOOD CONTEXT

A020

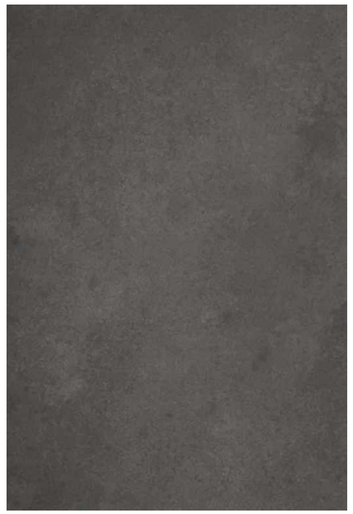
BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM

F. CLEAR GLAZED GLASS
EXTERIOR DOORS & WINDOWS



E. NATURAL STONE
SITE PAVING



D. ANODIZED BRONZE FINISH ON
ALUMINUM DOORS, WINDOWS,
TRIM, & RAILINGS

C. BOARD FORM CONCRETE ON
STRUCTURAL AND BREAKAWAY
WALLS

B. WEATHERED WOOD SIDING
GARAGE FACADE

A. NATURAL CEDAR SIDING
FACADE & FENCING

1 PROPOSED FRONT VIEW
NOT TO SCALE

BUTLER ARMSDEN
ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

PROPOSED
MATERIAL
BOARD

A030

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM

2 PROPOSED REAR VIEW

NOT TO SCALE

1 PROPOSED FRONT VIEW

NOT TO SCALE

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

BUTLER ARMSDEN
ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

EXTERIOR RENDERINGS

A031

BASIS OF SURVEY

OLD REPUBLIC TITLE COMPANY PRELIMINARY REPORT ORDER NO. 0457026158, 591 REDWOOD HWY. SUITE 3150, MILL VALLEY, CA. 94941. DATED APRIL 26, 2024. (TEL: 415-388-8740, FAX: 415-383-0416)

MAP REFERENCES

[A] UPTON TRACT, 5 RECORD MAPS 62, MARIN COUNTY RECORDS.

BASIS OF ELEVATION

BASED ON OPUS SOLUTION
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) GEOID 18.

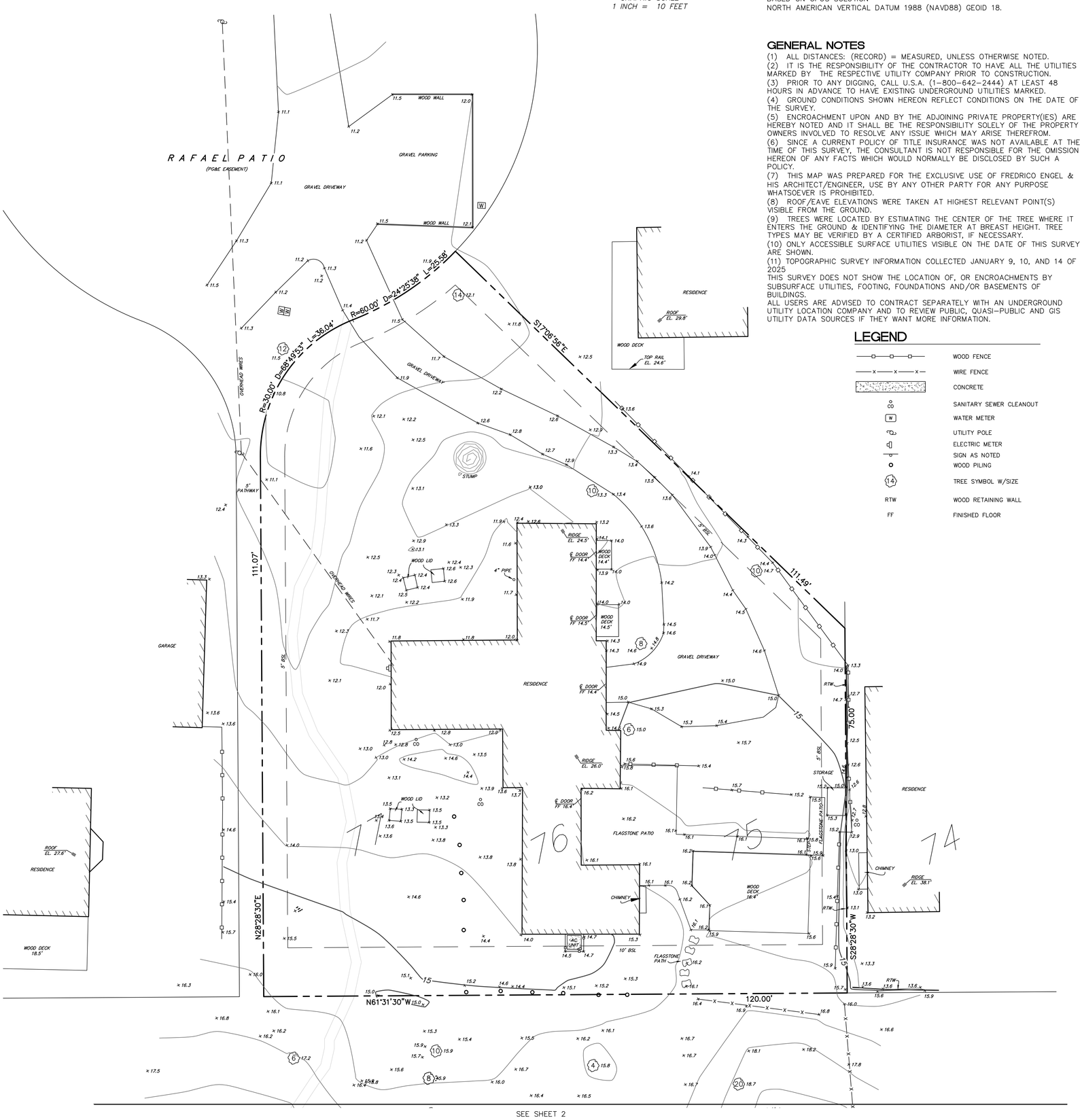
GENERAL NOTES

(1) ALL DISTANCES: (RECORD) = MEASURED, UNLESS OTHERWISE NOTED.
(2) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL THE UTILITIES MARKED BY THE RESPECTIVE UTILITY COMPANY PRIOR TO CONSTRUCTION.
(3) PRIOR TO ANY DIGGING, CALL U.S.A. (1-800-642-2444) AT LEAST 48 HOURS IN ADVANCE TO HAVE EXISTING UNDERGROUND UTILITIES MARKED.
(4) GROUND CONDITIONS SHOWN HEREON REFLECT CONDITIONS ON THE DATE OF THE SURVEY.
(5) ENCROACHMENT UPON AND BY THE ADJOINING PRIVATE PROPERTY(IES) ARE HEREBY NOTED AND IT SHALL BE THE RESPONSIBILITY SOLELY OF THE PROPERTY OWNERS INVOLVED TO RESOLVE ANY ISSUE WHICH MAY ARISE THEREFROM.
(6) SINCE A CURRENT POLICY OF TITLE INSURANCE WAS NOT AVAILABLE AT THE TIME OF THIS SURVEY, THE CONSULTANT IS NOT RESPONSIBLE FOR THE OMISSION HEREON OF ANY FACTS WHICH WOULD NORMALLY BE DISCLOSED BY SUCH A POLICY.
(7) THIS MAP WAS PREPARED FOR THE EXCLUSIVE USE OF FREDRICO ENGEL & HIS ARCHITECT/ENGINEER, USE BY ANY OTHER PARTY FOR ANY PURPOSE WHATSOEVER IS PROHIBITED.
(8) ROOF/EAVE ELEVATIONS WERE TAKEN AT HIGHEST RELEVANT POINT(S) VISIBLE FROM THE GROUND.
(9) TREES WERE LOCATED BY ESTIMATING THE CENTER OF THE TREE WHERE IT ENTERS THE GROUND & IDENTIFYING THE DIAMETER AT BREAST HEIGHT. TREE TYPES MAY BE VERIFIED BY A CERTIFIED ARBORIST, IF NECESSARY.
(10) ONLY ACCESSIBLE SURFACE UTILITIES VISIBLE ON THE DATE OF THIS SURVEY ARE SHOWN.
(11) TOPOGRAPHIC SURVEY INFORMATION COLLECTED JANUARY 9, 10, AND 14 OF 2025
THIS SURVEY DOES NOT SHOW THE LOCATION OF, OR ENCROACHMENTS BY SUBSURFACE UTILITIES, FOOTING, FOUNDATIONS AND/OR BASEMENTS OF BUILDINGS.
ALL USERS ARE ADVISED TO CONTRACT SEPARATELY WITH AN UNDERGROUND UTILITY LOCATION COMPANY AND TO REVIEW PUBLIC, QUASI-PUBLIC AND GIS UTILITY DATA SOURCES IF THEY WANT MORE INFORMATION.

LEGEND

	WOOD FENCE
	WIRE FENCE
	CONCRETE
CO	SANITARY SEWER CLEANOUT
W	WATER METER
	UTILITY POLE
	ELECTRIC METER
	SIGN AS NOTED
	WOOD PILING
14	TREE SYMBOL W/SIZE
RTW	WOOD RETAINING WALL
FF	FINISHED FLOOR

GRAPHIC SCALE
1 INCH = 10 FEET



7/31/2025

SITE SURVEY

9 RAFAEL PATIO
STINSON BEACH
APN 195-065-06 & 195-105-08
OFFICIAL RECORDS OF MARIN COUNTY
PREPARED AT THE REQUEST OF
FEDERICO ENGEL

MARIN COUNTY
JANUARY
CALIFORNIA
2025

MERIDIAN SURVEYING ENGINEERING, INC.
2858 VAN NESS AVENUE
SAN FRANCISCO, CA 94109
(415) 440-4131
777 GRAND AVENUE, #202
SAN RAFAEL, CA 94901
(415) 456-5450

SURVEY BY:	KR
DRAWN:	KR/AJ
APPROVED:	STG
SURVEY DATE:	1/2025
PROJECT NO.:	24092
REVISION DATE:	07/24/2025
SHEET	1 OF 2

COPYRIGHT 2025 BY MSE, INC. REPRODUCTION OR TRANSCRIPTION OF ALL OR PART OF THIS DOCUMENT WITHOUT EXPRESS WRITTEN PERMISSION IS PROHIBITED.

surveyrequest@meridiansurvey.com

APN: 195-065-06

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

DESIGN REVIEW SET

ISSUE:
DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT
FEDRICO ENGEL
No. C-32007
Rem. 9/31/2027
STATE OF CALIFORNIA

SURVEY

A110

BUTLER ARMSDEN ARCHITECTS
1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM
E INFO@BUTLERARMSDEN.COM
T 415-674-5554

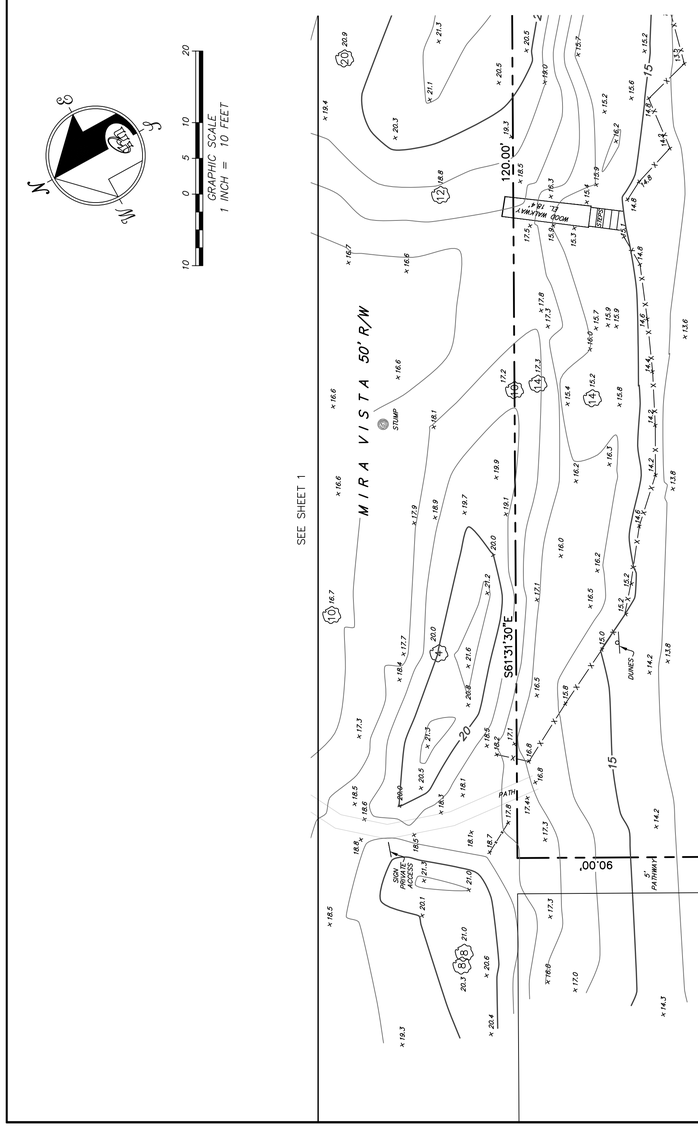
BASIS OF SURVEY
OLD REPUBLIC TITLE COMPANY PRELIMINARY REPORT ORDER NO. 0457026158, 591 REDWOOD HWY, SUITE 3150, MILL VALLEY, CA. 94941. DATED APRIL 26, 2024. (TEL: 415-388-8740, FAX: 415-383-0416)

MAP REFERENCES
[A] UPTON TRACT, 5 RECORD MAPS 62, MARIN COUNTY RECORDS.

BASIS OF ELEVATION
BASED ON OPUS SOLUTION
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) GEOID 18.

GENERAL NOTES
(1) ALL DISTANCES: (RECORD) = MEASURED, UNLESS OTHERWISE NOTED.
(2) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL THE UTILITIES MARKED BY THE RESPECTIVE UTILITY COMPANY PRIOR TO CONSTRUCTION.
(3) PRIOR TO ANY DIGGING, CALL U.S.A. (1-800-642-2444) AT LEAST 48 HOURS IN ADVANCE TO HAVE EXISTING UNDERGROUND UTILITIES MARKED.
(4) GROUND CONDITIONS SHOWN HEREON REFLECT CONDITIONS ON THE DATE OF THE SURVEY.
(5) ENCROACHMENT UPON AND BY THE ADJOINING PRIVATE PROPERTY(IES) ARE HEREBY NOTED AND IT SHALL BE THE RESPONSIBILITY SOLELY OF THE PROPERTY OWNERS INVOLVED TO RESOLVE ANY ISSUE WHICH MAY ARISE THEREFROM.
(6) SINCE A SURVEY IS NOT A PRODUCT OF TITLE INSURANCE WAS NOT AVAILABLE AT THE TIME OF THIS SURVEY, THE CONSULTANT IS NOT RESPONSIBLE FOR THE EXISTENCE OF ANY EASEMENTS OR ENCUMBRANCES WHICH MAY AFFECT THE PROPERTY SHOWN HEREON OR ANY FACTS WHICH WOULD NORMALLY BE DISCLOSED BY SUCH A POLICY.
(7) THIS MAP WAS PREPARED FOR THE EXCLUSIVE USE OF FREDRICO ENGEL & HIS ARCHITECT/ENGINEER, USE BY ANY OTHER PARTY FOR ANY PURPOSE WHATSOEVER IS PROHIBITED.
(8) ROOF/EAVE ELEVATIONS WERE TAKEN AT HIGHEST RELEVANT POINT(S) VISIBLE FROM THE GROUND.
(9) TREES WERE LOCATED BY ESTIMATING THE CENTER OF THE TREE WHERE IT ENTERS THE GROUND AND BY ESTIMATING DIAMETER AT BREAST HEIGHT. TREE TYPES MAY BE VERIFIED BY A CERTIFIED ARBORIST, IF NECESSARY.
(10) ONLY ACCESSIBLE SURFACE UTILITIES VISIBLE ON THE DATE OF THIS SURVEY ARE SHOWN.
THIS SURVEY DOES NOT SHOW THE LOCATION OF, OR ENCROACHMENTS BY SUBSURFACE UTILITIES, FOOTING, FOUNDATIONS AND/OR BASEMENTS OF BUILDINGS.
ALL USERS ARE ADVISED TO CONTACT SEPARATELY WITH AN UNDERGROUND UTILITY LOCATION COMPANY AND TO VERIFY WITH LOCAL—PUBLIC AND GIS UTILITY DATA SOURCES IF THEY WANT MORE INFORMATION.

LEGEND
- WOOD FENCE
- WIRE FENCE
- CONCRETE
- SANITARY SEWER CLEANOUT
- WATER METER
- UTILITY POLE
- ELECTRIC METER
- SIGN AS NOTED
- WOOD PILING
- TREE SYMBOL W/SIZE
- RTW WOOD RETAINING WALL
- FF FINISHED FLOOR



BUTLER ARMSDEN ARCHITECTS
1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM
E INFO@BUTLERARMSDEN.COM
T 415-674-5554

SITE SURVEY
9 RAFAEL PATIO
STINSON BEACH
APN 195-065-06 & 195-105-08
OFFICIAL RECORDS OF MARIN COUNTY

PREPARED AT THE REQUEST OF
FEDERICO ENGEL

MARIN COUNTY — CALIFORNIA
JANUARY — 2025

MERIDIAN SURVEYING ENGINEERING, INC.
2958 VAN NESS AVENUE
SAN FRANCISCO, CA 94109
(415) 440-4131

777 GRAND AVENUE, #202
SAN RAFAEL, CA 94901
(415) 456-5450

SURVEY BY:	KR	PROJECT NO.:	24092
DRAWN:	KR/AJ	REVISION DATE:	07/24/2025
APPROVED:	STG	SHEET	2 OF 2
FILE NAME:	---		
SURVEY DATE:	1/2025		

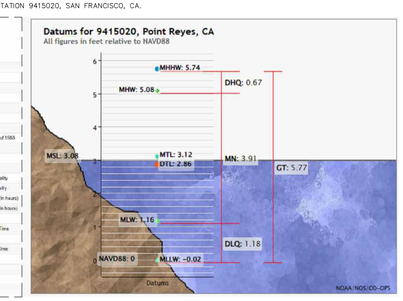
COPYRIGHT 2025 BY MSE, INC.: REPRODUCTION OR TRANSCRIPTION OF ALL OR PART OF THIS DOCUMENT WITHOUT EXPRESS WRITTEN PERMISSION IS PROHIBITED.

surveyrequest@meridiansurvey.com

MEAN HIGH HIGH WATER
MHHW AND MAX TIDE ELEVATION BASED ON NOAA STATION 9415020, SAN FRANCISCO, CA.

Elevations on NAVD88
Station: 9415020, Point Reyes, CA
Status: Accepted (Apr 17, 2013)
Stride: Four
Control Station:
LM: 0
Epoch: 1983-2001
Datum: NAVD88

Datum	Value	Description
MHHW	5.74	Mean Higher-High Water
MHW	5.08	Mean High Water
MTL	3.12	Mean Tide Level
MSL	3.08	Mean Sea Level
DTL	2.86	Mean Diurnal Tide Level
MLW	1.16	Mean Low Water
MLLW	-0.02	Mean Lower-Low Water
NAVD88	0.00	North American Vertical Datum of 1988
STND	-3.99	Station Datum
GT	5.77	Great Diurnal Range
MN	3.91	Mean Range of Tide
DHQ	0.67	Mean Diurnal High Water Inequality
DLQ	1.18	Mean Diurnal Low Water Inequality
HWI	6.66	Greenwich High Water Interval (in hours)
LWI	0.33	Greenwich Low Water Interval (in hours)
Max Tide	8.52	Highest Observed Tide
Max Tide Date & Time	02/06/1958 14:36	Highest Observed Tide Date & Time
Min Tide	-2.71	Lowest Observed Tide
Min Tide Date & Time	01/15/1968 17:18	Lowest Observed Tide Date & Time
HAT	7.41	Highest Astronomical Tide
HAT Date & Time	12/24/2025 17:48	HAT Date and Time
LAT	-2.35	Lowest Astronomical Tide
LAT Date & Time	06/04/1968 13:12	LAT Date and Time



9 RAFAEL PATIO
9 RAFAEL PATIO, STINSON BEACH, CA 94970
APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

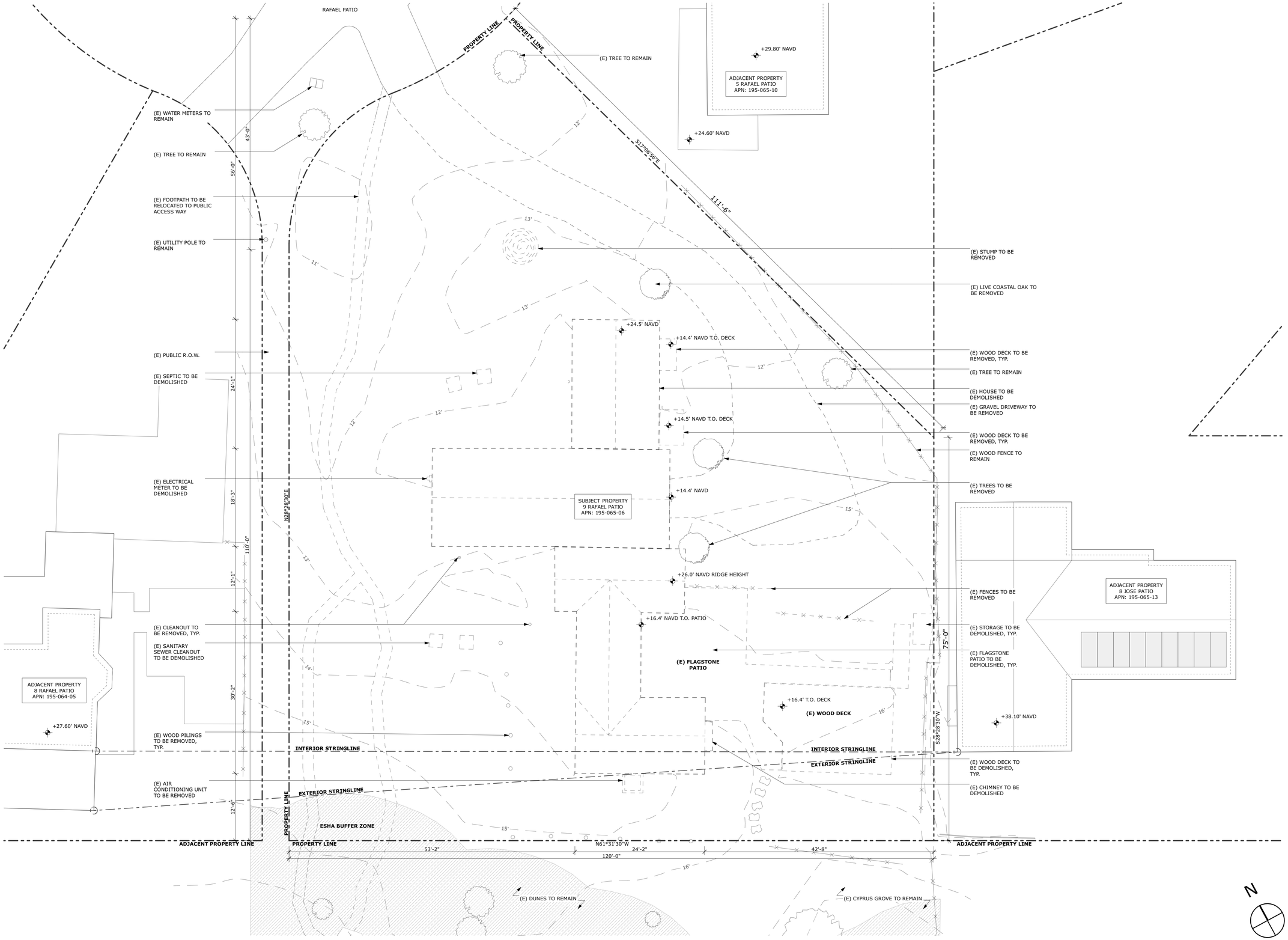
JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

SURVEY

A111

PRINTED:8/25/25, 6:13 PM



1 EXISTING & DEMOLITION SITE PLAN
SCALE: 1/8" = 1'-0"

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

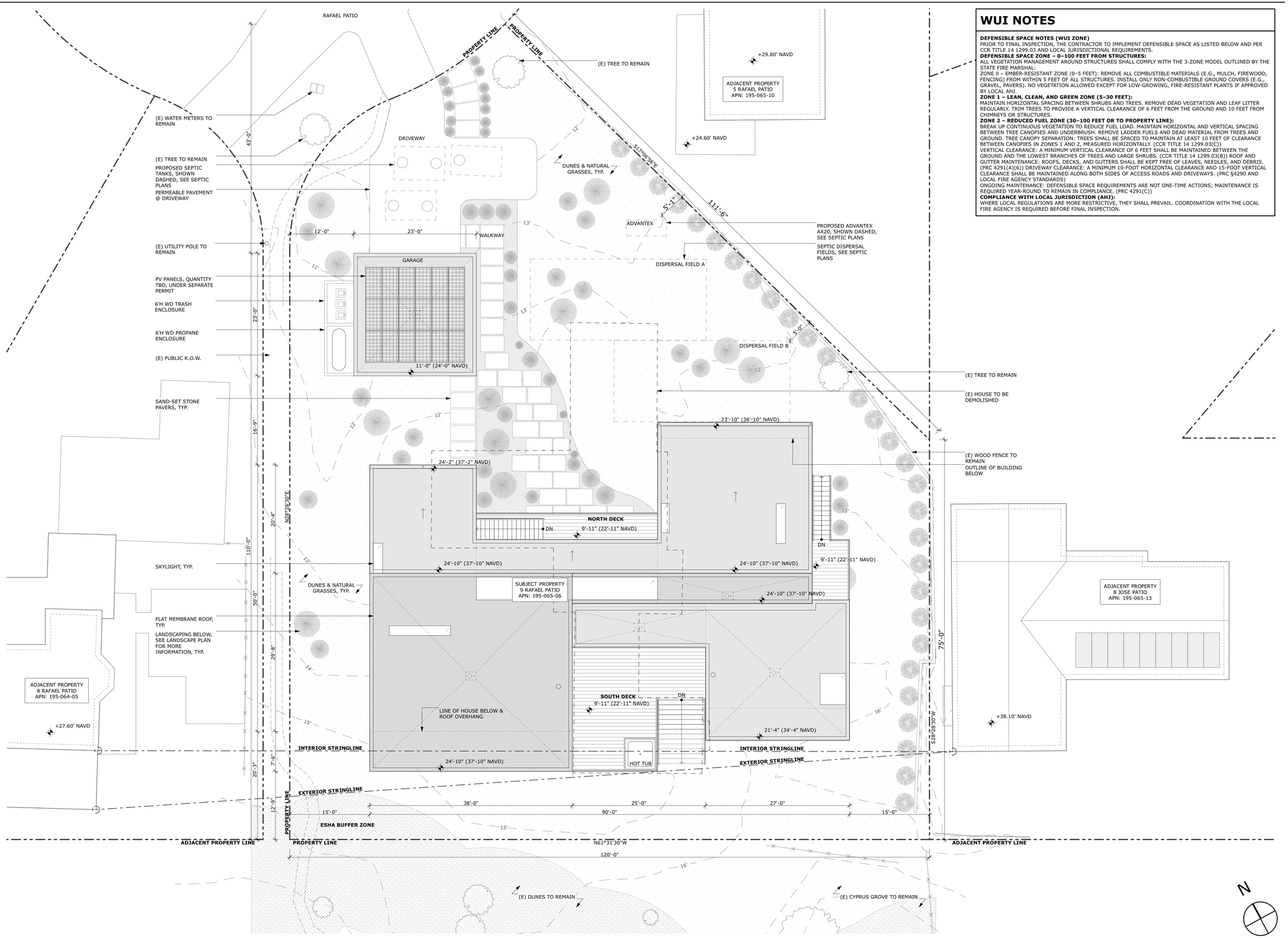
LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

EXISTING & DEMOLITION SITE PLAN

A120

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM



WUI NOTES

DEFENSIBLE SPACE NOTES (WUI ZONE)
PRIOR TO FINAL INSPECTION, THE CONTRACTOR TO IMPLEMENT DEFENSIBLE SPACE AS LISTED BELOW AND PER CCR TITLE 14 1299.03 AND LOCAL JURISDICTIONAL REQUIREMENTS.
DEFENSIBLE SPACE ZONE – 0–100 FEET FROM STRUCTURES:
ALL VEGETATION MANAGEMENT AROUND STRUCTURES SHALL COMPLY WITH THE 3-ZONE MODEL OUTLINED BY THE STATE FIRE MARSHAL:
ZONE 0 – EMBER-RESISTANT ZONE (0–5 FEET): REMOVE ALL COMBUSTIBLE MATERIALS (E.G., MULCH, FIREWOOD, FENCING) FROM WITHIN 5 FEET OF ALL STRUCTURES. INSTALL ONLY NON-COMBUSTIBLE GROUND COVERS (E.G., GRAVEL, PAVERS). NO VEGETATION ALLOWED EXCEPT FOR LOW-GROWING, FIRE-RESISTANT PLANTS IF APPROVED BY LOCAL AH).
ZONE 1 – LEAN, CLEAN, AND GREEN ZONE (5–30 FEET):
MAINTAIN HORIZONTAL SPACING BETWEEN SHRUBS AND TREES. REMOVE DEAD VEGETATION AND LEAF LITTER REGULARLY. TRIM TREES TO PROVIDE A VERTICAL CLEARANCE OF 6 FEET FROM THE GROUND AND 10 FEET FROM CHIMNEYS OR STRUCTURES.
ZONE 2 – REDUCED FUEL ZONE (30–100 FEET OR TO PROPERTY LINE):
BREAK UP CONTINUOUS VEGETATION TO REDUCE FUEL LOAD. MAINTAIN HORIZONTAL AND VERTICAL SPACING BETWEEN TREE CANOPIES AND UNDERBRUSH. REMOVE LADDER FUELS AND DEAD MATERIAL FROM TREES AND GROUND. TREE CANOPY SEPARATION: TREES SHALL BE SPACED TO MAINTAIN AT LEAST 10 FEET OF CLEARANCE BETWEEN CANOPIES IN ZONES 1 AND 2, MEASURED HORIZONTALLY. (CCR TITLE 14 1299.03(C))
VERTICAL CLEARANCE: A MINIMUM VERTICAL CLEARANCE OF 6 FEET SHALL BE MAINTAINED BETWEEN THE GROUND AND THE LOWEST BRANCHES OF TREES AND LARGE SHRUBS. (CCR TITLE 14 1299.03(B)) ROOF AND GUTTER MAINTENANCE: ROOFS, DECKS, AND GUTTERS SHALL BE KEPT FREE OF LEAVES, NEEDLES, AND DEBRIS. (PRC 4291(A)(6)) DRIVEWAY CLEARANCE: A MINIMUM 10-FOOT HORIZONTAL CLEARANCE AND 15-FOOT VERTICAL CLEARANCE SHALL BE MAINTAINED ALONG BOTH SIDES OF ACCESS ROADS AND DRIVEWAYS. (PRC §4290 AND LOCAL FIRE AGENCY STANDARDS)
ONGOING MAINTENANCE: DEFENSIBLE SPACE REQUIREMENTS ARE NOT ONE-TIME ACTIONS; MAINTENANCE IS REQUIRED YEAR-ROUND TO REMAIN IN COMPLIANCE. (PRC 4291(C))
COMPLIANCE WITH LOCAL JURISDICTION (AHJ):
WHERE LOCAL REGULATIONS ARE MORE RESTRICTIVE, THEY SHALL PREVAIL. COORDINATION WITH THE LOCAL FIRE AGENCY IS REQUIRED BEFORE FINAL INSPECTION.

BUTLER ARMSDEN ARCHITECTS
1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM
E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO
9 RAFAEL PATIO, STINSON BEACH, CA 94970
APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT FEDERICO ENGEL No. C-32207 Ren. 1/31/2027 STATE OF CALIFORNIA

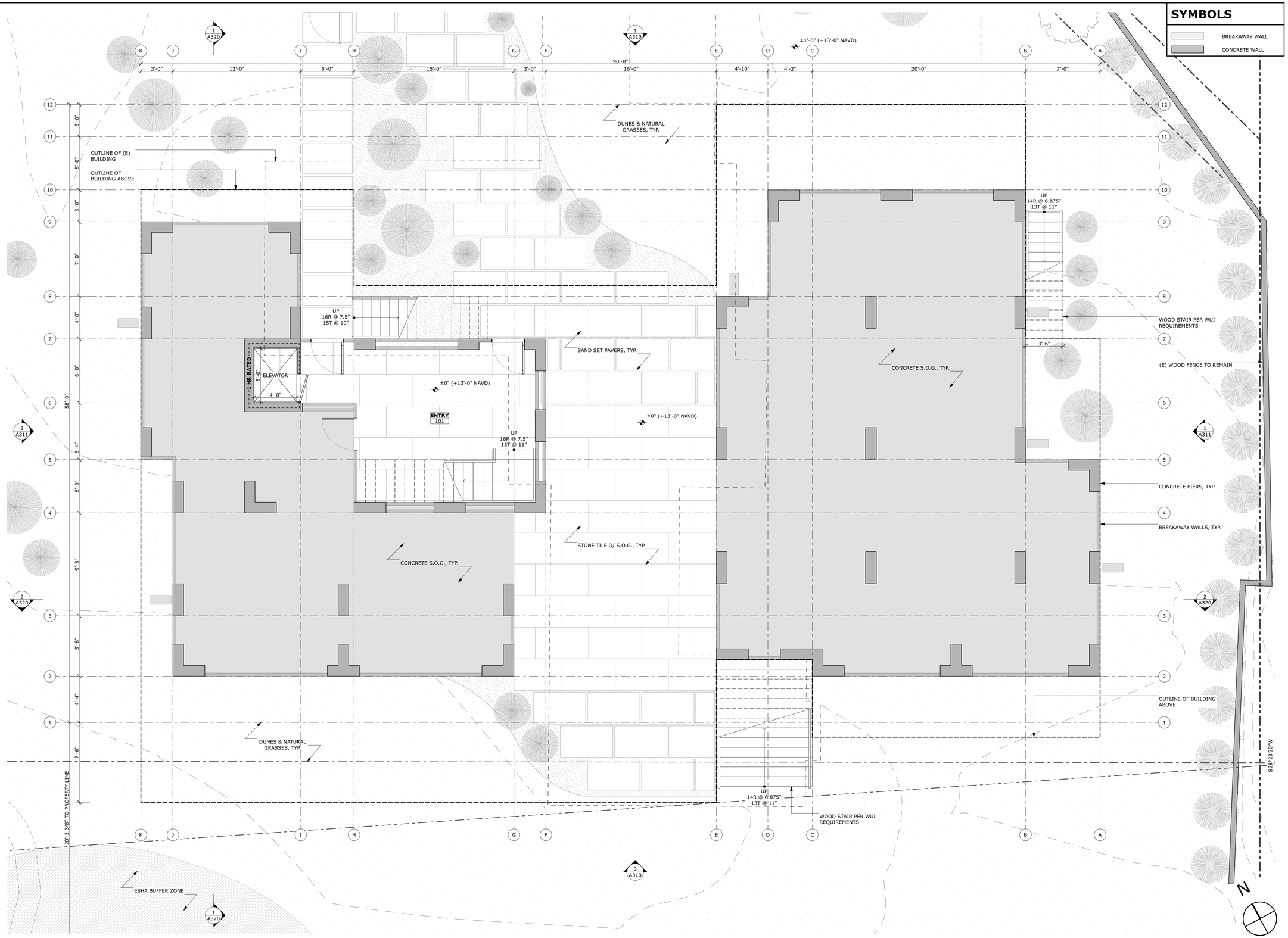
PROPOSED SITE PLAN

1 PROPOSED SITE PLAN
SCALE: 1/8" = 1'-0"

A130

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM



1 PROPOSED FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

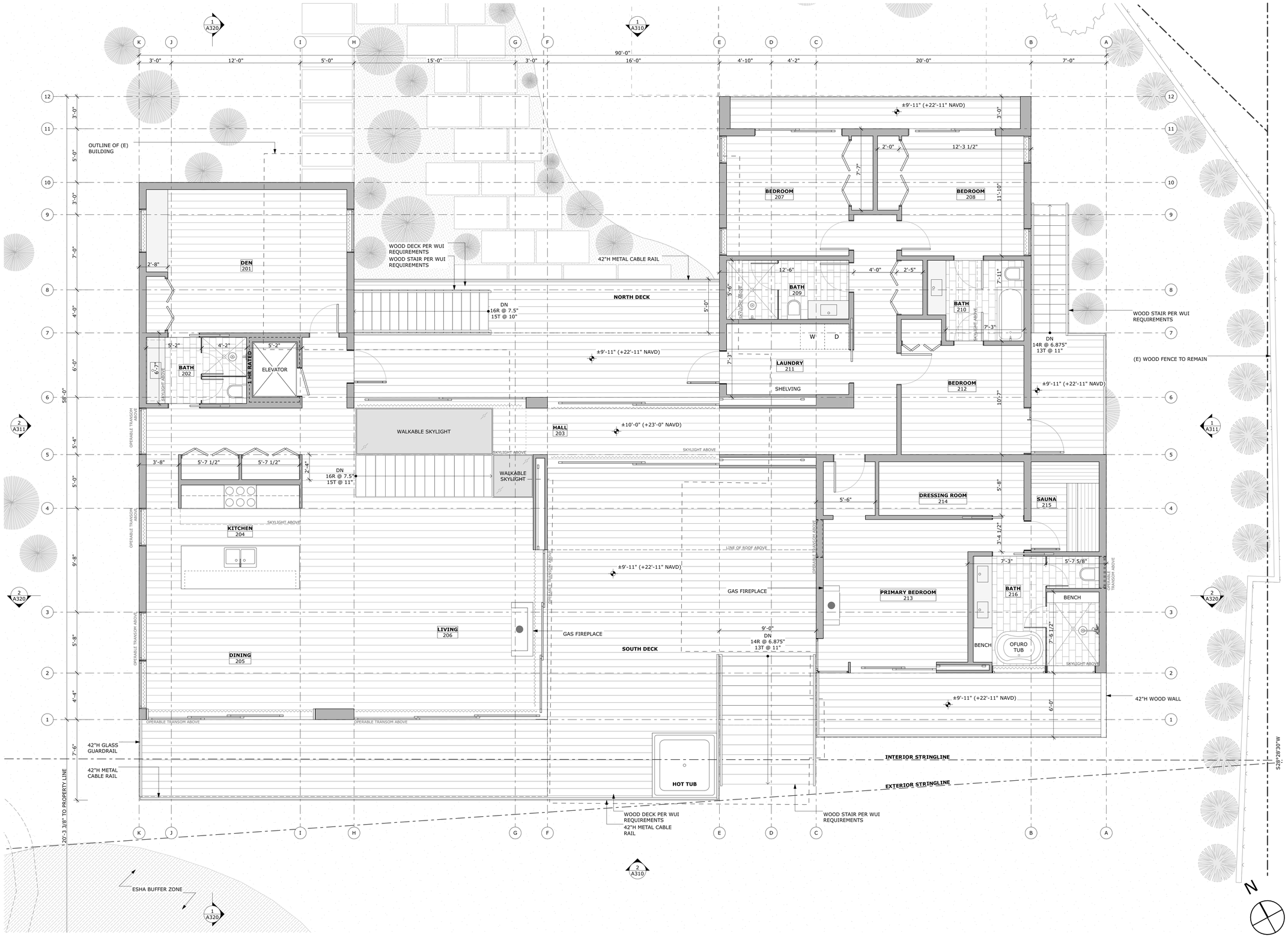
LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

PROPOSED FIRST FLOOR PLAN

A210

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM



1 PROPOSED SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

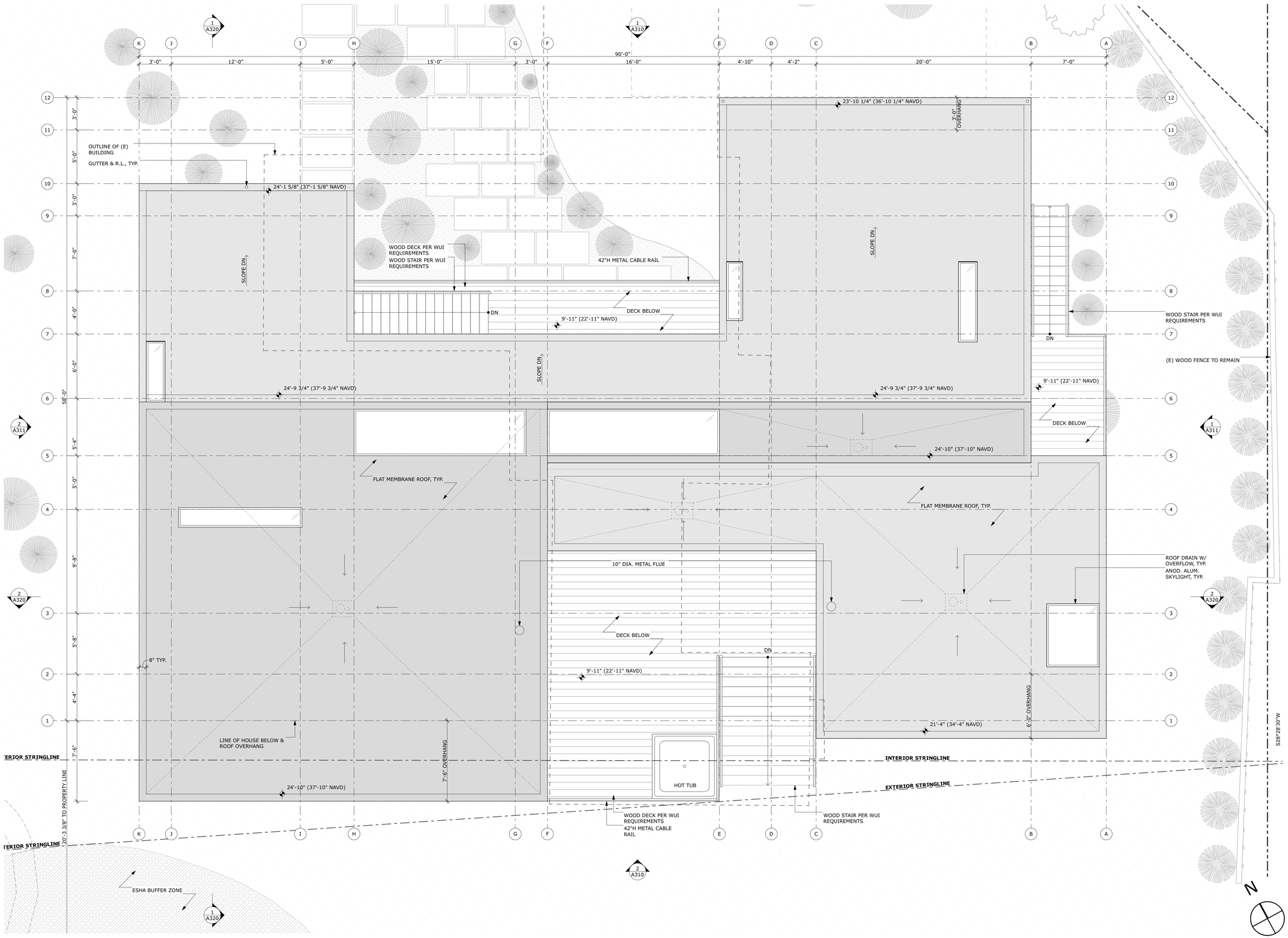
LICENSED ARCHITECT FEDERICO ENGELI No. C-32207 Ren. 1/31/2027 STATE OF CALIFORNIA

PROPOSED SECOND FLOOR PLAN

A211

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM



1 PROPOSED ROOF PLAN
SCALE: 1/4" = 1'-0"

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

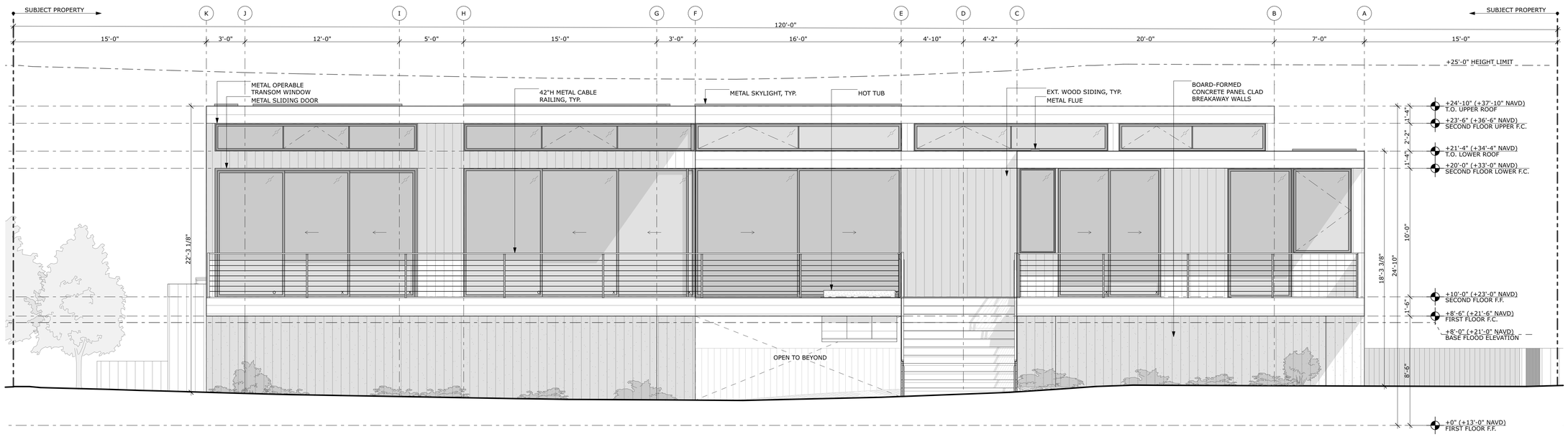
JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

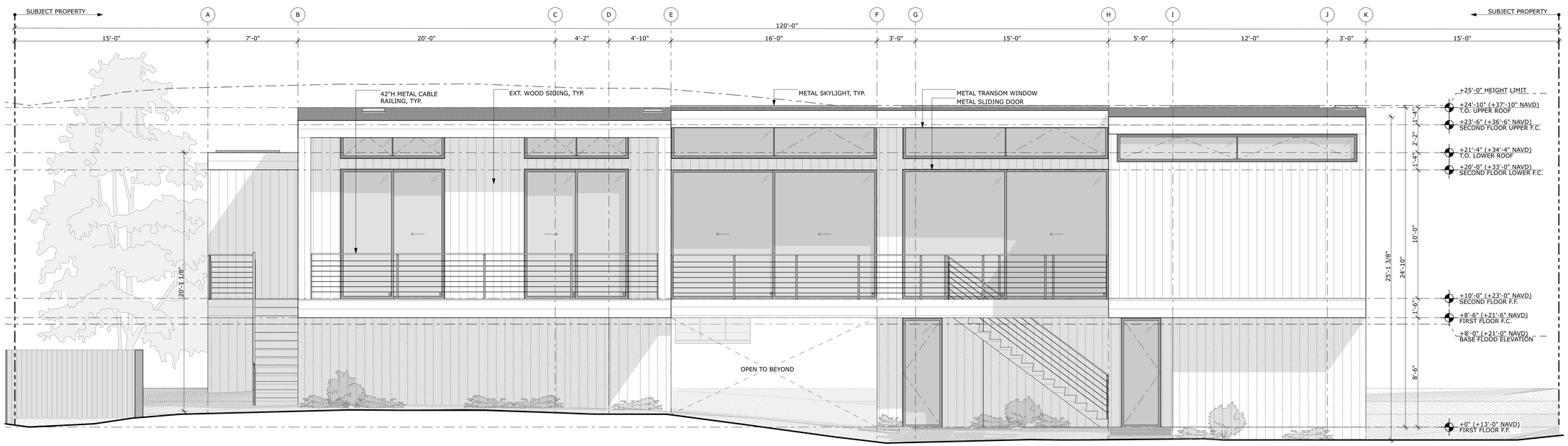
PROPOSED ROOF PLAN

A212

PRINTED:8/25/25, 6:13 PM



2 PROPOSED SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



1 PROPOSED NORTH ELEVATION
SCALE: 1/4" = 1'-0"

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

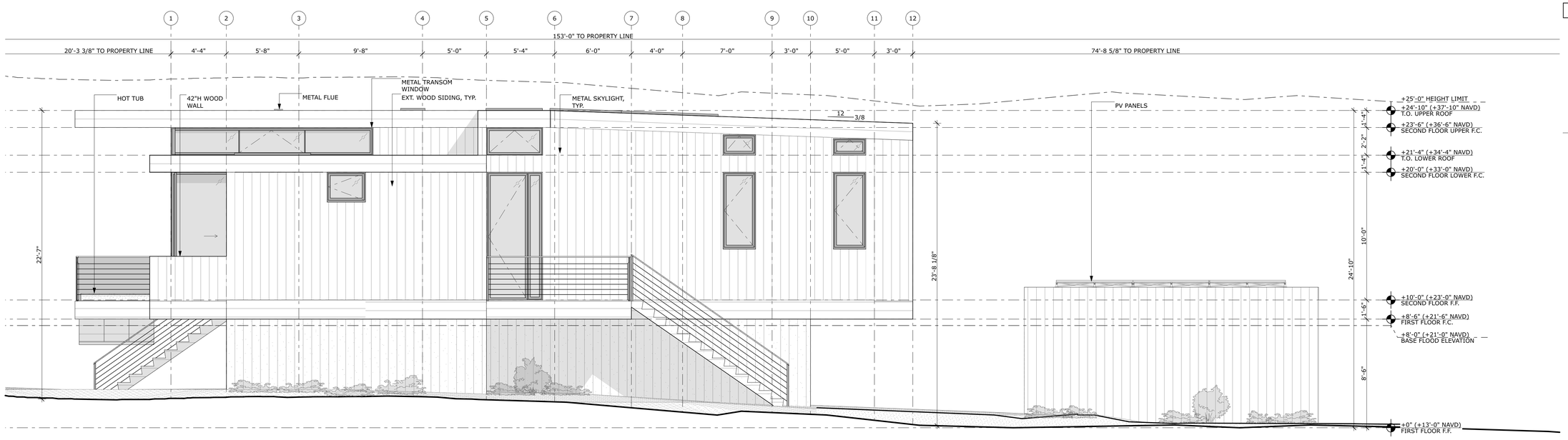
LICENSED ARCHITECT FEDERICO ENGEL No. C-32207 Ren. 1/31/2027 STATE OF CALIFORNIA

PROPOSED EXTERIOR ELEVATIONS

A310

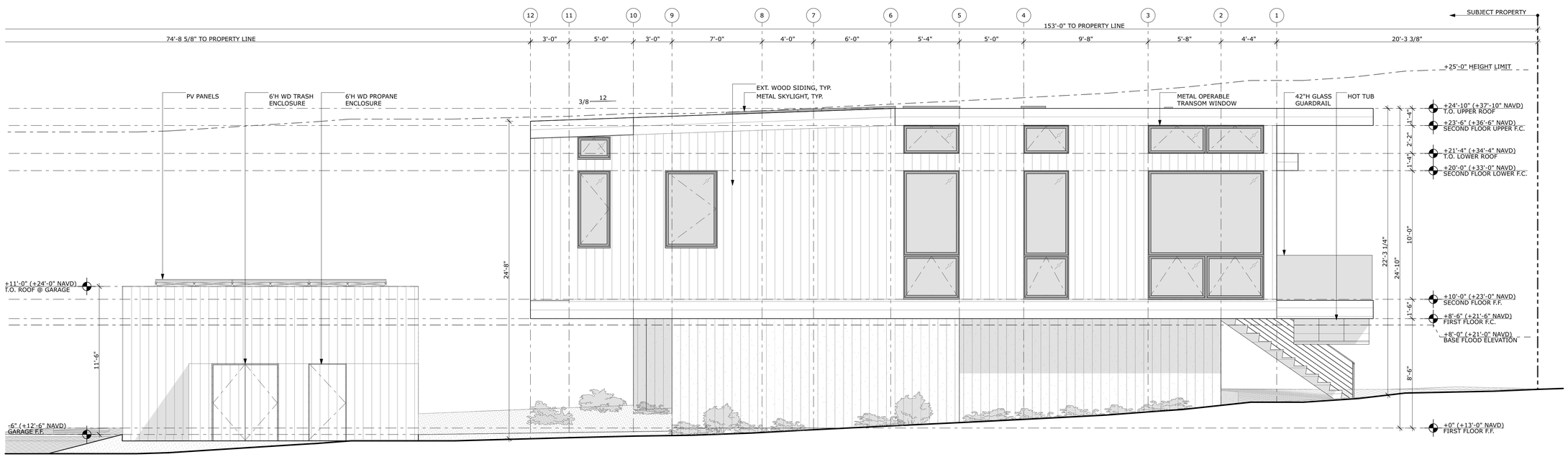
BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM



2 PROPOSED EAST ELEVATION

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



1 PROPOSED WEST ELEVATION

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

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

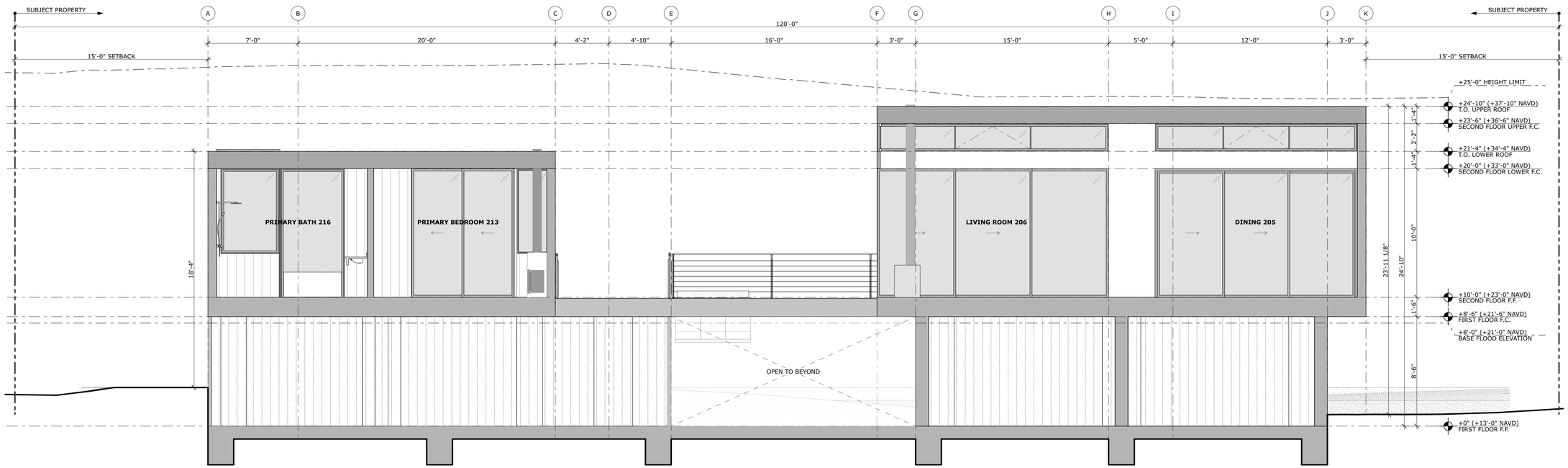
JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

PROPOSED EXTERIOR ELEVATIONS

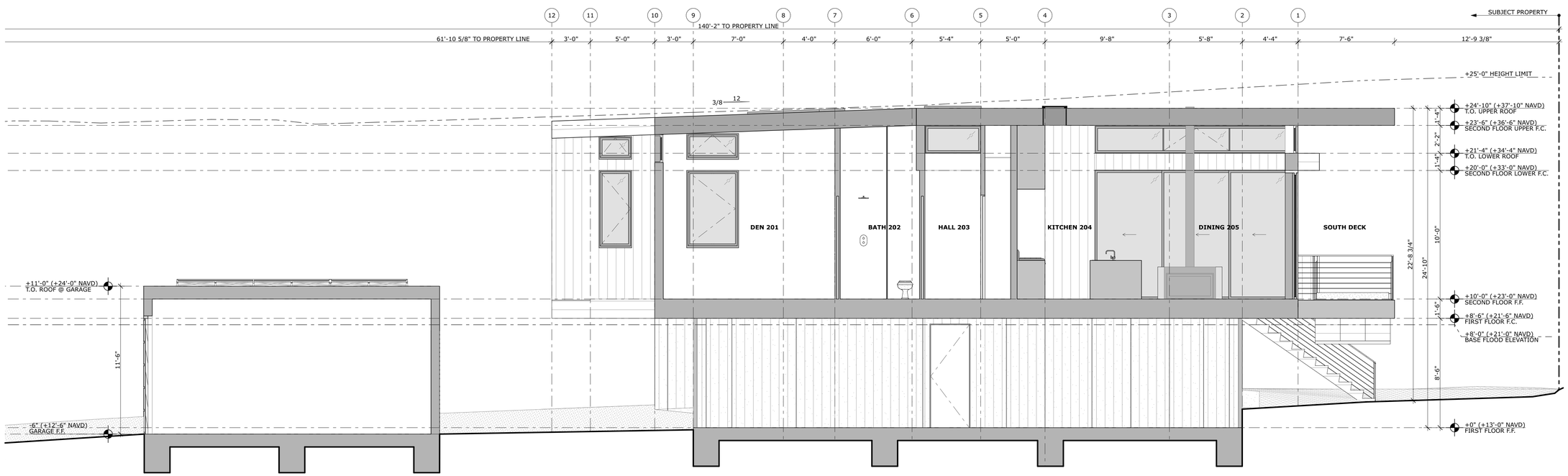
A311

PRINTED:8/25/25, 6:13 PM



2 PROPOSED LONGITUDINAL SECTION

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



1 PROPOSED TRANSVERSE SECTION

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

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

PROPOSED SECTIONS

A320

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM

1 PROPOSED LANDSCAPE PLAN - FIRST FLOOR

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

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

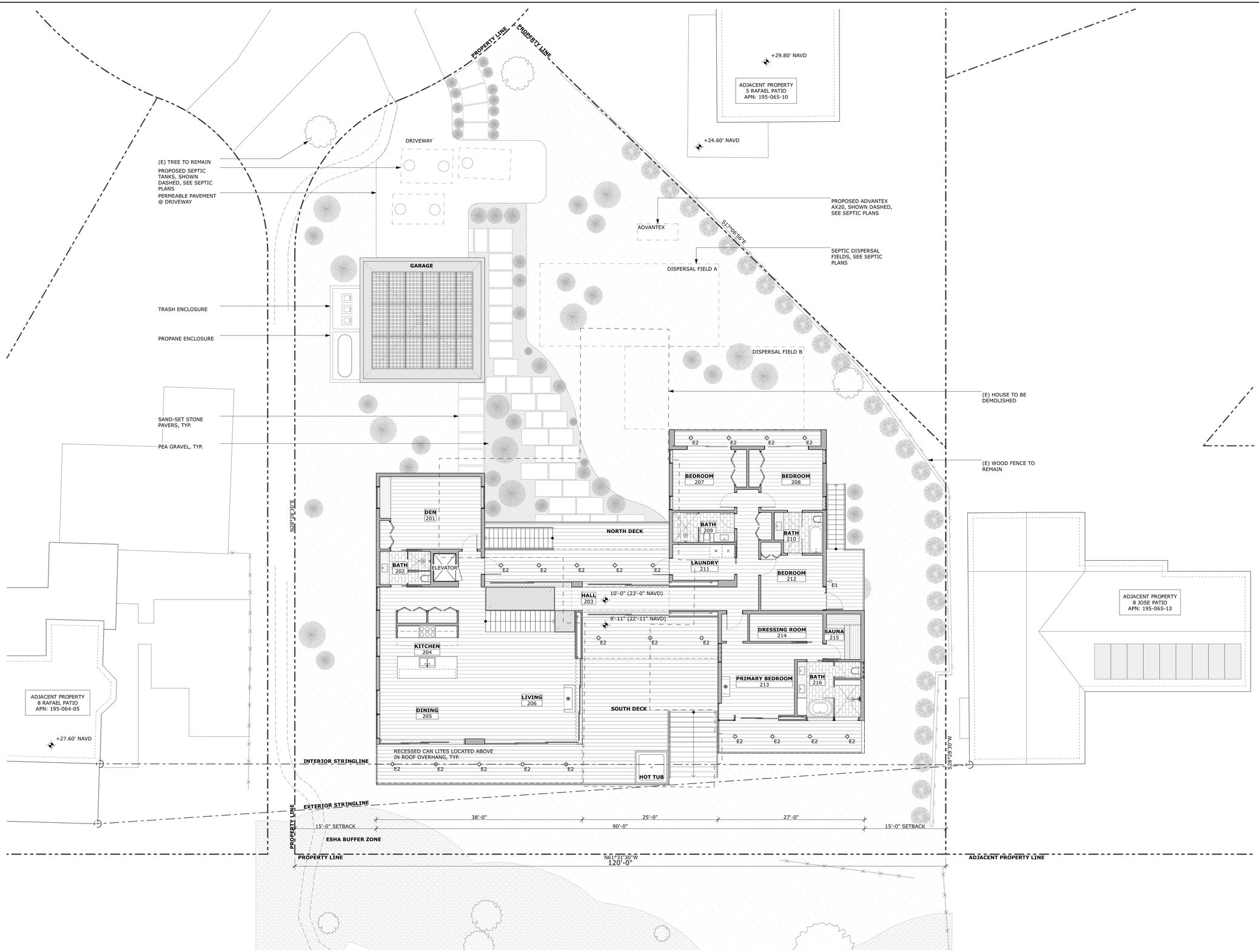
LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
STATE OF CALIFORNIA

LANDSCAPE EXT. LIGHTING PLAN FIRST FLOOR

L110

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM



1 PROPOSED LANDSCAPE PLAN - SECOND FLOOR

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

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT FEDERICO ENGEL No. C-32207 REGISTERED PROFESSIONAL ENGINEER

LANDSCAPE EXT. LIGHTING PLAN SECOND FLOOR

L111

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM

SPECIFICATIONS

GreenSource Initiative™
Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced on site. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Materials
Furnished in Copper-Free Aluminum (Type 6061-T6), Brass (Type 360) or Stainless Steel (Type 304).

Body
Fully machined from solid billet. Unibody design provides enclosed, water-proof wireway and integral heat sink for maximum component life. Integral knuckle for maximum mechanical strength. High temperature, silicone 'O' Ring provides water-tight seal.

Knuckle
The LOCK™ (Locking 'O' Ring Compression Knuckle) is comprised of two components. The first is integral to the body and features an interior, machined taper. The second is machined from solid billet and features a second, reverse angle taper. The resultant mechanical taper-lock allows a full 180° vertical adjustment without the use of serrated teeth, which inherently limit aiming. High temperature, silicone 'O' Ring provides water-tight seal and compressive resistance to maintain fixture position. Design withstands 73 lb. static load prior to movement to ensure decades of optical alignment. ½" pipe thread for mounting.

Optional 360SL™ additionally provides biaxial source control with 360° horizontal rotation in addition to vertical adjustment.

Cap
Fully machined. Accommodates [1] lens or louver media. Choose from 45° cutoff ('A' or 'D'), 3/8" deep bezel with 90° cutoff ('B' or 'E'), or flush lens ('C') cap styles. 'A' and 'B' caps include weep-hole for water and debris drainage. 'D' and 'E' caps exclude weep-hole and are for interior use only.

Lens
Shock resistant, tempered, glass lens is factory adhered to fixture cap and provides hermetically sealed optical compartment. Specify soft focus (#12) or rectilinear (#13) lens.

BKSSL®
Integrated solid state system with 'e' technology. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components.

Integral non-dimming driver. Minimum 50,000 hour rated life at 70% of initial lumens (L70). BKSSL technology provides long life, significant energy reduction and exceptional thermal management.

Optics
OPTIKIT™ modules are color-coded for easy reference: Narrow Spot (NSP) = Red, Spot (SP) = Green, Medium Flood (MFL) = Yellow and Asymmetrical (ASY) = Purple.

Remote Transformer
For use with 12VAC BKSSL remote transformer or magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.

Wiring
Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

Hardware
Tamper-resistant, stainless steel hardware. LOCK™ aiming screw is additionally black oxide treated for additional corrosion resistance.

Finish
StarGuard®, our exclusive RoHs compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating. Brass components are available in powder coat or handcrafted metal finish. Stainless steel components are available in handcrafted metal finish. (Brushed finish for interior use only).

Warranty
5 year limited warranty.

Certification and Listing
ITL tested to IESNA LM-79. UL Listed. Certified to CAN/CSA/ANSI Standards. RoHs compliant. Suitable for indoor or outdoor use. Suitable for use in wet locations. Suitable for installation within 4' of the ground. IP66 Rated. Made in USA.

RoHS

*Teflon is a registered trademark of DuPont Corporation.
*Energy Star is a registered trademark of the United States Environmental Protection Agency.

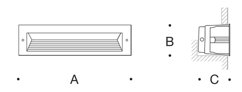
Application
LED recessed wall luminaire with asymmetrical light distribution for the illumination of ground surfaces, building entrances, stairs and footpaths.

Materials
Luminaire housing constructed of die-cast aluminum marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy
Clear safety glass
Silicone applied robotically to casting, plasma treated for increased adhesion
High temperature silicone gasket
Mechanically captive stainless steel fasteners
Stainless steel screw clamps
Composite installation housing

NRTL listed to North American Standards, suitable for wet locations
Protection class IP65
Weight: 1.5 lbs

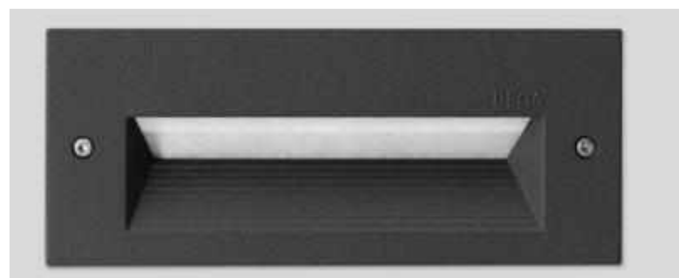
Electrical

Operating voltage	120-277V AC
Minimum start temperature	-40° C
LED module wattage	4.1 W
System wattage	6.0 W
Controlability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	231 lumens (3000K)
Lifetime at Ta=15°C	428,000 h (L70)
Lifetime at Ta=25°C	229,000 h (L70)



LED recessed wall luminaires · asymmetrical

	LED	A	B	C
33 053	4.1 W	6⅝	2¾	5



RECESSED WALL/ STEP LIGHT E4
BEGA LIGHTING
6 WATT 2700K LED

CATALOG NUMBER LOGIC	
Example: LT-L - 18 - LED - e71 - VER - A18 - SF	
MATERIAL	
Aluminum	
SERIES	
LT-L - Litestick® Pathlight Style 'L'	
STEM LENGTH	
3", 6", 12", 18", 24"	
SOURCE	
LED - with Non-Dimming Integral Driver*	
LED TYPE	
e70 - 3W LED/2700K	e85 – 3W LED/2700K 90 CRI
e71 - 3W LED/3000K	e86 – 3W LED/3000K 90 CRI
e72 - 3W LED/4000K	e87 – 3W LED/3500K 80 CRI
e73 - 3W LED/Amber	
FINISH (See page 2 for full-color swatches)	
Standard Finishes (BZP, BZW, BLP, BLW, WHP, WHW, SAP, VER)	
Premium Finish (ABP, AMG, AQW, BCM, BGE, BPP, CAP, CMG, CRM, HUG, NBP, OCP, RMG, SDS, SMG, TXF, WCP, WIR)	
Also available in RAL Finishes	
MOUNTING	
PP18B - 18" Power Pipe Stake with 'B' Cap**	
A18 - 18" Power Pipe with 18" Adjustable Stem (Must be specified with a 18" stem)	
PP-TRe20 - Power Pipe T with 18" Stake, TRe20 Electronic Transformer (105-300 VAC. 50/60 Hz. non-dimming)**	
OPTIONS	
SF - Stability Flange (For use with Power Pipe)	

PATH LIGHT LANDSCAPING **E3**
LITESTICK STYLE 'L' LED
3 WATT 2700K LED

SPECIFICATIONS

GreenSource Initiative™
Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced on site. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Materials
Furnished in Copper-Free Aluminum (Type 6061-T6), Brass (Type 360) or Stainless Steel (Type 316).

Backbox
Round, 4-1/4" dia. x 3-1/8" deep construction with [2] mounting tabs. Front access for wire connection and inspection. Provided with [5] 1/2" NPS tapped holes and [4] plugs. Suitable for concrete pour.

Faceplate
Fully machined from solid billet. Countersunk holes provide for flush hardware mounting with [2] tamper-resistant, stainless steel mounting screws. Stainless steel universal mounting ring for faceplate adjustment and 1/8" thick HT-805A silicone foam gasket with acrylic adhesive for water-tight seal. Accommodates [1] lens or louver media.

Lens
Shock resistant, tempered, glass lens is factory adhered to faceplate. Specify soft focus (#12) or rectilinear (#13) lens.

BKSSL®
Integrated solid state system with 'e' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components.

Integral, constant current driver. 12VAC/VDC input. 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current. Output, over-voltage, open-circuit, and short circuit protected. Inrush current limited to <1A (non-dimming). Conforms to Safety Std. C22.2 No. 250.13-12.

Line voltage dimmable via magnetic low voltage dimmer. For use with low voltage dimmer with dedicated neutral conductor. For purposes of dimming: Remote magnetic transformer with BKSSL® Power of 'e' technology loads should be loaded to 25% of the transformer VA (watts) rated value.

Optics
Interchangeable OPTIKIT™ modules permit field changes to optical distribution. Color-coded for easy reference: Narrow Spot (NSP) = Red. Spot (SP) = Green. Medium Flood (MFL) = Yellow. Wide Flood (WFL) = Blue. Adjustable optical bracket provides up to 24° vertical aiming.

Adjust-e-Lume® (Pat. Pending)
Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

Remote Transformer
For use with 12VAC BKSSL remote transformer or magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.

Wiring
Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

Hardware
Tamper-resistant, stainless steel hardware. Faceplate screws are additionally black oxide treated for additional corrosion resistance.

Finish
StarGuard®, our exclusive RoHs compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating. Brass components are available in powder coat or handcrafted metal finish. Stainless steel components are available in handcrafted metal finish. (Brushed finish for interior use only).

Warranty
5 year limited warranty.

Certification and Listing
ITL tested to IESNA LM-79. UL Listed. Certified to CAN/CSA/ANSI Standards. RoHs compliant. Suitable for indoor or outdoor use. Suitable for installation in combustible materials (Type Non-IC). Suitable for use in wet locations. Suitable for installation within 4' of the ground. IP65 Rated. Made in USA.

RoHS

*Teflon is a registered trademark of DuPont Corporation.
*Energy Star is a registered trademark of the United States Environmental Protection Agency.

RECESSED DOWN LIGHTING **E2**
BK LIGHTING
5 WATT 2700K LED

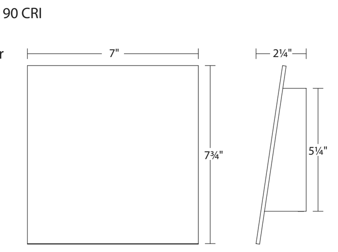
2363 **Angled LED Plane Downlight LED Sconce**

Dimensions:
Height: 7 ¾"
Width: 7"

Description:
Shade: Aluminum
Extension: 2 ¼"
Wall Plate: 5 ¼" x 5 ½"
Dimmable by
Electronic Low Voltage (ELV)
WET LOCATION (downlight only)

Lamping Options:
LED: 13w, 840 Lumens
Warm White (3000K), 90 CRI
120VAC Input
w/12VAC Transformer

Available Finishes:
Textured Bronze
2363.72-WL
Textured Gray
2363.74-WL
Textured White
2363.98-WL



Intertek ADA

SONNEMAN
A WAY OF LIGHT

EXTERIOR WALL SCONCE **E1**
SONNEMAN
13 WATT LED

2 EXTERIOR LIGHTING TYPES/ SCHEDULE

PERENNIALS / GROUNDCOVER

Turkish Speedwell Vl
Veronica Liwanensis
2"x2' Growth Pattern
WUCOLS IV: moderate

Carmel Creeper Wild Lilac Cg
Ceanothus Griseus Horizontalis
1.5' tall, 3' wide Growth Pattern
WUCOLS IV: Low

White Trailing Lantana Ls
Latana Sellowiana
1'x3' Growth Pattern
WUCOLS IV: Low/ Occasional

SHRUBS / GRASSES

Peruvian Feather Grass Si
Stipu Ichu
3'-6' Growth Pattern
WUCOLS IV: Low

Deer Grass Mr
Muhlenbergia Rigens
1'-3' Growth Pattern
WUCOLS IV: Low

Clustered Field Sedge Cp
Carex Praegracilis
1' tall, 3' wide Growth Pattern
WUCOLS IV: Low/ Moderate

1 PLANT LIST

BUTLER ARMSDEN
ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO
9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT
FEDERICO ENGEL
No. C-32207
Ren. 1/31/2027
STATE OF CALIFORNIA

LANDSCAPE SPECIFICATION

L120

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM

EROSION CONTROL LEGEND

- CONSTRUCTION FENCING
- SILT FENCING
- CONSTRUCTION ENTRANCE
- WD — CONCRETE WASHDOWN AREA
- D — DELIVERY AREA
- S — NON HAZARDOUS STORAGE
- PT — PORTABLE TOILET WITH LINER
- TREE PROTECTION
- DRAINAGE DISPERSAL

LEGEND

- DECK
- STONE PAVERS
- PEA GRAVEL

ABBREVIATIONS

AC	ASPHALT CONCRETE	FS	FINISH SURFACE
CONC	CONCRETE	GB	GRADE BREAK
DWY	DRIVEWAY	(N)	NEW
DS	DOWN SPOUT	PA	PLANTING AREA
(E)	EXISTING	SF	SQUARE FEET
EG	EXISTING GRADE	TS	TOP OF STAIR
FF	FINISH FLOOR	TW	TOP OF WALL
FG	FINISH GRADE	tw	BOTTOM OF WALL
		VIF	VERIFY IN FIELD

GENERAL NOTES

1. TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN WAS TAKEN FROM A SITE SURVEY PERFORMED BY MERIDIAN SURVEYING ENGINEERING, INC. , CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE COUNTY OF MARIN STANDARD PLANS AND SPECIFICATIONS
3. CIVIL ENGINEER SHALL INSPECT SITE AT COMPLETION OF ALL GRADING & DRAINAGE IMPROVEMENTS TO CONFIRM INSTALLATION IN ACCORDANCE WITH THE APPROVED PLANS. CIVIL ENGINEER WILL PROVIDE CERTIFICATION LETTER TO DPW. CERTIFICATION LETTER SHALL INCLUDE BUILDING PERMIT NUMBER & APN.

EARTHWORK QUANTITIES

1. PROPOSED FINISH GRADE IS DEFINED AS THE FINAL GRADE AS INDICATED ON THE GRADING PLAN.
2. THE EARTHWORK QUANTITIES ABOVE HAVE BEEN ADJUSTED FOR AN ASSUMED PAVEMENT SECTION OF 8". NO ADDITIONAL ADJUSTMENTS HAVE BEEN MADE.
4. THE CONTRACTOR SHALL RELY ON THEIR EARTHWORK ESTIMATES FOR BIDDING PURPOSES.
5. THE EARTHWORK QUANTITIES ABOVE ARE FOR PERMIT PURPOSES ONLY.
6. THE CONTRACTOR SHALL PERFORM EARTHWORK CALCULATIONS WHICH ACCOUNT FOR PROPOSED METHODS OF GRADING AND TRENCHING AS DEEMED NECESSARY FOR BIDDING AND CONSTRUCTION PURPOSES. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO BALANCE THE EARTHWORK OF THE PROJECT AND TO ACCOUNT FOR THE COST NECESSARY IMPORTING OR EXPORTING OF EARTH IN THE BID. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THIS ITEM OF WORK UNLESS THE OWNER REQUESTS ADDITIONAL WORK BE PERFORMED.
7. THE EARTHWORK SUMMARY TABULATION ON THESE PLANS IS PROVIDED AS A COURTESY AND A CONVENIENCE TO THE GRADING CONTRACTOR. THE INCLUSION OF THE SUMMARY ON THIS PLAN DOES NOT RELIEVE THE GRADING CONTRACTOR OF SOLE RESPONSIBILITY TO DETERMINE THE EARTHWORK QUANTITIES THAT WILL BE REQUIRED ON THE PROJECT. IT IS UNDERSTOOD BY THE OWNER AND THE CONTRACTOR THAT THE BID PRICE FOR ROUGH GRADING IS BASED ONT HE CONTRACTOR'S OWN EARTHWORK ESTIMATE, IS A FULL AND COMPLETE PRICE FOR THE WORK, AND IS NOT BASED ON THE QUANTITIES ESTIMATED BY THE ENGINEER OR ARCHITECT.

DRAINAGE NOTES

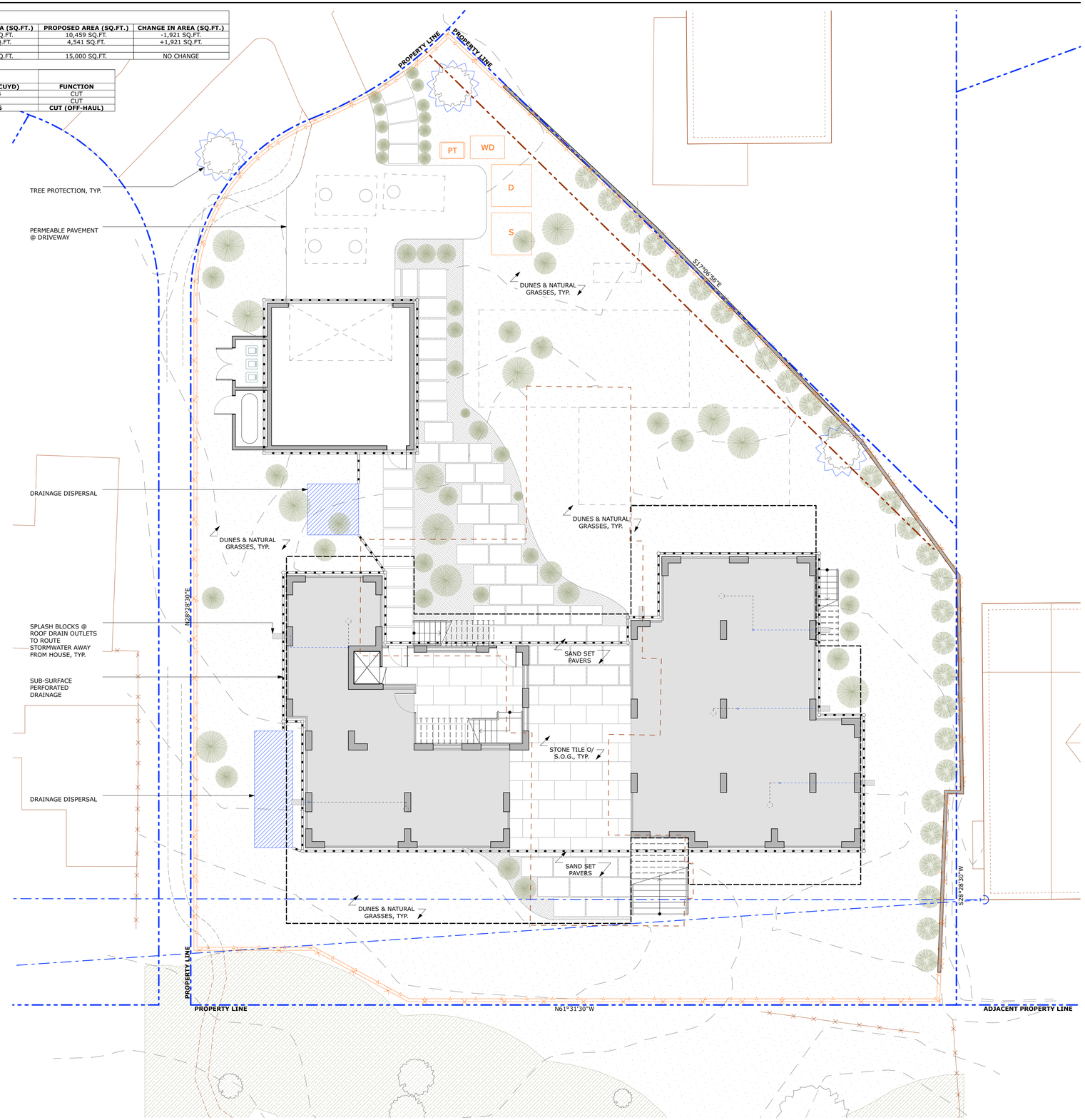
1. ALL STORM DRAIN PIPES SHALL BE SDR 35 PVC OR APPROVED EQUIVELENT.
2. ALL PERFORATED PIPES SHALL BE SDR 35 OR APPROVED EQUIVALENT.
3. STORM DRAINAGE SYSTEMS SHOWN ON THESE PLANS HAVE BEEN DESIGNED FOR THE FINAL SITE CONDITION AT COMPLETION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE OF THE SITE, DURING INTERIM CONDITIONS OF CONSTRUCTION.

IMPERVIOUS CALCULATIONS:

	EXISTING AREA (SQ.FT.)	PROPOSED AREA (SQ.FT.)	CHANGE IN AREA (SQ.FT.)
PERVIOUS:	12,380 SQ.FT.	10,459 SQ.FT.	-1,921 SQ.FT.
IMPERVIOUS:	2,620 SQ.FT.	4,541 SQ.FT.	+1,921 SQ.FT.
TOTAL SITE AREA:	15,000 SQ.FT.	15,000 SQ.FT.	NO CHANGE

GRADING CALCULATIONS:

ZONE	VOLUME (CUYD)	FUNCTION
MAIN HOUSE	238.4	CUT
GARAGE	39.2	CUT
TOTAL	277.6	CUT (OFF-HAUL)



1 GRADING, DRAINAGE, & EROSION CONTROL PLAN
SCALE: 1/8" = 1'-0"

BUTLER ARMSDEN ARCHITECTS

1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM

E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO

9 RAFAEL PATIO, STINSON BEACH, CA 94970

APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT FEDERICO ENGEL No. C-32207 REGISTERED PROFESSIONAL ENGINEER CALIFORNIA

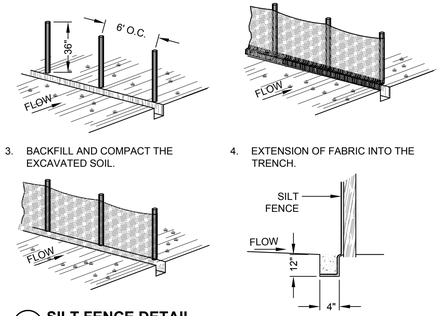
GRADING, DRAINAGE, & EROSION CONTROL

L210

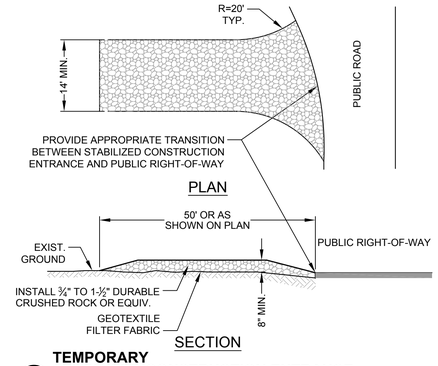
BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 9 Rafael Patio/2410_Current_9RafaelPatio_V28

PRINTED:8/25/25, 6:13 PM

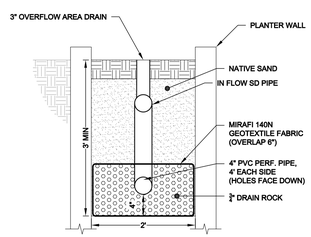
1. SET 4"Ø WOOD OR 1.33 PLF STEEL POSTS 5' IN LENGTH. EXCAVATE A 4"X4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.
2. ATTACH SILT FENCE TO POSTS AND EXTEND IT INTO THE TRENCH.
3. BACKFILL AND COMPACT THE EXCAVATED SOIL.
4. EXTENSION OF FABRIC INTO THE TRENCH.



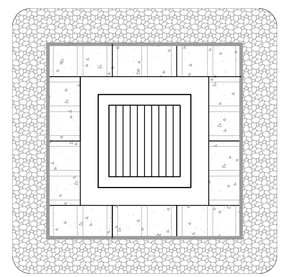
1 SILT FENCE DETAIL
SCALE: NTS



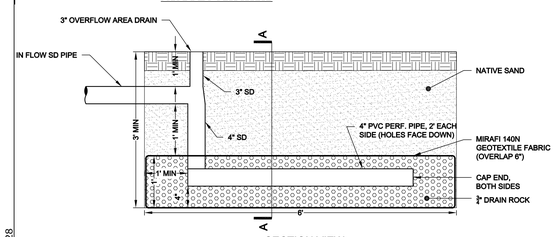
2 TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
SCALE: NTS



CROSS SECTION A-A

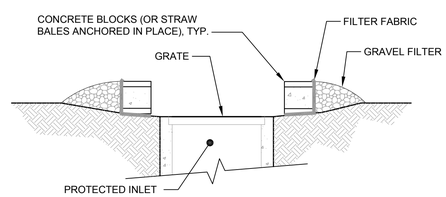


TOP



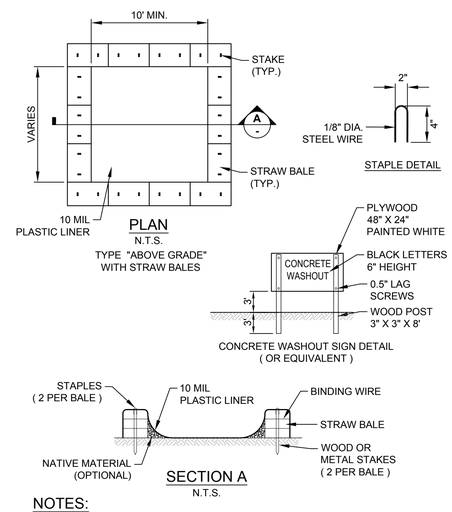
SECTION VIEW

2 DRAINAGE DISPERSAL DETAIL



SECTION

3 INLET PROTECTION DETAIL
SCALE: NTS



NOTES:
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

5 TEMPORARY CONCRETE WASHOUT DETAIL
SCALE: 1" = 1'

POLLUTION CONTROL NOTES:

1. LOT WILL BE ROUGH GRADED IN ACCORDANCE WITH THE GRADING PLAN PREPARED BY CSW/ST2. FUTURE FINISH GRADING SHALL DIRECT ALL STORM WATER RUNOFF TO THE STREETS OR INLETS SHOWN ON THIS PLAN AND ULTIMATELY TO THE CITY-MAINTAINED STORM DRAIN SYSTEM. ALL STORM WATER FROM THIS SITE IS INTENDBAA. DIRECTED TO THE CITY STORM DRAINS.
2. IF SIGNIFICANT SEDIMENT OR OTHER VISUAL SYMPTOMS OF IMPURITIES ARE NOTICED IN THE STORM WATER, CONTACT THE CIVIL ENGINEER IMMEDIATELY.
3. CONTRACTOR IS RESPONSIBLE FOR INSPECTION AND RESTORATION OF ALL ASPECTS OF THIS PLAN. SEDIMENT ON SIDEWALKS AND GUTTERS SHALL BE REMOVED BY SHOVEL OR BROOM.
4. ALL EMPLOYEES, CONTRACTORS, AND SUBCONTRACTORS ARE RESPONSIBLE FOR CONFORMING TO THE ELEMENTS SHOWN ON THIS PLAN OR RELATED DOCUMENTS. ANY CONTRACTOR PLANNING TO DO WORK ON-SITE SHALL BE RESPONSIBLE FOR OBTAINING AND REVIEWING ALL INFORMATION FROM OWNER PRIOR TO START OF WORK AND EDUCATING ALL OF THEIR EMPLOYEES OR SUBCONTRACTORS AS TO THE CONTENTS OF THIS PLAN SET.
5. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND FILING ALL PLANS WITH RELATED AGENCIES ASSOCIATED WITH THEIR WORK. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, PERMITS FOR STORAGE OF HAZARDOUS MATERIALS, BUSINESS PLANS, PERMITS FOR STORAGE OF FLAMMABLE LIQUIDS, GRADING PERMITS, OR OTHER PLANS OR PERMITS REQUIRED BY MARIN COUNTY, THE CITY OF LARKSPUR, OR OTHER AGENCIES. ALL PROPERTY OWNERS, CONTRACTORS, OR SUBCONTRACTORS WORKING ON-SITE ARE INDIVIDUALLY RESPONSIBLE FOR OBTAINING AND SUBMITTING ANY BUSINESS PLANS OR PERMITS REQUIRED BY CITY, STATE OR LOCAL AGENCIES.
6. CONTRACTOR MAY RELOCATE STORAGE, DELIVERY, OR WASH-OUT AREAS, TO SUIT THEIR OPERATIONS. RELOCATED LOCATION TO BE SHOWN ON PLANS MAINTAINED AT JOBSITE. CONTACT CIVIL ENGINEER FOR ANY PLAN REVISIONS. PLAN REVISIONS SHALL BE SUBMITTED TO CITY IF REQUESTED. CONTRACTOR TO MAINTAIN SECONDARY CONTAINMENT AS NECESSARY TO PROHIBIT POLLUTION AND TOXIC MATERIALS FROM ENTERING STORM DRAIN.
7. AFTER COMPLETION OF THE CURB, GUTTER, AND PAVING, OR CONCRETE V-DITCHES THE SILT FILTERS SHALL BE MODIFIED TO BURLAP SACKS FILLED WITH 3/4" DRAIN ROCK OR OTHER ACCEPTED BMP POSITIONED SURROUNDING EACH CATCH BASIN.

EROSION CONTROL NOTES:

1. NO VEHICLES SHALL BE ALLOWED TO TRACK OR SPREAD SOIL FROM THE CONSTRUCTION AREAS ONTO EXISTING PAVED PUBLIC STREETS. ANY VEHICLE OPERATING WITHIN THE PROJECT AREA AND OFF THE PAVED STREET SHALL CROSS A CONSTRUCTION ENTRANCE AS SHOWN HEREIN. THE ENTRANCE MAY BE MODIFIED BY THE CONTRACTOR TO FACILITATE HIS OPERATIONS.
2. THE EROSION AND SEDIMENT CONTROL MEASURES WILL BE OPERABLE DURING THE RAINY SEASON, OCTOBER 1ST TO APRIL 30TH. NO GRADING WILL OCCUR BETWEEN OCTOBER 1ST AND APRIL 30TH, UNLESS AUTHORIZED BY THE DIRECTOR OF PUBLIC WORKS.
3. CHANGES TO THIS EROSION CONTROL PLAN TO MEET FIELD CONDITIONS WILL BE MADE ONLY WITH THE APPROVAL OF, OR AT THE DIRECTION OF THE OWNER. CHANGES MADE TO SUIT FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CIVIL ENGINEER AND THE CITY ENGINEER.
4. DURING THE RAINY SEASON, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF ENTERS THE STORM DRAIN SYSTEM. THESE PLANS SHALL REMAIN IN EFFECT UNTIL THE IMPROVEMENTS ARE ACCEPTED BY THE CITY, AND ALL SLOPES ARE STABILIZED FROM EROSION.
5. STRAW AND TACKIFIER WILL BE APPLIED BY OCTOBER 1ST TO ALL DISTURBED AREAS. ALL EXPOSED SLOPES ADJACENT TO PUBLIC RIGHTS OF WAY SHALL ALSO RECEIVE STRAW AND TACKIFIER. STRAW AND TACKIFIER TO BE APPLIED PER MANUFACTURER'S SPECIFICATIONS AND SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE MINIMUM.
6. PRIOR TO START OF ANY CONSTRUCTION OR DEMOLITION, INSTALL PERIMETER FIBER ROLL.
7. ALL BANKS AND ALL GRADED AREAS SHALL BE HYDROSEEDED TO CONTROL EROSION BY OCTOBER 1ST.

URBAN RUNOFF POLLUTION NOTES:

1. STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 1 AND APRIL 30.
2. REMOVE SPOILS PROMPTLY AND AVOID STOCKPILING OF FILL MATERIALS WHEN RAIN IS FORECAST. IF RAIN THREATENS, STOCK-PILED SOILS AND OTHER MATERIALS SHALL BE TARPED, AT THE REQUEST OF THE CITY ENGINEER.
3. STORE, HANDLE AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES SO AS TO PREVENT THEIR ENTRY TO THE STORM DRAIN SYSTEM. CONTRACTOR MUST NOT ALLOW CONCRETE, WASHWATERS, SLURRIES, PAINT OR OTHER MATERIALS TO ENTER CATCH BASINS OR TO ENTER SITE RUNOFF.
4. USE FILTRATION OR OTHER MEASURES TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
5. NO CLEANING, FUELING OR MAINTAINING VEHICLES ON SITE SHALL BE PERMITTED IN ANY MANNER THAT ALLOWS DELETERIOUS MATERIALS TO ENTER CATCH BASINS OR TO ENTER SITE RUNOFF.
6. USE OF PESTICIDES AND/ OR FERTILIZERS SHALL BE APPLIED AND CONTROLLED TO PREVENT POLLUTION RUNOFF.
7. IN THE EVENT GRADING OPERATIONS ARE SUSPENDED BY WEATHER CONDITIONS AND IF THE STORM DRAIN SYSTEM IS INCOMPLETE, INSTALL ADDITIONAL ROCK FILTERS AND OTHER FACILITIES AS DIRECTED BY CITY AND ENGINEER.
8. CONTRACTOR TO RELOCATE CONCRETE WASHDOWN, VEHICLE STORAGE DELIVERY, AND NON HAZARDOUS WASTE AREAS AS NECESSARY TO FACILITATE THEIR OPERATION AND PROMOTE POLLUTION CONTROL.
9. HYDROMULCH & TACKIFIER MAY BE ELIMINATED WITHIN BUILDING FOOT PRINT IF CONSTRUCTION IS IMMINENT.

BMP SCHEDULE

	BMP	GENERAL DESCRIPTION
	EROSION CONTROL BMPS	
A	PRESERVE EXISTING VEGETATION	EXISTING VEGETATION SHOULD BE PRESERVED AS MUCH AS POSSIBLE. CASQA: EC-2.
B	REVEGETATION	AREAS OF DISTURBED SOIL/VEGETATION SHOULD BE REVEGETATED AS SOON AS PRACTICAL. CASQA: EC-4.
C	SOIL COVER	COVER ALL EXPOSED SOIL WITH STRAW MULCH AND TACKIFIER (OR EQUIVALENT). CASQA: EC-3, EC-5, EC-6, EC-7, EC-8, EC-14, and EC-16.
D	SOIL PREPARATION & ROUGHENING	SCHEDULE CONSTRUCTION ACTIVITIES TO REDUCE EROSION POTENTIAL, SUCH AS SCHEDULING GROUND DISTURBING ACTIVITIES DURING THE SUMMER AND PHASING PROJECTS TO MINIMIZE THE AMOUNT OF AREA DISTURBED.
E	EROSION CONTROL BLANKETS	SCHEDULE CONSTRUCTION ACTIVITIES TO REDUCE EROSION PORTENTIAL, SUCH AS SCHEDULING GROUND DISTURBING ACTIVITIES DURING THE SUMMER AND PHASING PROJECTS TO MINIMIZE THE AMOUNT OF AREA DISTURBED.
F	REVEGETATION	SCHEDULE CONSTRUCTION ACTIVITIES TO REDUCE EROSION PORTENTIAL, SUCH AS SCHEDULING GROUND DISTURBING ACTIVITIES DURING THE SUMMER AND PHASING PROJECTS TO MINIMIZE THE AMOUNT OF AREA DISTURBED.

	BMP	GENERAL DESCRIPTION
	SEDIMENT CONTROL BMPS	
H	STABILIZED SITE ENTRANCE	STABILIZE SITE ENTRANCE AND TEMPORARY DRIVEWAY. USE 3 TO 4-INCH CRUSHED ROCK FOR A MINIMUM OF 50 FEET (OR AS FAR AS POSSIBLE) TO PREVENT TRACKING SOIL OFFSITE. THIS CAN BE USED IN CONJUNCTION WITH A TIRE WASH OR RUMBLE PLATES. CASQA:TC-1; TC-3.
I	FIBER ROLLS (E.G. STRAW WATTLES)	USE FIBER ROLLS ALONG CONTOURS OF SHORT SLOPES 3:1 OR FLATTER, KEYED INTO GROUND AT LEAST 3-INCHES DEEP (TYPICALLY 25 FEET APART). USE WILDLIFE-FRIENDLY FIBER ROLLS MADE OF BIODEGRADABLE NATURAL MATERIALS. AVOID USING FIBER ROLLS MADE WITH PLASTIC NETTING OR FIXED APERTURE NETTING. CASQA: SE-5.
J	SILT FENCE	INSTALL SILT FENCE ALONG CONTOURS AS SECONDARY MEASURE TO KEEP SEDIMENT ONSITE AND TO MINIMIZE VEHICLE AND FOOT TRAFFIC BEYOND LIMITS OF SITE DISTURBANCE. SILT FENCING MUST BE KEYED IN. CASQA: SE-1.
K	DRAIN INLET PROTECTION	USE PEA-GRAVEL BAGS, (OR SIMILAR PRODUCT) AROUND DRAIN INLETS LOCATED BOTH ONSITE AND IN GUTTER AS A LAST LINE OF DEFENSE. CASQA: NS-2.
L	TRENCH DEWATERING	FOLLOW MCSTOPPP BMPS FOR TRENCH DEWATERING. CASQA: NS-2; OR CALTRANS: NS-2.

	BMP	GENERAL DESCRIPTION
	GOOD HOUSEKEEPING BMPS	
M	CONCRETE WASHOUTS	CONSTRUCT A CONCRETE WASHOUT SITE PLACED AT LEAST 50 FEET AWAY FROM STORM DRAINS, WATERBODIES, OR OTHER DRAINAGES. IDEALLY, PLACE ADJACENT TO STABILIZED ENTRANCE. CLEAN AS NEEDED AND REMOVE AT END OF PROJECT. CASQA: WM-8.
N	STOCKPILE MANAGEMENT	COVER ALL STOCKPILES AND LANDSCAPE MATERIAL AND BERM PROPERLY WITH FIBER ROLLS OR SAND BAGS. KEEP BEHIND SILT FENCE, AWAY FROM WATERBODIES. AVOIUD USE OF PLASTIC SHEETING WHERE POSSIBLE TO KEEP PLASTIC FROM ENTERING WATERBODIES. CASQA: WM-3.
O	HAZARDOUS MATERIAL MANAGEMENT	HAZARDOUS MATERIALS MUST BE KEPT IN CLOSED CONTAINERS THAT ARE COVERED AND UTILIZE SECONDARY CONTAINMENT, NOT DIRECTLY ON SOIL. CASQA: WM-6.
P	SANITARY WASTE MANAGEMENT	PLACE PORTABLE TOILETS NEAR STABILIZED SITE ENTRANCE, BEHIND THE CURB AND AWAY FROM GUTTERS, STORM DRAIN INLETS, AND WATERBODIES. ALL PORTABLE BATHROOMS SHOULD HAVE OVERFLOW PAN/TRAY (MOST VENDORS PROVIDE THESE). CASQA: WM-9.
Q	EQUIPMENT AND VEHICLE MAINTENANCE	PAVEMENT EQUIPMENT FLUID LEAKS ONTO GROUND BY PLACING DRIP PANS OR PLASTIC TARPS UNDER EQUIPMENT. CASQA: NS-8, NS-9, AND NS-10.
S	LITTER & WASTE MANAGEMENT	DESIGNATE WASTE COLLECTION AREAS ON SITE. USE WATERTIGHT DUMPSTERS AND TRASH CANS; INSPECT FOR LEAKS. COVER AT END OF EACH WORK DEATE & WHEN RAINY OR WINDY. ARRANGE FOR REGULAR WASTE COLLECTION. PICK UP SITE LITTER DAILY. CASQA: WM-5; OR CALTRANS: WM-5

NOTES:
1. BMP TO BE IMPLEMENTED YEAR ROUND, AS APPROPRIATE, UNTIL PROJECT IS COMPLETE

BUTLER ARMSDEN ARCHITECTS
1420 SUTTER STREET 1ST FLOOR
SAN FRANCISCO, CA 94109
BUTLERARMSDEN.COM
E INFO@BUTLERARMSDEN.COM
T 415-674-5554

9 RAFAEL PATIO
9 RAFAEL PATIO, STINSON BEACH, CA 94970
APN: 195-065-06

DESIGN REVIEW SET

ISSUE:	DATE:

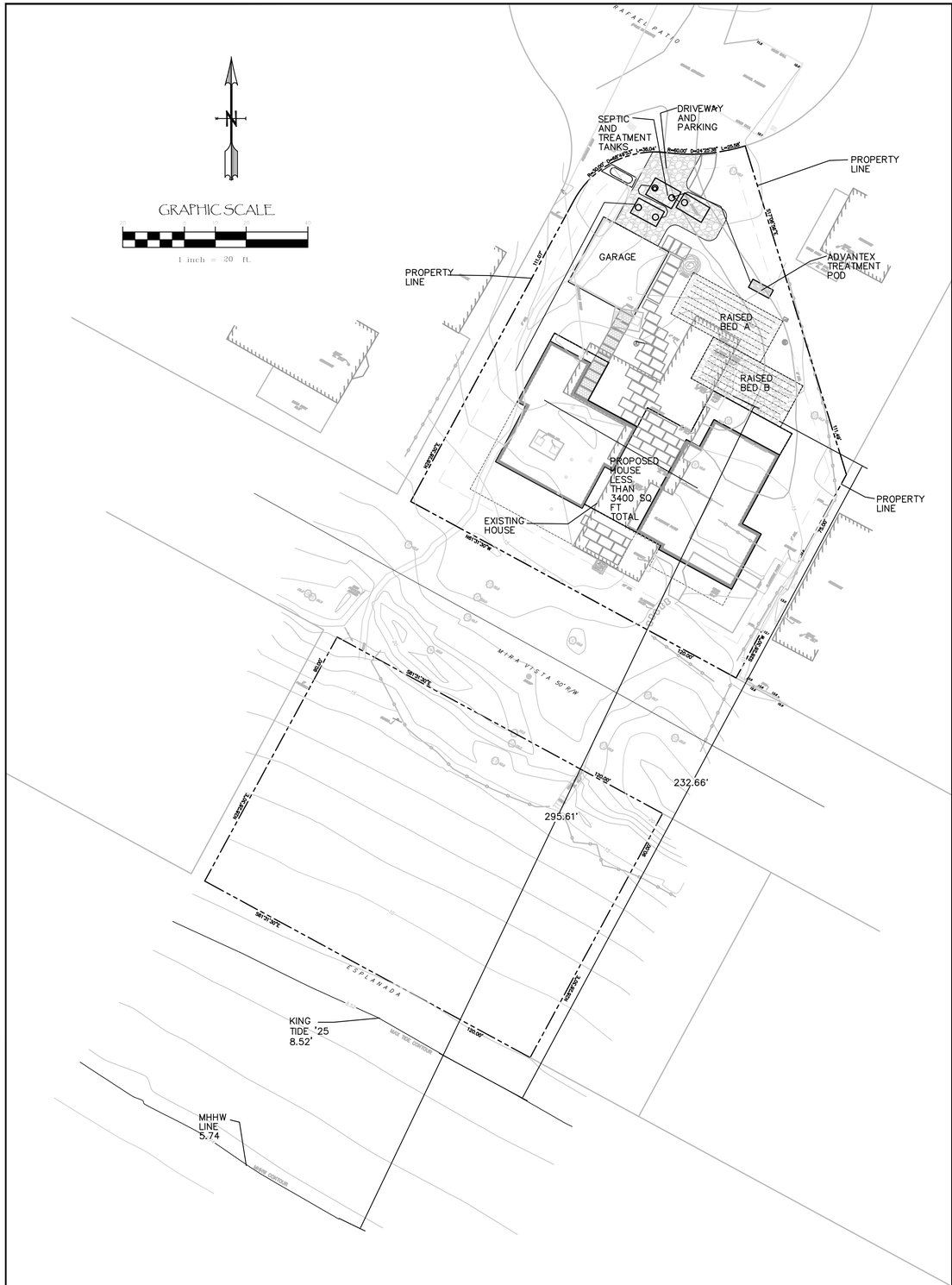
JOB#:	2410
DATE:	8/15/25
DRAWN:	JM, NL
CHECKED:	FE, DS
SCALE:	AS NOTED

LICENSED ARCHITECT FREDERICO ENGEL No. C-32207 REGISTERED PROFESSIONAL ARCHITECT CALIFORNIA

STORMWATER & EROSION CONTROL NOTES

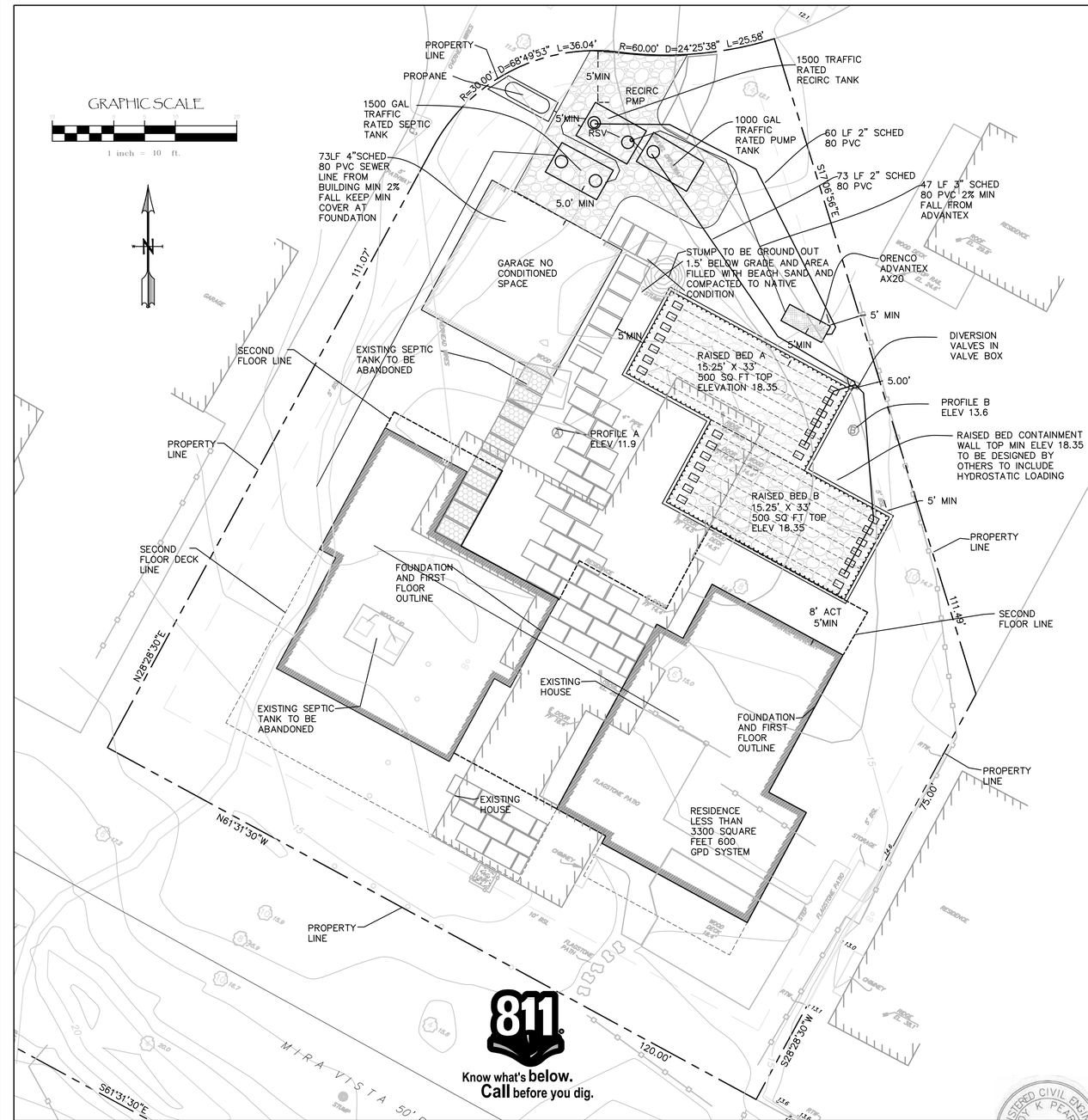
L211

BIMcloud: bim.butlerarmsden.com - BIMcloud Basic for Archicad 28/2410 Current_9RafaelPatio/2410_Current_9RafaelPatio_V28



OVERALL PROPERTY

SCALE 1"=20'



SEPTIC SYSTEM LAYOUT PLAN

Revisions:

PREPARED FOR:
9 Rafael Patio, LLC
3047 Fillmore St
San Francisco Ca 94123-4009

RAISED BED / ADVANTEX SYSTEM
9 RAFAEL PATIO
STINSON BEACH, CA
APN 195-065-06 & 08

AYS Engineering Group, Inc
PO Box 5693, Petaluma, CA 94955
Voice (707) 763-6620

Job. No. 2024-035
Date 8-13-25
Drawn By: TKP
Checked By: TKP
Scale as shown

REGISTERED CIVIL ENGINEER TROY K. PEARCE No. C55588 12/31/26 STATE OF CALIFORNIA

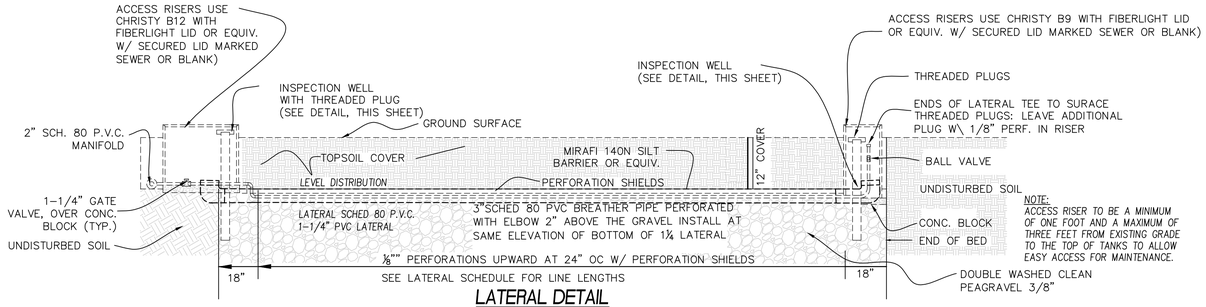
Sheet 1 of 2

S1

No.	DIAMETER	PERF SIZE	LENGTH	# OF PERF'S"
A1	1 ¼"	⅛"	29	15
A2	1 ¼"	⅛"	29	15
A3	1 ¼"	⅛"	29	15
A4	1 ¼"	⅛"	29	15
A5	1 ¼"	⅛"	29	15
A6	1 ¼"	⅛"	29	15
A7	1 ¼"	⅛"	29	15
B1	1 ¼"	⅛"	29	15
B2	1 ¼"	⅛"	29	15
B3	1 ¼"	⅛"	29	15
B4	1 ¼"	⅛"	29	15
B5	1 ¼"	⅛"	29	15
B6	1 ¼"	⅛"	29	15
B7	1 ¼"	⅛"	29	15

LATERAL SCHEDULE

NOT TO SCALE



LATERAL DETAIL

GENERAL NOTES

1) CONTRACTOR TO SUBMIT A STINSON BEACH WATER DISTRICT CONSTRUCTION PERMIT APPLICATION AND NOTIFY DESIGN ENGINEER 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
2) NOT TO BE USED AS A BOUNDARY SURVEY– SURVEYOR TO STAKE ALL PROPERTY LINES AND EASEMENTS. SURVEY PROVIDED BY MERIDIAN SURVEYING ENGINEERING INC 415–456–5450
3) MAINTAIN 10' SEPARATION FROM ANY SEWAGE LINE TO WATERLINE IF NOT POSSIBLE REROUTE TO MAINTAIN SEPARATION. CROSSING SHALL BE MADE WITH WATER ABOVE SEWER LINE WITH BOTH LINES SLEEVED WITHIN 10' OF EACH OTHER.
4) NO CUTS SHALL BE MADE DOWNSLOPE OF DRAINFIELD WITHOUT PERMISSION OF BOTH STINSON WATER AND DESIGN ENGINEER.
5) CONSULT DESIGN ENGINEER PERTAINING TO LANDSCAPE SEPTIC SYSTEM.
6) NO MATERIAL SUBSTITUTION WITH OUT DESIGN ENGINEER APPROVAL.
7) ALL TANKS TO BE WATERTIGHT–SEE WATERTIGHTNESS TEST.
8) CONTRACTOR NOT TO OVEREXCAVATE THE DELIVERY LINE TRENCH/S. MAXIMUM DEPTH OF TRENCH IS 24 INCHES.
9) THIS SYSTEM CALLS FOR A DIVERSION VALVE/S WHICH ARE TO BE HOUSED IN A SUBSTANTIAL VALVE BOX. THE BOX IS TO BE EXTENDED TO 3 INCHES ABOVE GRADE. THE VALVE SHOULD BE ALTERNATED EVERY SIX MONTHS.
10) EROSION PROTECTION SHALL BE PLACED IN ALL DISTURBED AREAS. STRAW AND SEED SHALL BE PLACED AT A MINIMUM PROIR TO FINAL INSPECTION.
11) ALL SEWER LINES FROM BUILDINGS SHALL BE 3 OR 4 INCH SCHED 80 PVC OR APPROVED EQUIVALENT WITH A MINIMUM SLOPE OF 2 PERCENT. INSTALL CLEANOUTS AT CHANGES IN DIRECTION AND 5 FEET FROM THE OUTSIDE OF THE BUILDING.
12) ALL WORK SHALL BE IN CONFORMANCE WITH THESE PLANS AND THE CURRENT TITLE 4 –ONSITE WASTEWATER MANAGEMENT CODE.
13) CONTRACTOR TO CONDUCT SQUIRT TEST CONSISTING OF PRESURIZING THE LEACHFIELD WITH THE PUMP AND ADJUSTING THE LEACHFIELD GATE VALVES TO PROVIDE A 5' HIGH STREAM OF WATER THROUGH ORIFICES. THIS IS TO BE REPEATED FOR FINAL CONSTRUCTION INSPECTION BY STINSON WATER.
14) CONTRACTOR TO KEEP A PLAN SET WITH ALL CHANGES MARKED UP AT THE JOB SITE AT ALL TIMES. THE CONTRACTOR TO PROVIDE ONE COPY OF THESE CHANGES ON A PLAN FOR PREPARATION OF AS– BUILT DRAWINGS TO GAIN COUNTY FINAL APPROVAL.

CONSTRUCTION INSPECTION NOTES
CONTRACTOR TO NOTIFY DESIGN ENGINEER A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION AND INSPECTION OF THE SYSTEM.
PHASE ONE:
1) INSPECT STAKE OUT LOCATION OF LATERALS ALONG CONTOURS,THE SEPTIC AND SUMP TANKS, AND THE SANDFILTER.
2) INSPECT THE LEACHLINE GRAVEL AND SANDFILTER MEDIA, AND PROVIDE A CERTIFIED COPY OF WET SIEVE ANALYSIS USING ASTM C–117 OR EQUIVALENT.

PHASE TWO:
1) INSPECT LEACHLINE INSTALLATION AND LEVEL VIA OPEN TRENCHES AND INSTALLED INSPECTION WELLS.
2) INSPECT PERFORATION SIZE AND SPACING.
3) INSPECT WATERTIGHTNESS OF ALL TANKS.
4) INSPECT SQUIRT TEST OF LEACHFIELD.
5) INSPECT CONTROL PANEL, FLOATS AND CIRCUIT BREAKER FOR ENTIRE SEPTIC SYSTEM.

PHASE THREE:
1) INSPECT ANY ITEMS LISTED ABOVE WHICH HAVE NOT BEEN OBSERVED YET.
2) INSPECT FINISHED SEPTIC SYSTEM INCLUSIVE OF ANY NECESSARY EROSION CONTROL MEASURES.
3) INSPECT FLOOR PLAN OF STRUCTURE BEING SERVED BY THE SEPTIC SYSTEM. INSPECT, IF APPLICABLE, WHETHER LOW FLOW FIXTURES WERE INSTALLED OR NOT.
4) PROVIDE STINSON WATER WITH BUILDING DEPARTMENT APPROVAL OF PUMP INSTALLATION.

OPERATION AND MAINTENANCE OF A SEPTIC SYSTEM

1) INSPECT SEPTIC TANKS AND DRAINFIELD EVERY SIX MONTHS.
2) IF SLUDGE OR SCUM BUILDUP IS GREATER THAN 6 TO 8 INCHES HAVE TANK PUMPED. (USUAL FREQUENCY FOR PUMPING IS 3 TO 5 YEARS).
3) MINIMIZE THE USE OF GARBAGE DISPOSAL.
4) MINIMIZE THE USE OF HARSH CHEMICALS IN LARGE QUANTITIES.
5) MINIMIZE THE AMOUNT OF GREASE DISPOSED OF IN SINKS. PACKAGE ALL FOOD WASTES AND DISPOSE OF IN GARBAGE FOR SANITARY LANDFILL.
6) MINIMIZE DISPOSAL OF NON–SEWAGE ITEMS SUCH AS SANITARY NAPKINS, CIGARETTES AND OTHERS.
7) MAINTAIN ALL PLUMPING. LEAKS SHOULD BE FIXED AS QUICK AS THEY OCCUR.
8) MINIMIZE LIQUID LOAD ON THE SYSTEM BY WASHING DISHES AND LAUNDRY IN LARGE LOADS. SPREAD LOADS OVER THE WEEK RATHER THAN DOING ALL LAUNDRY ON A SINGLE DAY.
9) PROHIBIT VEHICULAR TRAFFIC AND HOOFED ANIMALS FROM THE SEPTIC SYSTEM AREA.

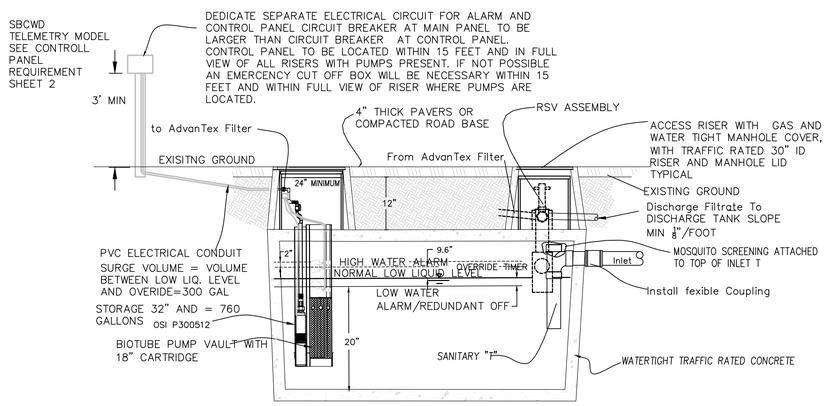
PUMP:
THE PUMP SHALL BE OF THE SIZE AND TYPE INDICATED ON THE PLANS AND SHALL INCLUDE THE FOLLOWING:
1) A HANDS OFF AUTO (HOA) SWITCH.
2) AN AUDIO AND VISIBLE ALARM AND NECESSARY EFFLUENT SENSING DEVICE TO INDICATE A HIGH WATER CONDITION.
3) USE EITHER PILL OR MERCURY TYPE FLOAT SWITCH.
4) SET PUMPING VOLUME AS STATED IN THE PUMP REQUIREMENTS.
5) PUMP TO BE SET A MINIMUM OF 8 INCHES FROM THE BOTTOM OF THE SUMP.

SUMP:
1) THE SUMP SHALL HAVE A WORKING CAPACITY OF 1.0 TIMES THE DESIGN FLOW DESIGNATED. THE CAPACITY SHALL INCLUDE THE DOSE VOLUME AND 24–HOUR STORAGE VOLUME.
2) ACCESS TO BE PROVIDE BY A MINIMUM 24–INCH DIAMETER WATERPROOF AIRTIGHT RISER AND LID SYSTEM.
3) ALL PIPE AND OR ELECTRICAL CONNECTIONS MADE THROUGH THE RISER EITHER TO BE PRECAST INTO THE RISER OR SEALED WITH GASTIGHT COMPRESSION CONNECTORS.

ELECTRICAL FEATURES
THE FOLLOWING ELCTRICAL FEATURES TO BE PROVIDED
1) AN OUTDOOR TYPE CONTROL BOX CONTAINING A FUSED DICONNECT AND MOTOR PROTECTION SWITCH. SEE THE PUMP REQUIREMENT SECTION OF THE PLANS FOR THE MODEL NUMBER AND REQUIREMENTS.
2) THE CONTROL BOX TO BE MOUNTED ON THE BUILDING BEING SERVED IF WITHIN 20 FEET OF THE SUMP OTHERWISE INSTALL ON A 4"X4" POST THAT IS INSTALLED SECURELY. CONTROL PANEL TO BE VISIBLE FROM THE ROADWAY IF AT ALL POSSIBLE.
3) ALARM AND PUMP TO BE INSTALLED ON SEPARATE CIRCUITS THAT ARE OF SIZE LARGE ENOUGH FOR THE RESPECTIVE USES.
4) ELECTRICAL CONDUIT SHALL BE PVC AND SEPARATE CONDUITS SHALL BE PROVIDED TO POWER PUMP AND FLOATS.

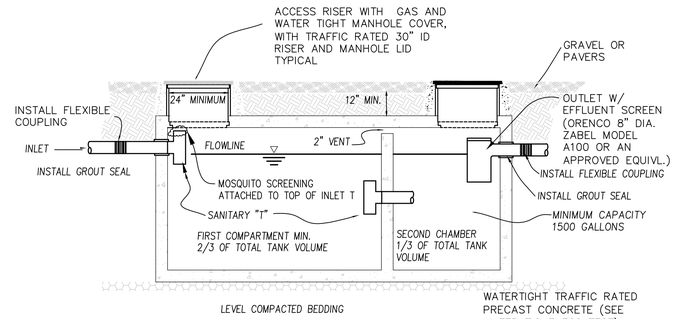
PRESSURE PIPING
1) THE PIPE FROM THE SUMP TO THE DRAINFIELD SHALL BE PVC IN THE SIZE AND SCHEDULE SPECIFIED ON THE PLANS.
2) A UNION SWING CHECKVALVE AND DOUBLE WEDGE GATE VALVE SHALL BE INSTALLED IN THE SUMP CHAMBER IN THIS ORDER AWAY FROM THE PUMP. ALTERNATIVELY THESE ITEMS CAN BE INSTALLED IN A VALVE BOX NEXT TO THE SUMP CHAMBER.
3) CONCRETE THRUST BLOCKS SHALL BE INSTALLED WHEN CHANGE IN PIPE DIRECTION IS 45 DEGREES OR GREATER.

PERMITS
STINSON WATER WILL ISSUE A DESIGN APPROVAL PERMIT AND A CONSTRUCTION PERMIT BEFORE CONSTRUCTION MAY BEGIN. ADDITIONAL PERMIT(S) WILL BE REQUIRED BY BY THE COUNTY'S BUILDING INSPECTION DEPARTMENT FOR PUMP INSTALLATION. UPON FINAL CONSTRUCTION INPECTION, SIGNOFF OF CONSTRUCTION PERMIT,SUBMITTAL OF DESIGNER CERTIFICATION AND SUBMITTAL OF AS–BUILT DRAWINGS, STINSON WATER WILL ISSUE THE OWTS DISCHARGE PERMIT FOR THE SYSTEM.



RT#1 1500 GALLON RECIRCULATION TANK AND ADVANTEX DETAIL

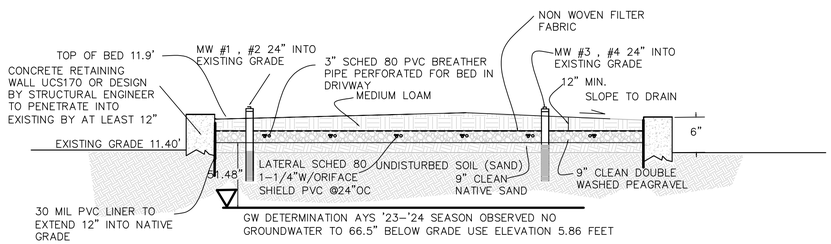
N.T.S.



NOTE:
ACCESS RISER TO BE A MINIMUM OF ONE FOOT AND A MAXIMUM OF THREE FEET FROM EXISTING GRADE TO THE TOP OF TANKS TO ALLOW EASY ACCESS FOR MAINTENANCE.

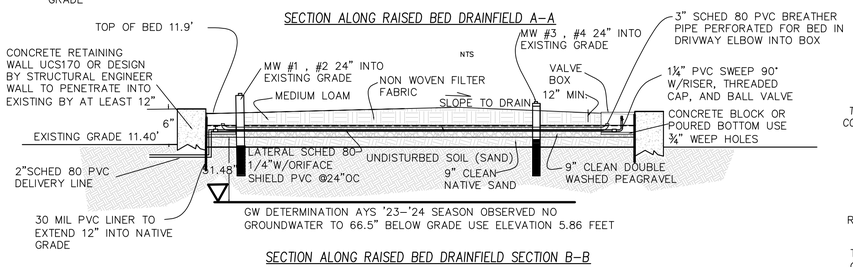
1500 GALLON SEPTIC TANK DETAIL (TYP.)

NOT TO SCALE



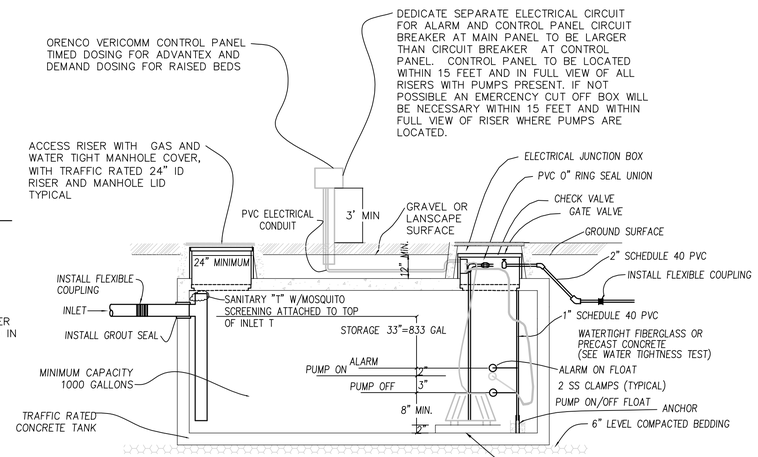
SECTION ALONG RAISED BED DRAINFIELD A–A

NTS



SECTION ALONG RAISED BED DRAINFIELD SECTION B–B

NTS



PS#1 1000 GALLON SUMP TANK DETAIL

NOT TO SCALE

RT#1 FROM RECIRC TANK TO ADVANTEX

TOTAL DYNAMIC HEAD = 24.6 FT
GALLONS PER MINUTE (GPM) = 32 GPM
DOSE = 32 GALLONS
OPERATION RANGE = 9.6"
RECOMMENDED PUMP TYPE: OSI PF300512 (230 VOLTS, SINGLE PHASE, 6.6 AMPS).

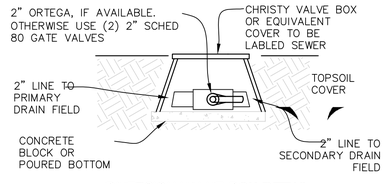
TIMER CONTROLLED
T OFF 30 MINS
T ON 24 SEC

T OVERRIDE OFF 10 MINS
T OVERRIDE ON 24 SEC
RECOMMENDED CONTROL PANEL:
SEE CONTROL PANEL REQUIREMENTS THIS PAGE.

PUMP REQUIREMENTS PS#1

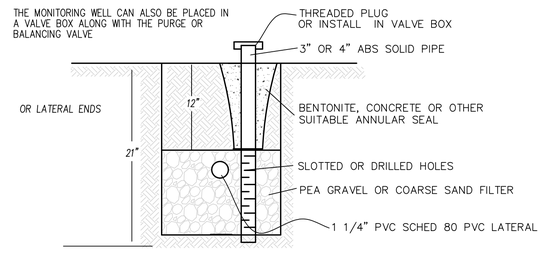
FROM DISPERSAL TANK TO RAISED BEDS
TOTAL DYNAMIC HEAD = 33 FT
GALLONS PER MINUTE (GPM) = 46
DOSE = 76 GALLONS
OPERATION RANGE = 3.0"
SUMP STORAGE = 833 GALLONS
RECOMMENDED PUMP TYPE GOULDS MODEL 3885 WE1012H OR APPROVED EQUAL RECOMMENDED CONTROL PANEL ORENCO VERICOMM PANEL WITH TIMER FOR PUMP TO RECIRC TANK AND ON DEMAND TO DRAIN FIELD

Know what's **below.**
Call before you dig.



DIVERSION VALVE BOX DETAIL

NOT TO SCALE



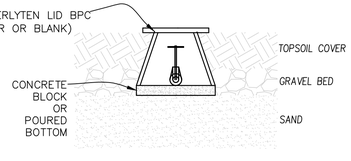
TYP. LEACHLINE INSPECTION WELL

NOT TO SCALE

TANK WATERTIGHTNESS TEST

1. CAP OR TEST PLUG ALL INLETS AND OUTLETS TO TANK.
2. FILL TANK WITH WATER TWO INCHES INTO THE RISER AND MARK WATER LEVEL. SCHEDULE WITH ENGINEER AND NECM 24 HOURS BEFORE FILLING TANK.
3. IF AFTER 24 HOURS WATER LEVEL DROPS, TANK MUST BE MADE WATERTIGHT BY APPLYING WATERPROOF SEALER (NOT BITMEOUS PRODUCT) THOROPLUG, THOROSEAL OR OTHER PORTLAND CONCRETE CEMENT PRODUCT.

ACCESS RISERS USE CHRISTY B9 WITH FIBERLYTEN LID BPC OR EQUIV. W/ SECURED LID MARKED SEWER OR BLANK)



VALVE BOX DETAIL

NOT TO SCALE

OVERALL PROPERTY

SCALE 1"=20'

SEPTIC SYSTEM LAYOUT PLAN

REGISTERED CIVIL ENGINEER TROY K. PEACE No. C55588 12/31/26 STATE OF CALIFORNIA

Revisions:

PREPARED FOR:
9 Rafael Patio, LLC
3047 Fillmore St
San Francisco Ca 94123-4009

RAISED BED / ADVANTEX SYSTEM
9 RAFAEL PATIO
STINSON BEACH, CA
APN 195-065-06 & 08

AYS Engineering Group, Inc
PO Box 5693, Petaluma, CA 94955
Voice (707) 763-6620

Job. No. 2024-19
Date
Drawn By: TKP
Checked By: TKP
Scale as shown

Sheet 1 of 2

S2