Single Family Residence

1019 Wilmington Way

Redwood City, CA

APN 068-211-190

Project Team

Architect
Gregg K Kawahara, Architect
5822 Dresslar Circle
Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

Surveyor & Civil Engineer
MacLeod & Associates
965 Center Street
San Carlos, CA 94070
(650) 593-8580

General Contractor
Grove Construction
1011 Bransten Road, Unit D
San Carlos, CA 94070
(650) 867-3531

Geotechnical Engineer
J. Yang and Engineers
2758 Canyon Creek Dr.
San Ramon, CA 94583
(925) 831-8678

Landscape Architect
Mara Young
Landscape Architect
836 18th Avenue
Menlo Park, CA 94025
(650) 704-9255

Arborist
Hortscience / Bartlett Consulting
2550 Ninth Street, Suite 112
Berkeley, CA
(925) 484-0211

Abbreviations

A.B.	ANCHOR BOLT
A.F.F.	ABOVE FINISHED FLOOR
ADD'L.	ADDITIONAL
AGG.	AGGREGATE
ALT.	ALTERNATE
ARCH.	ARCHITECT OR ARCHITECTURAL
B.F.F.	BELOW FINISHED FLOOR
BDRM.	BEDROOM
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
BOT.	BOTTOM
BTWN.	BETWEEN
C.J	CONTROL JOINT
CMU	CONCRETE MASONRY UNIT(S)
CALCS.	CALCULATIONS
CLG.	CEILING
CLR.	CLEAR OR CLEARANCE
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUATION OR CONTINUOUS
CONTR.	CONTRACTOR
COR.	CORNER
D.F.	DOUGLAS FIR
DL	DEAD LOAD
D.S.	DOWNSPOUT
DBL.	DOUBLE
DET.	DETAIL
DIA. OR ∅	DIAMETER
DIM.	DIMENSION
DN.	DOWN
(E)	EXISTING
E.J.	EXPANSION JOINT
ELEV.	ELEVATION
EN.	EDGE NAIL
EA.	EACH
E.S.	EACH SIDE
EQ.	EQUAL
E.W.	EACH WAY
EXT.	EXTERIOR
F.F.	FINISHED FLOOR
F.J.	FLOOR JOIST
FL	FLUORESCENT
FLR.	FLOOR
FS.	FAR SIDE
FOUND. OR FND.	FOUNDATION
FP.	FIREPLACE
FT.	FLOOR TRUSS
FTG.	FOOTING
G.S.M.	GALVANIZED SHEET METAL
GA.	GAUGE
GALV.	GALVANIZED
GLU-LAM, GLB.	GLUE LAMINATED BEAM
GYP. BD.	GYPSUM BOARD
HD	HOLDDOWN
HORIZ.	HORIZONTAL
HDR.	HEADER
HGR.	HANGER
INFO.	INFORMATION
INSUL.	INSULATION OR INSULATED
INT.	INTERIOR
INTER.	INTERSECTION
JT.	JOINT
LB. OR #	POUND OR NUMBER
LNG.	LONG OR LENGTH
LSL	TIMBER STRAND
LTWT. OR LW.	LIGHTWEIGHT
LVL	LAMINATED VENEER LUMBER
MAX.	MAXIMUM
MB.	MACHINE BOLT
M.E.P.	MECHANICAL, ELECTRICAL AND PLUMBING
MFR. OR MANU.	MANUFACTURER
MIN.	MINIMUM
ML	MICROLLAM
MSTR.	MASTER
(N)	NEW
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O/	OVER
O.C.	ON CENTER
OPT.	OPTIONAL
PSF	POUNDS PER SQUARE FOOT
PSL	PARALLAM
P.T.	PRESSURE TREATED
PAR.	PARALLEL
PERF.	PERFORATED
PERP.	PERPENDICULAR
PL.HT.	PLATE HEIGHT
PLYWD. OR PLY.	PLYWOOD
PR.	PAIR
R.	RISER
RECOM. OR REC.	RECOMMENDATIONS
REINF.	REINFORCING
REQ'D.	REQUIRED
REBAR	REINFORCING BAR(S)
R.J.	ROOF JOIST
RM.	ROOM
RR.	ROOF RAFTER
RT.	ROOF TRUSS
RWD.	REDWOOD
S.C.D.	SEE CIVIL DRAWINGS
S.L.D.	SEE LANDSCAPE DRAWINGS
S.S.D.	SEE STRUCTURAL DRAWINGS
SCHD.	SCHEDULE
S.O.G.	SLAB ON GRADE
SHL	SHEARWALL
T	TREAD
TOFF	TOP OF FINISH FLOOR
TOH	TOP OF HARDSCAPE
TOGB	TOP OF GRADE BEAM
T.O.P	TOP OF PARAPET
T.O.R.S.	TOP OF ROOF SHEATHING
T.O.S.F.	TOP OF SUBFLOOR
T/P	TOP PLATE
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
VERT	VERTICAL
VIF	VERIFY IN FIELD
VIFO	VERIFY WITH OWNER
W/	WITH
WD.	WOOD
WP.	WATERPROOF
WRB	WEATHER RESISTIVE BARRIER
W.W.M.	WELDED WIRE MESH

General Notes

1. ALL CONSTRUCTION SHALL EXCEED THE LATEST EDITION OF CODES ADOPTED BY THE LOCAL GOVERNING AGENCIES. THESE SHALL INCLUDE:

   2019 CALIFORNIA BUILDING CODE, 2019 CALIFORNIA RESIDENTIAL CODE, 2019 CALIFORNIA ELECTRICAL CODE, 2019 CALIFORNIA PLUMBING CODE, 2019 CALIFORNIA MECHANICAL CODE, 2019 CALIFORNIA FIRE CODE, 2019 CALIFORNIA GREEN BUILDING CODE, 2019 CALIFORNIA ENERGY CODE AND ALL OTHER HEALTH AND SAFETY CODES, ORDINANCES AND REQUIREMENTS ADOPTED BY GOVERNING AGENCIES.

2. THESE PLANS ARE FOR GENERAL CONSTRUCTION PURPOSES ONLY. THEY ARE NOT EXHAUSTIVELY DETAILED NOR FULLY SPECIFIED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SELECT, VERIFY, RESOLVE AND INSTALL ALL MATERIALS AND EQUIPMENT. ANY OR PART OF SYSTEMS, MATERIALS, CONNECTIONS, DETAILS, WATERPROOFING, FINISHES, FIXTURES, ETC... ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROPERLY VERIFY AND INSTALL.

3. THE ARCHITECT WILL NOT BE OBSERVING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE QUALITY CONTROL AND CONSTRUCTION STANDARDS FOR THIS PROJECT.

4. PROVIDE AN AUTOMATIC FIRE SPRINKLER SYSTEM DESIGNED PER NFPA 13D WITH LOCAL JURISDICTION AMENDMENTS. A SEPARATE PERMIT SHALL BE APPLIED FOR WITH THE FIRE OR BUILDING DEPARTMENT.

5. A CLASS A ROOF IS REQUIRED TO MEET THE REQUIREMENTS OF THE FIRE SEVERITY ZONE.

6. ROOFING, ATTIC VENTILATION, EXTERIOR WALLS, WINDOWS EXTERIOR DOORS, DECKING, FLOORS AND UNDERFLOOR PROTECTION SHALL MEET CRC R327 REQUIREMENTS.

Building Code Data

1. OCCUPANCY: R3 - SINGLE FAMILY & U-PRIVATE GARAGE
2. TYPE OF CONSTRUCTION: TYPE VB - SPRINKLERED
3. BASIC ALLOWABLE AREA R3 OCCUPANCY: UNLIMITED AREA

Description of Application

PROPOSED SCOPE OF WORK:

1. DEMOLITION OF EXISTING STRUCTURES TO INCLUDE A SINGLE FAMILY RESIDENCE AND TWO ACCESSORY STRUCTURES
2. REMOVAL OF EXISTING HARDSCAPE, RETAINING WALLS & SITE FEATURES
3. RETAINING WALL AT FRONT PROPERTY LINE TO REMAIN
4. REMOVAL OF 4 EXISTING TREES
5. A NEW TWO STORY SINGLE FAMILY RESIDENCE WITH ATTACHED TWO CAR GARAGE
6. NEW SITE RETAINING WALLS, PATIOS, WALKWAYS & STAIRS

Lot & Allowable Areas

ZONING	RH / DR
LOT AREA	13,925 S.F.
MAX ALLOWABLE FLOOR AREA (30%)	4,178 S.F.
MAX ALLOWABLE SITE COVERAGE (25%)	3,481 S.F.

Existing Structures Floor Area

RESIDENCE	1,540 S.F.
ACCESSORY STRUCTURE	248 S.F.
ACCESSORY STRUCTURE	48 S.F.

Proposed Floor Area Calcs.

PROPOSED FLOOR AREA	
FIRST FLOOR	1,942 S.F.
SECOND FLOOR	1,684 S.F.
TOTAL PROPOSED FLOOR AREA	3,626 S.F.
FRONT PORCH	55 S.F.
FRONT PORCH 4' EXEMPTION	-44 S.F.
GARAGE	517 S.F.
TOTAL PROPOSED COVERED FLOOR AREA	4,154 S.F.
MAX. ALLOWABLE FLOOR AREA (30%)	4,178 S.F.

Proposed Lot Coverage

REAR PATIO	623 S.F.
REAR PATIO LANDING	16 S.F.
STAIR EXTERIOR DOOR LANDING	16 S.F.
GARAGE STAIR TOP LANDING	66 S.F.
GARAGE STAIR BOTTOM LANDING	16 S.F.
FIRST FLOOR	1,942 S.F.
FRONT PORCH	55 S.F.
GARAGE	517 S.F.
PROPOSED LOT COVERAGE	3,251 S.F.
MAX ALLOWABLE SITE COVERAGE (25%)	3,443 S.F.

Landscape Areas

EXISTING LANDSCAPED & PERVIOUS AREA	7,252 S.F.
PROPOSED LANDSCAPED AREA	7,442 S.F.
PROPOSED LANDSCAPED & PERVIOUS AREA	9,183 S.F.

Sheet Index

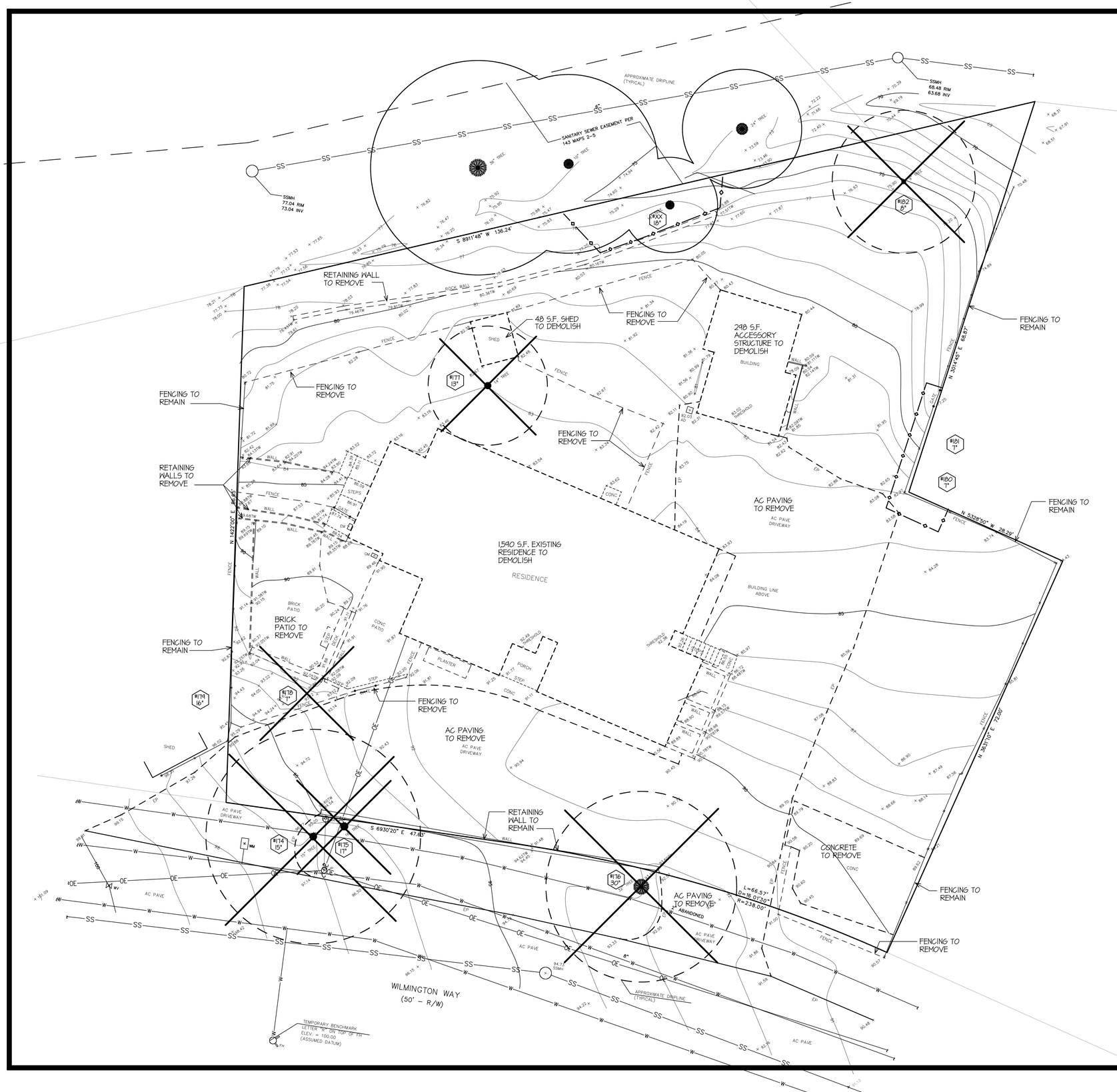
Vicinity Map

REVISIONS

△	Description	Date

Cover Sheet

Sheet
CS
Date 10-24-22



LEGEND

	PROPERTY LINE
AC PAVE	ASPHALT CONCRETE PAVEMENT
AD	AREA DRAIN
CONC	CONCRETE
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
FH	FIRE HYDRANT
FL	FLOWLINE
GA	GUY ANCHOR
GM	GAS METER
INV	INVERT
JP	JOINT UTILITY POLE
SSMH	SANITARY SEWER MANHOLE
TW	TOP OF WALL
WM	WATER METER
WV	WATER VALVE
●12" TREE	TREE W/ SIZE
—X—X—	FENCE
—OH—	OVERHEAD UTILITY LINE
—SS—	SANITARY SEWER LINE
—W—	WATER LINE
#XXX X"	TREE NUMBER W/ SIZE

DEMO SYMBOLS

- TREE TO REMOVE
- STRUCTURE OR FEATURE TO REMOVE

TREE FENCING LEGEND

- TREE PROTECTION FENCING - SEE TREE REPORT

EXISTING TREE LIST

TREE #	TRUNK DIA.	COMMON NAME
174	15"	ITALIAN STONE PINE
175	17"	MEXICAN FAN PALM
176	30"	CANARY ISLAND DATE PALM
177	13"	CALIFORNIA BAY
178	7"	JAPANESE MAPLE
179	16"	COAST LIVE OAK
180	7"	GLOSSY PRIVET
181	7"	GLOSSY PRIVET
182	8"	PLUM
XX	15"	UNKNOWN, SEE REPORT

Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

1019 Wilmington Way
Redwood City, CA

Grove Construction

NOTES

1. THE SITE PLAN IS NOT A SURVEY AND IS BASED ON INFORMATION PROVIDED BY THE SURVEYOR, MACLEOD & ASSOCIATES. IT IS PROVIDED FOR BUILDING AND SITE WORK LAYOUT ONLY. THE CONTRACTOR SHALL VERIFY ON SITE ALL GRADES, EXISTING IMPROVEMENTS, PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES AND SUB-STRUCTURES. WHERE DISCREPANCIES OCCUR, CONTACT THE ARCHITECT.
2. USE OF THE SITE PLAN FOR ANY USE BEYOND THE SCOPE OF WORK OF THE ARCHITECT AND NOT AUTHORED, DRAWN OR PERFORMED BY THE ARCHITECT IS WITHOUT THE ARCHITECTS AUTHORIZATION, IS AT THE USER'S RISK AND THE USER HOLDS THE ARCHITECT HARMLESS, RELEASEES THE ARCHITECT FROM ALL LIABILITY, INCLUDING THIRD PARTY CLAIMS.
3. TREE INFORMATION HAS BEEN PROVIDED BY THE SURVEYOR & THE ARBORIST, HORTSCIENCE BARTLETT CONSULTING

REVISIONS

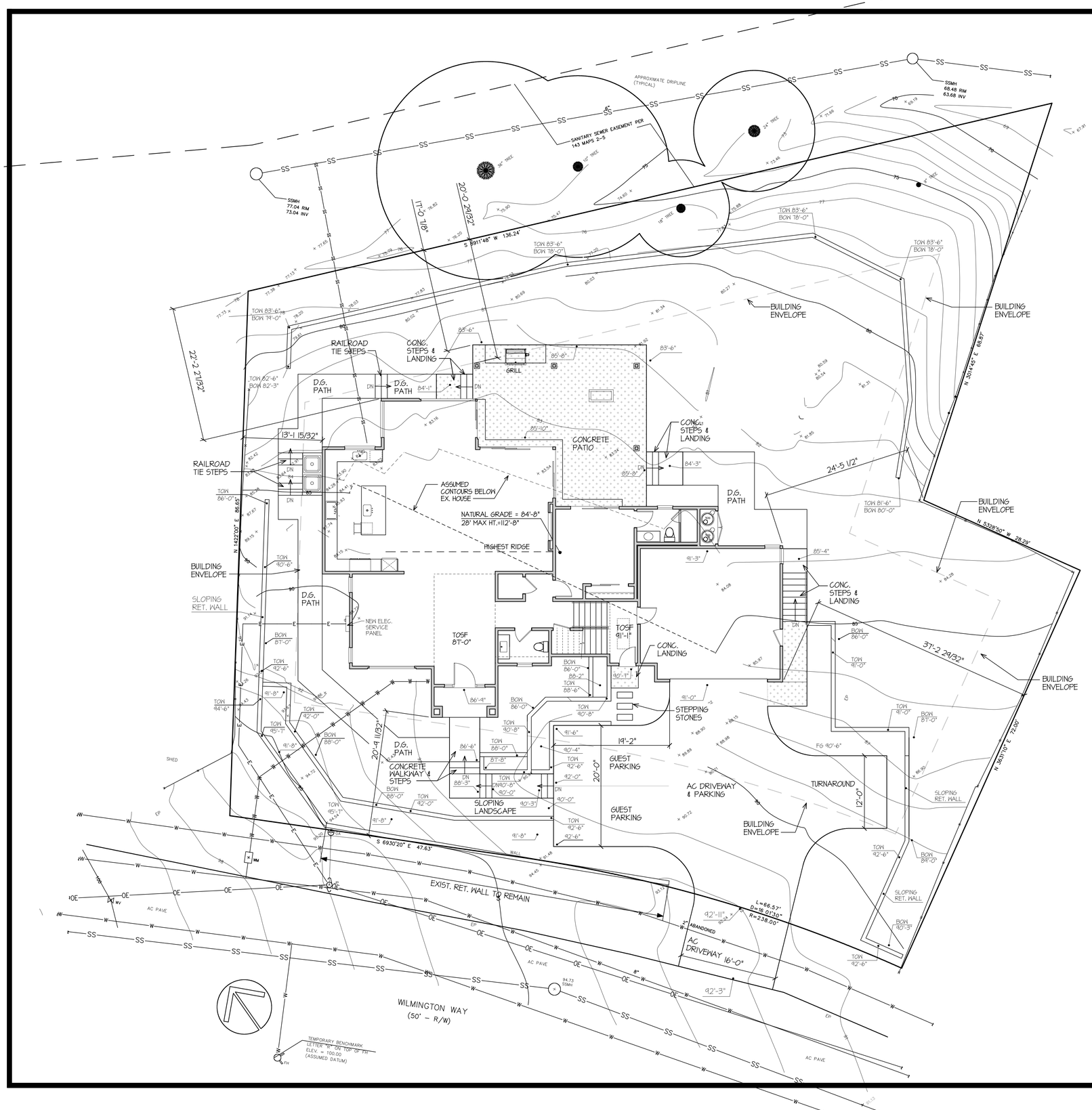
△	Description	Date

Existing & Demo Site Plan

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

A0

Date 10-24-22



LEGEND

———	PROPERTY LINE
AC	ASPHALT CONCRETE PAVEMENT
CO	CLEANOUT
BOW	BOTTOM OF WALL
CONC	CONCRETE
DG	DECOMPOSED GRANIT
FF	FINISH FLOOR
INV	INVERT
JP	JOINT UTILITY POLE
MB	MAILBOX
SSMH	SANITARY SEWER MANHOLE
TC	TOP OF CURB
TOSF	TOP OF SUBFLOOR
TOW	TOP OF WALL
WM	WATER METER
#4 ● 12" TREE	TREE W/ SIZE & TREE NUMBER PER ARBORIST REPORT
—X—X—	FENCE
—OE—	OVERHEAD UTILITY LINE
—SS—	SANITARY SEWER LINE
—W—	WATER LINE
—E—	ELECTRICAL LINE
	HARDSCAPE +/8" ABOVE EXIST. GRADE

Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
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gkarchitect@comcast.net

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SITE NOTES

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2. USE OF THE SITE PLAN FOR ANY USE BEYOND THE SCOPE OF WORK OF THE ARCHITECT AND NOT AUTHORED, DRAWN OR PERFORMED BY THE ARCHITECT IS WITHOUT THE ARCHITECTS AUTHORIZATION, IS AT THE USER'S RISK AND THE USER HOLDS THE ARCHITECT HARMLESS, RELEASEES THE ARCHITECT FROM ALL LIABILITY, INCLUDING THIRD PARTY CLAIMS.
3. SEE GRADING & DRAINAGE PLAN FOR INFORMATION REGARDING DRAINAGE, PERVIOUS PAVING, & IMPERVIOUS PAVING.
4. SEE LANDSCAPE PLANS FOR PLANTING INFORMATION & MORE DETAILED INFORMATION REGARDING HARDSCAPE & LANDSCAPING FEATURES.
5. SURFACE DRAINAGE SHALL BE DIVERTED TO A STORM SEWER CONVEYANCE OR OTHER APPROVED POINT OF COLLECTION THAT DOES NOT CREATE A HAZARD. FINISH GRADE SHALL DRAIN SURFACE WATER AWAY FROM THE FOUNDATION WALLS & THE GRADE SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'. WHERE LOT LINES, WALLS, SLOPES, OR OTHER PHYSICAL BARRIERS PROHIBIT 6" OF FALL WITHIN 10', DRAINS OR SWALES SHALL BE CONSTRUCTED TO ENSURE DRAINAGE AWAY FROM THE STRUCTURE. IMPERVIOUS SURFACES WITHIN 10' OF THE BUILDING FOUNDATION SHALL BE SLOPED A MIN. OF 2% AWAY FROM THE BUILDING.
6. PROVIDE EXPANSION AND CONTROL JOINTS IN ALL EXTERIOR CONCRETE SLABS. SPACING OF JOINTS SHALL BE PER INDUSTRY STANDARD.
7. STORMWATER FROM ROOF DOWNSPOUTS SHALL DISCHARGE ACCORDING TO THE GRADING & DRAINAGE PLANS
8. SURFACE WATER SWALES SHALL HAVE A 1% MINIMUM SLOPE.
9. IRRIGATION SYSTEM SHALL BE DESIGNED TO PREVENT THE SATURATION OF SOIL ADJACENT TO BUILDING.
10. TREE INFORMATION HAS BEEN PROVIDED BY THE SURVEYOR & THE ARBORIST, HORTSCIENCE BARTLETT CONSULTING

REVISIONS

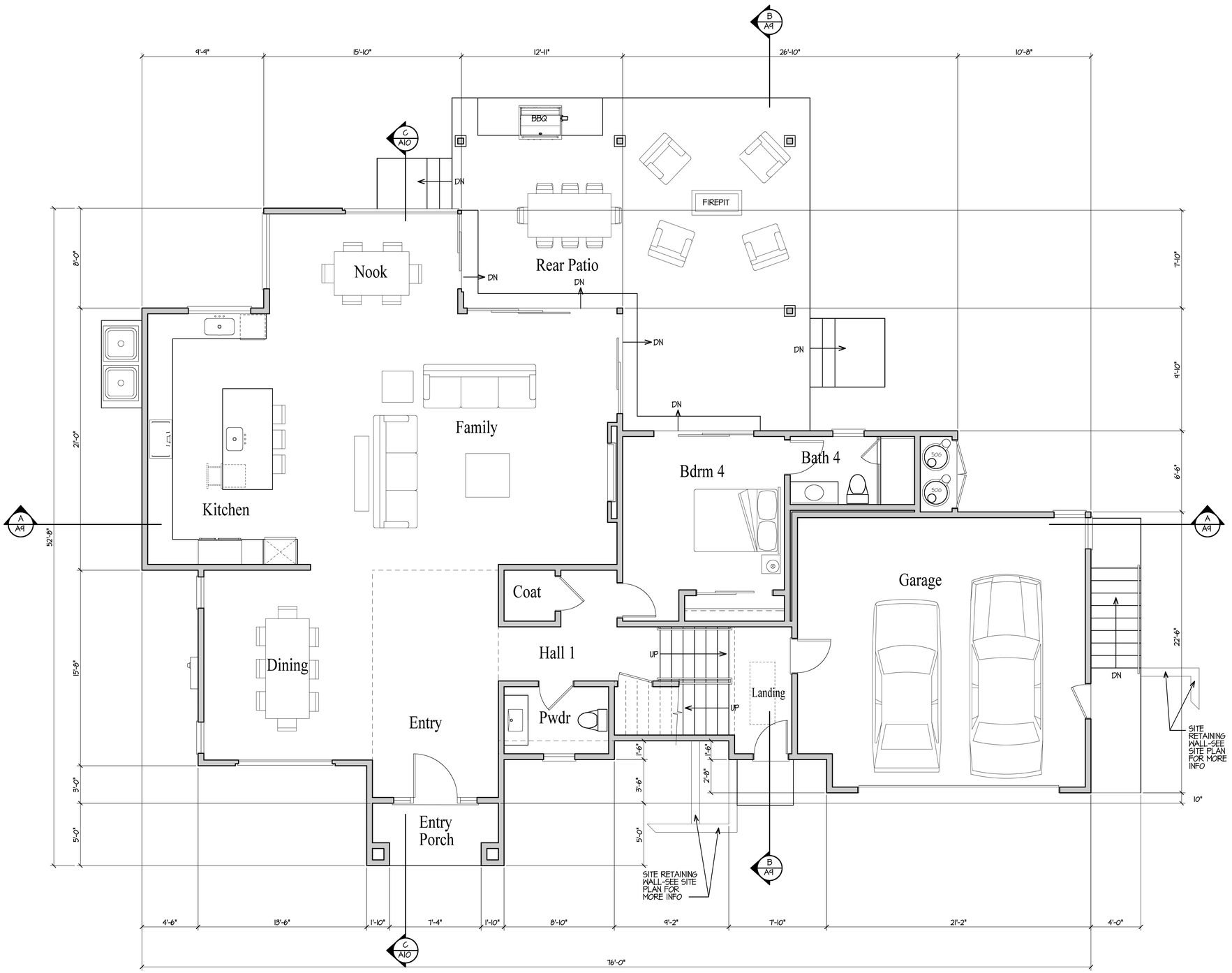
△	Description	Date

Proposed Site Plan

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

A1

Date 10-24-22



Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

1019 Wilmington Way
Redwood City, CA

Grove Construction

REVISIONS

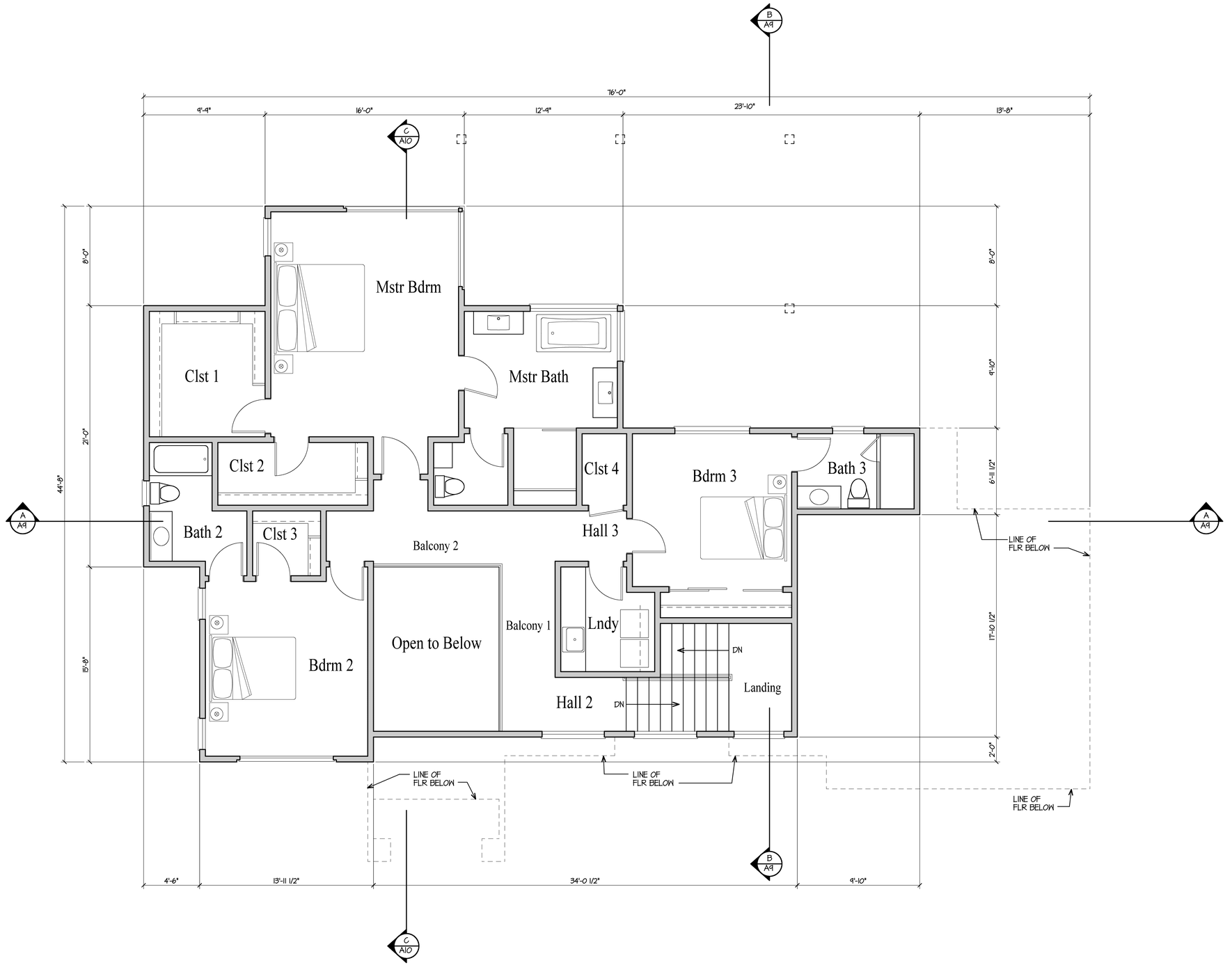
△	Description	Date

First Floor Plan

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

Sheet
A2

Date 10-24-22



Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

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Redwood City, CA

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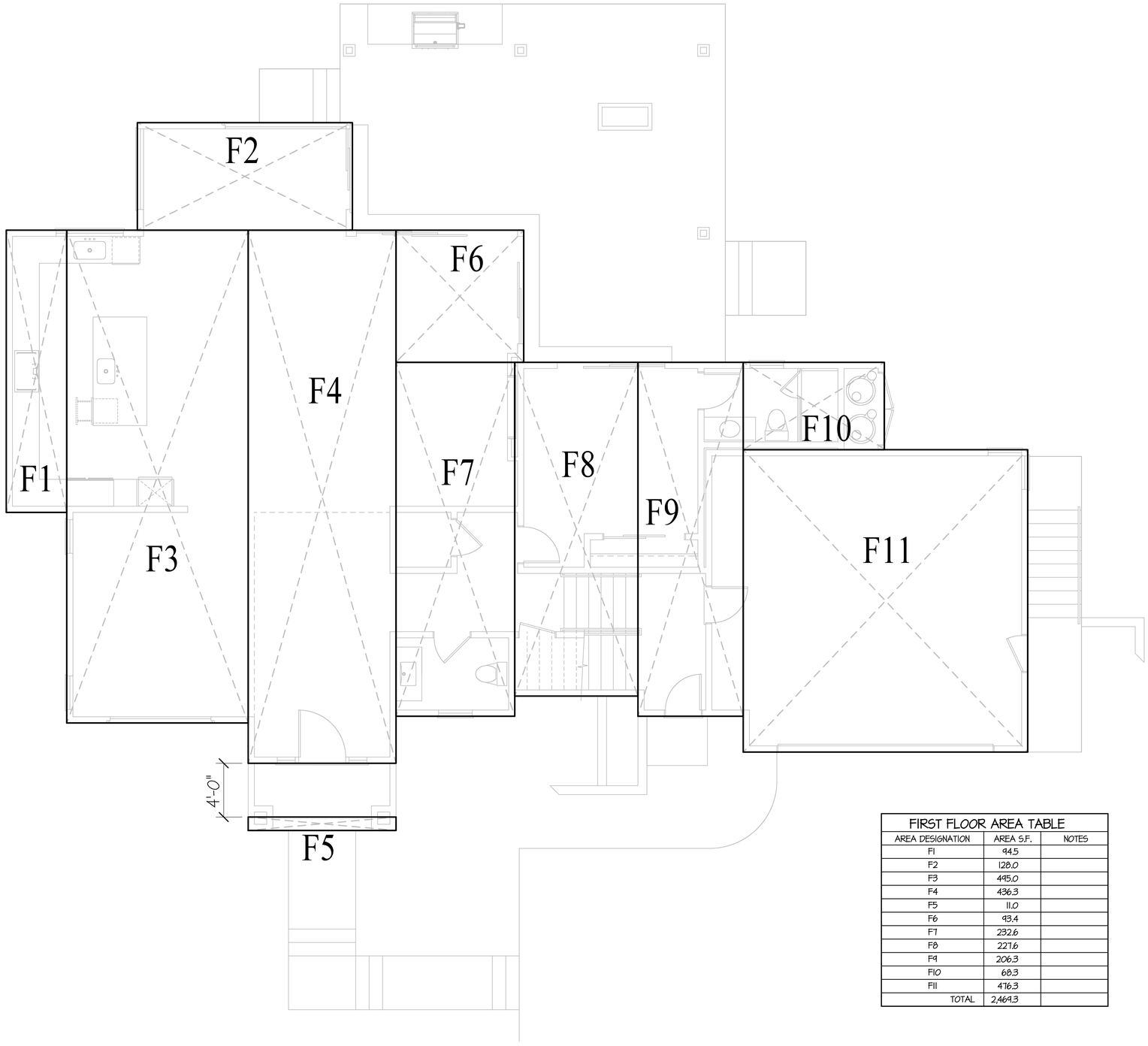
△	Description	Date

Second Floor Plan

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

Sheet
A3

Date 10-24-22



FIRST FLOOR AREA TABLE		
AREA DESIGNATION	AREA S.F.	NOTES
F1	44.5	
F2	128.0	
F3	445.0	
F4	436.3	
F5	11.0	
F6	93.4	
F7	232.6	
F8	227.6	
F9	206.3	
F10	68.3	
F11	476.3	
TOTAL	2,469.3	

Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

1019 Wilmington Way
Redwood City, CA

Grove Construction

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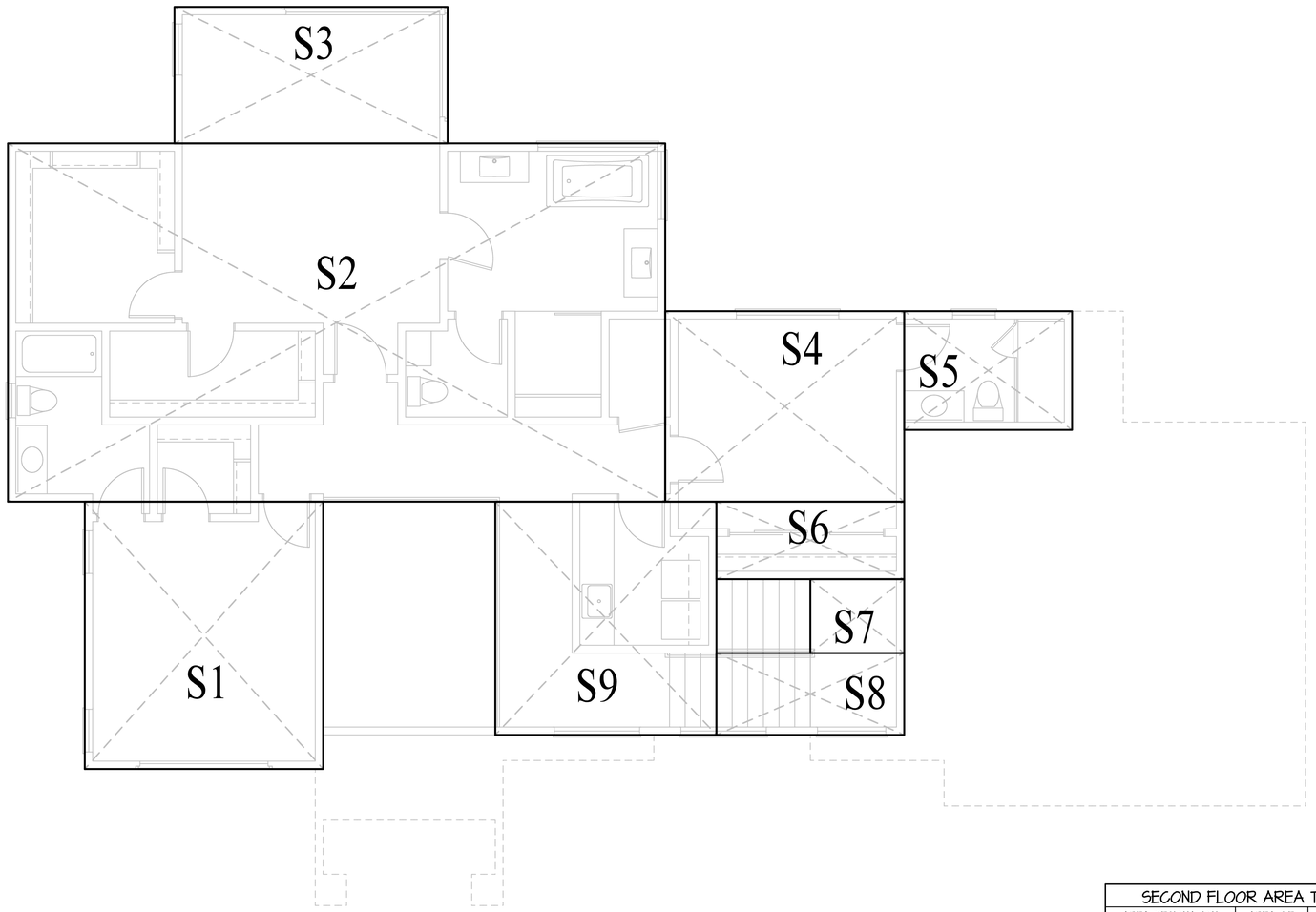
△	Description	Date

First Floor Area Exhibit

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

Sheet
A4

Date 10-24-22



SECOND FLOOR AREA TABLE		
AREA DESIGNATION	AREA S.F.	NOTES
S1	218.7	
S2	808.5	
S3	128.0	
S4	156.3	
S5	68.4	
S6	50.0	
S7	23.8	
S8	52.7	
S9	177.1	
TOTAL	1,684	

Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

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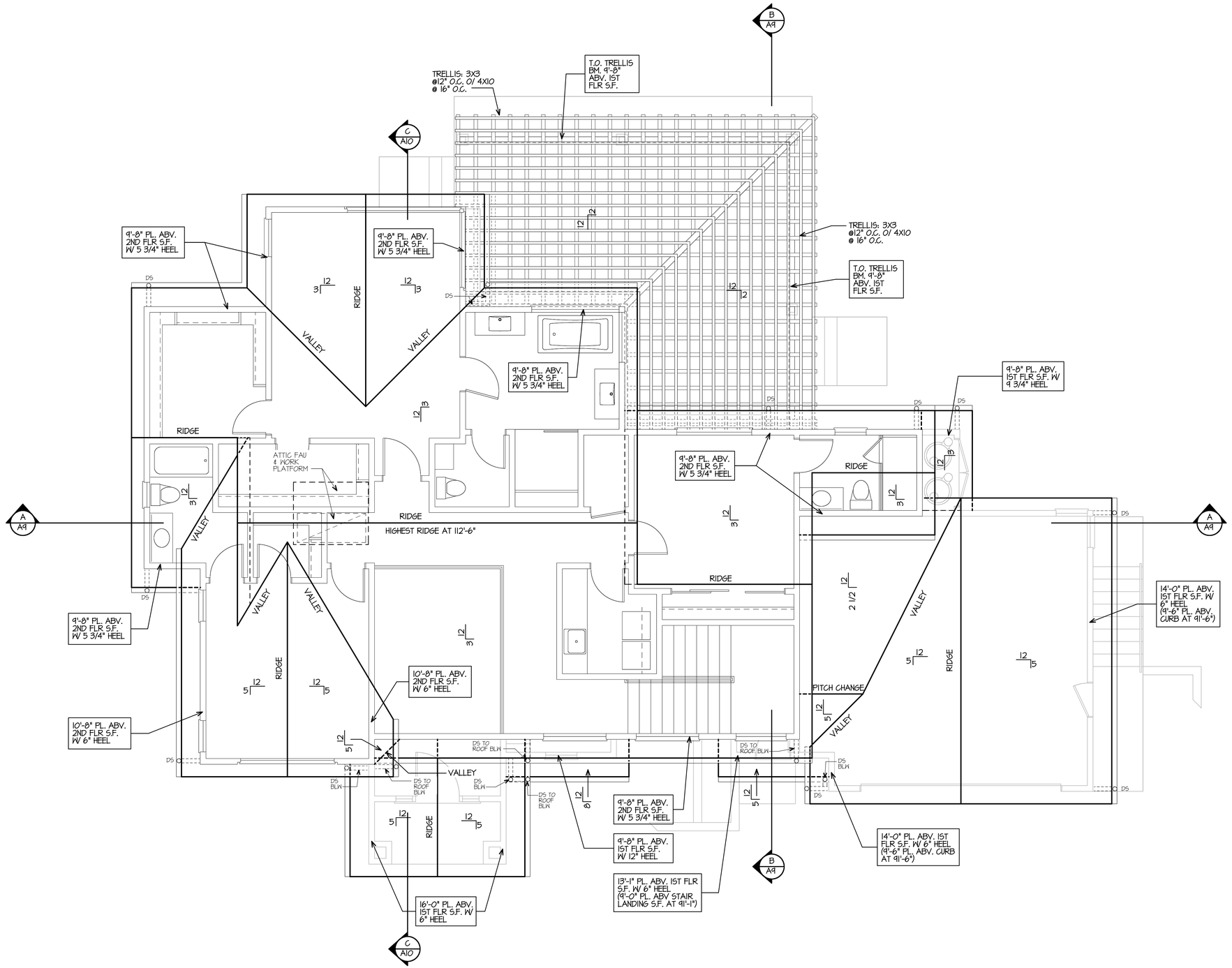
△	Description	Date

Second Floor Area Exhibit

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

Sheet
A5

Date 10-24-22



Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
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gkarchitect@comcast.net

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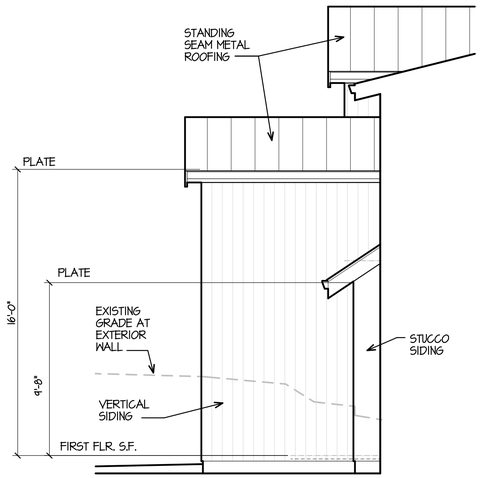
Roof Plan

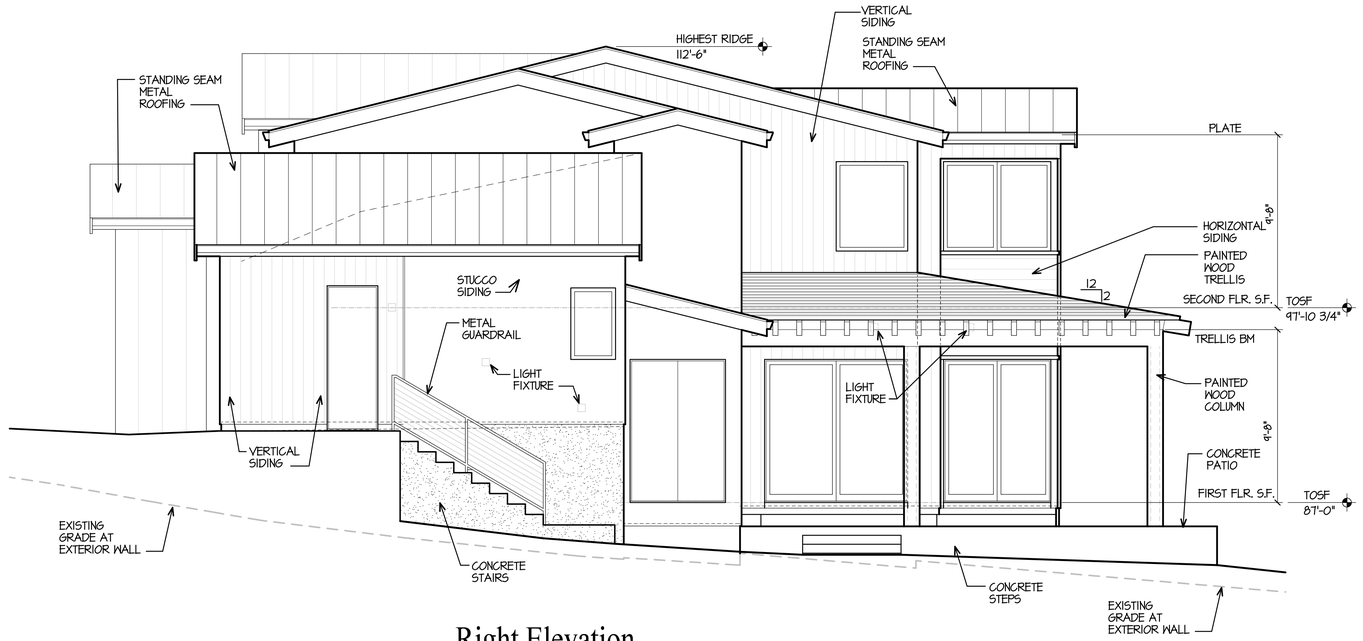
Scale: 1/4"=1'-0"

Sheet
A6

Date 10-24-22



Partial Right Elevation



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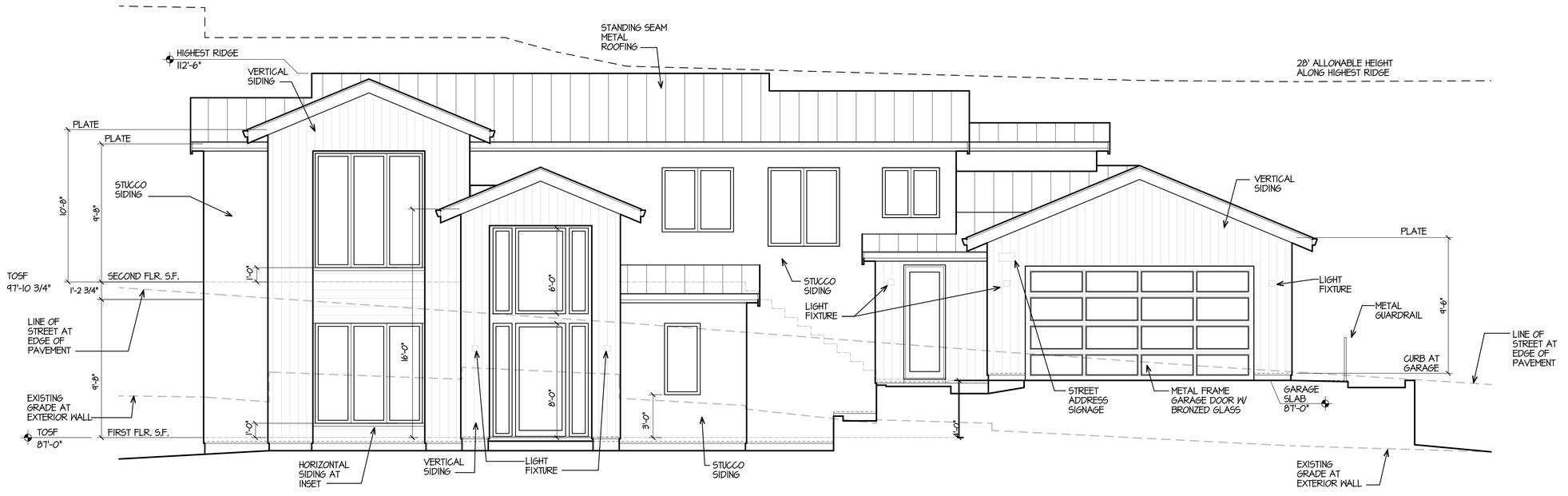

Front Elevation

Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

1019 Wilmington Way
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Elevations

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

Sheet
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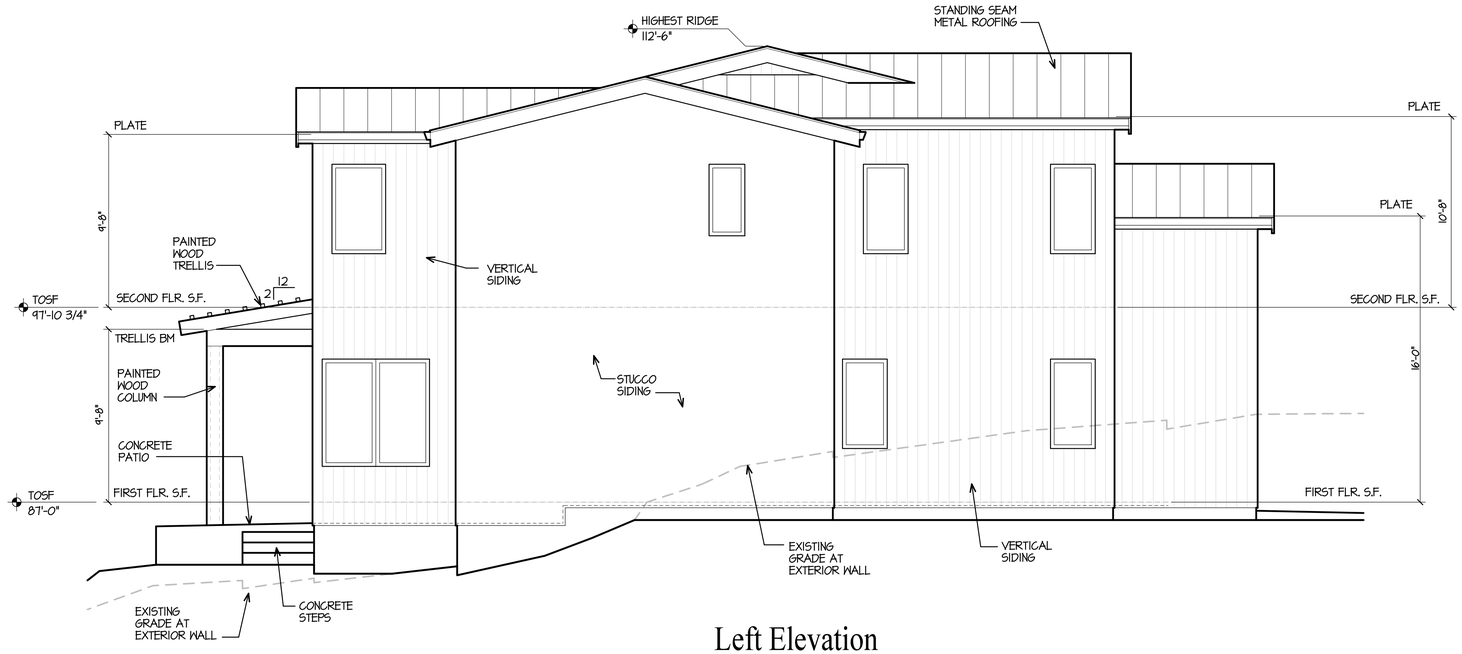
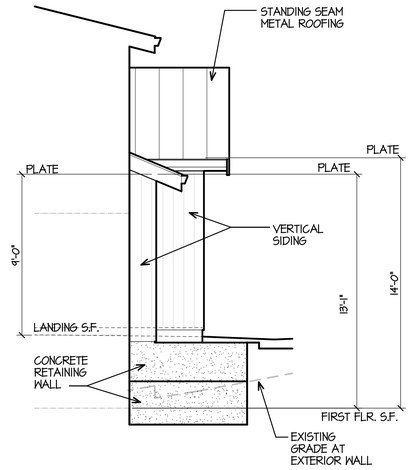
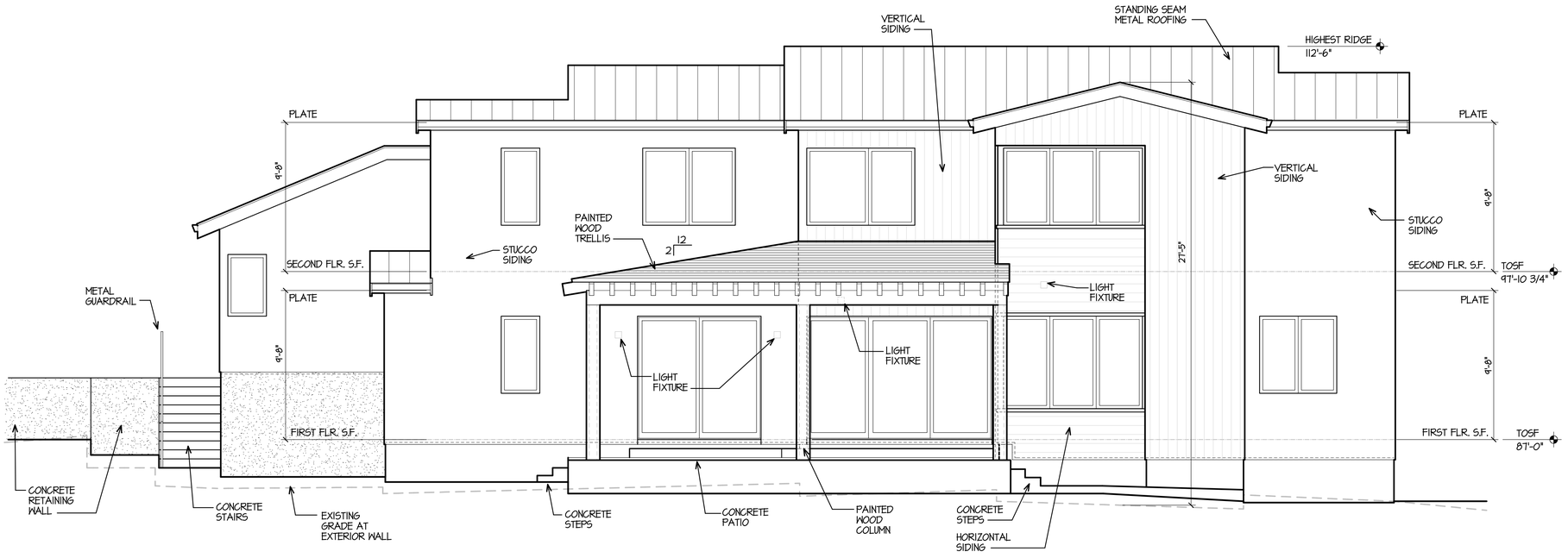
Date 10-24-22



Left Elevation



Partial Left Elevation



Rear Elevation

Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

1019 Wilmington Way
Redwood City, CA

Grove Construction

REVISIONS

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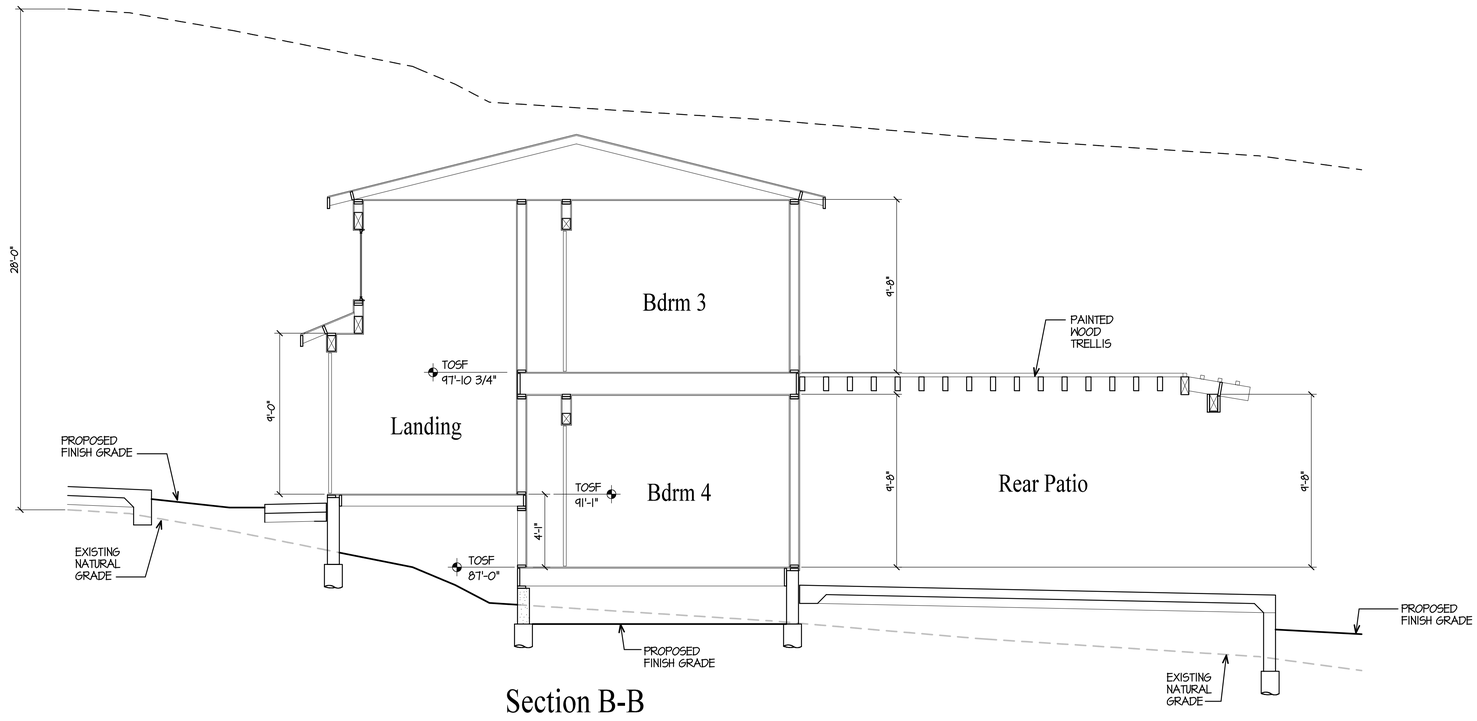
Elevations

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

Sheet
A8

Date 10-24-22



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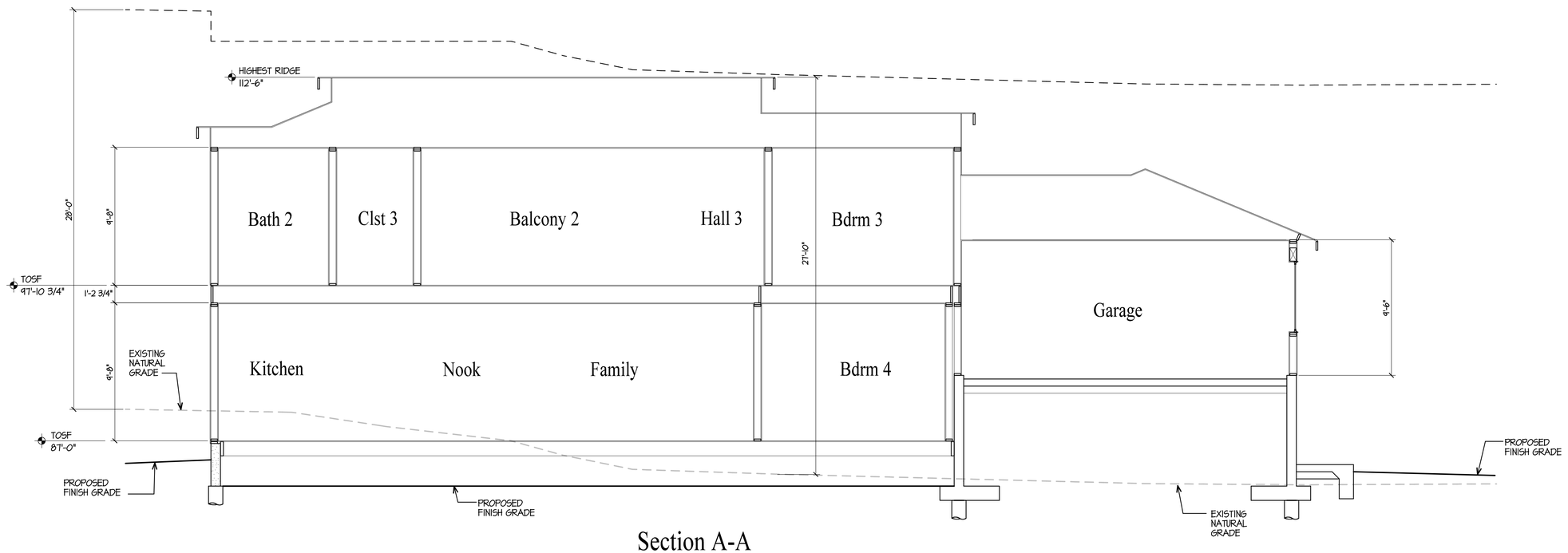

Section A-A

(AT HIGHEST RIDGE)

Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

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Redwood City, CA

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Sections

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

Sheet
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Gregg K. Kawahara
architect
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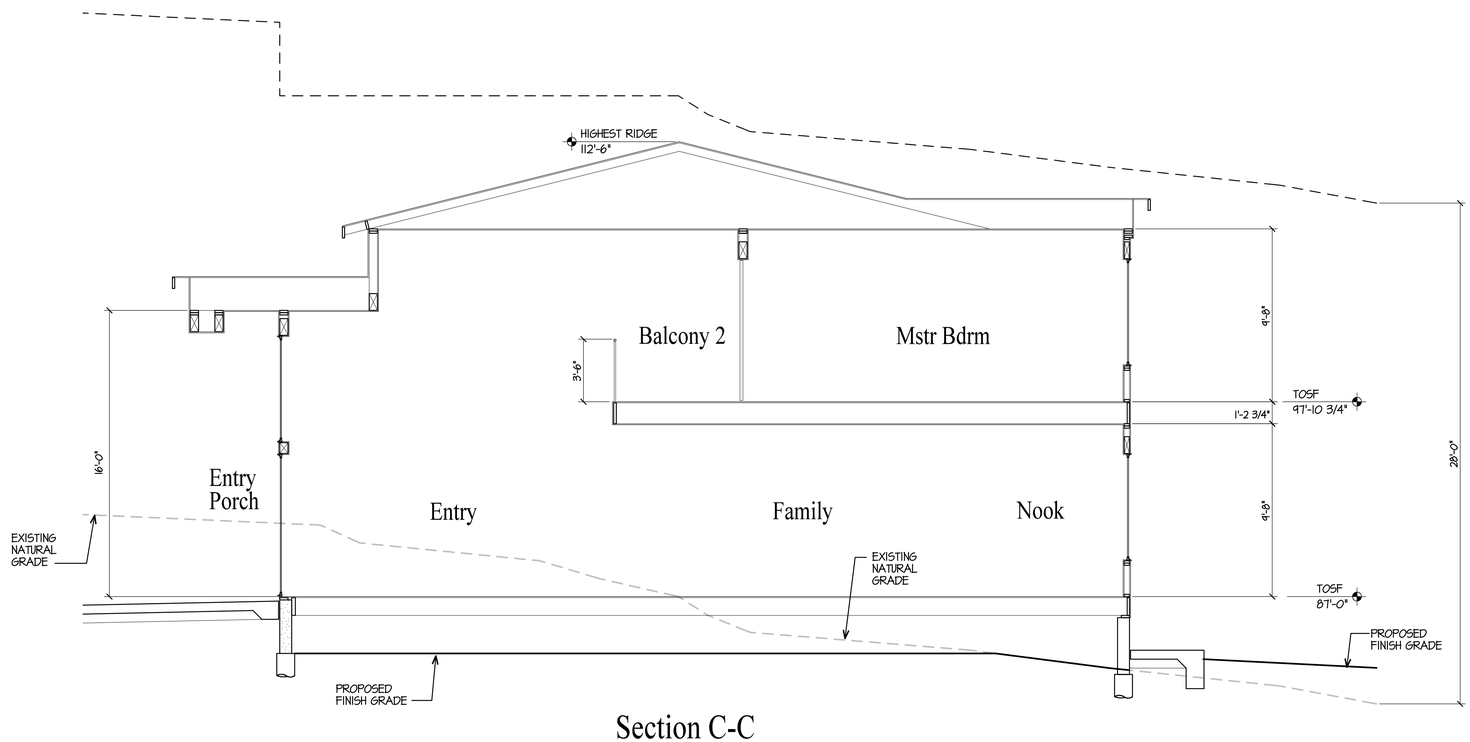


Section C-C

REVISIONS

△	Description	Date

Sections

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

Sheet
A10

Date 10-24-22

Lightology

Blok Outdoor Wall Sconce

ITEM NUMBER ET21106096

BRAND Et2

DESCRIPTION

The Blok Outdoor Wall Sconce features the classic cube form that has become a staple in modern lighting design. The high-powered LED light engine is low-voltage and comes with a range voltage driver, making it easier to fulfill a variety of site requirements. The smaller downlight size is designed for Night Sky applications, while both sizes may be utilized in corridor areas for commercial and hospitality applications. Note: Dimmable at 120V only.

Shown in: Black

SHADE COLOR	N/A
BODY FINISH	Black
WATTAGE	8W
DIMMER	Low Voltage Electronic
DIMENSIONS	4.75"W x 4.75"H x 4"D
LAMP	1 x LED8W/120-277V LED
Technical Information	
LUMINOUS FLUX	440 lumens
LUMENS/WATT	55.00
LAMP COLOR	3000 K
COLOR RENDERING	90 CRI
ITEM NUMBER	ET21106096

COMPANY | PROJECT | FIXTURE TYPE | APPROVED BY | DATE

1 Wall Sconce

Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

1019 Wilmington Way
Redwood City, CA

Grove Construction

REVISIONS

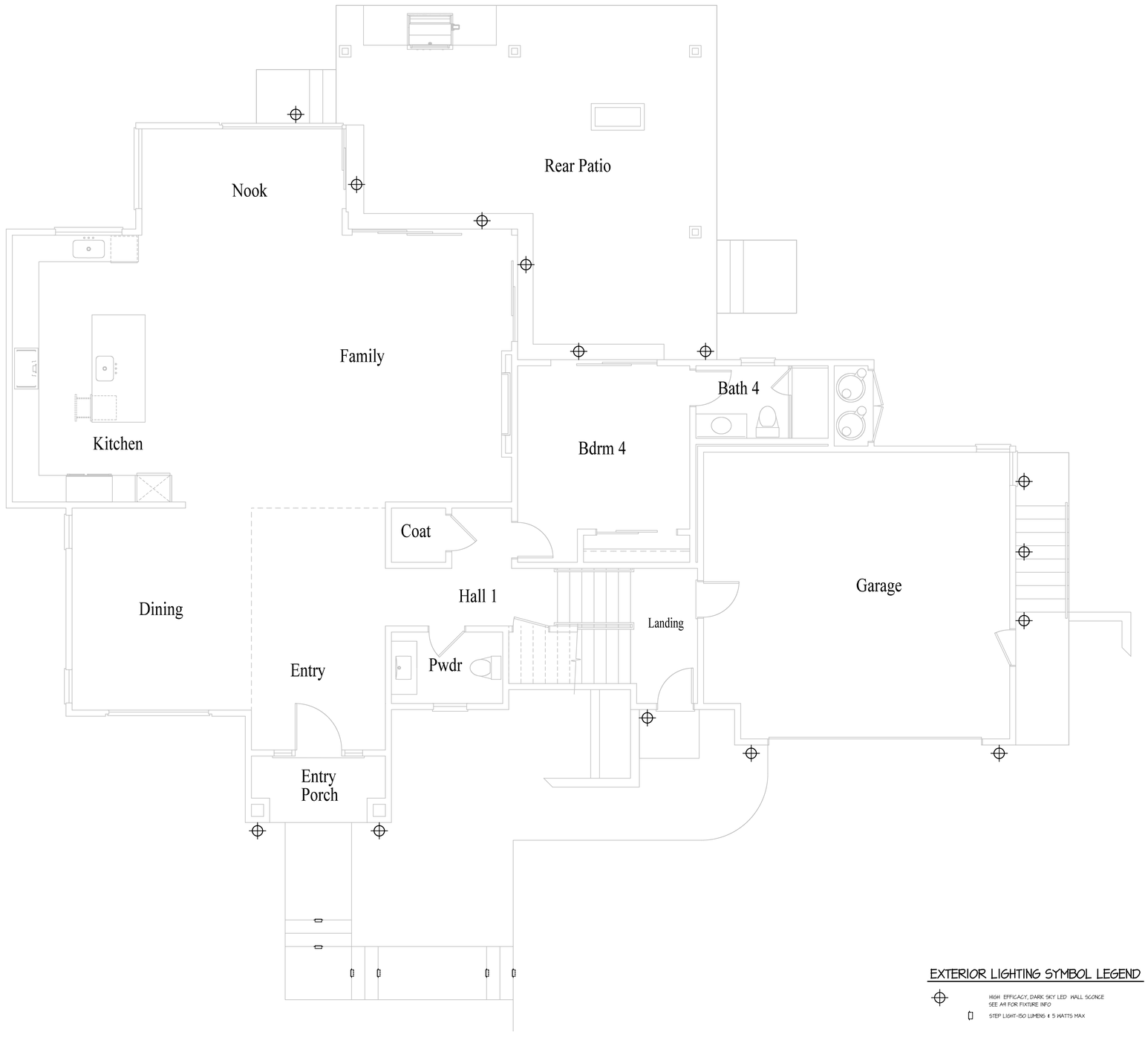
△	Description	Date

Light Fixture

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

Sheet
A11

Date 10-24-22



EXTERIOR LIGHTING SYMBOL LEGEND

HIGH EFFICACY, DARK SKY LED WALL SCONCE
SEE A4 FOR FIXTURE INFO

STEP LIGHT-150 LUMENS @ 5 WATTS MAX

Gregg K. Kawahara
architect
5822 Dresslar Circle Livermore, CA 94550
(925) 449-6182
gkarchitect@comcast.net

1019 Wilmington Way
Redwood City, CA

Grove Construction

REVISIONS

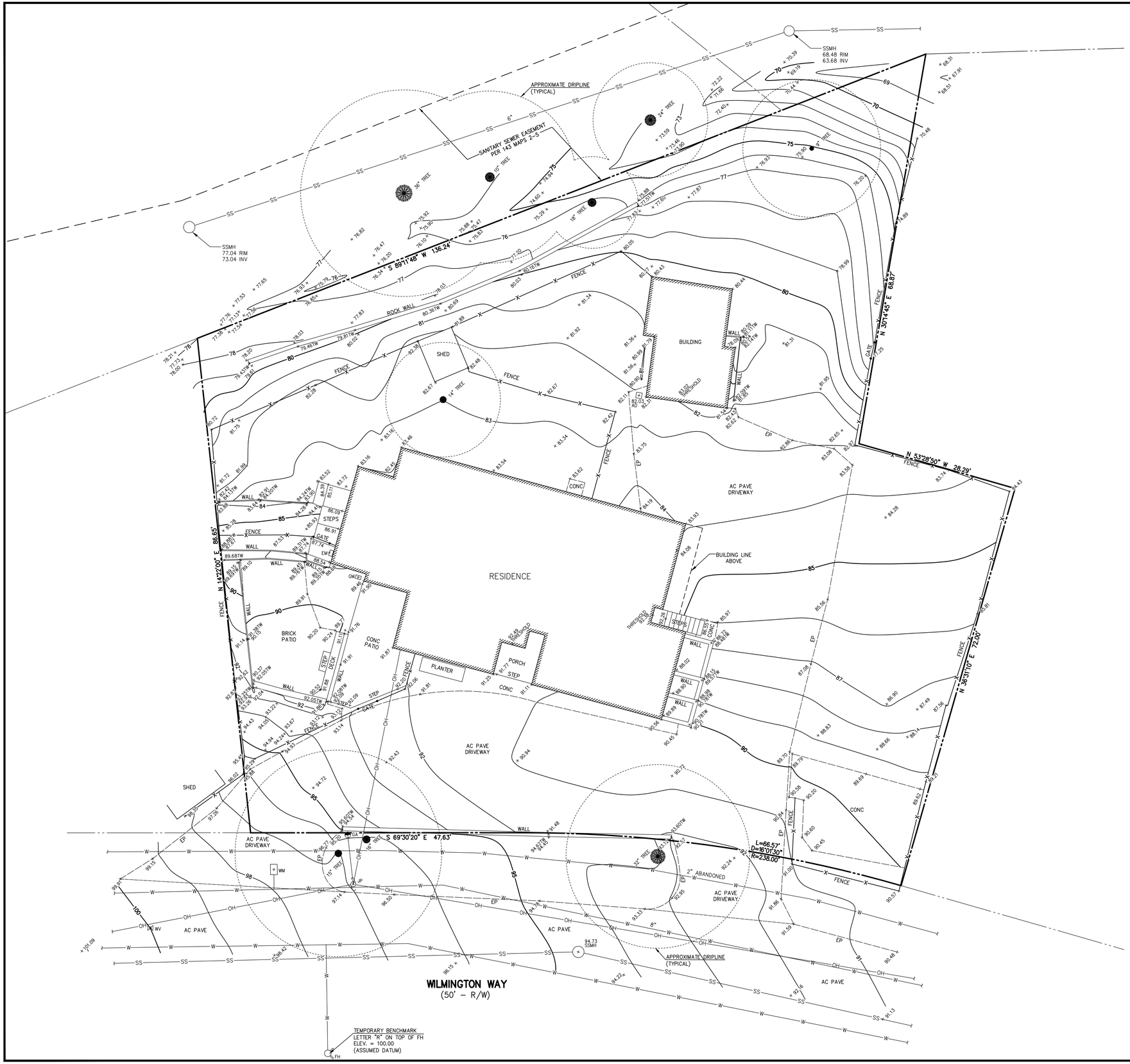
△	Description	Date

Exterior Lighting Plan

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

Sheet
A12

Date 10-24-22



LEGEND

———	PROPERTY LINE
AC PAVE	ASPHALT CONCRETE PAVEMENT
AD	AREA DRAIN
CONC	CONCRETE
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
FH	FIRE HYDRANT
FL	FLOWLINE
GA	GUY ANCHOR
GM	GAS METER
INV	INVERT
JP	JOINT UTILITY POLE
SSMH	SANITARY SEWER MANHOLE
TW	TOP OF WALL
WM	WATER METER
WV	WATER VALVE
12" TREE	TREE W/ SIZE
-X-X-X-	FENCE
———OH———	OVERHEAD UTILITY LINE
———SS———	SANITARY SEWER LINE
———W———	WATER LINE

LOT AREA:

= 13,925 SQ. FT. ±
= 0.320 ACRES ±

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

GRAPHIC SCALE

(IN FEET)
1 inch = 8 ft.

C-1

REV.	DESCRIPTION	BY:	DATE:

LICENSED LAND SURVEYOR DANIEL G. MacLEOD No. 5304 STATE OF CALIFORNIA

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580

PREPARED FOR:
GROVE CONSTRUCTION

BOUNDARY AND TOPOGRAPHIC SURVEY PLAN
1019 WILMINGTON WAY
A.P.N. 068-211-190
PARCEL A, 59 PM 1
SAN MATEO COUNTY
CALIFORNIA
UNINCORPORATED

DRAWN BY:	MDL
DESIGNED BY:	---
CHECKED BY:	DGM
SCALE:	1"=8'
DATE:	05-25-22
DRAWING NO.	5212-TOPO
SHEET	1 OF 4

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

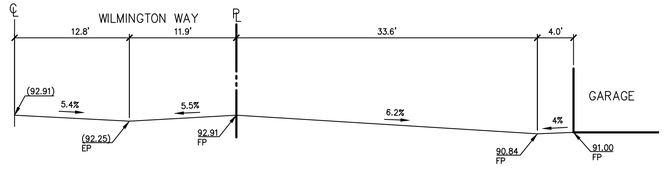
LEGEND

	PROPERTY LINE
AC PAVE	ASPHALT CONCRETE PAVEMENT
AD	AREA DRAIN
BS	BOTTOM OF STEP
CONC	CONCRETE
COTG	CLEANOUT TO GRADE
D.G.	DECOMPOSED GRANITE
DS	DOWNSPOUT
DS	DOWNSPOUT WITH CONCRETE SPLASHBLOCK
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FP	FINISH PAVE
GA	GUY ANCHOR
GB	GRADE BREAK
GM	GAS METER
HP	HIGH POINT
INV	INVERT
JP	JOINT UTILITY POLE
SSMH	SANITARY SEWER MANHOLE
TG	TOP OF GRATE
TS	TOP OF STEP
TW	TOP OF WALL
WM	WATER METER
WV	WATER VALVE
12" TREE	TREE W/ SIZE
12" TREE	EXISTING TREE TO BE REMOVED
X X	FENCE
JT	JOINT TRENCH LINE
OH	OVERHEAD UTILITY LINE
SS	SANITARY SEWER LINE
W	WATER LINE
101	FINISH CONTOUR
	6" PVC STORM DRAIN PIPE (1% MIN. SLOPE)
	CONNECT DOWNSPOUTS WITH 4" PVC STORM DRAIN PIPE (2% MIN. SLOPE)

GRADING QUANTITIES:	CUT	FILL
HOUSE PAD	235	--
GARAGE PAD	--	100
DRIVEWAY	5	55
FRONT YARD GRADING	200	10
REAR YARD GRADING	--	270
DETENTION PIPE	30	10
TOTAL	470	445

TOTAL EARTHWORK = 470 + 445 = 915 C.Y. ±
EXPORT = 470 - 445 = 25 C.Y. ±

NOTE:
EARTHWORK QUANTITIES SHOWN ON THIS PLAN ARE FOR INFORMATION ONLY. CONTRACTORS ARE TO PERFORM THEIR OWN QUANTITY TAKE OFFS.



A CENTERLINE DRIVEWAY PROFILE
SCALE: 1" = 8'

GRAPHIC SCALE
8 0 4 8 16 32
(IN FEET)
1 inch = 8 ft.

TEMPORARY BENCHMARK
LETTER "R" ON TOP OF FH
ELEV. = 100.00
(ASSUMED DATUM)

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS, CA 94070 • (650) 593-8580

REGISTERED PROFESSIONAL ENGINEER
DANIEL G. MacLEOD
No. 35048
Civil
STATE OF CALIFORNIA

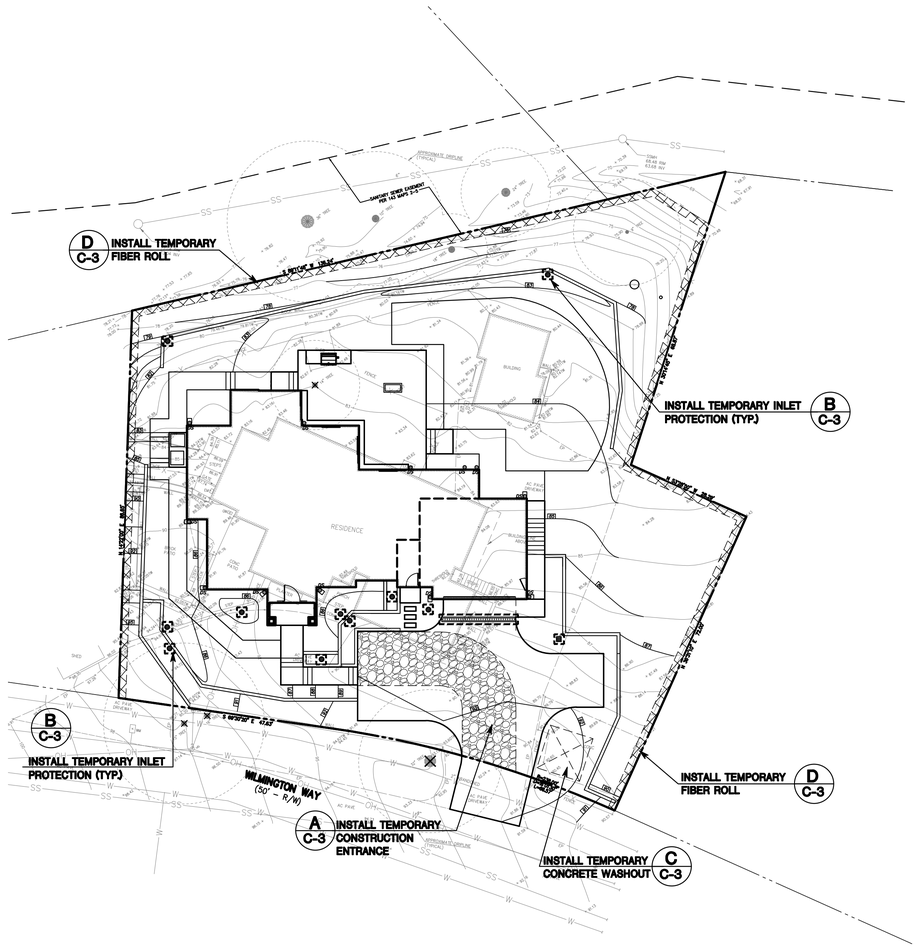
PREPARED FOR:
GROVE CONSTRUCTION

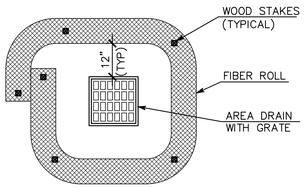
PRELIMINARY GRADING, DRAINAGE, & UTILITY PLAN
1019 WILMINGTON WAY
UNINCORPORATED SAN MATEO COUNTY CALIFORNIA

DRAWN BY:	DJK
DESIGNED BY:	DJK
CHECKED BY:	DGM
SCALE:	1"=8'
DATE:	08/10/22
DRAWING NO.	5212-GRAD
SHEET	2 OF 4

REV.	DESCRIPTION	BY:	DATE:

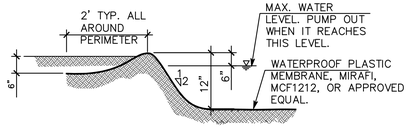
C-2



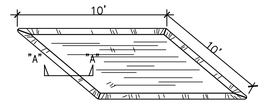


B DRAIN INLET PROTECTION DETAIL

SCALE: (NOT TO SCALE)



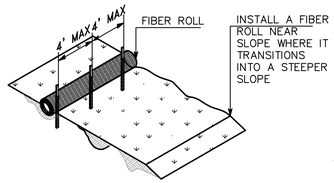
SECTION A-A
N.T.S.



PLAN
N.T.S.

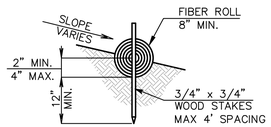
C CONCRETE WASHOUT DETAIL

SCALE: (NOT TO SCALE)



NOTE:
INSTALL FIBER ROLL ALONG A LEVEL CONTOUR, WHERE POSSIBLE.

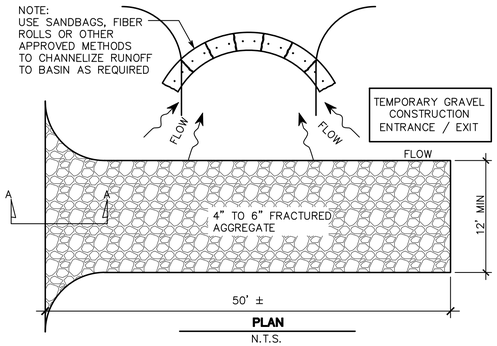
TYPICAL FIBER ROLL INSTALLATION
N.T.S.



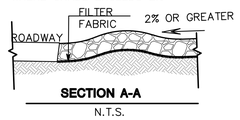
ENTRENCHMENT DETAIL
N.T.S.

D FIBER ROLL DETAIL

SCALE: (NOT TO SCALE)



PLAN
N.T.S.



SECTION A-A
N.T.S.

DESIGN AND CONSTRUCTION SPECIFICATIONS FOR CONSTRUCTION ENTRANCE:

1. THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 3 TO 6 INCH ROCK.
2. THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 12 INCHES.
3. THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS AND EGRESS.
4. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANUP OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.
5. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.
6. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

A CONSTRUCTION ENTRANCE DETAIL

SCALE: (NOT TO SCALE)

SAN MATEO COUNTY STANDARD NOTES:

1. EROSION CONTROL POINT OF CONTACT:
   CONTRACTOR: GROVE CONSTRUCTION
   EMAIL: groveconstruction@msn.com
   OFFICE: (650) 867-3531
2. PERFORM CLEARING AND EARTH-MOVING ACTIVITIES ONLY DURING DRY WEATHER. MEASURES TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO EARTH-MOVING ACTIVITIES AND CONSTRUCTION
3. STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 1 AND APRIL 30.
4. STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
5. CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICAL, WASH WATER OR SEDIMENTS AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
6. AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN A DESIGNATED AREA WHERE WASH WATER IS CONTAINED AND TREATED.
7. LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
8. LIMIT CONSTRUCTION ACCESS ROUTES TO STABILIZED, DESIGNATED ACCESS POINTS.
9. AVOID TRACKING DIRT OR OTHER MATERIALS OFF-SITE; CLEAN OFF-SITE PAVED AREAS AND SIDEWALKS USING DRY SWEEPING METHODS.
10. TRAIN AND PROVIDE INSTRUCTION TO ALL EMPLOYEES AND SUBCONTRACTORS REGARDING THE WATERSHED PROTECTION MAINTENANCE STANDARDS AND CONSTRUCTION BEST MANAGEMENT PRACTICES.
11. THE AREAS DELINEATED ON THE PLANS FOR PARKING, GRUBBING, STORAGE ETC., SHALL NOT BE ENLARGED OR "RUN OVER".
12. CONSTRUCTION SITES ARE REQUIRED TO HAVE EROSION CONTROL METERIALS ON-SITE DURING THE "OFF-SEASON".
13. DUST CONTROL IS REQUIRED YEAR-ROUND.
14. EROSION CONTROL MATERIALS SHALL BE STORED ON-SITE.
15. USE OF PLASTIC SHEETING BETWEEN OCTOBER 1st. AND APRIL 30th IS NOT ACCEPTABLE, UNLESS FOR USE ON STOCKPILES WHERE THE STOCKPILE IS ALSO PROTECTED WITH FIBER ROLLS CONTAINING THE BASE OF THE STOCKPILE.
16. THE TREE PROTECTION SHALL BE IN PLACE BEFORE ANY GRADING, EXCAVATING OR GRUBBING IS STARTED.

EROSION CONTROL NOTES:

1. THE INTENT OF THE EROSION CONTROL PLAN IS TO MINIMIZE ANY WATER QUALITY IMPACTS IN THE FORM OF SEDIMENT POLLUTION TO MAIN CREEK & TRIBUTARIES.
2. A CONSTRUCTION ENTRANCE WILL BE INSTALLED PRIOR TO OF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE CONSTRUCTION ENTRANCE. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS- OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITION DEMAND, AND REPAIR OF ANY MEASURES USED TO TRAP SEDIMENTS.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH THE USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
4. THE EROSION AND SEDIMENT CONTROL MEASURES WILL BE OPERABLE DURING THE RAINY SEASON, OCTOBER 1 TO APRIL 15. BY OCTOBER 1, GRADING AND INSTALLATION OF STORM DRAINAGE AND EROSION AND SEDIMENT CONTROL FACILITIES WILL BE COMPLETED. NO GRADING WILL OCCUR BETWEEN OCTOBER 1 AND APRIL 15 UNLESS AUTHORIZED BY THE COUNTY REPRESENTATIVE.
5. 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 DRAINAGE SYSTEM.
6. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE EROSION AND SEDIMENT CONTROL FIELD MANUAL OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD.
7. AT THE CONTRACTOR'S DISCRETION SILT FENCES MAY BE INSTALLED INSTEAD OF FIBER ROLLS.

DUST CONTROL NOTES:

1. WATER ALL CONSTRUCTION AND GRADING AREA AT LEAST TWICE DAILY.
2. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS, OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST 2 FEET OF FREEBOARD.
3. PAVE, APPLY WATER TWO TIMES DAILY, OR APPLY (NON-TOXIC) SOIL ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE PROJECT SITE.
4. SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS.
5. ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY (NON-TOXIC) SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.).

GRAPHIC SCALE

16 0 8 16 32 64

(IN FEET)
1 inch = 16 ft.

DATE	BY	DESCRIPTION	REV.

REGISTERED PROFESSIONAL ENGINEER
DANIEL G. MacLEOD
No. 35048
CIVIL
STATE OF CALIFORNIA

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS, CA 94070 • (650) 593-8580

PREPARED FOR:
GROVE CONSTRUCTION

EROSION & SEDIMENTATION CONTROL PLAN
1019 WILMINGTON WAY
UNINCORPORATED SAN MATEO COUNTY CALIFORNIA

DRAWN BY:	DJK
DESIGNED BY:	DJK
CHECKED BY:	DGM
SCALE:	1"=16'
DATE:	08/10/22
DRAWING NO.	5212-GRAD
SHEET	3 OF 4

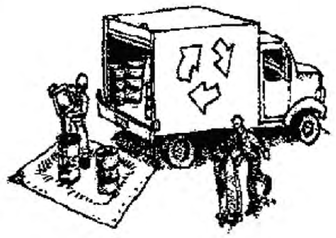
C-3

SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community.

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control

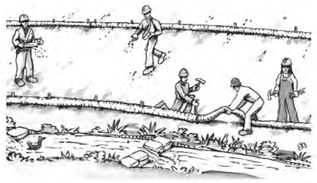
Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving



- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells
  - Buried barrels, debris, or trash.

Paving/Asphalt Work

- ❑ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

- ❑ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, abosorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application

- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping

- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

Painting & Paint Removal

Painting Cleanup and Removal

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering

- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to $10,000 per day!

C-4

REV.	DESCRIPTION	BY:	DATE:

REGISTERED PROFESSIONAL ENGINEER — DANIEL G. MacLEOD — No. 35048 — CIVIL — STATE OF CALIFORNIA

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580

PREPARED FOR:
GROVE CONSTRUCTION

CONSTRUCTION BEST MANAGEMENT PRACTICES PLAN
1019 WILMINGTON WAY
UNINCORPORATED SAN MATEO COUNTY CALIFORNIA

DRAWN BY:	DJK
DESIGNED BY:	DJK
CHECKED BY:	DGM
SCALE:	NONE
DATE:	08/10/22
DRAWING NO.	5212-GRAD
SHEET	4 OF 4

PLANT LIST

	#	QU.	SIZE	BOTANICAL NAME	COMMON NAME	WOCOLS PLANT FACTOR
REQ. REPLACEMENT	A	2	24" BOX	QUERCUS AGRIFOLIA	COAST LIVE OAK	VL
REQ. REPLACEMENT	B	6	24" BOX	LAURUS 'SARATOGA'	SARATOGA LAUREL	L
REQ. REPLACEMENT	C	2	24" BOX	PISTACHIA 'KEITH DAVIES'	CHINESE PISTACHE (SEEDLESS)	L
REQ. REPLACEMENT	D	2	24" BOX	OLEA ARIZONA FRUITLESS 'MULTI'	NON FRUITING OLIVE	VL
	E	45	15G	PRUNUS CAROLINIANA	CAROLINA LAUREL CHERRY	L
	F	21	5G	OLEA 'LITTLE OLLIE'	DWARF OLIVE	VL
	G	8	1G	PHLOMIS FRUTICOSA	JERUSALEM SAGE	L
	H	26	2G	LOROPETALUM 'PURPLE PIXIE'	PURPLE FRINGE FLOWER	L
	I	43	1G	LOMONDRA 'BREEZE'	GREEN MATT RUSH	L
	J	36	1G	MYOPORUM PARVIFOLIUM	MYOPORUM GROUNDCOVER	L
	K	11	2G	LAVANDULA 'INTERMEDIO GROSSO'	ENGLISH LAVENDER	L
	L	20	1G	ARCTOSTAPHYLOS 'JOHN DOUHRY'	MANZANITA	L
	M	12	1G	MUHLENBERGIA RIGENS	DEER GRASS	L

LANDSCAPE AREA

LOW WATER USE TREES AND SCREENING SHRUBS AT PERIMETER , ON SLOPES AND AT FRONT DRIVEWAY PLANTING AREAS	6229 S.F.
REAR LAWN	1263 S.F.
TOTAL LANDSCAPE AREA	7492 S.F.
LAWN (17%)	

PLANTING NOTES

1. AMEND ALL PLANTING AREAS BY FOLLOWING THE RECOMMENDATIONS OF THE SOIL TESTING AND MANAGEMENT REPORT PREPARED BY WAYPOINT ANALYTICAL INC. (SEE SHEET L-4 FOR FULL REPORT) INCORPORATE THE RECOMMENDED SOIL AMENDMENTS AS SPECIFIED IN THE REPORT AND TILL TO A MINIMUM OF 6" DEEP. MULCH ALL NON-SOD AREAS WITH MINIMUM 3" THICK LAYER FIR BARK OR REDWOOD MULCH
2. ALL PLANT MATERIAL EXCEPT LAWN, SHALL BE CLIMATE ADAPTED PLANTS THAT REQUIRE LITTLE OR NO SUMMER WATER, (AVERAGE WOCOLS FACTOR=.3)

REVISIONS	BY

MARA YOUNG
LANDSCAPE ARCHITECT
(650) 704-9255

LANDSCAPE PLAN

NEW RESIDENCE FOR:
1019 WILMINGTON WAY
REDWOOD CITY, CA

APN: 068-211-190

DRAWN MY
CHECKED MY
DATE 7/22/22
SCALE 1/8"=1'-0"
JOB NO. xxx
SHEET
L-1
OF SHEETS

LANDSCAPE PLAN

IRRIGATION EQUIPMENT LEGEND

SYMBOL	DESCRIPTION	NOTES
C	CONTROLLER: HUNTER PRO-C CONTROLLER WITH ADDED MODULES FOR ULTIMATE WATER EFFICIENCY	INSTALL IN LOCTION VERIFIED BY OWNER
	FEBCO 1" ATMOSPERIC BACKFLOW DEVICE	
	NIBCO BRONZE 1" GATE VALVE	
	CONTROL VALVE HUNTER OR WEATHERMATIC 1" USE PRESSURE REDUCER FOR DRIP IRRIGATION	INSTALL IN 10" CARSON VALVE BOX
FM	1" HUNTER HC-150 FLOW METER (REQUIRED)	INSTALL IN 10" CARSON VALVE BOX
	SPRAY HEAD HUNTER MP1000 ADJ. AND FULL CIRCLE NOZZLES	6" POP UP FOR SOD (14' RADIUS)
	HOSE BIB/QUICK COUPLER	
	MAIN LINE 1" SCHEDULE 40 PVC	18" MINIMUM DEPTH USE PRIMER AND GLUE
	LATERAL LINE SCH. 40 PVC	1" OR AS SHOWN 12" MINIMUM DEPTH
	NETAFIM TECHLINE 12" SPACING DRIP IRRIGATION SYSTEM	INSTALL AS PER MANUFACTURERS RECOMMENDATIONS
	SOLID DRIP LINE IN PVC SLEEVE UNDER PAVING	INSTALL AS PER MANUFACTURERS RECOMMENDATIONS

VALVE LEGEND

VALVE #	SYSTEM TYPE	FLOW RATE GPM OR GPH	APPLICATION RATE INCHES PER HOUR	OPERATING PRESSURE
1	DRIP (LOW WATER USE)	1.02 per 100 LF 2.04 GPH	.64	30-40
2	DRIP (LOW WATER USE)	1.02 per 100 LF 2.04 GPH	.64	30-40
3	DRIP (LOW WATER USE)	1.02 per 100 LF 2.04 GPH	.64	30-40
4	DRIP (LOW WATER USE)	1.02 per 100 LF 2.04 GPH	.64	30-40
5	DRIP (LOW WATER USE)	1.02 per 100 LF 2.04 GPH	.64	30-40
6	DRIP (LOW WATER USE)	1.02 per 100 LF 2.04 GPH	.64	30-40
7	DRIP (LOW WATER USE)	1.02 per 100 LF 2.04 GPH	.64	30-40
8	SPRAY TO REAR SOD LAWN	4 GPM	3.12	40
9	SPRAY TO REAR SOD LAWN	3 GPM	3.12	40
10	DRIP (LOW WATER USE)	1.02 per 100 LF 2.04 GPH	.64	30-40
11	DRIP (LOW WATER USE)	1.02 per 100 LF 2.04 GPH	.64	30-40
12	DRIP (LOW WATER USE)	1.02 per 100 LF 2.04 GPH	.64	30-40

IRRIGATION NOTES

1. IRRIGATION SYSTEM AND COMPONENTS DESIGNED IN SUCH AS WAY AS TO CONSERVE WATER AND PREVENT OVERSPRAY AND RUNOFF. A RAIN SENSOR SHALL BE INSTALLED
2. IRRIGATION CONTROLLERS SHALL BE A TYPE WHICH DOES NOT LOSE PROGRAMMING DATA IN THE EVENT THAT THE PRIMARY POWER SOURCE IS INTERRUPTED.
3. PRESSURE REGULATORS SHALL BE INSTALLED ON THE IRRIGATION SYSTEM TO ENSURE THE DYNAMIC PRESSURE OF THE SYSTEM IS WITHIN THE MANUFACTURERS RECOMMENDED PRESSURE RANGE.
4. MANUAL SHUT OFF VALVES (SUCH AS GATE VALVE, BALL VALVE OR BUTTERFLY VALVE) SHALL BE INSTALLED CLOSE TO THE POINT OF CONNECTION AND WATER SUPPLY.
5. ALL IRRIGATION EMISSION DEVICES MUST MEET THE REQUIREMENTS SET IN THE ANSI STANDARD ASABE/ICC 802-2014 "LANDSCAPE IRRIGATION SPRINKLER AND EMITTER STANDARD" ALL SPRINKLER HEADS INSTALLED ON THE PROPERTY MUST DOCUMENT A DISTRIBUTION UNIFORMITY LOW QUARTER OF 0.65 OR HIGHER USING THE PROTOCAL DEFINED IN ASABE/ICC 802-2014.
6. AREAS LESS THAN 10' IN WIDTH IN ANY DIRECTION SHALL ABE IRRIGATED WITH SUBSURFACE IRRIGATION OR OTHER MEANS THAT PRODUCE NO RUNOFF OR OVERSPRAY
7. CHECK VALVES OR ANTI DRAIN VALVES ARE REQUIRED AT ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE COULD OCCUR
8. A DEDICATED WATER SERVICE METER OR SUBMETER SHALL BE INSTALLED AS REQUIRED ON ALL LANDSCAPE AREAS >5000 S.F.
9. AREAS LESS THAN 10'-0" WIDE IN ANY DIRECTION SHALL BE IRRIGATED WITH SUBSURFACE OR DRIP IRRIGATION
10. OVERHEAD IRRIGATION SHALL NOT BE PERMITTEDWITHIN 24" OF ANY NON-PERMEABLE SURFACE

I HAVE COMPLIED WITH THE CRITERIA OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLANS.

THE FINAL SET OF LANDSCAPE AND IRRIGATION PLANS SHALL BEAR THE SIGNATURE OF THE LICENSED LANDSCAPE ARCHITECT

A DIAGRAM OF IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.

AT THE TIME OF FINAL INSPECTION, A CERTIFICATION OF COMPLETION SHALL BE FILLED OUT FILLED OUT AND CERTIFIED BY EITHER THE DESIGNER OF THE LANDSCAPE PLANS, IRRIGATION PLANS, OR THE LICENSED LANDSCAPE CONCTRACTOR FOR THE PROJECT

AN IRRIGATION AUDIT REPORT SHALL BE COMPLETED AT THE TIME OF FINAL INSPECTION

REGISTERED LANDSCAPE ARCHITECT
MARA YOUNG NO. 5754
EXP 11/30/23
7/22/22
STATE OF CALIFORNIA

IRRIGATION PLAN

REVISIONS	BY

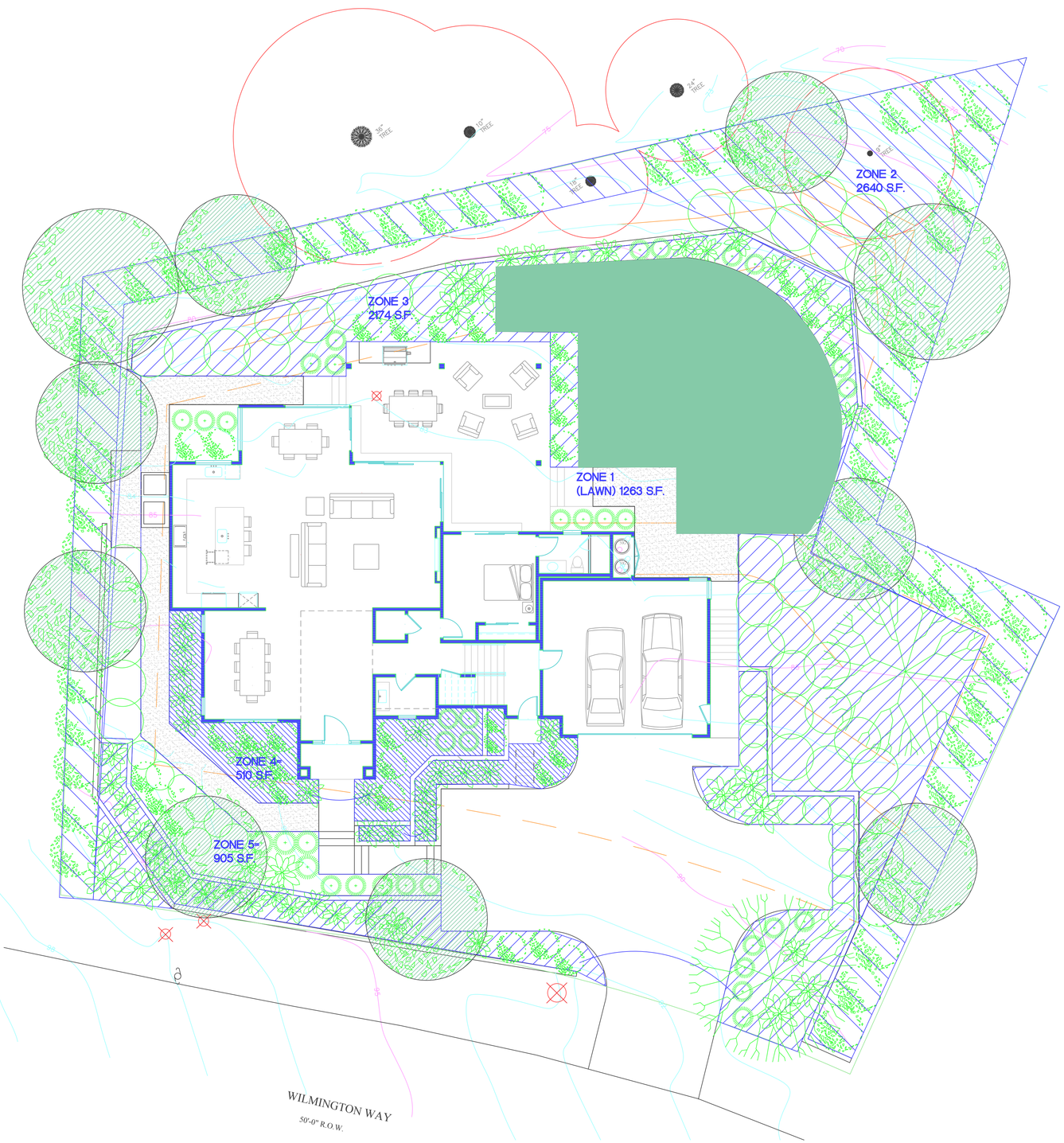
MARA YOUNG
LANDSCAPE ARCHITECT
(650)704-9255

IRRIGATION PLAN

NEW RESIDENCE FOR:
1019 WILMINGTON WAY
REDWOOD CITY, CA

APN: 068-211-190

DRAWN MY
CHECKED MY
DATE 7/22/22
SCALE 1/8"=1'-0"
JOB NO. xxx
SHEET
L-2
OF SHEETS



WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) 43.0

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Zone 1 lawn high	.7	Spray	.75	.93	1263	1175	31325
Zones 2,3,4 &5 Low	.25	Drip	.81	.30	6229	1869	49,828
				Totals	7492 (A)	3044 (B)	
Special Landscape Areas							
				1			
				1			
				1			
				Totals	0 (C)	0 (D)	
						ETWU Total	81,154
						Maximum Allowed Water Allowance (MAWA)[e]	109,855

[a] ***Hydrozone #/Planting Description*** *E.g 1.) front lawn 2.) low water use plantings 3.) medium water use planting*

[b] ***Irrigation Method*** *overhead spray or drip*

[c] ***Irrigation Efficiency*** *0.75 for spray head 0.81 for drip*

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

[e] ***MAWA (Annual Gallons Allowed) =*** *(Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]* where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)	3044
Total Area	(A)	7492
Average ETAF	**B ÷ A**	.40

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

All Landscape Areas

Total ETAF x Area	(B+D)	3044
Total Area	(A+C)	7492
Sitewide ETAF	**(B+D) ÷ (A+C)**	.40

A copy of this form may be obtained from Department of Water Resources website: http://www.water.ca.gov/wateruseefficiency/landscapeordinance/

HYDROZONE AREAS

ZONE 1 =(HIGH WATER USE LAWN) 1263 S.F.

ZONE 2 =2640 S.F.(LOW WATER USE PLANTS)

ZONE 3 =2174 S.F.(LOW WATER USE PLANTS)

ZONE 4 =510 S.F.(LOW WATER USE PLANTS)

ZONE 5 =905 S.F. (LOW WATER USE PLANTS)

TOTAL HYDROZONE AREA=7492 S.F.

TOTAL LAWN AREA 1263 S.F. 17%

REGISTERED LANDSCAPE ARCHITECT — MAIA YOUNG NO. 5154 — EXP 11/30/23 — SIGNATURE 7/22/22 DATE — STATE OF CALIFORNIA

REVISIONS	BY

MAIA YOUNG
LANDSCAPE ARCHITECT
(650) 704-9253

HYDROZONE DIAGRAM

NEW RESIDENCE FOR:
1019 WILMINGTON WAY
REDWOOD CITY, CA

APN: 068-211-190

DRAWN	MY
CHECKED	MY
DATE	7/22/22
SCALE	1/8"=1'-0"
JOB NO.	xxx
SHEET	L-3
OF	SHEETS

HYDROZONE DIAGRAM

Anaheim Office
July 13, 2022
Report 22-188-0013

Mara Young Landscape Architect
836 18th Ave
Menlo Park, CA 94025

Attn: Mara

RE: Wilmington Way - Redwood City

Background

One composite sample was processed on July 07, 2022 identified as site soil taken from a depth of 6 to 12 inches from areas where new landscaping is being installed. This sample was analyzed for horticultural suitability, fertility and physical characteristics in preparation for new planting and to meet WELO requirements. The results of the analyses are attached.

Analytical Results and Comments

Salinity (ECe), sodium and boron are safely low. The low sodium adsorption ratio (SAR) shows sodium is adequately balanced by soluble calcium and magnesium; this balance is important for soil structure quality, which relates to the rate at which water infiltrates the soil.

The reaction of the sample is slightly alkaline at 7.6 on the pH scale with low free lime present. Soil reactions of 7.5 and higher could cause some plants to show yellowing of foliage beginning with the younger growth. The low free lime present indicates that the pH is weakly buffered in the alkaline range. Soil sulfur is recommended to help decrease the pH to a more favorable range. Soil sulfur generally works slowly and only to the depth it is incorporated. Alkalinity is expected to remain elevated in the subsoil so this should be taken into account during plant selection.

According to the USDA Soil Classification system, the texture of the less than 2mm fraction of the soil is classified as sandy clay loam. Organic matter content is moderate at 2.38% dry weight. The over 35% gravel present classifies this material as very gravelly. Based on this information the estimated infiltration rate is a moderately slow 0.16 inch per hour. Infiltration rates may vary due to differences in compaction across the site. The amount of gravel present in combination with a wide distribution of particle sizes in the sand category indicates that this soil will have strong potential for issues with consolidation and compaction. The high gravel content occupies space that otherwise could be shared by air and water and will therefore reduce the volume of root zone available. The susceptibility towards consolidation and compaction may be only partially offset through the incorporation of organic matter.

In terms of soil fertility, magnesium is high optimum while the remaining major and minor nutrient elements are low.

Recommendations

Incorporation of a complete fertilizer is recommended at planting along with gypsum. Sulfur is recommended to help adjust the pH downward. Incorporation of a nitrogen stabilized amendment or composted greenwaste product is recommended in order to help improve nutrient holding capacity and

porosity. If a composted greenwaste amendment is chosen, that should also provide additional phosphorus and potassium as well as micronutrients.

The primary symptom of zinc, manganese and iron deficiencies is a general yellowing of leaves with veins remaining green. In severe cases, leaves may become pale yellow or whitish, but veins remain green. Brown spots may develop between veins and leaf margins may turn brown. Zinc deficiencies typically appear first on older, interior leaves. Manganese deficiency symptoms appear first on younger leaves. Iron deficiency shows first and more severely on the newer growth at branch tips. If these symptoms are present after plant installation they may be treated with an application of a chelated micronutrient product at the manufacturer's recommended rate. Incorporation of a composted greenwaste amendment would also provide additional micronutrients and may be sufficient to negate any deficiency, product depending.

Boron is safely low for general ornamental plants and may be below optimum levels for plant nutritional purposes. Irrigation water often supplies sufficient boron to meet plant nutritional requirements. However, if boron is low in the irrigation water and/or plants show symptoms of boron deficiency after they are well established, you may consider an application of a product containing boron at the manufacturer's label rate. Boron deficiency symptoms often include stunted or deformed younger growth and tight internodes. Tissue testing can be performed to identify a boron deficiency if it is suspected. Incorporation of a composted greenwaste amendment may be sufficient to negate this deficiency, product depending.

To Prepare for Mass Planting:
Drainage of the root zone should be improved by first loosening the top 10 inches of any undisturbed or compacted soil. The following materials should then be evenly spread and thoroughly blended with the top 6 inches of soil to form a homogenous layer:

Amount per 1000 Square Feet

4 cubic yards	Nitrogen Stabilized Organic Amendment*
10 pounds	Soil Sulfur
60 pounds	Gypsum
20 pounds	6-24-24* Fertilizer

For turf areas the organic amendment rate should be decreased by half.

*The rate may change based on the analysis of the chosen organic amendment. This rate is based on 270 lbs. of dry weight of organic matter per cubic yard of amendment.

To Prepare Backfill for Trees and Shrubs:

- Excavate planting pits at least twice as wide as the diameter of the rootball.
- Soil immediately below the rootball should be left undisturbed to provide support but the sides and the bottom around the side should be cultivated to improve porosity.
- The top of the rootball should be at or slightly above final grade.
- The top 12 inches of backfill around the sides of the rootball of trees and shrubs may consist of the above amended soil or may be prepared as follows:

4 parts	Site Soil
1 part	Nitrogen Stabilized Organic Amendment*

Uniformly blended with:

Amount per Cubic Yard of Backfill

1/2 pound	Soil Sulfur
3 pounds	Gypsum
1 pound	6-24-24* Fertilizer

- Backfill below 12 inches required for 24-inch box or larger material should not contain the organic amendment, fertilizer or soil sulfur. In order to continue pH decrease below 12 inches in depth, iron sulfate should be incorporated at a 1.5-pound rate. **Caution: iron sulfate can stain moist concrete.**
- Ideally a weed and turf free zone should be maintained just beyond the diameter of the planting hole. A 2-4 inch deep layer of coarse mulch can be placed around the tree or shrub. Mulch should be kept a minimum 4 inches from the trunk.
- Irrigation of new plantings should take into consideration the differing texture of the rootball substrate and surrounding soil matrix to maintain adequate moisture during this critical period of establishment.

Maintenance

Maintenance fertilization should rely primarily on a nitrogen only program supplemented with a complete fertilizer in the fall and spring. Beginning 45-60 days after planting, ammonium sulfate (21-0-0) should be applied at a rate of 5 pounds per 1000 square feet with reapplication every 45-60 days. Alternatively, slow release sulfur coated urea (43-0-0) may be applied at 6 pounds per 1000 square feet every 90 days. Once plants are performing satisfactorily, the frequency of fertilization may be decreased depending on color and rate of growth desired. In the winter for a quick greening effect, calcium nitrate (15.5-0-0) may be applied at a 6 pound rate if applicable. Early fall and spring, substitute a complete fertilizer such as 15-15-15 to help insure continuing adequate phosphorus and potassium.

Alternatively, Blood Meal (12-0-0) provides available nitrogen fairly rapidly while materials such as Feather Meal (12-0-0), Soybean or Cotton Seed Meal (7-1-1) are slower to provide available nitrogen, but they extend the length of time they make this contribution. In order to provide a good supply of nitrogen for a 3-4 month time frame a good combination would be 6 pounds Blood Meal and 14 pounds Feather Meal per 1000 square feet. In the fall and spring, substitute a complete organic fertilizer such as 5-5-5 applied at the manufacturer's label rate. Or, nutrient rich composted greenwaste may be spread in a 1 to 2 inch layer in general planting areas, which typically carries enough nutrition to boost complete nutrition though a source of nitrogen might also be added at a half rate to assure adequate nitrogen availability.

If we can be of any further assistance, please feel free to contact us.

Joe Kiefer, CCA

jkiefer@waypointanalytical.com

Mara Young Landscape Architect
836 18th Ave.

Menlo Park CA 94025

4741 East Hunter Ave. Suite A
Anaheim, CA 92807
Main 714-282-8777 ° Fax 714-282-8575
www.waypointanalytical.com

Project : Wilmington Way - Redwood City

Report No : **22-188-0013**
Purchase Order :
Date Recd : 07/07/2022
Date Printed : 07/12/2022
Page : 1 of 1

COMPREHENSIVE SOIL ANALYSIS

Sample Description - Sample ID	Half Sat % / TEC	pH / Qual Lime	ECe dS/m	NO_3-N ppm	NH_4-N ppm	PO_4-P ppm	K ppm	Ca ppm	Mg ppm	Cu ppm	Zn ppm	Mn ppm	Fe ppm	Organic % dry wt.	Lab No.
				Sufficiency Factors											
Site Soil	25	7.6	0.5	10	22	13	58	2330	1190	1.1	1.3	10	14	2.38	35720
	214	Low		0.6		0.4	0.2	0.7	2.6	0.4	0.1	0.4	0.1		

Saturation Extract Values						SAR	Gravel %		Percent of Sample Passing 2 mm Screen					USDA Soil Classification	Lab No.
									Sand						
Ca meq/L	Mg meq/L	Na meq/L	K meq/L	B ppm	SO_4 meq/L		Coarse 5 - 12	Fine 2 - 5	Very Coarse 1 - 2	Coarse 0.5 - 1	Med. to Very Fine 0.05 - 0.5	Silt .002-.05	Clay 0-.002		
2.5	3.1	0.4	0.1	0.03	0.5	0.2	21.6	20.8	15.4	10.0	26.7	18.4	29.3	Very Gravelly Sandy Clay Loam	35720

Sufficiency factor (1.0=sufficient for average crop) below each nutrient value. N factor based on 200 ppm constant feed. SAR = Sodium adsorption ratio. Half Saturation %=approx field moisture capacity. Nitrogen(N), Potassium(K), Calcium(Ca) and Magnesium(Mg) by sodium chloride extraction. Phosphorus(P) by sodium bicarbonate extraction. Copper(Cu), Zinc(Zn), Manganese(Mn) & Iron(Fe) by DTPA extraction. Sat. ext. method for salinity (ECe as dS/m),Boron (B), Sulfate(SO_4), Sodium(Na). Gravel fraction expressed as percent by weight of oven-dried sample passing a 12mm(1/2 inch) sieve. Particle sizes in millimeters. Organic percentage determined by Walkley-Black or Loss on Ignition.

* LOW , SUFFICIENT , HIGH

REGISTERED LANDSCAPE ARCHITECT
MARA YOUNG
EXP 11/30/23
7/22/22
STATE OF CALIFORNIA

SOIL REPORT

REVISIONS	BY

MARA YOUNG
LANDSCAPE ARCHITECT
(650)704-9255

SOIL ANALYSIS/REPORT

NEW RESIDENCE FOR:
1019 WILMINGTON WAY
REDWOOD CITY, CA

APN: 068-211-190

DRAWN
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MY
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OF SHEETS