ABBREVIATIONS

A.B.	Anchor Bolt	GRVL	Gravel
ACOUS	Acoustical	HCP	Handicapped
AP	Acoustical Plaster	HDW	Hardware
AT	Acoustical Tile	HWD	Hardwood
ADJ	Adjustable	HGT	Height
AG	Aluminum/Glass	HDR	Header
ALUM	Aluminum	HTG	Heating
&	And	H.D.	Heavy Duty
L	Angle	H.C.	Hollow Core
APPROX	Approximate	H.M.	Hollow Metal
A.C.	Asphaltic Concrete	HORIZ	Horizontal
@	At	H.B.	Hose Bibb
ANOD	Anodized	INFO	Information
ASB	Asbestos	INCL	Include
AGG	Aggregate	I.D.	Inside Diameter
A/C	Air Conditioning	INSUL	Insulation
ARCH	Architect (ural)	ICS	Intercom System
BLK'G	Blocking	INTM	Intermediate
BM	Beam	INT	Interior
BLK	Block	I.A.	Intrusion Alarm
BTWN	Between	INV	Invert
BOT	Bottom	J	Joint
BD	Board	JST	Joist
B	Brick	JAN	Janitor
BLDG	Building		
CAB	Cabinet	KIT.	Kitchen
CANTI	Cantilever	K.O.	Knockout
CAR	Carpet	LAM	Laminated
C.I.	Cast Iron	LP	Laminated Plastic
C.B.	Catch Basin	LAV	Lavatory
CK	Caulk	LITE	Light
CLG.	Ceiling	LAB	Laboratory
CEM	Cement	L.B.	Lag Bolt
℄	Centerline	LVR	Louver
CER	Ceramic	M.B.	Machine Bolts
C.CH	Channel	MACH	Machine
CLR	Clear	M	Masonry
CLOS	Closet	M.O.	Masonry Opening
COL	Column	MAX	Maximum
COMPO	Composition	MIN.	Minimum
CONC	Concrete	MTL.	Metal
C.M.U.	Concrete Masonry Unit	MISC	Miscellaneous
CON	Connection	M.R.	Moisture Resistant
CONFER	Conference	M.H.	Manhole
CONTR	Contractor		
CF/CI	Contractor Furnished/ Contractor Installed	NAT	Natural
		N.I.C.	Not In Contract
CONST	Construction	N.T.S.	Not To Scale
CONTI	Continuous	NOM	Nominal
CORRI	Corridor	OBS	Obscure
C.J.	Construction Joint	O.C.	On Center
C.S.	Countersink	OPNG	Opening
		O.D.	Outside Diameter
DET	Detail	P	Paint
DEM	Demolish	PART	Partition
DIAG	Diagonal	PLAS	Plaster
DIA. Ø	Diameter	PLAST.LAM	Plastic Laminate
DIM	Dimension	PL	Plate
D.F.	Douglas Fir	PLYWD	Plywood
D.S.	Downspout		
DWR	Drawer	RAD	Radius
DWG	Drawing	RWD	Redwood
		REINF	Reinforcing
D.W.	Drywall	REMOV	Removable
D.R.	Dressing Room	REQ'D	Required
DIV	Division		
DR	Door	RET	Retaining
DECO	Decorative	R.D.	Roof Drain
		RM	Room
EA	Each	S.C.	Saw Cut
E.W.	Each Way	S.J.	Sawcut Joint
E.P.	Edge of Paving	SECT	Section
ELEC	Electrical	SEL	Select
ELEV	Elevation	SHTG	Sheathing
EQ.	Equal	SHT	Sheet
EQUIP	Equipment	SIM	Similar
EXIST (E)	Existing	SPECS	Specifications
E.J.	Expansion Joint	SQ. FT.	Square Foot
EXT	Exterior	SQ. IN.	Square Inch
ELEV	Elevator	S	Stain
EMER	Emergency	S. STL	Stainless Steel
EST	Estimate	S.S.	Stainless Steel
EXP	Expansion	STD	Standard
ES	Exposed Structure	STL	Steel
E.I.F.S.	Exterior Insulation & Finishing System	STRUCT	Structural
		SCH	Schedule
F.O.S.	Face of Stud		
FIN	Finish	T.B.	Tack Board
F.F.	Finish Face	THK	Thick
F. FLR.	Finish Floor	THRU	Through
F.G.	Finish Grade	T.O.W.	Top of Wall
F.O.F.	Face of Finish.	TR	Tread
F.S.	Finish Surface	TYP	Typical
F.E.C.	Fire Extinguisher Cabinet	T.J.	Tooled Joint
		T.C.	Top of Curb
FLR	Floor		
F.D.	Floor Drain	UNO	Unless Noted Otherwise
F.L.	Flow Line	UR	Urinal
FURR	Furred		
FTG	Footing	V.T.R.	Vent Thru Roof
F.O.C.	Face of Concrete	VERT	Vertical
FLSHG	Flashing	V.W.C.	Vinyl Wall Covering
FND	Foundation	VEST	Vestibule
F.O.M.	Face of Masonry	V.C.T.	Vinyl Composition Tile
FR	Framing		
		W.C.	Water Closet
GALV	Galvanized	W.G.	Wire Glass
G.I.	Galvanized Iron	W.H.	Water Heater
GA	Gauge	W.P.	Water Proof
GLS	Glass	WF	Wide Flange
GR	Grade	W	Wide
GYP. BD	Gypsum Board	W/	With
G.B.	Gypsum Board	WD	Wood
GKT	Gasket	W.M.	Water Main

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GENERAL NOTES

1. DO NOT SCALE DRAWINGS.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK.
3. ALL FLOOR PLAN DIMENSIONS ARE TO FACE OF STUD AT ALL STUD WALLS UNLESS NOTED FACE OF FINISH (F.O.F.).
4. ALL WORK CONSTRUCTION AND MATERIALS SHALL COMPLY WITH ALL REVISIONS OF THE BUILDING CODE AND WITH OTHER RULES, REGULATIONS AND ORDINANCES GOVERNING THE PLACE OF THE BUILDING. BUILDING CODE REQUIREMENTS TAKE PRECEDENCE OVER THE DRAWINGS AND IT SHALL BE THE RESPONSIBILITY OF ANYONE SUPPLYING LABOR OR MATERIALS OR BOTH TO BRING TO THE ATTENTION OF HE ARCHITECT ANY DISCREPANCIES OR CONFLICT BETWEEN THE REQUIREMENTS OF THE CODE AND THE DRAWINGS.
5. REFERENCE TO ANY DETAIL OR DRAWING IS FOR CONVENIENCE ONLY AND DOES NOT LIMIT THE APPLICATION OF SUCH DETAIL OR DRAWINGS.
6. DISCREPANCIES IN THE DRAWINGS OR BETWEEN THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE ARCHITECT. CORRECTED DRAWINGS OR INSTRUCTIONS SHALL BE ISSUED BY THE ARCHITECT PRIOR TO THE INSTALLATION OF ANY WORK.
7. CONTRACTOR SHALL CHECK AND VERIFY SIZE AND LOCATION OF DUCTS, PLUMBING RUNS AND MECHANICAL EQUIPMENT BEFORE CONSTRUCTING WALLS, FLOORS, CEILINGS, CABINETS, EQUIPMENT BASES, ETC.
8. GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL WORK SHOWN ON THESE DRAWINGS AND SPECIFICATIONS UNLESS SPECIFICALLY NOTED OTHERWISE.
9. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE UNLESS OTHERWISE SHOWN; THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATIONS VISITS TO THE SITE BY FIELD REPRESENTATIVES OF THE ARCHITECT AND HIS ENGINEERS SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES REQUIRED FOR SAME, WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY SUPPORT SERVICES PERFORMED BY THE ARCHITECT AND HIS ENGINEERS DURING CONSTRUCTION SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ARCHITECT AND HIS ENGINEERS, WHETHER OF MATERIAL OR WORK, AND WHETHER PERFORMED TO, DURING OR AFTER COMPLETION OF CONSTRUCTION ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS, BUT THEY DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.
10. GLAZING MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH 2022 C.R.C. R308.
12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.
13. MAINTAIN SANITARY TOILET FACILITIES DURING CONSTRUCTION AS REQUIRED BY APPLICABLE REGULATIONS.
14. ~~SEPARATE PERMITS ARE REQUIRED FOR ELECTRICAL, PLUMBING AND MECHANICAL CONSTRUCTION. CONTRACTOR TO OBTAIN PROPER PERMITS PRIOR TO START OF CONSTRUCTION.~~
15. SMOKE DETECTORS ARE TO BE PROVIDED IN ALL LIVING AREAS AND IN CORRIDORS. SMOKE DETECTORS SHALL BE ON PERMANENT WIRING WITHOUT ANY DISCONNECT SWITCHES.
16. WORK IN PUBLIC RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT.
17. ~~SEPERATE PLANS ARE REQUIRED FOR ELECTRICAL WORK. APPROVAL REQUIRED FOR PERMIT.~~

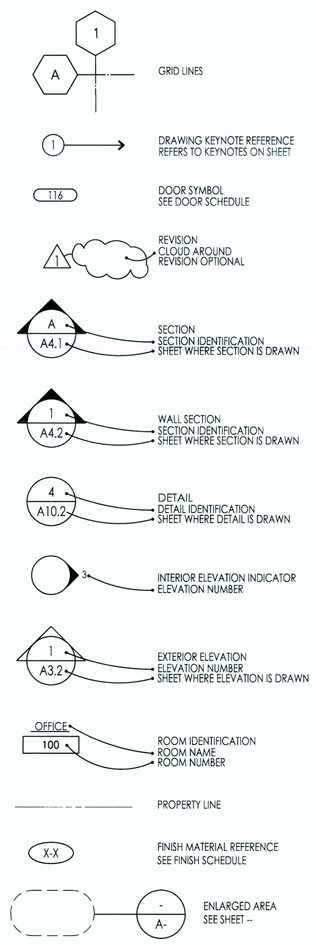
BUILDING DEPARTMENT NOTES

1. BOTTOM OF SILL PLATE TO BE 8" ABOVE ADJACENT EXTERIOR GRADE OR 3" ABOVE EXTERIOR FINISH ELEVATION. CRC R317.
2. PROVIDE FIREBLOCKS AND DRAFT STOPS PER 2022 CRC R302.
3. EXTERIOR LATH AND PLASTER: PROVIDE TWO LAYERS OF GRADE D PAPER OVER ALL WOOD BASE SHEATHING (CRC R703.6.3)
4. PROVIDE SMOKE DETECTORS IN EACH HALLWAY LEADING TO SLEEPING ROOMS, IN EACH SLEEPING ROOM OF NEW AND EXISTING CONSTRUCTION, ON TOP OF STAIRWAY, AND IN EACH STORY. SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE W/ UL 217. SYSTEMS AND COMPONENTS SHALL BE CALIFORNIA STATE FIRE MARSHALL LISTED. IN NEW CONSTRUCTION, DETECTORS TO BE HARD WIRED WITH BATTERY BACKUP. CRC R314.4 DETECTORS SHALL BE INTERCONNECTED TO SOUND AT THE SAME TIME. DETECTORS ARE NOT TO BE LOCATED IN KITCHEN, GARAGE, OR WITHIN 3 FEET FROM DOOR TO KITCHEN OR BATHROOM OR SUPPLY AIR REGISTERS. WHEN ONE OR MORE SMOKE ALARM IS REQUIRED THE ALARM DEVICE SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. EXCEPTION: INTERCONNECTION IS NOT REQUIRED IN EXISTING DWELLING UNITS WHERE REPAIRS DO NOT RESULT IN THE REMOVAL OF WALL AND CEILING FINISHES, THERE IS NO ACCESS BY MEANS OF ATTIC, BASEMENT OR CRAWLSPACE, AND NO PREVIOUS METHOD FOR INTERCONNECTION EXISTED.
5. ELECTRICAL OUTLETS IN BEDROOMS ARE TO BE ON ARC-FAULT CIRCUIT INTERRUPTER.
6. PUBLIC WORKS NOTE: IF THE EXISTING CITY IMPROVEMENTS SURROUNDING THE PROJECT SITE IS DAMAGED BY THE PRIVATE CONSTRUCTION WORK, NEW CONCRETE SIDEWALK, CURB AND GUTTER, STREET PAVEMENT AND CURB PAINTING MAY BE REQUIRED BY THE CITY AT THE TIME OF PRIVATE CONSTRUCTION COMPLETION. SAID DETERMINATION SHALL BE MADE AT THE DISCRETION OF THE PUBLIC WORKS INSPECTOR.
7. CONTRACTOR SHALL CONFORM WITH THE STATE ENERGY LAW AS FOLLOWS:
   BATHROOM TO HAVE FLUORESCENT GENERAL LIGHTING SWITCH TO BE FIRST NEAR THE DOOR.
   A. LIGHTING IN BATHROOM TO BE HIGH EFFICIENCY OR EQUIPPED WITH OCCUPANT SENSOR.
   B. LIGHTING IN STUDY TO BE HIGH EFFICIENCY OR SHALL BE CONTROLLED BY OCCUPANT SENSOR OR DIMMER.
   C. EXTERIOR LIGHTING MOUNTED ON THE BUILDING TO BE HIGH EFFICIENCY CONTROLLED BY PHOTO CONTROL/MOTION SENSOR COMBINATION.
8. CONTRACTOR SHALL VERIFY ALL EXISTING ELECTRICAL OUTLETS IN THE KITCHEN, BATHROOMS AND OUTDOOR TO BE G.F.I.C. COMPLIANCE.
9. PROVIDE R-15 RATED INSULATION IN WALLS, R-30 INSULATION IN CEILINGS,
10. GLAZING 20% OF FLOOR AREA PLUS ANY REMOVED GLAZING U 0.75 MAX (DUAL GLAZING) (50 SQ. FT. MAX FOR ADDITIONS < 100 SQ. FT.)
11. REFER TO SHEETS T-24-a, T-24-b & T-24-c FOR CERTIFICATE OF COMPLIANCE FORMS CF-1R AND MF-1R.
12. AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS WITHIN WHICH FUEL-BURNING APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES IN ACCORDANCE WITH R315.1. THE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS: OUTSIDE EACH SEPARATE DWELLING UNIT SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM(S); ON EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS; WHERE MORE THAN ONE ALARM IS REQUIRED TO BE INSTALLED WITHIN THE DWELLING UNIT OR WITHIN A SLEEPING UNIT THE ALARM SHALL BE INTERCONNECTED IN A MANNER THAT ACTIVATION OF ONE ALARM SHALL ACTIVATE ALL THE ALARMS IN THE INDIVIDUAL UNIT (EXCEPTION: INTERCONNECTION IS NOT REQUIRED IN EXISTING DWELLING UNITS WHERE REPAIRS DO NOT RESULT IN THE REMOVAL OF WALL AND CEILING FINISHES, THERE IS NO ACCESS BY MEANS OF ATTIC, BASEMENT OR CRAWLSPACE, AND NO PREVIOUS METHOD FOR INTERCONNECTION EXISTED); SINGLE AND MULTIPLE STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH THE REQUIREMENTS OF UL 2034. CARBON MONOXIDE DETECTORS SHALL BE LISTED AS COMPLYING WITH THE REQUIREMENTS OF UL 2075.
13. A CAL-OSHA PERMIT IS REQUIRED FOR EXCAVATIONS DEEPER THAN 5' AND FOR SHORING AND UNDERPINNING.
14. THE MAXIMUM TIME TO COMPLETE CONSTRUCTION ON A PROJECT IS LIMITED TO THREE YEARS FROM THE DATE OF THE PERMIT FOR ALL PERMITS ISSUED AFTER AUGUST 21, 2019 AS REQUIRED BY NBMC SECTION 15.02.095.

2316 FAIRHILL DRIVE

NEW 2 STORY RESIDENCE

SYMBOLS



PROJECT INFO

OWNER:
MR. & MRS. JOE QUERRIERA
2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660
(949) 223-4034

PROJECT ADDRESS:
2316 FAIRHILL DRIVE
NEWPORT BEACH, CALIFORNIA 92660

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:
PARCEL A:
LOT 8 OF TRACT NO. 2516, IN THE CITY OF NEWPORT BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS MAP RECORDED IN BOOK 111 PAGES 25 AND 26 OF MISCELLANEOUS MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, EXCEPT THEREFROM ALL OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES LYING BELOW THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY, AS RESERVED OR GRANTED IN DOCUMENTS OF RECORD.

PARCEL B:
THAT PORTION OF LOT 9 OF TRACT NO.2516, IN THE CITY OF NEWPORT BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS MAP RECORDED IN BOOK 111 PAGES 25 AND 26 OF MISCELLANEOUS MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:
BEGINNING AT THE MOST EASTERLY CORNER OF SAID LOT 9; THENCE SOUTH 43 DEGREES 58 FEET 14 INCHES WEST 58.17 FEET TO A POINT, SAID POINT BEING 6.00 FEET NORTHWESTERLY, AS MEASURE AT RIGHT ANGLES FROM THE SOUTHEASTERLY LINE OF SAID LOT 9, THENCE SOUTH 23 DEGREES 34 FEET 13 INCHES WEST 24.00 FEET TO THE SAID SOUTHEASTERLY LINE OF LOT 9; THENCE NORTH 38 DEGREES 02 FEET 53 INCHES EAST ALONG THE SAID SOUTHEASTERLY LINE OF LOT 9, A DISTANCE OF 81.10 FEET TO THE POINT OF BEGINNING.

APN: 119-333-20

BUILDING CODE:
2022 CALIFORNIA BUILDING CODE
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFORNIA PLUMBING CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA RESIDENTIAL CODE
2022 CALIFORNIA ENERGY STANDARDS
2022 CALIFORNIA GREEN BUILDING CODE

OPEN SPACE:
LOT SIZE: 9,760 SQ. FT.

EXISTING FIRST FLOOR: 2,030 SQ. FT.
EXISTING GARAGE: 539 SQ. FT.

DEMOLISHED FIRST FLOOR AREA: 2,030 SQ. FT.
DEMOLISHED GARAGE AREA: 539 SQ. FT.

NEW FIRST FLOOR: 2,060 SQ. FT.
NEW GARAGE: 562 SQ. FT.
FIRST FLOOR CONDITIONED SPACE AREA: 2,060 SQ. FT.
TOTAL FIRST FLOOR AREA: 2,599 SQ. FT.

NEW SECOND FLOOR: 1,475 SQ. FT.
NEW SECOND FLOOR DECK: 77 SQ. FT.

GRAND TOTAL AREA: 4,151 SQ. FT.

~~GRAND TOTAL CONDITIONED SPACE AREA: 3,535 SQ. FT.~~
GROSS FLOOR AREA (CONDITIONED SPACE + GARAGE): 4,097 SQ. FT.
~~TOTAL AREA 2 EAVES: 3,682 SQ. FT.~~

CALCULATION OF % OF BUILDING COVERAGE (INCLUDES ROOF OVERHANG): 37.7%
CALCULATION OF % OF OPEN SPACE: 62.3%

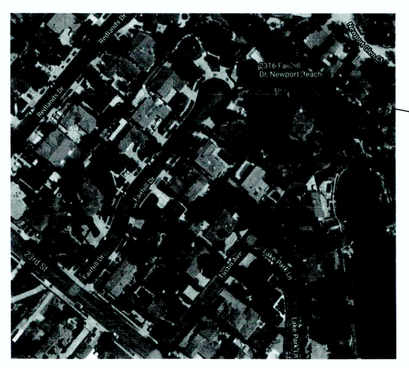
OCCUPANCY: R3/U, FIRST OCCUPIED IN 1959

TYPE CONSTRUCTION: VB, SPRINKLERED IN ACCORDANCE WITH NFPA 13D

STORIES: 2

SPECIAL HAZARD: LIQUEFACTION

VICINITY MAP



PROJECT TEAM

ARCHITECT
STERN ARCHITECTS, INC.
2961 W. MacArthur BLVD., SUITE 120
SANTA ANA, CALIFORNIA 92704
714-556-2656
FAX 714-556-2696

STRUCTURAL ENGINEERING
VECTOR ENGINEERS
23002 LA CADENA DRIVE. SUITE 201
LAGUNA HILLS, CALIFORNIA 92653
714-516-6524

CIVIL ENGINEERING
GILBERT ENGINEERING & ASSOC., INC.
2 MERRIWEATHER PLACE
LADERA RANCH, CALIFORNIA 92694
919-218-8075

ENERGY CONSULTANT
ENERGY CODE WORKS
2600 MICHELSON DRIVE. SUITE 1700
IRVINE, CALIFORNIA 92612
949-240-1867

GEOTECHNICAL ENGINEER
KLING CONSULTING GROUP, INC.
18008 SKY PARK CIRCLE. SUITE 250
IRVINE, CALIFORNIA 92614
949-797-6241

SCOPE OF WORK

DEMOLISH EXISTING ONE STORY RESIDENCE.

CONSTRUCT NEW 2 STORY 5 BEDROOM & 5 BATH + 2-CAR GARAGE RESIDENCE.

SHEET INDEX

	ARCHITECTURAL
A-0.0	SHEET INDEX AND GENERAL INFORMATION
A-0.1	GENERAL NOTES
A-0.2	RESIDENTIAL REQUIREMENTS
A-0.3	EXISTING & NEW SITE PLANS
~~—~~	~~CITY DRAINAGE PLAN SHEET~~
A-1.0	FIRST FLOOR DEMOLITION PLAN
A-1.1	ROOF DEMOLITION PLAN
A-2.0	NEW FIRST FLOOR PLAN
A-2.0D	NEW FIRST FLOOR DIMENSION PLAN
A-2.1	NEW SECOND FLOOR PLAN
A-2.1D	NEW SECOND FLOOR DIMENSION PLAN
A-3.0	NEW FIRST FLOOR ELECTRICAL PLAN
A-3.1	NEW SECOND FLOOR ELECTRICAL PLAN
A-4.0	NEW ROOF PLAN
A-5.0	SECTIONS
A-6.0	EXTERIOR ELEVATIONS
A-6.1	EXTERIOR ELEVATIONS
A-8.0	DETAILS
A-8.1	DETAILS
A-9.0	SCHEDULES
T-24-a	TITLE 24 COMPLIANCE REPORT
T-24-b	TITLE 24 COMPLIANCE REPORT
T-24-c	TITLE 24 COMPLIANCE REPORT
T-24-d	TITLE 24 COMPLIANCE REPORT
	STRUCTURAL
S1	STRUCTURAL GENERAL NOTES
S1.1	STANDARD DETAILS & SCHEDULES
S2	FOUNDATION PLAN
S3	LOW ROOF/FLOOR FRAMING PLAN
S4	~~UPPER~~ ROOF FRAMING PLAN
S5	MAIN SHEAR WALL PLAN
S6	UPPER SHEAR WALL PLAN
SD-1	STRUCTURAL DETAILS
SD-2	STRUCTURAL DETAILS
SD-3	STRUCTURAL DETAILS
SD-4	STRUCTURAL DETAILS
WSWH1	STRONG-WALL ANCHORAGE DETAILS
WSWH2	STRONG-WALL FRAMING DETAILS
	CIVIL
1	TITLE SHEET
2	PRECISE GRADING PLAN
3	EROSION CONTROL PLAN
4	DETAIL SHEET
5	BMP NOTES & DETAIL SHEET
6	GEOTECHNICAL RECOMMENDATIONS

DEFERRED SUBMITTALS

- SOUND ATTENUATION DESIGN FOR HVAC EQUIPMENT.
- FIRE SPRINKLER SYSTEM IN ACCORDANCE W/ NFPA 13D. OBTAIN FIRE SPINKLER PERMIT PRIOR TO CALLING FOR ROOF SHEATHING INSPECTION.
- 3.2kw SOLAR PANELS INSTALLATION.

DEFERRED SUBMITTALS TO BE REVIEWED BY PROJECT ARCHITECT OR ENGINEER OF RECORD AND CERTIFIED PRIOR TO SUBMITTAL FOR PLAN CHECK OR APPROVAL BY THE CITY.

HERS VERIFICATION REQ

CITY OF NEWPORT BEACH COMMUNITY DEVELOPMENT DEPARTMENT
APPROVAL OF THESE PLANS DOES NOT CONSTITUTE EXPERTISE OR IMPLIES ANY RESPONSIBILITY TO ASSOCIATE ANY LIABILITY ON THE CITY FOR ANY ACTION TO BE PERFORMED IN CONFORMANCE WITH THE DRAWINGS, PLANS AND SPECIFICATIONS APPROVED. THIS APPROVAL DOES NOT CONSTITUTE A WAIVER OF ANY OF THE REQUIREMENTS OF THE CITY OF NEWPORT BEACH BUILDING CODE AND OTHER APPLICABLE CODES, ORDINANCES AND STANDARDS UNLESS SPECIFICALLY APPROVED BY THESE PLANS. IT IS THE RESPONSIBILITY OF THE APPLICANT TO CONSTRUCT THIS BUILDING/SPACE/S, PLANS AND SPECIFICATIONS IN COMPLIANCE WITH ALL REQUIREMENTS OF THE CITY OF NEWPORT BEACH BUILDING CODE AND OTHER APPLICABLE CODES, ORDINANCES AND STANDARDS. BY SIGNING THESE PLANS, THE APPLICANT ACKNOWLEDGES THAT THEY HAVE READ THIS DISCLAIMER AND AGREE TO CONSTRUCT THIS BUILDING/SPACE/S, PLANS AND SPECIFICATIONS IN COMPLIANCE WITH ALL REQUIREMENTS OF THE CITY OF NEWPORT BEACH BUILDING CODE AND OTHER APPLICABLE CODES, ORDINANCES AND STANDARDS. THIS APPROVAL SHALL NOT BE INTERPRETED TO BE A COMPLETE AND EXHAUSTIVE LIST OF ITEMS NECESSARY TO COMPLY WITH SUCH REGULATIONS AND THE APPROVAL OF THESE PLANS SHALL NOT PREVENT THE BUILDING OFFICIAL FROM REQUIRING THE CORRECTION OF ERRORS IN THESE PLANS, BUILDING OPERATIONS, OR OTHER VIOLATIONS OF THE BUILDING CODE OR OTHER APPLICABLE CODES, ORDINANCES OR STANDARDS. THE PERMITTEE IS ACKNOWLEDGEMENT.
Planning Division
JAN - 9 2025
(SIGNATURE)
APPROVED BY: DATE: 1-9-25

PRE-CONSTRUCTION MEETING REQUIRED
DEPUTY SPECIAL INSPECTION REQUIRED
STRUCTURAL OBSERVATION REQUIRED
~~HEIGHT CERTIFICATION REQUIRED~~

STERN ARCHITECTS
2961 W. MacArthur Blvd.
Suite 120
Santa Ana, California 92704
t. (714) 556-2656
f. (714) 556-2696
CONSULTANT

PROJECT TITLE
NEW 2 STORY RESIDENCE FOR:
QUERRIERA RESIDENCE
2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS

5 BLDG. & PL CORRECTIONS	10-01-2024
4 PW CORRECTIONS	02-02-2024
3 BLDG. DEPT. CORRECTIONS	02-02-2024
2 BLDG. DEPT. CORRECTIONS	11-13-2023
1 PLNG & PW CORRECTIONS	08-10-2023
PLAN CHECK SET	07-31-2023
PROJECT RE-START SET	07-31-2023
PLAN CHECK SET (NOT USED)	10-26-2021
PROGRESS SET	06-07-2021
PROJECT NO:	20-51
SCALE:	SEE SHEET
DATE:	01-06-2021
DRAWN BY:	MDG
CHECKED BY:	SHS

SHEET TITLE
SHEET INDEX & GENERAL INFORMATION

SHEET NUMBER
A-0.0

CITY OF NEWPORT BEACH
PUBLIC WORKS NOTES

1. AN APPROVED ENCROACHMENT PERMIT IS REQUIRED FOR ALL WORK ACTIVITIES WITHIN THE PUBLIC RIGHT-OF-WAY.
2. A PUBLIC WORKS DEPARTMENT ENCROACHMENT PERMIT INSPECTION IS REQUIRED BEFORE THE BUILDING DEPARTMENT PERMIT FINAL CAN BE ISSUED, AT THE TIME OF PUBLIC WORKS DEPARTMENT INSPECTION, IF ANY OF THE EXISTING PUBLIC IMPROVEMENTS SURROUNDING THE SITE IS DAMAGED, NEW CONCRETE SIDEWALK, CURB AND GUTTER, AND ALLEY/STREET PAVEMENT WILL BE REQUIRED. ADDITIONALLY, IF EXISTING UTILITIES INFRASTRUCTURE ARE DEEMED SUBSTANDARD, A NEW 1-INCH WATER SERVICE, WATER METER BOX, SEWER LATERAL AND/OR CLEANOUT WITH BOX AND LID WILL BE REQUIRED. 100% OF THE COST SHALL BE BORNE BY THE PROPERTY OWNER (MUNICIPAL CODES 14.21.020 AND 14.08030). SAID DETERMINATION AND THE EXTENT OF THE RECONSTRUCTION WORK SHALL BE MADE AT THE DISCRETION OF THE PUBLIC WORKS INSPECTOR. CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE PUBLIC RIGHT OF WAY AT ALL TIMES DURING THE CONSTRUCTION PROJECT. A STOP WORK NOTICE MAY BE ISSUED FOR ANY DAMAGE OR UNMAINTAINED PORTION OF THE PUBLIC RIGHT OF WAY.
3. AN ENCROACHMENT AGREEMENT IS REQUIRED FOR ALL NON-STANDARD IMPROVEMENTS WITHIN THE PUBLIC RIGHT OF WAY. ALL NON-STANDARD IMPROVEMENTS SHALL COMPLY WITH CITY COUNCIL POLICY L-6.
4. ALL PRIVATE IRRIGATION SPRINKLER HEADS SHALL BE INSTALLED AND POSITIONED IN A MANNER THAT WILL NOT CAUSE IRRIGATION OVERSPRAY ONTO THE PUBLIC RIGHT OF WAY.
5. ALL WORK RELATED TO WATER IN THE PUBLIC RIGHT OF WAY SHALL BE PERFORMED BY A C-34 LICENSED PIPELINE CONTRACTOR OR A LICENSED GENERAL ENGINEERING CONTRACTOR.
6. ALL WORK RELATED TO WASTEWATER IN THE PUBLIC RIGHT OF WAY SHALL BE PERFORMED BY A C-42 LICENSED SANITATION SEWER CONTRACTOR OR A LICENSED GENERAL ENGINEERING CONTRACTOR.

RESIDENTIAL MANDATORY MEASURES

EXISTING NONCOMPLIANT PLUMBING FIXTURES SHALL BE REPLACED WITH WATER-CONSERVING PLUMBING FIXTURES FOR A RESIDENTIAL BUILDING UNDERGOING ADDITION OR ALTERATION PER SECTION 301.1.1

California

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.

Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1. Effective January 1, 2017, noncompliant plumbing fixtures, types of residential buildings affected and other important enactment dates.

301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings/high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where they apply. Sections specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

Exceptions:
1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.
2. [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the California Building Code, shall comply with the residential occupancy requirements. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

DIVISION 4.1 PLANNING AND DESIGN

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
SSA-SS	Division of the State Architect, Structural Safety
DSA/PD	Division of the State Architect Planning and Development
LR	Low Rise
HR	High Rise
A/A	Additions and Alterations
N	New

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES

SECTION 4.102 DEFINITIONS
4.102.1 DEFINITIONS.
The following terms are defined in Chapter 2 *(and are included here for reference)*

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material, used to collect or channel drainage or runoff water.

WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.

4.106 SITE DEVELOPMENT
4.106.1 General. Implementation of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, it shall be conveyed by pipe or similar enclosed method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil.

(Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)

4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales
2. Water collection and disposal systems
3. French drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception. Additions and alterations not altering the drainage path.

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electrical calculations, electrical equipment and the service panel shall be installed in accordance with the California Electrical Code, Article 625.

Exceptions:
1. Dwelling units or townhouses-care basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
   1.1. Where there is no local utility power supply or the local utility is unable to supply adequate power.
   1.2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

4.106.4.1 New one- and two-family dwellings and townhouses with private garages. For each dwelling unit, at least one EV space shall be provided in accordance with Section 4.106.4.2.1. The service panel shall not be less than trade size 1 (nominal 1inch inside diameter). The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit. The service panel or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the California Electrical Code.

4.106.4.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

4.106.4.2 New multifamily dwellings, hotels and motels and new residential buildings. When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Table 4.106.4.2. At least one EV space is required for multifamily buildings with no more than the nearest whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

4.106.4.2.1Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 25 sleeping units or guest rooms.
The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical systems, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exceptions:
1.When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.

2.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.

Notes:

a.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 25 or more sleeping units or guest rooms.
The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical systems, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exception: Where EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.

Notes:

a.Construction documents shall show locations of future EV spaces.

b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. For multifamily parking facilities, no more than one EVSE is required per dwelling unit on the common use parking area and shall be available for use by all residents at no charge.

When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical systems and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kVA simultaneously to each EV charging station (EVSE) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall have a minimum charging capacity of 3.3 kVA. The ALMS shall not be used to reduce the minimum required capacity to the required EV capable spaces.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS).
Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.

Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1 and Section 4.106.4.2.2.2, Item 3.

4.106.4.2.2.2 Electric vehicle charging stations (EVCS) dimensions.
The charging spaces shall be designed to comply with the following:

1.The minimum length of each EVCS space shall be 18 feet (5486 mm).

2.The minimum width of each EVCS space shall be 9 feet (2743 mm).

3.One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum area. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).

a.Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.2.3 Accessible EV spaces.
In addition to the requirements in Section 4.106.4.2.2.1 and 4.106.4.2.2.1.2, an EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A.

4.106.4.2.3 EV space requirements.
1.Signage is required. Install a listed raceway capable of accommodating a 20/30/40-volt dedicated branch circuit. The raceway must not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the charging location. The service panel or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit. The service panel or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit.

2.Multiple EV spaces required. Construction documents shall indicate the raceway termination point and the proposed location of future EV spaces and EV chargers. Plan design shall be based upon a 40-ampere minimum branch circuit. The information on panel layout shall reflect the future EV spaces and EV chargers. Conduit and wiring schematics and electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

4.106.4.3 Identification.
The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

4.106.4.3 Electric Vehicle Ready Space Signage.
Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with California Manual on Uniform Traffic Control Devices (2012 Edition Vehicle Signs and Pavement Markings) or its successor.

4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings.
When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.

Notes:

1.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

2.There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

DIVISION 4.2 ENERGY EFFICIENCY

4.201 GENERAL.
4.201.1 For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

4.303 INDOOR WATER USE
4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1. Effective January 1, 2017, noncompliant plumbing fixtures, types of residential buildings affected and other important enactment dates.

4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

4.303.1.3.1 Single Shower head. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one showerhead to be in operation at a time.

Note: A handheld shower shall be considered a showerhead.

4.303.1.4 Faucets.

4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas outside of dwellings or sleeping units in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.

4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

4.303.1.4.5 Pre-rinse spray valves.
When installed, shall meet *the requirements in the California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)1) Table H-2, Section 1605.3 (h)10) and Section 1607 (b)7) and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following tabs and code sections have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations),Section 1605.1 (h)1) and Section 1605.3 (h)10)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALVES MANUFACTURED ON OR AFTER JANUARY 28, 2019

PRODUCT CLASS (spray forms in ounce force (ozf))	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

Title 20 Section 1605.3 (h)(A)1) Commercial pre-rinse spray valves manufactured on or after January 1, 2006 shall have a minimum spray force of not less than 4.5 ounces-force (ozf) (113 grams-force(gf)).

4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial buildings.
Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the California Plumbing Code.

4.303.3 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code.

NOTE:
TABLE 1701.1 COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE - MAXIMUM FIXTURE WATER USE

FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GALFLUSH
URINALS	0.125 GALFLUSH

4.304 OUTDOOR WATER USE
4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

NOTES:
1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the *California Code Regulations*, Title 23, Chapter 2.7, Division 2, MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE
4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING
4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Exceptions:
1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion in excess of 65 percent is demonstrated. Documentation of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

1. Identify the materials that will be diverted from disposal by recycling reuse on the project or salvage for future use or sale.
2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).
3. Identify diversion facilities where the construction and demolition waste material collected will be taken.
4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

4.408.4 WASTE STREAM REDUCTION ALTERNATIVE (LR). Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4.

Notes:
1. Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" or other *equivalent forms* and calculation tools may be used to assist in documenting compliance with this section.
2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

4.410 BUILDING MAINTENANCE AND OPERATION
4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
2. Operation and maintenance instructions for the following:
   a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
   b. Roof and yard drainage, including gutters and downspouts
   c. Space conditioning systems, including condensers and air filters.
   d. Landscape irrigation systems.
   e. Water reuse systems.
3. Information from local utility, water-and-waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
4. Public transportation and/or carpool options available in the area.
5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may employ to maintain humidity within this range.
6. Information about water-conserving landscape and irrigation design and controllers which conserve water.
7. Instructions for maintaining gutters and downspouts and the importance of directing water at least 5 feet away from the foundation.
8. Information on required routine maintenance measures, including, but not limited to: caulking, painting, grading around the building, etc.
9. Information about state solar energy and incentive programs available.
10. A copy of all special inspections verifications required by the enforcing agency or this code.
11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.
12. Information and/or drawings identifying the location of grab bar reinforcements.

4.410.2 RECYCLING BY OCCUPANTS. When 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and is identified for the depositing, storage and collection of non-hazardous materials for recycling, including at a minimum, paper, cardboard, glass, plastics, organic wastes, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are not required to comply with the organic waste portion of this section.

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL
4.501.1 Scope
The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, chemically reactive and/or harmful to occupants and cause damage to plants, animals or property.

SECTION 4.502 DEFINITIONS
4.502.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

ADHESIVE, BONDING PRIMER. Coating formulations used to prepare substrates for bonding that provide a bridge between dissimilar substances, one of which is usually plastic, to improve the adhesive bond strength.

ADHESIVE PRIMER. Coating formulations used to prepare substrates for bonding that provide a bridge between dissimilar substances, one of which is usually plastic, to improve the adhesive bond strength.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium-density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

TABLE 4.504.1 - ADHESIVE VOC LIMIT[1]

(Less Water and Less Exempt Compounds in Grams per Liter)

ARCHITECTURAL APPLICATIONS	VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LIMIT

(Less Water and Less Exempt Compounds in Grams per Liter)

SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[1]

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS[2]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

TABLE 4.504.5 - FORMALDEHYDE LIMITS:

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES

2022 CALGREEN-RESIDENTIAL CONSTRUCTION MINIMUM REQUIREMENTS

CITY OF NEWPORT BEACH
COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING DIVISION
100 Civic Center Drive | P.O. Box 1768 | Newport Beach, CA 92658-8915
www.newportbeachca.gov | (949) 644-3200

2022 CALGREEN - RESIDENTIAL MINIMUM REQUIREMENTS

Scope

1. 2022 California Green Building Standards Code (CG) is applicable to all new residential buildings, including but not limited to, dwellings, apartment houses, condominiums, hotels, and other types of dwellings containing sleeping accommodations with or without common toilets or cooking facilities regulated by the Department of Housing and Community Development (HCD-1). (NBMC 15.11.010, CG Section 101.3.1(3)).
2. 2022 California Green Building Standards Code (CG) is applicable to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration. (301.1.1)

Energy Efficiency

3. New one- and two-family dwellings and townhouses with attached private garages shall install a listed nominal 1 inch inside diameter raceway to accommodate a dedicated 208/240 volt branch circuit. (4.106.4.1)
   a. The raceway shall originate at the main service or subpanel and terminate into a listed cabinet, box, or enclosure in close proximity to the proposed location of an EV charger.
   b. The service panel or subpanel shall provide capacity to install a minimum 40 ampere dedicated branch circuit and space reserved for installation of a branch circuit overcurrent protective device.
   c. The service panel or subpanel circuit directory shall identify the overcurrent protective devices space reserved for future EV charging as "EV CAPABLE."
   d. The raceway termination location shall be permanently and visibly marked as "EV CAPABLE."

13. Paints, stains, and other coatings shall be compliant with VOC and other toxic compound limits set forth in Table 4.504.3. (4.504.2.2)

VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS [2,3]
(Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds)

COATING CATEGORY	VOC LIMIT
Flat coatings	50
Nonflat coatings	100
Nonflat-high gloss coatings	150
SPECIALTY COATINGS	
Aluminum roof coatings	400
Basement specialty coatings	400
Bituminous roof coatings	50
Bituminous roof primers	350
Bond breakers	350
Concrete curing compounds	350
Concrete/masonry sealers	100
Driveway sealers	50
Dry fog coatings	150
Faux finishing coatings	350
Fire resistive coatings	350
Floor coatings	100
Form-release compounds	250
Graphic arts coatings (sign paints)	500
High temperature coatings	420
Industrial maintenance coatings	250
Low solids coatings[1]	120
Magnesite cement coatings	450
Mastic texture coatings	100
Metallic pigmented coatings	500
Multicolor coatings	250
Pretreatment wash primers	420
Primers, sealers, and undercoaters	100
Reactive penetrating sealers	350
Recycled coatings	250
Roof coatings	50
Rust preventative coatings	250
Shellacs	
Clear	730
Opaque	550
Specialty primers, sealers and undercoaters	100
Stains	250
Stone consolidants	450
Swimming pool coatings	340
Traffic marking coatings	100
Tub and tile refinish coatings	420
Waterproofing membranes	250
Wood coatings	275
Wood preservatives	350
Zinc-rich primers	340

1. Grams of VOC per liter of coating, including water and including exempt compounds.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2005. More information is available from the Air Resources Board.

Material Conservation and Resources Efficiency

4. Annular spaces around pipes, electric cables, conduits, or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or other similar method. (4.406.1)
5. Utilize one of the city's approved franchise hauler to recycle and/or salvage a minimum of 65% of the nonhazardous construction and demolition waste. (4.408.1, 4.408.3)

Water Efficiency and Conservation

6. New residential developments shall comply with City's water efficient landscape ordinance. (4.304.1, NBMC 14.17)
7. Plumbing fixtures and fittings shall comply with the following (4.303.1):

FIXTURE TYPE	MAXIMUM FLOW RATE
Single Showerheads	1.8 gpm @ 80 psi
Multiple Showerheads	Combine flow rate of 1.8 gpm @80 psi
Residential Lavatory Faucets	1.2 gpm @ 60 psi[2]
Common and Public use Lavatory Faucets	0.5 gpm @ 60 psi
Kitchen Faucets	1.8 gpm @ 60 psi
Metering Faucets	0.2 gallons per cycle maximum
Water Closets	1.28 gallons/flush[1]
Wall Mounted Urinal	0.125 gallons/flush
All Other Types of Urinal	0.5 gallons/flush

1. Includes single and dual flush water closets with an effective flush rate of 1.28 gallons or less when tested per ASME A112.19.233.2 for single flush and ASME A112.19.14 for dual flush toilets.
2. Lavatory faucets shall not have a flow rate less than 0.8 gpm at 20 psi.

Environmental Quality

8. Moisture content of building materials used in wall and floor framing is checked before enclosure according to one of the following (4.505.3):
   a. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
   b. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece to be verified.
   c. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.
9. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other toxic requirements in Sections 94522(e)(1) and (f)(1) of the California Code of Regulations, Title 17, commencing with Section 94520. (4.504.2.3)
10. Carpet and carpet systems shall be compliant with one of the following (4.504.3):
    a. Carpet and Rug Institute's Green Label Plus Program.
    b. California Department of Public Health Specification 01350.
    c. NSF/ANSI 140 at the Gold level.
    d. Scientific Certifications Systems Indoor Advantage™ Gold
11. Minimum 80% of floor area receiving resilient flooring shall comply with one of the following (4.504.4):
    a. VOC emission limits defined in the Collaborative for High Performance Schools (CHPS) High Performance Product Database.
    b. Products certified under UL GREENGUARD Gold.
    c. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program.
    d. California Department of Public Health Specification 01350.

14. Particleboard, medium density fiberboard (MDF) and hardwood plywood used in interior or exterior of the building shall comply with low formaldehyde emission standards as set forth in Table 4.504.5 below (4.504.5):

FORMALDEHYDE LIMITS[1]
(Maximum Formaldehyde Emissions in Parts per Million)

PRODUCT	LIMIT
Hardwood plywood veneer core	0.05
Hardwood plywood composite core	0.05
Particleboard	0.09
Medium density fiberboard	0.11
Thin medium density fiberboard[2]	0.13

1. Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E 1333-96(2002). For additional information, see California Code of Regulations, Title 17, Sections 93120 through 93120.12
2. Thin medium density fiberboard has a maximum thickness of 5/16 inch (8 mm).

15. All duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the building inspector to reduce the amount of water, dust and debris, which may enter the system until final startup of the HVAC equipment. (4.504.1)
16. Bathroom exhaust fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. Unless functioning as a component of whole house ventilation system, fans must be controlled by a humidity control capable of adjustment between a relative humidity range of less than or equal to 50% to maximum 80%. (4.506.1)
17. Duct systems are sized, designed and equipment is selected using the following methods (4.507.2):
    a. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2016 (Residential Load Calculation), ASHRAE handbooks or equivalent design software or methods.
    b. Size duct systems according to ANSI/ACCA 1 Manual D-2016 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
    c. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2014 (Residential Equipment Selection) or other equivalent design software or methods.

Installer and Special Inspector Qualifications

18. HVAC system installers shall be trained and certified or work under direct supervision of trained and certified installers in the proper installation of HVAC systems. (702.1)
19. HVAC special inspectors must be qualified and able to demonstrate competence in the discipline they are inspecting. (702.2)

Documentations

20. An operation and maintenance manual, CD, web-based reference or other approved media shall be provided by the builder to the building occupant or owner at the final inspection. It shall include operation and maintenance instruction of the equipment and appliances. (4.410.1)
21. Documentation shall be provided to verify that finish materials used comply with VOC limits as set forth in Tables 4.504.1, 4.504.2, & 4.504.3. (4.504.2.4)
22. Documentation shall be provided to verify that composite wood products used comply with formaldehyde limits as set forth in Tables 4.504.5. (4.504.5.1)
23. Documentation which shows compliance with CAL Green code including construction documents, plans, specifications, builder or installer certification, and inspection reports and verification shall be available at the final inspection. (703.1)
24. CAL Green Documentation Compliance Certification form (City form) is required to be submitted to the Building Inspector prior to final building inspection. (703.1)

12. Adhesives, sealants and caulks shall be compliant with volatile organic compound (VOC) limits set forth in Table 4.504.1 or Table 4.504.2. (4.504.2.1)

ADHESIVE VOC LIMIT [1,2]
(Less Water and Less Exempt Compounds in Grams per Liter)

ARCHITECTURAL APPLICATIONS	VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesive	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

1. If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.
2. For additional information regarding methods to measure VOC content specified in table, see South Coast Air Quality Management District Rule 1168.

SEALANT VOC LIMIT
(Less Water and Less Exempt Compounds in Grams per Liter)

SEALANTS	VOC LIMIT
Architectural	250
Marine deck	760
Nonmembrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural	
Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

RESIDENTIAL CONSTRUCTION MINIMUM REQUIREMENTS

CITY OF NEWPORT BEACH
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RESIDENTIAL CONSTRUCTION MINIMUM REQUIREMENTS

Applicable Standards: 2022 California Residential Code (CRC); 2022 California Building Code (CBC); 2022 California Plumbing Code (CPC); 2022 California Electrical Code (CEC); 2022 California Mechanical Code (CMC); 2022 Building Energy Efficiency Standards (BEES); 2022 California Green Building Standards Code (Cal Green); & Chapter 15 of the Newport Beach Municipal Code (NBMC)

GENERAL:

1. Residential building undergoing permitted alterations, additions or improvements shall replace non-compliant plumbing fixtures with water-conserving plumbing fixtures meeting the requirements of 2022 California Green Building Standards Code, Section 4.303.1 Plumbing fixture replacement is required prior to issuance of a certificate of occupancy or final inspection by the Chief Building Official. (Civil Code, Section 1101.1 et seq., NBMC 15.11.010)
2. Issuance of a building permit by the City of Newport Beach does not relieve applicants of the legal requirements to observe covenants, conditions and restrictions, which may be recorded against the property or to obtain plans. You should contact your community associations prior to commencement of any construction authorized by this permit.
3. Prior to performing any work in the city right-of-way an encroachment permit must be obtained from the Public Works Department.
4. A site survey by a licensed surveyor shall be required prior to foundation concrete pour.
5. Garage ceiling height. The minimum unobstructed vertical clearance for parking spaces shall be seven feet, except that the front four feet may have a minimum vertical clearance of four feet. (NBMC 20.40.090 A.4)
6. Utilize one of the city's approved franchise hauler to recycle and/or salvage a minimum of 65% of the nonhazardous construction and demolition waste. (Cal Green 4.408.1, 4.408.3)
7. Stairways shall not be less than 36 inches clear width. (CRC 311.7.1) The minimum head clearance shall be 6'-8" measured vertically from the sloped line adjoining tread nosing. (CRC 311.7.2)
8. Advisory Note: Homeowners Association (HOA) approval is independent of the City process and may be required for this improvement. Please check with the HOA Board.
9. Additional permits are required for detached structures including but not limited to:
   a. Accessory structures, detached patio covers, and trellises,
   b. Masonry or concrete fences over 3.5 ft. high or within 3 feet of the property line,
   c. Retaining walls over 4 ft. high from the bottom of the foundation to the top of the wall and any retaining wall within 3 ft. of property line regardless of height.

   d. Electrical and Plumbing for exterior improvements detached from the house (i.e. barbeque, fountain, fire feature)

CONSTRUCTION:

10. Pedestrian protection adjacent to public way to be as follows:

CBC TABLE 3306.1
PROTECTION OF PEDESTRIANS

HEIGHT OF CONSTRUCTION	DISTANCE FROM CONSTRUCTION TO LOT LINE	TYPE OF PROTECTION REQUIRED
8 feet or less	Less than 5 feet	Construction railings
	5 feet or more	None
More than 8 feet	Less than 5 feet	Barrier and covered walkway
	5 feet or more, but not more than one-fourth the height of construction	Barrier and covered walkway
	5 feet or more, but between one-fourth and one-half the height of construction	Barrier
	5 feet or more, but exceeding one-half the height of construction	None

11. All exterior lath and plaster shall have two layers of 10-minute Grade D paper over wood-based sheathing. (CRC R703.7.3, CBC 2510.6)
12. Wall covering of showers or tubs with showers shall be of cement plaster, tile, or approved equal, to a height of not less than 72 inches above drain inlet. Backing for tile shall be cement board or cement plaster. (CRC R307.2, CBC 1209.2.3)
13. Safety glazing shall be provided at the following hazardous locations: (CRC R308.4, CBC 2406.4)
    a. Swinging, bi-fold, and sliding doors.
    b. When located within 60 inches above the floor of wet surfaces such as tubs, showers, saunas, steam rooms, or outdoor swimming pool.
    c. Glazing adjacent to doors:
       i. Within a 24-inch arc of either vertical edge of doors or within 60 inches of walking surface.
       ii. Where the glazing is on a wall perpendicular to the plane of the door in a closed position and within 24 inches of the hinge side of an in-swinging door.
    d. Where glazing area is more than 9 sq. ft. in area, with the bottom edge less than 18 inches above the floor, top edge more than 36 inches above floor, and within 36 inches of a walking surface, measured horizontally.
    e. Glazing where the bottom exposed edge of the glazing is less than 36 inches above the plane of the adjacent walking surface of stairways, landings between flights of stairs and ramps.
    f. Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches above the landing and within 60 inches horizontally of the bottom tread.
    g. Glazing in guards and railings.
14. All doors and operable windows with sill height less than 48 inches above the indoor finished floor from the house into the pool area shall be equipped with an approved alarm or an approved alternate drowning prevention safety feature. (CBC 3109 (115922))
15. Smoke alarms shall be installed in the following locations (CRC R314.3, CBC 907.2.11.2, 907.2.11.3 & 907.2.11.4):

   a. In each sleeping room.
   b. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
   c. On each additional story, including basements and habitable attics.
   d. Not less than 3 feet horizontally from the door or opening of a bathroom that contains a bathtub or shower.
   e. A minimum of 20 feet horizontally from any permanently installed cooking appliance.
   f. Smoke alarms shall be hardwired with battery back-up and interconnected unless exempted in accordance with CRC R314.4 & R314.5 or CBC 907.2.11.5 & 907.2.11.6.
16. Carbon monoxide alarms shall be installed in the following locations (CRC R315.3):
    a. Outside of each sleeping area in the immediate vicinity of the bedroom(s).
    b. On every occupiable level of the dwelling unit including basements.
    c. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

    Carbon monoxide alarms shall be hardwired with battery back-up and interconnected unless exempted in accordance with CRC R315.6(4).
17. Newly constructed dwellings shall comply with Aging-in-place and fall prevention (CRC R327):
    a. At least one bathroom on the entry level shall be provided with reinforcement for grab bars, where there is no bathroom on the entry level, at least one bathroom on the second or third floor of the dwelling shall comply with CRC R327.1.1.
    b. Electrical receptacle outlets, switches and controls shall be located no more than 48" measured from the top of the outlet box and not less than 15" measured from the bottom of the outlet box above the finish floor. CRC R327.1.2.
    c. Doorbell buttons shall not be installed more than 48" above exterior floor or landing. CRC R327.1.4.
18. All fenestrations on windows and doors shall have U-factors (0.30 max) and Solar Heat Gain Coefficient (SHGC=0.23 max) values in accordance with T-24 energy calculations. All fenestrations must have temporary and permanent labels.

TEMPORARY GENERATOR:

19. Hand operated construction tools powered by electricity must use power provided by Southern California Edison through a temporary pole or available outlet. In the rare case where electricity is not readily available and a portable temporary generator is necessary, then the following restrictions must be adhered to:
    a. Must be portable and may be easily relocated.
    b. Temporary generators are to be located a minimum distance from any property line according to the following table:

Time in Use Hours	Required Setback from Property Line	Required Setback from Adjacent Structures
0 – 1 day	10 feet	5 feet
> 1 day	20 feet	5 feet

    c. If the minimum distance cannot be achieved, then the generator shall be located the most extreme distance practical to inhibit noise. Other methods to inhibit noise may be utilized when practical.
    d. May be operational for a maximum of five consecutive calendar days. After five consecutive calendar days of use, power shall be provided using a temporary power pole.
    e. Usage is limited to weekdays between the hours from 8:00 AM and 3:30 PM Monday through Friday. No use on the weekends or federal holidays.

FIREPLACE:

20. All fireplaces:
    a. Factory-built fireplaces, chimneys and all their components shall be listed and installed in accordance with their listing and manufacturer's installation instructions. (CRC R1004.1)
    b. Factory built wood burning fireplaces shall be qualified at the U.S. EPA's Voluntary Fireplace Program Phase 2 emissions level. (CRC 1004.1.1)
    c. Decorative shrouds shall not be installed at the termination of factory-built chimneys except where such shrouds are listed and labeled for use with the specific factory-built chimney system and are installed in accordance with manufacturer's installation instructions. (CRC R1005.2 & CMC 802.5.1.1 & CMC 802.5.4.3)
    d. Horizontal openings are not allowed, for exhaust vents, in walls closer than 3 feet to a property line, (Tables R302.1(1) & (2)). Horizontal vent caps shall be 2 feet clear from property lines.
    e. Exhaust openings shall not be directed onto walkways. (R303.5.2)
21. Solid fuel burning fireplaces:
    a. Provide a permanently anchored gaseous fuel burning pan to the firebox of a solid fuel burning fireplace.
    b. Solid fuel burning fireplace must comply with the California Energy Standards mandatory measures.
    c. Chimney shall extend at least 2 ft. higher than any portion of the building within 10 ft, but shall not be less than 3 ft. above the highest point where the chimney passes through the roof. (CRC R1003.9)
    d. Liquid fueled fireplaces are not allowed for interior use.
22. Direct vent gas appliance fireplace:
    a. Direct vent sealed-combustion gas appliance fireplace must comply with the Cal Green code requirements and must comply with US EPA New Source Performance Standards (NSPS). (Cal Green 4.503.1)

MECHANICAL:

23. Rooms containing bathtubs, showers, spas and similar fixtures shall be provided with an exhaust fan with humidity control sensor having a minimum capacity of 50 CFM ducted to terminate outside the building. (CRC R303.3, Cal Green 4.506.1, CBC 1202.5.2.1, CMC 402.5)
24. Where water closet compartment is independent of the bathroom or shower area, a fan will be required in each area. Bathrooms shall have an exhaust fan with humidity control sensor, min. 50 CFM capacity. (CRC R303.3)

25. Where whole house fans are used in bathroom areas, the fan must run continuously and shall not be tied to a humidity control sensor. (Cal Green 4.506.1(2)).
26. The clothes dryer vent shall not exceed 14 ft. in overall length with maximum two 90-degree elbows. (CMC 504.4.2.1)
27. Environmental air ducts shall terminate min. 3 feet from property line or openings into building, and 10 feet from a forced air inlet. (CMC 502.2.1)
28. Mechanical equipment shall be installed per the manufacture's installation instructions. (CMC 303.1)
29. Domestic range vents to be smooth metallic interior surface. (CMC 504.3)
30. Supply and return air ducts to be insulated at a minimum of R-6. (Cal Energy Code Table 150.1-A.)

PLUMBING:

31. Separate water meters are required for all new duplexes. Separate fire risers are required at each water meter.
32. Plumbing Fixtures:
    a. New Construction & Addition/Alterations that increases condition space area, volume, or size (Cal Green 4.303.1):
       i. Comply with CAL Green Mandatory Requirements
    b. Addition & Alteration: Existing fixtures shall be replaced to meet the following requirements:
       i. Shower Heads: 1.8 gpm @ 80 psi
       ii. Lavatory Faucets: 1.2 gpm @ 60 psi
       iii. Kitchen Faucets: 1.8 gpm @ 60 psi
       iv. Water Closet: 1.28 gallons per flush
33. Clearance for water closet to be a minimum of 24 inches in front, and 15 inches from its center to any side wall or obstruction. (CPC 402.5)
34. The water heater burner to be at least 18 inches above the garage floor, if located in a garage. (CPC 507.13)
35. Install a 3-inch diameter by 3 ft. tall steel pipe embedded in concrete slab for protection of water heaters located in garage. (CPC 507.13.1)
36. Water heaters to be strapped at top and bottom with 1 ½" x 16-gauge strap with 3/8" diameter. X 3" lag bolt each end. (CPC 507.2)
37. ABS and PVC drain waste and vent piping material is limited to 2 stories maximum, (CPC 701.2(2) (a). and 903.1.1)
38. ABS and PVC roof and deck drain material is limited to 2 stories maximum. (CPC 1101.4)
39. Roof and deck drain systems inside the building are required to be installed with directional DWV drainage fittings. (CPC 1101.4 and & 706.0)
40. Cleanouts are required within 2 feet of the connection between the building interior roof/deck drain piping system and the exterior onsite storm drain system. (CPC 1101.13)
41. All hose bibbs shall have vacuum breakers. (CPC 603.5.7)
42. The maximum amount of water closets on a 3-inch horizontal drainage system line is 3. (CPC Table 703.2)

43. The maximum amount of water closets on a 3-inch vertical drainage system line is 4. (CPC Table 703.2)
44. Provide a condensate drain no more than 2 inches above the base of the water heater space. (Cal Energy Code 150.0 (m))
45. Insulate all hot water pipes. (Cal Energy Code 150.0 (j) (1), and CPC 609.12).
46. Isolation valves are required for tankless water heaters on the hot and cold supply lines with hose bibbs on each valve, to flush the heat exchanger. (Cal Energy Code 110.3 (6))
47. Install 1 automatic clothes washer connection per one- and two-family dwelling. (CPC Table 422.1)

ELECTRICAL:

48. Electrical service shall be underground for new construction, replacement building, or addition to an existing building exceeds fifty (50) percent of the gross floor area of the existing building. (NBMC 15.32.015)
49. Edison Company approval is required for meter location prior to installation.
50. Field inspectors shall review and approve underground service requirement prior to concrete placement.
51. Service equipment and subpanels shall have a min 30" wide by 36" deep clear work space. (CEC 110.26)
52. All lighting is required shall be high efficacy. (California energy code section 150.0 (k) and Table 150.0-A.)
53. Provide a listed 1-inch raceway to accommodate a dedicated 208/240-volt circuit for future electrical vehicle (EV) charger. (Cal Green 4.106.4.1)
54. All receptacle outlets are required shall be listed tamper resistant (CEC 406.12 and 250.52)
55. Combination type AFCI circuit breakers are required for all 120-volt single phase 15/20 amp branch circuits. Except for bathrooms, garages, and outdoors. (CEC 210.12)
56. A minimum of one dedicated 20 amp circuit is required for a bathroom. (CEC 210.11(C)(3))
57. GFCI protection is required for all receptacle outlets located outdoors, garages, accessory buildings, bathrooms, crawl spaces, kitchens, laundry areas, kitchen dishwasher branch circuit, garbage disposal, all areas within 6 feet of a sink, and all receptacles within 6 feet of a bathtub or shower stall. (CEC 210.8)
58. Receptacle outlets are not allowed within or over a bathtub or shower stall. (CEC 406.9 (C))
59. Subpanels are not allowed to be located in bathrooms or clothes closets. Avoid installing sub-panels in fire wall envelope unless the panel is listed, or fire protection is clearly detailed to the satisfaction of the building official. (CEC 240.24 (D) and (E)
60. Circuits sharing a grounded conductor (neutral) with two ungrounded (hot) conductors must use a two-pole circuit breaker or an identified handle tie. Group non-cable circuits in panel. (CEC 210.4(B)) (CEC 210.4(D))
61. The receptacle outlets that serve kitchen counter tops, dining room, breakfast area, and pantry, must have a min of 2 dedicated 20 amp circuits. (CEC 210.52 (B)(1))
62. Kitchen counter tops 12 inches or wider must have a receptacle outlet. (CEC 210.52(C)(1))

63. Kitchen counter tops must have receptacle outlets so no point along the counter walls is more than 24 inches from a receptacle. (CEC 210.52 (C)(1))
64. Island and peninsular counter tops must have at least one receptacle. (CEC 210.52(C)(1), (2),and (3))
65. The spacing for general receptacle outlets must be located so that no point on any wall, fixed glass, or cabinets is over 6 feet from a receptacle outlet. (CEC 210.52(A)(1))
66. Hallways 10 feet or more must have at least one receptacle outlet. (CEC 210.52(H))
67. Garages shall have at least one receptacle for each car space on the interior. The branch circuit supplying the receptacles shall not serve outlets outside of the garage. (CEC 210.52 (G) (1)).
68. Laundry rooms must have at least one dedicated 20 amp receptacle circuit. (CEC 210.11(C) (2)).
69. Provide 120V receptacle within 3 feet of water heater. (Cal Energy Code 150.0 (n) 1 A.)

FOUNDATION:

70. Weep screed for stucco at the foundation plate line shall be a minimum of 4 inches above the earth or 2 inches above paved areas. (CRC R703.7.2.1, CBC 2512.1.2)
71. Fasteners and connectors (nails, anchor bolts, etc.) in contact with preservative-treated wood shall be of hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper. (CRC R317.3, CBC 2304.10.6)
72. Anchor bolts shall include steel plate washers, a minimum of 0.229" x 3" x 3" in size, between sill plate and nut. (CRC R602.11.1, CBC 2308.3, Acceptable alternate SDPWS 4.3.6.4.3)

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CONSULTANT

PROJECT TITLE

1st FLOOR REMODEL & 2ND FLOOR ADDITION FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS

2	BLDG. DEPT. CORRECTIONS	11-13-2023
1	PLNG & PW CORRECTIONS	08-10-2023

PLAN CHECK SET	07-31-2023
PROJECT RE-START SET	07-31-2023
PLAN CHECK SET (NOT USED)	10-26-2021
PROGRESS SET	06-07-2021
PROJECT NO:	20-51
SCALE:	SEE SHEET
DATE:	01-06-2021
DRAWN BY:	MDG
CHECKED BY:	SHS

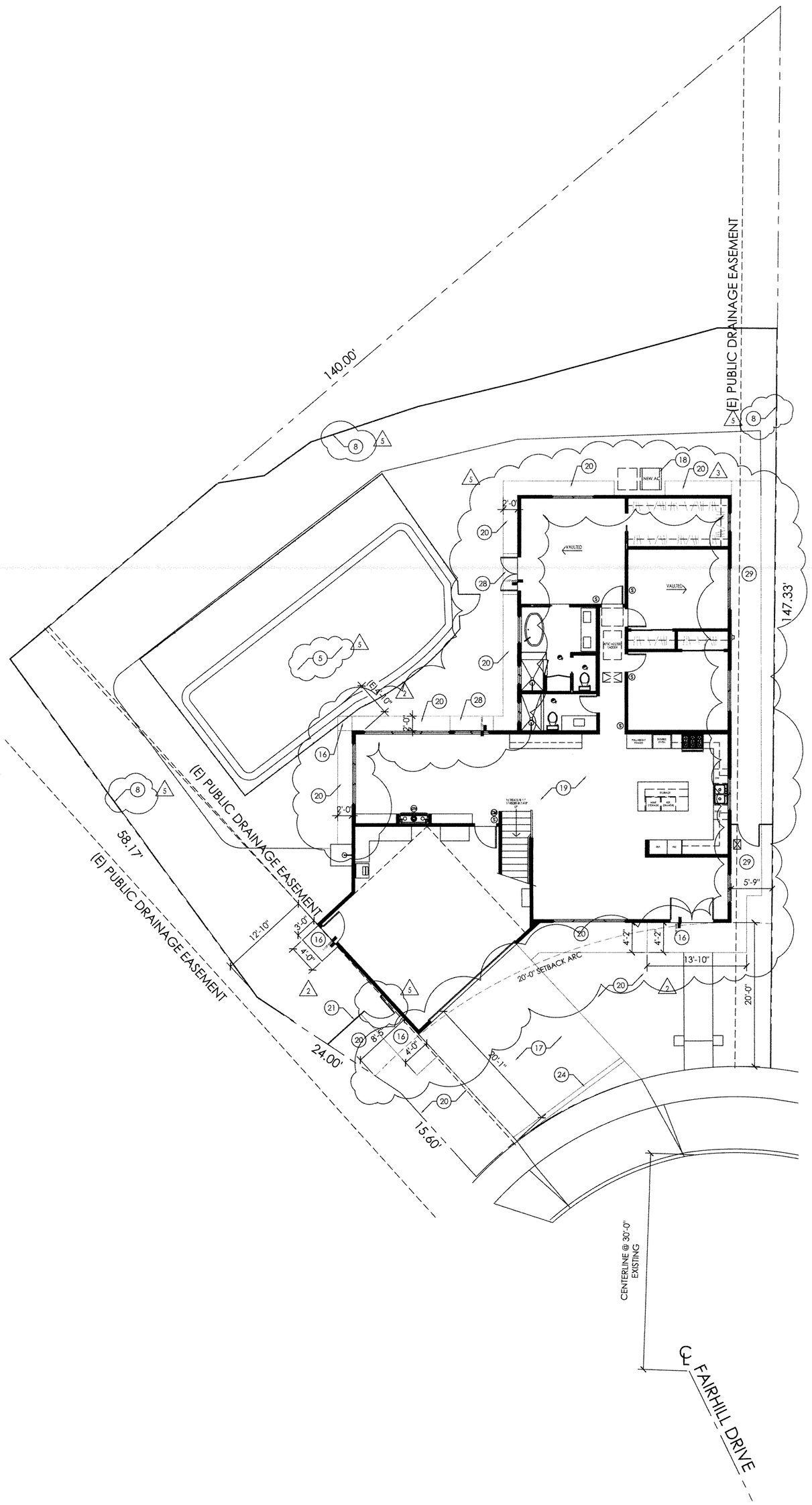
SHEET TITLE

RESIDENTIAL REQUIREMENTS

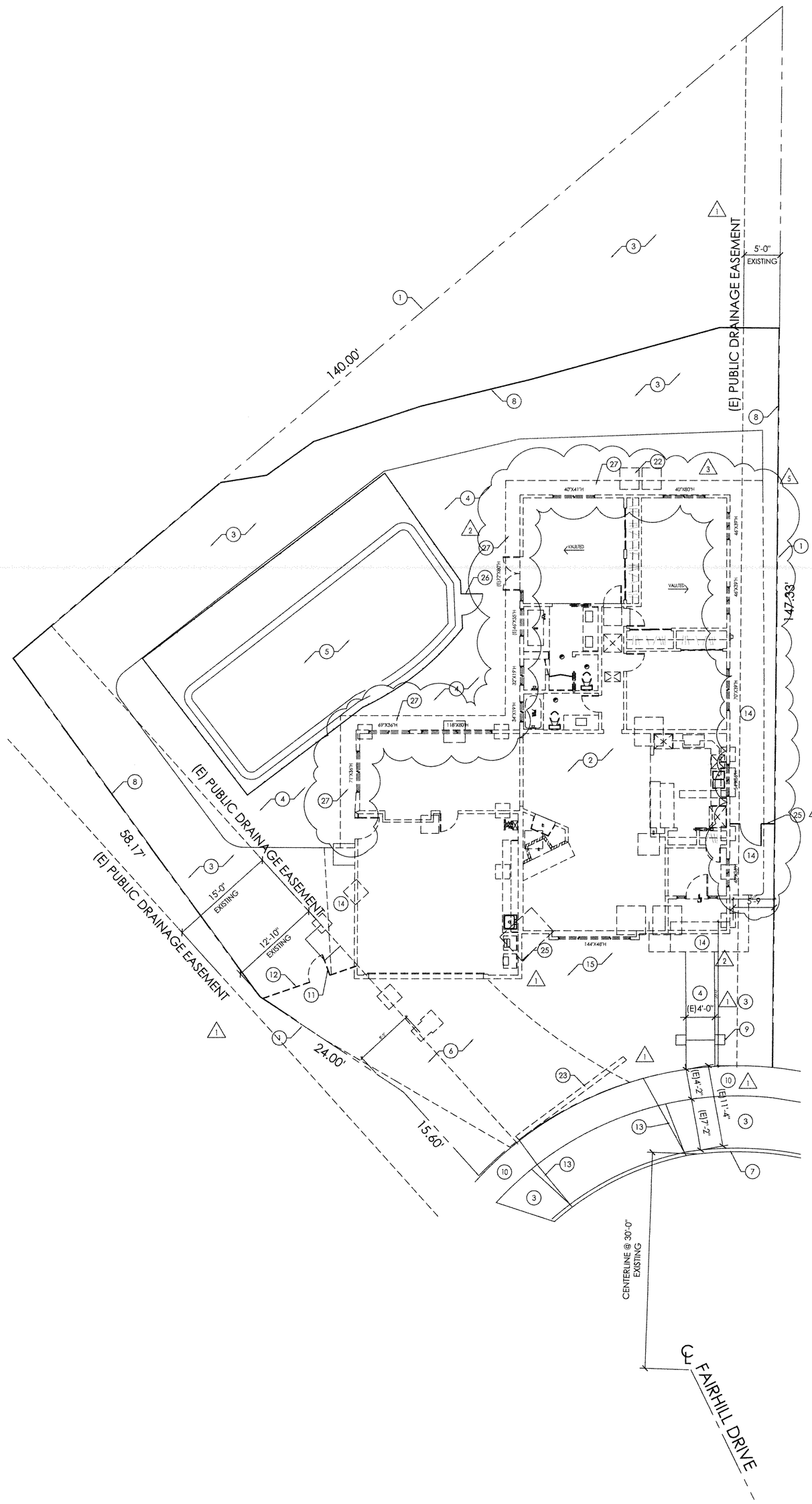
SHEET NUMBER

2 A-0.2

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2 NEW SITE PLAN
1/8"=1'-0"



1 DEMO SITE PLAN
1/8"=1'-0"

EXISTING SITE PLAN KEYNOTES

1. EXISTING PROPERTY LINE.
2. EXISTING STRUCTURE SHALL BE DEMOLISHED. SEE SHEETS A-1.0, A-1.1, A-2.0 & A-2.1 FOR ADDITIONAL INFORMATION.
3. EXISTING LANDSCAPING TO REMAIN.
4. EXISTING HARDSCAPE TO REMAIN.
5. EXISTING POOL TO REMAIN.
6. CONTRACTOR SHALL REMOVE EXISTING DRIVEWAY. PREPARE AREA FOR NEW DRIVEWAY.
7. EXISTING CITY CURB AND GUTTER TO REMAIN.
8. EXISTING 6'-0" HIGH FENCE TO REMAIN.
9. EXISTING BRICK PILASTERS TO REMAIN.
10. EXISTING SIDEWALK TO REMAIN.
11. EXISTING 6'-0" HIGH GATE TO BE REMOVED.
12. EXISTING 6'-0" HIGH FENCE TO BE REMOVED.
13. EXISTING DRIVEWAY FLARE & APRON TO REMAIN.
14. EXISTING HARDSCAPE TO BE REMOVED.
15. EXISTING LANDSCAPE TO BE REMOVED.
16. NEW HARDSCAPE.
17. NEW CONCRETE DRIVEWAY.
18. NEW AC CONDENSER LOCATION. NEW 36"x36"x4" CONCRETE PAD UNDER AC UNIT. SEPARATE REVIEW & PERMIT REQUIRED.
19. NEW STRUCTURE. SEE SHEET A-2.0 & A-2.1 FOR ADDITIONAL INFORMATION.
20. NEW LANDSCAPING.
21. NEW 6'-0" HIGH FENCE + NEW 36" WIDE x 6'-0" HIGH GATE.
22. EXISTING AC CONDENSER & PAD TO REMAIN. CONTRACTOR SHALL PROTECT DURING CONSTRUCTION.
23. CONTRACTOR SHALL REMOVE PORTION OF EXISTING DIRT FOR NEW BOTTOMLESS TRENCH DRAIN.
24. NEW BOTTOMLESS TRENCH DRAIN. DRAIN SHALL BE INSTALLED PER CITY OF NEWPORT BEACH PUBLIC WORKS REQUIREMENTS.
25. EXISTING 6'-0" HIGH FENCE & 36" WIDE x 6'-0" HIGH GATE TO REMAIN & BE MODIFIED AS REQUIRED.
26. EXISTING 5'-0" HIGH PERIMETER POOL FENCE W/ 36" WIDE ENTRY GATE. GATE SWINGS OUT AND HAS SELF-CLOSING & SELF-LATCHING MECHANISM LOCATED AT 5'-0" A.F.F.
27. CONTRACTOR SHALL REMOVE A PORTION OF THE EXISTING POOL DECK FOR NEW FOOTINGS. SEE CIVIL & STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
28. NEW CONCRETE PAD @ EXTERIOR DOOR. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
29. NEW HARDSCAPE SHALL BE REPLACED IN KIND. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.

NOTE:
CONTRACTOR SHALL CONTACT DIGALERT @ 811 PRIOR TO ANY EXCAVATION.

NOTE:
NO PERMANENT STRUCTURES CAN BE BUILT WITHIN THE LIMITS OF THE PUBLIC DRAINAGE EASEMENTS.

POOL ENCLOSURE:
~~THE SCOPE OF THE WORK INCLUDES MODIFICATIONS TO THE POOL ENCLOSURE, INCLUDING ADDITIONAL DOORS FROM THE RESIDENCE DIRECTLY TO THE POOL ENCLOSURE.~~

THE POOL ENCLOSURE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS: (NBMC 15.04.180, CBC 3109.4.4.3)

A. MINIMUM HEIGHT OF 5 FT. ABOVE GRADE, MEASURED FROM OUTSIDE OF THE POOL AREA.
B. MINIMUM 45 INCHES BETWEEN HORIZONTAL MEMBERS.
C. MAXIMUM 4 INCH CLEARANCE BETWEEN VERTICAL MEMBERS.
D. WHEN PART OF THE HORIZONTAL OR VERTICAL MEMBERS, DECORATIVE CUTOUTS SHALL NOT EXCEED 1.75 INCHES IN WIDTH.
E. MAXIMUM 2 INCH VERTICAL CLEARANCE BETWEEN THE BOTTOM OF FENCE AND GROUND.
F. CHAIN LINK MESH MAXIMUM SIZE SHALL BE A 2.25 SQUARE UNLESS PROVIDED WITH SLATS FASTENED AT THE TOP AND BOTTOM WHICH REDUCE THE OPENINGS TO 1.75 INCHES OR LESS.
G. DIAGONAL MEMBERS SHALL FORM OPENINGS OF NO MORE THAN 1.75 INCHES.

GATE WITH A BARRIER OR FENCE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS (NBMC 15.04.108, CBC 3109.4.1.7 & CBC 3109.4.4.3:
A. COMPLY WITH FENCE HEIGHT AND SPACING REQUIREMENTS.
B. INCLUDE SELF-CLOSING AND SELF-LATCHING MECHANISMS. THE SELF-LATCHING MECHANISM SHALL BE MINIMUM 60" ABOVE THE GROUND.
C. ALL GATES SHALL SWING OUT OF THE POOL AREA.

~~DROWNING PREVENTION MEASURES SHALL BE MAINTAINED. IF DOOR ALARMS WERE REQUIRED ON EXISTING DOORS LEADING INTO POOL ENCLOSURE, PROVIDE DOOR ALARMS AT NEW DOORS LEADING INTO POOL ENCLOSURE.~~

LEGEND

(E) WALL TO REMAIN
(E) WALL TO BE DEMOLISHED
NEW 2x6 WOOD STUD @ 16" O.C. WALL (SEE FLOOR PLANS)

STERN ARCHITECTS

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CONSULTANT

PROJECT TITLE

NEW 2 STORY RESIDENCE FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS	
5 BLDG. & PL CORRECTIONS	10-01-2024
4 PW CORRECTIONS	02-02-2024
3 BLDG. DEPT. CORRECTIONS	02-02-2024
2 BLDG. DEPT. CORRECTIONS	11-13-2023
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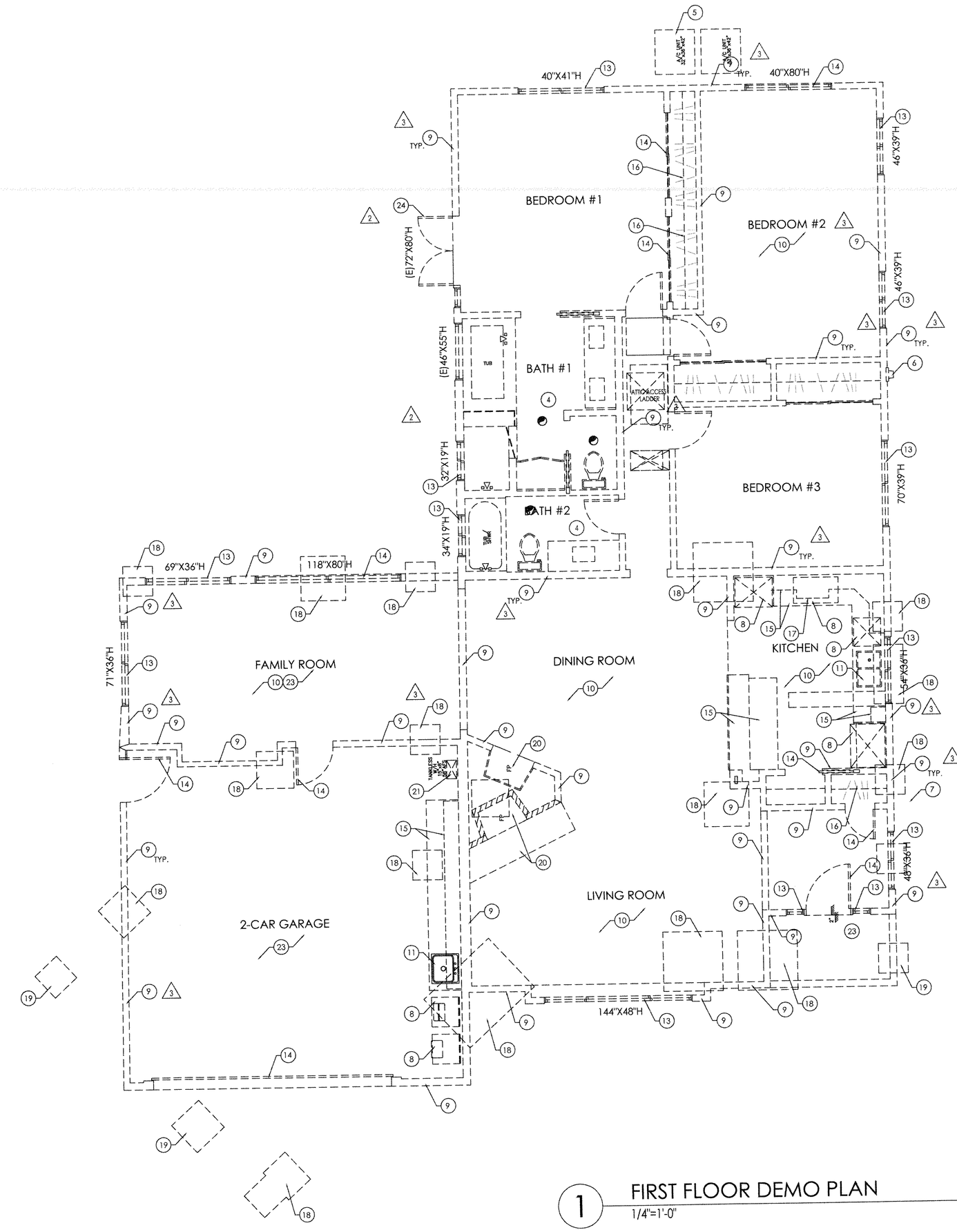
SHEET TITLE

EXISTING & NEW SITE PLANS 2

SHEET NUMBER

A-0.3

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1 FIRST FLOOR DEMO PLAN
1/4"=1'-0"

N

ISSUED
07-19-24

NOTE:
CONTRACTOR SHALL SEE STRUCTURAL DRAWINGS FOR NEW FOOTING LOCATIONS. CONTRACTOR SHALL REMOVE REQUIRED SOIL & CONCRETE FOR NEW FOOTINGS, TYP.

CONTRACTOR SHALL REMOVE ALL OF EXISTING DRIVEWAY PRIOR TO CONSTRUCTION. SEE SITE PLAN FOR ADDITIONAL INFORMATION.

DEMO PLAN KEYNOTES

1. ~~EXISTING WALL TO REMAIN. CONTRACTOR SHALL PROTECT DURING CONSTRUCTION.~~
2. ~~EXISTING WINDOW TO REMAIN. ALL OTHER WINDOWS SHALL BE REPLACED. CONTRACTOR SHALL PROTECT DURING CONSTRUCTION. CONTRACTOR SHALL PREPARE SURFACE FOR NEW PAINT SCHEME. SEE FINISH SCHEDULE SHEET A-9.0 FOR ADDITIONAL INFORMATION.~~
3. ~~EXISTING DOOR & WINDOW TO REMAIN. ALL OTHER DOORS SHALL BE REPLACED. CONTRACTOR SHALL PROTECT DURING CONSTRUCTION. CONTRACTOR SHALL PREPARE SURFACE FOR NEW PAINT SCHEME. SEE FINISH SCHEDULE SHEET A-9.0 FOR ADDITIONAL INFORMATION.~~
4. EXISTING PLUMBING FIXTURES, CABINETRY, FLOOR & WALL TILE TO BE REMOVED. CONTRACTOR SHALL RETURN TO OWNERS IF POSSIBLE.
5. EXISTING HVAC CONDENSER TO REMAIN. CONTRACTOR SHALL PROTECT DURING CONSTRUCTION.
6. EXISTING 200 AMP ELECTRICAL PANEL TO BE RELOCATED IN NEW WALL. CONTRACTOR SHALL PROTECT DURING CONSTRUCTION.
7. EXISTING GAS METER TO BE RELOCATED IN NEW WALL. CONTRACTOR SHALL PROTECT DURING CONSTRUCTION.
8. EXISTING APPLIANCES TO BE REMOVED. CONTRACTOR SHALL DISPOSE OF PROPERLY. CONTRACTOR SHALL CONFIRM W/ OWNER PRIOR TO DISPOSAL.
9. EXISTING WALL TO BE REMOVED. SEE SHEET A-2.0 FOR ADDITIONAL INFORMATION.
10. EXISTING FLOORING TO BE REMOVED.
11. EXISTING PLUMBING FIXTURE TO BE REMOVED. CONTRACTOR SHALL CAP PLUMBING LINES WHERE REQUIRED. SEE SHEET A-2.0 FOR ADDITIONAL INFORMATION.
12. ~~PORTION OF EXISTING WALL SHALL BE REMOVED. SEE SHEET A-2.0 FOR ADDITIONAL INFORMATION.~~
13. EXISTING WINDOW TO BE REMOVED.
14. EXISTING DOOR TO BE REMOVED.
15. EXISTING CABINETRY TO BE REMOVED.
16. EXISTING POLE & SHELF TO BE REMOVED.
17. EXISTING KITCHEN HOOD TO BE REMOVED.
18. CONTRACTOR SHALL REMOVE CONCRETE & SOIL REQUIRED FOR NEW FOOTINGS. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
19. CONTRACTOR SHALL REMOVE SOIL REQUIRED FOR NEW FOOTINGS. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
20. EXISTING FIREPLACE & HEARTH TO BE REMOVED.
21. EXISTING WATER HEATER TO BE REMOVED. CONTRACTOR SHALL ABANDON & CAP GAS & WATER LINES IN WALL.
22. CONTRACTOR SHALL REMOVE CONCRETE & SOIL REQUIRED FOR NEW ELECTRICAL CONDUIT FOR NEW ISLAND. SEE SHEETS A-2.0 & A-3.0 FOR ADDITIONAL INFORMATION.
23. CONTRACTOR SHALL REMOVE EXISTING SLAB. PREPARE AREA FOR NEW CONCRETE SLAB & FOOTINGS. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
24. EXISTING DOOR + SIDELIGHT TO BE REMOVED.
25. ~~PORTION OF EXISTING STUCCO SHALL BE REMOVED FOR INSTALLATION OF REINFORCEMENT FOR FUTURE GRAB BARS.~~

WALL LEGEND

- (E) WALL TO REMAIN
- LINE OF ITEM TO BE REMOVED
- SOIL &/OR CONCRETE TO BE REMOVED FOR NEW FOOTINGS. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

NOTE:
CONTRACTOR SHALL CONTACT DIGALERT @ 811 PRIOR TO ANY EXCAVATION.

STERN ARCHITECTS

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RENEWAL DATE OCTOBER 31, 2025
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REN. 4-30-25
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CONSULTANT

PROJECT TITLE

NEW 2 STORY RESIDENCE FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS

5 BLDG. & PL CORRECTIONS	10-01-2024
4 PW CORRECTIONS	02-02-2024
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SCALE:	SEE SHEET
DATE:	01-06-2021
DRAWN BY:	MDG
CHECKED BY:	SHS

SHEET TITLE

FIRST FLOOR DEMO PLAN

SHEET NUMBER

A-1.0

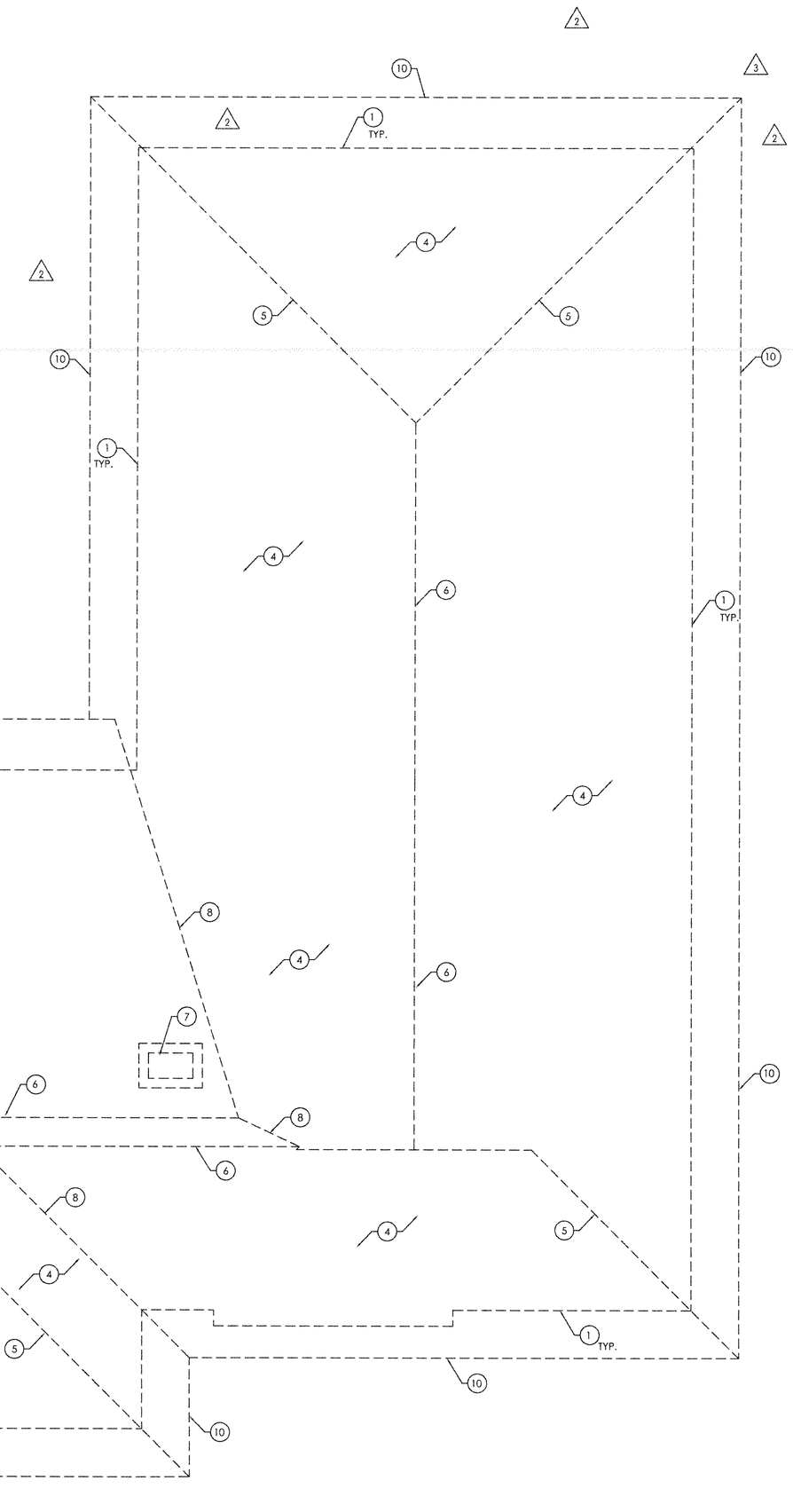
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ISSUED
03-13-25

DEMO ROOF PLAN KEYNOTES

1. LINE OF EXISTING WALLS BELOW. SEE SHEET A-1.0 FOR WALL DEMOLITION PLAN INFORMATION.
2. ~~PORTION OF EXISTING ROOF RIDGE & FRAMING TO REMAIN.~~ (3)
3. ~~EXISTING ROOF HIP & FRAMING TO REMAIN.~~ (3)
4. CONTRACTOR SHALL REMOVE EXISTING ROOF FRAMING & ROOFING MATERIAL. SEE ROOF PLAN SHEET A-4.0 FOR ADDITIONAL INFORMATION.
5. CONTRACTOR SHALL REMOVE EXISTING ROOF HIP & FRAMING.
6. CONTRACTOR SHALL REMOVE EXISTING ROOF RIDGE & FRAMING.
7. CONTRACTOR SHALL REMOVE EXISTING FIREPLACE STACK.
8. CONTRACTOR SHALL REMOVE EXISTING ROOF VALLEY & FRAMING.
9. ~~CONTRACTOR SHALL REMOVE PORTION OF EXISTING ROOF OVERHANG. SEE ROOF PLAN SHEET A-4.0 FOR ADDITIONAL INFORMATION.~~ (3)
10. CONTRACTOR SHALL REMOVE EXISTING ROOF FRAMING, FASCIA.

(3)
~~NOTE:~~
~~HATCHED AREA IS WHERE EXISTING ROOF FRAMING WILL REMAIN. ONLY EXISTING EAVE OVERHANG SHALL BE CUT BACK PER NOTE.~~



WALL LEGEND

- (E) WALL TO REMAIN
- LINE OF ITEM TO BE REMOVED

1 ROOF DEMO PLAN
1/4"=1'-0"

N

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PROJECT TITLE

NEW 2 STORY RESIDENCE FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS

(5) BLDG. & PL CORRECTIONS	10-01-2024
(4) PW CORRECTIONS	02-02-2024
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PROJECT NO:	20-51
SCALE:	SEE SHEET
DATE:	01-06-2021
DRAWN BY:	MDG
CHECKED BY:	SHS

SHEET TITLE

ROOF DEMO PLAN

SHEET NUMBER

A-1.1

NOTE:
CONTRACTOR SHALL CONTACT DIGALERT @ 811 PRIOR TO ANY EXCAVATION.

BUILDING ENVELOPE:
- EXTERIOR FRAMED WALLS: R-21 BATT INSULATION (2x6 FRAMING)
- CEILING/ROOF: R-30 BATT INSULATION (NO COOL ROOF REQUIRED)
- RAISED FLOOR OVER GARAGE: R-19 BATT INSULATION
- NEW OPERABLE WINDOWS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.23 SHGC
- NEW FIXED WINDOWS: DUAL PANE/NON-METAL FRAMING/0.30 U-FACTOR, 0.29 SHGC
- NEW FRENCH DOORS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.23 SHGC
- NEW PATIO DOORS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.25 SHGC

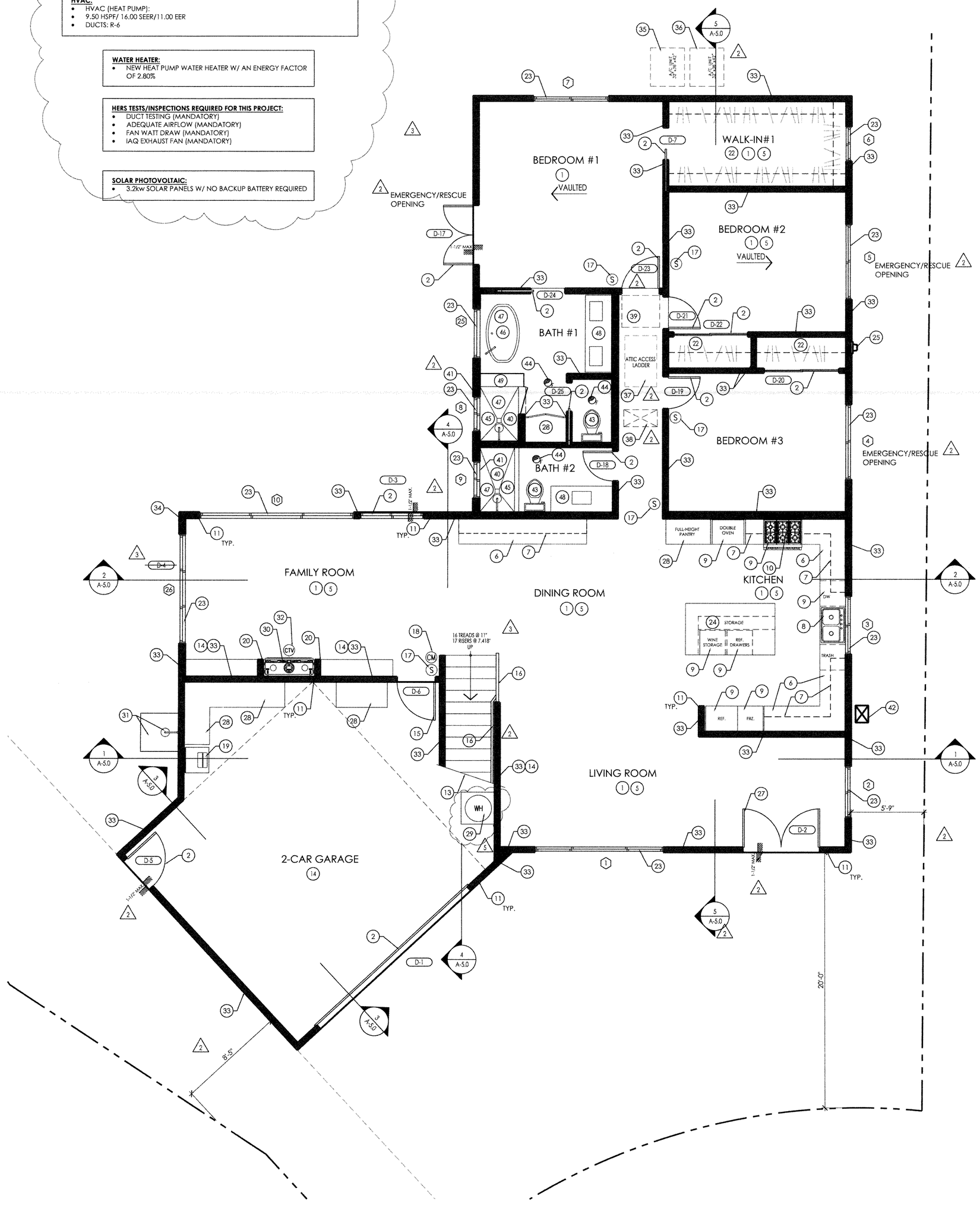
HVAC:
- HVAC (HEAT PUMP):
- 9.50 HSPF/16.00 SEER/11.00 EER
- DUCTS: R-6

WATER HEATER:
- NEW HEAT PUMP WATER HEATER W/ AN ENERGY FACTOR OF 2.80%

HERS TESTS/INSPECTIONS REQUIRED FOR THIS PROJECT:
- DUCT TESTING (MANDATORY)
- ADEQUATE AIRFLOW (MANDATORY)
- FAN WATT DRAW (MANDATORY)
- IAQ EXHAUST FAN (MANDATORY)

SOLAR PHOTOVOLTAIC:
- 3.2kw SOLAR PANELS W/ NO BACKUP BATTERY REQUIRED

NOTE:
MECHANICAL, ELECTRICAL & PLUMBING PLANS ARE NOT REVIEWED AND ARE SUBJECT TO FIELD INSPECTION.



1 NEW FIRST FLOOR PLAN
1/4"=1'-0"

WALL LEGEND

- (E) WALL TO REMAIN
- NEW 2x4 OR 2x6 WOOD STUD @ 16" O.C. WALL (SEE KEYNOTES)
- (1) WINDOW SYMBOL - SEE SCHEDULE SHEET A-9.0
- D-1 DOOR SYMBOL - SEE SCHEDULE SHEET A-9.0
- 4 / A-3.0 SECTION SYMBOL

GENERAL NOTES

1. CONTRACTOR SHALL VERIFY ALL EXISTING STRUCTURAL MEMBERS AND THEIR CONNECTIONS AND DOUBLE CHECK AGAINST NEW STRUCTURAL DRAWINGS BEFORE/DURING DEMO AND CONSTRUCTION. IF THERE ARE ANY DISCREPANCIES THE ARCHITECT AND STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY BEFORE DEMO OR CONSTRUCTION RESUMES.
2. CONTRACTOR SHALL PROVIDE DUST PROTECTION AT ALL CONSTRUCTION AREAS TO PREVENT DUST FROM ACCESSING VENTILATION SYSTEM AND ADJACENT ROOMS. PROTECTION OF ALL ADJACENT SPACES, ROOMS AND MATERIALS REQUIRED. CONTRACTOR SHALL REPAIR AND PAINT ANY DAMAGED SURFACES AS REQUIRED DURING CONSTRUCTION.
3. ALL WALLS, BASE, CASING & MOLDINGS IN REMODELED ROOMS SHALL BE PREPARED TO RECEIVE NEW PAINT. COLOR SELECTED BY OWNER.
4. CONTRACTOR SHALL VERIFY ALL WINDOW HEIGHTS AND MAKE ANY NECESSARY CHANGES TO THE OPENING TO MEET MINIMUM EGRESS REQUIREMENTS. ESCAPE OR RESCUE WINDOWS SHALL HAVE A MINIMUM NET CLEAR OF OPENABLE AREA OF 5.7 SF. THE MINIMUM NET CLEAR OPENABLE HEIGHT DIMENSION SHALL BE 24". THE MINIMUM NET CLEAR OPENABLE WIDTH SHALL BE 20". WHEN THE RESCUE WINDOWS ARE PROVIDED AS A MEANS OF ESCAPE OR RESCUE, THEY SHALL HAVE A FINISHED SILL HEIGHT OF NO MORE THAN 44" ABOVE THE FLOOR. WINDOW SHALL OPEN DIRECTLY INTO A PUBLIC WAY, PUBLIC ALLY, YARD OR COURT. WINDOW CONTROL OPENING DEVICE SHALL NOT REDUCE THE REQUIRED NET CLEAR OPENING AREA OF THE WINDOW.
5. CONTRACTOR SHALL VERIFY ELECTRICAL OUTLETS IN BEDROOMS TO BE ARC-FAULT CIRCUIT INTERRUPTERS.
6. CONTRACTOR SHALL SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. FENESTRATIONS MUST HAVE TEMPORARY AND PERMANENT LABELS.
8. SHOW SAFETY GLAZING IN THE FOLLOWING LOCATIONS:
   WHERE THE NEAREST EDGE OF GLAZING IS WITHIN A 24-INCH ARC OF EITHER SIDE OF A DOOR IN A CLOSED POSITION (UNLESS THERE IS AN INTERVENING WALL BETWEEN THE DOOR AND THE GLAZING OR IF THE GLAZING IS 5' OR HIGHER ABOVE THE WALKING SURFACE).

   GLAZING IN SHOWER AND TUB ENCLOSURES (LESS THAN 60" ABOVE STANDING SURFACE).

   GLAZING IN SWINGING AND SLIDING DOORS.

   GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36" HORIZONTALLY OF A WALKING SURFACE WHEN THE GLAZING IS LESS THAN 60" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
9. GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8" TYPE 'X' GYP BOARD.
10. STAIR HANDRAIL SHALL BE 34"-38" HIGH ABOVE THE TREAD NOSING. CIRCULAR HANDRAIL SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1.25" AND NOT GREATER THAT 2". IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER OF AT LEAST 4" AND NOT GREATER THAN 6.25", WITH A MAXIMUM CROSS SECTION DIMENSION OF 2.25" EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01" PER SECTION R311.7.8.
11. PROVIDE GUARDRAILS WHERE THE OPEN SIDE IS MORE THAN 30" MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36" HORIZONTALLY TO THE EDGE OF THE OPEN SIDE. R312.1.1. GUARDRAIL SHALL NOT BE LESS THAN 42" HIGH AND SHALL HAVE BALUSTERS OR ORNAMENTAL PATTERNS SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING. R312.1.2 & R312.1.3. TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD, AND BOTTOM RAIL SHALL PRECLUDE THE PASSAGE OF A 6" DIAMETER SPHERE. R312.1.3 EXCEPTION 1. OPENINGS BETWEEN INTERMEDIATE BALUSTERS ON THE OPEN SIDE OF THE STAIRS SHALL PRECLUDE THE PASSAGE OF A 4-3/8" DIAMETER SPHERE. R312.1.3 EXCEPTION 2.
12. THE MAXIMUM ALLOWED INSULATION SHALL BE INSTALLED BETWEEN THE FIRST & SECOND FLOOR CONSTRUCTION. THIS IS FOR THERMAL AS WELL AS SOUND ABSORPTION.

WOOD FRAMING NOTES

1. ALL WOOD BEARING ON MASONRY OR CONCRETE SHALL BE PRESSURE TREATED DOUGLAS FIR.
2. THE TOP PLATE OF ALL STUD WALLS SHALL BE 2 PIECES, THE SAME SIZE AS STUDS. SPLICES TO LAP 4'-0" MINIMUM AND BE NAILED WITH 12-16d MINIMUM ON EACH SIDE OF JOINT. SEE #5.
3. ALL STRUCTURAL LUMBER SHALL BE DOUGLAS FIR-LARCH FOLLOWING GRADES, CONFORMING TO STANDARD GRADING RULES FOR WEST COAST LUMBER, NO. 16, UNLESS OTHERWISE NOTED.
4. ALL WOOD FRAMING AND SUBSEQUENT LOADS SHALL BE IN PLACE PRIOR TO ANY FINAL WINDOW OPENING MEASUREMENTS TAKEN AND THE WINDOW ORDER BEING PLACED WITH THE MANUFACTURER.
5. CONTRACTOR SHALL ALLOW 1/2" MAX. SPACE/GAP AT TOP OF WINDOW AND ITS FRAMING TO ALLOW FOR POTENTIAL DEFLECTION OF SAID FRAMING MEMBERS.

FLOOR PLAN KEYNOTES

1. CONTRACTOR SHALL PROVIDE AND INSTALL WOOD BASE AND DOOR AND WINDOW CASINGS. BASE IS TO BE PROVIDED IN ALL ROOMS. WOOD BASE, TRIM AND MOLDINGS SHALL BE OWNER SELECTED.
2. NEW WOOD DOOR, HARDWARE & FRAME. ACTUAL DOOR DESIGN TO BE SELECTED. CONTRACTOR INSTALLED. SEE DOOR SCHEDULE FOR ADDITIONAL INFORMATION.
3. CONTRACTOR SHALL PROVIDE ALL NECESSARY HARDWARE FOR INSTALLATION AND PROPER OPERATION OF ALL INTERIOR & EXTERIOR DOORS. PROVIDE APPROPRIATE FUNCTION FOR EACH DOOR.
4. CONTRACTOR SHALL PROVIDE LOW E INSULATED GLAZING TO SOUTH, EAST AND WEST ELEVATION AND INSULATED CLEAR GLASS AT NORTH ELEVATION.
5. NEW FLOORING, OWNER SELECTED, CONTRACTOR INSTALLED.
6. NEW SOLID SURFACE COUNTERTOP W/ CABINETRY, OWNER SELECTED, CONTRACTOR INSTALLED.
7. NEW UPPER CABINETRY. OWNER SELECTED, CONTRACTOR INSTALLED.
8. NEW KITCHEN SINK W/ GARBAGE DISPOSAL. OWNER PROVIDED, CONTRACTOR INSTALLED.
9. NEW KITCHEN APPLIANCES. OWNER PROVIDED, CONTRACTOR INSTALLED.
10. NEW 36" RANGE HOOD, 180 CFM MINIMUM, BY ZEPHYR - MODEL #AK93348S, MONSOON II INSERT. THE EXHAUST FAN SHALL BE CERTIFIED AND LISTED ON THE CALIFORNIA ENERGY COMMISSION APPLIANCE DATABASE.
11. NEW STRUCTURAL MEMBER. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
12. ~~NEW WINDOW IN EXISTING OPENING. OWNER SELECTED. CONTRACTOR INSTALLED. SEE WINDOW SCHEDULE FOR ADDITIONAL INFORMATION.~~
13. CONTRACTOR SHALL PROVIDE 5/8" TYPE 'X' GYP. BD. AT UNDERSIDE OF STAIRS (WALLS & SOFFIT).
14. CONTRACTOR SHALL PROVIDE 1 HR. CONSTRUCTION BETWEEN GARAGE & DWELLING. CONTRACTOR SHALL INSTALL 5/8" TYPE 'X' GYP. BD. ON ALL WALLS & CEILING FRAMING.
15. NEW 1 HOUR RATED, SELF CLOSING & SELF LATCHING DOOR. SEE DOOR SCHEDULE SHEET A-9.0 FOR ADDITIONAL INFORMATION.
16. NEW WOOD HANDRAIL @ 36" A.F.F. SEE DETAIL #25/SHEET A-8.0 & STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION. WALL MOUNTED HANDRAIL SHALL BE CONTINUOUS TO 2ND FLOOR. SEE DETAIL #14/SHEET A-8.0 FOR WALL MOUNTED HANDRAIL DETAIL.
17. NEW SMOKE DETECTOR. SEE BUILDING DEPARTMENT NOTES SHEET A-0.0 & SHEET A-3.0 FOR ADDITIONAL INFORMATION.
18. NEW CARBON MONOXIDE ALARM. SEE BUILDING DEPARTMENT NOTES SHEET A-0.0 & SHEET A-3.0 FOR ADDITIONAL INFORMATION.
19. NEW STACKABLE WASHER/DRYER. PROVIDE VENT THRU WALL. DOMESTIC CLOTHES DRYER DUCT SHALL BE OF METAL AND A MINIMUM OF 4" IN DIAMETER. THE EXHAUST DUCT SHALL NOT EXCEED A TOTAL COMBINED HORIZONTAL AND VERTICAL LENGTH OF 14'-0", INCLUDING TWO 90-DEGREE ELBOWS. TWO FEET SHALL BE DEDUCTED FOR EACH 90-DEGREE ELBOW IN EXCESS OF TWO.
20. ~~NEW FULL HEIGHT 2x4 WOOD STUD WALL @ 16" O.C. W/ 5/8" TYPE 'X' GYP. BD. W/ R-15 INSULATION (FRICTION FIT).~~
21. ~~NEW 2x4 WOOD STUD INFILL @ 16" O.C. W/ 5/8" TYPE 'X' GYP. BD. W/ R-15 BATT INSULATION (FRICTION FIT).~~
22. NEW POLE & SHELF CLOSET SYSTEM. OWNER SELECTED, CONTRACTOR INSTALLED.
23. NEW WINDOW. SEE WINDOW SCHEDULE SHEET A-9.0 FOR ADDITIONAL INFORMATION.
24. NEW KITCHEN ISLAND W/ CABINETRY. OWNER SELECTED, CONTRACTOR INSTALLED.
25. ~~RELOCATED~~ 200 AMP ELECTRICAL PANEL.
26. NEW STACKING DOOR IN WALL POCKET. SEE DOOR SCHEDULE FOR ADDITIONAL INFORMATION.
27. NEW FRONT ENTRY DOOR. OWNER SELECTED, CONTRACTOR INSTALLED. SEE DOOR SCHEDULE FOR ADDITIONAL INFORMATION.
28. NEW FULL HEIGHT CABINETRY. OWNER SELECTED, CONTRACTOR INSTALLED.
29. NEW HEAT PUMP WATER HEATER ON 18" PLATFORM. SEE SHEET A-3.0 FOR ADDITIONAL INFORMATION.
30. NEW FRONT FACING GAS FIREPLACE BY ORTAL, MODEL LEGACY#FR110H, ANSI Z21.88. FIREPLACE IS DIRECT VENT TYPE, CSA CERTIFICATION #2358468. CONTRACTOR SHALL VENT TO THE SIDE EXTERIOR WALL. SEE MANUFACTURERS REQUIREMENTS & RECOMMENDATIONS FOR INSTALLATION & VENTING. VENTING CAVITY SHALL BE COORDINATED BETWEEN FRAMER & INTERIOR CABINETRY. CONTRACTOR SHALL PROVIDE SOFFIT AT CEILING TO CONCEAL VENT DUCTING TO OUTSIDE. THIS SHALL BE TAKEN INTO CONSIDERATION WHEN THE BUILT-INS ON EITHER SIDE OF THE FIREPLACE ARE DESIGNED/CONSTRUCTED. CONTRACTOR SHALL VERIFY FIREPLACE MANUFACTURER & MODEL WITH OWNER PRIOR TO FRAMING, PLACING ORDER & INSTALLATION OF FIREPLACE BOX.
31. NEW OUTDOOR SHOWER W/ 36" SQUARE CONCRETE PAN W/DRAIN. OWNER PROVIDED, CONTRACTOR INSTALLED. SHOWER SHALL HAVE BOTH HOT & COLD WATER & IT SHALL BE PROPERLY CONNECTED TO THE SANITARY SEWER SYSTEM OF THE HOME. ALL PROVISIONS OF PLUMBING CODE SECTION 304.0 SHALL APPLY INCLUDING A POSITIVE MEANS OF PREVENTING RAINWATER EXCLUSIVE FROM THE SHOWER PAN FROM ENTERING THE SHOWER DRAIN. HOWEVER, RAINWATER THAT FALLS DIRECTLY INTO THE SHOWER PAN REPRESENTS AN INSIGNIFICANT QUANTITY OF WATER. THEREFORE, IT IS ALLOWED TO ENTER THE SHOWER PAN. ALL CASES WHERE THE SHOWER DRAIN IS CONNECTED TO THE SANITARY SEWER SHALL BE PROVIDED WITH A TRAP PRIMER TO PRESERVE THE TRAP SEAL.
32. NEW CABLE TV CONNECTION & ELECTRICAL OUTLET. VERIFY EXACT LOCATION & HEIGHT W/ OWNER PRIOR TO INSTALLATION.
33. NEW FULL HEIGHT 2x6 WOOD STUD WALL @ 16" O.C. W/ 5/8" TYPE 'X' GYP. BD. W/ R-21 INSULATION (FRICTION FIT).
34. ~~NEW 2x WOOD STUD WALL @ 16" O.C. W/ 5/8" TYPE 'X' GYP. BD. @ INTERIOR & 7/8" LATH & PLASTER @ EXTERIOR W/ R-21 INSULATION (FRICTION FIT). WALL WIDTH SHALL BE DETERMINED BY POCKETED SLIDING GLASS DOOR. 2x8 MIN.~~
35. EXISTING A/C UNIT ON EXISTING CONCRETE PAD.
36. NEW A/C UNIT ON NEW CONCRETE PAD.
37. NEW 30"x48" ATTIC ACCESS IN HALLWAY CEILING.
38. ~~RE-INSTALLED~~ 26"x16" REGISTER/VENT IN HALLWAY CEILING.
39. ~~EXISTING~~ FAU IN ATTIC ABOVE TO BE RE-INSTALLED.
40. NEW TEMPERED GLASS SHOWER ENCLOSURE. GLAZING SHALL BE SELECTED BY OWNER.
41. CONTRACTOR SHALL INSTALL REINFORCEMENT FOR FUTURE GRAB BARS. REINFORCEMENT SHALL BE INSTALLED IN ACCORDANCE WITH CRC R327.1.1.
42. RELOCATED GAS METER.
43. NEW LOW FLUSH TOILET (1.28 GAL/FLUSH). OWNER PROVIDED, CONTRACTOR INSTALLED. CONTRACTOR SHALL PROVIDE NEW PLUMBING LINES & VALVES. CONTRACTOR SHALL MAKE ALL NECESSARY PLUMBING CONNECTIONS AND PREPARATIONS. PROVIDE 24" MIN. CLEAR IN FRONT OF WATER CLOSET.
44. NEW EXHAUST FAN. SEE SHEET 3.1 FOR ADDITIONAL INFORMATION.
45. NEW BATHROOM SHOWER W/ FAUCETS SHALL BE OWNER PROVIDED. CONTRACTOR INSTALLED. PROVIDE 70" HIGH NON-ABSORBENT WALL ADJACENT TO SHOWER. WATER RESISTANT GYP. BD. IS NOT PERMITTED FOR TILE BACKING IN SHOWER. CONTRACTOR SHALL COORDINATE WITH OWNER PLACEMENT OF SHOWER HEAD AND CONTROLS PRIOR TO INSTALLATION. SHOWERS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE THERMOSTATIC, OR COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVE TYPE THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION. CONTRACTOR SHALL INSTALL SHOWER SHELF IN WALL OPPOSITE OF SHOWER HEAD. VERIFY LOCATION W/ OWNER PRIOR TO INSTALLATION.
46. NEW FREE STANDING TUB W/ FLOOR MOUNTED CONTROLS/FAUCETS. OWNER PROVIDED, CONTRACTOR INSTALLED. PROVIDE 70" HIGH NON-ABSORBENT WALL ADJACENT TO TUB. WATER RESISTANT GYP. BD. IS NOT PERMITTED FOR TILE BACKING. CONTRACTOR SHALL COORDINATE WITH OWNER PLACEMENT OF CONTROLS/FAUCETS PRIOR TO INSTALLATION. TUB SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE THERMOSTATIC, OR COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVE TYPE THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION.
47. NEW TUB & SHOWER TILE WORK SHALL BE MORTAR SET. SEE DETAILS SHEET A-8.0 FOR ADDITIONAL INFORMATION.
48. NEW BASE CABINETRY + LAVATORY SINK, OWNER PROVIDED. CONTRACTOR INSTALLED. CONTRACTOR SHALL PROVIDE NEW PLUMBING LINES & VALVES. CONTRACTOR SHALL MAKE ALL NECESSARY PLUMBING CONNECTIONS AND PREPARATIONS.
49. NEW SHOWER BENCH. VERIFY HEIGHT & WIDTH WITH OWNER PRIOR TO FABRICATION.

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Suite 120
Santa Ana, California 92704
t. (714) 556-2656
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CONSULTANT

PROJECT TITLE

NEW 2 STORY RESIDENCE FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS

5	BLDG. & PL CORRECTIONS	10-01-2024
4	PW CORRECTIONS	02-02-2024
3	BLDG. DEPT. CORRECTIONS	02-02-2024
2	BLDG. DEPT. CORRECTIONS	11-13-2023
1	PLNG & PW CORRECTIONS	08-10-2023

PLAN CHECK SET	07-31-2023
PROJECT RE-START SET	07-31-2023
PLAN CHECK SET (NOT USED)	10-26-2021
PROGRESS SET	06-07-2021
PROJECT NO:	20-51
SCALE:	SEE SHEET
DATE:	01-06-2021
DRAWN BY:	MDG
CHECKED BY:	SHS

SHEET TITLE

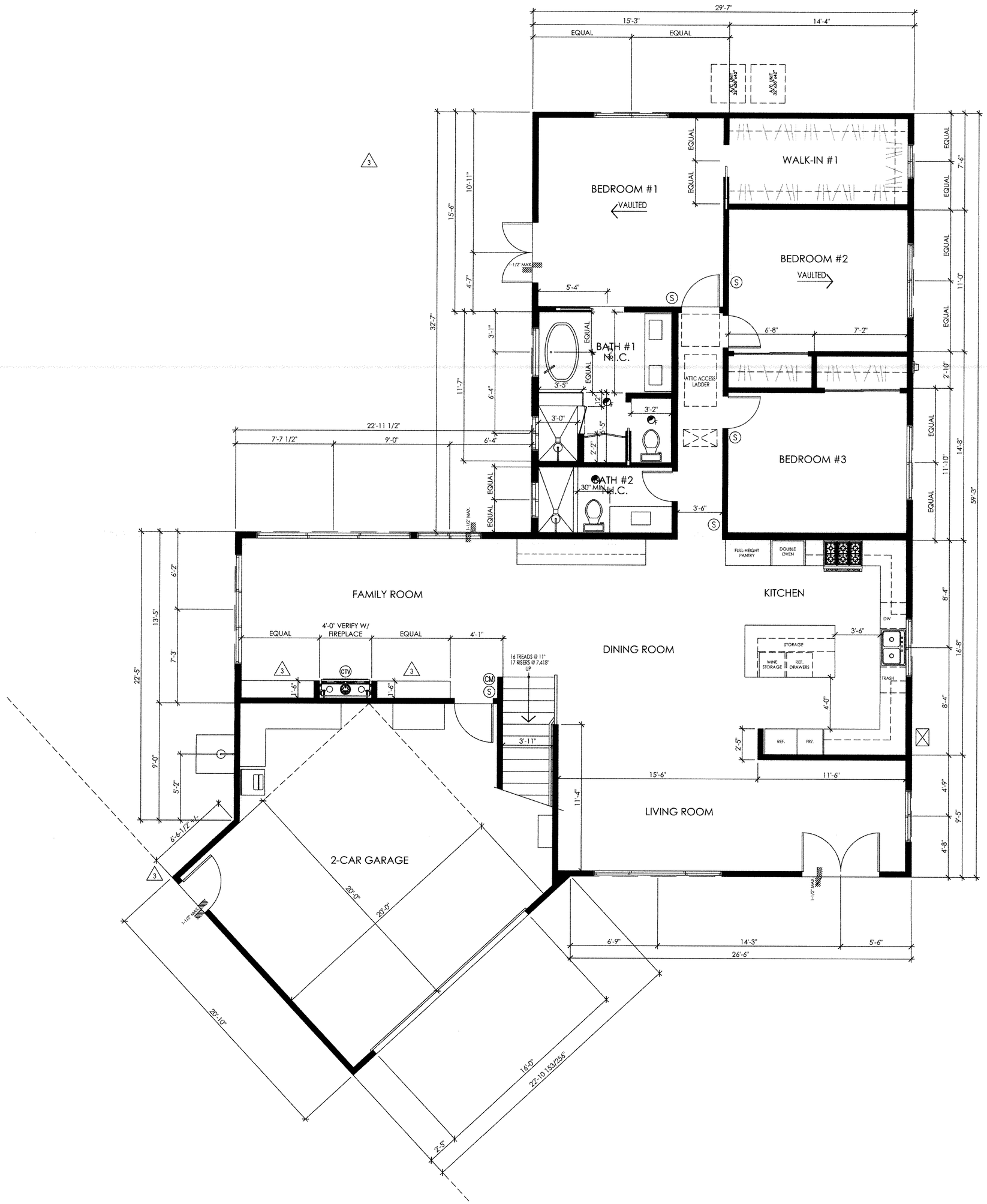
FIRST FLOOR PLAN

SHEET NUMBER

A-2.0

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1 NEW FIRST FLOOR DIMENSION PLAN
1/4"=1'-0"

N

ISSUED
03-19-25

STERN ARCHITECTS

LICENSED ARCHITECT
JAMES T. DUVA TEMPLATE
NO. C16792
REN. 4-30-25
STATE OF CALIFORNIA

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CONSULTANT

PROJECT TITLE

NEW 2 STORY RESIDENCE
FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS

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	SCALE:	SEE SHEET
	DATE:	01-06-2021
	DRAWN BY:	MDG
	CHECKED BY:	SHS

SHEET TITLE

FIRST FLOOR
DIMENSION PLAN

SHEET NUMBER

A-2.0D

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NOTE:
CONTRACTOR SHALL CONTACT DIGALERT @ 811 PRIOR TO ANY EXCAVATION.

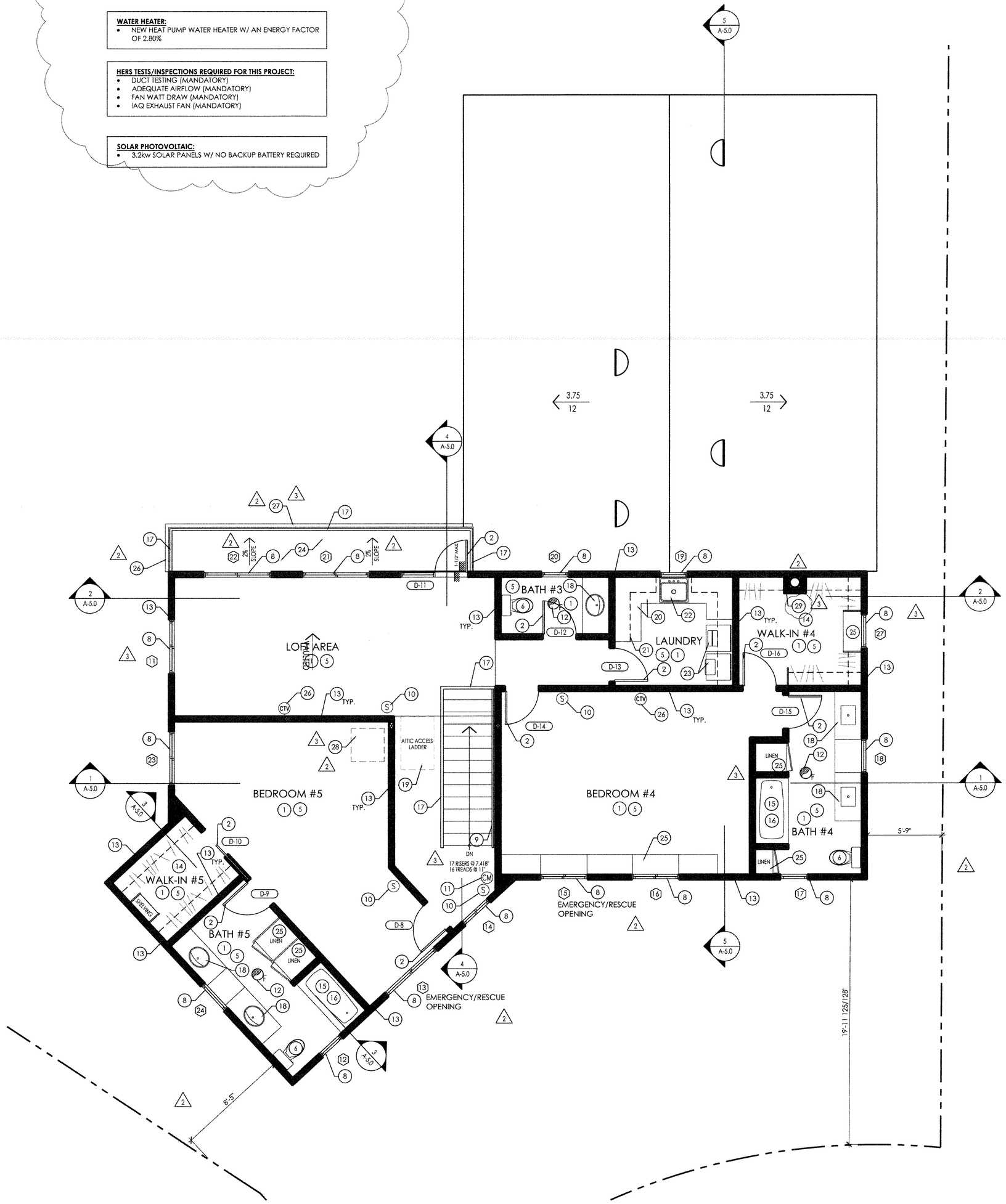
BUILDING ENVELOPE:
- EXTERIOR FRAMED WALLS: R-21 BATT INSULATION (2x6 FRAMING)
- CEILING/ROOF: R-30 BATT INSULATION (NO COOL ROOF REQUIRED)
- RAISED FLOOR OVER GARAGE: R-19 BATT INSULATION
- NEW OPERABLE WINDOWS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.23 SHGC
- NEW FIXED WINDOWS: DUAL PANE/NON-METAL FRAMING/0.30 U-FACTOR, 0.29 SHGC
- NEW FRENCH DOORS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.23 SHGC
- NEW PATIO DOORS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.25 SHGC

HVAC:
- HVAC (HEAT PUMP):
- 9.50 HSPF/ 16.00 SEER/11.00 EER
- DUCTS: R-6

WATER HEATER:
- NEW HEAT PUMP WATER HEATER W/ AN ENERGY FACTOR OF 2.80%

HERS TESTS/INSPECTIONS REQUIRED FOR THIS PROJECT:
- DUCT TESTING (MANDATORY)
- ADEQUATE AIRFLOW (MANDATORY)
- FAN WATT DRAW (MANDATORY)
- IAQ EXHAUST FAN (MANDATORY)

SOLAR PHOTOVOLTAIC:
- 3.2kw SOLAR PANELS W/ NO BACKUP BATTERY REQUIRED



1 NEW SECOND FLOOR PLAN
1/4"=1'-0"

WALL LEGEND

- (E) WALL TO REMAIN
- NEW 2x4 OR 2x6 WOOD STUD @ 16" O.C. WALL (SEE KEYNOTES)
- 1 / D-1 — WINDOW SYMBOL - SEE SCHEDULE SHEET A-9.0 / DOOR SYMBOL - SEE SCHEDULE SHEET A-9.0
- 4 / A-3.0 — SECTION SYMBOL

GENERAL NOTES

1. CONTRACTOR SHALL VERIFY ALL EXISTING STRUCTURAL MEMBERS AND THEIR CONNECTIONS AND DOUBLE CHECK AGAINST NEW STRUCTURAL DRAWINGS BEFORE/DURING DEMO AND CONSTRUCTION. IF THERE ARE ANY DISCREPANCIES THE ARCHITECT AND STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY BEFORE DEMO OR CONSTRUCTION RESUMES.
2. CONTRACTOR SHALL PROVIDE DUST PROTECTION AT ALL CONSTRUCTION AREAS TO PREVENT DUST FROM ACCESSING VENTILATION SYSTEM AND ADJACENT ROOMS. PROTECTION OF ALL ADJACENT SPACES, ROOMS AND MATERIALS IS REQUIRED. CONTRACTOR SHALL REPAIR AND PAINT ANY DAMAGED SURFACES AS REQUIRED DURING CONSTRUCTION.
3. ALL WALLS, BASE, CASING & MOLDINGS IN REMODELED ROOMS SHALL BE PREPARED TO RECEIVE NEW PAINT, COLOR SELECTED BY OWNER.
4. CONTRACTOR SHALL VERIFY ALL WINDOW HEIGHTS AND MAKE ANY NECESSARY CHANGES TO THE OPENING TO MEET MINIMUM EGRESS REQUIREMENTS. ESCAPE OR RESCUE WINDOWS SHALL HAVE A MINIMUM NET CLEAR OF OPENABLE AREA OF 5.7 SF. THE MINIMUM NET CLEAR OPENABLE HEIGHT DIMENSION SHALL BE 24". THE MINIMUM NET CLEAR OPENABLE WIDTH SHALL BE 20". WHEN THE RESCUE WINDOWS ARE PROVIDED AS A MEANS OF ESCAPE OR RESCUE, THEY SHALL HAVE A FINISHED SILL HEIGHT OF NO MORE THAN 44" ABOVE THE FLOOR. WINDOW SHALL OPEN DIRECTLY INTO A PUBLIC WAY, PUBLIC ALLY, YARD OR COURT. WINDOW CONTROL OPENING DEVICE SHALL NOT REDUCE THE REQUIRED NET CLEAR OPENING AREA OF THE WINDOW.
5. CONTRACTOR SHALL VERIFY ELECTRICAL OUTLETS IN BEDROOMS TO BE ARC-FAULT CIRCUIT INTERRUPTERS.
6. CONTRACTOR SHALL SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. FENESTRATIONS MUST HAVE TEMPORARY AND PERMANENT LABELS.
8. SHOW SAFETY GLAZING IN THE FOLLOWING LOCATIONS:
   WHERE THE NEAREST EDGE OF GLAZING IS WITHIN A 24-INCH ARC OF EITHER SIDE OF A DOOR IN A CLOSED POSITION (UNLESS THERE IS AN INTERVENING WALL BETWEEN THE DOOR AND THE GLAZING OR IF THE GLAZING IS 5' OR HIGHER ABOVE THE WALKING SURFACE).

   GLAZING IN SHOWER AND TUB ENCLOSURES (LESS THAN 60" ABOVE STANDING SURFACE).

   GLAZING IN SWINGING AND SLIDING DOORS.

   GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36" HORIZONTALLY OF A WALKING SURFACE WHEN THE GLAZING IS LESS THAN 60" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
9. GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8" TYPE 'X' GYP BOARD.
10. STAIR HANDRAIL SHALL BE 34"-38" HIGH ABOVE THE TREAD NOSING. CIRCULAR HANDRAIL SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1.25" AND NOT GREATER THAT 2". IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER OF AT LEAST 4" AND NOT GREATER THAN 6.25", WITH A MAXIMUM CROSS SECTION DIMENSION OF 2.25" EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01" PER SECTION R311.7.8.
11. PROVIDE GUARDRAILS WHERE THE OPEN SIDE IS MORE THAN 30" MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36" HORIZONTALLY TO THE EDGE OF THE OPEN SIDE. R312.1.1 GUARDRAIL SHALL NOT BE LESS THAN 42" HIGH. R312.1.2 AND SHALL HAVE BALUSTERS OR ORNAMENTAL PATTERNS SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING. R312. 1.3. THE TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD, AND BOTTOM RAIL SHALL PRECLUDE THE PASSAGE OF A 6" DIAMETER SPHERE. R312.1.3 EXCEPTION 1. OPENINGS BETWEEN INTERMEDIATE BALUSTERS ON THE OPEN SIDE OF STAIRS SHALL PRECLUDE THE PASSAGE OF A 4-3/8" DIAMETER SPHERE. R321.1.3 EXCEPTION 2.
12. THE MAXIMUM ALLOWED INSULATION SHALL BE INSTALLED BETWEEN THE FIRST & SECOND FLOOR CONSTRUCTION. THIS IS FOR THERMAL AS WELL AS SOUND ABSORPTION.

WOOD FRAMING NOTES

1. ALL WOOD BEARING ON MASONRY OR CONCRETE SHALL BE PRESSURE TREATED DOUGLAS FIR.
2. THE TOP PLATE OF ALL STUD WALLS SHALL BE 2 PIECES, THE SAME SIZE AS STUDS, SPLICES TO LAP 4'-0" MINIMUM AND BE NAILED WITH 12-16d MINIMUM ON EACH SIDE OF JOINT, SEE #5.
3. ALL STRUCTURAL LUMBER SHALL BE DOUGLAS FIR-LARCH FOLLOWING GRADES, CONFORMING TO STANDARD GRADING RULES FOR WEST COAST LUMBER, NO. 16, UNLESS OTHERWISE NOTED.
4. ALL WOOD FRAMING AND SUBSEQUENT LOADS SHALL BE IN PLACE PRIOR TO ANY FINAL WINDOW OPENING MEASUREMENTS TAKEN AND THE WINDOW ORDER BEING PLACED WITH THE MANUFACTURER.
5. CONTRACTOR SHALL ALLOW 1/2" MAX. SPACE/GAP AT TOP OF WINDOW AND IT'S FRAMING TO ALLOW FOR POTENTIAL DEFLECTION OF SAID FRAMING MEMBERS.

FLOOR PLAN KEYNOTES

1. CONTRACTOR SHALL PROVIDE AND INSTALL WOOD BASE AND DOOR AND WINDOW CASINGS. BASE IS TO BE PROVIDED IN ALL ROOMS. WOOD BASE, TRIM AND MOLDINGS SHALL BE OWNER SELECTED.
2. NEW WOOD DOOR, HARDWARE & FRAME. ACTUAL DOOR DESIGN TO BE SELECTED. CONTRACTOR INSTALLED. SEE DOOR SCHEDULE FOR ADDITIONAL INFORMATION.
3. CONTRACTOR SHALL PROVIDE ALL NECESSARY HARDWARE FOR INSTALLATION AND PROPER OPERATION OF ALL INTERIOR & EXTERIOR DOORS. PROVIDE APPROPRIATE FUNCTION FOR EACH DOOR.
4. CONTRACTOR SHALL PROVIDE LOW E INSULATED GLAZING TO SOUTH, EAST AND WEST ELEVATION AND INSULATED CLEAR GLASS AT NORTH ELEVATION.
5. NEW FLOORING. OWNER SELECTED, CONTRACTOR INSTALLED.
6. NEW LOW FLUSH TOILET (1.28 GAL/FLUSH). OWNER PROVIDED. CONTRACTOR INSTALLED. CONTRACTOR SHALL PROVIDE NEW PLUMBING LINES & VALVES. CONTRACTOR SHALL MAKE ALL NECESSARY PLUMBING CONNECTIONS AND PREPARATIONS. PROVIDE 24" MIN. CLEAR IN FRONT OF WATER CLOSET.
7. NOT USED.
8. NEW WINDOW. SEE WINDOW SCHEDULE SHEET A-9.0 FOR ADDITIONAL INFORMATION.
9. NEW HANDRAIL @ 36" A.F.F. SEE DETAIL #14/SHEET A-8.0 FOR ADDITIONAL INFORMATION.
10. NEW SMOKE DETECTOR. SEE BUILDING DEPARTMENT NOTES SHEET A-0.0 & SHEET A-3.1 FOR ADDITIONAL INFORMATION.
11. NEW CARBON MONOXIDE ALARM. SEE BUILDING DEPARTMENT NOTES SHEET A-0.0 & SHEET A-3.1 FOR ADDITIONAL INFORMATION.
12. NEW EXHAUST FAN. SEE SHEET A-3.1 FOR ADDITIONAL INFORMATION.
13. NEW FULL HEIGHT 2x6 WOOD STUD WALL @ 16" O.C. W/ 5/8" TYPE 'X' GYP. BD. W/ R-21 INSULATION (FRICTION FIT).
14. NEW POLE & SHELF CLOSET SYSTEM. OWNER SELECTED. CONTRACTOR INSTALLED.
15. NEW BATHROOM TUB/SHOWER W/ FAUCETS SHALL BE OWNER PROVIDED. CONTRACTOR INSTALLED. PROVIDE 70" HIGH NON-ABSORBENT WALL ADJACENT TO TUB/SHOWER. WATER RESISTANT GYP. BD. IS NOT PERMITTED FOR TILE BACKING IN SHOWER. CONTRACTOR SHALL COORDINATE WITH OWNER PLACEMENT OF SHOWER HEAD AND CONTROLS PRIOR TO INSTALLATION. SHOWERS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE THERMOSTATIC, OR COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVE TYPE THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION. CONTRACTOR SHALL INSTALL TUB/SHOWER SHELF IN WALL OPPOSITE OF SHOWER HEAD. VERIFY LOCATION W/ OWNER PRIOR TO INSTALLATION.
16. NEW TUB/SHOWER TILE WORK SHALL BE MORTAR SET. SEE DETAILS SHEET A-8.0 FOR ADDITIONAL INFORMATION.
17. NEW 42" HIGH GUARDRAIL, SELECTED BY OWNER, INSTALLED BY CONTRACTOR. SEE DETAIL #30/SHEET A-8.0 & STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
18. NEW BASE CABINETRY + LAVATORY SINK. OWNER PROVIDED. CONTRACTOR INSTALLED. CONTRACTOR SHALL PROVIDE NEW PLUMBING LINES & VALVES. CONTRACTOR SHALL MAKE ALL NECESSARY PLUMBING CONNECTIONS AND PREPARATIONS.
19. NEW 30"X48" ATTIC ACCESS PANEL IN CEILING WITH PULL DOWN STAIRS TO ACCESS FAU IN ATTIC SPACE ABOVE.
20. NEW SOLID SURFACE COUNTERTOP W/ CABINETRY. OWNER SELECTED, CONTRACTOR INSTALLED.
21. NEW UPPER CABINETRY. OWNER SELECTED, CONTRACTOR INSTALLED.
22. NEW LAUNDRY SINK. OWNER PROVIDED, CONTRACTOR INSTALLED.
23. NEW WASHER/DRYER. PROVIDE VENT THRU ROOF. DOMESTIC CLOTHES DRYER DUCT SHALL BE OF METAL AND A MINIMUM OF 4" IN DIAMETER. THE EXHAUST DUCT SHALL NOT EXCEED A TOTAL COMBINED HORIZONTAL AND VERTICAL LENGTH OF 14'-0", INCLUDING TWO 90-DEGREE ELBOWS. TWO FEET SHALL BE DEDUCTED FOR EACH 90-DEGREE ELBOW IN EXCESS OF TWO.
24. NEW DECK. DECK SURFACE SHALL BE DEX-O-TEX WEATHER WEAR: DECK COVERING TRAFFIC TOPPING. ESR #1757. COLOR TBD. SUPPORTING MEMBERS FOR PERMEABLE FLOORS: WOOD STRUCTURAL MEMBERS THAT SUPPORT MOISTURE-PERMEABLE FLOORS OR ROOFS THAT ARE EXPOSED TO THE WEATHER, SUCH AS CONCRETE OR MASONRY SLABS, SHALL BE OF NATURALLY-DURABLE OR PRESERVATIVE-TREATED WOOD UNLESS SEPARATED FROM SUCH FLOORS BY AN IMPERVIOUS MOISTURE BARRIER. THE IMPERVIOUS MOISTURE BARRIER SYSTEM PROTECTING THE STRUCTURE SUPPORTING FLOORS SHALL PROVIDE DRAINAGE OF WATER THAT INFILTRATES THE MOISTURE-PERMEABLE FLOOR TOPPING. THE DECK MINIMUM SLOPE FOR DRAINAGE IS 2%. THIS NEEDS TO BE INCORPORATED INTO THE SUBSTRATE (JOISTS, BEAMS, DECKING, ETC...) TO ALLOW THE MOISTURE BARRIER ABOVE TO HAVE SUFFICIENT POSITIVE DRAINAGE WITHOUT PONDING. VENTILATION IS REQUIRED BENEATH BALCONY OR ELEVATED WALKING SURFACES: ENCLOSED FRAMING ON EXTERIOR BALCONIES AND ELEVATED WALKING SURFACES THAT ARE EXPOSED TO RAIN, SNOW OR DRAINAGE FROM IRRIGATION SHALL BE PROVIDED WITH OPENINGS THAT PROVIDE A NET FREE CROSS VENTILATION AREA NOT LESS THAN 1/150 OF THE AREA OF EACH SEPARATE SPACE. SEE DETAIL #20/SHEET A-8.0 & STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
25. NEW BUILT IN CABINETRY. OWNER SELECTED, CONTRACTOR INSTALLED.
26. NEW CABLE TV CONNECTION & ELECTRICAL OUTLET. VERIFY EXACT LOCATION & HEIGHT W/ OWNER PRIOR TO INSTALLATION.
27. NEW GUTTER + DOWNSPOUT TO MATCH ROOF GUTTER. GUTTER SHALL CATCH ALL RUN OFF FROM DECK. SEE EXTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.
28. NEW FAU IN ATTIC ABOVE.
29. NEW FULL HEIGHT WALL 2x6 WOOD STUDS @ 16" O.C. W/ 5/8" TYPE 'X' GYP. BD. W/ R-21 BATT INSULATION (FRICTION FIT) SURROUNDING NEW KITCHEN RANGE EXHAUST FAN DUCTING.

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CONSULTANT

PROJECT TITLE

NEW 2 STORY RESIDENCE FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS	
5 BLDG. & PL CORRECTIONS	10-01-2024
4 PW CORRECTIONS	02-02-2024
3 BLDG. DEPT. CORRECTIONS	02-02-2024
2 BLDG. DEPT. CORRECTIONS	11-13-2023
1 PLNG & PW CORRECTIONS	08-10-2023
PLAN CHECK SET	07-31-2023
PROJECT RE-START SET	07-31-2023
PLAN CHECK SET (NOT USED)	10-26-2021
PROGRESS SET	06-07-2021
PROJECT NO:	20-51
SCALE:	SEE SHEET
DATE:	01-06-2021
DRAWN BY:	MDG
CHECKED BY:	SHS

SHEET TITLE

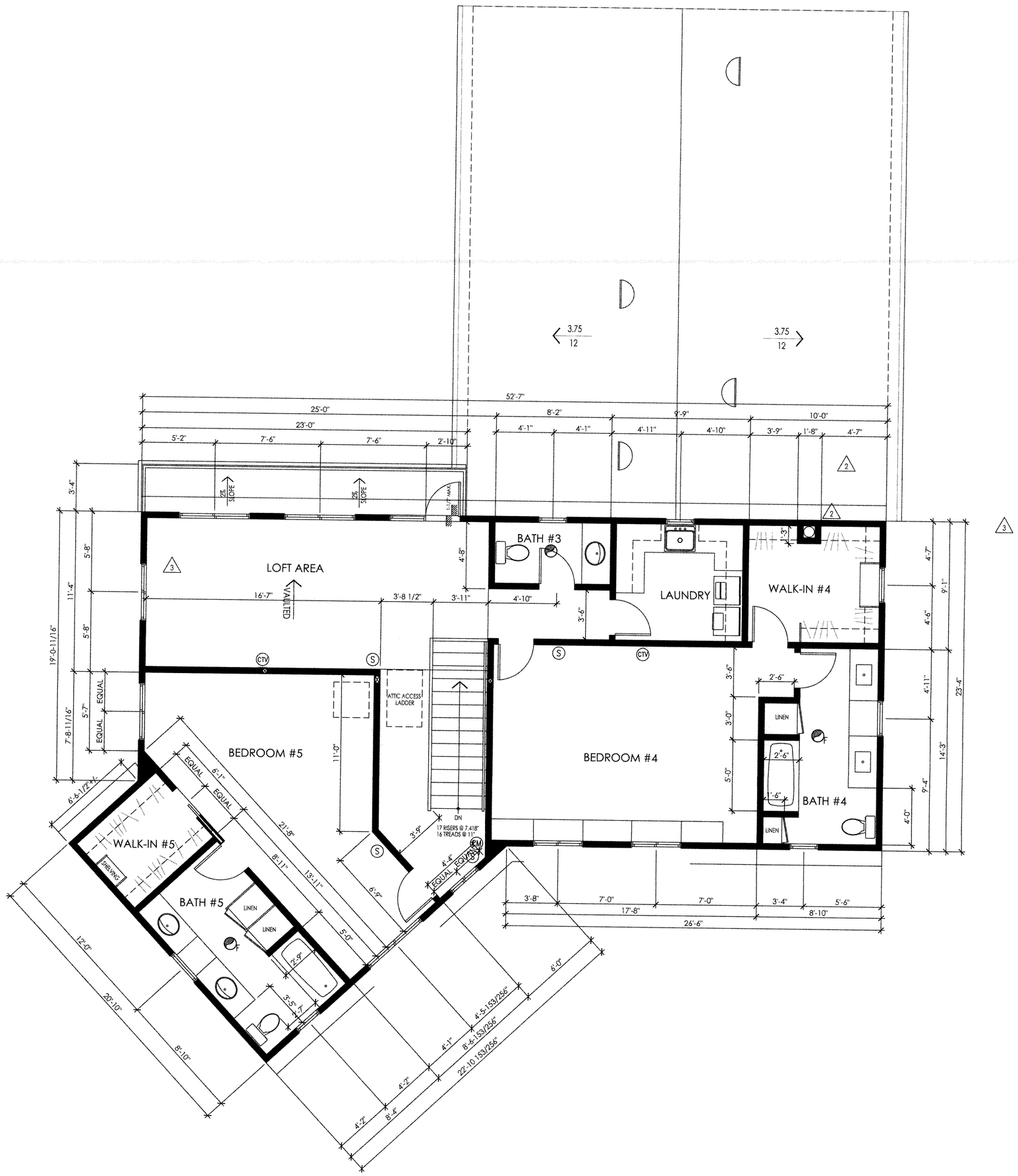
SECOND FLOOR PLAN

SHEET NUMBER

A-2.1

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ISSUED
03-19-25



1 NEW SECOND FLOOR DIMENSION PLAN
1/4"=1'-0"

N

STERN ARCHITECTS

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SHEET TITLE

SECOND FLOOR
DIMENSION PLAN

SHEET NUMBER

A-2.1D

VENTILATION NOTES

V1 CONTRACTOR SHALL VENT KITCHEN AND BATHROOMS LOCAL EXHAUST TO OUTDOORS.

V2 CONTRACTOR SHALL VENT CLOTHES DRYER TO OUTDOORS.

V3 CONTRACTOR SHALL PROPERLY VENT ALL COMBUSTION APPLIANCES AND AIR SYSTEMS DESIGNED TO PREVENT BACKDRAFTING.

V4 CONTRACTOR SHALL INSTALL MERV 6 FILTERS IN HVAC SYSTEM.

V5 CONTRACTOR SHALL VERIFY VENTILATION FANS MEET SOUND REQUIREMENTS:
CONTINUOUS OPERATION: 1.0 SONE
INTERMITTENT OPERATION: 3.0 SONE

V6 CONTRACTOR SHALL VERIFY ALL VENTILATION AIR MUST COME FROM OUT OF DOORS, NOT TRANSFERRED FROM ADJACENT DWELLING UNITS, GARAGES OR CRAWLSPACES.

V7 CONTRACTOR SHALL SEAL ALL WALLS AND OPENINGS BETWEEN GARAGES AND HOUSE.

V8 CONTRACTOR SHALL VERIFY THAT ALL HABITABLE ROOMS HAVE WINDOWS WITH VENTILATION AREA OF AT LEAST 4% OF FLOOR AREA FOR THAT ROOM, NOT LESS THAN 5 SQUARE FEET.

V9 PROVIDE AN EXHAUST FAN IN THE BATHROOM OF 4 AIR CHANGES PER HOUR MINIMUM W/ HUMIDITY CONTROL SENSOR.

ELECTRICAL NOTES

E1 ELECTRICAL OUTLETS THROUGHOUT THE ENTIRE RESIDENCE SHALL BE ARC FAULT CIRCUIT INTERRUPTER(S).

E2 ALL RIGID CONDUIT, DUCTS, PLUMBING & APPLIANCE VENTS LOCATED IN SOUND ASSEMBLIES SHALL BE ISOLATED FROM THE BLD'G. CONSTRUCTION BY MEANS OF RESILIENT SLEEVES, MPONTS OR MIN. ¾"THK. APPROVED RESILIENT MATERIAL.

E3 PROVIDE SMOKE DETECTORS IN ALL SLEEPING ROOMS, HALLWAY SMOKE DETECTORS SHALL BE HARDWIRED W/ BATTERY BACKUP.

E4 ELECTRICAL OUTLETS IN KITCHEN SHALL BE SPACED 24" O.C. PER EXISTING CODE.

E5 RECESSED LIGHT FIXTURES IN INSULATED CEILINGS SHALL BE APPROVED FOR ZERO INSULATION CLEARANCE AND ARE CERTIFIED TO ASTM E283 AND LABELED AS AIR TIGHT TO LESS THAN 2.0 CFM AT 75 PASCALS.

E6 ALL 120V SINGLE PHASE, 15 AND 20 AMP OUTLETS (RECEPTACLE, SMOKE DETECTORS, ETC.) SHALL BE PROTECTED BY COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER.

E7 ELECTRICAL SERVICE TO BE UNDERGROUND FOR NEW CONSTRUCTION OR ADDITIONS >50%. NBMC 15.32.015

E8 ALL ELECTRICAL OUTLETS INCLUDING GFI SHALL BE TAMPER PROOF AS WELL AS AFCI.

E9 WALLS 2 FEET WIDE OR GREATER SHALL HAVE AN OUTLET. OUTLETS SHALL BE SPACED NO MORE THAN 12 FEET APART AND A MAXIMUM OF 6 FEET FROM THE END OF WALLS OR OPENING.

E10 BATHROOM OUTLETS SHALL BE ON A DEDICATED 20-AMP CIRCUIT.

E11 A MINIMUM OF 2-20 AMP SMALL APPLIANCE BRANCH CIRCUITS SHALL BE PROVIDED FOR ALL RECEPTACLE OUTLETS IN THE KITCHEN, DINING ROOM, PANTRY OR OTHER SIMILAR AREA.

E12 AT LEAST ONE 20 AMP BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY LAUNDRY RECEPTACLE OUTLETS. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS.

E13 GROUND FAULT CIRCUIT INTERRUPTER (GFCI) RECEPTACLE PROTECTION IS REQUIRED IN THE BATH, GARAGE, OUTDOORS, UNDERFLOOR SPACE, KITCHEN COUNTERS, UNFINISHED BASEMENTS AND LAUNDRY/UTILITY/WET BAR SINKS (WHERE THE RECEPTACLE IS WITHIN 6 FT. OF THE OUTSIDE SINK EDGE).

GENERAL NOTES

G1 CONTRACTOR SHALL PROVIDE ALL COPPER PIPING, SHUTOFF VALVES AND SUPPLY LINES TO OWNER SELECTED BATHROOM FIXTURES.

G2 CONNECT ALL PIPES AND PLUMBING TO EXISTING SEWER SYSTEM.

G3 ALL OUTLETS ADJACENT SINKS IN KITCHEN AND BATHROOMS TO BE GFI.

G4 CONTRACTOR SHALL VERIFY EXISTING ELECTRICAL PANEL IS IN WORKING ORDER PRIOR TO CONSTRUCTION.

G5 CONTRACTOR SHALL PROVIDE UFER OR OTHER APPROVED GROUND PER CEC 250.

G6 CONTRACTOR SHALL SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

G7 PROVIDE AT LEAST ONE OUTSIDE WEATHERPROOF, GFI 120V RECEPTACLE AT FRONT & BACK OF DWELLING UNIT, CEC 210.52 (e)

G8 NEW FAUS, 2 TOTAL, IN ATTIC ABOVE 2ND FLOOR. CONTRACTOR SHALL INSTALL PER MANUFACTURERS SPECIFICATIONS. FAUS SHALL BE POSITIONED CLOSE TO NEW PULL DOWN STAIRS IN CEILING.

G9 ALL RECEPTACLE OUTLETS IN BATHROOMS, ABOVE KITCHEN COUNTERTOP, CRAWL SPACES, GARAGE, ROOFTOPS, OUTDOOR OUTLETS, WITHIN 6-FEET OF WET BAR SINK/LAUNDRY SINK TO BE PROTECTED BY GROUND FAULT CIRCUIT INTERRUPTER (GFCI) CEC 210.8

G10 FIELD INSPECTOR TO REVIEW AND APPROVE UNDERGROUND SERVICE REQUIREMENT PRIOR TO CONCRETE PLACEMENT.

G11 CARBON MONOXIDE ALARMS SHALL BE ON EACH LEVEL AND ALL SHALL BE HARDWIRED W/ BATTERY BACKUP. CARBON MONOXIDE DETECTOR SHALL BE INTERCONNECTED SUCH THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS. CARBON MONOXIDE ALARMS SHALL COMPLY W/ UL 2034.

G12 SMOKE DETECTOR SHALL BE INTERCONNECTED SUCH THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS.

VENTILATION REQUIREMENTS

A ALL LOW-RISE RESIDENTIAL BUILDINGS ARE REQUIRED TO HAVE WHOLE HOUSE VENTILATION.

B ADDITIONS SMALLER THAN 1000 SQUARE FEET ARE EXEMPT.

C HABITABLE ROOMS INCLUDE LIVING ROOMS, FAMILY ROOMS, BEDROOMS, KITCHENS.

D CLOSETS, CRAWL SPACES, GARAGES, UTILITY ROOMS, ATTICS ARE GENERALLY NOT HABITABLE ROOMS.

E OPENINGS DO NOT HAVE TO BE PROVIDED BY WINDOWS.

F OPENINGS CAN ALSO BE OPERABLE, INSULATED WEAHTERSTRIPPED PANELS.

G OPENINGS CAN BE SKYLIGHTS, THRU-WALL INLETS.

H STANDARDS MANDATE THAT THE OPENABLE AREA OF THE WINDOW NOT THE SIZE OF THE ENTIRE WINDOW UNIT BE 4% OF THE FLOOR AREA. THIS REQUIREMENT IS DIFFERENT FROM THE EGRESS REQUIREMENT IN THE HEALTH AND SAFETY CODE.

J RE-CIRCULATING KITCHEN HOODS ARE NO LONGER ALLOWED. ALL EXHAUST MUST VENT TO OUTDOORS.

K CLOTHES DRYER VENT SHALL NOT EXCEED 14-FEET IN OVERALL LENGTH. CMC 504.3.2

NOTE:
CONTRACTOR SHALL VERIFY THAT SMOKE ALARMS ARE PROVIDED AT EACH BEDROOM, EACH HALLWAY LEADING TO BEDROOMS. A CARBON MONOXIDE ALARM SHALL BE PROVIDED AT EACH FLOOR.

NOTE:
THE FOLLOWING WILL BE PROVIDED AT THE JOBSITE FOR THE ELECTRICAL INSPECTOR: SINGLE LINE DIAGRAM. PANEL SCHEDULES AND LOAD CALCULATIONS FOR ELECTRICAL SYSTEMS.

NOTE:
FOR NEW CONSTRUCTION AND ADDITIONS GREATER THAN 1,000 S.F., PROVIDE A WHOLE-BUILDING MECHANICAL VENTILATION SYSTEM IN ACCORDANCE WITH THE FAN VENTILATION RATE OR TOTAL VENTILATION RATE METHOD. INCLUDE VENTILATION SYSTEM SIZING CALCULATIONS ON PLANS.

a. FAN VENTILATION RATE METHOD (ASHRAE SECTION 4.1.1):
i. MINIMUM REQUIRED FAN FLOW RATE, QFAN, (cfm)=1 cfm PER 100 SF OF FLOOR AREA + 7.5 cfm PER OCCUPANT.
ii. NUMBER OF OCCUPANTS = NUMBER OF BEDROOMS + 1

b. TOTAL VENTILATION RATE METHOD (ASHRAE SECTION 4.1.2):
i. MINIMUM REQUIRED MECHANICAL VENTILATION RATE, QFAN (cfm) = QTOT -QINF
ii. TOTAL REQUIRED VENTILATION RATE, QTOT (cfm) = 3 cfm PER 100 SF OF FLOOR AREA + 7.5 cfm PER OCCUPANT.
iii. NUMBER OF OCCUPANTS = NUMBER OF BEDROOMS +1
iv. EFFECTIVE ANNUAL AVERAGE INFILTRATION RATE, QINF (cfm), DETERMINED IN ACCORDANCE WITH ASHRAE STD 62.2 EQUATION 4.6A.

NUMBER OF OCCUPANTS = 5 BEDROOMS + 1 = 6 3
SQUARE FOOTAGE OF CONDITIONED SPACE = 2955
MINIMUM RATE = 1 CFM/100SF x 2955 SF + 7.5 CFM x 6 = 75 CFM MIN.

WHOLE BUILDING VENTILATION SHALL BE PROVIDED BY EXHAUST AIR, SUPPLY AIR OR COMBINED EXHAUST AND SUPPLY AIR SYSTEM. NATURAL VENTILATION THROUGH DOORS/WINDOWS OR CONTINUOUS OPERATION OF CENTRAL FORCED AIR SYSTEM AIR HANDLERS USED IN CENTRAL FAN INTEGRATED VENTILATION SYSTEMS ARE NOT A PERMISSIBLE METHOD OF PROVIDING WHOLE-BUILDING VENTILATION. BEES 150(o), EXC. 5 TO 150.2(a) & ASHRAE STD 62.2. 3

PER TITLE 24 CONSULTANT THERE SHOULD BE A MINIMUM OF 151 TOTAL CFM OF WHOLE HOUSE EXHAUST FANS. 1 DOWNSTAIRS BATHROOM EXHAUST FAN & 1 UPSTAIRS BATHROOM EXHAUST FAN SHALL BE UPSIZED TO 80 CFM EACH. THESE SHALL BE CONSIDERED (2) WHOLE HOUSE EXHAUST FANS FOR A TOTAL OF 160 CFM.

KITCHEN STOVE EXHAUST:
IN KITCHEN THE LOCAL EXHAUST SYSTEM SHALL BE VENTED TO OUTDOORS, THE MINIMUM EXHAUST RATE SHALL FOLLOW TABLE 150-0-G. FOR THIS PARTICULAR PROJECT THE RATE SHALL BE 180. ~~AT ELECTRIC RANGE NO GAS HOOK UP TO STOVE:~~ (BEES 150(o), EXC 5 TO 150.2 (a) & ASHRAE STD 62.2). THE MINIMUM DUCT SIZING SHALL COMPLY WITH TABLE 150.0_H. FOR THIS PARTICULAR PROJECT THE MINIMUM DUCT SIZE SHALL BE MINIMUM OF 9". 3

NOTE:
THE EXISTING RANGE IN THE EXISTING KITCHEN IS DUAL FUEL. THE NEW RANGE IN THE REMODELED KITCHEN SHALL BE A DUAL FUEL.

NOTE:
ELECTRICAL RECEPTACLE OUTLETS, SWITCHES AND CONTROLS SHALL BE LOCATED NO MORE THAN 48" MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15" MEASURED FROM THE BOTTOM OF THE OUTLET BOX ABOVE THE FINISH FLOOR. CRC R327.1.2.

NOTE:
DOORBELL BUTTONS SHALL BE BE INSTALLED MORE THAN 48" ABOVE EXTERIOR FLOOR OR LANDING. CRC R327.1.4.

LUMINARIES SPECIFICATIONS

THE 2016 ENERGY STANDARDS REQUIRE ALL PERMANENTLY INSTALLED LUMINAIRES TO BE 'HIGH EFFICACY'. AS PECIFIED IN 150.0(k). PERMANENTLY INSTALLED LIGHTING IS DEFINED IN 100.1 AND EXAMPLES OF PERMANENTLY INSTALL LIGHTING INCLUDE:

ALL LUMINARIES INSTALLED IN RESIDENTIAL CONSTRUCTION MUST QUALIFY AS 'HIGH EFFICACY LUMINARIES'. THIS ELIMINATES VARYING REQUIREMENTS BY ROOM AND TYPE OF CONTROLS. THIS ALSO ELIMINATES THE NEED TO CALCULATE THE WATTAGE OF LOW VERSUS HIGH EFFICACY LUMINAIRES IN THE KITCHEN.
- LIGHTING ATTACHED TO WALLS, CEILINGS OR COLUMNS.
- TRACK AND FLEXIBLE LIGHTING SYSTEMS.
- LIGHTING INSIDE PERMANENTLY INSTALLED CABINETS.
- LIGHTING ATTACHED TO THE TOP OR BOTTOM OF PERMANENTLY INSTALLED CABINETS.
- LIGHTING ATTACHED TO CEILING FANS.
- LIGHTING INTEGRAL TO EXHAUST FANS.
- LIGHTING THAT IS INTEGRAL TO GARAGE DOOR OPENERS IF IT IS DESIGNED TO BE USED AS GENERAL LIGHTING, IS SWITCHED INDEPENDENTLY FROM THE GARAGE DOOR OPENER, AND DOES NOT AUTOMATICALLY TURN OFF AFTER A PRE-DETERMINED AMOUNT OF TIME.

PERMANENT INSTALLED LUMINAIRES IN BATHROOMS, ATTACHED AND DETACHED GARAGES, LAUNDRY ROOM AND UTILITY ROOMS SHALL MANUAL-ON/OFF OCCUPANT SENSORS, ALSO KNOWN AS VACANCY SENSORS, AUTOMAITCALLY TURN LIGHTS OFF IF AN OCCUPANT FORGETS TO TURN THEM OFF WHEN A ROOM IS UNOCCUPIED. ADDITIONALLY, THESE SENSORS ARE REQUIRED TO PROVIDE THE OCCUPANT WITH THE ABILITY TO MANUALLY TURN THE LIGHTS
- OFF UPON LEAVING THE ROOM.
- OFF WHILE STILL OCCUPYING THE ROOM.
- ON UPON ENTERING THE ROOM.

ALL LUMINAIRES THAT ARE INSTALLED WITH JA8-CERTIFIED LIGHT SOURCES ARE REQUIRED TO BE CONTROLLED BY EITHER A DIMMER OR VACANCY SENSOR. IN ADDITION, ALL BLANK ELECTRICAL BOXES MORE THAN FIVE FEET ABOVE THE FLOOR MUST BE CONTROLLED BY A DIMMER, VACANCY SENSOR OR FAN SPEED CONTROL.

DIMMER OR VACANCY SENSORS ARE NOT REQUIRED ON ANY LUMINAIRIES LOCATED IN CLOSETS LESS THAN 70 SQUARE FEET OR IN HALLWAYS.

LUMINAIRES PROVIDING OUTDOOR LIGHTING, INCLUDING LIGHTING FOR PATIOS, ENTRANCE AND PORCHES, WHICH ARE PERMANENTLY MOUNTED, SHALL BE HIGH EFFICACY. THE LIGHTING SHALL BE CONTROLLED BY A MANUAL ON/OFF SWITCH, A MOTION DETECTOR NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT DISABLES THE PHOTO CONTROL; OR ASTRONOMICAL TIME CLOCK NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT DISABLES THE TIME CLOCK. OR AN EMCS NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT ALLOWS THE LUMINAIRES TO BE ALWAYS ON.

ALL NEW LOW-RISE RESIDENTIAL BUILDINGS AND ADDITIONS GREATER THAN 1,000 S.F. MUST HAVE A WHOLE HOUSE VENTILATION SYSTEM THAT PROVIDES A CALCULATED MINIMUM AMOUNT OF OUTDOOR AIR BY USING EITHER A CONTINUOUSLY RUNNING BATHROOM FAN OR A SUPPLY OR RETURN AIR VENTILATION THRU A CENTRAL HVAC SYSTEM. THE MINIMUM VENTILATION VOLUME MUST BE A MINIMUM OF 1 CFM FOR EACH 100 SQ. FT. FO FLOOR AREA PLUS 7.5 CFM FOR EACH OCCUPANT. THE NUMBER OF OCCUPANTS IS DETERMINED BY MULTIPLYING THE NUMBER OF BEDROOMS AND THEN ADDING ONE. (ASHRAI 62.2)

NOTE BLOCK, SHEET NOTES, SCHEDULES OR OTHER FORMS OF WRITTEN COMMUNICATION THAT SPECIFY THE REQUIREMENTS FOR VENTILATION AIRFLOW, THE ROOMS WHERE THE WHOLE-BUILDING AND LOCAL VENTILATION EXHAUST FANS ARE LOCATED, AND DUCT SIZING FOR THE WHOLE-BUILDING VENTILATION AND LOCAL VENTILATION EXHAUST SHALL BE SPECIFIED ON THE PLANS SUBMITTED TO THE CITY OF HUNTINGTON BEACH BUILDING DEPARTMENT FOR A PERMIT. HOWEVER, IN ALL CASES, TABLE 7.1 FROM THE 2016 CALIFORNIA ENERGY CODE SHALL BE ELECTRONICALLY PLACED ON THE PLANS TO ALLOW FOR DUCT CHANGES THAT MAY BE REQUIRED DURING CONSTRUCTION OF THE SYSTEM.

NOTE:
CONTRACTOR SHALL VERIFY LOCATION OF ALL RECESSED CEILING LED LIGHTS & ALL CEILING MOUNTED LIGHTS WITH OWNER PRIOR TO INSTALLATION. NO EXCEPTIONS. 2

TITLE 24 LIGHTING

1. CONTRACTOR SHALL CONFORM WITH THE STATE ENERGY LAW AS FOLLOWS:
KITCHEN & BATHROOM SHALL HAVE GENERAL LIGHTING SWITCH TO BE THREE FIRST NEAR THE DOOR.

A. KITCHEN LIGHTING: 100% OF WATTAGE TO BE HIGH EFFICACY AND SWITCHED SEPARATELY.

B. LIGHTING IN BATHROOMS, GARAGE, LAUNDRY ROOM, UTILITY ROOM: EQUIPPED WITH VACANCY SENSOR.

C. LIGHTING IN ALL BEDROOMS, HALL, LIVING ROOM, DEN TO BE CONTROLLED BY VACANCY SENSOR OR DIMMER.

D. EXTERIOR LIGHTING MOUNTED ON THE BUILDING TO BE HIGH EFFICACY CONTROLLED BY PHOTO CONTROL/MOTION SENSOR COMBINATION.

E. ALL INSULATION SHALL BE INSTALLED PER NAIMA REQUIREMENTS AND RECOMMENDATIONS.

F. INDOOR LIGHT CONTROLS: AUTO-OFF CONTROLS FOR LIGHTING IN DRAWERS AND CABINETS.

G. INDOOR LIGHT CONTROLS: UNDERSHELF, DISPLAY CABINETS, SWITCHED OUTLETS CONTROLLED SEPARATE FROM CEILING LIGHTING.

H. INDOOR LIGHT CONTROLS: LIGHTING IN HABITABLE SPACES SHALL HAVE ACCESSIBLE WALL-MOUNTED DIMMING CONTROLS.

FOR REFERENCE ONLY

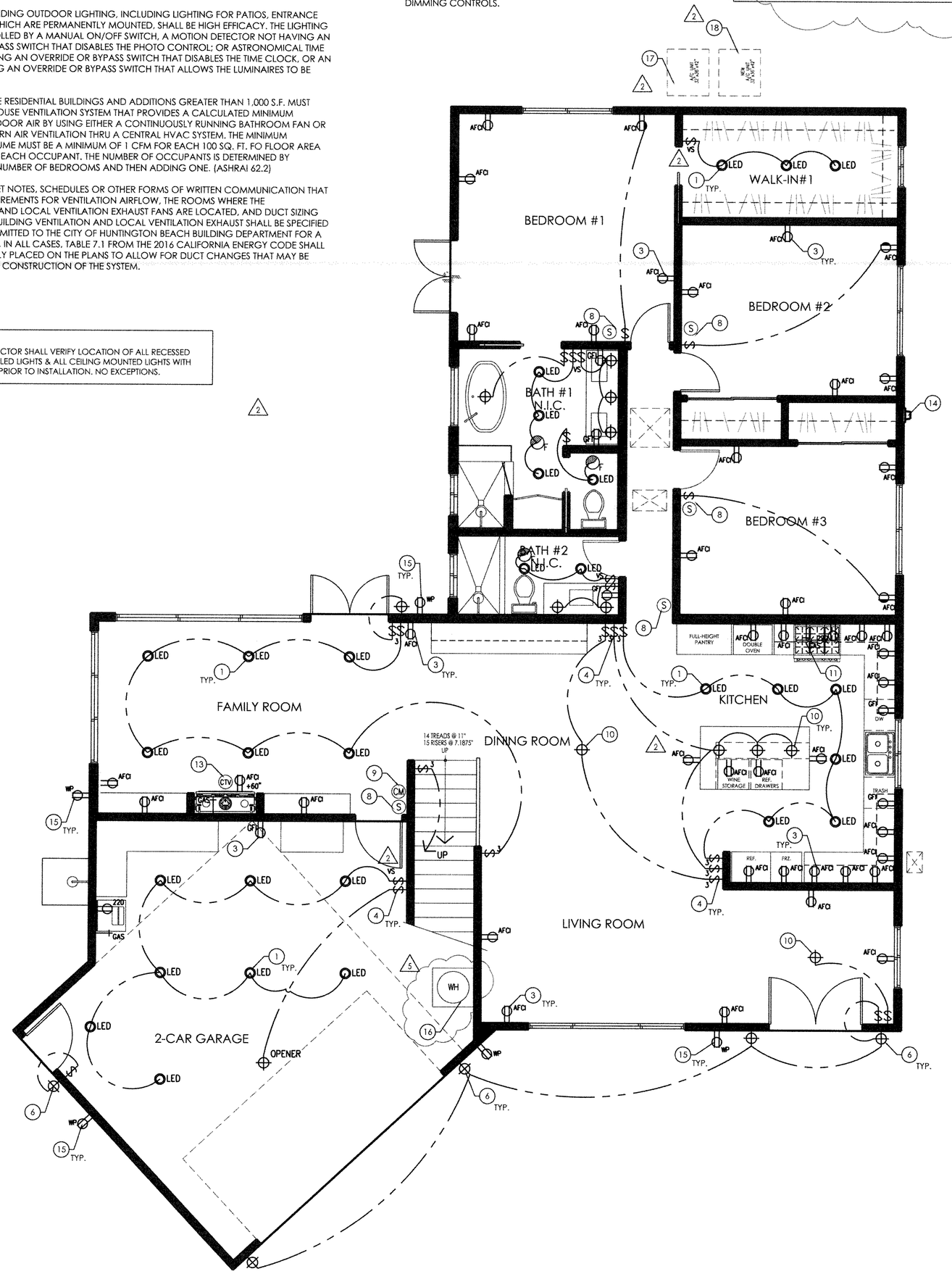
BUILDING ENVELOPE:
- EXTERIOR FRAMED WALLS: R-21 BATT INSULATION (2x6 FRAMING)
- CEILING/ROOF: R-30 BATT INSULATION (NO COOL ROOF REQUIRED)
- RAISED FLOOR OVER GARAGE: R-19 BATT INSULATION
- NEW OPERABLE WINDOWS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.23 SHGC
- NEW FIXED WINDOWS: DUAL PANE/NON-METAL FRAMING/0.30 U-FACTOR, 0.29 SHGC
- NEW FRENCH DOORS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.23 SHGC
- NEW PATIO DOORS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.23 SHGC

HVAC:
- HVAC (HEAT PUMP):
- 9.50 HSPF/ 16.00 SEER/11.00 EER
- DUCTS: R-6

WATER HEATER:
- NEW HEAT PUMP WATER HEATER W/ AN ENERGY FACTOR OF 2.80%

HERS TESTS/INSPECTIONS REQUIRED FOR THIS PROJECT:
- DUCT TESTING (MANDATORY)
- ADEQUATE AIRFLOW (MANDATORY)
- FAN WATT DRAW (MANDATORY)
- IAQ EXHAUST FAN (MANDATORY)

SOLAR PHOTOVOLTAIC:
- 3.2kw SOLAR PANELS W/ NO BACKUP BATTERY REQUIRED



1 NEW FIRST FLOOR ELECTRICAL PLAN
1/4"=1'-0"

ELECTRICAL PLAN KEYNOTES

1 NEW RECESSED LED LIGHTING, INSTALLED BY CONTRACTOR. SEE ELECTRICAL LEGEND. RECESSED LIGHTS @ TUBS/SHOWERS/EXTERIOR SHALL BE DAMP RATED.

2 CONTRACTOR SHALL OBTAIN PERMITS FOR THIS WORK.

3 ELECTRICAL OUTLET, GFI WHERE REQUIRED. SEE ELECTRICAL LEGEND.

4 LIGHT SWITCH. SEE ELECTRICAL LEGEND.

5 ALL RECESSED LIGHT FIXTURES ARE TO BE PROVIDED BY CONTRACTOR. RECESSED LIGHT FIXTURE IN SHOWER SHALL BE WET RATED.

6 NEW WALL MOUNTED LED LIGHT FIXTURE. LIGHTS @ TUBS/SHOWERS/EXTERIOR SHALL BE DAMP RATED. OWNER SELECTED, CONTRACTOR INSTALLED. SEE ELECTRICAL LEGEND.

7 CONTRACTOR SHALL INSTALL NEW BATHROOM EXHAUST FANS. FANS MUST BE ENERGY STAR COMPLIANT WITH HUMIDISTAT CONTROLS - HUMIDISTAT CONTROLS SHALL BE CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF 50-80% (4.506.1 CGBSC) SEE LEGEND THIS SHEET.

8 NEW SMOKE DETECTOR.

9 NEW CARBON MONOXIDE ALARM.

10 NEW CEILING MOUNTED LED LIGHT FIXTURE. OWNER FURNISHED, CONTRACTOR INSTALLED. SEE ELECTRICAL LEGEND. 4

11 NEW ABOVE RANGE EXHAUST FAN/HOOD, 180 CFM MIN.

12 ALL ELECTRICAL OUTLETS NEAR SINKS SHALL BE GFI.

13 NEW CABLE TV CONNECTION + ELECTRICAL OUTLET. VERIFY EXACT LOCATION & HEIGHT W/ OWNER PRIOR TO INSTALLATION.

14 EXISTING 200 AMP ELECTRICAL PANEL.

15 EXTERIOR ELECTRICAL OUTLET.

16 NEW HEAT PUMP WATER HEATER W/ ENERGY FACTOR OF 2.80%. WATER HEATER TO BE INSTALLED ON 18" HIGH PLATFORM, SEE NOTE THIS PAGE. 5

17 EXISTING A/C TO REMAIN.

18 NEW A/C ON NEW CONCRETE PAD.

OUTDOOR LIGHTING

01 CONCTRACTOR SHALL VERIFY ALL OUTDOOR LIGHTING IS HIGH EFFICACY OR CONTROLLED BY ONE OF THE FOLLOWING:

1. CONTROLLED BY A MANUAL ON/OFF SWITCH, AND

2. A MOTION SENSOR THAT IS NOT EQUIPPED WITH AN OVERRIDE OR BYPASS SWITCH THAT DISABLES THE MOTION SENSOR WHICH AUTOMATICALLY TURNS OFF THE LIGHTS WHEN NO MOTION IS DETECTED, AND

3. ONE OF THE FOLLOWING THREE METHODS TO AUTOMATICALLY TURN THE LIGHTS OFF DURING THE DAYTIME:
A. PHOTOCONTROL NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT DISABLES THE PHOTOCONTROL; OR
B. ASTRONOMICAL TIME CLOCK NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT DISABLES THE ASTRONOMICAL TIME CLOCK; OR
C. ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT ALLOWS THE LUMINARIES TO BE ALWAYS ON.

02 CONTRACTOR SHALL PROVIDE MOTION SENSOR THAT HAS THE FOLLOWING FEATURES: AUTO-ON AND AUTO-OFF, PHOTOCELL CONTROL, REGULAR SWITCH FOR MANUAL OPERATION AND THE SENSOR MUST COMPLY WITH 30 MINUTE SHUTOFF REQUIREMENT.

03 CONTRACTOR SHALL EXEMPT THESE LIGHTS FROM THE OUTDOOR LIGHTING REQUIREMENTS: ANY FIXTURE NOT ATTACHED TO THE EXTERIOR OF THE BUILDING, ALL DECORATIVE LIGHTING, AND ALL POOL/SPA LIGHTS.

WALL LEGEND

(E) WALL TO REMAIN

(N) WALL, 2x4 WOOD STUDS @ 16" O.C.

ELECTRICAL LEGEND

- NEW CEILING FAN/LIGHT COMBO PROVIDE SEPARATE SWITCHING W/DIMMER
- WALL MOUNT LIGHT FIXTURE
- CEILING RECESSED LIGHT FIXTURE
- LED RECESSED LIGHT FIXTURE
- PENDANT LIGHT FIXTURE 35WATT MAX. HALLOGEN LAMP
- WALL ELECTRICAL SWITCH
- D WALL ELECTRICAL DIMMER SWITCH
- N WALL ELECTRICAL OUTLET - NEW
- GFI WALL ELECTRICAL OUTLET G.F.C.I. KITCHEN, BATHROOM, GARAGE & OUTDOOR OUTLETS
- F EXHAUST FAN (50 CFM) W/ HUMIDITY SENSOR
- S SMOKE DETECTOR SEE BUILDING DEPARTMENT NOTES
- WALL WASHER LIGHT FIXTURE
- N SURFACE MOUNTED LIGHT FIXTURE - NEW
- CTV CABLE TV OUTLET
- NEW REGISTER LOCATION
- HB NEW HOSE BIB W/ APPROVED ANTI-SIPHON DEVICE. CPC 603.3
- CM CARBON MONOXIDE ALARM
- SP SPEAKER
- RECESSED FLOOR ELECTRICAL OUTLET

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PROJECT TITLE
NEW 2 STORY RESIDENCE FOR:
QUERRIERA RESIDENCE
2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS	
5 BLDG. & PL CORRECTIONS	10-01-2024
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PROGRESS SET	06-07-2021
PROJECT NO:	20-51
SCALE:	SEE SHEET
DATE:	01-06-2021
DRAWN BY:	MDG
CHECKED BY:	SHS

SHEET TITLE
NEW FIRST FLOOR ELECTRICAL /MECH/PLUMBING FLOOR PLANS
SHEET NUMBER
A-3.0

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VENTILATION NOTES

V1 CONTRACTOR SHALL VENT KITCHEN AND BATHROOMS LOCAL EXHAUST TO OUTDOORS.

V2 CONTRACTOR SHALL VENT CLOTHES DRYER TO OUTDOORS.

V3 CONTRACTOR SHALL PROPERLY VENT ALL COMBUSTION APPLIANCES AND AIR SYSTEMS DESIGNED TO PREVENT BACKDRAFTING.

V4 CONTRACTOR SHALL INSTALL MERV 6 FILTERS IN HVAC SYSTEM.

V5 CONTRACTOR SHALL VERIFY VENTILATION FANS MEET SOUND REQUIREMENTS:
CONTINUOUS OPERATION: 1.0 SONE
INTERMITTENT OPERATION: 3.0 SONE

V6 CONTRACTOR SHALL VERIFY ALL VENTILATION AIR MUST COME FROM OUT OF DOORS, NOT TRANSFERRED FROM ADJACENT DWELLING UNITS, GARAGES OR CRAWLSPACES.

V7 CONTRACTOR SHALL SEAL ALL WALLS AND OPENINGS BETWEEN GARAGES AND HOUSE.

V8 CONTRACTOR SHALL VERIFY THAT ALL HABITABLE ROOMS HAVE WINDOWS WITH VENTILATION AREA OF AT LEAST 4% OF FLOOR AREA FOR THAT ROOM, NOT LESS THAN 5 SQUARE FEET.

V9 PROVIDE AN EXHAUST FAN IN THE BATHROOM OF 4 AIR CHANGES PER HOUR MINIMUM W/ HUMIDITY CONTROL SENSOR.

ELECTRICAL NOTES

E1 ELECTRICAL OUTLETS THROUGHOUT THE ENTIRE RESIDENCE SHALL BE ARC FAULT CIRCUIT INTERRUPTER(S).

E2 ALL RIGID CONDUIT, DUCTS, PLUMBING & APPLIANCE VENTS LOCATED IN SOUND ASSEMBLIES SHALL BE ISOLATED FROM THE BLD'G. CONSTRUCTION BY MEANS OF RESILIENT SLEEVES, MPONTS OR MIN. ¾"THK. APPROVED RESILIENT MATERIAL.

E3 PROVIDE SMOKE DETECTORS IN ALL SLEEPING ROOMS, HALLWAY SMOKE DETECTORS SHALL BE HARDWIRED W/ BATTERY BACKUP.

E4 ELECTRICAL OUTLETS IN KITCHEN SHALL BE SPACED 24" O.C. PER EXISTING CODE.

E5 RECESSED LIGHT FIXTURES IN INSULATED CEILINGS SHALL BE APPROVED FOR ZERO INSULATION CLEARANCE AND ARE CERTIFIED TO ASTM E283 AND LABELED AS AIR TIGHT TO LESS THAN 2.0 CFM AT 75 PASCALS.

E6 ALL 120V SINGLE PHASE, 15 AND 20 AMP OUTLETS (RECEPTACLE, SMOKE DETECTORS, ETC.) SHALL BE PROTECTED BY COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER.

E7 ELECTRICAL SERVICE TO BE UNDERGROUND FOR NEW CONSTRUCTION OR ADDITIONS >50%. NBMC 15.32.015

E8 ALL ELECTRICAL OUTLETS INCLUDING GFI SHALL BE TAMPER PROOF AS WELL AS AFCI.

E9 WALLS 2 FEET WIDE OR GREATER SHALL HAVE AN OUTLET. OUTLETS SHALL BE SPACED NO MORE THAN 12 FEET APART AND A MAXIMUM OF 6 FEET FROM THE END OF WALLS OR OPENING.

E10 BATHROOM OUTLETS SHALL BE ON A DEDICATED 20-AMP CIRCUIT.

E11 A MINIMUM OF 2-20 AMP SMALL APPLIANCE BRANCH CIRCUITS SHALL BE PROVIDED FOR ALL RECEPTACLE OUTLETS IN THE KITCHEN, DINING ROOM, PANTRY OR OTHER SIMILAR AREA.

E12 AT LEAST ONE 20 AMP BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY LAUNDRY RECEPTACLE OUTLETS. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS.

E13 GROUND FAULT CIRCUIT INTERRUPTER (GFCI) RECEPTACLE PROTECTION IS REQUIRED IN THE BATH, GARAGE, OUTDOORS, UNDERFLOOR SPACE, KITCHEN COUNTERS, UNFINISHED BASEMENTS AND LAUNDRY/UTILITY/WET BAR SINKS (WHERE THE RECEPTACLE IS WITHIN 6 FT. OF THE OUTSIDE SINK EDGE).

VENTILATION REQUIREMENTS

A ALL LOW-RISE RESIDENTIAL BUILDINGS ARE REQUIRED TO HAVE WHOLE HOUSE VENTILATION.

B ADDITIONS SMALLER THAN 1000 SQUARE FEET ARE EXEMPT.

C HABITABLE ROOMS INCLUDE LIVING ROOMS, FAMILY ROOMS, BEDROOMS, KITCHENS.

D CLOSETS, CRAWL SPACES, GARAGES, UTILITY ROOMS, ATTICS ARE GENERALLY NOT HABITABLE ROOMS.

E OPENINGS DO NOT HAVE TO BE PROVIDED BY WINDOWS.

F OPENINGS CAN ALSO BE OPERABLE, INSULATED WEAHTERSTRIPPED PANELS.

G OPENINGS CAN BE SKYLIGHTS, THRU-WALL INLETS.

H STANDARDS MANDATE THAT THE OPENABLE AREA OF THE WINDOW NOT THE SIZE OF THE ENTIRE WINDOW UNIT BE 4% OF THE FLOOR AREA. THIS REQUIREMENT IS DIFFERENT FROM THE EGRESS REQUIREMENT IN THE HEALTH AND SAFETY CODE.

J RE-CIRCULATING KITCHEN HOODS ARE NO LONGER ALLOWED. ALL EXHAUST MUST VENT TO OUTDOORS.

K CLOTHES DRYER VENT SHALL NOT EXCEED 14-FEET IN OVERALL LENGTH. CMC 504.3.2

NEWPORT BEACH BD NOTES

ADDITIONAL REQUIREMENTS BASED ON SCOPE CHANGE TO NEW CONSTRUCTION: FOR NEW CONSTRUCTION, PROVIDE ENERGY STORAGE SYSTEMS READY SHALL MEET THE FOLLOWING: (CEnC SECTION 150.0(S))

AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED:
- ESS-READY INTERCONNECTION EQUIPMENT WITH A MINIMUM BACKED UP CAPACITY OF 60 AMPS AND A MINIMUM OF FOUR ESS-SUPPLIED BRACH CIRCUITS.
- A DEDICATED RACEWAY FROM MAIN SERVICE TO SUBPANEL THAT SUPPLIES BRANCH CIRCUIT.

FOUR OR MORE BRANCH CIRCUITS FROM A SINGLE PANELBOARD SUITABLE TO BE SUPPLIED BY THE ESS: AT LEAST ONE CIRCUIT MUST SUPPLY THE REFRIGERATOR, LIGHTING CIRCUIT NEAR THE PRIMARY EGRESS, AND A SLEEPING ROOM RECEPTACLE OUTLET.

A MAIN PANEL BOARD WITH A MINIMUM BUSBAR RATING OF 225 AMPS.

SUFFICIENT SPACE RESERVED TO ALLOW FUTURE INSTALLATION OF SYSTEM ISOLATION EQUIPMENT OR A TRANSFER SWITCH WITHIN 3 FT OF THE MAIN PANELBOARD.

ADDITIONAL REQUIREMENTS BASED ON SCOPE CHANGE TO NEW CONSTRUCTION: FOR NEW CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING ELECTRIC READINESS REQUIREMENTS: (CEnC SECTION 150.0(I)-(V)):

HEAT PUMP SPACE HEATER READY: IF A NATURAL GAS OR PROPANE FURNACE IS INSTALLED. ADD THE FOLLOWING NOTES ON THE PLAN (CEnC SECTION 150.0 (T))
- INSTALL DEDICATED 240-VOLT, 30 AMP BRANCH CIRCUIT WIRING WITHIN 3 FT FROM THE FURNACE AND ACCESSIBLE TO THE FURNACE WITH NO OBSTRUCTIONS.
- RESERVE SPACE ON THE MAIN ELECTRICAL SERVICE PANEL TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR FUTURE FURNACE INSTALLATION.

ELECTRIC COOKTOP READY: IF A GAS OR PROPANE COOKTOP SERVES INDIVIDUAL DWELLING UNITS, ADD THE FOLLOWING NOTES ON PLAN (CEnC SECTION150.0 (U)):
- INSTALL DEDICATED 240-VOLT, 50 AMP BRANCH CIRCUIT WIRING WITHIN 3 FT FROM THE COOKTOP AND ACCESSIBLE TO THE COOKTOP WITH NO OBSTRUCTIONS.
- RESERVE SPACE ON THE MAIN ELECTRICAL SERVICE PANEL TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR FUTURE COOKTOP INSTALLATION.

ELECTRIC CLOTHES DRYER READY: IF A CLOTHES DRYER LOCATION HAS GAS OR PROPANE PLUMBING, ADD THE FOLLOWING NOTES ON PLAN (CEnC SECTION 150.0 (V)):
- INSTALL DEDICATED 240-VOLT, 30 AMP BRANCH CIRCUIT WIRING WITHIN 3 FT FROM THE CLOTHES DRYER AND ACCESSIBLE TO THE CLOTHES DRYER WITH NO OBSTRUCTIONS.
- RESERVE SPACE ON THE MAIN ELECTRICAL SERVICE PANEL TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR FUTURE CLOTHES DRYER INSTALLATION.

GENERAL NOTES

G1 CONTRACTOR SHALL PROVIDE ALL COPPER PIPING, SHUTOFF VALVES AND SUPPLY LINES TO OWNER SELECTED BATHROOM FIXTURES.

G2 CONNECT ALL PIPES AND PLUMBING TO EXISTING SEWER SYSTEM.

G3 ALL OUTLETS ADJACENT SINKS IN KITCHEN AND BATHROOMS TO BE GFI.

G4 CONTRACTOR SHALL VERIFY EXISTING ELECTRICAL PANEL IS IN WORKING ORDER PRIOR TO CONSTRUCTION.

G5 CONTRACTOR SHALL PROVIDE UFER OR OTHER APPROVED GROUND PER CEC 250.

G6 CONTRACTOR SHALL SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

G7 PROVIDE AT LEAST ONE OUTSIDE WEATHERPROOF, GFI 120V RECEPTACLE AT FRONT & BACK OF DWELLING UNIT. CEC 210.52 (e)

G8 NEW FAUS, 2 TOTAL, IN ATTIC ABOVE 2ND FLOOR. CONTRACTOR SHALL INSTALL PER MANUFACTURERS SPECIFICATIONS. FAUS SHALL BE POSITIONED CLOSE TO NEW PULL DOWN STAIRS IN CEILING.

G9 ALL RECEPTACLE OUTLETS IN BATHROOMS, ABOVE KITCHEN COUNTERTOP, CRAWL SPACES, GARAGE, ROOFTOPS, OUTDOOR OUTLETS, WITHIN 6-FEET OF WET BAR SINK/LAUNDRY SINK TO BE PROTECTED BY GROUND FAULT CIRCUIT INTERRUPTER (GFCI) CEC 210.8

G10 FIELD INSPECTOR TO REVIEW AND APPROVE UNDERGROUND SERVICE REQUIREMENT PRIOR TO CONCRETE PLACEMENT.

G11 CARBON MONOXIDE ALARMS SHALL BE ON EACH LEVEL AND ALL SHALL BE HARDWIRED W/ BATTERY BACKUP. CARBON MONOXIDE DETECTOR SHALL BE INTERCONNECTED SUCH THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS. CARBON MONOXIDE ALARMS SHALL COMPLY W/ UL 2034.

G12 SMOKE DETECTOR SHALL BE INTERCONNECTED SUCH THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS.

LUMINARIES SPECIFICATIONS

THE 2016 ENERGY STANDARDS REQUIRE ALL PERMANENTLY INSTALLED LUMINAIRES TO BE 'HIGH EFFICACY'. AS SPECIFIED IN 150.0(k). PERMANENTLY INSTALLED LIGHTING IS DEFINED IN 100.1 AND EXAMPLES OF PERMANENTLY INSTALL LIGHTING INCLUDE:

ALL LUMINAIRES INSTALLED IN RESIDENTIAL CONSTRUCTION MUST QUALIFY AS 'HIGH EFFICACY LUMINARIES'. THIS ELIMINATES VARYING REQUIREMENTS BY ROOM AND TYPE OF CONTROLS. THIS ALSO ELIMINATES THE NEED TO CALCULATE THE WATTAGE OF LOW VERSUS HIGH EFFICACY LUMINAIRES IN THE KITCHEN.
- LIGHTING ATTACHED TO WALLS, CEILINGS OR COLUMNS.
- TRACK AND FLEXIBLE LIGHTING SYSTEMS.
- LIGHTING INSIDE PERMANENTLY INSTALLED CABINETS.
- LIGHTING ATTACHED TO THE TOP OR BOTTOM OF PERMANENTLY INSTALLED CABINETS.
- LIGHTING ATTACHED TO CEILING FANS.
- LIGHTING INTEGRAL TO EXHAUST FANS.
- LIGHTING THAT IS INTEGRAL TO GARAGE DOOR OPENERS IF IT IS DESIGNED TO BE USED AS GENERAL LIGHTING, IS SWITCHED INDEPENDENTLY FROM THE GARAGE DOOR OPENER, AND DOES NOT AUTOMATICALLY TURN OFF AFTER A PRE-DETERMINED AMOUNT OF TIME.

PERMANENT INSTALLED LUMINAIRES IN BATHROOMS, ATTACHED AND DETACHED GARAGES, LAUNDRY ROOM AND UTILITY ROOMS SHALL MANUAL-ON/OFF OCCUPANT SENSORS, ALSO KNOWN AS VACANCY SENSORS. AUTOMATICALLY TURN LIGHTS OFF IF AN OCCUPANT FORGETS TO TURN THEM OFF WHEN A ROOM IS UNOCCUPIED. ADDITIONALLY, THESE SENSORS ARE REQUIRED TO PROVIDE THE OCCUPANT WITH THE ABILITY TO MANUALLY TURN THE LIGHTS
- OFF UPON LEAVING THE ROOM,
- OFF WHILE STILL OCCUPYING THE ROOM.
- ON UPON ENTERING THE ROOM.

ALL LUMINAIRES THAT ARE INSTALLED WITH JA8-CERTIFIED LIGHT SOURCES ARE REQUIRED TO BE CONTROLLED BY EITHER A DIMMER OR VACANCY SENSOR. IN ADDITION, ALL BLANK ELECTRICAL BOXES MORE THAN FIVE FEET ABOVE THE FLOOR MUST BE CONTROLLED BY A DIMMER, VACANCY SENSOR OR FAN SPEED CONTROL.

DIMMER OR VACANCY SENSORS ARE NOT REQUIRED ON ANY LUMINAIRES LOCATED IN CLOSETS LESS THAN 70 SQUARE FEET OR IN HALLWAYS.

LUMINAIRES PROVIDING OUTDOOR LIGHTING, INCLUDING LIGHTING FOR PATIOS, ENTRANCE AND PORCHES, WHICH ARE PERMANENTLY MOUNTED, SHALL BE HIGH EFFICACY. THE LIGHTING SHALL BE CONTROLLED BY A MANUAL ON/OFF SWITCH, A MOTION DETECTOR NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT DISABLES THE PHOTO CONTROL; OR ASTRONOMICAL TIME CLOCK NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT DISABLES THE TIME CLOCK. OR AN EMCS NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT ALLOWS THE LUMINAIRES TO BE ALWAYS ON.

ALL NEW LOW-RISE RESIDENTIAL BUILDINGS AND ADDITIONS GREATER THAN 1,000 S.F. MUST HAVE A WHOLE HOUSE VENTILATION SYSTEM THAT PROVIDES A CALCULATED MINIMUM AMOUNT OF OUTDOOR AIR BY USING EITHER A CONTINUOUSLY RUNNING BATHROOM FAN OR A SUPPLY OR RETURN AIR VENTILATION THRU A CENTRAL HVAC SYSTEM. THE MINIMUM VENTILATION VOLUME MUST BE A MINIMUM OF 1 CFM FOR EACH 100 SQ. FT. FO FLOOR AREA PLUS 7.5 CFM FOR EACH OCCUPANT. THE NUMBER OF OCCUPANTS IS DETERMINED BY MULTIPLYING THE NUMBER OF BEDROOMS AND THEN ADDING ONE. (ASHRAI 62.2)

NOTE BLOCK, SHEET NOTES, SCHEDULES OR OTHER FORMS OF WRITTEN COMMUNICATION THAT SPECIFY THE REQUIREMENTS FOR VENTILATION AIRFLOW, THE ROOMS WHERE THE WHOLE-BUILDING AND LOCAL VENTILATION EXHAUST FANS ARE LOCATED, AND DUCT SIZING FOR THE WHOLE-BUILDING VENTILATION AND LOCAL VENTILATION EXHAUST SHALL BE SPECIFIED ON THE PLANS SUBMITTED TO THE CITY OF HUNTINGTON BEACH BUILDING DEPARTMENT FOR A PERMIT. HOWEVER, IN ALL CASES, TABLE 7.1 FROM THE 2016 CALIFORNIA ENERGY CODE SHALL BE ELECTRONICALLY PLACED ON THE PLANS TO ALLOW FOR DUCT CHANGES THAT MAY BE REQUIRED DURING CONSTRUCTION OF THE SYSTEM.

TITLE 24 LIGHTING

1. CONTRACTOR SHALL CONFORM WITH THE STATE ENERGY LAW AS FOLLOWS:

KITCHEN & BATHROOM SHALL HAVE GENERAL LIGHTING SWITCH TO BE THREE FIRST NEAR THE DOOR.

A. KITCHEN LIGHTING: 100% OF WATTAGE TO BE HIGH EFFICACY AND SWITCHED SEPARATELY.

B. LIGHTING IN BATHROOMS, GARAGE, LAUNDRY ROOM, UTILITY ROOM: EQUIPPED WITH VACANCY SENSOR.

C. LIGHTING IN ALL BEDROOMS, HALL, LIVING ROOM, DEN TO BE CONTROLLED BY VACANCY SENSOR OR DIMMER.

D. EXTERIOR LIGHTING MOUNTED ON THE BUILDING TO BE HIGH EFFICACY CONTROLLED BY PHOTO CONTROL/MOTION SENSOR COMBINATION.

E. ALL INSULATION SHALL BE INSTALLED PER NAIMA REQUIREMENTS AND RECOMMENDATIONS.

F. INDOOR LIGHT CONTROLS: AUTO-OFF CONTROLS FOR LIGHTING IN DRAWERS AND CABINETS.

G. INDOOR LIGHT CONTROLS: UNDERSHELF, DISPLAY CABINETS, SWITCHED OUTLETS CONTROLLED SEPARATE FROM CEILING LIGHTING.

H. INDOOR LIGHT CONTROLS: LIGHTING IN HABITABLE SPACES SHALL HAVE ACCESSIBLE WALL-MOUNTED DIMMING CONTROLS.

NOTE:
CONTRACTOR SHALL VERIFY THAT SMOKE ALARMS ARE PROVIDED AT EACH BEDROOM, EACH HALLWAY LEADING TO BEDROOMS. A CARBON MONOXIDE ALARM SHALL BE PROVIDED AT EACH FLOOR.

NOTE:
THE FOLLOWING WILL BE PROVIDED AT THE JOBSITE FOR THE ELECTRICAL INSPECTOR: SINGLE LINE DIAGRAM, PANEL SCHEDULES AND LOAD CALCULATIONS FOR ELECTRICAL SYSTEMS.

FOR REFERENCE ONLY

BUILDING ENVELOPE:
- EXTERIOR FRAMED WALLS: R-21 BATT INSULATION (2x6 FRAMING)
- CEILING/ROOF: R-30 BATT INSULATION (NO COOL ROOF REQUIRED)
- RAISED FLOOR OVER GARAGE: R-19 BATT INSULATION
- NEW OPERABLE WINDOWS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.23 SHGC
- NEW FIXED WINDOWS: DUAL PANE/NON-METAL FRAMING/0.30 U-FACTOR, 0.29 SHGC
- NEW FRENCH DOORS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.23 SHGC
- NEW PATIO DOORS: DUAL PANE/NON-METAL FRAMING/0.32 U-FACTOR, 0.25 SHGC

HVAC:
- HVAC (HEAT PUMP):
- 9.50 HSPF/ 16.00 SEER/11.00 EER
- DUCTS: R-6

WATER HEATER:
- NEW HEAT PUMP WATER HEATER W/ AN ENERGY FACTOR OF 2.80%

HERS TESTS/INSPECTIONS REQUIRED FOR THIS PROJECT:
- DUCT TESTING (MANDATORY)
- ADEQUATE AIRFLOW (MANDATORY)
- FAN WATT DRAW (MANDATORY)
- IAQ EXHAUST FAN (MANDATORY)

SOLAR PHOTOVOLTAIC:
- 3.2kw SOLAR PANELS W/ NO BACKUP BATTERY REQUIRED

NOTE:
CONTRACTOR SHALL VERIFY LOCATION OF ALL RECESSED CEILING LED LIGHTS & ALL CEILING MOUNTED LIGHTS WITH OWNER PRIOR TO INSTALLATION. NO EXCEPTIONS.

ELECTRICAL PLAN KEYNOTES

1 NEW RECESSED LED LIGHTING. INSTALLED BY CONTRACTOR. SEE ELECTRICAL LEGEND. RECESSED LIGHTS @ TUBS/SHOWERS/EXTERIOR SHALL BE DAMP RATED.

2 CONTRACTOR SHALL OBTAIN PERMITS FOR THIS WORK.

3 ELECTRICAL OUTLET. GFI WHERE REQUIRED. SEE ELECTRICAL LEGEND.

4 LIGHT SWITCH. SEE ELECTRICAL LEGEND.

5 ALL RECESSED LIGHT FIXTURES ARE TO BE PROVIDED BY CONTRACTOR. RECESSED LIGHT FIXTURE IN SHOWER SHALL BE WET RATED.

6 NEW WALL MOUNTED LED LIGHT FIXTURE. LIGHTS @ TUBS/SHOWERS/EXTERIOR SHALL BE DAMP RATED. OWNER SELECTED, CONTRACTOR INSTALLED. SEE ELECTRICAL LEGEND.

7 CONTRACTOR SHALL INSTALL NEW BATHROOM EXHAUST FANS. FANS MUST BE ENERGY STAR COMPLIANT WITH HUMIDISTAT CONTROLS - HUMIDISTAT CONTROLS SHALL BE CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF 50-80% (4.506.1 CGBSC) SEE LEGEND THIS SHEET.

8 NEW SMOKE DETECTOR.

9 NEW CARBON MONOXIDE ALARM.

10 NEW CEILING MOUNTED LED LIGHT FIXTURE. OWNER FURNISHED, CONTRACTOR INSTALLED. SEE ELECTRICAL LEGEND.

11 ALL ELECTRICAL OUTLETS NEAR SINKS SHALL BE GFI.

12 NEW CABLE TV CONNECTION + ELECTRICAL OUTLET. VERIFY EXACT LOCATION & HEIGHT W/ OWNER PRIOR TO INSTALLATION.

13 NEW CEILING MOUNTED FAN/LIGHT. OWNER PROVIDED, CONTRACTOR INSTALLED.

14 EXTERIOR ELECTRICAL OUTLET.

15 EXTERIOR ELECTRICAL OUTLET IN EAVE.

OUTDOOR LIGHTING

01 CONCTRACTOR SHALL VERIFY ALL OUTDOOR LIGHTING IS HIGH EFFICACY OR CONTROLLED BY ONE OF THE FOLLOWING:

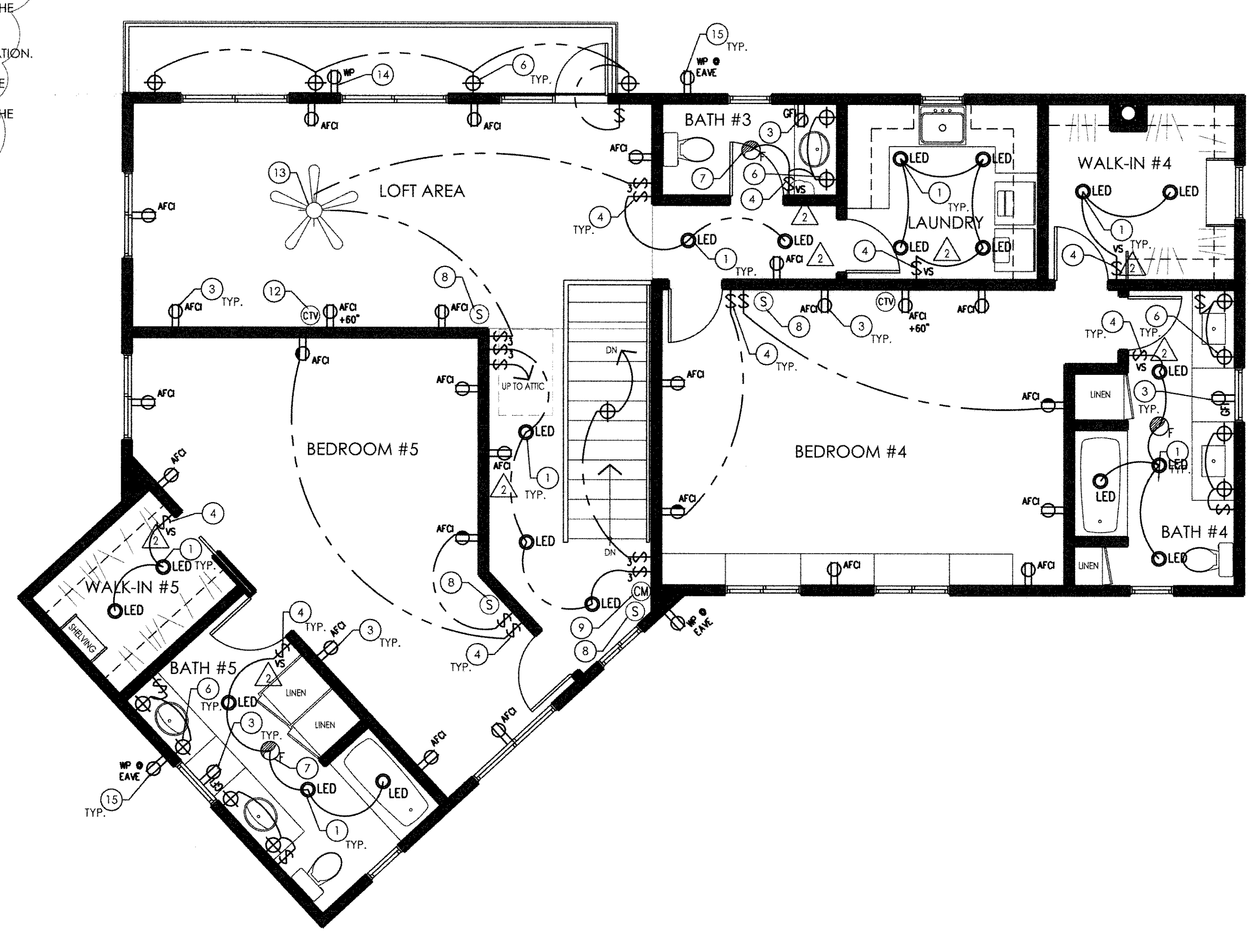
1. CONTROLLED BY A MANUAL ON/OFF SWITCH, AND

2. A MOTION SENSOR THAT IS NOT EQUIPPED WITH AN OVERRIDE OR BYPASS SWITCH THAT DISABLES THE MOTION SENSOR WHICH AUTOMATICALLY TURNS OFF THE LIGHTS WHEN NO MOTION IS DETECTED, AND

3. ONE OF THE FOLLOWING THREE METHODS TO AUTOMATICALLY TURN THE LIGHTS OFF DURING THE DAYTIME:
   A. PHOTOCONTROL NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT DISABLES THE PHOTOCONTROL; OR
   B. ASTRONOMICAL TIME CLOCK NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT DISABLES THE ASTRONOMICAL TIME CLOCK; OR
   C. ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) NOT HAVING AN OVERRIDE OR BYPASS SWITCH THAT ALLOWS THE LUMINARIES TO BE ALWAYS ON.

02 CONTRACTOR SHALL PROVIDE MOTION SENSOR THAT HAS THE FOLLOWING FEATURES: AUTO-ON AND AUTO-OFF, PHOTOCELL CONTROL. REGULAR SWITCH FOR MANUAL OPERATION AND THE SENSOR MUST COMPLY WITH 30 MINUTE SHUTOFF REQUIREMENT.

03 CONTRACTOR SHALL EXEMPT THESE LIGHTS FROM THE OUTDOOR LIGHTING REQUIREMENTS: ANY FIXTURE NOT ATTACHED TO THE EXTERIOR OF THE BUILDING. ALL DECORATIVE LIGHTING, AND ALL POOL/SPA LIGHTS.



1 NEW SECOND FLOOR ELECTRICAL PLAN
1/4"=1'-0"

N

WALL LEGEND

(E) WALL TO REMAIN

(N) WALL, 2x4 WOOD STUDS @ 16" O.C.

ELECTRICAL LEGEND

- NEW CEILING FAN/LIGHT COMBO PROVIDE SEPARATE SWITCHING W/DIMMER
- WALL MOUNT LIGHT FIXTURE
- CEILING RECESSED LIGHT FIXTURE
- LED RECESSED LIGHT FIXTURE
- PENDANT LIGHT FIXTURE 35WATT MAX. HALLOGEN LAMP
- WALL ELECTRICAL SWITCH
- D WALL ELECTRICAL DIMMER SWITCH
- N WALL ELECTRICAL OUTLET - NEW
- GFI WALL ELECTRICAL OUTLET G.F.C.I. KITCHEN, BATHROOM, GARAGE & OUTDOOR OUTLETS
- F EXHAUST FAN (50 CFM) W/ HUMIDITY SENSOR
- S SMOKE DETECTOR SEE BUILDING DEPARTMENT NOTES
- WALL WASHER LIGHT FIXTURE
- N SURFACE MOUNTED LIGHT FIXTURE - NEW
- CTV CABLE TV OUTLET
- NEW REGISTER LOCATION
- HB NEW HOSE BIB W/ APPROVED ANTI-SIPHON DEVICE. CPC 603.3
- CM CARBON MONOXIDE ALARM
- SP SPEAKER
- RECESSED FLOOR ELECTRICAL OUTLET

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PROJECT TITLE

NEW 2 STORY RESIDENCE FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

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PROJECT NO:	20-51
SCALE:	SEE SHEET
DATE:	01-06-2021
DRAWN BY:	MDG
CHECKED BY:	SHS

SHEET TITLE

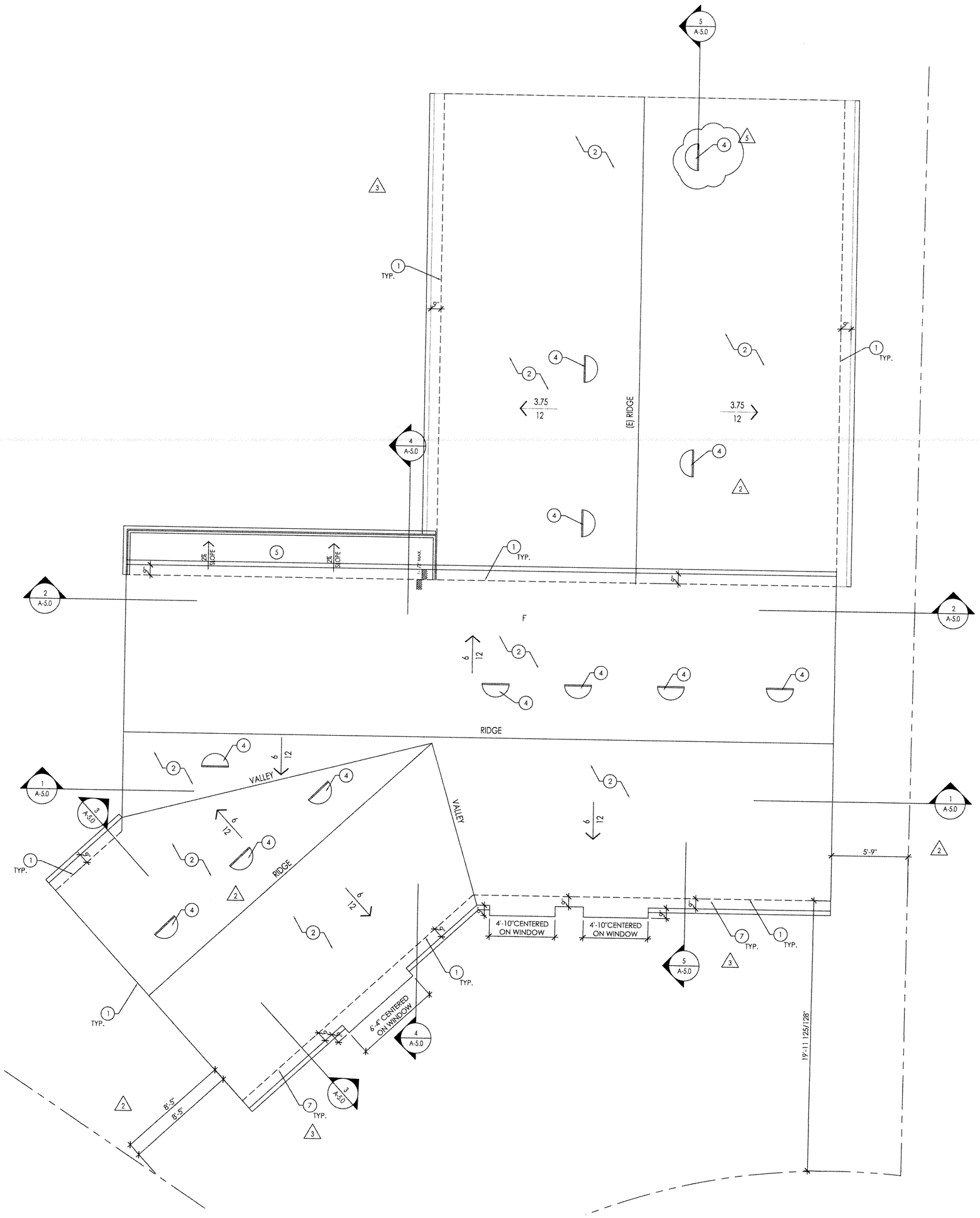
NEW SECOND FLOOR ELECTRICAL /MECH/PLUMBING FLOOR PLANS

SHEET NUMBER

A-3.1

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ROOF PLAN KEYNOTES

1. LINE OF BUILDING BELOW.
2. NEW ASPHALT ROOFING SHINGLES O/ 30# UNDERLAYMENT O/ NEW ROOF FRAMING. ROOF BY GAF TIMBERLINE HDZ SHINGLES, ESR #1475. COLOR: TBD. CLASS B FIRE RETARDANT ROOF. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. ~~EXISTING ROOF VENT TO REMAIN. CONTRACTOR SHALL PROTECT DURING CONSTRUCTION. PAINT TO MATCH ROOF.~~
4. NEW DORMER ROOF VENT. PAINTED TO MATCH ROOF.
5. DECK BELOW.
6. ~~NEW ASPHALT ROOFING SHINGLES O/ 30# UNDERLAYMENT O/ EXISTING ROOF FRAMING. EXISTING ROOF OVERHANG SHALL BE CUT BACK TO DIMENSION ON ROOF PLAN. ROOF BY GAF TIMBERLINE HDZ SHINGLES, ESR #1475. COLOR: TBD. CLASS B FIRE RETARDANT ROOF.~~
7. NEW UNDER EAVE VENTS FOR CROSS VENTILATION @ FRONT OF HOUSE ONLY. VENTS SHALL BE CONTINUOUS & BE PAINTED TO MATCH ADJACENT EAVE.

NOTE:
ALL EAVES LOCATED BETWEEN 2' AND 5' FROM THE PROPERTY LINE IN NON-SPRINKLERED STRUCTURES SHALL BE OF AT LEAST 1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION OR HEAVY TIMBER. R302.1(1) AND TABLE R302.1(2)

ATTIC VENTILATION VENTS SHALL MEET THE FOLLOWING REQUIREMENTS:

- OPENINGS SHALL BE PLACED SO AS TO PROVIDE CROSS VENTILATION OF THE ATTIC SPACE.
- THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE ATTIC AREA.
- OPENINGS SHALL HAVE CORROSIVE-RESISTANT WIRE MESH OR OTHER APPROVED MATERIAL WITH 1/8 INCH MINIMUM AND 1/4 INCH MAXIMUM OPENING.
- WHERE THE RATIO OF 1/300 IS USED TO VENT THE ATTICS, NOT LESS THAN 40% BUT NOT MORE THAN 50% OF THE VENTS SHALL BE LOCATED NOT MORE THAN 3 FT BELOW THE RIDGE.
- 50% OF THE REQUIRED VENTILATION AREA MUST BE LOCATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE PROVIDED BY EAVE OR CORNICE VENTS.

ROOF VENTILATION NOTE:
EACH NEW 12"X24" HALF-ROUND DORMER VENT CAN VENTILATE 226 SQUARE FEET. NEW ROOF VENTS: 7x226=1,582 SQUARE FOOT.

TOTAL SQUARE FOOTAGE OF THE NEW FIRST FLOOR VENTILATED SPACE (ATTIC SPACE) IS 579 SQUARE FEET. USING THE FORMULA 1/150 OF ATTIC AREA = NUMBER OF VENTS NEEDED WE COME UP WITH 1/150 x 579 = 4 VENTS

TOTAL SQUARE FOOTAGE OF THE NEW SECOND FLOOR VENTILATED SPACE (ATTIC SPACE) IS 1,207 SQUARE FEET. USING THE FORMULA 1/150 OF ATTIC AREA = NUMBER OF VENTS NEEDED WE COME UP WITH 1/150 x 1207 = 8 VENTS

NOTE:
CONTRACTOR SHALL OBTAIN FIRE SPRINKLER PERMIT PRIOR TO CALLING FOR ROOF SHEATHING INSPECTION.

WALL LEGEND

- WALL BELOW
- 4 / A-3.0 — SECTION SYMBOL

1 EXISTING/NEW ROOF PLAN
1/4"=1'-0"

N

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CONSULTANT

PROJECT TITLE

NEW 2 STORY RESIDENCE FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

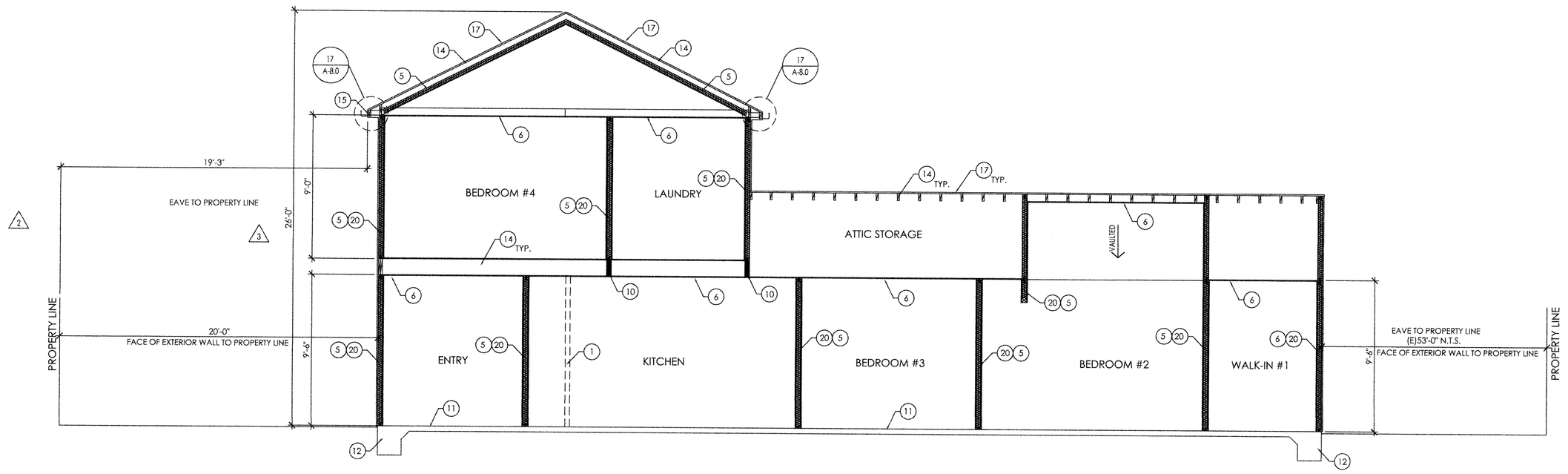
REVISIONS	
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4 PW CORRECTIONS	02-02-2024
3 BLDG. DEPT. CORRECTIONS	02-02-2024
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SHEET TITLE

EXISTING/NEW ROOF PLAN

SHEET NUMBER

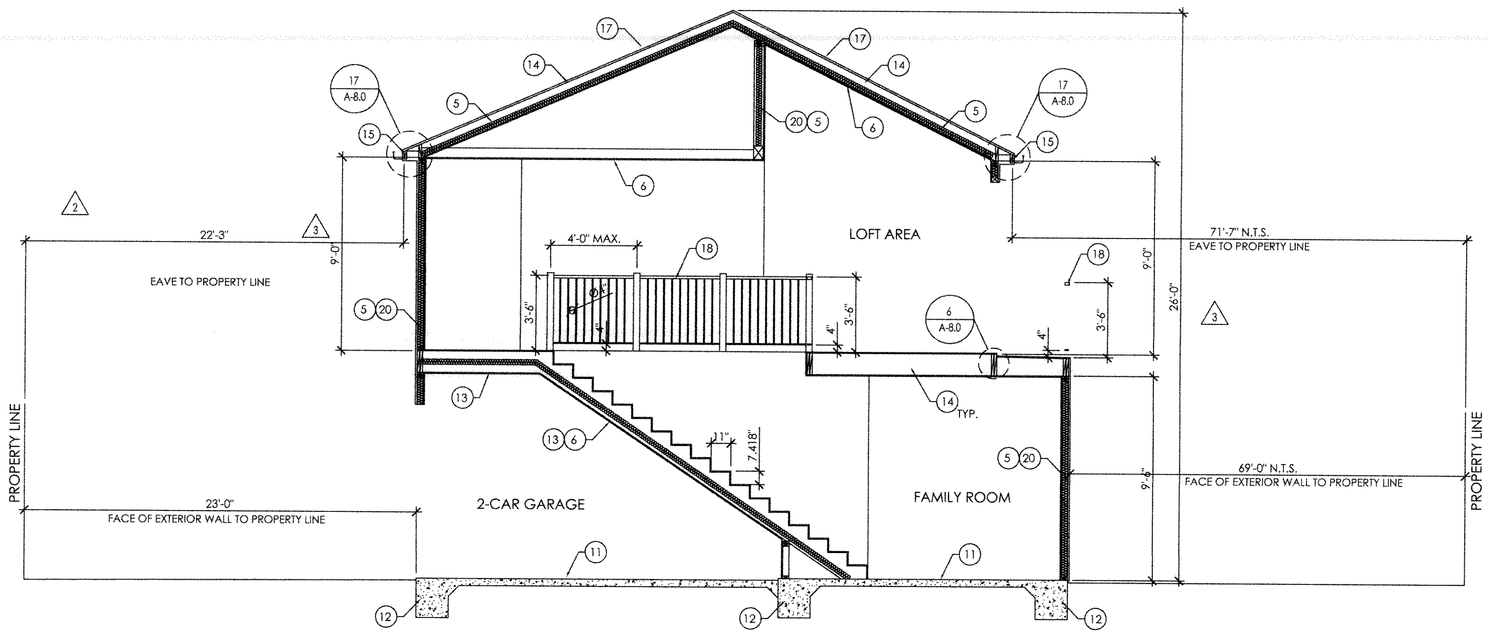
A-4.0



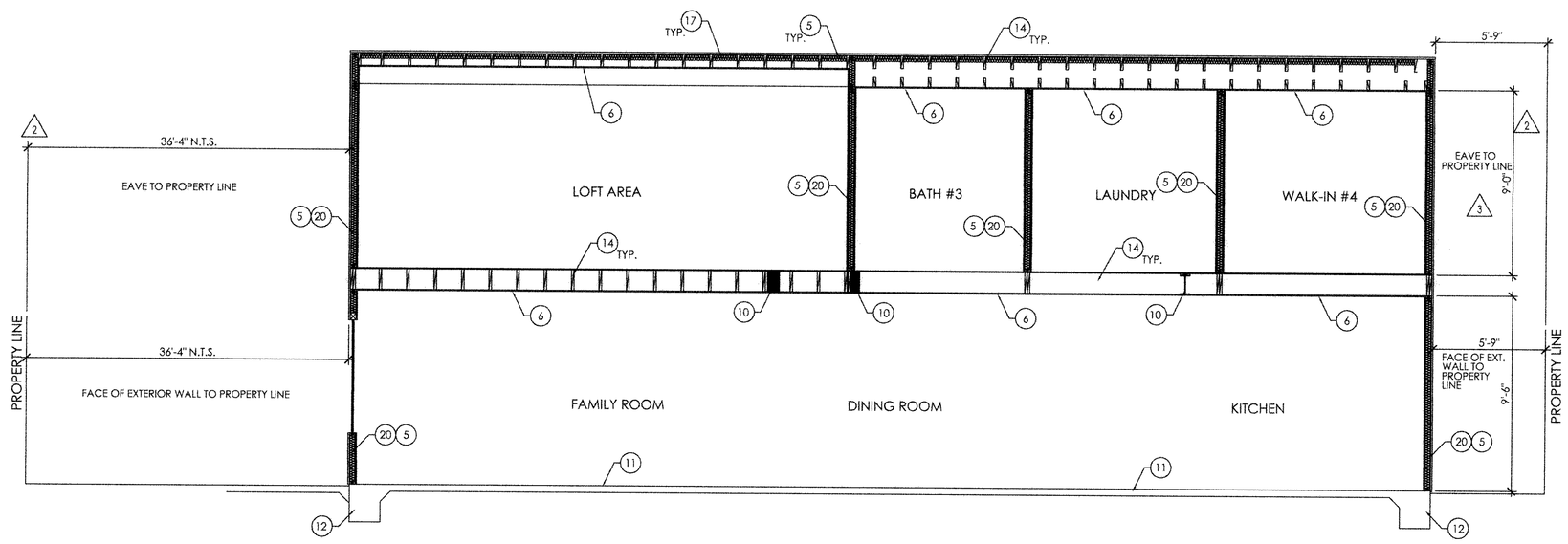
5 SECTION E
1/4"=1'-0"

SECTION KEYNOTES

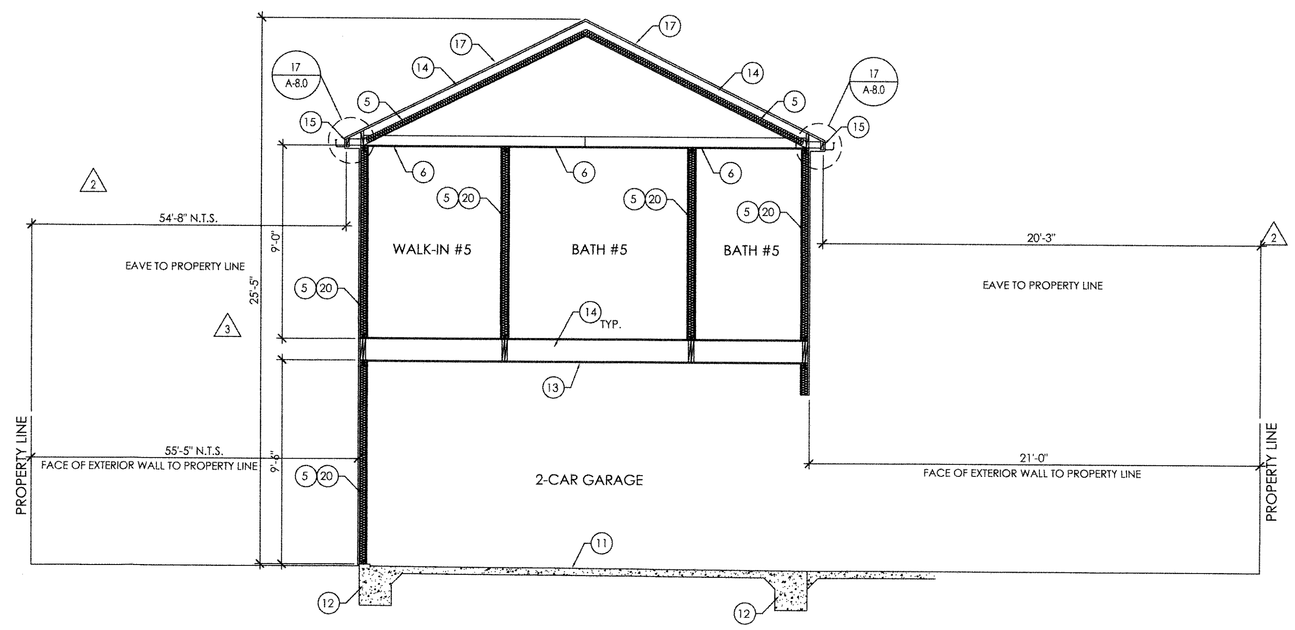
1. EXISTING WALL TO BE REMOVED.
2. ~~CONTRACTOR SHALL CONSTRUCT NEW 2x4 WOOD STUD WALL @ 16" O.C. W/ 5/8" TYPE 'X' GYP. BD. W/ R-15 (FRICTION FIT). PAINT COLOR TO BE SELECTED BY OWNER. APPLIED BY CONTRACTOR.~~ 3
3. ~~EXISTING FOUNDATION.~~
4. ~~EXISTING CONCRETE FOOTINGS.~~
5. CONTRACTOR SHALL INSTALL NEW INSULATION PER TITLE 24 REPORT (TYP.):
   - R-21 @ WALLS
   - R-38 @ CEILING/ROOF
   - R-19 @ RAISED FLOOR OVER GARAGE
6. NEW 5/8" TYPE 'X' GYP. BD. CEILING.
7. ~~EXISTING WALL TO REMAIN.~~ 3
8. ~~EXISTING FRAMING TO REMAIN.~~
9. ~~EXISTING GYP. BD. TO REMAIN.~~
10. NEW STRUCTURAL MEMBER. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
11. NEW CONCRETE SLAB. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
12. NEW CONCRETE FOOTING. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
13. 1 HR. CONSTRUCTION BETWEEN GARAGE & DWELLING.
14. NEW FRAMING. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
15. NEW 1x FASCIA + GUTTER. NEW GUTTER SHALL BE OWNER SELECTED, CONTRACTOR INSTALLED.
16. ~~NEW ROOFING MATERIAL O/ EXISTING FRAMING. SEE ROOF PLAN FOR ADDITIONAL INFORMATION.~~ 3
17. NEW ROOFING MATERIAL O/ NEW FRAMING. SEE STRUCTURAL DRAWINGS & ROOF PLAN FOR ADDITIONAL INFORMATION.
18. NEW 42" HIGH GUARDRAIL. OWNER SELECTED, CONTRACTOR INSTALLED.
19. ~~NEW 1xFASCIA.~~ 3
20. CONTRACTOR SHALL CONSTRUCT NEW 2x6 WOOD STUD WALL @ 16" O.C. W/ 5/8" GYP. BD. W/ R-21 (FRICTION FIT). PAINT COLOR TO BE SELECTED BY OWNER. APPLIED BY CONTRACTOR.



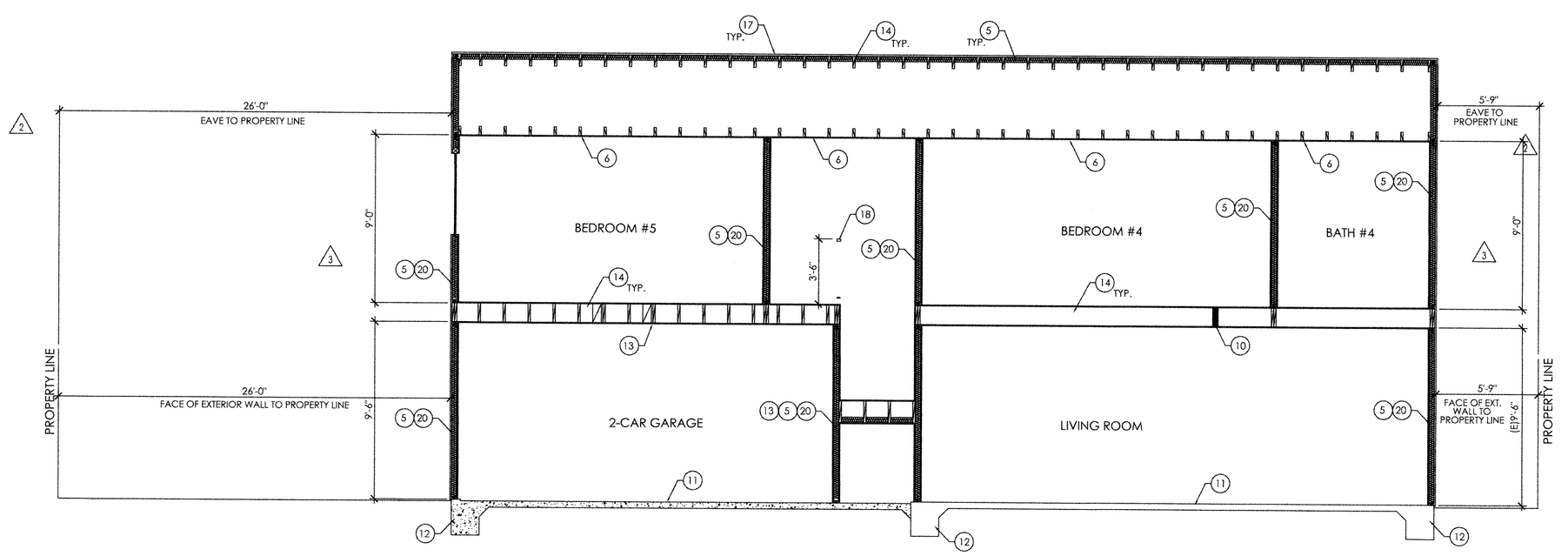
4 SECTION D
1/4"=1'-0"



2 SECTION C
1/4"=1'-0"



3 SECTION B
1/4"=1'-0"



1 SECTION A
1/4"=1'-0"

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CONSULTANT

PROJECT TITLE

NEW 2 STORY RESIDENCE FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS

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	DRAWN BY:	MDG
	CHECKED BY:	SHS

SHEET TITLE

SECTIONS

SHEET NUMBER

A-5.0

ELEVATION KEYNOTES

3 1 ~~EXISTING EXTERIOR LATH AND PLASTER TO RECEIVE NEW SMOOTH (SANTA BARBARA) FINISH, COLOR TBD.~~

2 NEW EXTERIOR LIGHT FIXTURE. OWNER SELECTED, CONTRACTOR INSTALLED.

3 NEW DOOR. SEE DOOR SCHEDULE SHEET A-9.0.

4 NEW 3-COAT EXTERIOR LATH AND PLASTER (7/8"THICK) TO MATCH EXISTING OVER WOOD FRAMING. TWO LAYERS OF GRADE "D" PAPER REQUIRED UNDER STUCCO APPLIED OVER WOOD SHEATHING (SHEAR WALLS). SEE DETAIL #1/SHEET A-8.0 FOR ADDITIONAL INFORMATION. FINISH SHALL BE SMOOTH (SANTA BARBARA) FINISH. COLOR TBD.

5 NEW ROOF SHINGLES O/ 2 LAYERS #30 FELT. SEE ROOF PLAN SHEET A-4.0 FOR ADDITIONAL INFORMATION.

6 NEW 1x FASCIA, PAINTED + GUTTER. GUTTER SHALL BE OWNER SELECTED, CONTRACTOR INSTALLED.

7 RELOCATAED UTILITIES.

8 NEW 1x FASICA, PAINTED.

9 NEW DECORATIVE METAL ROOF SUPPORTS. OWNER SELECTED, CONTRACTOR INSTALLED.

10 NEW ALUMINUM DOWNSPOUT, PAINTED. DOWNSPOUTS SHALL DRAIN AWAY FROM HOUSE.

11 NEW PLASTER HEADER ABOVE WINDOW OR DOOR. SEE DETAIL #18/SHEET A-8.0 FOR ADDITIONAL INFORMATION.

12 NEW PLASTER SILL BELOW WINDOW. SEE DETAIL #19/SHEET A-8.0 FOR ADDITIONAL INFORMATION.

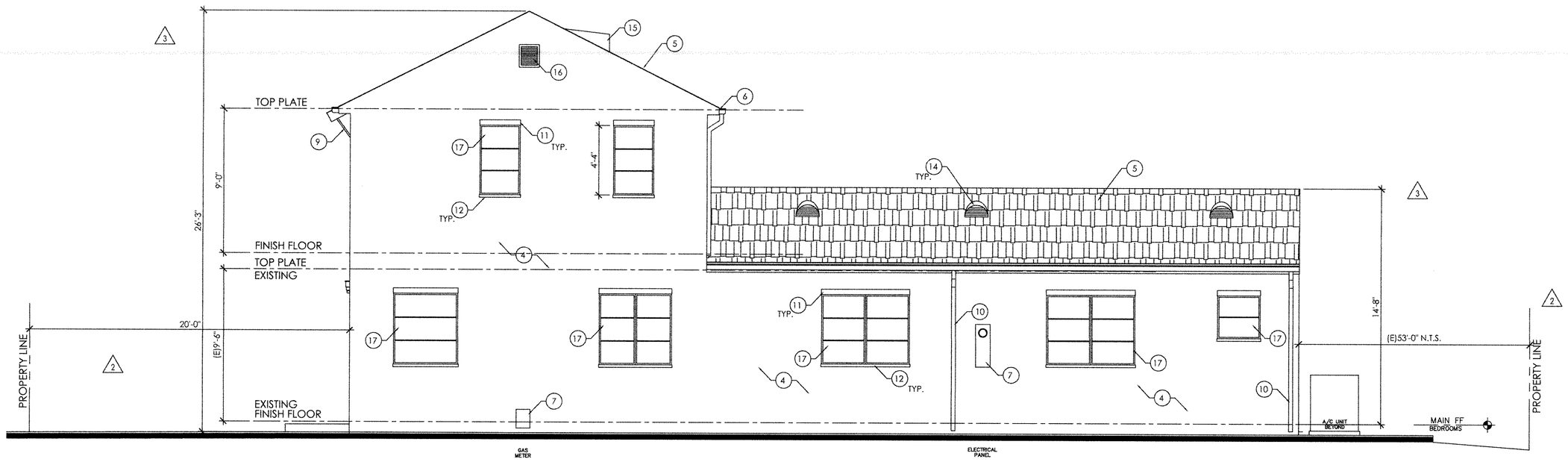
13 NEW PLASTER OR STONE DOOR SURROUND. SEE DETAIL #23/SHEET A-8.0 FOR ADDITIONAL INFORMATION.

3 14 ~~EXISTING ATTIC VENT TO REMAIN.~~

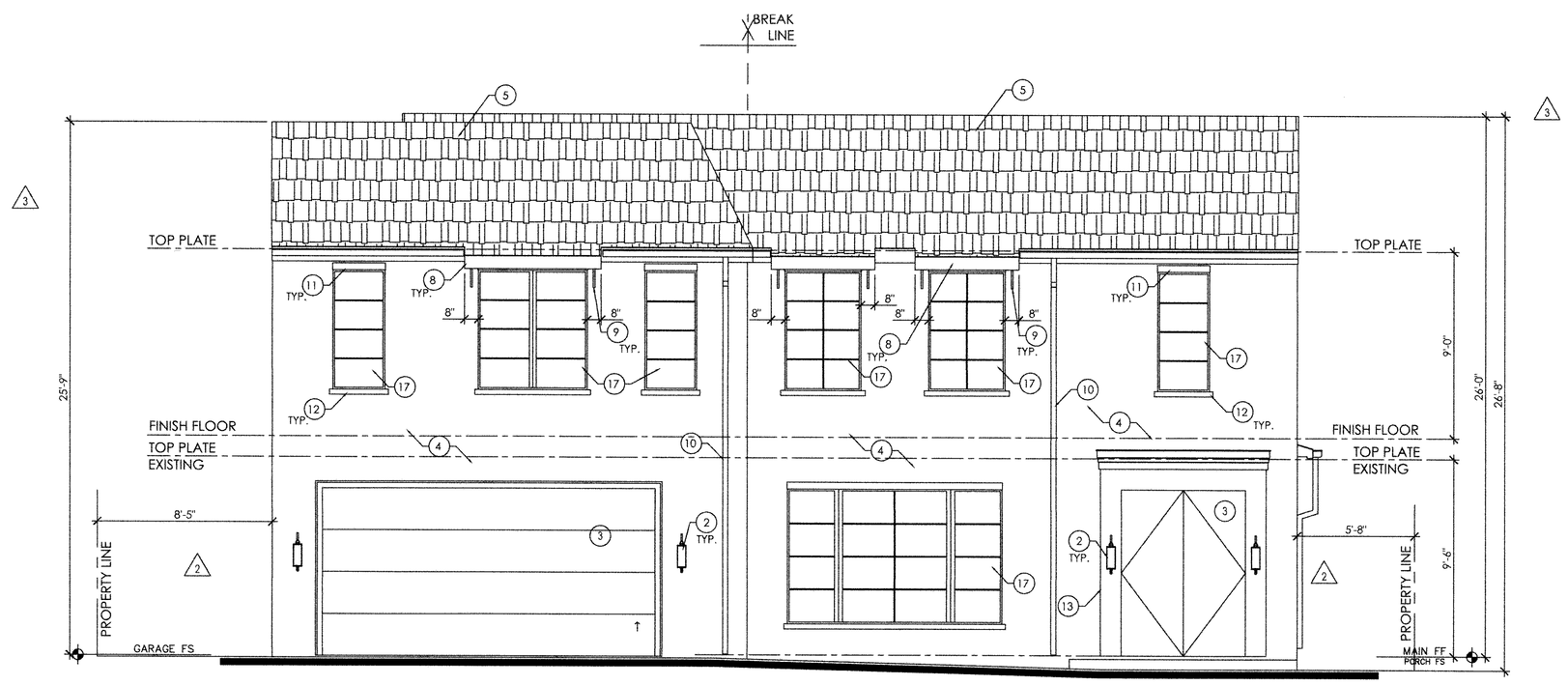
15 NEW ATTIC VENT. SEE ROOF PLAN FOR ADDITIONAL INFORMATION.

16 NEW 12"x14" ATTIC VENT. PAINT TO MATCH ADJACENT FINISH. SEE ROOF PLAN FOR ADDITIONAL INFORMATION.

17 NEW WINDOW. SEE WINDOW SCHEDULE FOR ADDITIONAL INFORMATION.



2 NEW RIGHT SIDE ELEVATION
1/4"=1'-0"



1 NEW FRONT ELEVATION
1/4"=1'-0"

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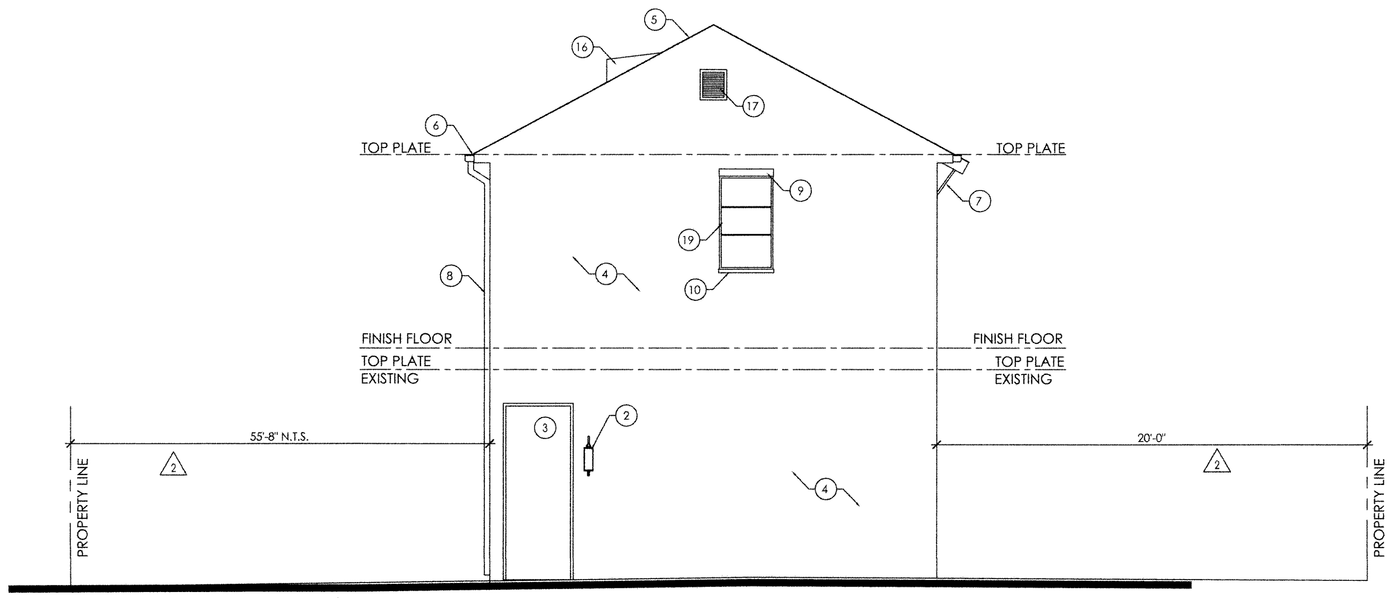
EXTERIOR ELEVATIONS

SHEET NUMBER

A-6.0

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3 NEW FAR LEFT SIDE ELEVATION
1/4"=1'-0"

ELEVATION KEYNOTES

3 1 ~~EXISTING EXTERIOR LATH AND PLASTER TO RECEIVE NEW SMOOTH (SANTA BARBARA) FINISH, COLOR TBD.~~

2 NEW EXTERIOR LIGHT FIXTURE. OWNER SELECTED, CONTRACTOR INSTALLED.

3 NEW DOOR. SEE DOOR SCHEDULE SHEET A-9.0.

4 NEW 3-COAT EXTERIOR LATH AND PLASTER (7/8"THICK) TO MATCH EXISTING OVER WOOD FRAMING. TWO LAYERS OF GRADE "D" PAPER REQUIRED UNDER STUCCO APPLIED OVER WOOD SHEATHING (SHEAR WALLS). SEE DETAIL #1/SHEET A-8.0 FOR ADDITIONAL INFORMATION. FINISH SHALL BE SMOOTH (SANTA BARBARA) FINISH, COLOR TBD.

5 NEW ROOF SHINGLES O/ 2 LAYERS #30 FELT. SEE ROOF PLAN SHEET A-4.0 FOR ADDITIONAL INFORMATION.

6 NEW 1x FASCIA, PAINTED + GUTTER. GUTTER SHALL BE OWNER SELECTED, CONTRACTOR INSTALLED.

7 NEW DECORATIVE METAL ROOF SUPPORTS. OWNER SELECTED, CONTRACTOR INSTALLED.

8 NEW ALUMINUM DOWNSPOUT, PAINTED. DOWNSPOUTS SHALL DRAIN AWAY FROM HOUSE.

9 NEW PLASTER HEADER ABOVE WINDOW OR DOOR. SEE DETAIL #18/SHEET A-8.0 FOR ADDITIONAL INFORMATION.

10 NEW PLASTER SILL BELOW WINDOW. SEE DETAIL #19/SHEET A-8.0 FOR ADDITIONAL INFORMATION.

11 NEW METAL 42" HIGH GUARDRAIL. OWNER SELECTED, CONTRACTOR INSTALLED.

3 12 ~~EXISTING DOOR TO REMAIN. CONTRACTOR SHALL PREPARE DOOR TO RECEIVE NEW PAINT COLOR TO MATCH NEW WINDOW/DOOR COLOR. OWNER SELECTED.~~

13 ~~EXISTING WINDOW TO REMAIN. CONTRACTOR SHALL PREPARE WINDOW TO RECEIVE NEW PAINT COLOR TO MATCH NEW WINDOW/DOOR COLOR. OWNER SELECTED.~~

14 ~~NEW 1x FASCIA, PAINTED.~~

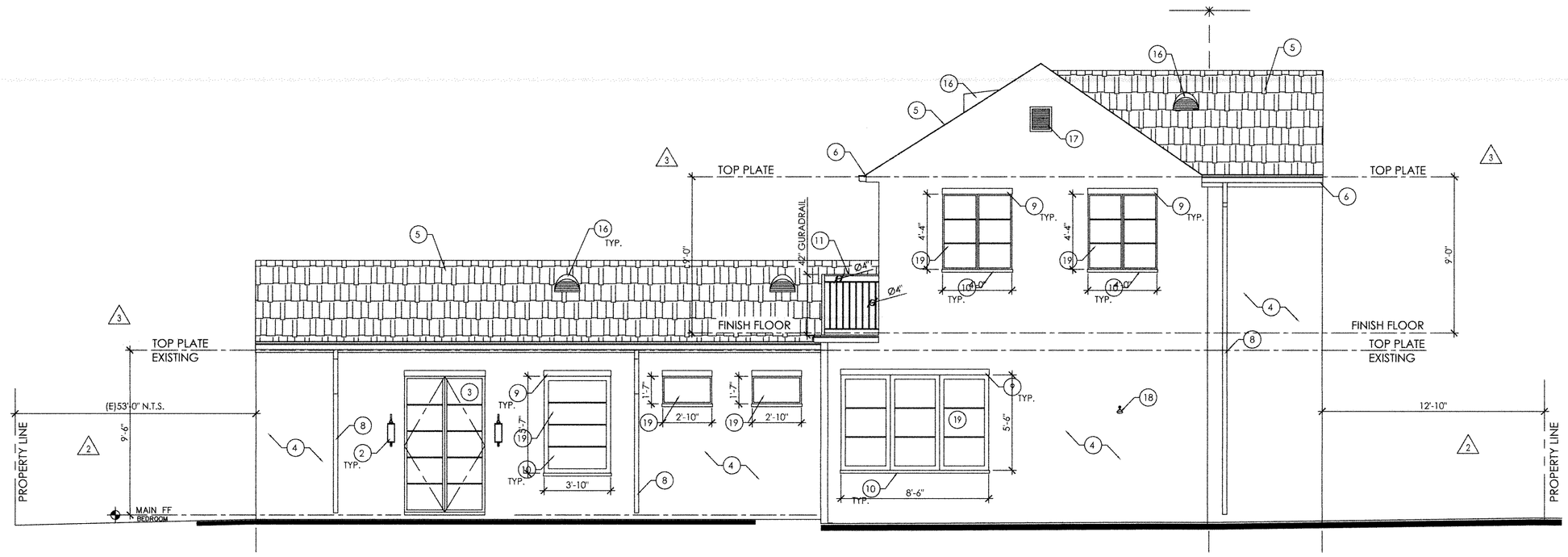
15 ~~EXISTING ATTIC VENT TO REMAIN.~~

16 NEW ATTIC VENT. SEE ROOF PLAN FOR ADDITIONAL INFORMATION.

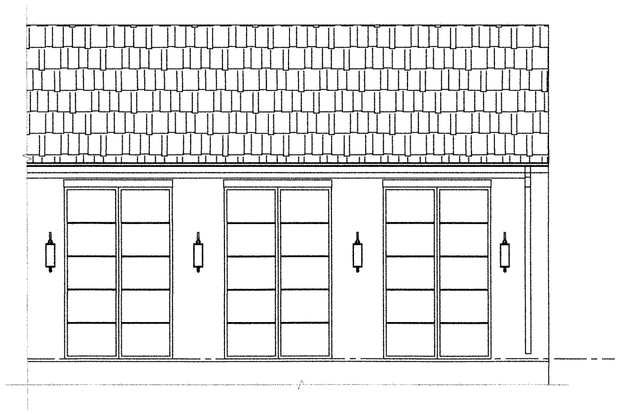
17 NEW 12"x14" ATTIC VENT. PAINT TO MATCH ADJACENT FINISH. SEE ROOF PLAN FOR ADDITIONAL INFORMATION.

18 NEW OUTDOOR SHOWER. SEE SHEET A-2.0 FOR ADDITIONAL INFORMATION.

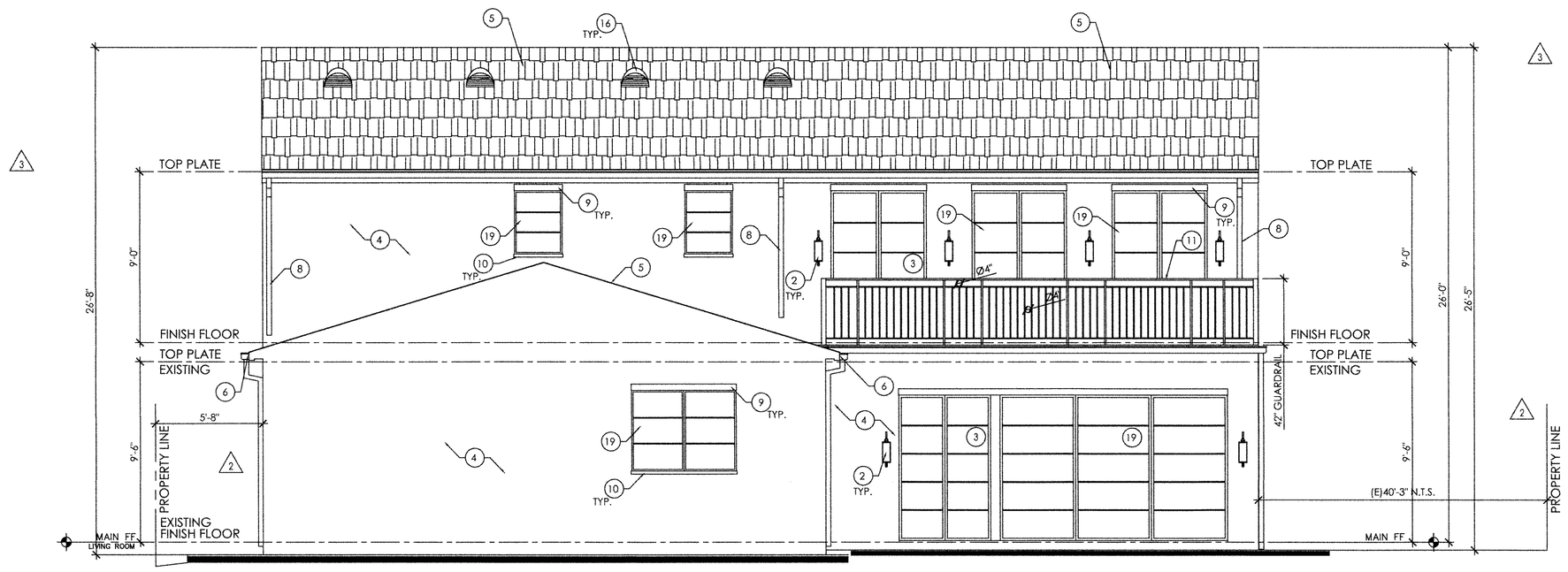
19 NEW WINDOW. SEE WINDOW SCHEDULE FOR ADDITIONAL INFORMATION.



2 NEW LEFT SIDE ELEVATION
1/4"=1'-0"



4 PARTIAL REAR ELEVATION @ LOFT DECK
1/4"=1'-0"



1 NEW REAR ELEVATION
1/4"=1'-0"

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REVISIONS

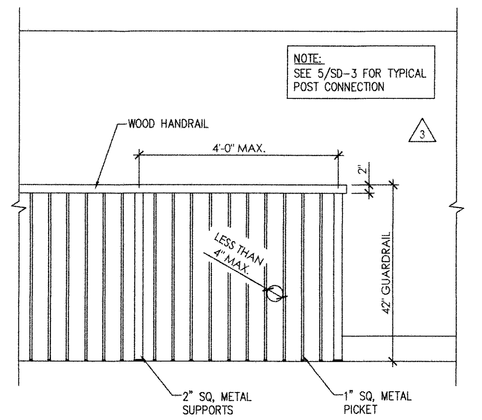
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EXTERIOR ELEVATIONS

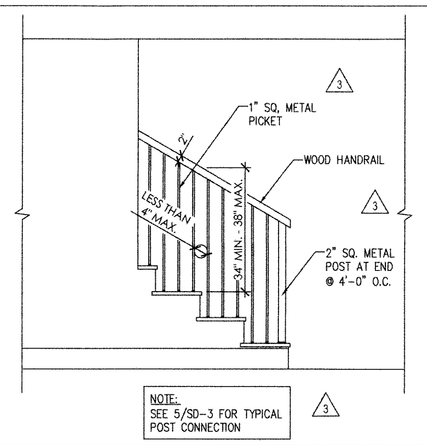
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A-6.1



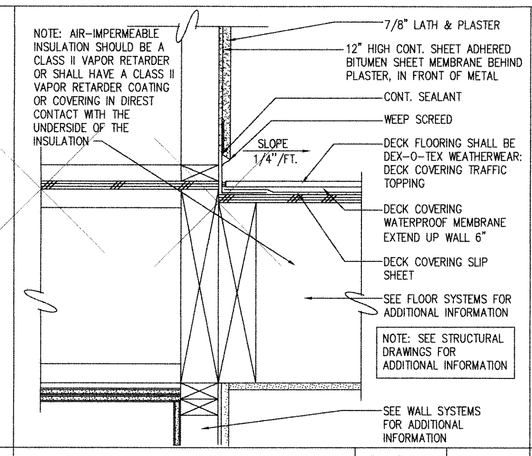
RAILING @ 2ND FLOOR

– | N.T.S. | 30



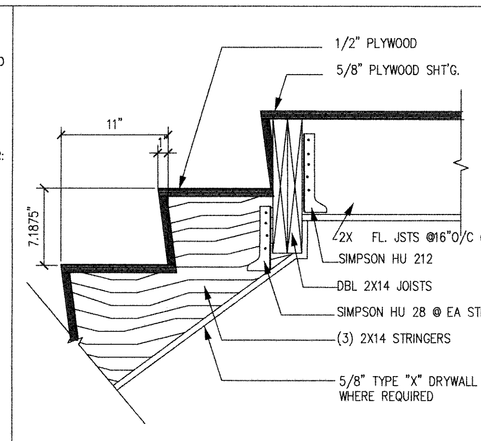
RAILING @ 1ST FLOOR

– | N.T.S. | 25



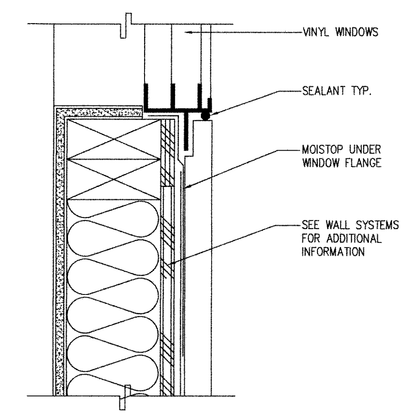
WATERPROOFING @ DECK

R8-B-02 | 1-1/2"=1'-0" | 20



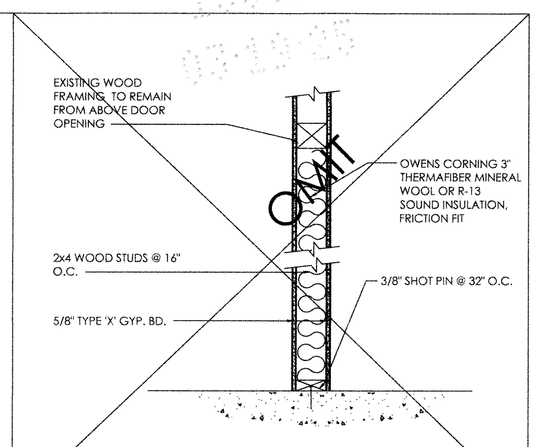
STAIR TOP

R13-F-02 | 1"=1'-0" | 15



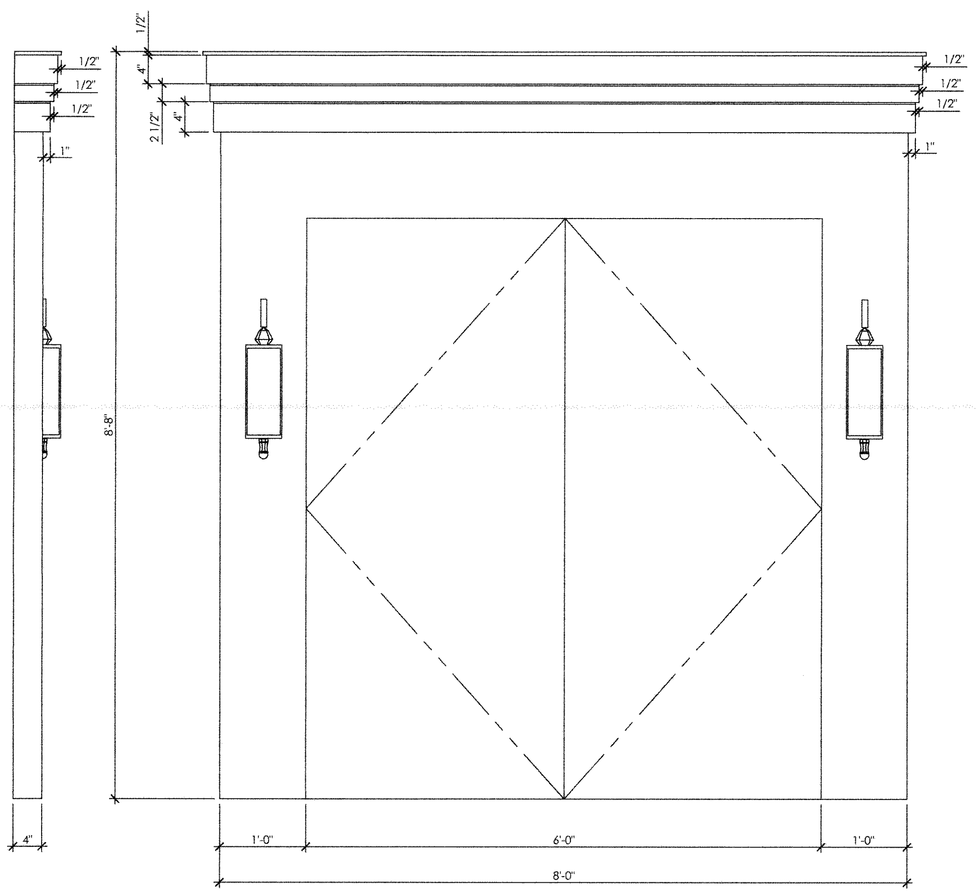
WINDOW SILL (W/ TRIM)

R7-B-07 | 3"=1'-0" | 10



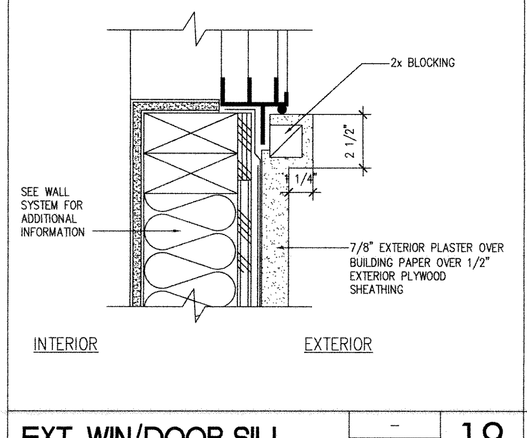
INTERIOR WALL INFILL

R5-C-02 | N.T.S. | 5



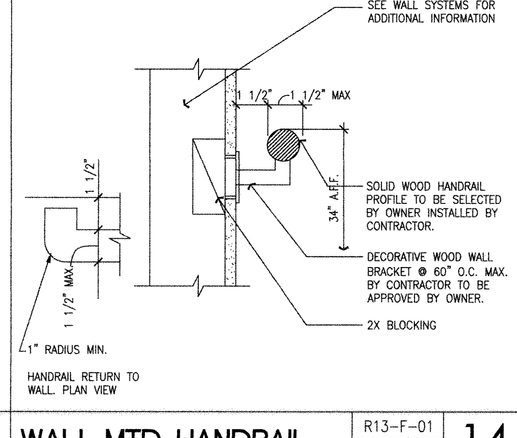
FRONT DOOR STONE SURROUND DIMENSIONS

– | 1"=1'-0" | 23



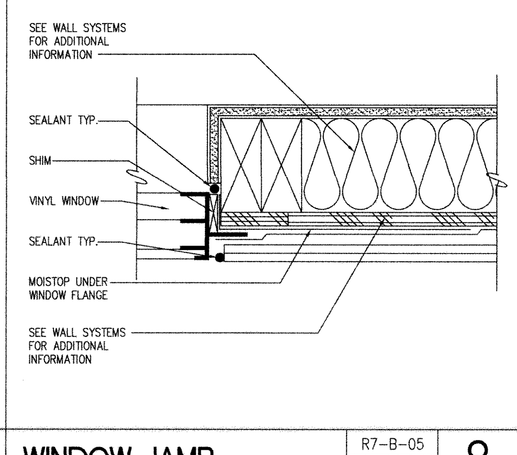
EXT. WIN/DOOR SILL

– | 3"=1'-0" | 19



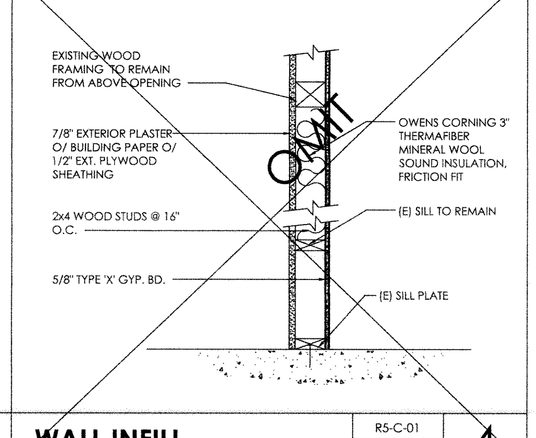
WALL MTD. HANDRAIL

R13-F-01 | 3"=1'-0" | 14



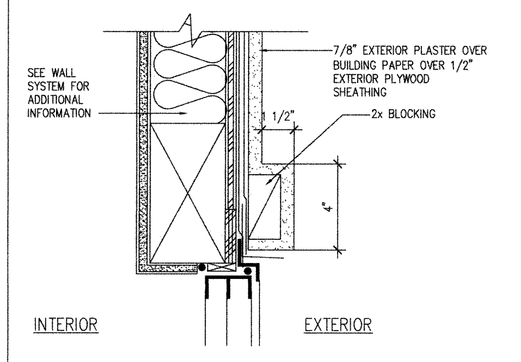
WINDOW JAMB

R7-B-05 | 3"=1'-0" | 9



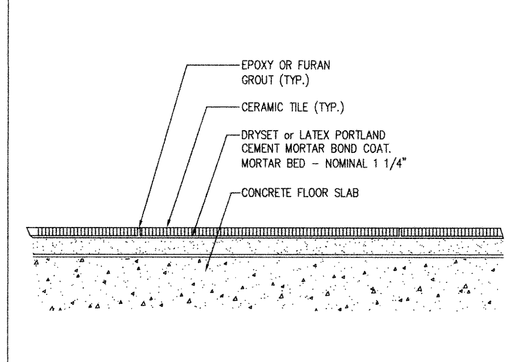
WALL INFILL

R5-C-01 | N.T.S. | 4



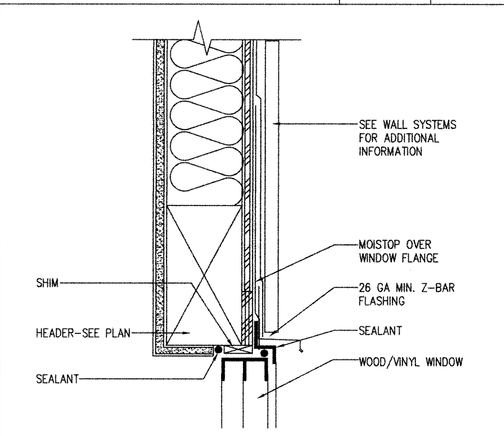
EXT. WIN/DOOR HEADER

– | 3"=1'-0" | 18



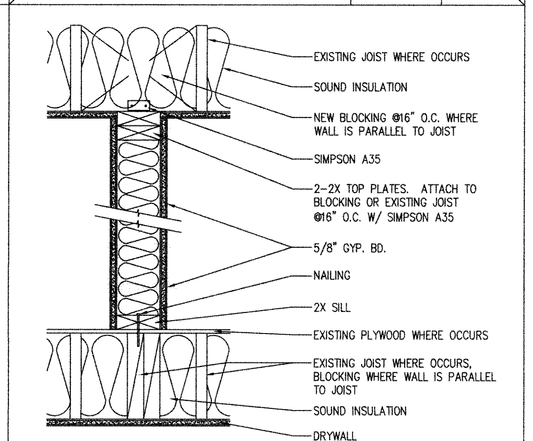
CERAMIC TILE FLOOR

R10-C-02 | 1"=1'-0" | 13



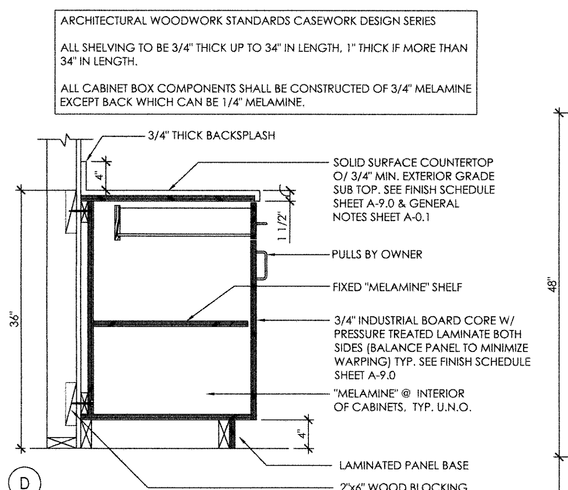
WINDOW HEADER

R7-B-03 | 3"=1'-0" | 8



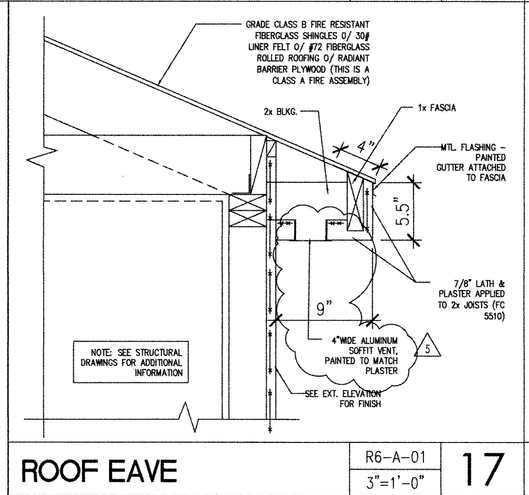
NEW WALL CONST.

R5-BAA-06 | 1-1/2"=1'-0" | 3



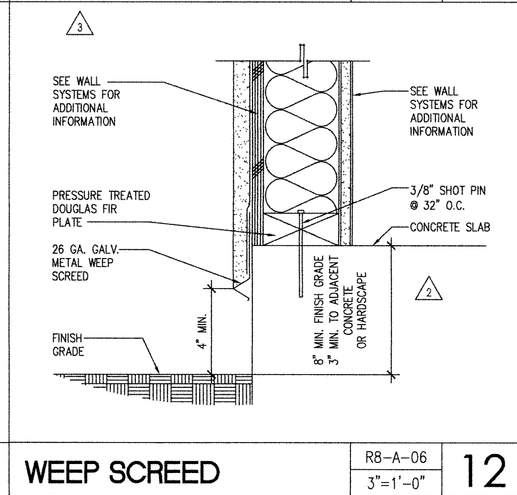
CABINET - RESIDENTIAL - WOOD STUD

12-A-01 | 1"=1'-0" | 21



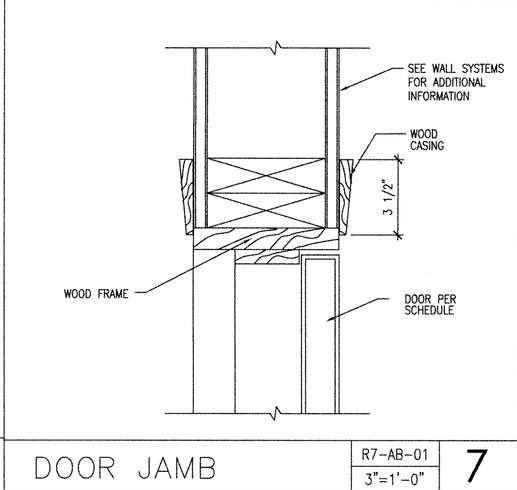
ROOF EAVE

R6-A-01 | 3"=1'-0" | 17



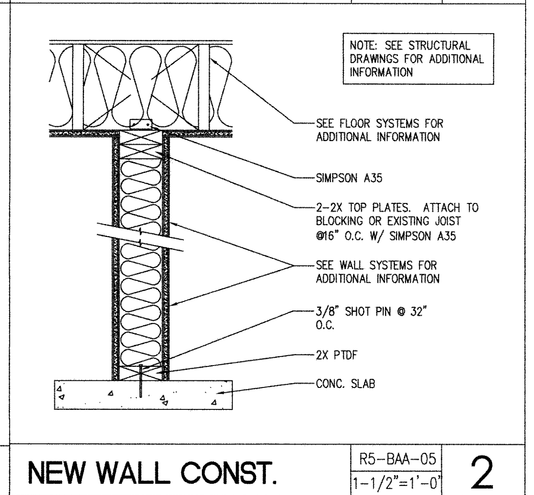
WEEP SCREED

R8-A-06 | 3"=1'-0" | 12



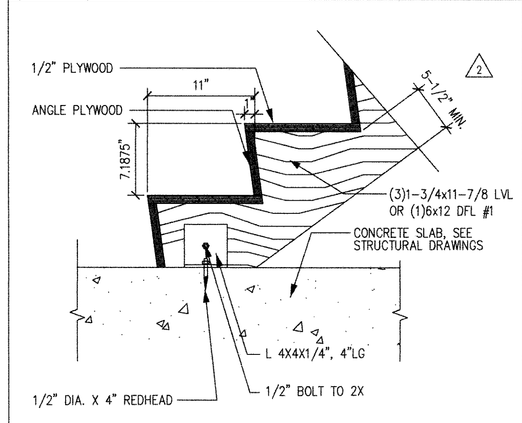
DOOR JAMB

R7-AB-01 | 3"=1'-0" | 7



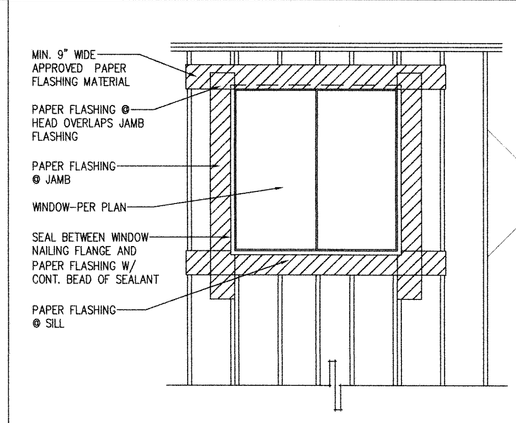
NEW WALL CONST.

R5-BAA-05 | 1-1/2"=1'-0" | 2



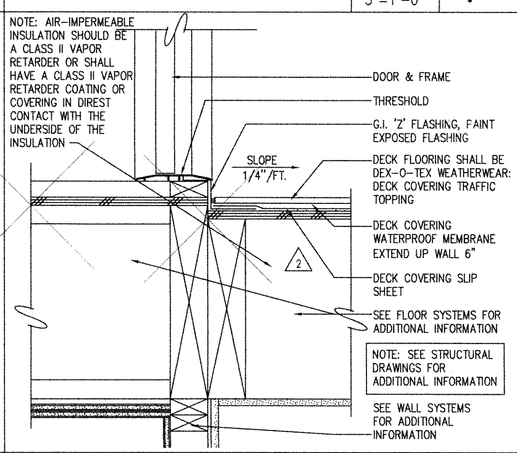
STAIR BOTTOM @ CONCRETE

R13-F-04 | 1"=1'-0" | 16



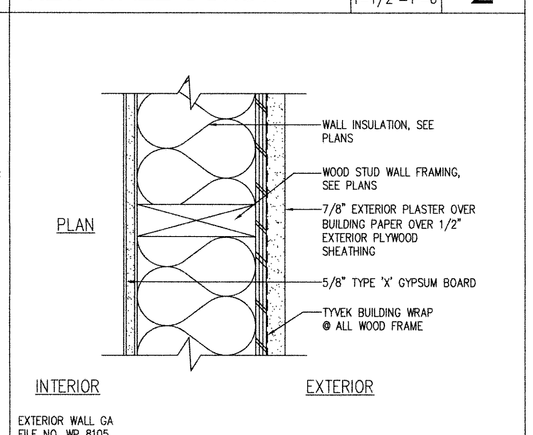
PAPER FLASHING

R8-A-01 | 3/8"=1'-0" | 11



DOOR THRESHOLD+DECK

R7-AA-01 | 1-1/2"=1'-0" | 6



WALL TYPE 1-EXTERIOR

R5-A-06 | 3"=1'-0" | 1

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PROJECT TITLE

NEW 2 STORY RESIDENCE FOR:

QUERRIERA RESIDENCE

2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

REVISIONS

5 BLDG. & PL CORRECTIONS	10-01-2024
4 PW CORRECTIONS	02-02-2024
3 BLDG. DEPT. CORRECTIONS	02-02-2024
2 BLDG. DEPT. CORRECTIONS	11-13-2023
1 PLNG & PW CORRECTIONS	08-10-2023
PLAN CHECK SET	07-31-2023
PROJECT RE-START SET	07-31-2023
PLAN CHECK SET (NOT USED)	10-26-2021
PROGRESS SET	06-07-2021
PROJECT NO:	20-51
SCALE:	SEE SHEET
DATE:	01-06-2021
DRAWN BY:	MDG
CHECKED BY:	SHS

SHEET TITLE

DETAILS

SHEET NUMBER

A-8.0

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RECEIVED
03-19-25

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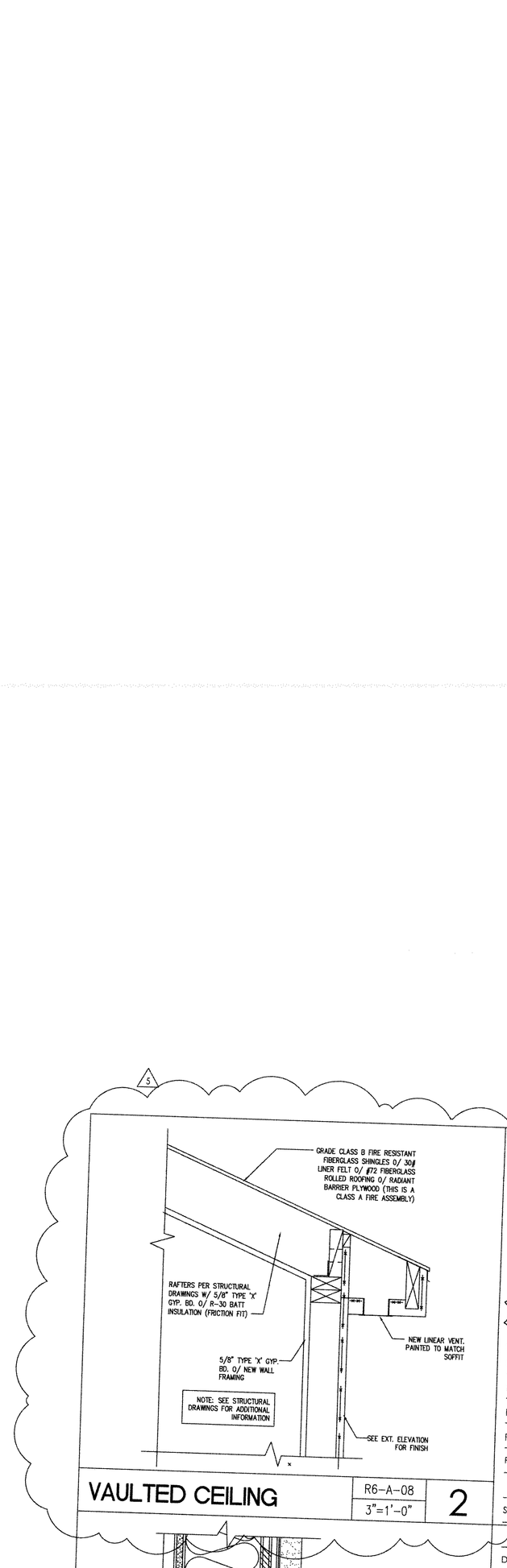
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DETAILS

SHEET NUMBER

A-8.1 2

FINISH NOTES

GENERAL NOTES:

1. PREPARE SURFACES AND INSTALL FINISHES THE FULL HEIGHT OF WALL WHERE NEW FINISHES ARE INDICATED ON THE PLAN.
2. SUBMIT THE FOLLOWING SAMPLES FOR ARCHITECT'S/PROJECT MANAGER'S APPROVAL (WHERE APPLICABLE):
   A. THREE (3) 1'-0"X1'-0" SAMPLES OF ALL PAINT, VINYL AND FABRIC FINISHES, AND COLOR APPLIED TO A SUBSTRATE WHICH IS REPRESENTATIVE OF THE SURFACE TO BE FINISHED. SUBMIT FINISH SAMPLES FROM THE DYE LOT INTENDED FOR APPLICATION.
   B. ONE (1) 2'-0"X2'-0" MOCK-UP WITH SAMPLE SEAM (CENTERED) FOR ALL FABRIC AND VINYL FINISHES AND COLORS.
   C. THREE (3) 1'-0"X1'-0" SAMPLES OF FLOOR COVERINGS.
3. SUBMIT MATERIAL SAMPLES BEFORE PLACING ORDERS FOR MATERIALS.
4. NOTIFY ARCHITECT/PROJECT MANAGER IMMEDIATELY OF LONG LEAD TIMES.
5. ALL FINISHES SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION FOR THE PARTICULAR SURFACE.
6. NO SUBSTITUTIONS ALLOWED WITHOUT APPROVAL OF ARCHITECT/OWNER.
7. LEVEL AREA IS DEFINES AS "A SPECIFIED SURFACE THAT DOES NOT HAVE A SLOPE IN ANY DIRECTION EXCEEDING 1/4" IN ONE FOOT HORIZONTALLY.
8. CHANGES IN LEVEL UP TO 1/4" MAY BE VERTICAL AND WITHOUT EDGE TREATMENT.
9. CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE ACCOMPLISHED BY MEANS OF A RAMP NO STEEPER THAN 1 VERTICAL UNIT TO 2 HORIZONTAL UNITS. CONTRACTOR TO PROVIDE RUBBER REDUCER TO MATCH SPECIFIED FINISHES AT ALL TRANSITIONS OF MATERIAL. AT EXTERIOR LOCATIONS, CONTRACTOR TO PROVIDE ALUMINUM THRESHOLD IN FINISH TO MATCH BUILDING STANDARD.
10. THE FLOOR OR LANDING SHALL NOT BE MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY.
11. GENERAL CONTRACTOR SHALL PROVIDE RECORD DRAWINGS AND PROVIDE SAID DOCUMENTATION TO OWNER AT COMPLETION OF TENANT CONSTRUCTION.
12. ELECTRICAL RECEPTACLES, OUTLETS AND COVERS ARE TO BE WHITE, UNLESS OTHERWISE SPECIFIED.

FLOORING:

13. FLOAT ALL AREAS WHERE FLOOR IS NOT LEVEL OR TRUE PRIOR TO FLOORING INSTALLATION. NOTIFY ARCHITECT/OWNER OF VARIANCE PRIOR TO FLOATING FLOOR. CARPET CONTRACTOR MUST VERIFY EXISTING FLOOR CONDITIONS PRIOR TO BID AND INSTALLATION.
14. SUBMIT SEAMING PLAN FOR CARPET/SHEET VINYL TO ARCHITECT/OWNER FOR APPROVAL WHERE NEW CARPET/SHEET VINYL OCCURS.
15. CARPET CONTRACTOR SHALL PROVIDE AND INSTALL SPECIFIED REDUCTION/TRANSACTION STRIP AT DOORS WHERE ALL CARPET AND RESILIENT FLOORING MEET. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
16. FLOOR COVERING IN CLOSETS SHALL BE THE SAME AS THAT OF THE SPACE ONTO WHICH THE CLOSET DOOR OPENS INTO. U.O.N.
17. WHERE FLOOR MOUNTED OUTLETS ARE REQUIRED ON CARPETED AREA, CUT THE CARPET AT AN 'X' OVER THE HOLE. THIS ALLOWS CARPET PATCHING WHERE OUTLETS ARE LATER CAPPED. DO NOT TRIM THE CARPET.
18. ALL EXPOSED GYPSUM BOARD TO RECEIVE NEW BASE. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
19. IF CARPET OR CARPET TILE IS USED ON A FLOOR SURFACE, IT SHALL BE SECURELY ATTACHED, HAVE A FIRM CUSHION, PAD OR BACKING OR NO CUSHION OR PAD, AND HAVE A LEVEL LOOP, TEXTURED LOOP, LEVEL CUT PILE OR LEVEL CUT/UNCUT PILE TEXTURE. THE MAXIMUM PILE HEIGHT SHALL BE 1/2". EXPOSED EDGES OF CARPET SHALL BE FASTENED TO FLOOR SURFACE AND HAVE A TRIM ALONG THE ENTIRE LENGTH OF THE EXPOSED EDGE. CARPET EDGE TRIM SHALL COMPLY WITH SECTION 1124B.2.

INTERIOR FINISHES:

20. INTERIOR WALL AND CEILING FINISHES SHALL NOT EXCEED A FLAME SPREAD AND CLASSIFICATION OF 200 (CLASS III).

PAINT:

21. ALL GYPSUM BOARD SOFFITS AND CEILINGS SHALL BE PAINTED WITH FLAT PAINT FINISH UNLESS OTHERWISE SPECIFIED. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
22. ALL WALLS SHALL BE PAINTED IN EGGSHELL FINISH. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
23. ALL WALLS & CEILINGS IN BATHROOMS/TOILET ROOMS SHALL BE PAINTED IN SEMI-GLOSS FINISH. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
24. ALL DOOR FRAMES SHALL BE PAINTED SEMI-GLOSS. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.

CERAMIC TILE:

25. PROVIDE CRACK ISOLATION MEMBRANE AND SOFT JOINTS AT ALL CRACKS WHERE THE NEW CERAMIC TILE FLOORING IS SCHEDULED.
26. ALL CERAMIC TILE SHALL BE INSTALLED PER THE LATEST EDITION OF THE TCNA HANDBOOK FOR CERAMIC, GLASS AND STONE TILE INSTALLATION.
27. ALL TILE IN WET AREAS TO BE INSTALLED OVER APPROVED WATERPROOFING. SEE SPECIFICATION SHEET AND DETAILS.
28. ALL CERAMIC TILE SHALL RECEIVE APPROPRIATE TRIM PIECES TO FINISH EDGES.
29. PROVIDE CERAMIC TILE TRIM UNITS TO MATCH ADJOINING FLAT TILE IN THE FOLLOWING SHAPES: BASE - COVED & STRAIGHT AND SURFACE BULLNOSE FOR WAINSCOT CAP AND TILE END. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
30. CONTRACTOR SHALL PROVIDE SCHLUTER-JOLLY PIECE. STAINLESS STEEL FINISH. WHEN NO CERAMIC TILE TRIM PIECES ARE SPECIFIED .
31. PROVIDE GROUT FROM MAPEI, ULTRA COLOR PLUS OR APPROVED EQUAL THAT MATCHES SPECIFIED TILE. ARCHITECT TO SELECT. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
32. GROUT JOINTS SHALL BE 1/8" TO 3/16" MAX. DEPENDENT ON TILE, MORTAR AND SUBSTRATE. GROUT JOINTS 1/8" OR GREATER SHALL USE SANDED GROUT. IF THE TILE IS RECTIFIED AND SLAB, SUBSTRATE AND TILE PERMITS A MIN. OF 1/8" GROUT JOINT IS ADVISED. IF THE TILE IS CALIBRATED AND SLAB, SUBSTRATE AND TILE PERMITS A 3/16" GROUT JOINT IS ADVISED.
33. ALL MOVEMENT JOINTS SHALL BE IN ACCORDANCE WITH EJ171 OF LATEST EDITION OF THE TCNA HANDBOOK FOR CERAMIC, GLASS AND STONE TILE INSTALLATION.

DOOR / HARDWARE NOTES

GENERAL NOTES:

1. ALL DOORS SHALL RECEIVE LEVER HARDWARE (SEE HARDWARE SCHEDULE). U.O.N. HARDWARE SHALL BE IN COMPLIANCE WITH CALIFORNIA BUILDING CODES AND OR REGULATION [C.C.R.], TITLE 24, AND SHALL BE ABLE TO BE OPENED BY A SINGLE EFFORT.

   MAXIMUM ALLOWABLE DOOR CLOSER PRESSURE;
   INTERIOR DOORS: 5 POUNDS (5 LBS.)
   EXTERIOR DOORS: 8½ POUNDS (8½ LBS.)
   FIRE DOORS: 15 POUNDS (15 LBS.)
2. FOR DOOR ASSEMBLIES REQUIRED TO BE FIRE-RATED, PROVIDE MANUFACTURER CERTIFICATION THAT EACH DOOR AND FRAME ASSEMBLY HAS BEEN CONSTRUCTED TO CONFORM TO THE REQUIREMENTS FOR LABELED CONSTRUCTION.
3. GENERAL CONTRACTOR SHALL PROVIDE MANUFACTURER CERTIFICATION THAT GLAZING DOORS AND ADJACENT PANELS SHALL COMPLY WITH APPLICABLE CONSUMER PRODUCT SAFETY STANDARDS AND IMPACT HAZARDS IN ACCORDANCE WITH THE C.B.C.
4. ALL LABELED DOORS SHALL BE TIGHT-FITTING WITH A GASKET AND INTUMESCENT SEAL INSTALLED TO PROVIDE A SEAL WHERE THE DOOR MEETS THE STOP ON BOTH SIDES AND ACROSS THE TOP AS WELL AS THE ASTRAGAL OF A DOOR PAIR.
5. PROVIDE AN S-LABEL SMOKE SEAL AT ALL 20 MIN. RATED DOORS.
6. DOORS SHALL BE UNDERCUT TO ALLOW MINIMUM TOLERANCE FOR ALL FLOOR FINISHES BUT MAX. 1/4", UNLESS OTHERWISE NOTED.
7. THE CONTRACTOR SHALL PROTECT EXISTING DOORS, FRAMES AND HARDWARE TO REMAIN FOR THE DURATION OF CONSTRUCTION.
8. THE CONTRACTOR IS TO HOLD SURVEY AND NOTE ANY DAMAGES OR NONFUNCTIONING HARDWARE PRIOR TO START OF CONSTRUCTION FOR ALL EXISTING DOORS, FRAMES AND HARDWARE TO REMAIN. THE CONTRACTOR SHALL SUBMIT A REPORT LISTING DEFICIENT ITEMS. ALL ITEMS NOT LISTED WILL BE ASSUMED TO BE IN GOOD WORKING ORDER AND CONDITION.
9. THE CONTRACTOR SHALL DEVELOP AND SUBMIT TO THE ARCHITECT FOR REVIEW SHOP DRAWINGS OF THE FULL COMPLETE SCHEDULE OF DOORS, FRAMES AND FINISH HARDWARE, INDICATING THE QUANTITY, PART NUMBER, INSTALLATION, LOCATION AND FINISH OF EACH ITEM AS NEEDED FOR A COMPLETE AND PROPER INSTALLATION.
10. HARDWARE SCHEDULE SUBMITTAL SHALL INCLUDE BUT NOT NECESSARILY BE LIMITED TO: BUTTS, LOCK-SETS, LATCH-SETS, CLOSERS, WEATHER-STRIPPING, PANIC HARDWARE, FLOOR HINGES, PIVOTS, KICK PLATES, PULLS, STOPS, ANCHORS, WALL BUMPERS, THRESHOLDS, DOOR SHOES AND MUTES. THIS INCLUDES ALL HARDWARE FOR DOORS BY OTHERS, U.O.N.
11. CHECK DOOR SCHEDULE FOR FRAME DETAIL, DOOR THICKNESS, DETAILS OF TRIM CLEARANCES FOR HINGES, STRIKES, CLOSERS, FASTENER REQUIREMENTS, FIRE RATING REQUIREMENTS, AND ALL DOOR SPECIFICATIONS. COORDINATE FRAME WIDTH WITH WALL THICKNESS.
12. DOORS PROVIDED BY MILLWORK SUB-CONTRACTOR TO BE COORDINATED BY CONTRACTOR, WITH DOOR SUB-CONTRACTOR, PROVIDING ALL HARDWARE, U.O.N.
13. TYPICAL OFFSET DOES NOT APPLY TO DOORS ON MAGNETIC HOLD OPEN DEVICES. DOOR OFFSET TO MATCH MAGNETIC HOLD OPEN DEPTH SO DOOR IS HELD OPEN @ 90° OR 180° ANGLE IN RELATION TO DOOR PLANE IN CLOSED POSITION.
14. CONTRACTOR SHALL COORDINATE KEYING REQUIREMENTS OF ALL LOCKS WITH OWNER AND BUILDING MANAGEMENT. VERIFY IF TEMPORARY CONSTRUCTION CORES WILL BE REQUIRED AND PROVIDE AS NEEDED.
15. ALL PAIR OF DOORS SHALL RECEIVE ASTRAGALS OR MEETING STILES

FRAMES

1. TYPICAL AT ALL NEW AND EXISTING WALLS TO RECEIVE NEW DOOR/FRAME ASSEMBLY. - VERIFY WALL THICKNESS FOR FRAME THROATS AT EXISTING OPENINGS PRIOR TO ORDERING FRAMES.
2. WHERE ALUMINUM FRAMES ARE SPECIFIED; PROVIDE CLEAR ANODIZED SHOP FINISH FOR FRAMES U.N.O., ASSEMBLE IN FIELD.
3. PROVIDE BLACK DUST BOX AND SPACE FOR DUST BOX INSTALLATION ON STRIKE SIDE OF DOOR.
4. PROVIDE SILENCERS FOR ALL DOOR FRAME ASSEMBLIES. (NOTE: GASKETING ON RATED DOORS SATISFIES THIS REQUIREMENT.)

FINISHES:

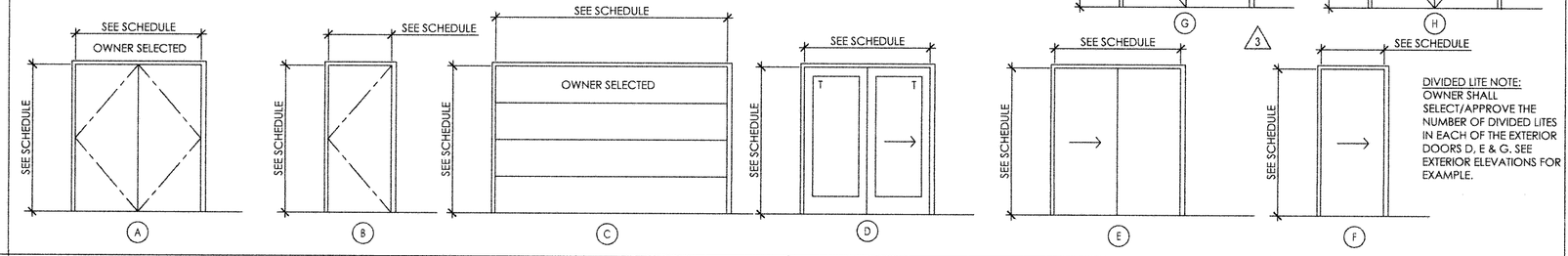
1. FOR RATED DOOR ASSEMBLIES REQUIRING SMOKE & FIRE GASKETING, PROVIDE A WHITE PRODUCT FINISH PROVIDING A REASONABLE MATCH TO THE PAINT AND FRAME FINISHES.
2. ALL NEW AND EXISTING H.M. DOORS & FRAMES TO BE FIELD PAINTED W/ SEMI-GLOSS PAINT PER FINISH NOTED ON SCHEDULE.
3. FOR ANY FIELD PAINTING (e.g.-H.M. FRAMES), USE NEW SMALL DIAMETER LOW KNAP ROLLER IN APPLICATION OF FINISH TO OBTAIN AS SMOOTH A FINISH AS POSSIBLE.

DOOR, FRAME AND HARDWARE SCHEDULE

ASSEMBLY		DOOR						FRAME					REMARKS
		DIMENSIONS				MATERIAL	FINISH	MATERIAL	FINISH	FIRE RATING	HARDWARE GROUP	U-FACTOR/SHGC	
DOOR NO.	TYPE	WIDTH	HEIGHT	THICKNESS	ORIENTATION								
D-1	C	16'-0"	8'-0"	1-3/8"		SC	PAINT	WOOD	PAINT	-	-		NEW ROLL UP GARAGE DOOR + NEW OPENER
D-2	A	6'-0"	↓	↓	↓	↓	↓	↓	↓	↓	HW-1	⚠2	↓
D-3	D	5'-0"			E						HW-1	0.32 U-factor/0.23 SHGC	TEMPERED GLASS SLIDING DOOR ⚠3
~~D-4~~	~~E~~	~~7'-6"~~			~~N~~						~~-~~	~~0.32 U-factor/0.23 SHGC~~	~~3 PANEL SLIDING DOOR/TEMPERED GLASS~~
D-5	B	3'-0"									HW-1		
D-6	B	3'-0"								60 MIN.	HW-1		60 MIN. RATED DOOR BETWEEN 2 CAR GARAGE & RESIDENCE/ SELF-CLOSING & SELF-LATCHING DOOR
D-7	F	2'-6"									-		POCKET DOOR W/ HARDWARE
D-8	B	2'-6"									HW-2		
D-9	B	2'-6"									HW-2		
D-10	F	2'-6"									-	⚠2	POCKET DOOR W/ HARDWARE
D-11	G	5'-0"			E						-	0.32 U-factor/0.23 SHGC	TEMPERED GLASS
D-12	B	2'-6"									HW-2		
D-13	B	2'-6"									HW-2		
D-14	B	2'-6"									HW-2		
D-15	B	2'-6"									HW-2		
D-16	B	2'-6"									HW-2		⚠2
D-17	H	5'-0"			N						HW-1	0.35 U-factor/0.23 SHGC	TEMPERED GLASS
D-18	B												
D-19	B												
D-20	E												SLIDING CLOSET DOOR W/ HARDWARE
D-21	B												
D-22	E												SLIDING CLOSET DOOR W/ HARDWARE
D-23	B												
D-24	F												POCKET DOOR W/ HARDWARE
D-25	F	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	POCKET DOOR W/ HARDWARE

RESIDENTIAL GENERAL NOTES:
SAFETY GLAZING SHALL BE PROVIDED AT THE FOLLOWING HAZARDOUS LOCATIONS: CBC 2406.3
a. SWINGING AND SLIDING DOORS.
b. WHEN LOCATED WITHIN 60-INCHES OF THE FLOOR SURFACE IN TUBS, SHOWERS, SAUNAS, OR STEAM ROOMS.
c. WITHIN 24-INCH ARC OF EITHER VERTICAL EDGE OF DOORS AND WITHIN 60-INCHES OF WALKING SURFACE.
d. WHERE GLAZING AREA IS MORE THAN 9 SQ. FT. IN AREA, WITH THE BOTTOM EDGE LESS THAN 18-INCHES ABOVE THE FLOOR AND TOP EDGE MORE THAN 36-INCHES ABOVE FLOOR.
e. ADJACENT TO STAIRWAYS, LANDINGS, AND RAMPS WITHIN 36-INCHES HORIZONTALLY OF WALKING SURFACE AND WITHIN 60-INCHES ABOVE WALKING SURFACE.
f. ADJACENT TO STAIRWAYS WITHIN 60-INCHES HORIZONTALLY OF BOTTOM TREAD OF STAIRWAY AND EXPOSED SURFACE IS WITHIN 60-INCHES ABOVE NOSE OF TREAD.

DOOR TYPES


SEE SCHEDULE
OWNER SELECTED
SEE SCHEDULE
SEE SCHEDULE
OWNER SELECTED
SEE SCHEDULE
SEE SCHEDULE
SEE SCHEDULE

GENERAL INFORMATION					
01	Project Name	Querriera Residence			
02	Run Title	Title 24 Analysis			
03	Project Location	2316 Fairhill Drive			
04	City	Newport Beach	05	Standards Version	2022
06	Zip code	92660	07	Software Version	EnergyPro 9.3
08	Climate Zone	6	09	Front Orientation (deg / Cardinal)	160
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Newly Constructed	13	Number of Bedrooms	5
14	Addition Cond. Floor Area (ft²)	0	15	Number of Stories	2
16	Existing Cond. Floor Area (ft²)	n/a	17	Fenestration Average U-factor	0.32
18	Total Cond. Floor Area (ft²)	3535	19	Glazing Percentage (%)	22.52%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Fuel Type	Natural gas	23	No Dwelling Unit	No

COMPLIANCE RESULTS	
01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	This building incorporates one or more Special Features shown below

ENERGY DESIGN RATINGS	Energy Design Ratings			Compliance Margins		
	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)
Standard Design	37.9	48.8	30.3			
Proposed Design	31.7	42	26.2	6.2	6.8	4.1

RESULT[3]: PASS

[1] Efficiency EDR includes improvements like a better building envelope and more efficient equipment
[2] Total EDR includes efficiency and demand response measures such as photovoltaic (PV) system and batteries
[3] Building complies when source energy, efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

- Standard Design PV Capacity: 3.20 kWdc

ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft²-yr)	Standard Design TDV Energy (EDR2) (kTDV/ft²-yr)	Proposed Design Source Energy (EDR1) (kBtu/ft²-yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft²-yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	1.84	8.3	1.15	8.21	0.69	0.09
Space Cooling	0.13	6.78	0.15	6.88	-0.02	-0.1
IAQ Ventilation	0.35	3.74	0.16	1.74	0.19	2
Water Heating	0.92	9.96	0.7	7.92	0.22	2.04
Self Utilization/Flexibility Credit			0	0	0	0
Efficiency Compliance Total	3.24	28.78	2.16	24.75	1.08	4.03
Photovoltaics	-1.03	-28.08	-1.08	-29.72		
Battery			0	0		
Flexibility			0			
Indoor Lighting	0.64	6.41	0.64	6.41		
Appl. & Cooking	1.86	12.02	1.86	11.98		
Plug Loads	2.08	21.69	2.08	21.69		
Outdoor Lighting	0.18	1.68	0.18	1.68		
TOTAL COMPLIANCE	6.97	42.5	5.84	36.79		

ENERGY USE INTENSITY	Standard Design (kBtu/ft² - yr)	Proposed Design (kBtu/ft² - yr)	Margin (kBtu/ft² - yr)	Margin Percentage
Gross EUI[1]	9.94	8.33	1.61	16.2
Net EUI[2]	4.73	2.82	1.91	40.38

Notes
1. Gross EUI is Energy Use Total (not including PV) / Total Building Area.
2. Net EUI is Energy Use Total (including PV) / Total Building Area.

REQUIRED PV SYSTEMS											
01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Annual Solar Access (%)
3.2	NA	Standard (14-17%)	Fixed	none	false	180	Degrees	22	4.85	97	100

REQUIRED SPECIAL FEATURES
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.
• IAQ Ventilation System: as low as 0.1625 W/CFM • Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed

HERS FEATURE SUMMARY
The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry
• Indoor air quality ventilation • Minimum Airflow • Verified SEER/SEER2 • Fan Efficacy Watts/CFM • Verified HSPF • Verified HSPF2 • Verified heat pump rated heating capacity • Duct leakage testing

BUILDING - FEATURES INFORMATION						
01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
Querriera Residence	3535	1	5	2	0	1

ZONE INFORMATION						
01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
First Floor	Conditioned	HVAC 1st Floor1	2060	8	DHW Sys 1	New
New Second Floor Addition	Conditioned	New HVAC 2nd Floor2	1475	8	DHW Sys 1	New

OPAQUE SURFACES							
01	02	03	04	05	06	07	08
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)
Front Wall (W)	First Floor	R-21 Wall	260	Front	470	135.17	90
Rear Wall (E)	First Floor	R-21 Wall	80	Back	470	159.38	90
New Left Wall (N)	First Floor	R-21 Wall	350	Left	550	117.1	90

OPAQUE SURFACES							
01	02	03	04	05	06	07	08
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)
New Right Wall (S)	First Floor	R-21 Wall	170	Right	550	91.6	90
New Front Wall (W)	New Second Floor Addition	R-21 Wall	260	Front	250	56.54	90
New Front Wall (SW)	New Second Floor Addition	R-21 Wall	225	n/a	180	57.51	90
New Front Wall (NW)	New Second Floor Addition	R-21 Wall	315	n/a	160	10.83	90
New Rear Wall (E)	New Second Floor Addition	R-21 Wall	80	Back	460	136.66	90
New Left Wall (N) 2	New Second Floor Addition	R-21 Wall	350	Left	190	34.66	90
New Right Wall (S) 2	New Second Floor Addition	R-21 Wall	170	Right	190	16.66	90
New Roof/R-30	First Floor	R-30 roof attic	n/a	n/a	996	n/a	n/a
New Roof/R-30 2	New Second Floor Addition	R-30 roof attic	n/a	n/a	1475	n/a	n/a
Raised Floor Over Garage	New Second Floor Addition	New raised floor over gar	n/a	n/a	525	n/a	n/a
Interior Surface	New Second Floor Addition	Interior Floor	n/a	n/a	990	n/a	n/a

ATTIC							
01	02	03	04	05	06	07	08
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof
Attic First Floor	Attic RoofFirst Floor	Ventilated	3	0.1	0.85	No	No
Attic New Second Floor Addition	Attic RoofNew Second Floor Addition	Ventilated	3	0.1	0.85	No	No

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CHEERS CERTIFIED RATER

Querriera Residence
2316 Fairhill Drive
Newport Beach, Ca. 92660

PLAN NUMBER:

DRAWING TITLE:
Title-24 Compliance Report

SCALE: 1/4"=1'-0" 24x36

PLOT DATE: 1.6.2025

SHEET NO.
T-24-a

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
#1 New Op Window	Window	Front Wall (W)	Front	260			1	67.17	0.32	NFRC	0.23	NFRC	Bug Screen
#D-2 French Door	Window	Front Wall (W)	Front	260			1	48	0.32	NFRC	0.23	NFRC	Bug Screen
#7 New Op Window	Window	Rear Wall (E)	Back	80			1	23.38	0.32	NFRC	0.23	NFRC	Bug Screen
#D-3 New Patio Door	Window	Rear Wall (E)	Back	80			1	40	0.32	NFRC	0.25	NFRC	Bug Screen
#10 New Op Window	Window	Rear Wall (E)	Back	80			1	96	0.32	NFRC	0.23	NFRC	Bug Screen
#26 New Op Window	Window	New Left Wall (N)	Left	350			1	46.75	0.32	NFRC	0.23	NFRC	Bug Screen
#9 New Op Window	Window	New Left Wall (N)	Left	350			1	4.48	0.32	NFRC	0.23	NFRC	Bug Screen
#8 New Op Window	Window	New Left Wall (N)	Left	350			1	4.48	0.32	NFRC	0.23	NFRC	Bug Screen
#25 New Fx Window	Window	New Left Wall (N)	Left	350			1	21.39	0.3	NFRC	0.29	NFRC	Bug Screen
#D-17 French Door	Window	New Left Wall (N)	Left	350			1	40	0.32	NFRC	0.23	NFRC	Bug Screen
#2 New Op Window	Window	New Right Wall (S)	Right	170			1	17.33	0.32	NFRC	0.23	NFRC	Bug Screen
#3 New Op Window	Window	New Right Wall (S)	Right	170			1	19.5	0.32	NFRC	0.23	NFRC	Bug Screen

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
#4 New Op Window	Window	New Right Wall (S)	Right	170			1	23.83	0.32	NFRC	0.23	NFRC	Bug Screen
#5 New Op Window	Window	New Right Wall (S)	Right	170			1	23.83	0.32	NFRC	0.23	NFRC	Bug Screen
#6 New Op Window	Window	New Right Wall (S)	Right	170			1	7.11	0.32	NFRC	0.23	NFRC	Bug Screen
#15 New Op Window	Window	New Front Wall (W)	Front	260			1	21.06	0.32	NFRC	0.23	NFRC	Bug Screen
#16 New Op Window	Window	New Front Wall (W)	Front	260			1	21.06	0.32	NFRC	0.23	NFRC	Bug Screen
#17 New Op Window	Window	New Front Wall (W)	Front	260			1	14.88	0.32	NFRC	0.23	NFRC	Bug Screen
#12 New Op Window	Window	New Front Wall (SW)		225			1	14.88	0.32	NFRC	0.23	NFRC	Bug Screen
#13 New Op Window	Window	New Front Wall (SW)		225			1	28.75	0.32	NFRC	0.23	NFRC	Bug Screen
#14 New Op Window	Window	New Front Wall (SW)		225			1	14.38	0.32	NFRC	0.23	NFRC	Bug Screen
#24 New Op Window	Window	New Front Wall (NW)		315			1	10.83	0.32	NFRC	0.23	NFRC	Bug Screen
#19 New Op Window	Window	New Rear Wall (E)	Back	80			1	8.33	0.32	NFRC	0.23	NFRC	Bug Screen
#20 New Op Window	Window	New Rear Wall (E)	Back	80			1	8.33	0.32	NFRC	0.23	NFRC	Bug Screen

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
#21 New Op Window	Window	New Rear Wall (E)	Back	80			1	40	0.32	NFRC	0.23	NFRC	Bug Screen
#22 New Op Window	Window	New Rear Wall (E)	Back	80			1	40	0.32	NFRC	0.23	NFRC	Bug Screen
#D-11 French Door	Window	New Rear Wall (E)	Back	80			1	40	0.32	NFRC	0.23	NFRC	Bug Screen
#11 New Op Window	Window	New Left Wall (N) 2	Left	350			1	17.33	0.32	NFRC	0.23	NFRC	Bug Screen
#23 New Op Window	Window	New Left Wall (N) 2	Left	350			1	17.33	0.32	NFRC	0.23	NFRC	Bug Screen
#18 New Op Window	Window	New Right Wall (S) 2	Right	170			1	8.33	0.32	NFRC	0.23	NFRC	Bug Screen
#27 New Op Window	Window	New Right Wall (S) 2	Right	170			1	8.33	0.32	NFRC	0.23	NFRC	Bug Screen

OPAQUE DOORS

01	02	03	04
Name	Side of Building	Area (ft^2)	U-factor
D-6 Door to garage	Front Wall (W)	20	0.5

SLAB FLOORS

01	02	03	04	05	06	07	08
Name	Zone	Area (ft^2)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab-on-Grade	First Floor	2060	175	none	0	80%	No

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.069	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: 3 Coat Stucco
Attic Roof/First Floor	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no Insul. / 2x4
Attic Roof/New Second Floor Addition	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no Insul. / 2x4
R-30 roof attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 Insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
New raised floor over gar	Exterior Floors	Wood Framed Floor	2x10 @ 16 in. O. C.	R-19	None / None	0.047	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x10

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
Interior Floor	Interior Floors	Wood Framed Floor	2x6 @ 16 in. O. C.	R-0	None / None	0.199	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no Insul. / 2x6 Ceiling Below Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04	05
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50
Not Required	Not Required	N/A	n/a	n/a

WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)

WATER HEATERS - NEEA HEAT PUMP

01	02	03	04	05	06	07	08
Name	# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source
DHW Heater 1	1	50	A. O. Smith	HP10S0H45DVDR 130 (50 gal, iA13)	Outside	First Floor	First Floor

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type
HVAC 1st Floor1	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump System 1	1	HVAC Fan 1	Air Distribution System 1	Setback
New HVAC 2nd Floor2	Heat pump heating cooling	Heat Pump System 2	1	Heat Pump System 2	1	HVAC Fan 2	Air Distribution System 2	Setback

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	System Type	Number of Units	Heating			Cooling				Zonally Controlled	Compressor Type	HERS Verification
			Heating Efficiency Type	HSPF/HS PF2/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/S4 ER2	EER/EER 2/CEER			
Heat Pump System 1	Central split HP	1	HSPF2	9.5	60000	32500	EER2SEER2	16	11	Not Zonal	Single Speed	Heat Pump System 1-hers-hpump
Heat Pump System 2	Central split HP	1	HSPF	9.5	36000	22500	EERSEER	16	11	Not Zonal	Single Speed	Heat Pump System 2-hers-hpump

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C|H|E|E|R|S
CERTIFIED RATER

Querriera Residence
2316 Fairhill Drive
Newport Beach, Ca. 92660

PLAN NUMBER:

DRAWING TITLE:
Title-24 Compliance Report

SCALE: 1/4"=1'-0" 24x36

PLOT DATE: 1.6.2025

SHEET NO:
T-24-b

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-hspump	Required	350	Not Required	Required	No	Yes	Yes	Yes
Heat Pump System 2-hers-hspump	Required	350	Not Required	Required	No	Yes	Yes	Yes

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
			Duct Ins. R-value		Duct Location		Surface Area				
Name	Type	Design Type	Supply	Return	Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification
Air Distribution System 1	Unconditioned attic	Non-Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 1-hers-dist
Air Distribution System 2	Unconditioned attic	Non-Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 2-hers-dist

HVAC DISTRIBUTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No
Air Distribution System 2-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.45	HVAC Fan 1-hers-fan
HVAC Fan 2	HVAC Fah	0.45	HVAC Fan 2-hers-fan

HVAC FAN SYSTEMS - HERS VERIFICATION

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan 1-hers-fan	Required	0.45
HVAC Fan 2-hers-fan	Required	0.45

INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status
SFam IAQVentRpt 1-1	80	0.1625	Exhaust	No	n/a / n/a	No	Yes	
SFam IAQVentRpt 2-1	80	0.1625	Exhaust	No	n/a / n/a	No	Yes	

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I, I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mark Madison	Documentation Author Signature: Mark Madison
Company: Energy Code Works	Signature Date: 01/06/2025
Address: 1 Park Plaza	CEA/ HERS Certification Identification (If applicable): ACH20153
City/State/Zip: Irvine, CA 92614	Phone: 949-240-1867

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.
2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with the building permit application.

Responsible Designer Name: James Fortunes	Responsible Designer Signature: James Fortunes
Company: Stern Architects	Date Signed: 01/06/2025
Address: 2961 W. MacArthur Blvd, Suite 120	License:
City/State/Zip: Santa Ana, CA 92704	Phone: (714) 556-2656

Digitally signed by California Home Energy Efficiency Rating Services (CHEERS). This digital signature is grounded in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

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CHEERS CERTIFIED RATER

Querriera Residence
2316 Fairhill Drive
Newport Beach, Ca. 92660

PLAN NUMBER:

DRAWING TITLE:
Title-24 Compliance Report

SCALE: 1/4"=1'-0" 24x36

PLOT DATE: 1.6.2025

SHEET NO:
T-24-c

2022 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information.
(04/2022)

Building Envelope:

§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AAMA/WDMA/CSA 101/I.S.2/A440-2011. *
§ 110.6(a)5:	**Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a)
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped.
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	**Roof Deck, Ceiling and Rafter Roof Insulation.** Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding UA-184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling, or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesives or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration, as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling. *
§ 150.0(b):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102 Masonry walls must meet Tables 150.1-A or B. *
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration must not exceed 0.45.

Fireplaces, Decorative Gas Appliances, and Gas Log:

§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device. *
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *

Space Conditioning, Water Heating, and Plumbing System:

§ 110.0-§ 110.3:	**Certification.** Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone, and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
§ 110.3(c)3:	**Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation; or tank surface heat loss rating
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

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§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces, household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters. *
§ 150.0(h)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2
§ 150.0(h)3A:	**Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	**Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code.
§ 150.0(j)2:	**Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	**Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2" higher than the base of the water heater.
§ 150.0(n)3:	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.

Ducts and Fans:

§ 150.0(m)1:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement. **CMC Compliance.** All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher, ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements; or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than ¼". If mastic or tape is used, Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts, ducts installed in these spaces must not be compressed. *
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for; pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.
§ 150.0(m)12:	**Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter. *

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§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *

Ventilation and Indoor Air Quality:

§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1. *
§ 150.0(o)1B:	**Central Fan Integrated (CFI) Ventilation Systems.** Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed andcontrolled per §150.0(o)1Biii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	**Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses** . Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1Gi-ii
§ 150.0(o)1G:	**Local Mechanical Exhaust.** Kitchens and bathrooms must have local mechanical exhaust; nonrecirculated kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1Giii;enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Giii-iv. Airflow must be measured by the installer per §150.0(o)1Gv, and rated for sound per §150.0(o)1Gvi. *
§ 150.0(o)1H&I:	**Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems.** The airflow required per § 150.0(o)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminalsgivities per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G

Pool and Spa Systems and Equipment:

§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDbS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating. *
§ 110.4(b)1:	**Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, fittors, and valves. *

Lighting:

§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. *
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.
§ 150.0(k)1B:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must not contain screw based sockets; must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.
§ 150.0(k)1D:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1E:	**Blank Electrical Boxes.** The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k)

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§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	**Accessible Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	**Multiple Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	**Mandatory Requirements.** Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	**Energy Management Control Systems.** An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	**Automatic Shutoff Controls.** In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	**Dimmers.** Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(k)2K:	**Independent controls.** Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Solar Readiness:

§ 110.10(a)1:	**Single-family Residences.** Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§ 110.10(b)1A:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. *
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane. *
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

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§ 150.0(n)	**Energy Storage System (ESS) Ready.** All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, or a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps, sufficient space must be reserved to allow future installation of a system isolation equipmentntransfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(l)	**Heat Pump Space Heater Ready.** Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(o)	**Electric Cooktop Ready.** Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v)	**Electric Clothes Dryer Ready.** Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permenently marked as "For Future 240V use."

*Exceptions may apply.

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C|H|E|E|R|S
CERTIFIED RATER

Querriera Residence
2316 Fairhill Drive
Newport Beach, Ca. 92660

PLAN NUMBER:

DRAWING TITLE:
Title-24 Compliance Report

SCALE: 1/4"=1'-0" 24x36

PLOT DATE: 1.6.2025

SHEET NO:
T-24-d

ISSUED
03-13-25

STRUCTURAL GENERAL NOTES

A. G

1. The contractor shall verify all dimensions prior to starting construction. The architect shall be notified of any discrepancies or inconsistencies.
2. Dimensions shall take precedence over scale shown on drawings.
3. Notes and details on drawings shall take precedence over general notes and typical notes.
4. All work shall conform to the minimum standards of the following code. The 2022 edition of the California Building Code (2021 IBC), and any other regulating agencies which have authority over any portion of the work, and those codes and standards listed in these notes and specifications.
5. See architectural drawings for the following:
   - Size and location of all door and window openings, except as noted.
   - Size and location of all interior and exterior nonbearing partitions.
   - Size and location of all concrete curbs, floor drains, slopes, depressed areas, changes in level, chamfers, grooves, inserts, etc.
   - Size and location of floor and roof openings except as shown
   - Floor and roof finishes
   - Stair framing and details (except as shown)
6. See mechanical, plumbing, and electrical drawings for the following:
   - Pipe runs, sleeves, hangers, trenches, wall and slab openings, etc. Except as shown or noted.
   - Electrical conduit runs, boxes, outlets in walls and slabs.
   - Concrete inserts for electrical, mechanical or plumbing fixtures.
   - Size and location of machine or equipment bases, anchor bolts for mounts.
7. The contract structural drawings and specifications represent the finished structure. They do not indicate the method of construction. The contractor shall provide all measures necessary to protect the structure during construction. Such measure shall include, but not be limited to, bracing, shoring for loads due to construction equipment, etc. Observation visits to the site by the structural engineer shall not include inspection of the above structural members.
8. Openings, pockets, etc. larger than 6 inches shall not be placed in slabs, decks, beams, joists, columns, walls, etc. unless specifically detailed on the structural drawings. Notify the structural engineer when drawings by others show openings, pockets, etc. not shown on the structural drawings, but which are located on structural members.
9. ASTM specifications noted shall be the latest revision.
10. Contractor shall investigate site during clearing and earthwork operations for filled excavations or buried structures such as cesspools, cisterns, foundations, etc. If any such structures are found, the structural engineer shall be notified immediately.
11. Construction materials shall be spread out if placed on floors or roof. Load shall not exceed the design live load per square foot. Provide adequate shoring and/or bracing where structure has not attained design strength.
12. Design Loads:
    - Roof:
      - 17 psf DEAD (MAX ROOFING MATERIAL WEIGHT = 5 psf)
      - 20 psf LIVE
    - Floor:
      - 16 psf DEAD (MAX FLOORING MATERIAL WEIGHT = 5 psf)
      - 40 psf LIVE
    - Deck:
      - 16 psf DEAD (MAX DECKING MATERIAL WEIGHT = 5 psf)
      - 60 psf LIVE
    - Wind:
      - Velocity 95 mph (3 sec. Gust)
      - Exposure "C"
      - Risk Category = II
    - Seismic:
      1. Importance Factor: I = 1.0
      2. S_s = 1.52 S_1 = 0.500
      3. Site Class: "E"
      4. S_{MS} = 1.17 S_{D1} = 1.22
      5. Seismic Design Category "D"
      6. Seismic Force Resisting System: Timber roof & floor diaphragms with wood shear walls & Strong-Wall panels.
      7. Base Shear:
         - V = 26.8 kips
      8. C_s = 0.180
      9. R =6.5
      10. Analysis Procedure: Equivalent lateral force method.
      11. Risk Category: "II"

1. Footings are designed based on an allowable soil pressure of 2000 PSF per the project soils report. Footings and foundations have been designed in accordance with the soils report prepared by:

   Kling Consulting Group
   Job Number: PN 19039-00
   Date: December 5, 2019, Revision Date: May 19, 2023

2. Contractor shall provide for proper de-watering of excavations from surface water, ground water, seepage, etc.
3. Footings shall be placed according to depths shown on the drawings.
4. Footing back fill and utility trench back fill within building area shall be mechanically compacted in layers. Flooding will not be permitted.
5. All abandoned footings, utilities, etc. that interfere with new construction shall be removed.
6. The soil under perimeter beams and slabs shall be above optimum moisture as described in the referenced geotechnical report prior to concrete placement and shall be verified by the soils engineer.
7. Holdown anchor bolts shall meet the requirements of detail 1/SD-1.
8. All 5/8" Ø anchor bolts may be replaced with ICC approved 5/8"Ø Titen HD screws or 5/8"Ø all thread rod in 3/4" Ø hole with 7" embed using Simpson SET-XP epoxy at the spacing indicated below.

WALL TYPE	RETROFIT 5/8" TITEN OR ALL-THREAD ROD SPACING
S1, S2, NON-SHEAR	SAME AS 5/8"ø A.B.
S3 & S4	12" O.C.

C. CONCRETE

1. All phases of work pertaining to the concrete construction shall conform to the "Building Code Requirements for Reinforced Concrete" (ACI 318 latest approved edition) with modifications as noted in the drawings and specifications.
2. Reinforced concrete design is by the "Ultimate Strength Design Method", ACI 318-(latest edition)
3. Schedule of structural concrete 28-day strengths and types:

Location in structure	Strength PSI	Type
Slabs on Grade	4500	Hard rock
Footings	4500	Hard rock

   Design based on 2500 PSI, 28-day strength, special inspection is not required. u.n.o. on foundation plans.
4. Concrete mix design shall be submitted to the engineer for approval with the following requirements:
   a. Compressive strength at age 28 days as specified above.
   b. Large aggregate-hardrock, ¾" maximum size conforming to ASTM C-33
   c. Cement-ASTM C-150, Type V Portland cement
   d. Maximum slump 5-inches, max water cement ratio: 0.50
   e. No admixtures, except for entrained air, and as approved by the engineer.
5. Concrete mixing operations, etc. shall conform to ASTM C-94
6. Placement of concrete shall conform to ACI standard 514 and project specifications.
7. Clear coverage of concrete over outer reinforcing bars shall be as follows: Concrete poured directly against earth - 3 inches clear, structural slabs - 3/4 inches clear (top and bottom), formed concrete with earth back fill - 2 inches clear.
8. All reinforcing bars, anchor bolts and other concrete inserts shall be well secured in position prior to placing concrete.
9. Provide sleeves for plumbing and electrical openings in concrete before placing. Do not cut any reinforcing that may conflict. Coring in concrete is not permitted except as shown. Notify the structural engineer in advance of conditions not shown on the drawings.
10. Conduit or pipe size (O.D.) shall not exceed 30% of slab thickness and shall be placed between the top and bottom reinforcing, unless specifically detailed otherwise. Concentrations of conduits or pipes shall be avoided except where detailed openings are provided.
11. Modulus of elasticity of concrete, when tested in accordance with ASTM C-460, shall be at least the value given by the equations in section 8.5.1 of ACI 318 for the specified 28-day strength.
12. Shrinkage of concrete, when tested in accordance with ASTM C-157, shall not exceed 0.0004 inches/inch.

D. REINFORCING STEEL

1. Reinforcing bars shall conform to the requirements of ASTM A-615 grade 60.
2. All reinforcing bar bends shall be made cold
3. Minimum lap of welded wire fabric shall be 6 inches or one full mesh and one half, which ever is greater.
4. All bars shall be marked so their identification can be made when the final in-place inspection is made.
5. Rebar splices are to be: Class "B"
6. Reinforcing splices shall be made only where indicated on the drawings.
7. Dowels between footings and walls or columns shall be the same grade, size and spacing or number as the vertical reinforcing, respectively.

E. WOOD

1. Framing Lumber
   a. Douglas fir larch No. 2 grade for 2x and 4x framing except for 2x4, 2x6 studs use Douglas fir stud grade, U.N.O.
   b. 6x framing DFL No. 1 grade
2. Bolt holes shall be 1/16" maximum larger than the bolt size. Re-tighten all nuts prior to closing in.
3. 3x3x0.229" plate washers shall be used under all sill plate anchor bolts, U.N.O. at shear walls. See the Shear Wall Schedule on sheet S1.1 for anchor bolt spacing and washer requirements at shear walls.
4. All sills or plates resting on concrete or masonry shall be pressure treated Douglas Fir. Bolts shall be placed 9 inches from the end of a plate, or from a notch greater than ½ the width of the plate, and spaced at intervals noted.
5. Do not notch joists, rafters or beams except where shown in details. Obtain engineer's approval for any holes or notches not detailed. Holes through sills, plates, studs and double plates in interior, bearing and shear walls shall conform with detail 17/SD-3.
6. Connection hardware shall be by USP or Simpson Strong-Tie, or ICC approved equal.

DUAL SPECIFICATION TABLE

SIMPSON CONNECTOR	USP CONNECTOR	SIMPSON CONNECTOR	USP CONNECTOR
CS16	RS150	HDU2	PHD2A
ST6224	KST224	HDU4	PHD4A
A35	MPA1	HDU5	PHD5A
LUS24-2	JUS24-2	HDU8	PHD8
H1	RT15	HDU11	UPHD11
H10	RT16A		
LTP4	MP4F	STHD10	STAD10
LSSU	LSSH	STHD14	STAD14

7. Fastening schedule per 2022 edition of the California Building Code (2021IBC), table No. 2304.10.2. Unless noted otherwise.
8. All nails, bolts, holdowns, straps or other steel fasteners in contact with pressure treated timber shall be hot-dipped galvanized, stainless steel or otherwise treated to prevent chemical attack. Contractor shall verify treatment method and confirm appropriate corrosion resistance be provided in accordance with hardware supplier recommendations.
9. Non-bearing, non-shear interior walls to be anchored to floor and /or roof as indicated on detail 10/S1.1.

G. GLUE LAMINATED BEAMS (GLB)

1. Glue laminated beams shall be 24F-V4 (cantilevers and continuous beams shall be 24F-V8) and have the following minimum properties: fb=2400 psi, Fv=190 psi, Fc (perpendicular)=650 psi, E=1,800,000 psi. All beams shall be fabricated using waterproof glue. Fabrication and handling per latest AITC and WCCA standards. Beams to bear grade stamp and AITC stamp and certificate. Moisture content shall be limited to 12% or less.

H. ENGINEERED LUMBER

1. Parallel strand lumber (PSL) to have min: Fb=2900 psi, Fv=290 psi, E=2 0x10^6psi
2. Laminated veneer lumber (LVL) to have min: Fb=2600 psi, Fv=285 psi, E=1.9x10^6psi
3. Double & triple LVL beams shall be nailed together as follows:
   Provide (2) rows of 16d sinkers at 12" O.C. for beams < 11 7/8" deep
   Provide (3) rows of 16d sinkers at 12" O.C. for beams > 11 7/8" deep
4. Beams w/ (4) or more plies shall be bolted together as indicated in the manufacturer's written specifications.

I. WOOD STRUCTURAL PANELS

1. All wood structural panels shall be plywood or APA rated oriented strand board. Panels shall bear the stamp of an approved agency. Panels shall be of the span/index rating shown on the plans. Fastening shall be indicated on the plans.
2. All plywood shall be C-D interior sheathing with exterior glue. Plywood shall be 4-ply, minimum.

J. SHOP DRAWINGS

1. Shop drawings shall be submitted for all structural items in addition to items required by architectural specifications.
2. The contractor shall review all shop drawings prior to submittal. Items not in accordance with contract drawings shall be flagged for review.
3. Verify all dimensions with architect.
4. Any changes, substitutions, or deviations from original contract drawings shall be redlined or flagged by submitting parties, shall be considered approved after engineers review, unless noted otherwise.
5. The engineer has the right to approve or disapprove any changes to the original drawings at anytime before or after shop drawings review.
6. The shop drawings do not replace the original contract drawings. Items omitted or shown incorrectly and are not flagged by the structural engineer or architect are not to be considered changes to the original contract drawings.
7. The adequacy of engineering designs and layout performed by the others rests with the designing or submitting authority.
8. Reviewing is intended only as an aid to the contractor in obtaining correct shop drawings. Responsibility for corrections shall rest with the contractor.

K. SHEATHING

1. Roof sheathing
   15/32" wood structural panel: plywood or oriented strand board (O.S.B.) panel index = 32/16, unblocked, nail with 8d common nails at 6" O.C. at all boundaries and supported edges, 12" O.C. field. Minimum penetration 1" in supporting member (NER 272).
2. Floor sheathing
   3/4" (min.) wood structural panel: plywood or oriented strand board (O.S.B.) T & G, panel index = 48/24, unblocked, nail with 10d common nails at 6" O.C. at all boundaries and supported edges, 12" O.C. field.
3. Shear wall sheathing
   Sheathing for shear walls shall be as indicated on the shear wall plans and schedules. Sheathing at shear walls may be installed with panels horizontal or vertical. All shear wall panels shall have minimum wood structural panel span rating of 24/0 or "Wall-16."

L. STRUCTURAL STEEL

1. Hot-rolled structural steel shapes & plates shall be per ASTM A36 with the following exception. All W-Flange shapes shall be per ASTM A992.
2. Structural steel pipe shall be per ASTM A53 grade B, Tube steel per ASTM A500 Grade B.
3. Nuts & bolts in structural steel connections shall be per ASTM 325N, with hardened washers. Design is based upon bearing type connections with thread not excluded, therefore, no special inspection required, U.N.O. in note M below.
4. Anchor bolts shall be per ASTM A307, U.N.O.
5. Welds shall be by E70XX, low hydrogen electrodes, all welding shall be performed in a shop approved by the building official.
6. Grout material for base plates shall be non-metallic, non-shrink, pre-packaged grout conforming to ASTM C 1107.

M. SPECIAL INSPECTION / QUALITY ASSURANCED FLOOR PLAN

1. The seismic lateral load resisting system consists of timber roof diaphragms with wood shear walls and Strong-Wall panels.
2. Special inspections shall be required:
   - All field welding
   - All high-strength bolting operations
   - All pre-manufactured shear walls (Simpson Strong-wall panels)
   - All post-installed anchorage to concrete (epoxy grout applications)
   - When required by the local building department: All timber elements of the lateral force resisting system components
   a. The owners shall employ special inspectors who shall provide additional inspections during construction in accordance with CBC section 17.
   b. All special inspections shall be performed by an independent certified inspector from an established testing agency, licensed and approved by the building department.
   c. The testing agency shall send copies of all structural testing and inspection reports directly to Vector Structural Engineering and all interested parties.
3. Structural testing is not required.
4. All reports shall be distributed on a monthly basis to the engineer of record, owner, contractor, and to the building official.
5. No structural observation is required. However, the engineer of record reserves the right to make field observations during construction approximately once per week.

SHEET INDEX

SHT #	SHEET NAME	ORIGINAL	1 MM-DD-YY	2 MM-DD-YY	3 MM-DD-YY	4 MM-DD-YY	5 MM-DD-YY	6 MM-DD-YY	7 MM-DD-YY	8 MM-DD-YY
S1	STRUCTURAL GENERAL NOTES	●								
S1.1	STANDARD DETAILS & SCHEDULES	●								
S2	FOUNDATION PLAN	●								
S3	LOW ROOF / FLOOR FRAMING PLAN	●								
S4	ROOF FRAMING PLAN	●								
S5	MAIN SHEAR WALL PLAN	●								
S6	UPPER SHEAR WALL PLAN	●								
SD-1	STRUCTURAL DETAILS	●								
SD-2	STRUCTURAL DETAILS	●								
SD-3	STRUCTURAL DETAILS	●								
SD-4	STRUCTURAL DETAILS	●								
WSWH1	STRONG-WALL ANCHORAGE DETAILS	●								
WSWH2	STRONG-WALL FRAMING DETAILS	●								

ABBREVIATIONS

A.B.	ANCHOR BOLT	LSL	LAMINATED STRAND LUMBER
ARCH'L	ARCHITECTURAL DRAWINGS	LVL	LAMINATED VENEER LUMBER
BLDG	BUILDING	MFR	MANUFACTURED
BLK	BLOCK	N.T.S.	NOT TO SCALE
BLK'G	BLOCKING	o/	OVER
BM	BEAM	O.C.	ON CENTER
CANT'L	CANTILEVERED	OPT'L	OPTIONAL
C.L.	CENTER LINE	O.S.B.	ORIENTED STRAND BOARD
CLG	CEILING	PSL	PARALLEL STRAND LUMBER
CMU	CONCRETE MASONRY UNIT	PL	PLATE
COL	COLUMN	REQ'D	REQUIRED
CONT	CONTINUOUS	SHTH'G	SHEATHING
DBL	DOUBLE	SHT	SHEET
DTL	DETAIL	SIM	SIMILAR
(E)	EXISTING	STL	STEEL
EL	ELEVATION	SW	STRONG-WALL
EOR	ENGINEER OF RECORD	T.O.F.	TOP OF FOOTING
FND	FOUNDATION	T.O.W.	TOP OF WALL
FTG	FOOTING	T&B	TOP AND BOTTOM
GL	GLUE LAMINATED (BEAM)	TYP.	TYPICAL
HDR	HEADER	U.N.O.	UNLESS NOTED OTHERWISE
HORIZ.	HORIZONTAL	VERT.	VERTICAL
H.D.	HOLD DOWN	w/	WITH

RELEASE DATE

DATE:	08-09-24	ENG.AE	DRW.AE	CHK.KAW
REV.#	DATE	BY:	DESCRIPTION	

VECTOR ENGINEERS
23022 LA CADENA DR. STE 201
LAGUNA HILLS, CA
(714)576-6524

STERN ARCHITECTS
QUERRIERA RESIDENCE
2316 Fahrill Drive
Newport Beach, CA. 92660
STRUCTURAL GENERAL NOTES

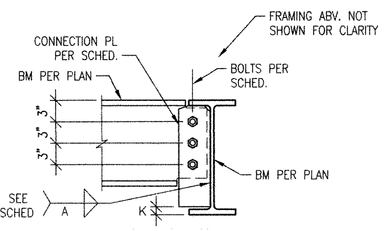
LICENSED PROFESSIONAL ENGINEER
KALEN ALMA WILSON
83753
CIVIL
STATE OF CALIFORNIA
11-4-2024

KALEN A. WILSON, P.E.
LICENSE # 83753

C0216-001-241

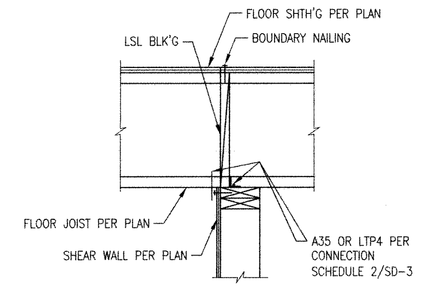
S1

ISSUED
08-19-25



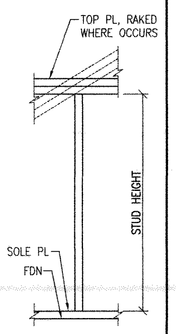
BEAM CONNECTION SCHEDULE			
SHEAR PLATE CONNECTION			
MEMBER (DEPTH)	# OF BOLTS CONN. 3/4" DIA. A325N	PL t	WELD SIZE A
8"–10"	2	5/16"	1/4"
12"–14"	3	3/8"	1/4"

N.T.S. 11



N.T.S. 7

STUD HEIGHT TABLE			
STUD WALL TYPE	BEARING AND/OR SHEAR WALLS (MAX. HEIGHT)		NON-BEARING AND NON-SHEAR WALLS (MAX. HEIGHT)
	EXTERIOR	INTERIOR	INTERIOR ONLY
2x4 STUD @ 16" O.C.	8'-6"	10'-0"	13'-0"
2x4 STUD @ 12" O.C.	9'-6"	11'-6"	14'-0"
(2) 2x4 STUD @ 16" O.C.	12'-0"	13'-6"	14'-0"
2x4 DFL #2 @ 16" O.C.	9'-0"	11'-0"	13'-0"
2x4 DFL #2 @ 12" O.C.	10'-6"	13'-0"	14'-0"
(2) 2x4 DFL #2 @ 16" O.C.	13'-0"	13'-6"	14'-0"
2x6 STUD @ 16" O.C.	14'-6"	19'-0"	20'-0"
2x6 STUD @ 12" O.C.	17'-0"	21'-0"	22'-0"
(2) 2x6 STUD @ 16" O.C.	21'-0"	22'-0"	22'-6"
2x6 DFL #2 @ 16" O.C.	16'-6"	19'-6"	20'-0"
2x6 DFL #2 @ 12" O.C.	18'-6"	21'-6"	22'-0"
(2) 2x6 DFL #2 @ 16" O.C.	22'-6"	22'-6"	22'-6"
2x8 DFL #2 @ 16" O.C.	22'-0"	26'-6"	27'-0"
2x8 DFL #2 @ 12" O.C.	25'-6"	28'-0"	30'-0"
(2) 2x8 DFL #2 @ 16" O.C.	29'-6"	29'-6"	30'-0"
1-3/4 x 7-1/4 LVL STUDS @ 16" O.C.	26'-6"	28'-6"	30'-0"
1-3/4 x 5-1/2 LVL STUDS @ 16" O.C.	20'-0"	21'-6"	22'-0"



NOTES:
1. THIS TABLE ASSUMES IBC WIND LOADS w/ 95 mph, EXP. "C" AT EXTERIOR WALLS AND 5 psf LATERAL LOAD AT INTERIOR WALLS.
2. THIS TABLE ASSUMES AXIAL DL = 710 lb/ft, LL = 760 lb/ft. AT EXTERIOR AND INTERIOR WALLS.
3. THIS TABLE ASSUMES IBC 5psf LATERAL LOAD @ INTERIOR WALLS.

STANDARD STUD TABLE

N.T.S. 4

SHEAR WALL SCHEDULE							
MARK	MIN. BLOCKED MATERIAL	EDGE / BOUNDARY NAILING	FIELD NAILING	SOLE PL NAILING, WHERE OCCURS	SHEAR WALL CAPACITY		DEFAULT SILL ANCHORAGE, U.N.O.
					SEISMIC	WIND	
P1	3/8" PLYWOOD OR O.S.B.	8d COMMON NAILS @ 6" O.C.	8d COMMON NAILS @ 12" O.C.	16d SINKERS @ 6" O.C.	260 plf	365 plf	S1
P2	3/8" PLYWOOD OR O.S.B.	8d COMMON NAILS @ 4" O.C.	8d COMMON NAILS @ 12" O.C.	16d SINKERS @ 4" O.C.	380 plf	520 plf	S2
P3	3/8" PLYWOOD OR O.S.B.	8d COMMON NAILS @ 3" O.C.	8d COMMON NAILS @ 12" O.C.	16d SINKERS @ 3" O.C.	490 plf	685 plf	S3
P4	3/8" PLYWOOD OR O.S.B.	8d COMMON NAILS @ 2" O.C.	8d COMMON NAILS @ 12" O.C.	16d SINKERS @ 2" O.C.	640 plf	895 plf	S4
P5	15/32" WOOD STRUCTURAL 1 PANEL	10d COMMON NAILS @ 2" O.C.	10d COMMON NAILS @ 12" O.C.	1/4x6" SDS SCREWS @ 6" O.C.	870 plf	1040 plf	S5

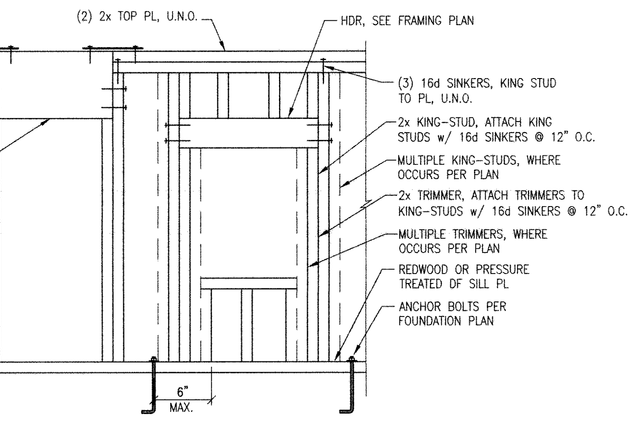
SILL ANCHORAGE SCHEDULE			
MARK	NOMINAL SILL PL THICKNESS	5/8"ø A.B. SPACING	CAPACITY
S1	2x	48" O.C.	370 plf
S2	2x	32" O.C.	550 plf
S3	2x	24" O.C.	740 plf
S4	2x	16" O.C.	1040 plf
S5	3x	10" O.C.	1785 plf

SHEAR WALL LENGTH TOLERANCES	
SPECIFIED SHEAR WALL LENGTH	ACCEPTABLE SHEAR WALL TOLERANCE
UP TO 3'-0"	± 2"
OVER 3'-0" AND UP TO 5'-0"	± 3"
OVER 5'-0" AND UP TO 7'-0"	± 4"
OVER 7'-0" AND UP TO 10'-0"	± 6"
OVER 10'-0"	± 8"

1. ALL SHEAR WALLS SHALL BE FRAMED TO THE MINIMUM LENGTHS SHOWN ON THE PLANS WITH THE TOLERANCES INDICATED ON THE TABLE ABOVE, U.N.O. ON PLAN W/ MINIMUM WALL LENGTH.
2. ALL SHEAR WALLS SHALL TERMINATE ON AT LEAST (1) FULL HEIGHT STUD. ADDITIONAL STUDS OR SOLID POSTS SHALL BE INSTALLED AS REQUIRED FOR HOLDOWNS WHERE THEY OCCUR.
3. 8d COMMON NAIL SHANK DIAMETER = .131", 16d SINKER SHANK DIAMETER = .148"
4. FASTENERS AND CONNECTORS IN CONTACT WITH PRESERVATIVE TREATED WOOD ARE TO BE GALVANIZED.
5. FOR "P3" AND "P4" SHEAR WALLS, ALL FRAMING RECEIVING EDGE NAILING FROM ADJOINING PANEL EDGES SHALL BE 3-INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED. AS AN ALTERNATE, (2) 2x STUDS MAY BE USED PROVIDED THEY ARE NAILED TOGETHER w/ (2) 16d SINKERS @ 6" O.C. FULL HEIGHT. SEE DTL 6/-.
6. FOR "P2", "P3" AND "P4" DOUBLE-SIDED SHEAR WALLS, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING SHALL BE 3-INCH NOMINAL OR WIDER AT ADJOINING PANEL EDGES AND NAILS ON EACH SIDE SHALL BE STAGGERED. SEE DTL 6/-
7. ALL ANCHOR BOLTS SHALL HAVE 7" MINIMUM EMBEDMENT.
8. ALL SHEAR WALL ANCHOR BOLTS SHALL INCLUDE A STEEL 3"x3"x0.229" PLATE WASHER BETWEEN THE SILL PL & NUT. THE HOLE IN THE PLATE WASHER IS PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1¾". PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT. ANCHOR BOLTS & PLATE WASHERS ARE TO BE OFFSET TOWARD THE SHEATHED WALL EDGE TO LIMIT THE GAP BETWEEN THE EDGE OF WASHER TO SHEATHING TO A MAXIMUM OF 1/2". WHERE BOTH SIDES OF A 2x6 WALL IS SHEATHED A STEEL 4-1/2"x3"x0.229" PLATE WASHER SHALL BE CENTERED ON THE SILL PLATE, PER DTL 2/-.
9. PROVIDE DOUBLE EDGE NAILING FULL HEIGHT OF SHEAR WALL WHEN HDU8 OR LARGER HOLDOWNS ARE USED.

STANDARD SHEAR WALL SCHEDULE

N.T.S. 1



TYPICAL WALL FRAMING

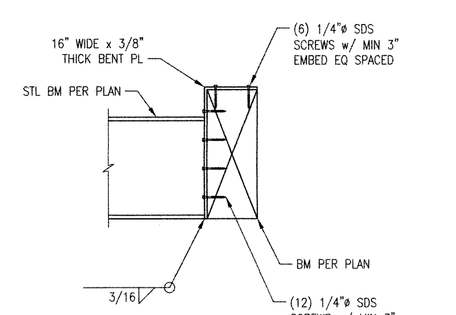
N.T.S. 8

CEILING JOIST SPAN TABLE				
DOUGLAS FIR-LARCH GRADE	2x4	2x6	2x8	2x10
	MAXIMUM CEILING JOIST SPAN (CEILING JOIST SPACING = 16" O.C.)			
	(FT.-IN.)	(FT.-IN.)	(FT.-IN.)	(FT.-IN.)
#1	7'-9"	12'-3"	16'-0"	20'-3"
#2	7'-6"	12'-0"	15'-6"	19'-0"

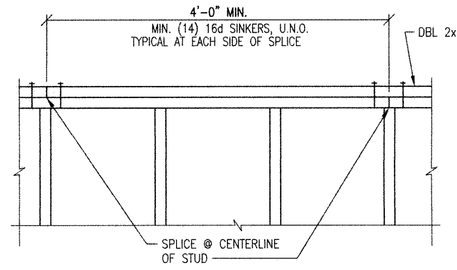
NOTES:
- SPAN TABLE ASSUMES MAX DEAD LOAD = 10 PSF, MAX LIVE LOAD = 20 PSF
- ATTACH CEILING JOISTS TO FRAMING PER CBC TABLE 2304.10.1, U.N.O.

STANDARD CEILING JOIST SPAN TABLE

N.T.S. 5



N.T.S. 12

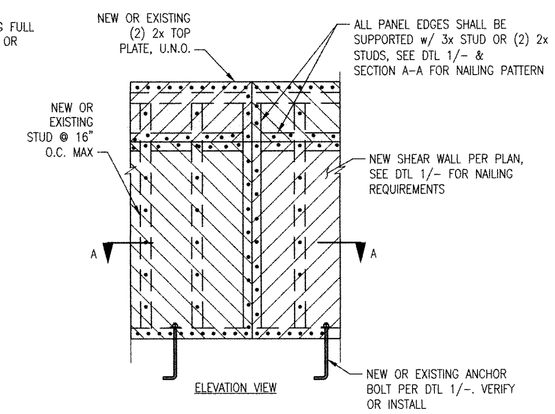


NOTE:
WHERE SPLICE LENGTH IS LESS THAN 4'-0" INSTALL ST6224 STRAP AT PL SPLICES. STRAPS ARE NOT REQUIRED WHERE ONE OF THE PLATES IS CONTINUOUS FOR AT LEAST 4'-0" IN EACH DIRECTION.

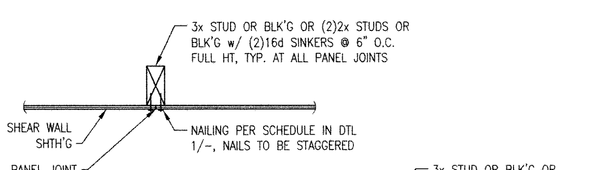
TYPICAL TOP PLATE SPLICE

N.T.S. 9

NOTE: PROVIDE DOUBLE EDGE NAILING FULL HEIGHT OF SHEAR WALL WHEN HDU8 OR LARGER HOLDOWNS ARE USED.

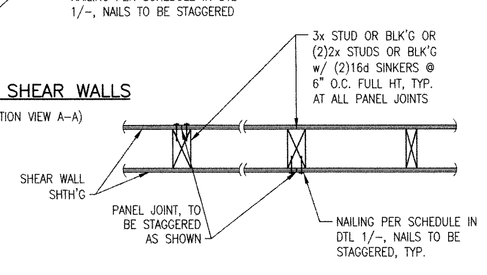


ELEVATION VIEW



P3 & P4 SHEAR WALLS

(SECTION VIEW A-A)

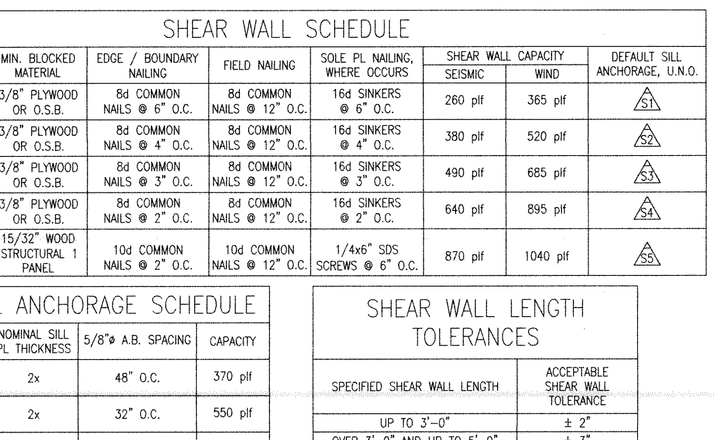


DOUBLE P2, P3, & P4 SHEAR WALLS

(SECTION VIEW A-A)

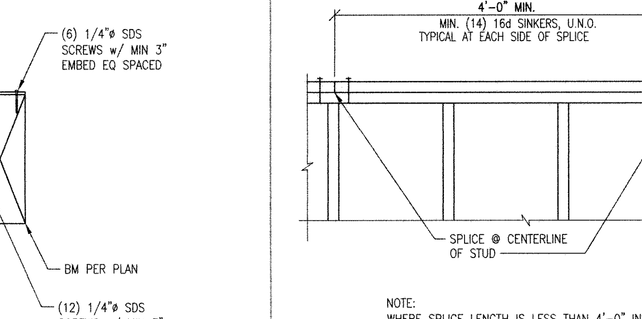
TYPICAL SHEAR WALL PANEL EDGE NAILING

N.T.S. 6



TYP. SHEAR WALL WASHERS

N.T.S. 2



NON-BRN'G & NON-SHEAR WALL CONN.

N.T.S. 10

FOOTING SCHEDULE		
MARK	SIZE*	REINFORCING, BOTTOM
F2.0	2'-0" SQ. x 12" THICK	(3) #4 EACH WAY
F2.5	2'-6" SQ. x 12" THICK	(4) #4 EACH WAY
F3.0	3'-0" SQ. x 12" THICK	(4) #4 EACH WAY
F3.5	3'-6" SQ. x 12" THICK	(5) #4 EACH WAY
F4.0	4'-0" SQ. x 12" THICK	(6) #4 EACH WAY
F4.5	4'-6" SQ. x 12" THICK	(6) #4 EACH WAY
F5.0	5'-0" SQ. x 12" THICK	(7) #4 EACH WAY
F5.5	5'-6" SQ. x 12" THICK	(8) #4 EACH WAY

*NOTE:
INCREASE FOOTING THICKNESS AT HOLDOWNS PER HOLDOWN SCHEDULE & AS REQUIRED FOR MIN FOOTING DEPTH AS SPECIFIED ON PLANS & DETAILS, TYP. AS REQUIRED

STANDARD FOOTING SCHEDULE

N.T.S. 3

DATE:	08-08-24	ENG: AE	DWN: AE	CHK: KAW
REV. #	DATE	BY:	DESCRIPTION	

VECTOR ENGINEERS
23022 La Cadena Dr, Ste 201
Laguna Hills, CA
(714) 576-6524

STERN ARCHITECTS
QUERRIERA RESIDENCE
2316 Fairhill Drive
Newport Beach, CA. 92660
STANDARD DETAILS & SCHEDULES

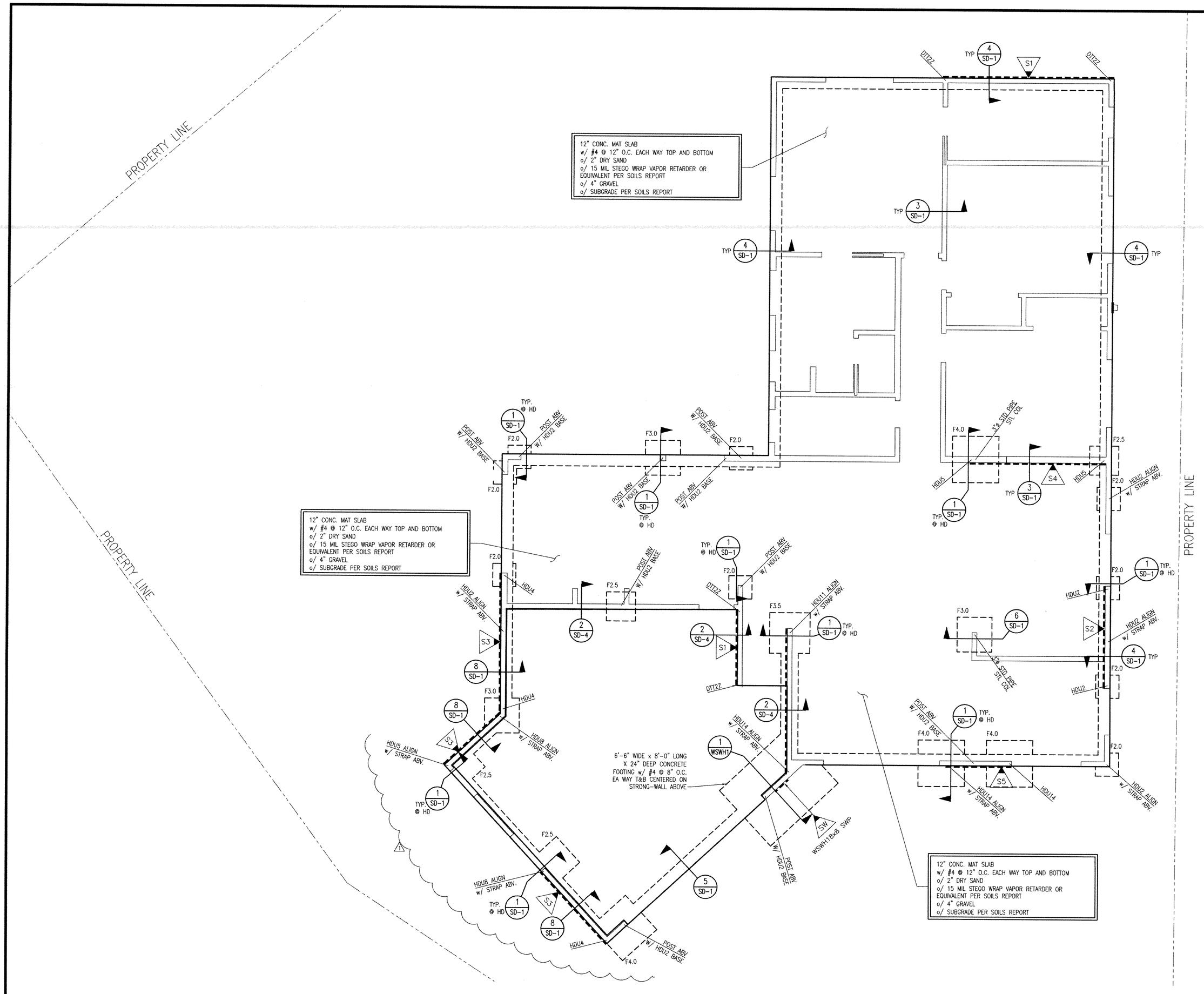
REGISTERED PROFESSIONAL ENGINEER
KALEN ALMA WILSON
No. 83753
CIVIL
STATE OF CALIFORNIA
11-4-2024

KALEN A. WILSON, P.E.
LICENSE # 83753

C0216-001-241

S1.1

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03.19.25

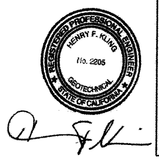


FOUNDATION PLAN

1/4" = 1'-0"

FOUNDATION NOTES:

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
2. ALL EXTERIOR WALLS, INTERIOR BEARING WALLS & SHEAR WALLS TO BE ATTACHED TO THE FOUNDATION w/ 5/8"ø x 10" LONG ANCHOR BOLTS (7" EMBED.) AT 48" O.C., U.N.O. SEE THIS PLAN & SHEAR WALL SCHEDULE FOR ANCHOR BOLT REQUIREMENTS AT SHEAR WALLS. ANCHOR BOLTS AT SHEAR WALLS TO HAVE WASHERS PER SHEAR WALL SCHEDULE (S1.1). ALL OTHER ANCHOR BOLTS TO HAVE WASHERS PER NOTE "E" IN GENERAL NOTES (S1).
3. ALL HOLDOWNS SHALL BE INSTALLED AS SHOWN ON DETAIL 1/SD-1.
4. ISOLATED FOOTINGS & INTERIOR STRIP FOOTINGS TO BE CENTERED BELOW POSTS & BEARING/SHEAR WALLS, RESPECTIVELY.
5. SEE SHEET S1.1 FOR FOOTING SCHEDULE.
6. SW – INDICATES LOCATION OF SIMPSON STRONG WALL, INSTALL PER MFR'S SPECIFICATIONS, USE MFR'S TEMPLATE TO ENSURE PROPER ANCHORAGE LOCATION. SEE SHEAR WALL PLANS FOR SPECIFICATIONS.



NOTE:
SEE SHEET S1.1 FOR SILL ANCHORAGE SCHEDULE

SILL ANCHORAGE KEY

NOTE:
ADDITIONAL PAD NOT REQUIRED UNDER HDU2 & HDU4 WHEN SSTB ANCHOR BOLTS ARE USE, TP

DATE:	08-08-24	ENG.AE:	DWN.AE	CHK.KAW
REV. #	DATE	BY:	DESCRIPTION	
1	11-4-24	KAW	PLANCHECK	

VECTOR
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STERN ARCHITECTS
QUERRIERA RESIDENCE
2316 Fairhill Drive
Newport Beach, CA. 92660
FOUNDATION PLAN

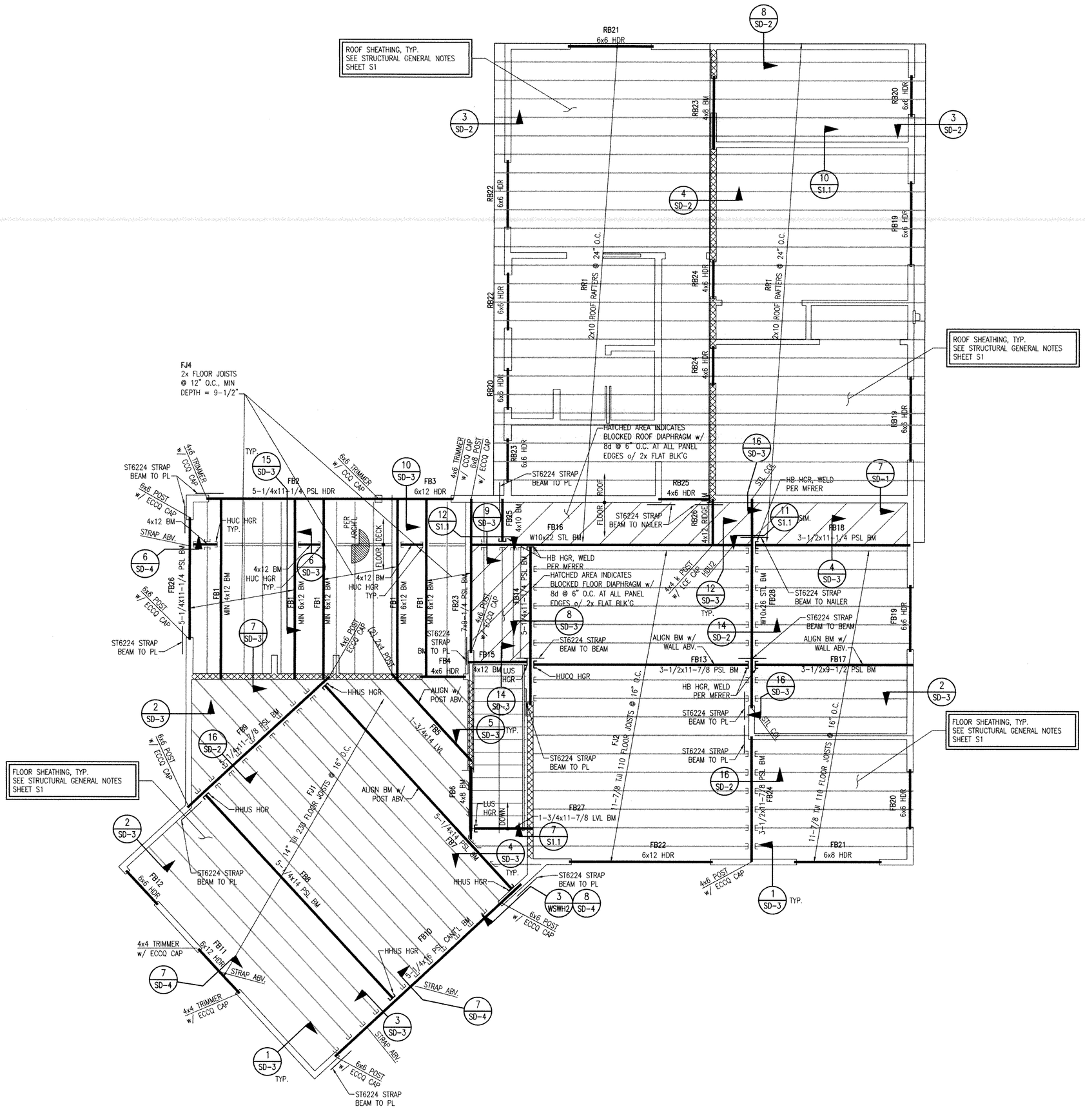
LICENSED PROFESSIONAL ENGINEER
KALEN ALMA WILSON
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STATE OF CALIFORNIA
11-4-2024

KALEN A. WILSON, P.E.
LICENSE # 83753

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S2

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08-19-25



MAIN FLOOR / LOW ROOF FRAMING PLAN

1/4" = 1'-0"

NOTES:

1. ALL FRAMED WALLS TO BE 2x @ 16" O.C. (MAX) PER ARCHITECTURAL PLANS AND SHALL MEET REQUIREMENTS OF WALL TABLE ON SHEET S1.1.
2. FOR 2x4 FRAMED WALLS AT HEADERS (HDR):
   A. PROVIDE (1) 2x4 TRIMMER & (1) 2x4 KING STUD AT OPENINGS < 6'-0" U.N.O.
   B. PROVIDE (2) 2x4 TRIMMERS & (2) 2x4 KING STUDS AT OPENINGS ≥ 6'-0" & ≤ 10'-0" U.N.O.
   C. PROVIDE (2) 2x4 TRIMMERS & (3) 2x4 KING STUDS AT OPENINGS ≥ 10'-0" & ≤ 18'-0" U.N.O. (1) KING STUD REQUIRED AT BAY WINDOW OPENINGS & AT GARAGE OPENINGS WHERE ADDITIONAL KING STUDS WOULD NOT FIT.
   NOTE: KINGSTUDS NOT REQUIRED AT BEAMS (BM)
3. FOR 2x6 FRAMED WALLS AT HEADERS (HDR):
   A. PROVIDE (1) 2x6 TRIMMER & (1) 2x6 KING STUD AT OPENINGS < 8'-0" U.N.O.
   B. PROVIDE (2) 2x6 TRIMMERS & (2) 2x6 KING STUDS AT OPENINGS ≥ 8'-0" & ≤ 12'-0" U.N.O.
   C. PROVIDE (2) 2x6 TRIMMERS & (3) 2x6 KING STUDS AT OPENINGS ≥ 12'-0" & ≤ 20'-0" U.N.O.
   NOTE: KINGSTUDS NOT REQUIRED AT BEAMS (BM)
4. FOR 2x8 FRAMED WALLS AT HEADERS (HDR):
   A. PROVIDE (1) 2x8 TRIMMER & (1) 2x8 KING STUD AT OPENINGS < 8'-0" U.N.O.
   B. PROVIDE (2) 2x8 TRIMMERS & (2) 2x8 KING STUDS AT OPENINGS ≥ 8'-0" & ≤ 12'-0" U.N.O.
   C. PROVIDE (2) 2x8 TRIMMERS & (3) 2x8 KING STUDS AT OPENINGS ≥ 12'-0" & ≤ 20'-0" U.N.O.
   NOTE: KINGSTUDS NOT REQUIRED AT BEAMS (BM)
5. FACE NAIL MULTIPLE 2x POSTS WITH 16d SINKERS @ 6" O.C.
6. SHADED AREAS ARE TYPICAL OVERFILL, STICK FRAMED PER DETAIL 5/SD-2 OR OVERBUILD TRUSSES PER TRUSS MANUFACTURER
7. INTERIOR BEARING WALLS
8. ALL GLULAM BEAMS TO HAVE STANDARD CAMBER (R = 2000') U.N.O.
9. PROVIDE (2) 2x POST, EACH END OF ALL BEAMS & GIRDER TRUSSES, U.N.O.
10. BEAM AND HEADER SIZES INDICATED ON THE PLANS ARE MINIMUM SIZES. LARGER SIZES MAY BE INSTALLED AT THE CONTRACTOR'S OPTION.
11. CONTINUOUS TOP PLATE MAY BE USED IN LIEU OF ST6224 STRAP FROM BEAM TO PLATE.
12. SEE DTL 15/SD-2 FOR STANDARD POST TO BEAM, POST TO POST, BEAM TO BEAM CONNECTION U.N.O.

BEAM KEY:
= NEW BEAM

TYP. WALL KEY:
= NEW WALL

DATE:	08-08-24	ENG: AE	DWN: AE	CHK: KAW
REV: #	DATE:	BY:	DESCRIPTION	

VECTOR ENGINEERS
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Laguna Hills, CA
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STERN ARCHITECTS
QUERRIERA RESIDENCE
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Newport Beach, CA. 92660
LOW ROOF / FLOOR FRAMING PLAN

LICENSED PROFESSIONAL ENGINEER
KALEN ALMA WILSON
No. 83753
CIVIL
STATE OF CALIFORNIA
11-4-2024

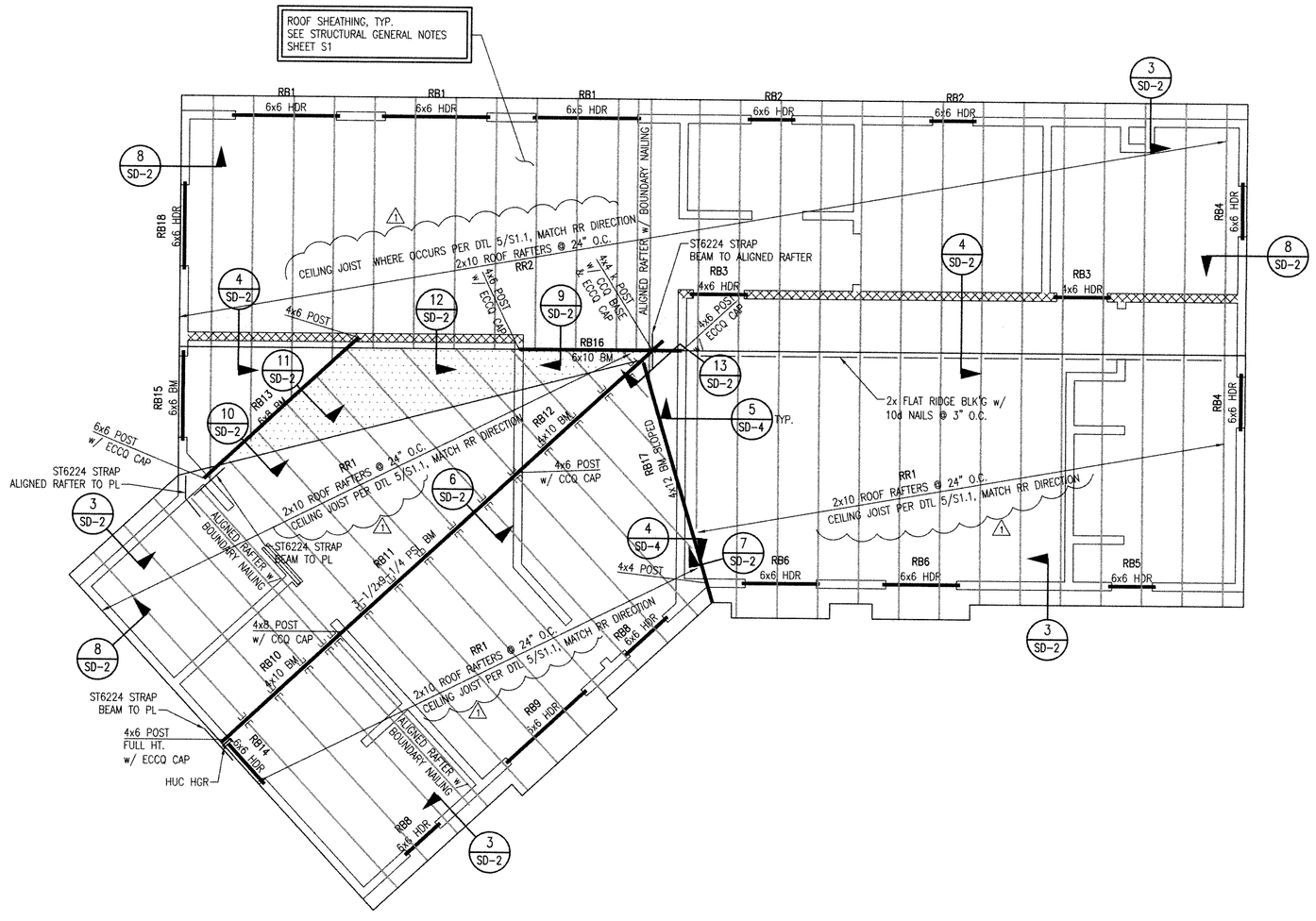
KALEN A. WILSON, P.E.
LICENSE # 83753

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S3

ISSUED
03-19-25

NOTES:
1. ALL FRAMED WALLS TO BE 2x @ 16" O.C. (MAX) PER ARCHITECTURAL PLANS AND SHALL MEET REQUIREMENTS OF WALL TABLE ON SHEET S1.1.
2. FOR 2x4 FRAMED WALLS AT HEADERS (HDR):
   A. PROVIDE (1) 2x4 TRIMMER & (1) 2x4 KING STUD AT OPENINGS < 6'-0" U.N.O.
   B. PROVIDE (2) 2x4 TRIMMERS & (2) 2x4 KING STUDS AT OPENINGS ≥ 6'-0" & ≤ 10'-0" U.N.O.
   C. PROVIDE (2) 2x4 TRIMMERS & (3) 2x4 KING STUDS AT OPENINGS ≥ 10'-0" & ≤ 18'-0" U.N.O. (1) KING STUD REQUIRED AT BAY WINDOW OPENINGS & AT GARAGE OPENINGS WHERE ADDITIONAL KING STUDS WOULD NOT FIT.
   NOTE: KINGSTUDS NOT REQUIRED AT BEAMS (BM)
3. FOR 2x6 FRAMED WALLS AT HEADERS (HDR):
   A. PROVIDE (1) 2x6 TRIMMER & (1) 2x6 KING STUD AT OPENINGS < 8'-0" U.N.O.
   B. PROVIDE (2) 2x6 TRIMMERS & (2) 2x6 KING STUDS AT OPENINGS ≥ 8'-0" & ≤ 12'-0" U.N.O.
   C. PROVIDE (2) 2x6 TRIMMERS & (3) 2x6 KING STUDS AT OPENINGS ≥ 12'-0" & ≤ 20'-0" U.N.O.
   NOTE: KINGSTUDS NOT REQUIRED AT BEAMS (BM)
4. FOR 2x8 FRAMED WALLS AT HEADERS (HDR):
   A. PROVIDE (1) 2x8 TRIMMER & (1) 2x8 KING STUD AT OPENINGS < 8'-0" U.N.O.
   B. PROVIDE (2) 2x8 TRIMMERS & (2) 2x8 KING STUDS AT OPENINGS ≥ 8'-0" & ≤ 12'-0" U.N.O.
   C. PROVIDE (2) 2x8 TRIMMERS & (3) 2x8 KING STUDS AT OPENINGS ≥ 12'-0" & ≤ 20'-0" U.N.O.
   NOTE: KINGSTUDS NOT REQUIRED AT BEAMS (BM)
5. FACE NAIL MULTIPLE 2x POSTS WITH 16d SINKERS @ 6" O.C.
6. SHADED AREAS ARE TYPICAL OVERFILL, STICK FRAMED PER DETAIL 5/SD-2 OR OVERBUILD TRUSSES PER TRUSS MANUFACTURER
7. INTERIOR BEARING WALLS
8. ALL GLULAM BEAMS TO HAVE STANDARD CAMBER (R = 2000') U.N.O.
9. PROVIDE (2) 2x POST, EACH END OF ALL BEAMS & GIRDER TRUSSES, U.N.O.
10. BEAM AND HEADER SIZES INDICATED ON THE PLANS ARE MINIMUM SIZES. LARGER SIZES MAY BE INSTALLED AT THE CONTRACTOR'S OPTION.
11. CONTINUOUS TOP PLATE MAY BE USED IN LIEU OF ST6224 STRAP FROM BEAM TO PLATE.
12. SEE DTL 15/SD-2 FOR STANDARD POST TO BEAM, POST TO POST, BEAM TO BEAM CONNECTION U.N.O.



ROOF FRAMING PLAN

1/4" = 1'-0"

BEAM KEY:
——— = NEW BEAM

TYP. WALL KEY:
▭ = NEW WALL

DATE:	08-08-24	ENG.AE	DWN.AE	CHK: KAW
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1	11-4-24	KAW	PLANCHECK	

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(714)576-6524

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Newport Beach, CA. 92660
ROOF FRAMING PLAN

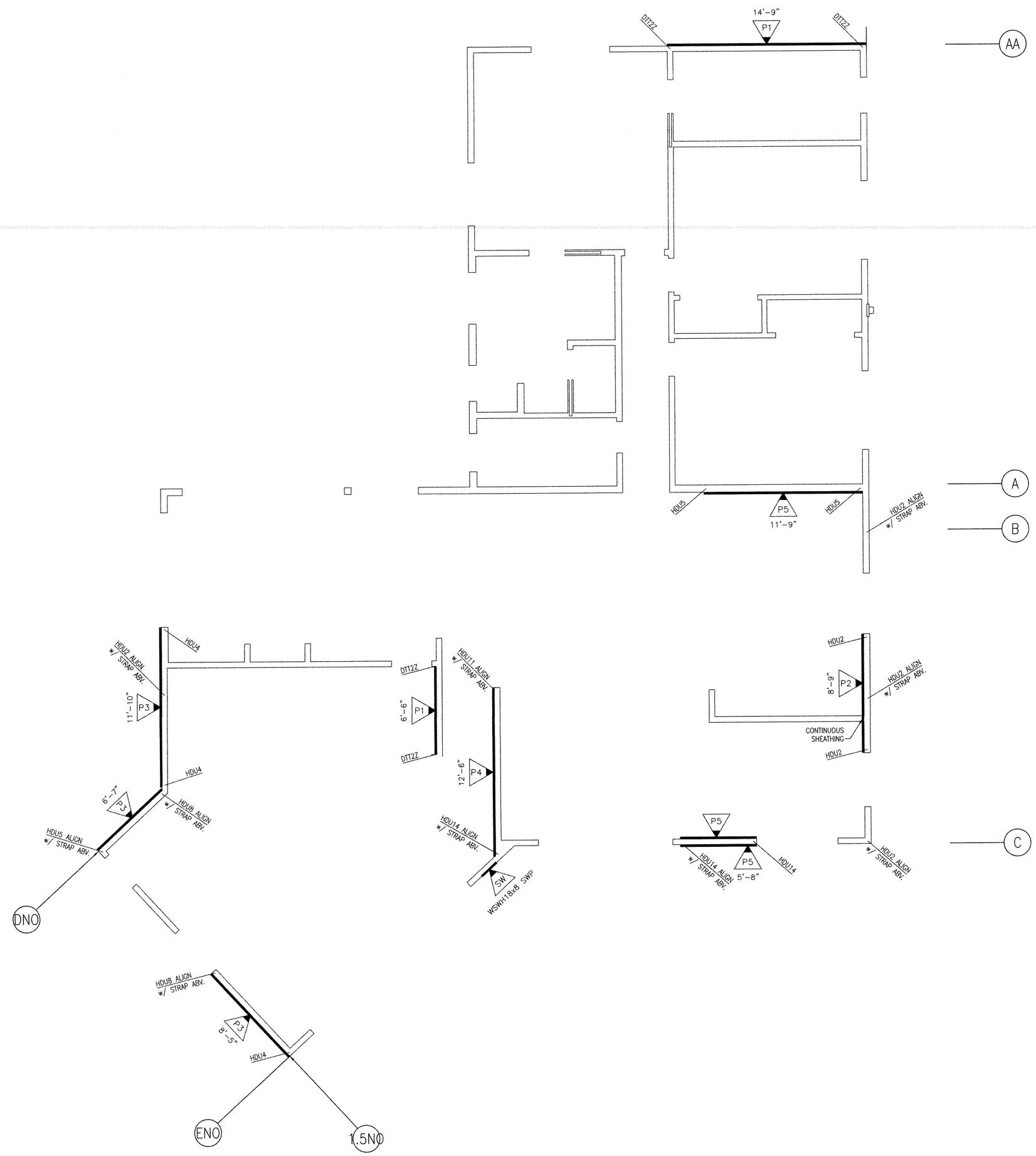
LICENSED PROFESSIONAL ENGINEER
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CIVIL
STATE OF CALIFORNIA
11-4-2024

KALEN A. WILSON, P.E.
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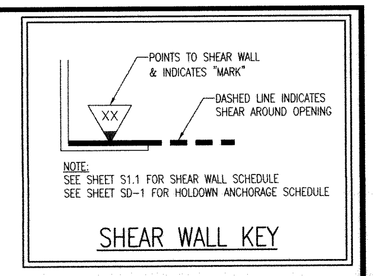
S4

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03-19-25



MAIN SHEAR WALL PLAN

1/4" = 1'-0"



NOTE:
SEE SHEET S1.1 FOR SHEAR WALL SCHEDULE
SEE SHEET SD-1 FOR HOLDOWN ANCHORAGE SCHEDULE

SHEAR WALL KEY

NOTE:
WHERE STRAP HOLDOWN IS ATTACHED TO A SINGLE KINGSTUD & A SINGLE TRIMMER, ATTACH THE TWO TOGETHER w/ (2) 16d SINKERS @ 6" O.C. FULL HEIGHT OR w/ LTP4 @ 12" O.C. FULL HEIGHT.

NOTE:
INSTALL CS16 STRAPS TO 2x STUDS ABOVE AND BELOW FLOOR FRAMING. NAIL EACH END w/ (11) 10d NAILS. (STRAP LENGTH = 48"). WHERE WALL DOES NOT OCCUR BELOW, ATTACH TO BEAM OR TRUSS

NOTE:
INSTALL MST48 STRAPS TO 2x STUDS ABOVE AND BELOW FLOOR FRAMING. NAIL EACH END w/ (23) 16d NAILS. WHERE WALL DOES NOT OCCUR BELOW, ATTACH TO BEAM

NOTE:
SHEAR WALL SHEATHING MAY BE ON EITHER SIDE OF INDICATED WALL.

DATE:	08-08-24	ENG.AE	CHK: KAW
REV: #	DATE	BY:	DESCRIPTION

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LAGUNA HILLS, CA
(714)576-6524

STERN ARCHITECTS
QUERRIERA RESIDENCE
2316 Fairhill Drive
Newport Beach, CA. 92660
MAIN SHEAR WALL PLANS

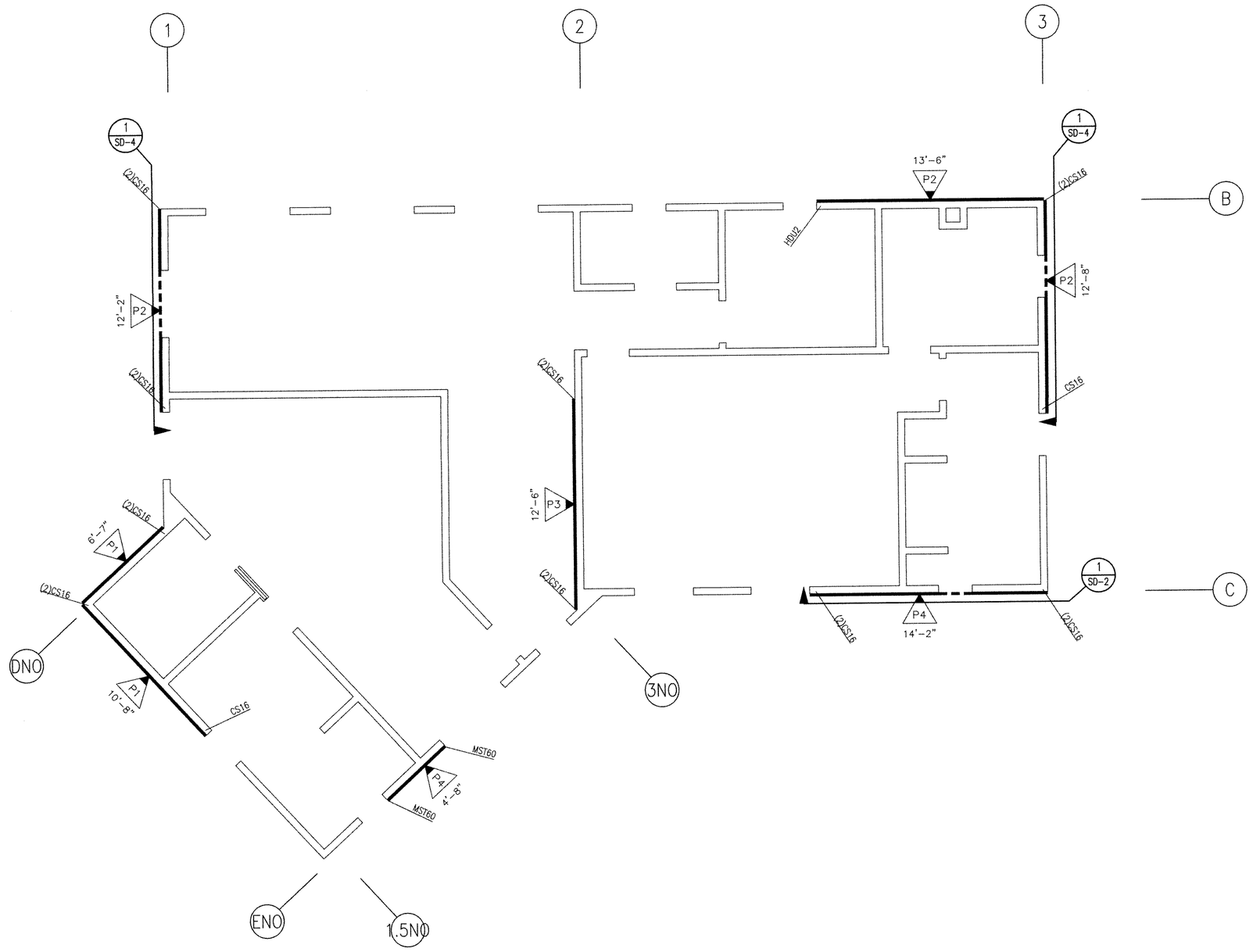
LICENSED PROFESSIONAL ENGINEER
KALEN ALMA WILSON
83753
CIVIL
STATE OF CALIFORNIA
11-4-2024

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UPPER SHEAR WALL PLAN

1/4" = 1'-0"

POINTS TO SHEAR WALL & INDICATES "MARK"

DASHED LINE INDICATES SHEAR AROUND OPENING

XX

NOTE:
SEE SHEET S1.1 FOR SHEAR WALL SCHEDULE
SEE SHEET SD-1 FOR HOLDOWN ANCHORAGE SCHEDULE

SHEAR WALL KEY

NOTE:
WHERE STRAP HOLDOWN IS ATTACHED TO A SINGLE KINGSTUD & A SINGLE TRIMMER, ATTACH THE TWO TOGETHER w/ (2) 16d SINKERS @ 6" O.C. FULL HEIGHT OR w/ LTP4 @ 12" O.C. FULL HEIGHT.

NOTE:
INSTALL CS16 STRAPS TO 2x STUDS ABOVE AND BELOW FLOOR FRAMING. NAIL EACH END w/ (11) 10d NAILS. (STRAP LENGTH = 48"). WHERE WALL DOES NOT OCCUR BELOW, ATTACH TO BEAM OR TRUSS

NOTE:
INSTALL MST48 STRAPS TO 2x STUDS ABOVE AND BELOW FLOOR FRAMING. NAIL EACH END w/ (23) 16d NAILS. WHERE WALL DOES NOT OCCUR BELOW, ATTACH TO BEAM

NOTE:
SHEAR WALL SHEATHING MAY BE ON EITHER SIDE OF INDICATED WALL.

DATE:	08-08-24	ENG.AE	DWN: AE	CHK: KAW
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23022 LA CADENA DR. STE 201
LAGUNA HILLS, CA
(714)576-6524

STERN ARCHITECTS
QUERRIERA RESIDENCE
2316 Fahrill Drive
Newport Beach, CA. 92660
UPPER SHEAR WALL PLANS

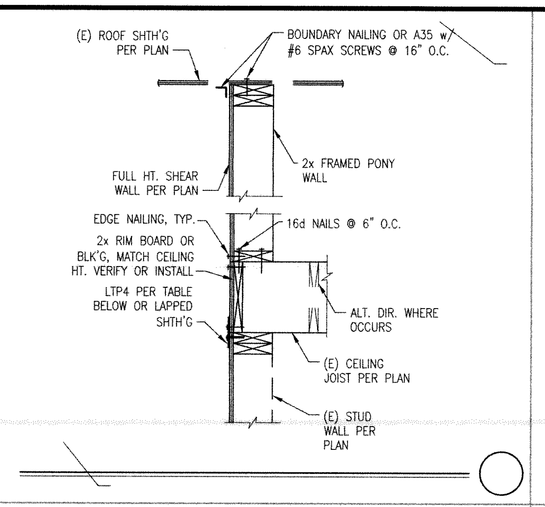
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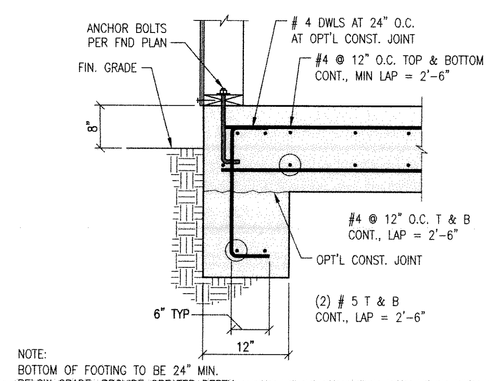
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C0216-001-241

S6

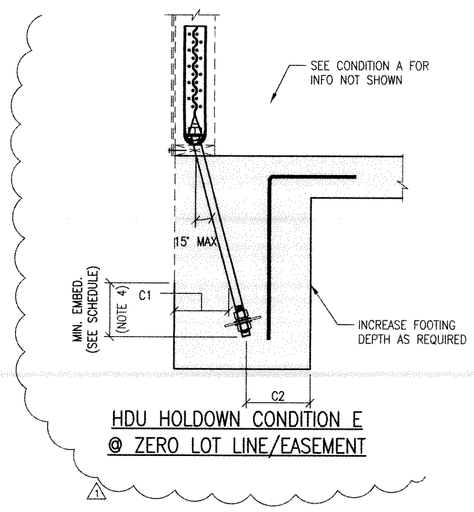
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03-19-25



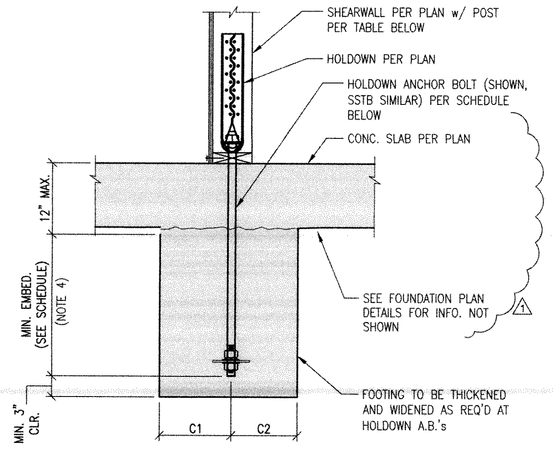


NOTE:
BOTTOM OF FOOTING TO BE 24" MIN. BELOW GRADE. PROVIDE GREATER DEPTH AS REQ'D FOR HOLDOWN ANCHOR BOLTS.

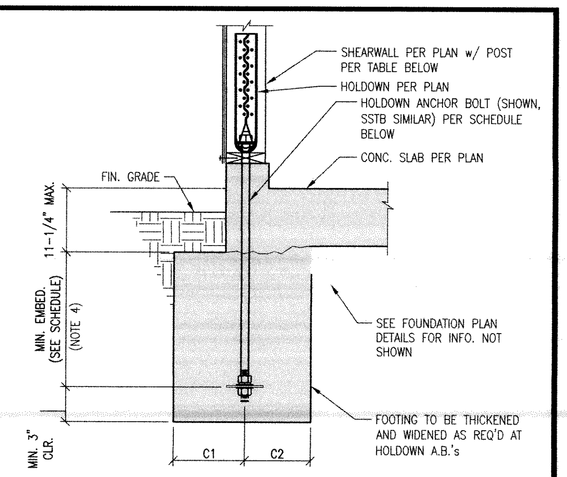
N.T.S. 4



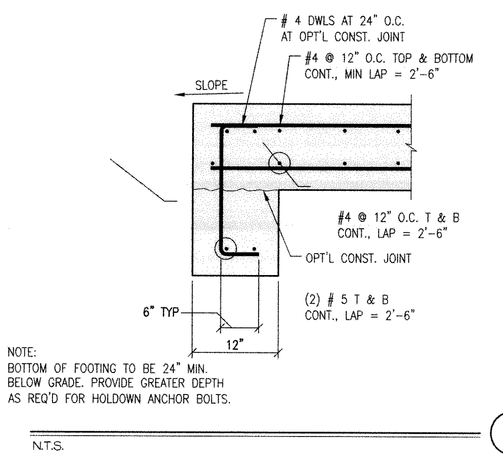
HDU HOLDOWN CONDITION E @ ZERO LOT LINE/EASEMENT



HDU HOLDOWN CONDITION B



HDU HOLDOWN CONDITION A

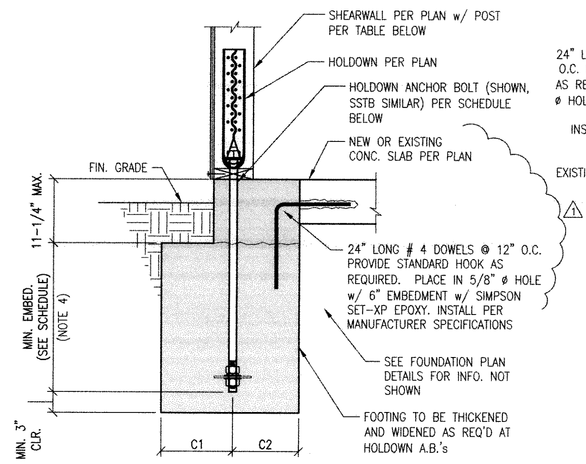


NOTE:
BOTTOM OF FOOTING TO BE 24" MIN. BELOW GRADE. PROVIDE GREATER DEPTH AS REQ'D FOR HOLDOWN ANCHOR BOLTS.

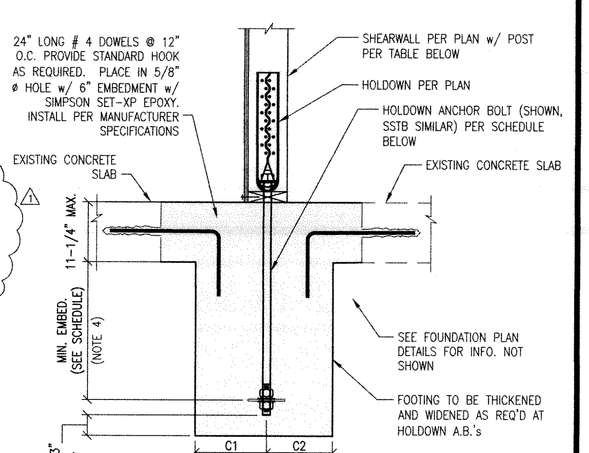
NOTE:
BOTTOM OF FOOTING TO BE 24" MIN. BELOW GRADE. PROVIDE GREATER DEPTH AS REQ'D FOR HOLDOWN ANCHOR BOLTS.

N.T.S. 5

NOTE: SEE DTL 4/– FOR MAT SLAB & FOOTING INFO NOT SHOWN



HDU HOLDOWN CONDITION C



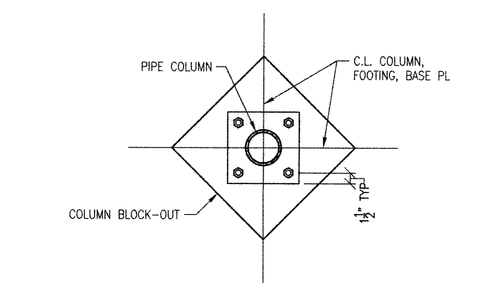
HDU HOLDOWN CONDITION D

ANCHORAGE

HOLDOWN	ANCHORAGE (CAST IN PLACE) SSTB	ANCHORAGE (CAST IN PLACE) ALL THREAD ROD (NOTE 1)	ANCHORAGE (RETROFIT) ALL THREAD ROD (NOTE 2 & 3)	ANCHORAGE (RETROFIT) HOLE DIAMETER	CAST IN PLACE OR RETROFIT EMBEDMENT	C1	C2	POST	FOOTING
DTT2Z – SDS2.5	NONE	1/2"ø A307	1/2"ø A307	5/8"	8"	6"	6"	(2) 2x	PER FOUNDATION DETAILS
HDU2 – SDS2.5	SSTB24	5/8"ø A307	5/8"ø A307	3/4"	10"	7"	7"	(2) 2x	PER FOUNDATION DETAILS
HDU4 – SDS2.5	SSTB24	5/8"ø A307	5/8"ø A307	3/4"	10"	9"	9"	(2) 2x	PER FOUNDATION DETAILS
HDU5 – SDS2.5	NONE	5/8"ø A307	5/8"ø A307	3/4"	13"	12"	12"	(2) 2x	SPREAD FOOTING REQUIRED
HDU8 – SDS2.5	NONE	7/8"ø A307	7/8"ø A307	1"	18"	15"	15"	6x6	SPREAD FOOTING REQUIRED
HDU11 – SDS2.5	NONE	1"ø A307	1"ø A307	1-1/4"	18"	20"	20"	6x6	SPREAD FOOTING REQUIRED
HDU14 – SDS2.5	NONE	1"ø A307	1"ø A307	1-1/4"	18"	20"	20"	4x8	SPREAD FOOTING REQUIRED
HHDQ14 – SDS2.5	NONE	1"ø A307	1"ø A307	1-1/4"	18"	20"	20"	4x8	SPREAD FOOTING REQUIRED

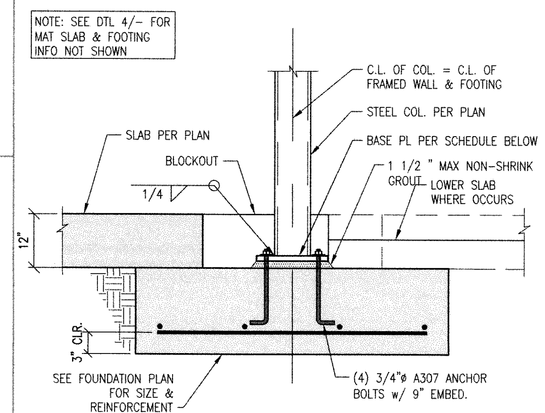
NOTES:
1. PROVIDE 2-1/8"x2-1/8"x3/8" STEEL PLATE w/ (2) NUTS @ CAST IN PLACE ANCHORS.
2. RETROFIT ALL-THREAD ROD IN HOLES w/ SIMPSON SET-XP EPOXY. PREPARE HOLES & INSTALL EPOXY PER MFR DIRECTIONS w/ EMBEDMENT AND EDGE DISTANCES AS SHOWN.
3. SIMPSON SET-XP EPOXY PER ICC-ES 2508.
4. INCREASE FOOTING DEPTH AS REQUIRED FOR 3" MIN. COVER BELOW BOLT & COORDINATE EXACT LOCATIONS WITH THE FRAMING CONTRACTOR.
5. HOLDOWNS MAY BE INSTALLED 4" MAX. FROM SHEAR WALL EDGE. BOUNDARY NAILING MUST BE PROVIDED @ STUDS ALIGNED WITH HOLDOWNS.
6. SEE EXISTING P.T. FOUNDATION NOTES, SHEET S2 WHERE OCCURS.

N.T.S. 1



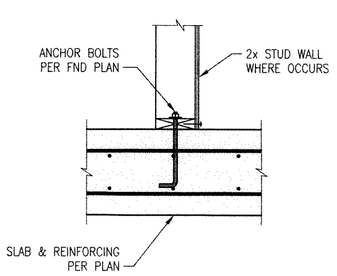
PLAN VIEW

NOTE: SEE DTL 4/– FOR MAT SLAB & FOOTING INFO NOT SHOWN

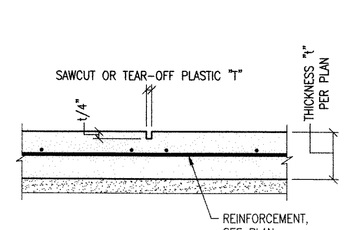


BASE PLATE SCHEDULE	
COLUMN SIZE	BASE PLATE
3", 3 1/2" STD PIPE COL.	10"x10"x3/4" PLATE

N.T.S. 6



N.T.S. 3



N.T.S. 2

DATE:	08-08-24	ENG.KE	DWN.KE	CHK.KAW
REV.#	DATE	BY:	DESCRIPTION	
1	11-4-24	KAW	PLANCHECK	

VECTOR ENGINEERS
23022 La Cadena Dr, Ste 201
Laguna Hills, CA
(714)576-6524

STERN ARCHITECTS
QUERRIERA RESIDENCE
2316 Fahrl Drive
Newport Beach, CA. 92660
FOUNDATION DETAILS

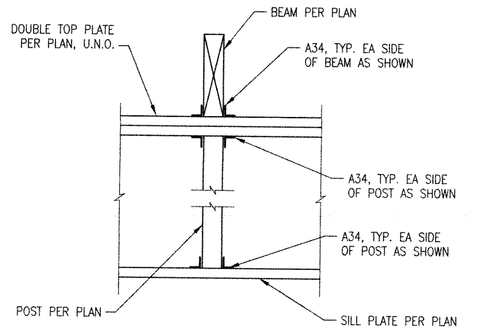
LICENSED PROFESSIONAL ENGINEER
KALEN ALMA WILSON
No. 83753
CIVIL
STATE OF CALIFORNIA
11-4-2024

KALEN A. WILSON, P.E.
LICENSE # 83753

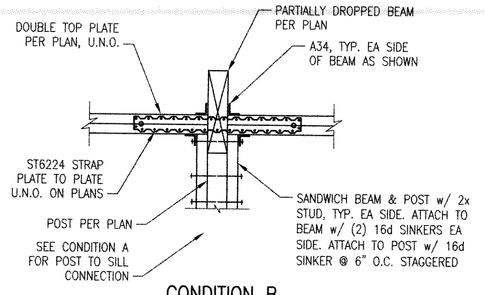
C0216-001-241

SD-1

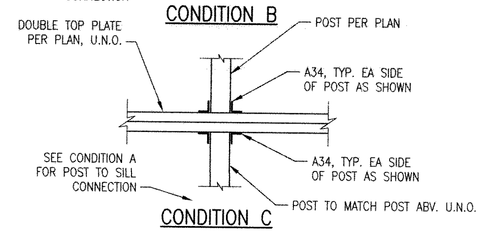
ISSUED
03.19.25



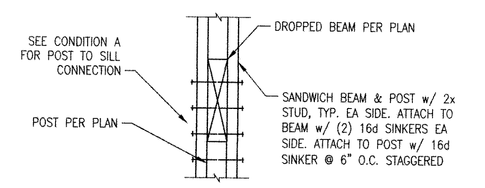
CONDITION A



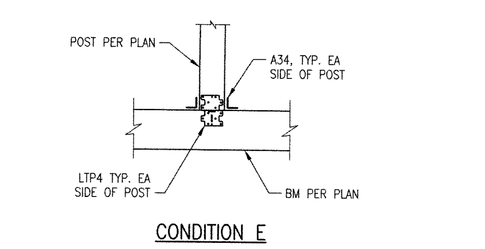
CONDITION B



CONDITION C

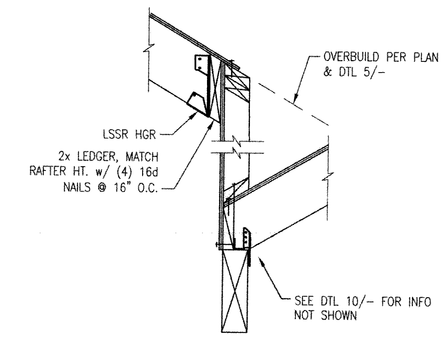


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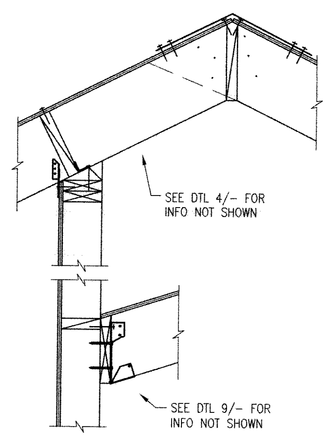


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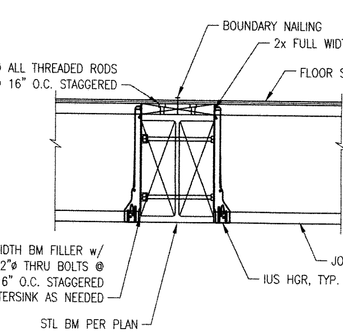
N.T.S. 15



N.T.S. 11



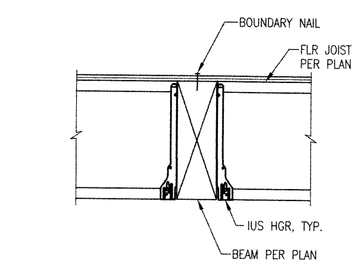
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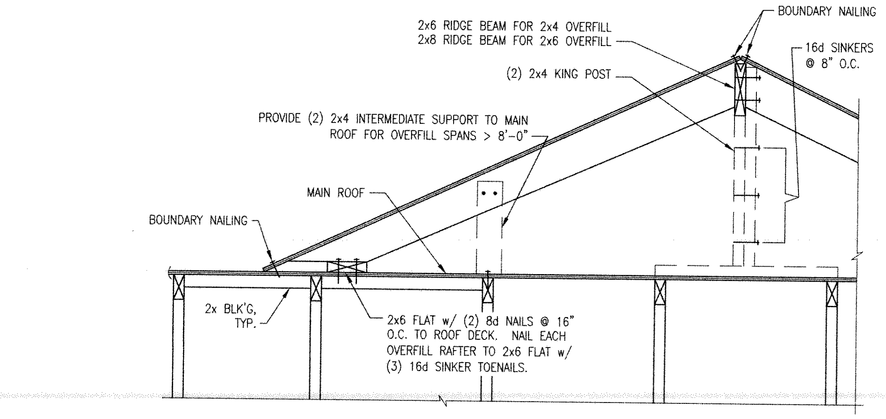
SECTION A-A

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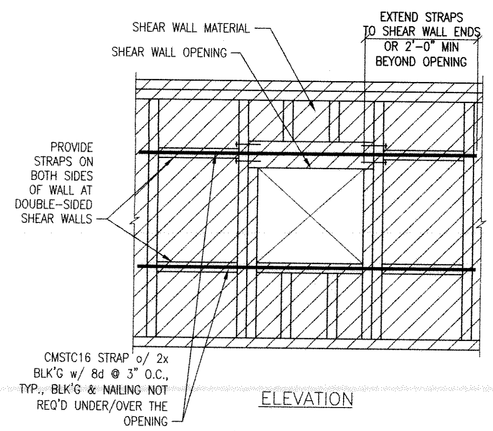
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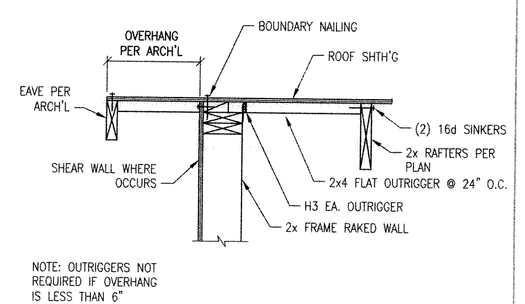


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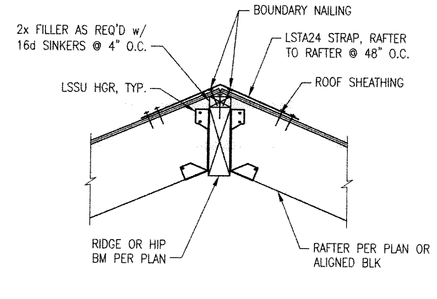
ELEVATION

N.T.S. 1

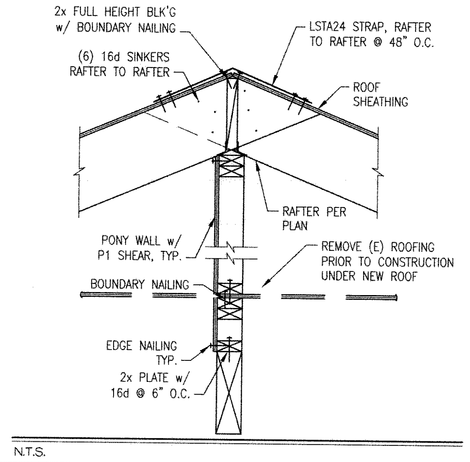


NOTE: OUTRIGGERS NOT REQUIRED IF OVERHANG IS LESS THAN 6"

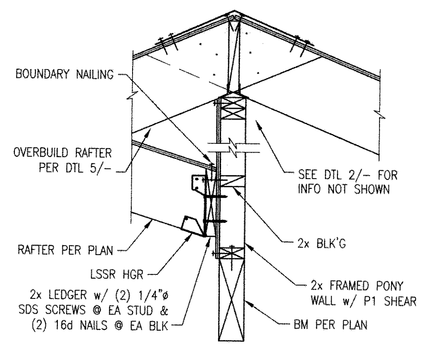
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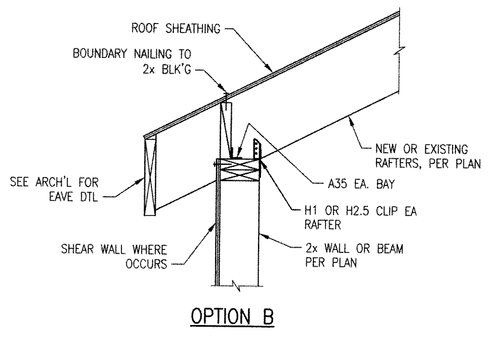
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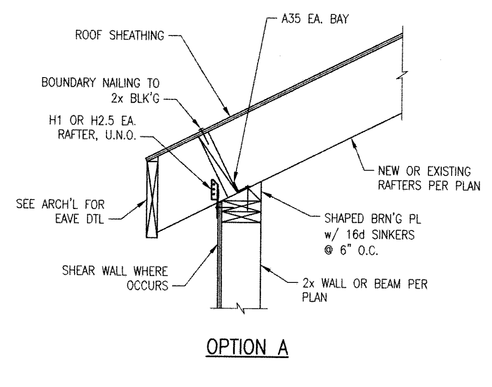
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N.T.S. 9



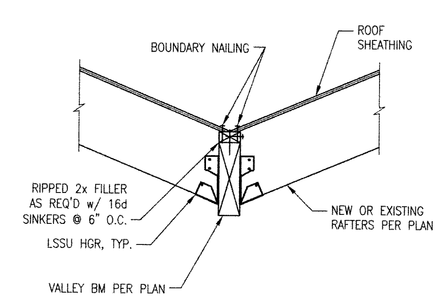
OPTION B



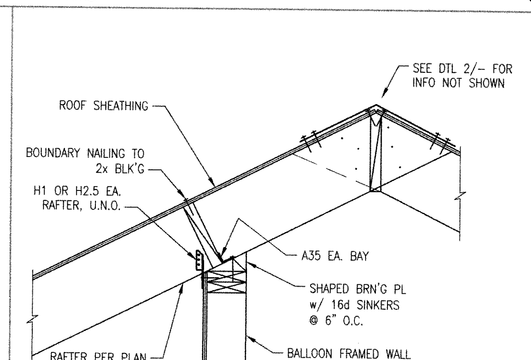
OPTION A

N.T.S. 3

N.T.S. 10



N.T.S. 7



N.T.S. 4

DATE:	REV. #	DATE	BY:	DESCRIPTION
		08-08-24	END: AE	DWN: AE
				CHK: KAW

VECTOR ENGINEERS
23022 La Cadena Dr. Ste 201
Laguna Hills, CA
(714)576-6524

STERN ARCHITECTS
QUERRIERA RESIDENCE
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STRUCTURAL DETAILS

LICENSED PROFESSIONAL ENGINEER
KALEN ALMA WILSON
No. 83753
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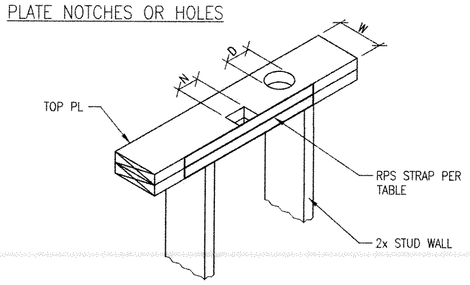
KALEN A. WILSON, P.E.
LICENSE # 83753

C0216-001-241

SD-2

ISSUED
08-13-25

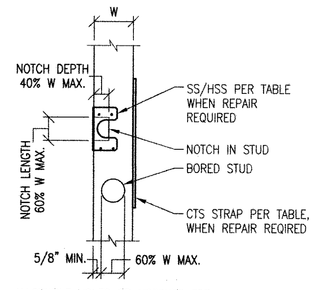
PLATE NOTCHES OR HOLES



2x4 PLATE	2x6 PLATE	2x4 & 2x6 PLATE	
HOLE DIA 'D'	HOLE DIA 'D'	NOTCH WIDTH 'N' (MAX. NOTCH DEPTH = W/2)	RPS STRAP
≤ 7/8"	≤ 1"	≤ 1"	(1) RPS18
≤ 1"	≤ 1 3/8"	≤ 2 1/2"	(1) RPS18
≤ 1 3/8"	≤ 2 1/8"	≤ 5 1/2"	(2) RPS18
≤ 2"	≤ 3 1/4"	≤ 12"	(2) RPS28

NOTES:
1. USE RPSZ FOR SILL PLATE.
2. CENTER STRAPS @ NOTCH OR HOLE.
3. WHERE ROOF TRUSS OR FLOOR JOIST IS BEARING WITHIN STUD BAY OF THE HOLE OR NOTCH, INSTALL AN ADDITIONAL STUD DIRECTLY BELOW THE TRUSS OR JOIST UNLESS NO RPS STRAP IS REQUIRED OR WHERE EXISTING STUD FACE IS WITHIN 3" OF TRUSS OR JOIST FACE.
4. NOTCHES & HOLES MUST BE SEPARATED BY "2x0" OR "2xN".
5. WHERE MULTIPLE HOLES ARE LOCATED ADJACENT TO EACH OTHER, THE STRAP REPAIR MAY BE WITH A CS16 STRAP ON EACH SIDE OF THE UPPER PLATE. THE STRAPS AND NAILING SHALL EXTEND AT LEAST 9" BEYOND EACH END OF THE WHOLE GROUP. NAILING BETWEEN THE HOLES IS NOT REQUIRED. NAILS IN THE CS16 STRAPS MAY BE N8'S OR N10'S.

STUD NOTCHES OR HOLES



ALLOWABLE HOLES OR NOTCHES FOR NON-BEARING, NON-SHEAR OR INTERIOR PARTITIONS (NO REPAIR REQ'D)

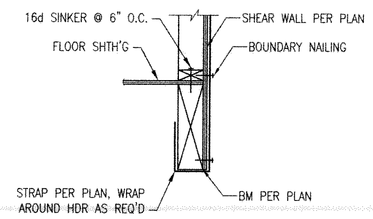
HOLE / NOTCH SCHEDULE		
HOLE / NOTCH % OF 'W'	2x4 STUD	2x6 STUD
25%	3/4"	1-3/8"
40%	1-3/8"	2-1/8"
60%	2"	3-1/4"

NOTES:
1. HOLES & NOTCHES SHALL NOT OCCUR IN THE SAME STUD.
2. WHERE HOLES OR NOTCHES EXCEED THOSE SHOWN ABOVE, REPAIR PER TABLE BELOW.
3. ALL NOTCHES IN BEARING OR SHEAR OR EXTERIOR WALLS REQUIRE REPAIRS.

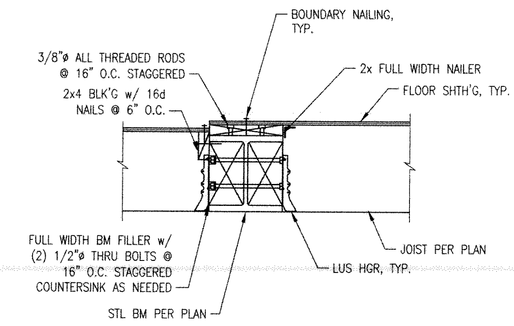
STUD HOLE REPAIR			
	2x4 STUD	2x6 STUD	
	HOLE DIA 'D'	HOLE DIA 'D'	REPAIR
NON-BEARING & NON-SHEAR & INTERIOR	≤ 2 3/4"	≤ 4 1/2"	(1) CTS218 w/ 10d
BEARING OR SHEAR OR EXTERIOR WALL	≤ 3/4"	≤ 1 3/8"	(1) CTS218 w/ 10d
BEARING OR SHEAR OR EXTERIOR	≤ 2 3/4"	≤ 4 1/2"	(2) CTS218 TWO-SIDED w/ 10d

STUD NOTCH REPAIR					
	2x4 STUD	2x4 STUD	2x6 STUD	2x6 STUD	
	NOTCH DEPTH	NOTCH LENGTH	NOTCH DEPTH	NOTCH LENGTH	REPAIR
NON-BEARING & NON-SHEAR & INTERIOR	≤ 2 1/2"	≤ 4 1/2"	≤ 3 3/4"	≤ 4 1/2"	(1) CTS218 w/ 10d
BEARING OR SHEAR OR EXTERIOR	≤ 2 1/2"	≤ 2 1/2"	≤ 2 1/2"	≤ 2 1/2"	SS w/ 10d
BEARING OR SHEAR OR EXTERIOR	≤ 2 3/4"	≤ 4 1/2"	≤ 4 1/2"	≤ 4 1/2"	(2) CTS218 TWO-SIDED w/ 10d

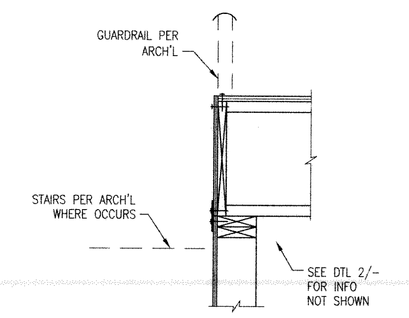
17 N.T.S.



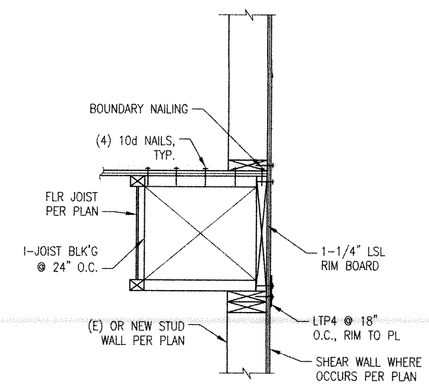
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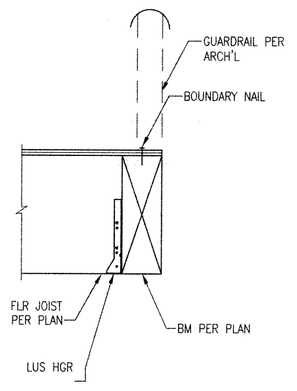
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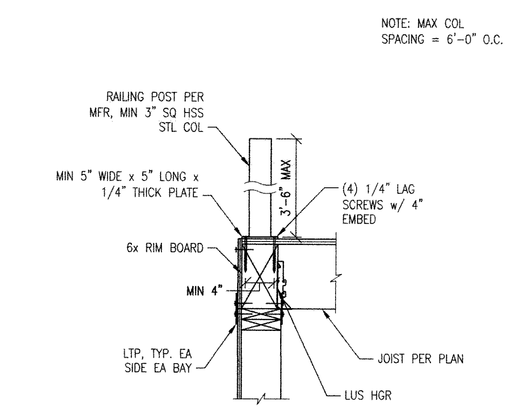
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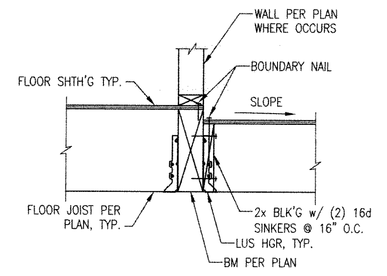
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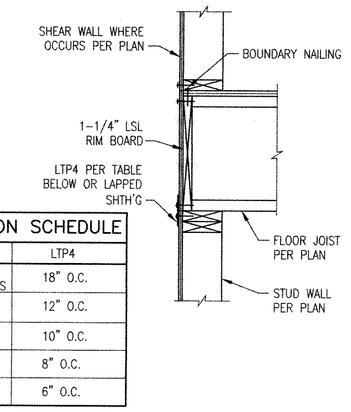
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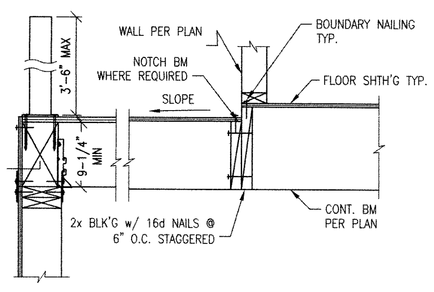


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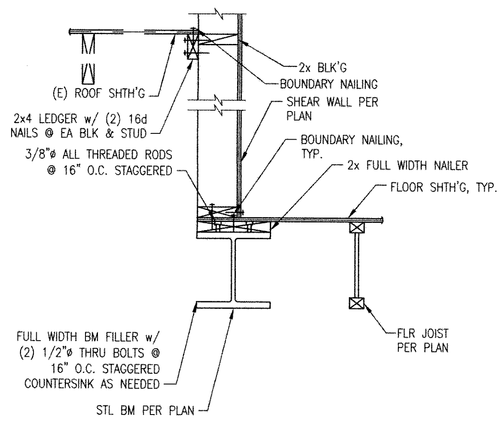


CONNECTION SCHEDULE	
SHEAR WALL	LTP4
P1 & NON-SHEAR WALLS	18" O.C.
P2	12" O.C.
P3	10" O.C.
P4	8" O.C.
P5	6" O.C.

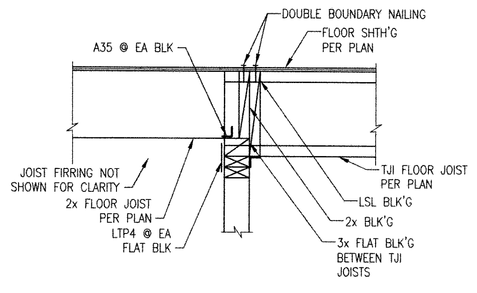
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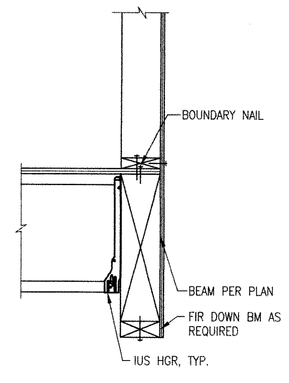
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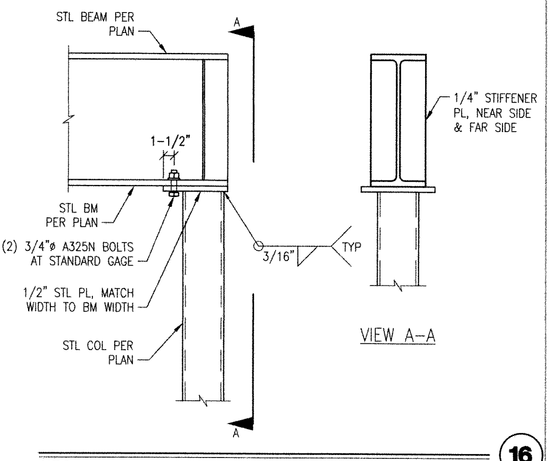
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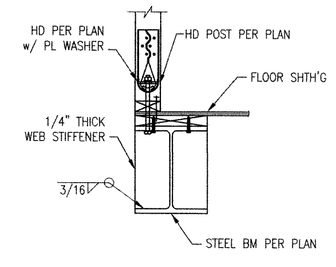
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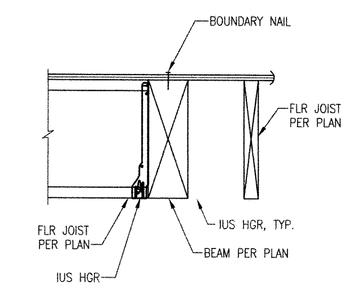
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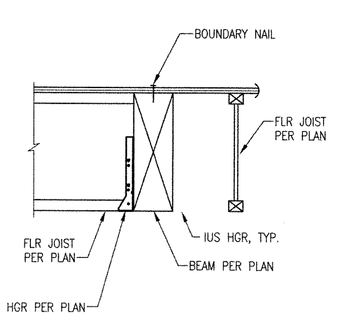
16 N.T.S.



12 N.T.S.



8 N.T.S.



4 N.T.S.

DATE:	08-06-24	ENG-AE	DWN-AE	CHK-KAW
REV. #	DATE:	BY:	DESCRIPTION	

VECTOR ENGINEERS
23022 LA CADENA DR. STE 201
LAGUNA HILLS, CA
(714)576-9524

STERN ARCHITECTS
QUERRIERA RESIDENCE
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Newport Beach, CA. 92660
STRUCTURAL DETAILS

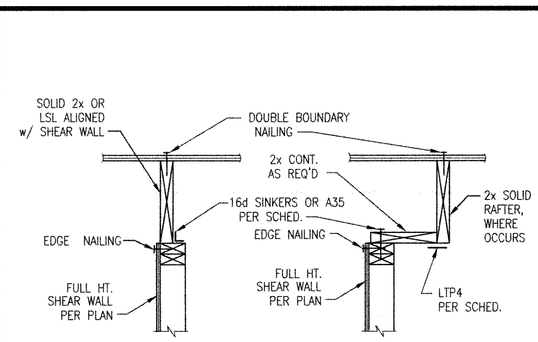
LICENSED PROFESSIONAL ENGINEER
KALEN ALMA WILSON
83753
CIVIL
STATE OF CALIFORNIA
11-4-2024

KALEN A. WILSON, P.E.
LICENSE # 83753

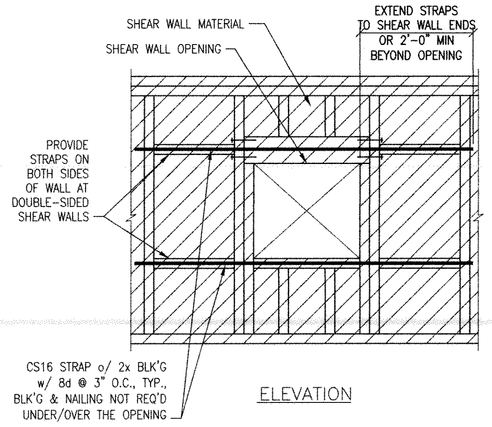
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SD-3

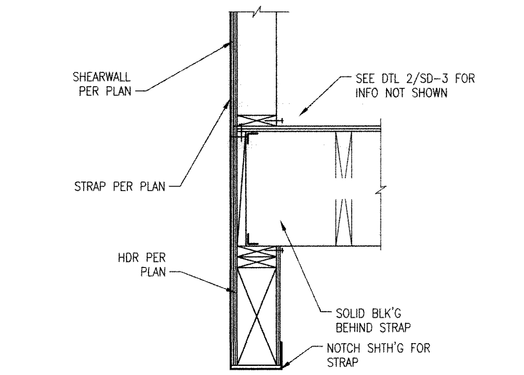
ISSUED
11-19-25



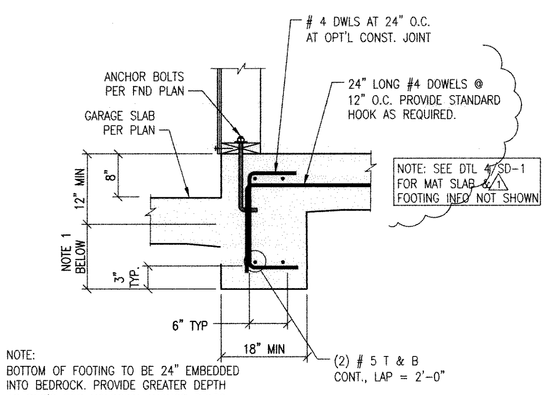
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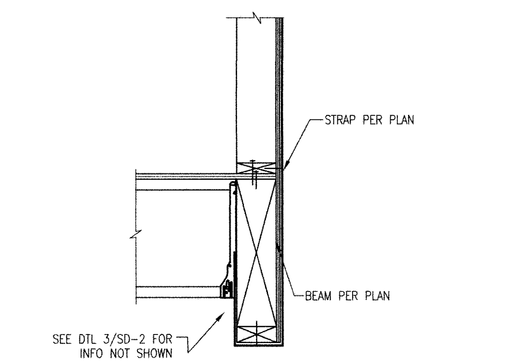
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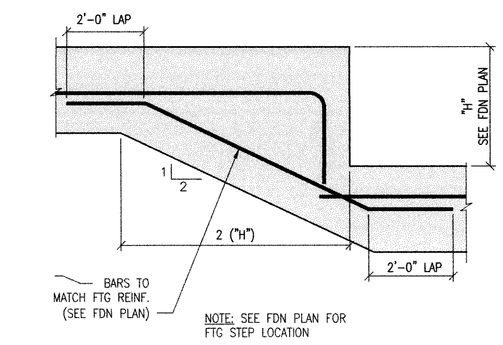
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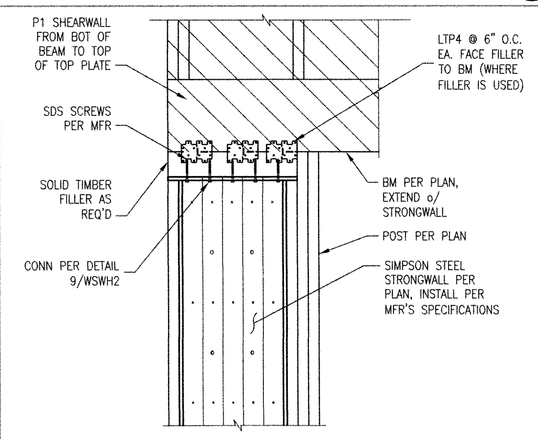
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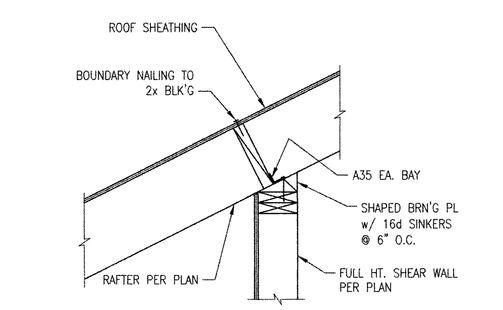
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N.T.S. 3



N.T.S. 8



N.T.S. 4

DATE:	08-09-24	ENG-JE	DWN-JE	CHK-KAW
REV.#	DATE	BY:	DESCRIPTION	
1	11-4-24	KAW	PLANCHECK	

VECTOR ENGINEERS
23022 LA CADENA DR, STE 201
LAGUNA HILLS, CA
(714)576-6524

STERN ARCHITECTS
QUERRIERA RESIDENCE
2316 Fairhill Drive
Newport Beach, CA. 92660
STRUCTURAL DETAILS

LICENSED PROFESSIONAL ENGINEER
KALEN ALMA WILSON
No. 83753
CIVIL
STATE OF CALIFORNIA
11-4-2024

KALEN A. WILSON, P.E.
LICENSE # 83753

C0216-001-241

SD-4

ISSUED
03-19-25

PRECISE GRADING PLAN

FOR
2316 FAIRHILL DRIVE
NEWPORT BEACH, CA

GENERAL NOTES:

GENERAL:

1. ALL WORK SHALL CONFORM TO CHAPTER 15 OF THE NEWPORT BEACH MUNICIPAL CODE (NBMC), THE PROJECT SOILS REPORT AND SPECIAL REQUIREMENTS OF THE PERMIT.
2. DUST SHALL BE CONTROLLED BY WATERING AND/OR DUST PALLIATIVE.
3. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE DURING THE CONSTRUCTION PERIOD.
4. WORK HOURS ARE LIMITED FROM 7:00 AM TO 6:30 PM MONDAY THROUGH FRIDAY; 8:00 AM TO 6:00 PM SATURDAYS; AND NO WORK ON SUNDAYS AND HOLIDAYS PER SECTION 10-28 OF THE NBMC.
5. NOISE, EXCAVATION, DELIVERY AND REMOVAL SHALL BE CONTROLLED PER SECTION 10-28 OF THE NBMC.
6. THE STAMPED SET OF APPROVED PLANS SHALL BE ON THE JOB SITE AT ALL TIMES.
7. PERMITTEE AND CONTRACTOR ARE RESPONSIBLE FOR LOCATING AND PROTECTING UTILITIES.
8. APPROVED DRAINAGE PROVISIONS AND PROTECTIVE MEASURES MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING THE GRADING OPERATION.
9. CESSPOOLS AND SEPTIC TANKS SHALL BE ABANDONED IN COMPLIANCE WITH THE UNIFORM PLUMBING CODE AND BY THE BUILDING OFFICIAL.
10. HAUL ROUTES FOR IMPORT OR EXPORT OF MATERIALS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER AND PROCEDURES SHALL CONFORM WITH CHAPTER 15 OF THE NBMC.
11. POSITIVE DRAINAGE SHALL BE MAINTAINED AWAY FROM ALL BUILDING AND SLOPE AREAS.
12. FAILURE TO REQUEST INSPECTIONS AND/OR HAVE REMOVAL EROSION CONTROL DEVICES ON-SITE AT THE APPROPRIATE TIMES SHALL RESULT IN A "STOP WORK" ORDER.
13. ALL PLASTIC DRAINAGE PIPES SHALL CONSIST OF PVC OR ABS PLASTIC SCHEDULE 40 OR SDR 35 OR ADS 3000 WITH GLUED JOINTS.
14. NO PAINT, PLASTER, CEMENT, SOIL, MORTAR OR OTHER RESIDUE SHALL BE ALLOWED TO ENTER STREETS, CURBS, GUTTERS OR STORM DRAINS. ALL MATERIAL AND WASTE SHALL BE REMOVED FROM THE SITE.

EROSION CONTROL:

1. TEMPORARY EROSION CONTROL PLANS ARE REQUIRED FROM OCTOBER 15 TO MAY 15.
2. EROSION CONTROL DEVICES SHALL BE ON-SITE BETWEEN OCTOBER 15 AND MAY 15.
3. BETWEEN OCTOBER 15 AND MAY 15, EROSION CONTROL MEASURES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHENEVER THE FIVE-DAY PROBABILITY OF RAIN EXCEEDS 30 PERCENT. DURING THE REMAINDER OF THE YEAR, THEY SHALL BE IN PLACE AT THE END OF THE WORKING DAY, WHENEVER THE DAILY RAINFALL PROBABILITY EXCEEDS 50 PERCENT.
4. TEMPORARY DESILTING BASINS, WHEN REQUIRED, SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT.

REQUIRED INSPECTIONS:

1. A PRE-GRADING MEETING SHALL BE SCHEDULED 48 HOURS PRIOR TO START OF GRADING WITH THE FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOILS ENGINEER, GEOLOGIST, CITY BUILDING INSPECTOR OR THEIR REPRESENTATIVES. REQUIRED FIELD INSPECTIONS WILL BE OUTLINED AT THE MEETING.
2. A PRE-PAVING MEETING SHALL BE SCHEDULED 48 HOURS PRIOR TO START OF SUB-GRADE PREPARATION FOR THE PAVING WITH THE FOLLOWING PEOPLE PRESENT: OWNER, PAVING CONTRACTOR, DESIGN CIVIL ENGINEER, SOILS ENGINEER, CITY BUILDING INSPECTOR OR THEIR REPRESENTATIVES. REQUIRED FIELD INSPECTIONS WILL BE OUTLINED AT THE MEETING.

GRADING FILLS/CUTS:

1. GRADED SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
2. FILL SLOPES SHALL BE COMPACTED TO NO LESS THAN 90 PERCENT RELATIVE COMPACTION OUT TO THE FINISHED SURFACE.
3. ALL FILLS SHALL BE COMPACTED THROUGHOUT TO A MINIMUM OF 90 PERCENT RELATIVE COMPACTION AS DETERMINED BY ASTM TEST METHOD 1557, AND APPROVED BY THE SOILS ENGINEER. COMPACTION TESTS SHALL BE PERFORMED APPROXIMATELY EVERY TWO FEET IN VERTICAL HEIGHT AND OF SUFFICIENT QUANTITY TO ATTEST TO THE OVERALL COMPACTION EFFORT APPLIED TO THE FILL AREAS.
4. AREAS TO RECEIVE FILL SHALL BE CLEARED OF ALL VEGETATION AND DEBRIS, SCARIFIED AND APPROVED BY THE SOILS ENGINEER PRIOR TO PLACING OF THE FILL.
5. FILLS SHALL BE KEYED OR BENCHED INTO COMPETENT MATERIAL.
6. ALL EXISTING FILLS SHALL BE APPROVED BY THE SOILS ENGINEER OR REMOVED BEFORE ANY ADDITIONAL FILLS ARE ADDED.
7. ANY EXISTING IRRIGATION LINES AND CISTERNS SHALL BE REMOVED OR CRUSHED IN PLACE AND BACKFILLED AND APPROVED BY THE SOILS ENGINEER.
8. THE ENGINEERING GEOLOGIST AND SOILS ENGINEER SHALL, AFTER CLEARING AND PRIOR TO THE PLACEMENT OF FILL IN CANYONS, INSPECT EACH CANYON FOR AREAS OF ADVERSE STABILITY AND DETERMINE THE PRESENCE OF, OR POSSIBILITY OF FUTURE ACCUMULATION OF, SUBSURFACE WATER OR SPRING FLOW. IF NEEDED, DRAINS WILL BE DESIGNED AND CONSTRUCTED PRIOR TO THE PLACEMENT OF FILL IN EACH RESPECTIVE CANYON.
9. THE EXACT LOCATION OF THE SUBDRAINS SHALL BE SURVEYED IN THE FIELD FOR LINE AND GRADE.
10. ALL TRENCH BACKFILLS SHALL BE COMPACTED THROUGHOUT TO A MINIMUM OF 90 PERCENT RELATIVE COMPACTION, AND APPROVED BY THE SOILS ENGINEER. THE BUILDING DEPARTMENT MAY REQUIRE CORING OF CONCRETE FLAT WORK PLACED OVER UNTESTED BACKFILLS TO FACILITATE TESTING.
11. THE STOCKPILING OF EXCESS MATERIAL SHALL BE APPROVED BY THE CITY GRADING ENGINEER.
12. LANDSCAPING OF ALL SLOPES AND PADS SHALL BE IN ACCORDANCE WITH CHAPTER 15 OF THE NBMC.
13. ALL CUT SLOPES SHALL BE INVESTIGATED BOTH DURING AND AFTER GRADING BY AN ENGINEERING GEOLOGIST TO DETERMINE IF ANY STABILITY PROBLEM EXISTS. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS OR POTENTIAL GEOLOGICAL HAZARDS, THE ENGINEERING GEOLOGIST SHALL RECOMMEND AND SUBMIT NECESSARY TREATMENT TO THE BUILDING DEPARTMENT FOR APPROVAL.
14. WHERE SUPPORT OR BUTTRESSING OF CUT AND NATURAL SLOPES IS DETERMINED TO BE NECESSARY BY THE ENGINEERING GEOLOGIST AND SOILS ENGINEER, THE SOILS ENGINEER WILL OBTAIN APPROVAL OF DESIGN LOCATION AND CALCULATIONS FROM THE BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
15. THE ENGINEERING GEOLOGIST AND SOILS ENGINEER SHALL INSPECT AND TEST THE CONSTRUCTION OF ALL BUTTRESS FILLS AND ATTEST TO THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION.
16. WHEN CUT PADS ARE BROUGHT TO NEAR GRADE THE ENGINEERING GEOLOGIST SHALL DETERMINE IF THE BEDROCK IS EXTENSIVELY FRACTURED OR FAULTED AND WILL READILY TRANSMIT WATER. IF CONSIDERED NECESSARY BY THE ENGINEERING GEOLOGIST AND SOILS ENGINEER, A COMPACTED FILL BLANKET WILL BE PLACED.

DOCUMENTATION:

1. AN AS-BUILT GRADING PLAN SHALL BE PREPARED BY THE CIVIL ENGINEER INCLUDING ORIGINAL GROUND SURFACE ELEVATIONS, AS GRADED GROUND SURFACE ELEVATIONS, LOT DRAINAGE PATTERNS AND LOCATIONS, AND ELEVATIONS OF ALL SURFACE AND SUBSURFACE DRAINAGE FACILITIES. HE/SHE SHALL PROVIDE WRITTEN APPROVAL THAT THE WORK WAS DONE IN ACCORDANCE WITH THE FINAL APPROVED GRADING PLAN AND STATE THE NUMBER OF YARDS OF CUT AND/OR FILL MOVED DURING THE OPERATION.
2. A SOILS GRADING REPORT PREPARED BY THE SOILS ENGINEER, INCLUDING LOCATIONS AND ELEVATION OF FIELD DENSITY TESTS, SUMMARIES OF FIELD AND LABORATORY RESULTS AND OTHER SUBSTANTIATED DATA AND COMMENTS ON ANY CHANGES MADE DURING GRADING AND THEIR EFFECT ON THE RECOMMENDATIONS MADE IN THE SOILS ENGINEERING INVESTIGATION REPORT. HE SHALL PROVIDE WRITTEN APPROVAL AS TO THE ADEQUACY OF THE SITE FOR THE INTENDED USE AND COMPLETION OF WORK IN ACCORDANCE WITH THE JOB SPECIFICATIONS.
3. A GEOLOGIC GRADING REPORT PREPARED BY THE ENGINEERING GEOLOGIST, INCLUDING A FINAL DESCRIPTION OF THE THE GEOLOGY OF THE SITE, INCLUDING ANY NEW INFORMATION DISCLOSED DURING THE GRADING AND THE EFFECT OF SAME ON RECOMMENDATIONS INCORPORATED IN THE APPROVED GRADING PLAN. HE/SHE SHALL PROVIDE WRITTEN APPROVAL AS TO THE ADEQUACY OF THE SITE FOR THE INTENDED USE AS AFFECTED BY GEOLOGIC FACTORS.

NOTE:

SURVEYOR TO FILE A CORNER RECORD OR RECORD OF SURVEY WITH THE OFFICE OF COUNTY SURVEYOR. EVIDENCE OF FILING SHALL BE SUBMITTED TO BUILDING INSPECTOR PRIOR TO FOUNDATION INSPECTION.

NOTE:

A PUBLIC WORKS DEPARTMENT ENCROACHMENT PERMIT INSPECTION IS REQUIRED BEFORE THE BUILDING DEPARTMENT PERMIT FINAL CAN BE ISSUED. AT THE TIME OF PUBLIC WORKS DEPARTMENT INSPECTION, IF ANY OF THE EXISTING PUBLIC IMPROVEMENTS SURROUNDING THE SITE IS DAMAGED, NEW CONCRETE SIDEWALK, CURB AND GUTTER, AND ALLEY/STREET PAVEMENT WILL BE REQUIRED. ADDITIONALLY, IF EXISTING UTILITIES INFRASTRUCTURE ARE DEEMED SUBSTANDARD, A NEW 1-INCH WATER SERVICE, WATER METER BOX, SEWER LATERAL/OR CLEANOUT WITH BOX AND LID WILL BE REQUIRED. 100% OF THE COST SHALL BE BORNE BY THE PROPERTY OWNER (MUNICIPAL CODES 14.24.020 AND 14.08.030). SAID DETERMINATION AND THE EXTENT OF THE RECONSTRUCTION WORK SHALL BE MADE AT THE DESCRETION OF THE PUBLIC WORKS INSPECTOR. CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE PUBLICK RIGHT OF WAY AT ALL TIMES DURING THE CONSTRUCTION PROJECT. A STOP WORK NOTICE MAY BE ISSUED FRO ANY DAMAGE OR UNMAINTAINED PORTION OF THE PUBLIC RIGHT OF WAY.

NOTE:

AN APPROVED ENCROACHMENT PERMIT IS REQUIRED FOR ALL WORK ACTIVITIES WITHIN THE PUBLIC RIGHT-OF-WAY

NOTE:

AN ENCROACHMENT AGREEMENT IS REQUIRED FOR ALL NON-STANDARD IMPROVEMENTS WITHIN THE PUBLIC RIGHT OF WAY. ALL NON-STANDARD IMPROVEMENTS SHALL COMPLY WITH CITY COUNCIL POLICY L-6

NOTE:

LICENSED SURVEYOR TO PROVIDE MONITORING OF SHORING AND IMPROVMENTS ON ADJACENT PROPERTIES AND SUBMIT RESULTS WITH A REPORT TO THE SHORING DESIGN ENGINEER AND TO THE BUILDING INSPECTOR ON A DAILY BASIS DURING EXCAVATION AND SHORING AND WEEKLY BASIS THEREAFTER. WHERE DEWATERING IS REQUIRED, MONITORING SHALL CONTINUE UNTIL DEWATERING IS STOPPED.

NOTE:

ISSUANCE OF A BUILDING PERMIT BY THE CITY OF NEWPORT BEACH DOES NOT RELIEVE APPLICANTS OF THE LEGAL REQUIREMENTS TO OBSERVE CONVENANTS, CONDITIONS AND RESTRICTIONS WHICH MAY BE RECORDED AGAINST THE PROPERTY OR TO OBTAIN PLANS. YOU SHOULD CONTACT YOUR COMMUNITY ASSOCIATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION AUTHORIZED BY THIS PERMIT.

NOTE:

PRIOR TO PERFORMING ANY WORK IN THE CITY RIGHT-OF-WAY AN ENCROACHMENT PERMIT MUST BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT.

NOTE:

ALL WORK RELATED TO WASTERWATER IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED BY A C-42 LICENSED SANITATION SEWER CONTRACTOR OR AN A LICENSED GENERAL ENGINEERING CONTRACTOR

EARTHWORK:*

CUT:	100 C.Y.
FILL:	0 C.Y.
EXPORT:	100 C.Y.
OVEREX:	231 C.Y.

NOTE:

EARTHWORK QUANTITIES SHOWN HEREON ARE PROVIDED FOR PERMIT PURPOSES ONLY.
CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES PRIOR TO CONSTRUCTION.
QUANTITIES DO NOT INCLUDE OVER EXCAVATION, SHRINKAGE, BULKING OR SUBSIDENCE FACTORS

INDEX:

SHEET 1: TITLE SHEET
SHEET 2: PRECISE GRADING PLAN
SHEET 3: EROSION CONTROL PLAN
SHEET 4: DETAIL SHEET
SHEET 5: BMP NOTES AND DETAIL SHEET
SHEET 6: GEOTECHNICAL RECOMMENDATIONS

ENGINEER'S NOTICE TO CONTRACTORS:

1. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
2. ALL UNDERGROUND UTILITIES OR STRUCTURES, REPORTED OR FOUND ON PUBLIC RECORDS, ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT. THE OWNER, BY ACCEPTING THESE PLANS OR PROCEEDING WITH THE IMPROVEMENTS HEREON, AGREES TO ASSUME LIABILITY AND TO HOLD THE ENGINEER HARMLESS FOR ANY DAMAGES RESULTING FROM THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED OR INDICATED ON PUBLIC RECORDS, OR THOSE CONSTRUCTED AT VARIANCE WITH REPORTED OR RECORDED LOCATIONS THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES SHOWN AND ANY OTHERS FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF ALL UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK.
3. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
4. THE ENGINEER DOES NOT RECOMMEND OR ENDORSE THE USE OF ASBESTOS-CEMENT WATER PIPE OR ANY PRODUCTS CONTAINING ASBESTOS DUE TO THE HEALTH HAZARD CONNECTED WITH SUCH PRODUCTS. SPECIFICATION HEREON OF ANY SUCH PRODUCT IS AT THE DIRECTION OF THE JURISDICTIONAL AGENCY. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ALL CONSTRUCTION, CONNECTION AND REMOVAL OF ASBESTOS PRODUCTS AND SHALL FOLLOW ALL OSHA & EPA GUIDELINES TO MINIMIZE HEALTH HAZARDS.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN HEREON AT THE JOB SITE PRIOR TO ANY CONSTRUCTION. GILBERT ENGINEERING & ASSOCIATES, INC. SHALL BE NOTIFIED OF ANY DISCREPANCIES. REVISIONS TO THE PLAN SHALL BE APPROVED BY THE ENGINEERING IN WRITING PRIOR TO IMPLEMENTATION.

LEGEND:

A.C.	ASPHALTIC CONCRETE	LF	LINEAR FEET
BDG	BUILDING	N.A.P.	NOT A PART OF CONSTRUCTION
B.W.	BACK OF WALK	NG	NATURAL GRADE
C.F.	CURB FACE	PA	PLANTER AREA
C.O.	CLEAN OUT	P.C.C.	PORTLAND CONCRETE CEMENT
C.Y.	CUBIC YARDS	P.I.V.	POST INDICATOR VALVE
D.D.C.	DOUBLE DETECTOR CHECK	PL	PROPERTY LINE
DOM. W.S.	DOMESTIC WATER SERVICE	RD	ROOF DRAIN
DRN	DRAIN	SCO	SEWER CLEAN OUT
D/W	DRIVE WAY	SG	SUB GRADE
EX.	EXISTING	ST. LT.	STREET LIGHT
F.D.C.	FIRE DEPARTMENT CONNECTION	S/W	SIDEWALK
FF	FINISHED FLOOR	TC	TOP OF CURB
FG	FINISHED GRADE	TF	TOP OF FOOTING
F.H.	FIRE HYDRANT	TG	TOP OF GRATE
FL	FLOW LINE	T.P.	TELEPHONE POLE
FS	FINISHED SURFACE	TEL. PED.	TELEPHONE PEDESTAL
G.B.	GRADE BREAK	W.M.	WATER METER
GF	GARAGE FLOOR	(322.22)	EXISTING ELEVATION
L.A.	LANDSCAPE AREA		

NOTE:

ANY CHANGES TO THE HARDSCAPE LANDSCAPE MUST BE INDICATED ON A REVISED PRECISE GRADING PLAN, APPROVED BY THE CITY, AND MAY TRIGGER A WATER QUALITY MANAGEMENT PLAN (WQMP) CONSISTANT WITH THE MODEL WQMP, EXHIBIT 7.11.

NOTE:

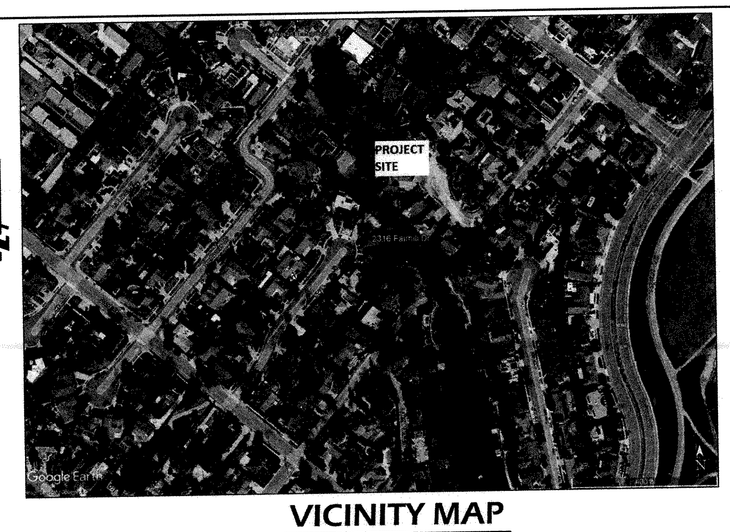
SURVEYOR OR ENGINEER SHALL PERMANENTLY MONUMENT PROPERTY CORNERS OR OFFSET BEFORE STARTING GRADING

NOTE:

CAL-OSHA PERMIT IS REQUIRED FOR EXCAVATIONS DEEPER THAN 5' AND FOR SHORING AND/OR UNDERPINNING

NOTE:

CONTINUOUS SPECIAL INSPECTION, PER SECTION 1705.6 SHALL BE PERFORMED BY THE GEOTECHNICAL ENGINEER DURING SHORING AND EXCAVATION OPERATIONS AND DURING REMOVAL OF SHORING



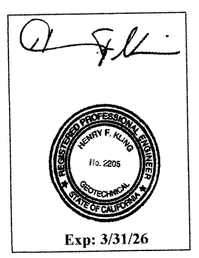
VICINITY MAP

NOT TO SCALE

CONSTRUCTION NOTES:

1. PROTECT IN PLACE
2. CONSTRUCT 4" P.C.C. SIDEWALK PER ARCHITECT DETAILS
3. CONSTRUCT 6" P.C.C. DRIVEWAY PER ARCITECT DETAILS
4. CONSTRUCT BOTTOMLESS TRENCH DRAIN PER DETAIL A ON SHEET 4
5. ADJUST CATCHBASIN TO GRADE
6. CONSTRUCT 4" PVC (SDR35) STORM DRAIN
7. SAWCUT CONCRETE LINE/OVEREXCAVATION LIMIT LINE
8. CONNECT PROPOSED STORM DRAIN TO EXISTING STORM DRAIN
9. CUT AND CAP EXISTING STORM DRAIN
10. JOIN PROPOSED STORM DRAIN TO BOTTOMLESS TRENCH DRAIN

2316 FAIRHILL DRIVE, NEWPORT BEACH
PRECISE GRADING & DRAINAGE PLAN
12-06-24



Exp: 3/31/26

GEOTECHNICAL ENGINEER:

KLING CONSULTING GROUP
18008 SKY PARK CIRCLE, SUITE 250
IRVINE CA 92614

Underground Service Alert
Call: TOLL FREE
811
TWO WORKING DAYS BEFORE YOU DIG

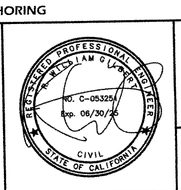
BENCHMARK:
ASSUMED ELEVATION =100.00'
LOCATED 3' WEST OF WESTERLY TOP OF X PER SOUTH COAST SURVEYING 3214 CLAY ST. NEWPORT BEACH, CA 92663
949-631-8840

ASSESSORS PARCEL NUMBER:
A.P.N. 119-333-20

OWNER/DEVELOPER:
JOE AND KATRINA QUERRIERA
2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

NO.	REVISIONS	APP'D.	DATE

Plans prepared by:
GILBERT
ENGINEERING & ASSOCIATES, INC.
CIVIL ENGINEERING, SURVEYING AND LAND DEVELOPMENT SERVICES
2 MERRIWEATHER PLACE LADERA RANCH, CA 92694
PH. (949) 218-8075
www.gilbert-engineering.com



TITLE SHEET
2316 FAIRHILL DRIVE
NEWPORT BEACH, CALIFORNIA

DRAWN:	R.W.G.
DESIGN:	R.W.G.
CHECKED:	R.W.G.
SCALE:	
JOB NO.:	725.000

SHEET 1 OF 6

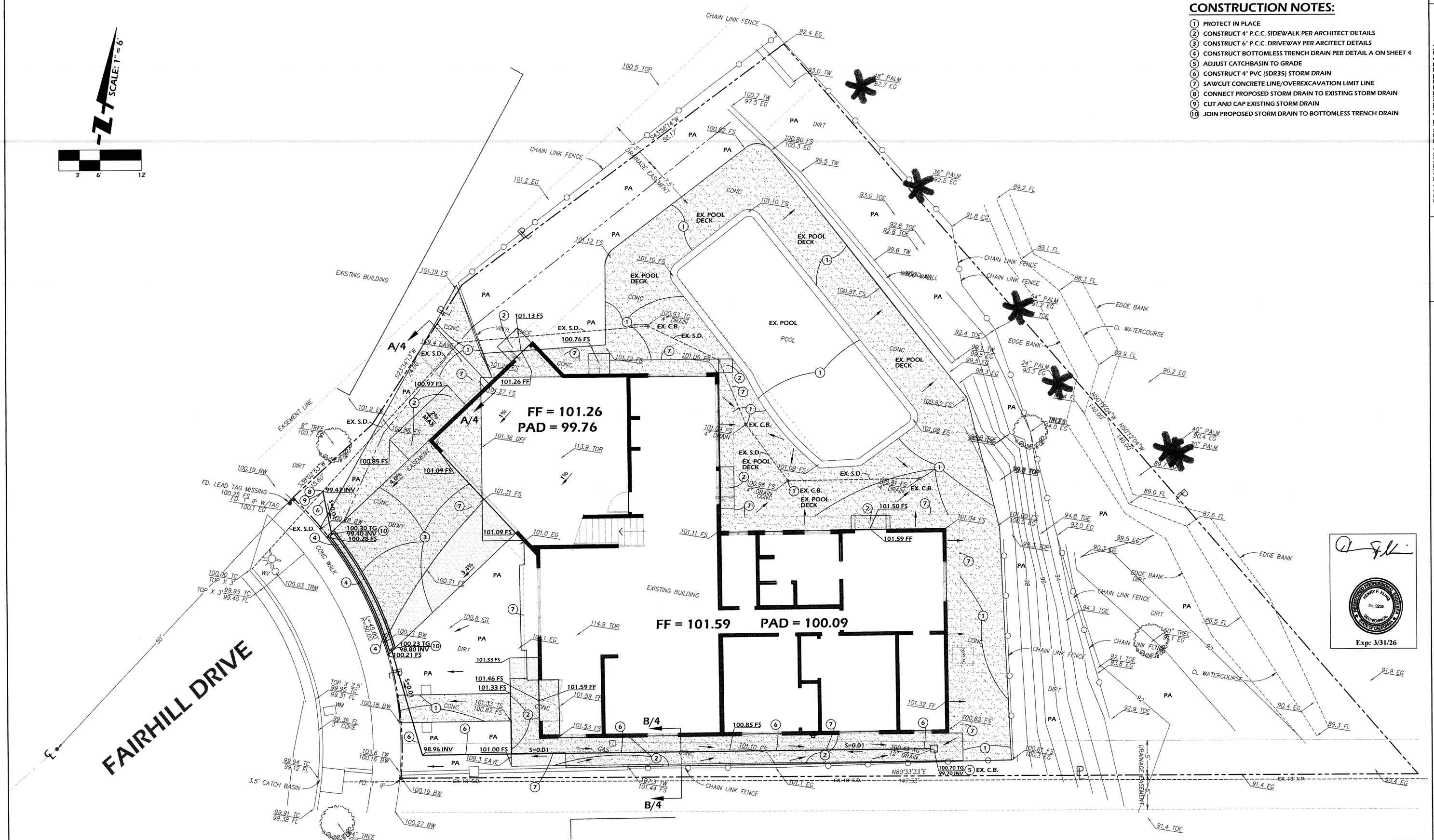
ISSUED
03-19-25

SCALE: 1" = 6'

3' 6' 12'

CONSTRUCTION NOTES:

1. PROTECT IN PLACE
2. CONSTRUCT 4" P.C.C. SIDEWALK PER ARCHITECT DETAILS
3. CONSTRUCT 6" P.C.C. DRIVEWAY PER ARCITECT DETAILS
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10. JOIN PROPOSED STORM DRAIN TO BOTTOMLESS TRENCH DRAIN



Underground Service Alert	BENCHMARK:	ASSESSORS PARCEL NUMBER:	OWNER/DEVELOPER:
Call: TOLL FREE 811 TWO WORKING DAYS BEFORE YOU DIG	ASSUMED ELEVATION =100.00 LOCATED 3' WEST OF WESTERLY TOP OF X PER SOUTH COAST SURVEYING 3214 CLAY ST. NEWPORT BEACH, CA 92663 949-631-8840	A.P.N. 119-333-20	JOE AND KATRINA QUERRIERA 2316 FAIRHILL DRIVE NEWPORT BEACH, CA 92660

NO.	REVISIONS	APP'D.	DATE

Plans prepared by:
GILBERT ENGINEERING & ASSOCIATES, INC.
CIVIL ENGINEERING, SURVEYING AND LAND DEVELOPMENT SERVICES
2 MERRIWEATHER PLACE LADERA RANCH, CA 92694
PH. (949) 218-8075
www.gilbert-engineering.com

REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA — No. C-55326 — Exp. 06/30/26

PRECISE GRADING PLAN
2316 FAIRHILL DRIVE
NEWPORT BEACH, CALIFORNIA

DRAWN:	R.W.G.
DESIGN:	R.W.G.
CHECKED:	R.W.G.
SCALE:	1" = 5'
JOB NO.:	725.000
SHEET	2 OF 6

12-06-24 | 2316 FAIRHILL DRIVE, NEWPORT BEACH | PRECISE GRADING & DRAINAGE PLAN

ISSUED
08-19-25

EROSION CONTROL:

1. TEMPORARY EROSION CONTROL PLANS ARE REQUIRED FROM OCTOBER 15 TO MAY 15.
2. EROSION CONTROL DEVICES SHALL BE ON-SITE BETWEEN OCTOBER 15 AND MAY 15.
3. BETWEEN OCTOBER 15 AND MAY 15, EROSION CONTROL MEASURES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHENEVER THE FIVE-DAY PROBABILITY OF RAIN EXCEEDS 30 PERCENT. DURING THE REMAINDER OF THE YEAR, THEY SHALL BE IN PLACE AT THE END OF THE WORKING DAY, WHENEVER THE DAILY RAINFALL PROBABILITY EXCEEDS 50 PERCENT.
4. TEMPORARY DESILTING BASINS, WHEN REQUIRED, SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT.

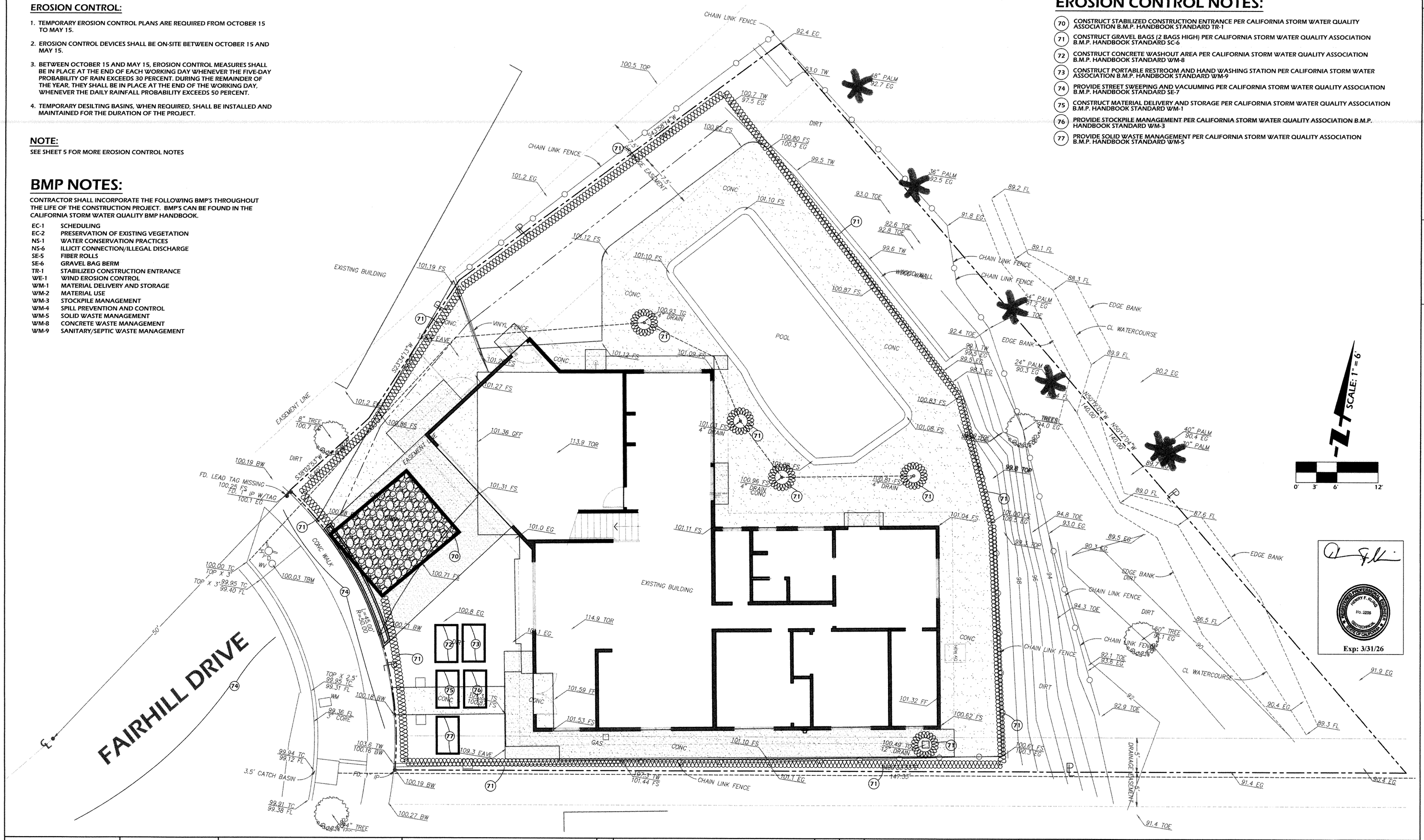
NOTE:

SEE SHEET 5 FOR MORE EROSION CONTROL NOTES

BMP NOTES:

CONTRACTOR SHALL INCORPORATE THE FOLLOWING BMP'S THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT. BMP'S CAN BE FOUND IN THE CALIFORNIA STORM WATER QUALITY BMP HANDBOOK.

EC-1	SCHEDULING
EC-2	PRESERVATION OF EXISTING VEGETATION
NS-1	WATER CONSERVATION PRACTICES
NS-6	ILLICIT CONNECTION/ILLEGAL DISCHARGE
SE-5	FIBER ROLLS
SE-6	GRAVEL BAG BERM
TR-1	STABILIZED CONSTRUCTION ENTRANCE
WE-1	WIND EROSION CONTROL
WM-1	MATERIAL DELIVERY AND STORAGE
WM-2	MATERIAL USE
WM-3	STOCKPILE MANAGEMENT
WM-4	SPILL PREVENTION AND CONTROL
WM-5	SOLID WASTE MANAGEMENT
WM-8	CONCRETE WASTE MANAGEMENT
WM-9	SANITARY/SEPTIC WASTE MANAGEMENT



EROSION CONTROL NOTES:

70. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE PER CALIFORNIA STORM WATER QUALITY ASSOCIATION B.M.P. HANDBOOK STANDARD TR-1
71. CONSTRUCT GRAVEL BAGS (2 BAGS HIGH) PER CALIFORNIA STORM WATER QUALITY ASSOCIATION B.M.P. HANDBOOK STANDARD SC-6
72. CONSTRUCT CONCRETE WASHOUT AREA PER CALIFORNIA STORM WATER QUALITY ASSOCIATION B.M.P. HANDBOOK STANDARD WM-8
73. CONSTRUCT PORTABLE RESTROOM AND HAND WASHING STATION PER CALIFORNIA STORM WATER ASSOCIATION B.M.P. HANDBOOK STANDARD WM-9
74. PROVIDE STREET SWEEPING AND VACUUMING PER CALIFORNIA STORM WATER QUALITY ASSOCIATION B.M.P. HANDBOOK STANDARD SE-7
75. CONSTRUCT MATERIAL DELIVERY AND STORAGE PER CALIFORNIA STORM WATER QUALITY ASSOCIATION B.M.P. HANDBOOK STANDARD WM-1
76. PROVIDE STOCKPILE MANAGEMENT PER CALIFORNIA STORM WATER QUALITY ASSOCIATION B.M.P. HANDBOOK STANDARD WM-3
77. PROVIDE SOLID WASTE MANAGEMENT PER CALIFORNIA STORM WATER QUALITY ASSOCIATION B.M.P. HANDBOOK STANDARD WM-5

12-06-24

2316 FAIRHILL DRIVE, NEWPORT BEACH
PRECISE GRADING & DRAINAGE PLAN

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LOCATED 3' WEST OF WESTERLY TOP OF X PER SOUTH COAST SURVEYING
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REGISTERED PROFESSIONAL ENGINEER — WILLIAM V. GILBERT — No. C-55235 — Exp. 08/30/26 — CIVIL — STATE OF CALIFORNIA

EROSION CONTROL PLAN
2316 FAIRHILL DRIVE
NEWPORT BEACH, CALIFORNIA

DRAWN:	R.W.G.
DESIGN:	R.W.G.
CHECKED:	R.W.G.
SCALE:	1" = 6'
JOB NO.:	725.000

SHEET 3 OF 6

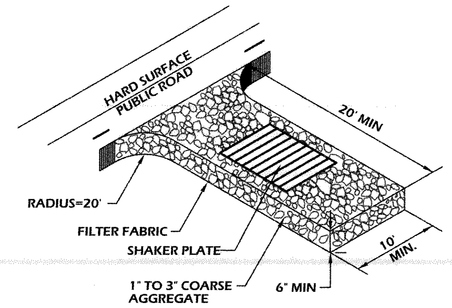
ISSUED
12-19-25

NPDES NOTES:

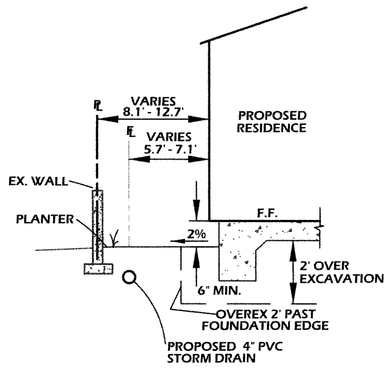
1. IN THE CASE OF EMERGENCY CALL JOE QUERRIERA AT (949) 223-4034.
2. SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING STRUCTURAL CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE.
3. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
4. APPROPRIATE BMP'S FOR CONSTRUCTION-RELATED MATERIALS, WASTES, AND SPILLS SHALL BE IMPLEMENTED TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTIES BY WIND OR RUNOFF.
5. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT CONSTRUCTION SITES UNLESS TREATED TO REDUCE OR REMOVE SEDIMENT AND OTHER POLLUTANTS.
6. ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.
7. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS.
8. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGE OF MATERIALS OTHER THAN STORMWATER ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT: CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302.
9. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING AND SUPERCHLORINATED POTABLE WATER LINE FLUSHING. DURING CONSTRUCTION, PERMITTEE SHALL DISPOSE OF SUCH MATERIALS IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
10. DEWATERING OF CONTAMINATED GROUNDWATER OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.
11. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE IS TO BE DIRECTED TOWARD DESILTING FACILITIES.
12. THE PERMITTEE AND CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
13. THE PERMITTEE AND CONTRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND INSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS.
14. THE PERMITTEE SHALL NOTIFY ALL GENERAL CONTRACTORS, SUBCONTRACTORS, MATERIAL SUPPLIERS, LESSEES, AND PROPERTY OWNERS: THAT DUMPING OF CHEMICALS INTO THE STORM DRAIN SYSTEM OF WATERSHED IS PROHIBITED.
15. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
16. ALL REMOVABLE EROSION PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40%.

EROSION & SEDIMENT CONTROL GENERAL NOTES:

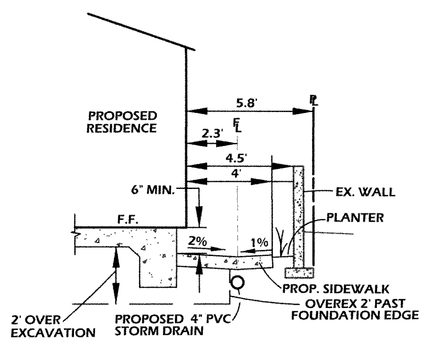
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE EROSION CONTROL PLANS, THE PROJECTS' STORM WATER POLLUTION PREVENTION PLAN (SWPPP), AND THE RECOMMENDATIONS OF SOILS REPORT.
2. EROSION CONTROL MEASURES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHENEVER THE DAILY RAINFALL PROBABILITY EXCEEDS 40%.
3. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ONSITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY EROSION CONTROL DEVICES AT ALL TIMES
4. CONTROLS SHALL BE SET UP AND MAINTAINED AS CONSTRUCTION PROCEEDS. ADJUSTMENTS TO THE EROSION CONTROL PLANS ARE ALLOWABLE AS REQUIRED AND APPROVED BY CITY.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL IMPLEMENT STRUCTURAL AND NONSTRUCTURAL BEST MANAGEMENT PRACTICES (BMPS) IN CONFORMANCE WITH THE GUIDELINES OF THE CALIFORNIA STORM WATER BMP HANDBOOKS.
6. AFTER A RAINSTORM, ALL SEDIMENT AND DEBRIS SHALL BE REMOVED FROM STREETS, BERMS AND DESILTING BASINS. ANY GRADED SLOPE SURFACE PROTECTION MEASURES DAMAGED DURING A RAINSTORM SHALL BE IMMEDIATELY REPAIRED.
7. THE PERMITTEE AND CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATED A HAZARDOUS CONDITION.



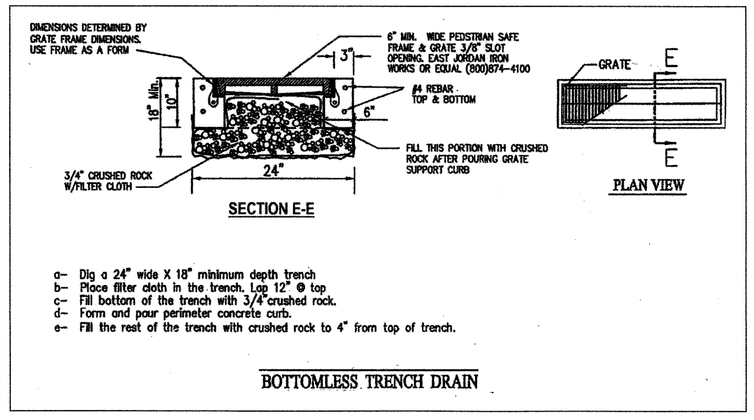
A STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



SECTION A-A:

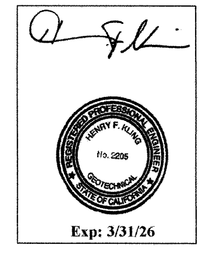


SECTION B-B:



DETAIL A:
BOTTOMLESS TRENCH DRAIN

GRATE WIDTH = 8"



12-06-24

2316 FAIRHILL DRIVE, NEWPORT BEACH
PRECISE GRADING & DRAINAGE PLAN

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ASSUMED ELEVATION =100.00' LOCATED 3' WEST OF WESTERLY TOP OF X PER SOUTH COAST SURVEYING 3214 CLAY ST. NEWPORT BEACH, CA 92663
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ASSESSORS PARCEL NUMBER:
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NEWPORT BEACH, CA 92660

NO.	REVISIONS	APP'D.	DATE
1	ADDED PILES TO SECTION DETAILS		

Plans prepared by:
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REGISTERED PROFESSIONAL ENGINEER
RCE C-65325
Exp. 06/30/26
CIVIL
STATE OF CALIFORNIA

DETAIL SHEET
2316 FAIRHILL DRIVE
NEWPORT BEACH, CALIFORNIA

DRAWN: R.W.G.
DESIGN: R.W.G.
CHECKED: R.W.G.
SCALE:
JOB NO.: 725.000

SHEET 4 OF 6

ISSUED
09-19-25

GENERAL NOTES

BEST MANAGEMENT PRACTICES (BMP'S) CONTAINED HEREIN REFLECT MINIMUM REQUIREMENTS. FOR ADDITIONAL BMP'S REFER TO CALIFORNIA STORMWATER BMP HANDBOOKS.

ALL CONSTRUCTION ACTIVITY SHALL BE PERFORMED IN ACCORDANCE WITH A STORMWATER POLLUTION CONTROL PLAN (SWPCP) DEVELOPED AND IMPLEMENTED IN COMPLIANCE WITH REQUIREMENTS OF THE LOS ANGELES COUNTY STORMWATER QUALITY MANAGEMENT PROGRAM, NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. CAS063339.

THE SWPCP SHALL:
- IDENTIFY POTENTIAL POLLUTANT SOURCES AND INCLUDE THE DESIGN AND PLACEMENT OF BMP'S TO EFFECTIVELY PROHIBIT THE ENTRY OF POLLUTANTS FROM THE CONSTRUCTION SITE INTO AND ONTO THE STREET AND STORM DRAIN SYSTEM DURING CONSTRUCTION.
- BE KEPT ON SITE AND AMENDED TO REFLECT CHANGING CONDITIONS THROUGHOUT THE COARSE OF CONSTRUCTION.
- BE KEPT UP TO DATE. ANY ADDITIONAL UPDATES REQUESTED BY AGENCY REPRESENTATIVES ARE TO BE MADE IMMEDIATELY.

NON-STORMWATER DISCHARGES ARE PROHIBITED FROM ENTERING ANY STORM DRAIN SYSTEM AND/OR STREET.

DISCHARGES OF PUMPED GROUND WATER REQUIRE A DISCHARGE PERMIT FROM THE STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (RWQCB).

POLLUTANTS SHALL BE REMOVED FROM STORMWATER DISCHARGES TO THE MAXIMUM EXTENT PRACTICABLE (MEP) THROUGH DESIGN & IMPLEMENTATION OF THE SWPCP.

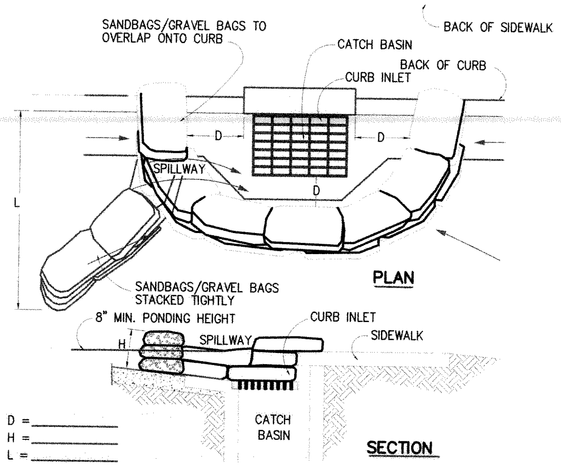
A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (NOV. 1 TO APR. 15). NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.

PORTABLE SANITARY FACILITIES SHALL BE LOCATED ON RELATIVELY LEVEL GROUND AWAY FROM TRAFFIC AREAS, DRAINAGE COURSES, AND STORM DRAIN INLETS.

EMPLOYEES, SUBCONTRACTORS AND SUPPLIERS SHALL BE EDUCATED ON ALL BMP'S INCLUDING CONCRETE WASTE STORAGE AND DISPOSAL PROCEDURES.

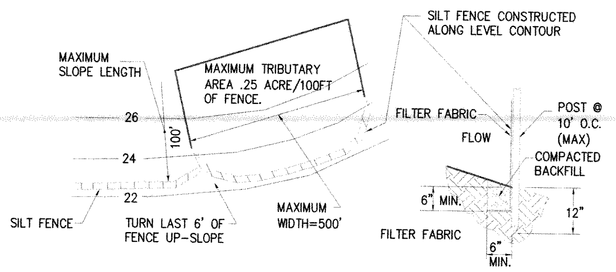
SEDIMENT CONTROL PRACTICES SHALL EFFECTIVELY PREVENT A NET INCREASE OF SEDIMENT LOAD IN STORMWATER DISCHARGE.

A
CATCH BASIN/INLET PROTECTION



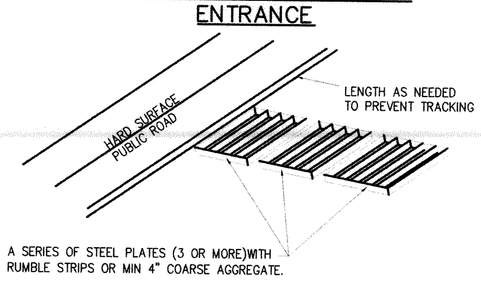
NOTES:
1. CATCH BASIN/INLET PROTECTION SHALL BE INSTALLED WHEREVER THERE IS A POTENTIAL OF STORMWATER OR NON-STORMWATER BEING DISCHARGED INTO IT.
2. INLET PROTECTION IS REQUIRED ALONG WITH OTHER POLLUTION PREVENTION MEASURES SUCH AS; EROSION CONTROL, SOIL STABILIZATION, AND MEASURES TO PREVENT TRACKING ONTO PAVED SURFACES.
3. MODIFY INLET PROTECTION AS NEEDED TO AVOID CREATING TRAFFIC HAZARDS.
4. INCLUDE INLET PROTECTION MEASURES AT HILLSIDE V-DITCHES AND MISC. DRAINAGE SWALES.
5. INLET PROTECTION SHALL BE INSPECTED AND ACCUMULATED SEDIMENTS REMOVED. SEDIMENT SHALL BE DISPOSED OF PROPERLY AND IN A MANNER THAT ASSURES THAT THE SEDIMENT DOES NOT ENTER THE STORM DRAIN SYSTEM.
6. DAMAGED BAGS SHALL BE REPLACED IMMEDIATELY.
7. ADDITIONAL SANDBAG SEDIMENT TRAPS SHALL BE PLACED AT INTERVALS AS INDICATED ON SITE PLAN.

B
SILT FENCE



NOTES:
1. CONSTRUCT THE SILT FENCE ALONG A LEVEL CONTOUR.
2. SILT FENCES SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
3. PROVIDE SUFFICIENT ROOM FOR RUNOFF TO POND BEHIND THE FENCE AND ALLOW SEDIMENT REMOVAL EQUIPMENT TO PASS BETWEEN THE SILT FENCE AND TOE OF SLOPE OR OTHER OBSTRUCTIONS. ABOUT 1200 SQ. FT. OF PONDING AREA SHALL BE PROVIDED FOR EVERY ACRE DRAINING TO THE FENCE.
4. TURN THE ENDS OF THE FILTER FENCE UPHILL TO PREVENT STORMWATER FROM FLOWING AROUND THE FENCE.
5. LEAVE AN UNDISTURBED OR STABILIZED AREA IMMEDIATELY DOWNSLOPE FROM THE FENCE.
6. DO NOT PLACE IN LIVE STREAM OR INTERMITTENTLY FLOWING CHANNELS.
7. WHEN STANDARD FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RINGS.

C
STABILIZED CONSTRUCTION ENTRANCE

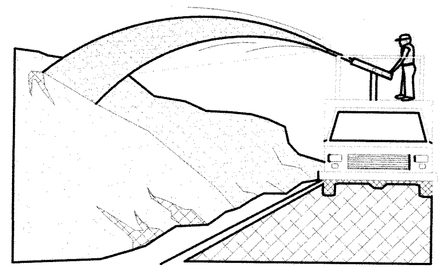


NOTES:
1. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC ROADS. DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
   A. LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, AND SIDEWALK OR PARKING AREA.
   B. A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN 4" COARSE AGGREGATE WITH LENGTH, WIDTH & THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.
3. ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
4. ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.

STREET MAINTENANCE

1. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
2. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
3. PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

D
EROSION CONTROL



SOIL/SLOPE STABILIZATION PRACTICES SHALL BE DESIGNED TO PRESERVE EXISTING VEGETATION WHERE FEASIBLE AND TO REVEGETATE OPEN AREAS AS SOON AS FEASIBLE AFTER GRADING. THESE CONTROL PRACTICES SHALL INCLUDE TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SOD STABILIZATION, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, OR OTHER SOIL STABILIZATION PRACTICES.

SOIL STABILIZATION SHALL BE IMPLEMENTED ON ALL INACTIVE DISTURBED AREAS FROM NOVEMBER 1 THRU APRIL 15 AND ON ALL DISTURBED AREAS DURING A RAIN EVENT OR POTENTIAL RAIN.

STABILIZATION PRACTICES SHALL CONTROL/PREVENT EROSION FROM THE FORCES OF WIND AND

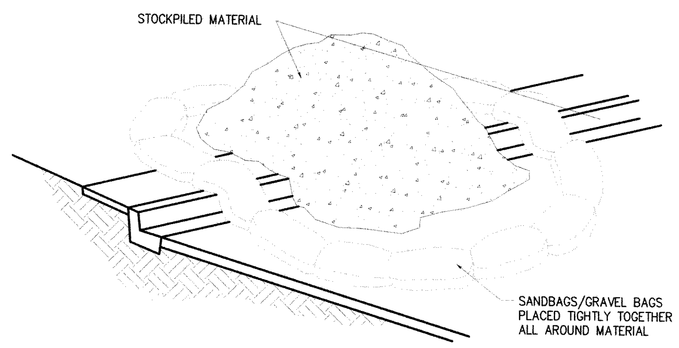
STABILIZATION PRACTICES SHALL BE IMPLEMENTED IN CONJUNCTION WITH SEDIMENT TRAPPING/FILTERING PRACTICES AND PRACTICES TO REDUCE THE TRACKING OF SEDIMENT ONTO PAVED ROADS.

WHEN USING STRAW MULCHING, THE MINIMUM APPLICATION SHALL BE 2 TONS/ACRE. MULCH MUST BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.

WHEN USING HYDROSEEDING/MULCHING, THE MINIMUM APPLICATION OF WOOD FIBER SHALL BE 1,500 LBS/ACRE, THAT DOES NOT CONTAIN MORE THAN 50 PERCENT NEWSPRINT.

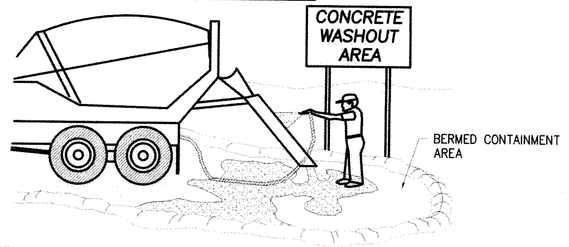
FOR SEEDING RECOMMENDATIONS, CONTACT: USDA, NATURAL RESOURCES CONSERVATION SERVICE OR VENTURA COUNTY RCD.

E
MATERIAL STORAGE



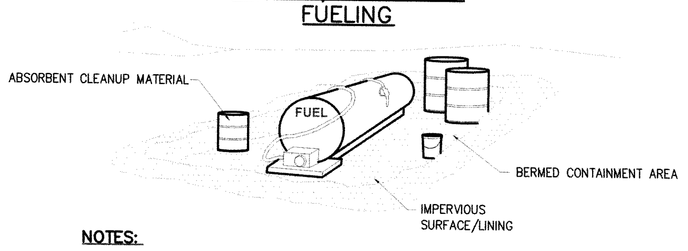
NOTES:
1. DIRT AND OTHER CONSTRUCTION RELATED MATERIALS PLACED IN THE STREET OR ON OTHER IMPERVIOUS SURFACES MUST BE CONTAINED WITH SANDBAGS OR OTHER MEASURES TO PREVENT TRANSPORT TO THE STORMDRAIN SYSTEM.
2. ANY CONSTRUCTION MATERIAL STORED ON STOCKPILED ON-SITE SHALL BE PROTECTED FROM BEING TRANSPORTED BY THE FORCE OF WIND OR WATER.

F
CONCRETE WASTE MANAGEMENT



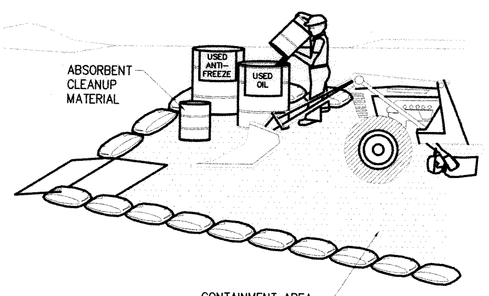
NOTES:
1. EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO THE STREET OR INTO A DRAINAGE SYSTEM.
2. FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL BE PROVIDED ON SITE.
3. SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHALL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OF PROPERLY.

G
VEHICLE/EQUIPMENT FUELING



NOTES:
1. FUELING SHALL BE PERFORMED IN A DESIGNATED AREA, AWAY FROM DRAINAGE COURSES.
2. ABSORBENT CLEANUP MATERIAL SHALL BE ON SITE AND USED IMMEDIATELY IN THE EVENT OF A SPILL.

H
EQUIPMENT REPAIR/MAINTENANCE



NOTES:
1. LEAKING VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED ON-SITE. EQUIPMENT AND VEHICLES SHALL BE INSPECTED FREQUENTLY FOR LEAKS AND SHALL BE REPAIRED IMMEDIATELY. CLEAN UP SPILLS AND LEAKS PROMPTLY WITH ABSORBENT MATERIALS; DO NOT FLUSH WITH WATER.
2. VEHICLES AND EQUIPMENT SHALL BE MAINTAINED, AND REPAIRED ON-SITE ONLY IN DESIGNATED AREAS. PREVENT RUN-ON AND RUN-OFF FROM DESIGNATED AREAS. CONTAINMENT DEVICES SHALL BE PROVIDED AND AREAS SHALL BE COVERED IF NECESSARY.
3. DESIGNATE ON-SITE VEHICLE AND EQUIPMENT MAINTENANCE AREAS, AWAY FROM STORM DRAIN INLETS AND WATERCOURSES.
4. ALWAYS USE SECONDARY CONTAINMENT, SUCH AS A DRAIN PAN OR DROP CLOTH, TO CATCH SPILLS AND LEAKS WHEN REMOVING OR CHANGING FLUIDS.
5. LEGALLY DISPOSE OF USED OILS, FLUIDS, AND LUBRICANTS.
6. PROVIDE SPILL CONTAINMENT DIKES OR SECONDARY CONTAINMENT AROUND STORED OIL, FUEL, AND CHEMICAL DRUMS.
7. MAINTAIN AN ADEQUATE SUPPLY OF ABSORBENT SPILL CLEANUP MATERIALS IN DESIGNATED AREA.

12-06-24

2316 FAIRHILL DRIVE, NEWPORT BEACH
PRECISE GRADING & DRAINAGE PLAN

HARRY P. BLINE — No. 5205 — REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA

Exp: 3/31/26

Underground Service Alert
Call: TOLL FREE 811
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
ASSUMED ELEVATION =100.00'
LOCATED 3' WEST OF WESTERLY TOP OF X PER SOUTH COAST SURVEYING
3214 CLAY ST.
NEWPORT BEACH, CA 92663
949-631-8840

ASSESSORS PARCEL NUMBER:
A.P.N. 119-333-20

OWNER/DEVELOPER:
JOE AND KATRINA QUERRIERA
2316 FAIRHILL DRIVE
NEWPORT BEACH, CA 92660

NO.	REVISIONS	APP'D.	DATE

Plans prepared by:
GILBERT ENGINEERING & ASSOCIATES, INC.
CIVIL ENGINEERING, SURVEYING AND LAND DEVELOPMENT SERVICES
2 MERRIWEATHER PLACE LADERA RANCH, CA 92694
PH. (949) 218-8075
www.gilbert-engineering.com

REGISTERED PROFESSIONAL ENGINEER — RYAN LAM O'NEIL — No. C-66326 — Exp. 06/30/26 — CIVIL — STATE OF CALIFORNIA

BMP NOTES AND DETAIL SHEET
2316 FAIRHILL DRIVE
NEWPORT BEACH, CALIFORNIA

DRAWN:	R.W.G.
DESIGN:	R.W.G.
CHECKED:	R.W.G.
SCALE:	
JOB NO.:	725.000

SHEET 5 OF 6

GEOTECHNICAL ENGINEER'S RECOMMENDATIONS:

- Demolition will likely disturb the upper two feet of existing soil under the structure.

RECOMMENDATIONS

The following recommendations have been formulated based on the results of our investigation including field exploration and laboratory testing of relevant soil samples.

Grading

After the existing residential structure and associated flatwork (walkways, driveways) have been demolished and removed from the site. The pad should be over-excavated minimum of two feet in order to remove disturbed soil resulting from the demolition. The removal should be deepened as needed where utility lines were installed greater than two feet deep, such as sewer lines. Once the soil has been removed and cleansed of construction debris, it may be re-used as engineered fill. The fill should be moisture conditioned to 2 percentage points above optimum moisture, placed in thin lifts and compacted to minimum of 90 percent relative compaction per ASTM D1557. The removals should extend approximately two feet beyond the footprint where practical.

Foundations

New foundations should be designed in accordance with Building Code Policy, CBC-1803.5.11-12, which requires foundations embedded a minimum depth of 24-inches, reinforced with two No. 5 rebars, top and bottom with width of 15-inches (for two story construction). An allowable bearing pressure of 2000 pounds per square foot may be assumed for continuous and square pad footings. Square pad footings should have a minimum depth of 24-inches and width of 18-inches and be tied by grade beams in two directions.

If normal code requirements are used, the allowable bearing pressure value may be increased by one-third (1/3) for short-duration loads such as wind or seismic forces.

A friction coefficient of 0.40 between soil and concrete may also be used for design. For calculating passive pressure, an equivalent fluid weight of 250 psf for each foot of depth may be used, to a maximum total value of 1500 psf.

Settlement of existing foundations supporting the second story addition is expected to not exceed ¼-inch over fifty horizontal feet. An additional ½-inch over 100 horizontal feet of seismically-induced settlement should be assumed and anticipated to impact the entire residence.

Conventional Slab on Grade

New slabs-on-grade should also conform to the requirements of Code Policy 1803.5.11-12, consisting of 5-inch thick slab (actual) and reinforced with two No. 4 rebars, 12-inches on center, each way, in the center of the slab. Dowelled connections between slab and footings with No. 4 rebars at 24-inches on center, maximum spacing. The project structural engineer should consider these recommendations as minimum requirements, and modify these recommendations as appropriate. The subgrade soil is considered "expansive" with an Expansion Index of 79.

Slab subgrade soil should be pre-moistened to 3 percentage points over optimum moisture content to a depth of 18-inches prior to placement of concrete or vapor barrier.

Interior slabs-on-grade should be underlain by a four inch layer of ½-inch aggregate, or approved sand (SE > 30). The aggregate/sand should be underlain by a 15-mil Stego Wrap vapor retarder or equivalent product with a permeance rate of 0.012 perms (or less) and a puncture resistance of Class "A" or "B" in accordance with ASTM E 1745-11. As per the manufacturer's recommendations all seams should overlap a minimum of 6 inches and should be sealed in accordance with the specifications provided by the vapor retarder manufacturer. All penetrations must be sealed using a combination of Stego Wrap, Stego Tape and/or Stego Mastic or approved equivalent. The vapor retarder should be lapped downward a minimum of 12 inches where the vapor retarder encounters an interior footing or exterior thickened edge or footing. The vapor retarder must be placed on top of the sand layer if the sand is expected to become wet prior to pouring of concrete.

If the aggregate/sand can be kept dry prior to pouring concrete, the vapor retarder may be placed under the sand or sandwiched within the sand layer. The water cement ratio of structural concrete should be not greater than 0.50. However, it should be determined based on floor coverings.

If moisture sensitive floor coverings are utilized, interior concrete slabs should be designed and constructed in accordance with the applicable floor manufacturer's specifications. The flooring installer should conduct all applicable testing to determine if concrete slabs have sufficiently cured to receive flooring materials.

Sulfate Exposure

A soluble sulfate test performed on a shallow soil sample resulted in 117 ppm. As such the sulfates are considered to be nil. Therefore, all new concrete in contact with the soil should be designed in accordance with 2014 ACI, Section 318, Tables 19.3.1.1 and 19.3.2.1 utilizing Class SO sulfate exposure (Reference 1)

Exterior Flatwork

The onsite soil is essentially moderately expansive; therefore, concrete hardscape, if any, should be designed by the structural engineer to resist moderate expansion. At a minimum we would recommend that exterior hardscape be at least four inches in total thickness and reinforced with #3 rebars on 18-inch centers, both ways. Subgrade soil should be pre-moistened to a moisture content of 4 percentage points over optimum moisture to a depth of 18-inches. Saw cuts or joints should be closely spaced as practical. The final design should be determined by the Structural Engineer for the project.

Surficial Drainage

Drainage around structures should be designed in accordance with Section 1804.3 of the 2022 CBC.

Foundation Plan Review

Our office should perform a geotechnical review of the foundation plan under a separate scope of work when they become available to see that our recommendations are implemented in the design of the proposed improvements.

Geotechnical Observation and Testing

Geotechnical observation and testing should be conducted during the following stages of grading:

- During all phases of earthwork, footing excavations, etc.
- During slab subgrade moisture conditioning.
- During utility trench and slab subgrade compaction.
- During placement of slab vapor barrier, capillary break sand, footings and slab-on-grade.
- For any unusual conditions encountered.

Professional Limitations

Geotechnical reports are based on the project description and proposed scope of work as described in the proposal. Our conclusions and recommendations are based on the results of the field, laboratory, and office studies, combined with an interpolation and extrapolation of soil conditions as described in the report. The results reflect our geotechnical interpretation of the limited direct evidence obtained. Our conclusions and recommendations are made contingent upon the opportunity for KCG to continue to provide geotechnical services beyond the scope in the proposal to include all geotechnical services. If parties other than KCG are engaged to provide such services, they must be notified that they will be required to assume complete

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