permit SONOMA

REVIEWED
By Kh. Fallah at 3:15 pm, Oct 05, 2021

County of Sonoma
Permit & Resource Management Department

July 07, 2021

THESE ATTACHMENTS ARE PART OF THE APPROVED PLANS.
* DO NOT REMOVE THEM *
10/05/2021
PERMIT AND RESOURCE MANAGEMENT DEPARTMENT BUILDING PLAN CHECK
PERMIT # BLD20-3161 / 1 OF 11

L & L Bridges
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Sebastopol, CA 95472
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Email: levigurule@outlook.com

SUBJECT: BLD20-3161
6748 Rutgers Drive – Sebastopol, CA 95472

APN: 063-300-022

Plans for the above-referenced project have been reviewed for building code compliance. The applicable code versions are the following codes adopted January 1, 2020:

- 2019 California Residential Code (CRC; referenced sections of this code have the 'R' prefix)
- 2019 California Building Code (CBC)
- 2019 California Plumbing, Electrical, and Mechanical Codes (CPC, CEC, CMC)
- 2019 California Green Building Standards (Cal Green)
- 2019 California Energy Code Supplement

A review of the plans included with this building permit application indicates the following items must be revised, corrected or submitted in greater detail.

Please revise your plans and/or provide documents and/or additional justification as indicated in the comments provided below. **At this time, hard copy resubmittals are not being accepted. Digitally resubmit a complete set of revised plans and all relevant supporting documentation pertaining to the project** for additional review and approval. Please see the attached instructions for information regarding the process for resubmittal through the Permit Sonoma Citizen's Access web portal. All digitally submitted documents shall be signed, sealed, and dated in accordance with applicable laws and statutes.

Adherence to the following resubmittal guidelines is required for a timely review:

- Revise plans, specifications and calculations to clearly respond to the attached comments, resubmitting complete (not partial) plans. **ALL changes made to original Application plans MUST be Clouded and Dated so that the changes can be easily identified.**

- Respond in writing to each comment by marking the attached comment list. Indicate which detail, specification or calculations show the required information. Responses such as "see plans" or "plans comply" do not save time. Responses of a general nature, such as "handrails shall be as per CBC Section 1014" are not acceptable – compliance with building code requirements shall be illustrated using fully dimensioned details.

- Plans stamped by an architect or engineer cannot be modified in any way (e.g. – red lined) except by the architect or engineer. Plans modified by others will **not** be accepted.

- REMEMBER: Any response not conforming to the literal prescriptive requirements of the codes can only be approved by the Building Official.

The following issues should be addressed before the plan check process can continue:

General:

Attached is the link to the Residential Plan Checklist (https://sonomacounty.ca.gov/PRMD/Instructions-and-Forms/BPC-002-Residential-Plan-Checklist/). Construction Drawings shall include and reference all applicable Code citations. Please review in detail and amend drawings to include applicable Code citations;

Please correct the items indicated by the "X" mark for each division. Please contact me, if you have any questions or need any clarifications on any item(s) before submitting your digital plans or document's in to the system. Please see section of the code as indicated on the correction item(s) for additional information and contact me, if you need any helps.

DIVISION 01 / GENERAL

✓ 1-[X] Show and label the Grid Lines on all Architectural Roof Plans, Floor Plans, Elevations plus Structural Plans for Foundation Plans, Floor Framing Plans and Roof Plans. Grid lines on Architectural and Structural shall match each other.

✓ 2- This information shall be printed in the title block on all sheets of the drawings (Archit., Struct., Civil, Elect., Mech., …):

[X] Name of the Owner(s) as shown on the permit application and records.

[ ] Address of Project (as assigned by the planning department).

[X] Assessor's Parcel Number (A.P. #).

✓ 3-[X] Specify on the **Site Plan** or **Cover Sheet** the codes edition used for the design of the project.
Ref.: Sheet # 1 or 3

✔ 4- Specify on the **Site Plan** or **Cover Sheet** the latitude and longitude for the building or project as indicated on the permit application. our staff shall verify this information at time of submittal for the permit(s).

N. 38° 22' 34.97" **W.** 122° 48' 19.15" **Ref.: Sheet # 1 0r 3 of 10**

✔ 5-[X] Specify on the **Site Plan** or **Cover Sheet** the Name, Address, and Telephone number of the person designated as the **Design Professional in Responsible Charge.**

The register design professional in responsible charge shall be responsible for review and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building this information shall be match the building permit application. **SEC. 107.3.4 C.B.C.** or **SEC. R106.1 C.R.C.** **Ref.: Sheet # 1 or 3**

✔ 6- Submit signed and stamped engineer's designs and calculations for the following item(s):

[X] Soil Report * -Where the soil properties are not known in sufficient detail to determine the site class, Site Class D shall

be used unless the building official or geotechnical data determines site class e or f soils are present at the site.

*[ ] For C.R.C. design : specify the Soil Site Class per sec. R301.2.2.1 of C.R.C.

[X] Indicate on the cover sheet of the calculation the Itemized Summation for Dead load assembly for Roof, Ceiling, Exterior Walls, Interior Walls, Floors and Partitions as Shown on Architectural Drawings. **

[ ] **for C.R.C. Design : See Limitation of Load by SEC. R301.2.2.2 to R302 OF C.R.C.

[X] Foundation – [X] Per Chapter 18 & 19 of C.B.C. or [ ] Per Chapter 4 of C.R.C.

[ ] Retaining Walls or Basement Walls - [ ] Per Chapter 18 & 19 of C.B.C. or [ ] Per Chapter 4 of C.R.C.

[X] Structural Frame [X] Roof [ ] Floors [ ] Roof Truss – Also See division # 06

[X] Seismic Forces - [X] Per 2019 C.B.C. or [ ] Per 2019 C.R.C.- R301.2.2/See Below: Other

[X] Wind Forces - [X] Per 2019 C.B.C. or [ ] Per R301.2.1 OF 2019 C.R.C.

[ ] Decks (Structure & Foundation)

[ ] Pools and Spas – **Also see Chapter 31b of C.B.C.**

[X] Specify the Load Combinations that are used for the calculation design of the Structure per Section 1605 C.B.C. (Strength Design / Stress Design or / Alternative Basic Load Combinations).

[X] Other: With Concrete filled Metal Deck; the calculation shall be design as a Rigid Diaphragms condition. Please modify calculations to show the load distributions as rigid and add the eccentricity between the center of the mass and the center of the rigidity.

✓ 7- State on the plans that: "**Structural Observation Shall be Required by the**

[ ] Architect **[X] Engineer** for structural conformance to the approved plans.
[X] For Seismic Resistance **[X] For Wind Requirements**

owner shall employ a registered design professional to perform structural observation as defined in sections 1704 of the 2019 C.B.C.

✓ 8- A **Special Inspection** is required for the types of work specified: **[ ] Concrete [ ] Shotcrete**
[ ] Pool Shotcrete (Verify ACI nozzleman credential) **[ ] Structural Masonry** **[X] Welding**

[ ] Drilled Piers, Piling, and Caissons **[ ] Epoxy** **[ ] Epoxy with Pull Test**

[X] "HERS" **[X] Special Cases** : Please submit the Data sheet for the type of "ICF" and indicate on the drawings the "R" value of the wall type as indicated by the manufacture.

[X] Please have the engineer of record complete and return a Statement of Special Inspections, identifying all 3rd party observation and testing, in accordance with CBC Chapter 17. The Statement of Special Inspections can be downloaded from the following link:
https://sonomacounty.ca.gov/WorkArea/DownloadAsset.aspx?id=2147552249
The **Owner** or the **Registered Design Professional in Responsible Charge** acting as the owner's agent shall employ one or more special inspectors to provide inspections during construction on the type of work listed above. **Section 1704, 1705, 1706 & 1707 of 2019 C.B.C.**

✓ 9-**[X]** Submitted Energy Calculations are: [X] Incorrect: [X] Incomplete:

Please correct the area = 912 SQ. Ft. + show the "R" value of the walls & Roof per drawings.

✓ 10-[X] Forms **CF-1R** and **MF-1R** of residential energy calculations shall be printed on one of the drawing sheets. [X] see item # 08 above.

✓ 11- State on the **Site Plan or Cover Sheet** all deferred submittals. deferral of any submittal items shall have the prior approval of the building official.

[X] Fire Sprinkler System [ ] **Ref. : Sheet #**

The **Registered Design Professional in Responsible Charge** shall list the deferred submittals on the **Site Plan or Cover Sheet** for review by the building official. **Section 107.3.4.2 of 2019 C.B.C.**

✓ 12- Modify Engineer's Calculations for: Also, see item # 5 above for the coordination.

[X] Seismic - [X] per 2019 C.B.C. or [ ] per 2019 C.R.C.- R301.2.2.1 (Wall Bracing R602.10 – Table R602.10.3 & 4)

[X] Wind - [X] per 2019 C.B.C. or [ ] Per R301.2.1 of 2019 C.R.C. (Wall Bracing R602.10 – Table R602.10.3 & 4)

[X] **Provide sketches in the calculation package to show complete path of forces at each level and show on the Roof and Floor plan(s) sketches the distribution of forces at Each Grid and Column Lines in each story.**

DIVISION 02 / SITE WORK

✓ 1-**[X] Site Grading.** the ground immediately adjacent to the foundation shall comply with **sec. 1804.4 of C.B.C. or SEC. R401.3 OF C.R.C.**

- Shall be sloped away from the building at a slope of not less than one unit vertical in 20 units horizontal (5 % slope) for a minimum distance of 10 feet measured perpendicular to the face of the wall.
- If physical obstructions or lot lines prohibit 10 feet of horizontal distance, a 5 % slope shall be provided to an approved alternative method of diverting water away from the foundation.
- Swales used for this purpose shall be sloped a minimum of 2 percent where located with10 feet of the building foundation.
- Impervious surfaces within 10 feet of the building foundation shall be sloped a minimum of 2 % away from the building.

DIVISION 03 / CONCRETE

✓ 1-**[X]** Show Foundation Plan(s) ***Ref.: Sheet #*** No Foundation Plan

[X] Show all Details of the Foundation.

[X] Key all Details on the Foundation Plan(s). **SEC. 107.2.1 C.B.C. OR SEC. 106.1.1 C.R.C.**

[X] Height of Foundation wall above grade**. PER SECTION 2304.11.2.2 OF C.B.C.**

[X] Height of Foundation wall above grade**. PER SECTION 2304.11.2.2 OF C.B.C.**

✓ 2-**[X]** Show size and details for each type of grade beams**. SEC. 1810.3.12 C.B.C.** ***REF.: SHEET #***

[X] Show and specify all reinforcement for grade beams.

[X] Show size, space and details for stirrups in the grade beams.

✓ 3- On concrete retaining walls & concrete walls: show minimum requirements for wall thickness and reinforcement steel in accordance with ACI 318. **SEC. 1807.1.6.2 C.B.C. OR SEC. R404.1.2.3.7 C.R.C.**

[ ] The design of the steel spacing in all the tables at C.B.C. & C.R.C. are based on ASTM A706 for low alloy steel with minimum yield strength of 60,000 psi (grade 60), if another grade is used; modify and adjust spacing per C.B.C. & C.R.C. Ref. Sheet 8 of 10

[X] Horizontal Reinforcement: Max. @ 16" O.C. (Temp. Steel)

[ ] Vertical Reinforcement:

[ ] Wall Thickness (MIN. 7 ½"):

[X] Show Maximum Height of the concrete (or masonry) retaining wall(s) from top to the bottom of the foundation.

✓ 4-[X] Show location, size and type of all the anchor bolts for the Holdowns and the type of the Holdowns on the foundation plans. specify size, type and minimum required anchor embedment in the concrete.

DIVISION 05 / METALS

✓ 1-[X] Show connection detail(s) for Steel Beam(s) to wood structure or walls.

✓ 2-[X]Specify and submit data for the Metal Roof Deck by the manufacture. Also, show details and spacing for the ceiling metal joist at bottom of the steel members. Details as shown on sheet 8 of 10 dose not match the design of the building.

DIVISION 06 / WOOD & PLASTIC

✓ 1-Show roof rafters on the Framing Plans and key all required details on the roof plans.

REF.: SHEET # 8 of 10 with 2 ft cantilever + 7 of 10 with 2.5 ft. cantilever (Show Detail)

[X] At: **Top of Wall Detail** Area [X] Size: 2 x 4 @ 24" O.C. are over stress. Required design for minimum 300 lb. concentrated load – Please modify design to comply.

[X] Span, and location of supports. [X] Details of connections.

DIVISION 07 / THERMAL & MOISTURE PROTECTION

✓ 1-[X] Show the floor base and foundation perimeter drain layout. all drains shall discharge by gravity or mechanical means into an approved drainage system. Sec. 1805.4.3 of C.B.C. or Sec. R405 of C.R.C.

[X] See Division 02-Item # 1 for coordination.

✓ 2-[X] The minimum roof coverings installed on buildings shall have class "A" Roof Assemblies. Specify type of roof covering and show detail(s) of assembly. **SEC. 1505 & 1507 OF C.B.C. OR SEC. R905 OF C.R.C. Submit data from manufacture.**

✓ 3-[X] Show detail(s) for installation of the slab edge insulation for heated slabs, as required by section118(g) of the standards . SEC. 118(g) of C.E.C.

4-[X] Specify on the Doors and Windows schedule the thermal resistance of glazing (max. U-Factor) required by the energy calculation for the building at exterior envelope.

✓ 5- On the transverse framing section of the building, show the type and specify the thermal resistance of material as indicated by the Heat loss Calculations at:

[X] Ceiling [X] Enclosed rafter space*/ Also see Sec. R806.4 of C.R.C.
[X] Walls [X] Floors

* When no cross ventilation is provided at enclosed rafter space, the entire depth of the rafter shall be filled with rigid insulation and vapor barrier shall be installed at the warm –in-winter side of the ceiling rafter assembly between the gypsum board and rafters. show details for compliance. [X] See sec. R806.5 of C.R.C. for Unvented Attic Assemblies.

DIVISION 08 / DOORS & WINDOWS

✓ 1-[X] Label and specify each emergency escape window on the floor plan. Emergency escape and rescue shall have minimum net clear opening of 5.7 square feet. The minimum net clear opening height dimension shall be 24 inches. The minimum net clear opening width dimension shall be 20 inches. the net clear opening dimensions shall be the result of normal operation of the opening. emergency escape and rescue opening shall have the bottom of the clear opening not greater than 44 inches measured from the floor. SEC. 1030 OF C.B.C. or SEC.R310 OF C.R.C.

Ref. Sheet 4 of 10 @ office with closet.

DIVISION 09 / FINISHES

✓ 1-[X] Specify type of exterior wall coverings for proposed project. Show detail of installation of wall covering to comply with chapter 14 of **C.B.C. or SEC. R703 OF C.R.C.**

Show detail of the installation for weep screed at the bottom of the wall from grade.

✓ 2- Floors and Walls in the Bathroom(s) shall have a smooth, hard, nonabsorbent surface per **SEC. 1209 OF C.B.C. & CHAPTER 4 OF C.P.C.** Show details and specify the materials used at:

[ ] Floors (shall extend upward onto the walls at least 4 inches) – **Sec. 1209.2.1 of C.B.C.**

[ ] Walls (to a minimum height of 4 feet) – **Sec. 1209.2.2 of C.B.C.**

[ ] Showers (to a minimum height of 72 inches) **– Sec. 1210.3 of C.B.C.**

[X] Tubs and Shower (to the minimum height of 72 inches) – **Sec. R307 of C.R.C.**

[X] Location of control valves and shower heads shall comply with **Sec. 408.9 of C.P.C.** – Modify Design to show locations.

✓ 3- Show on the plans the minimum requirement for installation of water closet or bidet per

Sec. 402.5 of C.P.C. or Sec. R307 of C.R.C.

[X] Width (minimum 15 inches from its center to any side wall or obstruction, no closer than 30 inches center to center to any similar fixture)

[ ] Clear space in front (minimum 24 inches)

[ ] Water Closets with maximum of 1.28 gallons flush volume. Sec. 4.303 C.G.C.

[X] Single or Multiple Showerheads with maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Sec. 4.303 of C.G.C.

DIVISION 10 / SPECIALTIES

✓ 1- Provide a vent for domestic clothes dryers to the exterior of the building per Section 504.4 of C.M.C.

[X] Show path of the vent and location of termination on the plan (4 inches minimum diameter ,14 feet maximum of combined horizontal and vertical length, including two 90-degree elbows).

✓ 2- All Bathrooms shall be mechanically ventilated in accordance with Section 402 & 403 of C.M.C. and Sec. 1202 of C.B.C. or Sec. R303.3 of C.R.C. & Section 150–o of Cal. Energy code & ANSI/ASHARE standard 62.2 Ref. Sheet 4 of 10

[X] Specify the size of the mechanical fan in cubic feet per minute. shall be size for one c.f.m. per one square foot of area with minimum fan size of 50 c.f.m. (for 8 ft. to 10 ft. ceiling height).

[X] Specify the duct diameter , type (flex or smooth) and maximum length of the duct on the floor plan per table 4-16 of C.E.C.

✓ 3- Every Kitchen shall have an exhaust fan to the outside of the building with minimum size of 100 c.f.m. Section 403.7 of C.M.C. & 150-o of Cal. Energy Code & ANSI/ASHARE Standard 62.2

[X] Specify the size of the fan in cubic feet per minute (with minimum size of100 c.f.m.)

[X] Specify the duct diameter , type (smooth) and maximum length of the duct on the floor plan per table 4-16 of C.E.C. Ref. Sheet 4 of 10

DIVISION 15 / MECHANICAL

✓ 1- Plans shall reflect the type, capacity, efficiency and location of the water heater(s) as indicated in the Energy Calculation. Ref. Sheet 4 of 10 Also, required tank for the boiler / submit data.

[X] Gas or Propane water heaters shall have a gas supply line with a minimum capacity of at least **200,000 bth/hr.** Please show or specify on the floor plan(s) for sizing the gas pipe(s). Sec. 150.0 (n).1. d of C.E.C.

✓ 2-[X] All new low-rise residential buildings or additions of 1000 sq. ft. or more are required to have a whole-building mechanical ventilation for indoor air quality. Sec. 150-o of 2013 C.E.C.Total Required Ventilation Rate [ASHRAE 62.2:4.1.1] Ref. Sheet 4 of 10

$Q_{tot} = 0.03A_{floor} + 7.5(N_{br} + 1)$ where Q_{tot} = total required ventilation rate, cfm

A_{floor} = dwelling-unit floor area, sq. Ft. N_{br} = number of bedrooms (not to be less than 1)

[X] Show details & drawing for how the design is going to comply with this requirement.

DIVISION 16 / ELECTRICAL

✓ 1- **Smoke Alarms** shall be installed per Section 907 of C.B.C. or Section R314 of C.R.C. – Show the location of smoke alarms on the drawings. **Provide Smoke Alarms AT:**

[ ] On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.

[X] In each room used for sleeping purposes.

[ ] In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent level, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

[ ] In enclosed common stairwell of Apartment Complexes and other Multiple-Dwelling Complexes.

[ ] In a group R-3.1 occupancy, in addition to the above, smoke alarms shall be provided throughout the habitable areas of the dwelling unit except kitchens.

[X] **Power Source** – In new construction and existing buildings where accessible, smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup.

✓ 2- Show location of the Grounding Electrode on the Foundation Plan. Sec. 250-52 C.E.C.

[X] Provide minimum of **20** feet long of number **4 AWG** bare copper conductor in the footing, located two inches from the bottom of footing.

✓ 3-[X] All Receptacle in Dwelling Units for 125-volt, 15 & 20 ampere shall be listed *Tamper-Resistant Receptacles*. Section 406.11 of C.E.C.

✓ 4- Location of the Receptacle Outlets shall be designed to comply with C.E.C. section 210.50 to 215.0.

[ ] Receptacles shall be installed so that no point measured horizontally along the floor line in any wall space is more than 6 feet from a receptacle outlet. Sec. 210.52 (a) C.E.C.

[ ] Receptacles at kitchen countertops shall be installed so that no point along the wall line is more than 24 inches measured horizontally from a receptacle outlet in that space. Sec. 210.52 (c) C.E.C.

[ ] At least one receptacle outlet shall be installed in bathrooms within 3 feet of the outside edge of each basin. Sec.210.52 (d) C.E.C.

[X] At least one receptacle outlet accessible at *Grade Level* and not more than 6-1/2 feet above *Grade* shall be installed at the front and back of the dwelling. Sec. 210.52 (e) C.E.C.

[ ] Hallways of 10 feet or more in length shall have at least one receptacle outlet. sec. 210.52 (h) C.E.C.

[ ] At least one receptacle outlet, in addition to any provided for laundry equipment, shall be installed in each basement and in each attached garage, and in each detached garage with electric power. Sec. 210.52 (f & g) C.E.C.

[X] A 125-volt, single-phase, 15- or 20- ampere-rated receptacle outlet shall be installed at an accessible location for the servicing of heating, air-conditioning, and refrigeration equipment. The receptacle outlet shall not be connected to the load side of the equipment disconnecting means. Sec. 210.63 C.E.C.

✓ 5- All 125-volt, single-phase, 15- and 20- ampere receptacles installed in the locations specified below (**Dwelling Units**) shall have ground-fault circuit-interrupter protection (GFCI) for personnel. Sec. 210.8 (a) C.E.C.

[X] Bathrooms [ ] Garage and Accessory buildings [X] Outdoors [ ] Crawl spaces

[ ] Unfinished Basements [X] Kitchens – where the receptacles are installed to serve the countertop surfaces.

[X] Laundry, Utility, and Wet Bar Sinks [ ] Boathouses

✓ 6- All 120-volt, single phase, 15- and 20- ampere branch circuits suppling outlets installed in dwelling unit.

[X] kitchens, [X] Family Rooms, [X] Dining Rooms, [X] Living Rooms, [ ] Parlors, [ ] Libraries,

[ ] Dens, [X] Bedrooms, [ ] Sunrooms, [ ] Recreation rooms, [X] Closets, [X] Hallways,

or [ ] Similar rooms or areas

Shall be protected by a *listed arc-fault circuit interrupter* (**AFCI**) combination type installed to provide protection of the branch circuit. Sec. 210.12 C.E.C.

✓ 7- Design layout for lighting shall comply with mandatory measure of 2016 by Cal. Energy Code correct and modify design for lighting fixture on the plans, at the location specified below, for compliance with cal. energy code.

[X] **Luminaire Efficacy:** All installed luminaires shall be high-efficacy in accordance with table 150.0-a of 2016 C.E.C.

[X] **Recessed downlight luminaires in ceiling:** luminaires recessed into ceilings shall meet all of the requirement of section 150.0 (k)-1.c of 2016 C.E.C.

[X] **Under cabinet lightings:** All under cabinet lightings shall be switched separately from other lighting systems.

[X] **Vacancy Sensor:** at least one luminaire in each of these spaces listed below shall be controlled by a vacancy sensor. [X] Bathrooms [ ] Garages [ ] laundry rooms [ ] Utility Rooms

All Hardwired Lighting in: [X] Bedrooms [X] Family Rooms [X] Dining Rooms [X] All Other Rooms

[X] Closets (with more than 70 sq. ft. area)

Must be high efficiency, controlled by a **MANUAL-ON OCCUPANT SENSOR**, or controlled by a dimmer.

[X] **Outdoor Lighting Attached to a Building :** all outdoor lighting attached to building must be high efficiency, and controlled by both a motion sensor and photocontrol.

✓ 8- Control switch for Exhaust Fan at Bathrooms and Kitchen for indoor air quality and mechanical ventilation shall be operating separately from lighting switch. Sec. 150-o of C.E.C.

[X] Please show location of the switch(s) on the floor plan or Electrical Floor Plans.

Please pass this correction list to all other designers and professional's which are involved in the design for the coordination of the items as requested.

Thank you,

Khosrow Fallah

Plan Check Engineer

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