



Date: 5/10/2024
Project: Astrid Building 7
ESA Project Number: 22014
From: ESA Architects
Regarding: Building Code Review Correction Notice SPRMU240254
Dated 4/24/2024

Plan Review Comments Response

Building Code Review:

1. Completed and Approved Site Plan meeting submittal requirements from the AHJ. Note the following items for consideration and submittal(s) required prior to approval:

- An accessible route to include loading zones, recreational facilities, pools and spas shall be provided in accordance with the International Building Code.

RESPONSE: Accessible route to amenities per agreement with Bear Claw. A guest will drive to Bear Claw, park in an existing accessible space and enter the building via an existing accessible route to the amenities provided in the building.

There are no loading zones in this project.

Include details of site-built stairs, ramps with handrails on both sides.

RESPONSE: See separate response provided by Baseline

- Retaining walls shall be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning. Final designs for construction purposes must be performed by a Colorado registered Professional Engineer, using the actual conditions of the proposed site. Exception: Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.

RESPONSE: The site retaining wall stamped drawings were included in the Civil Construction Plans submittal PL20240055.

- Any building element or system must be provided with a safeguard that will limit the damage that could be caused from the processes involved to the equipment and materials used in accordance with SECTION 3307 PROTECTION OF ADJOINING PROPERTY. Where a retention system is used to provide support of an excavation for protection of adjacent structures, the system shall conform to the requirements in Sections 3307.2.1 through 3307.2.3 and soils report. Excavation retention systems shall be designed by a registered design professional to provide vertical and lateral support.

RESPONSE: See separate response provided by GSI

- Special inspection is required of segmental block or boulder walls. The architect or engineer shall prepare an inspection program which shall be submitted to the building official or his authorized representative for approval prior to issuance of the building permit. The inspection program shall designate the portions of the work that require special inspection and the name or names of the individuals or firms who are to perform the special inspections, and indicate the duties of the special inspectors. Special inspectors shall be employed by the owner, the architect or engineer responsible for the design, or an agent of the owner, but NOT by the contractor or any other person responsible for the work. The installation of drain pipe to be verified by RCRBD personnel

RESPONSE: The required Retaining Wall Special Inspections are noted on sheet S001 of the Astrid Civil Permit Submittal Set for the Site Retaining Walls. NWCC will be performing the required special inspections for these retaining walls.

2. Many of the UL fire resistive systems are “Proprietary,” meaning that very specific brand name products must be used in the construction of the assemblies and have furring channels or multiple layers required for fire or sound. A substitution for using Type ‘C’ ‘X’ or other gypsum board with substitute materials raises the question of whether the alternates exhibitor exceed the properties of the listed product. Substitutions shall be submitted the Architect and approved prior to submittal to the Building Official for review and approval prior to installation or inspection.

RESPONSE: Understood.

Other assemblies apply to the structural members specified on the structural plans. For example, steel members when not specified as a component of a fire-resistance rated wall or partition system such as tube steel columns require individual protection.

RESPONSE: See floor plans and sheet A516 for rated column enclosure details.

Approved plans will provide nomenclature glulam beams are protected

RESPONSE: Exposed glu-lams per structural drawings. Beams include char rates for 1 hour fire resistance per page 652 of structural calculations.

and also provide general explanatory notes with added details to the approved plans to show how items such as wood structural panels are permitted to be added to one or both sides with additional fastener length equal to thickness of the addition or additional layer of 5/8” Type X when excessive insulation is present.

RESPONSE: Notes added to GA file No. WP8418 and WP3520 to note item 23 of GA600 allows for structural sheathing on sheet A501. There is no insulation that exceeds the depth of the studs.

Provide details of all required fire-resistive construction with complete assemblies to include walls, shafts, rated floor and roof ceilings, fire partition and penetrations of wall or floor-ceiling assemblies required to protect penetrations in fire-resistance-rated assemblies in accordance with IBC Section 714

RESPONSE: No protection is required at the elevator shaft/doors per 2021 IBC Table 3006.2. The elevator is four stories but is sprinklered, not a I-1, I-2, I-3 or in a high rise. Therefore no protection is required. There are no other shafts.

GA File No. 5406 was added to sheet A502. The notation on 4/A505 was changed from 5407 to 5406.

1 hour rated Fire stop systems are shown on A501 in the upper left corner. 2 hour rated fire stop system added to sheet A502.

3. While plans reference 2021 IECC TABLE C402.4, instead, EnergyLogic is using a preliminary ERI of 44. ERI was added to the 2021 code under C401.2.1, SECTION R406 ENERGY RATING INDEX COMPLIANCE ALTERNATIVE. The approved plans shall show how this 4 Story R-2 is allowed to comply with requirements for ERI compliance as included in Section R406. This means actual mandatory ERI target scores needed of 50 and shall be noted on the plans along with the path of compliance

RESPONSE: Per Section 401.2.1.1 Prescriptive Compliance, “Dwelling units and sleeping units in Group R-2 buildings without systems serving multiple units shall be deemed to be in compliance with this chapter, provided they comply with Section R406.” Each condominium has its own heating and cooling systems. There are no systems that serve more than one unit, therefore section R406 was used for compliance.

The path of Compliance used was Prescriptive compliance based on R406.

4. In reference to Table R406.2 submitted by EnergyLogic, and the information gathered is used to calculate an ERI by comparing the efficiency of this constructed design to an ERI reference design. All requirements for ERI compliance are included in Section R406, including Table R406.2, which was added to the 2021 code and allows

dividing responsibilities with approval of Building Official. Reading the commentary to Section R406; as the construction documents are verified in the field, insulation and efficiency levels, lighting and appliances (including those not addressed in Sections R401 through R405, such as washers and dryers), fans, service water systems, thermal storage and whole-house mechanical ventilation elements, an assessment of insulation installation is conducted, building and duct air leakage is determined and a final score is calculated after values have been field verified and appropriate tests conducted. When a third party independent from the installer does not inspect both air barrier and insulation, installation criteria, testing shall include all such areas. As I was present via a Zoom meeting, I recall verification of compliance with Section R406 shall be completed by EnergyLogic, an approved third party and request Routt County Building Official be consulted for obtaining approval of responsibilities otherwise (divided) blower door test to be completed as applicable.

RESPONSE: EnergyLogic will be performing all field inspections for the units and providing compliance documents.

5. Outdoor Heated Snow Melt Systems shall not be allowed to be installed unless they are powered by a 100% Renewable energy Source. See Exceptions and controls required per local amendments in IECC.

RESPONSE: See separate response provided by Boulder Engineering

6. While an oil separator is not required in hydraulic elevator pits where an approved alarm system is installed, add location and details of elevator sump pump oil alarm.

RESPONSE: Elevator is traction, not hydraulic. The pit and pump are for water . Per phone conversation with Ted on 5/2/2024, no alarm is required.

Electrical Review (Reviewed By: Tom Cook)

RESPONSE: See separate response provided by Boulder Engineering

1. NO COMMENTS AVAILABLE
2. Panel descriptions don't match
3. loads don't match panel schedules
4. . NO COMMENTS AVAILABLE
5. 408.30 panel shall have a rating not less than load calculated
6. Missing panel board schedules

Engineering Review (Reviewed By: Emrick Soltis, P.E., CFM)

1. See conditions associated with PI

RESPONSE: See separate response provided by Baseline.

Planning Review (Reviewed By: Kelly Douglas, AICP)

1. PL20220662 has open conditions that require resolution prior to approval of a construction permit. Please see conditions in portal here: <https://cityview.steamboatsprings.net/Portal/Planning/Status?planningId=7656>

RESPONSE: Outstanding conditions are being coordinated with the owner and the parties involved.

2. Planning: Sheet A201: West Elevation: Transparency appears slightly different in this area than that approved with PL20220662.

RESPONSE: Windows added as shown on approved planning drawings.

3. 3. Planning: Sheet A201: West Elevation: Proposed grade and overall height appears different than that approved with PL20220662.

RESPONSE: See corrected elevation 1/A201

4. Planning: Sheet A202: South Elevation: Transparency appears slightly different in this area than that approved with PL20220662.

RESPONSE: Windows added to Garage-2 as shown on approved planning drawings. The lower window was removed because the space it was part of was removed from the project. Windows and doors throughout the

South elevation were modified to provide similar transparency to what was approved on the planning elevations..

5. Planning: Sheet A202: South Elevation: Proposed grade and overall height appears different than that approved with PL20220662.

RESPONSE: See corrected elevation 1/A202

6. Planning: Sheet A202: East Elevation: Proposed grade and overall height appears different than that approved with PL20220662.

RESPONSE: Grades modified to match planning submittal

7. 56.96 ft

RESPONSE: See corrected elevation 1/A201.

8. 51.36 ft

RESPONSE: See corrected elevation 1/A201.

9. 48.71 ft

RESPONSE: See corrected elevation 1/A201.

10. 43.86 ft

RESPONSE: See corrected elevation 1/A201.

11. 64.74 ft

RESPONSE: See corrected elevation 1/A202.

12. 59.46 ft

RESPONSE: See corrected elevation 1/A202.

13. 62.87 ft

RESPONSE: See corrected elevation 1/A202.

14. 57.85 ft

RESPONSE: See corrected elevation 2/A202

15. 55.00 ft

RESPONSE: See corrected elevation 2/A202

16. 33.59 ft

RESPONSE: See corrected elevation 2/A202

17. 45.36 ft

RESPONSE: See corrected elevation 2/A202

18. Please provide color elevations.

RESPONSE: Colored elevations submitted.

19. Please provide landscape plan for just phase 1.

RESPONSE: See separate response provided by Baseline

20. Please provide a site plan that shows all improvements required with phase 1 per PL20220662.

RESPONSE: See separate response provided by Baseline

GIS Land Development Review (Reviewed By: Colten Yoast)

1. Please contact me for addressing plan at cyoast@steamboatsprings.net.

RESPONSE: See separate response provided by JSM

Construction Site Management Review (Reviewed By: Scott Slamal)

1. Proposed work exceeds one acre, city Construction Stormwater Permit required.

RESPONSE: See separate response provided by JSM

Utilities Review - Mt. Werner (Reviewed By: Beau Cahill)

RESPONSE: See separate response provided by Baseline

Construction Stormwater Review (Reviewed By: Scott Slamal)

1. Proposed work exceeds one acre, city Construction Stormwater Permit required.

RESPONSE: See separate response provided by JSM

Please call or email should you have any further questions.



Julianna Pochon, Architect
ESA Architects