908 WEST GORDON AVE. SUITE #3
LAYTON, UT 84041
(801) 547-8133

September 13, 2017

FIRST REVIEW
WC^3 Project #: *217-525-154*

Weber County
Building Inspection Department
2380 Washington Boulevard, Suite 240
Ogden, Utah 84401
Phone: (801) 399-8374

Attention: Craig Browne, Building Official

Subject: Carter SFD – Plan Review Comments

Mr. Browne:

West Coast Code Consultants, Inc. (WC^3) has completed the first review of the proposed Carter SFD project located in Eden, UT. This review was based upon the following:

1. Architectural drawings dated 8/15/2017 by Upwall Design, sealed and signed by Joshua Dean Arrington, Licensed Architect.
2. Structural drawings and calculations dated 2/24/2017 by Iridium AE, sealed and signed by Kimly C Mangum, Licensed Professional Engineer.
3. Mechanical drawings dated 8/15/2017 by Upwall Design, sealed and signed by Joshua Dean Arrington, Licensed Architect.
4. Electrical drawings dated 8/15/2017 by Upwall Design, sealed and signed by Joshua Dean Arrington, Licensed Architect.
5. Geotechnical investigation report (#02347-001) dated 6/9/2017 by IGES, sealed and signed by David A Glass, Professional Engineer.

The 2015 IRC, as adopted by the State of Utah, were used as the basis of our review. Specific comments regarding this project are enclosed with this cover letter. If you have any questions regarding this review please do not hesitate to contact me.

Sincerely,

DeAnn Wilde

DeAnn Wilde, CBO
Senior Plans Examiner

Attachment: Comments

CC:
CC:
CC:
CC:

Plan Review Comments

Project Name: Carter SFD

Location(s): 8452 East Spring Park, Eden, UT

Checked By: DeAnn Wilde

Code Review by: Jason vonWeller

Structural by: Joe Bingham

SQUARE FOOTAGE SUMMARY:

Main Level	Upper Level	Finished Basement	Unfinished Basement	Covered Deck(s)	Covered Patio(s)	Garage	Carport
1,462-ft^2	1924-ft^2	-	-	482-ft^2	148-ft^2	506-ft^2	-

GENERAL INFORMATION:

The submitted documents for the above-mentioned project, as outlined in the cover letter, have been reviewed. The following comments address areas of concern, non-compliance with the governing code, potential errors, or omissions in the proposed design. The appropriate design professional must address each comment below and submit a written response in addition to revised plans and calculations if necessary. **Please cloud any revisions made to the construction drawings and provide the date of the latest revision on each revised sheet.**

CODE REVIEW COMMENTS:

A1. Sheet 1 of 1 identifies the street as Spring Park. Other sheets throughout the plans identify the street as Parley's Lane. Please clarify and make necessary corrections.

A2. Sheet A2.0: Please address the following:

A. Bunk Rooms 1 and 2 constitute sleeping rooms and are required to have emergency escape and rescue openings meeting the requirements of IRC R310.2.

A3. Sheet A6.3: Please address the following:

A. Utah State Amendments identify the stair riser height at 8-inches maximum and the tread depth at 9-inches minimum. Please note this information on the plans.

MECHANICAL REVIEW COMMENTS:

No Comments

PLUMBING REVIEW COMMENTS:

No Comments

ELECTRICAL REVIEW COMMENTS:

No Comments

ENERGY REVIEW COMMENTS:

E1. The REScheck submitted is for the Hollis Residence in Park City, UT. Provide an accurate REScheck based upon the 3,386 SF residence in Weber County, UT

A. Per the Utah State Amendments, IECC Section R401.2, a new number 4 requires compliance be shown by demonstrating a result, using the software REScheck 2012 Utah Energy Conservation Code of: (a) on or after January 1, 2017, and before January 1, 2019, at "3 percent better than code".

B. The REScheck identifies the slab-on-grade as unheated with an R-15 continuous insulation. Based upon the plans, hydronic heating is being provided in the slab floor. Additionally, the cross sections provided on Sheet A3.7 do not identify any type of slab insulation.

C. Please make all necessary corrections to the REScheck and the plans to ensure the same accurate information is provided throughout.

E2. Per IECC R401.3, please note on the plans that a permanent certificate shall be completed and located in an approved location that lists the predominant R-values of the insulation installed in the ceiling/roof, walls, foundation and ducts outside conditioned spaces, and U-factors for fenestration.

STRUCTURAL COMMENTS:

General:

S1. Detail A/A1.5 shows a schedule for rock walls up to 14 feet in height, but also includes a note that walls over 4 feet must be designed and inspected by a qualified state licensed engineer. Please address whether rock walls over 4 feet in height are to be constructed and provide engineering for these walls.

S2. Please address the potential for snow to accumulate on the deck and the possibility of this exceeding the 60 psf live load that was used for design.

S3. Sheet A4.1 shows a river rock ballasted roof. This does not appear to have been included in the design dead load. Please address.

A. Please also verify that this has been included in the seismic mass of the structure.

S4. Included in the roof rafter calculations are what appear to be 14-inch Microllams at 8 inches on center and HSS 4x4x3/16 at 24 inches on center. These could not be found on the plans. Please clarify.

S5. The proposed structure includes a nonparallel system irregularity as defined by Table 12.3-1 of ASCE 7-10. Please confirm that the requisite forces were increased as required by Section 12.5.3 of ASCE 7.

If you have any questions regarding the above comments, please contact DeAnn Wilde at DeAnnW@WC-3.com or by phone at (801) 547-8133.

[END]