REVIEWED
FOR
CODE
COMPLIANCE
08/15/2024

Structural Notes--Swary Residence, 32755 RCR #5, Routt County, Colorado

1. All concrete shall contain six 90 pound sacks of Type II cement per cubic yard, ¾ inch maximum size aggregate, 2% to 4% entrained air, and shall be placed in full accordance with all provisions of the current version of ACI-318.

2. All reinforcing steel shall conform to ASTM A-615, Grade 60

3. Design slab on grade floor load is 100 lbs./sq. ft.

4. Design nominal snow load is 60 lbs./sq. ft.

5. Design wind load is 115 mph, per IRC 'Exposure A' requirements at a density altitude of 6600 ft., mean sea level.

6. Design earthquake is per IRC 'Zone C' requirements.

7. Design soil conditions are 2.5 KiP/sq. ft., maximum net bearing and 0KiP/sq. ft., minimum dead load, per Bear Valley Design, Ltd., letter dated April 24, 2024. All details of the excavation, backfill, drainage, and other earthwork must be performed as described in the letter referenced in this note.

8. All dimension lumber must be #2 grade HF, at a minimum (#2 DF is acceptable, SPF is not).

9. All wall studs, both exterior and interior, must be laid out on 16 inches on center except as noted otherwise on the plans.

10. Sill plates as well as any other lumber in direct contact with concrete must be species 'Group B', and #2 grade or better, and must be pressure treated to a minimum retention of .4 lbs./cu.ft.

11. All exterior wall sheathing must be a minimum of 7/16 inch thick OSB, APA rated at 24/16, and must be stapled with 2 inch long cc staples or 8d nails at 6 inches on center throughout, except where noted heavier. ½ inch thick plywood rated a minimum of 32/16 is an acceptable alternative.

12. All exterior sheathing shall be laid out so that it is continuous over sills, studs, plates and roof truss blocking. All horizontal joints in exterior sheathing must be over blocking and must have the sheet on both sides of the joint nailed to the blocking.

13. All roof sheathing must be 5/8" thick OSB, APA rated 40/20, minimum, nailed with 8 d nails at 6 inches on center, throughout. Tongue and groove is HIGHLY recommended.

14. All roof sheathing is to be laid with the 8 foot dimension of the sheets perpendicular to trusses or rafters, and with the end joints in adjacent rows staggered 4 feet apart.

15. All factory built, plated roof trusses are to be laid out and dimensioned per the conceptual details shown on the plans. Detailed design, engineering, , installation details, and certification of all plated trusses shall be by others, subject to review and approval by this office.

16. All load bearing plated trusses shall be anchored to the framing below with a minimum of a Simpson H1 hurricane clip at each bearing point of each truss.

17. Wherever plated trusses are not on layout with the wall studs beneath them, provide a single 2x6 header immediately beneath the top plates upon which such trusses bear.

18. All load bearing headers are to be of double 2x10 box construction with 2-½ inch thick foam insulation installed in the hollow portion of the box (no box in 2x4 stud walls) except where noted heavier on the plans.

19. Provide two load bearing studs (trimmers) under each end of load bearing headers at rough openings greater than 48 inches wide, except as noted heavier on the plans.

20. Provide two king studs at each end of headers at exterior rough openings greater than 48 inches wide, except as noted heavier on the plans.

21. 2x or LSL blocking required at all bearing points for all joists trusses, and out lookers.

22. All gable end walls must be balloon framed. A parallel chord truss must be provided over the top plates and between the exterior of each end wall and the bottom chord of the first truss in from the end wall.

23. Provide fire blocking in all stud cavities greater than 10 feet in height.

24. All 2x dimension lumber rafters must be connect to blocking with 3--10 d nails, and to the plate or beam below with 4--10d nails as well as a Simpson H1 hurricane clip. Provide 'birdsmouth' seat cuts for all rafters at all beams and plates.

25. All nailing, blocking, and other details shall be per IRC, at a minimum, except as noted heavier, either herein or on the plans.

26. Provide soffit vents. Provide full height LSL blocking between all roof trusses. The top of this blocking must be ripped to match to pitch of the bottom side of the roof sheathing. Provide either a ridge vent or gable end vents. Provide three 1-½ inch diameter vent holes in each piece of LSL blocking, located with their centers 1-½ inches below the top of the blocks between every roof truss.

27. All framing connectors shall be 'Simpson' 'Strong Tie', or equal, and must be installed and nailed or screwed in full accordance with the manufacturers specifications.

28. Electrical, plumbing, and heating plans and heat loss calculations to be provided on a design/build basis by the respective sub-contractors.