City of Wells Building and Safety Division

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Residential Post Frame Building Design Criteria and Checklist

(For Non-Engineered post framed buildings up to a 10' eave wall height)

General Information:

The following codes have been adopted:

- 2012 International Residential Code Chapters 12-43 with R313 deleted
- 2012 International Building Code
- 2012 International Fire Code
- 2012 Uniform Mechanical Code
- 2012 Uniform Plumbing Code
- 2011 National Electrical Code
- 2012 International Energy Code
- 2012 International Existing Building Code

The minimum design criteria for The City of Wells is as follows:

- Roof Live and Snow Load-Minimum 30 lbs. PSF (with no reductions)
- Seismic Zone D (bydesign)
- Wind Load-75 mph, exposure "Class C" (90 mph, 3 minute gusts) adjusted to 115 mph
- Frost depth 36" minimum vertical
- Soil Bearing Pressure 1500 lbs. Maximum without a designed soils report

The City Of Wells' objective is to provide you, the applicant, with a guideline of necessary information to be submitted in order to ensure that your application is processed in a timely and professional manner. *It is the responsibility of the contractor or owner/builder to become familiar and comply with the adopted codes, ordinances and the manufacturer's requirements for the specific product and processes as approved by the ICC Evaluation Service as adopted by the City Of Wells.* This checklist is specific to the actual construction requirements to the structure itself. Other requirements for Zoning, State Health and FEMA are to be addressed also at the time of permit application. Additional construction information will be required when located within a flood zone.

Plans and specifications shall be drawn to scale (minimum I, " per foot) and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations.

The following information is required and must be submitted for the plan review of the proposed structure. Please provide two identical sets of plans for review, an "APPROVED" job copy will be returned to the applicant as required. *The applicant must check each area below to indicate the documentation is provided as set forth in this checklist.* When not applicable please indicate so by "*N*/A".

_____ Design plans and supporting documents must be prepared, signed and stamped by a Nevada Registered Architect or Professional Engineer.

OR

_____ Residential Designers may submit design plans for single family or multifamily structures as authorized by NRS 623.330.

OR

Licensed Contractors may submit their own plans provided they are signed by the contractor and meet the conditions specified in NRS 623.330.

OR

_____ Owner/Builders may prepare and submit their own plans for their own private residential use. Plans must be titled without reference to being prepared by a party other than the property owner who is building or overseeing the building activity. The plans must have the owner/builder's original signature.

The building construction plans must be "wet stamped" with an original signature that states conditions are met.

Plot plan

- D Accurate representation of the legal description including property dimensions or acreage for large parcels over 40 acres
- D All buildings and attached structures shown
- D All setbacks to property lines from the proposed building and to other buildings within 20' shown
- D Location of the main electrical service and electrical line, including wire size to the building with distance for possible voltage drop calculation for new electrical installations
- D Location of a well (if applicable)

Building Construction Plans:

Cover Sheet

- D Design criteria list:
 - o Occupancy group
 - o Type of construction
 - o Seismic zone
 - o Square footage, total of all floors and accessory areas
 - o Height and number of stories
 - o Roof load
 - o Wind load
 - o Occupant load (duplexes or multifamily)

o Code editions used

Floor Plan:

- D Building dimensions, including any interior room dimensions
- D Overhead door size and location(s)
- D Door and window sizes and locations, list safety glazing (if applicable)
- D Fire wall construction and penetration rated materials (if applicable for attached garages)
- D Fire rated door type (i.e. metal or wood) (if applicable for attached garages)
- D Show attic access size and location (if ceiling is dry walled)

Footing Plan:

- D Show dimensions (diameter and depth of holes) for footings/columns
- D Show spacing of the footings (holes)
- D Show reinforcement iron size or spikes for uplift protection

Monolithic Foundation: (if designed)

- D Show dimensions for the continuous footings (typically located at the top of the foundation)
- D Show dimensions for the frost wall below the footings
- D Show the minimum 36" frost depth below grade and foundation height above grade (6" minimum)
- D Show the minimum iron size and spacing (both vertical and horizontal)
- D Show foundation anchor type and connections to columns

Cross Sectional Plan:

D A complete cross sectional drawing detailing construction methods from the footing (holes) or a monolithic foundation through the floor and columns to the roof structure shall be provided with full detail, including anchorage from foundation through roof structure

Framing Plan:

- D Column sizes and spacing (minimum size 6" x 6" decay resistant posts up to a 10' eave wall height
- D Exterior wall girt size, spacing and grade
- D Header sizes and spans and bearing to foundation for all specific locations (ie: doorways, windows, and overhead doors)
- D Manufactured roof truss layout, spacing and slope (showing truss to column connections, a nailing schedule for multiple trusses if required and uplift protection)
- D Roof purlin framing layout showing size, spacing, grade and hangers (if applicable)

NOTE: Engineering required for eave wall heights greater than 10'

Plumbing Plan: (if applicable, shall be shown on separate floor plan)

- D Water heater location(s) and type of fuel source
- D Plumbing fixture locations and types (sinks, lavs, tubs, showers, floor drains, water softeners)
- D Plumbing diagram for water, drain/waste and venting, gas and the materials used

Mechanical Plan: (if applicable, shall be shown on separate floor plan)

- D FAU location(s) (furnace) and type of fuel source
- D Exhaust fans
- D Combustion air shall comply with the requirements of Chapter 7 of the 2012 Uniform Mechanical Code
- D Duct diagram and materials used (ie: supply air, return air, combustion air)

Electrical Plan: (if applicable, shall be shown on separate floor plan)

- D Location of lights, switches, receptacles
- D Location of panels (outside disconnect and load centers)
- D List the branch circuits and conductor sizes for the garage electrical

Elevations:

' **.** ' .

- D Exterior final grading elevations shown around the building
- D Exterior landings and steps showing type of material (concrete or wood), rise and run, handrail, guardrail
- D Roof material type
- D Exterior siding material provide evaluation report for the types of exterior wall covering and supply all certificate of installation (if applicable)

When the building official issues the permit where plans are required, the building official shall endorse in writing or stamp the plans and specifications APPROVED. Such approved plans and specification shall not be changed, modified or altered without authorization from the building official, and all work regulated by this code shall be done in accordance with the approved plans.

All construction or work for which a permit is required shall be subject to inspection by the building official and all such construction or work shall remain accessible and exposed.

Work requiring a permit shall not be commenced until the pelmit holder or an agent of the permit holder shall have posted or otherwise made available an inspection record card as to allow the building official to conveniently make the required entries thereon regarding inspections of the work. (NOTE: Failure to post permit documents shall be subjected to re-inspection fees)

It shall be the duty of the person doing the work authorized by a permit to notify the building official that such work is ready for inspection. The City Of Wells requires all inspection request to be scheduled 48 hours in advance by **4:00 pm.** Inspections will be made the following 2 working days between **8:00 am and 5:00 pm.**

Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the building official.

Every permit issued by the building official under the provisions of this code shall expire by limitation and become null and void if the building or work authorized by such permit is not commenced within 180 days from the date of such permit, or if the building or work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days.

I ______do hereby verify that all necessary and required information has been submitted for plan review on this date ______ 20_____.