## City Of Wells Building and Safety Division

PO Box 366, Wells, NV 89835 (775) 752-3355 (775) 752-3419 (fax)

## Foundation System Design Criteria and Checklist

(For factory built structures under the Nevada Manufactured Housing Division)

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 ICBO 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, F.E.M.A. or State Health are to be addressed also at the time of permit application. Additional construction information will be required when located within a flood zone.

General Information:

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The following codes have been adopted:

- 2011 National Electric Code
- 2012 International Building Code
- 2012 International Residential Code

Plans and Specifications shall be drawn to scale (minimum  $\frac{1}{4}$ " 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, 2009 IBC, Section 107.1

The minimum design criteria for the City Of Wells is as follows:

- Seismic Zone D (by design)
- 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 following information is required and must be submitted for the plan review of the proposed foundation. Please provide two identical sets of plans for review and one set of electronic plans. An "APPROVED" job copy will be returned to the applicant as required by IBC section

# 107.3.1. The applicant must initial each area below to indicate the documentation is provided as set forth in this checklist. When not applicable please indicate so by "NIA".

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

\_\_\_\_\_ 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:** (Separate from the building plans)

- □ Accurate representation of the legal description including property dimensions or acreage for large parcels over 40 acres.
- □ All buildings and attached structures shown.
- □ All setbacks to property lines from the proposed building and to other buildings within 20' shown.
- □ Location of the main electrical service and electrical line, including wire size to the building with distances for possible voltage drop calculation for new electrical installations.
- □ Location of applicable utilities: well, septic tank, water lines, etc.

## **Building Construction Plans:**

#### **Floor Plans:**

□ Building dimensions, including any interior room dimensions.

#### **Foundation Plan View:**

□ Plan view showing the foot print of the foundation, with crawlspace ventilation and access locations.

#### **Footing Plan:**

- $\hfill\square$  Show dimensions for continuous footings or pier pad footings
- □ Footing elevations that are stepped down due to changes in grade shall be shown
- □ Show reinforcement iron size and spacing (if applicable)

## Foundation Wall Plan: (Exterior load bearing structures)

- □ Foundation wall height and thickness.
- □ Show reinforcement iron size and spacing (both vertical and horizontal)
- □ Anchor bolt and washer size, spacing and the embedded depth to comply with 1806.6 & 1806.6.1
- □ Foundation hold down devices shown when designed by the Engineer of Record for the structure

#### **Frost Wall Plan:**

- □ Frost wall height and thickness
- □ Show reinforcement iron size and spacing (both vertical and horizontal)
- □ Anchor bolt size, spacing and the embedded depth to comply with section 1806.6 & 1806.6.1

#### **Monolithic Frost Wall:**

- □ Show dimensions for the continuous footings (typically located at the top of the foundation)
- □ Show dimensions for the frost wall below the footings
- Show the minimum frost depth below grade and foundation height above grade (6" minimum)
- □ Show reinforcement iron size and spacing (both vertical and horizontal)

#### **Cross Sectional Plan:**

□ A complete cross sectional drawing detailing construction method from the footing and foundation shall be provided with full detail.

#### **Electrical Plan:**

- □ Location of panels (Meter and outside disconnect)
- □ List the main breaker amperage rating and conductor sizes
- $\Box$  Grounding location(s)

#### **Elevation/Architectural Views:**

□ Exterior final grading elevations shown around the building

#### **Required Design Submittals:** (Nevada Registered Architect or Engineer)

- □ Factory built structures placed on a basement (HUD, 2012 IBC.)
- □ Basement and crawlspace foundations located in a flood plain

The City of Wells Building Department will only issue permits for a foundation system for a HUD, or UBC structure. Permits for electrical services, additions and attached garages to these structures are required separately. **CITY OF WELLS NO LONGER ESTABLISHES MINIMUM CONNECTION REQUIREMENTS from** the foundation system to a factory built structure under HUD Design Standards.

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 specifications 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 (section 107.4, of 2009 IBC).

Work requiring a permit shall not be commenced until the permit 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 (section 109.4, 2009 IBC).

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 (section 110.1, 2012 IBC). The City of Wells requires all inspection requests 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 (section 105.3.2, 2009 IBC)

Every permit issued by the building official under the provisions of this code shall expire by limitation and become null and void if 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 (section 105.3.2, 2009 IBC).

I, \_\_\_\_\_\_ do hereby verify that all necessary and required information has been submitted for plan review on this date of \_\_\_\_\_\_ 20 \_\_\_\_\_