

# **City of Henderson Development Services Center**

## **Residential Custom Home**

and Related Grading Permit Application Submittal Checklist

Please use this checklist and the supporting detail to assure that your permit submittal includes all the information necessary for a timely review of your plans. All applications for permits **must** be submitted electronically through the DSC Online Portal (<u>dsconline.cityofhenderson.com</u>).

Please apply through DSC Online as a Residential Building Permit Application.

### **PDF Standards for Electronic Plan Submittals**

The prerequisites **must** be completed before a building permit application can be accepted for processing:

<b>Prerequisites:</b>	
Final	Map or Parcel Map recorded.
Appro	opriate zoning is currently in place for this proposed use.
Perma	nent address has been assigned. Addressing Application.
For ada Flo	inage [Hydrology] Study properties in a flood zone, a CLOMR may be required and approved by FEMA. In lition, concurrent approval of the drainage study is required by Clark County Regional od Control District. For more information, please call Public Works at 702-267-3680.
If c Con	nditional Use Permit or Variance for Guest House and/or Casita ustom home plans include a guesthouse/casita, applicant must receive prior Planning mmission approval. For more information, please call Community Development at 702-7-3640.
 Ар <u>ү</u> Lak	owners' Association letter of approval plies only to custom homes developed in Lake Las Vegas, MacDonald Ranch, and Ascaya. The Las Vegas also requires Homeowners' Association sign off on the actual plans mitted.
Civ	iated Civil Improvement Plans il Improvement Plans for this site must have been previously approved or must be rently in the review process.
Submittal Pack	age:
	g documentation must be included when submitting the building permit application for ll applicable <u>Building Codes</u> must be included on the plans:
A con	npleted Building Permit Application
Any	hed structures and a Building Permit Application for each [if applicable] of detached structure, e.g., guesthouse, casita, detached garage, fences/walls, or pool, muster a separate permit application. Submittal Checklists

	Complete set of stamped/sealed plans (including a site plan)
	■ Include a copy of the Plot and Grading Plan. Must be electronically stamped with a digital
	signature by a Professional Civil Engineer registered with the State of Nevada. An
	Architect or Surveyor may stamp the plot and grading plan only when the custom home is
	part of a master grading plan stamped by a Civil Engineer and the finished floor is not
	changed.
	Owner Builder Affidavit of Exemption (Nevada State Contractors Board form)
	• if the Owner/Builder will be acting as the general contractor
	Owner Builder Subcontractor Registration Form
	• Owner Builder Subcontractor Registration Form if the Owner/Builder will be acting as the
	Electrical, Plumbing, or Mechanical subcontractor.
	Plans must be stamped by the Southern Nevada Health District (SNHD) only if the residence
	will have a septic system. Please contact Utility Plans Examiners at 702-267-3670 for city
	sewer and septic requirements.
	Clark County Desert Conservation Program Land Disturbance Mitigation form <i>(if a grading</i>
	permit is required)
	<u>Grading Permit Application</u> form (if applicable)
	Geotechnical Report (also known as a Soils Report)
	<ul> <li>Dated within 1 year, or with a Geotechnical Report update letter dated within 1 year</li> </ul>
	provided by the design professional who prepared the report.
	• The report must be electronically stamped with a digital signature by the registered design
	professional who is responsible for the report.
	_ Energy code analysis with current codes listed.
	<ul> <li>Must be signed by preparer using the City of Henderson form or approved program</li> </ul>
	(ResCheck).
	<u>Electrical Load Calculations</u> with current codes listed on the report.
	• Must be signed by preparer using the City of Henderson form or designer's form.
	Heat/gain heat/loss calculations
	<ul> <li>Must be signed by preparer and comply with ACCA Manual J or other accepted method.</li> </ul>
	(ResCheck)
	_ Structural Calculations
	• The calculations must be electronically stamped with digital signature by the registered
	design professional responsible for the structural design of the building.
	_ Truss Calculations [if applicable and may be deferred]
	• The calculations must be electronically stamped with digital signature by the registered
	design professional. The truss calculations must be reviewed and accepted by the design
	professional responsible for the structural design of the building.
	_ Copy of Master Grading Plan [if applicable]
	Required for custom lots included in a subdivision master grading plan.
	• Any significant changes to the original grading plan must be made by the engineer of record
	and approved by the City of Henderson Public Works. The Land Development section of
	Public Works must clear exceptions to this rule.
Plan Co	ntents
	Cover Sheet

- Address
- Location mapSquare footage of the structureComplete Code Analysis

- Type of construction
- Occupancy classification
- Energy schedule

#### Site Plan

- Show address, lot, and block number.
- Show all structures on the site and setbacks.
- Show dimensions to property lines from front and rear of house.
- Driveway slopes cannot exceed a maximum slope of 12.5%.
- Show patios, balconies, detached garages or structures, casitas, and fences [if applicable]
- Note: Site Plan and Plot & Grading Plan information may be combined into a single plan.

#### Plot & Grading Plan

- Show vicinity map.
- Address of Property and/or Assessor's Parcel Number
- Owner's Name and Address
- Engineer's, Architect's, or Surveyor's Name and Address
- Legend
- Basis of Bearing
- City of Henderson Benchmark
- Scale shall not be less than 1" = 50'
- Show elevation at flow line high point.
- Flow lines with direction of flow arrows
- Show spot elevations as needed to show drainage from the property.
- A minimum of 1% slope is required for drainage around the building and 2% slope for drainage away from the building.
- Identify Cross Sections for all property lines showing wall, property line, swales, adjacent property elevation, and any fixed structures.
- Include perimeter wall details including wall openings to maintain the historic drainage patterns.
- Show existing contours extending 50 feet beyond the site.
- Show existing rights-of-way and existing improvements adjacent to the property.
- The pad elevation and the finished floor elevation must be shown on the plan.
- Include total cubic vards of cut and fill (combined) and total acreage of lot.

#### Floor Plan

 Provide a dimensioned floor plan showing all walls, structural elements, exits, windows, fire assemblies, draft stops, separations, and related information.

#### **Exterior Elevation**

- Elevations of exterior walls, showing heights, construction material and openings must be submitted to be accepted.
- Additional information required for a complete plan review will include showing all views, openings, vertical dimensions, and heights, and identifying all materials and approved colors.
- Provide elevations of all exterior walls that show the location, size, and illumination method
  of the building address numbers, all finish materials, paint color palette, and the screening
  methods for all mechanical, electrical, utility, communications equipment.

#### Roof & Ceiling Plans

• Show all elements, assemblies, fire ratings and material, dimensions, and details.

#### Building & Wall Section Details

 Show dimension of all heights, materials of construction, non-related and fire-rated assemblies, and fire-rated penetrations [if applicable]

Architectural Details
• Show building sections, wall sections, waterproofing, fire proofing, weather proofing, door,
and window information, finishes, and accessibility requirements.
Structural Notes [may be included in structural calculations]
<ul> <li>Include material specifications and requirements for all structural elements and assemblies.</li> </ul>
<ul> <li>Include design requirements.</li> </ul>
<ul> <li>Include special inspection requirements and structural observation.</li> </ul>
• Third party inspection requirements shall be project specific. <i>Please do not use boiler plate</i>
special inspection lists.
 Foundation Plans
<ul> <li>Show all foundations and footings, indicating size, locations, thicknesses, materials,</li> </ul>
strengths and reinforcing.
<ul> <li>Show all imbedded anchoring such as anchor bolts, hold-downs, and post bases.</li> </ul>
Reference soil report for the proposed structure at that site as required.
 Floor & Roof Framing
• Show all structural members, their size, methods of attachment, location, and materials.
 Structural Details  Show details of all compactions interfaces assemblies februation units at
<ul> <li>Show details of all connections, interfaces, assemblies, fabrication units, etc.</li> <li>Electrical Plans</li> </ul>
 <ul> <li>Show the size and location of the main electrical service equipment and all sub-panels.</li> </ul>
<ul> <li>Show the size and location of the main electrical service equipment and an sub-panels.</li> <li>Show the location of all outlets, switches, light fixtures (interior, exterior, and site), smoke</li> </ul>
detectors, and special outlets.
<ul> <li>Identify the locations of all required GFCI and AFCI protected outlets and light fixtures.</li> </ul>
• If electrical services are 600 amps or larger, electrical plans must include a One-Line
Diagram.
<ul> <li>Provide <u>Electrical Load Calculations</u>.</li> </ul>
Water, Wastewater & Gas Plumbing Plans
<ul> <li>Show all points of connection to water and sewer lines, with call outs identifying each</li> </ul>
plumbing fixture.
<ul> <li>Indicate the minimum water meter size required in accordance with the Uniform Plumbing</li> </ul>
Code.
• The meter size called out on the plumbing plans must match the meter size called out on
the associated civil plans. If the meter size required is larger than the size called out on
the approved civil plans, a civil revision will be required, and Southern Nevada Water
Authority fees will be due before the permit is approved.
 Plumbing Fixtures and Calculations  List each individual fixture and indicate whether each fixture is connected to water, direct
• List each individual fixture and indicate whether each fixture is connected to water, direct waste, and/or indirect waste in a fixture table.
<ul> <li>Include the gas demand schedule showing individual and total appliance BTU/CFH</li> </ul>
demands.
<ul> <li>Show either plan view or isometric drawing showing gas pipe type, size, and length.</li> </ul>
Include gas table used.
Mechanical Plans
Provide dimensioned mechanical plans showing duct layouts and sizes, fire, smoke and

- Provide dimensioned mechanical plans showing duct layouts and sizes, fire, smoke and combination fire/smoke dampers, location of mechanical units on roof, ground, or walls.
   Normally mechanical engineering plans are required.
- Equipment Schedules Show details of all mechanical equipment sizes.

#### **Other Information**

Fire Sprinkler Plans

- Required for all custom homes.
- Fire protection system plans and calculations are typically submitted after the main set of building plans is accepted for review.
- See <u>fire protection systems checklist</u> or call 702-267-3630.

Septic permit from Southern Nevada Health District

- If a custom home will be using a septic tank, a Septic Permit from Southern Nevada Health District 702-759-0660, must be submitted to the Department of Utility Services **before** the building permit will be approved.
- Custom home must be located more than 400 linear feet from the City of Henderson Municipal water and sewer system.

Water from Well

- If a custom home is being provided water from a well, the tested & approved Well Drillers Report must be submitted to the Department of Utility Services before the building permit will be approved.
- Custom home must be located more than 400 linear feet from the City of Henderson Municipal water and sewer system.

**Grading Permit** 

- At the time of custom home submittal, it will be determined if a Grading Permit is required.
  - o If the combined total of cut + fill is greater than 100 cubic yards
  - o If the total acreage of the lot is greater than 1.00 acre.
    - If the acreage is 1.00 or greater
- It may be necessary to visit the site to make the final decision in certain cases, and the decision will be forwarded to the applicant.
- If a <u>Grading Permit</u> is required, an application shall be submitted with the residential building permit application. Clark County Desert Conservation Program <u>Land Disturbance</u> <u>Mitigation Fee Form</u> will be required on all grading permits.
  - o If the total acreage is 1.00 or greater SWPPP/NOI documents will be required
  - o Nevada Division of Environmental Protection for SWPPP/NOI
  - o SWPPP (SWPPP Stormwater Pollution Prevention Plan)
  - o NOI (NOI Notice of Intent)
  - O Proof of Coverage under General Construction Permit (NVR100000) is required if the total acreage of the lot is equal to or greater than 1.00 acres or will disturb less than one acre but is part of a larger common plan or within 1 ½ mile of receiving waters. Copy of Notice of Intent and receipt showing fees paid or a copy of authorization letter from the Nevada Division of Environmental Protection.
- The submittal package for the residential building will be utilized for the Grading Permit with no additional documents required, other than the application forms.

#### **Reports:**

QAA Agreement: email signed completed form to bldgplancheck@cityofhenderson.com

QAA Registration: email completed form to <a href="mailto:bldgplancheck@cityofhenderson.com">bldgplancheck@cityofhenderson.com</a>

QAA Special Inspection Report: email to inspectionreports@cityofhenderson.com

Final Grading Report: email to <a href="mailto:inspectionreports@cityofhenderson.com">inspectionreports@cityofhenderson.com</a>