

Grading Permit

City of Henderson

Subdivision, Multi-Family & Commercial

Development Services Center

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 <u>Commercial Building Permit Application</u>.*

Note: For custom home grading applications see the Custom Home Checklist.

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

Prei	requisites:
	An approved Tentative Map, Design Review, or Planned Unit Development.
	An approved Drainage [Hydrology] Study For properties in a flood zone, a CLOMR may be required and approved by FEMA. In addition, concurrent approval of the drainage study is required by Clark County Regional Flood Control District. For more information, please call Public Works at 702-267-3680.
	Associated Civil Improvement Plans under review. Civil Improvement Plans for this site must have been previously approved or must be currently in the review process.
	Approved <u>Dust Control Permit</u>
	Proof of Coverage under General Construction Permit (NVR100000)
	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 ¼ 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.
Sub	mittal Package:
	The following documentation must be included when submitting the building permit application for review and all applicable <u>Building Codes</u> must be included on the plans:
	A completed Grading Permit Application
	 Complete set of stamped/sealed plans (including a site plan) Include a copy of the Grading Plan. Must be electronically stamped with a digital signature by a Professional Civil Engineer registered with the State of Nevada.
	 Geotechnical Report (also known as a Soils Report) Dated within 1 year, or with a Geotechnical Report update letter dated within 1 year 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.

	Copy of the approval letter and permit number from the approved Drainage Study [Hydrology]
	_ Approved report on ground water mitigation measure [In areas with known groundwater issues or high-water tables]
	Completed Clark County Desert Conservation Program Land Disturbance Mitigation Form
Grading	Plan Contents
	_ General Information
	 Location map – General vicinity of the proposed site Property limits and accurate contours of existing round and details of terrain and area drainage.
	Soils & Engineering Report Information
	 General Information: Include the dates of reports together with the names, addresses, and telephone numbers of the firms or individuals who prepared the reports. Note: Please verify this is the correct information since it is frequently missed or incorrect on the plans. Recommendations: Report recommendations shall be incorporated into grading plans or specifications.
	_ Elevations & Contours
	 Elevation datum and benchmark as established by the NAVD88. Elevation of curbs or centerline of roads or streets. Finish floor elevations. Existing contours at least 100 feet beyond the property lines. Proposed finish contours or spot elevations at the property corners and at swale flow lines.
	_ Positive Drainage & Physical Obstructions
	 Show positive drainage of a minimum 5% away from foundations for 10 feet. Alternately, if physical obstructions or lot lines prohibit 10 feet of horizontal distance, a 5% slope shall be provided to an approved alternate method of diverting water away from the foundation. A 2% slope is permitted if the structure abuts hard surface (concrete, pavers, pavement, etc.) Limiting dimensions, elevations or finish contours to be achieved by the grading, and proposed drainage channels and related construction.
	Buildings & Structures & Features
	 Proposed locations: Site any buildings or structures on the property where the work is to be performed and the location of any buildings or structures on land of adjacent owners that are within

- ıd 50 feet of the property or that may be affected by the proposed grading operation.
- Adjacency to slopes
 The placement of buildings and structures on and or adjacent to slopes steeper than 3H:1V in accordance with IBC 1805.3.
- Topographical Features

O Locate other existing topographical features either natural or man-made such as streets, drainage structures, pavements, fence walls, etc.

Earthwork, Cut and Fill

- List quantities in cubic yards and scope of work.
- Designate a disposal area for any excess excavation.
- Provide the cut to fill transition line.
- Setback dimensions of cut and fill slopes from site boundaries.

Details and Cross Sections

• Details and cross sections at property lines, fence walls, retaining walls, berms, etc.

Slopes

- Typical details of fill over natural slopes and fill over cut slopes where fill is to be placed on natural or cut slopes steeper than 5H:1V.
- Check for areas of existing terrain with a slope greater than 5:1. Ensure the grading plan incorporates the recommendations of the soils report and for placement of fill on slopes steeper than 5:1. Provide details and cross sections of typical fill slopes and cut slopes.
- Check for proposed slopes steeper than 2:1.
- Check slopes steeper than 3H:1V for terracing requirements.

Geotechnical Report (Soils Report)

- Show the location of test borings and/or excavations. The plot shall be dimensioned and show the location of all existing structures.
- A minimum number/depth of required explorations per 1802.4.2 Southern Nevada Building Code Amendment.
- A complete record of the soil samples.
- A record of the soil profile.
- Depth of the water table, if encountered.
- Recommendations for foundation type and design criteria, including but not limited to:
 - Bearing capacity
 - Mitigation of the effects of expansive soil, liquefaction, differential settlement, varying soil strength, adjacent loads, collapsible soils, soluble soils, chemical heave, corrosive soils.
- Expected total and differential settlement.
- Pile and pier foundation information in accordance with IBC 1807.2.1.
- Special design and construction provisions for footings or foundations founded on expansive soils.
- Compacted fill properties and testing in accordance with Section 1803.4 Southern Nevada Building Code Amendment. Provide provisions to mitigate the effects of collapsible soils, soluble soils, uncontrolled fill, chemical heave, and corrosive soils.
- Soil classification by the Unified Soil Classification System. Backup data on test performed in the soil classification shall be included.
- Address the possible impacts on adjoining properties and mitigating measures to be undertaken.
- Suitability of onsite soils for use as fill material.
- Provide the grading requirements for onsite and import soils including, but not limited to, swell, solubility, and sulfates.
- Geotechnical design considerations for drainage structures.

- Trenching or other special procedures for determining fault and fissure locations.
- Faults per 1805.1.1 Southern Nevada Building Code Amendment.
- Procedures for mitigating geological hazards.
- Erosion control requirements, as applicable.
- Anticipated structural loads and type of proposed structure.
- Site class. Back-up data required if less than D is assumed. (IBC 1615.1.1)
- Post-tension slab design criteria per Southern Nevada Building Code Amendment Table 1805.8.
- Engineer's original seal, signature, and date on soils report.
- Geotechnical report is current within the last year. Reports more than one year old must have an attached letter wet sealed, dated, and signed by the engineer of record attesting that the report is still valid and current for project.
- Ensure the soils report addresses the placement of fill on slopes steeper than 5:1.
- Provide a slope stability analysis for any proposed slopes steeper than 2:1.

Other Information

Construction General Permit

- Construction Inspection Fees of \$105.00 per acres
- Copy of completed "Construction Permit Submittal Checklist" from Las Vegas Valley Construction Site Best Management Practices.
- Copy of completed "Performance Standards Compliance Checklist" from Las Vegas Valley Construction Site Best Management Practices.
- A Clark County Desert Conservation Program <u>Land Disturbance Mitigation Fee Form</u> will be required on all grading permits.
- The NOI & SWPPP (links below) are required if:
 - o If the total acreage of the lot is equal to or greater than 1.00 acre.
 - A Clark County Desert Conservation Program <u>Land Disturbance Mitigation Fee</u> <u>Form</u> will be required on all grading permits.
 - o The Notice of Intent (NOI) Construction Sites 1 acre or more | NDEP (nv.gov)
 - o The Storm Water & SWPPP Stormwater Discharge Permits | NDEP (nv.gov)