Clark County Department of Building & Fire Prevention

4701 West Russell Road, Las Vegas, NV 89118 ~ (702) 455-3000

Single Family Residence & Guest House Building Permit Guide

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Part I. General Information

This guide outlines the requirements for submitting an application and plan package to obtain a building permit to construct a single family residence or guest house and the inspection process required to ensure your safety.

To ensure that your application is processed in a timely manner, all submittals must be complete. Pencil or whiteout on documents is not acceptable.

Part II. Review Process

Plan reviews will be conducted by the following departments/divisions to ensure compliance with applicable requirements:

- Current Planning Zoning Plans Check reviews plans for compliance with adopted Clark County zoning codes (Title 30) and applicable Nevada Revised Statutes.
  Plan review includes, but is not limited to:
  - Land use
  - Legality of lot(s)
  - Setbacks
  - Heights
  - Parking
  - Landscaping
  - Walls and fences
  - Lot coverage
  - Recorded easements

- **Public Works Development Review** reviews plans for compliance with adopted Clark County code (Title 30). Plans are reviewed for:
  - Right-of-way dedication
  - Drainage improvement compliance
  - Off-site improvement requirements
  - Traffic studies

- **Building Plans Examination** reviews building plans for compliance to Clark County's current adopted building codes and local code amendments, and applicable Nevada Revised Statues. This review includes the following codes and components:
  - International Residential Code – Architectural, Structural, Geotechnical
  - National Electrical Code – Electrical
  - Uniform Plumbing Code - Plumbing (gas piping only)
  - International Energy Conservation Code – Thermal Envelope, Window U values, SEER values of Mechanical/Plumbing Equipment

Part III. Plan Preparation

Plans for single family residences submitted to the Clark County Department of Building must be prepared by one of the following:

- Construction design plans and supporting documents may be prepared, signed, and stamped by a Nevada registered professional engineer, Nevada registered residential designer, or licensed architect as applicable; **OR**

- Contractors licensed under the provisions of the Nevada Revised Statutes (N.R.S 624 - Contractors) may prepare and submit their own plans for their own construction activities provided that the plans are signed by the contractor and meet the conditions specified in N.R.S 623.330 - Architecture, Interior Design and Residential Design - Exemptions; **OR**

- Owner/builders may prepare and submit plans for their private residential use as allowed under N.R.S 624.031 (Contractors – Exemptions, listed above). In order to utilize this exemption, the applicant will be required to title the plans without reference to being prepared by a party other than the property owner who is building or overseeing the building activities.

NOTE: Cover sheets of each discipline designed by a design professional must be wet stamped with an original signature of the design professional as applicable. Subsequent sheets within the element or professional discipline may be reproductions.

Part IV. Application

- Completed Building Permit Application. (Assessor's parcel number [APN] must be included on application).

- Completed Sub-Permit Applications are required for the following:
  (Sub-Permit applications may be submitted with your building permit package or after the building permit is approved):
  - Electrical
  - Plumbing
  - Mechanical

- Additional Permit Application(s) are required for the following: *(May be submitted as a separate application and number with the initial building permit package or as a separate submittal at a later time):*
  - Pool/Spa
  - Fence/Block Wall
  - Temporary Trailer

Part V. Ownership/Legal Description

- Two (2) copies to show ownership and legal description of the property of **ONE** of the following documents:
  (If application is submitted by an owner/builder, a copy of the recorded deed showing correct ownership will be required prior to permit issue):
  - Recorded Deed
  - Deed of Trust
  - Escrow Instructions indicating transfer of ownership

- Lot/block and file/page number

Part VI. Plan Content & Supporting Documentation

All plans must be the same size, 30" x 42" maximum, must be legible, imaging quality, and drawn to scale, in ink or reproduction.

- **GRADING PLAN:** Must be prepared by a Nevada registered professional civil engineer and show the following:
  - Building footprint (must match floor and site plans and setback dimensions to adjacent property lines)
  - Name and width of streets (public or private)
  - Finished floor elevation
  - Corresponding street elevations
  - Lot drainage
  - Scale of drawing
  - Benchmark per NAVD 88
  - North directional arrow
  - Land contours
  - Any easements of record
  - Dimensioned property boundaries
  - Location and type of any existing structures

To meet the above grading plan requirements, one of the following must be submitted:

- Site specific grading plan prepared by a Nevada registered civil engineer; OR
  (4 sets of which one copy must have original stamp and signature)
- Parcel map grading plan, if available, from Civil Engineering Map Room (3 copies); OR
- Recorded subdivision grading plan, if available, from Civil Engineering Map Room (3 copies).

NOTE: If the property is located in a designated flood zone, additional requirements may be imposed by Public Works. For information on the status of your property, please call (702) 455-4600.

- **BUILDING SITE PLAN: (3 sets),** must show the following:
  - North directional arrow
  - All lot dimensions
  - Street names and width of dedication to centerline
  - Building footprint and all ground mounted condensing unit locations
  - All Easements of Record
  - All Public Works Right of Ways (R.O.W.)
  - Indicate any other new or existing structures and their uses (fences, walls, storage buildings, etc)
  - All setback dimensions from property lines to the proposed dwelling and projections from the dwelling and to all other new or existing structures
  - Septic tank size and location, if applicable
  - Sewer line size and tap location
  - Private or shared water well location, if applicable
  - Water meter size and tap location
  - Electric utility transformer location
  - Location, size, and type of all required or proposed landscaping

- **GEOTECHNICAL (SOILS) REPORT: (2 sets),** required for all projects that require new foundations and are required for all additions of 600 square feet or greater. Geotechnical reports must be prepared by a Nevada registered engineer in accordance with the current Southern Nevada Building Code Amendments. The reports must meet the following criteria:
  - Show date prepared
  - Bear engineer's original stamp and signature
  - Must be less than one (1) year old, OR must be accompanied by two (2) current cover letters of applicability bearing engineer's original stamp and signature with current date
  - Identify soil conditions
  - Identify fill and grading requirements
  - Identify design considerations for foundations and drainage structures
  - Show earthquake faults and fissures

- **STRUCTURAL PLANS and CALCULATIONS: (2 sets),** if applicable, must be prepared by a Nevada registered professional civil or structural engineer. All plans and calculations must bear the engineer's original stamp and signature.

- **STRUCTURAL FOUNDATION PLANS/DETAILS: (3 sets),** must include the following:
  - Indicate concrete compressive strength and dimensional size and depth for all continuous and isolated spread footings and stem walls for the entire structure, including basement and window wells, if applicable
  - Show minimum size, grade and number of reinforcing steel bars required for all continuous and isolated spread footings and stem walls for entire structure, including basement, if applicable
  - Show all concrete embed anchors; bolts, hold downs, post base anchors, etc. and spacing, with adequate detailing
  - Show thickness, reinforcing and vapor barrier requirements for all concrete slabs on grade
  - Show material, strength, thickness and reinforcing for all masonry or concrete basement walls, if applicable

- **STRUCTURAL FLOOR FRAMING PLANS/DETAILS: (3 sets),** must include the following:
  - Size, grade and spacing of posts, columns, beams, girders, ledgers and all connection details
  - Size, grade, spacing of floor joists, or two (2) sets of engineered floor truss package, per our Engineered Wood Truss Guide
  - Indicate material, grade, span index and anchorage of structural floor sheathing
  - Provide floor opening details for stairs, shafts, etc.
  - Exterior & interior stud wall framing members, grade, height and spacing
  - Window and door header sizes
  - Specify all metal framing hangers and anchors used
  - Provide current ICC ES Evaluation Report numbers for all prefabricated framing components

- **STRUCTURAL ROOF FRAMING PLANS/DETAILS: Three (3 sets),** must include the following:
  - Size, grade and spacing of posts, columns, beams, girders, ledgers and all connection details
  - Size, grade, spacing of roof and ceiling joists or two (2) sets of engineered roof truss package, per our Engineered Wood Truss Guide
  - Exterior & interior stud wall framing members, grade, height and spacing
  - Attic access openings, including walkways to attic furnaces and air handlers
  - Indicate material, grade, span index and anchorage of structural roof sheathing
  - Window and door header sizes
  - Specify all metal framing hangers and anchors used

- Provide current ICC ES Evaluation Report numbers for all prefabricated framing components

- **ARCHITECTURAL FLOOR PLAN: Three (3 SETS),** Must include the following:
  - Need separate floor plan for each floor level of the residence
  - Dimension and indicate all exterior and interior walls and finishes
  - Locate and specify all braced wall frames (shear walls) and the specific material anchorage requirements
  - Specify the types of all fire-resistance-rated walls
  - Specify fire-resistive requirements for door or window openings or any plumbing, electrical or mechanical devices located in any fire-resistance-rated wall
  - Dimension and indicate all interior rooms, closets, cabinets, plumbing fixtures and fixed equipment
  - Indicate ceiling heights and uses for each room (bedroom, kitchen, wet bar, etc.)
  - Show locations of all window and doors and their sizes
  - Indicate insulating U-Values, Solar Heat Gain Coefficients (SHGC) and all safety glazing
  - Stair details (if applicable)

- **ELEVATION PLANS: Three (3 SETS),** must include the following:
  - Front, rear and all side elevation plans are required
  - Indicate exterior wall finishes, with current ICC ES Evaluation Reports for all stucco systems
  - Show finished grade elevation
  - Indicate roof pitch
  - Dimension building height from grade
  - Show all windows, doors, eaves and projections (foam projections are limited to 4" in thickness)
  - Show locations and net area of all louvered attic vents
  - Provide attic ventilation calculations
  - Indicate roofing materials and the current ICC ES Reports for all materials
  - Flat roof details for roof rain fall drainage and overflow scuppers

- **CROSS SECTION PLANS: Three (3 sets),** must show the following:
  - Exterior wall construction details, including stud size, stud heights, R-values for roof and wall cavity insulation (must match energy calculations), and interior and exterior wall finishes
  - Exterior wall to foundation details, including wall anchorage and weathering/flashing/weep screed details
  - Exterior wall and roof details for all projections, including wall anchorage and weathering/flashing/weep screed details
  - Roof construction and connection details exterior walls for rafters, ceiling joists or trusses and bracing details at gable end walls
  - Roof eave and parapet wall connection details
  - Roofing materials with current ICC ES Evaluation Report Number(s)

- **ENERGY CODE COMPLIANCE REPORT: (2 sets),** must submit the following:
  - Submit two (2) copies of the complete RESCheck Compliance Report, including all input and output data. This report is available from the Department of Energy at: http://www.energycodes.gov/.
  - All requirements, indicated on the Energy Compliance Report must also be shown on all drawings.
  - Or must meet the Prescriptive Requirements: (See Prescriptive Energy Schedule Form on our website in the Forms section)

- R-30 insulation in attic spaces
- R-13 insulation in walls, including all knee walls
- Glazing U-Factor of 0.65 (Clark County) and 0.35 (Spring Mountain Range) for all exterior windows and exterior doors
- Minimum 13 SEER rating for all mechanical heating/cooling equipment
- Minimum water heater energy factor of 0.65

- **ELECTRICAL PLANS: Three (3 SETS)** showing:
  - Electrical receptacle locations, name/type of circuit & spacing
  - Light fixtures, wall switches, other devices/equipment locations
  - Smoke detector locations
  - GFI receptacles/fixtures
  - Arc fault receptacles and locations
  - Electrical service(s) size, AIC Rating (Indicate if fully rated or series rated) and location
  - Show service section load calculations
  - Show panel schedules with load calculations for each panel

- **GAS PIPING PLANS: Three (3 SETS),** showing:
  - Provide isometric and floor plan view of all gas piping
  - Indicate all gas pipe sizing and length of piping between all fittings
  - Indicate all vertical pipe runs
  - Indicate BTU input ratings of all appliances
  - Indicate gas meter location and type of gas supplied to dwelling (natural or LPG)

- **VENTED FACTORY BUILT FIREPLACES: Two (2 SETS)** (as applicable):
  - **WOOD BURNING FIREPLACES ARE PROHIBITED,** Exception: Dwellings to be built at an elevation greater than 4,000 feet above sea level; OR the fireplace must meet Federal EPA Standards.
  - Indicate factory-built fireplace locations, the name of the manufacturer, the model number and provide a copy of the current Evaluation Services Report. (ICC or IAPMO)
  - Provide copy of the Manufacturer's installation and venting instructions/requirements.

- **FIRE SPRINKLER PLANS: Two (2 SETS),** as required:
  - An automatic fire sprinkler system shall be required throughout a dwelling when the total fire area exceeds 10,000 square feet or whenever there is insufficient fire department access or insufficient fire flow at the fire hydrants.
  - When the total area of each floor under roof, including all attached accessory structures, exceeds 3600 square feet, the building must have the minimum required fire flow available at the fire hydrants, per the Clark County Fire Code, or the building will be required to have an automatic fire sprinkler system. The approved civil utility plans must indicate the available fire flow for the dwelling.
  - Two (2) copies of the approved fire department permit and approved fire sprinkler plans will be required, prior to the building permit being issued, if an automatic sprinkler system is required.
  - When a Fire Department sprinkler permit is required, the sprinklers must be inspected by the Fire Department prior to the Department of Building framing inspection and also at the final inspection, prior to Certificate of Occupancy.

Part VII. Submittal Requirements & Fees

Submit entire sets of plans and calculations, as outlined in items III, IV, and V above, to the Residential Plan Submittal counter, in the Permit Application Center.

- An estimated valuation of work will be determined based upon the square footage of the residence. (See *Building Valuation Cost Factors* guide.)
  - The building permit fee will be calculated based upon the estimated valuation. (See *Permit and Plan Review Fees* guide).
  - The building plan review fee will be sixty-five (65%) percent of the building permit fee.
  - Payment of the building plan review fee will be required at time of submittal.
  - Plans will then be routed to the required departments/divisions for review.

Part VIII. Agency Approvals

Agency approvals are not required at initial submittal; however, they must be completed and presented to the Department of Building prior to permit issuance.

- **Water Verification** *(one of the following):*
  - Las Vegas Valley Water District commitment (Applications are available at the Las Vegas Valley Water District and Clark County Department of Building).
  - Water commitment from another applicable water purveyor agency.
  - Well Driller's Report (if a private well)
  - State Division of Water Resources Well Permit and Well Driller's Report (if a community well)
  - Private water source (if applicable)

NOTE: Secondary habitable structures, guest houses, or any detached accessory structures require their own source of water.

- **Sanitation** (Septic/Sewer) Verification (one of the following):
  - Clark County Water Reclamation District Connection Fee Receipt for Sewer (or other applicable sanitation agency)
  - Septic System Permit from the Southern Nevada Health District

NOTE: Secondary detached structures containing plumbing require their own sanitation verification.

- **Desert Conservation Plan Land Disturbance/Mitigation Fee Form**

- **Clark County Department of Air Quality & Environmental Management Dust Permit** *(required if area to be disturbed exceeds .25 acres.)*

Part IX. Quality Assurance Agency (QAA) Requirements

Certain types of work may require special inspection in accordance with Uniform Building Code, Section 1701. When special inspections are required, the Owner must select a Clark County approved quality assurance agency to perform these inspections and sign a Quality Assurance Agency (QAA) Agreement stating that they will employ the quality assurance agency to perform required special inspections during construction. Types of residential work typically requiring special inspection include:

- Concrete greater than 2,500 psi design strength
- Bolts installed in concrete

- Special moment resisting concrete frame
- Reinforcing pre-stressing and post-tensioning steel
- Welding
- Structural masonry
- Reinforced gypsum concrete
- Insulating concrete fill
- Piling, drilled piers and caissons
- Shotcrete
- Special grading, excavation and filling
- Light gauge steel trusses
- Epoxy set bolts
- Built-up light gauge steel members
- Post-tensioned cable in garages that are driven over
- Structural steel

Part X. Processing & Permit Issue

- **Processing Time**
  Normal processing time to obtain a permit to construct a single family residence or guest house is approximately 21 calendar days not including any needed land use approvals (Current Planning) or Civil Engineering requirements. If there are problems with your plans or if there is an increased volume of submittals from the public, this processing time could increase.

NOTE: Check your permit application status via the internet. You will need the application number.

- **Plan Correction/Communication**
  During the review process, items needing correction on the plans may be discovered. Plan correction letters are typically used to advise the applicant that items need to be corrected on the plans.

  Minor items are usually resolved by telephone, fax or in person. If multiple corrections are needed, they will be identified in a plan correction letter and provided to the applicant or designee for resolution. Multiple plan reviews may be occurring concurrently; therefore, you could receive more than one plan correction letter on multiple issues pertaining to zoning, architectural, structural, plumbing, mechanical and/or electrical issues. Please ensure that corrections are submitted to the appropriate Plans Examiner. **It is in your best interest to respond promptly to any requests for information or corrections as this may delay plan approval and permit issue.**

- **Permit Issue**
  - When all plan review approvals have been received from Zoning Plans Examination, Public Works, and Building Plans Examination, you will be notified that your permit is ready to issue pending:
    - Receipt of all departmental/agency approvals.
    - Payment of remaining fees which may include:
      - Permit fee(s)
      - Building plan review fees (less payment made at time of plan submittal)
      - Current Planning Zoning Plans Check plan review fees
      - Desert Conservation Mitigation and Administrative Fee
      - Transportation Tax

        - Residential (park fee) Construction Tax
    - Signing of Landscape Certificate by Property Owner or Landscape Architect.
    - Signing of Quality Assurance Agency (QAA) Agreement (if applicable).
- An Inspection Record (job card) will be issued with the permit.
- One (1) set of approved plans will be returned to the permittee.

Part XI. Inspection & Clearance Requirements

- **Inspection Requirements**
  - Required inspections may be scheduled via the Internet or through the Automated Telephone Inspection Scheduling System by calling (702) 455-3000.
    - Required inspections for your project are listed on the Inspection Record (job card) received at permit issuance.
    - Required inspections must be done in sequence as shown on the Inspection Record (job card).
    - **NO WORK** should be covered before an approved inspection has been received.
    - Reports, certifications and clearances will be required within specific time frames (**Note:** See Clearance requirements (below) for details).
    - The permit, Inspection Record (job card), and approved plans must be kept on site for convenient access by the Inspection staff.
    - An approved required inspection must be obtained for each permit within **180 days** from date of issue or from the last approved inspection; otherwise, the permit becomes null and void.
      NOTE: Permits issued for structures located at Mt. Charleston have 365 days to receive an approved required inspection from date of issue or from the last approved inspection.

- **Clearance Requirements**
  - **Grading Report** (if applicable) – must be submitted prior to requesting any inspections:
    - Must be prepared, signed and sealed by a Nevada registered engineer.
    - Must be submitted to the Building Inspection Division for approval/clearance.

  - **Pad Certification Report** – must be submitted prior to the foundation inspection:
    - Must be prepared, signed and sealed by a Nevada registered engineer.
    - Must be submitted to the Building Inspection Division for approval/clearance.
    - A pad certification inspection must be requested after submittal.

  - **Finished Floor Elevation Certificate** – must be submitted after the foundation and slab inspections and prior to requesting the framing inspection:
    - Must be completed, signed and sealed by a Nevada registered land surveyor.
    - Must be submitted to Building Inspection Scheduling, Permit Application Center, for clearance.

  - **Drainage Compliance Report** – must be submitted prior to requesting final inspection:
    - Section 1 (if applicable) must be completed by the developer or signed and sealed by a Nevada registered engineer.
    - Section 2 (if applicable) must be completed by a Nevada registered civil engineer.
    - Must be submitted to Building Inspection Scheduling, Permit Application Center, for clearance.

- **FEMA Elevation Certificate** – must be submitted prior to requesting final inspection:
  - Required only if located in a flood zone.
  - Must be completed, signed and sealed by a Nevada registered land surveyor or engineer.
  - Must be submitted to Civil Engineering for clearance.

- **Utilities** – must be cleared prior to requesting final inspection. Applicant must contact serving utility for inspection and clearance:
  - **Water**
  - **Sanitation** (sewer system)
  - **Health District** (septic system)

- **QAA Final Report** (if applicable) – must be submitted prior to requesting final inspection:
  - Must be prepared by QAA responsible for original contract signed prior to permit issuance.
  - Must be submitted to the Building Division Field Services Office for approval / clearance.

NOTE: For your convenience and to help expedite your **inspection requests,** the Department of Building offers both an automated **Telephone Inspection Scheduling System and Inspection Scheduling via the Internet.**

To use the automated telephone system, call (702) 455-3000, press "1" to select inspections, and follow the prompts. You will need the phone system number and 4-digit inspection type codes which are located on both the permit and inspection record (job card).

To schedule an inspection online, visit our website and click on the "Construction Services Online" button. Then click on the "Managing Inspections" link. Access requires permit and Internet P.I.N. numbers which are printed at the top of the permit.

After passing the final inspection, a Certificate of Occupancy and an electrical tag will be issued so that you may order your utility services and move into your new home.

Department Of Building & Fire Prevention Locations & Services

MAIN OFFICE 4701 W. Russell Road Las Vegas, NV 89118 (702)455-3000	On-Site Plan Submittals All "Walk-Through" Plan Review / Permitting Functions Residential Tract Submittal / Permitting All Sub-Trade (Electrical, Plumbing & Mechanical) Permitting Building Inspection Scheduling Functions Fire Prevention Inspection Services Records	Temporary Certificate of Occupancy Submittals Building Inspections Building Inspector Inquiries Amusement / Transportation Systems Operation Certificates Approved Fabricators Quality Assurance Agency Listing
LAUGHLIN OFFICE Regional Government Center 101 Civic Way Laughlin, NV 89029 (702)298-2436	Building Inspection Services Fire Prevention Inspection Services	
OVERTON OFFICE 320 North Moapa Valley Blvd. Overton, NV 89040 (702)397-8089	Building Inspection Services Fire Prevention Inspection Services	

Automated Phone System (702) 455-3000

Option 1: For all Inspection services or to report a building code violation.
Option 2: For information regarding on-site permits or new plan submittals.
Option 3: For the Building Plans Examination division or QAA information.
Option 4: For the Zoning Plans Examination division.
Option 5: For information or copies regarding land development, construction documents, plans or permits.
Option 6: To speak with Management staff.
Option #: For hours of operation, Office location and website information.

Other Clark County Departments/Divisions/Districts

Air Quality & Environmental Management	500 S. Grand Central Parkway, Las Vegas NV	(702) 455-5942
Public Works, Development Review Services	500 S. Grand Central Parkway, Las Vegas NV	(702) 455-6000
Comprehensive Planning	500 S. Grand Central Parkway, Las Vegas NV	(702) 455-4314
Fire Department	575 E. Flamingo Road, Las Vegas NV	(702) 455-7316
Las Vegas Valley Water District	1001 S. Valley View Boulevard, Las Vegas NV	(702) 870-2011
Southern Nevada Health District	625 Shadow Lane, Las Vegas NV	(702) 759-1000
Water Reclamation District	5857 E. Flamingo Road, Las Vegas NV	(702) 668-8888

State of Nevada

Division of Water Resources	400 Shadow Lane, Suite 201, Las Vegas NV	(702) 486-2770
Nevada State Contractors Board	2310 Corporate Circle, Suite 200, Henderson NV	(702) 486-1100

Utilities

Nevada Power	6226 W. Sahara Avenue, Las Vegas NV	(702) 402-5555
Southwest Gas	5241 Spring Mountain Road, Las Vegas NV	(877) 860-6020

www.clarkcountynv.gov/building