Clark County Department of Building & Fire Prevention 4701 West Russell Road, Las Vegas, NV 89118 ~ (702) 455-3000



Commercial, Industrial & Multi-Family Development Building Permit Guide

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Part I. General Information

This guide outlines the requirements for obtaining the necessary building permits for commercial, industrial, and multi-family developments. This guide is not intended for Complex Facilities such as Highrise Buildings, Atria, Hospitals, Covered Malls, Casinos, Convention Facilities, Amusement Building and similar Structures.

Part II. Prerequisites

You must obtain land use approval from the Clark County Planning Commission and/or board of County Commissioners. All land use applications are made through the Comprehensive Planning Department (702) 455-4314.

Land use approvals are typically subject to conditions imposed by Comprehensive Planning, Public Works Development Review, and other departments and agencies. Once granted, land use approval is consent for the project in concept only and does not constitute approval of any earthwork or construction activities. On-site development plan submittals (discussed in the next paragraph) are reviewed by Comprehensive Planning Zoning Plans Check, Public Works Development Review and Building Plans Examination to verify compliance with applicable codes and ordinances. Plans are also reviewed for consistency with the approved land use and compliance with the imposed conditions. Permits will not be issued until all requirements are met.

While you are waiting for the land use application to be processed by the Comprehensive Planning, you may want to submit your on-site plans to the Department of Building. You are also advised to submit your off-site applications and technical studies to the Public Works Development Review as early as possible after commission approval or when you know your off-site requirements. These actions should help to reduce processing time.

NOTE: For large, complex, or unique projects, you may request a pre-development meeting at which representatives of various departments and agencies are present to discuss various aspects of the proposed project before you submit your plans. Contact Building Plans Examination at (702) 455-3000 to schedule a pre-development meeting.

Part III. Applicant's Responsibility

NOTE: An applicant may propose a phased design and construction approach with the approval of the Department of Building. In order to utilize this option a pre-submittal meeting must be scheduled by contacting the Building Plans Examination office at (702) 455-3000. For more information and the appropriate guidelines, please refer to the "Phased Design Building Guide."

PERMIT APPLICATION(S)

Permits for commercial, industrial, and multi-family developments will only be issued to appropriate Nevada licensed contractors with a Clark County business license.

- Completed Building Permit Application(s)
 - Must include assessor's parcel number (APN and associated land use application numbers received from Comprehensive Planning.
 - Applicants must specify the work to be covered by the permit. Separate buildings and associated fences, walls, trash enclosures, carports, shade structures, signs, etc. require separate permit applications but may be included in the same plan submittal package.
- Completed Sub-permit Applications(s), as appropriate.
 - Sub-permit applications may be included with your building permit package and appropriate plans, or they may be submitted after the building permit is approved.
 - ◆Electrical ◆Plumbing ◆Mechanical
- Additional Permit Application(s) and appropriate plans, when required.
 - May be included with the initial building permit plan submittal or as a separate submittal at a later time, if appropriate.
 - ◆Fence/Block Wall ◆Pool/Spa ◆Amusement/Transportation Rides
- Grading (may be done as a separate permit, refer to Part IV, Submittal Package, Grading).
 Temporary structures (i.e., canopies or fences) used for the protection of the public also require a separate permit.

OWNERSHIP/LEGAL DESCRIPTION)

• One (1) copy of recorded deed, deed of trust, or escrow instructions (to show ownership and legal description of the property).

Part IV. Applicable Codes

Currently adopted:

- International Building Code
- Uniform Mechanical Code
- Uniform Plumbing Code
- International Energy Conservation Code
- National Electrical Code
- ➢ ICC/ANS A117.1
- Southern Nevada Building Code Amendments
- Clark County Building Administrative Code
- Title 30, Unified Development Code

Part V. Construction Documents

Construction design plans and supporting documents must be prepared, signed and stamped by a Nevadaregistered architect or professional engineer (as applicable for the discipline involved). Each sheet of plans must be stamped, signed, and dated by the design professional. The cover sheets of each discipline must be wet-stamped with an original signature of the design professional. All sheets must be sized the same and 24" x 36" sized plan sheets are preferred.

A contractor licensed under the provisions of the Nevada Revised Statutes (NRS 624) may prepare and submit his own plans provided that the plans are signed by the contractor and meet the conditions specified in the Nevada Revised Statutes (623.330).

PLANS AND SUPPORTING DOCUMENTATION:

Upon submittal of a plan package, the applicant is required to pay a plan review fee based upon the valuation of the structure (per building) or the estimated contract price (per building). Apartment and condominium projects are assessed a plan review fee for each building type based upon valuation per sq. ft. as determined by Clark County.

- Grading plan three (3) copies prepared by a Nevada registered professional civil engineer and showing structure, finished floor elevations, corresponding street elevations, land contours and elevations, lot drainage and any storm-water mitigating features, scale, benchmark, legal description, and north arrow. For more information regarding grading plan requirements refer to the "Grading" handout.
- Three (3) sets of building plans, drawn to scale in ink or reproduction including, architectural, structural, electrical, mechanical and plumbing. All sheets must be sized the same and 24" x 36" plan sheets are preferred and must include the following:

ARCHITECTURAL PLANS:

Architectural plans must be prepared by appropriately licensed Nevada Architect or Contractor. At a minimum, the plans must include the following:

Design Summary/ Code Analysis, including:

- Proposed building uses/occupancies.
- Mixed-Use design analysis (separated versus non-separated uses)
- The type(s) of construction.
- Allowable building height(s) and area(s) analysis, itemized by each proposed use.
- Occupant loads of each building(s), itemized by each proposed use.
- Fire protection design, including all passive and active elements and design criteria.
- Minimum plumbing facilities analysis
- Accessibility Analysis, including accessible parking
- Energy Compliance Report/Analysis
- Site plan, indicating all property lines (real and assumed) and separation distances and accessible routes.

- Floor plans which indicate the use of each space and all wall types.
- Exterior and interior Elevations.
- Fire protection plans, indicating all fire walls, fire barriers, shaft enclosures, fire partitions, smoke barriers, smoke partitions, horizontal assemblies, penetrations, fire-resistant joint systems, opening protective's, exit enclosures and all construction details and fire-stopping methods.
- Interior and exterior wall plans and cross-sections, including all wall framing details, material details, fire-resistance-ratings/details, minimum energy conservation requirements and connection to structure details.
- Exterior wall cladding systems and materials, including EFIS, curtain walls, store fronts, etc. and all edge of slab protection details, if applicable.
- Roof and reflective ceiling plans.
- Dropped ceiling construction framing details, connection to structure details and materials.
- Furniture/fixture plans per floor.
- Fixed seating plans for all possible event configurations, if applicable.
- Building cross-sections, indicating all minimum energy conservation requirements and sound transmission requirements.
- Door & window schedules including, fire-resistance ratings, and minimum energy fenestration ratings (U-values and SHGC). For site-built windows, simulation report reference numbers provided by an NFRC accredited simulation laboratory, for each type of product to be used in the project.
- All other necessary Architectural details.
- Stairs, handrails and guards and associated cross-sections and details.
- Interior and exterior floor, wall and ceiling finishes, schedules and details.

STRUCTURAL PLANS:

Structural plans and calculations must be prepared by an appropriately licensed Nevada professional engineer. A Nevada licensed structural engineer must analyze and design buildings over three stories, or more than 45 feet, measured from the bottom of the foundation to the peak of the roof. At a minimum, the structural plans must include:

- Two (2) Sets of the Geotechnical Report
- Two (2) Sets of structural calculations
- General structural notes, including specific special inspection requirements

- Foundation plan(s)
- Floor framing plan(s)
- Roof framing plan(s)
- Pre-fabricated floor and roof truss calculations/plans
- Column and beam schedules
- Shear wall schedules
- All structural connection details
- Seismic restraint design and details of all required mechanical, plumbing and electrical elements, if applicable.
- Complete exterior wall cladding designs, including all structural connection details and edge of slab protection details, if applicable.
- Steel fireproofing plans and schedules, if applicable, which must include: Structural framing backgrounds with hourly fire-resistance ratings.
- Fireproofing schedules.
- A handout can be obtained from our website in our How-To Guides titled: "<u>Fireproofing for Steel</u> <u>Construction - Building Permit Guide</u>". Guide number BPG-053.
- Additional submittal requirements for Structural Steel Fireproofing Plans can be obtained from our website in our Plan Review Division, Standard Designs titled: "<u>F-101 Requirements For</u> <u>Structural Steel Fireproofing Plan</u>".

MECHANICAL/PLUMBING PLANS:

Mechanical and Plumbing plans must be prepared by appropriately licensed Nevada Mechanical Engineer or Contractor. At a minimum, the plumbing and mechanical plans must include the following:

- Two (2) Sets of mechanical energy conservation compliance calculations, based on the IECC.
- Site Utility Plan, indicating cooling towers, fire pumps, private and public sewer lines, manholes, cleanouts, materials, sizing, slopes.
- Mechanical & plumbing floor plans, with architectural backgrounds, indicating all fire-resistance
 rated walls and horizontal assemblies and the required duct and air transfer opening protection.
- All equipment and fixture schedules, for both plumbing and mechanical, including water heating devices.

- Seismic restraint design and details of all required mechanical and plumbing elements, if applicable.
- Provide calculations for minimum outside air ventilation requirements. All refrigeration systems, refrigerant classifications, machinery rooms, and piping.
- Duct and register materials, sizes and support methods for supply, return, outside air, environmental air, product conveying systems, commercial hoods and kitchen ventilation.
- Vertical riser diagrams for all multi-story structures, for DWV, water, gas and mechanical ventilation systems.
- Locations and functions of all smoke/fire detectors and duct detectors.
- Locations of all smoke/fire/ceiling dampers.
- Waste & vent materials, sizing and isometric layouts.
- Water supply & distribution materials, sizing, calculations and isometric layouts.
- Indirect waste, materials, sizing, cleanouts.
- Fuel gas piping, design pressures, regulator locations, and shut-off valves. Southwest Gas Approval is required for Medium or High pressure gas.
- Combustion air openings and details.
- All gas venting sizing, terminations & details.
- Cross-connection control devises.
- Roof drainage piping for both primary and overflow plans and calculations.
- Sand & oil and grease interceptors, with calculations.

ELECTRICAL PLANS:

Electrical plans must be prepared by appropriately licensed Nevada Electrical Engineer or Contractor. At a minimum, the electrical plans must include the following:

- Energy compliance calculations for lighting based on the IECC and local amendments.
- Electrical site plan identifying all site lighting, utility transformer(s), service location(s), emergency generator location(s) and fire pump(s).
- Electrical floor plans, with architectural backgrounds, for lighting, power, communications and all special systems with all circuits clearly identified.

- Provide ¼" = 1'-0" scale drawings of electrical rooms, elevator machine rooms, and generator and fire pump rooms.
- Electrical symbol schedule and legend.
- Switchboard and panel board schedules with A.I.C ratings, specifications and loads clearly shown.
- Show the location of all emergency panel board locations and coordinate with Architectural Plans.
- Lighting fixture schedule.
- Switchboard schedule (if applicable).
- Single-line diagrams, indicating size and types of all transformers, conduit, conductors and overcurrent protection sizing with distribution boards, switchboards, panels and services, including all electric utility information.
- All raceways, wiring methods, materials, sizes and circuiting.
- Seismic restraint design and details of all required electrical elements, if applicable.
- All over current protection.
- Bus bracing, fault-current calculations.
- Complete electrical load calculations.
- Seismic restraint design and details of all required electrical elements, if applicable.
- Separation/fire-resistance-protection of all emergency and standby systems.
- All Egress Illumination and egress identification.
- All systems supplied by emergency and standby power.

CLARK COUNTY FIRE DEPARTMENT PERMIT SURVEY FORM

• The completed form must be attached to the building permit application.

GRADING:

Site grading is normally included under the scope of the general building permit when it is issued. An applicant may apply for a separate on-site grading/excavation permit, if the nature of the project warrants the issuance of a site grading permit separate from numerous individual building permits.

Additional grading plans, geotechnical (soils) reports, cubic yards of cut and fill for fees determination, departmental reviews and approvals are required for a separate site grading permit.

Civil Engineer's approval of the grading plan in association with the civil design (OFF-SITE) plans does not constitute approval of an on-site grading permit or authorization to perform on-site grading

activities. An on-site grading permit submittal must be filed directly with the Department of Building. Public Works Development Review will not approve grading permit applications until all required technical studies and off-site improvement plans are approved. For more detailed information, refer to the "Grading" handout.

Part VI. Review & Approval Steps

AGENCY APPROVALS - not required at initial submittal; however, they must be completed and presented to the Department of Building prior to permit issuance.

- Water Verification You must provide one of the following:
 - Las Vegas Valley Water District Commitment (Application available at the Las Vegas Valley Water District and the Clark County Department of Building)
 - Water Commitment from another applicable water purveyor agency
 - State Division of Water Resources Well Permit if a commercial well
 - Private Water Source (if applicable)
- Sanitation (Septic/Sewer) Verification You must provide one of the following:
 - Water Reclamation District [or other applicable sanitation agency] Connection Fee Receipt for Sewer
 - Septic System Permit (when the public sewer is not available to the property) from the Southern Nevada Health District.
 - Water Reclamation District approval for a privately owned wastewater facility such as a package extended aeration plant or oxidation ponds system
- Desert Conservation Plan Land Disturbance/Mitigation Fee Form
- Clark County Air Quality Management Dust Permit (if required)
- Required if area to be disturbed exceeds .25 acre.
- Southern Nevada Health District Food Establishment Approval. Health Department approval is required for food and (drink) related establishments including food service establishments, food service support facilities, retail/wholesale food sales, and retail/wholesale food processors.

ADDITIONAL APPROVALS

Depending on the project, you may be required to submit your fire protection system plans (including hazardous materials management, fire alarm, and fire sprinkler plans) to the Clark County Fire Department (575 E. Flamingo Road, Las Vegas, NV 89119). For specific information, contact the Clark County Fire Department's plancheck office at (702) 455-7100.

NOTE: Federal law requires the issuance of a storm water discharge permit when construction activities disturb five (5) or more acres of land and discharge storm water.

For additional information on requirements and/or questions, applicants should contact the Bureau of Water Pollution Control at (702) 687-4670 ext. 3153 or ext. 3149.

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