

City of Omaha Plans and Permits Commercial New Building and Additions Permit Submittal Checklist

This checklist contains the standard information required on submittals for commercial construction projects. For additional information, please contact Permits and Inspections, 1819 Farnam Street, 11th Floor, Suite 1110, Omaha, NE 68183, (402) 444-5350

Three complete sets of plans, drawn to scale, are to be submitted for a plan review. (11"x17" min size, 1/8"=1' min scale) Plans must be collated and stapled on left side of plans. All pages must be the same size.

The plans required are as follows:

All submittals for commercial building permits should be appropriately scaled and should provide the following information:

Project Description:

- New building
- New shell building
- Addition
- Parking lots
- Street scape
- Footing and foundation

Owner/Applicant/Information:

- Owner's name
- Owner's mailing address
- Phone number
- E-mail
- Contact person (owner or owner's rep.)
- Statement that applicant is the authorized agent of the property owner.
- Contact person mailing address
- Contact person's phone number
- Contact person's e-mail

GENERAL CODE DATA

The information required below can be shown either on site plan or architectural cover sheet.

Sealed by an architect and the coordinating professional in State of Nebraska (if applicable)

- Provide building information containing
 1. Occupancy
 2. Address of building
 3. Separated use or non-separated use
 4. Type of construction
 5. Square footage (of each building/ tenant space)
 6. Allowable area calculation
 7. Sprinklers / Yes or No
 8. Fire alarms / Yes or No
 9. Emergency lighting / Yes or No
 10. Number of exits required
 11. Exits provided
 12. Number of floors in the building
 13. Floor number on which work is being performed
 14. Plumbing fixture requirements
 15. Governing Codes
 16. IECC building compliance (COMCheck or other)

17. Historic designation or district (if applies)
18. Complete description of business operation
19. Provide an Hazardous Material Identification System for storage and manufactured operations
20. Actual address of the project (suite number and floor number if applicable)
21. Legal description of the property.

SITE PLANS

Sealed, signed and dated by a registered civil engineer in State of Nebraska (if applicable).

- Plans drawing to scale showing
 1. Date, scale, title, North direction, name of owner and name of person preparing the plan.
 2. Location and dimensions of boundary lines, easements and required yards (street yards, interior side yards, buffer yards) and setbacks of existing and proposed buildings and other improvements.
 3. Location, size and use of existing and proposed structures on the site
 4. The location of existing and proposed site improvements, including parking and loading areas, pedestrian and vehicular access, sewers, utilities, service areas, fencing, screening, landscaping and lighting.
 5. Location of major site features, including drainage systems and existing and proposed contour lines as necessary to display proposed grading, but in no case greater than at five foot intervals.
 6. Special information for a particular use, as required by article XV, "Supplemental Use Regulations".
 7. A traffic impact analysis (if required)
- Landscape plan showing property lines with the number, location and species of plant materials and provide free area calculations.
- Complete site plan review form including zoning and overlay district.
- Show parking lot and parking lot perimeter landscaping setbacks on plans.
- Complete site water, storm & sewer plans (if applicable).
- Show the location of the electric service entrance (if applicable).
- Show the streets and alleys.
- Proposed and existing curbs;
- Directional drainage arrows;
- Stormwater collection and discharge points;
- Show the parking spaces (standard and accessible), and provide parking calculations.
- Provide accessibility routes including ramps as required.
- Grading and erosion control plan (if applicable - > 1 acre).
- Post construction stormwater management plans (if applicable - > 5000 sf disturbed ground).
- No-net increase in stormwater runoff calculations.
- Sidewalks and handicap ramps
- Driveways.
- Right-of-way dedication
- Douglas County approval (if applicable)
 1. Working within or adjacent to county highways;
 2. Grading within or adjacent to county highways;
 3. Discharging stormwater to county sewer and ditched;
 4. Constructing septic systems;
 5. Working within environmental sensitive areas;
 6. Anything that may affect the environment; and
 7. Other similar items.
- State of Nebraska approval (if applicable)
 1. Working within or adjacent to state highways;
 2. Grading within or adjacent to state streets;
 3. Discharging stormwater to state sewer and ditched;
 4. Working within environmental sensitive areas;

5. Anything that may affect the environment; and
6. Other similar items.

PUBLIC IMPROVEMENT PLANS

Sealed by a registered civil engineer in State of Nebraska (if applicable).

- Plans drawing to scale showing:
 1. Project number application.
 2. Construction plans (prepared according to PWD guidelines).
 3. Final design review request form.
 4. Drainage study (prepared according to PWD guidelines).
 5. Specifications
 6. Designer's plan check form.
 7. Contract, Bond (PW-55), Engineers estimate and Insurance.
 8. Easements.
 9. Governmental approvals.
 10. Subdivision / Development Agreements.
- Army Corps of Engineers approval (if applicable)
- Papio-Missouri Natural Resource District approval (if applicable)
- Right-of-Way stormwater sewer materials.
- Stormwater discharge onto adjacent property owner plan.
- Drainage way easement plans.
- Driveway culverts.
- Dissipation structure and outlet computations.
- Impacting existing public sewers. The following items must not be located or constructed on public sewer lines or within their associated easements:
 1. Building;
 2. Structures;
 3. Monuments;
 4. Deep rooted trees;
 5. Retaining walls;
 6. Poles;
 7. Structural wall supports;
 8. Footings.
- Retaining wall locations.

ARCHITECTURAL PLANS

Sealed, signed and dated by an architect in State of Nebraska (if applicable).

- Provide complete architectural floor plans, roof plans and reflected ceiling plans:
 1. Show complete floor layout including fixed equipment.
 2. Identify the use of each room
 3. Identify the complete exiting system, including the occupant load of each room.
 4. Provide a wall schedule to identifying walls to be demolished, new/existing, bearing/non-bearing, and different height walls
 5. Provide dimensions of rooms, corridors, doors, etc.
 6. State the occupancy classification of the adjoining suites
- Provide energy code requirement for the building envelope and related details.
- Identify fire rated assemblies (if applicable) and provide architectural details, referred UL/Gypsum Board Association number and standard details.
- Show accessibility information to include:
 1. The location and dimensions of the accessible restroom facilities
 2. The location and dimensions of elevators (if applicable)
 3. For remodels and alterations: if accessible route is not being made fully accessible provide documentation showing cost of upgrades to the accessible route is not more than 20% the cost of the total alteration
- Provide four sides building elevations
- Provide building cross-sectional views

- Provide general architectural details
- Provide wall details (top and bottom connection details with approved listed anchors)
- Provide window schedule, door schedule and hardware schedule
- Provide floor/wall finish schedule

MECHANICAL PLANS

Sealed, signed and dated by a registered mechanical engineer in State of Nebraska (if applicable).

- Site plan documenting new equipment for the project.
- Provide a symbol schedule of all symbols and abbreviations used.
- Provide mechanical system compliance per IECC using COMcheck or ASHRAE 90.1.
- Mechanical demolition plans.
- Complete mechanical HVA/C and piping floor plans for the new systems that includes mechanical layout (ductwork, piping, smoke dampers, fire dampers, smoke/fire dampers, A/C units, air-handlers, diffusers, terminal hydronic units, boilers, pressure vessels, etc.).
- Mechanical roof plans showing equipment, distance from edge of roof, exhaust air to intake air and plumbing vents to intake air.
- Mechanical equipment schedules (air side and hydronic side), specifications and weight.
- Mechanical equipment clearances.
- Outside air ventilation calculations for each system and room.
- Air-balance schedule.
- Air-balance report note.
- HVAC equipment specifications.
- HVAC duct detector automatic shutoffs.
- Restrooms exhaust ventilation systems.
- Kitchen exhaust system, CFM, make-up air and method used to size hoods.
- Hazardous exhaust ventilation systems (if applicable).
- Building make-up air openings [sizes and locations] (if applicable).
- Combustion make-up air [sizes, details, required CFM and locations] (if applicable).
- Combustion-air openings [sizes and locations] (if applicable).
- Identify any special inspection items.

PLUMBING PLANS

Sealed by a registered mechanical engineer in State of Nebraska (if applicable).

- Site plan documenting new equipment and piping for the project.
- Provide a symbol schedule of all symbols and abbreviations used.
- Complete plumbing supply, waste and vent floor plans for the entire project area.
- Roof drainage systems and calculations for the entire project area.
- Minimum number of plumbing fixture analysis.
- Plumbing fixture specifications.
- Plumbing fixture connection schedule.
- Drain, waste, and vent sizing isometrics.
- Water pipe and meter sizing calculations.
- Grease interceptors [as required] – Type(s), Location(s) and sizing calculation.
- Sand/oil interceptors [as required] – Type(s), Location(s) and sizing calculation.
- Backflow Devices [as required] – Type(s) and Location(s).
- Expansion Tanks [as required] -- Size(s) and Location(s).
- Gas pipe sizing calculations and isometric (if applicable)
 1. Provide a scaled site plan clearly denoting project location and gas meter location.
 2. Provide a floor/roof plan documenting ALL appliance types and locations.
 3. Provide a one-line gas pipe, sizing diagram.
 4. Identify on the one-line, ALL branch pipe lengths, sizes and equipment Btu/hr input ratings.
 5. Identify the total building MBH and pressure from the gas meter.
 6. Specify gas pipe support method and spacing.
 7. Address gas venting and combustion air.

ELECTRICAL PLANS

Sealed, signed and dated by electrical engineer registered in Nebraska, or signed by the licensed electrical contractor performing the work (if applicable).

- Provide lighting power calculations and controls per IECC using COMcheck or ASHRAE 90.1.
- Provide complete electrical site plans showing utility transformer(s) and SES location(s) and all exterior lighting or other wiring.
- Provide a symbol schedule of all symbols and abbreviations used.
- Provide a one-line drawing of the complete electrical system showing:
 1. System voltage, phase configuration, and available fault current.
 2. All subpanels and feeders with conductor sizes and types.
 3. Fault current calculations from SES to lowest rated overcurrent device or equipment.
 4. Ampere rating of all overcurrent devices.
 5. Grounding detail(s).
- Provide a lighting floor plan (with emergency and exit lights) including fixture types & wattage.
- Provide a power floor plan showing receptacles, switches, outlets, etc.
- Label all rooms/areas on all floor plans.
- Show the location of all electrical equipment (IE, SES, panels, transformers, etc).
- Provide nameplate ratings of all motors, elevators, AC units, and equipment.
- Provide a schedule for each panel showing:
 1. Voltage, phase configuration, and interrupting rating.
 2. NEMA enclosure type.
 3. Ampere rating of all overcurrent devices.
- Load calculations for the SES and all panels.
- Identify any hazardous or classified areas by NEC type.
- Provide a copy of Special Electrical Inspection Certificate if applicable.

STRUCTURAL PLANS

Sealed, signed and dated by an engineer registered in the State of Nebraska.

- General Structural Notes
 1. Design Dead Loads
 2. Design Live Loads
 3. Wind Design Data
 4. Seismic Design Data
 5. Special Loads (if applicable) that are specified by the code
 6. Identify all Deferred Submittal Items
 7. Identify all Special Inspection and Structural Observation requirements
 8. Material Specifications
 9. Geotechnical Information, i.e. Soils Class, Allowable Bearing Pressure, Reference to Geotechnical
 10. Investigation Report or IBC Table 1804.2, other information pertaining to the design
- Foundation Plan
 1. Indicate shear wall and hold down locations
 2. Include separate sheets for "mirrored" plans
 3. Footing bearing or top of footing elevations
 4. Anchor size and placements
- Floor Framing Plan
 1. • Indicate shear wall and hold down locations
 2. • Include separate sheets for "mirrored" plans
 3. • Framing floor layout and sizes
 4. • Section and detail cuts
- Roof Framing Plan
 1. Framing roof layout and sizes
 2. Section and detail cuts
- Wall Framing Information and Details

- Structural Details
 1. • General structural details, connection details and all cut structural details called out from structural foundation/framing plans.
- Calculations
 1. One copy of Structural calculations that includes vertical and lateral structural analysis and sealed by the structural engineer of record:
 - Computer Calculations shall include design input load summary, output summary and explicit cross references to supplemental calculations as well as the plans.
 - Sketched detailed layout of Lateral Force Resistance System members
 - Hand calculations to validate design input loads, output data, connection details, etc.
- Geotechnical Investigation Report
 1. Provide one copy of soil report sealed by the geotechnical engineer of record
- Prefabricated Metal Building:
 1. Provide separate manufacturer's construction drawings and calculations that are sealed by the structural engineer of record for the prefabricated metal building.
- Post-Tension Slab-on-Ground Plans:
 1. Slab/beam geometry: length, width, thickness, overlapping regions based on simplified analysis for complex geometries, thickened sections if used, dimensions of turndowns.
 2. Slab type per PTI guide- type I, II, III, or IV.
 3. Minimum concrete strength at 28 days and minimum concrete strength at jacking.
 4. E_m , Y_m , coefficient of subgrade friction, soil subgrade modulus.
 5. Strand specifications; strand grade and diameter, clearances, drape if used,
 6. Post tendons' jacking force, assumed losses, anchor set, edge distance to first strand, edge moisture variation. Plans shall graphically show all locations of strand tendons with dimensioned spacing requirements.
 7. Mild reinforcing associated with stress concentrations (re-entrant corners, etc.)
 8. Provide the following loading data in Post-Tension Slab-on-Ground calculation: concentrated loads from framing elements; posts and columns, fire places, heavy equipment, etc, and perimeter line loading.
 9. Plans shall reference the correct vital soil report information for design: the company and their report number, allowable soil bearing capacities and at what depth and any compacted fill requirements in addition to items noted above. All calculations shall be based and coordinated with this soil report.
 10. Strand elongation.
 11. Post tension hardware supplier assumptions- ie, proprietary data from supplier used in analysis assumptions.
- Special Inspections:
 1. One copy of Special Structural Inspection Certificate and Special Geotechnical Inspection Certificate if applicable
 2. Provide name and contact information for the inspector.

NOTE: Additional drawings may be required depending on the complexity of the project.