COMMERICAL PLAN REVIEW SUBMITTAL REQUIREMENTS

Project construction documents, when accepted and approved by the City of Allen Building & Code Division and Fire Department, become a legal document that is used during construction and then archived under state law. Each set of construction documents shall only contain information for the specific permit. Submittals must accurately and clearly convey what is being constructed and demonstrate compliance with those codes and standards adopted at time of approval.

Except for the General Plan Requirements, which are outlined below, the composition of your submittal can be altered to fit the proposed scope of work.

Comments may be provided during the review process that may require additional information on your plans to demonstrate compliance with the adopted codes and standards.

1. GENERAL REQUIREMENTS

1.1. All Documents shall be in Portable Document Format (PDF).

1.2. The plan set submitted must include all design disciplines (architectural, structural, mechanical, electrical, plumbing, etc.) grouped within the same document, without providing individual plan sheets or plan sets broken into individual disciplines.

Exception: Large commercial projects where the file size exceeds 500 MB

1.3. Orient all sheets so the top of the page is at the top of the computer screen.

1.4. All sheets within the submittal must be placed in the order reflected within the sheet index for the plan set.

1.5. All documents created shall have all layers flattened prior to submitting as a PDF. Without flattening the layers, the design information can be altered/filtered and not allow certain review features to function properly.
1.6. Documents submitted with "Security Settings" shall not prevent this municipality from completing the review and permit issuance process. This may include but is not limited to submitting documents that are locked or use electronic signatures.

1.7. All plan sheets within the electronic document submittal shall be of a uniform size throughout the submittal.

1.8. Minimum electronic document size shall be:
   - 11" x 17" for minor commercial permits
   - 24"x 36" for commercial permits
   - 8-1/2" x 11" for reports or supporting design information documents. (Not applicable or allowed for the actual design drawings)

1.9. Text and design drawings on submittals may not use red or blue ink. The use of red or blue ink for markups and text is reserved for use by this office only.

1.10. Construction Floor Plans and Life Safety Plans shall be fully dimensioned and drawn to a minimum 1/8" = 1'-0" scale or greater, with overall dimensions and dimensions to key construction points shown.

1.11. The scale shall be indicated on each page and on each separate detail or elevation.

1.12. The plan sheets must include a Title Block, with the following minimum information:
   - Project address
   - Seal and signature from the registered design professional or designer, as required by state law regulating the design profession.
   - Sheet name
   - Sheet number

1.13. When required under state law, plans submittals must be prepared by a Registered Architect and/or Professional Engineer that is licensed to practice within the state. State of Texas Admin Law 137.59 requires an engineer shall practice only in their areas of competence. The AHJ is limited in their ability to assess competence of engineers to information provided on the Texas Board of Engineering website, the AHJ does not determine competence related to work scope outside of an area of competence assigned by the board.
2. GENERAL COMMERCIAL PLAN REQUIREMENTS

2.1. SUPPORTING CONSTRUCTION DOCUMENTS, based on the scope of the project:

- The construction documents must demonstrate compliance with the adopted edition of the International Energy Conservation Code (IECC), as adopted and amended by the City of Allen. The available options are: 1) meet the prescriptive requirements of IECC Chapter C4 or R4; 2) meet the requirements of the AHRI/ASHRAE 90.1 (Energy Standard for Buildings Except Low-rise Residential Buildings); 3) or provide an energy analysis of the proposed building. (IECC Section C401.2)

  NOTE: COMcheck or REScheck (multi-family) are accepted alternatives to achieve compliance. COMcheck or REScheck are a free energy conservation compliance software through the U.S. Department of Energy (US DOE).

- Geotechnical Report

  NOTE: Per IBC Section 1803.2 Exception the Building Official may waive this requirement if satisfactory data is provided from an adjacent geotechnical investigation. Please seek approval from the Building Official or Plans Examiner prior to submittal.

- Statement of Required Special Inspections completed by the owner or owner’s representative, and the Registered Design Professional in Responsible Charge (RDPiRC) as applicable to work scope.

- TDLR TABS number

- Asbestos Survey Report for all (commercial) projects where demolition is included in work scope.

2.2. COVER SHEET, with the following:

- Identify the project name and address.

- Provide a vicinity map.

- Provide brief scope of work narrative.

- A sheet or drawing index, reserved for smaller commercial projects, i.e. tenant finish outs. This is not practical for large complex commercial projects.

- Indicate the names of all Registered Design Professionals associated with the project. This must include the name of the firm, address, phone number, name of the point of contact and email address.
• List all adopted codes and standards applicable to the scope of work. (List only those codes used for this project. As an example, the International Residential Code or International Swimming Pool and Spa Code are not typically applicable to the scope of most commercial projects).

Refer to Land Development Code of Allen, Texas Section Article III for adopted codes and amendments: https://library.municode.com/tx/allen/codes/land_development_code

2.3 **Building Data**, with the following:

• International Building Code Occupancy Type(s)

• Building Construction Type

• Building Area (Square Footage). For additions, provide a square footage breakdown of existing area versus proposed area.

• Total Design Occupant Load (See Life Safety Plan requirements)

• Sprinkler System – Y/N

• Code Analysis – Indicate the allowable height and area of the proposed new building and provide calculations, per International Building Code Chapter 5.

• Plumbing Fixtures – Indicate the provided plumbing fixtures versus the required plumbing fixtures, as indicated by International Building Code Chapter 29.

2.4 **ARCHITECTURAL SITE PLAN**: The Architectural Site Plan must include the following information. Note, the Architectural Site Plan must match the Approved Site Plan stamped by the Planning & Zoning Department:

• Prepared to an approved architectural or engineering scale.

• Show the property boundary lines.

• Placement of the proposed building or structure within the property.

• Indicate the setback requirements of the Planning & Zoning Department.

• Placement of all existing buildings or structures on the property, with an assumed or imaginary property line between structures to establish fire separation distances and fire resistance rating requirements within the adopted edition of the International Building Code.
3.1 LIFE SAFETY / EGRESS PLAN with CODE ANALYSIS:

- The floor plan must show all fixed and moveable obstructions that the occupants would be required to navigate around to safely exit the tenant space or building.

- The Life Safety Plan must include a line indicating the path of egress travel from the most remote space to the point of exit or exit discharge, with the travel distance indicated in feet and inches. This line of travel must also show the travel path around fixed / moveable objects and the point of divergence in the egress path at the point of the common path of travel.

- Show the Occupant Load of each space including exterior occupied spaces, listing the correct occupant load factor in accordance with Table 1004.5, 2021 IBC.

- Show the EXIT and EXIT directional signage on this sheet and within the electrical design sheets.

- Show the location of the portable fire extinguisher(s) in accordance with Section 906 of the International Building Code.

- Clearly indicate and show the locations of all required fire-rated wall assemblies and horizontal rated assemblies. Large commercial projects must color code each component.

3.2 DOOR & DOOR HARDWARE SCHEDULE: This information is used to verify compliance with both the egress and accessibility prescriptive requirements. Note, data shall be provided for all existing doors and door hardware assemblies.

3.3 PARTITION / WALL SECTIONS: Wall section details must show the construction of the wall from the floor (bottom plate) to the top plate, and/or underside of the roof or suspended ceiling, with framing members and connections specified. Bracing must be specified if framing terminates under the suspended ceiling.

3.4 FIRE RESISTANCE RATED ASSEMBLIES: Where fire resistance rated walls or horizontal assemblies are provided, the plan set must include the UL design numbers and sections of the rated assemblies. This may be those assemblies listed and published from but not limited to UL or Gypsum Association.

3.5 LISTED THROUGH PENETRATION FIRESTOPPING ASSEMBLIES: Include where applicable to the design the UL design numbers and sections of the penetration firestopping assemblies. (2021 IBC Sec. 714.4.1.2 & 714.5.1.2)
3.6 **ROOF AND WALL SECTION DETAILS:** Roof and Wall Section Details, with the composition of the roof and wall construction and finish materials.

3.7 **ARCHITECTURAL ROOF LAYOUT**

3.8 **BUILDING SECTIONS:** Provide a lengthwise section and a complete section that bisects the building in the opposite direction, at a minimum; however, provide as many sections as necessary to accurately reflect the design.

3.9 **EXTERIOR ELEVATIONS:** Exterior view of all sides of the building showing height dimensions, exterior finish materials, and location of exterior roof access ladder as applicable to project scope.

Note, exterior elevations shall corroborate elevation drawings approved by Planning & Zoning.

3.10 **ENLARGED RESTROOM FLOOR PLANS:** Enlarge plan view of the restroom(s), which is prepared to a minimum ¼” = 1'-0" scale. This plan view must be fully dimensioned, with clearance space shown.

3.11 **INTERIOR WALL ELEVATIONS OF THE RESTROOMS:** Fully dimensioned interior wall elevations of the restrooms to show compliance with accessibility and finish requirements. These elevations shall show but not be limited to the height of the toilet, location of flush controls, grab bars, toilet paper dispenser, sink, mirror, soap dispenser, towel dispenser, etc. Note, where the valuation exceeds $50,000, compliance with accessibility will be determined by a RAS and governed by TAS regulations. Projects with a valuation less than $50,000 shall cite compliance with Chapter 11 of the IBC and the current adopted ICC A117.1.

4 **MECHANICAL DESIGN SUBMITTAL SHEETS (As required by project scope)**

4.1 Provide a complete mechanical system design. When required under state law, plans submittals must be prepared by a Professional Engineer demonstrating compliance with the current adopted International Mechanical Code. State of Texas Admin Law 137.59 requires an engineer shall practice only in their areas of competence as recognized by the State Board.

4.2 Complete Mechanical Equipment Schedule

4.3 Calculations for mechanical ventilation including ventilation source and rate.

4.4 Mechanical Floor Plan, with complete duct layout showing duct material, sizes, and types. Indicate the locations and types of any required fire and/or smoke dampers that coincides with the Life Safety Plan.

4.5 Mechanical Roof Plan, with locations of all equipment, intakes, and exhaust locations.
4.6 Provide details for any Type I and Type II hood system and grease exhaust systems in compliance with the International Mechanical Code. Drawings shall be signed and sealed by an Engineer of Record.

4.7 Indicate the source of make-up air and air balance requirements.

4.8 Provide a condensate drainage plan showing locations of the condensate drainage piping and discharge points.

4.9 Provide a fuel gas piping one-line diagram to show compliance with the sizing requirements of International Fuel Gas Code.

5 PLUMBING DESIGN SUBMITTAL SHEETS (As required by project scope)

5.1 Provide a complete plumbing system design. When required under state law, plans submittals must be prepared by a Professional Engineer demonstrating compliance with the current adopted International Plumbing Code. State of Texas Admin Law 137.59 requires an engineer shall practice only in their areas of competence. MEP plans shall be sealed by an engineer licensed in each respective discipline/area of competence as recognized by the State Board.

5.2 Plumbing fixture schedule

5.3 Plumbing floor plan, with the location and type of all plumbing fixtures shown.

5.4 Isometric plan of the Drain, Waste and Vent (DWV) system, with piping material types and sizes specified.

5.5 Isometric plan of the water supply system, with piping material types and sizes specified.

5.6 Roof plan providing the size calculations of roof drains, vertical conductors and leaders. The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on six (6) inches per hour rainfall rate.

5.7 Grease interceptor designs shall be prepared by an Engineer licensed in the State of Texas. Grease interceptors shall comply with the current adopted edition of the International Plumbing Code and Sec. 14-56 of the Allen Land Development Code (ALDC):
https://library.municode.com/tx/allen/codes/code_of_ordinances?nodeId=COOR_CH14UT_ARTIISEGE_S14-56MAFAOIGR

6. ELECTRICAL DESIGN SUBMITTAL SHEETS (As required by project scope)

6.1 Provide a complete electrical system design. When required under state law, plans submittals must be prepared by a Professional Engineer in compliance with the current adopted International Mechanical Code Engineer State of Texas Admin Law 137.59 requires an engineer shall practice only in their areas of competence. MEP plans shall be sealed by an engineer licensed in each respective discipline/area of competence as recognized by the State Board.
6.2 One-Line diagram of the service, feeder, and branch circuit panels. This diagram must also identify all grounding, with all raceway sizes and types, conductor sizes and types noted.

6.3 Provide a complete panel schedule(s)

6.4 Electrical load calculations

6.5 Indicate the wiring methods used.

6.6 Indicate the circuit and feeder conductor sizes and types.

6.7 Electrical power plan that identifies the layout of outlets with circuit number corresponding to the panel schedule.

6.8 Electrical lighting plan that identifies the layout of all light fixtures, exit signage and emergency exit lighting w/ circuit numbers corresponding to the panel schedule.

7. STRUCTURAL DESIGN SUBMITTAL SHEETS (As required by project scope)

7.1 Provide a complete structural design, which is prepared and sealed by Professional Structural Engineer. State of Texas Admin Law 137.59 requires an engineer shall practice only in their areas of competence.

7.2 Specify the soil bearing pressure in terms of pounds per square foot (PSF) for the design of the foundations.

7.3 Specify the dead load and live load applicable to the design of the roof structure.

7.4 On the roof plan indicate all concentrated dead loads. Example: Mechanical equipment, roof deck features, etc.

7.5 All construction materials must be identified within the plans. For light frame construction provide the wood size, species, and grade of all structural and framing members. Example: 2 x 8 Southern Yellow Pine #2, 4 x 4 Spruce-Pine-Fir #2, etc.

7.6 If shop drawings are submitted as supplements of the construction documents, each building component not prepared by the principle structural design professional shall include an acceptance letter signed and sealed by the principle structural design professional acknowledging that the shop drawings are in conformance with his/her design.

7.7 Provide a fully dimensioned Foundation Plan, with details.

7.8 Wall Framing / Shear Wall Plan

7.9 Roof Framing Plan

7.10 All structural sections and details for the design
PLAN REVIEW TIMEFRAMES:

Once the project has been accepted for review, the plan review general timeframes are as follows:

<table>
<thead>
<tr>
<th>Submittal Type</th>
<th>Approval / Initial Review Comments*</th>
<th>Subsequent Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Family</td>
<td>Up to 15 business days</td>
<td>10 - 15 business days</td>
</tr>
<tr>
<td>Minor Commercial*</td>
<td>Up to 15 business days</td>
<td>10 - 15 business days</td>
</tr>
<tr>
<td>Commercial</td>
<td>Up to 20 business days</td>
<td>15 – 20 business days</td>
</tr>
</tbody>
</table>

* The first day starts after the date of acceptance, which allows for internal routing

* Timeframes are based on first review. Times may be affected by the quality of the plans submitted by the Design Professional.

CURRENT ADOPTED CODES

- 2021 International Building Code, as amended by the City of Allen
- 2021 International Fire Code, as amended by the City of Allen
- 2021 International Mechanical Code, as amended by the City of Allen
- 2021 International Plumbing Code, as amended by the City of Allen
- 2021 International Residential Code, as amended by the City of Allen
- 2021 International Spa and Swimming Pool Code, as amended by the City of Allen
- 2021 International Energy Conservation Code, as amended by the City of Allen
- 2023 National Electrical Code
- 2021 International Fuel and Gas Code, as amended by the City of Allen
- 2021 International Existing Building Code, as amended by the City of Allen
- Refer to the Allen Land Development Code (ALDC) Texas Section Article III for all adopted codes and amendments: https://library.municode.com/tx/allen/codes/land_development_code