City of FRESNO

Planning and Development Department
Building and Safety Services Division
2600 Fresno Street, Third Floor, Room 3043
Fresno, CA 93721-3604

RECOMMENDED ELEMENTS FOR COMPLETE BUILDING PERMIT PLAN REVIEW

Use this checklist to assemble the materials required for your application when submitting in Accela. The following items will be reviewed in order to process your application, as applicable. If the plans are not legible, or do not contain the information listed below, your application can be deemed incomplete.

The drawings shall include plan views (foundation, floor, and roof), sections, elevations, and details. Minimum scaling as follows:

Plan View Section/Elevation	$^1/_8$" = 1'
Building Detailed Section/Elevation	¼" = 1'
Section Detail	½" = 1'

Note: smaller scales may be approved on a case by case basis, as determined by a licensed professional Architect or Engineer of Record.

1. ( ) The **Title Sheet** must contain all of the following information:

    i. Complete Code Analysis For each building, provide:

        a. Current code references.

        b. Use of Building/Structure.

        c. Occupancy classification.

        d. Allowable area.

        e. Allowable building height.

        f. Construction type.

        g. Mixed ratio and area increase justifications.

    ii. Index of all sheets.

    iii. Complete Design Criteria. The design criteria shall include lateral load parameters (wind & seismic) and gravity load (i.e. dead loads, live loads etc.).

    iv. List all Special Inspections.

    v. List all Deferred Submittals.

    vi. Designer's name, address, and contact information.

    vii. Indicate if the structure has, or will have fire sprinklers.

    viii. PROJECT SCOPE:

        a. New Construction.

        b. Alteration/Modernization.

c. Addition(s).

d. Relocation.

e. Reconstruction.

f. Rehabilitation (REH).

ix. Zoning.

a. Setbacks.

b. Buildable area.

c. Building heights.

d. Allowable area calculation.

e. Actual structure square footages are required; Note: This is usually different than allowable square footages used for Planning purposes.

x. Owner's Name.

a. Address contact information.

2. ( ) **Site Plan** showing all setbacks and trees

i. Is the project located in a flood hazard area, as defined by the local jurisdiction flood hazard map?

ii. Comprehensive site plan and enlarged site for scope of work.

iii. Identification of each building including name, use and occupancy.

iv. List the building type for buildings within the scope of work and adjacent buildings.

v. If project is not located in a flood hazard area, provide a flood hazard map adopted by the local authority supporting that position or supporting data per 2016 CBC, Section 1612A.3.

vi. Within the scope of work, fully dimension real and assumed property lines from the face of buildings.

vii. Accessibility site plan data.

viii. Accessible parking spaces identified and detailed within scope.

ix. Parking ratio calculations for each parking lot, within or impacted by the scope of work.

x. Accessible restrooms, drinking fountains, public phones and other required accessible features.

xi. Sidewalk and roadway delineated, with widths and surface materials identified within scope.

xii. Path of travel from public transportation stops, public way, accessible parking, accessible passenger loading zones, administration building, area of work, and accessible restroom(s) serving area of work.

xiii. Path of exit discharge to public way or to identified area(s) of safe dispersal.

xiv. Civil drawings with topographic lines, building outlines and elevations, grade information and hydrants utilized in fire water flow test.

xv. Show "Frontage Increase" area(s), dimensioned, perpendicular to face of buildings.

xvi. Show all fencing and gates, indicating required exit gates, panic hardware and widths.

xvii. Fire department access route, dimensioned, with fire hydrant and water supply data.

xviii. Post indicator valve(s), fire department connection(s) and fire hydrant(s) identified.

xix. All underground fire lines, including the length of each run and pipe sizes, thrust block locations, water tanks and capacities, fire pump locations, or other fire suppression resources, with details and calculations.

xx. Identify underground and above-ground utilities and drainage systems.

xxi. Location of automatic fire sprinkler riser(s) indicated and detailed.

3. ( ) **Demolition Plans:**

i. Provide a site plan indicating area of demolition and location of adjacent structures.

ii. Provide detailed demolition plan for partial demolitions.

4. ( ) **Floor Plans:**

i. Provide dimensioned drawings demonstrating access compliance, including restrooms, elevators, wheelchair lifts, stairs, ramps, door clearances, door swings, doors with panic hardware and all other required accessibility features.

ii. Accessible egress systems identified and detailed.

iii. Provide room labels, indicating use and room occupancy with load factor used for occupant load calculations identified (net or gross).

iv. For each room or occupant area, indicate net or gross floor area totals.

v. Provide occupancy loads for all areas not identified as a room.

vi. Provide an exit analysis, indicating exit widths and cumulative loads at exits, including exit discharge paths and widths.

vii. Indicate fire areas, fire barriers, fire partitions, fire walls, horizontal assemblies, smoke barriers, smoke compartments, and fire-resistance-rated shafts, corridors, exterior walls and openings.

viii. For deferred or submitted bleachers, include a detailed bleacher seating layout, identifying accessible seating and remaining floor area load calculations.

ix. Show fire-resistance-rated walls, with wall and detail schedules, including wall types, assemblies and assembly design number references.

x. Provide enlarged floor plans of restrooms, elevators, stairs, ramps, lifts, etc., cross-referenced and dimensioned.

xi. Elevator location in relation to nearest stair identified within 200 feet.

xii. Indicate fixed furniture and equipment layouts, detailing casework functions and accessibility features.

xiii. Locate new and existing portable fire extinguishers, indicating types and sizes.

5. ( ) **Architectural Details, Elevations, Sections, Roof Plans, and Reflective Ceiling Plans:**

i. Detailed interior elevations, exterior elevations, and sections.

ii. Fire-resistance-rated ceilings and floors identified and detailed.

iii. Door openings and wall penetrations located and detailed.

iv. Provide sky light locations, sizes and detail references.

v. Identify space activity and use for Access and Fire & Life Safety review.

vi. Provide door, hardware, windows and wall finish schedules, including details, panic hardware, fire doors, referencing any fire-resistance-rated and tempered glazing/window assemblies.

vii. Signage schedules, including details of room identification and way-finding signage.

viii. Casework details, including elevations, details, anchorage and required accessibility clearances and features.

ix. Identify soffits and other architectural projections.

x. Provide all mounted equipment brackets and detail references.

xi. Identify walk-in refrigerators and freezers with detail references.

xii. Identify roof classes for new and existing roofs.

6. ( ) **Structural Plans:**

i. Each plan sheet must be stamped & signed by the Civil Engineer or Structural Engineer responsible for preparing the plans.

ii. Current code references and risk category.

iii. Provide a design basis, indicating the materials and lateral system utilized.

iv. Complete Design Criteria. The design criteria shall include lateral load parameters (wind & seismic) and gravity load (i.e. dead loads, live loads etc.).

v. List all Special Inspections.

vi. List all Deferred Submittals.

vii. Foundation plan.

viii. Floor framing plan (if occurs). All MEP loads larger or equal than 200 lbs shall be listed on the floor framing plan.

ix. Roof framing plan. All MEP loads larger or equal than 200 lbs shall be listed on the roof plan.

x. Building sections and elevations (this may be linked to the Architectural drawings.

xi. Typical details (for applicable building materials).

xii. Specific details.

xiii. The details used, should be referenced on the plan view, sections or elevations.

xiv. Elevations of the lateral resisting system (i.e. moment frames, braced frames, shear walls etc.). Wood shear walls without any openings do not have to be elevated. However, perforated shear walls need to be shown on elevations

xv. Identify and detail concrete foundations.

xvi. Provide complete truss detailing, including open web manufactured trusses, unless deferred.

xvii. All windows, doors, skylights, ducts, pipes and other openings identified and detailed.

xviii. Locate mechanical and electrical equipment on plans, sections and elevations with unit weights on floor and roof framing plans.

xix. Provide typical details, schedules and notes, as applicable to scope of work.

7. ( ) **Structural Calculations:**

i. Provide two set of stamped and signed structural calculations.

ii. Include an index of all calculations.

iii. Provide page numbers for calculations.

iv. Provide a scope of work covered by the submitted calculations.

v. Provide complete design criteria:

a) Gravity loading (dead load, live load, snow load etc.).

b) Seismic criteria (SDC, Risk category, Importance factor, etc.).

c) Wind criteria (wind speed, exposure category etc.).

vi. Indicate utilized soil bearing pressure. If greater than 1,500 psf, provide substantiating geotechnical report.

vii. Indicate utilized lateral soil bearing pressure. If greater than 100 psf, provide substantiating geotechnical report.

viii. Provide allowable lateral soil pressure for the design of poles, signs or antennae.

ix. Provide structural plans for foundations, floors and roofs, coordinated and cross referenced to the submitted structural calculations.

x. Provide lateral drift calculations as required by code.

xi. Provide load calculations, including weight of mechanical and electrical units and fire sprinkler pipe.

xii. Provide calculations for mechanical equipment anchorage, including overturning.

xiii. Provide complete truss calculations and details for open-web trusses, unless deferred.

xiv. Provide chord and collector calculations.

xv. Provide lateral system calculations, including plywood shear walls, braced frames, moment frames, concrete masonry unit (CMU) and concrete shear walls.

xvi. Provide maximum diaphragm dimension ratio for wood diaphragms.

xvii. Provide calculations for lateral floor and roof diaphragms.

xviii. Identify rigid diaphragms and provide calculations for accidental torsion consideration.

xix. Provide dynamic analysis calculations for buildings with structural irregularities, in accordance with ASCE Table 12.6-1.

xx. Provide calculations for site structures: light poles, signs, antennas, retaining walls, etc.

xxi. For designs by computer analysis, include a representative hard copy with input and output files on a CD.

8. ( ) **Geotechnical Report, two copies of the report**

9. ( ) **Electrical Plans:**

i. switches, plugs, lights, fixture and equipment locations and layouts.

ii. Wire size, conduit size,

iii. panel calculations,

iv. single line drawing service and feeders are required for ALL commercial projects.

10. ( ) **Mechanical Plans:**

i. Location of all rated assemblies identified

ii. Mechanical unit locations shown, anchorage details referenced

iii. Mechanical equipment schedule, including equipment CFMs and unit operating weights

iv. Anchorage details for ducts and piping

v. Plumbing fixture schedules

vi. Mechanical and piping wall penetrations at fire-resistance-rated walls, shear walls, headers and lintels to be identified with detail references

vii. Plumbing layout coordinated with architectural plans and accessible fixtures identified

viii. Grade level gas shut-off valve location indicated at all buildings

ix. Provide the location of all fire/smoke dampers, supply/return registers and ducting with details cross referenced

x. Indicate fume hood system including exhaust duct identified and detailed

xi. Type I or II kitchen hood fire suppression system identified and detailed

xii. Indicate any special systems, including smoke removal, special venting, dust collection and all interfacing equipment identified and detailed

xiii. Provide domestic water and gas load calculations with pipe sizes identified

xiv. Title 24 energy calculations

11. ( ) **Plumbing Plans:**

i. Fixture layout, water,

ii. DWV and gas pipe sizing.

iii. Gas Pipe Sizing,

iv. Water supply pipe material and size,

v. Drainage waste & vent pipe material and size,

vi. Isometric drawings are required for Commercial

12. ( ) **Waterproofing Plans** (if basements are proposed)

13. ( ) **Title 24:**

i. Energy Calculations with all required features called out on the plans and Energy Calculations match Plans

ii. Energy Compliance Documentation Submittal Checklist with signatures

iii. Title 24 Energy Compliance forms with appropriate signatures on drawings

iv. Title 24 Energy Report (8 1/2 inch x 11 inch format)

14. ( ) **California Green Building Code Mandatory Measures (No point system or Tiers required).**

15. ( ) **Tree Protection Plan**; Note: Tree protection must be installed and approved by the Town Arborist prior to any permits being issued.

16. ( ) **Completed Special Inspection Agreement Form when required by Structural Engineer or City Builidng Department**.