



City and County of Honolulu

SUPPLEMENT TO

The Building Permit Commercial Application Checklist

Department of Planning and Permitting

The purpose of this supplement is to provide a brief explanation of the requirements associated with the commercial application checklist. Please refer to applicable jurisdictions, code sections, rules, ordinances and statute for more detailed information.

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GENERAL PROJECT DATA (DRAWN TO SCALE AND DIMENSIONED)

SECTION 1.0 — General Project Data

Construction documents

- 1.1 Required No. of sets of plans: _____
Provide minimum of three (3) copies (one additional copy required for Department of Health, when applicable). If extra copies are provided, multiple branches may perform certain plan review simultaneously.
- 1.2 Required Cover sheet title block
Generally, the cover sheet includes the following information:
- Project name.
 - Project address.
 - Map and tax lot/state Tax I.D. number, TMK.
 - Owner's name, address, and phone number.
 - Designer/preparer (include address, email, phone number, fax number, and contact person).
 - Date of preparation (or revision).
- 1.3 Required Cover sheet vicinity map
Generally, the vicinity map includes the following information:
- North arrow.
 - Locate the parcel and distance between existing and proposed buildings to all adjacent residences, properties, and areas.
- 1.4 Required Cover sheet plan index
Generally, the plan index identifies the location of the specific information to be found in the plan set. Examples include:
- C for Civil
 - A for Architectural
 - S for Structural
 - M for Mechanical
 - E for Electrical
- 1.5 Required Statement pertaining to the design standard of accessibility
Provide a brief explanation about the standard.
Example:
"Conformance with the design and construction requirements of the Americans with Disabilities Act Accessibility guideline"
- 1.6 Required Table of abbreviations and symbols
Provide a list of abbreviations and symbols used in plans.
Example: A/C Air conditioning
AB Anchor Bolt

GENERAL PROJECT DATA (DRAWN TO SCALE AND DIMENSIONED)

SECTION 1.0 — General Project Data

1.7 Required Summary of applicable code(s)

The building code summary generally provides a minimum of following information:

- Effective code.
- Type of construction.
- Fire sprinkler information.
- Occupancy group classification(s).
- Occupant load.
- Building code floor area.
- Total building area.
- Number of stories.
- Percentage of open perimeter.
- Percentage of height reduction.
- Fire-resistance rating of vertical opening enclosures.
- Type of HVAC system and number of floor served.
- Number of exits.
- LEED compliance, for state or city projects.
- Protection of openings, indicate if:
 - Unprotected.
 - Protected.
 - Meet exceptions.

1.8 Required Zoning code summary

Show following items where applicable:

- Tax Map Key number.
- State Land Use.
- Special Design District, including HCDA.
- Zoning.
- Proposed uses.
- Verification that the proposed use is allowed in the site's zoning district.
- Setback requirements, including street widening setbacks (if applicable).
- Lot area.
- Building area (lot coverage).
- Height of building.
- Floor area ratio.
- Floor area bonus calculations.
- Optional yards and replacement area calculations.
- Allowable floor area.
- Proposed floor area.
- Total building area.
- Parking/loading requirement.
- Flood Zone.
- Minimum finished floor elevation (if applicable).
- Buffer requirements.

GENERAL PROJECT DATA (DRAWN TO SCALE AND DIMENSIONED)

SECTION 1.0 — General Project Data

- Signage requirements.
- Landscaping requirements.
- Open space.
- Height limits.
- Number of units and unit size (if residential).
- List all discretionary permits associated with project.
- Article 5 special requirements.
- LEED compliance requirement (if City or State project).

1.9 Required Location map
Show property line where applicable

1.10 Required Professional stamp and signature
Consultant must also indicate his or her license expiration date.

1.11 P NA Summary/List of Special Inspector/Structural Observation item(s)

1.12 P NA Deferred submittal summary

Supporting Documents

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CIVIL DATA (DRAWN TO SCALE AND DIMENSIONED)

SECTION 2.0 — CIVIL DATA (IF APPLICABLE)

Construction documents

2.1 Required Symbols legend

2.2 Required Civil site/plot plan (**All site and floor plans in the set of drawings shall have a consistent North Arrow orientation and drawn to scale**)

Show following items where applicable:

- Civil notes (may be on separate sheets if necessary).
- North arrow.
- Actual property lines with dimensions.
- Accurate citing of new and existing buildings.
- Building separations.
- Existing/proposed landscaping in required yards.
- Associated properties.
- Street widening.
- Easements (label accordingly).
- Optional yards and replacement area(s) should be clearly marked on plans.
- Bonus area(s) should be color or shade-coded (open space/arcades).
- Site demolition (may be on a separate sheet).
- When in a Flood Hazard Zone and/or Flood Hazard District boundaries, show following items where applicable:
 - Flood Hazard District boundaries.
 - Shoreline setbacks.
 - Certified shoreline.
 - Spot elevations based upon the North American Vertical Datum (NAVD), 1988.
 - Established flood elevations as shown on the Flood Insurance Rate Maps (FIRM) from the Federal Emergency Management Agency (FEMA).

2.3 Required Site utility plan (piping profiles, connection to city utilities or existing site utilities, and coordination with plumbing floor plans)

Show following items where applicable:

- North arrow.
- Easements.
- Location and sizes of existing and proposed gas lines.
- Location and sizes of existing and proposed potable water, sanitary and storm drain lines.
- Catch basins, rain drains, footing drains, backwater valves, sanitary sewer lines, water lines including pipe locations and sizes, irrigation supply, storm water detention details including piping, filters, interceptors, etc.
- Existing and proposed water distribution system location with pipe sizes shown, and valve, hydrant, and meter locations indicated.
- Water service details.

CIVIL DATA (DRAWN TO SCALE AND DIMENSIONED)

SECTION 2.0 — CIVIL DATA (IF APPLICABLE)

- Backflow prevention assembly locations and details.
- Fire suppression supply lines locations and sizes, including fire department connection monuments.
- Manhole elevation and elevation of lowest floor with plumbing fixtures (Reference [Section 6.0 – Plumbing Data](#)).
- Location of all utility vaults with details.
- BWS flow requirements.
- Water development fee estimate calculation.
(Signature block for Chief, Capital Projects Division, BWS; Chief, Civil Engineering Branch, DPP; and Chief, Traffic Review Branch, DPP)
- Utility line profiles with appropriate signature blocks.
- Miscellaneous civil details.

2.4 Required Driveway/side walk details

2.5 Required Parking layout

If parking on grade, show the following items where applicable:

- Provide Parking layout in which differentiate existing vs. new stalls, length, and width of stall.
- Show wheel stops & car overhang aisle widths, typical parking angles, driveway width, and paving material.
- If tandem employee parking, only 25% of the required parking can be in tandem. Employee parking spaces must be labeled, tandem parking to be performed by an attendant at all times, provide a note on plan and attach a copy of the DPP approved recorded restrictive covenant to plans, and tandem parking assigned to a dwelling unit must be noted on plan.
- Provide parking count summary showing the minimum requirement and the proposed quantity of stalls being provided.

2.6 Required Grading plan

Show following items where applicable:

- North arrow.
- The preparation (and revision) dates of the drawings.
- Property limits and existing and proposed contours and area drainage features on the site.
- Detailed plans of all surface and subsurface drainage devices, water quality systems, walls, cribbing, dams, and other protective devices to be constructed with, or as a part of, the proposed work, together with a map showing the drainage area and the estimated runoff of the area served by any drains.
- Location of all buildings or structures on the property where the work is to be performed. The location of all buildings or structures on land of adjacent owners that are within 15 feet (4572 mm) of the property, or that may be affected by the proposed grading operations. Provide finished floor and finished grad elevations.

CIVIL DATA (DRAWN TO SCALE AND DIMENSIONED)

SECTION 2.0 — CIVIL DATA (IF APPLICABLE)

- Recommendations included in the soils engineering report and the engineering geology report shall be incorporated in the grading plans or specifications. When approved by the building official, specific recommendations contained in the soils engineering report and the engineering geology report, which is applicable to grading, may be included by reference.
- Preparation dates of the soils engineering and engineering geology reports together with names, addresses, and telephone numbers of the firms or individuals who prepared the reports.
- Location(s) of site retaining walls, including footing and wall drainage.
- Designated 100-year flood plain from an approved source with elevation information, wetland boundaries, jurisdiction required buffer lines and flood plain boundaries, sensitive areas, creeks, and other identified areas of concern.
- Existing utilities and easements.

2.7 Required Erosion-control plan

If the erosion control measures, and the grading and the site retaining wall features can be clearly shown, the erosion control plan may be combined with the grading plan.

Show following items where applicable:

- General vicinity of the proposed site.
- Property limits, topography, and existing and proposed contours.
- Existing drainage patterns and existing drainage systems on and immediately up and downstream of the site.
- Designated 100-year flood plain from an approved source, with elevation information, wetland boundaries, jurisdiction required buffer lines and flood plain boundaries, sensitive areas, creeks and other identified areas of concern.
- Specific erosion control measures to be used, their locations, and construction details (gravel construction entrance, wheel wash details, silt fence details, straw bale sediment barrier details, sediment pond details, bio-filter bags inlet protection, etc).
- Additional requirements for wet weather grading and erosion control measures control.
- A note indicating the standard or ordinance used to design the erosion control measures (consult the local jurisdiction for specific requirements).
- A note that specifies dust control measures to be taken during grading activities and building construction.

2.8 P NA Fire-hydrant is within 150 ft of a new building (on or off site)

CIVIL DATA (DRAWN TO SCALE AND DIMENSIONED)

SECTION 2.0 — CIVIL DATA (IF APPLICABLE)

- 2.9 P NA Water feature & fishpond piping plan, including piping schematic (exception: self-contained recirculation systems with no provision for make-up water, drain discharge and overflow discharge)
- 2.10 P NA See further requirements from CEB checklist

Supporting Documents

- 2.11 P NA Storm-water calculations
- 2.12 P NA Site retaining-wall structural calculations
- 2.13 P NA "Assurance of Compliance" with environmental rules

LANDSCAPING (DRAWN TO SCALE AND DIMENSIONED)

SECTION 3.0 — LANDSCAPING DATA (IF APPLICABLE)

Construction documents

- 3.1 Required Site plan showing Land Use Ordinance require yard and landscaping **(all site and floor plans in the set of drawings shall have a consistent North Arrow orientation and drawn to scale).**
- 3.2 Required Plant material schedule
- Plant name and species.
 - Plant size, caliper and truck height of trees, height of hedge.
 - Plant spacing.
- 3.3 Required Irrigation plan or hose bibs within 50 feet of landscaping area(s)
- Connection to city utilities or existing site utilities and coordination with plumbing floor plans.
 - Backflow prevention assembly locations and details.

ARCHITECTURAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 4.0 — ARCHITECTURAL DATA

Construction documents

4.1 Required Symbol legend

4.2 Required Wall type legend

4.3 Required Interior finish schedule

4.4 Required Floor plan(s) (**all site and floor plans in the set of drawings shall have a consistent North Arrow orientation and drawn to scale**)

Indicate proposed permitted use as listed in the LUO, if usage differs, provide dimensions from outside face of exterior walls to center line of interior walls, floor area for each use and the common areas.

Show following items where applicable:

- North arrow.
- Proposed use or occupancy of each room or area.
- Dimensions of each room or area.
- Location(s) of fire resistive walls.
- Door and window identification.
- Location(s) of all permanently attached items (plumbing fixtures, cabinets, counters, etc.).
- Location(s) of all required exits.
- For Tenant Improvements (TI's), additions, or alterations show the location of work within the building.

4.5 Required Architectural site/plot plan (**all site and floor plans in the set of drawings shall have a consistent North Arrow orientation and drawn to scale**).

Show following items where applicable:

- North arrow.
- Actual property lines with dimensions.
- Accurate citing of new and existing buildings.
- Building separations.
- Existing/proposed landscaping in required yards.
- Associated properties.
- Street widening.
- Easements (label accordingly).
- Optional yards and replacement area(s) should be clearly marked on plans.
- Bonus area(s) should be color or shade-coded (open space/arcades).
- Site demolition (may be on a separate sheet).
- When in a Flood Hazard Zone and/or Flood Hazard District boundaries, show following items where applicable:
 - Flood Hazard District boundaries.
 - Shoreline setbacks.
 - Certified shoreline.
 - Spot elevations based upon the NAVD, 1988.

ARCHITECTURAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 4.0 — ARCHITECTURAL DATA

- 4.6 P NA Building elevations (not required on interior renovations)
- Indicate existing and finish grades, finished floor elevations, building height, and height setback envelopes. If the building is in a special design district, color samples may be required.
 - Flood elevations.
- 4.7 P NA Roof plans (not required on interior renovations)
- Show following items where applicable:
- North arrow.
 - Roof slope.
 - Crickets.
 - Parapets.
 - Location of rooftop mechanical equipment.
 - Location of all rain drains, overflow drains, scuppers, etc.
 - Insulation details, if applicable.
 - Roof covering material and classification.
 - Rooftop screening for mechanical units.
 - Roof access such as stairs, scuttles, or ladders.
 - Personnel protection such as catwalks and/or guardrails.
 - Cross sectional details for attic ventilation.
 - Roof access details
 - Indicate the roof access location(s). If access is by a hatch, indicate hatch size, location, and note ladder or stair access. If access is by a permanently affixed exterior ladder, indicate its location. Indicate the locations of all parapet ladders and ladders serving adjacent roofs which are at different elevations. Provide detail information on guardrails, catwalks, personnel protection, etc. Check with OSHA the safety requirements for permanently affixed ladder requirements.
- 4.8 P NA Transverse and longitudinal cross sections
- Show following items where applicable:
- Foundation construction.
 - Wall and floor framing.
 - Roof construction.
 - Insulation details, include R-Value as applicable.
 - Exterior wall and roof sheathing.
 - Interior and exterior finish materials.
- 4.9 P NA Fire safety plan
- Show following items where applicable:
- Occupant load & egress capacity calculations.
 - Egress Plan.
 - Gross floor area.
 - Distance between exits.

ARCHITECTURAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 4.0 — ARCHITECTURAL DATA

- Maximum diagonal.
- Minimum number of exits.
- Travel distance.
- Location of existing signs.
- Fire Sprinkler.

4.10 P NA Fire-rated construction plans
Show following items where applicable:

- Occupancy.
- Fire wall.
- Fire barrier.
- Corridor.
- Smoke barrier.
- Horizontal exit.
- Shaft exposure.
- Exit passage.

4.11 P NA Fire-rated construction details

- Design reference numbers for fire rated walls, floor/ceiling assemblies, and roof/ceiling assemblies, fire protection of light fixtures penetrating the fire rated floor, and roof assemblies.
- Fire stop at penetrations of fire rated assemblies.
- Location and types of portable fire extinguishers.

4.12 P NA Parking layout (Reference [Section 2.5](#))

4.13 P NA Existing/demolition drawings separate from the proposed/new work

4.14 P NA Interior elevations

Show following items where applicable:

- Door and window locations (door and window locations are typically dimensioned on the floor plan and the sizes are usually called out on the door and window schedules).
- Interior floor, wall and ceiling finishes.
- Permanently attached items such as plumbing fixtures, cabinets, counters (casework), etc.

4.15 P NA Exterior elevations – provide all exterior elevations

Show following items where applicable:

- Compass direction of view.
- Door, window locations and sizes.
- Exterior finish materials.
- Building height, with dimensions to each floor, eaves, and ridge-line or parapet.
- Exterior grade adjacent to project.

ARCHITECTURAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 4.0 — ARCHITECTURAL DATA

4.16 P NA Wall type sections and details

Show following items where applicable:

- Wall construction method.
- Indication if wall type is fire rated or not.
- If wall type is fire rated, provide the listing agency name, listing number, fire resistance rating in hours, and construction verbiage from listing.
- Insulation methods to meet building envelope requirements.
- Insulation methods to meet sound transference control, if required by LUO.
- Percentage of open perimeter (parking garages).
- Details showing seismic bracing requirements for suspended ceilings.

4.17 P NA Reflected ceiling plan(s)

Show following items where applicable:

- North arrow.
- Location(s) of exit signs (Reference electrical drawing).
- Location(s) of ceiling lights.
- Attic access location and size.
- Fire sprinkler plan (Reference [Section 6.6](#)).

4.18 P NA Window and Door schedule (with hardware)

Show following items where applicable:

- Sizes (height and width).
- Construction (material).
- Type of closures.
- Hold opens.
- Fire Rating.
- Gaskets.
- Size and type of glazing in the door.
- Exterior door U-Values.
- Special features (such as louvers, grills, undercut, etc.).
- Type and thickness of glass.
- Hardware if separate specifications are not provided.

4.19 P NA Furniture plan

Supporting Documents

STRUCTURAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 5.0 — STRUCTURAL DATA (IF APPLICABLE)

Construction documents

5.1 Required Structural cover sheet

Generally, structural cover sheet provides the following information:

- Name of engineering firm and engineer of record, postal service address, email, telephone number, and fax number of firm.
- Preparation (or revision) date of sheet.
- Identify the codes used for design (specify edition dates).
- Identify the design loads to include dead loads, live loads, all occupancy importance factors, wind speed, wind exposure, seismic design criteria including seismic zone, and special loads.
- General structural notes, including material specifications.
- Structural design parameters and assumptions.
- Notes indicating if building is designed as open, enclosed, or partially enclosed.
- Special inspection matrix indicating items which are to be inspected. The firm is responsible for inspection (soil engineer, special inspection agency, etc.), stage of construction when items will be inspected, and whether inspection will be continuous or periodic.
- Structural observation matrix indicating item to be observed, person responsible for the observation, and stage(s) of construction when observation(s) will be performed.
- Deferred submittal matrix.
- Geotechnical report verification with firm name, names of preparers, date of report, address, and telephone number of preparers.
- Notes indicating soil classification (Unified Soil Classification), limiting bearing capacity, design lateral loading for retaining walls (active, at-rest, and passive), pile design and construction recommendations, and other design, and construction requirements specified in the geotechnical report.

5.2 Required Symbol legend

5.3 Required Foundation plan and details, if new or addition

Provide following information where applicable:

- North arrow.
- Size and location of under-slab drainage piping and foundation wall drainage systems, the point of outfall or discharge for the drainage, and references to details.
- Under-slab drainage piping and foundation wall drainage system details to match references.
- Sizes and locations of slab and foundation wall penetrations for pipes and conduits, and references to penetration details.
- Slab and foundation wall penetration details to match references.

STRUCTURAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 5.0 — STRUCTURAL DATA (IF APPLICABLE)

- Design soil bearing pressure, pile capacity and lengths, lateral design loads, backfill requirements, and footing embedment requirements (unless shown on Structural Cover Sheet).
- Footing and foundation wall layout location dimensions, grid lines, and references to cross-sections and construction details.
- Step foundation locations and references to details.
- Step foundation details to match references.
- Details for footings on or adjacent to slopes or alternative engineered setbacks and clearances to slopes.
- Top of slab and top of foundation elevations.
- Footing layout location and schedule.
- Column location and schedule.
- Locations of shear walls, anchors and hold-downs, braced frames, moment frames, embedded base-plates, and references to details for each type.
- Details for shear walls, anchors and hold-downs, braced frames, moment frames, and embedded base-plates to match references.
- Control joint and expansion joint location and details.
- Vapor barrier and ground cover details.
- References to, and details for, elevator pits, fireplaces, special equipment and any other architectural and structural features.

5.4 P NA Floor framing plan, identify shear and bearing walls (**all site and floor plans in the set of drawings shall have a consistent North Arrow orientation and drawn to scale**)

Provide following information where applicable:

- North arrow.
- Locations, sizes, spacing, and material types for all structural members supporting a floor.
- Columns, shear walls, bearing wall, and braced and moment frame locations, with references to type and size. Provide references to details.
- Details of columns, shear walls, bearing walls, braced and moment frames to match references.
- Beam to column connections and references to details.
- Details of beam and column connections to match references.
- References to connection details for attachment of posts and columns to piers and bases.
- Details of connections for posts and columns, to piers and bases, to match references. References to cross section and details of decking (wood frame, metal, concrete).
- Cross sectional and construction details of decking (wood frame, metal, and concrete) to match references.
- Fastener schedule and hold-down schedule.

STRUCTURAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 5.0 — STRUCTURAL DATA (IF APPLICABLE)

- References to floor/shaft details (including elevator, dumbwaiters, mechanical, etc.).
- References to exterior balcony details.
- Details of floor/shaft details (including elevator, dumbwaiters, mechanical, etc.) to match references. Exterior balcony details to match references.
- Seismic and/or expansion joint locations and references to details.
- Details of seismic and/or expansion joints to match references.

5.5 P NA Roof framing plan (identify shear and bearing walls)

Provide following information where applicable:

- North arrow.
- Columns, shear walls, bearing walls, and other framing member locations, with references to types and sizes, and references to roof connection details.
- Details for columns, shear walls, bearing walls, other framing members, and roof/wall connections to match references.
- Diaphragm sheathing materials and details including a diaphragm nailing schedule.
- Roof framing members and support beam types, sizes, and locations and references to details.
- Details for roof framing members and support beams to match references.
- Beam to column connections and details.
- Truss details.
- Rafter tie details.
- Sheathing details.
- Drag struts and strapping with locations shown and references to details.
- Drag struts and strapping details to match references.
- Mansard details.
- Attic and roof access framing.
- Draft stop location and construction details.
- Parapet top elevations and references to details.
- Parapet construction details, to match references.
- Scupper and roof drain locations and references to details.
- Scupper and roof drain details to match references.
- Elevator penthouse location and references to details.
- Elevator penthouse construction details to match references.
- Mechanical well, equipment screen-walls, equipment locations and references to details.
- Mechanical well construction details, equipment screen-wall construction and attachment details, and equipment.
- Installation details to match references.
- Seismic and expansion joint locations and references to details.
- Seismic and expansion joint details to match references.

STRUCTURAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 5.0 — STRUCTURAL DATA (IF APPLICABLE)

5.6 P NA Structural elevations (Reference [Section 8.1](#))

Provide following information where applicable:

- Compass direction of view.
- Building height, with dimensions to each floor, eaves, and ridge-line or parapet.
- Grade beam elevations (North arrow orientation).
- Special wall framing elevations and references to details.
- Special wall framing details to match references.
- Braced and moment frame elevations with references to connection details.
- Braced and moment frame connection details, to match references.
- Shaft framing and references to details (to include elevator).
- Shaft framing details to match references.
- Elevation drawing and details of bearing walls, shear walls, diaphragms, stairs, roof framing, etc.

5.7 P NA Structural details and cross sections

Provide following information where applicable:

- Footing, foundation, and wall details showing reinforcement.
- Beam, slab, column, and girder details and schedules.
- Pile details and schedule.
- Column and base plate connection details including anchors and hold-downs.
- Column to beam, column to column, and other framing member connection details.
- Foundation, wall, floor, and roof construction and framing details.
- Details of bolted and welded connections.
- Structural details for stairs and stair connections to structure.
- Beam connections schedule.
- Beam to column schedule.
- Details of floor to wall and wall to roof connections.

Supporting Documents

5.8 P NA Structural calculations must include analysis for gravity, lateral, and special loads

MECHANICAL/PLUMBING SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 6.0 — MECHANICAL/PLUMBING DATA (IF APPLICABLE)

Construction documents

6.1 Required Symbol legend and code references

6.2 Required Plumbing Floor and Roof plans (**all site and floor plans in the set of drawings shall have a consistent North Arrow orientation and drawn to scale**).

Provide following information where applicable:

- North arrow.
- Complete building layout with dimensions showing all shafts, rooms and areas, and their uses.
- Location and rating of all fire resistive construction such as walls, floors, shafts, and smoke control walls.
- Locations of all equipment related penetrations in fire resistive construction.
- Location and size of all plumbing equipment, fixtures, accessories, waste, vent, water, fuel and medical gas piping.
- Underground piping location(s) and size(s) including depth, and distance to footings, piers, pilings or other structural – load bearing elements.
- Isometric piping diagrams coordinated with plumbing floor plan.
- Swimming pool equipment and piping plans including piping schematic.

6.3 Required Mechanical Equipment schedule(s)

Provide following information where applicable:

- A complete list of all mechanical equipment, including the weight of each piece of equipment.
- Equipment performance rating.
- BTU and/or kilowatt rating of each piece of equipment so rated.
- Equipment listing information, including electrical power requirements.

6.4 P NA Compliance Block for Mechanical components of ROH Chapter 32 Building Energy Efficiency Standards

6.5 P NA HVAC equipment and duct plan(s)

- This information may be included on the floor plan(s) and/or roof plan as appropriate if those plans are of sufficiently large scale and detail to be clear and understandable.
- Plans indicating the location of HVAC equipment and ductwork typically include the following information:
 - North arrow.
 - Complete building layout with dimensions showing all shafts, rooms and areas, and their uses.
 - Location and rating of all fire resistive construction such as walls, floors, shafts, and smoke control walls.

MECHANICAL/PLUMBING SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 6.0 — MECHANICAL/PLUMBING DATA (IF APPLICABLE)

- Provide complete details and specifications for all penetrations of fire-rated construction. Include listing information, manufacturer's installation instructions, and construction details for all fire-stopping material(s) and fire/smoke dampers.
- Locations of all HVAC equipment including duct smoke detectors for equipment shut down.
- Locations of all equipment related penetrations in fire resistive construction.
- Outside air calculations to show compliance with code required quantities based on uses and occupant load.
- Size and location of all ductwork, include fire, smoke and volume damper locations. Indicate appropriate fire ratings for penetrations through fire resistive construction.
- Locations for all exhaust, transfer, supply and return registers and indicate CFM requirement at each register.
- Locations of all fire/smoke dampers, indicating appropriate fire ratings for penetrations through fire resistive construction.
- Smoke control design method. Location of all equipment required for proper operation of the smoke control system. Location of smoke barriers where part of a smoke control system. Sequence of operation explaining system operation when smoke is detected.
- Condensate drain piping extending from the equipment to the point of discharge.
- Sequence of control narrative and schematic explaining HVAC system operation.

6.6 P NA Fire sprinkler plan with fire sprinkler head locations (Reference [Section 4.17](#))

- Occupancy hazard of the designated area to have sprinklers.
- Static and residual water pressure available on site or at the nearest fire hydrant.
- Location and detail of the alarm riser and control valve piping.
- Location and detail of the fire department connection.
- Reflected ceiling plans showing at a minimum the fire sprinkler coverage of the protected area(s). Clearly identify new and existing (removed or remaining) heads.
- Fire sprinkler head types.
- Provide the following statement on plans:
“Note: Two (2) sets of complete working plans and hydraulic calculations stamped and signed by a Hawaii licensed mechanical engineer shall be submitted, as applicable, to the fire protection special inspector (FPSI) for code compliance review. One (1) set with the FPSI approval stamp shall be submitted to the DPP Building Division along with the FPSI final report/letter prior to closing of the building permit.”

MECHANICAL/PLUMBING SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 6.0 — MECHANICAL/PLUMBING DATA (IF APPLICABLE)

- 6.7 P NA Kitchen equipment plan
- This information may be included on the floor plan if that plan is of sufficiently large scale and detail to be clear and understandable.
 - Plans that indicate the locations of all kitchen equipment and ductwork/vents, typically including the following information:
 - Location of all kitchen equipment including ranges, cook tops, hot plates, steam tables, dishwashers, hoods, etc.
 - Location and size of all ducts/vents serving kitchen equipment.
 - Provide an equipment schedule listing all kitchen equipment.
 - Provide location, type, and size of plumbing connections required for each equipment.
 - Location and type of fire suppression system for kitchen hoods and ducts.
- 6.8 P NA Standpipe: Piping on floor plans and piping diagrams including fire department connections
- 6.9 P NA Fire Department Connections
- Fire hydrant is within 150 ft of a new building (on or off site).
 - Standpipe and sprinkler connections.

Supporting Documents

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ELECTRICAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 7.0 — ELECTRICAL DATA (IF APPLICABLE)

Construction documents

- 7.1 Required Electrical symbol legend
- Symbol legend: electrical symbol list shall be provided for other than simple minor electrical work.
 - Electrical notes provide notes for all penetrations of fire-rated construction; include listing information, manufacture's installation instructions, and construction details for all fire-stopping material(s) and fire/smoke dampers.
 - Reference code.
- 7.2 Required Power and Signal plan(s)
Show following items where applicable:
- North arrow.
 - Nature and extent of the proposed work.
 - Use or occupancy of all rooms or areas.
 - Location(s) of classified (hazardous) areas. For hazardous areas (as defined by the National Electrical Code), areas shall be clearly delineated on plans and indicated with the hazard zone classification, and wiring of equipment shall be shown to match classification.
 - Location(s) of exit signs, smoke detections and egress lighting.
 - Wiring method(s).
 - Light fixtures, switch, equipment locations with fixture type, receptacle locations with voltage, amperage and mounting height indicated, electrical switchboards, panel boards, and cabinets labeled whether new or existing.
 - Electrical service equipment elevations shall be provided when new or upgraded.
 - Fire alarm devices: for Fire Alarm work in existing buildings, connection of new devices to existing systems shall be shown with applicable notes provided for Fire Department approval.
 - Provide a note on the drawings, *"All exterior light fixtures shall be designed/shielded to prevent direct illumination onto adjacent lots and/or right-of-ways,"* whenever applicable.
 - Provide the complete elevation detail; properly label the exiting grade and the dimension of the height of light poles to its highest point and its setback from the property lines.
 - Conduit location(s) including depth, and distance to footings, piers, pilings or other structural – load bearing elements.
 - Conduit size and material.
 - Conduit insulation and/or sleeve material.
 - Service UFER ground attachments that will be inaccessible for inspection after cover.

ELECTRICAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 7.0 — ELECTRICAL DATA (IF APPLICABLE)

- 7.3 Required Electrical load calculations
Provide electrical load calculations for feeders and for the total service.
- 7.4 Required One-Line diagram
The One-Line diagram typically includes the following information:
- Type(s) and sizes of service equipment, feeders, panels, transformers, etc.
 - Service grounding, bonding.
 - Conduit and wire insulation types and sizes.
 - Service capacity.
- 7.5 Required Feeder riser diagram
Where feeders are added to an existing service, provide available Fault Current at the end of feeder. If the calculations indicates a current greater than 10 KAIC (thousand amps interrupting current), show that panel and breakers are fully rated, or provide series rated information.
- 7.6 Required Available fault current information
For new or altered service, provide available fault current information with supporting documentation from the utility company.
- 7.7 Required Light fixture schedule
Lighting Fixture schedule shall be provided to determine conformance to Building Energy Efficiency Standards.
- 7.8 Required Panel schedule(s)
- Provide on the plans, a panel schedule that lists all circuits and the load(s) installed.
 - Panel board ratings (i.e. voltage, amperage, phase and short circuit ratings) to be shown and shall be coordinated with One-Line diagram.
- 7.9 Required Fire alarm devices
For Fire Alarm work in existing buildings, connection of new devices to existing systems shall be shown with applicable notes provided for Fire Department approval.
- 7.10 P NA Site electrical plan
Show following items where applicable:
- North arrow.
 - Site lighting and other exterior electrical installations.
 - Location of the electrical service.
 - Location of all above and below ground utilities.
 - Location of the emergency power supply (generator, storage batteries, etc.) if provided.
 - Location(s) of existing and proposed underground and overhead electrical lines.
 - Transformer location and electrical service entrance location(s).

ELECTRICAL SHEETS (DRAWN TO SCALE AND DIMENSIONED)

SECTION 7.0 — ELECTRICAL DATA (IF APPLICABLE)

7.11 P NA Lighting plan

Show following items where applicable:

- North arrow.
- Lighting Fixture Schedule that lists all proposed lighting fixtures.
- Lighting plans are usually superimposed onto a background of the floor plan. Provide layout of all Means of Egress lighting, exit signs, and emergency exit illumination (with emergency back-up power if applicable).
- Provide Emergency Power System and Emergency Lighting Plan.
 - An emergency power/back-up system must be provided in all Group I, Divisions 1.1 and 1.2 occupancies (regardless of occupant load) and in all other occupancies with an occupant load of 100 or more. An Emergency Power System and Emergency Lighting Plan must be provided whenever emergency lighting is required, or provided, and is powered by a secondary source of power, whether it be internal battery back-up, external battery stack, or emergency generator.
 - The plans must, at a minimum, indicate the following information:
 - North arrow.
 - Emergency power system egress lighting site plan, which indicates emergency lighting and its power source.
 - Emergency power system egress lighting floor plan(s), which indicates emergency lighting and its power source.
 - Exit sign locations and their power source.
 - Location and type of other emergency fixtures and/or equipment (call boxes, battery stacks, power converters, generators, etc.).
 - Equipment schedule which lists type and rating of emergency equipment.
 - Full load rating of emergency power service.
 - Calculated emergency load.

7.12 P NA Utility-vault location and details

Indicate the proposed locations of utility vaults and above ground transformers on the plans.

7.13 P NA Compliance Block for Building components of ROH Chapter 32, Building Energy Efficiency Standards (when applicable area of new lighting exceeds 1000 sq. ft. supporting calculations to be provided on drawings).

Supporting Documents

OTHER DOCUMENTS AND REPORTS

SECTION 8.0 — OTHER DOCUMENTS AND REPORTS

- 8.1 Required Structural calculations (Reference [Section 5.6](#))
- 8.2 P NA Specifications
- 8.3 P NA Geotechnical/soil engineer report (new and addition to structures)
Generally the report includes the following information:
- Preparations dates of the soils engineering and engineering geology reports together with names, addresses and phone numbers of the firms or individuals who prepared the reports.
 - A plan of the property showing the location of identified geological conditions such as landslides, areas subject to liquefaction, or fault zones.
 - A plan of the property showing the location of all test borings and/or excavations.
 - Data regarding the nature, distribution and strength of existing soils.
 - Descriptions and classifications of the material encountered.
 - Elevation of the water table, if encountered.
 - Recommendations for foundation type and design criteria, including bearing capacity, provisions to mitigate the effects of expansive soils, provisions to mitigate the effects of liquefaction and soil strength, and the effects of adjacent loads.
 - Recommendation regarding the design of the proposed foundation type and the shoring, if applicable.
 - Recommendations regarding road and driveway construction, building pad preparation, and temporary cut slopes.
 - Expected total and differential settlement.
 - Conclusions and recommendations for grading procedures and design criteria for corrective measures, including buttress fills, when necessary.
 - An opinion on the adequacy for the intended use of site to be developed by the proposed grading as affected by soil engineering factors, including the stability of slopes.
- 8.4 P NA Called inspection forms for gypsum wallboard or lathing fire-rated assemblies
- 8.5 P NA Special inspection form completed and verified prior to issuance of permit
- 8.6 P NA Flood certifications (when applicable)
- 8.7 P NA Park Dedication approved with all required supporting documents provided. If private park provided, plans consistent with approved plan on file at DPP.

OTHER DOCUMENTS AND REPORTS

SECTION 8.0 — OTHER DOCUMENTS AND REPORTS

- 8.8 P NA Conditional Use Permit, Type 1 for Joint Development approved Agreement recorded at Bureau of Conveyances or Land Court. (recorded copy on file at DPP)

- 8.9 P NA All other discretionary permits: e.g., Special District, Plan Review Use, Variance, Conditional Use Permit , Zoning Adjustment, 201H, include supporting documents showing that all conditions have been met (plans are consistent with approved plans on file at DPP).

- 8.10 P NA Zone Change w/ Unilateral Agreement
All associated documents show compliance with conditions of approval.

- 8.11 P NA LUO Article 5 requirements, all required supporting documents provided

- 8.12 P NA Telecommunication Antenna Form, plans shall include a delineation of the exclusion distance (when applicable)

Approval From Other Agencies

Please refer to codes, other pertinent laws and ordinances where applicable.