Construction documents are required to be of a quality and detail such that the reviewing official can determine that the work conforms to the applicable codes and regulations. The CSU Office of Fire Safety shall review, or cause to be reviewed, the plan submittal documentation in order to determine:

1. whether the construction described is in accordance with the requirements of applicable codes, regulations and policies and,
2. if the plans are of sufficient quality and detail to be submitted to the Office of the State Fire Marshal (OSFM) for final review and approval.

The following reminder list specifies the minimum detailed information that must be shown on the submitted documents.

**Administrative Provisions**

Prior to any analysis based on the technical provisions of the California Building Code, it is important that the fundamental administrative aspects be addressed on the plans. This information is most suitable on the cover/introduction sheet(s) of the construction documents.

- Stamp and Signature of The Architect and Engineers of Record
- Detailed Scope of Work
- Applicable Codes for This Project List
- Alternate Materials, Design, and Methods of Construction
- Address of Project/Site
- Name of Owner/Property
- Volume/Sheet Index
- North Arrow/Plan Orientation Symbol
- Scale of Each Drawing/Detail and Graphical Scale
- List of Deferred Approvals

**Non-Structural Provisions**

The plans must include the classification of the building for Occupancy and Construction Type, anticipated use(s) and construction features. This information includes but is not limited to:

- Occupancy Type(s)
- Construction Type(s)
- Fire Resistive Properties of Building and Elements
- Fire Sprinkler Type and Coverage
- Fire Alarm Type and Coverage
- Building Height and Stories Above Grade Plane with Any Height Increases
- Building Area with Any Frontage Increases
- Location of Building on Site
Fire Separation Distance from Buildings, Structures, Lot Lines and Assumed Property Lines
Number and location of buildings adjacent to the project building, located on same parcel or adjacent parcel
Exterior Opening Protection Calculations
Rooftop Structures
Occupied Roofs

Existing Buildings Adjacent to Project Site
Location on property in association with the project
Building Name
Suppression and Detection (Type and Coverage)
Year Built and Code at the time of Permit
Building Occupancy Type/Use
Construction Type
Height and Area
Relevant information (OFSM #, Renovations, etc.)

Determine allowable area permitted for each story and building if:
Single-Occupancy Building
Multi-Occupancy w/Accessory Occupancies
Multi-Occupancy Building w/Nonseparated
Multi-Occupancy Building w/Separated Occupancies
Use of Fire Wall
Incidental Accessory Occupancies

Show all detailed requirements based on special Occupancy Types:
High-Rise Buildings
Atriums
Underground Buildings
Motor-Vehicle-Related Occupancies
Special Amusement Buildings
Group H Occupancies
Live/Work Units
Residential Occupancies

Show details of fire and smoke resistance and tested/listed systems:
Structural Members
Fire Barriers
Fire Partitions
Smoke Barriers
Smoke Partitions
Horizontal Assemblies
Shaft Enclosures (Top and Bottom)
Penetrations Through and Membrane (F/T Ratings)
Joint Systems (Head/Base, Floor/Ceiling Perimeter / Curtain Wall)
Means of Egress Provisions

The plans shall provide details based on anticipated occupant loads. The expected occupant load is the basis for the design of the means of egress system. The egress elements must provide for a direct, continuous, obvious, undiminished and unobstructed path of travel from any occupiable point in the building to the public way. Details include but are not limited to:

- Egress width and distribution
- Emergency lighting
- Accessible means of egress
- Door swing
- Door operations
- Fire Exit/Panic hardware
- Stairway width
- Stairway tread and riser dimensions
- Exit signs
- Stairway and ramp handrail dimensions
- Guardrails
- Egress through intervening spaces
- Common path of egress travel
- Number of exit or exit access doorways
- Egress separation distances
- Areas of Refuge (Interior, Exterior)
- Refuge Area Calculations
- Travel distance
- Corridor construction
- Number of exits
- Vertical exit enclosures
☐ Exit passageways
☐ Horizontal exits
☐ Exterior exit stairways
☐ Exit discharge
☐ Egress from assembly occupancies

**Fire Protection System Provisions**

The plans shall show the minimum requirements, details, and specifications for active fire protection systems associated with the project. Information shall include but is not limited to:

**Fire Alarm Systems**
- Product Specification Sheets for all components
- Fire Alarm Panel and Annunciator location
- Current California State Fire Marshal (CSFM) listings
- Sequence of Operations Matrix
- Identification of Zones
- Approved monitoring station details
- Egress-control systems
- Ceiling configuration, surface, and height
- Voltage drop calculations
- Primary and Secondary Power Supply
- Riser diagram with location of breaker shut off
- Standby battery calculations
- Audible visual notification coverage
- Manual fire alarm box location(s)
- Location of Fire Rated Walls
- Symbols in compliance with NFPA 170
- Drawings compliant with NFPA 72

**Fire Sprinkler Systems**
- Product Specification Sheets for all components
- System type and coverage (Wet, Dry, Full or partial coverage)
- Riser Location
- Hydraulic calculations
- Full height cross sections/ceiling construction
- Area protected by each system for each floor
- Area limitations for hazard classifications
- Notes/design to reflect CA amendments
- Miscellaneous storage conditions
- Location of all control valves
- Seismic Bracing Details
- Spare Head Box Location
☐ Drawings compliant with NFPA 13, 13R, 13D with CA Amendments

**Fire Pumps**
- ☐ Fire pump type and location with exterior access provided
- ☐ Room details, location, and separation
- ☐ Automatic sprinkler system type and specifications
- ☐ Isometric drawings of pipe and component location
- ☐ Location of all Control Valves
- ☐ Room ventilation, security, floor drains
- ☐ Drawings Compliant with NFPA 20

**Alternative Automatic Fire Extinguishing Systems**
- ☐ Actuation details
- ☐ Interlocking with other systems
- ☐ Protection area
- ☐ Alarms and Warning Signs
- ☐ Monitoring System Details
- ☐ Wet Chemical Drawings in accordance with NFPA 17A
- ☐ Dry Chemical Drawings in Accordance with NFPA 17
- ☐ Foam System Drawings in accordance with NFPA 11 and 16
- ☐ Carbon Dioxide System Drawings in accordance with NFPA 12
- ☐ Clean Agent System Drawings in accordance with NFPA 2001
- ☐ Water Mist Systems in Accordance with NFPA 750

**Standpipes**
- ☐ Class and Type of Standpipe
- ☐ Location(s)
- ☐ Seismic Bracing Details
- ☐ Interconnection Details
- ☐ Fire-resistive protection
- ☐ Horizontal Exit Location
- ☐ Dimensions of Hose Pull (Interior and Roof)
- ☐ Drawings Compliant with NFPA 14

**Portable Fire Extinguishers / Automatic External Defibrillator**
- ☐ Type
- ☐ Location(s)
- ☐ Mounting Height
- ☐ Mounting Types – Surface, Cabinet
- ☐ Rated wall details for cabinet recess
- ☐ Signage

**Smoke Control Systems**
- ☐ General design requirements
- ☐ Special Inspection and Testing Requirements
- ☐ Rationale Analysis
- ☐ Smoke Barrier Construction
Method(s) (Mechanical or Passive)
☐ List of equipment
☐ Stand-by Power details
☐ Detection and Control System(s)
☐ Control Diagrams
☐ Firefighter Control Panel type and location
☐ Smoke proof enclosure details
☐ Sequence of Operation Matrix
☐ Third Party Review Report
☐ Review OFS Procedure on Smoke Control Systems

Smoke and Heat Removal
☐ Location(s)
☐ Smoke and Heat Vent Specifications
☐ Mechanical smoke removal system(s)
☐ Activation
☐ Manual Control

Fire Command Center
☐ Location
☐ Access
☐ Separation
☐ Layout / Size
☐ Required Features
☐ Ventilation

Fire Department Connection
☐ Location
☐ Access
☐ Signs

Emergency Communication Systems
☐ Emergency Voice/Alarm Communication System
☐ Emergency Responder Radio Coverage
☐ Mass Notification Systems

Fire Safety Provisions

Show on the plans minimum fire safety requirements for new and existing buildings, facilities, storage and processes. The plans must provide specifications and details showing fire prevention, fire protection, life safety and safe storage and use of hazardous materials in facilities and processes. The minimum items and details include but are not limited to:

General Requirements
☐ Combustible waste storage
☐ Motion picture projection rooms
☐ Powered industrial trucks and equipment storage and areas
☐ Vehicle impact protection details (bollards)
☐ Storage of fueled equipment
☐ Indoor displays
☐ General Storage
☐ Hazards to Firefighters
☐ Rooftop gardens
☐ Laundry Cart Specifications
☐ Tunnels and Bridges

**Fire Service Features**
☐ Fire Apparatus Access Roads
☐ Roof Access
☐ Premises identification detail
☐ KNOX Box/ Key Box Locations
☐ Gate access
☐ Fire flow requirements
☐ Fire hydrant location and spacing calculations
☐ Water tanks
☐ Fire protection identification signs
☐ Fire detection identification signs
☐ Utility Identification signs
☐ Fire equipment access
☐ Emergency Responder Radio Coverage
☐ Provide diagram of 150’ hose lay lengths

**Building Systems**
☐ Fuel fired appliances
☐ Fuel oil storage locations
☐ Incinerators/Kilns or Industrial Ovens
☐ Trash/Linen Chutes
☐ Working space dimensions around electrical equipment
☐ Electrical room signs
☐ Mechanical refrigeration type and alarm requirements
☐ Commercial kitchen hoods
☐ Kitchen combustible oil storage
☐ Carbon Dioxide use and storage

**Interior Finishes**
☐ Wall finishes
☐ Ceiling finishes
☐ Floor finish
☐ Upholstered furniture location and specifications
☐ Mattress location and specifications
☐ Natural vegetation location and specifications
☐ Decorative materials location and specifications
☐ Artificial vegetation location and decorative materials
☐ Waste Containers

**Kitchen Hood and Duct Systems**
☐ Scaled plan of area and equipment
☐ Dimensions of hoods, ducts, and appliances
☐ Equipment list for system, devices and materials
☐ Manufacturer’s installation instructions
☐ Cut sheets and compliance with UL 300 Standard
☐ Isometric drawing of piping and components

**Emergency Generators**
☐ Proximity to structures and property lines
☐ Type make and model
☐ Class, level, type, & purpose
☐ Engine fuel type and consumption
☐ Location/protection of automatic transfer switch
☐ Elevation/location of exhaust
☐ Details of normal and emergency venting
☐ Calculations for vent modifications
☐ Fuel source type, contents and quantity
☐ Fuel tank location and setbacks
☐ Generator/tank pad details and load calculations
☐ Method of filling, overfill prevention, monitoring
☐ Secondary containment
☐ Piping type, fittings and method of joining
☐ Classified electrical boundaries
☐ Vehicle impact protection
☐ Signage
☐ Total Load
☐ Break Down Emergency and Standby Loads and duration requirements

**Photovoltaic System**
☐ Site plan
☐ Location to property line(s)
☐ Separation distance to adjacent structures
☐ Separation between arrays/supporting structures
☐ Location of emergency power disconnects
☐ Fire department access/fire lanes
☐ Array type
☐ Array elevation
☐ Construction type
☐ Occupancy group
☐ Use underneath arrays
Warning signage for all disconnects
☐ DC circuit marking
☐ Rooftop layout, access, ventilation, pathways
☐ Vegetation clearance

**Electrical Energy Storage Systems**
- Battery Storage Type
- Room Details (Signs, Separation, Cabinets, Ventilation)
- Indoor/Outdoor Installation Details
- Fire extinguishing and detection systems
- Seismic protection
- Vehicle impact protection
- Emergency Disconnect location and identification signage
- Drawings in Compliance with NFPA 111

**Hazardous Materials**
- Hazardous Materials Inventory Statement (HMIS)
- Hazardous Materials Management Plan (HMMP)
- Safety Data Sheets
- Location of Hazardous Materials Storage
- Details of additional safety features
- Type and location of hazardous materials storage
- Building / Room Signage – NFPA 704

**Additional OSFM Provisions**
- Provide clear written response to plan review comments and indicate where corrections can be found. Plan revisions to address comments shall be identified with Cloud and Revision Number.
- OSFM will not acknowledge an exit if the access path requires passing another exit.
- Plans submitted to OSFM shall not be identified as less than a 100% version
- Include completed and signed OSFM Local Fire Authority form within documents.
- Red markings such as lines, clouds, and words shall not appear within documents.
- The use of Alternate Materials and Methods Requests (AMMRs) and Engineering Judgements (EJs) is highly restricted. AMMRs and EJs must be approved by OFS prior to submission of documents to OFSM. Approved AMMRs and EJs shall be incorporated into final drawing set.
- Egress Width Factor for Assembly occupancies cannot take the reduction factors for Emergency Voice/Alarm Communication System per OSFM.
- Horizontal exits are not readily accepted by OSFM - their use should be extremely limited.
- Fire flow figures shall be based upon fire flow testing witnessed by OSFM or an acceptable water purveyor/AHJ test performed within 6 months prior to plan submission date.

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☐ The State Fire Marshal requires the Fire Department Connection (FDC) to be within 40 feet of a building and a fire hydrant to be within 40 feet of the FDC
☐ Do not use words or phrases on the plans that are not found in the code unless accompanied with written explanation.
☐ All spaces marked as laboratories need to be explained. If a room is a computer, civil engineering or educational laboratory like geology or physical science that do not use chemicals; they need to be clearly identified or they will be assumed as having chemicals
☐ Remove all notes and details not related to the project
☐ OSFM encourages color coded documents for items such as: fire rated walls, distinct occupancy types, smoke control systems, hazardous materials control areas.