Purpose:
To identify the specific design elements necessary for each design phase of plan review by the Office of Fire Safety (OFS).

Background:
The California State University (CSU) system is currently engaging in a Memorandum of Understanding (MOU) with the Office of the State Fire Marshal (OSFM). This MOU will delegate OSFM responsibility relating to enforcement of fire and panic safety standards in permitting, inspection and compliance to Designated Campus Fire Marshals (DCFM’s) within the CSU OFS.

In preparation for the transfer of responsibility from OSFM staff to OFS staff, OFS staff will perform project reviews and collaborate with design teams to ensure 1) code compliance, 2) long-term building flexibility, and 3) the highest possible standards of fire and panic safety for the CSU community members.

In order to effect design changes in alignment with these goals, it is imperative that OFS staff be involved in project planning as early as possible. This necessitates review of high-level items (e.g., building placement on site, fire department access and water supply) at the Feasibility Study phase, and the specific details of building and life safety systems in final construction documents. OFS Letters of Concurrence will be required at critical points in the design process to ensure that OFS staff have had an opportunity to review the project and ensure that any outstanding items have been adequately addressed prior to the project moving to the next phase.

Requirements:
ALL Major Capital Projects are required to be submitted to OFS at the following design milestone points:

1. Feasibility Study – Concurrence Point (OFS Concurrence Letter required to proceed to Board of Trustees for approval).
2. 75% Schematic Design - Concurrence Point (OFS Concurrence Letter required to proceed to Preliminary Design Documents).
4. 90% Construction Documents – Concurrence Point (OFS Concurrence Letter required to submit Construction Documents to OSFM for permit – concurrent OFS/OSFM reviews shall not be permitted.

Procedure:
Submittal Process
Project Teams shall submit full document packages for the given level of development/design to OFS electronically in PDF format to utilizing the application found on the OFS home page.

1. Submit online OFS plan review application.
2. Submit Complete Project Documents – (example: Drawings, Specifications, Calculations, Product Data, Reports).
3. Submit Master Project Comment Log with response comments from designers of record – (Master Project Comment Log = SRB, MRB, independent code review, campus, comments – include responses from prior review phases). If Comment Log with responses are not part of the uploaded package – submittal will be rejected.
4. If the above submittal (after OFS Intake process) is incomplete, the submittal will be rejected, and applicant will be notified.

Design packages submitted for review require the following specific contents and information:

Feasibility Study Design Phase

1. Site plan indicating all existing and proposed property lines or assumed property lines showing the project location, footprint, side yards with dimensions, and number of below grade stories.

2. Site plan indicating all surrounding existing buildings with the following information:
   a. Building Name and existing occupancy / use,
   b. Building Construction Type,
   c. Building Area,
   d. Number of Stories,
   e. Actual Building Height,
   f. Year Built and approximate Code of record,
   g. Building has Fire Sprinklers? – Yes or No,
   h. Building has Fire Alarm? – Yes or No,
   i. Provide any other relative information.

Schematic Design Phase (SD) – 75% SD

1. Site plan indicating all existing and proposed property lines or assumed property lines showing the project location and yards, with dimensions.

2. Site plan indicating all surrounding existing buildings with the following information:
   a. Building Name and existing occupancy / use,
   b. Building Construction Type,
   c. Building Area,
   d. Number of Stories,
   e. Actual Building Height,
   f. Year Built and approximate Code of record,
   g. Building has Fire Sprinklers? – Yes or No,
   h. Building has Fire Alarm? – Yes or No,
i. Provide any other relative information – Renovations year and scope – OSFM permit #.

3. If planning to submit the project as a Phased Project – provide detailed phasing plan with each phase scope of work and schedule clearly identified (helps trigger a Preliminary Meeting with OSFM).

4. Provide Preliminary Code Analysis Package (include all the following):
   a. Proposed Building Occupancy Classification / Uses,
   b. Separated or Non-separated / Accessory design approach,
   c. Mixed-Use design analysis,
   d. Building Construction Type,
   e. Building Area / Size / SF or TI Area SF,
   f. Number of Stories,
   g. Allowable Height / Actual Height,
   h. Allowable Area per CBC,
   i. Area Increase – justify allowable area increases with calculations,
   j. Height Increase – justify allowable height increases with calculations,
   k. Fire Separation Distances – Real property lines and imaginary assumed,
   l. Frontage Calculations – Fire Department use, Side Yards / Open Space,
   m. Water Based Fire Suppression (Fire Sprinklers, Standpipes, Fire Department Connections, Fire Pumps, Fire Hydrants, Water Supplies),
   n. Fire Alarm and Detection (Manual, Automatic, etc.),
   o. Special Fire Suppression Systems (Clean Agent, Wet or Dry Chemical),
   p. Smoke Control Systems – Provide List if Mechanical, Pressurization or Passive/Natural,
   q. Building in a High Fire Hazard Severity Zone? - Yes or No,
   r. Year built and approximate Code of record.

5. Site Plans with Fire Department Access Plan – Fire Hydrant locations (Existing and New), Fire Lane Widths, Existing Fire Department Connection’s, Existing Egress Courts or Yards, Public Ways, egress paths from surrounding buildings.

6. Provide preliminary list of Hazardous Materials and quantities (PD and Full at CD) (HMIS – Hazardous Materials Inventory Statement – Appendix H Figure A-H-I Section II Part A and B) and the campus HMMP - Hazardous Materials Management Plan – Appendix H Section H3. Use the short form where applicable.

Preliminary Design (Design Development) Phase (PD) – 100% PD

1. Project Team provide narrative on changes from 75% SD presentation to CPDC.


3. Provide list of any proposed AMMRs for project – all AMMRs will need to be approved by OFS prior to Plan Review CD submission to OSFM.
4. Provide **Complete** Code Analysis Package and information on drawings (include all the following):
   a. Proposed Building Occupancy Classification / Uses,
   b. Separated or Non-separated / Accessory design approach,
   c. Mixed-Use design analysis,
   d. Building Construction Type,
   e. Building Area / Size / SF or TI Area SF,
   f. Number of Stories,
   g. Allowable Height / Actual Height,
   h. Allowable Area per CBC,
   i. Area Increase – justify allowable area increases with calculations,
   j. Height Increase – justify,
   k. Fire Separation Distances – Real property lines and assumed,
   l. Frontage Calculations – Fire Department use, Side Yards / Open Space,
   m. Protected / Unprotected Opening Calculations per floor for New or Existing Buildings,
   n. Total Occupant Load of Building and Each floor breakdown,
   o. Egress Analysis – Travel distances, cumulative loading, loading and required width at each exit and stairs,
   p. Fire Riser and Hose connection locations in building,
   q. Fire Sprinklers (Wet, Dry, Pre-action or Deluge),
   r. Fire Alarm (Manual, Automatic, etc.),
   s. Emergency Voice/Alarm Communication Systems – (EVACS),
   t. Emergency Responder Radio Coverage,
   u. Smoke Control Systems – Provide List if Mechanical, Pressurization or Passive/Natural,
   v. Smoke Control System Rational Analysis by FPE,
   w. Smoke Control – Special Inspections and Testing,
   x. Fire protection systems – Ansl, CO2 Detection, Mass Notification Systems (CFC 917),
   y. High Fire Hazard Severity Zone,
   z. Year building was constructed and approximate Code of Record,
   aa. Fire Pump size and location (if pump is required),
   bb. Emergency Generator location and list of loading (equipment) and duration for Emergency power and Standby power systems. (CFC Chapter 12),
   cc. Rated wall types (Exterior, Fire Wall, Fire Barrier, Fire Partition, Smoke Barrier and required rating in HR) – UL/GA Listings.

5. Provide further developed Fire Access Plan / Site Plan:
   a. Fire Water Routing and Domestic – Underground (UG) connection points
   b. Fire Flow Requirements per CFC Appendix B – Suggest a preliminary Fire Flow Analysis be done
   c. Fire Hydrant (FH) Spacing per CFC Appendix C
   d. Hose Pull Distances from Apparatus – not measured as a radius, physical hose lengths around the building.
   e. Fire Department Connection, Post Indicator Valves and Backflow Location
   f. Fire Riser, Standpipe and Hose connection locations in building
6. Provide a list of Deferred Approvals to OSFM – Fire Sprinklers, Suppression Systems, Fire Alarm, Smoke Control System, Emergency Responder Radio Coverage. These are the only deferred approvals accepted by OSFM.

7. Provide preliminary list of Hazardous Materials and quantities (HMIS – Hazardous Materials Inventory Statement – Appendix H Figure A-H-I Section II Part A and B) and the campus HMMP - Hazardous Materials Management Plan – Appendix H Section H3. Use the short form where applicable.

Construction Documents Phase (CD) – 90% CD

1. 90 – 95% Drawing package to be submitted to all Peer Reviewers, CSU Independent 3rd party Plan Reviewer, and OFS.

2. All Comments to be gathered on one document (Project Master Comment Log) for each package review set. Next submittal backcheck must have Master Comment log with replies to comments or it will be considered incomplete and will be rejected (review time will not be started).

3. Hazardous Materials:
   a. Provide complete list of Hazardous Materials and quantities (HMIS – Hazardous Materials Inventory Statement – CFC Appendix H Figure A-H-I Section II Part A and B).
   b. Provide a copy of the updated campus approved Hazardous Materials Management Plan (HMMP) that accounts for the materials in relation to this project.

4. An in-depth submittal checklist is available in OFS Resources on the website. At a minimum, provide Construction Documents with the following:
   a. Proposed Building Occupancy Classification / Uses,
   b. Separated or Non-separate / Accessory design approach,
   c. Mixed-Use design analysis,
   d. Building Construction Type,
   e. Building Area / Size / Square Feet or Tenant Improvement (TI) Area Square Feet,
   f. Number of Stories,
   g. Allowable Height / Actual Height,
   h. Allowable Area per CBC,
   i. Area Increase – justify allowable area increases with calculations,
   j. Height Increase – justify allowable height increase with calculations,
   k. Fire Separation Distances – Real property lines and/or assumed,
   l. Frontage Calculations – Fire Department use, Side Yards / Open Space,
   m. Protected / Unprotected Opening Calculations per floor for New and/or Existing Buildings,
   n. Total Occupant Load of Building and Each floor breakdown,
   o. Egress Analysis – Travel distances, cumulative loading, loading and required width at each exit and stairs,
   p. Fire Riser and Hose connection locations in building,
   q. Fire Sprinklers (Wet, Dry, Pre-action or Deluge),
   r. Fire Alarm (Manual, Automatic, etc.),
   s. Emergency Voice/Alarm Communication Systems – (EVACS),
   t. Emergency Responder Radio Coverage,
u. Smoke Control Systems – Provide List if Mechanical, Pressurization or Passive/Natural,
v. Smoke Control System Rational Analysis by a California licensed Fire Protection Engineer,
w. Smoke Control – Special Inspections and Testing – Procedures and methods and Smoke Control Matrix,
x. List other fire protection systems – Ansul, CO₂ Detection, Mass Notification Systems (CFC 917),
y. High Fire Hazard Severity Zone,
z. Year building was constructed and/or Code year – TI,
aa. Fire Pump location – if pump is required,
bb. Emergency Generator location and list of loading (equipment) and duration for Emergency power and Standby power systems. (CFC Chapter 12),
c. Fire Extinguisher locations,
dd. Knox Box locations,
ee. FA Annunciator Panel location,
ff. FA Pull Station locations,
gg. Rated wall types (Exterior, Fire Wall, Fire Barrier, Fire Partition, Smoke Barrier and required rating in HR),
hh. UL Listings on plans for Walls, Floors, Roofs, Shafts, Penetrations (membrane and through), Individual encasement, Fire Proofing, Intumescent, Dampers,
i. Rated requirements for protected openings on Window and Door Schedules, Louver Schedule, Dampers,
jj. Panic Hardware requirements for Doors,
kk. Emergency Exit Illumination requirements– Photometrics to public way,
ll. Exit signage,
m. Code required signage and max occupant load signage locations and quantity,
nn. Provide completely developed Fire Access Plan / Site Plan,
oo. Fire Water Routing and Domestic - UG connection points,
pp. Fire Flow Testing within 6 months of Permit / OSFM submittal – to be witnessed by Local OSFM-Deputy Fire Marshal,
qq. Fire Flow Requirements per CFC Appendix B – Suggest a preliminary Fire Flow Analysis be done,
rr. FH Spacing per CFC Appendix C,
s. Hose Pull Distances from Apparatus – no radius, physical hose lengths around the building,
tt. Fire Department Connection, Post Indicator Valve and Backflow Location,
uu. Fire Riser, Standpipe and Hose connection locations in building,
vv. Standard OSFM Underground Fire Water Notes and Thrust Block Details,
ww. Provide Roadway sections/details for Fire Roads, Fire Access Lanes, etc.,
xx. Provide a list of Deferred Approvals to OSFM – Fire Sprinklers, Suppression Systems, Fire Alarm, Smoke Control System, Emergency Responder Radio Coverage. These are the only deferred approvals accepted by OSFM.

5. After plans have been reviewed and approved, OFS will issue concurrence letter to submit project to OSFM for review.

Attachments:

References: