

DESIGN DEVELOPMENT REVIEW PACKAGE CHECKLIST

Check off each item that is included within the submitted Design Development Review Package. Provide a written explanation for any omissions. The following items, in addition to the required Items in Schematic Design, are to be included as a minimum, respective of the project type.

CONFIRMATION

- Written confirmation that items noted by the University staff in response to the Schematic Design submittal have been addressed, and that the Schematic Design submission has been approved by the Department of Facilities Planning.

GENERAL DESCRIPTION

- Description of construction phasing
- On the Cover Sheet, list applicable building information, to include at a minimum: Codes applicable to project
 - Building Code review, describing means of compliance for major code issues and building systems
 - Description of any proposed occupancy within the construction area
 - Evaluation of anticipated sustainability performance (use LEED “GreenBuilding Rating System”)
 - Description of water and vapor characteristics of roof and exterior walls
 - Design intent document (rough draft)

SITE

- General dimensions, site and FFL elevations, adjoining streets and property lines
- North arrow
- Parking plan and elevations, including accessible parking
- Site drainage
- Lighting plan
- Concept details of site fixtures and equipment
- Utility plans, elevations, and details
- Plan to address existing hazardous materials, if applicable
- Dewatering plan
- Protection requirements during construction for the plantings that remain

LANDSCAPING

- Planting Plan
- Irrigation Plan
- Spare sleeve locations for the irrigation system

FIRE PROTECTION / LIFE SAFETY

- Wall types, Fire Ratings
- Floor areas (square feet)

- Proposed Construction Type
- Mixed occupancy description
- Smoke control zones (with areas)
- Plan to address existing hazardous materials, if applicable
- Exit access corridors
- If the project includes an addition to an existing building:
 - Describe or show the condition and extent of the existing building's fire protection/life safety features.
 - Give area and code classification type of construction of the existing building
 - Show locations of existing fire division walls
 - Show the locations of existing toilets and exits
- Show existing buildings in close proximity to the new project
- Show assumed property lines between facing walls of new and existing buildings
- Identify facing walls that are exterior bearing or non-bearing
- Verify fire resistance of facing walls
- Calculate percentage of openings in existing and new facing walls
- Show code compliance for "Buildings Located on the Same Lot".
- Determine and Identify Knox Box location.

BUILDING INTERIOR

- All floor plans (min 1/16" scale)
- Room Names and Numbers as approved by Facilities Planning
- Enlarged plans at elevation changes (such as stairs)
- Enlarged plans at toilet rooms, including a code related "Plumbing Count"
- Reflected ceiling plans
- Fixed seating
- Define seating, serving, and kitchen facilities
- Equipment and furniture layouts
- Important interior elevations
- Details of unique features
- Details of fixed equipment
- Preliminary finish schedule
- Preliminary door schedule
- Preliminary material schedule
- Custodial closets with floor drains, sinks, and storage
- Determination and review of Interior Signage

BUILDING EXTERIOR ENVELOPE

- All building elevations with dimensional heights
- Typical wall sections
- Parapet and coping details
- Roof and drainage plan
- Exterior door details
- Typical window details
- Details of unique features
- Expansion joint locations
- Large scale building cross-sections and other cross sections as necessary to explain the spaces and overall design of the building
- Determination and review of Exterior Signage

ELEVATORS

- Elevator shaft section
- Equipment description

STRUCTURAL

- Foundation plan
- Typical floor framing plan
- Framing plan(s) at unique features
- Main member sizing
- Structural sections

HVAC

- Identify all systems; written description of system, including source of heat and cooling, type of air distribution system, and dehumidification process.
- Exterior equipment locations
- Air intake and discharge locations
- Mechanical legend
- Special occupancy zones
- Energy code requirements
- Design criteria for each mechanical system (including room T & H specs, NC levels, etc)
- One-line diagrams and other materials as required to describe the fundamental design concept for all mechanical systems
- Indication of the amount of redundancy for all major pieces of mechanical equipment, e.g. "two pumps 100% capacity each"
- Overall building air flow diagram indicating air handlers, exhaust fans, duct risers, and duct mains.
- Plans indicating shaft, chase, recess requirements
- Duct layout for typical spaces
- Equipment schedules (major equipment)

- Equipment locations (with enlarged mechanical plans(s))
- Control diagrams (concept form) for all mechanical and plumbing systems
- Description of major sequences of operation
- Central automation operation
- M/E smoke control scheme
- Preliminary calculations
- Submission of boiler specification sheet and MDEQ Form 502 B10

PLUMBING AND PIPING

- Main water supply and connection to sanitation sewer.
- Plumbing legend
- Design criteria for each plumbing system (including set points, water quality levels, etc.)
- One-line diagrams, etc. that describe the fundamental design concept for all plumbing systems
- Piping plans (domestic and process) with indication of required serviced access areas
- Water header diagram
- Central cooling water header diagram
- Steam header diagram
- Steam metering concept

FIRE PROTECTION (MECHANICAL)

- Report documenting adequacy of utility
- Connection to utility
- Location of sprinkler valve
- Sprinkler legend
- Fire Protection systems (as required by code)
- Riser diagram
- One-line layout
- Fire pump sizing calculations
- Stand Pipes
- Sprinkler System Type/Heads

ELECTRICAL – POWER DISTRIBUTION

- One-line diagrams
- Electric vault locations
- Electric legend
- Normal power riser diagram with circuit breaker and fuse sizes
- Emergency power riser diagram with circuit breaker and fuse sizes
- List of equipment on emergency power
- Emergency generator layout

- Submission of generator specification sheet and MDEQ Form 502 B10
- Equipment layout/sizes, with receptacles
- Panel locations/schedules
- Load estimates
- Plan for temporary power during construction

ELECTRICAL – LIGHTING

- Typical lighting plans
- Fixture/switching layout
- Fixture types and schedule
- Fixture Cut-Sheets
- Light level calculations
- Energy code requirements

ELECTRICAL – FIRE ALARM

- Connection to the University Power Plant
- Panel locations
- Riser diagram
- Fire alarm zones
- Smoke zones
- Device locations
- Exit signs

ELECTRICAL – COMMUNICATIONS (including Voice, Data, Video, and A/V Systems)

- Building and local distribution
- Cable tray locations
- Riser diagrams
- Voice/data utility outlet locations
- Conduit plans
- Material cut-sheets
- Description of audio/visual systems
- Audio/visual equipment locations (indicate hangers, cabinets, and connection boxes)

ELECTRICAL – SECURITY SYSTEMS

- General security / CCTV system description and locations
- General description of card access system and locations
- Security system riser diagrams
- Security equipment locations
- Card access equipment closet layout and elevations

SPECIFICATIONS

- System and material narrative description.
- Outline specification with same section numbering as Construction Documents. Specifications to briefly describe:
 - Finishes
 - Construction systems
 - Electrical work, lighting types and intensities
 - Mechanical systems and requirements
 - Unusual features
 - Water supply and sewage systems

COST

- Updated construction cost estimate by materials, including all necessary Allowances. The only Allowances allowed shall be for access controls and mechanical controls. Note – Design Development Phase shall not be considered completed until the Design Professional construction submits their preliminary cost estimate.
- Coordinate the Design Professional’s construction cost estimate with the “Project Budget Sheet” issued by Facilities Planning.

SUBMITTALS

- At the completion of the Design Development Phase, two (2) sets of the documents shall be submitted to the Department of Facilities Planning for review.

I, _____, attest that the above minimum requirements are provided within the Design Development Review Package, or that an explanation has been provided.

Signature Date

Printed Name

- END OF DESIGN DEVELOPMENT PHASE REVIEW PACKAGE CHECKLIST -