

Design Phase Documentation Requirements

UO Project Management, UO Housing, UO Maintenance, etc, personnel will review the design documents at Proposal Submission, Design Verification, and 100% Design Development. The following pages outline the level of documentation required to accompany each design phase's documentation package.

UO values design requirements for the maintainability and serviceability of building systems. Every building component shall be designed for safe and efficient maintainability and serviceability by UO Housing, UO Maintenance, etc. personnel. Maintenance Access shall be defined as the 3-dimensional obstruction-free spaces required to properly and safely service and maintain a built-in item or component. Construction coordination is then required to assure the preservation of these mandatory maintenance access spaces and clearances remain obstruction free.

Proposal Submission: The following requirements are those of specific concern to UO Personnel and shall be included in the (RFP) Proposal Submission.

UO Requirements for Design Proposal Documentation:	
General Description:	<ol style="list-style-type: none"> 1. Scope of work narrative. 2. Building Program. 3. List of applicable building codes on drawing title sheet. 4. Strategies of anticipated sustainability performance; SEED and LEED. 5. Description of construction phasing. 6. Description of any proposed occupancy within construction area.
Specification:	<ol style="list-style-type: none"> 1. System and material narrative description in outline form.
Site and City of Eugene (COE) Site Review Requirements:	<ol style="list-style-type: none"> 1. Storm water management strategy. 2. Site plans that include the following: <ul style="list-style-type: none"> • Existing conditions • Demolition • Building outline(s) • Future expansion • Site entrance • Roads & driveways • Parking locations • Bike parking locations • Loading dock location • Waste & recycling collection location • Walkway and stairway locations • Emergency telephone locations • Utility requirements • Site utilities • Preliminary grading plan • Soil remediation work by Owner, if needed • Site lighting layout concept
Landscaping:	<ol style="list-style-type: none"> 1. Existing conditions. 2. Landscaping concept.
Structural:	<ol style="list-style-type: none"> 1. Structural scheme – framing and structural materials. 2. Written description.
Building Exterior Envelope:	<ol style="list-style-type: none"> 1. Typical elevations. 2. Material designations. 3. Overall building cross-sections.

UO Requirements for Design Proposal Documentation:	
Building Interior:	<ol style="list-style-type: none"> 1. Floor plans with legends. 2. Beginning of room numbering complying with 'Room Numbering Guide' Appendix. 3. Mechanical, electrical, and other service closets and rooms. 4. Circulation paths, flow diagrams, egress. 5. Area tabulations compared to program requirements. 6. Show flexibility for expansion and alterations. 7. Preliminary layout of major spaces with building supported fixed equipment. 8. Identify locations of all equipment (kitchen and woodshop) provided in program.
Elevators:	<ol style="list-style-type: none"> 1. Elevator locations. 2. Equipment room locations.
HVAC:	<ol style="list-style-type: none"> 1. Description of the fundamental design concept for all mechanical systems. 2. Major equipment locations. 3. Air intake and discharge locations for major systems. 4. Special occupancy zones if any.
Plumbing:	<ol style="list-style-type: none"> 1. Describe the fundamental design concept for all plumbing systems. 2. Major equipment locations. 3. Restroom locations.
Fire Protection:	<ol style="list-style-type: none"> 4. The fundamental design concept for all fire protection systems. 5. Fire Alarm system description.
Lighting:	<ol style="list-style-type: none"> 1. Fixture, lamp, and controls descriptions.
Electrical Power Distribution:	<ol style="list-style-type: none"> 1. Exterior equipment locations.
Communications (Voice, Data, & Video Systems):	<ol style="list-style-type: none"> 1. Building entrance and phone/data room locations. 2. Emergency phone locations and types (wall or pedestal).
Security (CCTV and Access Control Systems):	<ol style="list-style-type: none"> 1. System descriptions.
A/V and Special Systems:	<ol style="list-style-type: none"> 1. System descriptions.
Other Graphics:	<ol style="list-style-type: none"> 1. Renderings, models, or other graphics as necessary to clearly present concept.

Design Verification: The following requirements are those of specific concern to UO Personnel and shall be included in the Design Verification Documentation for Owner review.

UO Requirements for 100% Design Verification Documentation:	
General Description:	1. The final refinement of the Proposal Design requirements as approved by the User Groups and the Campus Planning Committee, and as required for the City of Eugene Site Review application process.

Design Development (DD): The following requirements are those of specific concern to UO Personnel and shall be included in 100% DD Documentation for Owner review.

UO Requirements for 100% DD Documentation:	
General Description:	<ol style="list-style-type: none"> 1. Maintained and developed requirements listed above. 2. Specifics of building systems and components with three dimensional accuracy. 3. Building code(s) review with list of anticipated AM&Ms required. 4. Details of water and vapor characteristics for roof and exterior walls. 5. Defined zones of 'Maintenance Access' per requirement noted in the Standards Introduction. 6. Maintainability of the facility. 7. Proposed routes of access and egress: fire access; emergency life safety egress; ADA access; pedestrian access & egress; etc.
Specification:	<ol style="list-style-type: none"> 1. Specifications indicating features of major equipment as well as component materials (ex: 'welded schedule 40 steel pipe', etc.). 2. Complete systems descriptions and material selections. 3. Specifications to conform to materials and standards set in UO Campus Construction Standards which includes the University Housing Addendum. 4. List of sole-source materials and/or systems (not including kitchen equipment).
Site:	<ol style="list-style-type: none"> 1. Extent of construction area to include construction signage, site entrance(s), staging area(s) and area traffic plan if existing roads / walks are impacted. 2. Site development phasing. 3. Details of site fixtures and equipment. 4. Site details, including hardscapes. 5. Profiles for underground utilities including pipe sizes and connection details. 6. Local government review comments on utilities and modifications in right(s)-of-way. 7. Final photometric for exterior site lighting plan.
Landscaping:	<ol style="list-style-type: none"> 1. Protection for existing trees and significant plantings during construction. 2. Soil preparation and planting specifications. 3. Irrigation plan with pipe sizes, details and legends.
Structural:	<ol style="list-style-type: none"> 1. Beam, column, and slab schedules. 2. Mechanical and electrical house keeping pads.
Building Exterior Envelope:	<ol style="list-style-type: none"> 1. Building elevations with dimensioned heights. 2. Typical wall heights. 3. Roof layout and drainage plans. 4. Expansion and control joint locations. 5. Energy model required for LEED (independent energy analyst?) 6. Roof-mounted equipment. 7. Roof system details. 8. Exterior wall system details. 9. Flashing system details.
Building Interior:	<ol style="list-style-type: none"> 1. Dimensioned floor plans for all levels. 2. Equipment and furniture layouts. 3. Important interior elevations. 4. Defined seating, serving and kitchen facilities. 5. Details of fixed equipment. 6. Finish schedules. 7. Door schedules and UO supplied hardware schedules. 8. Ceiling system details.

UO Requirements for 100% DD documentation continued:	
Elevators:	[RESERVED]
HVAC:	<ol style="list-style-type: none"> 1. Overall HVAC plan indicating air handlers, exhaust fans, duct risers and duct mains. 2. Plans indicating shaft, chase and recess requirements. 3. Duct layout for typical spaces. 4. Equipment schedules. 5. Strategy for HVAC zoning and typical individual space zoning. Ex: VAV boxes per office = x, etc. 6. Mechanical legend. 7. Dimensioned 3 dimensional clear maintenance space to be maintained at all service points on fan coil units, filter banks, motor locations, dampers, etc shall be graphically shown. 8. Indication of typical locations of fire dampers, smoke dampers, and combination fire / smoke dampers. 9. Control diagrams (concept form) for all mechanical and plumbing systems. 10. Outline of major control sequence of operation. 11. Enlarged preliminary floor plans of mechanical rooms with all components and required service areas drawn to scale. 12. Meter locations and types. 13. General layout of mechanical rooms. 14. Indication of the amount of redundancy for all major pieces of mechanical equipment. Ex: 2 pumps with 100% capacity each, etc. 15. Floor plans with all components and required service access areas drawn to scale. 16. Indicate location of control panels. 17. Connection to fire alarm and campus control systems. 18. Draft controls sequences of operation, alarm set points and time delays.
Plumbing & Piping:	<ol style="list-style-type: none"> 1. One-line diagrams for every plumbing system (ex: domestic water, sanitary, storm, gas, etc.) and other materials as required. 2. Plumbing legend. 3. Design criteria for each system including set points, water quality levels, etc. Energy model. 4. Piping plans (domestic & process) with indication of required service access areas with material and size details. 5. Meter locations and types. 6. Fixtures and equipment schedules. 7. Enlarged preliminary floor plans of mechanical rooms with all components and required service areas drawn to scale. 8. Indication of the amount of redundancy for all major pieces of mechanical equipment. Ex: 2 pumps with 100% capacity each, etc. 9. Floor drains/sinks; unless identified in Architectural.
Fire Protection (Mechanical):	<ol style="list-style-type: none"> 1. Report documenting adequacy of utility system, flow calculations, etc. 2. Location of fire pump and controller. 3. FA panel / subpanel locations. 4. One-line diagrams for each plumbing system and other materials as required. 5. Location of fire pump and controller 6. Location of all sprinkler zone valve and drain connections. 7. Zoning extents, for areas where the contractor will size the piping.
Fire Alarm:	<ol style="list-style-type: none"> 1. FA panel / subpanel location plans. 2. Details of connections to HVAC, fire pump, fire suppression, door hold-open, and door lock systems. 3. Detailed sequence of operations.

UO Requirements for 100% DD documentation continued:	
Lighting:	<ol style="list-style-type: none"> 1. Typical interior lighting. 2. Outdoor lighting. 3. Fixture types, schedules, and cut sheets. 4. Documentation of energy code to support SEED, and LEED compliance level. 5. Electrical symbols legend. 6. General drawing notes. 7. Interior lighting plans. 8. Fixtures cut sheets and photometrics.
Electrical Power Distribution:	<ol style="list-style-type: none"> 1. Details of power service to the building. 2. One-line diagrams of all power systems. 3. Power plans, including primary cable raceways, feeder conduits, electrical loads, duplex and special receptacles, and circuiting. 4. Standby and emergency power system plans, controls, and details. 5. Substation, generator, and ATS descriptions. 6. Substation, generator, and electrical room locations. 7. Normal, Standby and Emergency power diagram with circuit breaker sizes. Coordination study. 8. List of equipment on standby / emergency power. 9. Panel schedules and locations. 10. Electrical equipment location plans. 11. Typical electrical outlet location plans. 12. Plan for temporary power during construction.
Communications (Voice, Data, & Video Systems):	<ol style="list-style-type: none"> 1. Communication room plan layouts 2. Building entry and phone/data room locations, sizes, and door swings. 3. Backboard locations. 4. Conduit and cable tray plans with conduit and cable tray sizes. 5. Material cut-sheets.
Security (CCTV and Access Control Systems):	<ol style="list-style-type: none"> 1. Card access control equipment closet layout and elevations. 2. Panel locations. 3. Equipment schedules.
A/V and Special Systems:	<ol style="list-style-type: none"> 1. Detailed Equipment location plans. 2. Panel locations. 3. Equipment schedules. 4. Time clock and other equipment location plans.
Other Graphics:	[RESERVED]