

# MEETING MINUTES

**To:** Margo Rettig  
 SERA Architects  
 338 NW Fifth Avenue  
 Portland, OR 97209  
 (503) 445-7332  
 margor@serapdx.com

**Date:** January 15, 2014  
**From:** Ron Bayles, Dustin Stallings  
**cc:** Nathan Burton – SERA Architects  
 nathanb@serapdx.com

**Project Name:** U of O - EMU  
**Project Number:** 02.13.00545  
**Subject:** Package 2, 4, 5 100% DD UO Technical Review (Electrical and Technology)

<b>Meeting Date/Time:</b>	1/9/14 - 9:30am – 3:00pm	<b>Meeting Location:</b>	UO Capital Construction Conference Room
<b>Next Meeting Date/Time:</b>		<b>Next Meeting Location:</b>	

**Distribution/Attendance:** (persons shown in bold were present)

NAME	COMPANY	PHONE	EMAIL
<b>Martina Oxoby</b>	<b>UO – CPRE</b>	(541) 346-5880	<a href="mailto:mbill@uoregon.edu">mbill@uoregon.edu</a>
<b>Janet Lobue</b>	<b>UO -CC</b>	(541) 346-5259	<a href="mailto:lobue@uoregon.edu">lobue@uoregon.edu</a>
Fred Tepfer	UO – CPRE		<a href="mailto:ftepfer@uoregon.edu">ftepfer@uoregon.edu</a>
<b>Gregg Lobisser</b>	<b>UO User Group</b>		<a href="mailto:lobisser@uoregon.edu">lobisser@uoregon.edu</a>
<b>Dana Winitzky</b>	<b>UO – EMU</b>	(541) 346-6092	<a href="mailto:drw@uoregon.edu">drw@uoregon.edu</a>
<b>David Flock</b>	<b>UO – EMU</b>	(541) 346-6116	<a href="mailto:dflock@uoregon.edu">dflock@uoregon.edu</a>
<b>Mike Kraiman</b>	<b>UO - EMU</b>		<a href="mailto:kraiman@uoregon.edu">kraiman@uoregon.edu</a>
<b>*Ryan Rusby</b>	<b>EMU Event Services</b>		<a href="mailto:rrusby@uoregon.edu">rrusby@uoregon.edu</a>
<b>*Mike Ragsdale</b>	<b>EMU Event Services</b>		<a href="mailto:mragsda1@uoregon.edu">mragsda1@uoregon.edu</a>
<b>*Wade Young Jelinek</b>	<b>EMU Event Services</b>		<a href="mailto:jelinek@uoregon.edu">jelinek@uoregon.edu</a>
<b>*Del McGee</b>	<b>UO Electrical Scope</b>	(541) 346-5387	<a href="mailto:mcgee@uoregon.edu">mcgee@uoregon.edu</a>
<b>*Jeff Hite</b>	<b>UO Information Services</b>	(541) 346-1732	<a href="mailto:jeffh@uoregon.edu">jeffh@uoregon.edu</a>
*Bruce Eveland	UO – EMU		<a href="mailto:beveland@uoregon.edu">beveland@uoregon.edu</a>
<b>*Eric Fullar</b>	<b>UO Information Services</b>		<a href="mailto:efullar@uoregon.edu">efullar@uoregon.edu</a>
Bill Anderson	UO Dept Public Safety		<a href="mailto:banders@uoregon.edu">banders@uoregon.edu</a>
<b>*Ken Straw</b>	<b>UO Lock Shop/Security</b>		<a href="mailto:kstraw@uoregon.edu">kstraw@uoregon.edu</a>
<b>Drew Standridge</b>	<b>UO – ERS</b>		<a href="mailto:des@uoregon.edu">des@uoregon.edu</a>
Stan Hall	UO Libraries CMET		<a href="mailto:shall@uoregon.edu">shall@uoregon.edu</a>
<b>*Tobin Cooley</b>	<b>Listen Acoustics</b>	503-241-5255	<a href="mailto:tobin@listenacoustics.com">tobin@listenacoustics.com</a>
<b>Natasha Koiv</b>	<b>SERA Architects</b>	(503) 445-7372	<a href="mailto:natashak@serapdx.com">natashak@serapdx.com</a>
<b>Eric Philips</b>	<b>SERA Architects</b>	(503) 445-7372 ex 332	<a href="mailto:ericp@serapdx.com">ericp@serapdx.com</a>
<b>Nathan Burton</b>	<b>SERA Architects</b>	(503) 445-7372	<a href="mailto:nathanb@serapdx.com">nathanb@serapdx.com</a>
<b>Margo Rettig</b>	<b>SERA Architects</b>	(503) 445-7376	<a href="mailto:margor@serapdx.com">margor@serapdx.com</a>
Jon DeLeonardo	SERA Architects	(503) 445-7372	<a href="mailto:jond@serapdx.com">jond@serapdx.com</a>
Aaron Olsen	Cameron McCarthy	(541) 485-7385	<a href="mailto:aaron@cameronmccarthy.com">aaron@cameronmccarthy.com</a>
Larry Gilbert	Cameron McCarthy	(541) 485-7385	<a href="mailto:larry@cameronmccarthy.com">larry@cameronmccarthy.com</a>
<b>Mark Holligan</b>	<b>LCL</b>		<a href="mailto:Mark.Holligan@lewisbuilds.com">Mark.Holligan@lewisbuilds.com</a>
<b>Jeff Hamilton</b>	<b>OEG</b>	541 948 2316	<a href="mailto:Jeff.Hamilton@oregon-electric.com">Jeff.Hamilton@oregon-electric.com</a>
<b>Doug Aljets</b>	<b>OEG</b>	(541)988-5255	<a href="mailto:d.aljets@oregon-electric.com">d.aljets@oregon-electric.com</a>
Rob Schnare	Glumac PM/Mechanical	(503) 227-5280	<a href="mailto:rschnare@glumac.com">rschnare@glumac.com</a>
<b>Ron Bayles</b>	<b>Glumac Electrical</b>	(503) 227-5280	<a href="mailto:rbayles@glumac.com">rbayles@glumac.com</a>
<b>Dustin Stallings</b>	<b>Glumac Technology</b>	(503) 227-5280	<a href="mailto:dstallings@glumac.com">dstallings@glumac.com</a>

#	ACTION REQUIRED BY	DUE DATE	ISSUES/ACTIONS
<b>GENERAL</b>			
1.09.01			Overall project construction phasing needs to be determined to keep the building operational during construction for the various systems and to identify any impacts to the design. UO (Janet) talked about the need in setting up coordination meetings to discuss some areas in more detail.
1.09.02	UO/Glumac		<p>Craft Center Package #1 items discussed:</p> <ul style="list-style-type: none"> <li>Discussed the 480 volt 4000amp service and the benefits to providing a temporary pad mounted transformer and secondary feeder just to service the Craft Center 480 loads. Del to research getting a temporary 480 volt transformer so final transformer size can be delayed until better information is available. The secondary feeders will be reviewed, conduits for the full 4000 amps will be provided.</li> <li>The primary 12.47KV feeder to the transformer to have a 1/0 grounding per Del.</li> <li>UO would like one spare 4 inch primary conduit to each transformer.</li> <li>Demo drawing DEC100 is missing panel CC in room 22B and panel XA.</li> <li>Door contacts on all exterior doors.</li> </ul>
<b>ELECTRICAL (Meeting time 9:30-11:00)</b>			
1.09.03	UO/SERA/ Glumac		<p>Lighting</p> <ul style="list-style-type: none"> <li>SERA reviewed the current lighting plans on the A25X series in general.</li> <li>SERA noted fixture density was reduced in the North Wing program areas, since the last set of documents.</li> <li>Service ability issues were raised in the multi story spaces. Currently UO can service lighting up to 32 feet AFF so the typical lighting cannot be mounted above 32 feet. If the lamp life exceeds 5 years and service would not be required in less than 5 years UO is open to exceeding the 32 feet for a maximum mounting height. T5HO lamps are currently specified in all areas that are hard to reach both for their increased output and lamp life. Lamp life for F54 T5HO at 12 hours / start is 36,000 hours. Lumen Output is 5000 lumens. Lamp life for F028 T8 is also 36,000 hours at 12 hours/start but the output is only 2725 lumens. The lighting team will evaluate LED and other sources both for output as well as life for this area.</li> <li>LED lighting is preferred in challenging service areas. New plasma lighting is expected to have a long lamp life and should be reviewed.</li> <li>Concern was raised on the number of different luminaires types for the project. There are a lot of different luminaire types; given the large amount of different spaces and uses, the number is probably practical but will be reviewed. SERA noted that the schedule accounts for separate fixture codes for fixture of different lengths (within the same family). EMU facilities noted that consolidating lamp types is more critical than consolidating fixture types.</li> <li>Concern was raised over the possible number of lamp types for the project that would need to be stocked. UO to review the lamp column in the luminaire schedule and provide feedback on the quantity of the various types of lamps. SERA is still refining downlight fixture selections to consolidate the number of LED lamp types used.</li> <li>UO indicated the type W4 luminaire specified has caught on fire on a previous project and would like to find an alternative. Fixture type W-4 will be eliminated from the project.</li> </ul>

#	ACTION REQUIRED BY	DUE DATE	ISSUES/ACTIONS
1.09.04			<p>Lighting Control</p> <ul style="list-style-type: none"> <li>SERA/Glumac reviewed the lighting controls covered on drawings E200, E401 and E606.</li> <li>Confirmed a central low voltage lighting control system in the common areas will be provided.</li> <li>Egress lighting to be controlled similar to Allen Hall with occupancy sensors during non typical occupied times.</li> <li>Future meeting are required to go through various areas in detail.</li> </ul>
1.09.05	UO/Glumac		<p>Site/Building Power</p> <ul style="list-style-type: none"> <li>Reviewed site electrical in general, approach at south lawn and north court is appropriate.</li> <li>Provide power and data for future bicycle charging station along 13<sup>th</sup> Avenue.</li> <li>Event power and signal was reviewed in electrical meeting, network meeting and AV meeting. The following items were discussed: <ul style="list-style-type: none"> <li>Event power panel location. UO to confirm event power panel needs and location; presently a 200 amp, 208/120 volt panel with camlock connectors is anticipated.</li> <li>Adding empty conduits and vaults for pulling in power and signal for events from the event power panel on the south lawn.</li> <li>Amphitheater area presently has eight 120 volt circuits connected to panel F; circuits will need to be reconnected to new panel.</li> <li>Add exterior power and telecom on the north side of the new north bar.</li> <li>Attached is electrical drawing E051 indicating changes discussed for review.</li> <li>UO to provide event layouts to design team indicating mixing and stage locations</li> </ul> </li> </ul>
1.09.06	Glumac		<p>Power Distribution/Electric Room</p> <ul style="list-style-type: none"> <li>There have been minimal changes to the electrical distribution system and concepts discussed in the previous meetings. Single line diagrams are shown on E601, E602 and E603.</li> <li>There have been minimal changes to the electrical room locations and concepts discussed in the previous meetings. Electric room layouts are shown on E402, E501 and E502.</li> <li>Discussed the need to meter the loads on existing power that will remain or be replaced. Glumac to provide a marked up single diagram identifying the panels.</li> <li>Ballroom ATS does not function correctly and will need to be connected to the emergency system to provide code required egress lighting in the ballroom.</li> <li>Power metering has been updated and is shown on the single line diagrams.</li> <li>Grounding detail on E605 needs more detail for UO (Del) to review.</li> <li>Discussion of panel labeling and identification - unique names/numbers needed. Dana recommends labeling existing downstream circuits in- house, update the as-builts as necessary</li> <li>Reference to aluminum wiring to be removed from drawings and specifications</li> <li>Provide one extra conduit to each transformer for future capacity.</li> </ul>



#	ACTION REQUIRED BY	DUE DATE	ISSUES/ACTIONS
1.09.07			<p>Standby and Emergency Power</p> <ul style="list-style-type: none"> <li>Discussed the standby/emergency power shown on E603.</li> <li>Reviewed the standby/emergency loads, loads are as indicated on schedule on E603 except there will only be three elevators on standby power. The freight elevator will not be on standby power. Telecom room with transformer will have HVAC on standby power.</li> <li>Radio station manual transfer switch will be electronic (motorized function) but be open and closed by staff versus operating automatically with loss of power.</li> <li>Radio station connection to manual operated transfer switch can be a plug connection.</li> </ul>
1.09.08	UO		<p>Power and Signal Devices</p> <ul style="list-style-type: none"> <li>Discussed that the power and signal devices for UO's review are on the E3XX series drawings.</li> <li>Discussed the need for feedback on the type of floor devices needed in various areas, detail 1/E803 shows various options.</li> </ul>
1.09.09	LCL/OEG/ Glumac		<p>Demo/Electrical Project Phasing</p> <ul style="list-style-type: none"> <li>Future meeting are needed to review and discuss demo and project phasing with the contractors.</li> </ul>



<b>SECURITY and ACCESS CONTROLS (Meeting time 11:00-12:00)</b>			
1.09.10	UO/SERA		<p>Door Access Control</p> <ul style="list-style-type: none"> <li>Reviewed drawing E405 and discussed changes.</li> <li>Attached is electrical drawing E405 indicating changes for UO's review. "Prox" refers to electronic proximity card reader. "Keypad" is an access control device built in to the door latch, which does not require wired power or signal.</li> <li>Access Control system will require its own client software.</li> <li>Prox card access to be added to existing main elevator.</li> <li>Prox card access to be added in NE elevator, installed in elevator cab.</li> <li>Electric latch or strike at each exterior door for remote lockdown via access control system.</li> <li>All conference rooms to be keyed only.</li> <li>UO to review ADA operator locations on 100% DD plans and provide feedback. Greg suggested removing ADA operators at North Student Programs – more UO discussion needed.</li> <li>SERA suggested that a separate door hardware meeting is scheduled to review the plans and door schedule, door by door.</li> <li>UO (Ken Straw) to set up user meetings and provide feedback to Rick Jermain and the design team</li> <li>Survey of existing doors to be undertaken by UO (Ken/Dana) to catalog existing doors and hardware. Survey to be given to design team for integration into door schedule.</li> </ul>
1.09.11	Glumac		<p>Intrusion Detection</p> <ul style="list-style-type: none"> <li>Door contacts are required on all existing and new exterior and access controlled doors, including doors with Keypad only.</li> <li>Need for additional intrusion devices (glass break sensors, motion detectors) was not discussed.</li> </ul>
1.09.12	UO/Glumac		<p>Video Surveillance</p> <ul style="list-style-type: none"> <li>UO has drawings that indicate areas that require coverage. It was suggested to get ASG vendor involved to help layout cameras per UO's desired coverage.</li> <li>Separate meeting is needed to get UOPD input for perimeter and exterior/site cameras.</li> </ul>
1.09.13	UO		<p>Art Security</p> <ul style="list-style-type: none"> <li>Not discussed</li> </ul>
<b>NETWORK/TELECOM SERVICES (Meeting time 1:00-2:00)</b>			
1.09.14	UO		<p>General</p> <ul style="list-style-type: none"> <li>Jeff Hite has reviewed the 100%DD drawings and specs and will forward his review comments/markups to design team.</li> </ul>
1.09.15	UO/Glumac		<p>Service to the Building</p> <ul style="list-style-type: none"> <li>UO Network &amp; Telecom Services will provide the labor and materials required to disconnect campus backbone cabling at existing main entrance room and re-route through the new tunnel section to the new main entrance room.</li> <li>Glumac to provide support pathway for cabling in new tunnel section, via either cable tray or messenger strand, and wall space for terminations.</li> </ul>

1.09.16	Glumac		<p>Telecom Room Locations</p> <ul style="list-style-type: none"> <li>Discussed telecom room in NE wing feeding all floors. Glumac to verify that all outlet locations will be within 90-meters of the telecom room, per Cat5e cable standards.</li> <li>Verified that additional cooling to account for the transformer located within the level 2 telecom room is covered.</li> <li>There has been minimal change to the telecom room locations, sizes, or layouts concepts.</li> </ul>
1.09.17	UO		<p>Raceways and Cable Tray</p> <ul style="list-style-type: none"> <li>Jeff Hite to forward review markups on cable tray layout. His main concern was to avoid routing cable tray above offices where possible, so that tray can be accessed without disturbance.</li> <li>Access to conduit riser rooms above NE telecom room not needed, space for conduit routed between ceilings on each floor is sufficient. Provide spare empty conduits for future use.</li> <li>Access to and routing of low voltage cable at Mezzanine Administration offices discussed. Explore routing conduit through existing chase, where hydronic convectors are to be demolished. Alternate to cable tray is desirable given restricted ceiling height in space and limited architectural scope in space.</li> </ul>
1.09.18	UO/Glumac		<p>Telecom Outlets and Cable TV Outlets</p> <ul style="list-style-type: none"> <li>Discussed general cable quantity direction; four cables vs two cables. Offices four cable per outlet with two outlets. Locations not requiring a phone will only require two cables (study locations). UO to review and provide any additional direction on locations requiring two cables.</li> <li>UO to identify where digital signage is located.</li> <li>Cable TV outlet locations: Not reviewed, see AV meeting notes for additional information.</li> </ul>
1.09.19	UO/Glumac		<p>Wireless Coverage (WAP)</p> <ul style="list-style-type: none"> <li>Building will have complete coverage. Devices currently shown on E3XX series drawings. UO indicated they estimate the quantity required to be higher than what is currently shown in the drawings.</li> <li>UO to perform software mapping and provide WAP locations to design team. UO would like CAD drawings to do layout on.</li> </ul>
1.09.20	UO		<p>DAS</p> <ul style="list-style-type: none"> <li>Outdoor node system is being investigated by UO.</li> <li>Drew and Fred to follow up on DAS topic.</li> <li>4'x8' of wall space for possible future DAS (Distributed Antenna System) cellular reinforcement system in each telecom room, and a full empty relay rack in the main telecom room for future head-end equipment. Empty pathways for DAS backbone cabling will be provided for future DAS needs.</li> </ul>
1.09.21			<p>Site</p> <ul style="list-style-type: none"> <li>Discussed changes to site telecom outlets. See comments under electrical section item 01.09.05.</li> </ul>
<b>AV (Meeting time 2:00-3:00)</b>			
1.09.22	LA		<p>Listen Acoustics reviewed the basic AV scope. Some conference rooms will require lighting control and motorized blinds interface with AV system. Discussed providing two 1-1/2" conduits from the floor boxes to wall locations.</p>



1.09.23	UO		<p>Public Address System</p> <ul style="list-style-type: none"> <li>Building wide public address system is currently a desired additive alternate. Areas that need to be zoned separately still need to be reviewed.</li> <li>This system would need to separate from voice evacuation per input from Drew.</li> </ul>
1.09.24	LA/UO		<p>Exterior Event Electrical</p> <ul style="list-style-type: none"> <li>Reviewed AV site requirements. See comments under electrical section item 01.09.05.</li> <li>Stage area may be at either NW or SE area of south lawn, with mixing location at the middle of the lawn.</li> <li>UO Event Services desires an E-W continuous trough through the middle of the South Lawn, this has visual, maintenance and cost impacts. This is for temporary event needs, current scope assume laying cabling on lawn surface.</li> <li>UO to provide location of stages, mixing areas on site plan to finalize quantity and location of power/data in South Lawn area.</li> </ul>
1.09.25	LA/SERA		Listen Acoustics suggested a future meeting to discuss Multifunctional Auditorium on the 3 <sup>rd</sup> floor of the north bar.
1.09.26	SERA		Design team to reorient headwall at Main Lobby Conference Room 131 to south wall.
1.09.27	UO		Desire for divisible conference rooms 130/131 was expressed by Event Services. This partition is not currently in the scope of the project. An existing column also reduces flexibility/functionality of a combined room.
1.09.28	LA/Glumac		Small and Very Small Conference Rooms: to have Digital Display Screen with integral speakers (not separate wall speakers). To have (1) floor box typical.
1.09.29	SERA/LA		River Conference Rooms: Typical "medium room" AV scope to be added to Rogue Conference Room 140. Typical "small room" AV scope to be added to Umqua Conference Room 141.
1.09.30	SERA/LA		Hearth AV: Provide motorized projection screen for stadium stair at hearth, permanent projector too, study size and distance to verify with UO. Provide control/input at info desk, design team to consider built-in vs. portable speakers
1.09.31	SERA/LA		Very Large Divisible Conference Room is to have motorized room darkening shades on the North and South walls, integrated to the scene controller. SERA to verify scope capture
1.09.32	SERA/LA		Manual pull down screens to be provided at Medium and Large Conference Rooms, typical.
1.09.33	SERA/LA/ Glumac		Provide motorized display screens at Very Large Divisible Conference Room 145/146, and Student Street Frontage Conference Rooms 023, and 230, and at Multifunctional Auditorium 208.
1.09.34	SERA		<ul style="list-style-type: none"> <li>Provide manual roller shades (room darkening) at Level 2 Divisible Conference Rooms, 231 and 232, and at Medium Conference Rm230.</li> <li>Relocate door of Conference Room 230 to south end of west wall.</li> </ul>
1.09.35	LA		Cable TV: UO asked LA whether Cable TV outlets were provided to the TV locations. Glumac verified that these are covered on the Glumac E3XX series drawings.
<p><b>LANDSCAPE/CIVIL (Meeting time 1/10/14 1:00-2:30)</b> Glumac did not attend the meeting – Refer to separate meeting minutes.</p>			
<p><b>FIRE ALARM and FIRE PROTECTION (Meeting time 1/10/14 2:30-3:30)</b> Glumac did not attend the meeting – Refer to separate meeting minutes.</p>			

These meeting minutes reflect our understanding of the issues discussed. This will act as the project record unless the sender of these minutes is notified within 3 days of the issue date.

# MEETING MINUTES

**To:** Margo Rettig  
 SERA Architects  
 338 NW Fifth Avenue  
 Portland, OR 97209  
 (503) 445-7372 X376  
 margor@serapdx.com

**Date:** January 13, 2014  
**From:** Joshua Checkis/Todd Kolibaba  
**cc:**

**Project Name:** U of O EMU  
**Project Number:** 02.13.00545  
**Subject:** 100% DD Tech Review Meeting Notes (Plumbing/Mechanical)

<b>Meeting Date/Time:</b>	1/10/2014	<b>Meeting Location:</b>	
<b>Next Meeting Date/Time:</b>		<b>Next Meeting Location:</b>	

**Distribution/Attendance:** (persons shown in bold were present)

NAME	COMPANY	PHONE	EMAIL
<b>Martina Oxoby</b>	<b>UO – CPRE</b>	<b>(541) 346-5880</b>	<a href="mailto:mbill@uoregon.edu">mbill@uoregon.edu</a>
<b>Janet Lobue</b>	<b>UO -CC</b>	<b>(541) 346-5259</b>	<a href="mailto:lobue@uoregon.edu">lobue@uoregon.edu</a>
Fred Tepfer	UO – CPRE		<a href="mailto:ftepfer@uoregon.edu">ftepfer@uoregon.edu</a>
<b>Gregg Lobisser</b>	<b>UO User Group</b>		<a href="mailto:lobisser@uoregon.edu">lobisser@uoregon.edu</a>
<b>Dana Winitzky</b>	<b>UO – EMU</b>	<b>(541) 346-6092</b>	<a href="mailto:drw@uoregon.edu">drw@uoregon.edu</a>
<b>David Flock</b>	<b>UO – EMU</b>	<b>(541) 346-6116</b>	<a href="mailto:dflock@uoregon.edu">dflock@uoregon.edu</a>
<b>Casey Hagerman</b>	<b>UO – User Group</b>		<a href="mailto:hagerman@uoregon.edu">hagerman@uoregon.edu</a>
<b>Natasha Koiv</b>	<b>SERA Architects</b>	<b>(503) 445-7372</b>	<a href="mailto:natashak@serapdx.com">natashak@serapdx.com</a>
<b>Eric Philips</b>	<b>SERA Architects</b>	<b>(503) 445-7372 ex 332</b>	<a href="mailto:ericp@serapdx.com">ericp@serapdx.com</a>
<b>Nathan Burton</b>	<b>SERA Architects</b>	<b>(503) 445-7372</b>	<a href="mailto:nathanb@serapdx.com">nathanb@serapdx.com</a>
<b>Margo Rettig</b>	<b>SERA Architects</b>	<b>(503) 445-7372</b>	<a href="mailto:margor@serapdx.com">margor@serapdx.com</a>
Jon DeLeonardo	SERA Architects	(503) 445-7372	<a href="mailto:jond@serapdx.com">jond@serapdx.com</a>
<b>Rob Schnare</b>	<b>Glumac PM/Mechanical</b>	<b>(503) 227-5280</b>	<a href="mailto:rschnare@glumac.com">rschnare@glumac.com</a>
<b>Joshua Checkis</b>	<b>Glumac Mechanical</b>	<b>(503) 227-5280</b>	<a href="mailto:jcheckis@glumac.com">jcheckis@glumac.com</a>
<b>Todd Kolibaba</b>	<b>Glumac Plumbing</b>	<b>(503) 227-5280</b>	<a href="mailto:tkolibaba@glumac.com">tkolibaba@glumac.com</a>

#	ACTION REQUIRED BY	DUE DATE	ISSUES/ACTIONS
<b>PLUMBING</b>			
1.10.01	SERA		Lack of roof overflows on existing building discussed. UO standard is to provide overflow, but because roofs are well maintained at EMU, facilities did not think it necessary to add them. SERA to contact City to determine whether they will require overflows. UO and Glumac will be notified of that outcome. If required, external scuppers are preferred and will be coordinated by design team.
1.10.02	No action		No hose bibs required in restrooms for this project.
1.10.02.1	Glumac, SERA, CM		Exterior hose bibs preferred in landscape vaults rather than on building. Design team to coordinate and propose locations
1.10.02.2	Glumac, SERA, CM, ABHT, BHE		Proposed grease interceptor strategy and location presented. UO has concerns about unsightly appearance and/or odors near a building entry, as well as constructability questions about the proposed location. In general it was agreed that this area is best from a cost and piping practicality standpoint, but care must be taken to execute it well. Design team to coordinate design issues and propose final location option(s) to be discussed in a future meeting with UO.

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#	ACTION REQUIRED BY	DUE DATE	ISSUES/ACTIONS
1.10.03	Glumac		Discussion of drains at south mechanical room revealed inadequate existing condition. More capacity is needed, possible sump pump issues as well. Design team to coordinate possible replacement of the two floor drains with two larger floor sinks.
1.10.04	Glumac		Provide mixing station in Janitor closets.
1.10.04.1	Glumac		Question asked about all known locations of leaky valves, fixtures, failing piping, etc. Glumac to coordinate a time to tour with David Flock to review
1.10.04.2	Glumac, SERA		Level 3 (E) restroom renovation scope removed per UO since less renovation is now occurring on that floor
1.10.04.3	Glumac		Ball valves and unions required at control valves to accommodate replacement
1.10.04.4	Glumac		Check valves requested at Craft Center sinks
1.10.04.5	Glumac		Freeze protection to be added at Craft Center outdoor supply piping and fixtures
1.10.04.6	Glumac, BHE		Glumac to verify with Civil that exterior pump is properly alarmed
<b>MECHANICAL</b>			
1.10.05	UO		Glumac has requested heat loads from KWVA Rackroom.
1.10.06	Glumac		Glumac went on site with UO facilities after the meeting to as built the 3 <sup>rd</sup> floor 50s building area. This will be updated in the next CD submission.
1.10.07	Glumac		Glumac requested condition of all existing radiant floors. UO confirmed they are all in good working condition and can be reused in the new design. This exception to this is the 2 <sup>nd</sup> Floor McMillan Gallery radiant floor which requires a new control valve for improved zone control.
1.10.08	UO/Glumac		Glumac again stressed the importance of the existing preTAB report and the value to maintain existing conditions in the 50's building. Glumac to comment on TAB scope of work to attempt to reduce cost.
1.10.09			UO confirmed 60lb steam pressure to the building is consistent throughout the year.
1.10.10	Glumac		Glumac requested any manufacturer preference type from facilities: Glumac will use B&G Pumps, ABB VFDs and the UO standards for a reference guide.
1.10.11	Glumac		Glumac requested information on performance of existing hot water radiators. UO indicated there is existing water hammer issue due to piping corrosion. Glumac will not reuse radiators in new design where possible. Elimination of entire hot water system is not possible due to areas not being in the scope of the project. The intent is to abandon radiators in place for the project scope. UO may consider coming back through and demolish as required/desired at a later date.
1.10.12	Glumac		Based on input from UO, the team rezoned three zones in the KWVA area. The card office room (001A) was also added to the card office zone (001).
1.10.13	Glumac		Will add ventilation/conditioning air to the corridor behind the food service area on the 1 <sup>st</sup> level. Zoning plan will be updated.
1.10.14	Glumac		In lieu of providing electric heaters on standby power to serve the KWVA area, UO requested providing a dedicated pump in the mechanical room on standby power to provide tempered air during power outages. A split system will be provided for the rack room on standby power.
1.10.15	N/A		Glumac noted that there is one space with Active Chilled Beams in the building, at the 1 <sup>st</sup> floor seating area. This is due to ceiling height. UO has other projects that have used ACBs before.

#	ACTION REQUIRED BY	DUE DATE	ISSUES/ACTIONS
1.10.16	Glumac		Glumac to send cut sheets of the Jaga Clima Canal for UO review. The other option is to provide a radiant baseboard similar to the 1 <sup>st</sup> and 2 <sup>nd</sup> floor in lieu of this project. Specifically, UO addressed concerns regarding maintenance and water being used to clean the floors. Glumac does not recommend radiant floors in the ground floor north section of the north wing, due to future flexibility constraints (in order to rezone in the future, the slab would need to be demolished and new pex routed).
1.10.17			Glumac indicated current design in the student street/hearth area is displacement ventilation with radiant slabs. Our ECM report goes into detail about the comfort issues that would result from eliminating the radiant scope. UO requests that Glumac provide detailed information about comfort range at peak hours in the student street (without cooling) for review, including as much granularity as is practical.
1.10.18			UO questioned open spec for controls. Glumac is open to this, but a meeting that includes LCL, GSM and UO facilities is recommended
1.10.19			Some controls have been recently replaced and may have re-use opportunities. This may be possible, but will need to be coordinated by the contractor. UO to identify this equipment so provisions can be specified.
1.10.20			VAV access should not be required through private offices if at all possible. Design team is coordinating locations that will be more readily accessible from public and semi public office areas. They should also be within a few feet of the access ceiling.
1.10.21			Approach to conference room conditioning strategy and management of peak load concerns was presented. UO seems comfortable with this approach.
1.10.22			UO concerns with past issues of condensation from chilled beams. Glumac described control strategies that prevent these issues.
1.10.23			Split system heat pumps at Mezzanine and Level 3 spaces are intended to be wall-mount. Care will be taken to avoid ADA issues with this strategy or ceiling-mounted units may be a secondary option.
1.10.24			UO questioned comfort at Level 3 Emerald space. Currently, some windows have tint film or are blocked out with solid panels for A/C units. New system will provide comfort. Cross breeze through operable windows is still possible as well. Ventilation occurs through operable windows and/or leakage. There is currently no architectural scope to replace windows in order to address energy efficiency, but high performance window film may be an option. This will be added to the ECM discussions.
1.20.25			Safer roof access is needed at level 3 South roof where mechanical equipment will require maintenance. SERA to provide improved accommodation options for UO review.

These meeting minutes reflect our understanding of the issues discussed. This will act as the project record unless the sender of these minutes is notified within 3 days of the issue date.

**Project Name** UO Erb Memorial Union Renovation and Expansion  
**Project Number** 110451  
**Purpose** Technical Review – **Fire & Life Safety**  
**Date and Time** 09 January 2013 – 2:30 – 3:30pm  
**Location** EMU Capital Construction Conference Room

<b>Attendees</b>	<b>Name</b>	<b>Organization</b>
	<b>UO:</b>	
	Gregg Lobisser	UO, Student Affairs, User Group Chair
	Dana Winitzky	UO, EMU Staff
	Drew Standridge	UO, Enterprise Risk Services
	Martina Oxoby	UO, CPRE
	<b>Design Team:</b>	
	Natasha Koiv	SERA
	Eric Philps	SERA
	Nathan Burton	SERA
	Margo Rettig	SERA
	Larry Gilbert	Cameron McCarthy
	Aaron Olson	Cameron McCarthy
	Geoff Larsen	BHE

## Discussion Items

### 1.0 FDC locations and Backflow vaults/lids

- UO Questioned the number of FDCs on drawings. After discussion it was realized that 3 locations were shown but only 2 intended. 1 location is preferred by Drew, but through discussion of interconnection difficulties and cost involved, 2 locations would be acceptable as long as the City accepts 2. The city indicated this would be ok in original SD phase meeting.
- Fire Protection backflow vaults must be located as close to the street as possible, but not in the street or sidewalk. This will require vaults as shown by BHE, preferred just behind the sidewalk or in furnishing zone. Provide heavy traffic rated lids, not manhole covers in order to prevent worker injuries. Arena has a good example of heavy duty aluminum lid.
- FDC can be integrated in landscape wall or other element, but cannot be concealed by vegetation.

### 2.0 Fire Truck Access

- Fire truck access discussed along North plaza. Accommodations appear to work well as shown.
- Landscape asked what triggers red painted curbs on other projects. Drew does not know exactly who dictates it, but suspects it demarcates the extent of area designed for fire truck loading. This needs to be discussed with the City, and if required, any proposed alternates to red curbs would need to get approval. Another approach may be to make all paving compliant. UO will research what is required by any campus departments.
- South lawn access discussed at length. Proposed base option from SERA would require some widening of new sidewalk areas as well as extension of project scope toward the Promenade in order to provide turnaround accommodations per the Fire Code (or ask City for existing condition exception for existing pedestrian sidewalk at 14' wide). Aaron proposed idea to limit fire truck access further in order to eliminate these issues, yet still provide the required access to EMU and Straub. This change is preferred by UO and will be proposed to the city. Requirements for paving demarcation will also need to be discussed.

### **3.0 Craft Center**

- Concern that Craft Center specs may not include voice evacuation to be compatible with requirements for the rest of the project – design team confirmed this is included in current documents.
- Further discussion about appropriate sprinkler protection at outdoor glass kilns – UO concerned that cost and design not fully captured to make this a safe condition (not just code compliant) Current documents indicate special requirements to be coordinated with owner, recent addendum includes dry sprinkler valve for this area. UO has general discomfort with design-build of essential systems like fire alarms and sprinklers. A future meeting was suggested including LCL to determine whether a design consultant needs to be brought on to deal with this issue.
- Dust collection is to be temporary in phase 1, permanent solution in package 4. Sprinkler coverage to be included inside duct.
- Design team to verify that sprinkler coverage at bike shelters is well documented in design.

### **4.0 Alternate Means & Methods**

- AM&M drafts are currently being developed. These will be submitted to UO for review by 2/7. Goal will be to submit finals to City by 28 so that a follow-up meeting can be scheduled in March.
- Question about separation strategy at level 2 bridge: design team would like to pursue a fire rated curtain with egress as it provides improved life safety for disabled occupants and is lighter weight/more compact to ease installation in the space available. Global Scholars used a smaller lighter curtain that has had deployment issues. Cut sheets and detailed info on proposed product to be submitted to UO for review. Coiling fire door is secondary alternative.
- City has expressed concern with concealed spaces with combustible framing in the existing building. Design team to discuss in more detail with Dana to ensure that all known areas are addressed as part of AM+M language.
- North stair 3 (Mills Center wing) is to be enclosed and 1-hour rated. Design team to develop this enclosure and discuss implications with UO. Doors on hold-opens preferred if possible.

### **5.0 Next Steps**

- AM+M review by UO and submittal to City
- Remote annunciation panel locations to be identified by UO
- Fire access diagram revisions and submittal to City
- Future discussions to be scheduled about Stair 3 design impacts, fire protection at Craft Center outdoor space, fire curtain/door if necessary
- UO to research whether fire lane marking required by any campus departments

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**Project:** UO EMU Expansion and Renovation January 17, 2014  
**Attended By:** SERA, BHE, CM, UO Management and Facilities  
**Date of Meeting:** January 10, 2014 **Pages:** 1

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## Meeting Notes

1. Refer to meeting notes issued by Cameron McCarthy for other site-related and stormwater-related items discussed during the meeting.
2. The location of the fire hydrants and FDCs along East 13th Avenue were discussed. It was determined that one too many FDC locations is currently shown, this will be revised and further coordinated by the design team. The location of hydrants along 13th and others throughout the site will be studied further by the design team.
3. UO staff noted that backflow preventer vault covers within vehicular areas need to be able to stand up well to repetitive traffic loads. Lids design for incidental loading will not be acceptable.
4. Drew noted that UO prefers to have hatch-type backflow preventer lids instead of manhole lids. Given the large size, the manhole lids become a lifting concern. Drew cited the Lillis Complex lid as a suitable large traffic-rated hatch-type lid.
5. UO staff expressed interest in moving the fire protection backflow preventer(s) south (out of the street) to facilitate access. Paved areas just south of the street were discussed as tentative locations, but further study and coordination is required to select final locations. BHE noted that EWEB would need to be consulted if the backflow preventers move further away from the connection to the mainline.
6. The location of the grease interceptor was discussed. The location will be further studied and refined by the design team, keeping in mind the issues of excavation, monthly cleanout process, odor control, etc.
7. UO staff noted their desire to stockpile suitable soils removed from the site. UO noted the location of the preferred offsite stockpile location (see attached map). The project team discussed whether or not the stockpiled materials should include organic topsoil material only or additional (and more inert) excavated material. A final decision was not reached. Further discussion is needed to determine the process for coordinating the stockpiling issue with UO and LCL.
8. The fire protection water supply and FDC distribution around the building was discussed. Drew expressed interest in consolidating the FDCs by studying possible routes through the building since a buried line around the building is likely cost prohibitive. The design team can identify the limited space and route through the building, and there will be challenges and impacts to discuss with this approach.

University of Oregon  
Erb Memorial Union

**PACKAGE 4/5 100% DD OWNER REVIEW MEETING****DATE: 1/10/14**

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**Attendees:**

See attached sign in sheet from SERA

**Meeting Notes:**

1. The Mills Center Japanese Maple will be transplanted by UO facilities and stored during construction. They currently have the plaque and concrete surround. CM will show the tree installed in a similar location on construction drawings.
2. There are a few trees on the north side of the building that have been removed for construction trailers. In addition to the trees shown for removal on the Package 1 drawings the Sweet Gums and Maple on the south side of the EMU will be removed during package 1 work to create a construction layout area. CM will update tree removal plans to eliminate these trees from construction drawings.
3. The trees north of Straub Hall are shown to be removed. No new trees are shown to be replanted based on the presentation to CPC.
4. Path from campus heart to the 440 level of EMU north bar is a combination of 2% walk with 2 segments of ramp that includes hand rails and center landing. The ramps are necessary to not impact existing telecom lines. Sloping plant beds and terraces with retaining walls are along the walk/ramp to pick up the elevation changes.
5. The entrance to the book store is in line with the walk leading up from campus heart.
6. A new flag pole is located in a similar location to the existing.
7. Fire hydrant and FDC locations were discussed at north side of EMU near the turn around. Additional study is required for the location of the hydrant, emergency phone, and utility back flow vault. CM to further review the design of this area and look to improve alignment of paths to new North building entry.
8. Fire access was discussed. UO asked about which paving needs to be reinforced for emergency vehicles and if there are options to reduce. It was discussed the savings for the reduced concrete profile is minimal.
9. FDC connection NE of EMU shown in plant beds is acceptable. Plants should not block the FDC or they will be removed by UO. This connection can be a part of a wall or other element or standalone pipe as necessary.
10. There are 3 storm water planters along 13<sup>th</sup> Ave. CM and BHE will review the options for storm water design to optimize storm treatment and soil requirements for trees and plants. One planter location to the East of the fire truck access plaza will revert to stormwater treatment planter per UO direction.
11. Bike share structure will be included as Contractor installed. Power and data need to be routed to bike share.
12. Emergency phone locations were presented as designed to be available/visible from all sides of the building. UOPD to provide final review and feedback.



13. Hoop bike racks along north side of EMU (under cover) will be campus standard with the exception of being charcoal/black in color. All other bike racks are UO Green (campus standard).
14. Seat and retaining walls will have a sand wash finish. UO does not want to see a sack and patch finish.
15. Accent band paving is shown to be a colored gray concrete with recycled glass. Confirmation is needed that current cost estimate includes this level of finish. Design team to confirm what was presented to CPC and verify with UO.
16. Trench drain grate locations were pointed out. The trench drain grate is included in the drawing set.
17. Locations of teak benches (campus standard) were pointed out. Next to the building CM requested a backless teak bench be used to allow students to face either direction. No objection was voiced.
18. UO requested plant beds to be expanded to incorporate trees instead of having trees in lawn areas next to plant beds.
19. UO requested top soil be salvaged and stock piled at a location near the river front research park. Erosion control would be a requirement of LCL during construction. After construction the UO would be in charge of erosion control. The quantity of topsoil material is not known but will be evaluated during construction. Specifics of what LCL included in their current estimate needs to be determined.
20. Discussions of event power at North pedestrian plaza included discussion of fire lane conflicts, power and data to be provided at building face in lieu of planter walls on North edge
21. Event power and data for South lawn events will require further coordination and UO feedback through markups. Design team will coordinate the preferred locations to provide pathways and connection points integrated with landscape design elements.
22. Hose bibs currently located on building are preferred to be provided at in-ground boxes within planted areas. Design team will provide locations for UO review.
23. Grease interceptor to be located near new SE entrance, design team to coordinate and provide a location that has minimal visual and odor impact and provides for monthly cleanout.
24. Exterior trash/recycling/compost strategy to be studied in conjunction with interior building strategy for collection and current campus standards.
25. 1 of the 2 bike parking shelters for Straub Hall has been moved to University Street. The current drawings show only 1 of the covered bike parking structures south of the EMU. Martina indicated that the other covered bike parking structure, even though it is located outside of the EMU project boundary, still needs to show on a drawing. Martina will coordinate internally to determine whether the Straub or EMU drawings should include the bike shelter along University Street.
26. Accommodation of Emerald bikes within South shelter is in UO court to discuss, design team does not need to provide any modifications at this time.
27. UO wants the ornamental gate on the existing storage container in the loading dock. The storage container itself should not be salvaged.
28. UO indicated a mid level landing needs to be included at the loading dock for food carts. Design team to review and show options to UO.
29. The pedestrian connection from the south edge of the EMU through the parking lot was reviewed. UO commented the extra room for service vehicle movements is good.
30. UO requested medium size trees at the concrete plaza area between the EMU and Onyx Street.

31. UO likes the Birch trees that are at the Jaqua Center. These should be used at the rain garden.
32. UO to provide comments or direction on trees they prefer installed for the project.
33. Large canopy trees will be installed along 13<sup>th</sup> Ave and around the south lawn.
34. Design team will explore opportunities to express storm water from building canopies into storm water planters. The new south canopy may be one such opportunity.
35. Grading of the south lawn was reviewed. A trench drain is shown at the project limit to capture storm water to meet LEED requirements.
36. Fire and emergency vehicle access was partially discussed. Full discussion of emergency access was held off for the subsequent meeting. In general, the design team is to review final proposed fire access routes. If additional site work needs to be added beyond the current scope UO will ask that an equal amount is reduced from the current scope.
37. It is not clear whose requirement it is to mark fire lanes with red paint. UO will review internally. The fire lane will have to be marked in some way to meet city code. Design team to incorporate fire lane marking solution in plans. Alternates to painted curbs or lines may be possible, but will require City review.

**Project Name** UO Erb Memorial Union Renovation and Expansion  
**Project Number** 110451  
**Purpose** Technical Review – **Zero Waste** (Recycling and Trash)  
**Date and Time** 09 January 2013 – 2:30 – 3:30pm  
**Location** EMU Capital Construction Conference Room

<b>Attendees</b>	<b>Name</b>	<b>Organization</b>
	<b>UO:</b>	
	Gregg Lobisser	UO, User Group Chair
	Dana Winitzky	UO, EMU Staff
	Dan Geiger	UO, EMU Staff
	Karyn Kaplan	UO, Zero Waste Program Manager
	Martina Oxoby	UO, CPRE
	<b>Design Team:</b>	
	Natasha Koiv	SERA
	Eric Philps	SERA
	Nathan Burton	SERA
	Margo Rettig	SERA

## Discussion Items

### 1.0 Introduction

- General discussion of sustainability plans for the EMU.
- Discussion of off-the-shelf receptacle examples

### 2.0 Trash/Recycle/Compost Receptacle Locations & Strategy

- Distributed compost is desired, odor issue is the same whether food is in trash or compost. Design team does not intend to provide any standalone trash, though UO will manage receptacle provision within student suites.
- Receptacle design that provides clearly visible deposit locations is highly preferred, essentially these should not be on the top of excessively tall receptacles.
- Zero Waste provided loose diagrams of areas where they saw needs, this appeared to be based on older design drawings.
- Design team described the types of casework proposed for various locations throughout the public spaces in the building, some were modified and added along the way.
- Discussion determined that casework is not ideal within student programs, standalone off-the-shelf receptacles and/or existing green bins (qty. 35) will provide maximum flexibility.
- Casework proposed throughout public spaces was generally agreed upon, though the design team needs to create plans for review of final locations by UO.
- Further discussion of conference room provisions as part of misc. casework scope is recommended.
- Accommodation of sustainability educational signage will be provided for in the design of receptacle casework, especially at Fishbowl food service casework.
- Display opportunities will be captured above receptacles as part of design throughout.
- Discussions of mobile casework at Fountain Court food service resulted in concerns over weight and constructability. Design team to study an integrated element at the South end to serve both the food service area and conference suite for presentation to UO.
- Design team will send examples of casework designed for EOU
- Proposed casework designs for EMU will be presented as they are developed in CDs.

### **3.0 Other Waste Management/Reduction Issues**

- The creation of a container rinsing station within the existing ATM vestibule is desired. Design team to provide casework for sink, microwave location, etc.
- Confirmed that design includes drinking fountains with bottle fillers in new North wing.
- Exterior receptacle strategy to be studied in conjunction with interior strategy and current campus standards.

### **4.0 Past issues to track**

- Provide a curb at dumpster locations to capture dumpsters.
- Clarify requirements for placement and configuration of recycling casework in corridors set by Campus FLS group.
- Ensure casework design prevents spill-over around the can

### **5.0 Next Steps**

- Design team to send EOU and other precedent casework examples. Presentation of developed interior receptacle locations and design as well as exterior collection strategy. Discuss provisions for conference rooms, discuss restroom waste reduction potentials, signage opportunities, synergies with Erb Garden, encouragement of container re-use, etc.