WELCOME

THE UNIVERSITY OF UTAH
Planning, Design & Construction Forum
May 8th, 2018
INTRODUCTION

Presenter:
Robin Burr - Chief Design & Construction Officer
Acting Director of Campus Planning
MEETING GOALS

Our Organization
- Where we've been
- Where we are today
- Where we are going

General Updates

Practice Changes

Current and Upcoming Projects

Q & A
WHERE WE’VE BEEN...

A mandate to change

U of U Team

AE / GC Community
WHERE WE ARE TODAY...

Smaller, more customer-focused project teams

More support for project delivery

Invested in training

Beginning to implement practice changes around how we work
WHERE WE ARE GOING...

We are becoming:

- More involved and informed Owner's Representatives

- More knowledgeable about the details of the work, the schedule, and the budget

- More willing to ask hard questions

- More open to feedback from our Architects and Contractors
WHAT WE NEED FROM YOU...

A willingness to share information at a deeper level

A willingness to try new practices

Openness to feedback

Willingness to tell us what we can do better

Trust in the process
GENERAL UPDATES

Presenter:
Robin Burr - Chief Design & Construction Officer
Acting Director of Campus Planning
Ken Nye - Deputy Chief Design & Construction Officer
CHANGE IN BIDDING SYSTEMS

Switching to BidSync on May 8th
Make sure you are registered in BidSync
Verify your firm contacts are current
Notifications (only) continue on SciQuest until July
CHANGES IN REQUESTS FOR PROPOSALS & QUALIFICATIONS

Responding to consultant / contractor input

11 x 17 Submittal format and constraint

- Check and follow directions
- Provides greater flexibility
- Include most important information concisely
- Graphs convey a lot

Selection criteria and scoring
OTHER PROCUREMENT ITEMS

Health Insurance Requirements

- Same as DFCM
- Prime firm must provide Statement of Compliance from their Actuary / Underwriter if contract value is over $2 million
- Prime firm obtains Statement from any subcontractor or sub consultant with a contract over $1 million
- Effective May 7th, 2018

No gratuities
PARKING ON CAMPUS POLICY

Parking is a challenge for students, staff, and visitors (including AEs and Contractors)

Working with campus to update parking requirements

Resolution anticipated by July 2018
**U OF U IS TOBACCO FREE**

Effective July 1st, 2018

Applies to all University property

Includes cigarettes, cigars, pipes, smokeless or chewing tobacco, and electronic cigarettes

Nicotine replacement therapy products are allowed

We want you to continue working here
CHANGES IN PRACTICE & EXPECTATIONS

Presenters:
Gary Giglio - Director of Design & Construction Support
Michael Beck - Quality Control
Bryan Romney - Building Official
Colin Moore - Project Estimator
SCHEDULING & OAC MEETING AGENDA

CPM Schedules
- Primavera P6 or Microsoft Project

Pull Planning

Constraint Logs
- Managing issues before they impact critical path

Owner engagement

OAC Meeting Agenda
- What and how we talk about the issues that impact construction
Owner, Architect, Contractor (OAC) Meeting Agenda & Constraint Log

05-02-2018

The intent and purpose of an OAC meeting varies dramatically from project to project, even within the same organization. In order to standardize, set expectations and develop a higher level of transparency for our internal teams, clients and industry partners, the following provide direction on how to conduct an OAC meeting. As it pertains to the management of U of U projects, the purpose of the weekly OAC meeting is as follows:

1. To inform the discussion around the schedule critical path, to identify constraints to achieving the schedule critical path and tracking individual commitments to removing constraints so that schedule dates are maintained.
2. With few exceptions, all topics of discussion in an OAC tie to a schedule activity, and it is rigor around maintaining the critical path schedule that the OAC should focus.
3. A Constraint Log will be used to manage issues that have the potential to impact schedule. Typical issues include RFI’s, Submittals, Procurement/long lead items (60-90 days out), fabrication, delivery of materials and equipment, Coordination, design direction, PCO/CO’s, Owner decision deadlines, etc... all issues generated from these sources and others will be managed using a Constraint Log.
4. OAC meetings are not the place to point blame, revisit the history of a particular issue or to generate solutions by committee. It is to identify the potential constraint, who will resolve it and when the resolution will be provided.
5. Typical project lists should be used as they too have a role in the oversight of a project and tie to Unifier. Lists however, are not the tool by which to manage, but a constraint log is because it joins important information into a single format.
6. Other topics of discussion that also need to be a part of an OAC, but not necessarily in a constraint log can include safety; GC and subcontractor Quality Control; AVI Quality Assurance (excluding deficiency notices and inspections), PACE plans, client concerns, etc.
7. Finally, each project team needs to determine what works best for them, so if there is a new innovation or approach to managing the OAC, it is encouraged and should be explored.
8. OAC meeting minutes are to be uploaded into Unifier within 72 hours of the meeting conclusion. It is the expectation of the University that everyone that attends the meeting will review the meeting minutes and respond with comment or indicate no exception taken within 72 hours.

OAC Meeting Agenda – Part A, U of U Mandated Discussion Topics

1. Critical Path Schedule Review
   a. Review CP (incl. CP’s for interim completion dates and milestones) and all activities within 14 (this timeline can be adjusted to suit team needs) days of CP
   b. Review 3 week (or whatever is agreed upon by the Owner’s Representative) rolling schedule (4.7.9 Updates)
      i. Review long lead items
   c. Review Schedule of Submittals (4.7.10)
   d. Schedule Recovery (4.7.11)
   e. Review Contract Time Extension Requests (4.7.12(1))
   f. Review Re-ordering, Rescheduling and Changing Activity Durations (4.7.12(2))
   g. Review Changes in Contract Time (4.7.12(3))

2. Constraint Log – All items potentially impacting the Critical Path
3. Coordination Log – Everything else

Part B, Possible Discussion Topics (team/project determinant)
4. Submittal List – Shop Drawings, Product Data/Samples, Substitution Requests
5. RFI List
6. Procurement/Long Lead Items
7. Anticipated Scope Changes – ASI’s, Owner requests, etc....
8. PRD’s/CO’s
9. Applications for Payment
10. Lead/Sustainability/Energy
11. Weatherization
12. Site Logistics/SWPPP
13. Owner Commissioning
14. BIM
15. Transition to Sustainable Operations
16. Owner Departments – Uff/Space Planning/Start-up; Services/Clintech
17. Cash Flow
18. Quality Control
19. Quality Assurance/Inspections
20. PACE Plans
CODE REVIEW & INSPECTION SERVICES

Bureau Veritas North America - new vendor at the U

- Remote Plan Checking
  - Highly qualified, experienced Plans Examiners
- Full-time inspector / Quality Assurance - June 1st
  - Online Inspection Request Form
  - Cloud based inspection management
  - Proactive, collaborative approach to code issues
- Developing over-the-counter review process
- Special Inspection and U of U Inspection tracking and documentation
- Requirements for Code Review During Construction
The University of Utah as a State of Utah Agency is required to comply with the adopted Construction and Fire Codes listed in Title 15A of the Utah Code. In accordance with the International Building Code, the building official is to review and approve the construction documents and issue a permit (2015 IBC Section 107.5). Once the construction documents are stamped by the building official as “Reviewed for Code Compliance” and the permit is issued, construction may commence and will be inspected as requested by the permit holder to ascertain compliance with the provisions of the code (2015 IBC Section 110.1).

During the course of construction, various changes to the scope of work typically occur. These changes include Addenda, Request for Information (RFI), Architect Supplemental Instructions (ASI), Construction Change Directives (CCD), Requests for Proposal (RFP), Change Orders (CO), Revised Drawings (RD) and marked-up shop drawings (MSD). Additionally, as a condition listed on the approved set of construction documents, deferred submittals are required to be reviewed by the building official. All these changes are to be handled in a very specific manner because of the potential that the changes may have certain code compliance requirements.

The code stipulates that any change to the code approved set of construction documents are to be reviewed by the building official for review and approval (2015 IBC Section 107.5). However, it would seem unreasonable to require every change to a project during construction be approved by the building official. Some changes are not significant nor do they materially alter the approved construction documents. Provided the changes do not materially alter compliance with the code, the building official would not be required.

For the purposes of this Code Instruction, Materially Alter is defined as any change, alteration or modification to the code approved construction documents, as determined by the building official, in accordance with Chart 1, that causes the project to be non-compliant with the adopted codes of Utah, or causes an unreasonable risk to the health, safety, and welfare of the building occupants and public.

In accordance with the requirements of the code, once the Registered Design Professional in Responsible Charge (RDPR) has determined that a material alteration to the code approved documents is anticipated, an amended set of construction documents shall be resubmitted to the building official for approval. The changes are not to be installed until approval is given by the building official (2015 IBC 107.4). The following outlines the procedure for resubmittal of an amended set of construction documents:

- The RDPR shall submit the specific changed RFP documents sealed and signed by the appropriate design professional as a “Code Review” task in Unifier.
- Once reviewed and approved, the building official will stamp the documents as “Reviewed for Code Compliance” or acknowledges code compliance.

### CHART 1
Changes in Project Specifications

<table>
<thead>
<tr>
<th>Change Item</th>
<th>Review Required</th>
<th>RFP 1 or 2 Required</th>
<th>RFP 3 or 4 Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All Deferred Submittals</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. All changes which require structural engineering calculations</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Change orders or interpretations by RDPR</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Construction means and methods by contractor</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Temporary power connections, temporary air handlers, temporary bulk oxygen systems, temporary shoring supporting an existing building, temporary exiting from an existing building</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. RFI’s, ASI’s and Substitutions for equipment, products, materials which have not been part of the code approved construction documents</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. New details adding clarification to already code approved construction documents. RDPR to document justification for nonmaterial change</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Final routing configurations of ducts, conduits, pipes, etc. where shown diagrammatically on the code approved construction documents, provided the routing has no code requirements such as seismic bracing, penetrations of smoke or fire rated assemblies, or other modifications which affect code compliance.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Dimensional changes to roofs or other building components that do not include changes to structural elements, fire or smoke rated assemblies, or minimum room requirements of the codes</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Relocation of doors, windows, electrical switches and receptacles, plumbing fixtures, etc. which do not trigger code required minimum dimensions or opening fire resistance rating requirements.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### REQUIREMENTS FOR CODE REVIEWS DURING CONSTRUCTION

- Door hardware changes which require electromagnetic locking or access controlled systems
- All changes to fire or smoke resistance rated assemblies which involve openings or penetrations not shown on the code approved construction documents
- Modifications to site grading, curbs, parking or sidewalks which affect accessibility, emergency access, or building occupant exit discharge requirements
- Changes to the fire water main line

- AISI’s which clarify misgiving or conflicting information on the code approved construction documents which do not cause a change to the design intent or code violation
- Changes to clearance requirements between new and existing site utility lines, such as modifications to inventories that reduce slope of drain below minimum requirements
- Trenching immediately adjacent to structural footings
- AISI’s clarifying finish materials that do not conflict withIBC requirements
- Deletion of any smoke entering fire dampers
- Reclassification of horizontal or wall assemblies which affect the fire resistance ratings
- Changes to the fire sprinkler system which affect the hydraulic calculations
- Changes to the air balance or air flow of any building space which result in a non-compliant condition
- Relocation of supply or return or exhaust registers which do not create a non-compliant condition
- Changes to temporary fire-resistance rated partitions
- All changes to the code approved construction documents which affect compliance withIBC Chapter 11 requirements
- Relocating electrical receptacles and switches which do not create a non-compliant NEC requirement
- Changes to equipment which do not change design intent to the code approved construction documents
- Modifications to proprietary or manufactured items which do not create a non-compliant code
- Modifications to proprietary or manufactured items which do not create a non-compliant condition
- Relocating or deleting electrical receptacles and switches which do not create a non-compliant condition
SUSTAINABILITY

New PD&C Sustainability Manager - July 1st

Owner's Project Requirements (OPR)

Working with designers to achieve LEED / DFCM High Performance Building Standards in accordance with University direction
KNOW YOUR CONTRACT

Please read your General and Supplementary Conditions and familiarize yourself with contractual obligations to your client.

Any contract questions should be directed to the University Project Manager.
ESTIMATING

Internal Estimating Support

- Preparing estimates
- Peer review
- Cost proposal review

Standardizing Project Estimates and setting expectations

- Estimating Manual
- Work Breakdown Structure
- Cost Database
QUALITY CONTROL (QC)

QC is the management of work between the GC and the sub-contractor to ensure compliance with Contract Documents

Minimum QC program requirements to be reflected in Supplemental General Conditions

Working on template for Contractor QC Program

Evaluating cloud based QC programs for implementation
SAFETY

The University expects compliance with OSHA requirements on all job sites and University property.

Increase awareness for Student, Employee, and Worker safety.

Minimum Safety Program requirements to be reflected in Supplemental General Conditions.

Working on template for Contractor Safety Program.
PROJECTS

Presenters:
Robin Burr presenting for Rochelle Randazzo - Director of Finance & Accounting
Bob Simonton - Director of Capital Projects
Liz Blackner - Director of Design & Construction
Nils Eddy - Program Manager
PROJECT METRICS

U of U: Up to $10M of construction value

DFCM: Over $10M of construction value
<table>
<thead>
<tr>
<th>FISCAL YEAR</th>
<th>PROJECTS UNDER $10M</th>
<th>PROJECTS OVER $10M</th>
<th>TOTAL (IN MILLIONS)</th>
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<td>2012</td>
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<td>147</td>
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<td>2019</td>
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<tr>
<td>2023</td>
<td>71</td>
<td>185</td>
<td>256</td>
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</tbody>
</table>
## Project Managers

- Scott Jefferson
- Steve Laraway
- Brett Petersen
- Jon Jefferson
- Astrid Paredes

## Financial Analyst

- Brenda Diaz

## Project Assistant

- Carley Bradbury

## Types of Projects

- Campus Utilities
- Central Plants and Distribution Systems
- Building System Renewal
  - Electrical
  - Plumbing
  - Roofs
  - HVAC
- Transportation Infrastructure
- Red Butte Garden
MAIN CAMPUS & RESEARCH PARK TEAM

Presenter:
Liz Blackner - Director of Design & Construction
MAIN CAMPUS & RESEARCH PARK

Project Managers
- Desslie Andreason
- Christin Robbins
- Mark Grabl
- Lori Kaczka
- Andrea Cavrag
- Andrew Heiner

Financial Analyst
- Floyd Corbin

Project Assistant
- Christian Johansen
- Sherri Somers

Types of Projects
- Academic
- Research
- Athletics
- Classroom
- Administration
- Performing Arts
- Tenant Improvements
- General Renovations
- Remodels
- Envelope
- Miscellaneous

Generally architect as primary consultant
# Health Sciences & Transformation

## Project Managers
- Krin Kirijas
- Rick Johansen
- Harry Corsi
- Mike Wessman

## Types of Projects
- Clinical
- Research
- Academic

## Financial Analyst
- Nana Amoah Ewusi-Emmim
- Jeff Kuehdahl

## Project Assistant
- Sherri Somers