

Instructional Science Facility Phase I

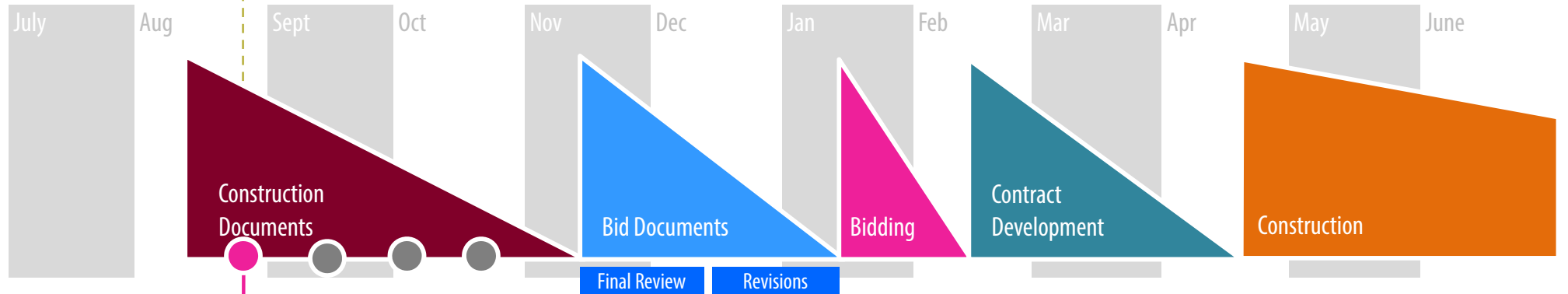
University of Wisconsin – La Crosse Campus

August 26, 2015



Project Schedule

Timeline



Exec Meeting
Aug 26, 2015

Project Schedule

August 2015 - April 2016

Item/Description

Schedule

Executive Committee Meeting

August 26, 2015

Classes Begin

September 8, 2015

Executive Committee Meeting

September 15, 2015

Design Committee Meeting

September 17, 2015

Executive Committee Meeting

October 6, 2015

Design Committee Meeting

October 8, 2015

Executive Committee Meeting

October 27, 2015

Design Committee Meeting

October 29, 2015

Project Schedule

August 2015 - April 2016

Item/Description

Schedule

Final Review Documents to DFD/UW-La Crosse

November 12, 2015

Final Review Comments to AE

December 10, 2015

Bid Documents to DFD

January 7, 2016

Bid Documents to Bidders

January 21, 2016

Bid Date

February 18, 2016

Commence Construction

April/May 2016

Additional Information Required

Task List

- **Access Control**
 - Plans to be circulated to UWL for review and comment
 - Provided by security vendor (FFE)
 - Approx. 205 doors
- **Equipment Moving Access**
 - Access to basement spaces
- **Cowley Hall Exhaust/Air Quality**
 - Emissions from existing Cowley Hall upon completion of Phase 1
- **Interior Signage/Wayfinding**
 - Contractor furnished & installed
 - Digital/Cable TV
- **Furnishings**
 - Expectation of design team
- **Security (future camera locations)**
 - Plans received from UWL
- **Microbiology/Biochemistry Lab**
 - Room name has been changed to Microbial Genetics
- **Fume Hoods/Emergency Power**
 - Quantity of hoods
 - Percent ventilation
- **Emergency Generator**
 - Quantity
 - Location
 - Fuel Type
- **South Corridor Enclosure**
 - Corridor to remain

Additional Information Required

Task List

- **Microbiology Lockers**
 - Previous design quantity: 128
 - Quantity requested: 144
 - Quantity achieved: 144
 - Locker size: 15"W x 18"D x 36"H
- **Lighting Controls**
 - Wall mounted switches or through AV system?
- **Site Located Emergency Phones**
 - Campus to provide locations
- **Well vs City Water**
 - City water to be provided and treated appropriately for River Studies use
- **Pad Mounted Switch Relocation**
 - Funded by this project or campus project?
- **Science on Display**
 - Location
 - Quantity
 - Type: window, display case, 2-sided display case

PR Submittal Review Comments

How did we do?

- **Civil**

- Removal of stone seat walls
- Bike parking quantity

- **Architectural**

- Revise NW stair window
- Add door to east stair exit
- Remove laboratory niche detail

- **Structural**

- No comments received

- **Plumbing/Fire Protection**

- DFD requested changes to plumbing system
- Well water omitted – treated city water

- **HVAC**

- Laboratory exhaust concerning emergency power and controls functionality (VAV vs 2-position hoods)
- East area well for basement located generator and mechanical and electrical room ventilation.
- Snow infiltration at intake louvers – further detailing and discussion required.
- Process loop to be provided at each floor to serve lab equipment – lab equipment cut sheets required for flow rates and acceptable process chilled water temperatures.

PR Submittal Review Comments

How did we do?

- **Electrical/IT**

- Relocate exterior padmount switchgear into Basement of Wimberly Hall
- Emergency generator sizing and location. DFD requests the generator be located outdoors and be sized to handle all the fume hood exhaust for safety reasons. DFD requests natural gas, but in the case of generators over 200kW, justification and / or understand by the Agency is required due to the additional costs. The fume hood / generator matrix provides the information necessary for a decision.

- **Audio-Visual**

- Class 1 Notice to be developed for equipment

- **Lab Planning Review**

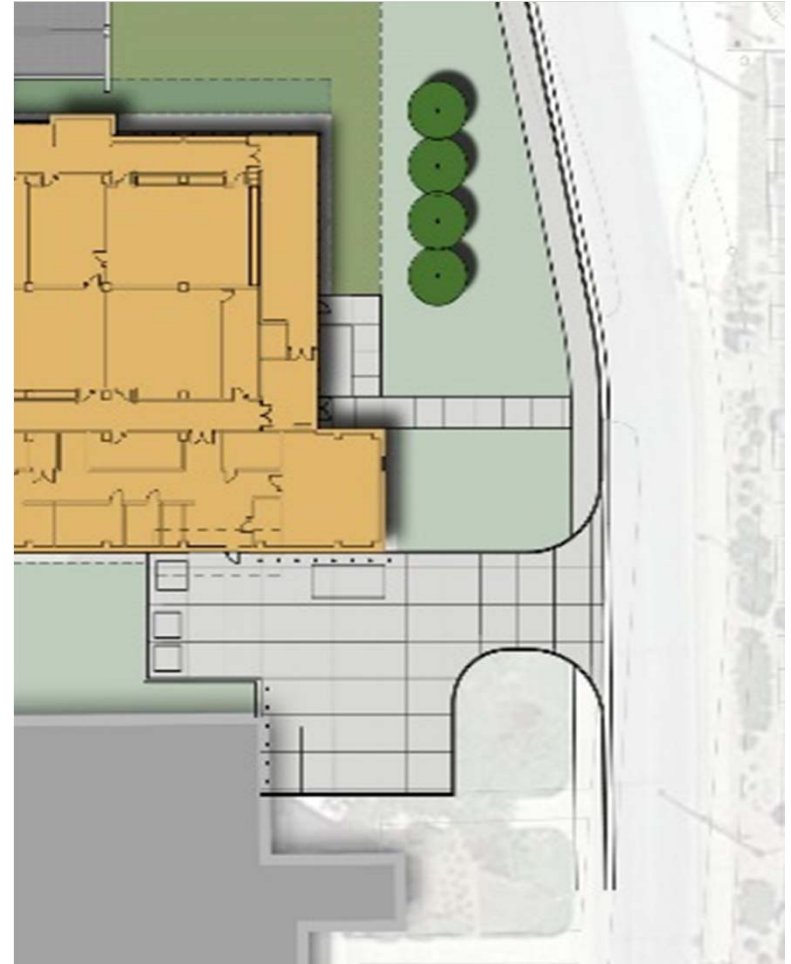
- Radiation Center plan revision
- Numerous casework revisions
- Front of room variations
- Anatomy Lab ventilation
- Clean Room: Class 10,000
 - *No perchloric acid hoods needed*
 - *Work in hood will be Class 1,000*
- Safety shower quantity

Outstanding Issues...

Emergency Generator

- **Generator Selection Issues**

- Fuel type
- Location
 - Interior (basement space)
 - Exterior (site constraints)
- Fume hood exhaust
- Cost
 - Phase 1 capital cost
 - Phase 2 capital cost
 - Operational costs
- Future capacity
- Safety

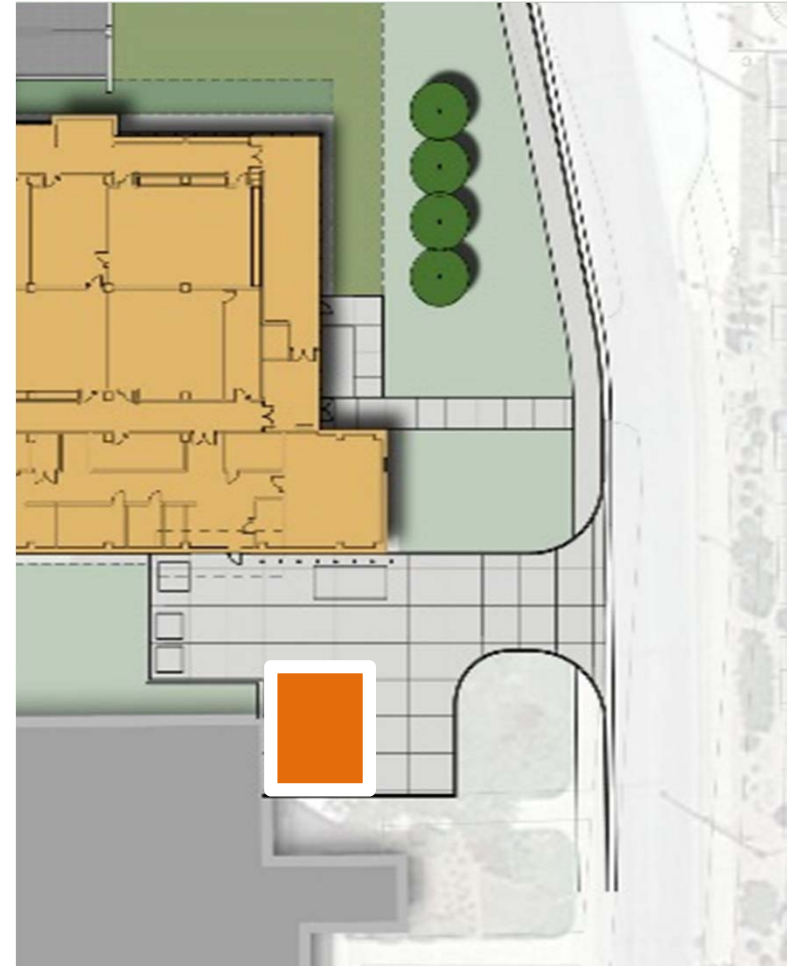


Current site plan

Outstanding Issues...

Emergency Generator

- **Current Design**
 - (1) 400 kW natural gas generator located in the basement
 - 50% of fume hoods on emergency exhaust @ 60% exhaust flow
- **Design Option 1**
 - (1) 400 kW natural gas generator located in the basement
 - 50% of fume hoods on emergency exhaust @ 60% exhaust flow
 - Add automatic sash closer (+) \$171,000
- **Design Option 2**
 - (1) 400 kW natural gas generator located on site
 - 50% of fume hoods on emergency exhaust @ 60% exhaust flow
 - Add automatic sash closer (+) \$171,000
 - Remove basement area (-) \$TBD
 - Add masonry screen wall (+) \$TBD
- **Design Option 3**
 - (3) 400 kW natural gas generators located on site
 - 100% of fume hoods on emergency exhaust @ 60% exhaust flow
 - Add automatic sash closer (+) \$330,000
 - Electrical cost increase (+) \$420,000
 - Remove basement area (-) \$TBD
 - Add masonry screen wall (+) \$TBD

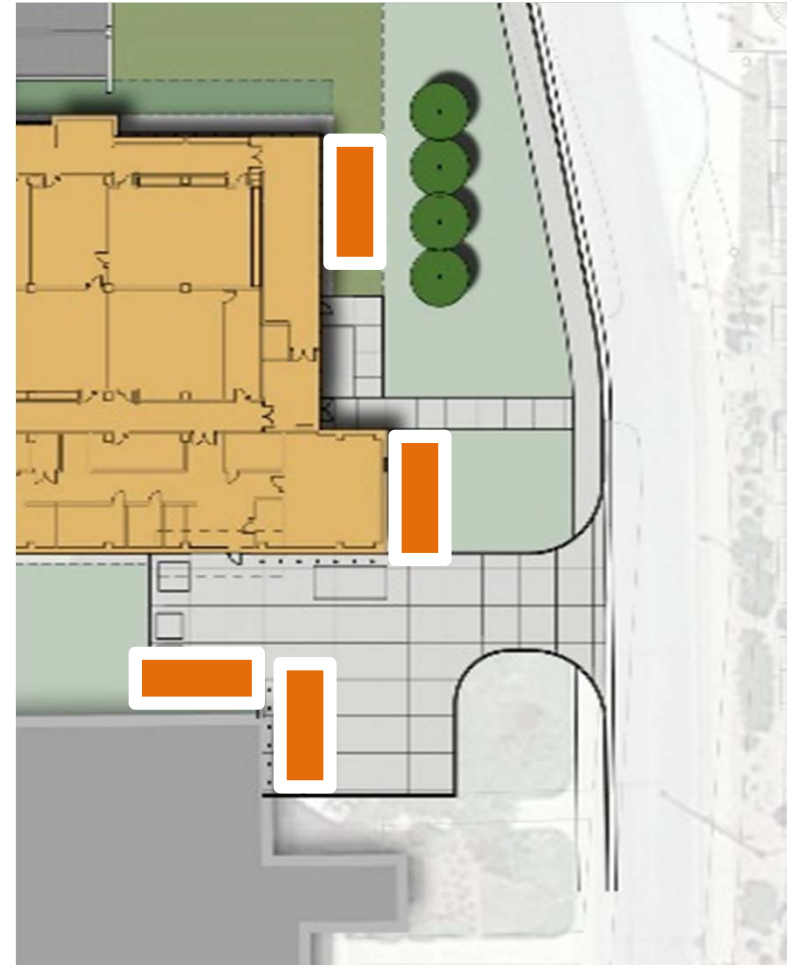


Exterior generator location option – (3) natural gas shown

Outstanding Issues...

Emergency Generator

- **Design Option 4**
 - (1) 1,000 kW diesel generator located on site
 - 100% of fume hoods on emergency exhaust @ 60% exhaust flow
 - Add automatic sash closer (+) \$330,000
 - Electrical cost increase (+) \$20,000
 - Remove basement area (-) \$TBD
 - Add masonry screen wall (+) \$TBD
- **Design Option 5**
 - (1) 1,250 kW diesel generator located on site
 - 100% of fume hoods on emergency exhaust @ 100% exhaust flow
 - Electrical cost increase (+) \$140,000
 - Remove basement area (-) \$TBD
 - Add masonry screen wall (+) \$TBD
- **Design Option 6**
 - (1) 1,500 kW diesel generator located on site
 - 100% of fume hoods on emergency exhaust @ 100% exhaust flow
 - Electrical cost increase (+) \$150,000
 - Remove basement area (-) \$TBD
 - Add masonry screen wall (+) \$TBD



Exterior generator location options – 1,500 kw units shown

Design Details

Stair Railing Examples



Interior

Science on Display



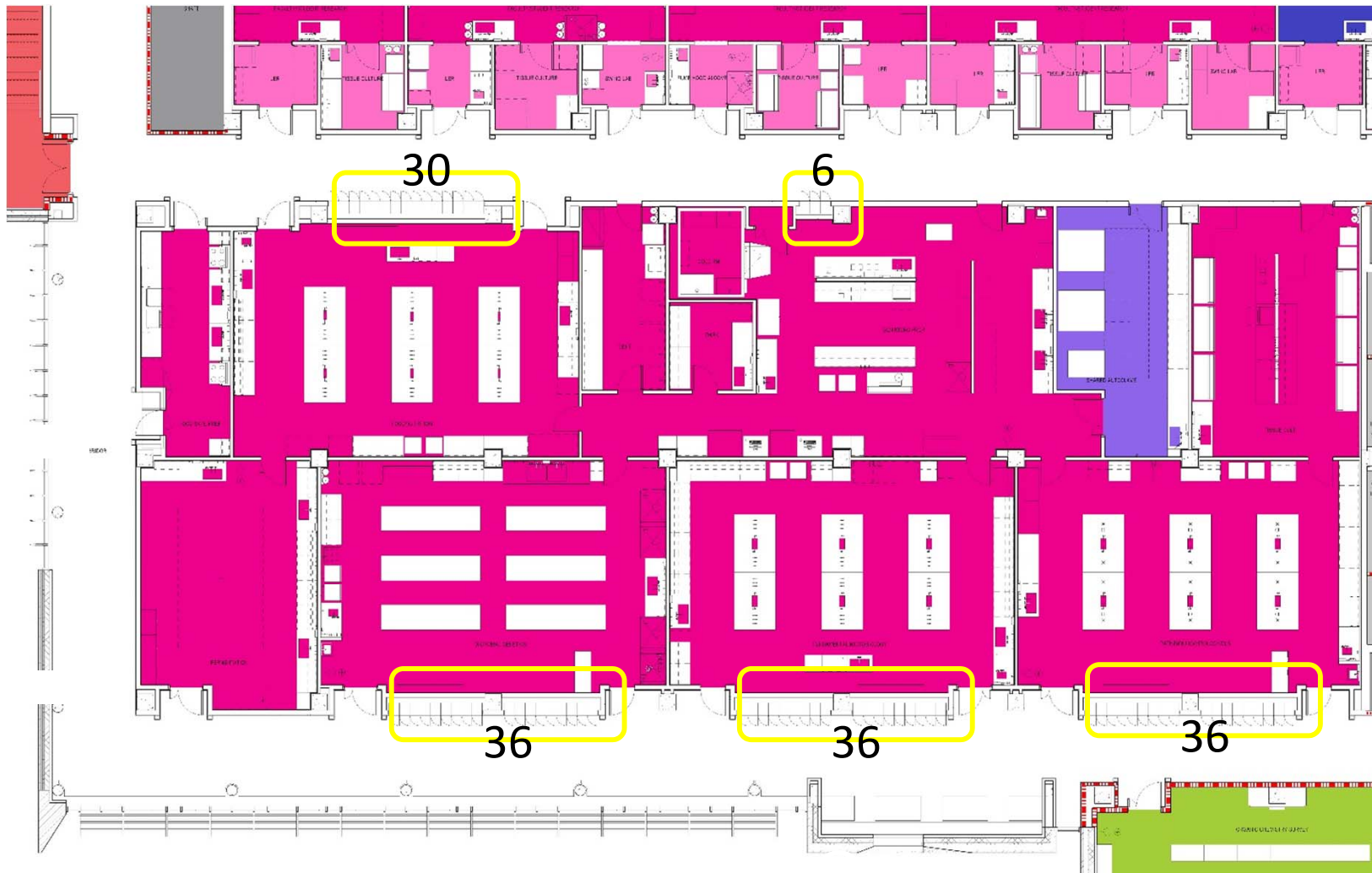
Interior

Microbiology Lockers

Previous Design: 128 lockers @ 18x18x36

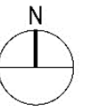
Requested: 144 lockers

New Design: 144 lockers, sized 15x18x36



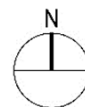
Plan Updates

Confluence – Level 1



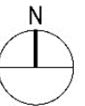
Plan Updates

Confluence – Level 2



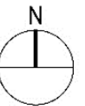
Plan Updates

Confluence – Level 3



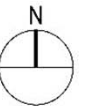
Plan Updates

Confluence – Level 4



Plan Updates

Confluence – Basement



Next Steps...

