CONSTRUCTION PLANNING AND PROGRESS MEETING

Brought to you by the Physical Plant Division

Thursday, January 10, 2013
NEW-AND-IMPROVED SURVEYS!

They are available on the table at the front of the room

• Please fill out your surveys and return them to the front table before you leave.
• We want your thoughts and suggestions about how you feel Construction Junction went, and what we could do to improve.
• Thank you in advance!
Today’s Agenda

- Board of Trustee updates
- New presentations
  - Transportation Services – Self-Serve Fuel Station
  - Steam Distribution and Road Reconstruction – Bogue Street and Shaw Lane Intersection
  - Brody Complex Utility Improvements (Phase 5)
- Project updates
  - Steam Distribution and Road Reconstruction – West Circle Steam Loop 2013 (Phase 2 of 4)
  - Music Building Electrical Substation
  - Armstrong/Bryan Hall Renovations
Step 1: Authorization to Plan

• Akers Hall – Dining and Life Safety Renovation
• Munn Ice Arena – HVAC Upgrades, Ice Making System
• Steam Distribution – North Campus Infrastructure Improvements – West Circle Drive 2014 (Phase 3 of 4)
• Steam Distribution – North Campus Infrastructure Improvements – West Circle Drive 2015 (Phase 4 of 4)
• West Circle Housing Complex Infrastructure Improvements 2014 (Phase 2 of 2)

Step 2: Authorization to Proceed

• Parking Lot 67 (Jenison Fieldhouse) Reconstruction
• Transportation Services – Self-Serve Fuel Station

Step 3: Bid and Contract Award

• Butterfield Hall – Major Renovation
• Steam and Road Reconstruction – Bogue and Shaw Intersection
Transportation Services – Self-Serve Fuel Station

Transportation Services
Fuel station and carwash site plan
Fuel station and carwash – looking east
Fuel Station & Carwash – Looking West
Fuel station and carwash – looking northeast
Fuel station and carwash – looking south
Project details:
• Internal construction manager (CM) project
• Construction schedule: May – August 2013
• Two compartmentalized 30,000-gallon underground storage tanks: double-walled and utilizing the most current continuous leak detection systems to contain regular, diesel and E85 ethanol blend
• One 6,000-gallon coated and cathodically protected single-walled underground liquid propane gas tank
• Storm/oil separator system to contain/treat runoff
Transportation Services – New Fuel Station

In-Planning/Design
April 2012 – January 2013

Description: The current Transportation Services Fueling Station is located adjacent to Spartan Stadium. There is consensus that this fueling station should be relocated remotely from this large assembly area.

The planning of this project is anticipated to include decommissioning the existing fueling station and relocating the function to an alternative location. The new station will include underground tanks, dispenser units and overhead canopy paved circulation space to accommodate large and small service vehicles as well as buses and rental vehicles.

Questions, comments, concerns?

Design Representative: Jeff Kasdorf, jkasdorf@pplant.msu.edu
Project area

Steam Distribution and Road Reconstruction – Bogue Street and Shaw Lane Intersection
Steam Distribution and Road Reconstruction – Bogue Street and Shaw Lane Intersection

Video Presentation

[Image of road network with MSU logo]

MSU Draft 03.wmv
Reconstruct Bogue Street and Shaw Lane Road Intersection and Steam Distribution – Replace Steam Lines to Owen Graduate hall

**In Planning/Design**
December 2011 - December 2012

**Description:** The existing Bogue Street and Shaw Lane traffic circle does not meet current U.S. Access Board's design guidelines for public rights-of-way to provide equal accessibility for all users. These new standards require design modifications and traffic signals for pedestrian safety, particularly pedestrians with mobility disabilities. Additionally, many new standards do not support continued use of a traffic circle for an intersection with high volumes of pedestrians, bicycles, and vehicles. As part of the redesign of the Bogue Street and Shaw Lane Intersection, the closure of a section of Bogue Street will allow for further expansion of the facility for Rare Isotopes Beams Laboratory (RIB).

There is also a need to address the steam distribution lines that are located below the Bogue Street and Shaw Lane intersection. The existing direct-buried steam distribution and condensate return lines serving Owen Graduate Hall were installed in 1997 and have been repaired several times during the last 10 years. They now need to be replaced with a steam tunnel to ensure reliable steam service and provide flood protection measures.

The steam distribution area to be replaced is located between the east side of the Business Complex and the west wing of Owen Graduate Hall. The intersection of Bogue Street and Shaw Lane borders the central academic and residential districts.

This project involves reconstruction of the Bogue Street and Shaw Lane traffic circle to be compliant with ADA standards. This will require converting the existing roundabout to a more conventional signalized intersection. The project includes the addition of bike lanes consistent with the campus master plan. The project incorporates closure of Bogue Street between Shaw Lane and Wilson Road to accommodate RIB expansion. Accessibility to Wharton Center Koop driveway will remain, allowing for drop-off, accessible parking, and short-term business at the Wharton Box Office, along with periodic service access to RIB. The project will also replace deteriorating direct-buried steam and condensate lines with a steam tunnel from the east side of the Business Complex to the west side of Owen Graduate Hall.

**Timetable:** Construction is planned to begin in April 2013, with substantial completion in August 2013, and final completion by June 2014.

**Questions, comments, concerns?**

Design Representative: Scott Gardner, mgardner@plant.msu.edu, 517-432-0782
Brody Complex – Utility Improvements – Phase V
January 2013

Brody Complex
Brody Neighborhood - Utility Improvements - Phase V

In-Planning/Design
October 2011 - December 2012

Description: The utility distribution system in the Brody Neighborhood is more than 50 years old and no longer able to provide reliable service. The direct-buried steam and condensate return lines (which are involved in heating and cooling campus buildings) from Brody Hall to Bailey Hall and Enmons Hall were installed in 1957 and have been repaired several times.

This project involves replacing the steam and condensate distribution system and creating a loop from the Hamson Road bridge to Brody Hall. The loop provides redundancy so the complex can continue to be fed steam if there is a line break.

Timeline: Construction is planned to begin in April 2013 with substantial completion in August 2013, and final completion by August 2014.

Questions, comments, concerns?

Design Representative: John LaFevre, jlefevre@pplant.msu.edu, 517-884-6740
Project area
Looking east from the Kalamazoo Street Intersection along West Circle Drive
Vault 270 being constructed
Vault 270 being constructed
View of the lay down area for construction materials on the north side of West Circle Drive
IM Sports Circle electrical substation being constructed
Lay down area for construction materials along the south side of West Circle Drive
View of the current work looking west along West Circle Drive
Steam Distribution - Replace West Circle Steam Loop Segement 2 (2013)

**In-Construction**

**Description:** The north campus arch-style steam tunnels are 87 to 102 years old and have significantly deteriorated. The structural anchors, pipe supports and steam equipment within these tunnels are severely deteriorated and require replacement or repair for safe and reliable operation of the steam distribution system. The water main in this area is also at the end of its useful life and should be increased in size for effective fire-fighting capability and reliability. Communication lines are in the same tunnels as steam and condensate return lines, which is not optimal. The existing electrical duct bank is currently full and requires additional ducts to be installed for future electrical improvements to this region of campus.

This project is anticipated to be the second phase of a four-phase program to replace the deteriorating north campus arch steam tunnels, and is anticipated to include replacing the existing deteriorated arch steam tunnel from IM Circle to vault 92, north of the MSU Library, along with repair and replacement of steam piping, supports and equipment within some existing steam tunnels. The project is also anticipated to include replacing the deteriorated cast-iron water main with a larger pipe to increase fire-flow capacity and reliability. Additional communication and electrical duct will be installed, West Circle Drive will be reconstructed with two traffic lanes and a bike lane to be consistent with current MSU transportation standards, including pedestrian, bicycle and vehicular traffic flow and safety. On-street parking removal will be investigated.

The proposed project is located along Beal Street and West Circle Drive, between the MSU Library and IM Circle in the North Academic District.
Looking northwest at the Music Building. Site is very limited.
View of the work on the south side of the walk tunnel that connects Music Building and Music Practice Building
Music Building - Replace Electrical Substation

In-Planning/Design
November 2008 - January 2013

Description: The Music Building is located on West Circle Drive across from IM Sports Circle. The electrical system needs to be upgraded. The upgrade will provide a double-ended electrical service to this building. This double-ended sub-station will be fed by two circuits. If there is a circuit failure, the other circuit can provide service to the facility without a power outage.

The new vault will be placed in an underground vault adjacent to the music-music practice pedestrian tunnel within the courtyard area of the two buildings. There will be space and provisions for an emergency generator in the new vault that can be added in the future. All work will be performed underground and will take about three months to be put in place.

Timeline: The project will start over Christmas break in 2012. The sheet pile driving required to construct the new vault will take place between the Christmas and New Year’s holidays to minimize noise interruption.

Questions, comments, concerns?

Design Representative: Scott Gardner, mgardner@ppplant.msu.edu, 517-432-0780

Construction Representative: Andy Linebaugh, alinebau@ppplant.msu.edu, 517-432-7103
Insulation being added to building exterior
Concrete steps completed at the northwest entrance
Bryan Hall: Steel erected over main entrance
Armstrong Hall: Fourth-floor restroom
Bryan Hall: New tiling in shower stalls in fourth-floor restroom
Armstrong Hall: Restroom partitions take form in fourth-floor restroom
Armstrong Hall: Lockers in third-floor restroom
Restroom tiles are labeled to ensure the pattern on the walls is placed correctly.
Armstrong Hall: Workers use cement plaster to create the ceiling for the second-floor restroom.
Bryan Hall: Waterproofing sealant has been rolled onto the floor in one of the restrooms.
Bryan Hall: Long light fixtures line the hallways
Bryan Hall: Finished flooring being installed in a student room
Armstrong Hall: Work ongoing in the first-floor hallway
Bryan Hall: New stairwell ceiling with light fixtures has been constructed
Armstrong Hall: New windows have been installed in the stairwell
Armstrong/Bryan Halls Renovations
January 2013

Armstrong Hall: New paint has been rolled onto the fourth-floor walls
Armstrong Hall: Fresh paint along fourth-floor hallway
Armstrong Hall: Study room on fourth floor has been painted and equipped with lighting fixtures.
Armstrong Hall: Drinking fountains have been installed in the hallway on the fourth floor.
Armstrong Hall: A feature wall has been constructed on the fourth floor.
Bryan Hall: Work is ongoing on the second floor
Bryan Hall: Gaming stations located on the fourth floor have been painted
Bryan Hall: Gaming station on the fourth floor
Armstrong Hall: Gaming stations and student room entrances painted on the fourth floor
Armstrong Hall: New windows are installed for the project room on the fourth floor
Armstrong Hall: Framing continues on the first floor
Project details:
• Project to date: On schedule
• LEED status: 78% waste diverted from landfill
• Roofing complete for both halls
• Permanent heat to both buildings 90% complete
• Curtain wall (windows) installation 90% complete
• Basketball hoops installed
• Electrical fixtures installed on the third and fourth floors of both halls
• Flooring in student rooms complete on third and fourth floors of both halls
• Tile in toilet rooms projected to be completed by mid-February
Armstrong and Bryan Halls Renovations

In-Construction
May 2012 - May 2013

Description: Armstrong and Bryan halls, located on the west side of Brody Neighborhood, are the fourth and fifth residence halls to be renovated in the complex. Improvements to both buildings will include the addition of common spaces to both A and B wings, curtain wall features and artwork, interior project, meditation and fitness rooms, third-floor kitchen/dining areas and accessible entrances.

Additional features will include:
- Major mechanical, electrical and ventilation upgrades and replacements
- Addition of life-safety systems
- ADA code-required modifications
- Asbestos abatement
- Lighting upgrades
- Flooring and ceiling replacement
- Roofing and exterior repair
- Window replacement
- Reception desk modifications
- Improvements to student rooms and common areas
- Reconfiguration of community bathrooms
- Replacement of existing plumbing
- Heated walkways
- Entrances will be more defined and canopied

The design of this project includes sustainable features relating to the Leadership in Energy and Environmental Design (LEED) rating system.

Timeline: Construction is planned to begin in May 2012 with substantial completion in May 2013, and final completion by May 2014.

Questions, comments, concerns?
Design Representative: Ken Gottschalk, kgottsch@eplant.msu.edu, 517-355-3372
Construction Representative: Nick Wilk, nwil@eplant.msu.edu, 517-353-3619

Please refer to the Construction Detours web page for current and upcoming detour information.
The Vista at Shaw Hall open for business
January 2013
Help us keep campus safer this winter!

• To request services or to report dangerous spots on campus, call 353-1760.
• For more information on snow removal, visit www.pp.msu.edu and click on “campus snow plan.”
• E-mail feedback, suggestions and comments to snowplan@pplant.msu.edu.
• To let us know how we’re doing in general, visit www.pp.msu.edu and click on “Contact Us.”
Your help is welcome and appreciated!

WALKWAY ICE MELT

Please help us keep campus surfaces clear of snow and ice this winter. If you see an icy area, please sprinkle it with ice-melt compound.

The ice-melt compound is an environmentally friendly alternative to salt that is provided by your Physical Plant partners in snow removal:
- Building Services–Custodial Services
- Landscape Services

Questions or comments?
Call 517-353-1760

Thank you for your help!
MiAPPA Winter Conference 2013

MSU welcomes the Michigan Association of Physical Plant Administrators to the 2013 Winter Conference

The MiAPPA Winter Conference 2013 will be held Tuesday, Feb. 12, to Wednesday, Feb. 13, 2013.

Registration is now open.

Sponsorship opportunities are now available. Please click the Sponsorship link for more information.

The Michigan Colleges and Universities Energy Managers Meeting will take place Monday, Feb. 11, 2013.

Both events will be held at the Kellogg Hotel and Conference Center on the campus of Michigan State University.

For more information, contact Anita Eberhard:
Phone: 517-432-0516
E-mail: ameberha@pplant.msu.edu

Additional information will be posted as it becomes available.

For more information about the Michigan Association of Physical Plant Administrators or to be added to the MiAPPA mailing list, visit the MiAPPA website.
Stay connected via social media

For updates on all things Physical Plant follow @MSUPhysPlant on twitter and become a fan of our facebook page – MSU Physical Plant Division. Also, check out our YouTube page at youtube.com/physicalplantmsu for virtual tours of major projects on campus.
BEFORE YOU GO, VISIT THE CONSTRUCTION ‘SITE’:

CONSTRUCTION.MSU.EDU

Key features:

- Construction Projects
  - Project info
  - Contact information
- Construction Detours
- Construction Junctions
- Construction Listserv
SECOND SURVEY ALERT!

Please fill one out before you leave if you did not do so already

- We have recently revamped our surveys in an effort to better understand your experience at Construction Junction.
- Please fill out your surveys and return them to the front table before you leave.
- We want your thoughts and suggestions about how you feel Construction Junction went, and what we could do to improve.
- Thank you in advance!
Construction Junctions continue monthly

Meetings are at 8:30 a.m. the second Thursday of the month in Room 112 at Brody Hall

• February 14
• March 14
• April 11

Please sign in and take a survey before you go!