PLEASE FILL OUT A SURVEY!

They are available at each table

• 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

• **MSU Board of Trustees updates**

• **Informational**
  - Tree preservation, post-game cleanup and sidewalk restoration

• **New projects**
  - Hubbard Hall – exterior masonry repair

• **Project updates**
  - North campus infrastructure improvement - West Circle Drive 2015
  - New Intercollegiate Golf Building
  - Bio Engineering Facility
  - Berkowitz Basketball Complex - alterations to basketball offices
  - Reconstruct Chestnut Road from Trowbridge to Wilson Road
  - Children's Garden - restroom and sewer line
  - MSU Community Music School - reconstruct parking lot
Step 2: Authorization to proceed

- Electrical distribution – upgrade northwest zone
- T.B. Simon Power Plant – capacity and future needs
- Sheep Barn – addition 2 – Sheep Lambing and Research Facility
- Crop Science - storage building 2 – construct original building
Step 2: Authorization to proceed

- Breslin Student Events Center - facility upgrades
- Food Processing and Innovation Center
- Hubbard Hall - exterior masonry repair
MSU Campus
Tree Preservation Efforts
MSU campus facts

- Over 20,000 trees and 7,500 plant species
Reasons to preserve trees

- A primary reason students choose MSU is the beauty of campus
- Teaching and research
- Preservation of the historic campus
Reasons to preserve trees

- Alumni and public support for the beautification of campus
Reasons to preserve trees

- Environmentally sound, benefits watershed and reduces energy consumption

- Green administration providing support
Without tree protection
Mortality after two years

CONSTRUCTION DAMAGE
Two years after
10 years later
Past

1960s

Present

Today
Correct level of tree protection

Good??

Better!

Best!!!
Thank You
Post-game cleanup

Post-game tailgate cleanup
The calm before the storm
Tailgaters enjoying pre-game festivities
Tailgaters enjoying pre-game festivities
Post-game cleanup

The aftermath
Post-game cleanup

A small example of the challenges our crews face after games
Our crews preparing for cleanup
The results of a job well done
Tailgating on campus

"7/9/1" Tailgating Times

When kickoff is set for noon or 1 p.m., tailgate lots will open at 7 a.m.

If kickoff is set for 3:30 p.m., tailgate lots will open at 9 a.m.

For Saturday evening games, lots will open at 1 p.m.

An exception to this rule is Friday evening games, when lots will open at 3:30 p.m.

All fans are encouraged not to come before these times as traffic lineups will not be permitted.

Tailgating Sites

Tailgating is permitted in all public parking areas on campus. There are many parking and transportation options that can make your game day more enjoyable, including shuttle buses.

Because soil compaction endangers the long-term health of campus trees, vehicles cannot be parked on grass surfaces north of the Red Cedar River and are restricted to designated grass areas south of the Red Cedar River.

Munn Field is an alcohol-free parking area close to the stadium that is ideal for family tailgating. In the event of heavy rain, Munn Field will be closed and fans will be asked to park in Lot 89 (Commuter Lot) located off of Mount Hope Road and Farm Lane. Shuttle service from the lot will facilitate parking and transportation for those fans displaced from Munn. Parking in Lot 89 is free. A round-trip shuttle costs $4 per game.

Tailgating Rules

MSU Board of Trustees
Ordinances
Ticket Information
No-bag policy
Spartan Stadium evacuation plan
MSU Athletics
MSU Alumni Association
Spartan Stadium
"Keep It Green and Clean"

- Fans are encouraged to take their paper, boxboard, cardboard, plastic and metal to one of more than 30 recycling stations located across campus.

- Close to the stadium, there are containers for recycling plastic and metal, and the concourse inside the stadium now has signs indicating where recycling containers are located for plastic cups and bottles. Please empty cups, non-returnable bottles and cans before recycling them.
"Keep It Green and Clean"

- For garbage, MSU Grounds staff members wearing bright green vests will hand out free green-and-white garbage bags to tailgaters a few hours before kick-off. The bags are for garbage only. There are also green and white barrels located across campus for garbage.
Questions?
Unit Cost Construction Projects 2015
Scope of work

• Road maintenance
  o Asphalt pavement, asphalt crack sealing

• Sidewalk maintenance (concrete)

• Pavement markings
  o Center line, cross walk, turn arrow, bike symbols

• Brick inset, Brick banding
  o Detection for barrier-free accessibility
  o Paver and stone retaining walls
Pedestrian safety

• Do not cross orange construction fence
Pedestrian safety

- Use provided pedestrian detours
Pedestrian safety

• Pay attention to safety signage
2015 Completed Projects

Shaw Lane – mill and pave south of Spartan Stadium

Pre Construction
• Held together with crack seal

Milling Process

Post Construction
2015 Completed Projects

Farm Lane – mill and pave north of Red Cedar Bridge

Milling Process

Milling Process

Post Construction
- With new pavement markings
2015 Completed Projects

Peoples Park – concrete walk repair

Broken Flags

Trippers

New Concrete
2015 Completed Projects
Storm structure repairs
2015 Completed Projects

Shaw Hall – drive removal and walk repair
Questions?
Why?

• Restore the structural integrity of the masonry building envelope that has serious structural problems identified in a 2013 masonry investigation.
• Building windows will be replaced since the existing windows need to be removed to perform the masonry repairs.
• This project will be completed in four phases:
  o Southeast façade – 2016
  o Southwest façade – 2017
  o Northeast façade – 2018
  o Northwest façade - 2019
Impacts

- Summer programs using residence halls—project limits use of Hubbard Hall to one living wing each summer 2016-2019.

Timeline

- Construction start: May 2016
- Phase one completion: July 31, 2016
- Phase four completion: August 2019
Photos from 2014 interim masonry restoration and exploratory work
Design representative:
John LeFevre
lefevr20@ipf.msu.edu
(517) 884-6740

Construction representative:
Carol Cool
ccool@ipf.msu.edu
(517) 353-8619
North campus infrastructure improvements - West Circle Drive 2015
August 2015

Project location
Why?

• Replace existing structurally deteriorating arch steam tunnels from the North Campus Substation to Steam Vault 376 (northeast corner of Library building), some of which are 87 to 102 years old.

• Provide new steam services to Olds Hall and complete the north campus steam loop (which also includes steam distribution work in the NCS).

• Install new electrical duct bank from the NCS to north of Olds Hall and replace deteriorated electrical vault lid by Olds Hall.
Why?

• Road reconstruction of West Circle Drive (two 10-foot traffic lanes, one four-foot bicycle lane) from the east side of the MSU Library to the west side of the Auditorium Road and West Circle Drive intersection. Improve pedestrian, vehicular and bicycle safety.

• Reconfigure Parking Lots 6 and 11 to meet current parking standards.

• Replace deteriorated cast iron water mains and improve fire flow capacity.

• Decommission NCS electrical transformers.

• Repair/replace deteriorated sanitary and storm sewer mains.
Parking impacts

- Parking Lot 6 (MSU Museum parking lot) has been reconfigured to meet current parking standards and will result in a loss of eight (total count from 45 to 37) parking spaces.

- Parking Lot 11 (Hannah Administration, MSU Library and Olds Hall) has been reconfigured to meet current parking standards and pedestrian safety. The above improvements will result in a loss of 10 (total count from 127 to 117) parking spaces.
Timeline

• Construction early preparation: March – May
• Construction began: May 11
• West Circle Drive and Parking Lot 6 reopened: July 12
• Parking Lot 11 and access drives reopened: August 14
North campus infrastructure improvements - West Circle Drive 2015
August 2015

Proposed - West Circle Drive - project area and phases

Phase 4 of 4
Proposed hardscape, utilities and vegetation
Construction phasing
Proposed construction sequence – phase 1 (May 11 – July 12)

- **On Street Parking Closed**
- **Flagger Provided at Intersection to Help Direct Traffic**
- **Temporary Drive to Lot 11**
- **Parking Closed**
- **Loading and Delivery Access to Lot 11 Only**
- **West Circle Drive Closed to Traffic. 2-Way Traffic for Loading and Deliveries Only**
- **Flagger Provided at Library to Help Direct Delivery and Loading Traffic on Sidewalk**

North campus infrastructure improvements - West Circle Drive 2015
August 2015
Proposed construction sequence – phase 2 (July 12 – August 14)
Planters at MSU Museum
Ongoing mechanical work in vault 377
Sidewalk and bike parking construction at Olds Hall
Sidewalk construction at Library
Subbase preparation at Library Plaza
Duct bank construction
North campus infrastructure improvements - West Circle Drive 2015
August 2015

CONSTRUCTION.MSU.EDU

Construction representative:
Andy Linebaugh
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(517) 432-7103

North Campus Infrastructure Improvement – West Circle Drive 2015

Project phase: Construction

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. 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, requiring additional ducts be installed for future electrical improvements to this region of campus. This project is the final segment of a four-segment program.
Why?

• The existing intercollegiate golf facility was built in 1958.
• Built with residential-grade construction, the building requires ongoing maintenance.
• The conversion of the outdoor pavilion into an indoor practice area in 2006 served to extend the building’s functionality, but falls far short in comparison to competing Big Ten facilities.
• A new facility is necessary to enable the recruitment, training and development of future athletes and to ensure continued success of the MSU Golf Team.
Project scope:

• **Site work to include:**
  - More prominent entry
  - Parking
  - Utilities
  - Landscaping

• **New building to include:**
  - Coaching offices
  - Locker rooms
  - Indoor practice green
  - Public/player lounge/gathering space
  - Public restrooms
  - Small weight training area
  - Small club repair room
  - Display space
Impacts:

• All areas of the west course to remain open
• Periodic traffic impacts to facilitate material deliveries

Schedule:

• Construction start: May 2015
• Ready for occupancy: January 2016
New intercollegiate golf facility
August 2015

Proposed floor plan
New intercollegiate golf facility
August 2015

Rendering of front exterior
Front exterior view
Men’s and women's locker rooms
Indoor practice area
Construction representative:
Todd Wilson
tdwilson@ipf.msu.edu
(517) 432-4355
Why?

- This project involves a four-story research lab building that is designed to facilitate interdisciplinary research and interaction among all occupants.
- The building will be physically connected to the existing Clinical Center C-Wing and Life Science B-Wing, with proximity to the Radiology Building to facilitate the sharing of core research resources.

Timeline

- Construction start: September 2013
- Ready for occupancy: December 2015
Impacts

• The two east doors on the southeast side of Life Science are for emergency egress only (directional fencing in place).

• The north drive off of Service Road, east of the Life Science building, will remain open for construction traffic and deliveries only.

• Life Science partial loading dock closure August 3 through August 7. West lane of the drive will be removed.

• There will be increased construction traffic.
Facing the north side of the building. All exterior panels are installed.
North site screen wall near completion separating Life Science loading dock from new facility.
Toilets and other bathroom fixtures have been installed in bathrooms.
Carpet tile in the offices and write up spaces (hallway) have been installed.
Casework benches are near completion in the new lab space on the second floor.
New bike parking location
New bike parking
Bike parking fence enclosure

**FENCE AND GATE**

**SCALE:** 1/2" = 1'-0"

- 3/8" @ 14ga picket, TYP.
- 5 1/2" @ 14ga post, TYP.
- EXPANDED METAL SCREEN
- MECHANICAL PADLOCK LATCH
- (2) SURFACE MOUNTED DROP BOLT (SD-MAR), TYP.
- HOLD TOP OF CONCRETE FOUNDATION DOWN 4" BELOW FINISH GRADE SLOPE TOP AWAY FROM POST
- CONCRETE FOOTING, TYP.

**NOTES:**
- OVERALL DIMENSION TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION OF FENCE WING PANELS
- EXPANDED METAL PROVIDED & INSTALLED BY AMERICAN AFTER COATING AND PRIOR TO SHIPPING
Road closed to the public. Construction and delivery use only.

Three – Way Stop
Bio Engineering Facility
August 2015

Construction Representative:
Ken Gottschalk
kjgottsc@ipf.msu.edu
(517) 353–7234

Bio Engineering Facility
Project phase: Construction

The construction of the Bio Engineering Facility will provide a unique opportunity to bring together research teams from engineering and biomedical research to promote the development of bio-engineering and engineering health sciences at Michigan State University. These emerging research areas have significant opportunities for increased federal research funding, as well as for technology transfer to the private sector, which can promote the development of a transformational bio-based economy in Michigan.
Berkowitz Basketball Complex – alterations to basketball offices
August 2015
Why?

• The Men’s intercollegiate basketball program has had extraordinary success, including multiple NCAA tournament appearances, Final Four appearances and the 1979 and 2000 Men’s National Championships.

• The coaches’ offices and meeting rooms no longer meet expectations for programs of this caliber and are in need of functional, technological and cosmetic upgrades.
Scope

• Renovations will include:
  o Furniture replacement
  o Finish upgrades
  o Increased storage space
  o Display improvements

• Focus will be on reception area, circulation corridors, film viewing room, coaches conference room and copy room.
Schedule

- Construction start: May 2015
- Ready for occupancy: August 2015
Berkowitz Basketball Complex – alterations to basketball offices
August 2015

Floor plan
Area of work – men’s basketball offices

FLOOR PLAN

HISTORIC WALLS
GRAPHIC WRAPPER
HISTORIC GAMES
CHANGEABLE GRAPHICS

CHAMPIONSHIP WALLS
NATIONAL TITLES
FINAL FOURS
BIG 10 TITLES
Reception area – looking west (proposed)
Berkowitz Basketball Complex – alterations to basketball offices
August 2015

Reception area - looking south
Corridor displays (proposed)
Coaches’ offices corridor
Video viewing room (proposed)
Berkowitz Basketball Complex – alterations to basketball offices
August 2015

Video viewing room
Berkowitz Basketball Complex – alterations to basketball offices
August 2015

Patio canopy (proposed)
Berkowitz Basketball Complex – alterations to basketball offices
August 2015

Construction representative:
Kevin Durkin
Kdurkin@ipf.msu.edu
(517) 432-2153

Breslin – Berkowitz – Renovations to Basketball Offices

Project phase: Construction

The Men’s and Women’s intercollegiate Basketball programs have had extraordinary success, including multiple NCAA tournament appearances, Final Four appearances, and the 1979 and 1999 Men’s National Championships. The coaches’ offices and meeting rooms no longer meet expectations for programs of this caliber and are in need of functional, technological and cosmetic upgrades. This project is anticipated to include upgrades to both the men’s and women’s basketball coaching offices.

Project details:
• Renovations to include furniture replacement, finish upgrades, increasing storage space and display improvements.
• The focus will be on the reception area, circulation corridors, film viewing room, coaches conference room and copy room.

The Breslin Berkowitz Basketball Complex is located on Birch Road between West Shaw and Kalamazoo Street.

Timeline
Start of construction: April 2015
Substantial completion: July 2015
Why?
- To repair and widen Chestnut Road
- Bike lanes and sidewalks have been added

Timeline
- Construction start: June 1
- Road reopened: July 24

Impacts
- Chestnut Road closure with associated pedestrian walkway detours
Reconstruct Chestnut Road from Trowbridge to Wilson Road
August 2015

Widened roadway to accommodate bike lanes
Reconstruct Chestnut Road from Trowbridge to Wilson Road
August 2015

Pedestrian crossing markers
Reconstruct Chestnut Road from Trowbridge to Wilson Road
August 2015

New sidewalks on east side of Chestnut Road with access to IPF Building
Reconstruct Chestnut Road from Trowbridge to Wilson Road
August 2015

Post-construction hydroseeding of project area
Construction representative: Matthew Postma
mpostma@ipf.msu.edu
(517) 353-9223
Children's Garden - restroom and sewer line
August 2015
Why?

- Provide accessible, family restrooms adjacent to children’s garden, replacing the portable units.
Project goals

- Increase safety for children. (The nearest restrooms are in the Plant and Soil Sciences Building and require walking through the parking lot.)
- Encourage efficiency of programs with nearby facilities.
- Accommodate ADA needs for all garden visitors and staff.
- Facility to be easily cleaned and maintained

Scope

- Building will include two restrooms and a mechanical room; approximately 360 square feet.
- Occupancy sensors, as well as natural light, are planned.
- Building will automatically lock, accommodating seasonal hours.
- Two drinking fountains will be located on entry exterior.

Impacts

- Completed project will not affect existing pedestrian circulation.
Site plan

Children's Garden - restroom and sewer line
August 2015

(2) DRINKING FOUNTAINS

RESTROOM

RESTROOM

MECHANICAL / STORAGE

PATIO EXPANSION

(RAILROAD FENCE)

(CREATION STATION)

(SMITH SCHOOLYARD)
Renderings of completed facility
Direction bore for the new sewer line

Bore Machine

Directional Bore Route

Construction Site
Timeline

July 27 – Foundations formed and ready for concrete
July 28 – Foundations poured and forms stripped
July 30 – Foundations waterproofed ready for backfill
July 31 – Foundations waterproofed ready for backfill
August 4 – Preparing for concrete slab pour
August 4 – Concrete slab poured, ready for finishing
August 6 – Masonry started
Milestone Completion Dates

- Masonry – August 21
- Site concrete – August 31
- Wood framing and trusses – September 2
- Roofing – September 3
- Interior finishes – September 18
- Flooring – September 22
- Completion – September 30
Construction representative:
Carol Cool
ccool@ipf.msu.edu
(517) 353-8619
Why?

• Project goal
  o Reconstruct and reconfigure the existing parking lot

• Project scope
  o Reconstruct the lot to meet MSU standards, including:
    ▪ Safety
    ▪ Accessibility
    ▪ Re-use of existing site lighting
    ▪ Pavement design
    ▪ Storm water management
  o Demolish existing house
MSU Community Music School – Reconstruct Parking Lot
August 2015

Demolition of house

Rain Garden
Timeline

June 18 – Phase 1 demolition
June 24
June 26
June 29
July 10
July 15
July 21
July 23

[Images of a construction site, showing a brick path alongside a concrete area with construction materials and equipment visible.]

MSU Community Music School – Reconstruct Parking Lot
August 2015
July 28
July 29 – Phase Two
Milestone Completion Dates

• Sub-base installation – August 10
• Asphalt base course – August 12
• Asphalt top course entire lot – August 19
• Pavement markings – August 20
• Completion – August 21
Construction representative:
Carol Cool
ccool@ipf.msu.edu
(517) 353-8619

MSU Community Music School – Reconstruct Parking Lot

Project phase: Construction

The MSU Community Music School moved to Hagadorn Road in 2012. The building was renovated at that time, including minor site modifications for accessibility. The parking lot requires a thorough reconstruction to bring materials and design up to MSU’s standards. In addition, there is a house on the property that is not in the university’s long-range plans.

This project is anticipated to include removal and replacement of entire parking lot. Subject to available funding, the project will also investigate removing the house on the property.

Project details:
Reconstruct the existing parking lot to meet MSU standards including:

- safety
- accessibility
- LED lighting
- pavement design

The MSU Community Music School is located east of Hagadorn Road near the east end of Shaw Lane.

Timeline
Start of construction: June 15, 2015
End of construction: August 31, 2015
IPF website

- Alerts feed
- Construction
  - Detours
  - CJ info
  - Project info
  - Contact info
- Resources
- Listservs

www.ipf.msu.edu
Stay connected via social media

- Follow IPF on Twitter: www.twitter.com/MSUfacilities
- “Like” IPF on Facebook: www.facebook.com/MSUFacilities
- Watch IPF videos on YouTube: www.youtube.com/FacilitiesMSU
Construction Junctions continue monthly

Meetings are at 8:30 a.m.
the second Thursday of the month

- September 10 (College of Law, room 343)
- October 8 (TBD)
- November 12 (TBD)

Please sign in and take a survey before you go!