

# Safety

Both tower cranes are now up. Concrete work is in full swing, with footings, foundation pads, walls and slab on grade. With the increase in activities and a growing workforce, safety remains our number one priority. Tunnel work has started putting pedestrian traffic to and from HCMC on the top of our list of safety concerns. Site fence and barriers are in place to secure the site. Lane closures and redirected pedestrian traffic along sidewalks is being monitored closely to ensure everyone's safety. Signage and directions have been placed to assist people in getting to and from their destinations safely. We will continue to monitor this throughout the project.

May will be another busy month. May 2-6 is National Safety Week. Mortenson along with over 40 national and global construction companies will focus on improving safety and eliminating injuries. Monday we will kick off safety week with a breakfast for all of our workers. Throughout the week there will be several training and educational events. We will round out the week with a lunch for all of our workers and project teams. Over the past 2 years, safety week has made a significant impact and heightened awareness of working safely. The timing is great as we start to pour concrete decks and the project becomes vertical. We look forward to a great week. <http://www.constructionsafetyweek.com/>



OSHA Chase Level 3 Participants



Project Team grills burgers for Mortenson craft workers



## MEP Update

Harris Companies and Parsons Electric are our mechanical and electrical trade partners for the HCMC-AOSC project. They have been involved in the project development since last spring, collaborating with Dunham Associates in a design-assist capacity. Construction documents are now at 100% and virtual coordination of the MEPFP (mechanical, electrical, plumbing, and fire protection) systems is in full swing. This coordination is an extremely critical part of their efforts as it allows them to identify opportunities for prefabrication and reduce the amount of on-site labor necessary to complete installation.

The current concrete work requires Harris and Parsons to follow closely and set sleeves in the concrete decks and foundation walls. Harris began underground plumbing and setting sump tanks soon after the mass excavation was underway. Parsons has had a constant presence since work started in November, setting up temporary electrical service for the jobsite and trailers. Ongoing communication and coordination is essential to remain on schedule.

## Contact Us

Dave Foley, Project Director  
 Dave.foley@mortenson.com  
 763-287-5629

Bryan Gingerich, Project Manager  
 Bryan.gingerich@mortenson.com  
 763-287-5143

**Newsletter Coordination**  
 Pamela Radcliffe 612-260-2094  
 pamelaradcliffe@mortenson.com



# HCMC-AOSC

Hennepin County Medical Center—Ambulatory Outpatient Specialty Center

April 2016

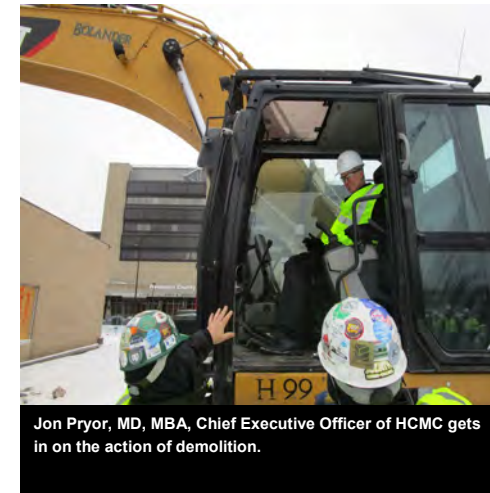
## Project Overview

With the official ground breaking on November 12, 2015, what was once a flat surface lot is now a 36 feet deep hole that will be transformed into a modern ambulatory outpatient specialty center. The Hennepin County Medical Center Ambulatory Outpatient Specialty Center (HCMC-AOSC) is a six story concrete structure with a 7<sup>th</sup> level mechanical floor, and two lower parking levels below grade with approximately 225 parking spots. This multi-story building will be 377,888 gross square feet, with a skyway and tunnel connecting to the main campus. The new HCMC facility will include a cancer center, same day surgery center, primary care, specialty care, physical and occupational therapy. This is the first new building for HCMC in 40 years.

Mass excavation is nearing completion and expected to be done by the end of April. Over 66,500 cubic yards of soil have been removed to date. Two tower cranes have been erected on site at 245 and 299 feet. The 127 lower level columns and exterior walls are currently being poured. The structure will begin to move above ground with the first elevated deck pour expected in May.

With the project ramping up, it's expected that the current workforce of 80 will peak near 300 from more than 25 different trades. As of April, craft workers have put in over 17,000 labor hours with no injuries. Safety is the number one priority of this and all projects. Mortenson and its construction partners provide daily messages and ongoing safety training throughout the project.

The project is anticipated to be completed by early 2018.



Jon Pryor, MD, MBA, Chief Executive Officer of HCMC gets in on the action of demolition.

## Schedule Milestones

- ◆ Mass excavation for the main building to be completed by the end of April
- ◆ The first elevated deck pour to be placed in May
- ◆ Work on the tunnel to the Red Building began April 4 and will continue through August (*work is being completed in 3 phases to allow traffic on 8<sup>th</sup> Street*)
- ◆ Enclosure to begin in August
- ◆ Work on the skyway to the Red Building scheduled to begin in September



Architectural rendering—BWBR Architects

## In This Issue

- Quality & VDC
- Concrete
- Carl Bolander & Sons
- Safety
- Mechanical, Electrical & Plumbing



Pouring Foundation Columns

127 foundation columns on lower level  
233.1 cubic yards of concrete in columns



## Concrete Work Begins

Lower level 2, Slab on Grade pours have begun.

The first of 6 pours was made 4-15-16, with the additional pours of the remainder of the lower level 2 parking will be completed by 5-9-16.

The main box foundation walls started on 3-28-16, and will be completed by 5-6-16.

This is a total of 64,000 sq. ft. of form work in 30 days, which breaks down to 2,133 sq. ft. per day, or 266 sq. ft. per hour.

As of 4-15-16 we have placed 2,820 yds. of concrete. Averaging 8.19 yds. placed every hour of every day since 2-17-16.

2831 cubic yards of concrete has been poured to date. It's estimated that an additional 1500-1800 cubic yards will be poured in May.



Project Team BBQ w/ Mortenson, Parsons Electric & Harris Mechanical



Second tower crane goes up.

66,500 cubic yards of soil excavated from site as of April 15th



Dwight Johnson, Operator

## Carl Bolander & Sons

Carl Bolander and Sons is an integral part of the construction team of the HCMC-AOSC project. Their scope of services for this project includes, demolition of two existing buildings, installation of an earth retention system, mass excavation & site utilities. The most distinguishable feature of their work is the earth retention system. At its deepest point, the system is holding back a 36' vertical face, which requires 3 rows of grouted tie-back anchors. The most challenging portion of this project will be site utilities and earthwork required for the construction of the tunnel that will cross 8<sup>th</sup> Street. Before this tunnel can be constructed, an existing 24" high volume sanitary line must be reconfigured to provide clearance for the tunnel. They have teamed with Pete's Water and Sewer to install site utilities; who has been tasked with the sanitary sewer reconfiguration.

Some notable quantities:

This project will require the exportation of approximately 7,000 dump truck loads of soil

The earth retention system will be composed of (190) driven H-pile, 30,500 SF of wooden lagging boards & (275) grouted tie-back anchors

Carl Bolander and Sons has been providing earthwork, excavation, demolition and site remediation throughout the Twin Cities for over 90 years.



36 ft. in the hole

Rich Bistodeau, Sr. Superintendent, Dr. John Pryor, HCMC CEO, Nick Balagurchik, Senior Director Ambulatory Administration

## Quality

Mortenson's approach to Quality is similar to the way we approach Safety: Our goal is zero defects. We believe all incidents are preventable with proper planning, but when incidents occur, we study them so we can learn from the experience. We're using Autodesk's BIM360 Field program to track material installations, managing inspections, manage construction photos, and track quality issues. While BIM360 Field is a great tool for use in the office, its mobile app has made managing the quality program in the field easier, more efficient, making it possible to complete inspections with the fast pace of this project. In the short time since we started construction, we have completed over 60 inspections, covering every aspect of the construction to date. If anything is found to be out of compliance, BIM360 Field automatically generates an issue so that it can be tracked until it is resolved.

## VDC

Mortenson pioneered the use of Virtual Design and Construction (or VDC) almost 20 years ago, and is committed to coordinating every aspect of the building in the virtual realm before we build it in the real world.

One of the first places this affects building projects is with the coordination of the Mechanical, Electrical, Plumbing and Fire Protection (MEPFP or MEP) systems. Each trade supplies a 3D model that represents the work they will be installing in the building, then the team uses

Navisworks software to compare information in the various models to check for clashes. You may have noticed the colors in the pictures seem odd – don't worry, they're not the colors that will be used in the building! Since many of the pieces in the model can look alike, we color code the systems so we can easily tell what we're looking at: Pink is electrical, purple is fire protection, green is ductwork. Interior partition walls are modeled semi-transparent so we can see the systems inside.

