# Minneapolis Bus Garage

**Construction Update** 

Robert Rimstad, Manager, Engineering Services Lisa Kline, Manager, Construction Services Stan Owens, Principal Contract Administrator





#### **Project Description**

- Project Completion 2023
- 11 Acre Site
- North Loop / West of downtown Minneapolis
- 350,000 sq. ft.
- 24 maintenance bays
- 216 bus capacity
- 400+ living wage jobs at full capacity
- 300+ construction jobs



Heywood Campus Map





#### **Project History & Schedule**

- Bus Maintenance & Storage Facility
  - Land Acquisition: 2006 2016
  - Demolition & Site Preparation: 2009-2017
  - Design: 2011-2019
  - Construction: 2020-2022
  - Start of Operations: 2023



Rendering Main Building Entrance

#### Future Projects

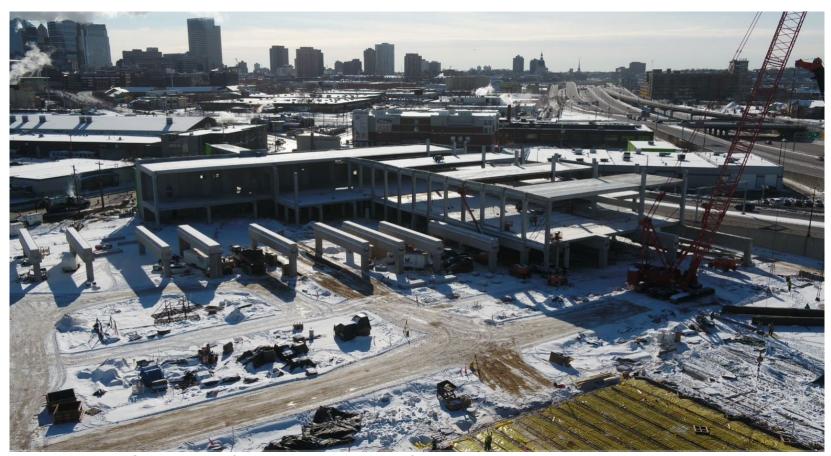
- Solar Array & Battery Storage Design: 2021-2022
- Solar Array & Battery Storage Construction: 2022-2023
- Electric Bus Charging Design: 2019-2022
- Electric Bus Charging Construction: 2023 & Beyond\*



<sup>\*</sup> Funding dependent



# Since last update, January 2021



January 2021 Site picture of bus garage structural framing





# **Construction Highlights: January 2021**









Four pictures of precast concrete being placed for new garage construction





## **Construction Highlights: February 2021**



Crane picking precast concrete, building in background

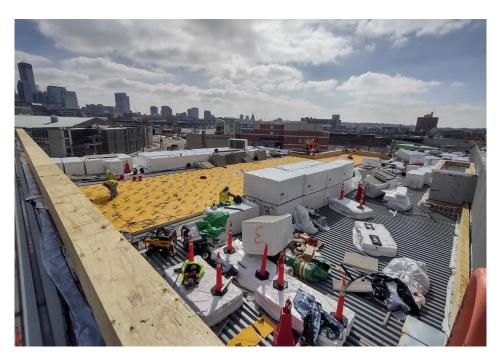


Inside picture of building with structural framing





# **Construction Highlights: March 2021**



Roof materials and crew installing



Building façade with windows and waterproofing





# **Structural Framing for bus lifts**





3 pictures of bus lifts structural framing







## **Construction Highlights: April 2021**





Exterior pictures of bus garage showing façade/windows going in and pre-cast beam being placed by crane.



## **Construction Highlights: May 2021**









Pictures of floor steel reinforcement, new concrete floor, interior mechanical systems being installed.



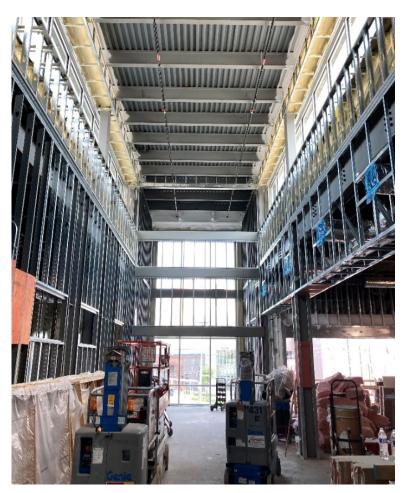


#### **June 2021**





Roof construction, roof insulation



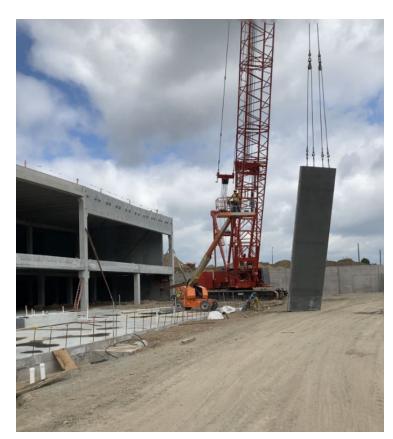
Interior building construction





#### Installed to date:

- ~2,200 of 3,000+ pieces of precast installed
- 17,000 yards of concrete
  (2.5 size of Goodyear Blimp)
- 1,500 tons of rebar (~75 60' buses)
- 0.6 of 6 football fields of roofing



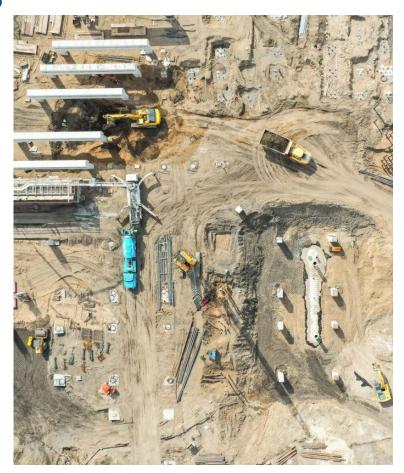
Precast panel being lifted by crane





## **Sustainability Highlights**

- 40,000 Gallon Rainwater Storage Tank
  - Save 2.6M gallons potable water/year for bus wash
- Geothermal System
  - Heat/cool operations building
- Thermal Wall Paneling
  - Preheats outside air in winter
- LED Lighting
- 2MW Solar Array



Rainwater filtration system for bus wash (Fall 2020)



## **Total Project Budget & Funding**

#### **Budget (millions)**

Land/Site Prep: \$ 12.7

Design/Mgmt: \$ 12.0

Construction: \$ 117.8

Contingency: \$ 7.1

Equipment: \$ 5.5

Future Projects\*: \$ 8.5

Total: \$ 163.6

Local Funding: \$85.9

Federal Funding: \$ 77.3

MWMO: \$ 0.4

Total: \$163.6



**Funding (millions)** 

<sup>\*</sup>Low-No 2MW solar array, 2MW battery storage, 2 quick chargers in garage.



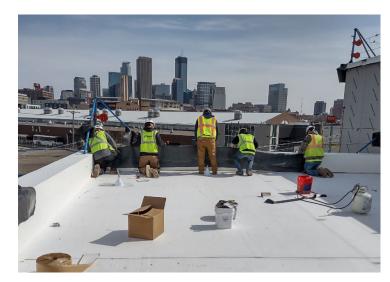
#### **DBE Participation**

- Construction Goal: 15%
  - 19 DBE Subcontractors



Concrete Pumping – DBE

- ITL Goal: 10%
  - 1 DBE Subcontractor



Roofing installation - DBE





• Questions?

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Thank you to Metro Transit staff Lisa Kline, Stan Owens, Mark Lanthier, Renee Dufour, Cole Mullins, Carrie Desmond, Molly Ellis for all their work so far on the project!

