

Transportation Committee

For the Metropolitan Council meeting of February 10, 2021

Subject: Minneapolis Bus Garage Independent Testing Agency, Contract 18P430 Amendment

Proposed Action

That the Metropolitan Council authorize the Regional Administrator to execute a contract amendment with Braun Intertec Corporation not to exceed \$315,000 for a total contract value of \$1,325,398.64 for additional Independent Testing Laboratory Services for the new Minneapolis Bus Garage.

Note: This motion reflects what was made, seconded, and adopted at the January 25, 2021 Transportation Committee meeting.

Summary of Committee Discussion/Questions

Metro Transit Principal Engineer Carrie Desmond presented this item in combination with a construction status update for the Minneapolis Bus Garage. Council Member Sterner asked where the water that was removed from the site was discharged. Desmond responded that water was discharged partially to the Minneapolis storm water system and partially to the Council sanitary system. Water was filtered and tested on site to determine if it could be discharged to the stormwater system or if additional treatment was needed requiring discharge to the sanitary system.

Motion to approve by Cummings, seconded by Fredson. Motion carried, **consent** to Council.

Transportation Committee

Meeting date: January 25, 2021

For the Metropolitan Council meeting of February 10, 2021

Subject: Minneapolis Bus Garage Independent Testing Agency, Contract 18P430 Amendment

District(s), Member(s): District 7, Robert Lilligren

Policy/Legal Reference: FM14-2 - Expenditures for the Procurement of Goods and Services Greater than \$500,000

Staff Prepared/Presented: Wes Kooistra, General Manager, 612-349-7510
Marilyn Porter, Director, E&F, 612-349-7689
Jim Harwood, Interim Assistant Director, E&F, 612-349-7339
Robert Rimstad, Lead Project Manager, E&F, 612-349-7768
Carrie Desmond, Principal Engineer, E&F, 612-349-7798

Division/Department: Metro Transit Engineering & Facilities

Proposed Action

That the Metropolitan Council authorize the Regional Administrator to execute a contract amendment with Braun Intertec Corporation not to exceed \$315,000 for a total contract value of \$1,325,398.64 for additional Independent Testing Laboratory Services for the new Minneapolis Bus Garage.

Note: This motion reflects what was made, seconded, and adopted at the January 25, 2021 Transportation Committee meeting.

Background

The Minneapolis Bus Garage will provide space to support bus operations and bus maintenance. The existing five service garages are overcrowded leading to suboptimal and inefficient operations and maintenance of the fleet.

This contract supports construction of the new Minneapolis Bus Garage (Contract 19P000A) by providing Independent Testing Agency services. Examples of testing and inspection services include concrete testing, masonry testing, structural steel inspections, soil and environmental testing, etc. to ensure materials and installation meet specified quality requirements. This contract also includes vibration monitoring of the Bassett Creek stormwater tunnel which runs below the site.

Work began on the Independent Testing Agency services in the Spring of 2020 with the start of construction. The original contract was for \$918,898.64. Contract Amendment #1 was authorized in the amount of \$91,500 in the Fall of 2020. With the addition of this Contract Amendment #2 request for \$315,000 the total contract value would be \$1,325,398.64. The project team agreed that the proposed amendment price is fair and reasonable.

During the first phase of construction, extensive unforeseen conditions were discovered underground. Twenty-two million gallons of water need to be pumped off-site to dewater and make way for construction. Braun is assisting with permitting and water analysis to minimize fees for this dewatering effort. Thousands of tons of unsuitable soils were also uncovered underground.

In order to mitigate the cost of landfill fees, Braun Intertec will provide on-site monitoring and rapid soil testing. This work will determine what soil can remain

on site and be used to backfill excavations without compromising the integrity of the future building. These additional consultant services will save the Council substantial additional construction costs.

Structural steel foundation piles are averaging approximately 11% over the estimated design length to reach required structural strength criteria. The overall production schedule has been slower than anticipated. Additionally, the contractor's means and methods differ from what was assumed during contract negotiations. Four different pile driving rigs are operating concurrently and spread throughout the site whereas two rigs were assumed during original negotiations. This has created a need for additional personnel to monitor pile driving activities and ensure structural criteria compliance for building foundations.

The Office of Equal Opportunity (OEO) assigned a 10% Disadvantaged Business Enterprise (DBE) Goal to this project. The requested amendment will not affect the commitment goal.

Rationale

The amendment of a professional/technical services contract exceeding 10% requires Council approval.

Thrive Lens Analysis

This action furthers the Thrive outcomes of Stewardship and Prosperity and Equity and Livability by leveraging transit investments with higher expectations of land use through needed facility development to support expanded bus service. The new Minneapolis Bus Garage will provide additional bus storage, operations, support functions, and maintenance space for planned growth in ridership demand and upcoming service infrastructure investment through expansion. By allowing the expansion of the bus fleet, it will increase mobility and access to opportunities for all residents, across race, economic means and ability.

Funding

Project funding is available in the Metro Transit adopted 2021-2026 Capital Improvement Program in projects: 62312 – Heywood Expansion, 62312e – New Minneapolis Bus Garage (NMBG), NMBG Electric Bus Lo-No Grant, and Electric Bus Infrastructure – NMBG.

Known Support / Opposition

There is no known opposition to this project. Support of the project has been demonstrated through the award of two competitive grants to contribute to the project funding. Multiple local agencies' long range plans include expansion of the bus fleet to support long term growth in the region and this facility is needed to meet those plans.



Minneapolis Bus Garage

Construction Update

Business Item 2021-20:
Independent Testing Agency Contract 18P430
Amendment #2

Carrie Desmond, Project Manager
January 25, 2020

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
- 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*



Rendering Main Building Entrance

* Funding dependent

Construction Highlights: May 2020



Week 2 of construction

Construction Highlights: July 2020



Earthmoving, pile driving, construction over Bassett Creek stormwater tunnel

Construction Highlights: September 2020



Pile driving, excavation for rainwater storage tank, retaining wall foundation

Construction Highlights: November 2020



Transfer girders over Bassett Creek stormwater tunnel



Construction Highlights: December 2020



Floor slab forming, geothermal loop installation, steel erection for operations and admin building

Construction Highlights: January 2020



Precast wall panel and column erection for the operations building

Construction Facts

- 60 Miles of Steel Pile Driven
 - ≈ 5280 60' buses in a row
 - ≈ 7x length of bus fleet
 - ≈ 1.5x length of Northstar
- Dewatering of 22M Gallons
 - ≈ 33 Olympic swimming pools
- Removal of 28,000 Tons Soil
 - ≈ 6 inches covering entire 24-acre Heywood Campus
 - ≈ 8 feet covering first floor of new MTPD building



Pile driving construction crew

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



40,000 gallon rainwater storage tank (Fall 2020)



Rainwater filtration system for bus wash (Fall 2020)

Total Project Budget & Funding

Budget (millions)

Land/Site Prep:	\$ 11.8
Design/Mgmt:	\$ 12.0
Construction:	\$ 115.5
Contingency:	\$ 7.7
Equipment:	\$ 4.5
<u>Future Projects*:</u>	<u>\$ 8.5</u>
Total:	\$ 160.0

Funding (millions)

Local Funding:	\$ 82.7
Federal Funding:	\$ 76.9
<u>MWMO:</u>	<u>\$ 0.4</u>
Total:	\$160.0

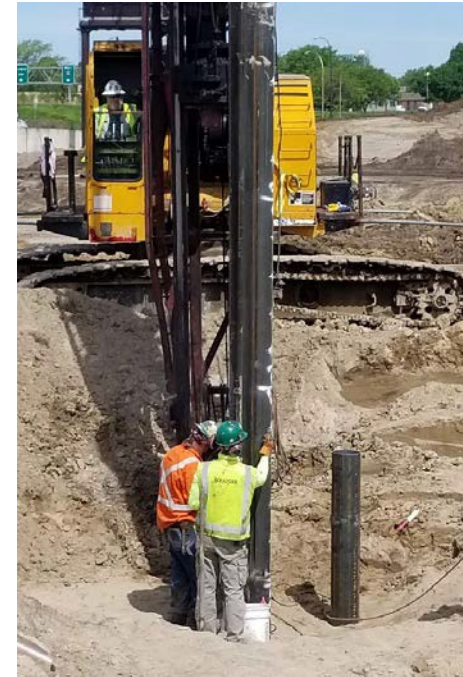
*See slide 3 for future projects

DBE Participation

- Construction Goal: 15%
 - 20 DBE Subcontractors
- ITL Goal: 10%
 - 1 DBE Subcontractor



Dewatering pumps and piping – DBE



DBE pile driving observation

Independent Testing Laboratory

Additional Services

- Environmental Oversight
 - Dewatering test samples
 - Dewatering permits
- Soils Monitoring
 - Soils sampling
- Pile Driving Oversight
 - Additional rigs to monitor

Cost Control Measures

- Dewatering
 - On site filtration
 - Storm & sanitary discharge
- Soils Reuse
 - Subgrade in deep excavation
 - Limit hauling off site

Proposed Action

- That the Metropolitan Council authorize the Regional Administrator to execute a contract amendment with Braun Intertec Corporation not to exceed \$315,000 for a total contract value of \$1,325,398.64 for additional Independent Testing Laboratory Services for the new Minneapolis Bus Garage.