

DC's Northeast Boundary Tunnel Project Pioneering e-Pours

Highlights

CONNECTED PROJECT PARTNERS AND DATA SOURCES IN REALTIME, simplifying how data from different suppliers and team members was combined, shared and consumed.

PROVIDED EASY ACCESS TO OPERATING INSIGHTS from sensors, concrete e-tickets, logistics, and field and lab QA/QC, allowing for improved visibility and streamlined analysis and resolution of issues.

ADAPTED INFORMATION TO THE NEEDS OF EACH TEAM. Unified, organized, and digitized information allows teams to shape it to their convenience for analysis and decision-making easily.

The Challenge

The Northeast Boundary Tunnel project (NEBT), contracted to The Lane Construction Corporation (formerly Salini/Impregilo/Healy JV), is the third in a series of tunnels that are part of the DC Clean Rivers project. The tunnel is 5.1 miles in length and will have a finished diameter of 23 feet.

Along the tunnel alignment, nine sites with drop shafts, adits, and near-surface structures connect the new tunnel with DC's existing infrastructure.

Thousands of cubic yards of concrete will be poured across these nine sites throughout the duration of the project. A project of this magnitude necessitates close coordination and collaboration of all team and a unified way to collect, manage, and report all concrete pour information.

The Solution

Using binni, the construction team (contractor, suppliers, owner) collaborates on every concrete pour as it progresses through its lifecycle – from planning to execution to the final reporting.

This real-time insight allowed for teams to properly allocate resources, easily access accurate information to aid in decision making and reporting.

Binni not only connected users to up to date information gathered using the binni application but also integrated with the concrete producer's e-tickets and the sensor manufacturer, Giatec, to provide a single, unified source of all concrete related information.

The Results

Lane Construction has realized increased efficiency across several process since implementing binni into their concrete operations. These performance efficiencies include:

- **100+ hours saved per month** for the engineering and management team per every 10 users of binni
- **Deeper insights** and many hours saved across the entire team due to simple, streamlined access to pour information eliminating the need to manually search for and compile the information.
- **Increased visibility of information** for concrete pours improving collaboration between all interested parties and enriching critical project discussions
- **Enhanced report quality**; digitization of concrete pour data at the point of placement has reduced data handling and the potential for errors in data input.

"Binni has streamlined how we manage our concrete pours really simplifying how information from various sources and suppliers is combined and reported" - Federico Bonaiuti | Lane Construction | Engineer