Roth I A M S Integrated Asset Management Strategies

PROJECT TYPE: Parking Garage Condition

Assessments

CLIENT NAME: State of Maine

PROJECT DATES: Phase I: December 2022, Phase

II: July 2023



CLIENT IMPACT AND SUCCESS

Through meticulous analysis and targeted investigations, Roth IAMS delivered actionable insights and recommendations crucial for prioritizing maintenance and renewal efforts.

By addressing structural concerns proactively, the State of Maine can implement preventive measures to ensure the safety and longevity of the Augusta Parking Garage. Moreover, the project underscored the importance of collaboration and innovative problem-solving in infrastructure maintenance, setting a precedent for future assessments.

PROJECT OVERVIEW

In the summer of 2022, Roth IAMS, via our Sourcewell Contract, collaborated with the State of Maine, Bureau of General Services to conduct a comprehensive Condition Assessment of the Augusta Parking Garage in Augusta, Maine. Erected in 1975, the Augusta Garage spans 140,000 GSF across two supported levels and a slab-on-grade level, accommodating 436 vehicles. Roth IAMS was tasked with evaluating the structural integrity of the garage due to historical concerns regarding its post-tensioned structure, compounded by repair work following a 2014 assessment.

SCOPE AND OBJECTIVES

Phase I involved a thorough review of existing reports and historical repair data, supplemented by on-site assessments and limited testing methods. This initial phase aimed to identify areas of concern and establish a foundation for targeted investigations.



Phase II encompassed detailed, invasive testing of concrete and post-tension cables to assess the overall structural health accurately. Working closely with specialized consultants, Roth IAMS utilized various testing methodologies to pinpoint areas requiring further scrutiny.



KEY DELIVERABLES AND CONSTRAINTS

One of the primary challenges encountered in Phase I was the absence of original structural drawings, necessitating innovative approaches to assess the garage's condition accurately. Additionally, coordination with state personnel to ensure minimal disruption to parking operations during Phase II testing posed logistical challenges. Notably, investigating precast perimeter wall panels without access to original drawings proved critical, revealing heightened corrosion levels at panel connections.

CONCLUSION

The Parking Garage Condition Assessments project exemplifies Roth IAMS' commitment to delivering comprehensive solutions tailored to our clients' needs. By leveraging expertise and embracing challenges head-on, we not only provided invaluable insights but also empowered the State of Maine to make informed decisions safeguarding critical infrastructure assets. As a trusted partner, Roth IAMS remains dedicated to driving positive outcomes and enhancing the resilience of infrastructure systems nationwide.







