

PIVOT ENGINEERS

ALI ABU-YOSEF, PH.D., P.E., S.E. SENIOR ENGINEER

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PRACTICE AREAS

- Corrosion Assessment and Repair
- Structural Repairs and Strengthening •
- Forensic Investigations
- Bridge Evaluation and Repair

REGISTRATIONS

- Professional Engineer: TX, IA •
- Structural Engineer: IL

HONORS AND AWARDS

- ICRI 40 Under 40, 2022
- Academic Excellence Award, 2007
- ICRI Project of the year, 2020
- ACI Excellence in Concrete Repair, 2020

PROFESSIONAL ACTIVITIES

- American Concrete Institute ACI 364 - Rehabilitation ACI 562 - Repair Code ACI 222 - Corrosion ACI 342 - Bridge Evaluation
- International Concrete Repair Institute •
- Association of Material Protection •

EDUCATION

- University of Texas at Austin Doctor of Philosophy, 2013 Masters of Science, 2009
- University of Jordan Bachelor of Science, 2007

EXPERIENCE

Ali is a structural engineer with a penchant for everything corroding and all that is oxidized. Ali has more than ten years of experience in structural forensics. He has performed forensic investigations of structural failures, evaluated service life of critical infrastructure, and designed state-of-the-art monitoring systems.

REPRESENTATIVE PROJECTS

The Austonian Investigation of premature corrosion damage in a 56story condominium. Development of multi-award-winning repairs that included the use of GFRP reinforcement.

Anaerobic Digester Collapse Investigation to determine the probable cause of the collapse of prestressed roof elements at an environmental facility. Evaluation included assessment of microbially-induced concrete disintegration.

Cline Avenue Bridge Investigation to evaluate as-built conditions of 28-span segmental post-tensioned bridge.

15-Level Scaffold Collapse Investigated the conditions leading to the fatal collapse of a 15-level erected scaffold structure. Assessment included site reconnaissance and evidence collection and preservation.

Leo Frigo Memorial Bridge Investigated the unique mechanisms that led to the severe corrosion of underground steel pilings, which failed abruptly.

Atlantic Bridge Evaluation of the impact of prescriptive concrete specifications on the poor performance of the concrete mixtures used in one of the largest cable-stayed bridges in the world.

Panama Canal Expansion Service life modeling to evaluate the adequacy of the concrete mixture designs. Assessment of the influence of cracks on the corrosion initiation.

Passive Wireless Corrosion Sensors Developed novel low-cost wireless sensor platform that enable early detection of corrosion within concrete members.