PERSONNEL QUALIFICATIONS

Thai X. Dam | Associate III

EDUCATION

- National University of Civil Engineering - Vietnam
  - Bachelor of Science, Civil Engineering, 2005
- Thammasat University, Sirindhorn International Institute of Technology - Thailand
  - Master of Science, Structural Engineering, 2010
- University of Michigan
  - Doctor of Philosophy, Structural Engineering, 2016

PRACTICE AREAS

- Failure/Damage Investigations
- Structural Analysis
- Concrete Structures
- Structural Metals
- Wood Structures
- Nondestructive Evaluation

REGISTRATIONS

- PE in CA and MI; SE in IL

PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI)
- Intl. Concrete Repair Inst. (ICRI)
- MI Structural Eng. Assoc. (SEAMi)

TECHNICAL COMMITTEES

- ACI 445 - Shear
- ACI 352 - Joints and Connections
- ACI 546 - Repair of Concrete

CONTACT

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EXPERIENCE

Thai Dam joined WJE in 2016 and is involved with and manages projects involving structural engineering and architecture. His typical projects have included investigation, analysis, and nondestructive evaluation of existing and damaged concrete, steel, wood, and masonry structures. He has also been responsible for development of repair and rehabilitation documents, as well as conducting construction supervision. Dr. Dam has published articles on shear strength of reinforced concrete structures, nonlinear finite element analysis, and structural strengthening and rehabilitation. He has served in technical committees of the American Concrete Institute.

Prior to joining WJE, Dr. Dam was a structural engineer at Vinaconex R&D in Ha Noi, Vietnam, where he conducted structural analysis and designed high-rise reinforced concrete buildings. He was also a lecturer at the Department of Civil Engineering of the National University of Civil Engineering in Ha Noi, Vietnam.

REPRESENTATIVE PROJECTS

Failure/Damage Investigations

- 1921 East Ferry Building - Detroit, MI: Structural assessment and analysis of ten-floor reinforced concrete flat plate structure
- McNamara Building - Detroit, MI: Structural evaluation and renovation of reinforced concrete structure
- Starkweather Elementary School - Plymouth, MI: Structural assessment and renovation of 1920s cast-in-place concrete floor and masonry structure
- Consumers Energy JHC - Bay City, MI: Structural evaluation of steel trestle
- Henry Ford Medical Center - Sterling Heights, MI: Evaluation of open-web steel joist structure
- Galleria Officentre - Southfield, MI: Structural investigation of damaged reinforced concrete slab
- Ed Larson Farm - Croswell, MI: Failure investigation of collapsed grain bin

Structural Analysis

- Baltimore Parking Structure - Detroit, MI: Nonlinear finite element analysis of unbonded post-tensioned slabs
- University of Michigan Light Poles - Ann Arbor: Fatigue analysis of high-mast lighting towers
- Detroit Yacht Club - Detroit, MI: Assessment, analysis, and repair of precast, reinforced concrete channel slab structure

Concrete Structures

- Advance Building Parking Structure - Southfield, MI: Structural assessment of prestressed concrete parking structure and Cazaly hanger
- Maccabees Plaza - Southfield, MI: Delamination repair design for reinforced concrete waffle slabs
- Ford Assembly Building - Indianapolis, IN: Restoration of reinforced concrete corbels
- Beaumont GP Parking Structure - Grosse Pointe, MI: Full-depth shear repair design for prestressed double-tee beams

Structural Metals

- Muskegon Community College - Muskegon, MI: Structural assessment and retrofit of steel and reinforced concrete structures
- Large Regional Hospital Facility - Wyoming, MI: Structural evaluation of open-web steel joist structure
- Buff Whelan - Sterling Heights, MI: Structural investigation and evaluation of fire-damaged steel structure

Wood Structures

- Parkside Apartments - Toledo, OH: Structural investigation and repair of fire-damaged wood truss
- Residential House - Ann Arbor, MI: Structural damage assessment for roof wood joists
- Woodland Hills Apartment – Trotwood, OH: Tornado-related structural damage assessment

Nondestructive Evaluation

- General Motors Tech Center - Warren, MI: Nondestructive assessment of cable stairs and steel deck roof system using vibration analysis
- Masonic Pathways - Lansing, MI: Nondestructive assessment of reinforced concrete structure using ground penetrating radar