# PERSONNEL QUALIFICATIONS



# Dhairya R. Patel | Associate II



## **EDUCATION**

- Carleton University
  - Bachelor of Engineering, Architectural Conservation and Sustainability, 2020
- Universidade do Minho
  - Master of Science, Structural Analysis of Monuments and Historical Constructions, 2021
- Universitat Politècnica de Catalunya - Barcelona Tech
  - Master of Science, Structural Analysis of Monuments and Historical Constructions, 2021

# **PRACTICE AREAS**

- Historic Preservation
- Repair and Rehabilitation
- Historic Structures Reports
- Water/Air Leakage Assessment
- Facade Condition Assessment
- Structural Engineering
- Building Enclosure Evaluation

## **PROFESSIONAL AFFILIATIONS**

Association for Preservation Technology (APT)

#### CONTACT

dpatel@wje.com 703.641.6570 www.wje.com

#### **EXPERIENCE**

Dhairya Patel joined WJE in 2022 with a primary focus on historic preservation and building enclosures. Mr. Patel has worked on various projects, from historically significant structures and plazas to modern construction. His work includes condition assessments, structural and architectural investigations, repair and rehabilitation design, and construction observation services on new construction. Mr. Patel's building material experience includes stone and brick masonry, concrete, timber, and waterproofing.

During his graduate studies, Mr. Patel focused his research on the analysis of a historic, mixed, timber-masonry structure subjected to seismic loading.

#### **REPRESENTATIVE PROJECTS**

#### **Historic Preservation**

- Russell Senate Office Building (1909) -Washington, D.C.: Documentation and asbuilt survey of marble stone masonry balustrade
- Senate Underground Garage and Plaza (1932)
  Washington, D.C.: Survey and monitoring of granite hardscape paving and concrete topping slab

### **Repair and Rehabilitation**

- Parliament of Canada (1866) Ottawa, ON:
  Stone masonry repair and restoration, and construction observation services \*
- Work Horse Barn (1892, Bar U Ranch National Historic Site) - Pekisko, AB: Development of repair and rehabilitation design of timber beams and columns, and rubble stone masonry; design of new concrete slab foundation \*

## **Historic Structures Reports**

 Fairfax Arms (mid-1700s) - Lorton, VA:
 On-site documentation of condition and architectural features to develop a historic structures report

# Water/Air Leakage Assessment

Central Pension Fund - Washington, D.C.:
 Below-grade water leakage evaluation and investigation

## **Facade Condition Assessment**

- Lamond House Alexandria, VA:
  Development of condition assessment report for brick colonial-style house to document history, condition, and treatment recommendations
- GrandView Condominium Annapolis, MD: Evaluation of distress at cast stone window sills and headers, and brick masonry and concrete masonry facades
- York University Toronto, ON: Survey and evaluation of multiple buildings to develop a maintenance plan \*
- Waterloo Apartments Baltimore, MD: Facade condition assessment of brick masonry and concrete
- 1500 Bronson Ottawa, ON: Facade condition assessment of granite spandrel panels \*
- Langevin Building Ottawa, ON: Facade condition assessment of limestone masonry \*

#### Structural Engineering

- Local Museum Washington, D.C.: Structural detailing of concrete column and footing
- Tradepoint Atlantic Baltimore, MD:
  Inspection and survey of steel-joist weld connections
- I-90 Bridge Design Lake County, IN: Detailing of reinforcement for bridge diaphragm beams and link slabs

# **Building Enclosure Evaluation**

- West Falls Church Falls Church, VA:
  Construction administration and document review of exterior enclosure systems, including below-grade waterproofing and weather barrier systems
- Pooks Hill Bethesda, MD: Construction administration and document review of exterior enclosure systems, including belowgrade waterproofing, weather barrier systems, and roofing
- \* Indicates projects with previous firms

