

Fort Lauderdale Police Headquarters Project Update

CITY OF FORT LAUDERDALE February 18, 2025 Conference Meeting

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Agenda

- Deflection Summary
- Peer Review
- Project Status
- Questions

Deflection Summary

- March 2024
 - Deflection Issue Identified Installation of North Window Wall Stopped
 - Corrective Designs Developed by Engineer of Record Thornton Tomasetti (TT)
 - o Building Services Division of DSD Engaged on Issue and Corrective Measures
 - Designs Approved & Permits Issued
 - o Work Started
 - April 2024
 - Inspections of Work Performed
 - City Staff Felt Deflection Issue Not Resolved
 - Stop Work Order Issued in Area of Concern
- May 2024
 - Lakdas/Yohalem Engineering (LYE) Engaged for Peer Review & Co-Develop Rectifications
 - Meeting Held with Building Services on Initial Findings
 - o LYE Provided Initial Report

Deflection Summary

- June 2024
 - $\circ~$ Temporary Shoring Installed per Direction of the City & LYE
 - o Engineering Designs for Additional Structural Enhancements Under Development
- July 2024
 - o Supplemental Recommendations Submitted to Building Services for Review
- August 2024
 - o AECOM / Thornton Tomasetti / LYE Submit Initial Designs for Permit Review
 - 4 Firms Interviewed to Perform Additional Peer Review Services
 - Wiss, Janney, Elstner Associates, Inc. (WJE) Selected for Peer Review
- September 2024
 - Preliminary Coordination Work with WJE Starts
- October 2024
 - Contract Signed with WJE & Phase 1 Work Begins
- December 2024
 - WJE Peer Review Phase 1 Report Completed
- January 2025
 - o WJE Peer Review of Phase 2 Begins (Remainder of Headquarters Building)

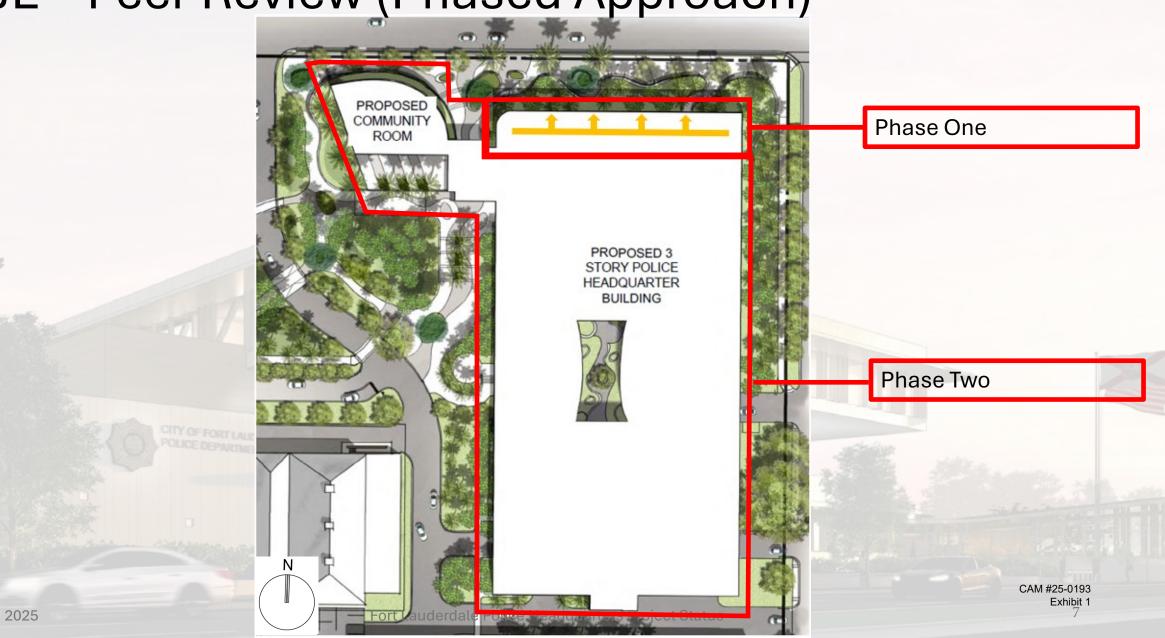
WJE - Peer Review

- WJE Chosen for Peer Review Work
 - Founded 65-Years Ago
 - o International Firm
 - Specializes in Investigation, Analysis, Testing, & Design of Structural Repairs and Retrofit Solutions
 - Conducted Over 175,000 Investigations Worldwide
 - Selected Relevant Projects
 - Rickards Middle School Roof Collapse
 - Champlain Towers South
 - Alcatraz Cellhouse Structural Stabilization
 - FIU Pedestrian Bridge
 - Washington Monument Structural Evaluation/Repair Following Earthquake
 - Boston, MA Metropolitan Highway System Structural Evaluation/Safety Review/Structural Repairs

WJE – Peer Review (Phased Approach)

- Phase 1 Deflection Area Only (Peer Review Started October 2024 / Completed December 2024)
 - Report Addressed the Following:
 - o Summarizes the Scope
 - o Summarizes the Findings
 - o Contains Project Background
 - Provides for Document Review
 - Observations from Site Visits
 - Summarizes Findings of WJE's Structural Design Review
 - Reviews Rectification Measures Already Implemented
 - o Reviews Rectification Measures Planned to be Implemented
 - Provides Discussion of Findings
 - o Provides Additional Comments and Recommendations for Consideration

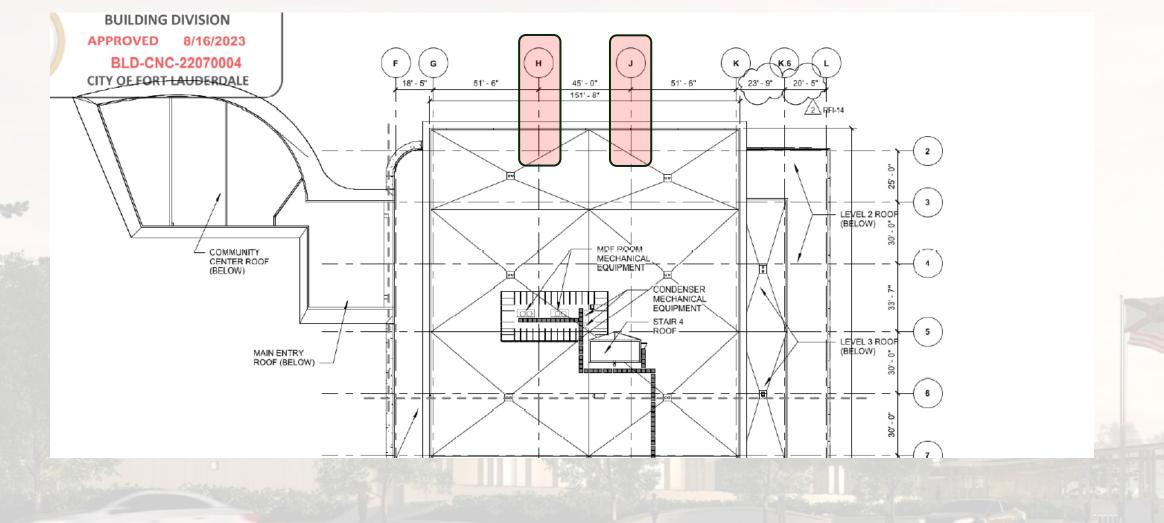
WJE – Peer Review (Phased Approach)



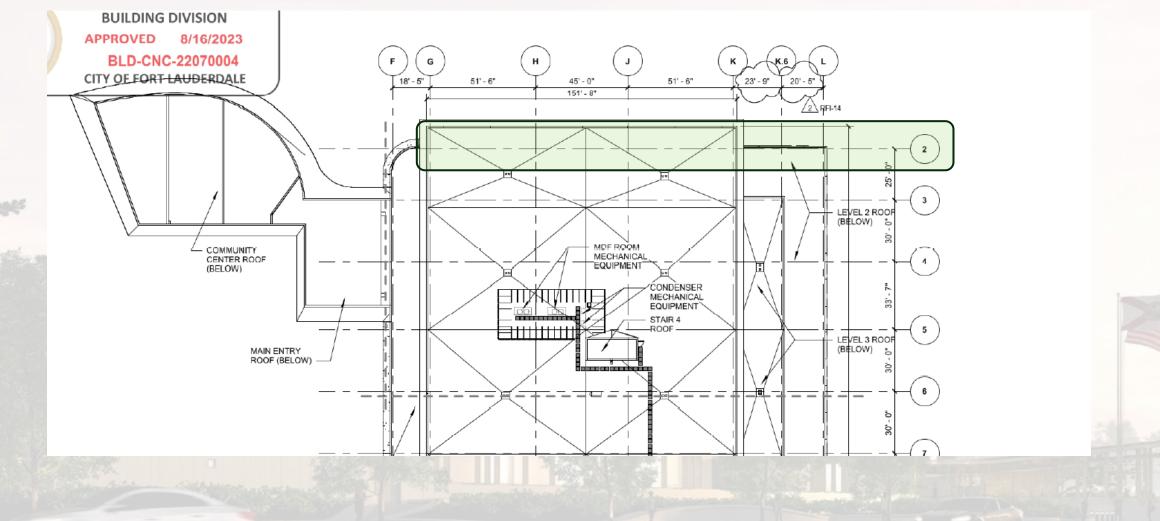
WJE – Phase 1 Summary of Findings

- Roof Beams
 - WJE Concurs that the Roof Cantilever Beams Were Not Fully Code Compliant
 - WJE Finds that Previous Rectification Efforts Did Not Bring the Beams Fully into Code Compliance
 - WJE Finds that Cantilever Beams at Gridlines H & J Are Not Fully Code Compliant
 - WJE Finds that the Spandrel Beams North of Gridline 2 are Fully Code Compliant
- Third Floor Beams
 - WJE Finds that 3rd Floor Cantilever Beams & Spandrel Beams North of Gridline 2 are Fully Code Compliant

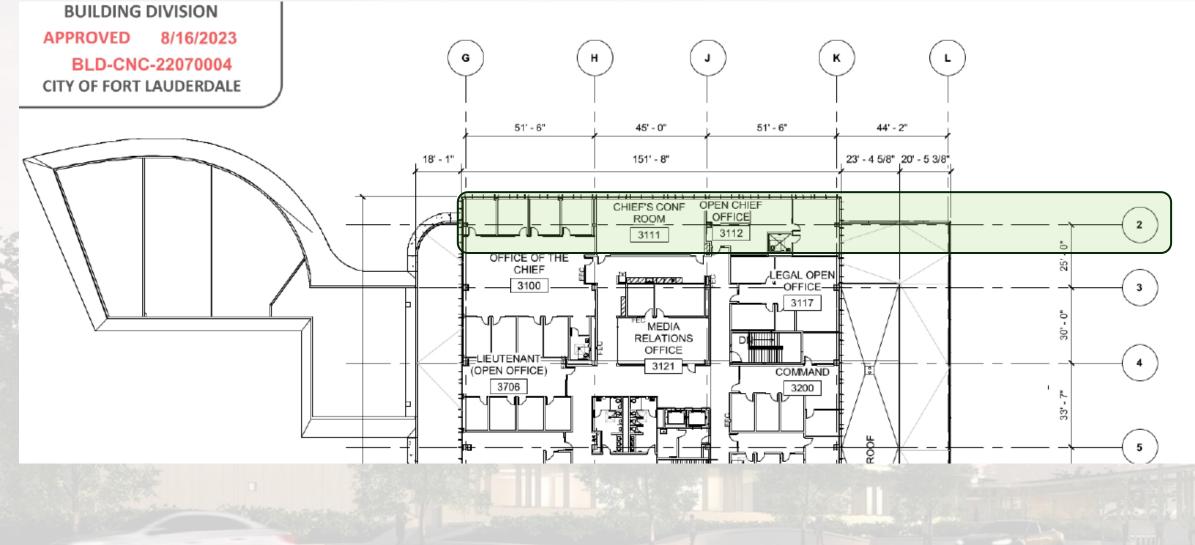
WJE – Phased Approach – Roof Beams (Cantilever)



WJE – Phased Approach – Roof Beams (Spandrel)



WJE – Phased Approach – 3rd Floor Beam (Cantilever)



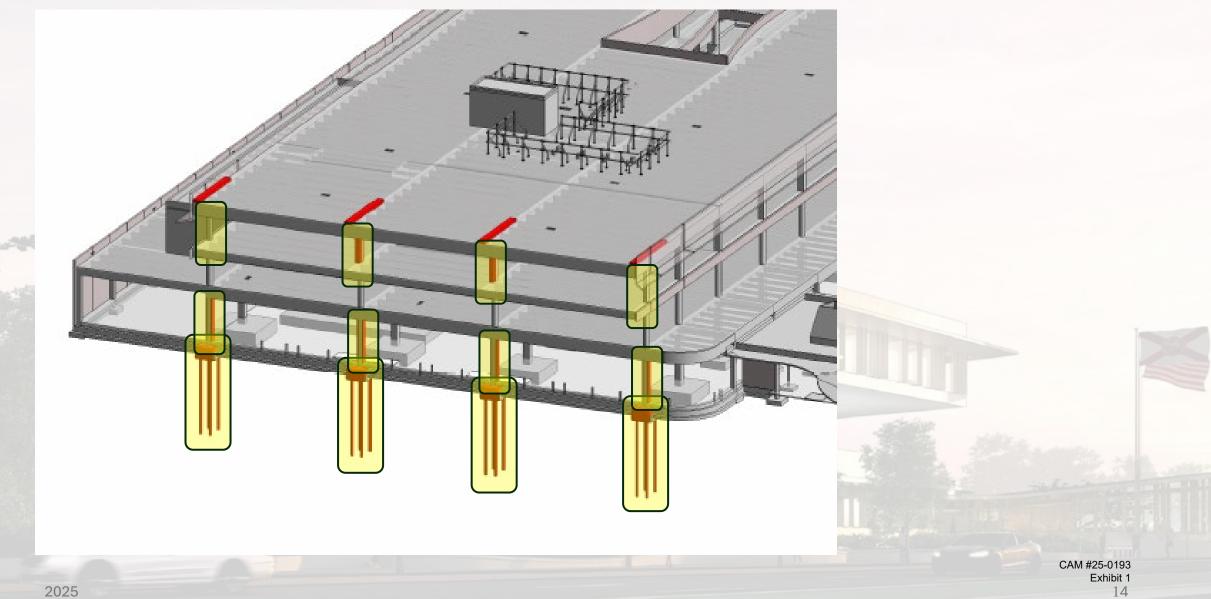
WJE – Phase 1 Summary of Findings

- Beam Deflection
 - WJE Finds that the Immediate & Long-Term Deflection Between the Roof and the 3rd Floor Need Careful Evaluation by Thorton Tomasetti Prior to Final Design of the Window Wall at the North Elevation of the 3rd Floor.
- Third Story Columns
 - WJE Finds that there are Design Issues at all four 3rd Story Columns at Gridline 2 and Previous Rectification Efforts do not Fully Resolve the Design Issues.
 - WJE Finds these Columns are not Fully Code-Compliant for Shear Strength
 - WJE Finds these Columns are not Fully Code-Compliant in Flexure at Some Locations or Under Certain Assumptions

WJE – Phase 1 Summary of Findings

- First Story Columns
 - WJE Agrees with the Findings of LYE & TT that Rectification Measures are Necessary for Code-Compliant Strength.
 - WJE Made Additional Minor Recommendations for Columns on the 1st Floor
- Foundations
 - WJE Agrees with the Findings of LYE & TT that Additional Rectification Measures Beyond Enlarged Footings are Necessary and Concurs that the Proposed Micropiles and Pile Caps are a Reasonable Rectification Measure.

Structural Enhancements



Next Steps

- Moss to Continue Implementation of Rectification Plan From Phase 1 Peer Review
- WJE to Complete Phase 2 Peer Review of the Remaining Headquarters Building
- General Site Work to Continue
- Finalize Plans to Maintain Existing Detention/Booking Facility
- Anticipated Move-in Date Fall 2025

Police Department HQ – Project Status

Percentage Complete – 80%

Critical Items Completed:

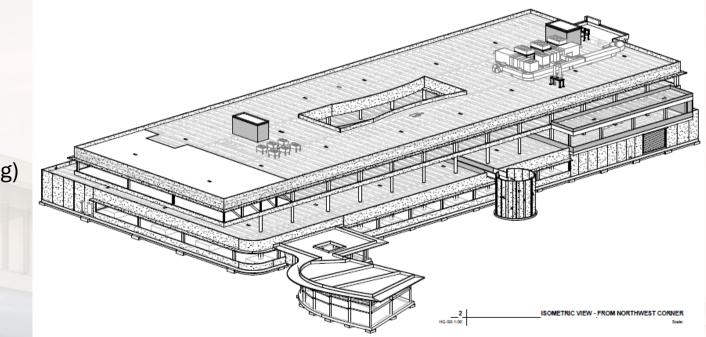
- Generator Installation
- FPL to Complete Vault Work and Energizing
- Shooting Range Complete (Energize for Testing)
- HVAC Chiller & AC Start Up
- Flooring Installation Started

Parking Garage:

Substantially Complete

Anticipated Items to be Completed:

- Radio Equipment Relocation
- Asbestos Abatement (Existing PD Building)
- Demo Existing PD Building
- Security & Low Voltage Design & Approval
- AT&T Pole Relocation



- Kitchen Design Finalization and Installation
- Completion of Remaining Site Work

Questions?