# City Hall WJE April 2021 Condition Assessment



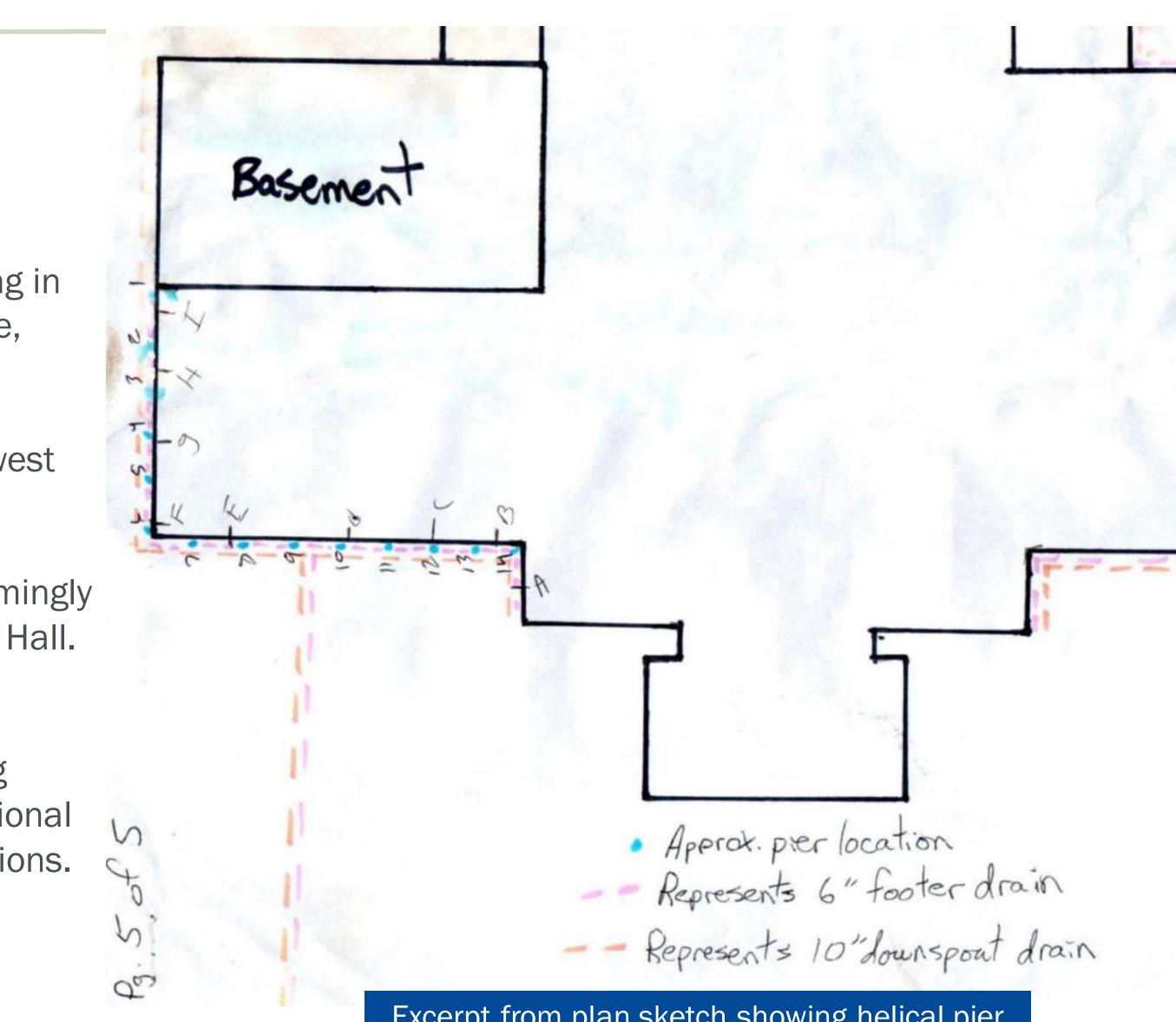
No. of Concession, Name



## Background

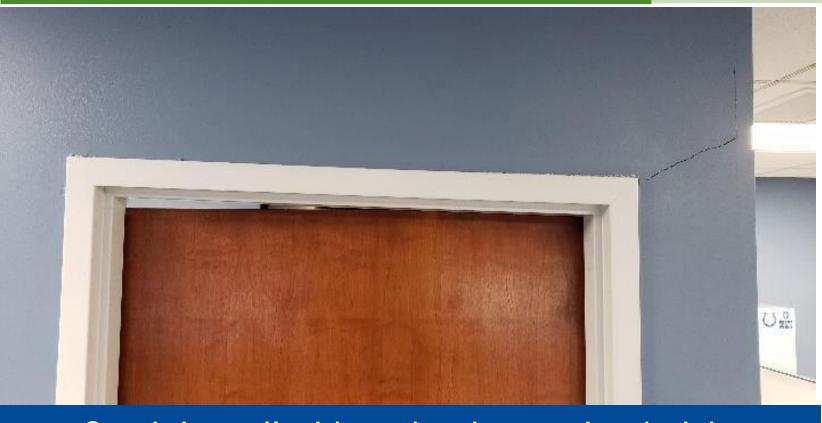
#### Structure

- Two-story wood-framed structure built circa 1991.
- Since original construction, the building has experienced movement, primarily on the west side of the building resulting in cracking and distress of the first-floor concrete slab on grade, exterior walls, and interior finishes.
- Initial underpinning efforts were attempted in 1994 on the west side of the building.
- The underpinning efforts performed in 1994 have been seemingly unsuccessful in mitigating building settlement issues at City Hall.
- In 2012/2013, 24 soil borings and two hand auger borings conducted by Cardno ATC on the western side of the building found the soils unsuitable for supporting the building. Additional underpinning efforts were attempted at limited interior locations.
- New movement at the City Hall building is now visible.



Excerpt from plan sketch showing helical pier installation locations installed in 2012

### **Observations**



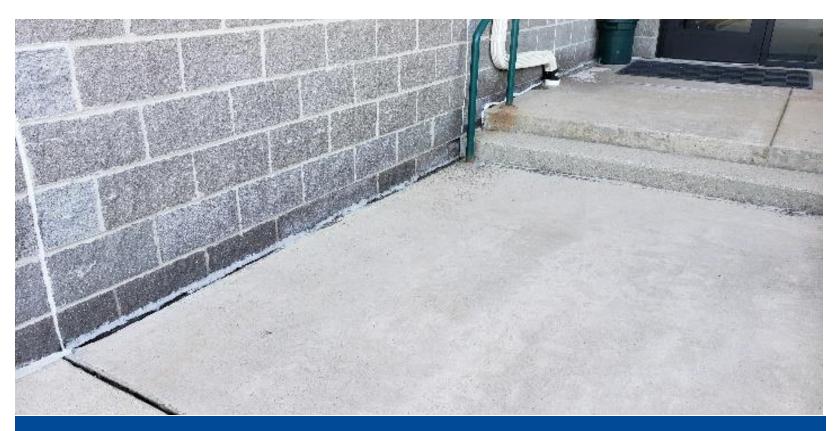
#### Crack in wall widened at increasing height



Steel wide-flange beam with gap between the bearing surface of the pocket

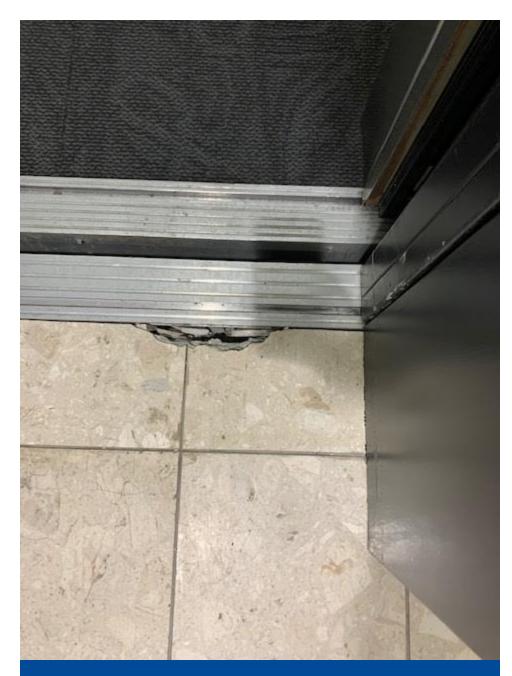


Cracked floor tiles at door threshold to the server room at the second floor



Approximately 1 inch of vertical displacement of the concrete flatwork at auditorium exterior wall

### **Observations cont.**



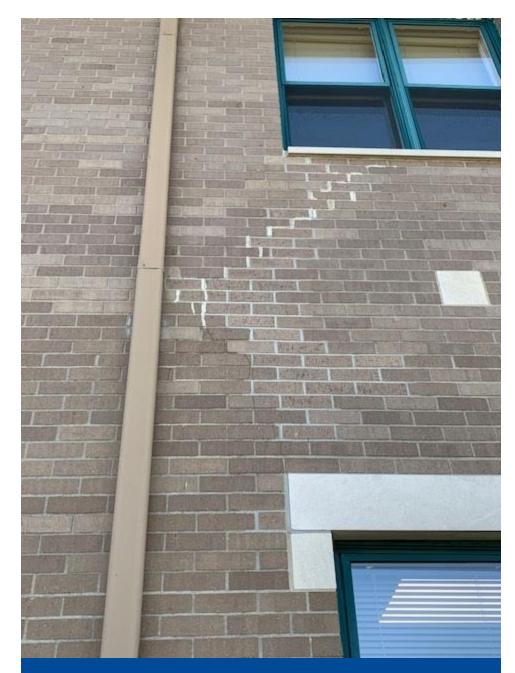
Second Floor Interior West Side Elevator Flooring breaking apart



First Floor Interior West Side water fountain Flooring sagging significantly



West Side Exterior 2013 updates beginning to fail



West Side Exterior 2013 updates beginning to fail

### **Maintenance History**

#### Past 5 years

Painting Exterior	\$30,000
Admin Remodel – BSG	\$100,000
Admin Remodel – Admin	\$160,000
Mold Remediation/HVAC	\$60,000
Sprinkler Lines in Auditorium	\$80,000
Nitrogen Generator	\$20,000
2 Boilers	\$64,000
Allerton HVAC Control System	\$150,000
Lighting Upgrade to LED	\$35,000
Door Replacements	\$60,000
HR/PR Painting	\$20,000
Atrium Painting	\$30,000



CD Walkthrough Door	\$4,000
IT Recabling for CAT 6	\$100,000
Braced up Walls for Auditorium	\$6,000
Central Conference Room Relocate	\$20,000
Stairway Carpet	\$35,000
Upgrade Fire Alarm	\$12,000
ADA Door Openers	\$10,000
ADA Entrance Ramp	\$175,000
Chiller	\$40,000
Office Furniture Upgrade	\$300,000
Electrical Upgrades	\$20,000
A/V Upgrades for City Council	\$140,000

## **City Hall Maintenance**

#### **Current Year Planned**

Accent Coatings	\$29,850
Flooring in PR and P&Z	\$25,565
Window and Door Replacement	\$239,788*

\* Contract has already started.



#### Current Year Recommended

Repair Damaged Roof Trusses

Further Investigation of Building Movements

- 1) Inspection of Second Floor Joists
- 2) Elevation Surveys of Floors
- 3) Inspection of Utilities

### Recommendations

#### Priority 1 (One to Three Years)

Review Edge Sheet Metal\*

Rout and Seal CMU Cracks\*

Install Concrete Curb\*

**Replace Guardrail Post Bases** 

Replace Coping Joint Sealants at Ramp\*

Install Sealant at Precast Head Joints\*

Repair Brick Mortar Joints\*

Repair Brick Sealant Joints\*

Replace CMU Expansion Joint Sealant

Monitor Sidewalk Cracks\*

Repaint Entry Doors

Repair EIFS Crack\*

Replace Windows\*



Repair Fascia Boards\*

Replace all Air Handlers and Add Dehumidification\*

Replace all Supply and Return Air Duct Work\*

**Replace Restroom Toiler Fixtures** 

Replace Indoor Light Fixtures with LED

Replace Outdoor Light Fixtures with LED

Upgrade Building Power and Distribution

Upgrade and Replace Emergency Generator

**Replace Water Softener** 

Replace Restroom Exhaust Fans

Reset Auditorium Doors\*

Install New Handrails in Stairs\*

\$2,117,230

\*Year 1 = \$1,664,000





## **Takeaways & Next Steps**

#### Discussion

- It appears that the 2012/2013 underpinning efforts, much like those of 1994, have been unsuccessful in permanently mitigating building settlement.
- issue.
- is between \$18.3M and \$20.8M

• Recommended maintenance over the next three years totals \$2.5M, without addressing settling

• Very preliminary estimate for a demolition and construction of a new, three-story steel-frame building