# AIA® Document B221™ – 2018

## *Service Order* for use with Master Agreement Between Owner and Architect

**SERVICE ORDER** number 01 made as of the First day of September in the year Two-thousand Twenty
*(In words, indicate day, month, and year.)*

**BETWEEN** the Owner:
*(Name, legal status, address, and other information)*

Weber County Library System
2039 W 4000 S
Roy, UT 84067
Telephone Number: (801) 337-2617

and the Architect:
*(Name, legal status, address, and other information)*

Prescott Muir & Associates, Professional Corporation
171 West Pierpont Avenue
Salt Lake City, UT 84101
Telephone Number: (801) 521-9111

for the following **PROJECT:**
*(Name, location, and detailed description)*

Preparation of drawings and specifications for mitigation of earthquake damage to five County Library buildings:

Weber County Main Library;
Weber County North Branch;
Weber County Ogden Valley Branch;
Weber County Pleasant Valley Branch; and
Weber County Southwest Branch/Headquarters.

**THE SERVICE AGREEMENT**
This Service Order, together with the Master Agreement between Owner and Architect dated the First day of September in the year Two-thousand Twenty
*(In words, indicate day, month, and year.)*

form a Service Agreement.

The Owner and Architect agree as follows.

**ADDITIONS AND DELETIONS:**
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document provides the Architect's scope of services for the Service Order only and is intended to be used with AIA Document B121™–2018, Standard Form of Master Agreement Between Owner and Architect

TABLE OF ARTICLES



## ARTICLE 1 INITIAL INFORMATION

**§ 1.1** Unless otherwise provided in an exhibit to this Service Order, this Service Order and the Service Agreement are based on the Initial Information set forth below:
*(State below details of the Project's site and program, Owner's contractors and consultants, Architect's consultants, Owner's budget and schedule, anticipated procurement method, Owner's Sustainable Objective, and other information relevant to the Project.)*

Refer to the attached Exhibit 'SO-Exhibit A: Earthquake Assessment Reports.'

**§ 1.2** The Owner and Architect may rely on the Initial Information. Both parties, however, recognize that such information may materially change and, in that event, the Owner and the Architect shall appropriately adjust the schedule, the Architect's services, and the Architect's compensation. The Owner shall adjust the Owner's budget for the Cost of the Work and the Owner's anticipated design and construction milestones, as necessary, to accommodate material changes in the Initial Information.

## ARTICLE 2 SERVICES UNDER THIS SERVICE ORDER

**§ 2.1** The Architect's Services under this Service Order are described below or in an exhibit to this Service Order, such as a Scope of Architect's Services document.

### § 2.1.1 Basic Services

*(Describe below the Basic Services the Architect shall provide pursuant to this Service Order or state whether the services are described in documentation attached to this Service Order.)*

Refer to the attached Exhibit 'SO-Exhibit B: Scope of Architect's Services.'

### § 2.1.2 Additional Services

*(Describe below the Additional Services the Architect shall provide pursuant to this Service Order or state whether the services are described in documentation attached to this Service Order.)*

Unknown at the time of this Agreement.

## ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

**§ 3.1** Unless otherwise provided in an exhibit to this Service Order, the Owner's anticipated dates for commencement of construction and Substantial Completion of the Work are set forth below:

.1 Commencement of construction date:

To be determined at a later date.

.2 Substantial Completion date:

To be determined at a later date.

**ARTICLE 4 COMPENSATION**

**§ 4.1** For Basic Services described under Section 2.1.1, the Owner shall compensate the Architect as follows:

.1 Stipulated Sum
*(Insert amount)*

*(Paragraphs deleted)*
Refer to the attached Exhibit 'SO-Exhibit C: Fee Proposal.'

**§ 4.2** For Additional Services described under Section 2.1.2 or in the Master Agreement, the Architect shall be compensated in accordance with the Master Agreement unless otherwise set forth below:
*(Insert amount of, or basis for, compensation if other than as set forth in the Master Agreement. Where the basis of compensation is set forth in an exhibit to this Service Order, such as a Scope of Architect's Services document, list the exhibit below.)*

As indicated in the Master Agreement.

**§ 4.3** For Reimbursable Expenses described in the Master Agreement, the Architect shall be compensated in accordance with the Master Agreement unless otherwise set forth below:
*(Insert amount of, or basis for, compensation if other than as set forth in the Master Agreement. Where the basis of compensation is set forth in an exhibit to this Service Order, such as a Scope of Architect's Services document, list the exhibit below.)*

As indicated in the Master Agreement.

**§ 4.4** When compensation identified in Section 4.1 is on a percentage basis, progress payments for each phase of Basic Services shall be calculated by multiplying the percentages identified in this Article by the Owner's most recent budget for the Cost of the Work. Compensation paid in previous progress payments shall not be adjusted based on subsequent updates to the Owner's budget for the Cost of the Work.

**ARTICLE 5 INSURANCE**

**§ 5.1** Insurance shall be in accordance with section 3.3 of the Master Agreement, except as indicated below:
*(Insert any insurance requirements that differ from those stated in the Master Agreement, such as coverage types, coverage limits, and durations for professional liability or other coverages.)*

As indicated in the Master Agreement.

**§ 5.2** In addition to insurance requirements in the Master Agreement, the Architect shall carry the following types of insurance.
(List below any other insurance coverage to be provided by the Architect, not otherwise set forth in the Master Agreement, and any applicable limits.)
*(Table deleted)*

**ARTICLE 6 PARTY REPRESENTATIVES**

**§ 6.1** The Owner identifies the following representative in accordance with Section 1.4.1 of the Master Agreement:
*(List name, address, and other information.)*

Lynnda Wangsgard
Weber County Library System
2039 W 4000 S
Roy, UT 84067
Telephone Number: (801) 337-2616

**§ 6.2** The Architect identifies the following representative in accordance with Section 1.5.1 of the Master Agreement:

*(List name, address, and other information.)*

Jay Lems
Prescott Muir Architects
171 West Pierpont Avenue
Salt Lake City, UT 84101
Telephone Number: (801) 521-9111

**ARTICLE 7 ATTACHMENTS AND EXHIBITS**

**§ 7.1** The following attachments and exhibits, if any, are incorporated herein by reference:

.1 AIA Document, B121™-2018, Standard Form of Master Agreement Between Owner and Architect for Services provided under multiple Service Orders;

.2 Other Exhibits incorporated into this Agreement:
*(Clearly identify any other exhibits incorporated into this Agreement.)*

SO-Exhibit A: Earthquake Assessment Reports.

SO-Exhibit B: Scope of Architect's Services.

SO-Exhibit C: Fee Proposal.

This Service Order entered into as of the day and year first written above.

**OWNER** *(Signature)*

Gage Froerer, Chair
Weber County Board of Commissioners
*(Printed name and title)*

**ARCHITECT** *(Signature)*

Jay Lems, President

*(Printed name, title, and license number, if required)*

Attested by:

*(Signature)*
Ricky Hatch, Clerk Auditor Weber County
*(Printed name and title)*

**OWNER** *(Signature)*
Cynthia Mattson, Library Board Chair
*(Printed name and title)*

Attested by:

*(Signature)*
Julia Valle, Library Business Office
*(Printed name and title)*

# *Additions and Deletions Report for*

## *AIA® Document B221™ – 2018*

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 17:12:23 ET on 09/01/2020.

**PAGE 1**

**SERVICE ORDER** number 01 made as of the First day of September in the year Two-thousand Twenty

...

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2039 W 4000 S
Roy, UT 84067
Telephone Number: (801) 337-2617

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171 West Pierpont Avenue
Salt Lake City, UT 84101
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Preparation of drawings and specifications for mitigation of earthquake damage to five County Library buildings:

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Weber County North Branch;
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This Service Order, together with the Master Agreement between Owner and Architect dated the First day of September in the year Two-thousand Twenty

**PAGE 2**

Refer to the attached Exhibit 'SO-Exhibit A: Earthquake Assessment Reports.'

...

Refer to the attached Exhibit 'SO-Exhibit B: Scope of Architect's Services.'

...

Unknown at the time of this Agreement.

...

To be determined at a later date.

**PAGE 3**

To be determined at a later date.

...

~~.2 Percentage Basis~~

~~*(Insert percentage value)*~~

~~( )% of the Owner's budget for the Cost of the Work, as calculated in accordance with Section 4.4.~~

~~.3 Other~~

~~*(Describe the method of compensation)*~~

Refer to the attached Exhibit 'SO-Exhibit C: Fee Proposal.'

...

As indicated in the Master Agreement.

...

As indicated in the Master Agreement.

...

As indicated in the Master Agreement.

...

~~Coverage~~ ~~Limits~~

...

Lynnda Wangsgard
Weber County Library System
2039 W 4000 S
Roy, UT 84067
Telephone Number: (801) 337-2616

**PAGE 4**

Jay Lems
Prescott Muir Architects
171 West Pierpont Avenue
Salt Lake City, UT 84101
Telephone Number: (801) 521-9111

...

SO-Exhibit A: Earthquake Assessment Reports.

~~.3 Other documents:~~SO-Exhibit B: Scope of Architect's Services.
~~*(List other documents, if any, including additional scopes of service forming part of this Service Order.)*~~
SO-Exhibit C: Fee Proposal.

...

Gage Froerer, Chair
Weber County Board of Commissioners

Jay Lems, President

...

Attested by:

*(Signature)*
Ricky Hatch, Clerk Auditor Weber County
*(Printed name and title)*

**OWNER** *(Signature)*
Cynthia Mattson, Library Board Chair
*(Printed name and title)*

Attested by:

*(Signature)*
Julia Valle, Library Business Office
*(Printed name and title)*

# *Certification of Document's Authenticity*

*AIA® Document D401™ – 2003*

I, Jay Lems, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 17:12:23 ET on 09/01/2020 under Order No. 4805526307 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document B221™ – 2018, Service Order for use with Master Agreement Between Owner and Architect, as published by the AIA in its software, other than those additions and deletions shown in the associated Additions and Deletions Report.

*(Signed)*

President

*(Title)*

09.01.20

*(Dated)*

- WEBER COUNTY MAIN LIBRARY
- WEBER COUNTY NORTH BRANCH
- WEBER COUNTY OGDEN VALLEY BRANCH
- WEBER COUNTY PLEASANT VALLEY BRANCH
- WEBER COUNTY SOUTHWEST BRANCH/HEADQUARTERS

**PRESCOTT MUIR ARCHITECTS**
**171 West Pierpont Avenue**
**Salt Lake City, Utah 84101**
**801-521-9111 • 801-521-9158 fax**

# EARTHQUAKE DAMAGE ASSESSMENT

**DATE: 06.03.20**

**PROJECT:** Weber County Library System
Main Library Branch
2464 Jefferson Avenue, Ogden, Utah

**TO:** Weber County Library
2039 West 4000 South
Roy, Utah 84067

**ATTN:** Lynnda Wangsgard

**FROM:** Jay Lems

**RE:** Earthquake Damage Observation for the Main Library

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Cecilia Uriburu, AIA representative of Prescott Muir Architects (PMA) visited the Main Library, located at 2464 Jefferson Avenue, Ogden, Utah on May 1st at 11:00 AM along with the Structural Engineer from ARW Engineers, McKay Parrish, the Insurance Adjuster, Alma Broadbent, and representatives from Weber County Library, Kevin Wilson and Robert Armstrong.
An evaluation letter from the Structural Engineer with their findings is attached to this report. PMA focused their visual observations on the overall state of the building conditions including elements of the building such as walls, ceilings, floor and slab condition and other building assemblies visible during the visit. Observations did not entail removal of building systems or finish materials.

**Evaluation Process:**
The evaluation process was based on our experience and knowledge of building construction and based on our experience of similar building assessments. We performed a walk around the exterior of the building on all sides, visually looking for signs of movement, or surface cracking. We also assessed the interior of the building by checking every room in the building. The Weber County Library facilities managers made all rooms available with good illumination for us to perform our evaluation. We looked for signs of shifting of ceiling panels, wall cracks, floor cracks, and any other signs of unusual movement of the finish systems. No remediation measures are identified as part of this report.

**Evaluation Results:**
Below is a summary of our findings followed with images and a plan for identification of main damage locations.

**The Exterior of the facility:**

Image 1. At all 4 sides of the building facades, the Plaster soffit exhibits several hairline cracks. This soffit overhangs the public walkways.

Image 2. On level 2, at several locations along the exterior walls, the exterior brick masonry exhibits cracks along the mortar joints on several areas. This is visible though the glass on the exterior face of the building but also as the brick masonry returns into the building. We photographed many of these instances, but there may be areas out of view that need to be accessed with a lift for better visibility. These cracks could carry moisture from the outside of the building into the wall assembly if left un-addressed.

Image 3. The North end of the building on level 2 exhibits several items that experienced recent movement: Plaster soffit cracks, separation of the ceiling from the wall and cracked masonry joints. We photographed these items, but did not access above the ceilings space.

**Building Interior:**

Walls:

Image 4. At the Activity Rooms on the lower level of the Library, cracking was observed at the corner of door frames on the gypsum board surface and cabinets were pulled away from the walls.

Image 5. On the lower level of the library at the mechanical room, fire riser room, electrical rooms and storage rooms where the building structure is exposed, hairline cracks on the concrete walls were observed.

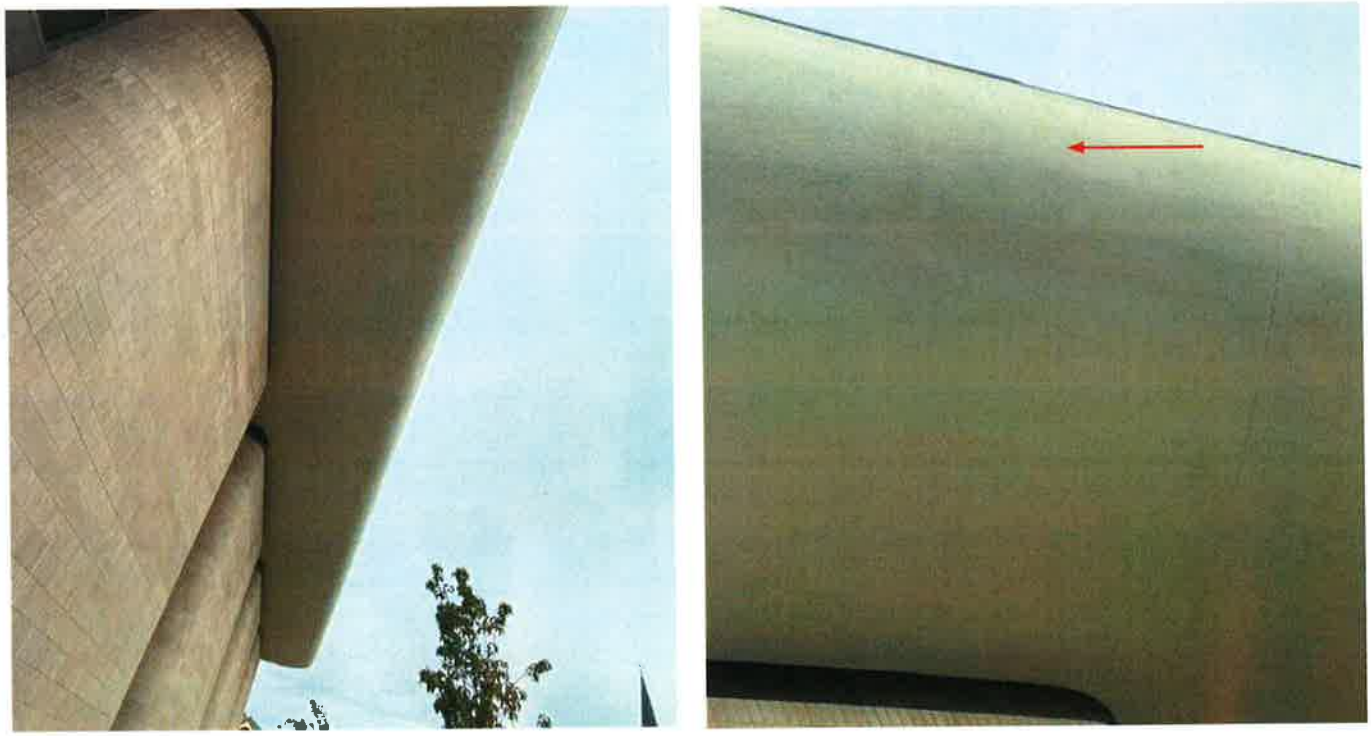
Image 6. At several locations within the building cracking of gypsum board surface was observed at wall corners or wall/ceiling intersections.

Ceilings:

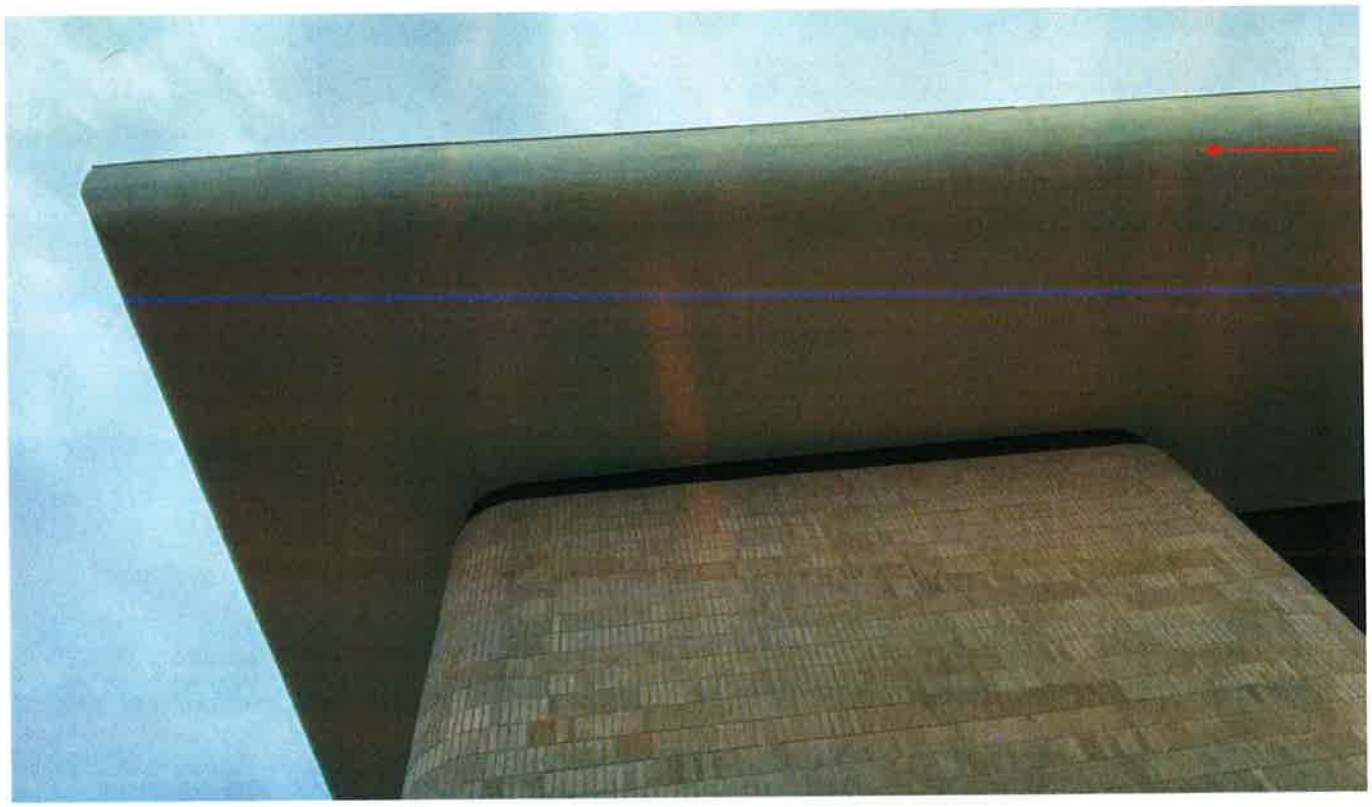
Image 7. On the level 2 stack areas and level 1 stack areas, the perforated decorative ceiling exhibits cracks at wall perimeters, speaker locations, and at re-entrant corners.

**Conclusions**

The building appears to have experienced movement of surfaces along the exterior brick masonry walls and plaster soffit. Although in general the damage to surfaces observed does not pose a risk to life safety, if the damage inside of the facility is left un-addressed, it could affect the overall quality and longevity of the facility. The cracks on the exterior walls and soffit should be addressed to prevent further damage and deterioration caused by moisture infiltration and the freeze-thaw cycle process typical to Utah's climate.



#1. Plaster Soffit hairline cracks



#1. Plaster Soffit hairline cracks

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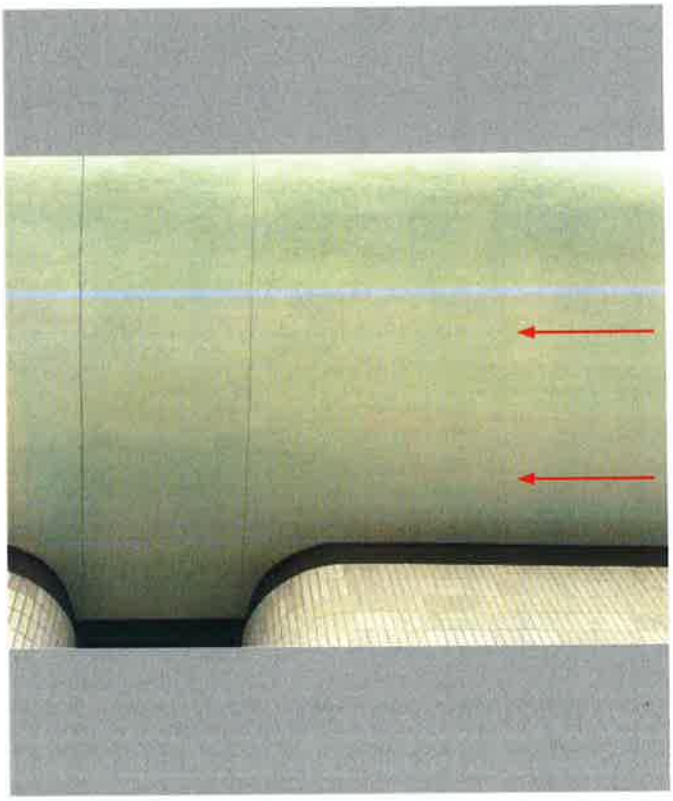

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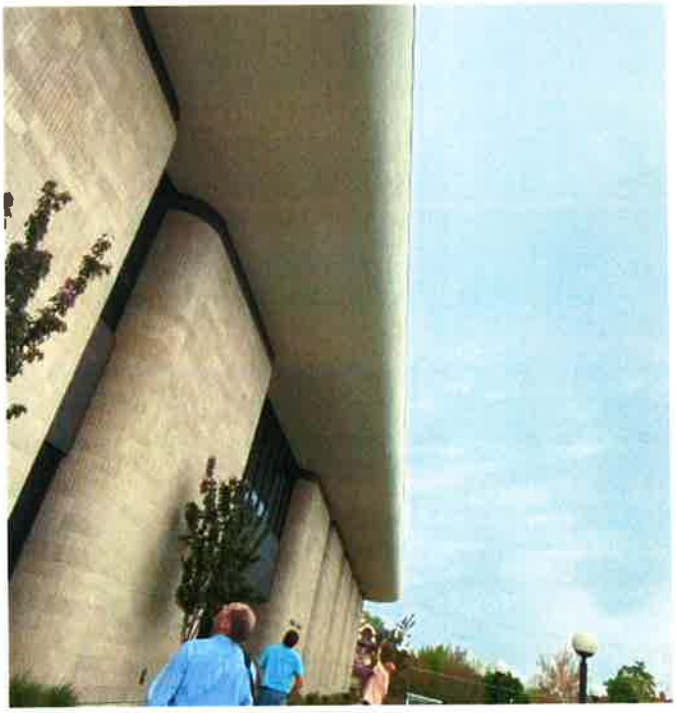
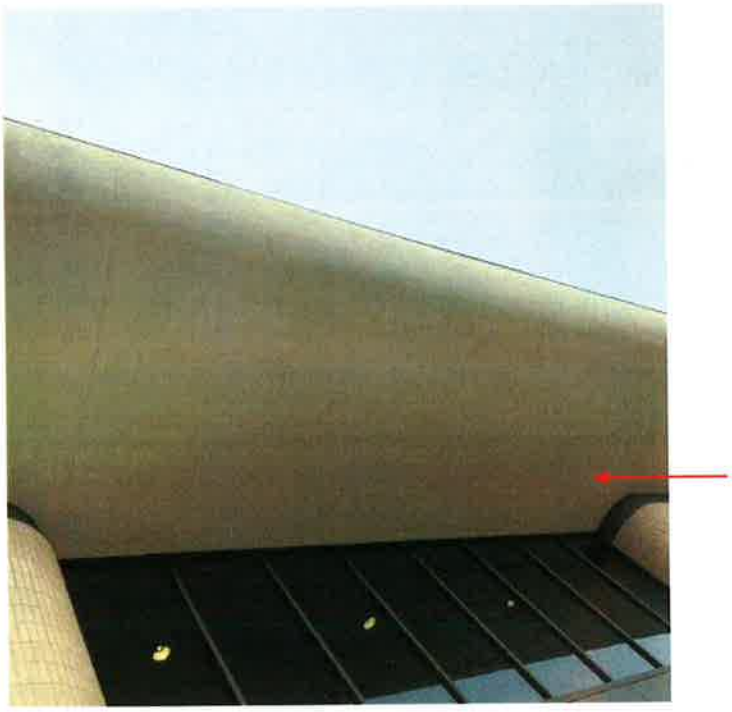
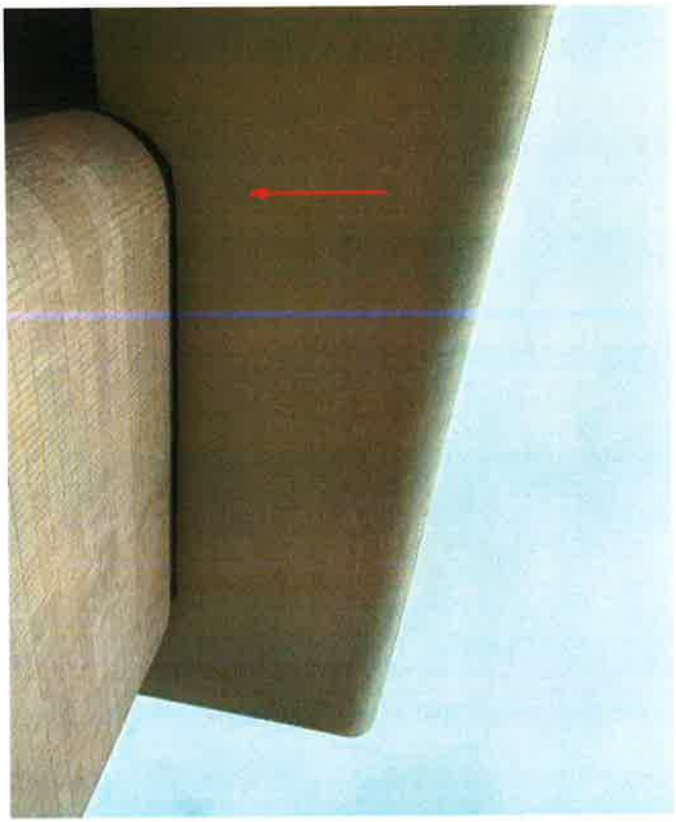
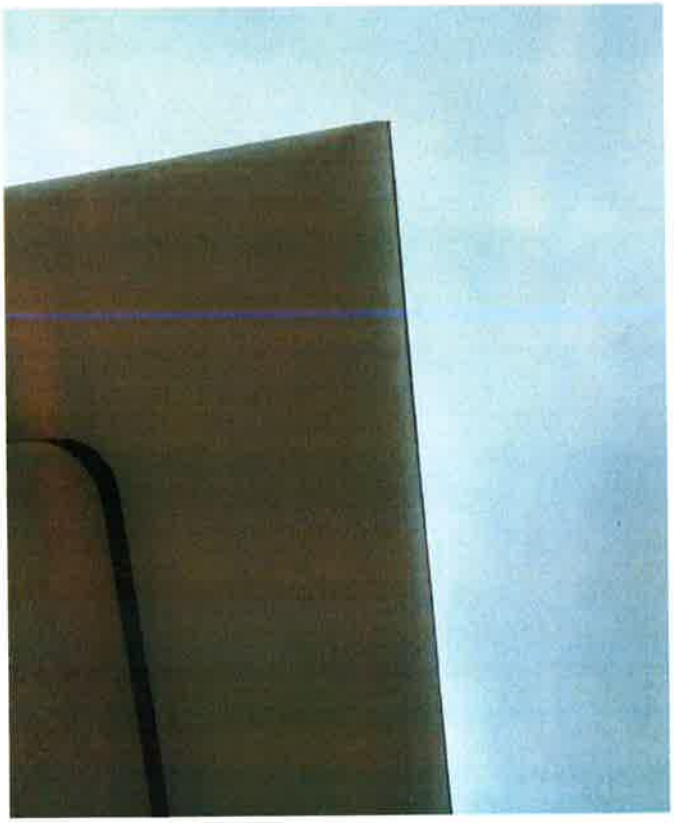




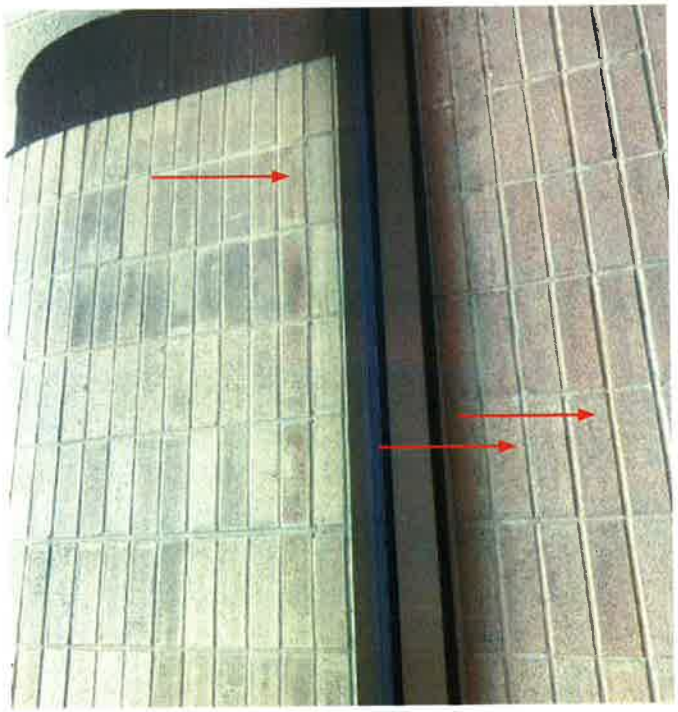
#1. Plaster Soffit hairline cracks



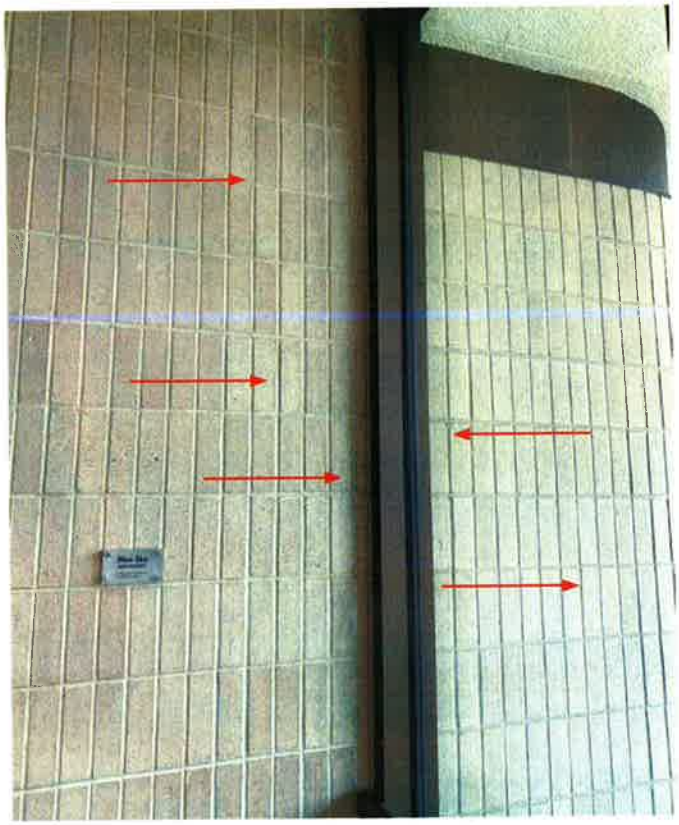


#1. Plaster Soffit hairline cracks

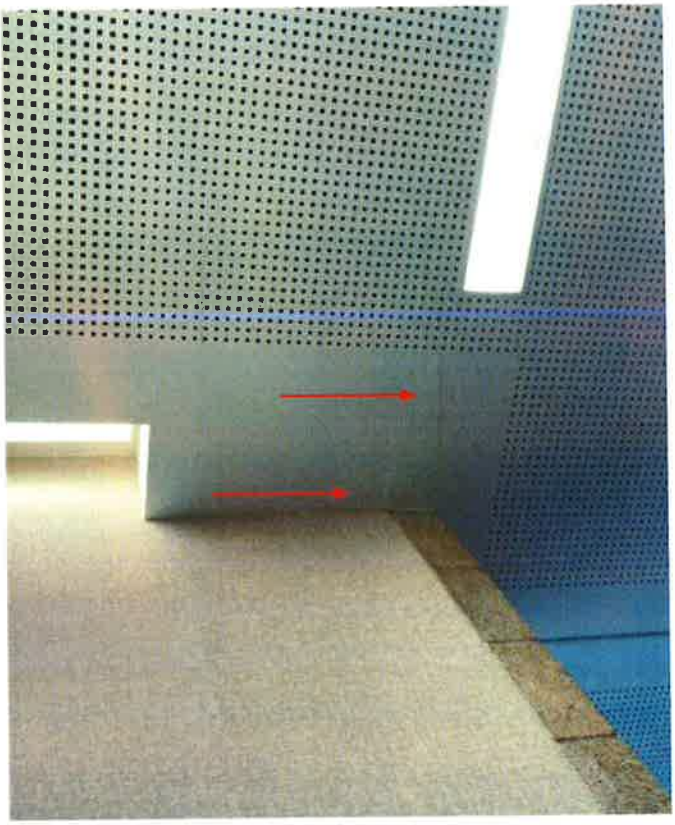
#2. Brick masonry joint cracking



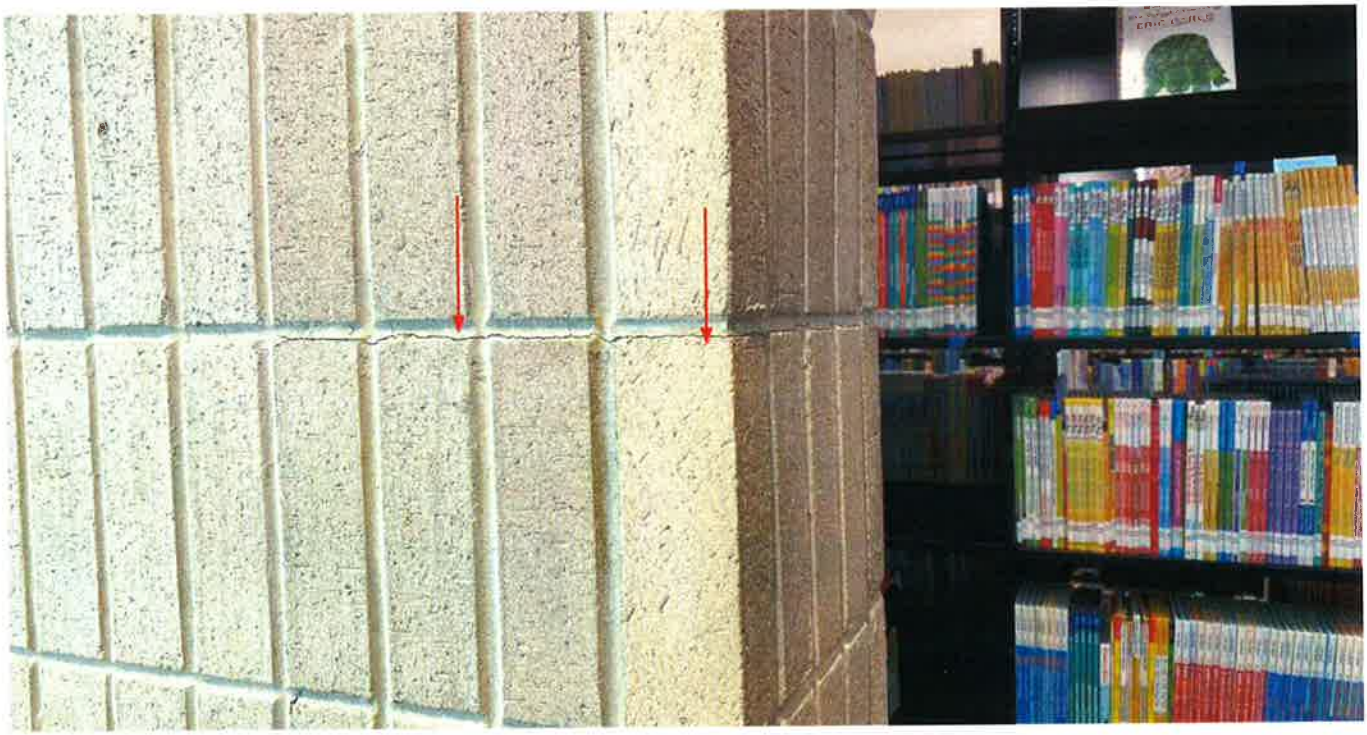
#2. Brick masonry joint cracking on level 2.



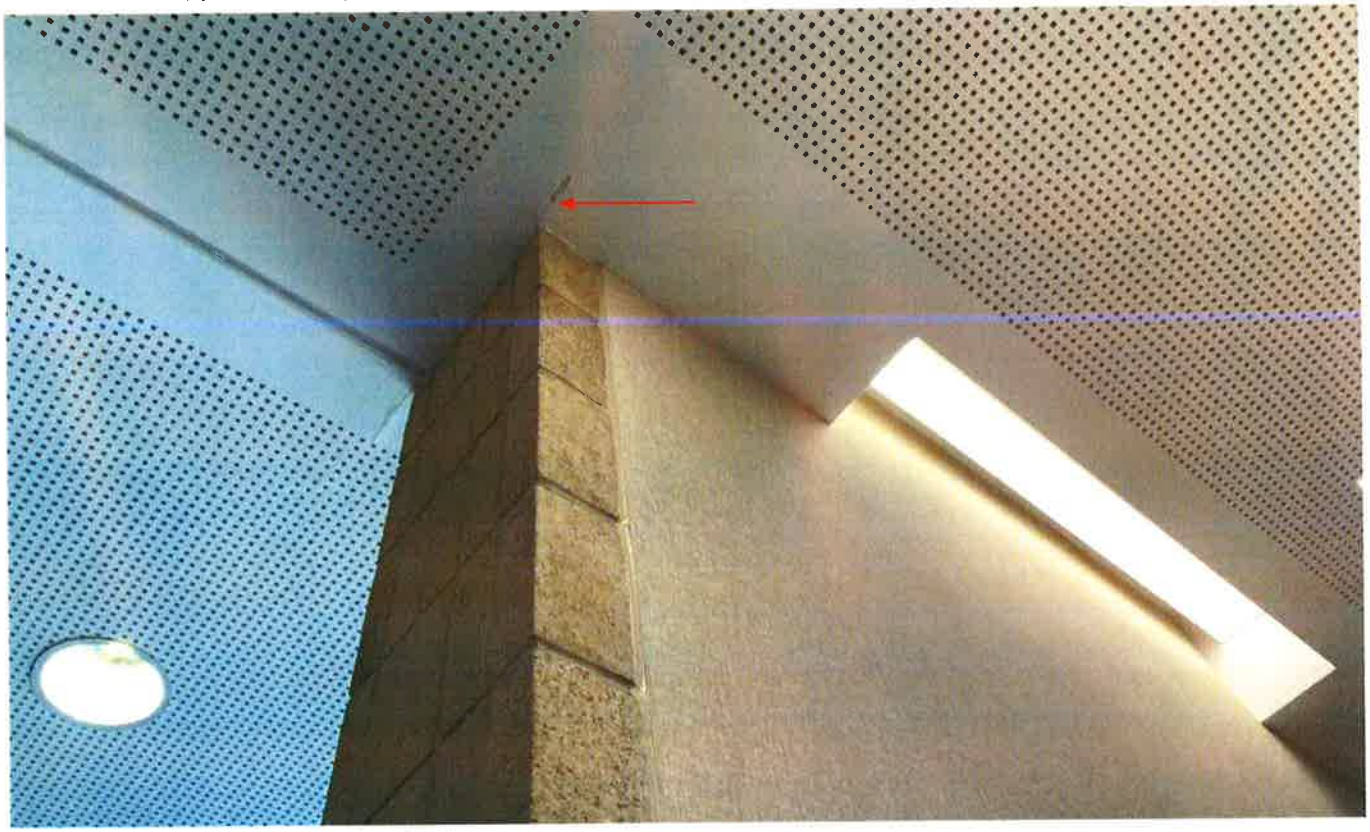
#2. Brick masonry joint cracking on level 2



#3. Ceiling separation from wall



#3. Brick masonry joint cracking at North end of building, level 2.



#3. Ceiling separation from wall on level 2.

#2. Brick masonry joint cracking on level 2

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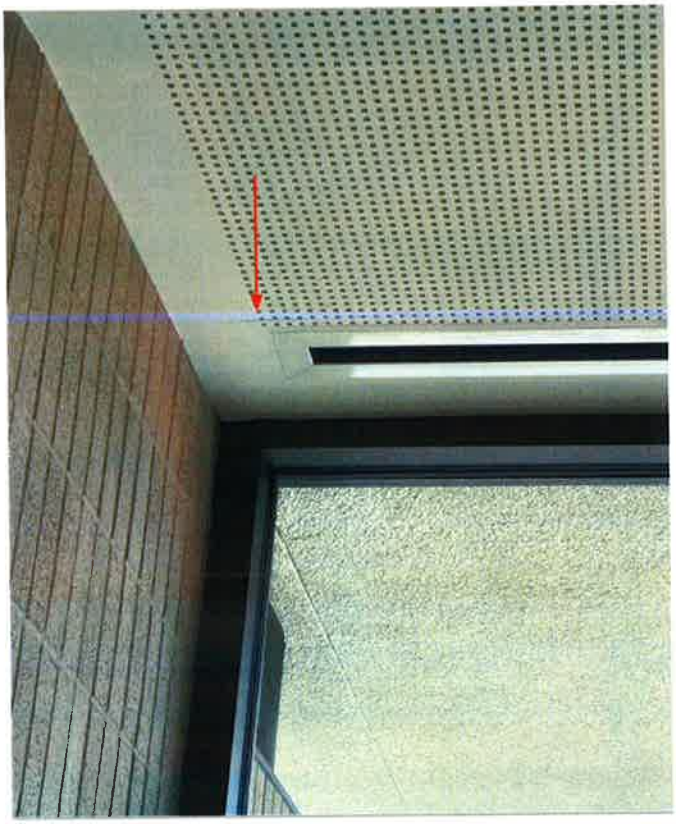
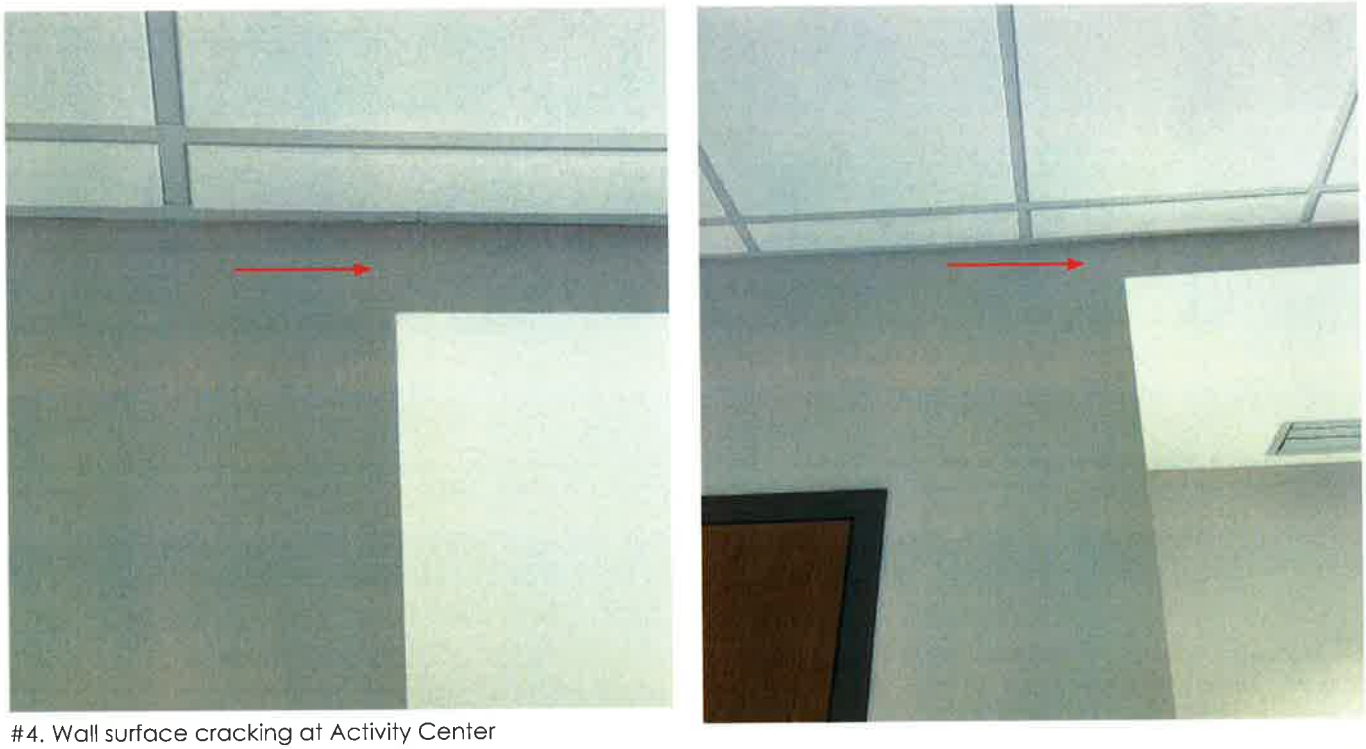
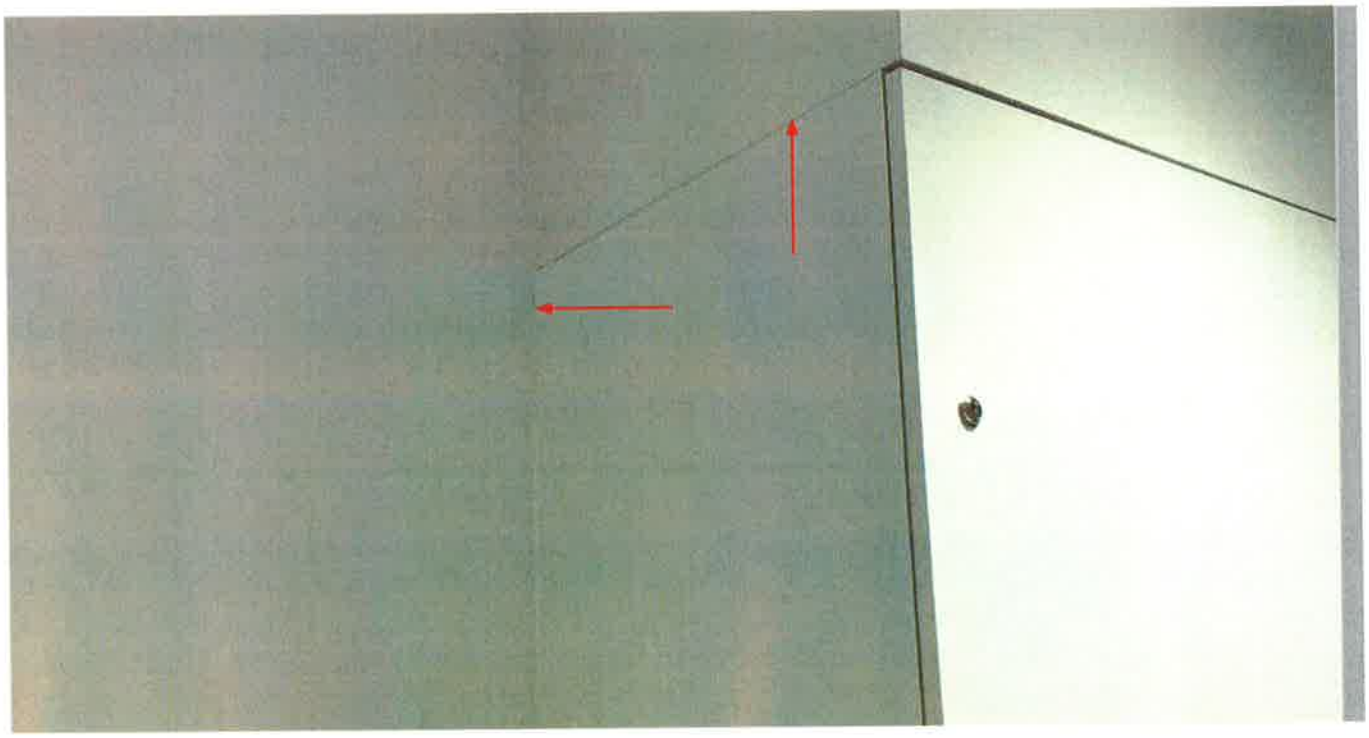


#7. Ceiling separation from wall on level 2.

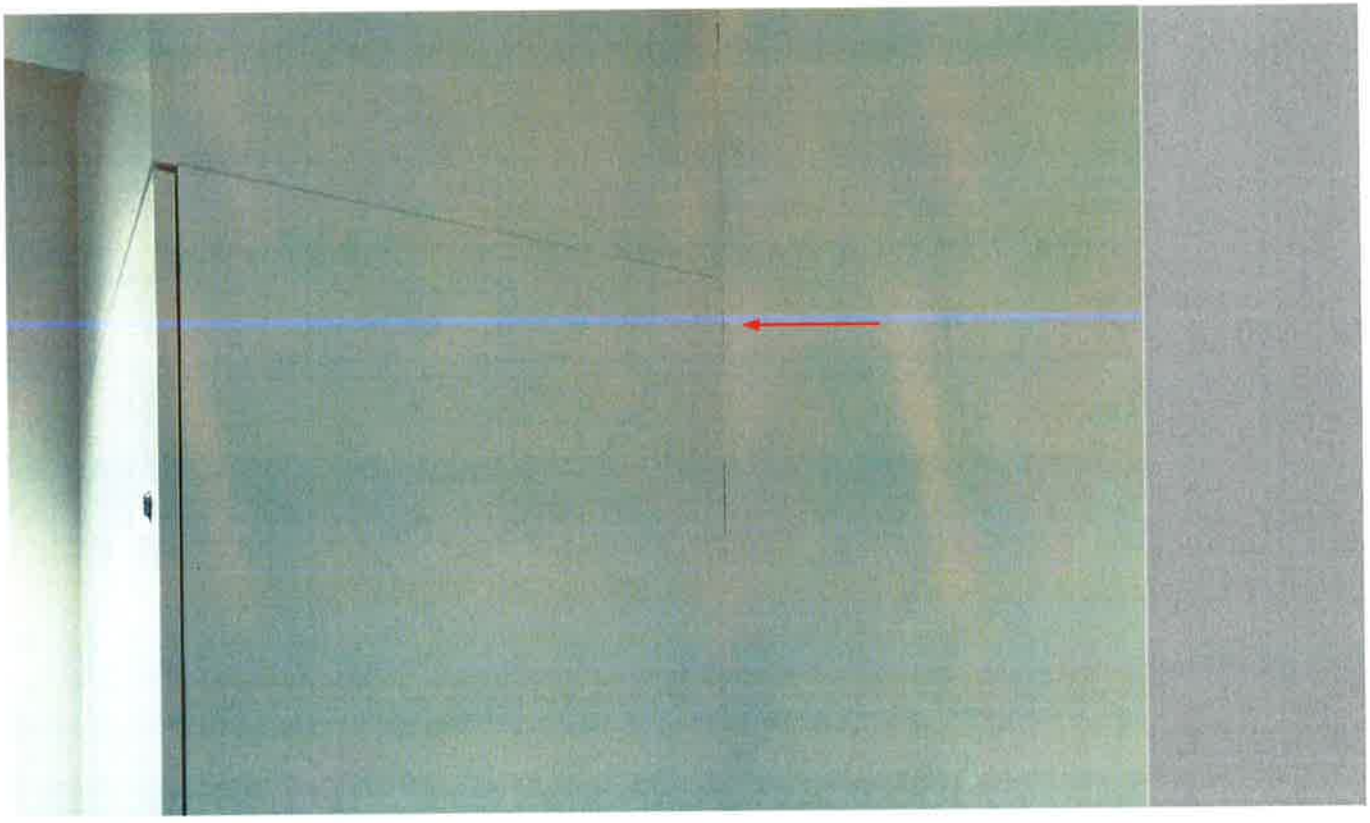


#4. Wall surface cracking at Activity Center

Concrete walls hairline cracking at Activity Center Storage rooms

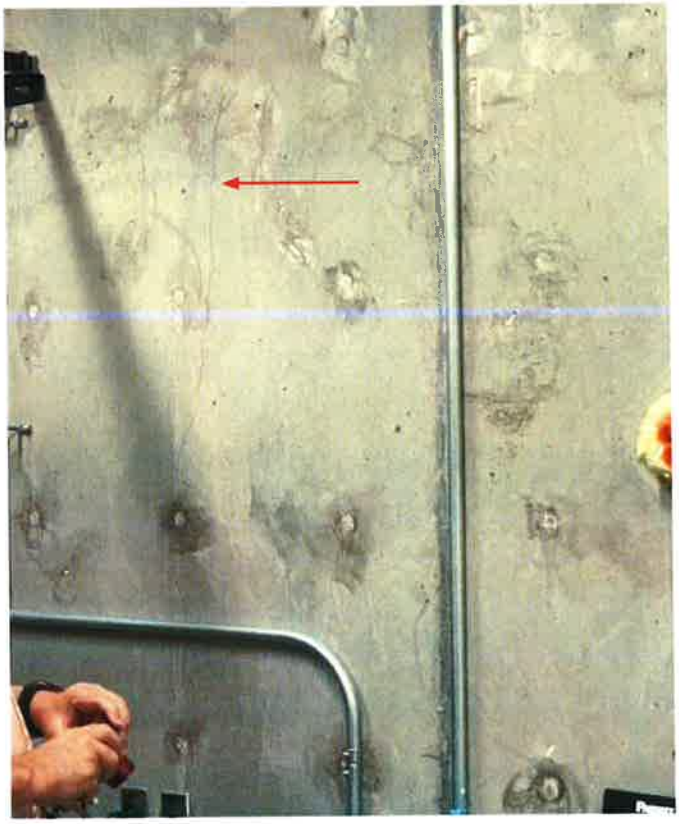


#4. Wall mounted cabinet pulled away from wall

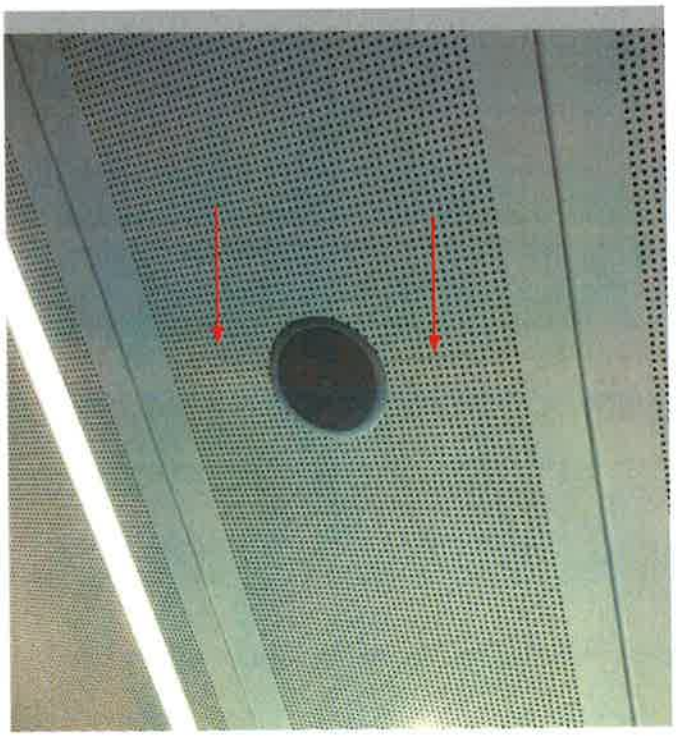


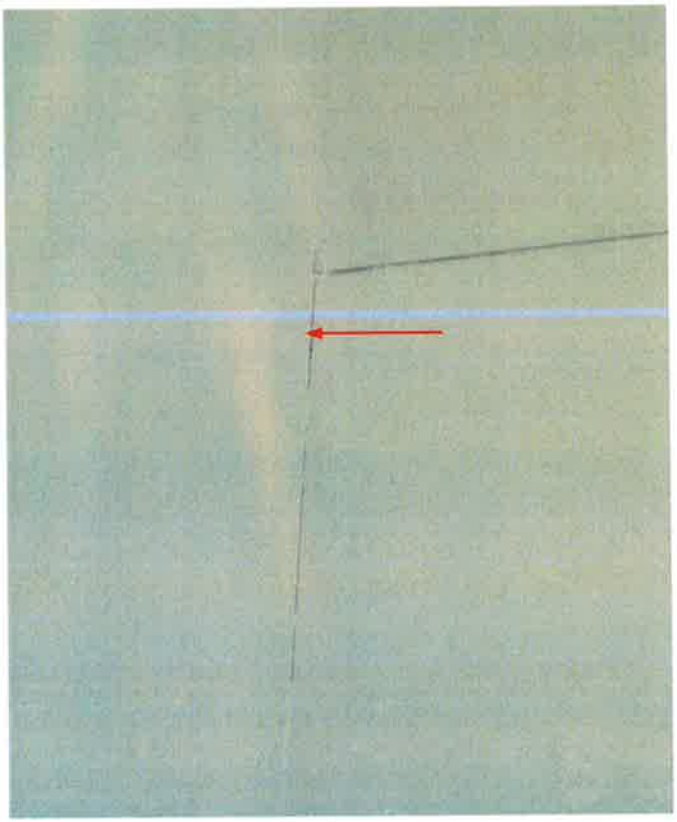
#4. Wall mounted cabinet pulled away from wall

#5. Concrete wall hairline cracks



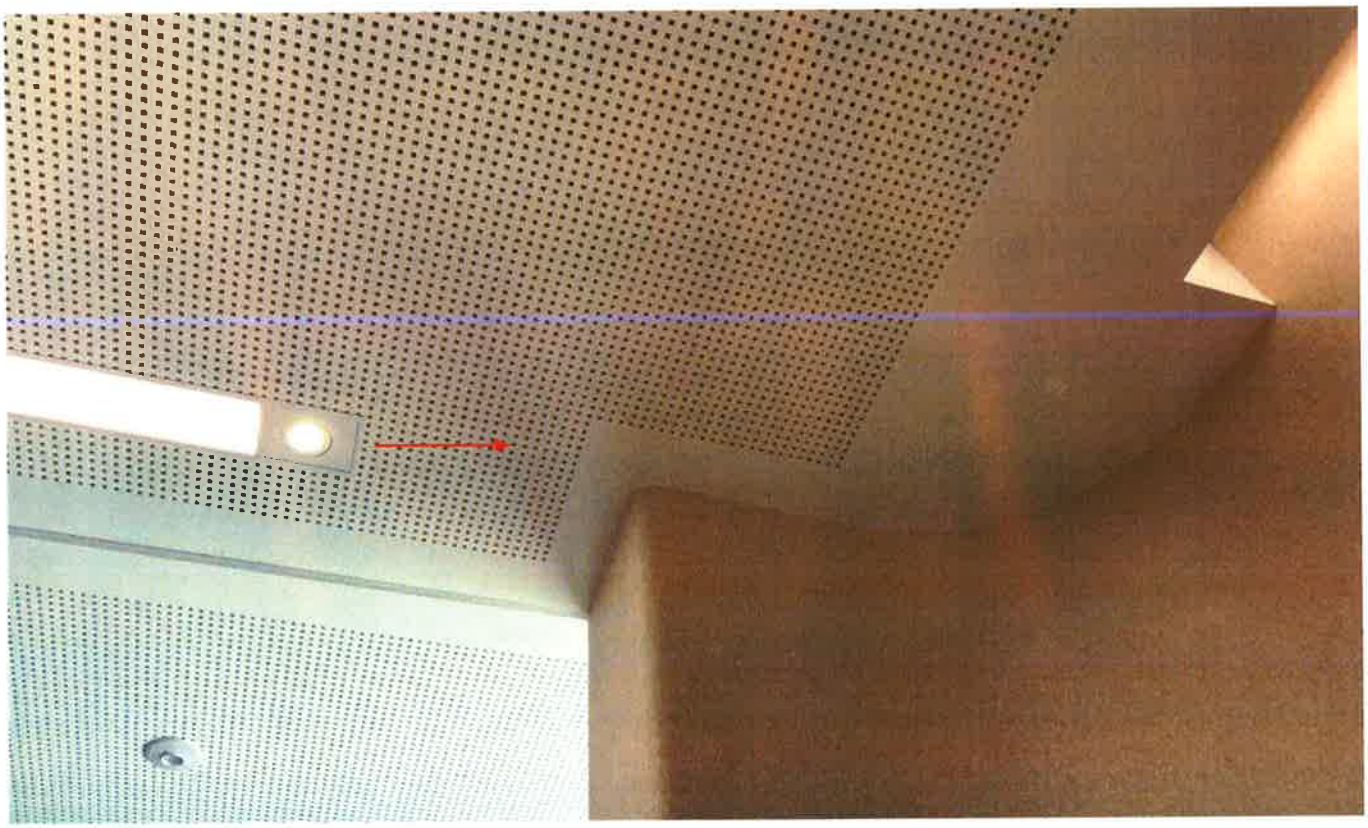
#5. Concrete wall hairline cracks



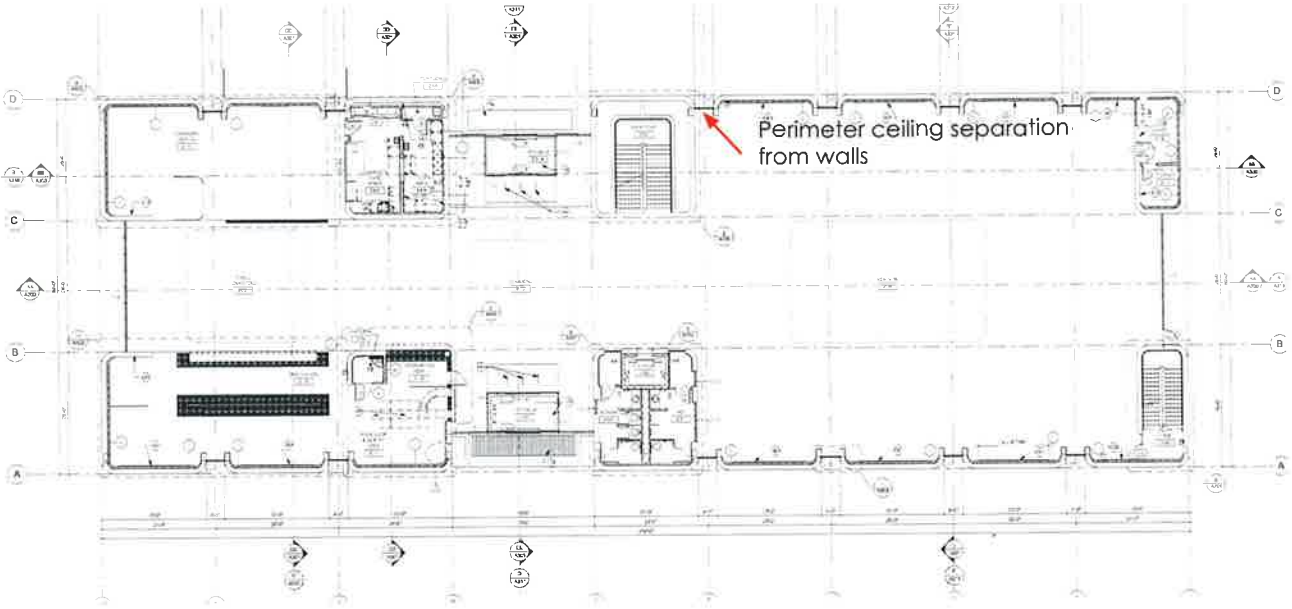


#6. Gypsum wall board cracks

#7. Ceiling separation from wall

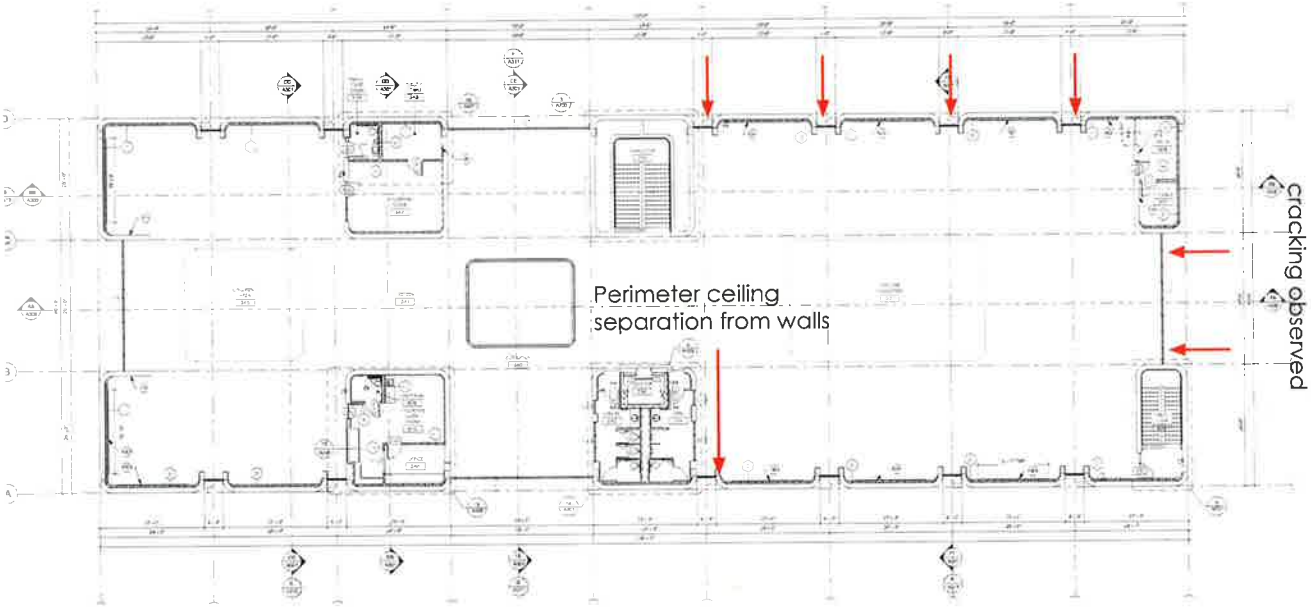


#7. Ceiling separation from wall




MAIN LEVEL FLOOR PLAN N >

Brick Masonry joints cracks most noticeable in these areas




LEVEL 2 FLOOR PLAN N >

ARW ENGINEERS

May 18, 2020

Cecilia Uriburu
Prescott Muir Architects
171 West Pierpont Ave.
Salt Lake City, Utah, 84101
Re: Main Library Earthquake Structural Evaluation
ARW Project: 20157.e

Dear Cecilia:

At your request we have completed a limited structural evaluation and observation of the Main Library located at 2464 Jefferson Ave, Ogden, Utah. The purpose of the evaluation was to determine in a very cursory way the structural condition of the existing building following the seismic event that occurred in Salt Lake County on March 18, 2020. Since that initial 5.7 magnitude earthquake there have been several significant aftershocks. Neither advanced analysis techniques nor observation of existing structural elements by removing finished materials were performed as part of this limited visual evaluation. This evaluation only refers to structural elements, conditions and concerns. Architectural, Mechanical, Electrical or other important building factors are beyond the scope of this evaluation and report. The observation visit to the existing building was completed on May 1st, 2020. Present during the visit were McKay Parrish and from ARW Engineers, Cecilia Uriburu from PMA, Alma Broadbent with the insurance company, and Robert and Kevin as owner representatives.

## Evaluation Process

The limited structural evaluation was accomplished by the following: 1) A site observation of the existing conditions visually reviewing any visible structural conditions such as materials, structural element types, general sizes and limited observation of framing connections. The site observation did not include the removal of any finished material or surfaces to view obscured structural elements. 2) Using engineering experience from multiple previous building evaluations, reasoned assumptions regarding the existing building structural condition were made in order to provide "next step" recommendations to the owner. As noted above, the evaluation process was intended to be cursory and preliminary. Detailed investigations, modeling and analysis were not completed after the seismic event. Additional in-depth evaluation alternatives are available if deemed necessary by the building's owners.

## Building Description

The building was built in 1968 and renovated in 2018. It is a two-story structure with a full basement. The building is constructed from precast double tee floor and roof beams with concrete topping slabs. The walls are constructed from concrete and masonry with brick veneer on exterior walls.

## Evaluation Results

During the evaluation the following items were noted:

- There are several cracks in the sheetrock ceilings. It is possible that some of these cracks may have propagated during the seismic event.
- There are several cracks in the exterior soffits. It is possible that some of these cracks may have propagated during the seismic event.
- There are several cracks in the interior and exterior brick veneer that may have been cause by the seismic event.

- There are several cracks in concrete foundation walls. It is possible that some of these cracks may have propagated during the seismic event.

**Conclusions**

Based on the limited evaluation and observation completed for the building, it is our opinion that the status of the structure relative to Life Safety has not changed as a result of the seismic event. We recommend that the cracks in foundation walls, exterior soffits, and exterior brick veneer be sealed so that water does not penetrate the cracks and cause additional long-term deterioration. Cracks in sheetrock ceilings can be repaired and painted as required.

It is our opinion that based on the limited observation that the Main Library can continue to be occupied. It is important that any changes in existing conditions be noted that may require additional detailed evaluation.

ARW Engineers would be happy to provide any additional assistance desired.

Sincerely,

McKay M. Parrish, SE

20157.e_evalrpt_20200518

Photo1 – Example of cracks in foundation walls

Photo 2 – Example of cracks in brick veneer

Photo #3 – Example of cracks brick veneer

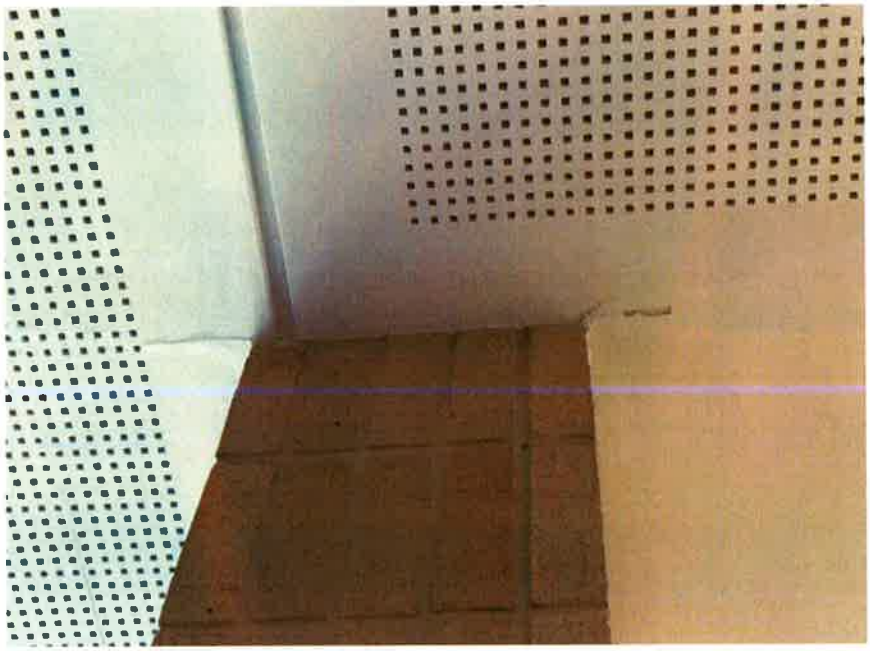


Photo #4 – Example of damage to sheetrock ceiling

Photo #5 – Example of cracks in exterior soffit

**PRESCOTT MUIR ARCHITECTS**
**171 West Pierpont Avenue**
**Salt Lake City, Utah 84101**
**801-521-9111 • 801-521-9158 fax**

# EARTHQUAKE DAMAGE ASSESSMENT

**DATE: 06.03.20**

**PROJECT:** Weber County Library System
Earthquake Damage Observation
North Branch
475 East 2600 North, Ogden, Utah

**TO:** Weber County Library
2039 West 4000 South
Roy, Utah 84067

**ATTN:** Lynnda Wangsgard

**FROM:** Jay Lems

**RE:** Earthquake Damage Observation for the North Branch

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Cecilia Uriburu, AIA representative of Prescott Muir Architects (PMA) visited the North Branch located at 475 East 2600 North, Ogden, Utah on May 1st at 8:00 AM along with the Structural Engineer from ARW Engineers, McKay Parrish, the Insurance Adjuster, Alma Broadbent, and representatives from Weber County Library, Kevin Wilson and Robert Armstrong.
An evaluation letter from the Structural Engineer with their findings is attached to this report. PMA focused their visual observations on elements of the building such as walls, ceilings, floors, and overall state of the building conditions. PMA focused their visual observations on the overall state of the building conditions including elements of the building such as walls, ceilings, floor and slab condition and other building assemblies visible during the visit. Observations did not entail removal of building systems or finish materials.

**Evaluation Process:**
The visual evaluation process was based on our experience and knowledge of building construction and based on our experience of similar building assessments. We performed a walk around the exterior of the building on all sides, visually looking for signs of movement, or surface cracking. We also assessed the interior of the building by checking every room in the building. The Weber County Library facilities managers made all rooms available with good illumination for us to perform our evaluation. We looked for signs of shifting of ceiling panels, wall cracks, floor cracks, and any other signs of unusual movement of the finish systems.
No remediation measures are identified as part of this report.

**Evaluation Results:**
Below is a summary of our findings followed with images and a key plan for identification of damage locations.

**The Exterior of the facility:**

Image 1. The North Entrance appears in good condition and not damage was observed.
Image 2. The south lower level entrance and patio exhibits fresh hairline cracks to the concrete slab on grade and apparent movement near the glazing.
Image 3. The North parking lot, West concrete retaining wall exhibits several cracks along the face of the wall and a large break at the top of the wall, at the connection of one of the railing posts.

**Building Interior:**
Walls:
Image 4. At the Teen's Reading area, cracking was observed at the gypsum board wall surface.
Image 5. The mechanical room, located on the lower level where the building concrete structure is exposed, cracks and signs of movement were observed.

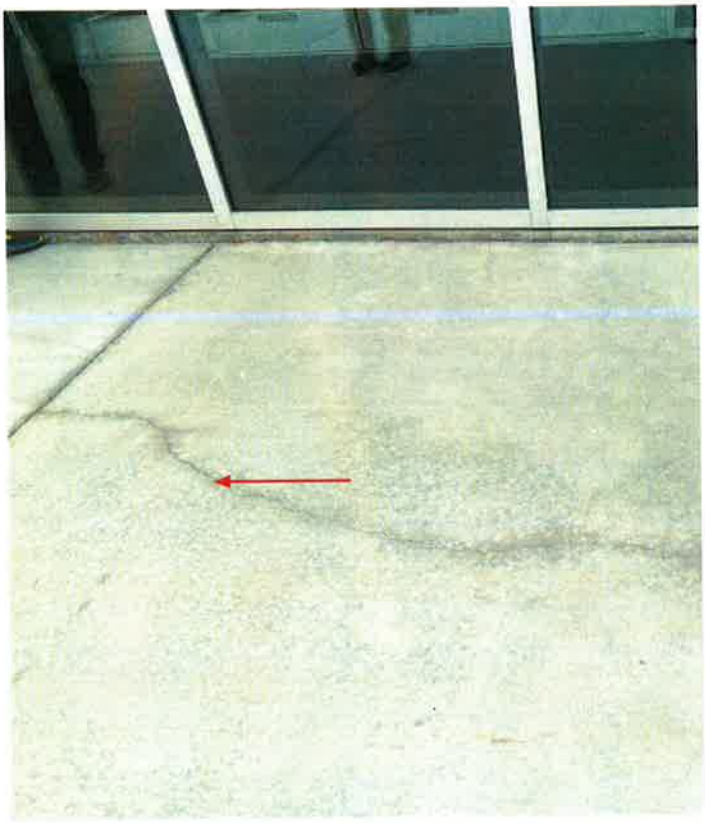
Ceilings:
Image 6. Minor movement of ceiling tiles was observed on the stack's area. Some light fixtures lenses need to be re-seated.

**Conclusions**

The building appears to have experienced movement visible in the lower level structure and entrance. The life safety systems of the building do not appear to be compromised. All exterior damage such as the paving cracks in the parking lot and cracks on the exterior walls should be addressed to prevent further damage and deterioration caused by moisture infiltration and the freeze-thaw cycle process typical to Utah's climate.

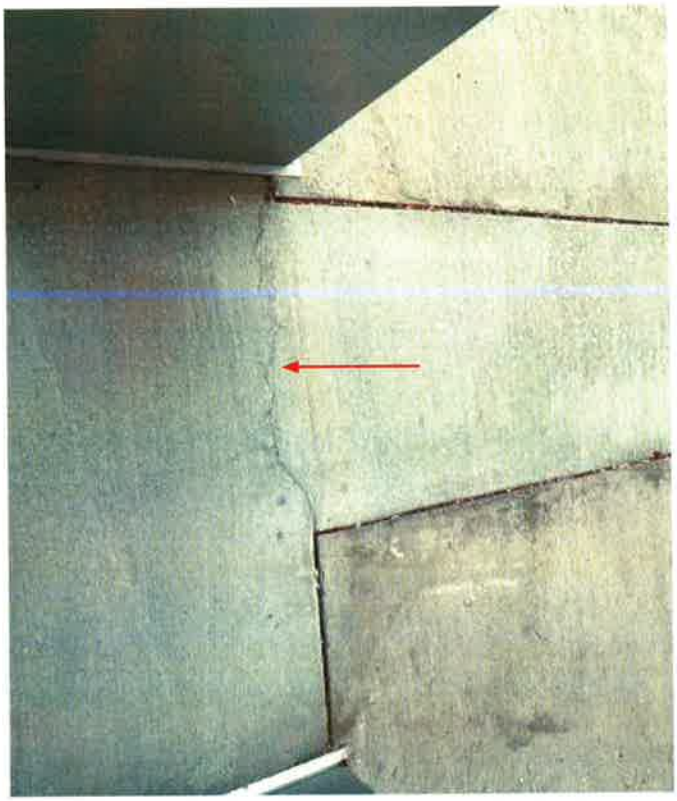

#1. North Entrance

#2. Lower level South entrance glazing

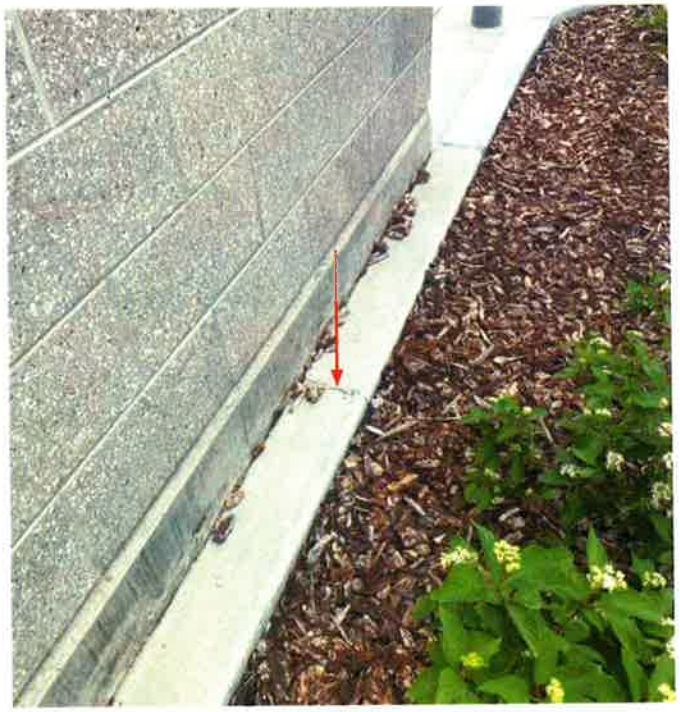


#2. Lower level South entrance concrete slab cracks

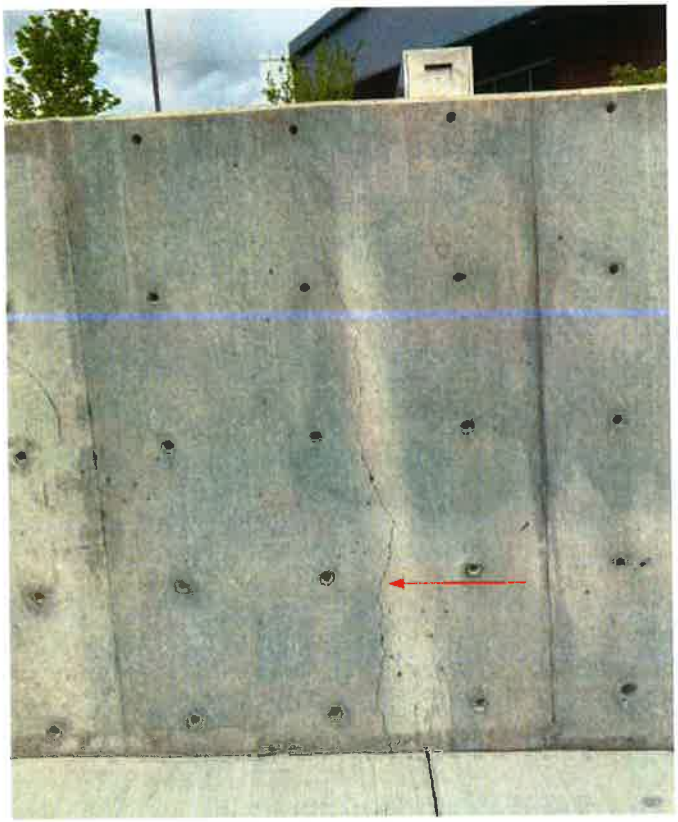
#2. Lower level South entrance foundation wall cracks



#2. Lower level South entrance concrete slab cracks



#3 Retaining concrete wall cracks



#3 Retaining concrete wall cracks

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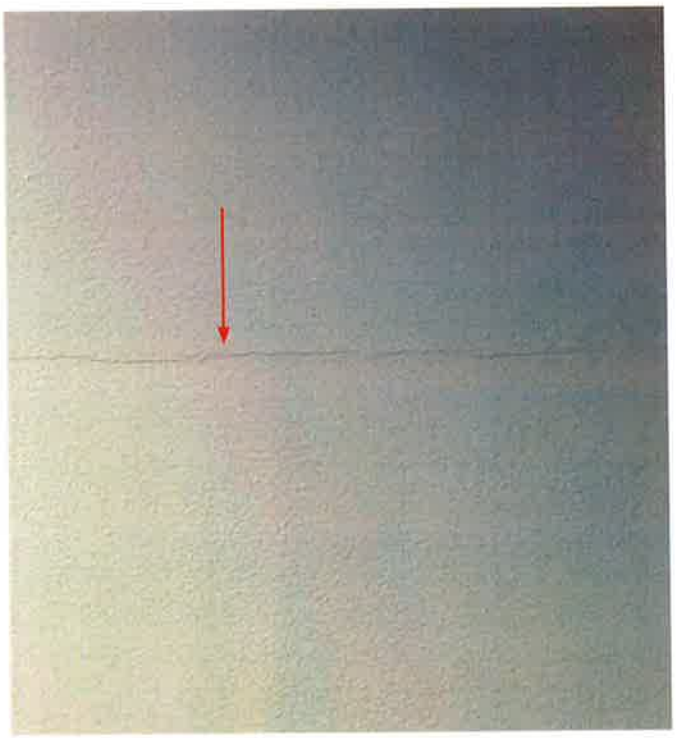
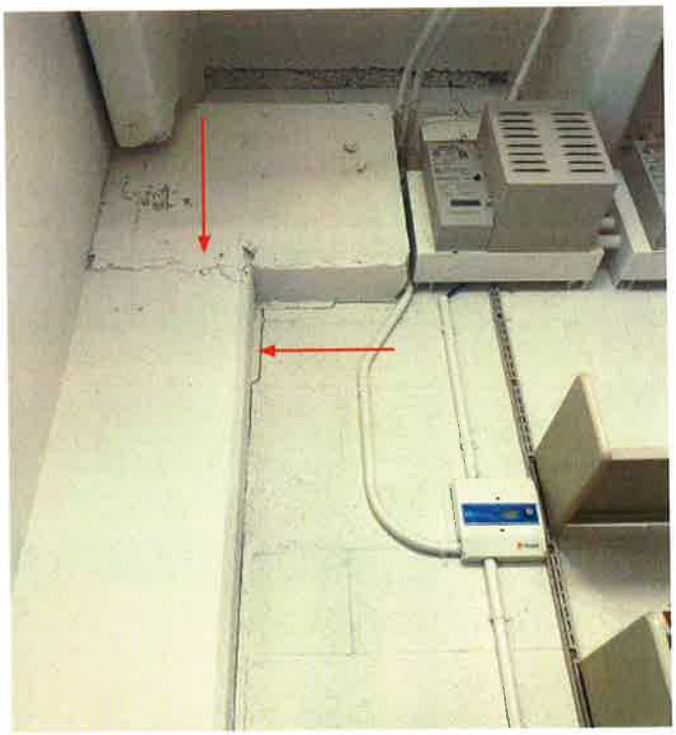
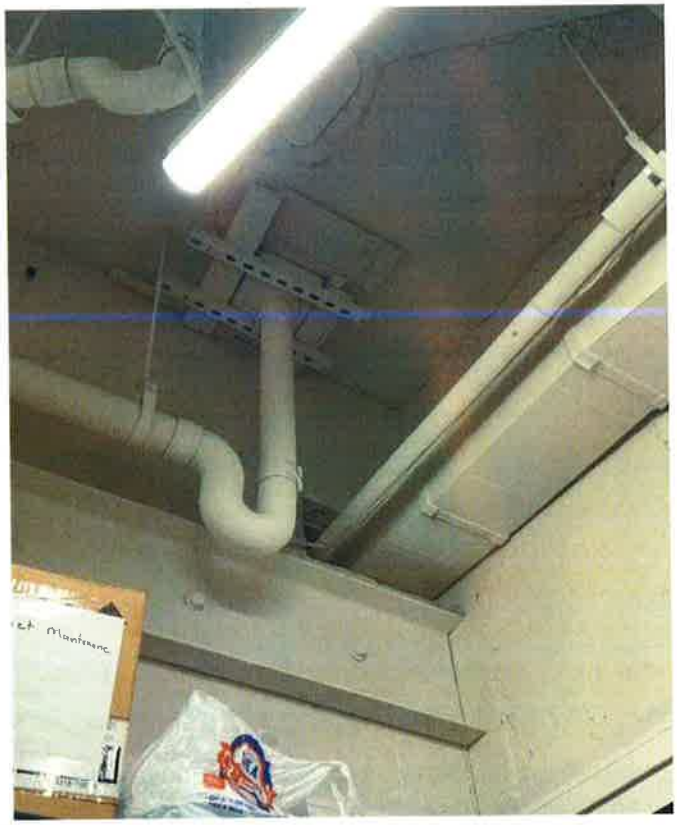


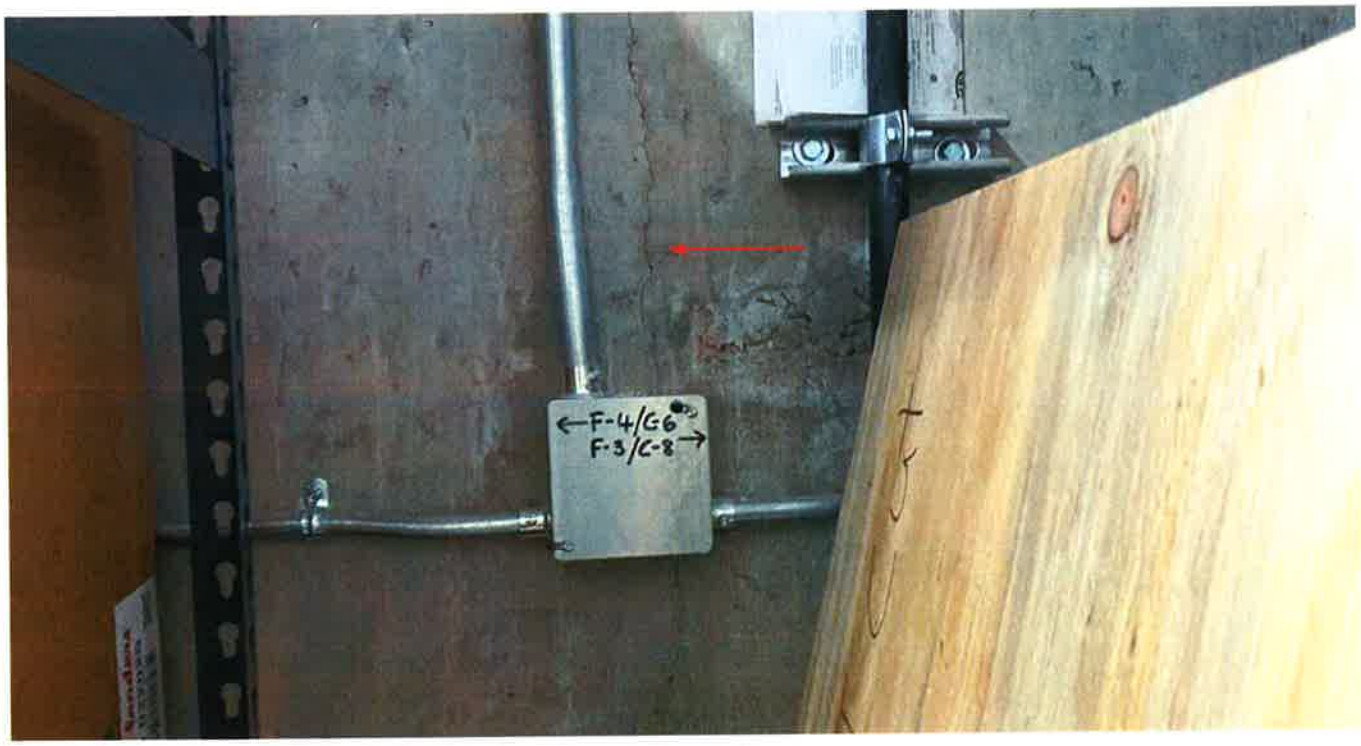
#4. Gypsum Board Wall crack



#5. Lower level storage room exhibits cracks at concrete structure

#5. Lower level storage room exhibits cracks at concrete structure






#5. Lower level storage room exhibits cracks at concrete structure

#6. Ceiling tile displacement

A R W ENGINEERS

May 18, 2020

Cecilia Uriburu
Prescott Muir Architects
171 West Pierpont Ave.
Salt Lake City, Utah, 84101
Re: North Branch Earthquake Structural Evaluation
ARW Project: 20157.c

Dear Cecilia:

At your request we have completed a limited structural evaluation and observation of the North Branch located at 475 E 2600 N, Ogden, Utah. The purpose of the evaluation was to determine in a very cursory way the structural condition of the existing building following the seismic event that occurred in Salt Lake County on March 18, 2020. Since that initial 5.7 magnitude earthquake there have been several significant aftershocks. Neither advanced analysis techniques nor observation of existing structural elements by removing finished materials were performed as part of this limited visual evaluation. This evaluation only refers to structural elements, conditions and concerns. Architectural, Mechanical, Electrical or other important building factors are beyond the scope of this evaluation and report. The observation visit to the existing building was completed on May 1st, 2020. Present during the visit were McKay Parrish and from ARW Engineers, Cecilia Uriburu from PMA, Alma Broadbent with the insurance company, and Robert and Kevin as owner representatives.

## Evaluation Process

The limited structural evaluation was accomplished by the following: 1) A site observation of the existing conditions visually reviewing any visible structural conditions such as materials, structural element types, general sizes and limited observation of framing connections. The site observation did not include the removal of any finished material or surfaces to view obscured structural elements. 2) Using engineering experience from multiple previous building evaluations, reasoned assumptions regarding the existing building structural condition were made in order to provide "next step" recommendations to the owner. As noted above, the evaluation process was intended to be cursory and preliminary. Detailed investigations, modeling and analysis were not completed after the seismic event. Additional in-depth evaluation alternatives are available if deemed necessary by the building's owners.

## Building Description

The building was built in 1983 and renovated in 1998 and 2018. The building is a 23,500 square foot structure. The gravity system consists of wood framing and plywood sheathing with brick veneer cladding. The roof system is wood truss system with a wood diaphragm. The first-floor suspended slab is a cast-in place concrete slab. The exterior foundation walls are constructed using concrete with interior masonry bearing walls.

## Evaluation Results

During the evaluation the following items were noted:

- There are several cracks in the sheetrock walls. It is possible that some of these cracks may have propagated during the seismic event.
- There are several cracks in the slab on grade that may have propagated.

- There are several cracks in the basement walls (concrete and masonry) that may have propagated.
- There are several cracks in the concrete retaining walls that may have propagated.
- There is an exterior soffit panel on the south side of the building that appears to have separated or come loose.
- Some lay-in ceiling tiles appear to have moved out of place during the seismic event.

**Conclusions**

Based on the limited evaluation and observation completed for the building, it is our opinion that the status of the structure relative to Life Safety has not changed as a result of the seismic event. We recommend that the cracks in non-structural concrete slabs on grade be sawcut and removed (or repaired in place) as necessary. Cracks in concrete site walls and/or masonry basement walls should be sealed so that water does not penetrate the cracks and cause additional long-term deterioration. Wall soffits and lay-in ceiling tile can be re-attached as required and cracks in sheetrock walls can be repaired and painted as required.

It is our opinion that based on the limited observation that the North Branch can continue to be occupied. It is important that any changes in existing conditions be noted that may require additional detailed evaluation.

ARW Engineers would be happy to provide any additional assistance desired.

Sincerely,

McKay M. Parrish, SE

20157.c_evalrpt_20200518

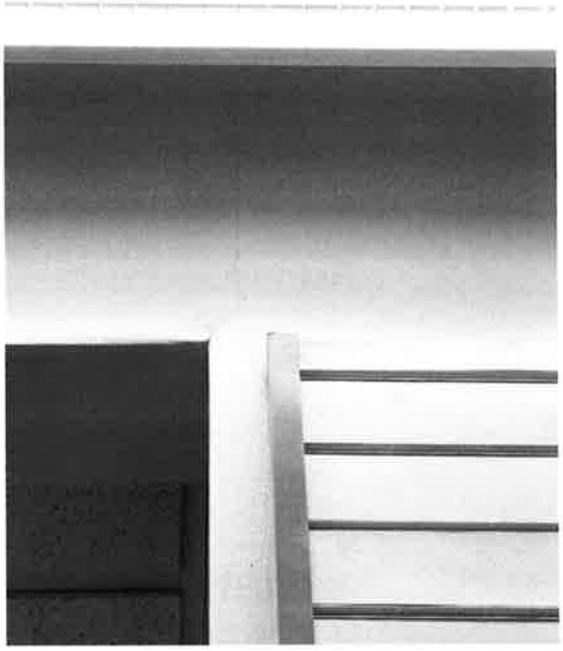


Photo1 – Example of cracks propagating sheetrock walls

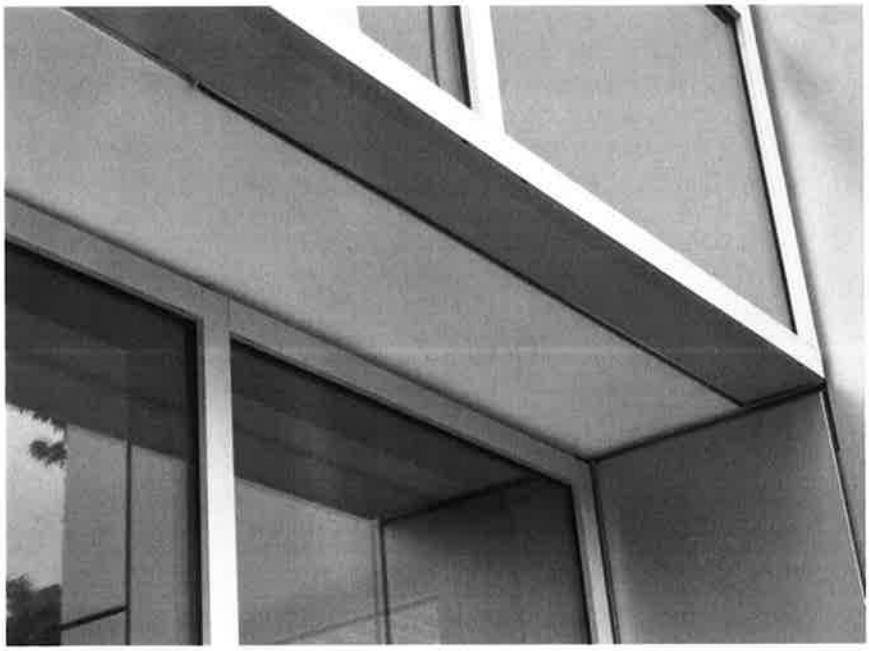


Photo 2 – Example of exterior soffit panel out of place

Photo #3 – Example of cracks in slab on grade

Photo #4 – Example of cracks in retaining wall

Photo #5 – Example of cracks in masonry and concrete walls

Photo #6 – Example of displaced ceiling tile

**PRESCOTT MUIR ARCHITECTS**
**171 West Pierpont Avenue**
**Salt Lake City, Utah 84101**
**801-521-9111 • 801-521-9158 fax**

# EARTHQUAKE DAMAGE ASSESSMENT

**DATE: 06.03.20**

**PROJECT:** Weber County Library System
Earthquake Damage Observation
Ogden Valley Branch
131 South 7400 East, Huntsville, Utah

**TO:** Weber County Library
2039 West 4000 South
Roy, Utah 84067

**ATTN:** Lynnda Wangsgard

**FROM:** Jay Lems

**RE:** Earthquake Damage Observation for the Ogden Valley Branch

---

Cecilia Uriburu, AIA representative of Prescott Muir Architects (PMA) visited the Ogden Valley Branch, located at 131 South 7400 East, Huntsville, Utah on May at 8:00 1st at 11:00 AM along with the Structural Engineer from ARW Engineers, McKay Parrish, the Insurance Adjuster, Alma Broadbent, and representatives from Weber County Library, Kevin Wilson and Robert Armstrong.
An evaluation letter from the Structural Engineer with their findings is attached to this report. PMA focused their visual observations on the overall state of the building conditions including elements of the building such as walls, ceilings, floor and slab condition and other building assemblies visible during the visit. Observations did not entail removal of building systems or finish materials.

**Evaluation Process:**
The evaluation process was based on our experience and knowledge of building construction and based on our experience of similar building assessments. We performed a walk around the exterior of the building on all sides, visually looking for signs of movement, or surface cracking. We also assessed the interior of the building by checking every room in the building. The Weber County Library facilities managers made all rooms available with good illumination for us to perform our evaluation. We looked for signs of shifting of ceiling panels, wall cracks, floor cracks, and any other signs of unusual movement of the finish systems. No remediation measures are identified as part of this report.

**Evaluation Results:**
Below is a summary of our findings followed with images for identification of damage locations.

**The Exterior of the facility:**
Image 1. Along the West façade, below and above the storefront windows, the exterior concrete walls exhibit hairline cracks. The North, East and South facades also exhibit some cracking of the concrete walls on the lower areas of the walls.
Image 2. The West facade concrete exterior columns and beams exhibits cracks.

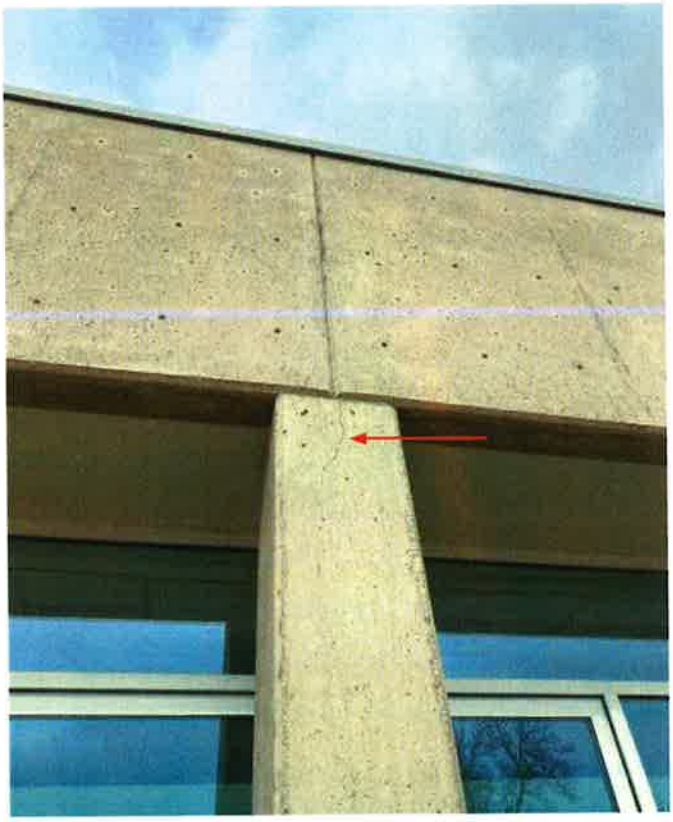
**Building Interior:**
Walls:
Image 3. At several locations within the building, cracking was observed at the corner of door frames on the gypsum board surface.
Image 4. At the two (2) offices and break room located along the West exterior wall, cracking of the gypsum board surface was observed at walls below and above the windows.
Image 5. Along the skylight that runs North-South cracking of gypsum board surface was observed below the storefront window and at the intersection with structural elements.
Image 6. At the Southwest corner of the Children's area, cracking of the gypsum board surface was observed. Dust was still present on the wall base.
Image 7. At several locations within the building cracking was observed at the corner of alcoves on the painted gypsum board surface.

## Conclusions

The building appears to have experienced movement of surfaces in several interior and exterior walls. Although the damage to surfaces observed does not pose a risk to life safety, the overall quality and longevity of the facility could be compromised if these items are not addressed. Furthermore, all exterior damage such as the cracks on the exterior concrete walls, columns and beams should be addressed to prevent further damage and deterioration caused by moisture infiltration and the freeze-thaw cycle process typical to Utah's climate.

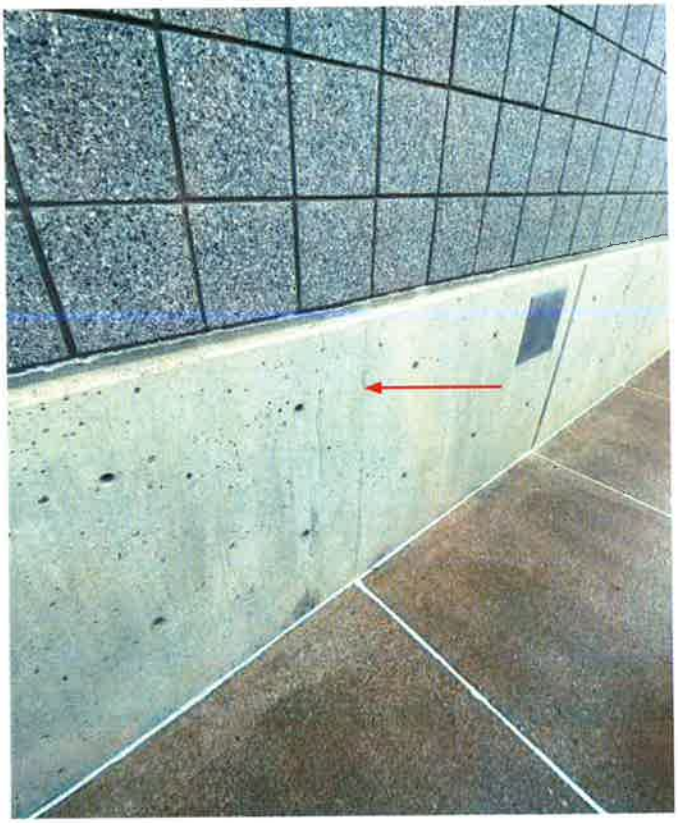

No damage was exhibited at the Main entrance

#1. West exterior wall hairline cracks at concrete wall



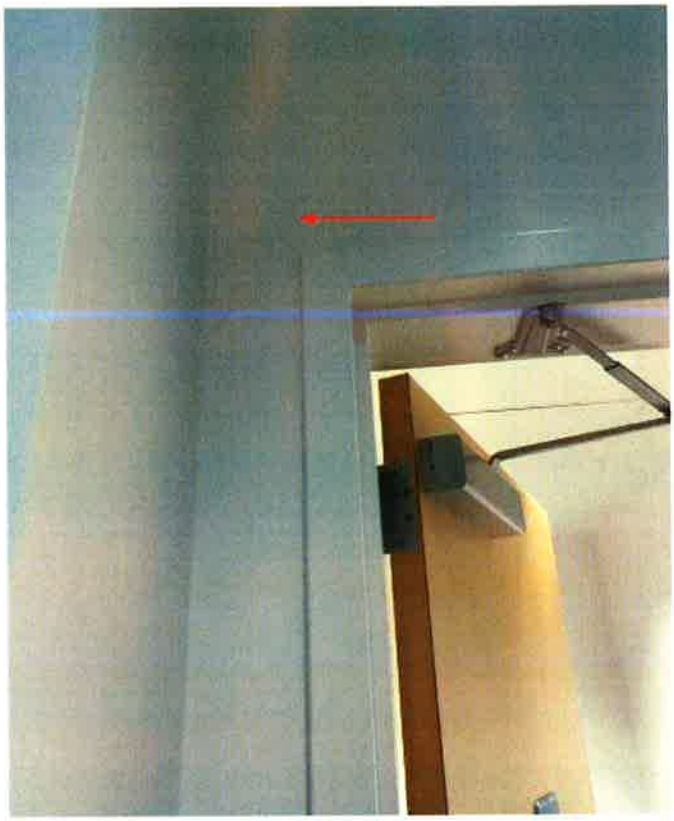
#2. West exterior wall hairline cracks at concrete column

#1. Concrete walls hairline cracks



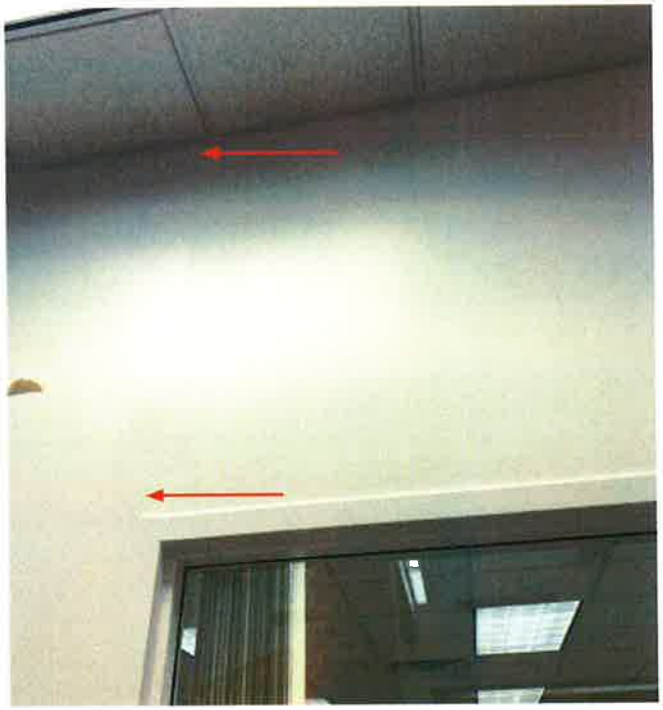
#1. Concrete walls hairline cracks

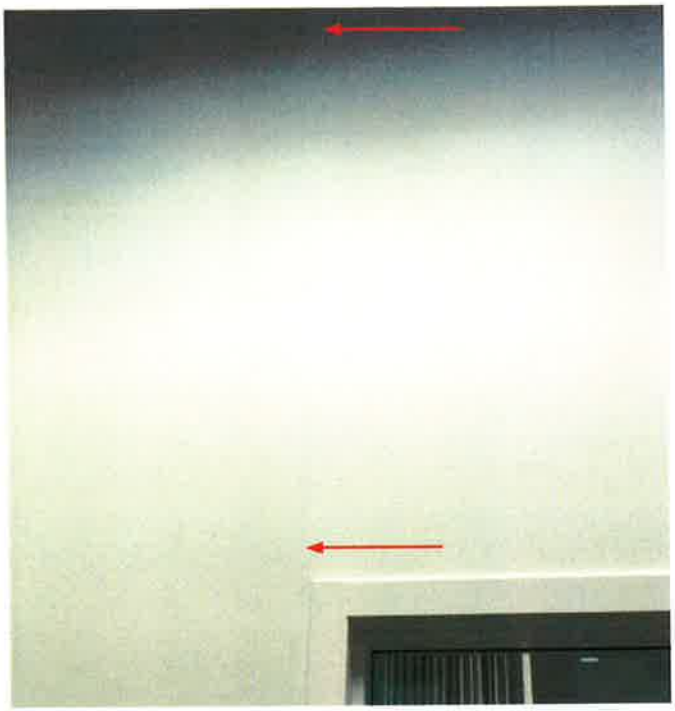
#3. Gypsum board wall cracks at door frames



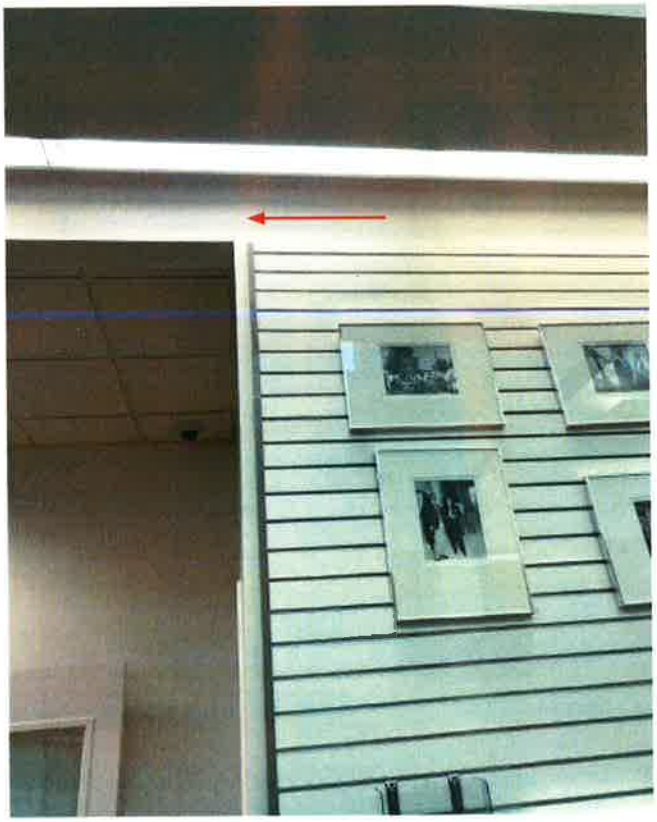
#3. Gypsum board wall cracks at door frames

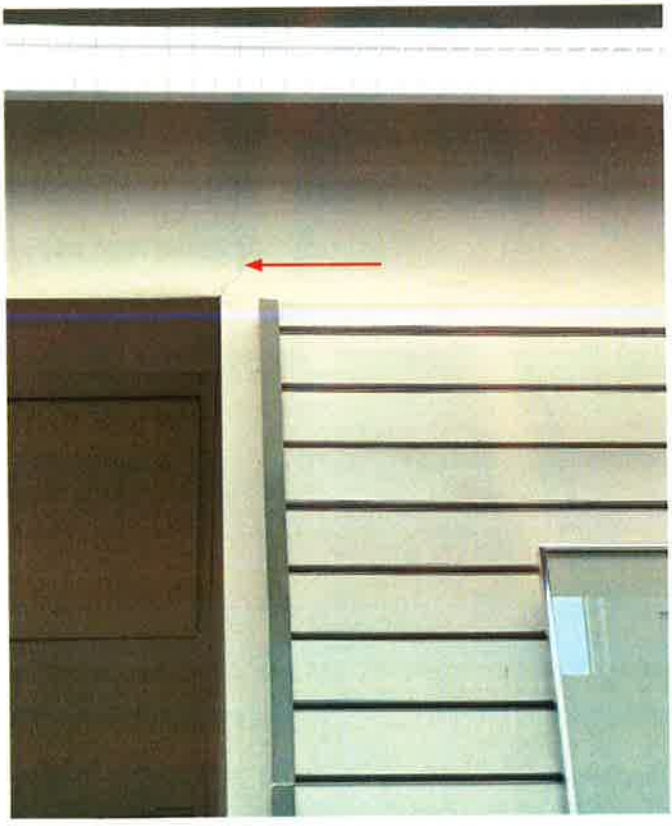
Ceramic tile joints movement at wall intersection





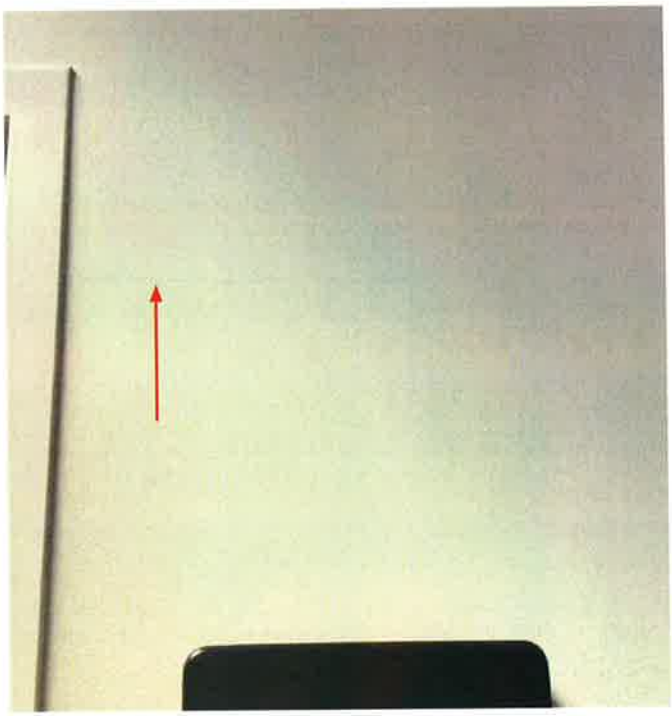
#3. Hairline cracking near door frames



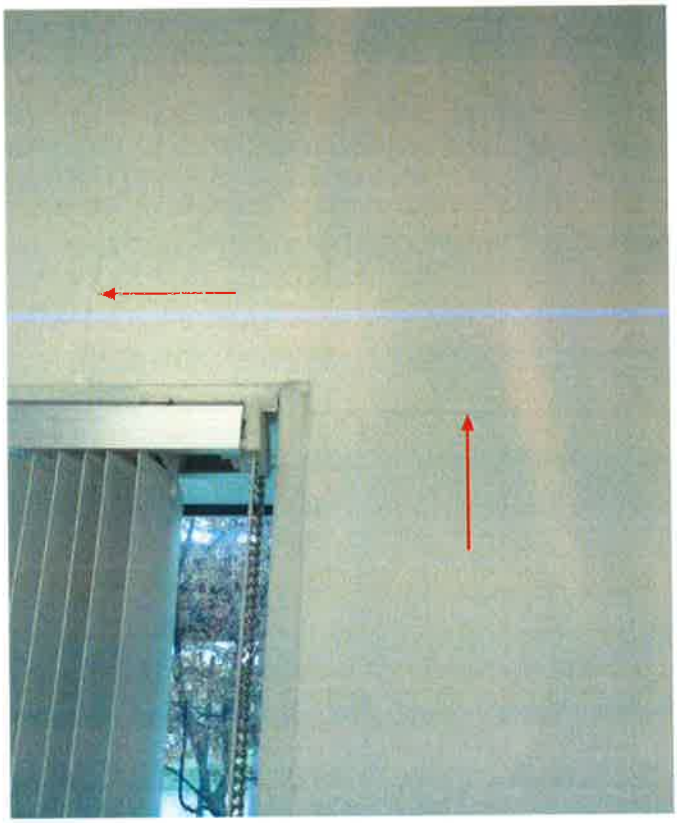


#3. Hairline cracking near door frames

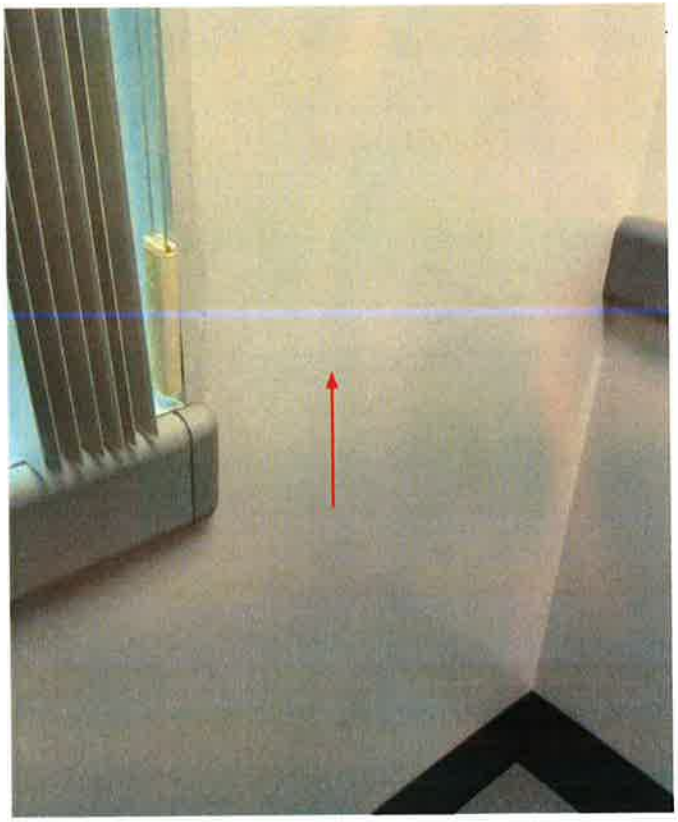
Ceramic tile joints movement at walls intersection



#3. Hairline cracking near door frames

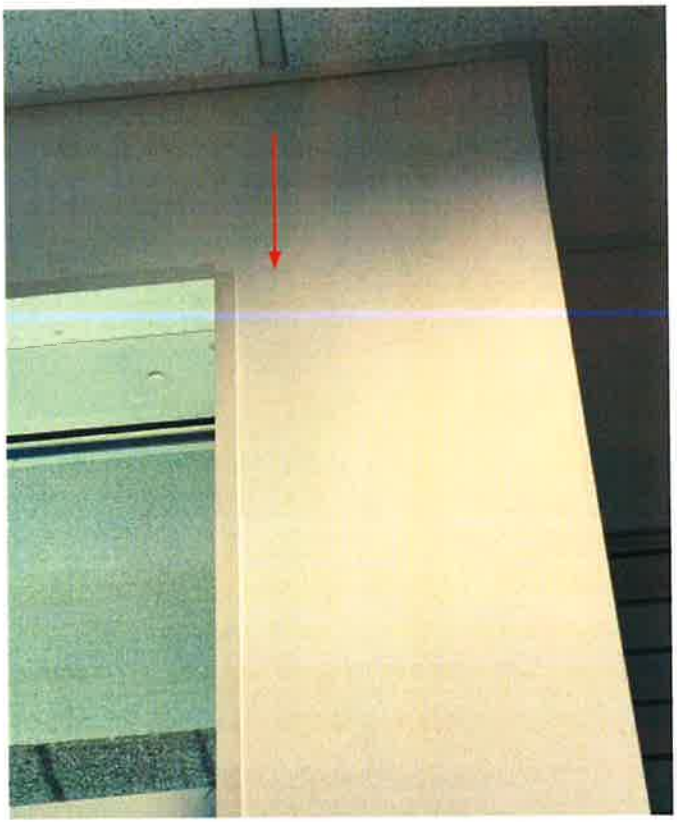


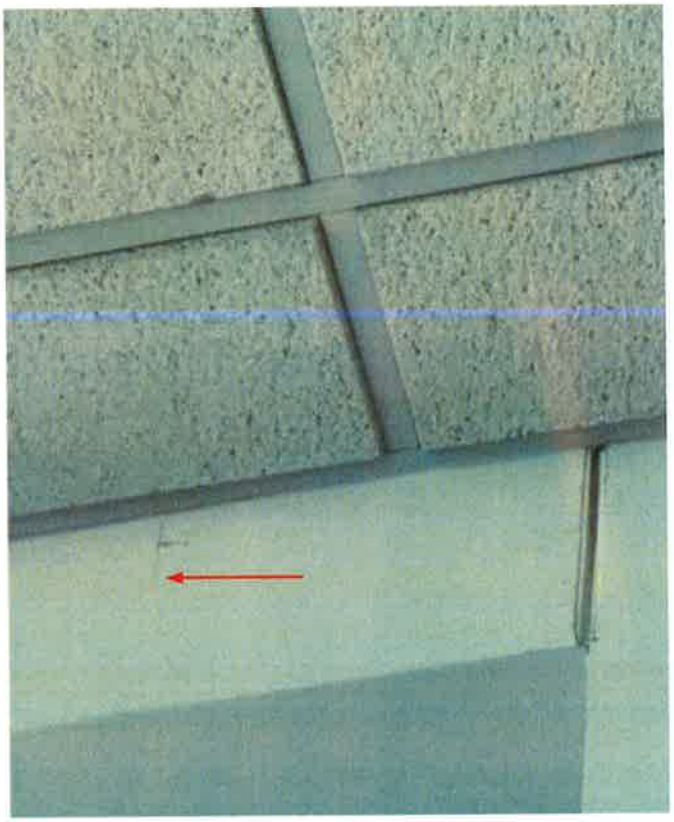
#4. Hairline cracking of the painted wall at office



Cabinet pulled from painted gypsum wall surface

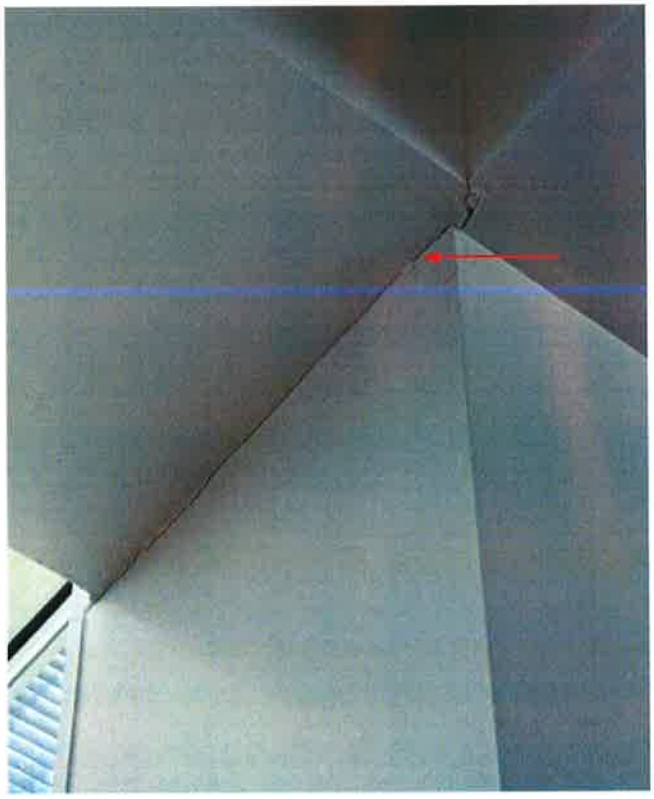
#3. Hairline crack at painted gypsum wall surface

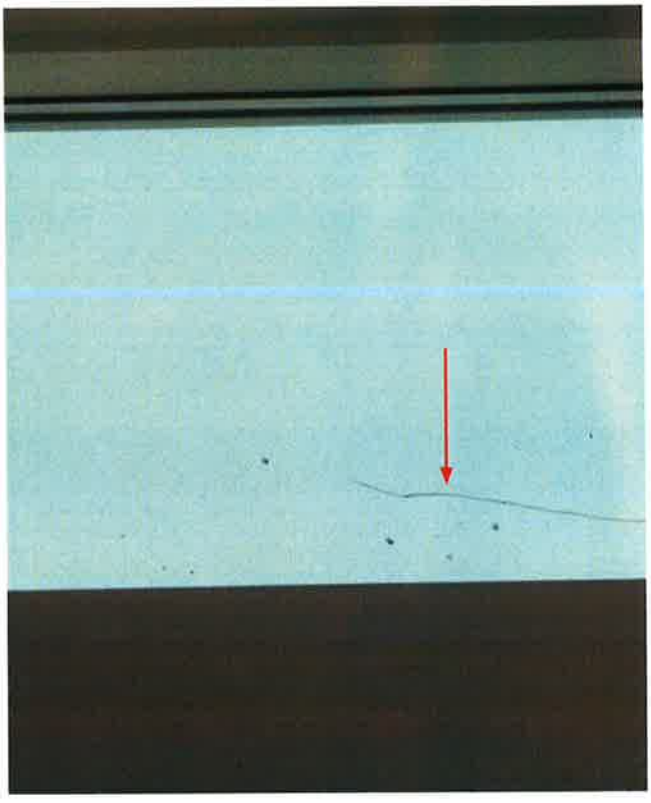




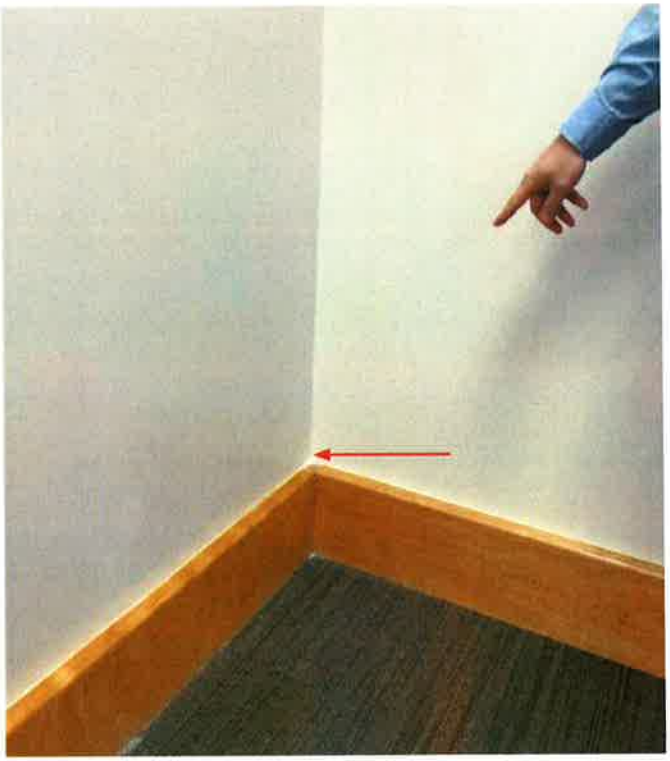
#3. Hairline crack at painted gypsum wall surface

#5. At central skylight, gypsum wall cracking was observed

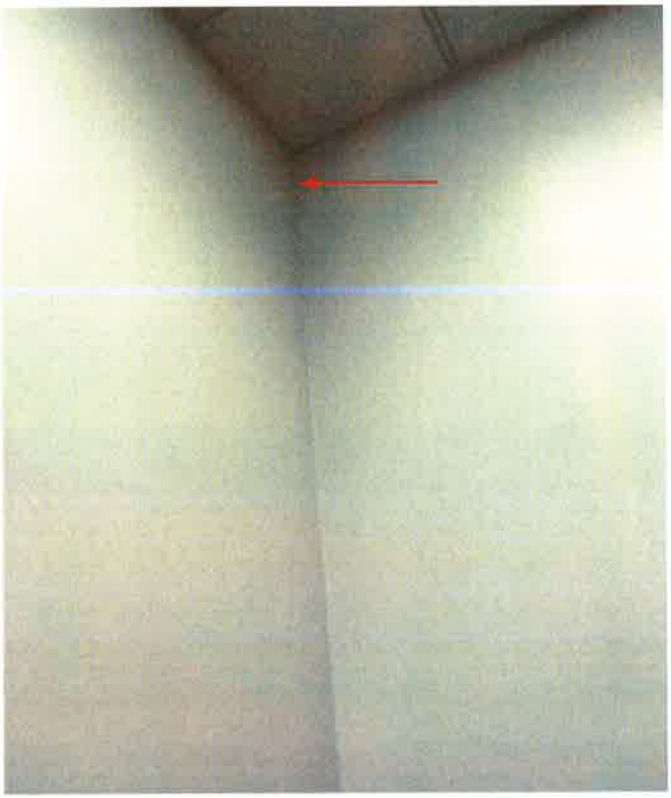




#5. At central skylight, gypsum wall cracking was observed



#6. The Children's Area exhibited gypsum board wall cracking



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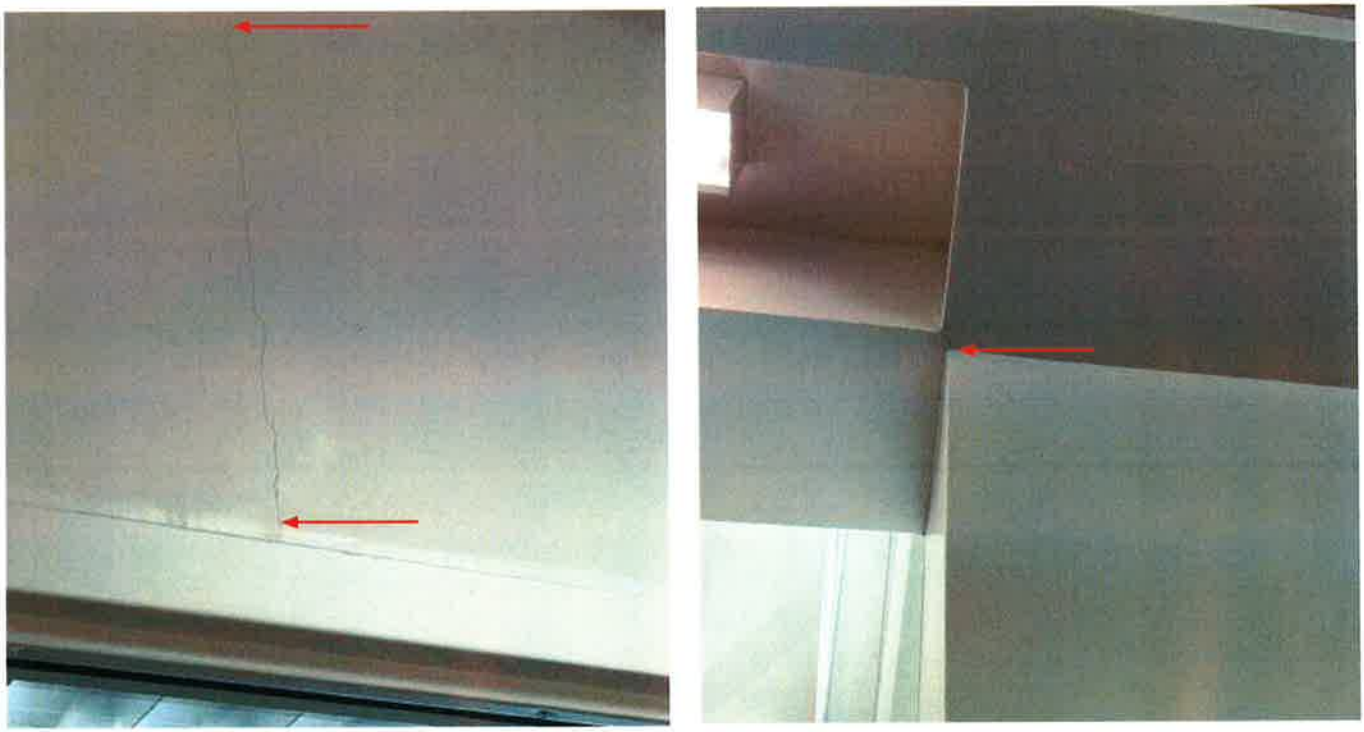
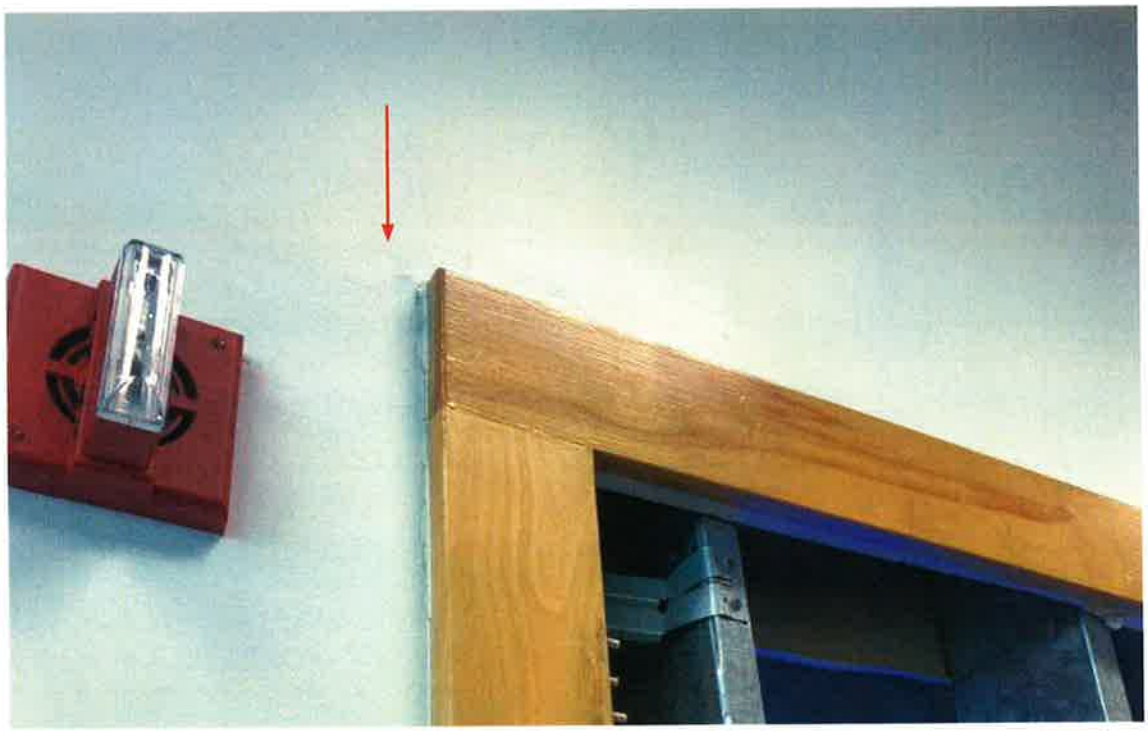


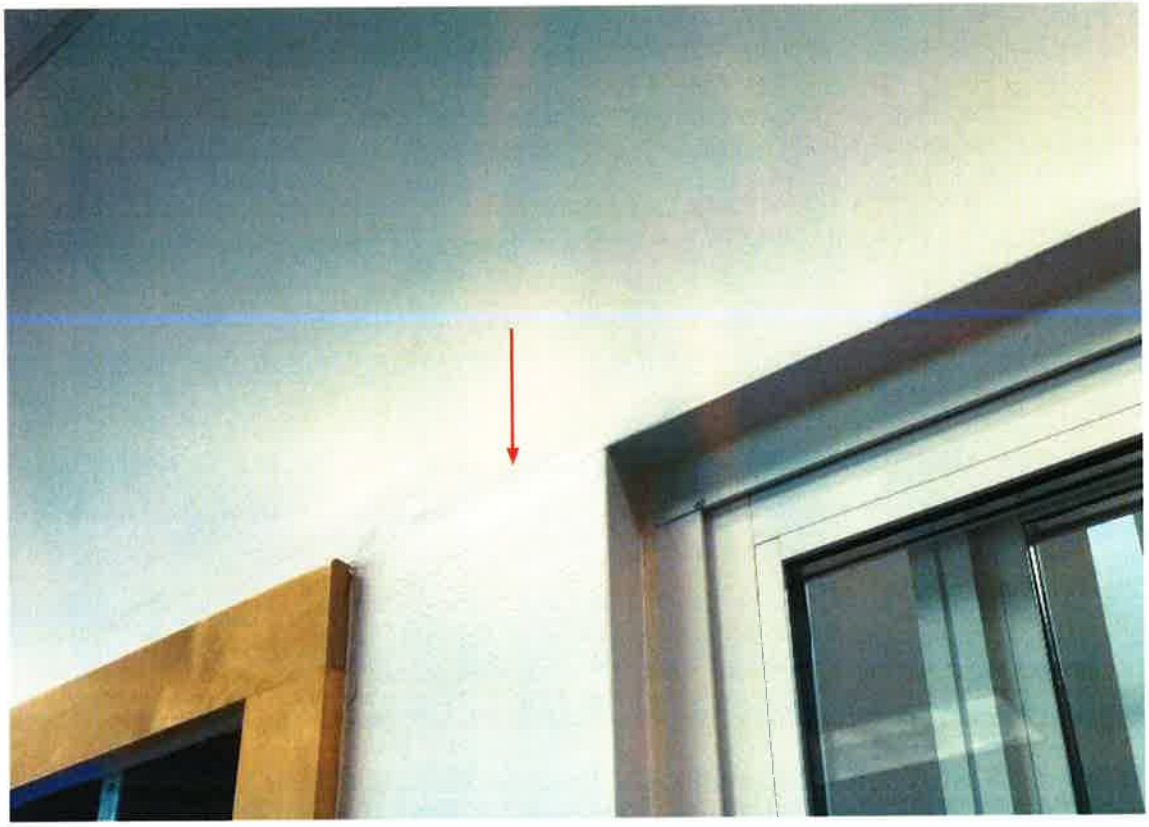
#7. Hairline crack at painted gypsum wall surface


#7. Hairline crack at painted gypsum wall surface

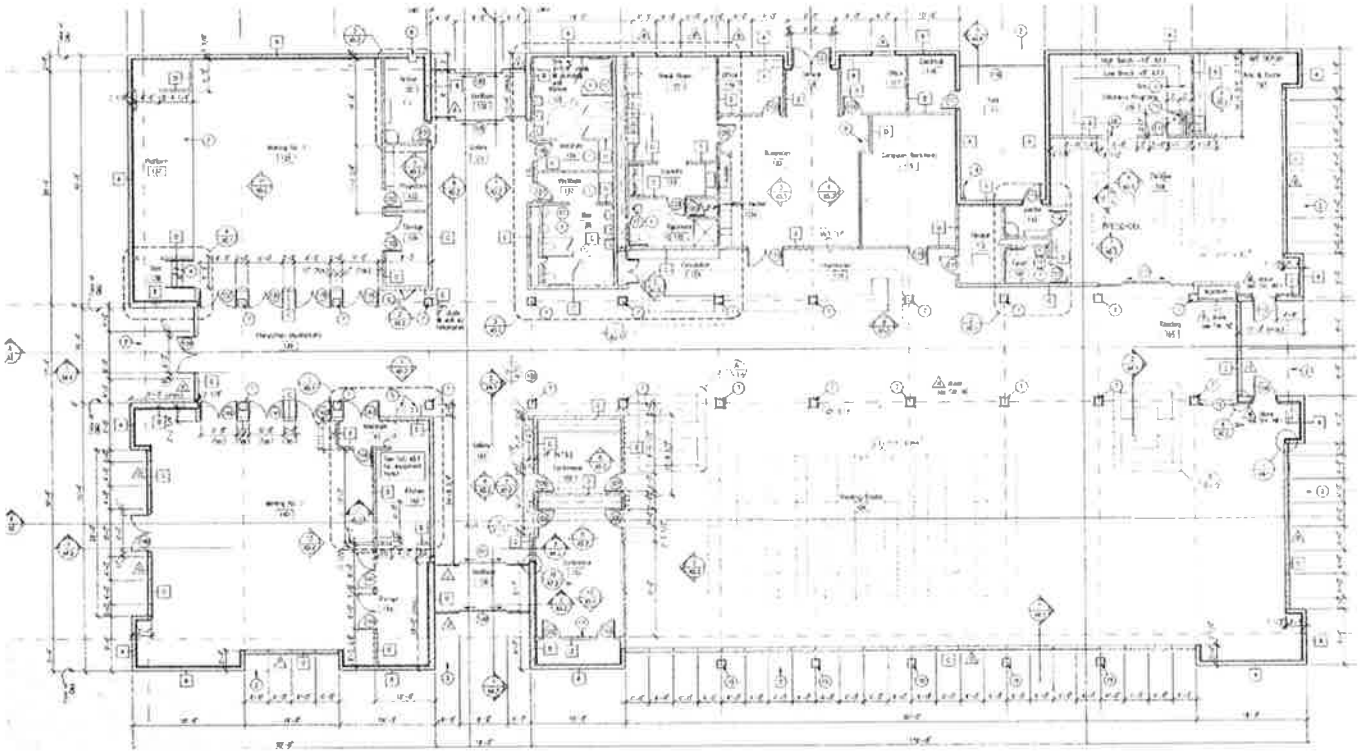
#7. Hairline crack at painted gypsum wall surface



#7. Gypsum board movement observed at millwork corner



#7. Gypsum board movement observed at millwork and door corner



MAIN LEVEL FLOOR PLAN

< N

ARW ENGINEERS

May 18, 2020

Cecilia Uriburu
Prescott Muir Architects
171 West Pierpont Ave.
Salt Lake City, Utah, 84101
Re: Ogden Valley Branch Earthquake Structural Evaluation
ARW Project: 20157.d

Dear Cecilia:

At your request we have completed a limited structural evaluation and observation of the Ogden Valley Branch located at 131 S 7400 E, Huntsville, Utah. The purpose of the evaluation was to determine in a very cursory way the structural condition of the existing building following the seismic event that occurred in Salt Lake County on March 18, 2020. Since that initial 5.7 magnitude earthquake there have been several significant aftershocks. Neither advanced analysis techniques nor observation of existing structural elements by removing finished materials were performed as part of this limited visual evaluation. This evaluation only refers to structural elements, conditions and concerns. Architectural, Mechanical, Electrical or other important building factors are beyond the scope of this evaluation and report. The observation visit to the existing building was completed on May 1st, 2020. Present during the visit were McKay Parrish and from ARW Engineers, Cecilia Uriburu from PMA, Alma Broadbent with the insurance company, and Robert and Kevin as owner representatives.

## Evaluation Process

The limited structural evaluation was accomplished by the following: 1) A site observation of the existing conditions visually reviewing any visible structural conditions such as materials, structural element types, general sizes and limited observation of framing connections. The site observation did not include the removal of any finished material or surfaces to view obscured structural elements. 2) Using engineering experience from multiple previous building evaluations, reasoned assumptions regarding the existing building structural condition were made in order to provide "next step" recommendations to the owner. As noted above, the evaluation process was intended to be cursory and preliminary. Detailed investigations, modeling and analysis were not completed after the seismic event. Additional in-depth evaluation alternatives are available if deemed necessary by the building's owners.

## Building Description

The building was built in 1995 and is a one level 19,600 square foot structure. The gravity system consists of steel trusses and masonry bearing walls.

## Evaluation Results

During the evaluation the following items were noted:

- There are several cracks in the sheetrock walls. It is possible that some of these cracks may have propagated during the seismic event.
- There are several cracks in the exterior concrete columns, beams and foundation walls. It is possible that some of these cracks may have propagated during the seismic event.
- One of the clerestory windows has a crack in it.
- Some lay-in ceiling tiles appear to have moved out of place during the seismic event.

**Conclusions**

Based on the limited evaluation and observation completed for the building, it is our opinion that the status of the structure relative to Life Safety has not changed as a result of the seismic event. We recommend that the cracks in exterior concrete beams, columns and foundation walls be sealed so that water does not penetrate the cracks and cause additional long-term deterioration. Cracked windows should be replaced. Cracks in sheetrock walls can be repaired and painted as required.

It is our opinion that based on the limited observation that the Ogden Valley Branch can continue to be occupied. It is important that any changes in existing conditions be noted that may require additional detailed evaluation.

ARW Engineers would be happy to provide any additional assistance desired.

Sincerely,

McKay M. Parrish, SE

20157.d_evalrpt_20200518

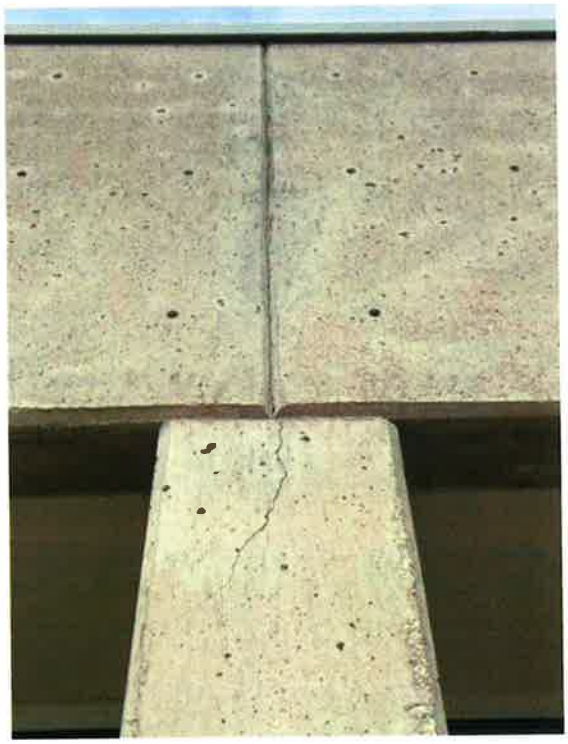


Photo1 – Example of cracks in exterior beams and columns

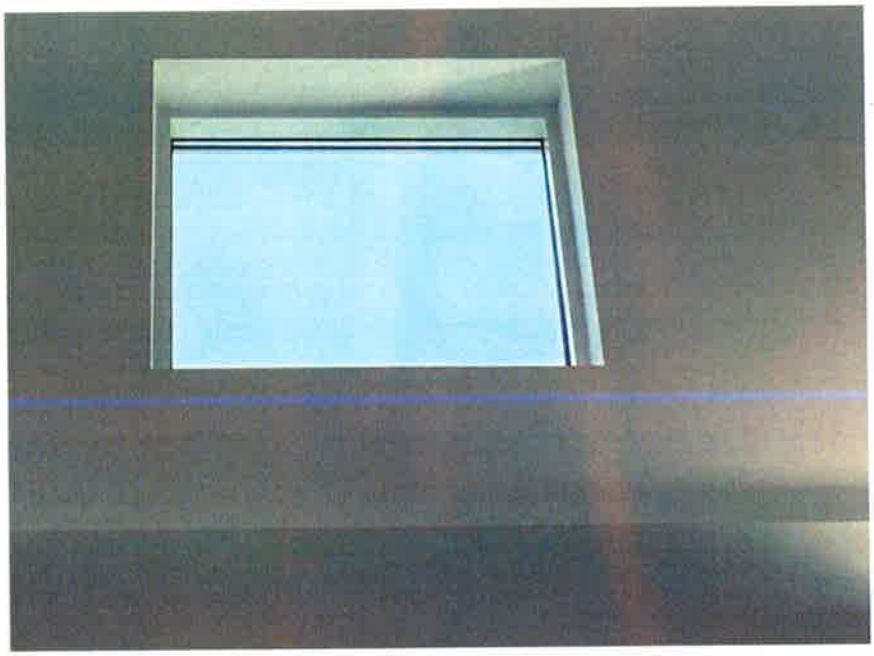


Photo 2 – Clerestory window is broken

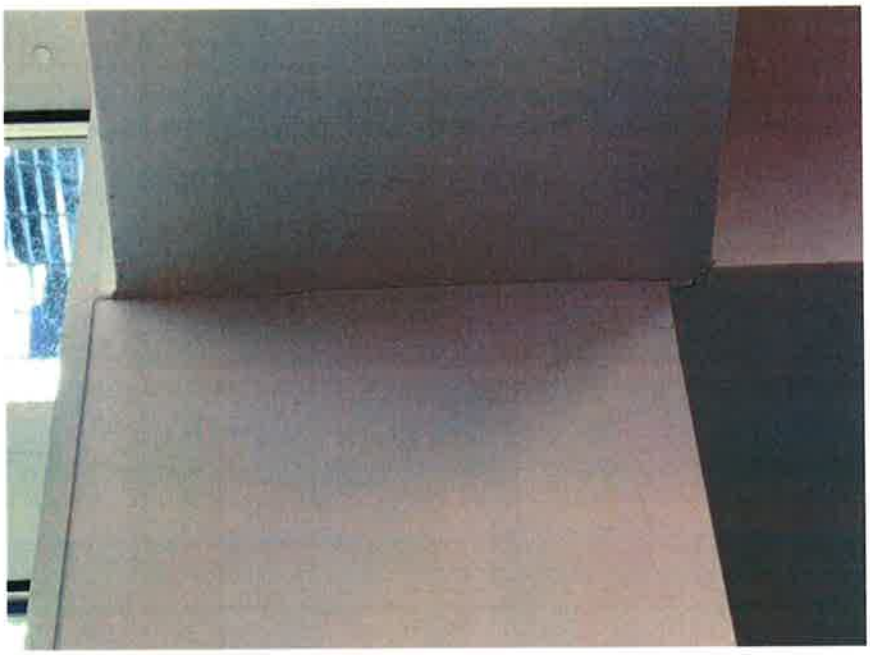


Photo #3 – Example of cracks in sheetrock walls

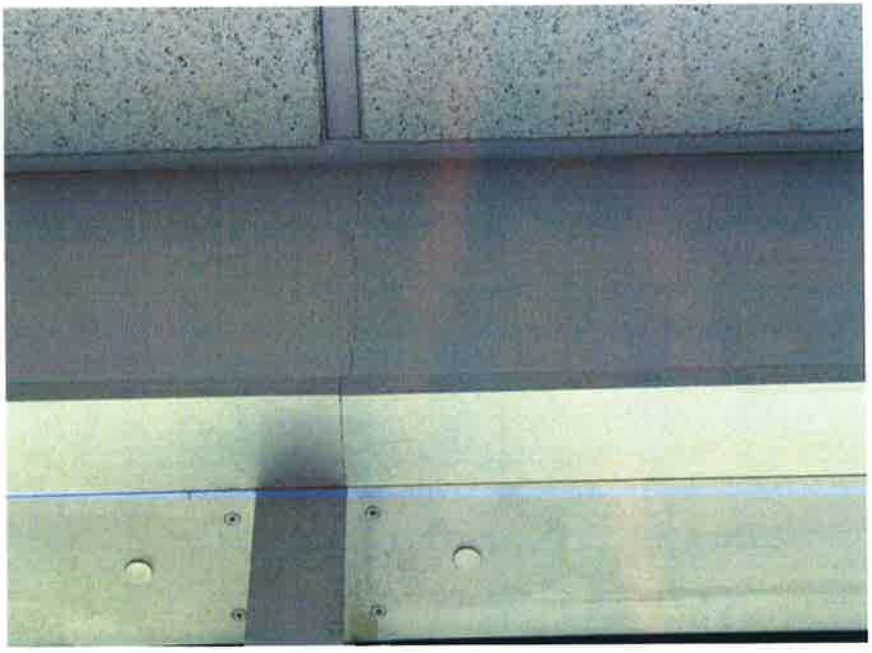


Photo #4 – Example of cracks in sheetrock walls

**PRESCOTT MUIR ARCHITECTS**
**171 West Pierpont Avenue**
**Salt Lake City, Utah 84101**
**801-521-9111 • 801-521-9158 fax**

# EARTHQUAKE DAMAGE ASSESSMENT

**DATE: 06.03.20**

**PROJECT:** Weber County Library System
Earthquake Damage Observation
Pleasant Valley Branch
5568 South 500 East, Washington Terrace, Utah

**TO:** Weber County Library
2039 West 4000 South
Roy, Utah 84067

**ATTN:** Lynnda Wangsgard

**FROM:** Jay Lems

**RE:** Earthquake Damage Observation for the Pleasant Valley Branch

---

Cecilia Uriburu, AIA representative of Prescott Muir Architects (PMA) visited the Pleasant Valley Branch, located at 5568 South 500 East, Washington Terrace, Utah on April 31st at 12:15 PM along with the Structural Engineer from ARW Engineers, McKay Parrish, the Insurance Adjuster, Alma Broadbent, and representatives from Weber County Library, Kevin Wilson and Robert Armstrong.
An evaluation letter from the Structural Engineer with their findings is attached to this report. PMA focused their visual observations on the overall state of the building conditions including elements of the building such as walls, ceilings, floor and slab condition and other building assemblies visible during the visit. Observations did not entail removal of building systems or finish materials.

**Evaluation Process:**
The evaluation process was based on our experience and knowledge of building construction and based on our experience of similar building assessments. We performed a walk around the exterior of the building on all sides, visually looking for signs of movement, or surface cracking. We also assessed the interior of the building by checking every room in the building. The Weber County Library facilities managers made all rooms available with good illumination for us to perform our evaluation. We looked for signs of shifting of ceiling panels, wall cracks, floor cracks, and any other signs of unusual movement of the finish systems. No remediation measures are identified as part of this report.

**Evaluation Results:**

Below is a summary of our findings followed with images and a key plan for identification of damage locations.

**The Exterior of the facility:**

Image1. The North parking lot shows a significant crack near the entrance main building.
Image 2. The North entrance exterior concrete walkway exhibits cracks in the concrete.
Image 3. The exterior windows and glazing did not show damage, further observation will be required as the weather pattern and humidity in the air changes.
Image 4. On the North Façade, one area shows damage to the brick masonry and the concrete foundation wall.

**Building Interior:**

Walls:
Image 5. At several locations within the building, cracking was observed at the corner of door frames on the gypsum board surface.
Image 6. At the public entrances, lobbies and gallery, the interior concrete floors exhibit cracking. Cracks appear to be new. Pre-existing cracks appeared to have widened by recent movement. These cracks are located at areas of heavy public traffic areas and if left un-addressed could become a tripping hazard.

Image 7. At several locations within the building cracking of gypsum board surface was observed at wall corners or wall/ceiling intersections.
Image 8. At the Activity Rooms, cabinets were pulled away from the wall

Ceilings:
Image 9. Displacement of ceiling tiles was observed

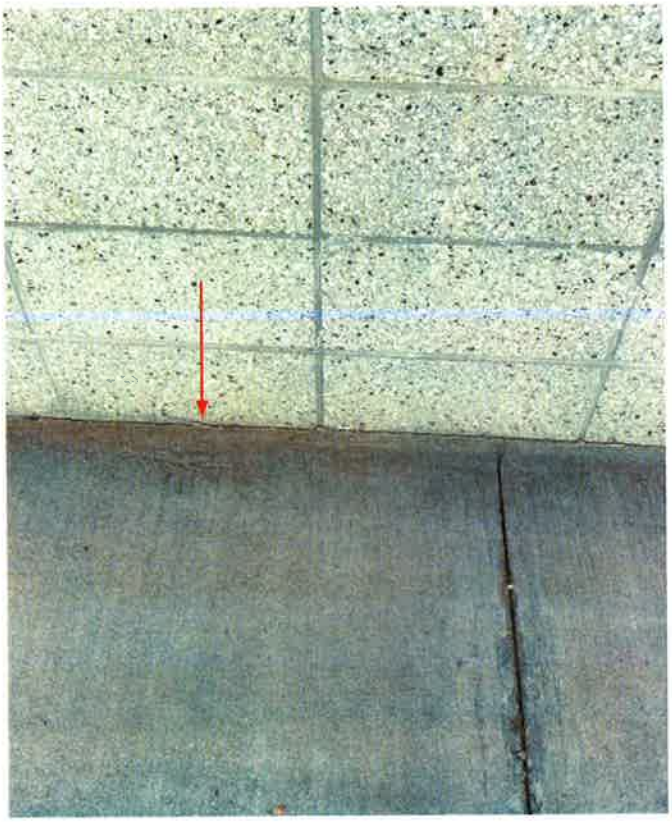
**Conclusions**

The building appears to have experienced movement of surfaces in some interior walls, but most visible in the concrete floors. The life safety systems of the building do not appear compromised. If left un-addressed, the concrete floors damage may widen or their edges may break causing tripping hazards. Furthermore, all exterior damage such as the paving cracks in the public plaza and cracks on the exterior walls should be addressed to prevent further damage and deterioration caused by moisture infiltration and the freeze-thaw cycle process typical to Utah's climate.

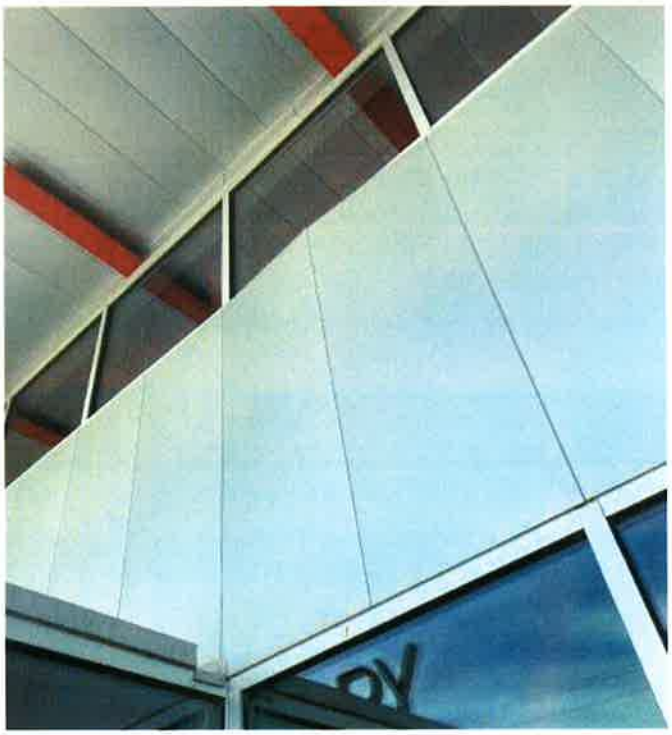
#1. Asphalt surface crack at parking lot

Brick and CMU does not show sign of damage

#2. Cracks at entrance walkway concrete slab on grade



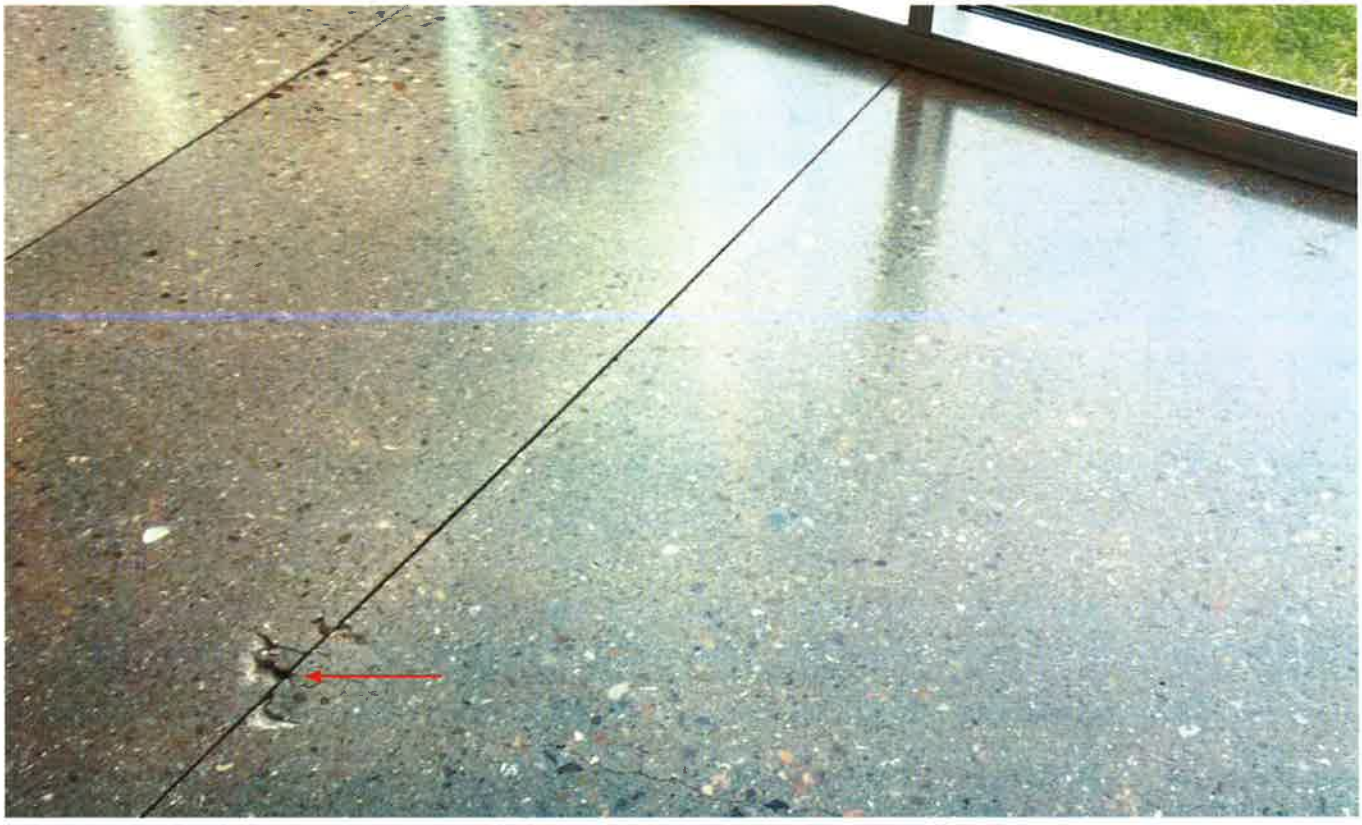
#2. Cracks at entrance walkway concrete slab on grade




3. North Entrance does not exhibit damage.

#4. North facade brick masonry and foundation wall damage

#6. Concrete floor cracks



#6. Concrete floor cracks

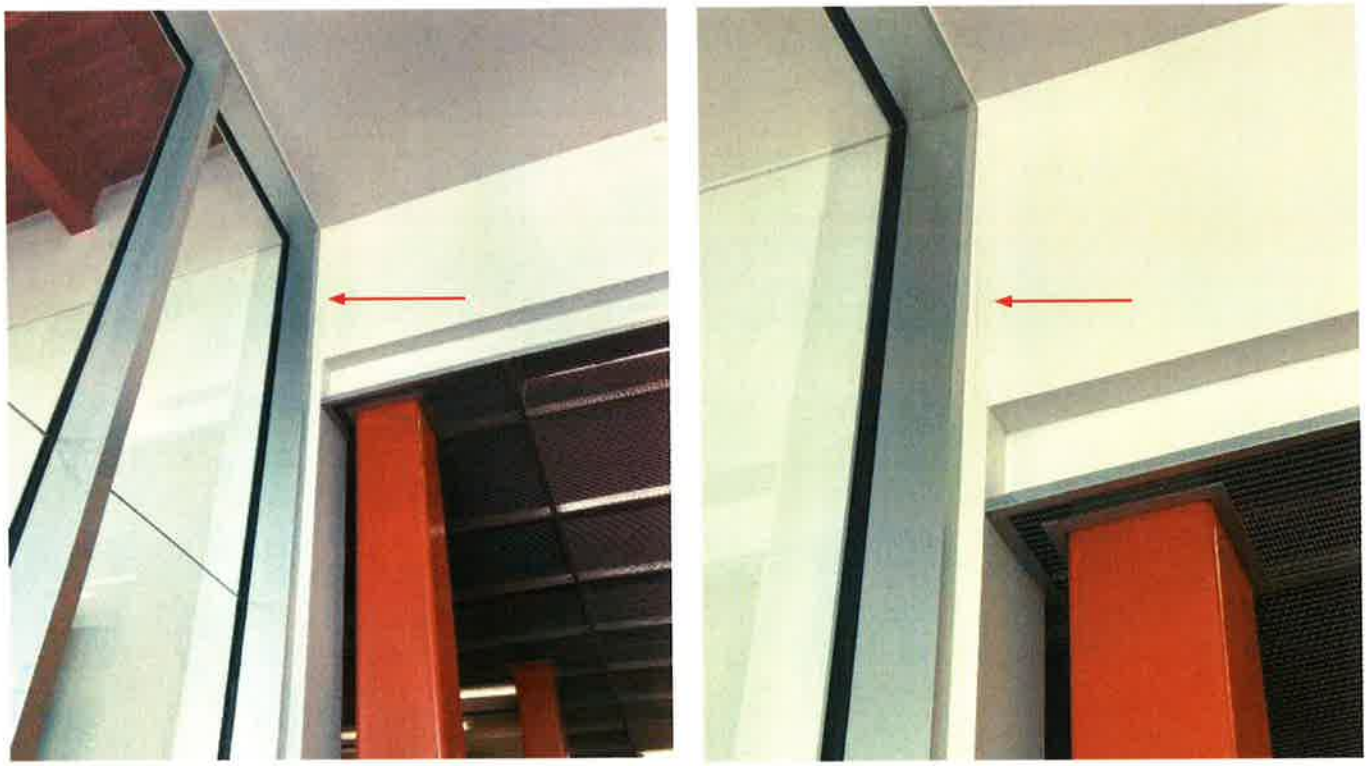
#6. Concrete floor cracks

#6. Concrete floor cracks

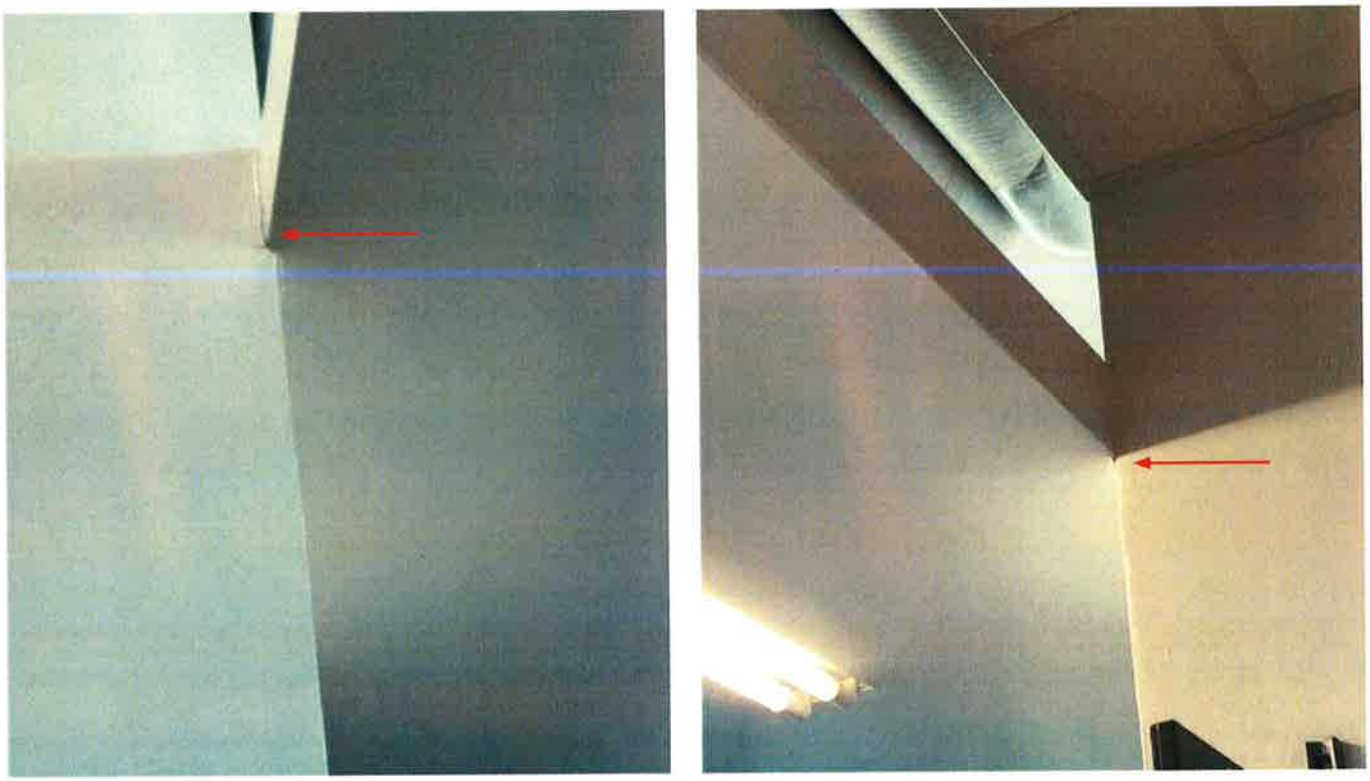
#6. Concrete floor cracks at public circulation areas

#6. Concrete floor cracks at public circulation areas

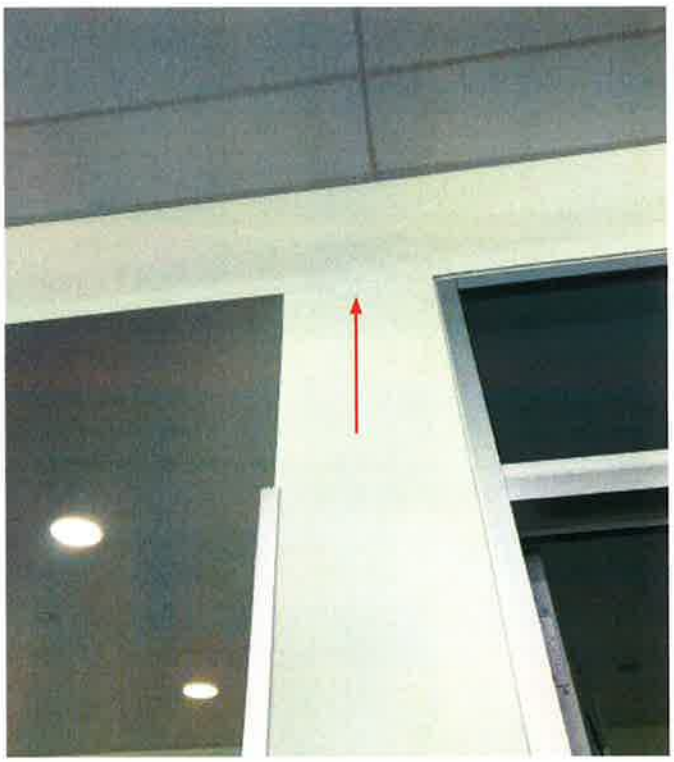
#6. Concrete floor cracks at public circulation areas



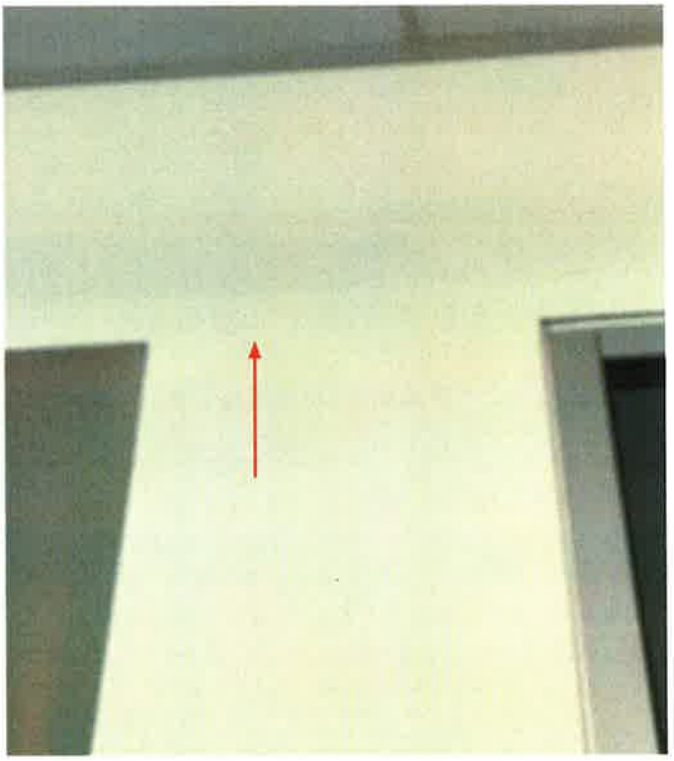
#7. Gypsum board wall cracks



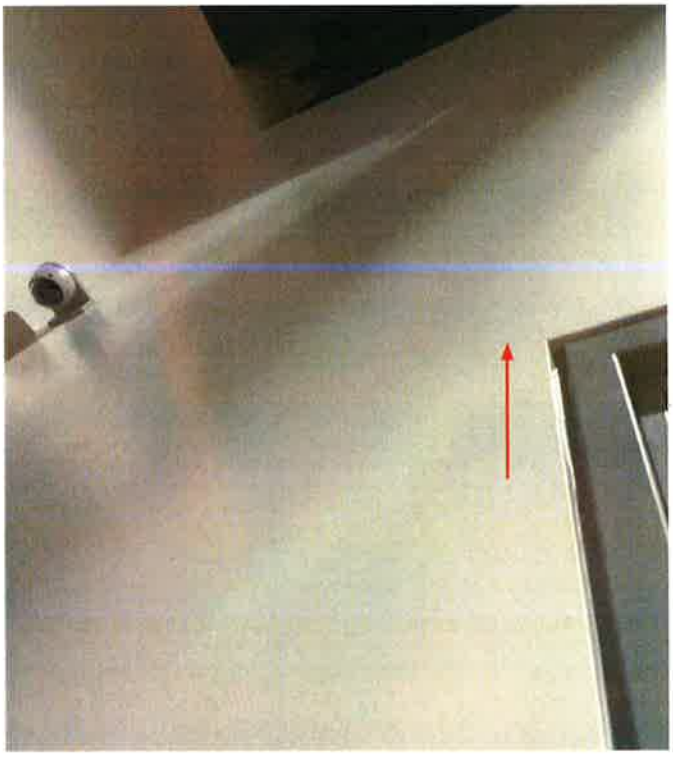
#7. Gypsum board wall cracks



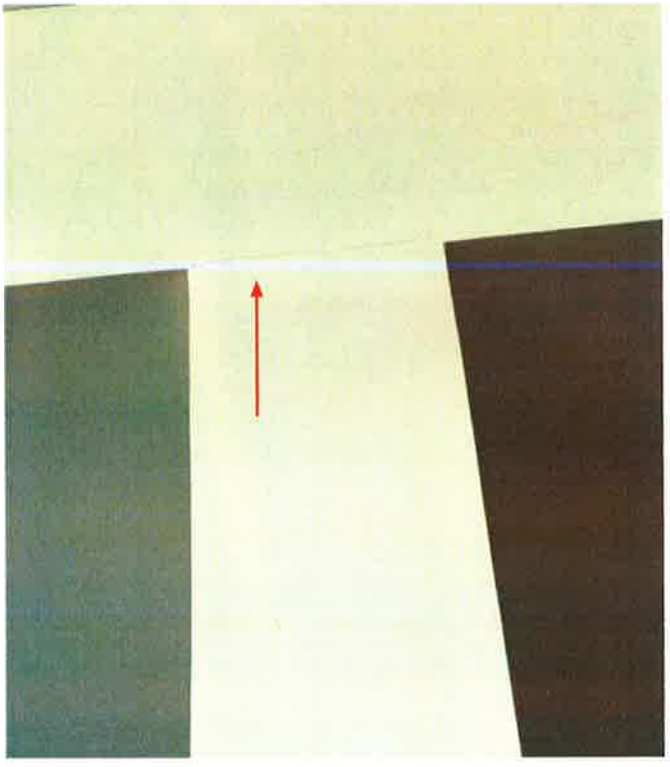
#5. Gypsum board wall cracks at door frames



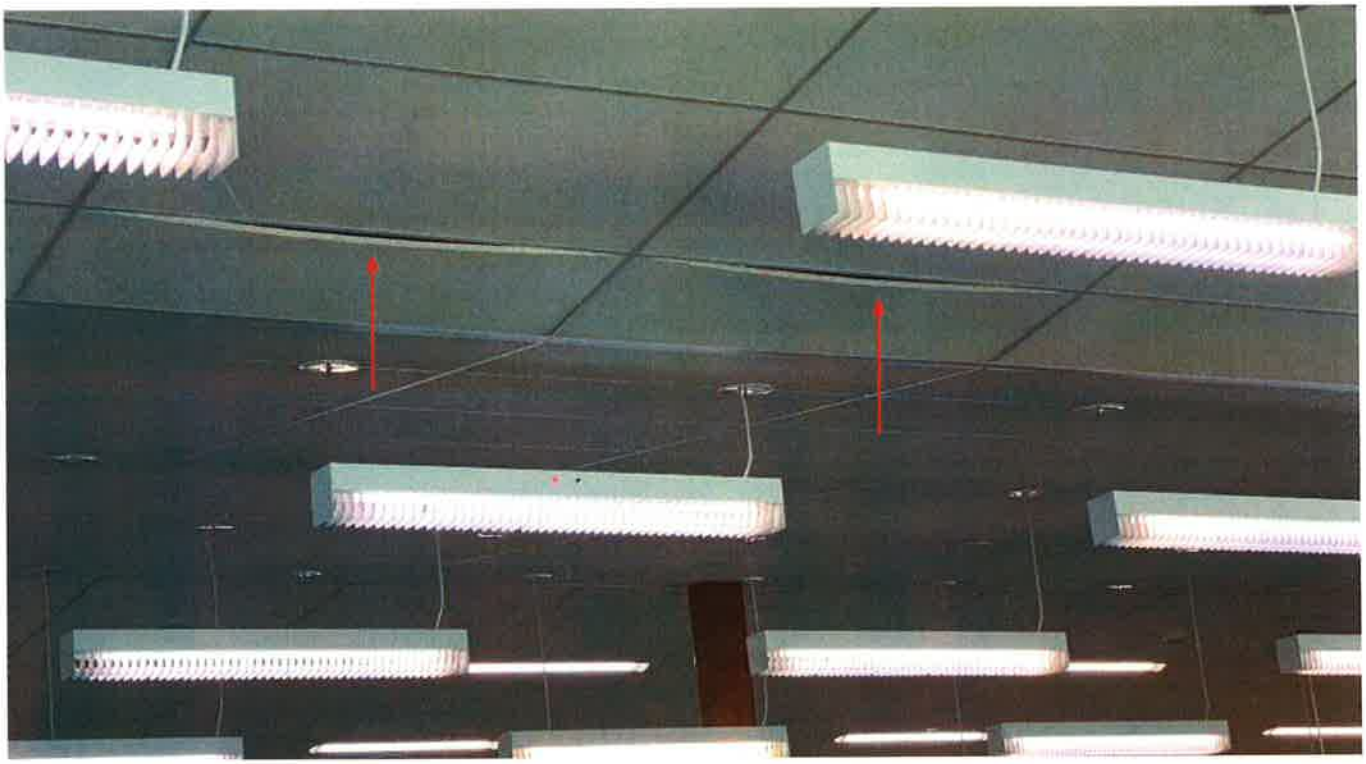
#5. Gypsum board wall cracks at door frames



#5. Gypsum board wall cracks at door frames



#6. Gypsum board wall cracks

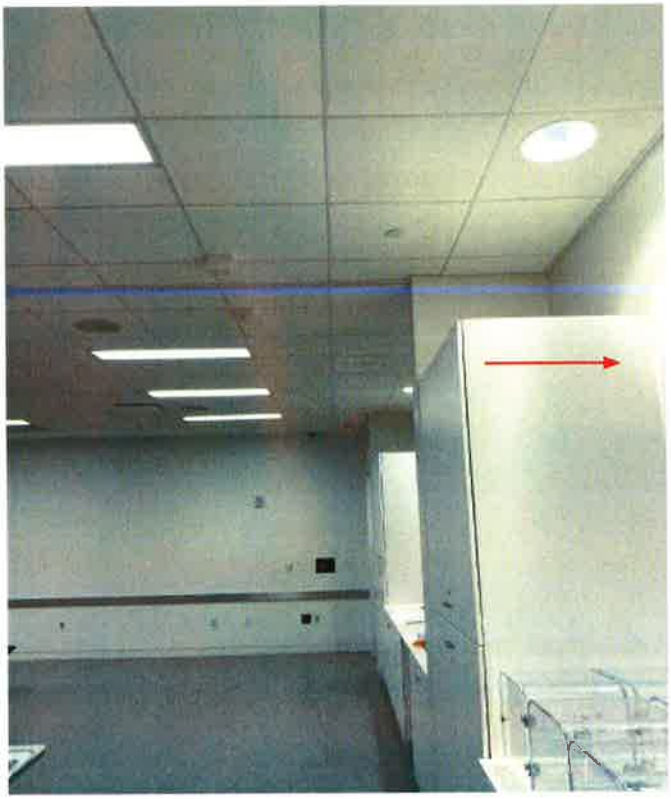


#9. Acoustical ceiling panel displaced from grid

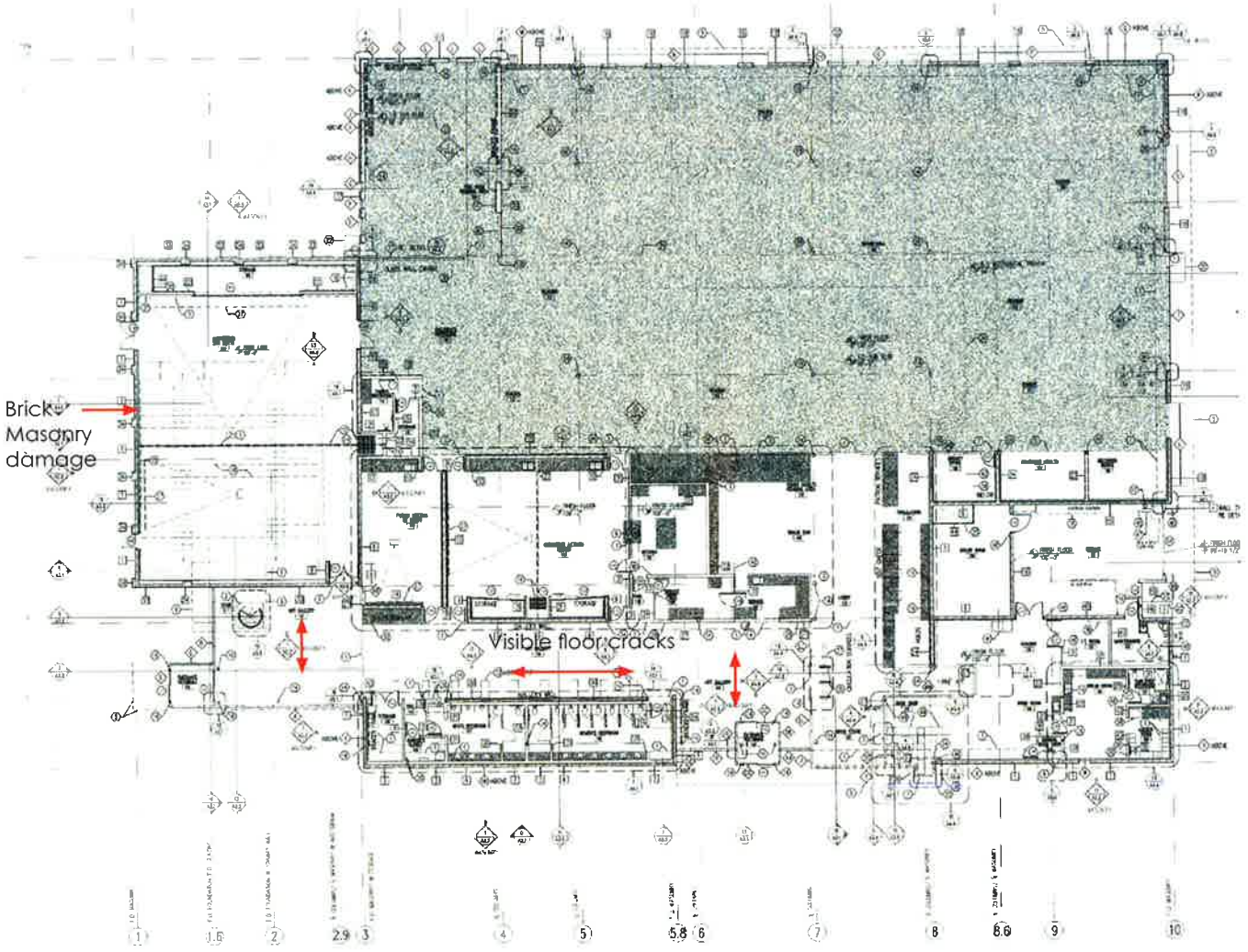
#9. Acoustical ceiling panel displaced from grid

#9. Acoustical ceiling panel displaced from grid


#9. Acoustical ceiling panel displaced from grid



#8. Cabinet pulled from wall at activity room




MAIN LEVEL FLOOR PLAN

N

A R W ENGINEERS

May 15, 2020

Cecilia Uriburu
Prescott Muir Architects
171 West Pierpont Ave.
Salt Lake City, Utah, 84101
Re: Pleasant Valley Branch Earthquake Structural Evaluation
ARW Project: 20157.b

Dear Cecilia:

At your request we have completed a limited structural evaluation and observation of the Pleasant Valley Branch located at 5568 Adams Ave, Ogden, Utah. The purpose of the evaluation was to determine in a very cursory way the structural condition of the existing building following the seismic event that occurred in Salt Lake County on March 18, 2020. Since that initial 5.7 magnitude earthquake there have been several significant aftershocks. Neither advanced analysis techniques nor observation of existing structural elements by removing finished materials were performed as part of this limited visual evaluation. This evaluation only refers to structural elements, conditions and concerns. Architectural, Mechanical, Electrical or other important building factors are beyond the scope of this evaluation and report. The observation visit to the existing building was completed on April 30th, 2020. Present during the visit were Mckay Parrish and from ARW Engineers, Cecilia Uriburu from PMA, Alma Broadbent with the insurance company, and Robert and Kevin as owner representatives.

## Evaluation Process

The limited structural evaluation was accomplished by the following: 1) A site observation of the existing conditions visually reviewing any visible structural conditions such as materials, structural element types, general sizes and limited observation of framing connections. The site observation did not include the removal of any finished material or surfaces to view obscured structural elements. 2) Using engineering experience from multiple previous building evaluations, reasoned assumptions regarding the existing building structural condition were made in order to provide "next step" recommendations to the owner. As noted above, the evaluation process was intended to be cursory and preliminary. Detailed investigations, modeling and analysis were not completed after the seismic event. Additional in-depth evaluation alternatives are available if deemed necessary by the building's owners.

## Building Description

The building was completed in 2009. The building is a 38,835 square foot structure. The gravity system consists of reinforced masonry walls and steel columns. The shear walls are constructed using masonry walls and steel braced frames and the diaphragm is a metal b-deck.

## Evaluation Results

During the evaluation the following items were noted:

- Several cracks appear to have occurred in the sheetrock walls. It is possible that some of these cracks may have propagated during the seismic event.
- There are several cracks in the slab on grade that may have propagated.
- There is an exterior non-structural metal wall panel that appears to have buckled out-of-plane.
- Some lay-in ceiling tiles appear to have moved out of place during the seismic event.

**Conclusions**

Based on the limited evaluation and observation completed for the building, it is our opinion that the status of the structure relative to Life Safety has not changed as a result of the seismic event. We recommend that the cracks in non-structural concrete slabs on grade be sawcut and removed (or repaired in place) as necessary. Wall panels can be re-attached as required and cracks in sheetrock walls can be repaired and painted as required.

It is our opinion that based on the limited observation that the Pleasant Valley Branch can continue to be occupied. It is important that any changes in existing conditions be noted that may require additional detailed evaluation.

ARW Engineers would be happy to provide any additional assistance desired.

Sincerely,

McKay M. Parrish, SE

20157.b_evalrpt_20200515

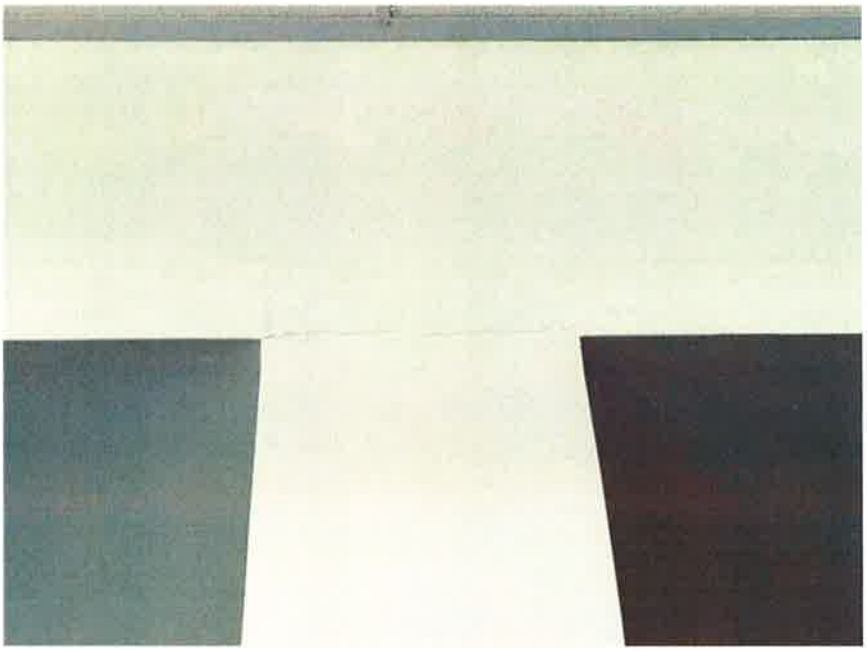


Photo1 – Example of cracks propagating sheetrock walls

Photo 2 – Example of exterior panel buckling out-of-plane

Photo #3 – Example of cracks propagating in slab on grade

**PRESCOTT MUIR ARCHITECTS**
**171 West Pierpont Avenue**
**Salt Lake City, Utah 84101**
**801-521-9111 • 801-521-9158 fax**

# EARTHQUAKE DAMAGE ASSESSMENT

**DATE: 06.03.20**

**PROJECT:** Weber County Library System
Earthquake Damage Observation
South West Branch
2039 West 4000 South, Roy Utah

**TO:** Weber County Library
2039 West 4000 South
Roy, Utah 84067

**ATTN:** Lynnda Wangsgard

**FROM:** Jay Lems

**RE:** Earthquake Damage Observation for the South West Branch

---

Cecilia Uriburu, AIA representative of Prescott Muir Architects (PMA) visited the Facility on April 31st at 8:00 AM along with the Structural Engineer from ARW Engineers, McKay Parrish, the Insurance Adjuster Alma Broadbent, and representatives from Weber County Library, Kevin Wilson and Robert Armstrong.
An evaluation letter from the Structural Engineer with their findings is attached to this report. PMA focused their visual observations on the overall state of the building conditions including elements of the building such as walls, ceilings, floor and slab condition and other building assemblies visible during the visit. Observations did not entail removal of building systems or finish materials.

**Evaluation Process:**
The evaluation process was based on our experience and knowledge of building construction and based on our experience of similar building assessments. We performed a walk around the exterior of the building on all sides, visually looking for signs of movement, or surface cracking. We also assessed the interior of the building by checking every room in the building. The Weber County Library facilities managers made all rooms available with good illumination for us to perform our evaluation. We looked for signs of shifting of ceiling panels, wall cracks, floor cracks, and any other signs of unusual movement of the finish systems. No remediation measures are identified as part of this report.

**Evaluation Results:**
Below is a summary of our findings followed with images and a key plan for identification of damage locations.

**The Exterior of the facility:**
Image 1. The North entrance exterior concrete plaza exhibits cracks in the concrete walkways. Building codes allow up to 1/2" of difference in level. Some spots could soon reach 1/2" if left un-addressed.
Image 2. The exterior North Facade and East Facade concrete masonry unit (CMU) reliefs within the Brick Masonry wall exhibit hairline cracks. Some hairline cracks extend to the foundation wall.
Image 3. At the perimeter East exterior walls, hairline cracking is visible at the foundation wall level.
In general, the exterior windows and glazing at these locations did not show signs of damage, further observation will be required as the weather pattern and humidity in the weather changes.
Image 4. At the East entrance, the metal panels ceiling exhibits movement and minor displacement of the panels.
Image 5. At the South East Corner of the building, the brick masonry exhibits damage. No other brick masonry damage or out of plane movement was observed.
Image 6. At the South Glazing, the foundation wall shows hairline cracks.
Image 7. On the West exterior wall, at the shipping and receiving south room, the exterior door was difficult to operate.
Roof:
No roofing membrane damage was observed.
Image 8. One (1) skylight unit is shattered. One of the layers of glass on the double insulated assembly is fully cracked.

**Building Interior:**
Walls:
Image 9. At several locations within the building, cracking was observed adjacent to the corner of door frames on the gypsum board surface.
Image 10. At several locations within the building along the main circulation hallway, cracking was observed at the corner of alcoves on the painted gypsum board surface.
Image 11. At several locations within the building cracking of gypsum board surface was observed at wall corners or wall/ceiling intersections.
Image 12. At several locations within the building, cracking of the gypsum board surface was observed at walls below windows.

Ceilings:
Image 13. The kitchen ceiling tiles exhibit surface cracking and displacement from the ceiling grid.
Image 14. The circulation desk high gloss painted gypsum board ceiling exhibits several cracks.
Image 15. At the children's areas, the gypsum board ceiling transition exhibit hairline cracking. Cracking was also observed at the valance gypsum walls where metal ceilings transition to acoustical lay-in tiles.
Image 16. Along the South exterior glazing, the gypsum board ceiling soffit at the top of the wall exhibits hairline cracks.

Other damage observed:
Image 17. In the multi-purpose rooms, cabinets were shifted/pulled away from the wall.
Image 18. At SR HALL #134, and the maintenance areas, cracks were observed in the concrete floor and concrete curb wall.
Image 19. Upper level landing at Stair S-2 exhibits cracks in the concrete floor surface.

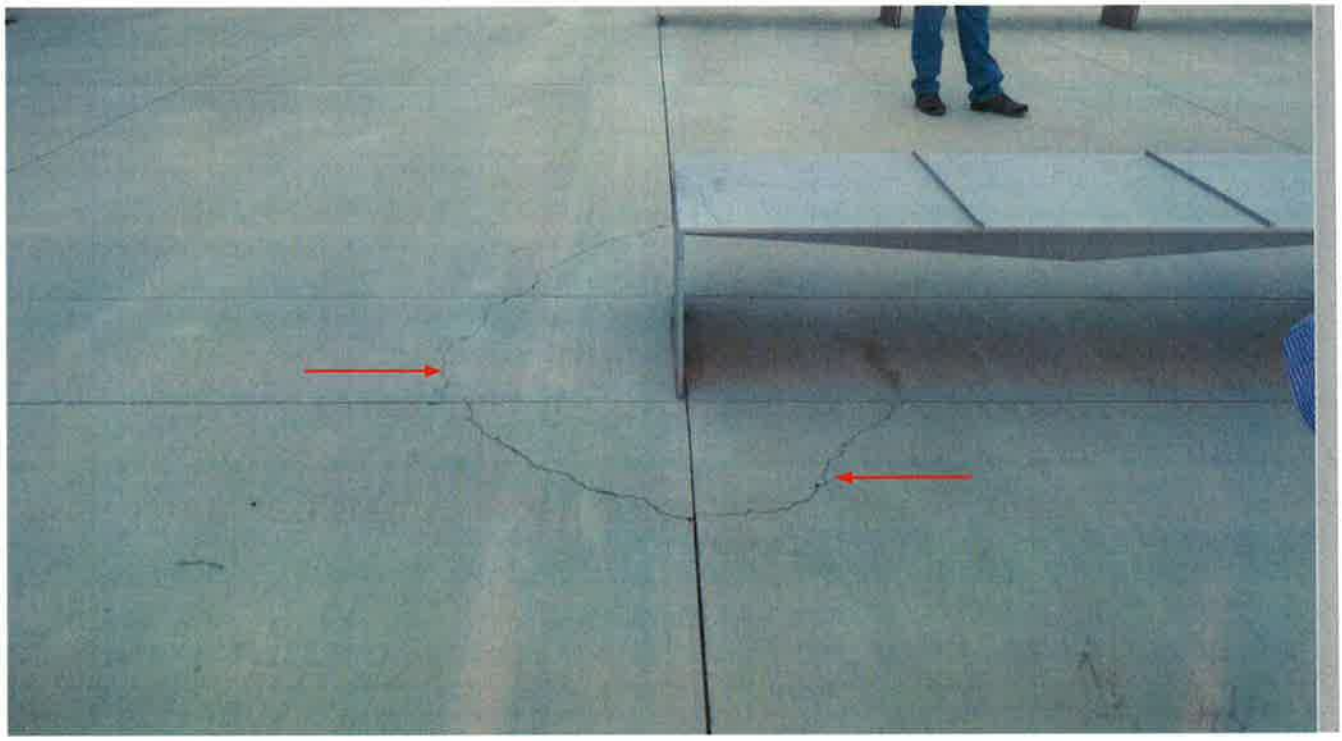
**Conclusions**

The building appears to have experienced movement of surfaces in several interior and exterior walls. Although in general the damage to surfaces observed does not pose a risk to life safety, the shattered glazing unit in the skylight above the stacks area should be replaced as soon as possible. The overall quality and longevity of the facility could be compromised if these items are not addressed. Furthermore, all exterior damage such as the paving cracks in the public plaza and cracks on the exterior walls should be addressed to prevent further damage and deterioration caused by moisture infiltration and the freeze-thaw cycle process typical to Utah's climate.

North Facade plaza and typical brick masonry reliefs were damage was observed

No apparent damage was observed at North entrance

In general, brick masonry appears leveled and without out of plan movement



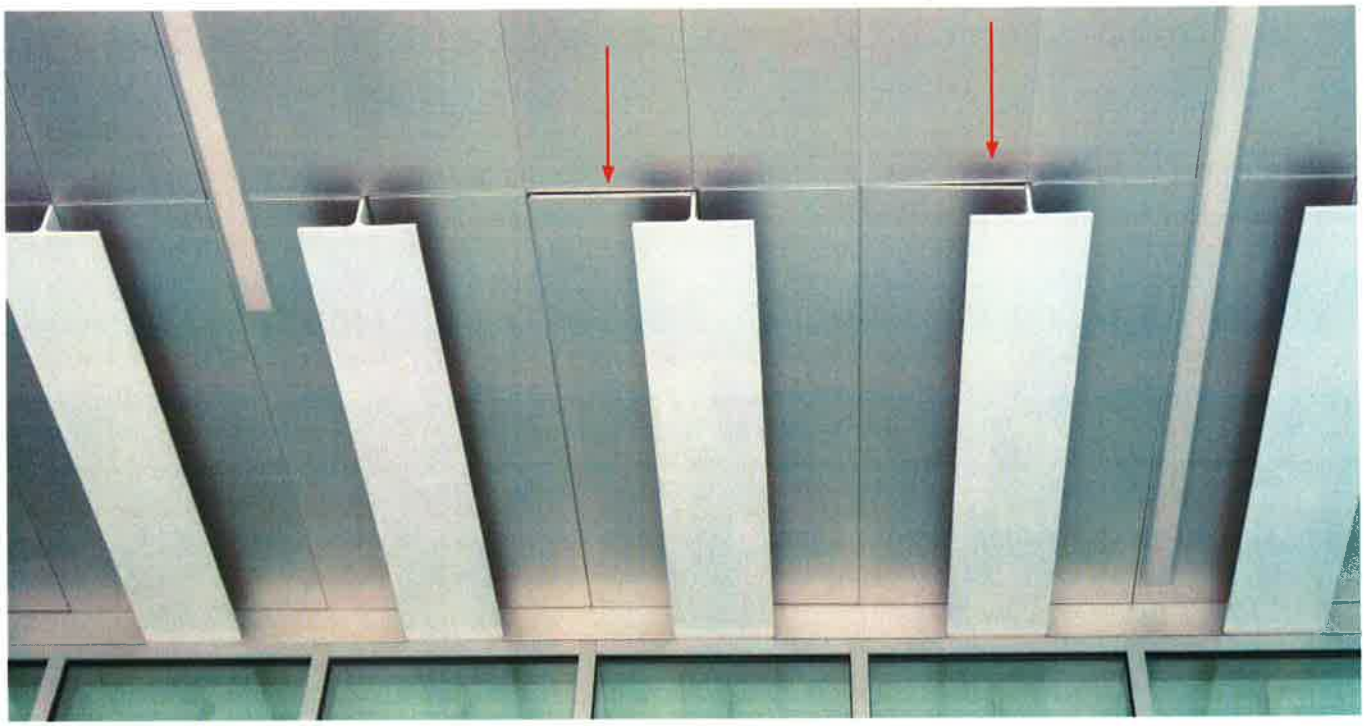
#1.Cracks at Entrance Plaza concrete slab on grade

#1.Exterior plaza cracking

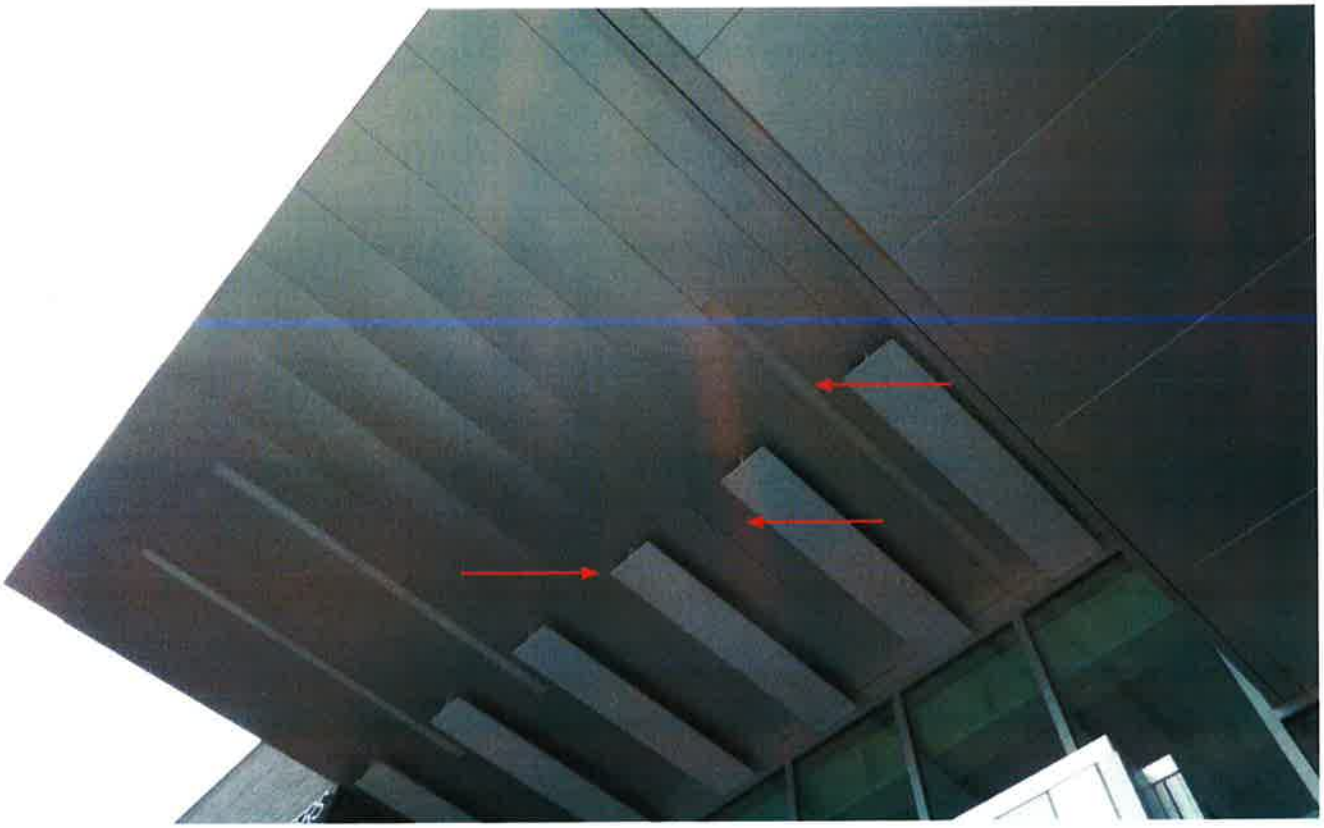
#2. Hairline cracking at CMU Walls: North and West Facades

#2. North and East masonry wall cracking.

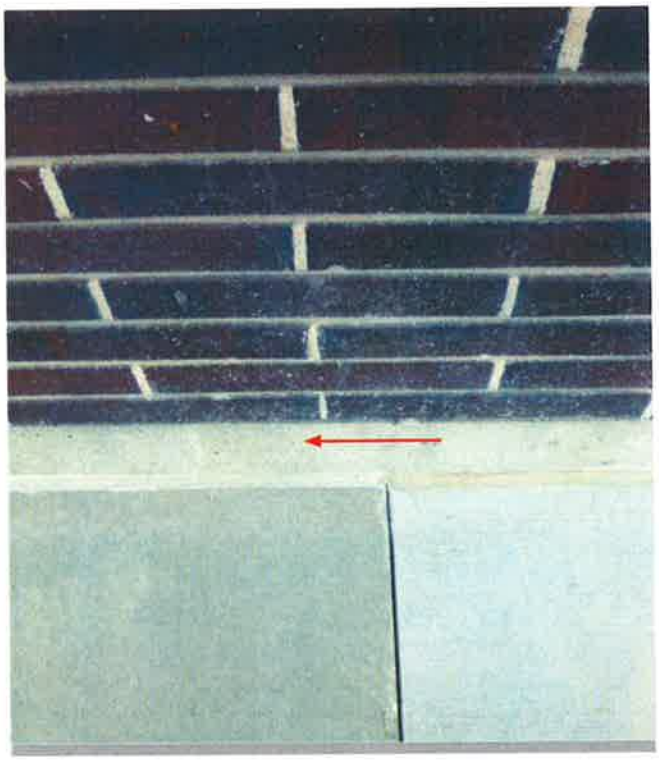
#3. North and East foundation wall cracking.



#4. Panel movement at soffit. Closer observation with lift needed.



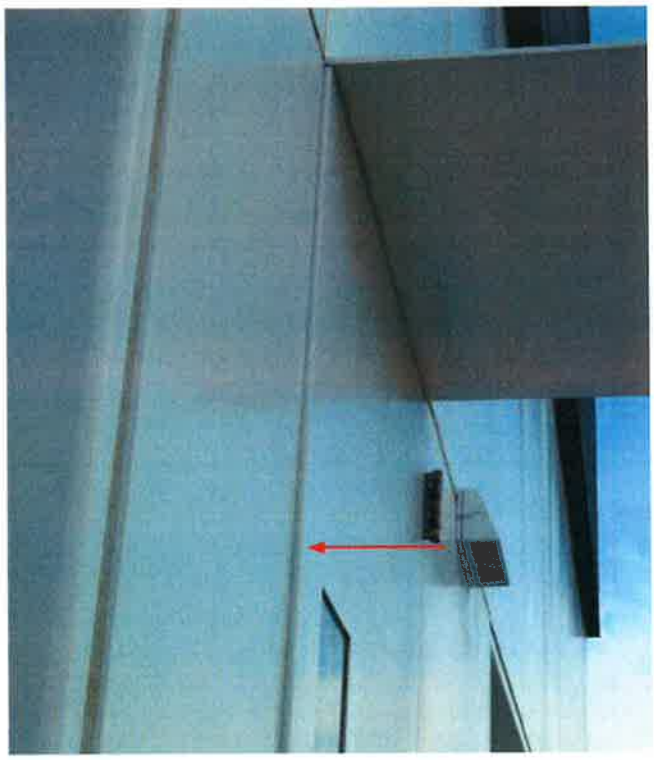
#4. Panel movement at soffit. Closer observation with lift needed.



#5. Brick masonry damage.

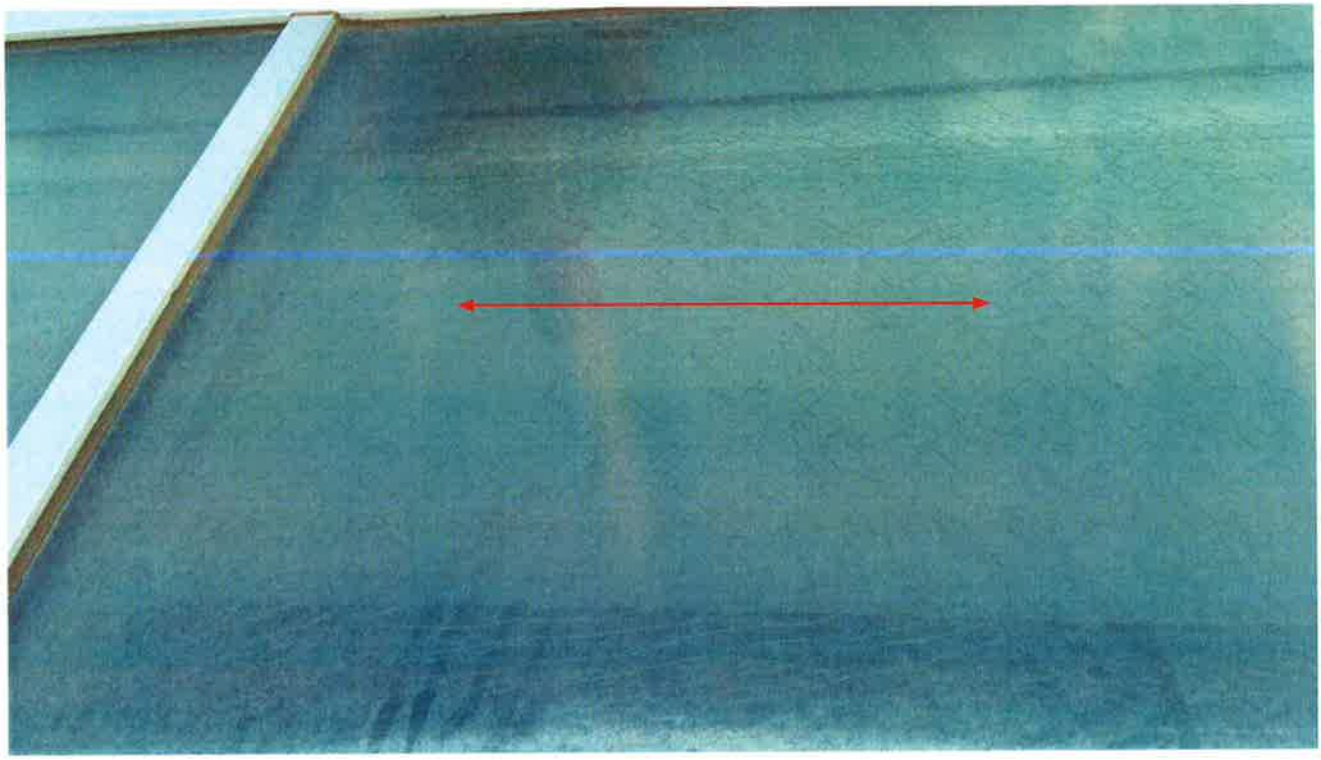
#5. Brick masonry damage.

#6. Hairline crack at foundation wall at South Glazing.

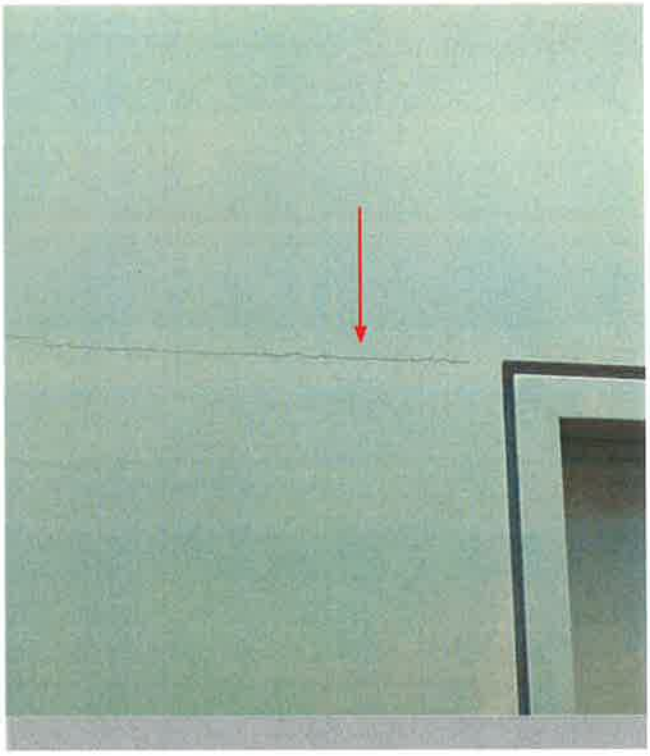


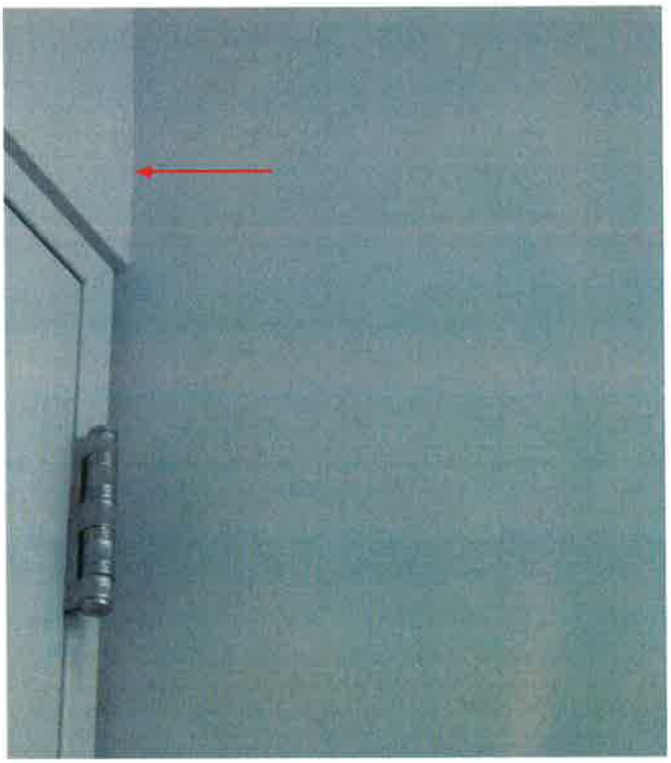
#7. Exterior door is to difficult operate, appears to be out of plane.

#8. Shattered glass at skylight. View from roof and stacks area.

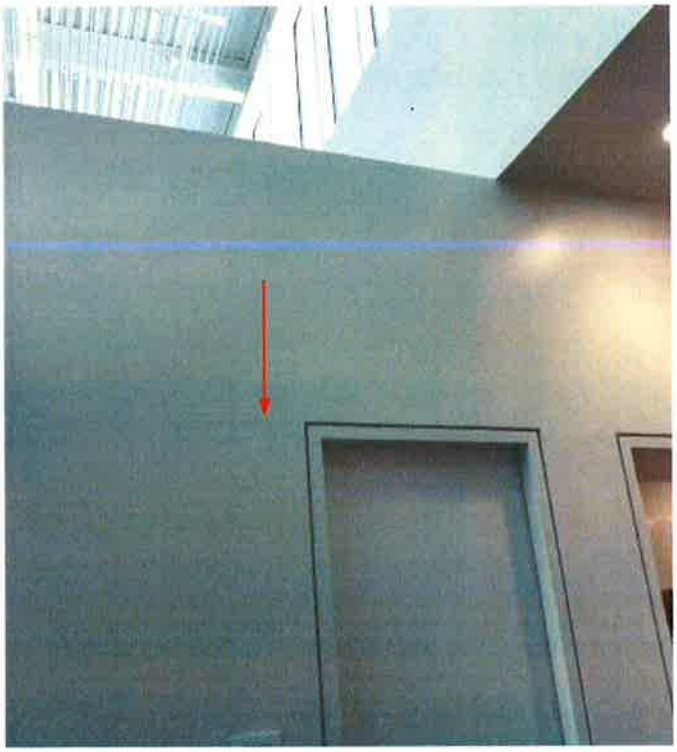


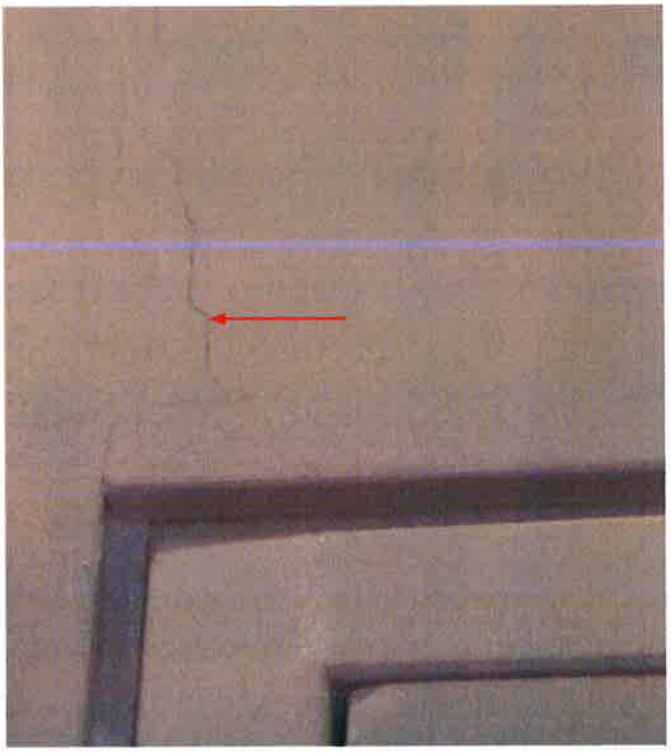
#8. Shattered glass at skylight. View from roof and stacks area.



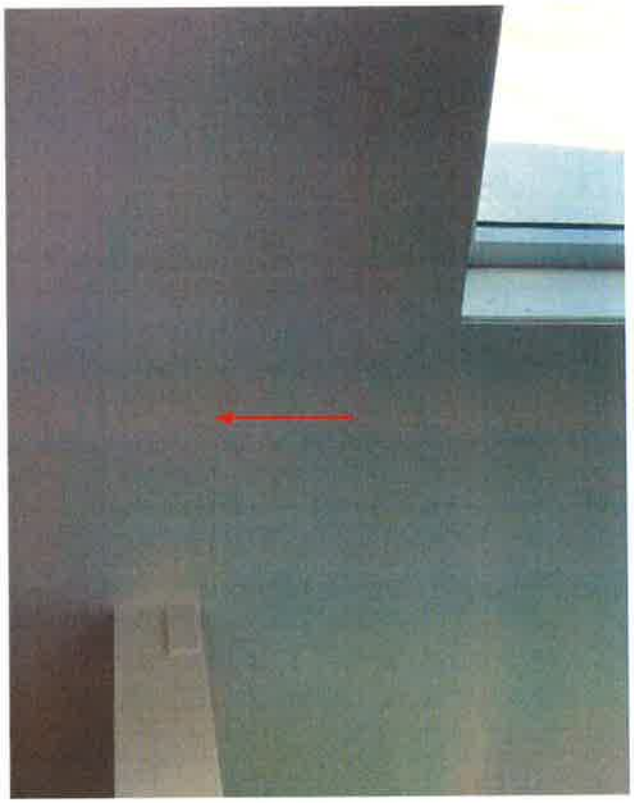


#9. Gypsum wall board cracking.



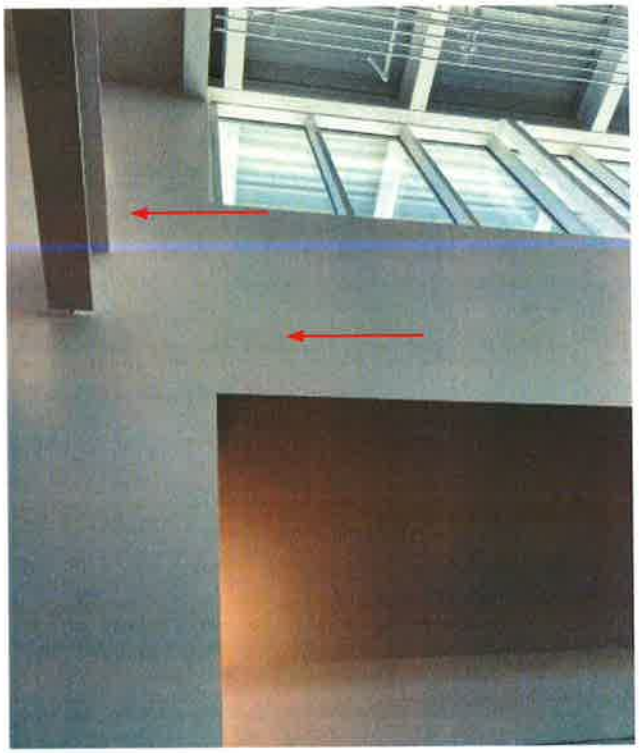


#9. Gypsum wall board cracking.

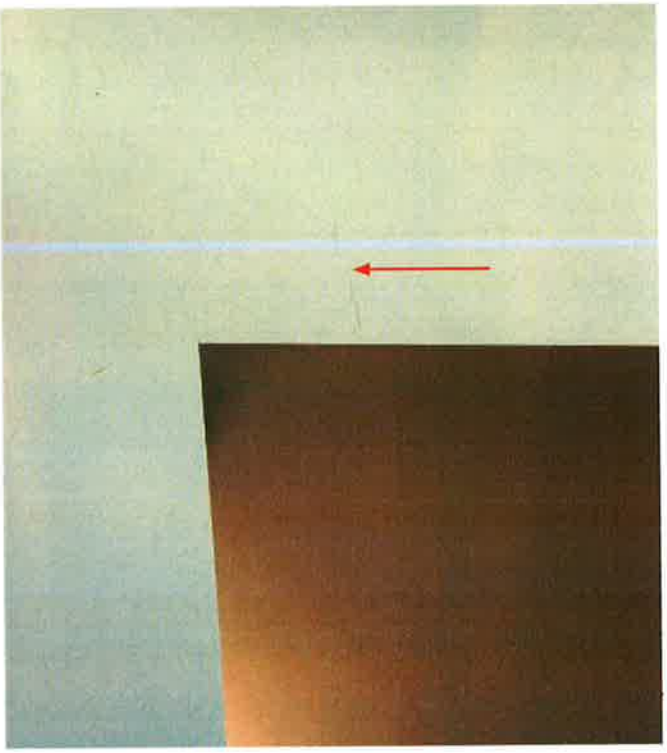


Painted Gypsum Board ceiling crack

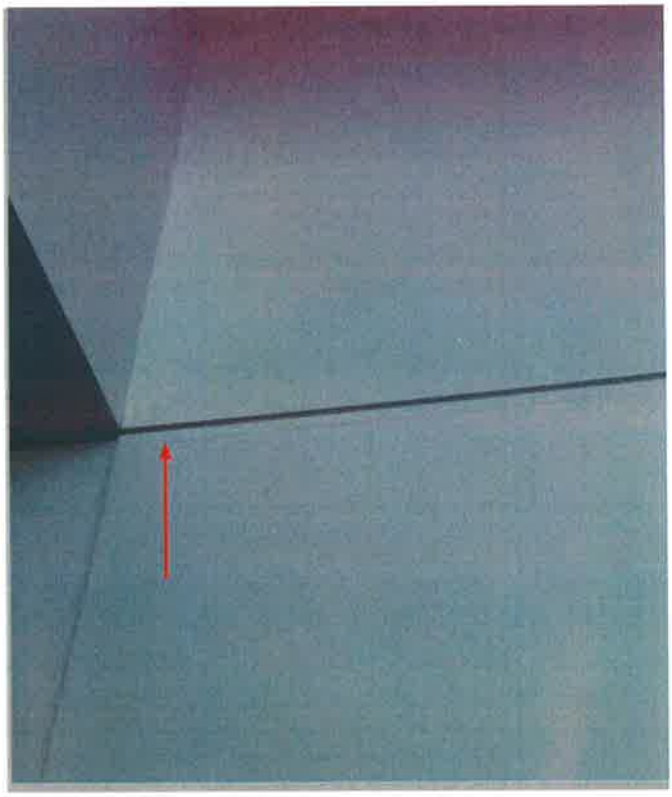
#10. Painted Gypsum Board wall crack



#10 and #11. Painted Gypsum Board wall crack



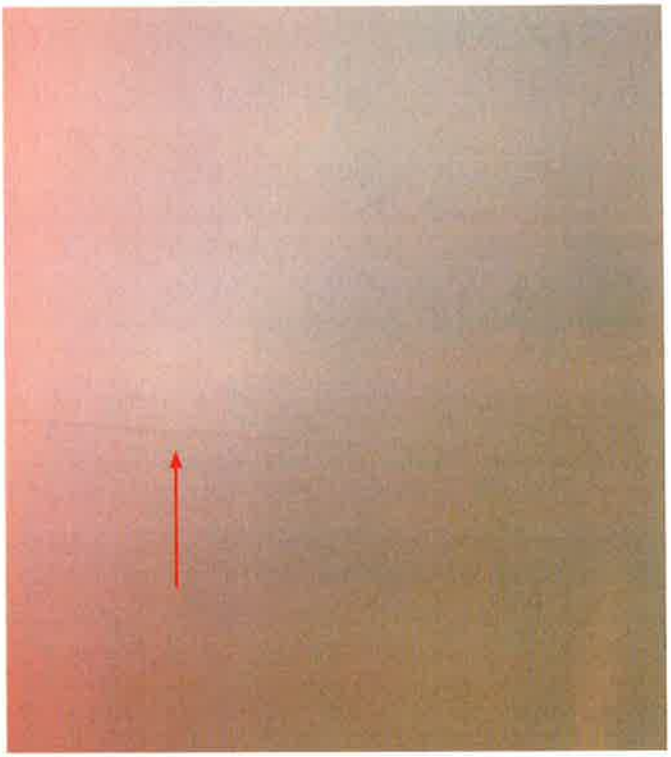
#10. Painted Gypsum Board wall crack



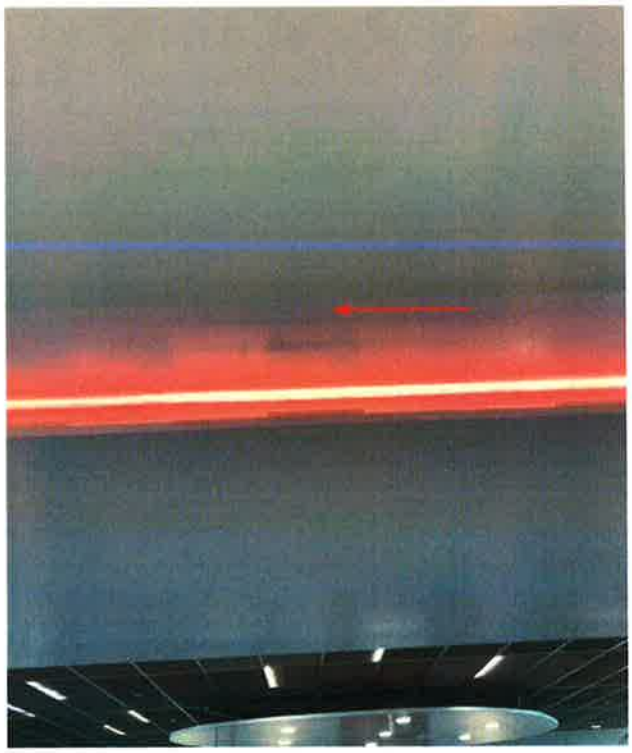
#11. Painted Gypsum Board wall crack

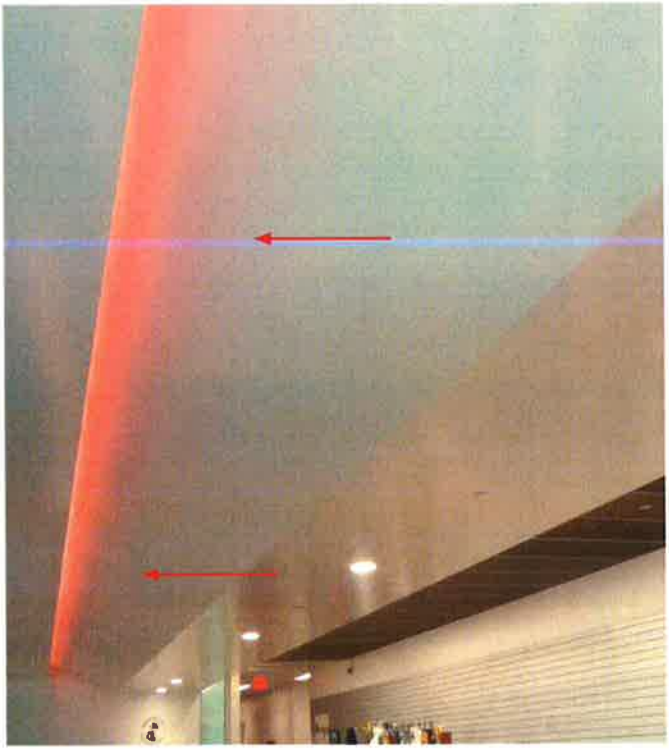
#13. Kitchen ceiling tiles surface cracking and shifting from ceiling grid

#13. Kitchen ceiling tiles surface cracking and shifting from ceiling grid

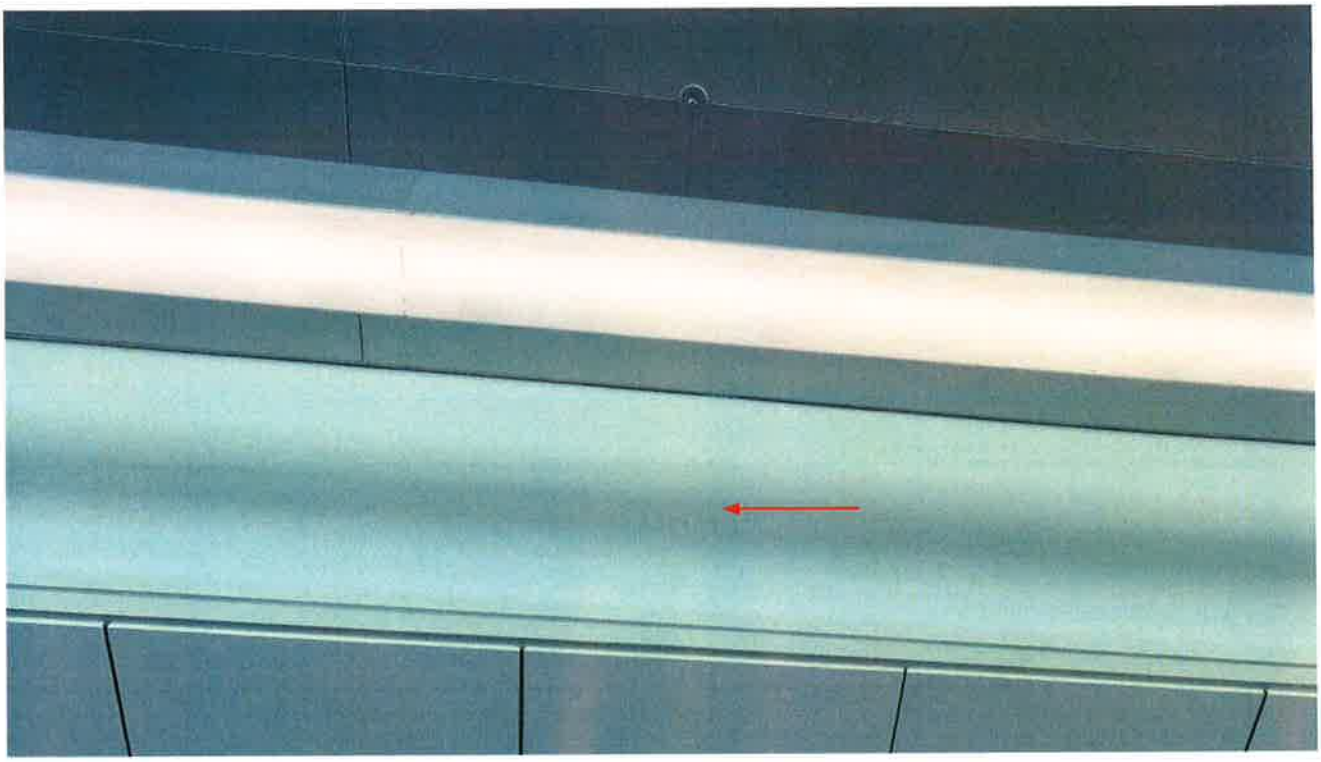


#14. Circulation desk ceiling cracks.

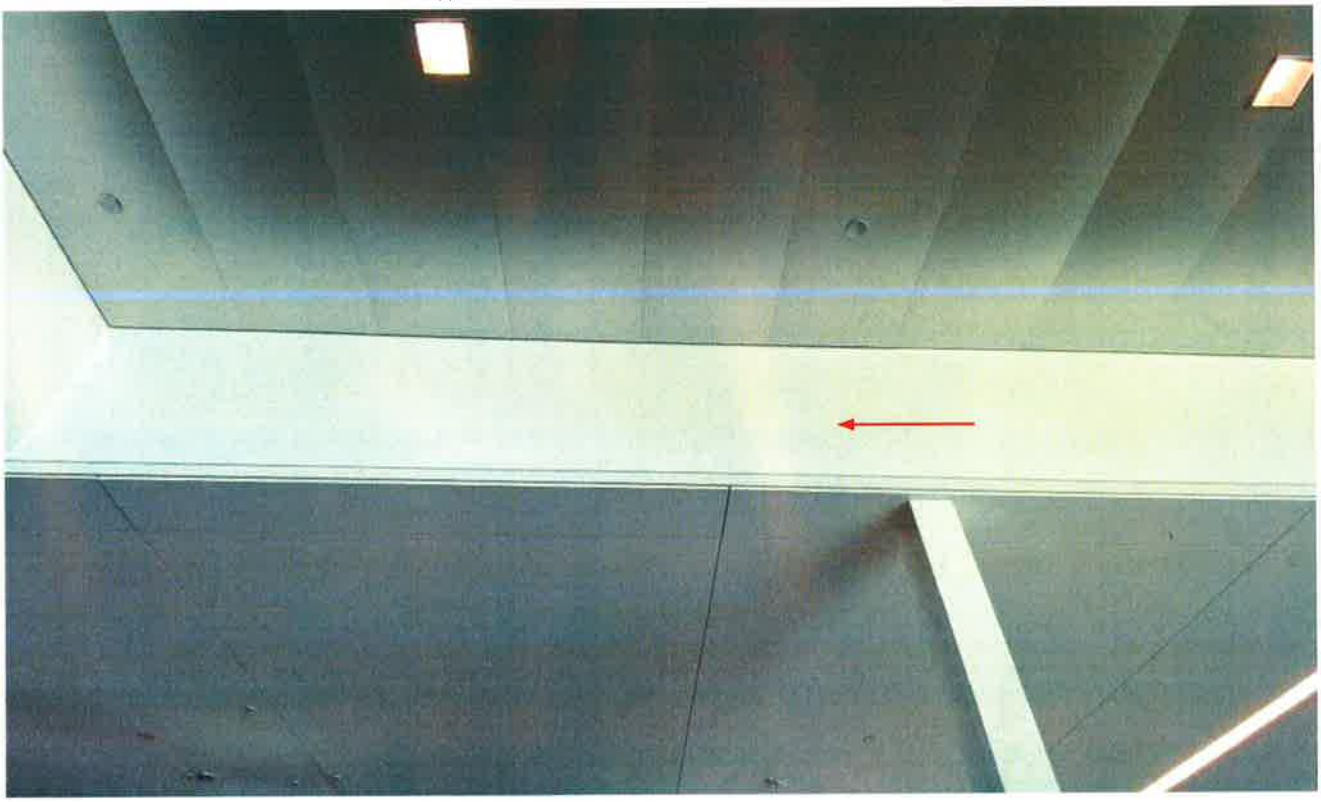




#14. Circulation desk ceiling cracks.



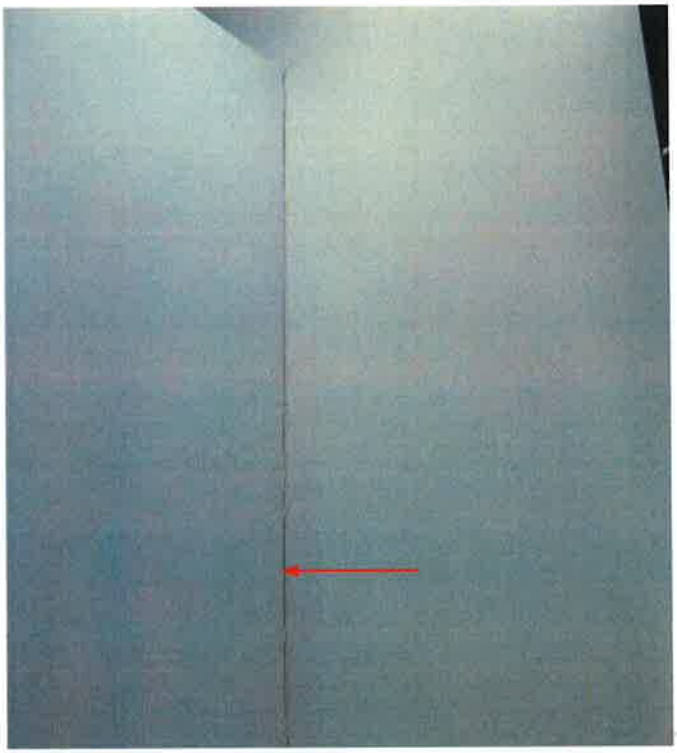
15. Valance walls at Children's Area, Gypsum Board crack



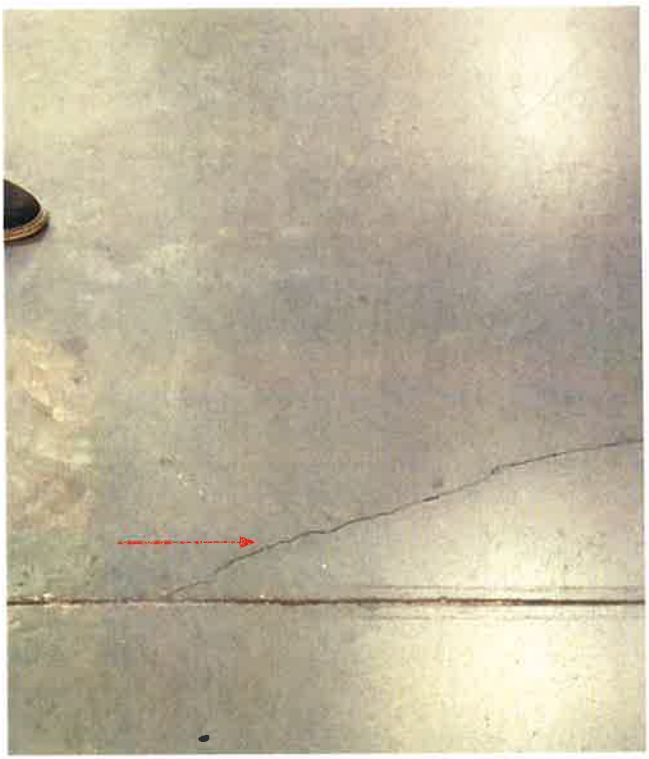
15. Valance walls at Children's Area, Gypsum Board crack


15. Children's Area, Gypsum Board crack

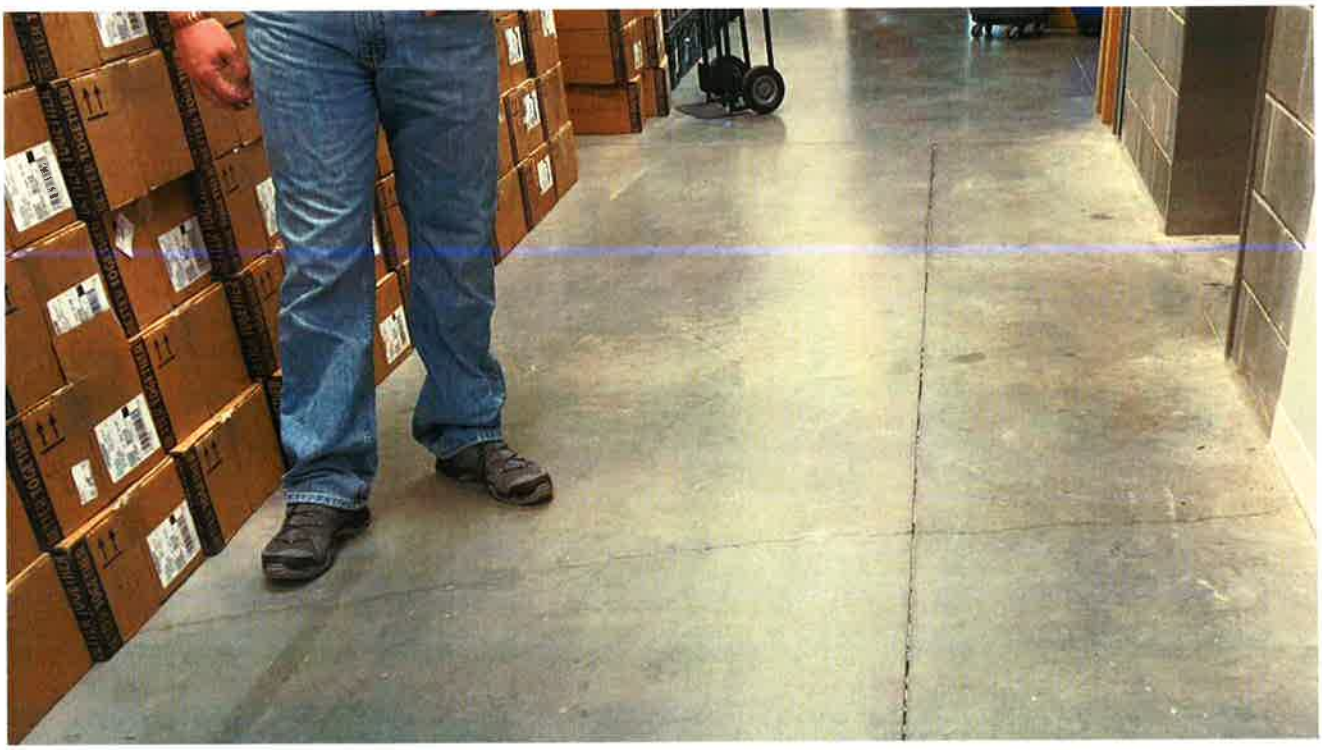
#16. Ceiling above South glazing cracks.



#17. Casework pulled away from wall.



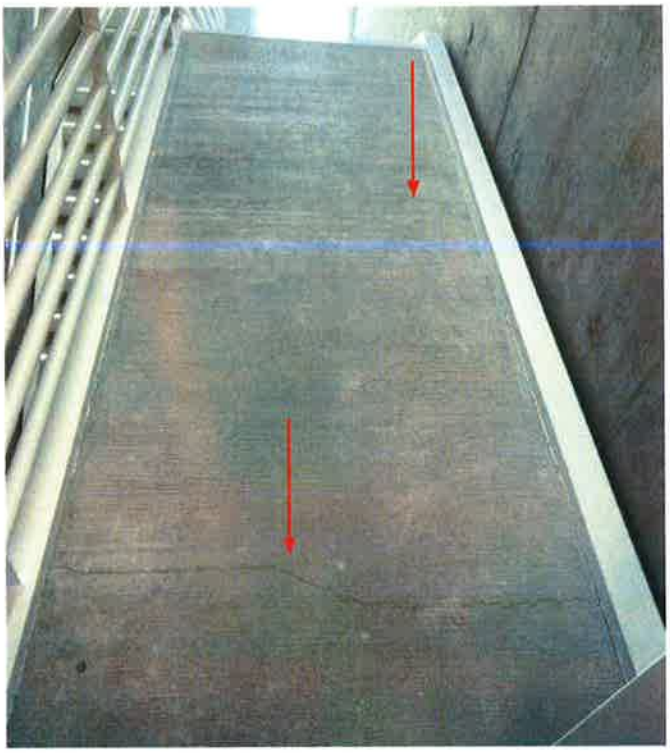
#18. Maintenance Area SR Hall cracks at concrete floor.



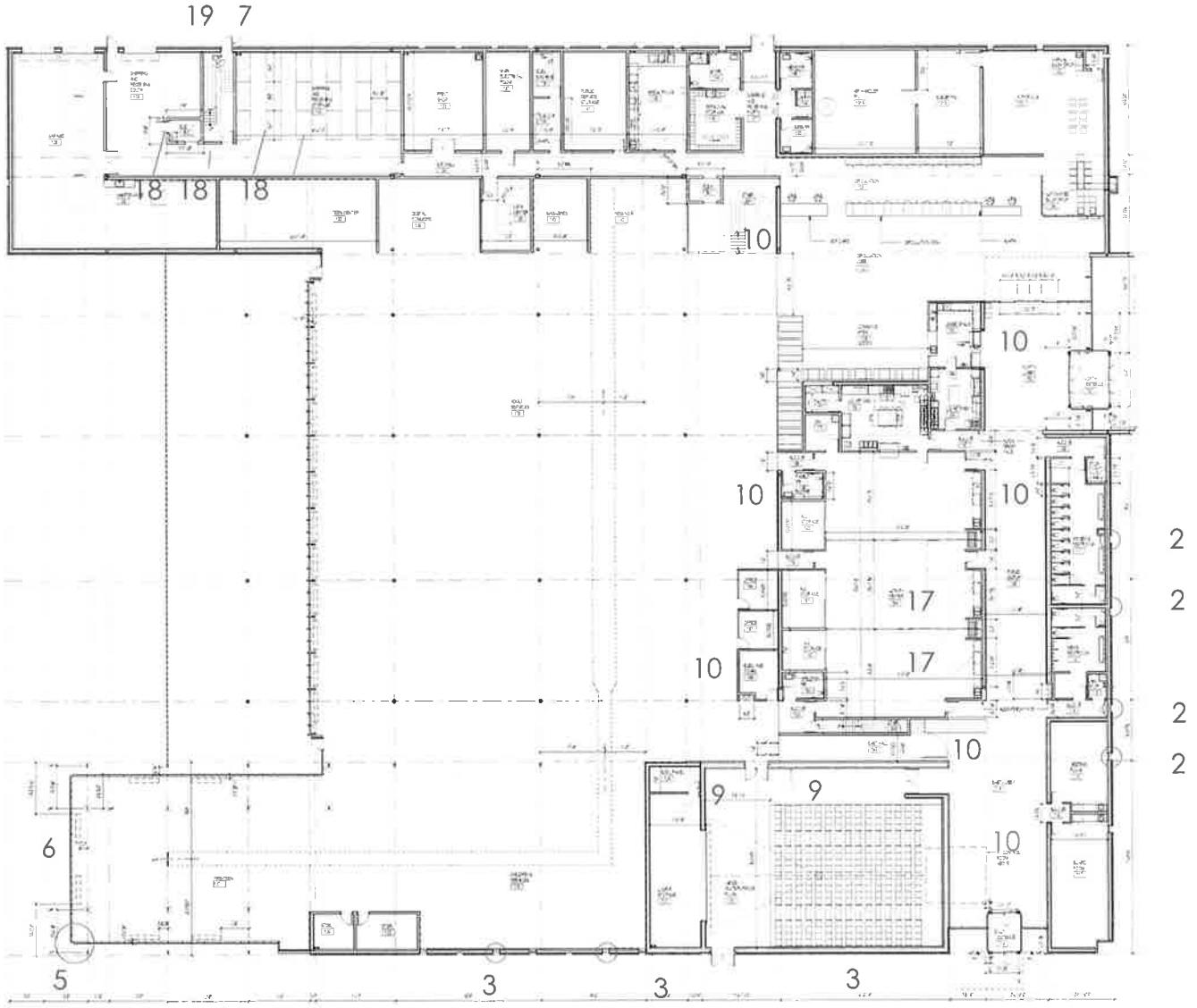
#18. Maintenance Area SR Hall cracks at concrete floor.

#18. Maintenance Area SR Hall cracks at concrete floor.

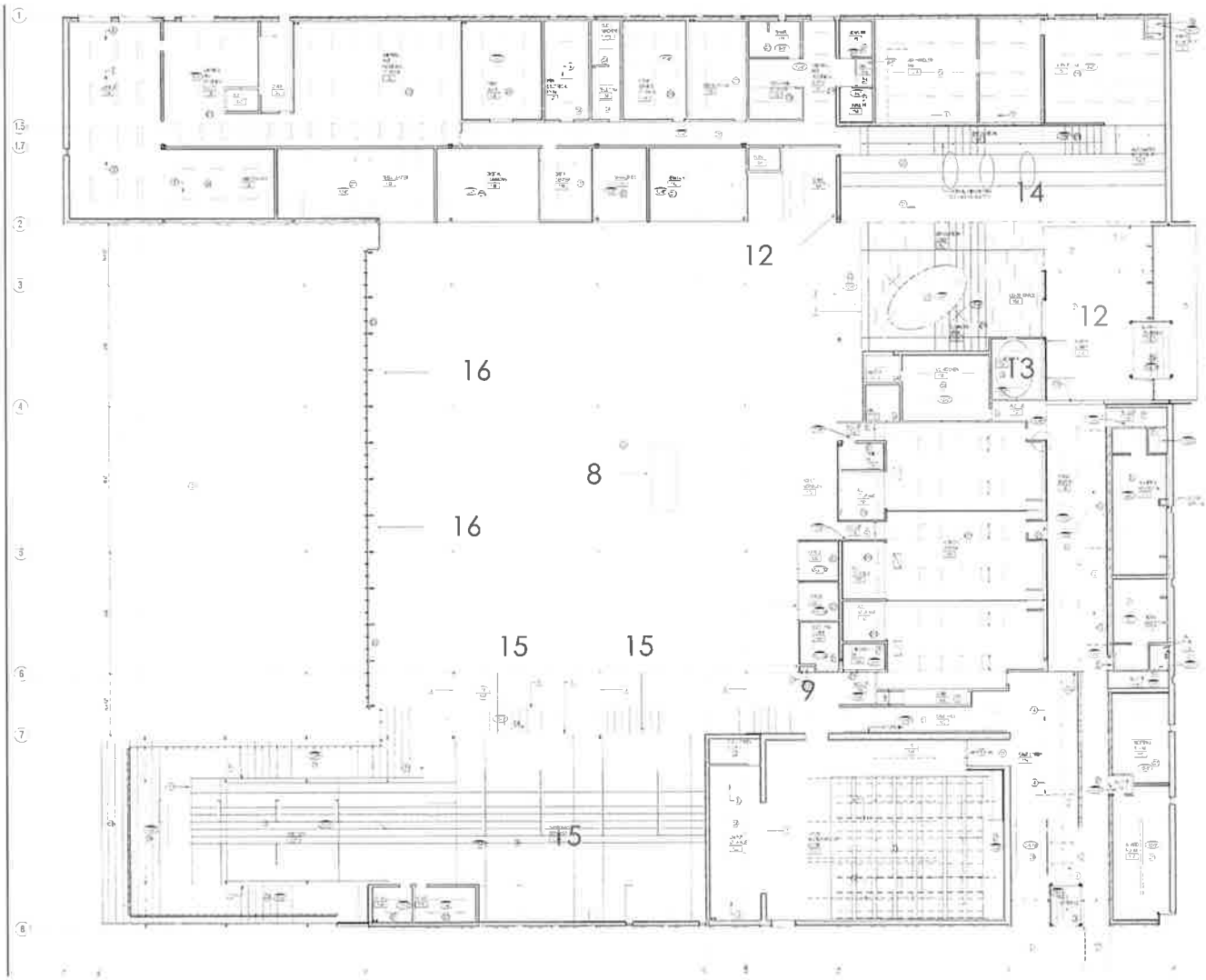
Maintenance Area SR Hall cracks at ceiling tile movement



#19. Upper level landing Stair S-2, floor cracking.




MAIN LEVEL FLOOR PLAN N >




MAIN LEVEL CEILING PLAN N >

A R W ENGINEERS

May 14, 2020

Cecilia Uriburu
Prescott Muir Architects
171 West Pierpont Ave.
Salt Lake City, Utah, 84101
Re: Southwest Headquarters Earthquake Structural Evaluation
ARW Project: 20157.a

Dear Cecilia:

At your request we have completed a limited structural evaluation and observation of the Southwest Headquarters located at 2039 W 4000 S, Roy, Utah. The purpose of the evaluation was to determine in a very cursory way the structural condition of the existing building following the seismic event that occurred in Salt Lake County on March 18, 2020. Since that initial 5.7 magnitude earthquake there have been several significant aftershocks. Neither advanced analysis techniques nor observation of existing structural elements by removing finished materials were performed as part of this limited visual evaluation. This evaluation only refers to structural elements, conditions and concerns. Architectural, Mechanical, Electrical or other important building factors are beyond the scope of this evaluation and report. The observation visit to the existing building was completed on April 30th, 2020. Present during the visit were Mckay Parrish and from ARW Engineers, Cecilia Uriburu from PMA, Alma Broadbent with the insurance company, and Robert and Kevin as owner representatives.

## Evaluation Process

The limited structural evaluation was accomplished by the following: 1) A site observation of the existing conditions visually reviewing any visible structural conditions such as materials, structural element types, general sizes and limited observation of framing connections. The site observation did not include the removal of any finished material or surfaces to view obscured structural elements. 2) Using engineering experience from multiple previous building evaluations, reasoned assumptions regarding the existing building structural condition were made in order to provide "next step" recommendations to the owner. As noted above, the evaluation process was intended to be cursory and preliminary. Detailed investigations, modeling and analysis were not completed after the seismic event. Additional in-depth evaluation alternatives are available if deemed necessary by the building's owners.

## Building Description

The building is approximately 4 years old. The building is a 74,614 square foot structure with a 2-story wing with offices. The gravity system consists of reinforced masonry walls and steel columns. The shear walls are constructed using masonry walls and the diaphragm is a metal b-deck.

## Evaluation Results

During the evaluation the following items were noted:

- Small hairline cracks exist in several of the exposed masonry walls around the building. It is possible that some of these cracks may have propagated during the seismic events.
- Brick veneer in one corner of the building appears to have cracked from movement due to the seismic event.
- Small hairline cracks exist in several of the exposed foundation walls around the building. It is possible that some of these cracks may have propagated during the seismic events.

- Several cracks appear to have occurred in the sheetrock walls. It is possible that some of these cracks may have propagated during the seismic event.
- There are several cracks in the slab on grade that appear to have propagated.
- There is a skylight window that appears to have broken due to the seismic event.
- There are several lay-in ceiling tiles that appear to have been displaced or damaged due to the seismic event.
- Some soffit panels appear to have moved out of place during the seismic event.
- Some wall cabinets appear to have pulled away from walls.

**Conclusions**

Based on the limited evaluation and observation completed for the building, it is our opinion that the status of the structure relative to Life Safety has not changed as a result of the seismic event. We recommend that the exterior cracks in masonry walls and concrete foundation walls, concrete slabs and brick veneer be sealed so that water does not penetrate the cracks and cause additional long-term deterioration. Cracks in brick veneer can be repaired using HeliBar crack repair stitching and with new mortar in the joints. Broken windows should be replaced. Cracks in non-structural concrete slabs on grade can be sawcut and removed (or repaired in place) as necessary. Soffits can be re-attached as required and cracks in sheetrock walls can be repaired and painted as required.

It is our opinion that based on the limited observation that the Southwest Headquarters can continue to be occupied. It is important that any changes in existing conditions be noted that may require additional detailed evaluation.

ARW Engineers would be happy to provide any additional assistance desired.

Sincerely,

McKay M. Parrish, SE

20157.a_evalrpt_20200515

Photo1 – Example of cracks propagating in masonry wall

Photo 2 – Example of cracks propagating in masonry veneer

Photo #3 – Example of cracks propagating in foundation wall

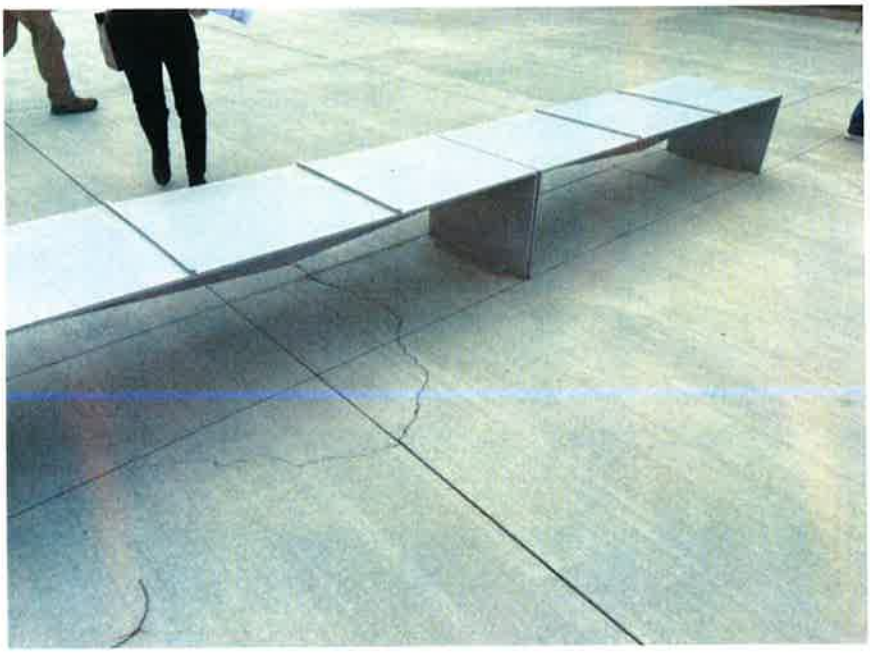


Photo #4 – Example of potential crack propagation in exterior slabs

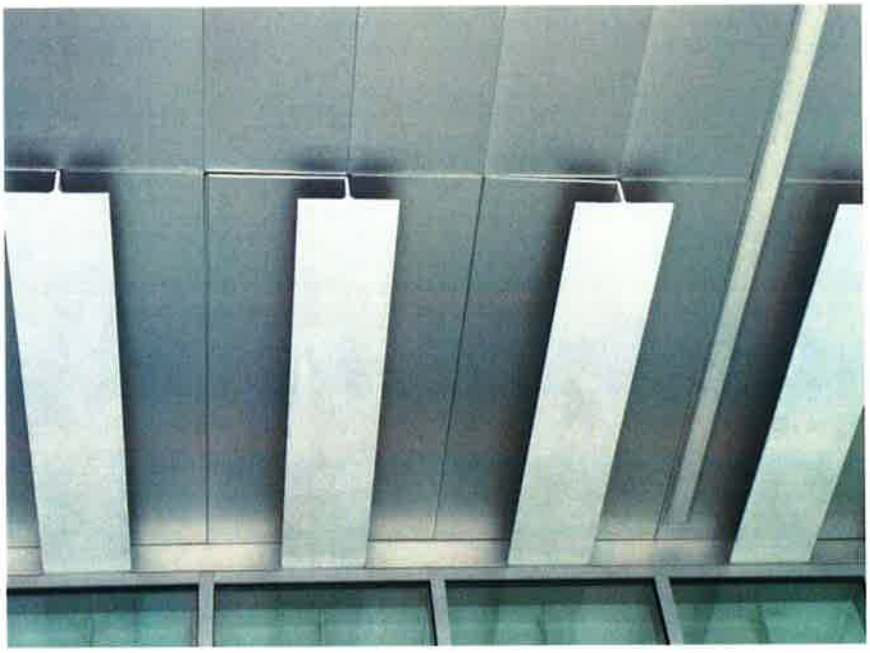


Photo #5 – Exterior soffits appear to have shifted

Photo #6 – Example of lay-in ceiling tile damage

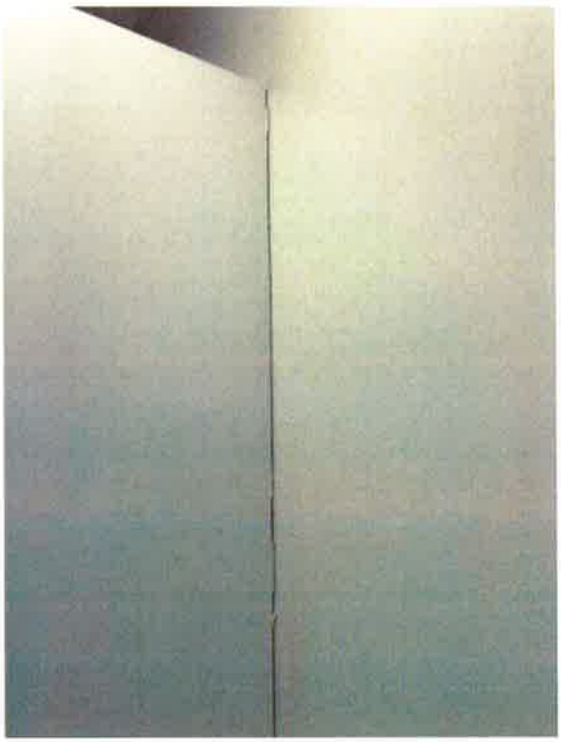


Photo #7 – Example of cabinet pulling away from wall


Photo #8 – Example of a crack in the sheetrock wall

Photo #8 – Broken window in skylight

**07.30.20 WCL Earthquake Remediation**

**Scope of architect's services:**

ITEM 1: Kick-off meeting with Owner to reconfirm scope of remediation work; **(Principal: 4 hours; Staff: 4 hours)**

ITEM 2: Preparation of construction documents: **(Principal: 40 hours; Staff: 120 hours)**

A. Prepare scope of work outline;
B. Notate existing drawings;
C. References to existing specifications;
D. Prepare supplemental details as necessary;
E. Prepare supplemental specifications as necessary;

ITEM 3: Selection of general contractor/bid administration: **(Principal: 4 hours; Staff: 12 hours)**

A. Pre-bid walk;

i. (1) walk of each building;
ii. Stack pre-bid walks for efficiency;

B. Anticipate open bid selection process;
C. Respond to questions during bid period;
D. Open bid review and score of proposals;
E. Negotiate contract with successful bidder/general contractor;

ITEM 4: Oversee preparation of insurance claim; **(Principal: 4 hours; Staff: 8 hours)**

A. Assume separate claim for each building;

ITEM 5: Construction administration:

A. Kick-off meeting with Owner and general contractor; **(Principal: 4 hours)**
B. Site visits; **(Staff: 25 hours – (5 visits at 5 hours each))**
C. Submittal review; **(Principal: 4 hours; Staff: 8 hours)**
D. Final inspection and punch list: **(Principal: 8 hours; Staff: 40 hours)**

i. (1) inspection and punch list for each building;
ii. Each inspection to occur separately;

E. Project closeout: **(Principal 4 hours; Staff: 4 hours)**

# Architectural Consulting
# Proposed Fee Schedule

Hourly Fees:

| | |
|---|---|
| Principal | $188.00 |
| Architects | $91.00-$175.00 |
| Drafting | $75.00-$120.00 |
| Graphic Artist/Administration | $70.00-$95.00 |

Proposed periodic adjustment for cost of living and incentive increases (detail):
Yearly staff review - 2% min.

Additional Service Fees:

| | |
|---|---|
| Copies | $0.15 each copy |
| Color Copies small (copier size) | $2.10 |
| Color Copies large (plotter size) | $4.25 |
| Prints small = 16" x 21" | $0.21 |
| Prints medium = 24" x 36" | $0.50 |
| Prints large = 30" x 42" | $0.75 |
| Plots < 16" x 22" | $4.00 |
| Plots > 17" x 23" | $8.00 |
| Color Plots < 16" x 222" | $13.00 |
| Color Plots > 17" x 23" | $26.00 |
| Presentation Boards (30" x 42") | $60.00 |
| Mileage | $0.00 |
| Site Visits | $Hourly based upon specific staff required |
| FedEx/Postage | $Cost + 10% |
| Expenses, cost plus | $Cost + 10% |
| Site Visits | $Hourly based upon specific staff required |
| Miscellaneous, undefined costs | $Cost + 10% |

Time not to exceed billable hours to complete specifications for earthquake mitigation project:

Architect:

| | |
|---|---|
| Principal | 72 hrs = $12,960 |
| Architects | 221 hrs = $17,680 |
| Drafting | Included above |
| Graphic Artist/Administration | Included above |
| Total fee for the listed scope of architectural services: | $30,640.00 |

Earthquake mitigation specifications to be completed within 44 days after award of contract.

NOTE: Please see SO-Exhibit B for detailed breakdown of services and personnel hours.

Note: Library Professional Property Manager will be available to coordinate day-to-day activities, as requested by architect.