APPROVED

MINUTES OF JULY 10, 2018 SPECIAL PROJECTS AND FACILITIES COMMITTEE MEETING GLENCOE PARK DISTRICT 999 GREEN BAY ROAD, GLENCOE, ILLINOIS 60022

The meeting was called to order at 7:00pm and roll was called.

<u>Committee Members present</u>: <u>Staff present</u>:

Dudley Onderdonk, Chair/Treasurer Lisa Brooks, President

Stefanie Boron, Vice President Steve Gaines, Commissioner Josh Lutton, Commissioner Lisa Sheppard, Executive Director/Secretary Chris Leiner, Director of Parks/Maintenance Bobby Collins, Director of Recreation/Facilities

<u>Members of the Public in attendance who signed in or spoke</u>: Caleb Barth, John McManus, Edward Torrez

Matters from the Public: There were no matters from the public.

<u>Discussion on Lakefront Park / Glencoe Beach Bluff Study</u>: Executive Director Sheppard introduced John McManus of Altamanu stated that preliminary findings will be shared tonight, not the final report. John McManus relayed Board directives, water effects on the bluff, the bluff's condition. Mr. McManus introduced Baird's Marine Engineer Caleb Barth who addressed surface water management and erosion, bluff slope stability, conclusion, and recommendations. Mr. Barth answered commissioner questions. Edward Torrez of Bauer Latoza Studio gave observations of the Halfway House and the Beach House. Mr. Torrez answered commissioner questions. All presentations are attached to these minutes.

The final report will be presented to the Board in a few months.

<u>Discussion on Parks with Standing Water</u>: Executive Director Sheppard explained that extreme rainfall has led to standing water in our parks and has been very challenging. Discussion ensued.

<u>Update on Park Projects</u>: Executive Director Sheppard then updated the committee on ongoing capital projects. The playgrounds are coming along really well. Grand openings are to be announced.

Director of Finance/HR Carol Mensinger and Administrative Assistant Jenny Runkel entered the meeting.

<u>Recognition of Retiring Commissioner – Steve Gaines</u>: Commissioners and staff commented on Commissioner Gaines' time as a Park Board Member and thanked him for his service. Chair Onderdonk read and Executive Director presented retiring

commissioner Steve Gaines with a plaque. Commissioner Gaines was offered an honorary plaque to be placed at a park of his choice.

<u>Comments from Retiring Commissioner – Steve Gaines</u>: Commissioner Gaines commented on his role at the District, personal experiences, praised staff members and commissioners, and thanked the community.

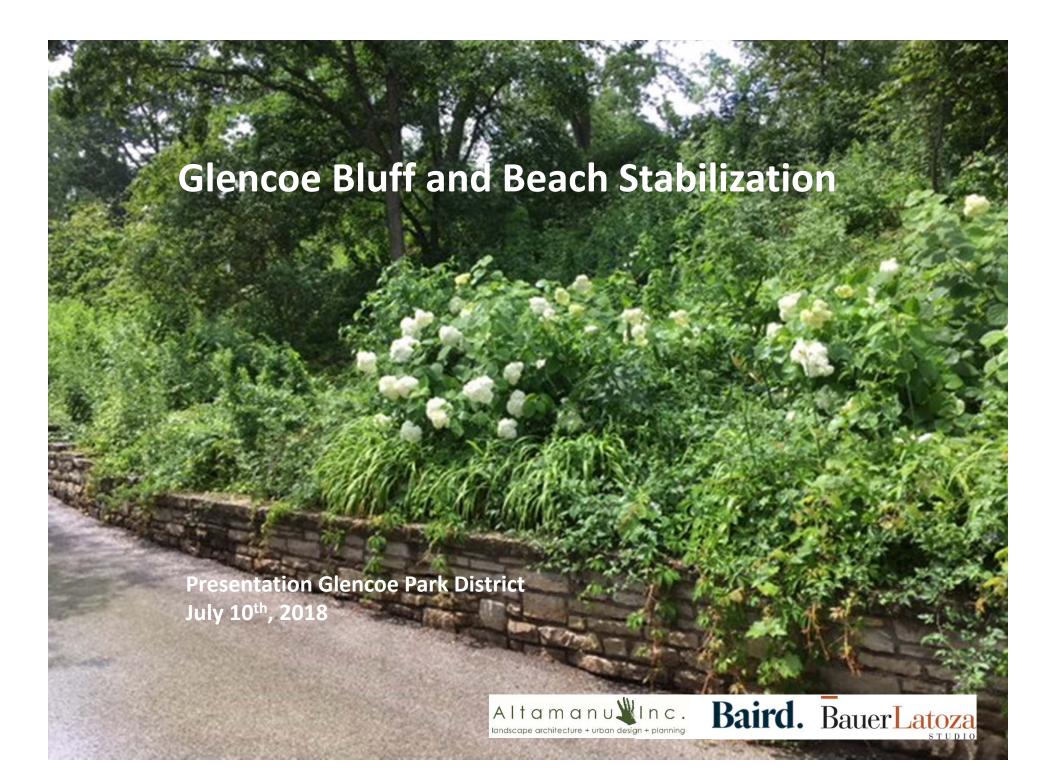
Matters from the Public: There were no matters from the public.

Other Business: The committee discussed ongoing projects.

<u>Adjourn</u>: Commissioner Lutton moved to adjourn the meeting at 9:13pm. Commissioner Boron seconded the motion, which passed by unanimous voice vote.

| Respectfully submitted, | |
|-------------------------|--|
| | |
| | |
| Lisa M. Sheppard | |

Secretary



Tonight:

Brief reminder why study had to be done and the Process

Preliminary Findings Caleb Barth, P.E. Marine Engineer, Baird

Edward Torrez, AIA, LEED, AP BD+C Principal, Bauer Latoza Studio









Carried out Master Plan of Lakefront Park

Blue Print for the Future
Make Park Accessible,
More Inviting entryways,
Accessible for all Glencoe Residents,
Diverse Activities

 play pods, nature based play overlooks, mini-decks, picnic tables, etc.







Lakefront Park Master Plan: Barriers in the Park



"Uninviting entryways"

"forced to navigate an obstacle course just to get through"







Lakefront Park Master Plan : A Series of Entryways



Open up to the Community and Create a Series of Spaces







Lakefront Park Master Plan: North West Entryway Scheme 1



But How to Deal with Storm Water January 2017





Water Flows Across Paths in Park and Along Hazel Ave

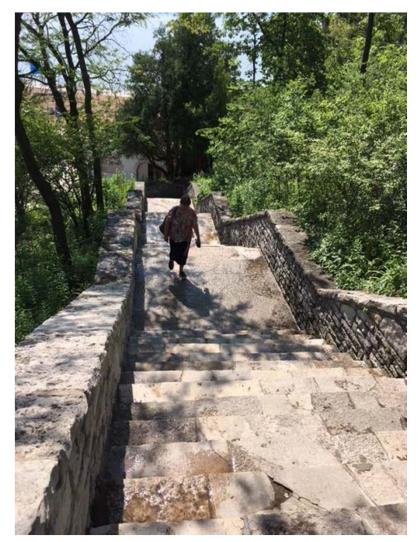








Lakefront Park: Storm Water & Drainage





Stairs and Half Way House Inundated after rainfall

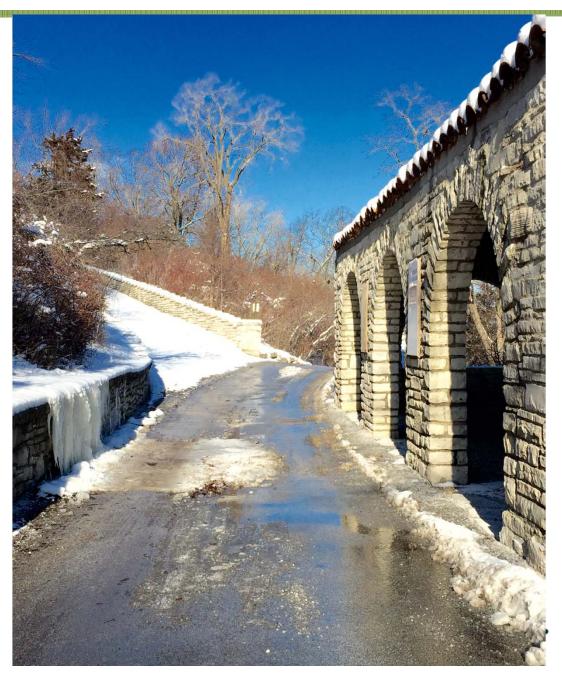








All Seasons: Storm Water & Drainage



Potential Movement of Bluff? July 7th 2017













Structural Failure July 7th 2017



Cribbing Failure – Bluff is pressing down on Beach House

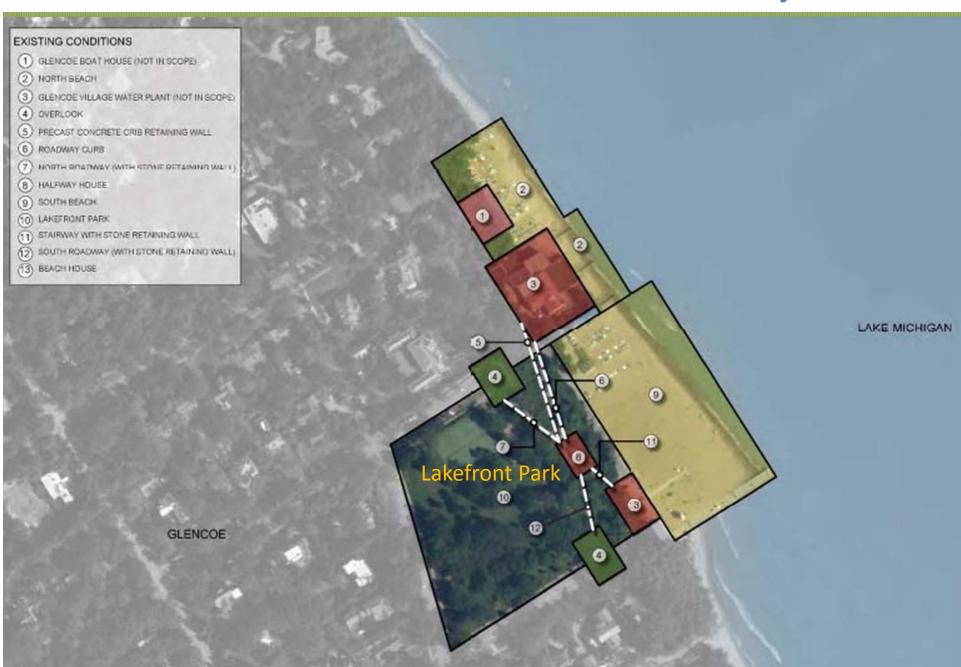








Project Limits



Not In Scope



Project Team

Direction from Chris Leiner "Find the best, Glencoe deserves the best"











Altamanu and **Baird** working together on the future design of N. Lake Shore Drive and seven and half miles of Chicago's northern lakeshore



Oak Street Beach Looking North - EXISTING VIEW



Oak Street Beach Looking North - POTENTIAL VIEW - Option 1

"a global coastal engineering company that boasts offices in Canada, Chile, the United Arab Emirates, Barbados, and Australia......Baird has now been in business for 25 years, but their work spans – and in a small but significant way, remakes – the globe".

In Business Magazine



Baird Team

Lars Barber, P.L.A.

Principal in charge and will be reviewing deliverables.

Caleb Barth, P.E. Marine Engineer Project Manager, data acquisition and structural reviews.

Richard Christensen, P.E., Ph.D., Technical lead for bluff stability

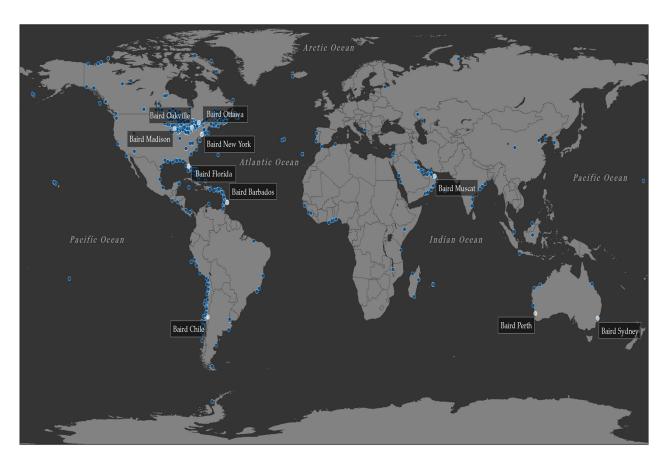
Mohammad Dibajnia, P.E., Ph.D.,

Technical lead for coastal processes (nearshore hydrodynamics, sediment transport, erosion control and beach protection.)

Baird Overview

- Team of engineers, planners, scientists, and geomorphologists
- Thousands of marine projects and studies worldwide

 Specialists 100% dedicated to water related projects Approximately 74 employees



Beach and Bluff Erosion Projects



Port Vincent Development Port Washington, WI, Lake Michigan



Whitesand First Nation Shoreline Stabilization Lake Nipigon, Ontario, Canada



Rosewood Beach, Highland Park, IL, Lake Michigan



Forest Park Beach, Lake Forest, IL, Lake Michigan Illinois Interim Shoreline Study, Northern Illinois, Lake Michigan

Process To Date

Preliminary Technical Analysis

Bluff Global Stability

Soil borings and visual assessment Cross sections analyzed to estimate the existing factor of safety of the bluff.

Bluff/Structure Local Stability

Park District prefers a structural solution

Storm Water Management

Review the existing conditions of storm water system

Top of Bluff - Surface water in park

Down Bluff - Collecting and/or redirecting surface water

Outfall - Review the existing outfalls and proposal of new or updated outfalls if required

Coastal Review

Cursory coastal review of beach.

Use data library of similar projects in the region.







Work to be Carried-Out

Alternative Analysis

2 alternatives will be developed and costed.

Conceptual drawings, consisting of plans and sections.

Summary of benefits and challenges and

Recommendations for priority of implementation.

Preliminary Opinion of Construction Costs

A Preliminary Opinion of Construction Costs for each conceptual design alternative

Deliverable and Presentation to Staff

The results of the alternative analysis, conceptual drawings and opinion of probable costs will be submitted in a draft report.

The Team will present to PD staff and respond to the comments & incorporate revisions Delivery of Final Report







Project Team

Bauer Latoza Studio









Project Team

Architecture - Planning - Historic Preservation

Sustainable Design

Local, national, and international

more than 30 design awards

Federal, State, and Local Government

MBE and DBE



Bauer Latoza Studio

BauerLatoza

- Founded in 1990
- Award-winning Preservation firm
- Architecture, Interiors, Planning, Restoration & Adaptive Reuse
- Masonry Repairs Experience
- Technically Skilled
- Strong Project Management
- Coordination with Stakeholders





Columbus Monument, Chicago, IL Museum of Science & Industry, Chicago, IL



Grant Monument, Chicago, IL



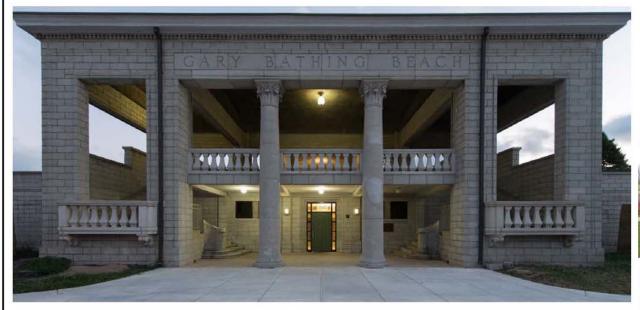
Humboldt Park Boathouse, Chicago, IL





Bathing Beach House





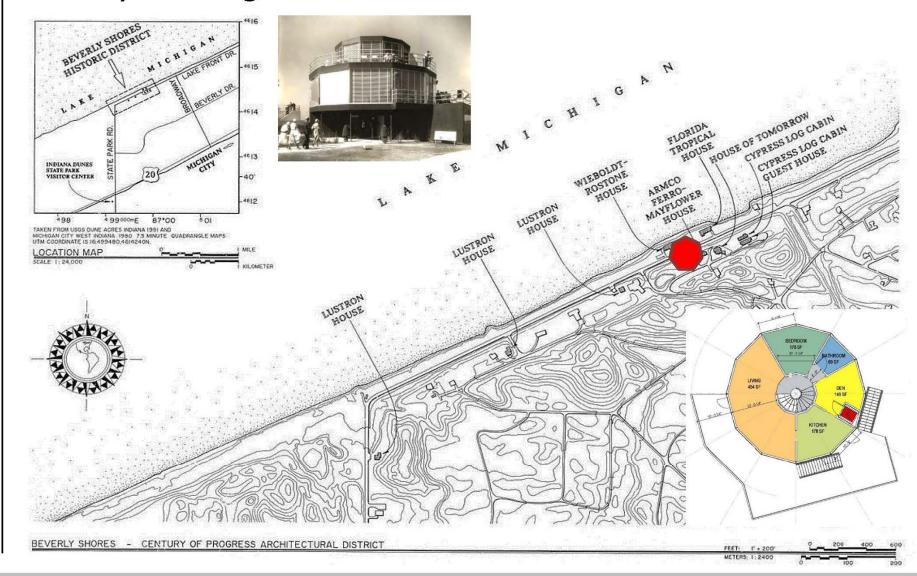








Century of Progress District







Bauer Latoza Studio





Edward Torrez, AIA, LEED AP BD+C

- 27 years experience in Architectural Historic Preservation. Serves as an Advisor to the National Trust of Historic Preservation and member of the Illinois Historic Sites Advisory Council.



Andrea Terry, RA, LEED AP

- related skills range from technical expertise with exterior envelopes, to research, interior renovation and preservation planning.



Kirk Sippel, AIA, LEED AP

- is responsible for the design and daily administration of BLS and has served as project architect on a number of award-winning projects

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Project Team

Baird









Project Team

Bauer Latoza Studio



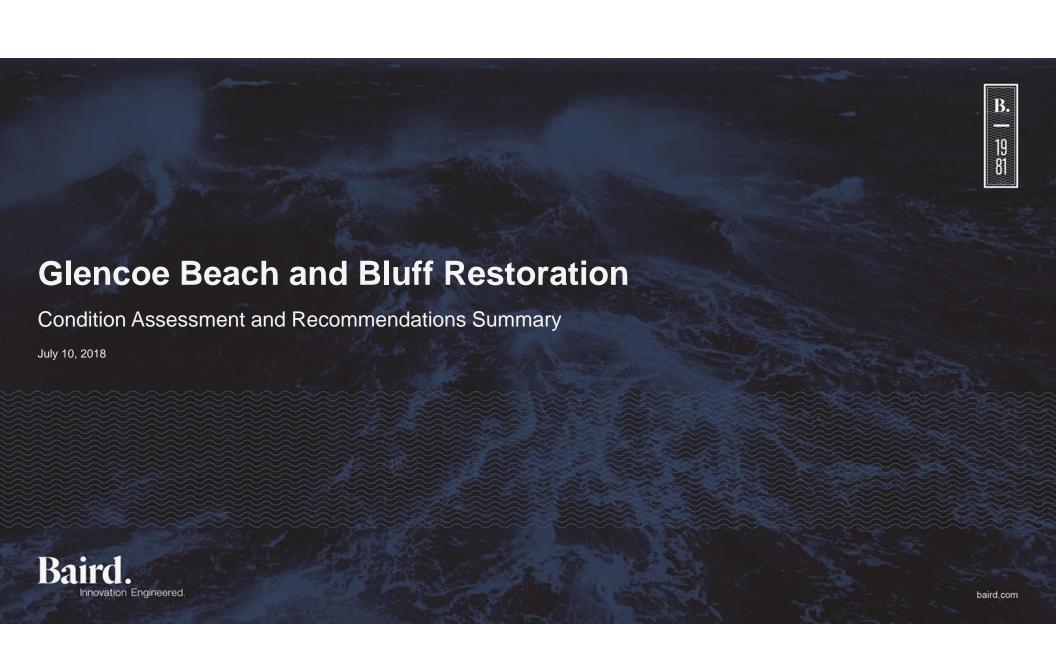








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Presentation Outline

- Surface-water Management
- Bluff Toe Stability / Coastal Review
- Bluff Slope Stability
- Bluff/Structure Local Stability North Overlook
- Bluff/Structure Local Stability Precast Concrete Crib Wall
- Bluff Stability Conclusions
- Recommendations





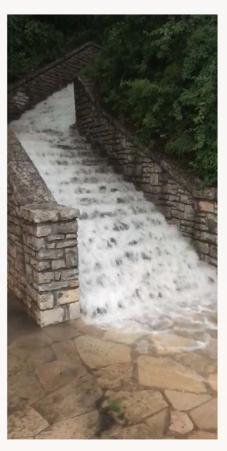
Causes and Effects of Coastal Erosion (cite: UW Sea Grant Institute)

Surface-water Management – Lakefront Park / South Bluff







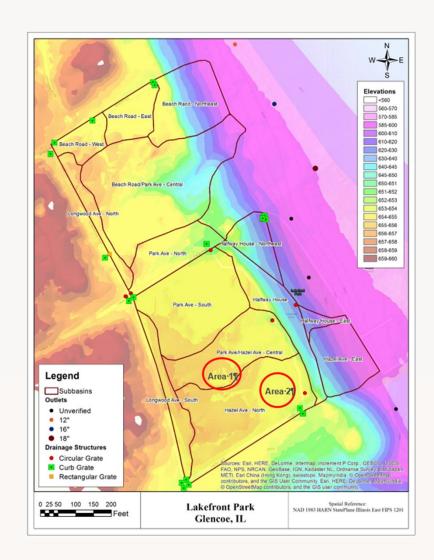




July 10, 2018

Surface-water Management

- Lakefront Park/South Bluff
 - Capacity of outfalls appears adequate.
 - Grading/routing/collection needs improvements to limit erosion.
- Center Bluff
 - Surface-water collected in armored ravine.
 - Capacity of outfall is adequate.
 - Recommend modifying gate/fence to limit erosion.

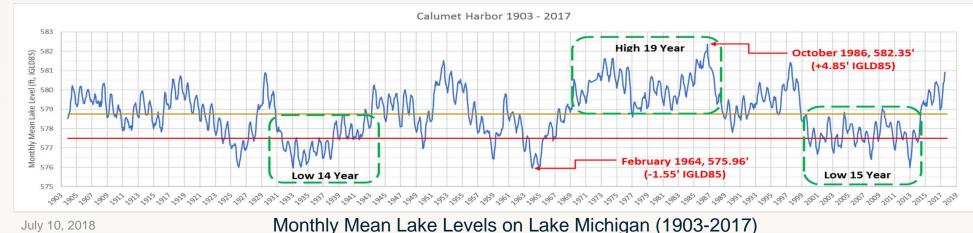




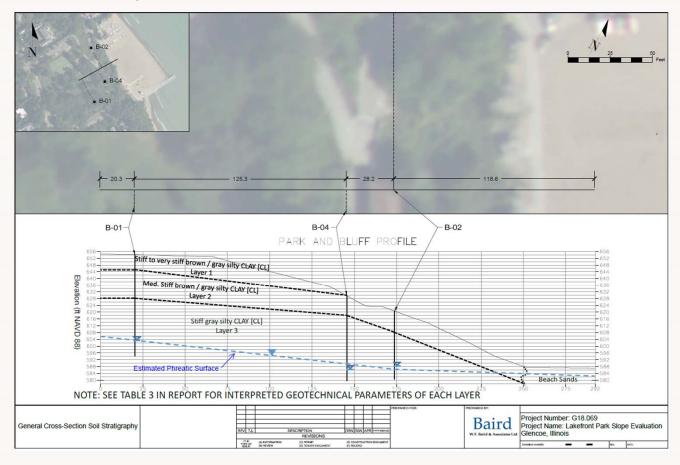
Bluff Toe Stability / Coastal Review (cont.)

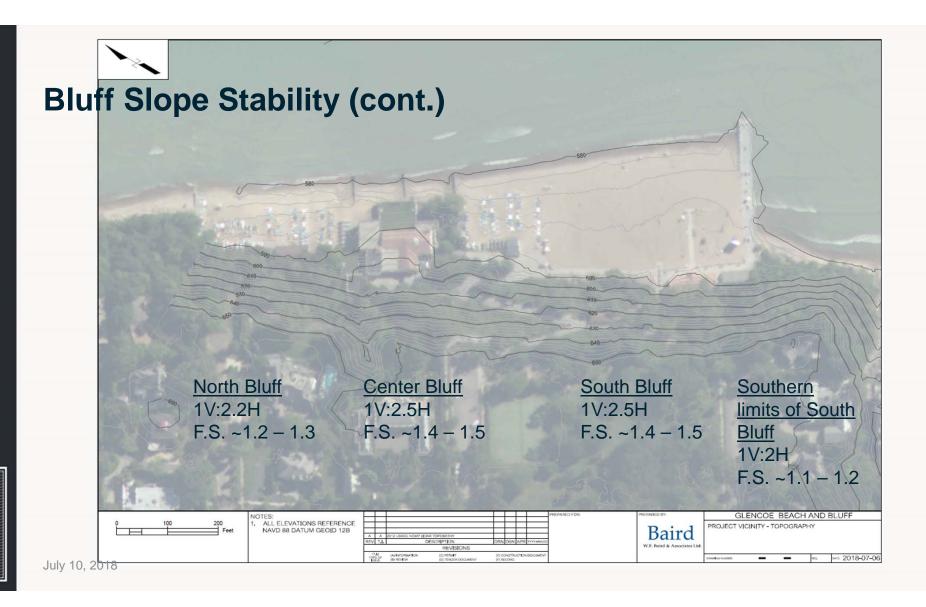
- Responds to natural variations in lake levels, wave action, and sediment supply/transport.
- Will continue to require beach nourishment requirements minimized if coastal structures are added.
- Outfall design causes additional erosion.





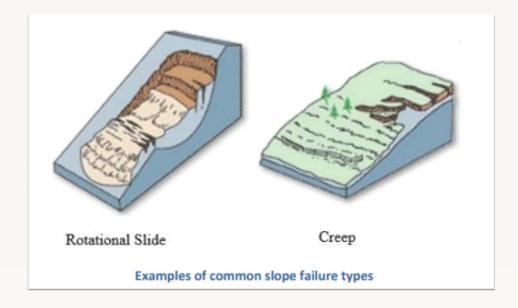
Bluff Slope Stability





B.19 81

Bluff Slope Stability (cont.)



<u>Surficial Soil Creep Failure:</u> Slow-moving, soil surface failures where slope material gradually moves downhill. Commonly caused by seasonal freeze-thaw or wet-dry cyclical loading.

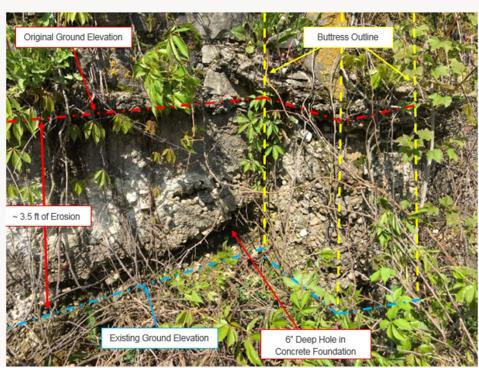
July 10, 2018

(Image Citation: MnDOT Slope Stabilization Guide.)

Bluff/Structure Local Stability – North Overlook



Historical Photo - 1998-99



Site Photo – May, 23, 2018



B.19 81

Bluff/Structure Local Stability – Precast Crib Wall



Historical Photo – 1998-99





Bluff Stability Conclusions

- South Bluff & Center Bluff factor of safety acceptable
- North Bluff & southern limits of South Bluff factor of safety marginal
- Local stability issues likely associated with creep and surface-water drainage issues.
- Surficial creep visually observed slow gradual process
- Southern section of South Bluff has lowest factor of safety.

Summary

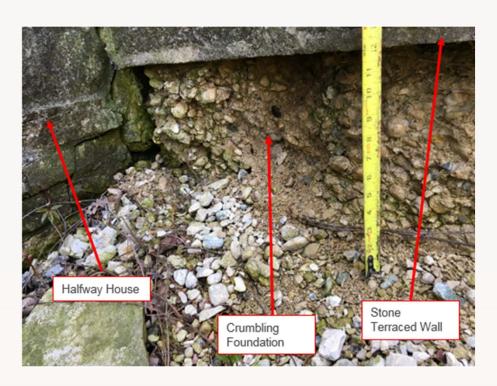
| Priority Level | Recommendations |
|-----------------|---|
| High Priority | Restore North Overlook Surface-water Management Modifications Replace Crib Wall |
| Medium Priority | Restore/Replace Lower North Roadway STW and curb Restore Upper North Roadway STW Fill "The Cave" Restore Halfway House |
| Low Priority | North Beach Outfall Modifications / Add Coastal Structures? Restore South Overlook Improve Beach House Drainage |

- High Priority Recommendations should be implemented in the next 1-2 years.
- Medium Priority Recommendations should be implemented in the next 5 years. Low Priority Recommendations should be implemented in the next 10 years.

Next Step: Develop Alternatives and Costs

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Bluff/Structure Local Stability – Lower North Roadway STW & Curb



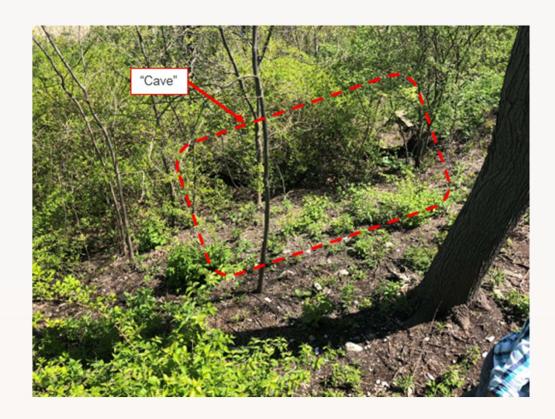


Bluff/Structure Local Stability – Upper North Roadway STW





Bluff/Structure Local Stability – "Cave"



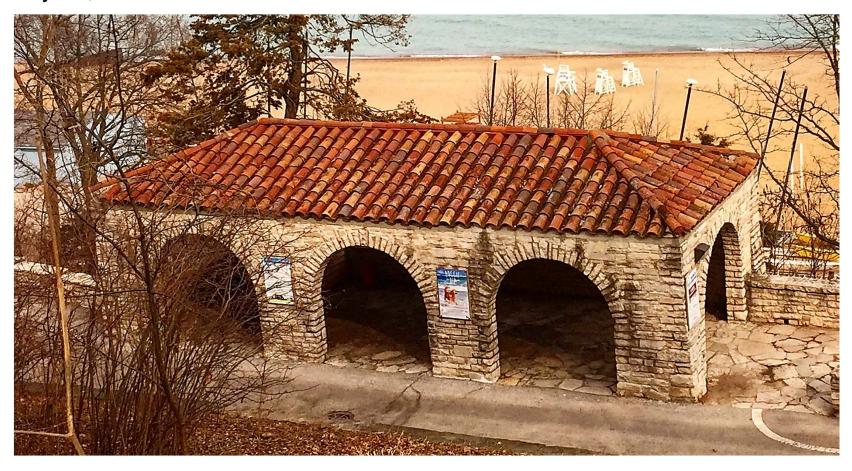
Bluff/Structure Local Stability – Halfway House





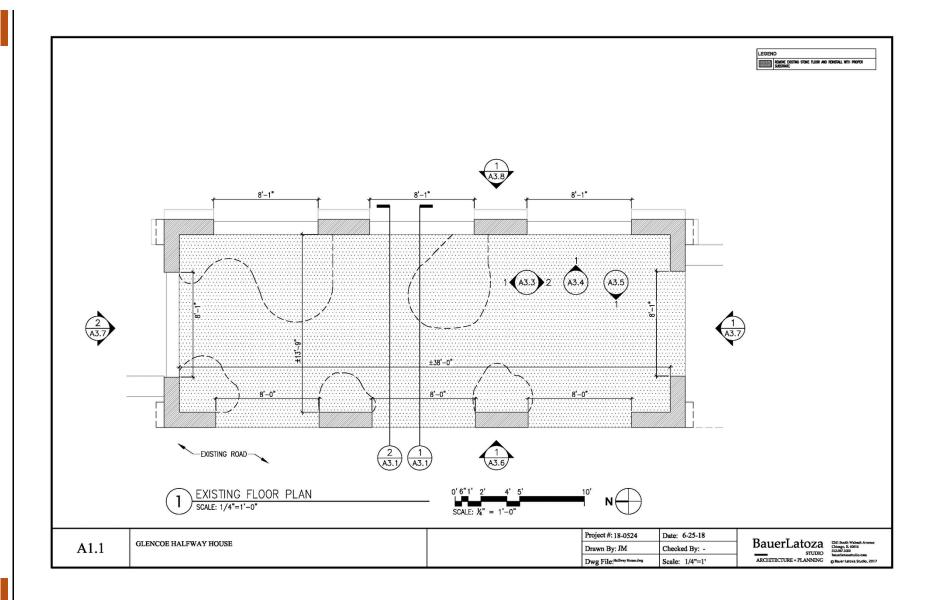
I Glencoe Beach Structures

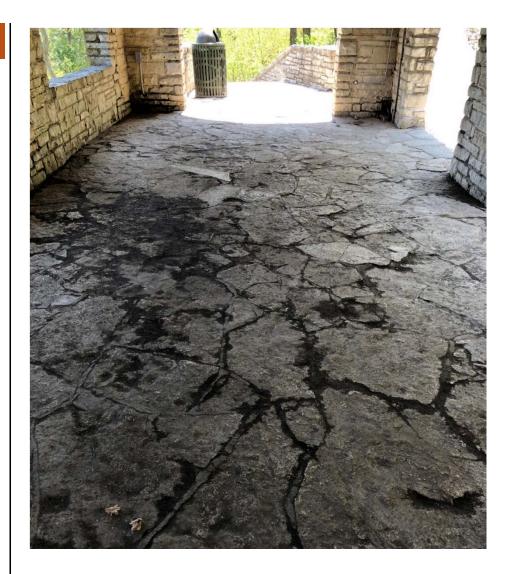
Edward Torrez, AIA, LEED AP **Bauer Latoza Studio**July 10, 2018



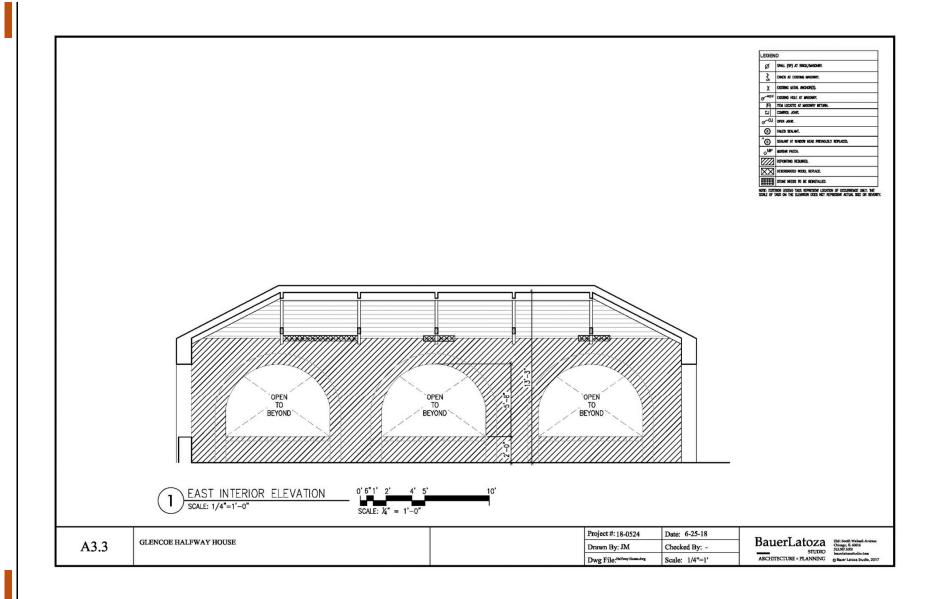




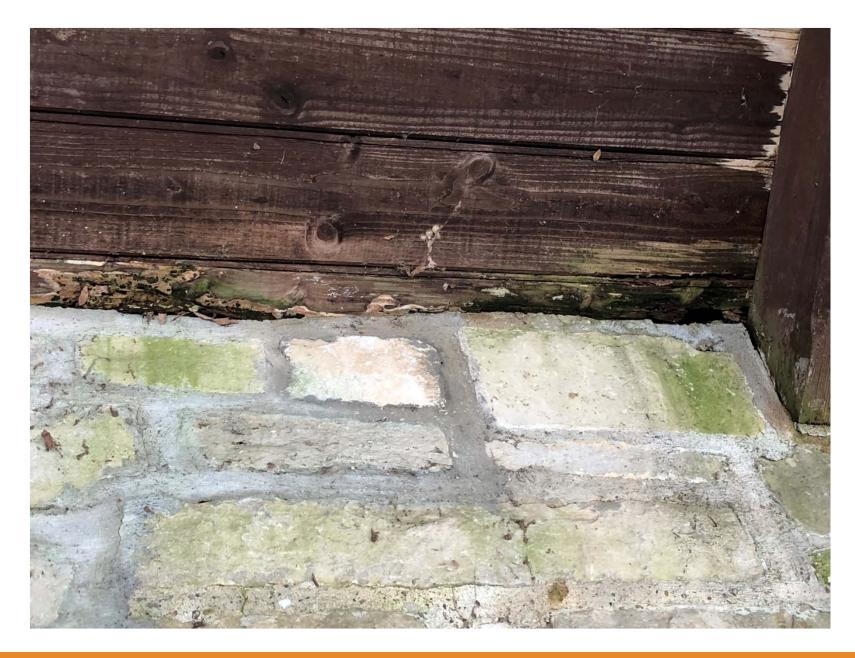


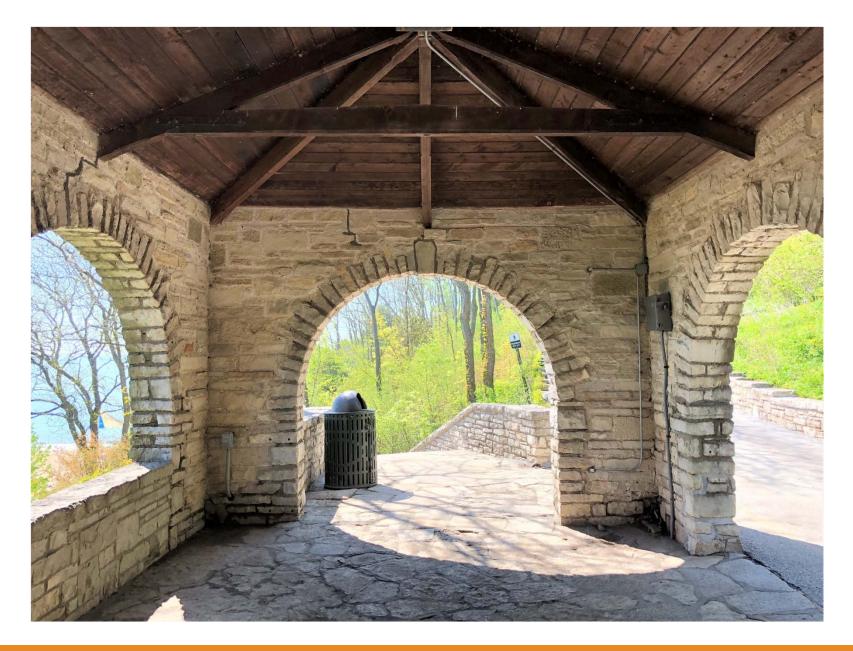






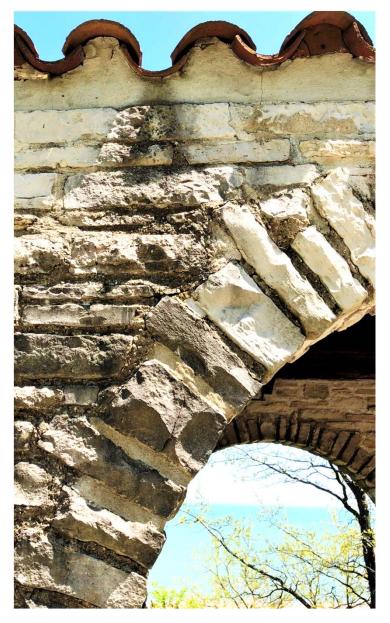






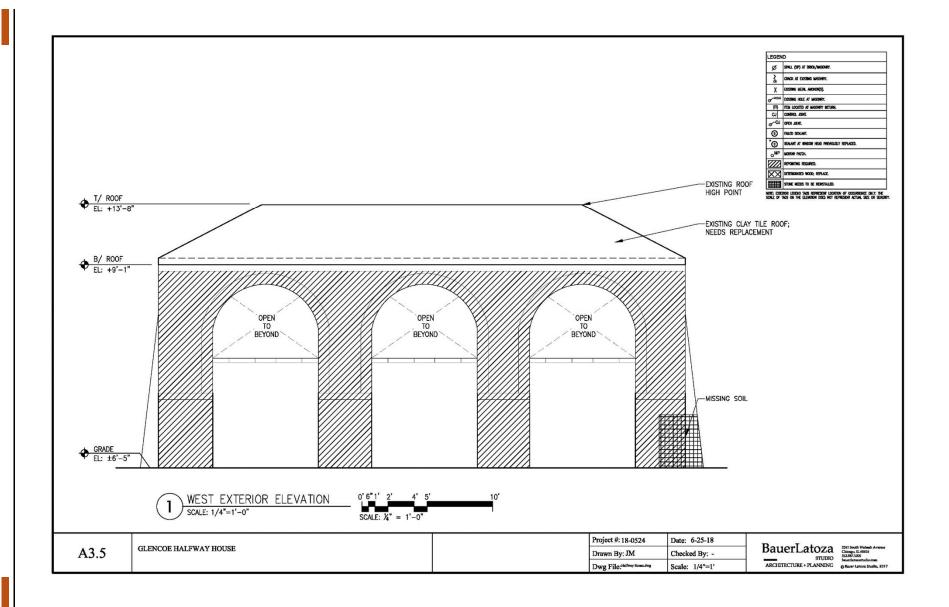










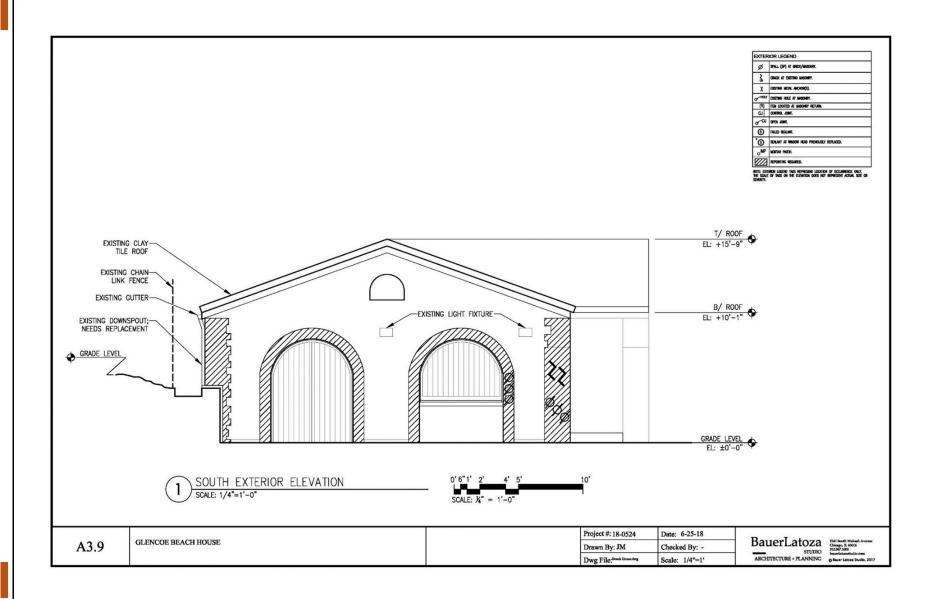


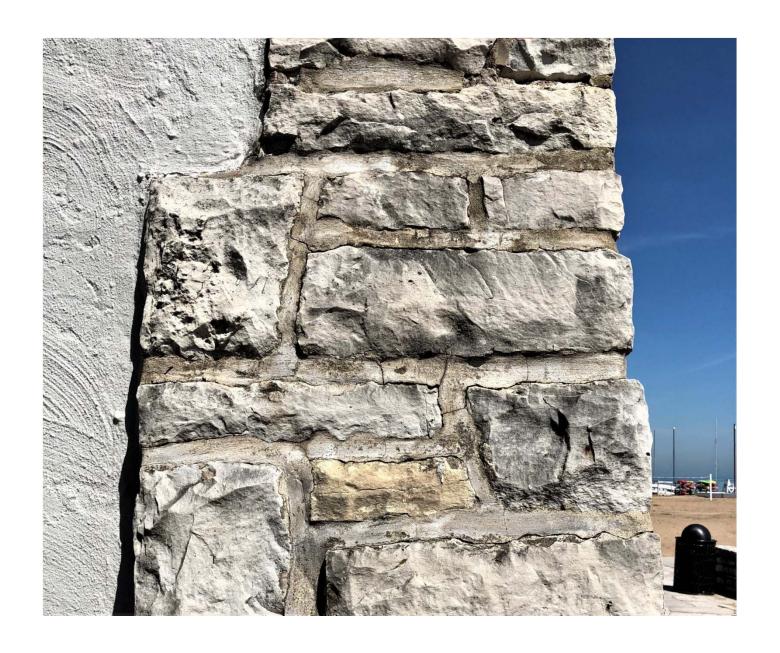


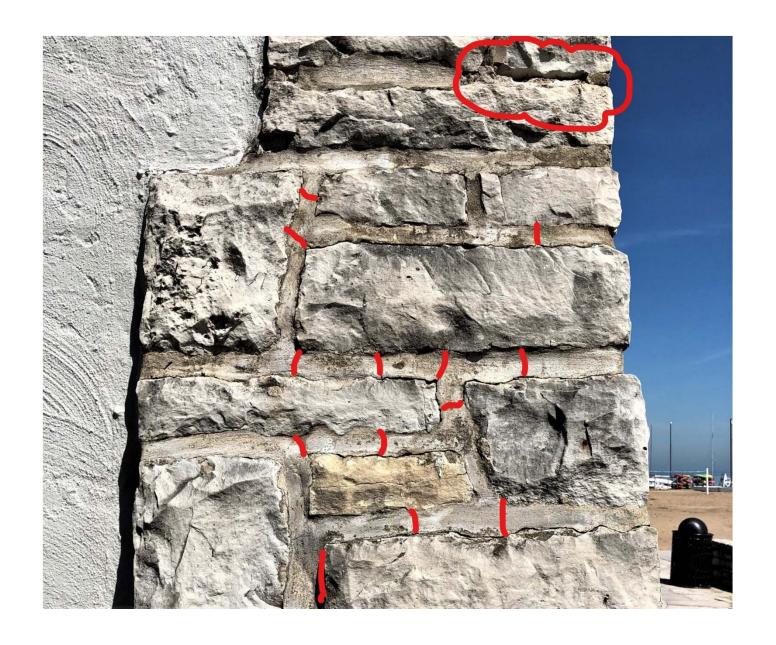


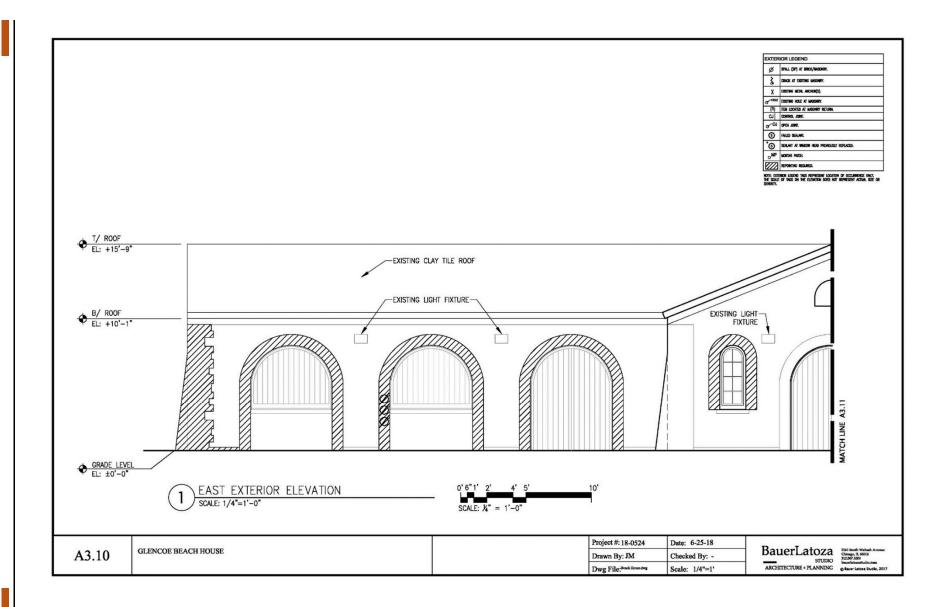


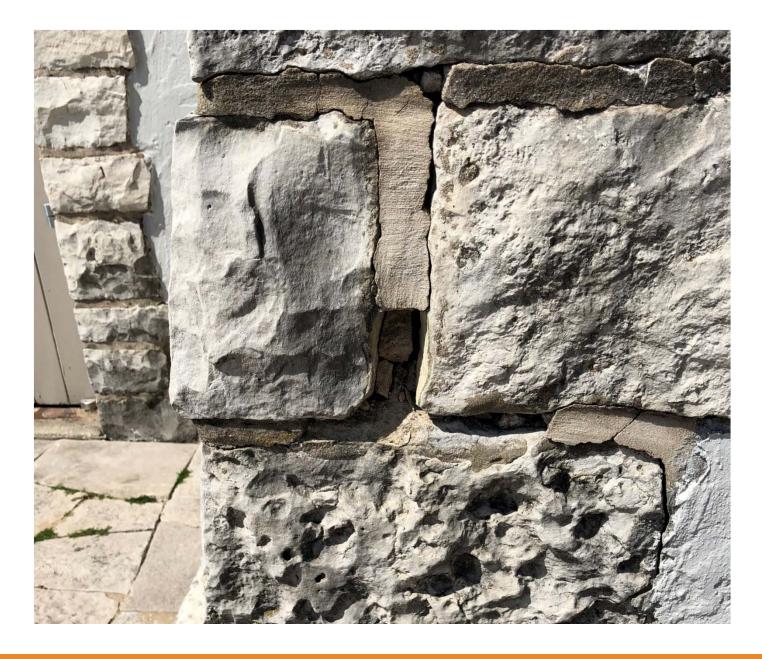


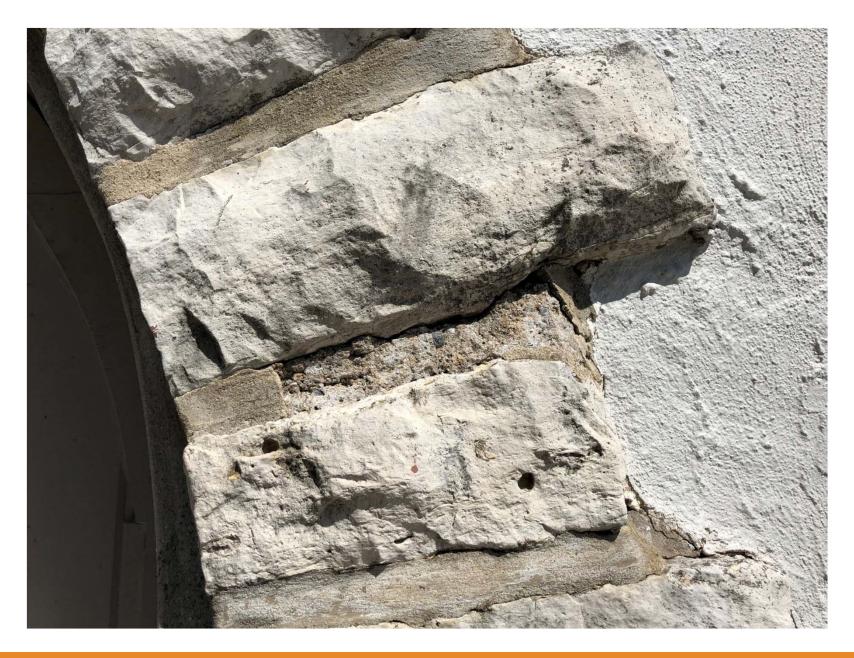
















Thank you!



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