



Hoover East Side Ice Mitigation

OBSERVATIONS

February 2022

Summary

DCI Group was contracted in January of 2022 as Construction Manager for a potential project to mitigate ice build up on the East side of the Hoover Building. As part of this project DCI Group and the Department of Administrative Services made observations of the existing conditions during and after snow fall events, which are documented here.

PURPOSE OF POTENTIAL PROJECT

During and after snow events, ice and snow is building up on the existing curtain wall system then melting down the face of the curtain wall and dripping to the paver system below. The melt is then freezing again on the pavers causing ice buildup. In order to mitigate potential slip hazards the State of Iowa is blocking off this area of the walkway and heavily salting the pavers, which may result in premature deterioration to systems the salt comes in contact with.

SCOPE OF OBSERVATIONS

- Observer and document how snow and ice buildup were occurring on the existing curtain wall system during snow events.
- Observe and document how the snow and ice were melting

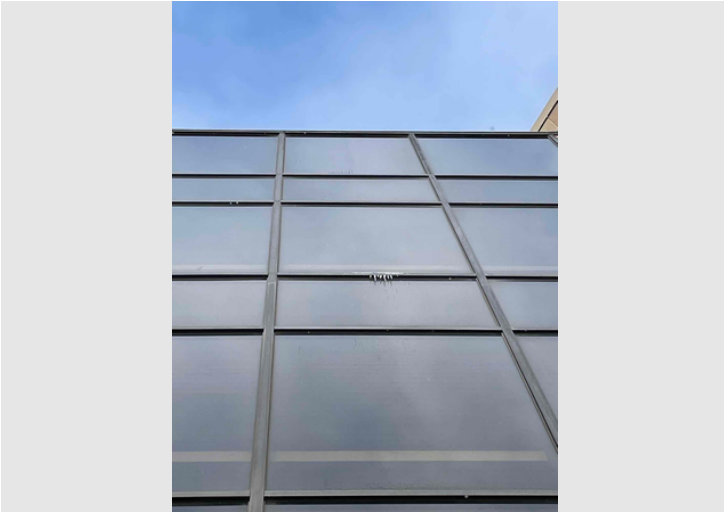
FINDINGS

Through multiple observations the following items were identified:

- The top of the curtain wall system consists of a slanted glass system. Snow is able to build up on the surface.
- Snow also is able to build up on the horizontal mullions.
- Warm conditioned air on the inside of the building, as well as general outside conditions, causes the snow build up to melt.
- It was observed that water will run down the face of the curtain wall system as well as within the vertical mullions.
- When this melt gets to the bottom of the curtain wall system it either freezes again, forming icicles, or falls to the patio system to freeze.
- On the West side of the building a similar issue appears to have been addressed utilizing a gutter system. If a similar resolution were pursued on the East side, the gutter system would need to include a downspout through the below paver patio system to connect to existing storm drains. Heat tape within the gutter system may also be warranted to avoid ice buildup.

PHOTOS

See photos of existing conditions on the following pages



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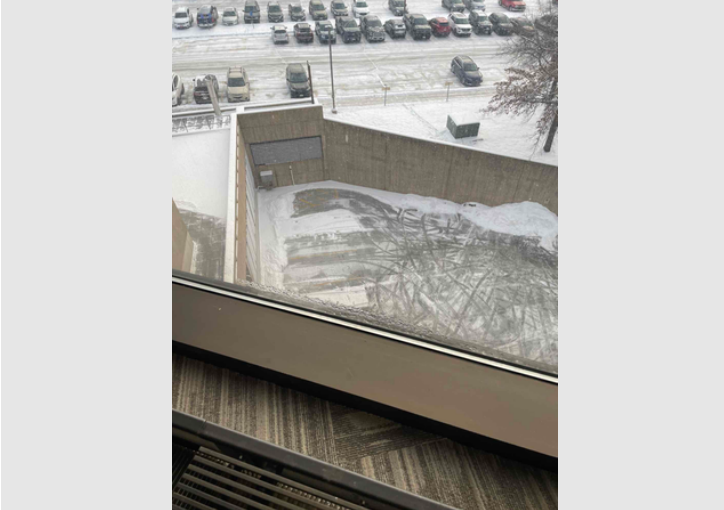
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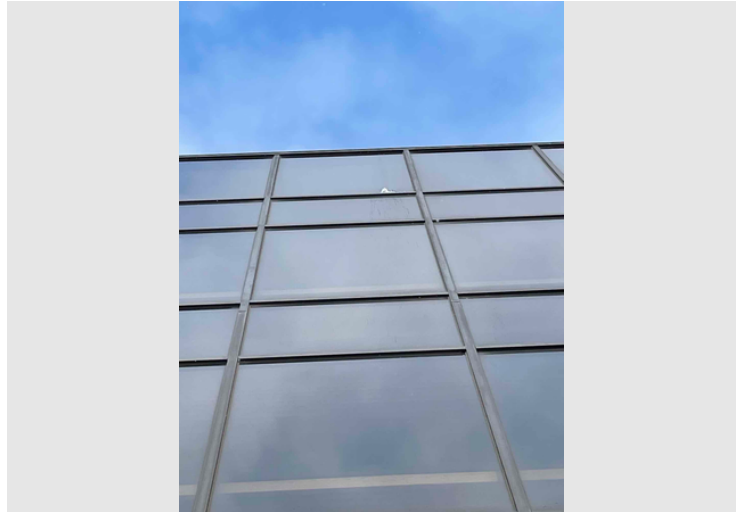
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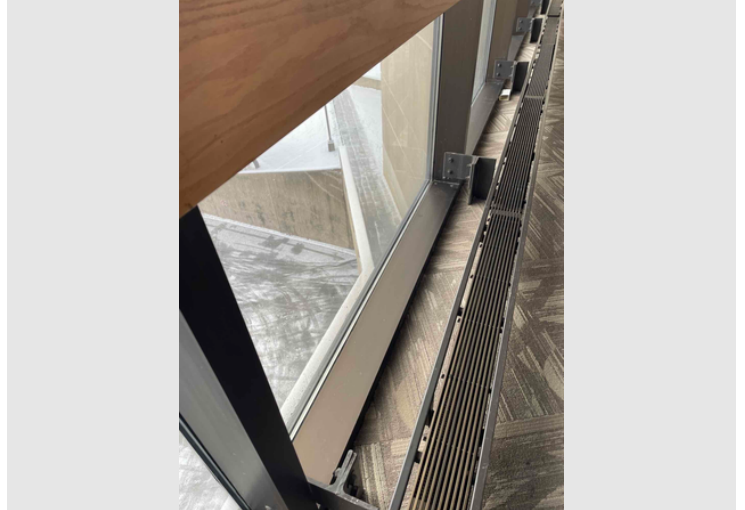
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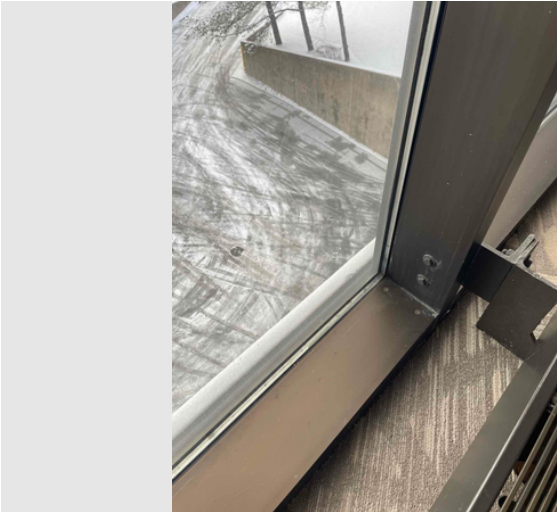
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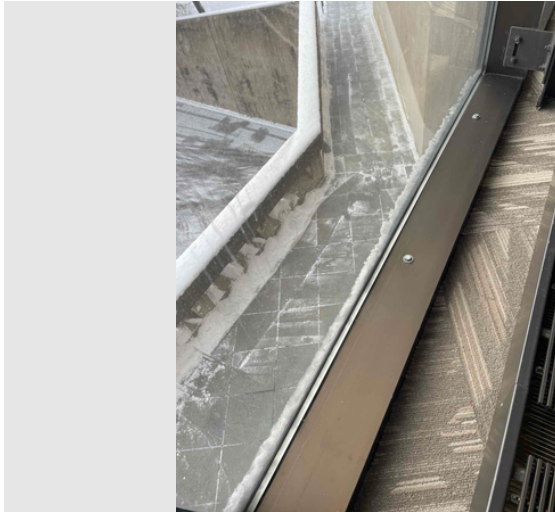
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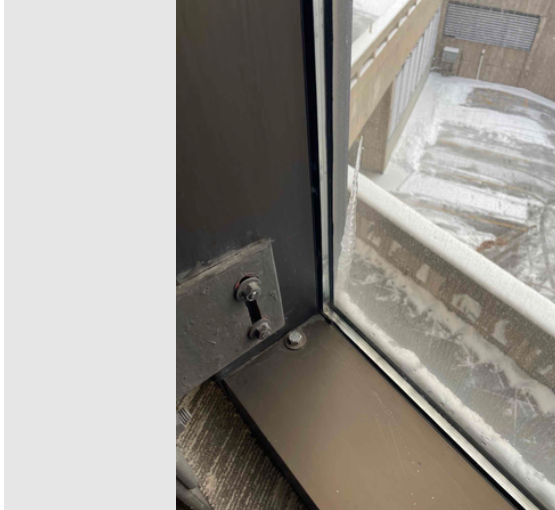
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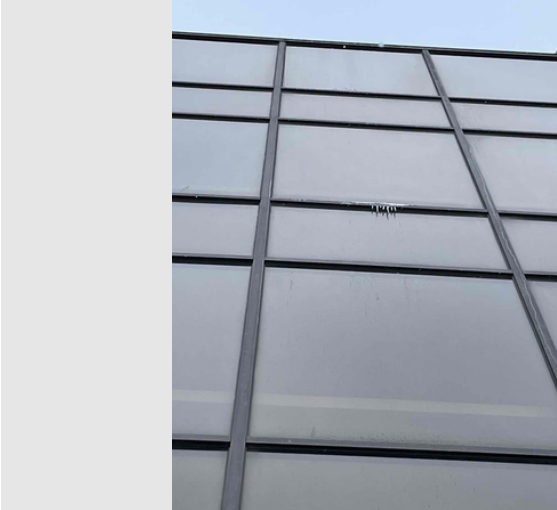
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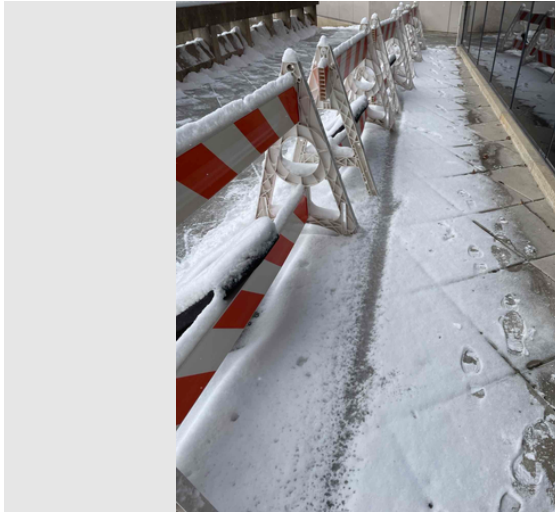
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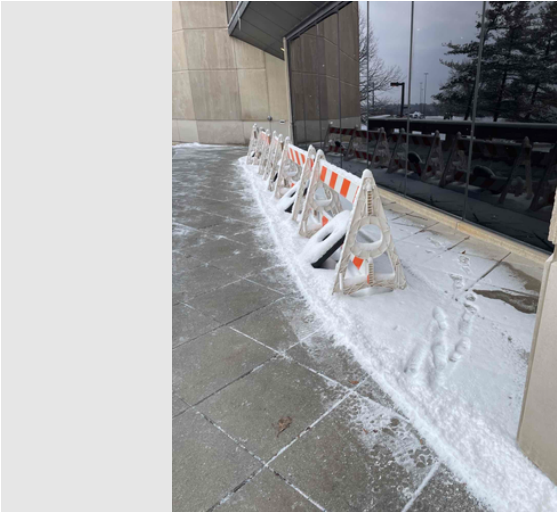
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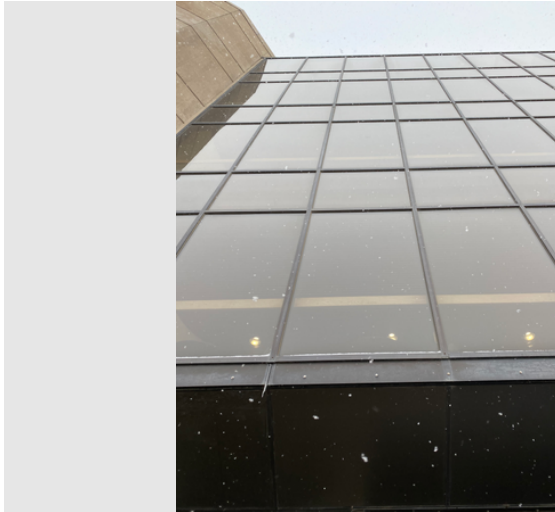
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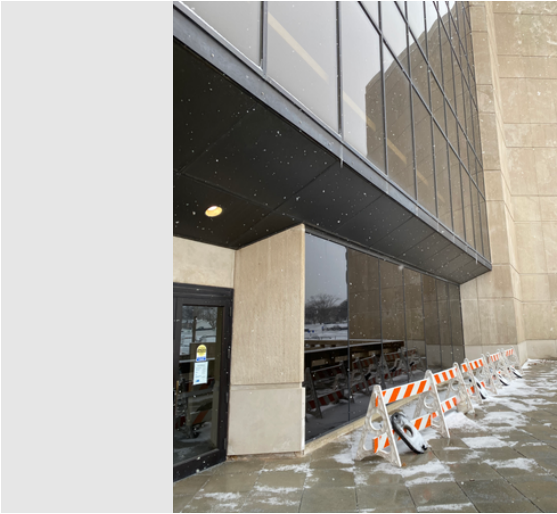
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