



MEMORANDUM

DATE: March 1, 2022

To: Honorable Mayor & City Council

CC: Dave Bennett, Director of Public Works/City Engineer; Mark Elliott, Police Chief; Mitzi Baker, Community Development Director; Lynette Peterson, City Clerk; Michelle Mahowald, Communications & Human Resources Director; Natalie Draper, Director of Library; Chris Hood, City Attorney

From: Ben Martig, City Administrator

RE: "Work Session Supplemental Agenda Background Memo" for March 1, 2022 No. 1.

Summary Report:

The following is an update on agenda items as supplemental background agenda information made available for Tuesday, March 1, 2022

1. Northfield City Council discusses Neighborhood Flooding Issues infrastructure improvements and home modification/acquisition.

An updated presentation related to process tonight and discussion items related to infrastructure improvements and home modifications/acquisitions.

Neighborhood Flooding Issues Report Recommendations

March 1, 2022



Background

- Climate Action Plan Adopted Nov. 5, 2019
 - Local Climate Hazards (Air, Weather, Water, Ecosystem)
 - Northfield – Flooding
 - Stormwater infrastructure that support community resiliency during heavy rainfall
- Northfield Surface Water Model from 1995 was updated in 2020 with the most current rainfall data (Atlas 14)
- The stormwater model identified properties at risk for flooding with new rainfall data and observations of area in the community from larger rain

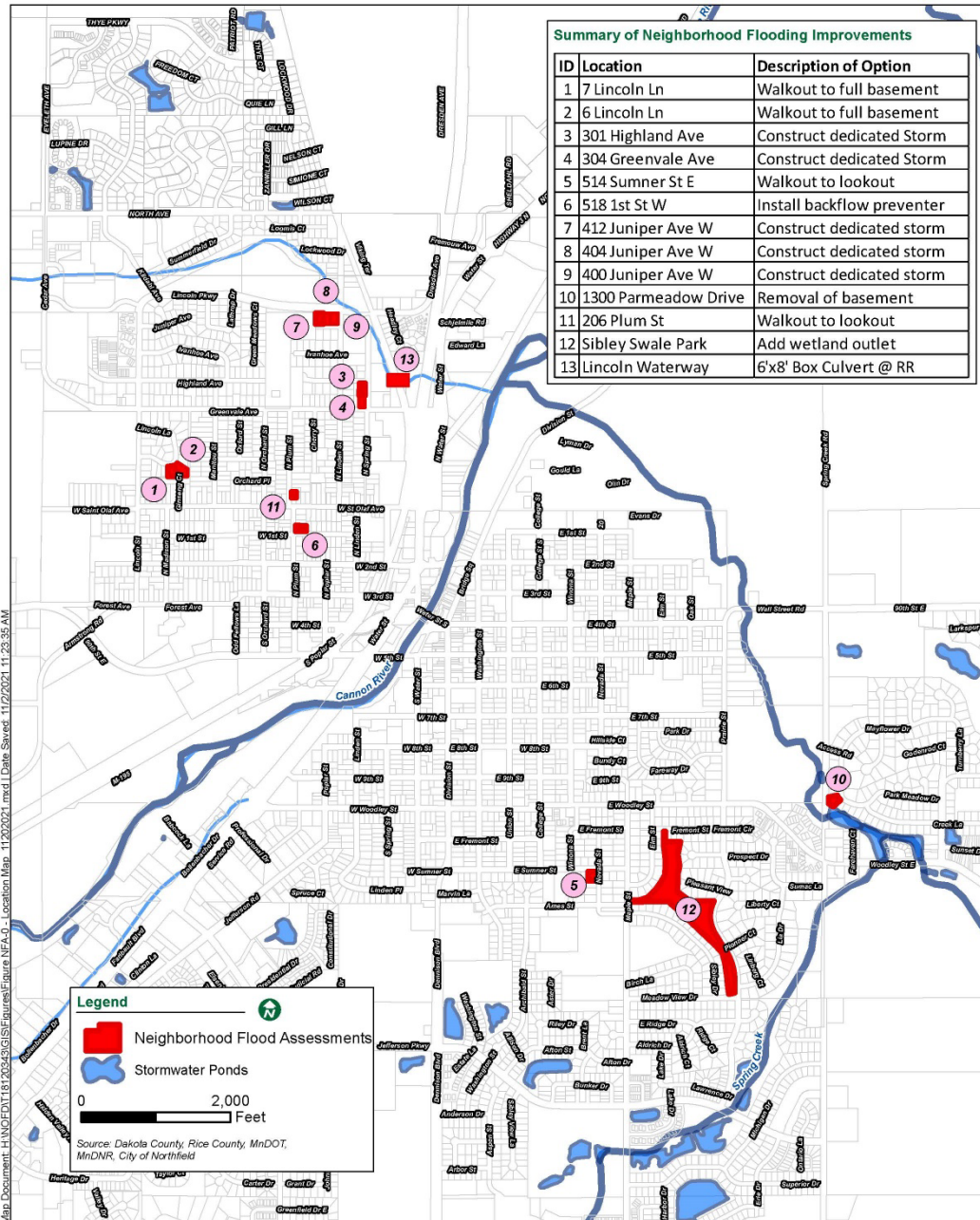


Neighborhood Flooding Issues

Discussion

- Staff presented initial report findings and recommendations at the 11/9/21 City Council work session.
- City Council requested additional information related at the 11/9/21 meeting
 - Alternate infrastructure vs. home conversions
 - Are property owners open to the idea of home conversion/acquisition
 - Insurance liability
 - What other cities have done to address localized flooding.



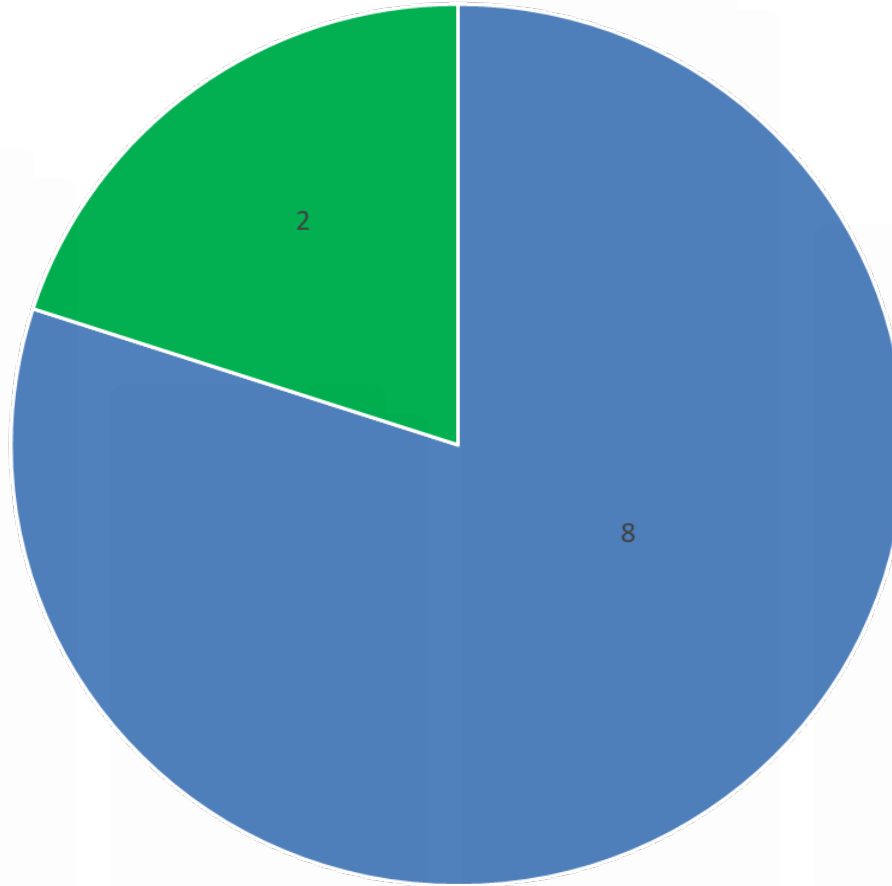


City Flood Mitigation Questionnaire



City Flood Mitigation Questionnaire

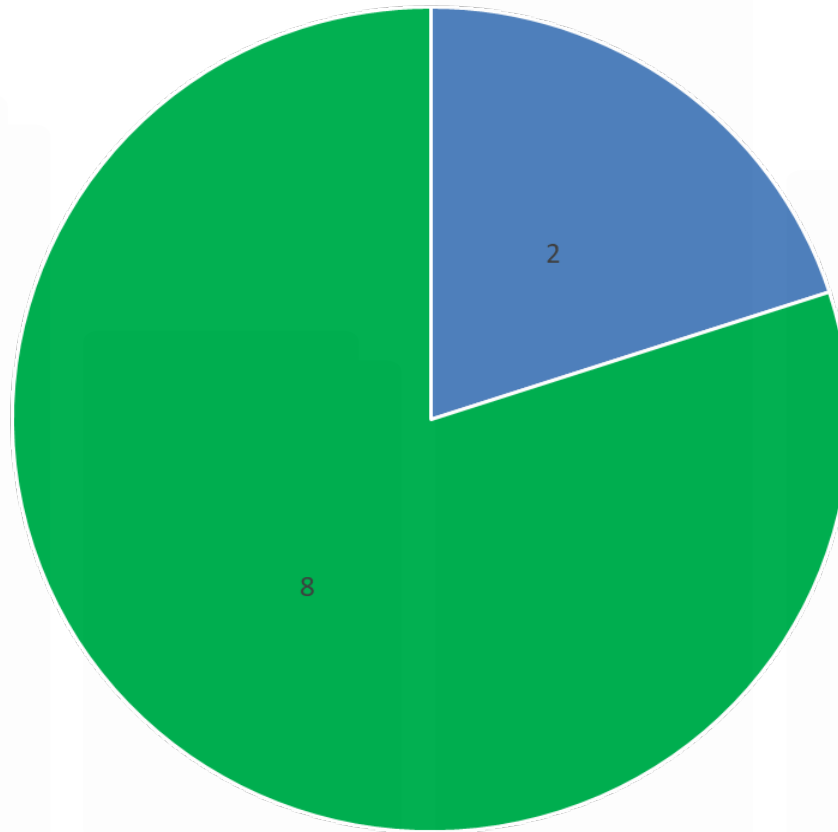
Has your City Purchased Property so it will no longer flood?



■ Yes ■ No

City Flood Mitigation Questionnaire

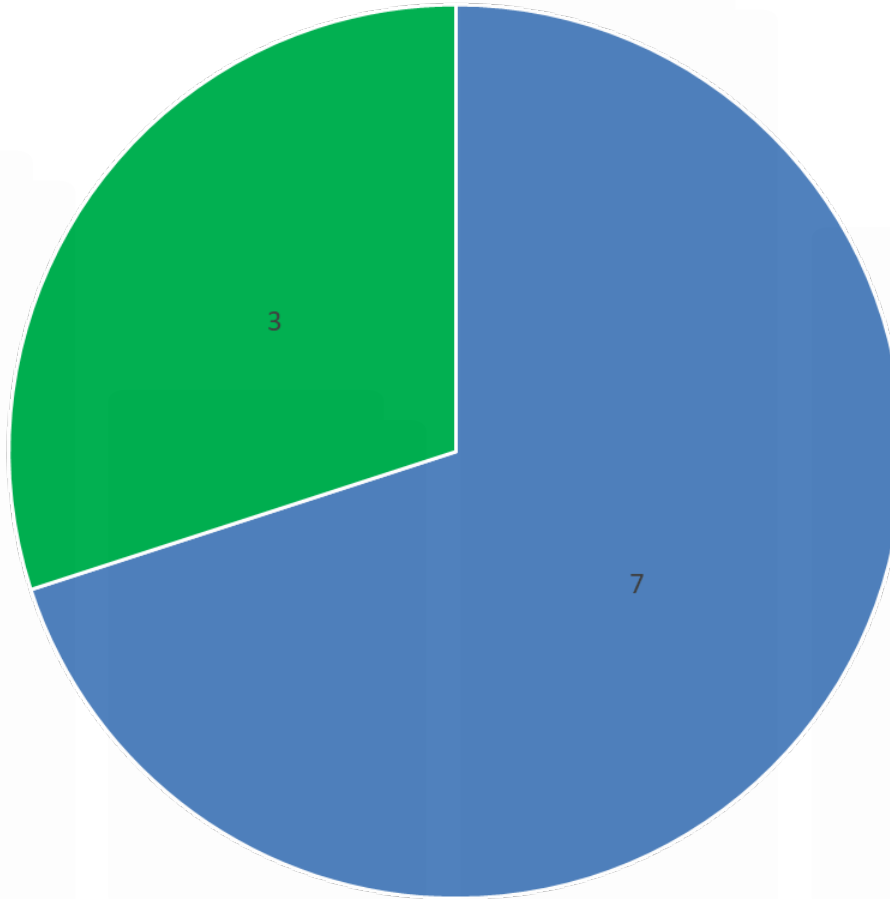
Has your City modified homes (ex. Convert walkout to lookout or full basement)?



■ Yes ■ No

City Flood Mitigation Questionnaire

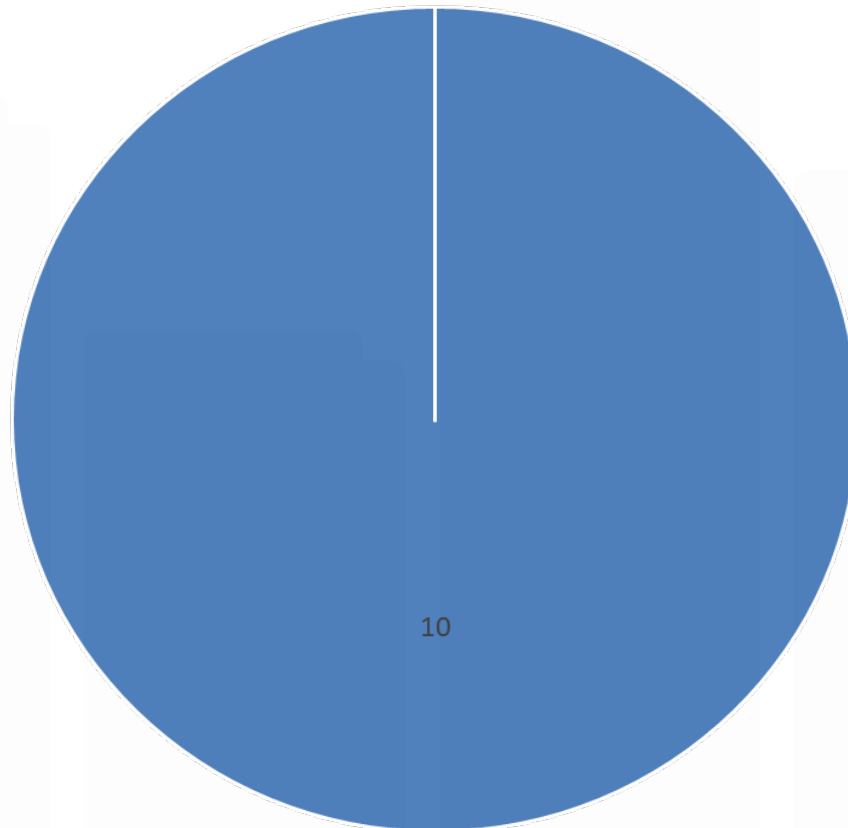
Has your City built additional flood storage?



■ Yes ■ No

City Flood Mitigation Questionnaire

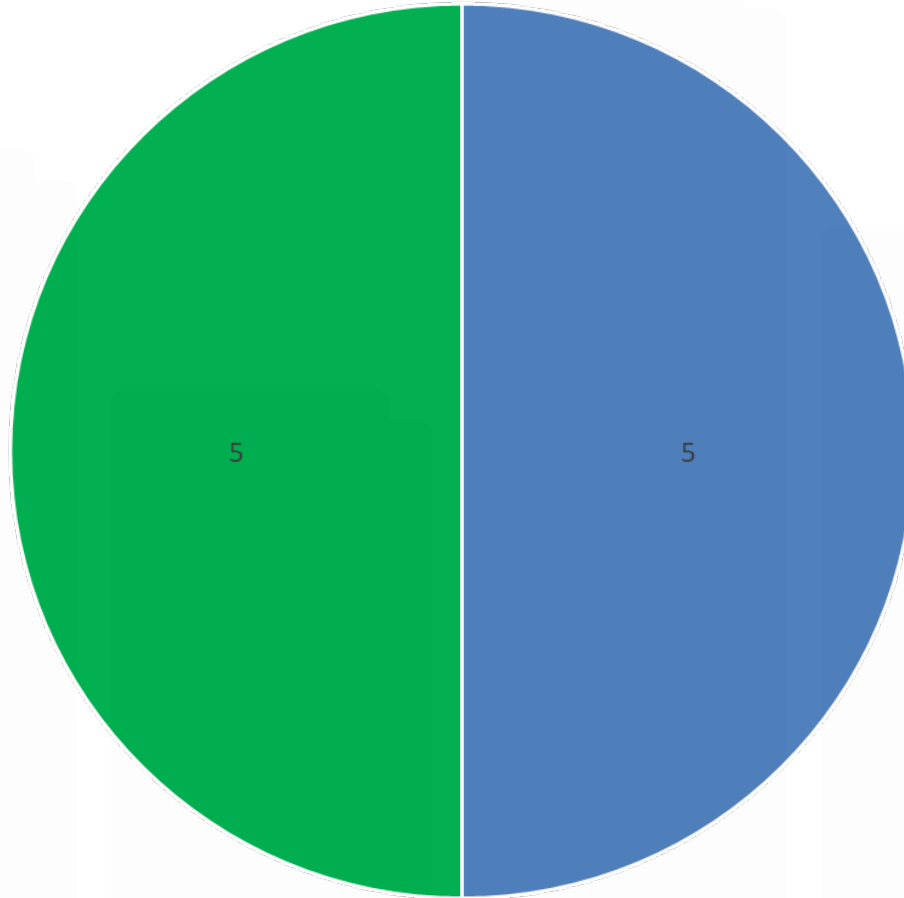
Has your City improved drainage infrastructure to reduce flooding?



■ Yes ■ No

City Flood Mitigation Questionnaire

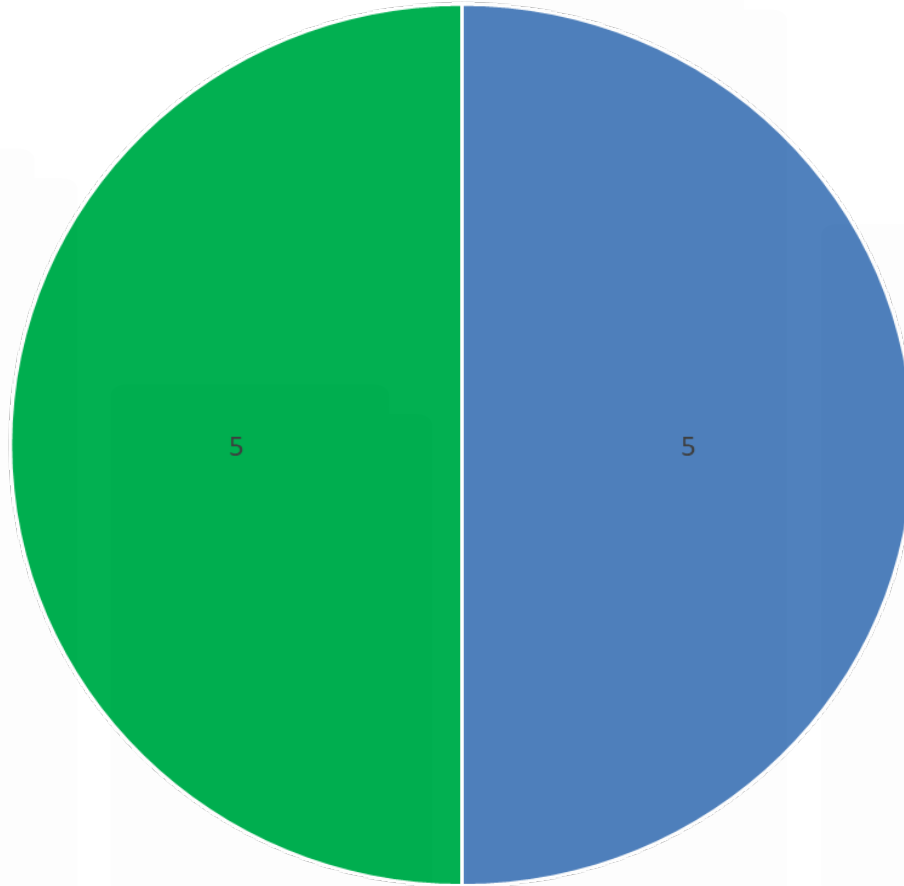
Has your City flood proofed a building?



■ Yes ■ No

City Flood Mitigation Questionnaire

Has your city constructed a flood control dike or wall?



■ Yes ■ No

City Liability

- City is not responsible for acts of nature.
- Liability would transfer to contractor if the homes flooded due to poor workmanship.
- Insurance suggested the City have the homeowner sign a waiver stating the property owner cannot hold the City liable for any flooding after the improvement project is complete.



Storm Sewer / Drainage System Improvements



Storm Sewer/Drainage Improvements

- Proposed on 11/9/21
 - 301 Highland (Inlet grading and lowering)
 - 518 First St West (Backflow Preventer)
 - Sibley Swale (Construction of dedicated outlet)
 - Lincoln Waterway – (6X8 Box Culvert at Rail Road, North and South Oak Apartments)
- Additions on 3/1/22
 - Juniper Avenue Dedicated Outlet
 - Serves 400, 404, and 412 Juniper
 - Eliminates need for the home conversions (3)
 - Dependent on LWW Box Culvert
 - Spring Street Dedicated Outlet
 - Serves all of the properties between Greenvale, Highland, Linden, and Spring
 - Eliminates need of home conversion at 304 Greenvale
 - Provides additional freeboard to 301 Highland





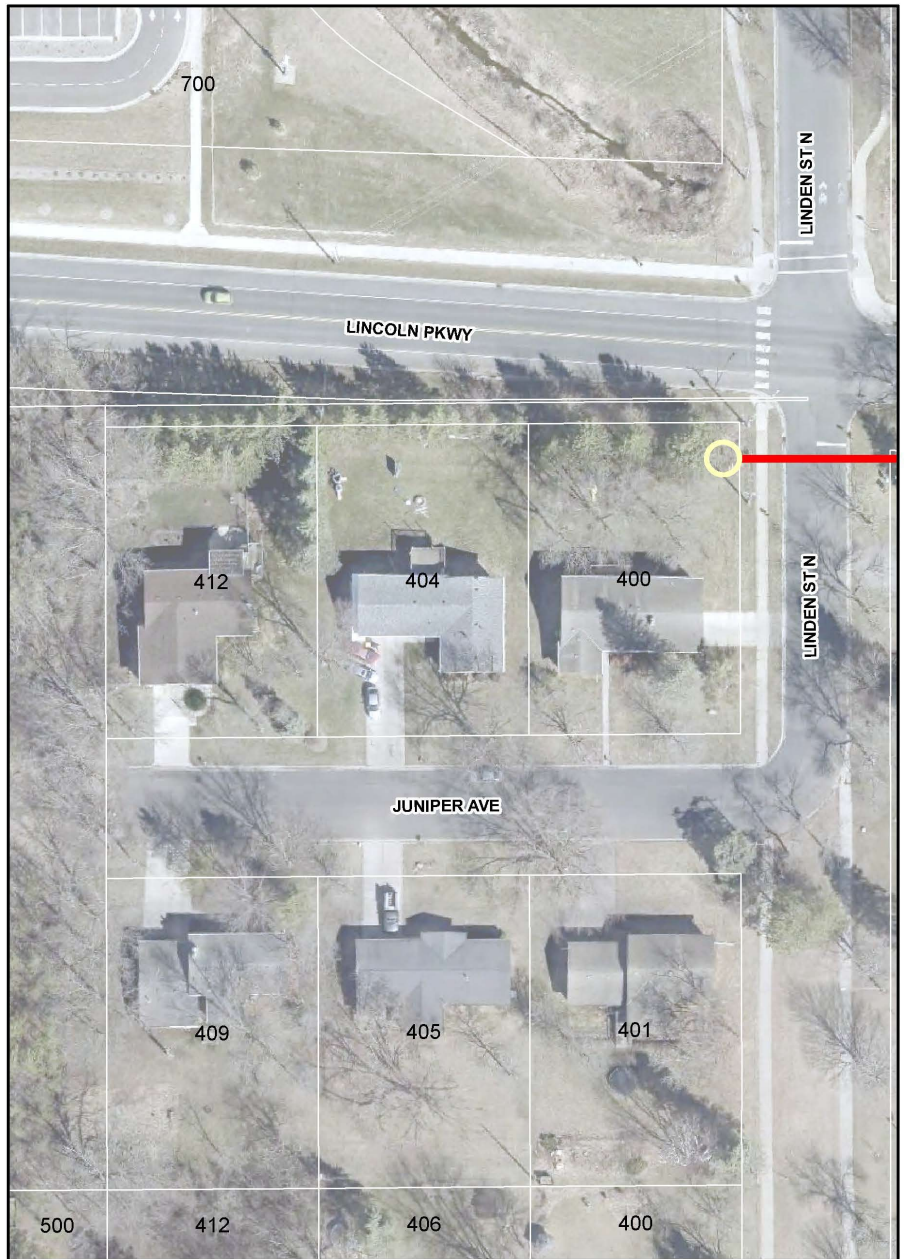
Home Conversion

Previous Recommendation
Walkout to Look Out Conversion

0 20 40 Feet



City of
Northfield
 Minnesota



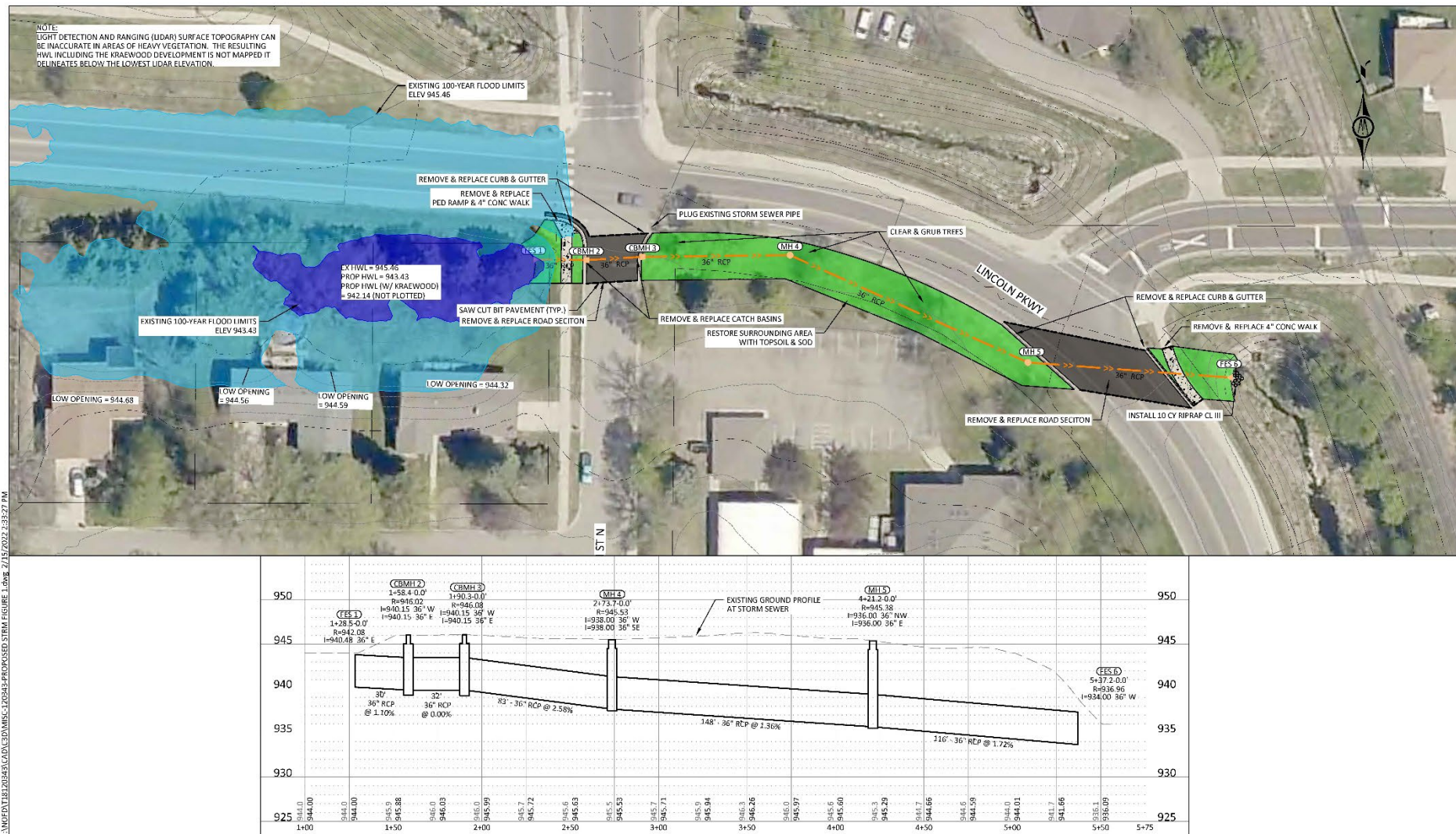
New Recommendation
Upsize Existing Storm
Outlet and Construct
Dedicated Storm Sewer

Existing Storm Structure
 Dedicated Storm Sewer



CITY OF NORTHFIELD, MN

JANUARY 2022





Home Conversion

Previous Recommendation
Walkout to Look Out Conversion

0 20 40 Feet



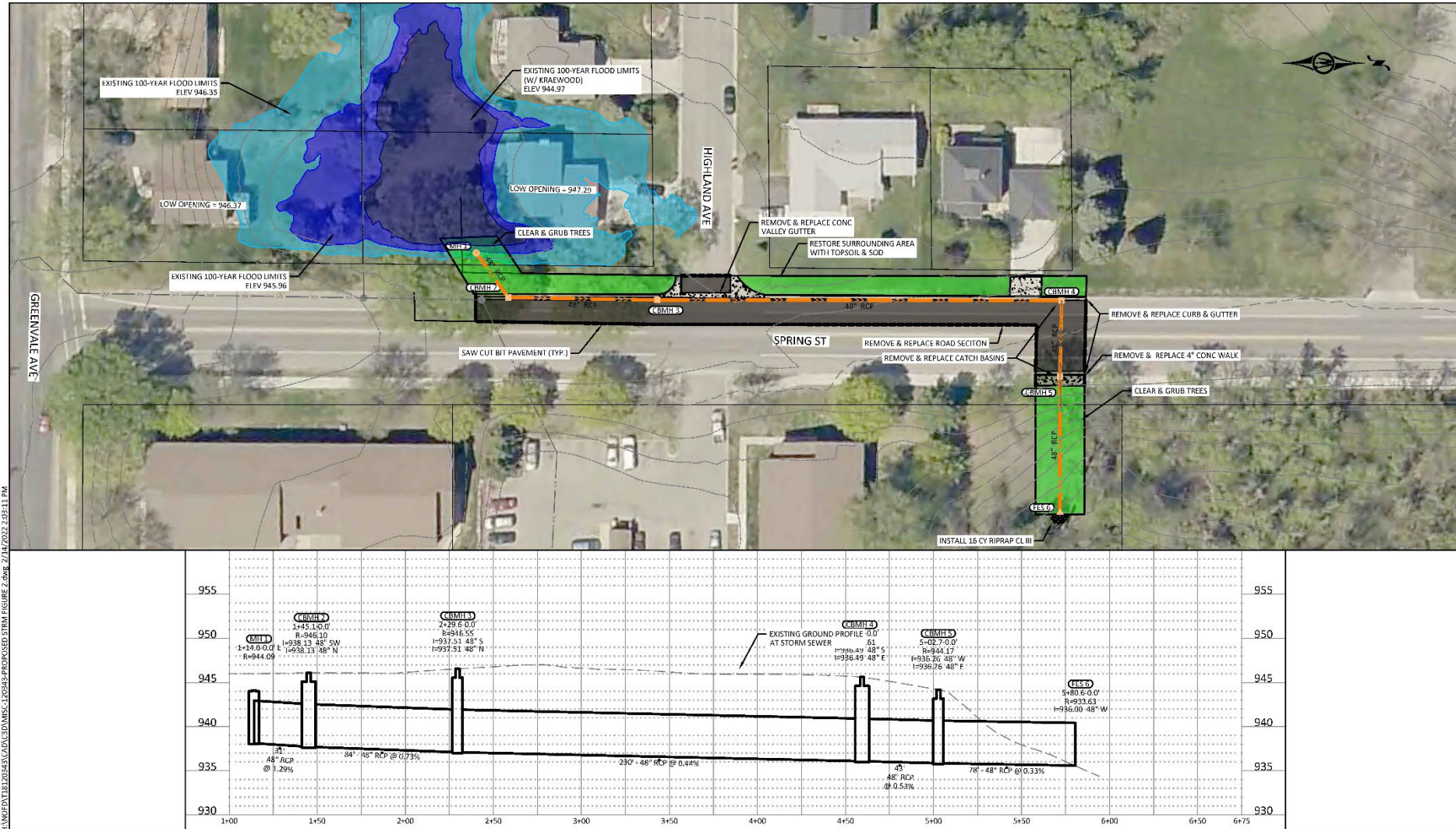
City of
Northfield
Minnesota

New Recommendation
Construct New Storm Outlet
and Dedicated Storm Sewer

New Storm Outlet
Dedicated Storm Sewer

CITY OF NORTHFIELD, MN

JANUARY 2022



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2022 Capital Improvement Costs

Address	Cost	Improvement
301 Highland/304 Greenvale Avenue	\$605,200	Install new dedicated 48" storm sewer
518 First Street West	\$19,575	Backflow Preventer
Sibley Swale	\$89,175	Install Outlet
Lincoln Waterway	\$445,900 + Railroad Costs (TBD)	6x8 Box Culvert @ RR
Juniper Avenue (400, 404, 412)	\$407,600	Install new dedicated 36" storm sewer
Total Cost	\$1,567,450	



Future Home Conversion Project

Address	Cost	Improvement	Participation
7 Lincoln Lane	\$300,000	Walkout to Full Basement	Open to discussion/participation
6 Lincoln Lane	\$300,000	Walkout to Full Basement	Open to discussion/participation
514 Sumner Street	\$217,500	Walkout to Lookout	Not willing to participate
206 Plum Street	\$217,500	Walkout to Lookout	Willing to participate
1300 Parmeadow Drive	\$550,000	Removal of Basement	Willing to participate (Home Acquisition)
Total Cost	\$1,585,000		



Cost Comparison

Project	Original Proposal (11/9/21)	Current Proposal
Home Modifications/Acquisition	\$2,455,000	\$1,585,000
Drainage/Infrastructure Improvement	\$584,650	\$1,567,450
Total Cost	\$3,039,650	\$3,152,450

Going Forward

- Is City Council comfortable proceeding with the Infrastructure Improvements?
 - Option 1 – Program into the Capital Improvement Plan (CIP) and review during budget process
 - Option 2 – Property owner would be responsible for flood protection on their individual properties



Going Forward

- Is the City Council comfortable proceeding with Home Modifications/Property Acquisition?
 - Option 1 - Explore modification/acquisition with property owners
 - Staff would meet again with Property Owners to explore interest
 - Staff would explore property appraisals
 - Staff would engage and Architect/Builder
 - City Council review of property appraisal and/or refined cost estimate/project scope
 - Option 2 – Leave as is
 - Property Owners would be responsible for flood protection on their individual properties



Property Owner Input

- Residents share their input with City Council (2-minutes per property owner)



City Council Discussion

- City Council Questions/Clarification



Going Forward

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Thank You

Questions

