



Meeting Date: February 11, 2020

To: Village Board

From: [Mike Braiman](#), Village Manager
[Erik Hallgren](#), Assistant Village Manager
[Brigitte Ann Berger-Raish](#), P.E., Director of Engineering and Public Works

Subject: Neighborhood Storage Project Update

Recommended Motion

No action requested- informational only for discussion purposes.

Background

At the February 25, 2020 meeting, the Village Board will be asked to consider approval of the following items:

1. Approval of the construction contract for Neighborhood Storage Project—Phase 1
2. Approval of the construction engineering agreement for Neighborhood Storage Project—Phase 1
3. Approval of a Private Property Easement
4. Approval of an Intergovernmental Agreement with School District 39
5. Approval of an Intergovernmental Agreement with the Park District

Note: Village staff will only bring the IGA's to the Village Board for approval if the School District and Park District approve the documents prior to the Village's February 25th meeting.

Discussion

The attached presentation includes an overview of the Neighborhood Storage Project (NSP) including project highlights, a budget update and details about the Intergovernmental Agreements. Additional information about the pending agenda items is provided below.

Approval of the construction contract for Neighborhood Storage Project—Phase 1

The bid opening for Phase 1 (Community Playfield) is February 13 with contract approval scheduled for February 25. Given the magnitude of the project, Village staff intends to conduct contractor interviews prior to Village Board approval to ensure the contractor being considered for the project is qualified and capable of completing the project in addition to providing a competitive bid. In addition to these interviews, the Village engaged Strand Associates to perform an independent review of the construction documents. The report from Strand is attached and confirms the project design.

In February 2019, the Village Board reviewed an option to optimize the NSP to protect 98% of the homes vulnerable to flooding in a ten-year storm event, the base project without optimization would protect 71% of such homes. The optimization requires larger reservoirs at Community Playfield and Thornwood Park as well as additional storm sewers. At that time, the Village Board made two decisions:

- “Future-proof” the NSP by optimizing the size of the reservoirs at Community Playfield and Thornwood Park
- Bid the additional storm sewers as alternatives in Phase 1 (Community Playfield- 2020) and Phase 3 (Thornwood Park- 2022) and determine at that time whether to pursue installation of the additional sewers based on bid prices and other economic factors
 - The engineer’s estimate of the Phase 1 optimization is \$2.85 million

As part of the construction contract approval on February 25, the Village Board will be asked to make a determination on Phase 1 optimization. A detailed financial analysis of the optimization option will be presented following receipt of the construction bids.

Approval of the construction engineering agreement for Phase 1

Construction management and contractor oversight are critical components of the project; therefore, Village staff has put together a qualified team to provide the day-to-day oversight of the project. The team consists of individuals from Baxter and Woodman (lead design engineer on Phase 1), Christopher B. Burke Engineering Ltd (lead consultant on the NSP) and RHMG (owner’s representative on the West Park Storage Facility Project). This team will supplement Village staff during the execution of the construction. They will also assist with ensuring the primary stakeholders (Park District, School District, and neighbor residents) are kept informed of the project’s progress. The scope of work includes a robust communication plan that will be essential in delivering a successful project.

Approval of a Private Property Easement

The project includes building a new storm sewer connection from Wilmette Avenue through Meadow Drive to the new vault under Community Playfield. This agenda item will approve the easement agreement that will provide the contractor access through private property so the sewer connection can be made. The easement was previously discussed by the Village Board in executive session and negotiated by staff within the parameters established by the Board.

Approval of Intergovernmental Agreements (IGAs) with School District 39 and the Park District

Park District

An IGA is necessary with the Park District so the Village can build the underground reservoirs beneath Community Playfield, Hibbard Park, and Thornwood Park. The general conditions of the IGA are still being reviewed and negotiated by the parties. The purpose of this presentation is to inform the Village Board of the Park District’s requested park enhancements as part of the IGA which include:

Park District Request	Community Playfield	Hibbard Park	Thornwood Park
Comprehensive Landscaping	\$312,500	\$57,000	\$57,000
Drainage Improvements (outside of work zone)	\$160,000	\$80,000	\$80,000
Public Restrooms	\$550,000		\$362,500
Lawn Irrigation	\$500,000		\$250,000
Recreational Path with Lighting	\$940,000		
<i>Subtotal per Park</i>	<i>\$2,462,500</i>	<i>\$137,000</i>	<i>\$749,500</i>
Subtotal	\$3,349,000		
Drainage improvements at CPF in work zone	\$1,200,000 * included in the base project		
Total Park District Benefit	\$4,549,000		

School District 39

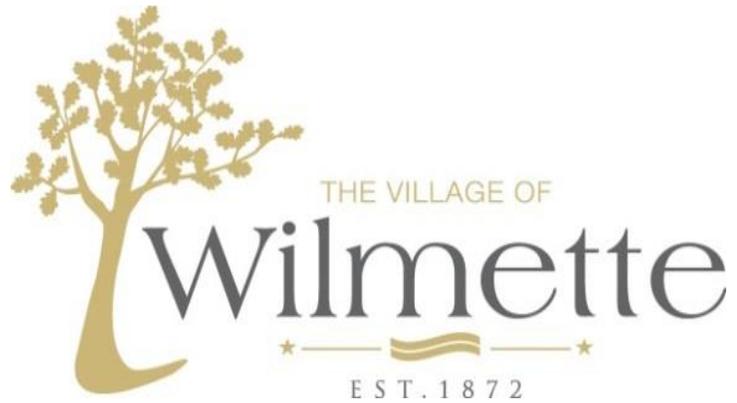
An IGA is necessary with School District 39 so the contractor constructing the reservoir can access Community Playfield through the Highcrest School parking lot, without this IGA, the construction traffic (up to 200 heavy trucks per day) would be required to use Birchwood Avenue. As with the Park District IGA, the general conditions are being negotiated by the respective attorneys, but the key business terms as requested by the School District are highlighted below:

School District Request	Cost
Resurfacing parking lot	\$175,000
Temporary air conditioning during construction	\$85,000
Point to point wireless internet connection	\$20,000
Replacement entry sign	\$40,000
Vibration testing	\$10,000
Site security cameras and lighting	\$20,000
Total	\$350,000

The School District IGA requires the Village to cease access of the construction site through their property by August 16, 2020. This timeline will require weekend work and extended hours during daylight on weekdays. This will have the benefit of completing the project in a shorter timeframe and ending the disruption to nearby residents sooner.

Documents Attached

1. Presentation on Neighborhood Storage Project—Phase 1

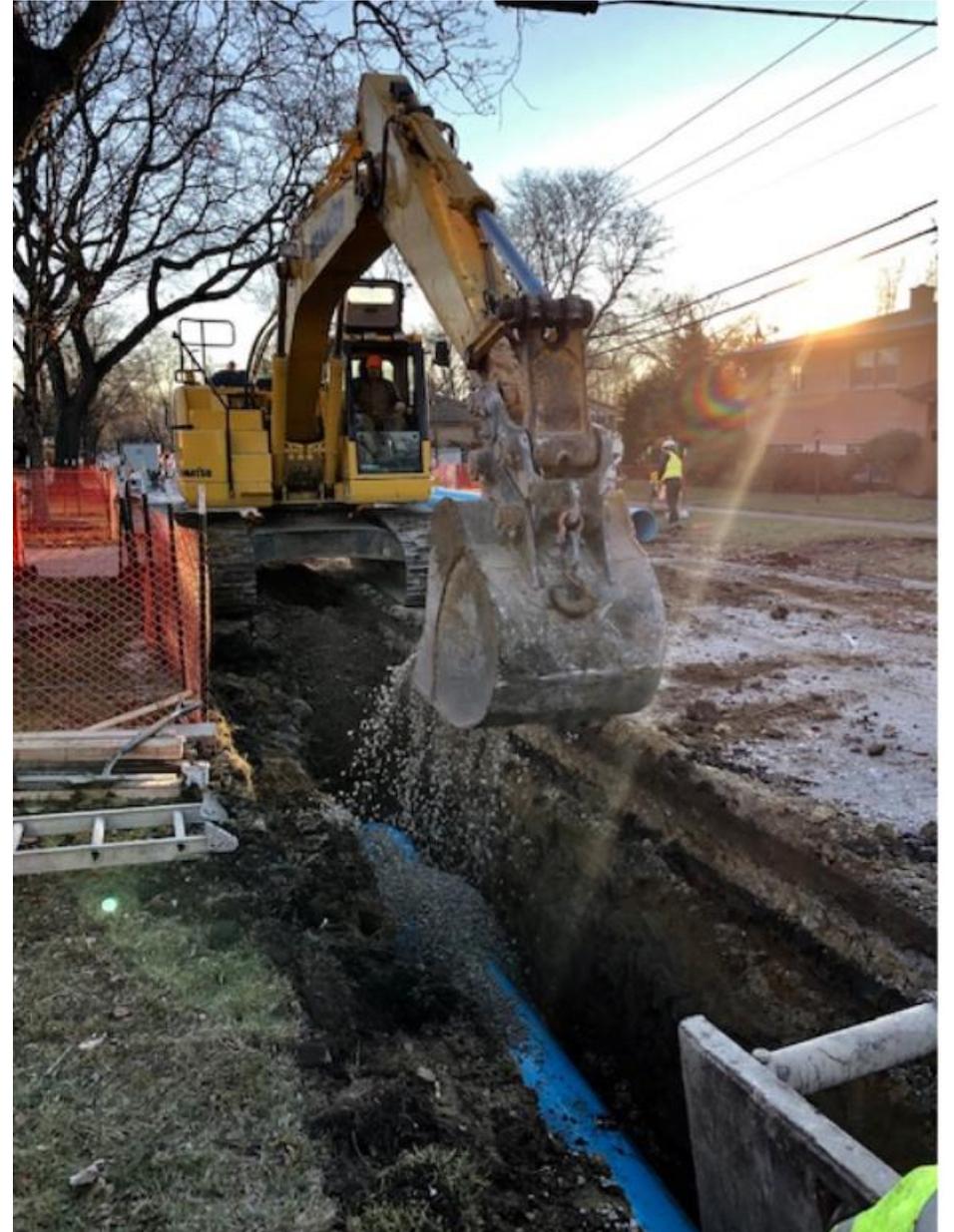


VILLAGE OF WILMETTE
STORMWATER
ACTION PLAN

Village Board Update
2-11-2020
Neighborhood Storage Project

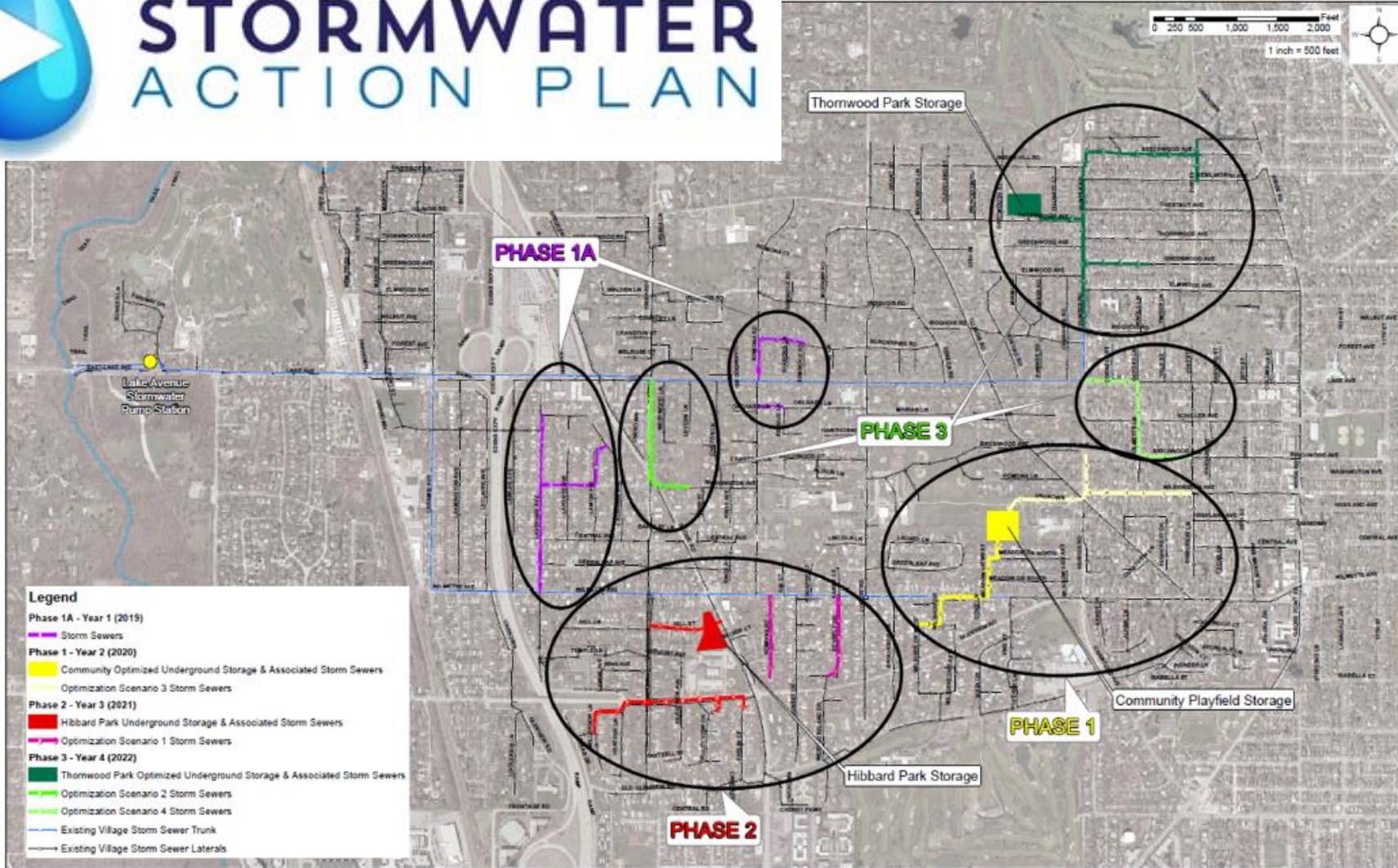
Overview

1. Project overview
2. Optimized sewers
3. Phase 1 highlights
4. Community Playfield construction
5. Communication plan
6. Project milestones
7. Budget update
8. Intergovernmental Agreements (IGA's)
9. Private easement





VILLAGE OF WILMETTE STORMWATER ACTION PLAN



Tentative Schedule

Phase 1A: 2019

Phase 1: 2020

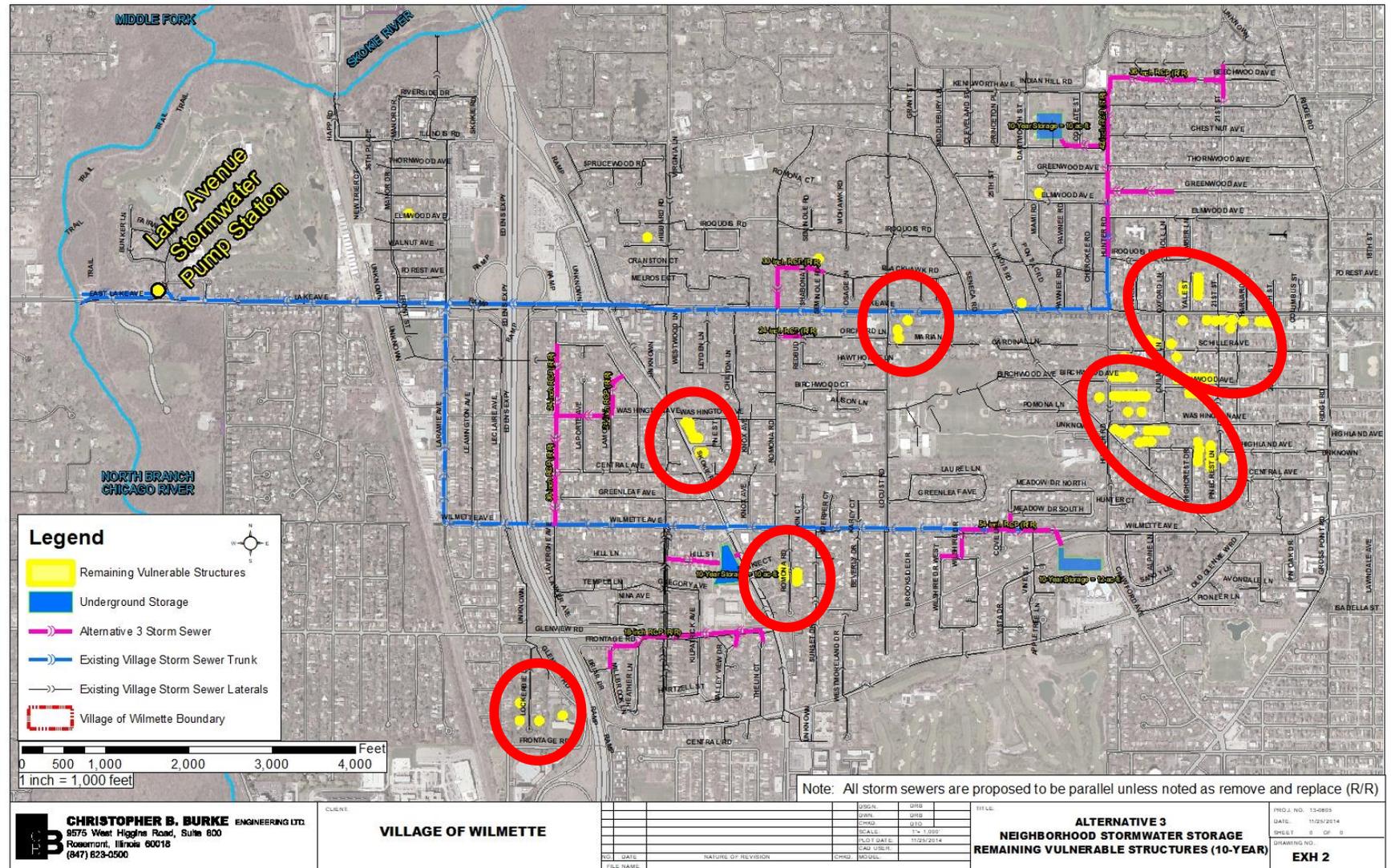
Phase 2: 2021

Phase 3: 2022

Optimized Plan provides 98% reduction in vulnerable structures for a 10-year return interval storm event

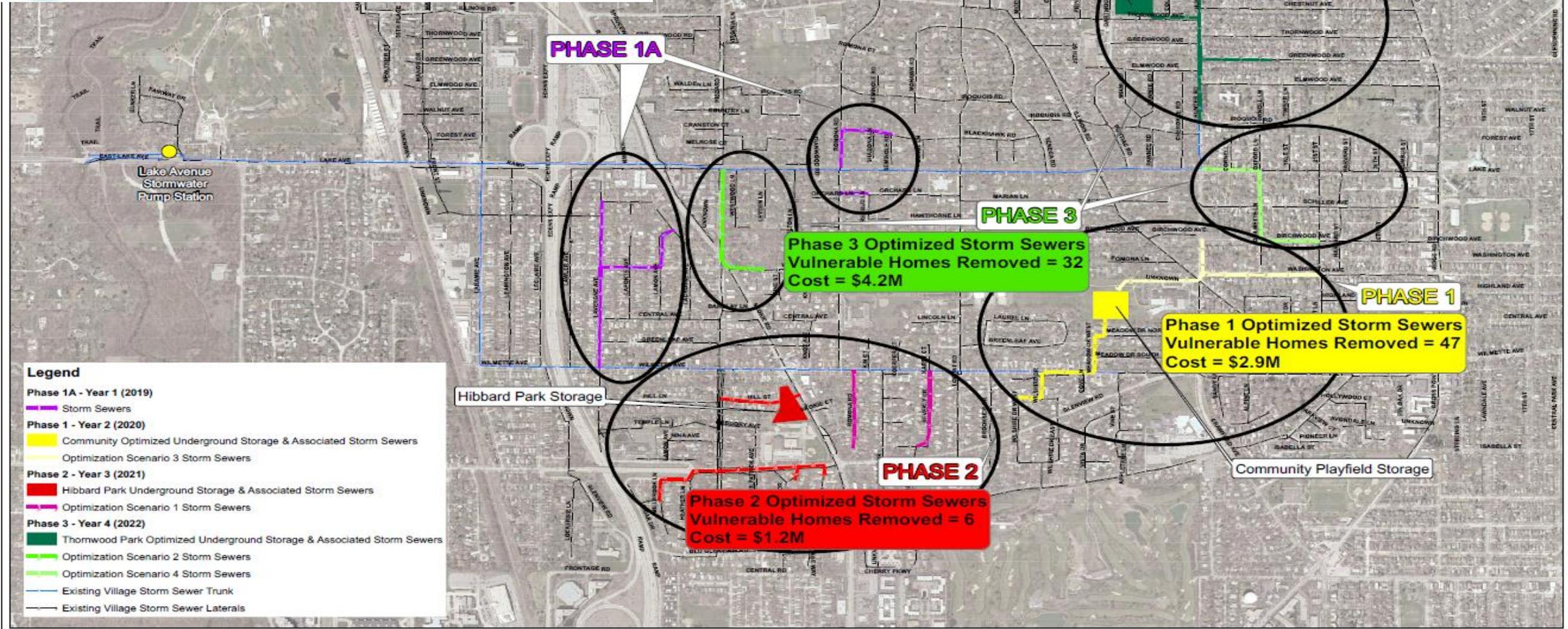
VULNERABLE STRUCTURES - AFTER THE BASE PROJECT IS COMPLETE

Approximately 90
 “Vulnerable
 Structures” remain for
 the 10-year event
 after implementation
 of Base Project





VILLAGE OF WILMETTE STORMWATER ACTION PLAN



Legend

- Phase 1A - Year 1 (2019)**
 - Storm Sewers
- Phase 1 - Year 2 (2020)**
 - Community Optimized Underground Storage & Associated Storm Sewers
 - Optimization Scenario 3 Storm Sewers
- Phase 2 - Year 3 (2021)**
 - Hibbard Park Underground Storage & Associated Storm Sewers
 - Optimization Scenario 1 Storm Sewers
- Phase 3 - Year 4 (2022)**
 - Thornwood Park Optimized Underground Storage & Associated Storm Sewers
 - Optimization Scenario 2 Storm Sewers
 - Optimization Scenario 4 Storm Sewers
- Existing Village Storm Sewer Trunk
- Existing Village Storm Sewer Laterals

PHASE 1A

PHASE 3

**Phase 3 Optimized Storm Sewers
Vulnerable Homes Removed = 32
Cost = \$4.2M**

PHASE 1

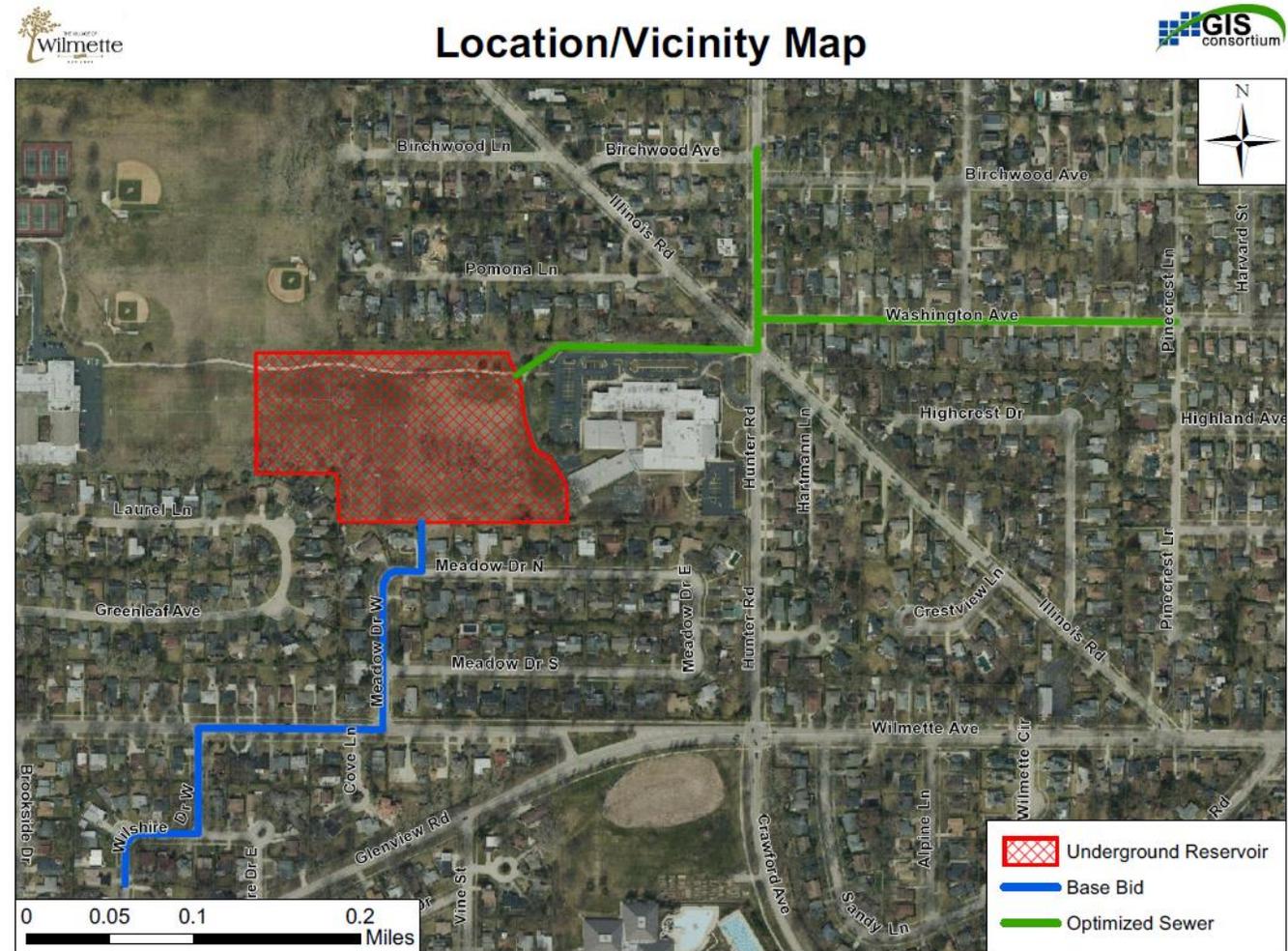
**Phase 1 Optimized Storm Sewers
Vulnerable Homes Removed = 47
Cost = \$2.9M**

PHASE 2

**Phase 2 Optimized Storm Sewers
Vulnerable Homes Removed = 6
Cost = \$1.2M**

Phase 1 Highlights

- 20.2 acre-foot stormwater storage facility (~2,250 pieces)
- 5,665 feet (1.07 miles) storm sewer ranging in size from 12" diameter to 60" diameter PVC and RCP pipe, 3'x7' and 5'-6' RCP rectangular box storm sewer
- Manholes, catch basins, inlets
- Pavement rehabilitation
- Sidewalk removal and replacement and ADA upgrades



Optimized Storm Sewers

Alternate 1 – Storm sewer construction through D39 Highcrest School property, and Illinois/Hunter Road Intersection construction

**Given the disruption to the Highcrest parking lot in 2020 for the Community Playfield reservoir, this alternate is only viable if constructed as part of Phase I in 2020.*

Estimate = \$1.41M

Alternate 2 – Storm sewer on Hunter Road and Washington Avenue

Alternate 2A – Summer-Fall 2020 construction simultaneously with Alternate 1 and Community Playfield and with restricted hours on days when school is in session.

Alternate 2B – Summer 2021, when school is out of session, dates to be determined.

Estimate = \$1.44M

Community Playfield Construction

The IGA with the School District defines three stages:

Early Access: April 6 through last day of school June 12/18

Full Access: June 12/18 through August 16

Late Access: August 17 through November 28

Each stage has specific requirements that define how the contractor can utilize Highcrest Parking Lot for access so as to minimize any disruption to school operations.

Community Playfield Construction

- Only during 6 weeks of “full access” will the contractor have unrestricted use of the Highcrest parking lot to build the reservoir
- 150 to 200 trucks per day hauling excavated material
- Up to 26 StormTrap deliveries per day
- Contractor will backfill excavated areas as they progress
- Contractor will likely have to work 7 days a week and outside of regular work hours in order to stay on schedule
- Highcrest parking lot to be rebuilt to at least “safe and usable” condition prior to August 15
- Secondary access through Birchwood after full access time period if necessary -- *this will be extremely disruptive to Birchwood residents*

Communication Plan

- Public Open House prior to construction
- Pre-construction mailing with detailed information
- Door hangers handed out by Resident Engineer
- Project website updated regularly
- Monthly paper newsletter
- Hand-delivered notices as needed
- Video Public Service Announcements
- Streaming Progress Videos
- Drone flyovers to document progress

NEIGHBORHOOD STORMWATER STORAGE IMPROVEMENT PROJECT: PHASE I



Over the last several months, the engineering team hired by the Village has been finalizing the design of the Community Playfield underground storage vault, site drainage improvements and new storm sewers. The project is anticipated to be out to bid in January 2020.



INTERGOVERNMENTAL AGREEMENTS (IGA'S) between the Village and the Park District and School District 39 are critical components of this project.

An IGA with the Park District is necessary for the Village to install the vault under Community Playfield. This agreement is under development by the Park District.

An IGA with School District 39 is necessary because the plan includes utilizing the Highcrest Middle School parking lot for construction access primarily during the summer of 2020, as well as to build a new storm sewer under the parking lot.

WHAT AREAS OF COMMUNITY PLAYFIELD WILL BE IMPACTED AND WHEN WILL THE PARK REOPEN?

Only the southeastern portion of the park (highlighted on the map to the right) will be under construction from April 2020 through November 2020. The area disturbed by construction will be restored with sod in the fall of 2020. Since the new sod requires time to establish roots, it is anticipated that the entire playfield will be open for the public to enjoy in the spring of 2021.

I LIVE NEAR COMMUNITY PLAYFIELD, WHAT CAN I EXPECT?

The entire construction zone will be protected with an 8-foot tall fence and dust control measures will be included in the construction contract.

The majority of the vault installation will occur during the eight weeks of summer recess. This aggressive schedule means that the contractor may have to work longer days and on weekends.

The Village will establish truck routes for the project that will generally limit trucks to major roads, such as Lake Avenue, Hunter Road and Glenview Road. Primary access to the Playfield will be through the Highcrest Middle School parking lot during the summer recess. If construction runs longer than the summer recess, a secondary access point will be necessary through Birchwood Avenue.

WHAT WILL COMMUNITY PLAYFIELD LOOK LIKE WHEN THE PROJECT IS COMPLETED?

Since the vault will be completely underground, Community Playfield will look like it does today when construction is over. In addition to providing significant flood relief, the project will also resolve the major drainage problems within the southeast quadrant of the park, therefore reducing standing water and making the park more usable throughout the year.



Project Milestones

- Bid opening on February 13
- February 25 Village Board meeting
 - ✓ Construction contract
 - ✓ Resident engineering services contract
 - ✓ IGA with the School District
 - ✓ IGA with the Park District
 - ✓ Private property easement
- School District approval targeted for February 24
- Park Board approval targeted for week of February 18
- Resident Open House in March
- Construction commences April 6



Project Budget

YEAR	PHASE	LOCATION	FEB 2019 Conceptual Estimate (\$M)	FEB 2020 Updated Estimate (\$M)*
2019	Phase 1A	Various	6.4	4.5
2020	Phase 1	Community Playfield	20.3	24.0
2021	Phase 2	Hibbard Park	14.2	13.2
2022	Phase 3	Thornwood Park	27.3	26.5
TOTAL			68.2	68.2

* Includes optimized sewers (\$8.3 million for all three phases), IGA requests and Miller easement

* Phases 2 and 3 costs are based on 2018 dollars

IGA: School District

School District Requests	Estimated Cost
Parking Lot Resurfacing	\$175,000
Air conditioning (temp)	\$85,000
Wireless Communication	\$20,000
Entry Sign	\$40,000
Vibration testing	\$10,000
Cameras in the park (temp)	\$10,000
Lighting in the park (temp)	\$10,000
Total	\$350,000

IGA: Park District

Park District Request	Community Playfield	Hibbard Park	Thornwood Park
Comprehensive Landscaping	\$312,500	\$57,000	\$57,000
Drainage Improvements	\$160,000	\$80,000	\$80,000
Public Restrooms	\$550,000		\$362,500
Lawn Irrigation	\$500,000		\$250,000
Recreational Path with lighting	\$940,000		
Subtotal per park	\$2,462,500	\$137,000	\$749,500
<i>SUBTOTAL 3 PARKS</i>	<i>\$3,349,000</i>		
Drainage improvements at Community in work zone	\$1,200,000 * <i>included in the base project bid</i>		
TOTAL PARK DISTRICT BENEFIT	\$4,549,000		

Note: Costs were developed based on draft IGA text and without concept plans or details. Costs include a 25% design and construction contingency

Private Property Easement

- 20-foot permanent easement through the driveway at 2432 Meadow
- Connects the Wilmette Avenue trunk sewer to the vault under Community Playfield
- Cash payment of \$180,000
- Easement access between April 1 and May 31, 2020
- All work must be completed in 45 days

