



1200 Wilmette Avenue
WILMETTE, ILLINOIS 60091

MEETING NOTICE & AGENDA
VILLAGE BOARD COMMITTEE OF THE WHOLE

September 19, 2016
7:00 p.m.
Village Hall Council Chambers

- 1) Call to Order
- 2) Discussion of Storm Sewer System Improvements
- 3) Public Comment
- 4) Other Business
- 5) Adjournment

Robert T. Bielinski
Village President

If you are a person with a disability and need special accommodations to participate in and/or attend any Village public meeting, please notify the Village Manager's Office at (847) 853-7509 or TDD (847) 853-7634. For additional information please call (847) 853-7511, the Village Clerk's Office.



Engineering and Public Works
Department

(847) 853-7500
Fax (847) 853-7705

MEETING DATE: September 16, 2016

TO: Timothy J. Frenzer, Village Manager

FROM: Brigitte Berger, P.E., Director of Engineering and Public Works
Russ Jensen, P.E., Village Engineer

SUBJECT: Separate Storm Sewer System Study

Recommendation

The purpose of the Committee of the Whole meeting on Monday, September 19, 2016 is for the Village Board to review and discuss the Separate Storm Sewer Study for the area west of Ridge Road. There is no specific action requested by staff at this time.

Background

In response to several significant storms of record in August 2007, September 2008 and April 2013, the Village Board approved a contract with Christopher B. Burke Engineering Ltd. (CBBEL) to conduct a hydraulic analysis of the separate storm sewer system, located west of Ridge Road. This 2014 study considered the following three components of the existing storm system:

- Trunk (large diameter) and lateral (small diameter) sewers that collect and convey the stormwater;
- Stormwater pump station on Lake Avenue;
- Two outfall pipes that discharge the stormwater from the pump station to the North Branch of the Chicago River.

The goal of the study was to determine the location of critical “bottlenecks” within the system and identify projects that would improve capacity, thereby reducing overland flooding. The identified performance standard recommended by the Municipal Services Committee was to keep flood levels below street level for the 10-year storm event.

The limiting factor in the system was determined to be the capacity of the existing storm sewers to convey the stormwater to the pump station in an efficient manner. The existing storm sewers have the capacity of only a 2-year storm. Table 1 documents the number of residential structures impacted by flooding as determined by the hydraulic modeling.

Return Storm Interval	Number of Structures Impacted ¹
10-year	120
25-year	280
50-year	480
100-year	700

Table 1. Summary of structures impacted by flooding

¹ Structures are considered “impacted” if water reaches within 1-foot of the highest lot elevation.

Two projects were identified that meet the performance standard of keeping flood levels below street level for the 10-year storm event.

- Alternative 1 includes building a relief storm sewer system to collect and convey excess storm flows to the stormwater pump station. This alternative includes installing 42,000 feet of new trunk and lateral sewers. The cost of this alternative is estimated to be \$77 million¹.

- 1. Alternative 2.2 includes building above-ground storage at Community Playfield. The bottom of the basin would be dry and suitable to replace athletic fields and stormwater management areas currently located within the basin footprint. Large Reinforced Concrete Box Culverts (RCBC’s) under Locust Road will provide conveyance to and from the centralized storage basin by gravity. The RCBCs would extend from Lake Avenue and Wilmette Avenue into the storage basin. The estimated construction cost is \$55.0 million¹.

¹ The estimated construction costs have been adjusted by 3% to reflect 2016 pricing.

Other alternatives were considered, but they did not achieve the performance standard of keeping flood levels below street elevation for the 10-year storm event.

Discussion

The presentations on Monday, September 19, 2016 will include the following:

1. Staff overview to include:
 - Summary of Municipal Services Committee meetings and Village Board actions related to overland flooding;
 - Overview of the separate sewer system;

- Discussion of why homes flood;
 - Data on reported sanitary sewer backups;
 - Past sewer infrastructure investments; and
 - Current sewer infrastructure investments.
2. Presentation by Darren Olson, Christopher B. Burke Engineering Ltd. on the Separate Storm Sewer System Study
 3. Financial review of existing and new debt service and cost impact to residents

The complete PowerPoint presentations are included for Village Board review.

At the last Municipal Services Committee meeting on April 5, 2016, there was Committee consensus that steps should be taken to address flooding west of Ridge Road. There was also consensus that Alternative 1, building a relief storm sewer system (\$77 million), is the preferred alternative because the storm segments can be built incrementally and reliance on third party property owners and stakeholders (namely the Park District and School District) was significantly less than Alternative 2 (above-ground storage at Community Playfield).

Documents Attached

1. Minutes of the July 9, 2013 MSC meeting
2. Minutes of the August 25, 2014 MSC meeting
3. Minutes of the January 28, 2015 MSC meeting
4. Minutes of the March 25, 2015 MSC meeting
5. Minutes of the September 24, 2015 MSC meeting
6. DRAFT Minutes of the April 5, 2016 MSC meeting (not yet approved)
7. PowerPoint Presentation



VILLAGE OF WILMETTE

1200 Wilmette Avenue
WILMETTE, ILLINOIS 60091-0040

MEETING MINUTES

MUNICIPAL SERVICES COMMITTEE OF THE VILLAGE BOARD

TUESDAY, JULY 9, 2013

5:00 P.M.

TRAINING ROOM OF VILLAGE HALL

Members Present: Trustee Julie Wolf, Chair
Trustee Alan Swanson
Trustee Cameron Krueger

Members Absent: None

Staff Present: Brigitte Mayerhofer, P.E., Director of Engineering Services
Jorge Cruz, Assistant Director of Engineering Services
Timothy J. Frenzer, Village Manager

Guests Present: Resident list attached

I. CALL TO ORDER.

Trustee Julie Wolf, Chair, called the meeting to order at 5:00 p.m. Committee members Trustees Swanson and Krueger were present.

II. APPROVAL OF MINUTES; MUNICIPAL SERVICES COMMITTEE MEETING OF MAY 13, 2013.

Trustee Wolf directed the Committee's attention to the draft minutes of the Municipal Services Committee meeting of May 13, 2013.

Trustee Krueger moved that the Committee approve the minutes. The motion was seconded by Trustee Swanson and approved by unanimous voice vote. The motion carried.

III. REVIEW OF APRIL 18, 2013 RESIDENT FLOOD SURVEY RESULTS

Brigitte Mayerhofer, Director of Engineering, summarized the report presented to the Committee regarding the Flood Survey Summary from the April 18, 2013

storm event. She reviewed the Village sewer systems which consist of a combined system (east of Ridge Road), a separate system (west of Ridge Road), a storm sewer system, and a sanitary sewer system. A review of storm records maintained by the Village since 1980 shows that four storms within the last five years were classified as a 10 year storm or greater. The April 18, 2013 storm generated 5.56 inches of rain at Wilmette's water treatment plant and approximately 5 inches at the storm water pump station over 24 hours. In addition, the antecedent soil conditions were saturated to April 18, which magnified the overland flooding. Ms. Mayerhofer reviewed the reasons for flooding in residential neighborhoods during storm events which included sanitary backups, street flooding and yard flooding.

Ms. Mayerhofer summarized the data from the 2013 Engineering flood survey results. The data results confirm that the most critical concern is the sanitary backups in basements. She identified the areas that flood in the Village from the flood density or "heat" maps provided to the Committee. Ms. Mayerhofer identified the sewer improvements from 1992 to the present. She also noted the areas of specific concern for flooding which are the Kenilworth Gardens subdivision, the Hibbard Road corridor and southwest Wilmette.

IV. UPDATE ON THE 2013-2015 SEPARATE SANITARY SEWER INITIATIVES

Ms. Mayerhofer outlined the 2013 through 2015 capital sewer program which is aimed at addressing the flooding problems identified in the areas of specific concern. Staff is recommending a sanitary sewer evaluation study to identify the inflow and infiltration sources. Ms. Mayerhofer also reviewed flood control systems for residential homes as well as rain gardens, bioswailes, and less impervious surface.

Trustee Wolf noted that the Village Board is in the process of preparing the 2014 Budget and working through the priorities of projects. She asked Ms. Mayerhofer to review the projects and what project would give the Village the best cost benefit.

Ms. Mayerhofer noted that there is a letter in the Committee's agenda packet from RJN, the Village's consulting engineer, that provides technical information on how large the storage component of the Harm's Road Project should be. Previous studies have indicated that this is a critical component of improving the efficiency of the sanitary sewer system on the west side of the Village. She noted the Village is limited in locations to provide storage and it is believed that West Park is the best location for an underground storage reservoir to handle peak sanitary flows. She said RJN did an analysis and determined that the optimal volume of storage to be provided for the Harms Road Region to cost-effectively reduce the number of basement backups is approximately 5.5 million

gallons.

Trustee Swanson said he reviewed the RJN report thoroughly and he believes it is a good analysis.

Trustee Wolf noted that a resident asked what the timing would be on building the underground storage.

Ms. Mayerhofer said assuming the funding would be in place, and the Village Board will be considering a bond issue for the project later in the year, the design could be started immediately and the project under construction next June.

Trustee Krueger noted that the project is not funded right now and that building an underground storage reservoir would not solve everyone's flooding problems in the Village.

There were questions from residents regarding flooding in their streets and why the sewer project was just being discussed at this time.

Trustees Wolf, Swanson and Krueger all noted that the agenda this evening was to provide information on all sewer projects. Sewer projects have been ongoing for many years, and every year a different sewer project is addressed and funded. The specific study from RJN was recently completed and the report is being shared with the Committee and the public this evening.

The Committee is in agreement with the recommendation from RJN that a storage reservoir would effectively reduce the number of basement backups and the most feasible location for the storage is West Park.

V. OVERHEAD SEWER COST SHARE PROGRAM

Ms. Mayerhofer said the Overhead Sewer Cost Share Program is proposed for the 2014 Capital Improvement Program. She noted that several neighboring communities currently have a cost share program for sanitary sewer back flow improvement such as an overhead sewer or flood control system. There is a recognition that the Village is not able to build pipes and storage reservoirs big enough so that we can guarantee that no home in the Village will flood. A program such as this is intended to provide some financial incentive for the homeowner to protect their property by installing a flood control system. Staff has contacted neighboring communities regarding what they have in place regarding cost participation. In many cases, it is 50% up to a certain dollar amount. The program would be an operational funded program and would compete with other sewer programs for funding in the Village. She said the program has become more popular in the past few years and staff has received

requests from residents asking for this type of program.

Trustee Krueger said after flooding three times, he installed overhead sewers to eliminate the sewer backup. Since the Committee is just starting to discuss the proposed program he encouraged residents, who have flooded several times, to install a flood system.

A resident asked if there is anything that can be done to improve power outages during a storm. When the power goes out, her sump pumps fail to work.

Trustee Krueger said the progress the Village has made with ComEd during the past three to four years has been tremendous, power outages have decreased dramatically.

Trustee Wolf said the Northwest Municipal Conference worked to put pressure on ComEd to have much better communication and response time with municipalities in our area.

VI. DISCUSSION OF NEW CIP STORMWATER INITIATIVE FOR GIS, MODELING AND HYDRAULIC ANALYSIS OF THE SEPARATE STORM SEWER SYSTEM.

Ms. Mayerhofer reviewed the report presented to the Committee noting that the GIS system would help staff understand the hydraulics of what is happening during storm events.

Trustee Wolf noted that the information could identify easily locatable areas to be fixed and ideas how to approach the whole issue regarding storm water.

Trustee Krueger asked when the data collection would be complete.

Ms. Mayerhofer said the GIS data would take approximately 3 months to complete.

VII. OLD BUSINESS

Trustee Wolf said she would like to update the Committee on the Elmwood Dunes area. The Park District has been staffing the area and said everything is going very smoothly on the property. There has been excellent compliance on the property.

VIII. PUBLIC COMMENT

Trustee Wolf said the meeting would now be open to those residents who wanted to address the Committee.

Joan Binder, 2034 Kenilworth Avenue, said she has lived in her home for 30 years. She said her backyard and her neighbors flood regularly and wondered if the Village has any regulations for homes that built additions, as she believes this has caused more water/drainage issues. She asked if homes that have installed flood control systems will cause more water issues for homes that do not install flood control systems.

Ms. Mayerhofer said theoretically if everyone on the block installed a flood system, the volume of water that used to flood their basements will now go back into the sewer. She asked Ms. Binder how long the water lasts in her backyard.

Ms. Binder said the water takes two days to go away.

Ms. Mayerhofer said 72 hours is a reasonable time after a significant rain event for water to evaporate or infiltrate the property. She said in 2005 the Village adopted a grading ordinance that would prohibit any homeowner from building up their property and transferring where water flows but Illinois drainage laws state that if you are downstream, you must accept upstream water as water flows downhill.

Trustee Swanson said many residents believe that the Village controls the locks and stated that the Metropolitan Water Reclamation District controls when the locks will be opened during a storm event. He also wanted to be clear that anyone who lives west of Ridge Road will not be impacted by the locks being opened due to flooding. He noted that there is a graph that shows the measurement of accumulated water during storms since 1980. The Village has been spending money every year to upgrade the sewers in the Village.

Tim Fox, 743 Leyden Lane, asked for clarification regarding the separate sanitary and sewer pipes west of Ridge Road. He has flooded four times due to sewer backup and is in the process of installing overhead sewers.

Ms. Mayerhofer said overtime the pipes crack which cause open joints in the public and private sector. She said there is also inflow due to foundation drains and other ground water sources that are connected to the sanitary.

Kristyn Gibson, 2030 Kenilworth, asked who is responsible for the sewers and maintenance of the sewers.

Ms. Mayerhofer said according to the Village Code, the homeowner is responsible for the sanitary lateral from the home to the connection of the public main.

Joel Kurzman, 243 Valley View Drive, said he appreciates the efforts that the Village has made but he put in an overhead sewer on his property and is frustrated by overland flooding that he still has on his property.

Wendy Crawford Schultz said she has lived on Beechwood Avenue in Kenilworth Gardens since 2000. Her basement experienced sewer back-ups numerous times and so she installed a sewer back-up system and has not experienced a sewer backup since that time. Due to ground water flooding on her street, her foundation is susceptible to ground water flooding. She is concerned that her foundation will be damaged due to the streets flooding and causing overland flooding.

Mitcha Farahati, 2135 Kenilworth Avenue, said she has had frequent sewer backups since she has owned her home since 1992 which has been very costly.

Bill Shapiro, 406 Wilshire Drive, said he has lived in his home for 40 years and his main problem is storm water. He has installed flood control but is not able to control the storm water.

Kristyn Gibson, 2030 Kenilworth Avenue, asked if there was any thought to building a stormwater basin in the Thornwood Park area and would it benefit the area.

Ms. Mayerhofer said they are currently looking at storm water options in that area but at this time staff is gathering data to find out where the water is coming from.

Renee Sexton said she lives at the corner of Kenilworth Avenue and 21st Street. She has previously talked to Ms. Mayerhofer as she has been frustrated with the flooding in the area. She is in the process of installing overhead sewers to prevent sewer back-ups in her home as the loss of personal items was overwhelming. She is concerned with the flooding in the street during storm events as she would not be able to get out of her home in a crisis and does not believe emergency vehicles would be able to navigate her street.

Mr. Frenzer said if there is a medical emergency, emergency vehicles are equipped to navigate the water in the streets and emergency personnel will do their job to the best of their ability.

Denise Kirshenbaum, 2108 Beechwood, said she does not believe flooding in the street is a good thing and would like the Village to address the issue. She has lost multiple appliances and has spent many hours cleaning up the damage from flooding.

Chip McCall, 2116 Beechwood, thanked the Committee for listening as well as

Ms. Mayerhofer for returning his call and discussing the flooding issue with him. He said many neighbors could not attend the meeting and wanted him to stress to the Village Board that something needs to be done with the flooding in their neighborhood as it has become a safety issue.

Greg Stephan, 614 Laporte, said he has lived in his home since 1986 and has experienced flooding for over 20 years. He also believes the flooding is getting worse every year. There is a major problem with flooding at the corner of Laporte and Central and it takes over three days for the water to flow away after a storm event.

Jeff Woodman, 2025 Kenilworth, said he believes his neighborhood floods the worst in the Village. He hopes the Village will remedy the situation.

IX. ADJOURNMENT

Trustee Wolf asked for a motion to adjourn. Trustee Krueger moved to adjourn the meeting. The motion was seconded by Trustee Swanson. No further discussion occurred on the motion. Voting yes: Trustee Wolf, Trustee Swanson and Trustee Krueger. Voting no: none. **The motion carried.**

The meeting was thereafter adjourned at 7:15 p.m.

Minutes Respectfully Prepared by Barbara Hirsch.



VILLAGE OF WILMETTE

1200 Wilmette Avenue
WILMETTE, ILLINOIS 60091-0040

MEETING MINUTES

MUNICIPAL SERVICES COMMITTEE OF THE VILLAGE BOARD

MONDAY, AUGUST 25, 2014

7:00 P.M.

TRAINING ROOM OF VILLAGE HALL

Members Present: Trustee Julie Wolf, Chair
Trustee Alan Swanson
Trustee Cameron Krueger

Members Absent: None

Staff Present: Brigitte Berger, P.E., Director of Engineering Services
Jorge Cruz, Civil Engineer
Timothy J. Frenzer, Village Manager
Michael Braiman, Assistant Village Manager

Guests Present: Thomas Burke, Christopher B. Burke Engineering Ltd.
Michael Henderson, Maxim Construction Corporation
Alan Hollenbeck, RJN Group

I. CALL TO ORDER.

Trustee Julie Wolf, Chair, called the meeting to order at 7:00 p.m. Committee members Trustees Swanson and Krueger were present.

II. APPROVAL OF MINUTES; MUNICIPAL SERVICES COMMITTEE MEETING OF JUNE 13, 2014.

Trustee Wolf directed the Committee's attention to the draft minutes of the Municipal Services Committee meeting of June 13, 2014.

Trustee Swanson moved that the Committee approve the minutes. The motion was seconded by Trustee Krueger and approved by unanimous voice vote. **The motion carried.**

III. UPDATE ON STORMWATER ACTION PLAN

Brigitte Berger, Director of Engineering, said the purpose of the discussion is to provide an update on the progress of the separate storm sewer system study that Christopher B. Burke Engineering Ltd has done over the past few months. She noted that in the past five years the Village has made significant progress reducing flooding for the homes tributary to the separate sewer system west of Ridge Road. The Village began with collecting resident flood data after major rain events and completing a comprehensive sewer system study in 2010. Many of the projects recommended in the 2010 study are currently underway. Ms. Berger reviewed the study recommendations and their status as presented in the report to the Committee.

Thomas Burke, Christopher B. Burke Engineering Ltd, provided a brief power point presentation discussing the 1) summary of work completed to date including the survey and flow monitoring, compilation of resident information and hydrologic and hydraulic modeling, 2) limitations of existing system, 3) the next step which is to evaluate potential drainage improvements including green infrastructure, stormwater conveyance and stormwater storage.

Trustee Wolf asked Ms. Berger for storm information from the past few years.

Ms. Berger said the data she received from the Water Plant states that over the past 34 years the Village has had four one hundred year rain events, one seventy year storm, two fifty year rain events, four twenty five year events, two fifteen year storms and five ten year storms.

Ms. Berger suggested a 10-year storm event be set as the performance goal for pipe conveyance, with roads and intersections passable for emergency vehicles. She also suggested performance levels of street ponding up to 6 inches of water, street and parkway ponding up to the right-of-way limits and full protection of habitable structures from overland flooding. The storage volumes will be designed based on maximum available open space.

There was a consensus among the Committee for the suggested starting point of protection for a 10-year storm.

Ms. Berger noted that staff and consultants will be available to answer any questions from residents in the training room.

IV. WEST PARK SANITARY STORAGE PROJECT-REVIEW OF THE DESIGN-BUILD AGREEMENT

Ms. Berger reviewed the report presented to the Committee highlighting the

design and site plan changes of the storage tank, the operation of the tank and the breakdown of how the Guaranteed Maximum Price (GMP) was calculated. Ms. Berger noted the design build agreement is currently under review by legal counsel and will be presented to the Village Board prior to the September 9 Village Board meeting. The construction schedule to build the West Park Sanitary Storage Project is very aggressive. The Park District approved the Intergovernmental Agreement with the Village at their August 18, 2014 Regular Meeting and the Intergovernmental Agreement is scheduled for approval at the Village Board's Regular Meeting on August 26, 2014. The Design Build Agreement is scheduled for approval at the September 9, 2014 Regular Village Board meeting and there is a tentative start date for the project of October 1, 2014. The substantial completion date is scheduled for September 15, 2015 with the final completion date scheduled for November 30, 2015.

Trustee Swanson asked why the shape of the storage tank was changed from circular to rectangular.

Michael Young, RJN, said by changing the configuration of the tank from circular to rectangular, they were able to save money due to the construction efficiencies realized with a deeper tank and smaller footprint.

Trustee Wolf asked if the rectangular shaped tank would take longer to pump out than the circular shaped tank.

Mr. Young said it may take a little bit longer to pump out but it is negligible.

Trustee Swanson asked for explanation regarding the contingencies in Exhibit 1 such as the unsuitable soil disposal and backfill and the soil stabilization.

Mr. Young said it is their expectation to stay within the provisions of the bid contract and the allowances.

Trustee Swanson asked if there would be incentives for the contractor to finish the job earlier or on time.

Mr. Frenzer said Corporation Counsel is still working on that element of the contract. It is important to stress that the Park District needs to have the project done on time to have their contractor start on the turf project in a timely manner.

Trustee Wolf asked who would be managing the installation of the turf.

Mr. Frenzer said the Park District would be managing the installation of the turf but the Village would be providing them an allowance for the project.

Trustee Krueger asked if there are problems that are discovered along the way and the contractors run over, is the Village responsible for the additional fees.

Ms. Berger said the guaranteed maximum price protects the Village from a substantial number of construction-related cost overruns. There is a remote risk of poor soil or hazardous conditions that would be extraordinary and result in additional cost to the Village.

Alan Hollenbeck, RJN Group, said he believes there is a much higher likelihood of cost savings than there is of additional costs.

Trustee Swanson said it is very important that the Village has the representation to look out for additional costs.

Trustee Krueger asked if the risk of economics and timeliness is being shifted from the Village to the contractor.

Ms. Berger said RJN Group and Boller Construction will take on the risk of the project.

Mr. Hollenbeck said they will be bonded and have insurance for the risks of the project. The primary risk for the project is the schedule which is driven by the weather.

V. NEW BUSINESS

Michael Braiman, Assistant Village Manager, sought agreement from the Committee to proceed with the recruitment process for the Assistant Water Plant Superintendent.

The consensus of the Committee was to proceed with the recruitment process.

VI. ADJOURNMENT

Trustee Wolf asked for a motion to adjourn. Trustee Krueger moved to adjourn the meeting. The motion was seconded by Trustee Swanson. No further discussion occurred on the motion. Voting yes: Trustee Wolf, Trustee Swanson and Trustee Krueger. Voting no: none. **The motion carried.**

The meeting was thereafter adjourned at 8:06 p.m.

Minutes Respectfully Prepared by Barbara Hirsch.



1200 Wilmette Avenue
WILMETTE, ILLINOIS 60091-0040

MEETING MINUTES

MUNICIPAL SERVICES COMMITTEE OF THE VILLAGE BOARD

**WEDNESDAY, JANUARY 28, 2015
7:00 P.M.
TRAINING ROOM OF VILLAGE HALL**

Members Present: Trustee Julie Wolf, Chair
Trustee Alan Swanson
Trustee Cameron Krueger

Members Absent: None

Staff Present: Brigitte Berger, P.E., Director of Engineering Services
Jorge Cruz, P.E., Assistant Director of Engineering Services

I. CALL TO ORDER.

Trustee Julie Wolf, Chair, called the meeting to order at 7:00 p.m. Committee members Trustees Swanson and Krueger were present.

II. APPROVAL OF MINUTES; MUNICIPAL SERVICES COMMITTEE MEETING OF OCTOBER 8, 2014.

Trustee Wolf directed the Committee's attention to the draft minutes of the Municipal Services Committee meeting of November 20, 2014.

Trustee Krueger moved that the Committee approve the minutes. The motion was seconded by Trustee Swanson and approved by unanimous voice vote. The motion carried.

III. PRESENTATION OF THE WEST SIDE SEPARATE STORM SEWER STUDY RESULTS

Trustee Wolf noted that there would be a presentation this evening by Christopher B. Burke Engineering Ltd. (CBBEL) of the storm sewer study and public comment would be taken after the presentation.

Brigitte Berger, Director of Engineering, said the presentation will cover the separate sewer system, why homes flood, sanitary versus storm systems, past and current capital infrastructure improvements. She noted that Wilmette's separate sewer system was constructed back in 1930-1950 when there were no modern stormwater management techniques that are used today. When the sanitary sewer system leaves Wilmette, it enter another piping system in two locations, one in the Kenilworth Gardens Subdivision which is Princeton Place and a second outfall is located at Lake Avenue and Harms Road. From there the Metropolitan Water Reclamation District of Greater Chicago takes the water and treats it.

Ms. Berger said the storm water system discharges directly into the North Branch of the Chicago River. It is a gravity system until a pump station at Lake Avenue and Harms Road pumps the stormwater to the Chicago River.

Ms. Berger said homes flood for a variety of different reasons which makes it an interesting problem to solve as there is not one solution that will take care of all types of flooding. She demonstrated, through a slide show, the different types of flooding for residential homes. She said they chose sanitary sewer improvements over stormwater improvements because federal and state laws require that sanitary sewer backups and sanitary sewer overflows be mitigated. Wilmette has three times more residents with sanitary sewer backups in their basement compared to structure damage caused by overland water flow. Sanitary backups result in raw sewage in basements which poses a health concern. When the Village did the hydraulic modeling of the sanitary system, some very evident structural problems were found right at the connection with the Metropolitan Water Reclamation District. During a storm event there were 17 hours that the Metropolitan Water Reclamation District's water was flowing backwards into Wilmette's system. That is a tremendous problem that is being corrected with the West Park Storage project that is currently under construction.

Ms. Berger said since 1990, not including current work being done, the Village has spent almost \$52 million Village-wide on our sewer systems. There is also ongoing Village wide maintenance in the form of sanitary sewer cleaning, lining and repair. The \$26 million project that is taking place now is related to fixing the sanitary problem on the west side of the Village.

Ms. Berger introduced Darren Olson from the firm of Christopher B. Burke Engineering Ltd., for the presentation of the Separate Storm Sewer Study.

Mr. Olson outlined the following in the attached power point presentation:

- Data collection
- Summary of Existing Model Results
- Identification of System Bottleneck
- Summary of Potential Drainage Improvement Projects

- Summary of Benefits and Costs
- Discussion of Potential Funding Sources

Mr. Olson noted that the compilation of resident information from those residents who attended Open Houses, responded to questionnaires and surveys, provided photographs and videos was invaluable for their study.

Mr. Olson highlighted the limitations of the existing system which are:

- Reliance on Storm Sewers and the Pump Station
- Topographic Limitations
- A highly developed residential area
- Sewers were developed prior to modern stormwater management practices
- Limited open space in the Village
- No easy place to safely store or send runoff

Mr. Olson said after reviewing all the limitations of the current system, the next step was to develop a stormwater model of the west side of the Village. They digitally imported survey data and landuse data, studied the area divided into 150 subbasins and modeled all trunk and lateral storm sewers. Underutilized segments and/or restrictions were identified as well as potential improvements. They also calibrated monitoring and flood events. The next step was to run the existing conditions model to get into the results. They looked at the different high water elevations at different locations throughout the Village for a variety of storm events and learned the existing stormwater capacities during specific events and the estimated number of structures impacted by flooding as detailed in the report attached.

Mr. Olson said using the results of the model they were able to identify bottlenecks in the system and given the limitations of the existing system they tried to identify a goal to improve the system. The goal is the 10 year system capacity which is usually reducing the 10 year flood elevation below pavement elevation which is similar to the design standard for new construction.

They looked at a variety of proposed drainage improvements from near term improvements and green infrastructure to long term capital improvement projects.

Mr. Olson reviewed the proposed drainage improvements for three alternatives:

- Alternative 1-Relief Storm Sewer System
- Alternative 2-Centralized Storage at Community Playfield
- Alternative 3-Neighborhood Stormwater Storage

Mr. Olson discussed the project benefits, costs and the other costs to the Village for each proposed drainage alternative as presented in the attached report. The unquantified benefits to the projects would be a reduction in the duration of street flooding, infiltration into sanitary sewer system, inflow into sanitary system, basement seepage and yard flooding. There would also be improved transportation access during storm events and increased property values.

Mr. Olson said possible funding sources for the projects could be cash reserves, bonding, Special Service Area, a stormwater utility fee, Metropolitan Water Reclamation District and Federal Emergency Management Agency. He noted that funding from the Water Reclamation District or the Federal Emergency Management Agency would be highly competitive.

Trustee Wolf said the study is a starting point to identify where problems are but geography plays a part as Chicago is a low lying area that has been developed. She would recommend green infrastructure for each homeowner but said it is hard to say what would be the best return for dollars spent.

Trustee Krueger said he encourages green infrastructure but according to the study results if every resident had a rain garden, there would only be a 0.2 foot of flood reduction for a 10 year storm event.

Trustee Swanson said every little improvement helps but it is understanding how much water has to be eliminated and where, and the projects will be costly. He thanked Mr. Olson for his presentation as he thought the study was very well done.

Trustee Wolf opened the meeting up to public comment.

Jordan Fitchew, 423 Wilshire Drive, asked how long it would take to complete each of the alternatives discussed.

Mr. Olson said the amount of funding would dictate how much storm sewer could be installed each year. He said Alternative 1 has a logical progression to install storm sewer as funding becomes available.

Ms. Berger said realistically it would take approximately a year to secure funding, a year to design, a year to permit and five years to build.

Irwin Smiley, 244 Sunset Drive, said some storms leave more than 3 feet of water in the street. He asked where the Village would start the project.

Ms. Berger said they would start downstream and work upstream so lateral

sewers would be last.

Glen Ventrell, 2525 Greenleaf Avenue, said he believes there are more houses impacted than the numbers contained in the study. Many homes in his area have sump pumps that discharge into the storm sewer system. He does not believe people are aware that they should disconnect them from the sewers.

Ms. Berger said that is allowed but the way to solve some of the water issues would be to disconnect the sump pump from the sewers. She said staff could get the word out that disconnecting sump pumps from the sewers is highly encouraged.

Mr. Ventrell said the Community Playfield floods during storm events so how far could they take that flooding down without the huge cost of storage underground.

Mr. Olson said there would be cost reductions to supplying water storage above ground.

Mr. Ventrell asked if there were any short term alternatives that would not take care of 100% of the problem but would provide some relief to a smaller percentage of residents.

Sheryl Katz, 740 Lacrosse, said she has had multiple flooding events on her street over the years. She asked if the Village coordinated with Glenview what impact would there be in benefits to minimize water flooding.

Mr. Olson said the work that Glenview is doing would only affect the portion of the Village that is immediately adjacent to the project which is about 20 acres of land in the southwest corner of Wilmette.

Howard Gantz, 2400 Meadow Drive North, said when the school district connected the Junior High the contractor broke the connection that brought the water from the playfield to the trunk line on Locust Road. He does not know how a storage facility in the Community Playfield would be connected.

Trustee Swanson asked Mr. Gantz how often he sees the Community Playfield flood.

Mr. Gantz said there is flooding the majority of time in the spring. He also stated that he would prefer to have a special charge on his property taxes which is deductible from his taxes.

Bill Shapiro, 406 Wilshire Drive West, asked if it was necessary to add a sixth pump station since there are already five, would the Village of Wilmette benefit from the project that Winnetka will be doing for flooding and if the alternative solution of

leaving water in the street, but not high enough to flood basements, would be less costly.

Mr. Olson said in response to the alternative solution, they looked at an alternative of a 10 year level of service and as the level of service provided goes down, the level of cost will go down. He said the deep tunnel project in Winnetka would not affect the area that Mr. Shapiro lives in. They contacted the manufacturer of the pump and the cost of the sixth pump was approximately \$750,000 which can be compared to the other alternative solutions.

Trustee Swanson clarified that we do not have to go to zero water in the street as that is an impractical goal. There is a level at which water can be in the street but does not enter a home and one can live with water in the street for a few hours but would not like to live with water in the basement.

Howard Gopman, 226 Millbrook Lane, said he believes that if the Village wants to mitigate flooding problems in west Wilmette, they should put a moratorium on new construction in the area.

Lee Canel, 2124 Birchwood, said he understands that Alternatives 1 and 2 have a similar overall cost and that in terms of relief provided the first Alternative provides more relief and that per household it was more efficient but that was based only on the upfront cost. He wondered about the costs of operating and maintaining the systems for each alternative.

Mr. Olson said Alternative 1 is a relief storm sewer system and the maintenance on those would be similar to what the Village does on its storm sewer system now and would most likely be incorporated into that maintenance program. Alternative 2 has less storm sewer but has the storage facility at Community Playfield. The lift station at Community Playfield will have operational and maintenance costs associated with it.

Joel Kurzman, 2615 Greenleaf Avenue, said he started the "Dry Out West Wilmette" campaign in the summer of 2013 which addresses long standing sanitary and stormwater issues. He does not agree with some of the numbers that are in the report prepared by Mr. Olson or the process the Village Board and Municipal Services Committee have taken in addressing the flooding issues in west Wilmette. He believes more public input is needed in addressing flooding issues in west Wilmette.

Trustee Wolf said she also believes more public input is needed and tonight is the beginning of a discussion. Trustee Wolf said public input is always welcome at any meeting and has always been welcome. She said the Village is looking at the problem, studying the problem and then deciding the best way to forward.

Mark Schoenfield, 328 Wilshire Drive West, said he has waterproofed his house, put in a rain garden, a new drainage system, re-leveled his backyard and the water level still comes up far enough in the front to infiltrate and over run the pumps. He said when the study looks at depth, the Village needs to look at what the impact is on the house and the surrounding area from flooding that comes from the front yard to the back of the house. He also noted other agencies use portable pumps to clear out high standing water and believes that the Village should look at this as a short term solution.

Mr. Acuna, 1936 Lake Avenue, said he has had flooding in his basement of over 6 inches from recent storm events. He said he is not able to afford a flood system of \$10,000 and does not know what to do with the water flowing back in through his basement floor drain.

Trustee Swanson said Mr. Acuna's water seems to be back flowing in from the sewer through his floor drain which comes from the sanitary sewer and that will be addressed by the West Park Reservoir which is currently under construction.

Bob Davis, 227 Kilpatrick, said on the year events in the study, is it possible to translate those numbers into inches of rain.

Mr. Olson said they looked at a wide duration of storm events. If there is a 100 year storm event, if there is a 24 hour event, there would be 7.58 inches of rain, if there is a 12 hour event, there would be 6.59 inches of rain. For a 10 year storm event for 24 hours duration, there would be 4.47 inches and for a 12 hour event there would be 3.89 inches of rain. For a 2 year storm event for a 12 hour duration there would be 2.64 inches and a 24 hour duration there would be 3.04 inches of rain.

Mr. Davis said most of the flooding seems to happen in the spring rather than the fall. He wondered if Mr. Olson knew the elevations of the river at that time.

Mr. Olson said they analyzed the system when the river was under the worst case scenario.

Mr. Davis said he believes the water in the streets around him was much higher than what was in the study, as there were cars floating in the street.

Mr. Olson showed on his map where the water flows were measured and how they were measured.

Paul Berglund, 135 Lockerbie Lane, said the solution for his street would be to connect to the Glenview project and asked if that would be possible.

Ms. Berger said the Glenview project would require an additional scope of work for the consultant as it was not included in the report presented this evening. Staff has spoken to Glenview staff and they are willing to work with Wilmette should this option be pursued.

Trustee Wolf said they would be discussing that issue at a future meeting and would keep Mr. Berglund informed. She believes Glenview is in a preliminary phase at this time.

A discussion ensued regarding past rain events. Ms. Berger noted that since 1980, Wilmette has had 16 storm events greater than the 10 year event. 86% of the storms since 1980 would have been protected with Alternative 1 or 2.

Trustee Wolf said everyone is recognizing that there is climate change and the storm events are happening more often.

Alan Rudin, 3132 Walden Lane, asked what the total number of structures would be in west Wilmette that would benefit from the proposed alternatives. He wondered if a decision is made regarding the proposed alternatives, would it be subject to a referendum.

Trustee Wolf said it depends on if a decision is made and what type of funding would be used. Wilmette is a Home Rule Municipality so a bond issue would not have to go to referendum.

Mr. Rudin said since the cost is so high for the alternatives provided in the study, would it make more sense to just help out the 700 homeowners that have flooding issues.

Trustee Krueger said he has a concern with getting into the public/private issues of providing funds to homeowners now and trying to justify that when there are future flooding problems.

Trustee Swanson said the Village is addressing the problems as they arise and trying to take care of the most important issues as there is not unlimited funding and not one project will take care of all the flooding issues. He sees the flooding issue as a Village-wide problem to deal with.

Kim Hardigan, 935 Harvard Lane, said she has lived there for 20 years and did not have any flooding for the first 6 years. She said the water runs from Mallinckrodt to her street and floods it.

Chris Tucker, 420 Brookside Lane, said the study showed that the Village has

capacity for a 2 year flood event and he wondered if that was adequate.

Trustee Wolf said absolutely not that is why they pursued the study. She thanked all the residents for coming to the meeting and providing input.

Ms. Berger said since this is such a large and significant project, the Village Manager's office has suggested that the Village Board review the study and the most logical time to that would be in conjunction with our 5 year Capital Improvement Program (CIP). Staff is in the process of drafting the CIP now and would be presented in late summer.

IV. OLD BUSINESS: COMPLETE STREETS ORDINANCE

Ms. Berger said that Corporation Counsel has verified that we can adopt the policy that staff has drafted as an ordinance. The changes that the Committee previously recommended have been made and the ordinance will come before the Village Board in February.

V. ADJOURNMENT

Trustee Wolf asked for a motion to adjourn. Trustee Krueger moved to adjourn the meeting. The motion was seconded by Trustee Swanson. No further discussion occurred on the motion. Voting yes: Trustee Wolf, Trustee Swanson and Trustee Krueger. Voting no: none. **The motion carried.**

The meeting was thereafter adjourned.

Minutes Respectfully Prepared by Barbara Hirsch.



1200 Wilmette Avenue
WILMETTE, ILLINOIS 60091-0040

MEETING MINUTES

MUNICIPAL SERVICES COMMITTEE OF THE VILLAGE BOARD

WEDNESDAY, MARCH 25, 2015

7:00 P.M.

COUNCIL CHAMBERS, SECOND FLOOR OF VILLAGE HALL

- Members Present: Trustee Julie Wolf, Chair
Trustee Alan Swanson
- Members Absent: Trustee Cameron Krueger
- Staff Present: Brigitte Berger, P.E., Director of Engineering Services
Michael Miller, Civil Engineer
- Guests Present: Mr. Olsen, Christopher B. Burke Engineering Ltd.
Michael Young, RJN Group

I. CALL TO ORDER.

Trustee Julie Wolf, Chair, called the meeting to order at 7:00 p.m. Committee member Trustee Swanson was present.

II. APPROVAL OF MINUTES; MUNICIPAL SERVICES COMMITTEE MEETING OF FEBRUARY 10, 2015.

Trustee Wolf directed the Committee's attention to the draft minutes of the Municipal Services Committee meeting of February 10, 2015.

Trustee Swanson moved that the Committee approve the minutes. The motion was seconded by Trustee Wolf and approved by unanimous voice vote. **The motion carried.**

III. REVIEW OF PROPOSALS FROM CHRISTOPHER B BURKE ENGINEERING LTD FOR ADDITIONAL WORK RELATED TO THE SEPARATE SEWER STORMWATER STUDY

Brigitte Berger, Director of Engineering, said at the January 28, 2015 Municipal

Services Committee meeting, the consulting firm of Christopher B. Burke Engineering Ltd. (CBBEL) presented the results of the Separate Storm Sewer Study. The goal of the study was to determine the location of critical “bottlenecks” within the system and identify projects that will improve capacity, thereby reducing overland flooding. The identified performance standard used by CBBEL was to keep flood levels below street level for the ten-year rain event. CBBEL built and calibrated an accurate hydraulic model of the separate storm system. The model results concluded that the respective capacities of the storm water pump station (585 cubic feet per second (CFS) and the two outfalls (980 cfs) to convey the stormwater the pump station in an efficient manner. Two projects were identified to meet the standard and presented.

Ms. Berger said in response to the January 28 presentation, staff asked CBBEL to submit proposals to further explore some of the options that were discussed at the meeting. The proposals are presented in the report to the Committee and a summary of the proposals is also provided.

Ms. Berger said the first proposal is a refinement of alternatives developed in the stormwater report to allow stormwater storage on the street and up to the public right-of-way. The cost for this study is approximately \$26,300.

A resident asked what defines the lowest point for allowing water to pond in the street.

Mr. Olsen, Christopher B. Burke Engineering Ltd., said the model they are working from has five different sections of the Village that will be defined individually for the lowest point in each section.

Ms. Berger said the second proposal is investigation of potential surface storage at Community Playfield. The scope of this study includes determining a location within Community Playfield to excavate the basin, what amenities could be placed within the lowered area (parks, soccer fields, etc.) and developing a concept grading plan and cost estimate. The cost for this additional study is \$16,000.

Ms. Berger said the third proposal includes coordination with the Village of Glenview on the feasibility of connecting to their stormwater project for drainage improvements for Lockerbie Lane and LeClaire Avenue. The cost for this study is approximately \$14,000 for a preliminary drainage design and cost estimate.

Trustee Swanson asked how many hours would be involved for each of the three proposals.

Mr. Olsen said for the first proposal there would be approximately 200 hours, the

second proposal there would be approximately 100 hours and the third proposal there would be approximately 90 hours involved.

Trustee Wolf asked when the Village of Glenview would have to be made aware of the Glenview study.

Mr. Olsen said it is important to start the coordination with Glenview as soon as possible.

Trustee Wolf asked about the potential surface storage of the Community Playfield and are there ways to construct it so the park would be fully functional.

Mr. Olsen said they have designed parks that are depressed to allow the stormwater to be temporarily stored there, the stormwater drains out and the parks are then usable to play on.

Trustee Swanson asked what the water detention time cycle would be.

Mr. Olsen said it depends on the type of system. The more water that you have to store and the longer it has to be held, obviously will take longer to drain out. They generally install under drains in systems like this so in some cases the water drains faster.

Trustee Wolf asked how deep the depressed area would have to be.

Mr. Olsen said it depends on each situation, the area could be depressed 4-8 feet with gradual sloping.

Karlene McAlister, 323 Wilshire Drive East, said her street already experiences one and half feet of ponding so where would the water go.

Ms. Berger said the storm system has three components; the conveyance (pipes), the pump station at Lake and Harms and the outfalls where the water goes from the pump station out to the north branch of the Chicago River. As the report showed, the bottleneck is in the conveyance so there will still have to be larger pipes but they can allow some of the water to pond in the streets and up onto the curb to keep the size of the pipes and cost down.

Joel Kurzman, 2615 Greenleaf, said the idea of having water in the street rather than your home is conceptually fine but the right of way is often the way out of the home. He said if streets already have a large amount of water in the streets, would the proposed plan reduce the water amount in the street.

Trustee Swanson said they are trying to determine how big a conveyance system is needed and how much water can be left in the street to pond up to the public

right-of-way.

Mr. Kurzman said he is concerned that notice was not properly given for the February 10, 2015 meeting when the stormwater study was discussed.

Ms. Berger said the stormwater study was not on the agenda at the February 10, 2015 meeting. She said in new business at the end of the meeting, she provided a follow up regarding suggestions made at the January 28, 2015 meeting noting that proposals from Christopher B. Burke Engineering would be reviewed at a future Municipal Services Committee meeting.

Jerry Tater, 333 Wilshire West, said one of the items brought up in the January meeting was the suggestion of piping in the street being pumped out to provide immediate relief of water. He said that solution has been used in other areas of the country in streets which he believes would be less expensive.

Mr. Olsen said that type of piping system is used when a river is over flooding its banks and the water is pumped back into the river system. There is no place in Mr. Tater's area that the water could be pumped to and the size of the pipes that would be needed would be very expensive.

Bob Davis, 227 Kilpatrick, said he relies on the Village Board meeting notices to tell him when stormwater will be discussed at an upcoming meeting. He believes re-grading the streets would help with flooding in his neighborhood.

Joel Feinstein, 407 Wilshire Drive West, said he would suggest placing berms in upland areas to help reduce the amount of water draining to lower areas in the neighborhood.

Trustee Swanson moved to recommend to the Village Board to enter into three agreements with Christopher B. Burke Engineering Ltd. as outlined in the March 25th memo provided by staff. The motion was seconded by Trustee Wolf and approved by unanimous voice vote. **The motion carried.**

IV. REVIEW OF SMOKE TESTING RESULTS FOR KENILWORTH GARDENS AND DISCUSSION OF ADDITIONAL INFILTRATION AND INFLOW (I/I) STUDIES

Ms. Berger said in response to widespread sanitary-related flooding in the separate sewer system west of Ridge Road, the Village implemented a multi-tiered approach to address sanitary sewer backups. Now that the large system improvements are either completed (Wilmette and Hibbard Relief Sewer project) or underway (West Park Sanitary Storage Project) staff is focusing on programs to reduce inflow and infiltration (I/I).

Reducing non-sanitary flows in the sanitary system will further reduce the severity and frequency of sewer backups. From a regulatory standpoint, the Metropolitan Water Reclamation District of Greater Chicago (MWRD) has recently adopted changes to the Watershed Management Ordinance, also adopted by Wilmette, that requires local agencies tributary to MWRD to adopt an I/I program over the next five years. This includes developing a program to address I/I on private property. Smoke testing is one of the most economical methods of determining inflow and infiltration sources on both public and private property. In October 2013, RJN completed smoke testing of the Kenilworth Gardens subdivision to identify public and private sources of inflow and infiltration into the sanitary system.

Ms. Berger said Michael Young from RJN Group will give a brief presentation of the subject.

Mr. Young reviewed the report provided to the Committee noting the first part of the project (West Park Sanitary Storage Project) is proceeding and is on schedule. He said the second part of the project is expanding smoke testing to additional areas within the Princeton Basin. Using the methods outlined in the report, RJN will use smoke testing to identify various defects in the collection system as well as to find contributing sources of inflow and infiltration. Common identified concerns include cracked main lines and laterals, connected downspouts and window well drains, directly connected storm sewer, connected foundation drains, area, patio, and driveway drains, and broken cleanouts. Additionally, cross connections such as leaking storm sewers crossing sanitary sewers will also be identified for further inspection by dyed water flooding.

Mr. Young said they have finished the smoke testing in the Kenilworth Gardens area and a portion of the dye flooding. The immediate proposal is to finish the dye flooding in Kenilworth Gardens and start to expand the smoke testing outside of Kenilworth Gardens to a larger portion of the Princeton Basin.

Trustee Swanson said he believes that the work done up to this point has been very valuable. He has concerns with the 54% compliance rate of property owners making repairs, he would like to see everyone comply. Trustee Swanson said it is a large contract that is proposed and he believes the Village may need to request proposals.

Trustee Wolf said she agrees that it would be prudent to do a request for proposals (RFP). She said the information provided so far has been extremely helpful especially since MWRD requires a plan from the Village.

Trustee Swanson said the information has been extremely helpful as the problems have been identified as not only Village issues.

Trustee Wolf said the Committee is in agreement that staff will do an RFP for the project.

V. RESOLUTION NAMING THE WILMETTE WATER PLANT

Trustee Swanson said there have been several articles written about Carbon P. Dubbs who was a previous mayor of Wilmette when the decision was made to build the plant. He was the person most responsible for developing what has turned out to be of Wilmette's greatest assets. As a result of Mr. Dubbs' leadership, the Wilmette water treatment plant was completed in 1934 and Trustee Swanson believes that his service should be recognized.

Trustee Swanson moved that the Municipal Services Committee recommend to the Village Board that the Wilmette Water Plant be renamed after Mr. Carbon P. Dubbs, seconded by Trustee Wolf and approved by unanimous voice vote. **The motion carried.**

VI. NEW BUSINESS

There was no new business.

VII. PUBLIC COMMENT

There was no public comment.

VIII. ADJOURNMENT

Trustee Wolf asked for a motion to adjourn. Trustee Swanson moved to adjourn the meeting. The motion was seconded by Trustee Wolf. No further discussion occurred on the motion. Voting yes: Trustee Wolf and Trustee Swanson. Voting no: none. **The motion carried.**

The meeting was thereafter adjourned.

Minutes Respectfully Prepared by Barbara Hirsch.



1200 Wilmette Avenue
WILMETTE, ILLINOIS 60091-0040

MEETING MINUTES

MUNICIPAL SERVICES COMMITTEE OF THE VILLAGE BOARD

**THURSDAY, SEPTEMBER 24, 2015
7:00 P.M.
TRAINING ROOM OF VILLAGE HALL**

Members Present: Trustee Cameron Krueger, Chair
Trustee Daniel Sullivan
Trustee Julie Wolf

Members Absent: None

Staff Present: Brigitte Berger, P.E., Director of Engineering and Public Works
Russ Jensen, Village Engineer

Guests: See attached attendees list

I. CALL TO ORDER.

Trustee Cameron Krueger, Chair, called the meeting to order at 7:04 p.m. Committee members Trustees Sullivan and Wolf were present.

II. APPROVAL OF MINUTES; MUNICIPAL SERVICES COMMITTEE MEETING OF MARCH 25, 2015.

Trustee Krueger directed the Committee’s attention to the draft minutes of the Municipal Services Committee meeting of March 25, 2015.

Trustee Wolf moved that the Committee approve the minutes. The motion was seconded by Trustee Sullivan and approved by unanimous voice vote. **The motion carried.**

III. REVIEW OF STUDIES FROM CHRISTOPHER B. BURKE ENGINEERING LTD FOR ADDITIONAL WORK RELATED TO THE SEPARATE SEWER STORMWATER STUDY.

Brigitte Berger, Director of Engineering and Public Works, said that there would be a presentation this evening by Christopher B. Burke Engineering Ltd.

(CBBEL) of three follow up storm sewer studies:

- 1) Refinement of alternatives developed in the original stormwater report to lower the 10-year hydraulic grade line to the back of sidewalk instead of below street level.
- 2) Above ground stormwater storage at Community Playfield.
- 3) Glenview stormwater connection for drainage improvements in the Lockerbie Lane and LeClaire Avenue areas

Ms. Berger reviewed the process of the studies since 2014 presented in the report to the Committee, noting that the Village has spent \$77 million addressing flooding in the Village.

Ms. Berger introduced Darren Olson from Christopher B Burke Engineering Ltd who would be providing the report and presentation this evening.

Mr. Olson reviewed the report presented to the Committee regarding the Village's current storm sewer system and how it is pumped and discharged to the Chicago River. He said the limitations of the existing system are the highly developed residential areas which were developed prior to modern stormwater management practices, no significant detention basins, storm sewers that were constructed decades ago that are undersized compared to modern practices, no overland flow routes and limited open space to safely store the water.

Mr. Olson said the three follow up storm water studies, as identified previously by Ms. Berger, were designed to reduce the 10 year HGL to the back of the curb by decreasing proposed pipe sizes and storage volumes identified in the Report. The following is a description of the design changes for each alternative:

- Alternative 1A – Relief Storm Sewer System: Under this alternative, the proposed storm sewer sizes decreased an average of 6 inches in diameter from Alternative 1 as shown on Exhibit 10A. The engineer's estimate of probable cost is \$65.8 million in 2014 dollars.
- Alternative 2A – Centralized Storage at Community Playfield: Under this alternative, the underground stormwater storage decreased by approximately 10% to 50 ac-ft and the storm sewer sizes decreased an average of 6 inches in diameter as compared to Alternative 2. This is shown on exhibit 11A. The engineer's estimate of probable cost for this alternative is \$63 million in 2014 dollars.
- Alternative 3A – Neighborhood Stormwater Storage: Under this alternative, the underground storage decreased by approximately 10% at Thornwood Park, Centennial Park, Community Recreation Center accompanied by associated storm sewer size decreases as compared to Alternative 3. This is shown on Exhibit 12A. The engineer's estimate of

probable cost for this alternative is \$39.1 million in 2014 dollars.

Mr. Olson summarized the projected costs, benefits and the impact of disruptions and conflicts to the community for each alternative as detailed in the report. He also noted that they looked at Alternative 2 in more detail and revised it to create Alternative 2.1 and 2.2 to analyze two additional options for above ground storage at the Community Park.

Mr. Olson said he has met with staff from the Village of Glenview twice regarding current improvements to their storm sewers and a proposed connection from Wilmette into the Glenview system. Glenview's system, however, is limited by their existing and proposed system and new pump stations.

Trustee Wolf asked how the water from the Community Playfield retention from Alternative 2.2 would drain out of the area.

Mr. Olson said the new trunk line that will run on Locust Road would back feed into the flood storage area that would then drain out by gravity when the water levels in the two trunk lines on Lake and Wilmette Avenues got back down to lower levels.

Trustee Sullivan asked if there would be any early benefits to flooding in the phased-in plan.

Mr. Olson said yes, in the early phases the Village would begin to see benefits.

Trustees Sullivan and Wolf asked if there would be any benefits for flooding in the Kenilworth Gardens and Thornwood Park area.

Mr. Olson said the new trunk and lateral sewers that would feed into two of the basins would benefit the area.

Trustee Krueger asked if there was anyone from the public that would like to ask the consultant a question.

Karlene McAllester, 323 Wilshire Drive, asked for clarification regarding the cost per structure for a 100 year event.

Mr. Olson explained the process for calculating the cost per structure for a 100 year event from the report presented to the Committee.

Ivan Sheldon, Meadow Drive, asked how deep the water would get in the proposed Community Playfield retention area and what safety measures would be taken.

Mr. Olson said the maximum amount of water in the retention area of the Community Playfield would be approximately 8-9 feet. He said other parks that have used a retention area have used a slope and/or railings for safety measures.

Brad Bogan, 2120 Beechwood, said with all the water accumulating on Beechwood, as it is the bottom of the basin on the diagrams in the report, what in the solution design will help the water dissipate on Beechwood.

Mr. Olson said they have proposed a storm sewer system in addition to the one that is already there to pick up additional water and also suggest improving the system downstream more efficiently.

Joel Kurzman, 2615 Greenleaf, said compared to Alternative 1 how well do Alternatives 2 and 3 address the state of the overall conditions of the pipes that are known to be the root of the problem of overland flooding in west Wilmette.

Mr. Olson said Alternative 2 is not putting in as many linear feet of trunk line as the water is being brought to the underground storage facility.

Mr. Kurzman said if we proceed with Alternatives 2 or 3, would the Village still have to anticipate making future investments in improving or maintaining the condition of the pipes that are not replaced.

Ms. Berger said yes, we will always to have maintain and improve the pipes.

Glen Ventrell, 2525 Greenleaf, asked how long it would take for the Community Playfield retention area to fill up and then drain away.

Mr. Olson reviewed the report noting the different types of storms and the drainage times. He also said currently there is no underdrain system in the Community Playfield, so the anticipation is that it would dry out quicker with a drainage system.

Mr. Ventrell asked how long it would take to excavate and make the Community Playfield usable again and what was the input from the School and Park Districts regarding water retention in the Community Playfield.

Mr. Olson said going on experience from other parks that have completed retention areas, the parks have been out of commission for 6 to 12 months depending on the project.

Ms. Berger said Village staff met with the School and Park Districts and they were open to discussion of the issue but also brought up safety concerns, how long the playfield would be under construction and the practical usage after each rain event. Staff feels the issues can all be addressed but it will take some time.

Al Patel said he lives on Beechwood in Kenilworth Gardens and asked about the viability of water being piped to east of Ridge Road to alleviate some of the flooding in the area.

Mr. Olson said bringing storm water into the combined sewer system east of Ridge Road is not allowed.

Chip McColl, 2116 Beechwood, asked if it is feasible to combine some of the alternatives and what would be the effect of that.

Mr. Olson said they looked at centralized storage and neighborhood storage and combining those would be more costly.

Barbara Schoenfeld, 328 Wilshire Drive, asked how the storage system in Alternative 2.2 would gravity drain in a multiple rain event.

Mr. Olson said the water elevation would go up and slowly drain back down over 10 hours. If there was another 10 year event within that 10 hour period, then there would be more water flowing into the basin and it would take longer to drain.

Julie Lipford, 2132 Beechwood, asked what the resulting scenarios would be for Alternative 2.1 versus 2.2 regarding the amount of water in the street.

Mr. Olson reviewed the risk of flooding from his previous presentation and the flood level reductions for each storm event. He will review the report and provide Ms. Lipford with the specific amounts of water for each flood event.

Kevin Williams, 4068 Fairway Drive, asked if the Village had future costs for each of the Alternatives presented as that may be material to a decision.

Ms. Berger said currently the Village has a network of pipes that has to be maintained with cleaning, televising and fixing broken pipes. All the Alternatives will have the same method of maintenance for underground infrastructure.

Paul Berglund, Lockerbie Lane, asked if the Glenview connection would help with the flooding in his area.

Mr. Olson said the Glenview connection would not significantly help Mr. Berglund's area.

Mr. Berglund asked if the Village of Wilmette was going to go forward with the Glenview connection.

Trustee Krueger said a decision has not been made on any of the Alternatives at this time.

Juan Parra, 2148 Beechwood, noted that there seems to be more 10 year events happening and wondered what the cost would be for a 25 year event.

Mr. Olson said based on the feedback they received from the Village, they only provided detailed information to deal with the 10 year event.

Doug Hart, 2133 Beechwood, asked if the School and Park Districts would be involved in making a decision regarding which alternative to use.

Trustee Krueger noted that the Village, School and Park Districts are all separate entities and have always worked together to find a solution that is good for the community.

Mr. Hart asked if there is a typical life expectancy for the sewer and water pipes in the Village.

Ms. Berger said theoretically the life expectancy of a pipe is 50 years but some of the Village's pipes that are over 50 years are still doing well and we only replace pipes when we need to. She noted that most of Kenilworth Gardens has had their sewer pipes lined which increases the life of the pipes for another 50 years.

Joel Feinstein, 407 Wilshire Drive, asked if there were any discussions with the Metropolitan Water Reclamation District (MWRD) or any other agencies such as the county.

Mr. Olson said in addition to meeting with the Village of Glenview, the Wilmette School and Park Districts, they also met with MWRD to let them know that the Village of Wilmette was studying the flooding on the west side of Wilmette and are generally looking at projects that involve storm sewers and storage.

A resident asked if the Village phased in Alternative 1, would there be an overall benefit to the Village.

Mr. Olson said that is the large storm sewer system and if the system is upsized, there would be benefits along the way to certain areas as storm sewers are tied in.

Mr. Olson said in response to Ms. Lipford's earlier question regarding water in the street in Kenilworth Gardens, for Alternative 2.1, the existing ten year flood elevation is 1.6 feet and that would be reduced down to no flood on the streets, for the 25 year flood event, the existing flood elevation is 2.2 feet, that would be reduced down to 1.6 feet, for the 50 year event, the existing flood elevation is 2.5 feet, that would be reduced down to 2.2 feet and in the 100 year event, the existing flood elevation is 2.9 feet and that would be reduced down to 2.6 feet.

Trustee Krueger said he would now open the meeting to public comment.

A resident said from questions he has heard, he believes other residents want the Village to be comprehensive in the solution design choices. He would like the Village to be sure that the models are correct so there is not a failure in the design of the model.

A resident said he believed the alternatives were way too expensive and suggested Kenilworth Gardens' residents talk to the golf course about accepting some of the water in their area.

Doug Hart said with current flooding in his area, he does not believe police and fire can get their vehicles down his street and it is difficult to get to work or school when the streets are flooded.

Wendy Schultz, 2130 Beechwood, provided a demonstration with water bottles that showed the amount of water accumulated on her street for each option. She asked if it was possible to consider more than one solution due to the amount of water that her street accumulates.

Yamin, 3022 Highland Avenue, said he has water in his basement during rain events but the worst storm was in 2013 which caused a large amount of flooding in his townhouse development. He hopes the Village will do something to improve the flooding situation.

Frank Schleicher, 638 Lavergne, said he has flooded five times at his home. He would like to see the numbers regarding how many houses were involved in flooding and what the cost per house is. He also believes the Village should get a second opinion from another engineering consultant firm as the costs of the projects are so high. He also asked that the Village determine the root cause of the flooding so that everything is done the right way to fix the flooding issues.

Bob Davis, 227 Kilpatrick, said since 1950 when sewers were put in, there have been many more structures that have been added but have any sewers been added to accommodate those structures.

Karlene McAllester, 323 Wilshire Drive, said she believes the engineering consultant seems to be saying that the problem is not enough pipes or large enough diameter pipes so that would lead her to think that Alternative 1 is the option to go with. She believes the Village should do something about the flooding issues and believes there is concern among residents.

Joel Kurzman, 2615 Greenleaf, said he supports Alternative 1 because he believes it is a more prudent investment for all of west Wilmette. He believes any investment the Village makes needs to be part of a comprehensive plan that incorporates both grey and green infrastructure.

Eddie McCall, 827 Lake, said he is new to Wilmette and wondered if there was any consideration by the Village to create a new pump station at the corner of Wilmette and Laramie.

Mr. Olson said they did investigate adding a second pump station in that area but it would cost more than Alternative 1 as they would still need to construct all of the storm sewers to the east of that to bring the water to the pump station and more sewers to bring the water to the river.

A resident asked where the process will go from this point and would residents be involved in that process.

Trustee Krueger said every meeting is public and the meeting this evening is also being televised. The agenda materials for meetings are all on the website and the Director of Engineering and Public Works has emailed notices for those residents who have provided email addresses.

A resident hoped there would be some type of short term interim fix for the flooding.

Trustee Krueger noted the end of public comment.

Ms. Berger said staff was looking for direction from the Committee on what to pursue moving forward on the issue.

Trustee Wolf said there has been a lot of work already done to help alleviate water from going into the sewer system. She also noted the Village did receive a grant from MWRD for some green alleys, some are finished and some are under construction now. The Village is also doing some of the first bioswales in the Village. There is no magic fix for the flooding in the Village and the Village will continue to study the issue.

Trustee Sullivan said it seems that Alternative 1 is the preferred option from residents but how do you fund the \$75 million cost. He would like to see some type of retention area in Thornwood Park.

Trustee Krueger said if Alternative 1 is the option to pursue then he did not see a reason to do any type of retention at Thornwood Park.

Trustee Wolf said our design standard was a 10 year flood and we are hearing that it would not solve all our problems so the other thing to look at would be a 25 year flood and that would be more money.

Trustee Krueger said in looking at the cost per house the economics become a challenge to fund.

Trustee Wolf noted that the Village would also have to work with the State and the County as they maintain some of the streets within the Village. She would not mind exploring funding options such as increasing the water rate or a storm water utility rate.

Trustee Krueger noted that a resident suggested a second engineering consult for ideas.

Trustee Wolf said she would be in favor of that before taking any major steps but she does not think the Committee is at that point yet.

Trustee Sullivan asked Ms. Berger if she believed another consultant was warranted to look at other options for flooding in Wilmette.

Ms. Berger said she has spent a lot of time with Christopher Burke Engineering and has the utmost faith in their work product. She has looked at their report in great detail, including their cost estimates which are in 2014 dollars, so every year that we wait, we are looking at a 3-5% increase. She is confident in the product they have presented this evening.

Trustee Krueger said the question for him, is how do you pay for the project and justify it on a cost per structure basis.

Trustee Wolf thanked everyone for attending the meeting and believes that Alternative 1 gives the most benefit for the most people. She would like to explore ways to fund the project and what the effect would be.

Trustee Krueger said the project would be extended over time in different phases so they would have to look at bond funding, flood fees, sewer rates and cash flow in the Village.

Trustee Wolf said she is a big proponent of green infrastructure but the Village does not have much in the way of open space. She would like to explore that and consider it a little more.

Trustee Krueger said the biggest problem is getting the water from one point to another point such as a retention area or pump station.

Trustee Sullivan noted that the cost per house affected is quite high but he believes that something should be done.

Trustee Krueger said there will be a cost for the proposed project and the Committee will have to figure out how to pay for it. He said the cost per structure protected will give them some feel on whether they are making a good recommendation that makes economic sense. If we look at staging the process over time, it does not provide immediate relief but it provides the promise of long term relief. The Village has spent \$77 million over the past 35 years and it has given relief and will continue to give relief.

Trustee Wolf said she agrees that the Village should look at a longer term plan and what it might look like in cost and staging.

Ms. Berger said in summary, staff will look at a detailed schedule and implementation plan, a detailed financial analysis with options on how to pay for the project and a more detailed analysis on cost per structure.

IV. OLD BUSINESS

No Report.

V. ADJOURNMENT

Trustee Krueger asked for a motion to adjourn. Trustee Wolf moved to adjourn the meeting. The motion was seconded by Trustee Sullivan. No further discussion occurred on the motion. Voting yes: Trustee Krueger, Trustee Sullivan and Trustee Wolf. Voting no: none. **The motion carried.**

The meeting was thereafter adjourned at 9:35p.m.

Minutes Respectfully Prepared by Barbara Hirsch.



1200 Wilmette Avenue
 WILMETTE, ILLINOIS 60091-0040

MEETING MINUTES

MUNICIPAL SERVICES COMMITTEE OF THE VILLAGE BOARD

TUESDAY, APRIL 5, 2016

6:30 P.M.

TRAINING ROOM OF VILLAGE HALL

Members Present: Trustee Cameron Krueger, Chair
 Trustee Daniel Sullivan
 Trustee Julie Wolf

Members Absent: None

Staff Present: Brigitte Berger, P.E., Director of Engineering and Public Works
 Russ Jensen, Village Engineer
 Nabil Quafisheh, Director of Water Management

I. CALL TO ORDER.

Trustee Cameron Krueger, Chair, called the meeting to order at 6:30 p.m. Committee members Trustees Sullivan and Wolf were present.

II. APPROVAL OF MINUTES; MUNICIPAL SERVICES COMMITTEE MEETING OF NOVEMBER 5, 2015.

Trustee Krueger directed the Committee's attention to the draft minutes of the Municipal Services Committee meeting of November 5, 2015.

Trustee Wolf moved that the Committee approve the minutes. The motion was seconded by Trustee Sullivan and approved by unanimous voice vote. **The motion carried.**

III. REVIEW OF SIGN POLICY

Brigitte Berger, Director of Engineering and Public Works, said since 2011 Village staff has worked on an initiative to reduce the number of redundant and unnecessary signs in the Village. The Village has removed 1695 signs and have only added 185 signs. There is consensus that too much signage adds to sign pollution, it clutters our streetscape, it is expensive to maintain and over time, the

signs become meaningless to drivers. As a part of the reduction of sign process, staff is bringing to the Board a new policy which formalizes the strategy for when staff determines a new sign is necessary. The federally adopted Manual of Uniform Traffic Control Devices is staff's guiding document when signing regulatory traffic control devices such as stop and parking signs. All other signs are considered discretionary and will only be approved if the following five basic requirements are met:

1. Fulfill a need
2. Command attention
3. Convey a clear, simple meaning
4. Command respect from road users
5. Give adequate time for proper response

Ms. Berger said single-purpose signs that have limited application are being removed across the Village and are no longer installed upon request. The most prevalent single-purpose signs are those that establish no parking to accommodate driveways entering a narrow street. In most cases, these signs are unnecessary and there for the resident's convenience.

Trustee Krueger said he is delighted to see the clutter of signs removed.

Trustee Wolf said she agrees with Trustee Krueger and she is happy to see that there is a Village wide speed limit unless otherwise posted as it clarifies the speed limit and reduces sign clutter.

Trustee Wolf moved to recommend that the draft sign policy be adopted by the full Village Board at a future Regular Village Board as drafted. The motion was seconded by Trustee Krueger and approved by unanimous voice vote. **The motion carried.**

IV. REVIEW OF VALET PARKING POLICY

Ms. Berger said recently Village staff has received request from business owners to allow for the operation of valet parking in the Village Center. The Current Village Code does not specifically permit or prohibit valet parking operations, nor does the Village have a procedure establishing parameters for valet parking. The purpose of this policy is to outline the procedure for operating valet parking licenses.

Ms. Berger said she has prepared an outline of the process by modeling it after other municipalities' ordinances. The following proposed policy may be discussed and tailored to Wilmette's needs.

1. An application for valet parking license shall be filed with the Village Engineer. The application will include contact information about the operator, business establishment served, copies of their Illinois and Wilmette business licenses, general description of the proposed operation including identification of the

- loading zone, hours of operation, location of vehicle storage and proof of insurance.
2. Valet parking licenses will be allowed only in the Village Center.
 3. Licenses will be issued by the Department of Engineering and Public Works for a \$100 annual fee.
 4. The Village Manager may, in his/her sole discretion, revoke or move a loading zone at any time if it is determined that the loading zone, or its location, has increased traffic congestion or traffic hazards in the public streets, or otherwise has impaired the public health, safety or welfare.
 5. A business or operator may temporarily store customers' motor vehicles on private nonresidential property only pursuant to a written lease or agreement.
 6. No vehicle shall be parked by a valet parking attendant on any public street.
 7. Operators may temporarily store customers' motor vehicles in municipal parking lots in the Village Center provided parked vehicles do not exceed the posted time restrictions or lot capacity.
 8. Motor vehicles accepted for valet parking shall not be parked on public streets or rights-of-way nor in private parking lots which have not been specifically approved for valet parking operations in the valet parking permit.

Ms. Berger noted there was a draft outline of an ordinance and sample copies of an application and license included in the report presented to the Committee.

Trustee Sullivan said he believes the proposed policy is a good initiative. He asked if there would be parking spaces blocked in front of the restaurant for a valet stand/car drop off area.

Ms. Berger said as part of the application process, a plan will have to be submitted by the restaurant and valet company showing where the car would load and unload and staff would have discretion in approving the area.

Trustee Krueger said he believes it is appropriate to create the policy as valet parking has created some problems so having rules to govern the process is important. He asked if any street parking would be lost due to valet parking.

Ms. Berger said there would be some parking spots lost due to the valet loading and unloading areas.

Trustee Wolf said she also believes the proposed process is a good thing as there have been some issues with valet parking in the Village Center and the policy will provide for an organized process.

Trustee Sullivan made a motion to approve the draft valet parking ordinance and recommendation of full Village Board adoption at a future Regular Village Board meeting. The motion was seconded by Trustee Wolf and approved by unanimous voice vote. **The motion carried.**

V. UPDATE ON THE SEPARATE STORM SEWER SYSTEM STUDY

Ms. Berger said after the November 5, 2015 meeting, the Committee asked staff to go back and look at two options related to the storm water study; 1) Alternative 1 which includes building a relief storm sewer system to collect and convey excess storm flows to the stormwater pump station, 2) Alternative 2.2 which includes building an above-ground storage at Community Playfield. The Committee asked staff to prepare the following for Committee review:

1. Detailed schedule and implementation plan for Alternative 1 (Relief Storm Sewer) and 2.2 (Centralized Stormwater Storage at Community Playfield-Above-Ground Only)
2. Detailed Cost/Benefit Analysis for Alternatives 1 and 2.2
3. Funding Options

Ms. Berger reviewed the report presented to the Committee noting that the schedule and implementation plan is very aggressive and the minimum time involved would be 6 years. Staff recommends that the detailed implementation schedule for Alternative 1 be closely aligned with other capital projects such as watermain replacement and road reconstruction to maximize economies of scale and minimize resident inconvenience.

Ms. Berger said the phasing plan for Alternative 2.2 is more complicated as the project would be impacting the Wilmette Park District and School District 39. A condensed construction schedule would be developed to ensure the existing operations of the field would be minimized as much as possible.

Staff can estimate the cost but what they struggled with is how to define the benefit. The number they continue to use is the number of homes protected. She said the number of cost per structure protected is 15 to 28 times more expensive than the West Park Project per the analysis report.

The only way to fund a \$55 or \$77 million sewer program is through a General Obligation Bond Issue. Staff has identified three options to pay the cost of the debt service; 1) Residential sewer rate increase, 2) Special service area, 3) Village-wide stormwater utility tax. Ms. Berger noted that each of the options would have to generate \$3.2 - \$4.5 million annually to pay the debt service.

The Village's sewer fee supports the entirety of \$5.0 million sewer program's annual expense, which includes operation and maintenance of the combined and separate sewer system as well as debt service for past sewer improvements.

Debt service accounts for 66% or \$3.3 million, of the total sewer fund expense. Due to Wilmette's substantial investment in its sewer system over the past 20 years, the Village's local sewer rate has historically been one of the highest in the region.

Ms. Berger also noted a Special Service Area (SSA) could be established by ordinance in order to pass on the cost of the storm sewer project to homeowners who reside within the SSA. Also, many Villages are addressing stormwater deficiencies by implementing a stormwater utility tax or fee as detailed in the report.

Trustee Wolf said the Village has not previously done a Special Service Area to finance storm sewer projects. She said it does not seem fair in some ways, as the whole Village has paid for other projects but on the other hand, she has heard from some residents that they would prefer to have something that they could write off as an increase to their property tax. The other option that she believes has some interesting potential is the Stormwater Utility Tax, if we go ahead with the project, there could then be some incentives for reducing one's runoff and getting some type of credit.

Trustee Krueger said he likes Alternative 1, even though it is more expensive, as it will give a long term fix to a problem and it can be done somewhat incrementally. He does not like the cost or the fact that any of the solutions solve the problem for everything. He said there is the possibility of raising the current sewer rate over the next few years and that money would specifically go to fund a big sewer project and simultaneously figure out how a Special Service Area works as both of those together may make sense. He would rather fund a sewer project through a combination of those as it is a combination of a Village wide problem and a function of the geography of that particular area. Doing nothing does not work for him, so he believes we should start with beginning to socialize the concept of raising the rates over the next several years and consider the Special Service Area.

Trustee Wolf said it makes sense to wait until the West Park Sewer Project is fully complete to see how it will impact the area.

Trustee Sullivan said he agrees that Alternative 1 is the right way to go but it is the most expensive. If we have to spend a lot of money, then he believes it should be in total of what the Village faces and how do you prioritize that.

Trustees Wolf and Krueger said that if the Village Board considers raising sewer rates then every time a street is redone, there may be money in the sewer fund to do something to address flooding in the area.

Village Engineer Russ Jensen said the idea of a sewer fund will be crucial as there are going to be costs just to develop the implementation plan moving forward.

Ms. Berger said in 2020 the water debt will be scaling back so the Trustees suggestions of having a future sewer fund will work nicely with that to implement new water main and street replacement.

Trustee Krueger asked if there was anyone present to address the item.

Karleen McAlister, 323 Wilshire Drive East, said there was an article called "The Prevalence and Cost of Urban Flooding; A Case Study of Cook County, Illinois" prepared by the Center for Neighborhood Technology that includes data for Wilmette from 2007 – 2011. They analyzed claims made to private insurance companies as well as claims made to FEMA and Wilmette was high up in Cook County in terms of claims. She said the report also noted that houses lose 10 to 25% of their property value if the basements flood and the average claim is approximately \$8,000. She said does not agree with setting up a Special Service Area (SSA) to pay for sewer projects within a certain area in the future as all the past sewer projects have been shared by the whole Village. She would also like to encourage more thought about the assessment based on impervious surface area.

Joel Feinstein, 407 Wilshire Drive West, said he believes Alternative 1 is the best solution and he likes the idea of setting up a future fund. He does not believe the SSA is fair to the residents of a specific area.

Mr. Henrick, 205 Thelin Court, said he believes that the neighborhoods are being over built and we are covering a lot of green space with cement and pavement so there is no place for water to go.

Howard Gopman, 226 Millbrook Lane, asked which Alternative would affect his property. He also believes that new construction causes flooding.

Ms. Berger asked that Mr. Gopman contact her and she would review the alternatives in the report and how they would apply to his property.

Bob Davis, 227 Kilpatrick, said a number of garages were built in his area and no one in the area knew they were being built. He believes they caused flooding issues for his property. He believes that there should be different types of noticing for variances.

Ms. McAlister asked if the Zoning Ordinance addressed water run-off and or detention for new homes.

Ms. Berger said Illinois Drainage Law says that if you are downstream, you have to accept upstream water so the notion that a new development is going to keep all their water on their property is incorrect. We do have a grading ordinance for new single family homes and if you are changing the contours of your property, you cannot create a situation where you are draining water onto your neighbor's

property.

Ms. McAlister noted that developments do have to provide water detention for larger developments per MWRD but there are probably some larger developments that were built before MWRD laws required detention.

Trustee Krueger noted the end of Public Comment.

Trustee Wolf asked if would make sense to go ahead with an Engineering Study for costs now or if the study should be done after the West Park Sanitary Sewer Project is completed to see how that will affect the area.

Ms. Berger said the Capital Improvement process for the budget is beginning at this time, so perhaps staff could draft a multi-year program of funding. She suggested the possibility of hiring an independent consultant to do a QAQC review of the \$75 million plan as they may be able to offer some alternative options to the overall design that could save money.

Trustee Krueger said it will be difficult to convince the remainder of the Village Board and other residents that spending millions of dollars is justified for a small number of homes.

Ms. Berger said staff could put together, through the Capital Improvement Program (CIP) process a program that would outline what the engineering costs would be and what consultant costs would be to look at a stormwater utility tax.

Trustee Sullivan said he agreed with Trustees Wolf and Krueger and was in favor of staff drafting a plan to put through the CIP process rather than going ahead with an engineering study at this time.

VI. UPDATE ON THE WILMETTE WATER SYSTEM CONDITION ASSESSMENT STUDY

Nabil Quafisheh, Director of Water Management, said in May of 2015 the VB approved a contract with CDM Smith for engineering services associated with Water System Assessment Study. Based on the findings of the study, the following items were recommended:

- 1) Adoption of the new risk based assessment methodology for the prioritization of future Capital Improvements Projects (CIP) at the water plant.
- 2) Further investigation of cost and alternatives related to the water plant electrical improvements program phase I.

Mr. Quafisheh said at this time, he is not requesting to review the results or the prioritization of the distribution system main replacement program as this program is slated to start in 2020 as an adopted goal.

The Water Management Department wished to establish a formal Asset Management Plan (AMP) for the Water Plant that would create strategies, recommend actions and quantify resources for future planning. The AMP would also mitigate the risk of failure of assets in the most cost-effective manner. Staff utilized the widely used concept in utilities assets management: risk based evaluation. Asset risk is the vulnerability probability that an asset would have a consequence related to its failure to meet prescribed level of service goals. Asset risk is comprised of two components: Condition of the asset and criticality of the asset. He reviewed the tables the tables presented in the report and noted as a result of the study, a modified and updated CIP program is proposed. He program consists of three main projects:

- 1) Replacement of the main switchgear, MCC-A1, MCC-A2 and MCC-A3.
- 2) Replacement of MCC-B and MCC-C
- 3) Replacement of the two backup engine generators.

Due to the cost amount of the project and some unknowns that would affect it, staff recommends performing a follow up study on the electrical improvements in 2016. The follow up study will provide the Village with the following information:

- A better planning cost estimate for the project.
- Explore potential solutions related to the location of the equipment and staging to provide better cost estimate.
- Explore the sequence of construction as it relates to keeping the facility operating and the potential costs associated with it.
- Submit a pre-application for an Illinois EPA SRF loan as a potential funding source for this project.

Mr. Quafisheh said given the cost of the proposed electrical improvements, a bond issue will be required, noting that historically the Village has issued general obligations bonds for water plant improvements of this magnitude. To reduce costs, staff is exploring the Illinois Environmental Protection Agency's Revolving Loan Fund which provides low interest loans for drinking water projects. Staff is asking the Committee to adopt the Assessment Methodology for the Water Management Department and approval for further investigation of the electrical improvements.

The Committee said they were comfortable moving ahead with adopting the Assessment Methodology for the Water Management Department and approval for further investigation of the electrical improvements.

VII. PUBLIC COMMENT

There was no additional public comment.

VIII. OLD BUSINESS

No Report.

IX. ADJOURNMENT

Trustee Krueger asked for a motion to adjourn. Trustee Sullivan moved to adjourn the meeting. The motion was seconded by Trustee Wolf. No further discussion occurred on the motion. Voting yes: Trustee Krueger, Trustee Sullivan and Trustee Wolf. Voting no: none. **The motion carried.**

The meeting was thereafter adjourned.

Minutes Respectfully Prepared by Barbara Hirsch.

DRAFT



Long Term Capital Planning Workshop Sewer System

September 19, 2016
7:00 PM

Wilmette's Sewer System

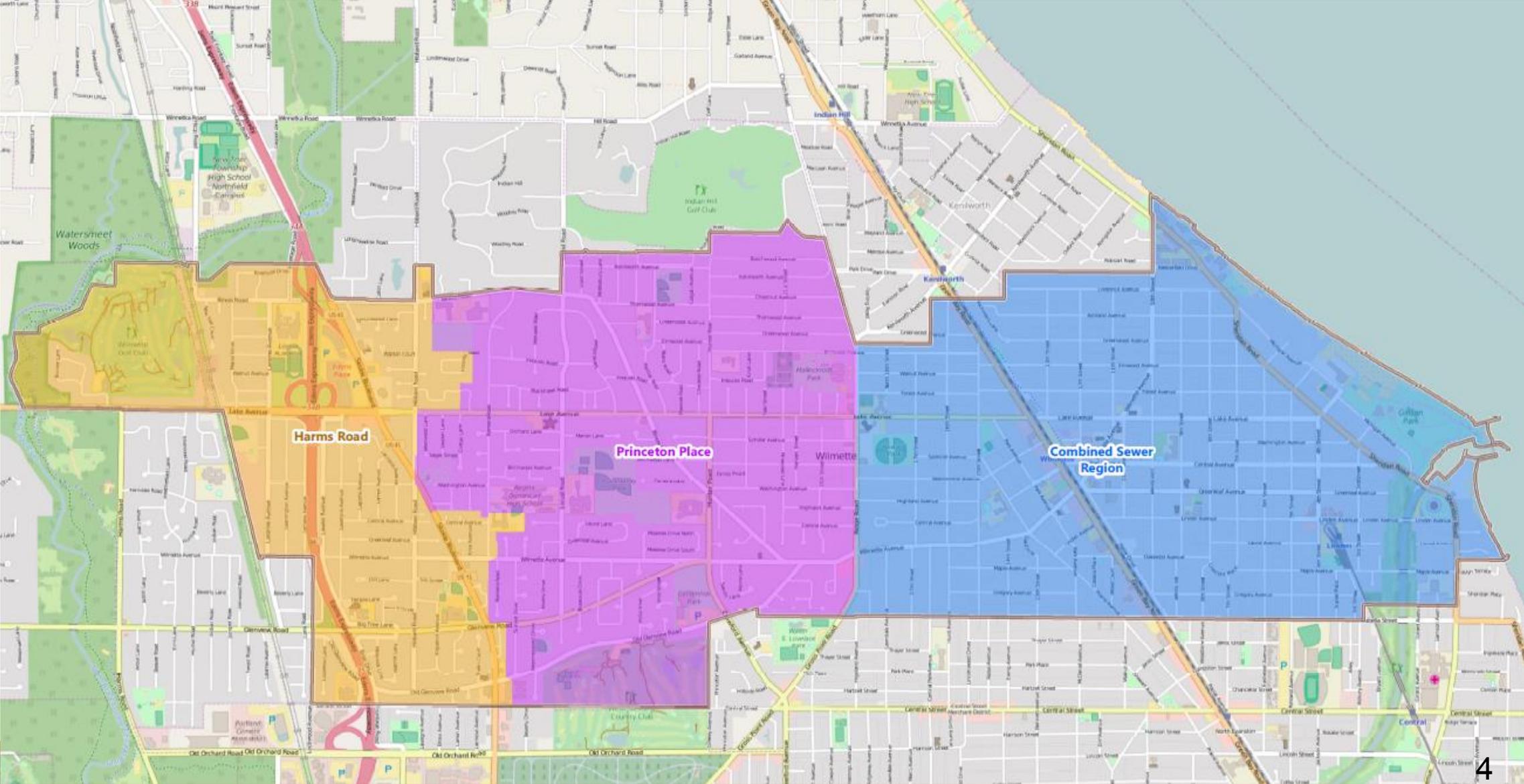
Today's presentation will cover:

- Overview of the Separate Sewer System
- Why Homes Flood
- Past Sewer Infrastructure Investments
- Reported Sanitary Sewer Backup Results
- Proposed 2017 Sewer Budget
- Separate Storm Sewer Study Timeline
- Discussion of Storm Sewer System
- Financial Review

Overview of Wilmette's Sewer Systems

- East of Ridge Road (late 1800's to 1940)
 - ✓ Combined Sewer System
 - ✓ Storm and Sanitary flows to MWRDGC
- West of Ridge Road (1930 to 1950)
 - ✓ Separate sewer system
 - ✓ Sanitary system has two outfalls to MWRDGC: Harms Road and Princeton Place
 - ✓ Stormwater collected and conveyed to the pump station on Lake Avenue with discharge to the North Branch of the Chicago River

Wilmette's Sewer System

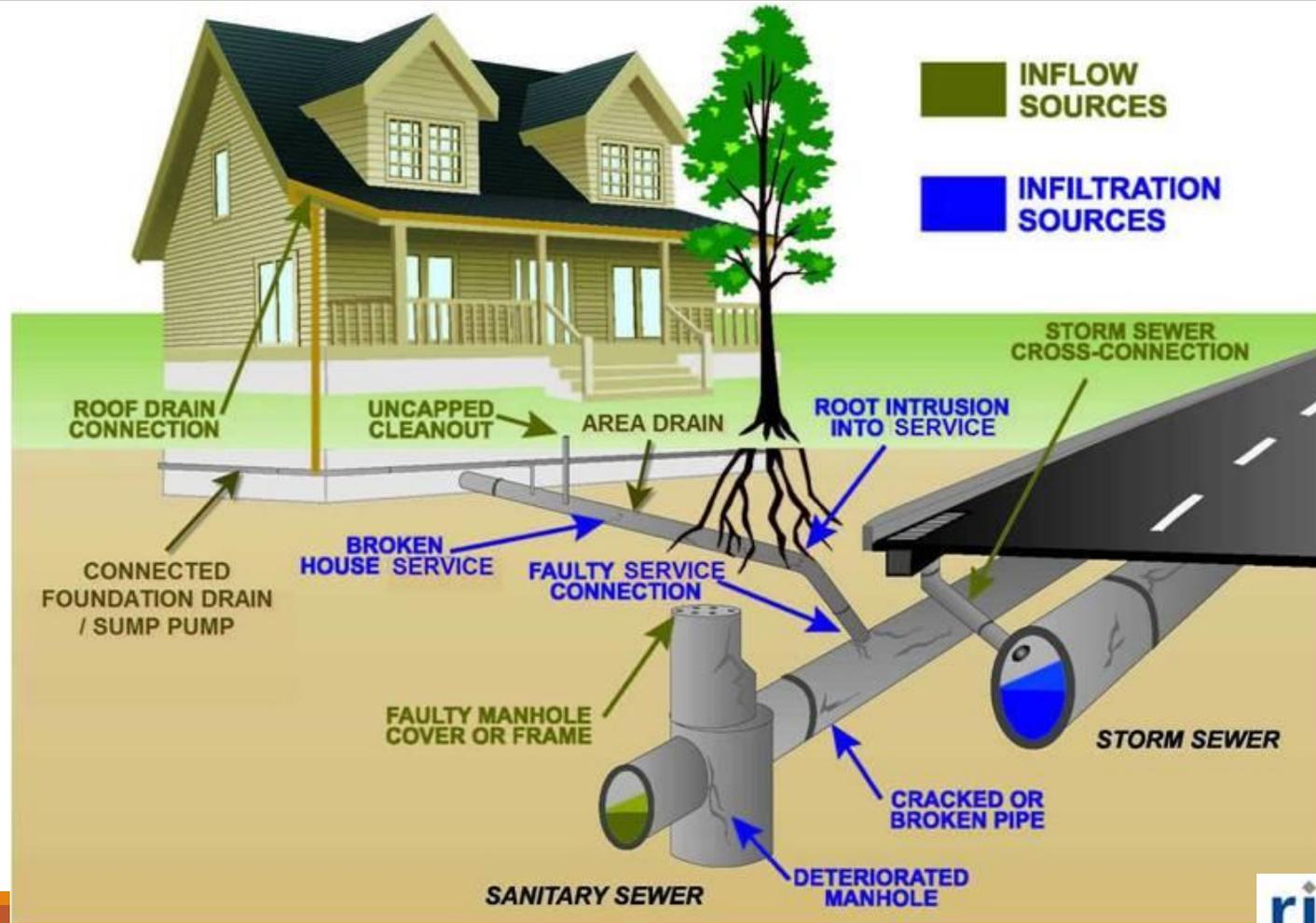


Understanding Why Homes Flood

- Sanitary backups
- Foundation seepage
- Overland flooding
- Window wells, basement doors, depressed garages
- Sump pump failure

It is critically important to understand why a home floods so that the appropriate flood protection measures can be installed.

Why Homes Flood



History of Sewer Improvements (1990 – Present)

Village-wide investment since 1990: \$77.3 million

Separate Sewer Area \$35.5 M (West of Ridge)

- Relief sewers
- Second stormwater outfall
- Backup generator at pump station
- \$24 million (2013-2016)

Combined Sewer Area \$29.9 M (East of Ridge)

- Relief Sewers
- Drainage Berms
- Inlet Restrictors

Village-Wide Maintenance \$11.9 M (Various Locations)

- Sewer repairs
- Sewer lining

\$24M Sanitary Sewer Program 2012 - 2016

Sanitary System Flow Metering and Modeling (2012)



Hunter Road Sewer Replacement (2013)



Local Storage (Wilmette Ave and Hibbard Road) (2014)



West Park Sanitary Storage Project (2016)



Manhole Rehabilitation / Lining (Spring, 2015)



Smoke Testing and I/I Removal
Kenilworth Gardens (2014 and 2016)

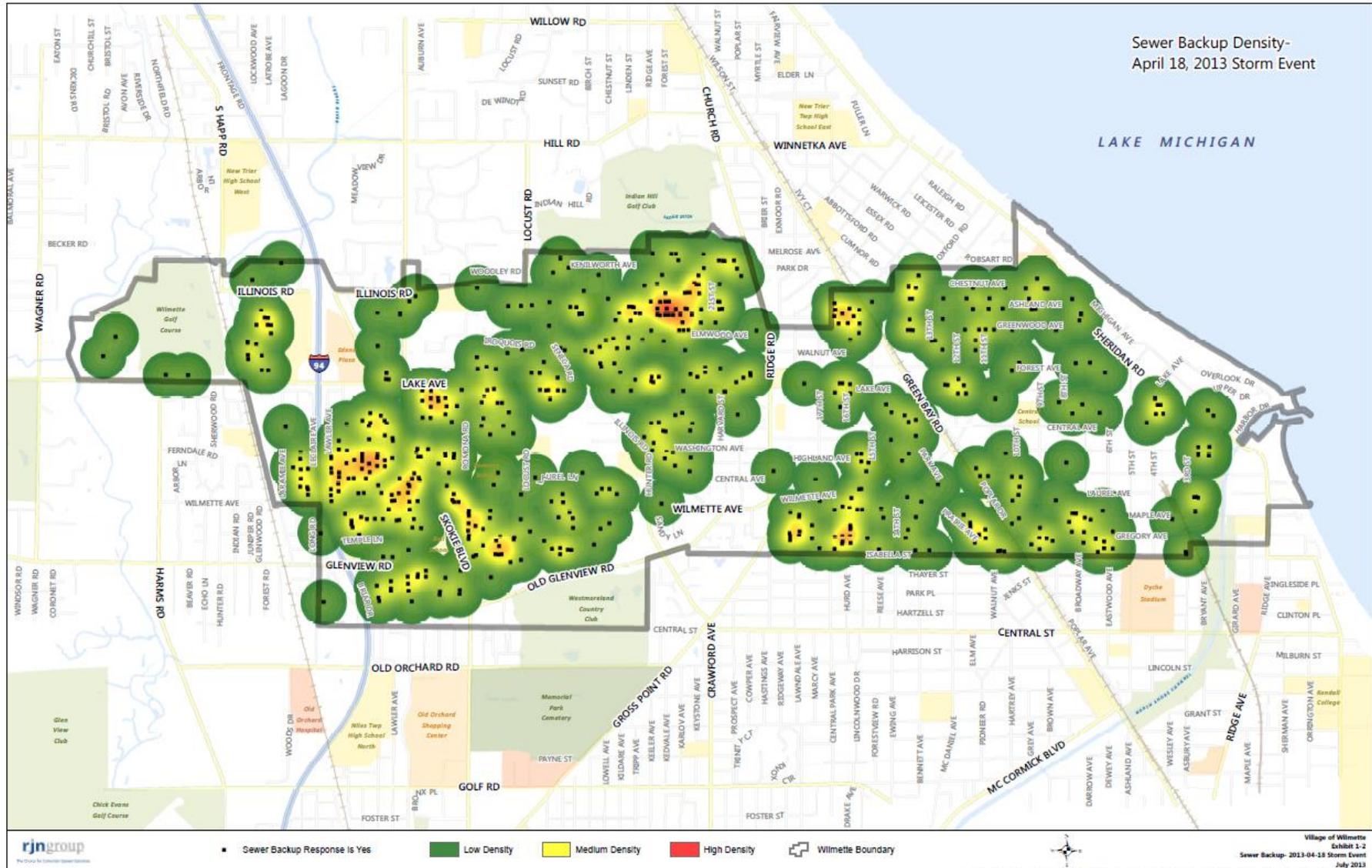


History of Rain Events in Wilmette

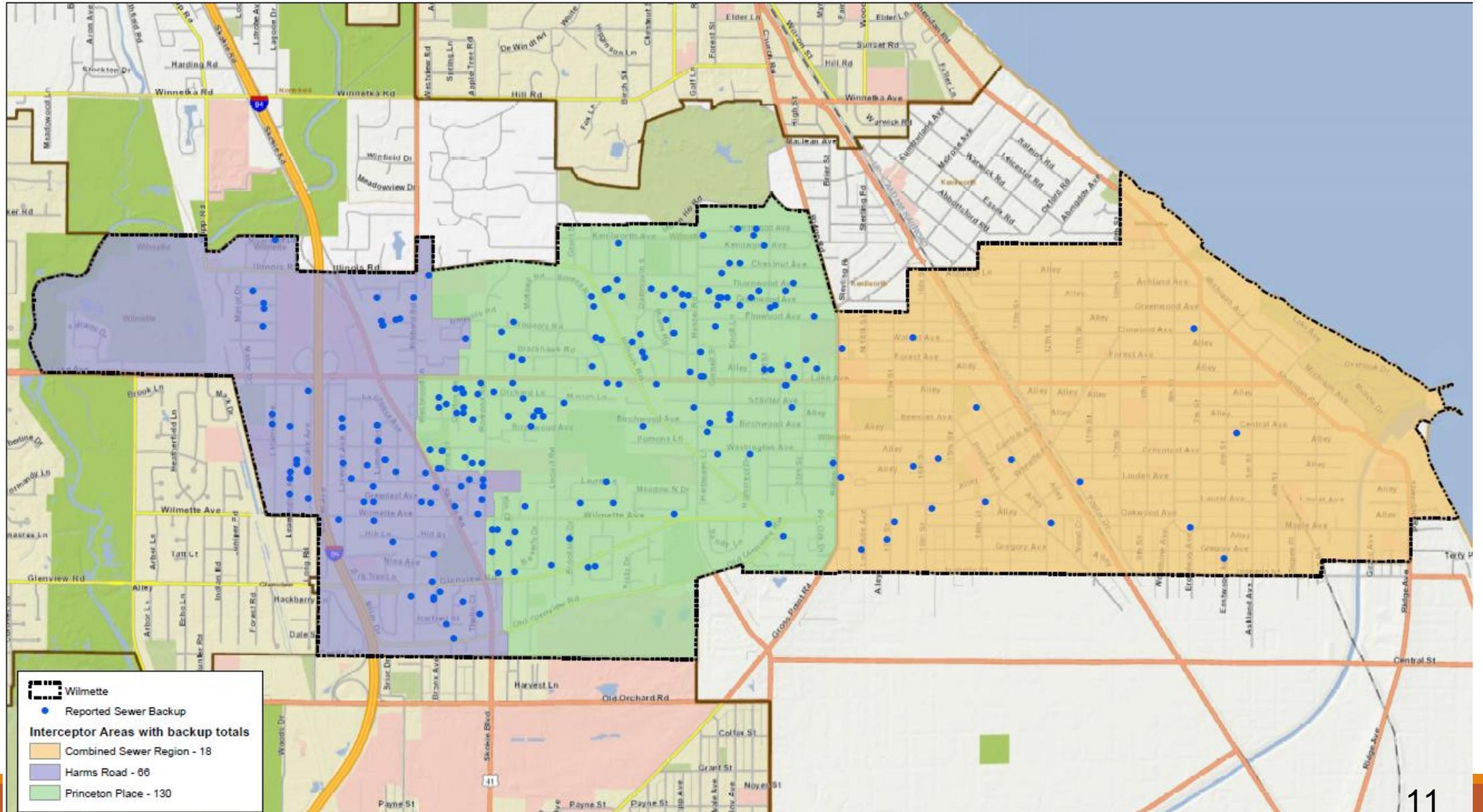
Storms of Record 1980-2016

Rank	Date	Location	Inches	Min.	Hours	Inch/Hr.	Freq.
1	8/2/2001	WTP (East)	4.11	80	1.33	3.08	100
2	7/12/1981	SWPS (West	3.60	120	2.00	1.80	100
3	8/7/1989	SWPS	4.20	150	2.50	1.68	100
4	8/13/1987	SWPS	9.80	1440	24.00	0.41	100
5	7/23/2016	SWPS	6.05	480	8.00	0.76	100
6	9/12/2008	SWPS	6.60	1200	20.00	0.33	70
7	9/12/2008	WTP	6.29	1200	20.00	0.31	70

Sanitary Backup Results-April, 2013



Sanitary Backup Results-July, 2016



West Park Performance- July 23/24, 2016



- Reservoir filled to 13'
- Stored volume: 4.5 million gallons
- Pump Over Lift Station Operated for 18 hours
- 76% reduction in backups compared to 2008

Reported Sanitary Sewer Backup Results

Reported Sanitary Sewer Backups			
Year	Sept, 2008	April, 2013	July, 2016
Type of Event	70 yr.	25 yr.	100 yr.
Harms	278	150	66
Princeton	168	236	130
Total	446	386	196

The reduction in Harms Basin sewer backups in 2016 is due to the West Park Sanitary Storage Facility

Sanitary System- Princeton & Harms Basins

Both Basins:

- On-going maintenance: cleaning, televising, lining, smoke testing

Princeton Basin:

- Concluded MWRD North Shore Intercepting Sewer System (NSISS) flow metering July, 2016
- Data Analysis and report expected end of October
- MWRD hired consultant to hydraulically model the NSISS
- I/I identification through dyed water flooding in Kenilworth Gardens (38 locations) this fall
- Follow up on private property defects identified through smoke testing

Harms Basin:

- Continue with I/I flow reduction to increase sanitary sewer capacity

Sewer System Proposed 2017 Budget

Sewer Lining and Rehabilitation	\$ 820,000
Sewer Main Repairs	\$ 514,000
Sewer Maintenance	\$ 261,500
Sewer Lateral Televising and Lining (pilot)	\$ 167,000
Smoke Testing	\$ 130,000
Overhead Sewer Cost/Share Program	\$ 30,000

Separate Storm Sewer Study Timeline

Date	Meeting	Action/Discussion
July 9, 2013	Municipal Services Committee	Discussed modeling and analysis of the Separate Storm Sewer System
July 15, 2013	Committee of the Whole	Staff recommended the Village Board fund a Separate Storm Sewer Study by Christopher B. Burke Engineering, LTD (CBBEL) to map out critical areas of overland flooding.
September 10, 2013	Village Board Meeting	Village Board Approved Contract with CBBEL for Separate Storm Sewer Study.
August 25, 2014	Municipal Services Committee	CBBEL provided an update on the Separate Storm Sewer Study.
January 28, 2015	Municipal Services Committee	CBBEL presented the results of the Separate Storm Sewer Study. Three project alternatives were identified to relieve flooding in West Wilmette.

Separate Storm Sewer Study Timeline (continued)

Date	Meeting	Action/Discussion
March 25, 2015	Municipal Services Committee	Approved proposal from CBBEL for additional Refinement of the Alternatives for the Separate Storm Sewer Study.
April 14, 2015	Village Board Meeting	Village Board Approved Contracts with CBBEL for Refinement of Alternatives.
September 24, 2015	Municipal Services Committee	<p>CBBEL gave a presentation on the alternatives aimed at eliminating street flooding for the ten-year storm event.</p> <p>Staff was asked to prepare a detailed schedule and implementation plan for Alternatives 1 and 2, detailed financial analysis including review of a stormwater utility fee, and a detailed analysis of cost per structure protected.</p>

Separate Storm Sewer Study Timeline (continued)

Date	Meeting	Action/Discussion
April 4, 2016	Municipal Services Committee (MSC)	<p>Village staff presented an update on the Separate Storm Sewer Study, including implementation schedule, cost/benefit review, and analysis of funding options.</p> <p>The MSC concurred that Alternative 1, building a relief storm sewer system (\$77 million), was the most logical of the alternatives and asked staff to include it as a place holder in the Capital Improvements Program for further discussion. There was consensus that funding a project of this magnitude would be a challenge.</p> <p>The MSC suggested that sewer rates should be increased on an incremental basis over time and the first increase could happen during the planning and design period so that the project fund could build early.</p>

Separate Storm Sewer System Study

Results Presented by:

Christopher B. Burke Engineering Services

Darren Olson, PE, **CFM, D.WRE**



VILLAGE OF WILMETTE
STORMWATER
ACTION PLAN

Separate Storm Sewer Study Summary

September 19, 2016



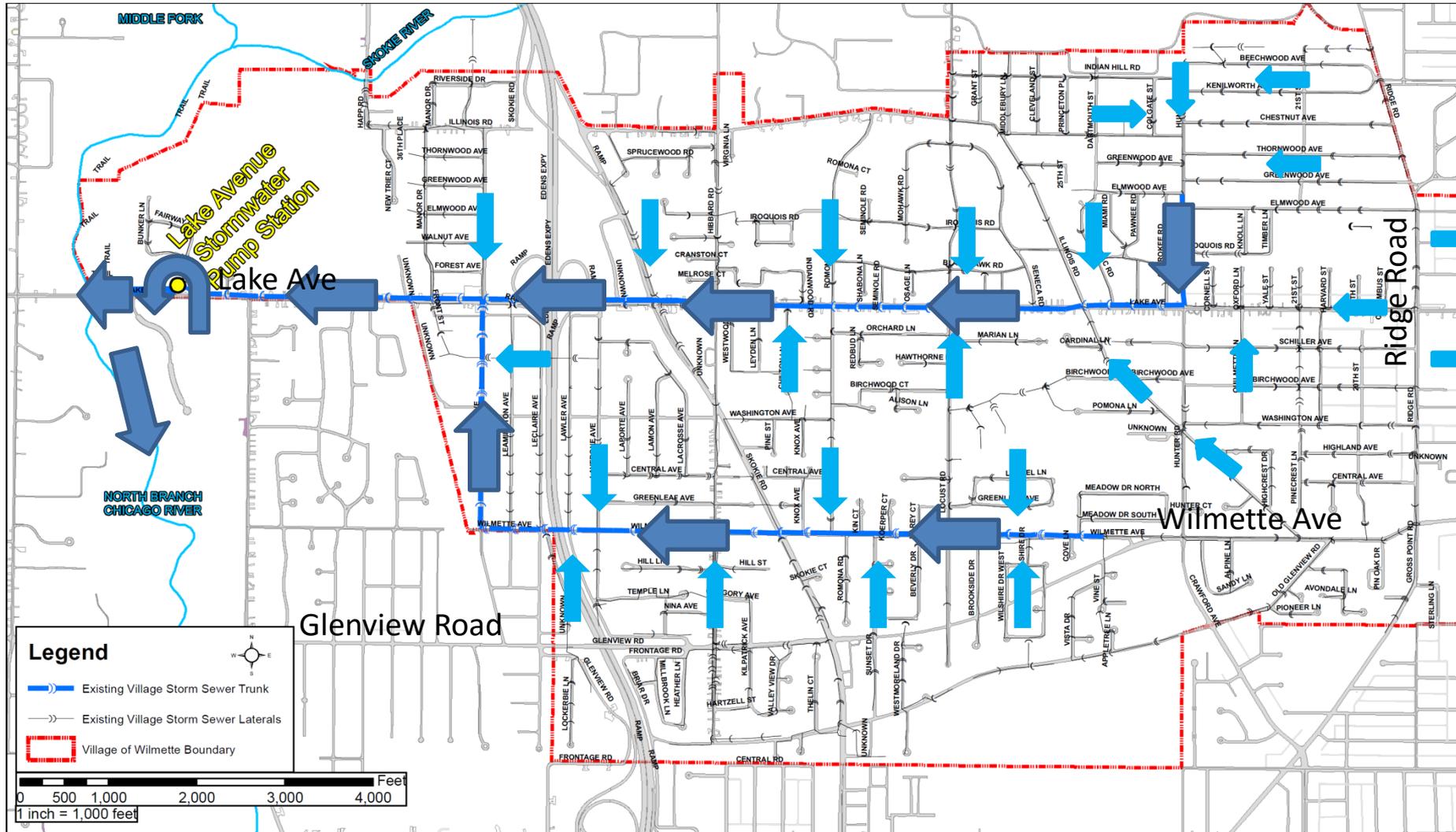
- Summary of Flooding Analysis
- Presentation of Selected Alternative
- Summary of Benefits and Costs
- Sample Phasing Plan
- Questions

- 100-year return interval storm event – Storm event with a 1% chance in occurring in any given year.
- 10-year return interval storm event – Storm event with a 10% chance of occurring in any given year.
- 2-year return interval storm event – Storm event with a 50% chance of occurring in any given year.
- Depth of flooding – Depth of standing water in the street.
- Impacted Structure – Floodwater rises within 1 foot of highest lot elevation
- cubic feet per second (cfs) – flowrate measurement of water
- Acre-foot – Volume measurement for stormwater
 - 1 acre of land 1 foot deep
 - A flat football field with a depth of 1 foot
 - 616,715 2-liter bottles
 - 325,828 gallons

- **Survey of Storm Sewer System**
 - >1,500 storm sewer manholes and pipes
- **Storm Sewer Flow Monitoring**
 - Two locations for 3 months – model calibration
 - Rainfall data collection
- **Compilation of Resident Information**
 - 168 residents attended Open Houses
 - 137 questionnaires/surveys
 - Photographs
 - Videos
 - Field visits
 - Input at MSC meetings

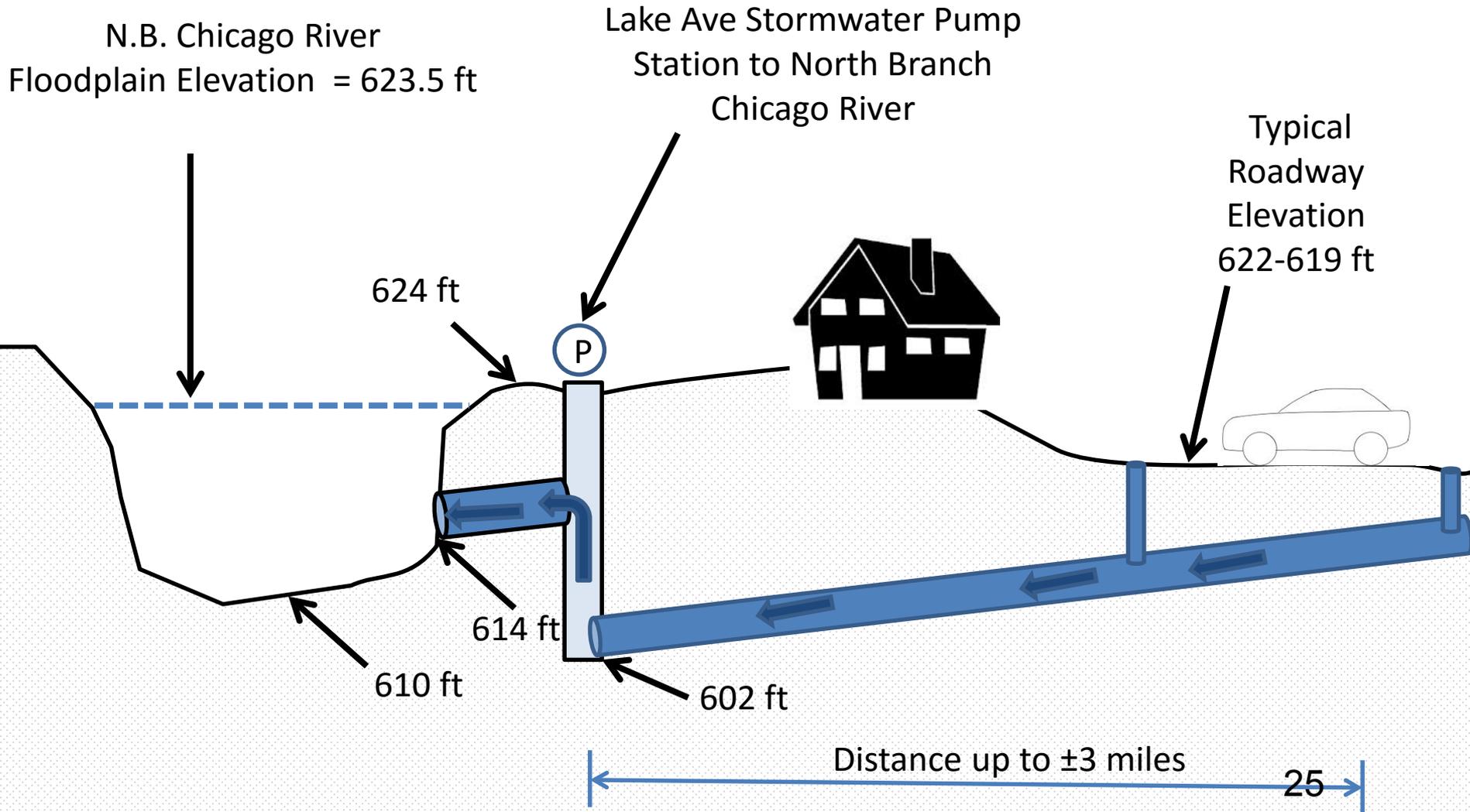


Existing Drainage System

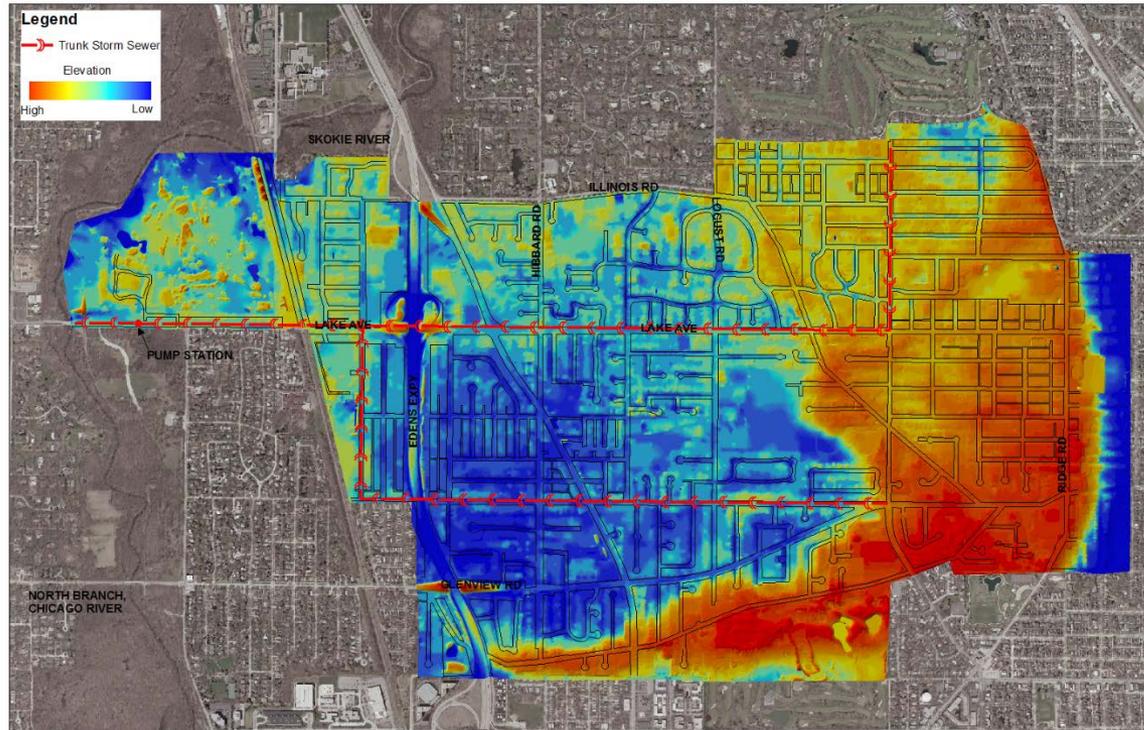


Limitations of Existing System

- Reliance on Storm Sewers and Pump Station



- Topographic Limitations



- Highly developed residential area
- Developed prior to modern stormwater management practices
- Limited open space
- No easy place to safely store or send runoff

- Stormwater model development
 - Incremental approach to develop a plan
 - Comprehensive analysis
 - Identify underutilized segments and/or restrictions
 - Identify potential improvements
- Calibration/verification from monitoring & flood events
 - April 2013
 - May 2014
 - June 2014
 - July 2016



July 23, 2016 Flood Event

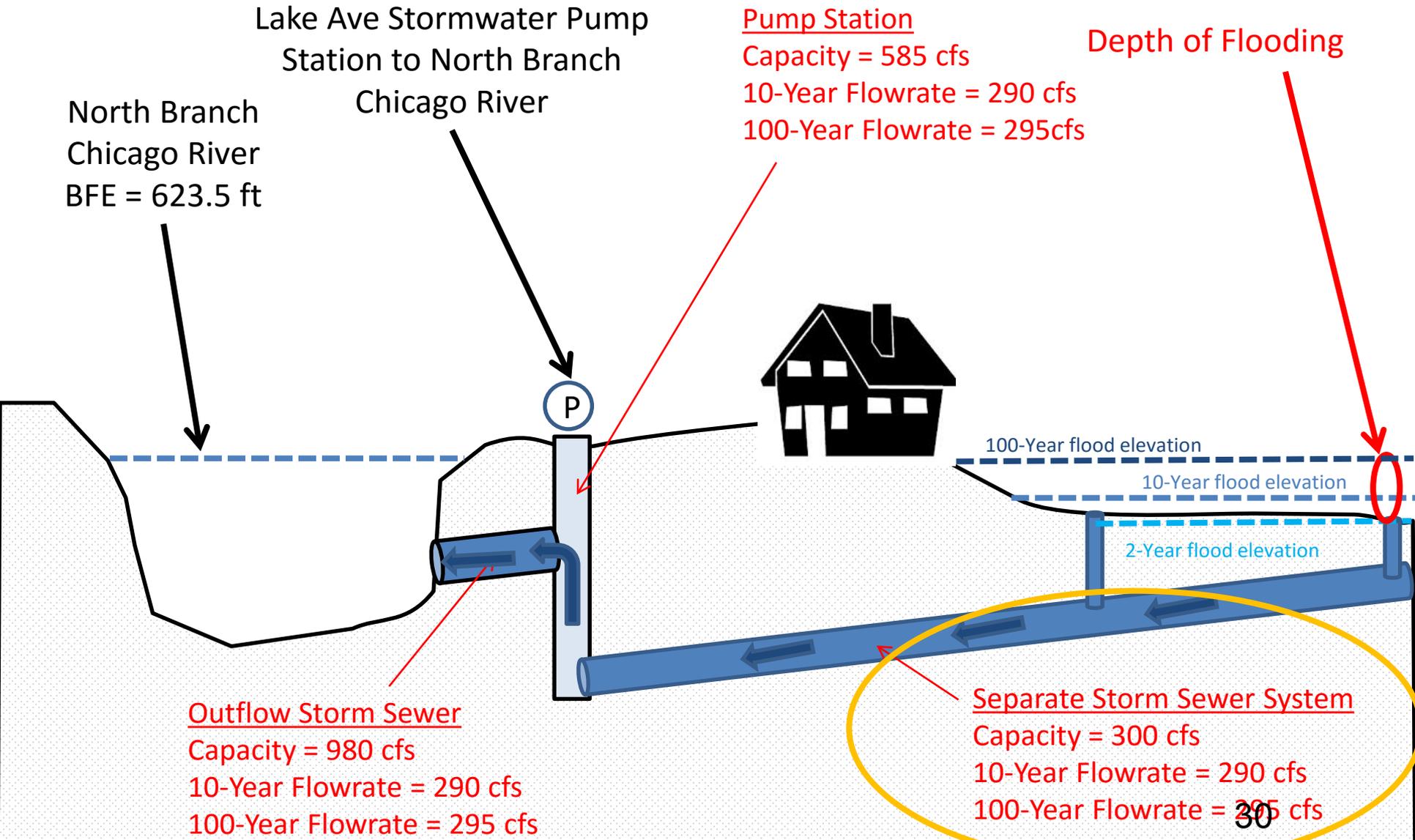
Existing Conditions Model Results

- Storm sewer system has 2-year capacity
- 10-Year storm event
 - Street flooding up to 2 feet in depth
- 100-year storm event
 - Street flooding up to 3 feet in depth
- April 2013 storm event
 - Equivalent to a 25-year storm event
 - Street flooding over 2.5 feet in depth

Estimated Number of Structures Impacted by Flooding

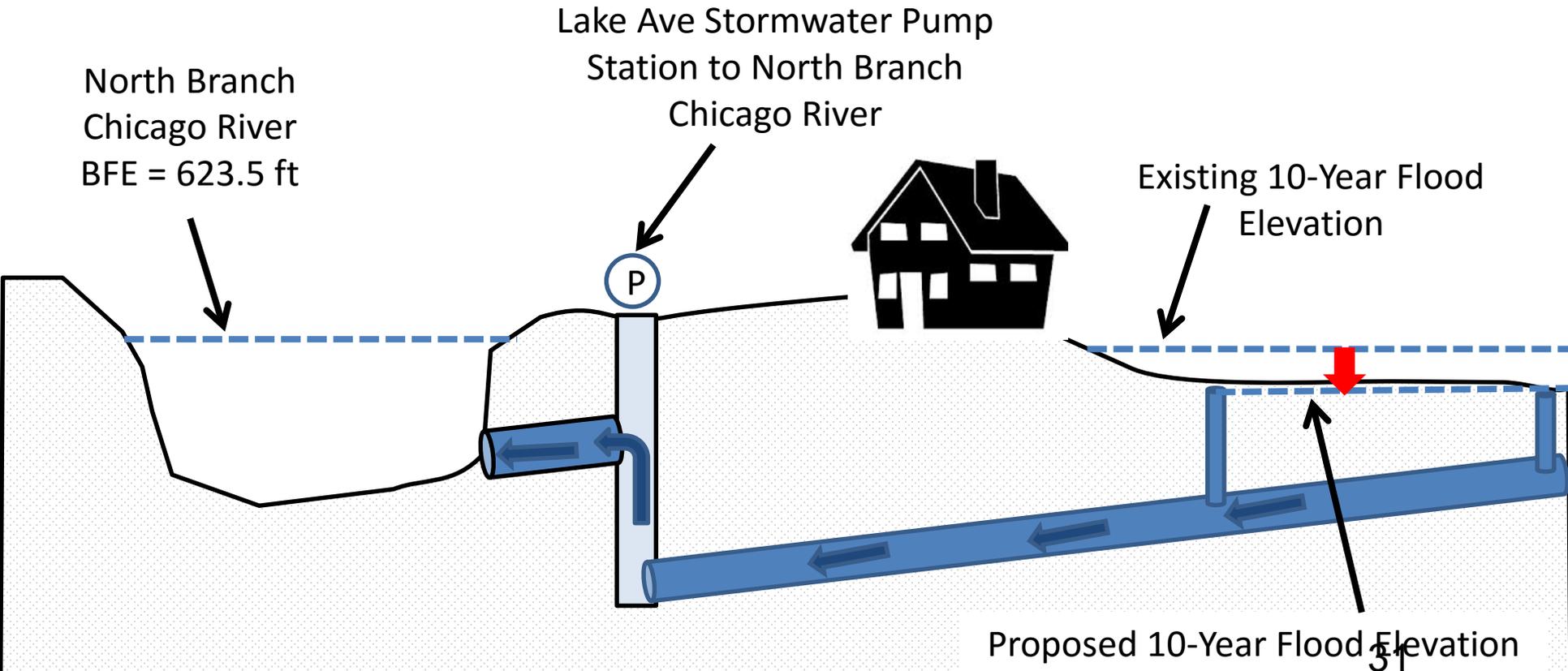
Return Interval Storm Event	Number of Structures*
10-year	120
25-year	280
50-year	480
100-year	700

Identification of System Bottlenecks



Proposed Drainage Improvements

- Goal: 10-Year System Capacity per August 2014 MSC meeting
 - Reduce 10-year flood elevation below pavement elevation
 - Similar to design standard for new construction



- Short Term Projects

- Residential flood-proofing
- High capacity inlets (limited benefit)
- Connection to Glenview system



- Green Infrastructure

- Village owned property (roadside bioswales and islands)
- Privately owned property (rain gardens and rain barrels)
- Ordinance requirements, maintenance and limited flood reduction benefits

- Long Term Capital Projects

- Alternative 1 – Relief Sewer System
- Alternative 2 – Centralized Storage at Community Playfield
- Alternative 3 – Neighborhood Stormwater Storage

- Green Roadways



Shoulder Bioswales



Island Rain Gardens



Permeable Pavement

- Private Property Improvements



Rain Gardens



Rain Barrels



Downspout
Disconnection

- Benefits

- Water quality improvements
- Can address local standing water issues
- Reduce runoff and stormwater pumping
- Required for larger developments under new Cook County Watershed Management Ordinance (WMO)



ECOLOC® PERMEABLE PAVERS

- Limitations
 - Vegetation requires establishment and maintenance
 - Reliance on infiltration – soils and weather constraints
 - Roadway jurisdictions and requirements
 - Capacity limitations:
 - A single 0.15 acre lot in Wilmette would generate up to 15,000 gallons of runoff during the April 2013 storm event
 - 235 rain barrels (55 gallons each)
 - Roof Only = 110 rain barrels
 - Goal of streets dry in 10-year event requires \pm 50 acre-ft of storage
 - 296,000 rain barrels (55 rain barrels per property on West Side)
 - 20-25 miles of permeable pavement (nearly $\frac{1}{2}$ of West Side)
 - 20,000 rain gardens (4 rain gardens per property on West Side)
 - Model results indicate <0.2 ft of flood reduction for 10-year storm event if every property installed 1 rain garden!

- **Projects Analyzed**
 - Alternative 1 – Storm Sewers
 - Alternative 2 – Community Park Floodwater Storage
 - Alternative 3 – Neighborhood Floodwater Storage
- **Project Benefits**
 - 10-year flood elevation at or below street level at all locations (except Alternative 3)
 - Reduction in street flooding depth and duration for all storm events
 - Reduction in structures impacted by flooding

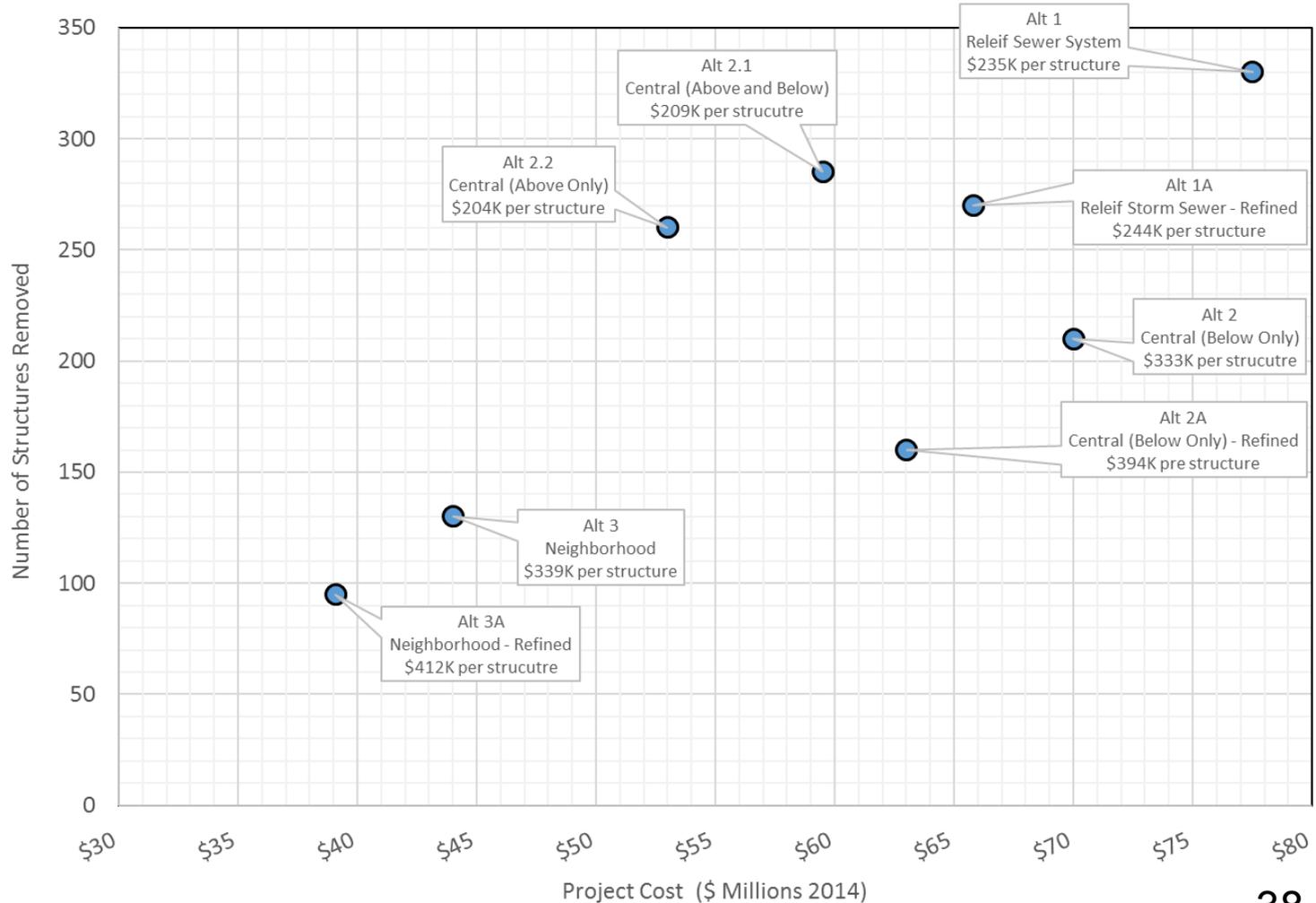


Capital Projects - Benefits and Costs

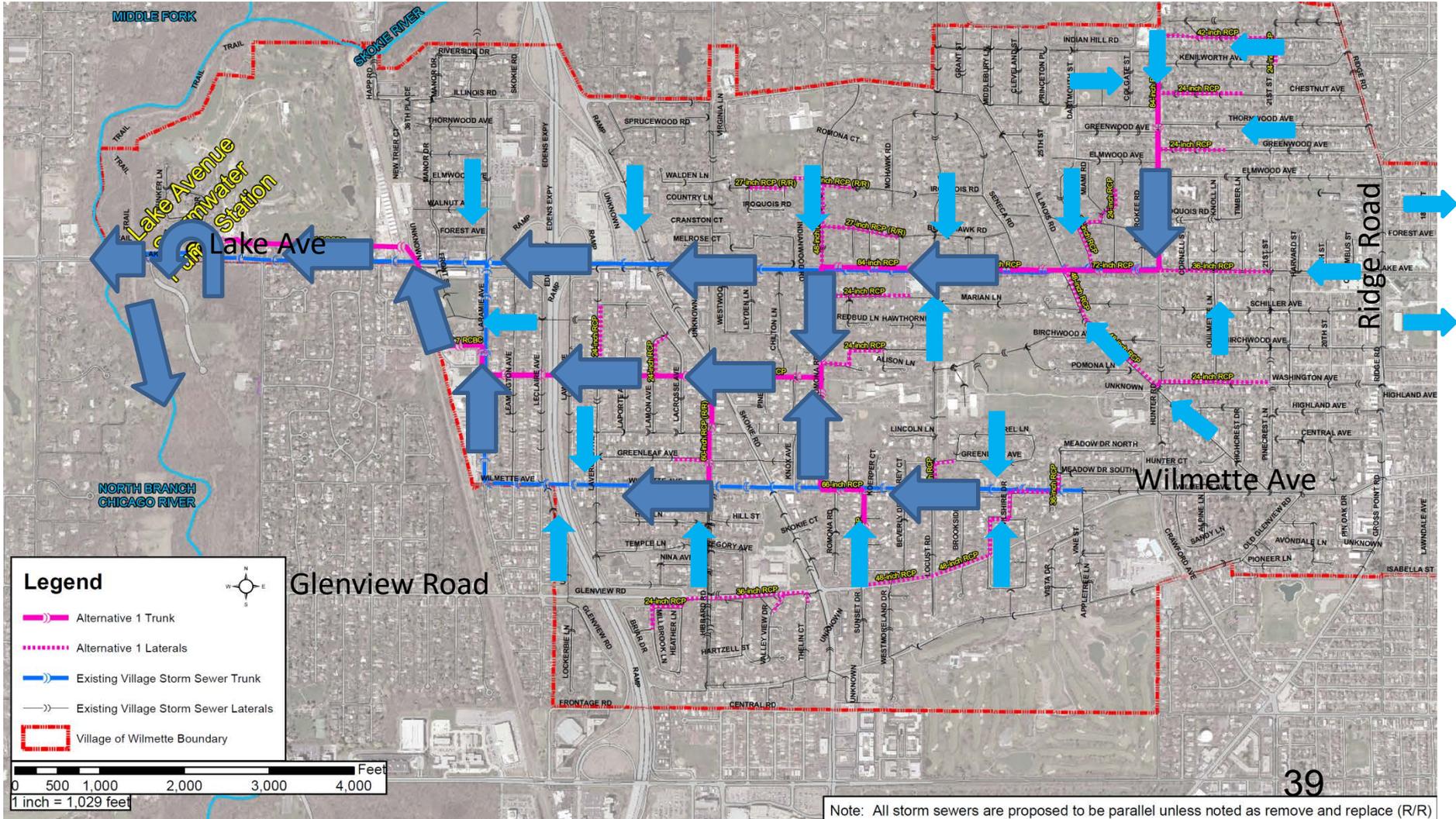
	Design Storm	Existing Conditions	Alternative 1	Alternative 1A	Alternative 2	Alternative 2A	Alternative 2.1	Alternative 2.2	Alternative 3	Alternative 3A
			Relief Storm Sewer System	Relief Storm Sewer System	Underground Stormwater Storage at Community Playfield	Underground Stormwater Storage at Community Playfield	Combination Stormwater Storage at Community Playfield	Above Ground Stormwater Storage at Community Playfield	Neighborhood Stormwater Storage	Neighborhood Stormwater Storage
Benefits	Number of structures impacted by flooding (% reduction)									
	10-year	120	0 (100%)	0 (100%)	0 (100%)	0 (100%)	0 (100%)	0 (100%)	50 (58%)	50 (58%)
	25-year	280	60 (79%)	95 (66%)	90 (67%)	115 (60%)	60 (79%)	60 (79%)	160 (43%)	170 (39%)
	50-year	480	190 (60%)	235 (51%)	240 (50%)	290 (40%)	180 (63%)	200 (58%)	320 (33%)	350 (27%)
	100-year	700	370 (47%)	430 (38%)	490 (30%)	540 (23%)	415 (41%)	440 (37%)	570 (19%)	605 (14%)
	Street Flooding Depth in feet (Minimum - Maximum)									
	10-year	0.3 - 2.2	0.0	0.0 - 0.8	0.0	0.0 - 0.8	0.0	0.0	0.0 - 2.2	0.0 - 2.2
	25-year	0.5 - 2.7	0.0 - 1.7	0.0 - 1.9	0.1 - 1.8	0.2 - 1.8	0.0 - 1.7	0.0 - 1.6	0.3 - 2.6	0.3 - 2.6
	50-year	0.6 - 3.0	0.0 - 2.2	0.0 - 2.3	0.5 - 2.3	0.5 - 2.3	0.3 - 2.2	0.0 - 2.2	0.5 - 2.9	0.5 - 2.9
	100-year	0.6 - 3.3	0.0 - 2.6	0.0 - 2.7	0.6 - 2.7	0.6 - 2.7	0.6 - 2.6	0.6 - 2.6	0.6 - 3.2	0.6 - 3.2
Costs	Total Cost*	--	\$77 Million	\$65.8 million	\$70 million	\$63 million	\$59.5 million	\$53.0 million	\$44 million	\$39.1 million
	Cost per Structure Protected for 100-year event	--	\$234,840	\$243,700	\$333,333	\$393,750	\$208,772	\$203,846	\$338,462	\$411,579

*Alternative 1 in 2016 Dollars, all others in 2014 Dollars

Number of Structures Removed from 100-year Inundation area versus Project Cost



Relief Storm Sewer System



- Add relief storm sewers to match pump station capacity
- Large diameter pipes & long distance
 - 21,000 linear feet of trunk storm sewer
 - 21,000 linear feet of lateral storm sewer
- Addition of 6th Variable Frequency Drive (VFD) pump (backup) at pump station
 - Redundancy and efficiency purposes only

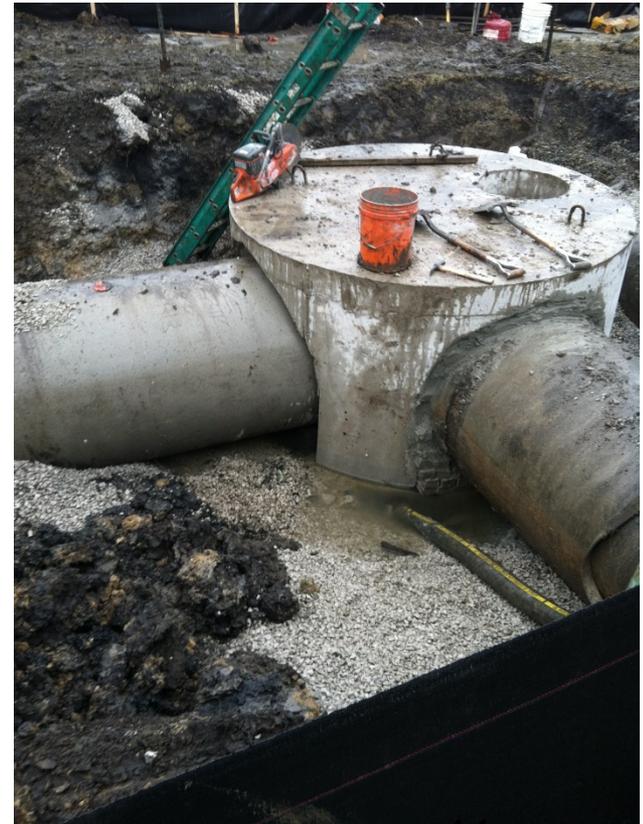
• Project Costs

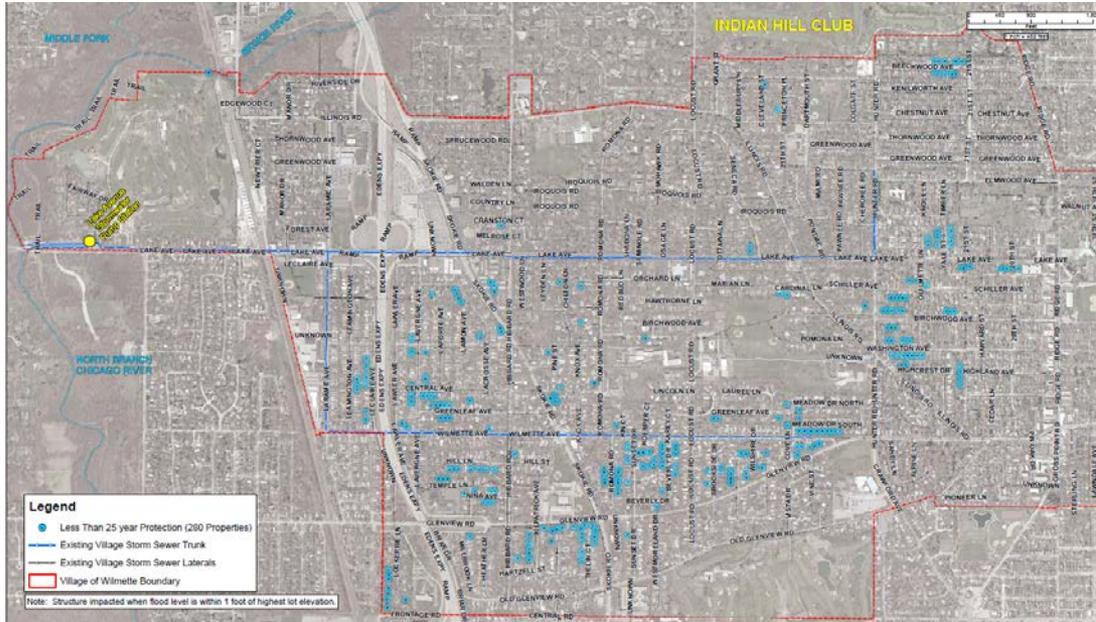
- Engineer's Estimate = \$77 Million

- Contingency = 20%
- Engineering costs included
- 2016 Dollars

- Other Costs

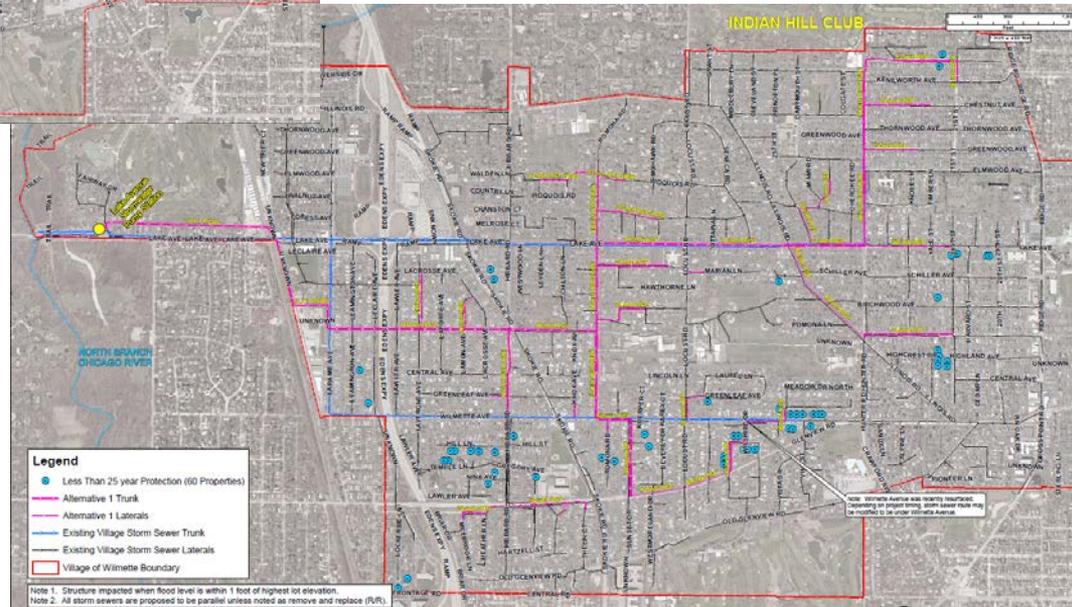
- Long project duration
- Significant traffic disruption
- Utility conflicts
- Golf course disruption





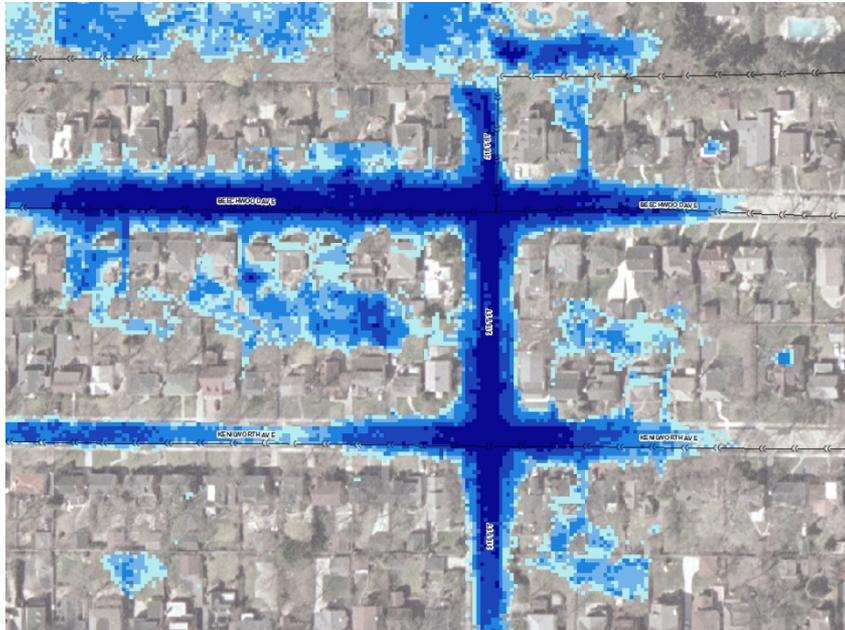
25-Year Return Interval Storm Event (April 2013)

Existing Conditions– Residential Structures Impacted = 280



Alternative 1 – Residential Structures Impacted = 60

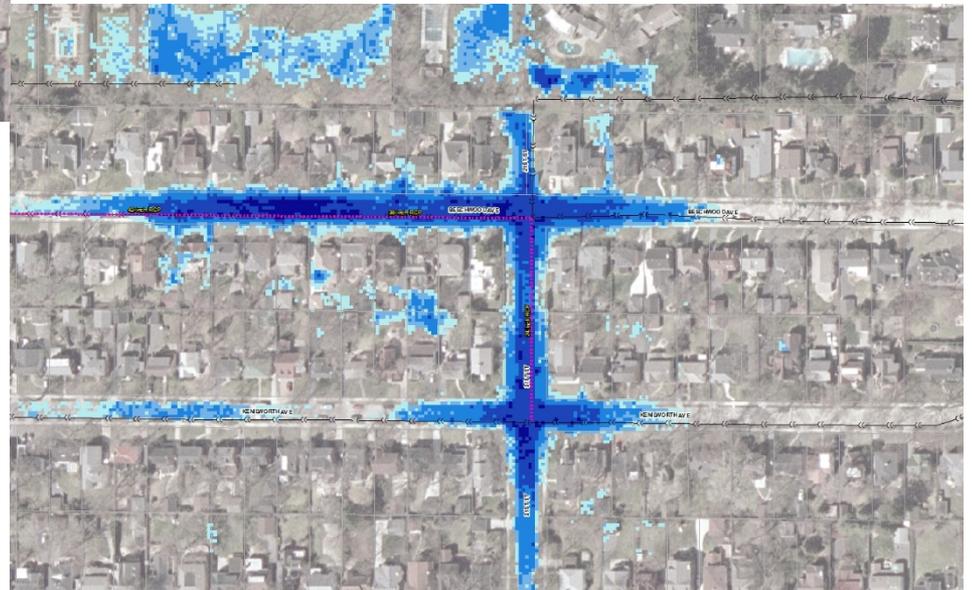
Alternative 1 – Street Flooding



Existing Conditions: Max Flood Depth = 2.2 ft.

25-Year Return Interval
Storm Event (April 2013)

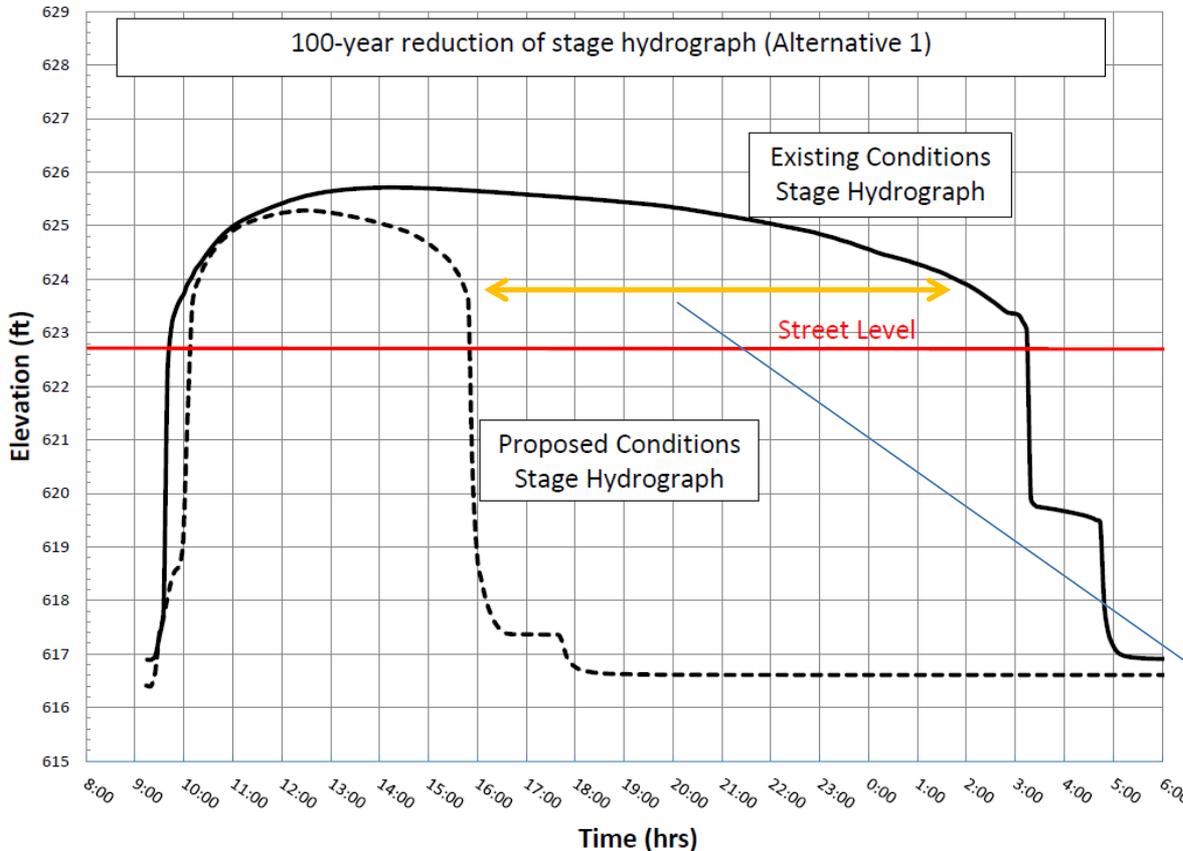
Kenilworth Gardens



Alternative 1: Max Flood Depth = 1.7 ft.

Alternative 1 – Reduction in Flood Duration

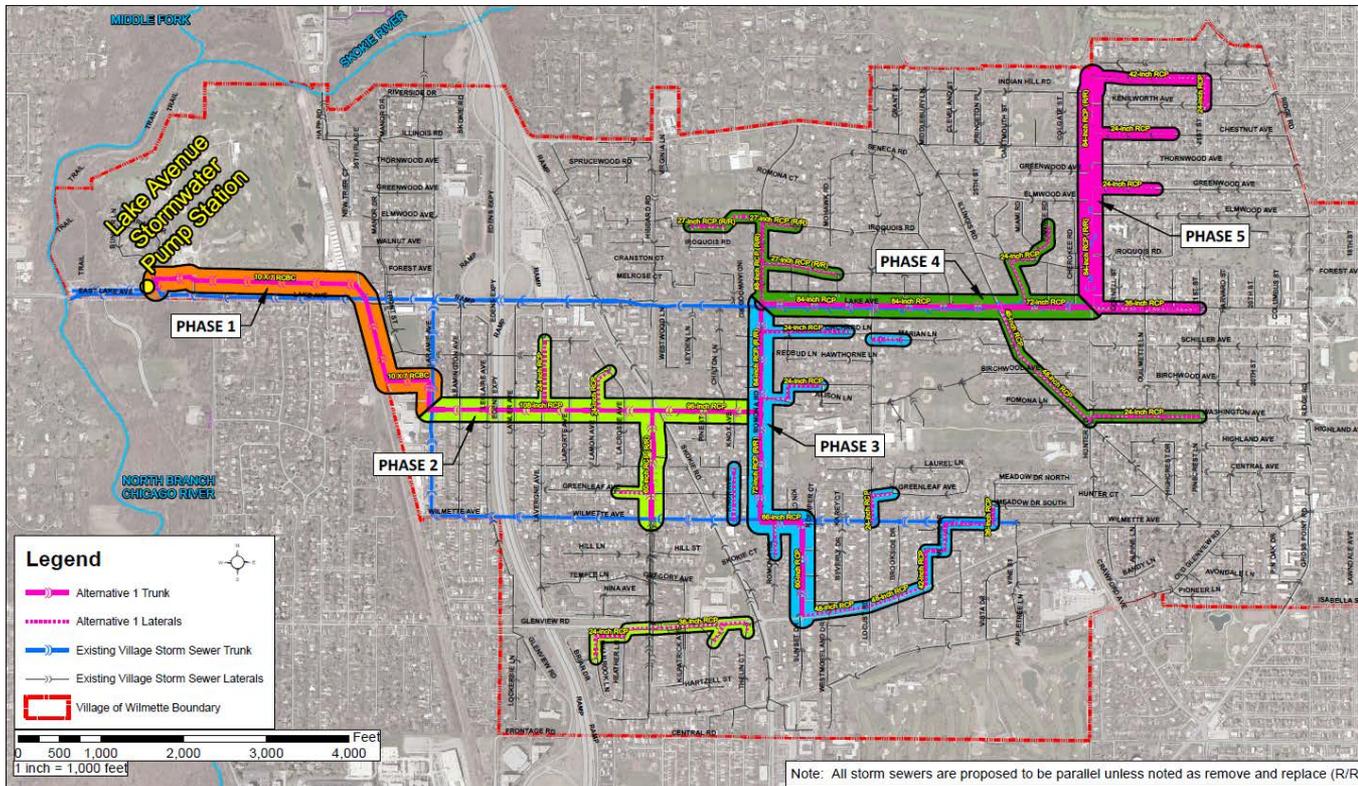
- Project Benefits
 - 100-year flood duration reductions



Duration of street inundation reduced by 66%

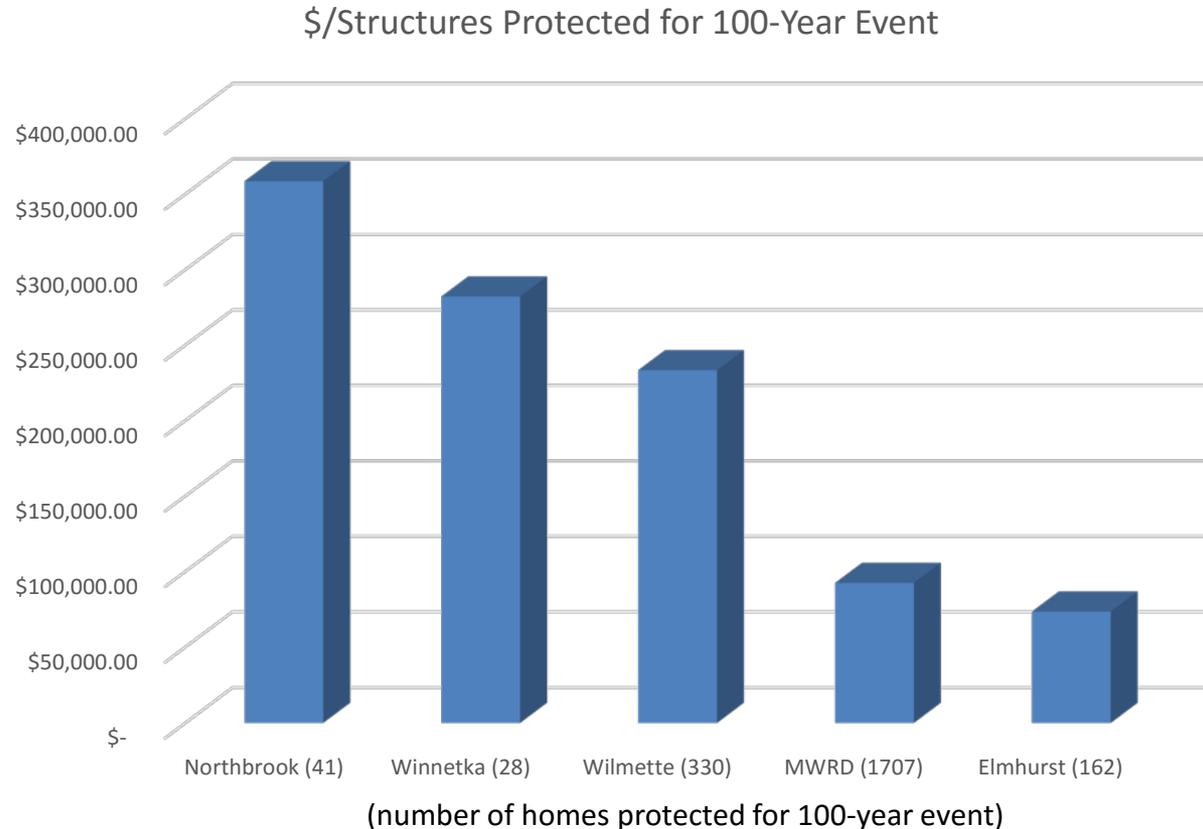
- Reduction in:
 - Frequency and depth of flooding for all impacted structures and roadways
 - Infiltration into sanitary sewer system
 - Inflow into sanitary system
 - Basement seepage
 - Yard flooding
- Improved access during storm events
- Increased pump station flexibility
- Increased property values

Possible Phasing Scenario – Alternative 1



Segment	Trunk Storm Sewers (\$)	Lateral Storm Sewers (\$)	Total Cost (\$)
Phase 1	\$16.2 M	\$0.0M	\$16.2 M
Phase 2	\$15.5 M	\$3.3 M	\$18.8 M
Phase 3	\$8.3 M	\$6.1 M	\$14.4 M
Phase 4	\$7.5 M	\$8.4 M	\$15.9 M
Phase 5	\$7.2M	\$4.6 M	\$11.8 M
Total	\$55.1 M	\$22.5 M	\$77.6 M

Flood Control Spending in Other Communities

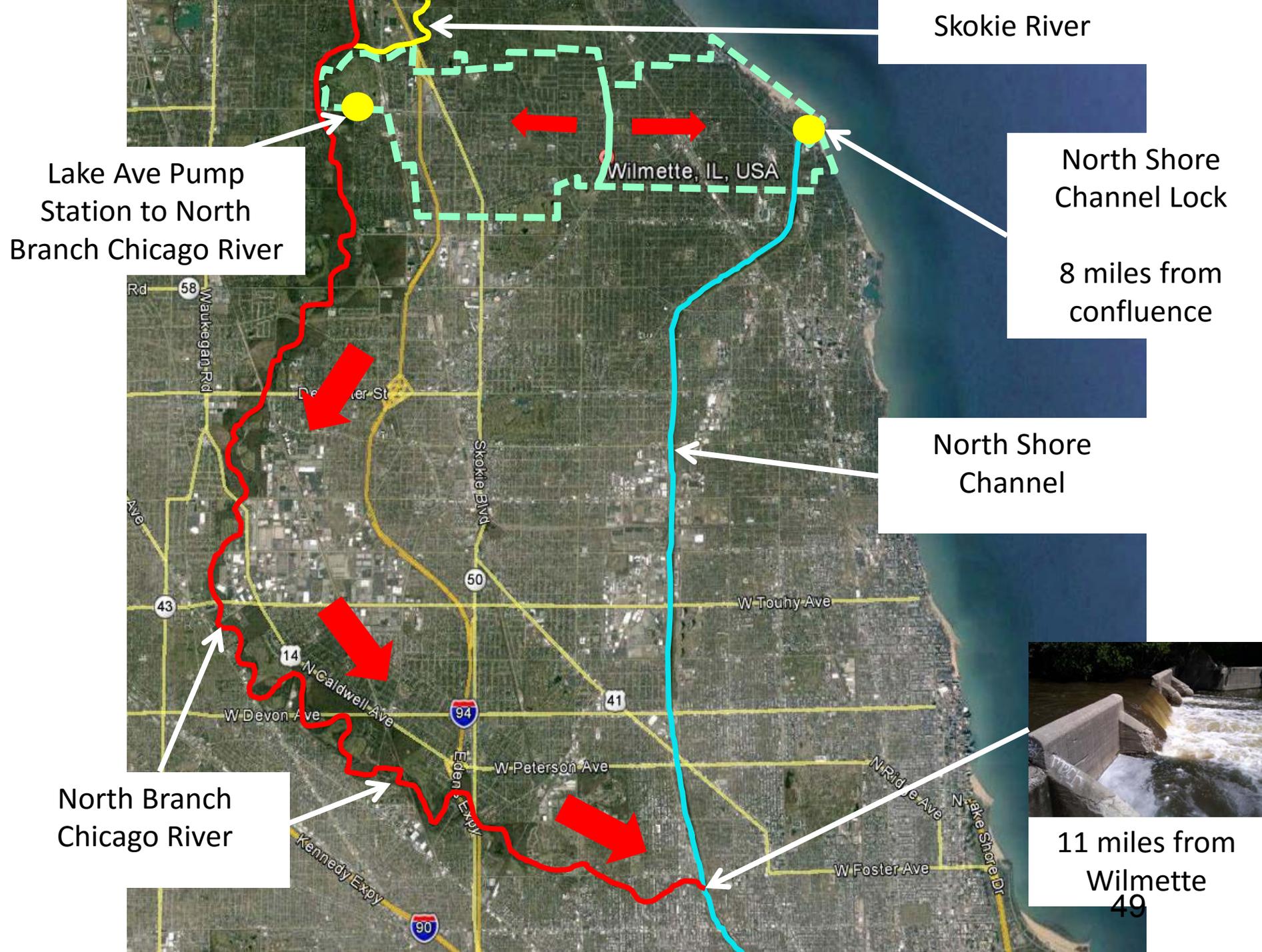


- Cost factors include:
 - Size of watershed
 - Available open space
 - Age of current stormwater infrastructure



End of Presentation

Questions



Financial Review

History of Village of Wilmette Debt Service

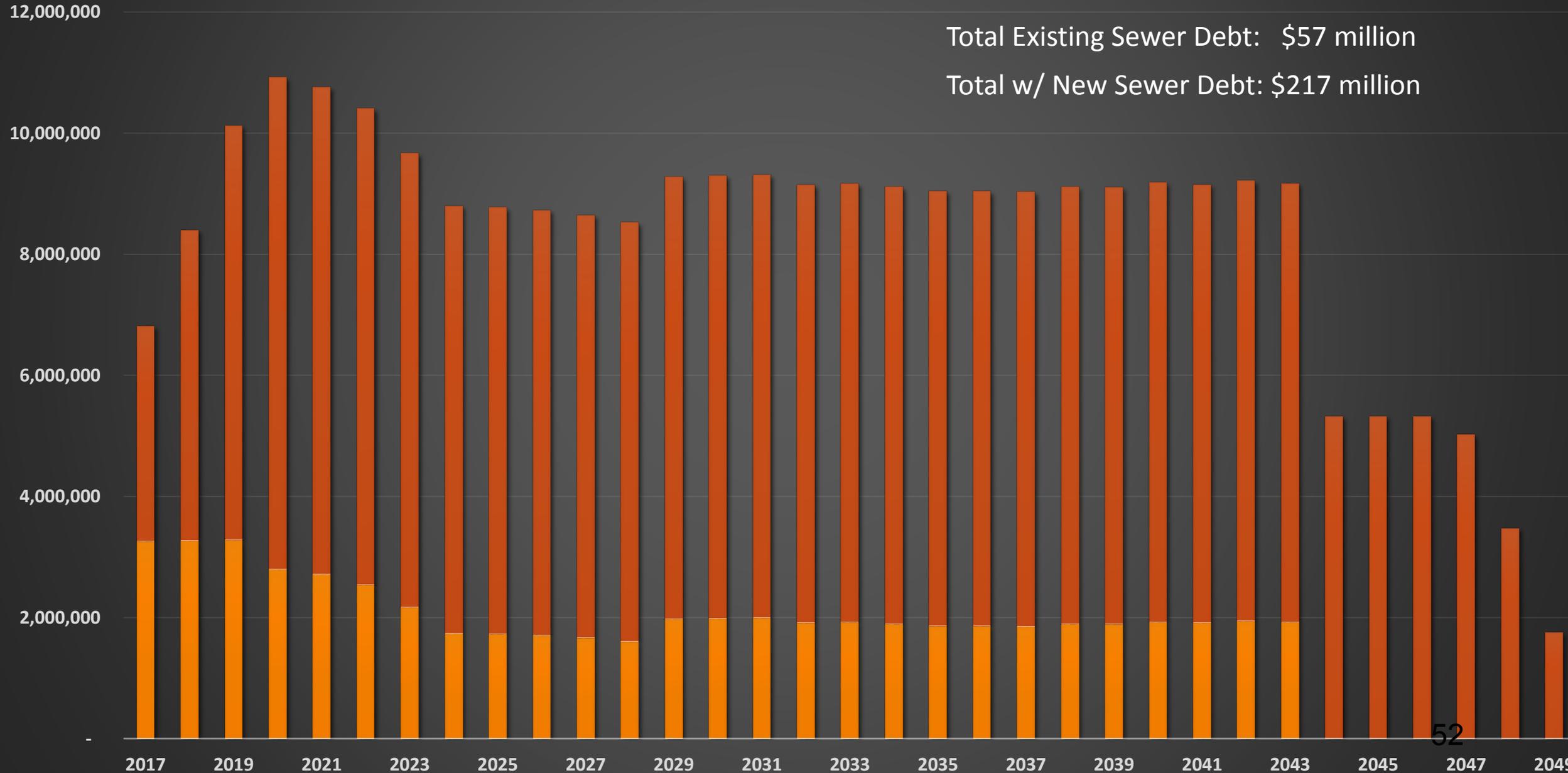
G.O. Debt Issued Since 1998	
General Fund	\$47.1M
Water Fund	\$12.6M
Sewer Fund	\$34.7M
Total Debt Issued	\$94.4M

Outstanding Debt Service As Of 12/31/16	
General Fund	\$33.8M
Water Fund	\$16.3M
Sewer Fund	\$57.3M
Total Debt Service	\$107.4M

Since 1990, the Village has also issued a total of \$37.8M in debt through the Illinois Environmental Protection Agency (IEPA) low interest loan program for sewer work

Existing & New Sewer Debt Service

Existing Debt Service New Debt Service



Impact of Debt Service on Sewer Rate

The current sewer rate is \$4.24 and the average annual household sewer bill is \$565. The impact of new debt service to the rate is as follows:

Project Cost	Annual Debt Service	Est. Rate Increase	Est. Avg. Annual Increase
\$40M	\$2,905,000	\$2.43	\$325
\$60M	\$4,400,000	\$3.68	\$500
\$77M	\$5,600,000	\$4.68	\$625

- The estimated rates and impact to households assumes average annual consumption does not decrease
- Annual debt service is subject to change based on timing of issuance(s), interest rates and debt structure

What Do Village Services Cost?

The following table demonstrates the average annual cost to a Wilmette homeowner for Village services:

2016 Taxes & Fees	Annual Cost
Property Tax	\$1,600
Water Bill	\$350
Sewer Bill	\$565
Refuse Fee	\$278
Vehicle Stickers	\$160
Total	\$2,953

Explanation of Property Tax Impact

For every \$10,000 in a home's EAV, \$108 goes to the Village in the form of property tax.

For every \$100,000 added to the tax levy by the Village, a home's tax bill increases by \$0.60 per every \$10,000 of EAV.

Recap of Long-Range Planning Meetings

Water Fund

- \$700,000 for engineering design of the \$7.7M Water Plant Electrical Improvements will be included in the Proposed FY 2017 Budget for the Board's consideration

General Fund & Roads

- Allocation of all FY 2016 non-recurring revenues to the Capital Equipment Replacement Fund (CERF), other than those revenues utilized to design the 2017/18 road and alley programs, will be included in the Proposed FY 2017 Budget for the Board's consideration
- An additional \$500,000 for the annual road program, funded through the property tax levy, will be included in the Proposed FY 2017 Budget for the Board's consideration
 - The Board will be meeting as a COW as part of the budget process and can continue discussion of these items

Storm Water Improvements

- Depending on direction from the Village Board, additional funds can be added to the budget in October/November, or a budget amendment made during the course of FY 2017
- Residents are encouraged to email the Village at sewers@wilmette.com to provide feedback on the storm water improvements under consideration