

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

www.mwrd.org

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Catherine A. O'Connor, Ph.D., P.E.

Director of Engineering

312.751.7905

oconnorc@mwrd.org

August 28, 2020

Mr. Bill McKenna
Village Engineer
Village of Oak Park
201 South Blvd
Oak Park, IL 60302

Dear Mr. McKenna:

Subject: Notice of Stormwater Partnership Program Project Selection

We are pleased to inform you that your project, titled "20-1 LeMoyné Parkway Relief Sewer" has been selected for assistance through the Metropolitan Water Reclamation District of Greater Chicago (District) Stormwater Partnership Program. During our most recent request for projects, the District received 46 applications during the application period.

The applications were reviewed and prioritized based on our current budgetary allocation for the program as well as the project's intended stormwater benefits towards protecting structures from flooding, potential for coordination with other infrastructure improvements, and various other factors.

Funding assistance to be provided by the District, as well as other roles and responsibilities of both parties, will be defined through Intergovernmental Agreement negotiations, and subject to approval by our Board of Commissioners.

Ms. Moriah Gelder of the District's Stormwater Management staff will reach out to you to schedule a meeting and discuss the project and next steps. Further, please feel free to contact Ms. Gelder via e-mail at GelderM@mwrd.org with any questions.

We look forward to beginning our partnership to construct this project and are certain that working together we can achieve significant flood mitigation.

Very truly yours,

Catherine A. O'Connor
Director of Engineering

WSS:JK:RF:cw



The Village of Oak Park
Village Hall
123 Madison Street
Oak Park, Illinois 60302-4272

708.383.6400
Fax 708.383.9584
www.oak-park.us
village@oak-park.us

February 14, 2020

Ms. Catherine O'Connor
Director of Engineering
Metropolitan Water Reclamation District of Greater Chicago
100 E. Erie St.
Chicago, IL 60611

Attention: Ms. O'Connor

Re: 2020 Stormwater Partnership Program Application

Dear Catherine,

Please see the attached application for the 2020 Stormwater Partnership Program.

If you have any questions or need additional information, please feel free to call me at (708)
358-5722.

Sincerely,

Bill McKenna, P.E.
Village Engineer
Village of Oak Park
201 South Blvd
Oak Park, IL 60302
708.358.5722
mckenna@oak-park.us



STORMWATER PARTNERSHIP PROGRAM APPLICATION FORM

DEADLINE: February 14, 2020 at 5:00 PM CDT

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is accepting project applications for partnership funding opportunities. MWRD seeks to partner with local municipalities and public agencies to address flooding issues within our service boundaries. **For more information, including program guidelines, partnership responsibilities, and eligibility requirements, visit www.mwrd.org and select Stormwater Partnership Program.**

HOW TO SUBMIT THE APPLICATION

Applications and all attachments must be submitted via e-mail, U.S. Mail or other courier service. **Electronic submission through E-mail is preferred.**

E-mail: Submit applications to StormApps@mwrd.org. Limit email size (including attachments) to 50MB. Submit application in one email only if possible, and include a list of all attachments in that email. Attach files using a filename that is unique to your project, referencing the organization name and/or project title.

Mail: It is strongly preferred that applications and all attachments be submitted electronically on a CD, DVD, or flash drive. If there is no way for you to submit electronically, please mail your application in a sealed envelope titled "STORMWATER PARTNERSHIP APPLICATION"

Address for Mailed or Hand Delivered Applications

Catherine O'Connor
Director of Engineering
Metropolitan Water Reclamation District
of Greater Chicago
100 East Erie Street
Chicago, IL 60611-3154

Contact for Questions

Richard Fisher
Principal Civil Engineer
Metropolitan Water Reclamation District
of Greater Chicago
312-751-5479
FisherR@mwrd.org

The following information must be received by MWRD on or before Friday, February 14, 2020 at 5:00 PM CDT. Late or partial applications will not be accepted. A representative authorized by the public partner must execute the signature page of the application in order for it to be accepted. This PDF is set up for electronic signature. If you prefer to sign a hard-copy, please print out the signature page separately and scan and email a copy of that page along with the completed electronic application.

Eligibility Requirements

The following are the eligibility requirements for MWRD's Stormwater Partnership Opportunity Program:

- Projects must be within the MWRD's corporate boundaries.
- Project must be intended to address structure flooding, not nuisance flooding such as rear-yard or minor street ponding issues.
- Projects must be designed to manage stormwater through conveyance, storage, or stream channel improvements. Elements of Green Infrastructure may be used, but should not be the primary source of stormwater abatement. Projects that are primarily Green Infrastructure related can be submitted for consideration through MWRD's Green Infrastructure program
- Applicants must have (or be able to obtain) perpetual ownership or easement over the project site.
- Applicants will not use funding to satisfy required obligations due to the MWRD's Watershed Management Ordinance (WMO) or any other local, state, or federal regulations due to a private or public development project. Please note that some projects may require a WMO permit due to its own project disturbance, a new sewer, etc. Please refer to wmo.mwrdd.org for additional information on permit requirements.
- The Applicant must be a public entity able to enter into an intergovernmental agreement (IGA) with the MWRD. Eligible public entities include municipalities, townships, county agencies, park districts, school districts, and other local government organizations.
 - Projects to be built by the applicant utilizing District Funds must be bid in general accordance with the District's Purchasing Act, which includes requirements to publicly advertise and award contracts to the lowest responsible bidder.
 - Projects will be required to meet MWRD's Minority Business Enterprise (MBE), Women's Business Enterprise (WBE), and Small Business Enterprise (SBE) requirements, as well as the MWRD's Veterans Business Enterprise (VBE) goals.
 - Please see website for more information on typical IGA requirements:
<https://mwrdd.org/stormwater-management-1>
- The Applicant must demonstrate a willingness and capability to maintain and operate the completed project in perpetuity.
- The Applicant should verify the capability to perform all aspects of the project by each department within their agency or community which will take part in funding, contract administration, maintenance and other requirements of the applicant.
- Maintenance projects or projects that are due to lack of maintenance will not be considered.

The MWRD may also consider whether applicants are in compliance with all MWRD ordinances (for example; WMO and Inflow & Infiltration Control Program) when prioritizing projects for funding assistance.

APPLICANT INFORMATION

Application Date: _____

Organization:

Name: _____

Department: _____

Street Address: _____

City: _____ State: _____ Zip Code: _____

Primary Contact:

First Name: _____ Last Name: _____

Title: _____

Phone: _____ Email: _____

PROJECT INFORMATION

The MWRD ranks all Stormwater project applications on many different criteria, but please note that economic need, propensity of nearby flooding (including frequency and severity), number of benefitting flood-prone structures as a result of the project, and cost-effectiveness are the most important factors.

Project Title: _____

Project Description:

1) Provide a brief description of the proposed project, identify all project locations, identify all major stormwater components, and describe how the project will address existing drainage/flooding issues.

Project Location:

Street Address*: _____

or Nearest Intersection: _____

City: _____ State: _____ Zip Code: _____

*If your project is not associated with an exact address, use either of the following example formats:

- 1. the 1900 block between 57th Court & 57th Avenue
- 2. between S Homan Avenue and S Trumbull Avenue, bounded by W Columbus Avenue and W 80th Street

If your project spans multiple locations, provide a list of addresses or intersections included with the map.

Existing Conditions:

2) Estimated area of flooding impact: _____ (acres)

Please estimate the amount of land area that is impacted by flooding . Provide hydrologic and hydraulic modeling and results if available.

3) Provide a brief description of the existing site conditions, including how the site is currently used.

4) Major cause of flooding problem:

- Lack of local stormwater detention
- Overwhelmed combined or storm sewer system
- Undersized culverts along drainage way
- Lack of overland drainage outlet
- Other, explain : _____

5) Describe the type and impact of flooding that this project is intended to address (e.g. overland or sewer backup, flooding of roadways, buildings, etc.). If possible, please estimate depth and width of flooded area. Please provide documentation (pictures, call data, etc.) as an attachment.

Project Collaboration:

17) Is there a possibility that this project can be combined with another proposed project in the area affected by flooding (i.e. roadway resurfacing, utility improvements, or other infrastructure projects):

Yes, explain: _____

No

Project Finances:

18) Estimated Applicant Funding Spent to Date: \$ _____

19) Please provide an estimate of the project’s total Capital costs below.

| Cost Category | Amount (\$) | Notes |
|---|--------------------|---|
| Engineering and Permitting | | This includes construction inspection and management |
| Construction | | |
| Land Acquisition | | If applicable |
| Other | | |
| Total Project Cost (sum of the above costs) | | Maintenance costs should be excluded from this table. |

20) Please indicate your planned funding sources below.

| Funding Source | Funding Amount (\$) | Status of Funding (Applying/Pledged/Committed) |
|---|----------------------------|--|
| Applicant Funding* | | |
| MWRD Funding Request** | | N/A |
| Additional Funding (please use the table in question number 21 below) | | |
| Total Funding*** (sum the the above amounts) | | |

*Total funding by the agency. This will not include funding from any other source.

**Indicate the amount of funding being sought from MWRD. Note that MWRD funding for selected Stormwater projects is in the form of reimbursement of construction related costs only. Engineering, land acquisition, operations, maintenance, and other non-construction related costs are not eligible for MWRD funding. Also note that MWRD may also consider whether applicants are in compliance with all MWRD ordinances (eg. WMO and Inflow & Infiltration Control Program) when prioritizing projects for funding assistance.

***Total Project Cost and Total Funding should be equal.

21) Please provide the proposed funding sources for the project.

| Organization Name | Funding Amount (\$) | Status of Funding (Applying/Pledged/Committed) |
|--------------------------|----------------------------|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

ATTACHMENTS

Please indicate below if you have attached the following documents (not an exhaustive list):

- * Map of project locations, highlighting project areas. Additional project address list.
- * Map highlighting area/ structures that will benefit from the project.
- * Documentation/records of drainage/flooding problems (map indicating problem locations, photos, 311 calls or similar, stormwater master plan, etc.)
- Detailed schedule for design and construction
- Photos
- Conceptual Plan/Preliminary Engineering Plan/Final Engineering Plan with any support documentation (such as drawings, construction cost estimates, stormwater and/or design calculations, etc.)
- Operations and Maintenance Plan
- Hydraulic & hydrological modeling results

* indicates required attachment

SIGNATURE PAGE

Applicant's Authorized Representative

First Name Bill Last Name: McKenna

Title: Village Engineer

Organization: Village of Oak Park

Project Title: 20-1 LeMoyne Parkway Relief Sewer

Signature of Authorized Representative*:  Date: 2/14/20

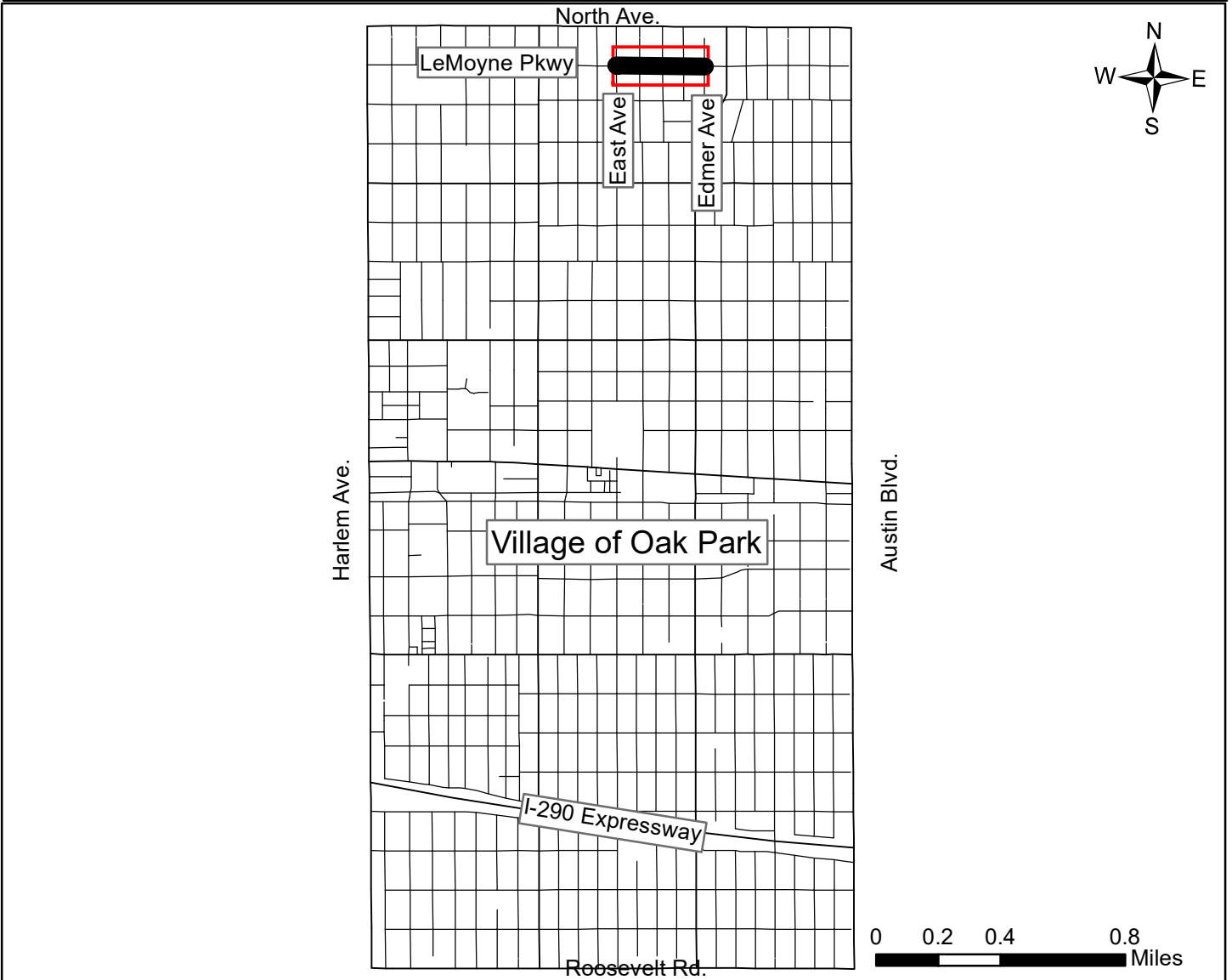
***Note:** Digital signatures are preferred, but if not comfortable digitally signing, 2 copies of the application may be submitted, a digital copy (unsigned) and a manually-signed copy (could be hard-copy or scanned)

By signing above, the Applicant acknowledges they understand the following eligibility requirements.

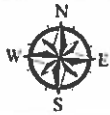
MWRD Local Stormwater Partnership Opportunity Eligibility Requirements:

- Projects must be within the MWRD's corporate boundaries.
- Project must be intended to address structure flooding, not nuisance flooding such as rear-yard or minor street ponding issues.
- Projects must be designed to manage stormwater through conveyance, storage, or stream channel improvements. Elements of Green Infrastructure may be used, but should not be the primary source of stormwater abatement. Projects that are primarily Green Infrastructure related can be submitted for consideration through MWRD's Green Infrastructure program
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- Applicants will not use funding to satisfy required obligations due to the MWRD's Watershed Management Ordinance (WMO) or any other local, state, or federal regulations due to a private or public development project. Please note that some projects may require a WMO permit due to its own project disturbance, a new sewer, etc. Please refer to wmo.mwrdd.org for additional information on permit requirements.
- The Applicant must be a public entity able to enter into an intergovernmental agreement (IGA) with the MWRD. Eligible public entities include municipalities, townships, county agencies, park districts, school districts, and other local government organizations.
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 - Projects will be required to meet MWRD's Minority Business Enterprise (MBE), Women's Business Enterprise (WBE), and Small Business Enterprise (SBE) requirements, as well as the MWRD's Veterans Business Enterprise (VBE) goals.
 - Please see website for more information on typical IGA requirements:
<https://mwrdd.org/stormwater-management-1>
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- The Applicant should verify the capability to perform all aspects of the project by each department within their agency or community which will take part in funding, contract administration, maintenance and other requirements of the applicant.
- Maintenance projects or projects that are due to lack of maintenance will not be considered.

Attachment 1- Vicinity and Location Map



Attachment 2- Estimated Area of Flooding Impact

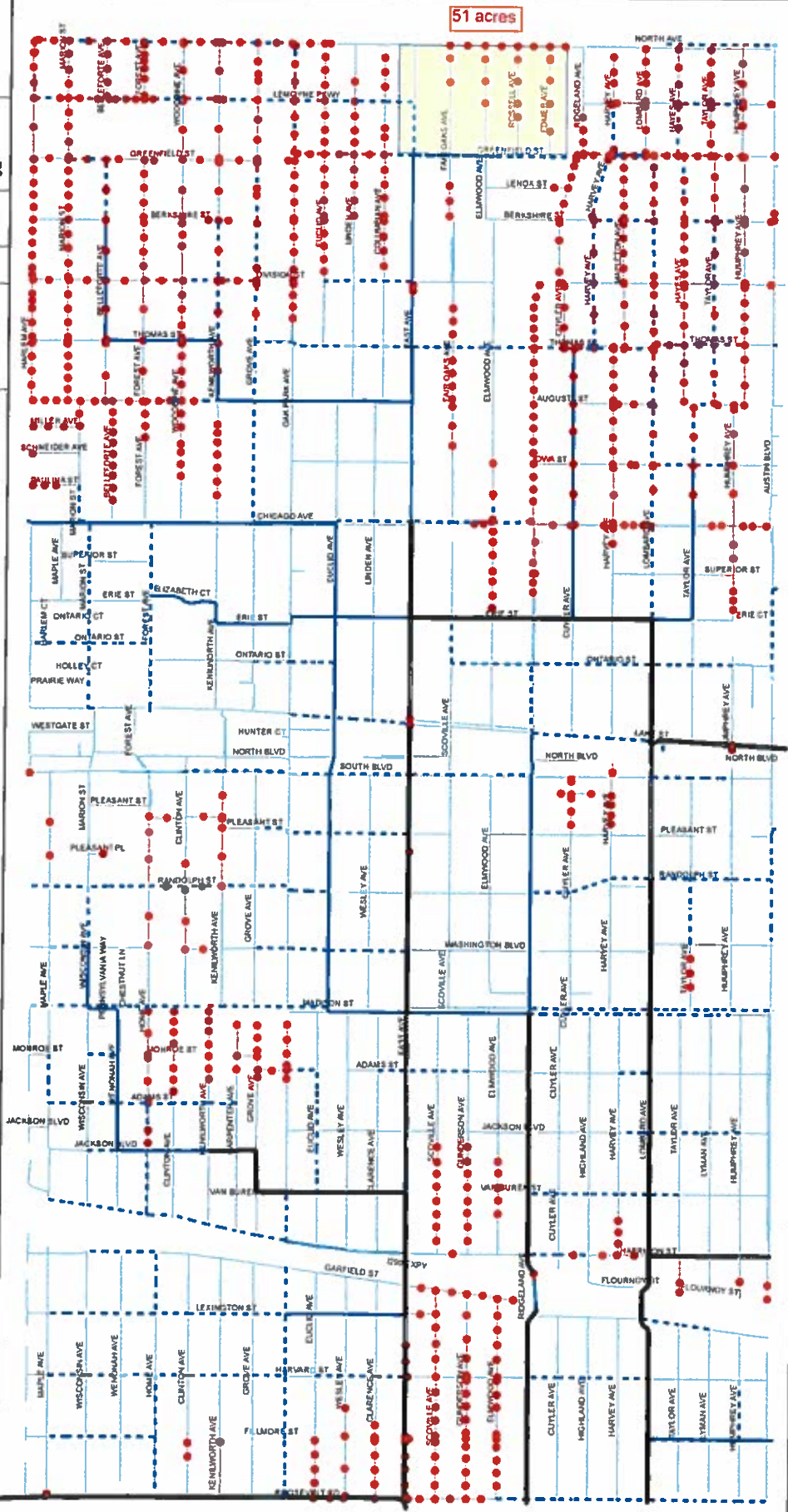


Village of Oak Park
Combined Sewer
Mapping and Modeling

Combined Sewer
Master Plan Report

February 2014

Figure 10:
April 2013
Level of Service
with Existing System



Legend

- Flood Risk
- Focus Areas

Existing Sewer Diameter

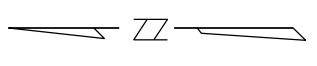
- 6 - 22 in.
- 24 - 48 in.
- 50 - 82 in.
- 84 - 180 in.

0 550 1,100 Feet



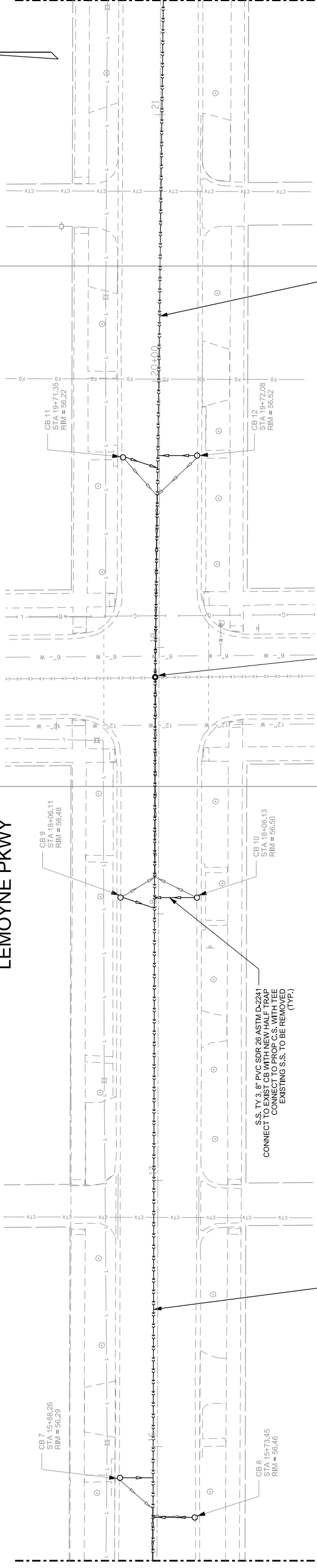
Attachment 3- Preliminary Engineering Plans

STA 21+43.00 MATCHLINE

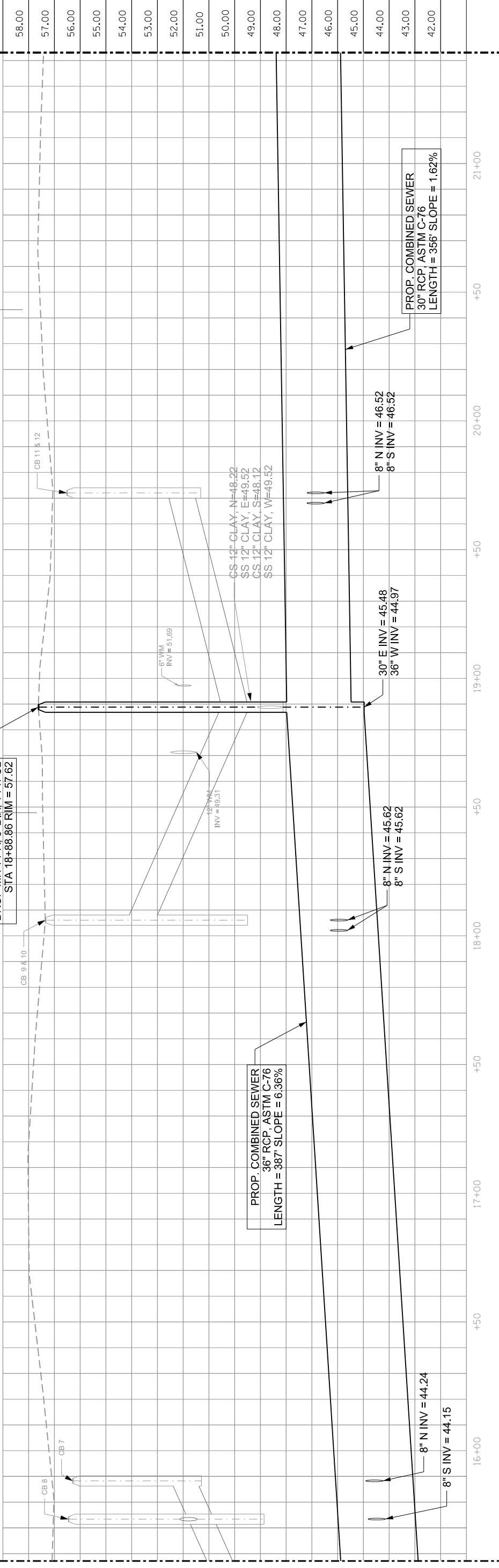


ELMWOOD AVE

LEMOYNE PKWY



STA 15+83.00 MATCHLINE



VILLAGE OF OAK PARK
ENGINEERING DIVISION

PROJECT No. 20-1
DESIGNED BY: ...
DRAWN BY: ...
DRAFTING CHK: ...

PROJECT NAME: LEMOYNE AVE - RELIEF SEWER
SCALE: 1"=20'
DATE: 1/27/19

EXISTING CONDITIONS OF:
LEMOYNE AVE - EAST TO EDMER

REVIS: ...
SHEET: 2 OF 3

Attachment 4- Level of Service with Existing System

Project Area

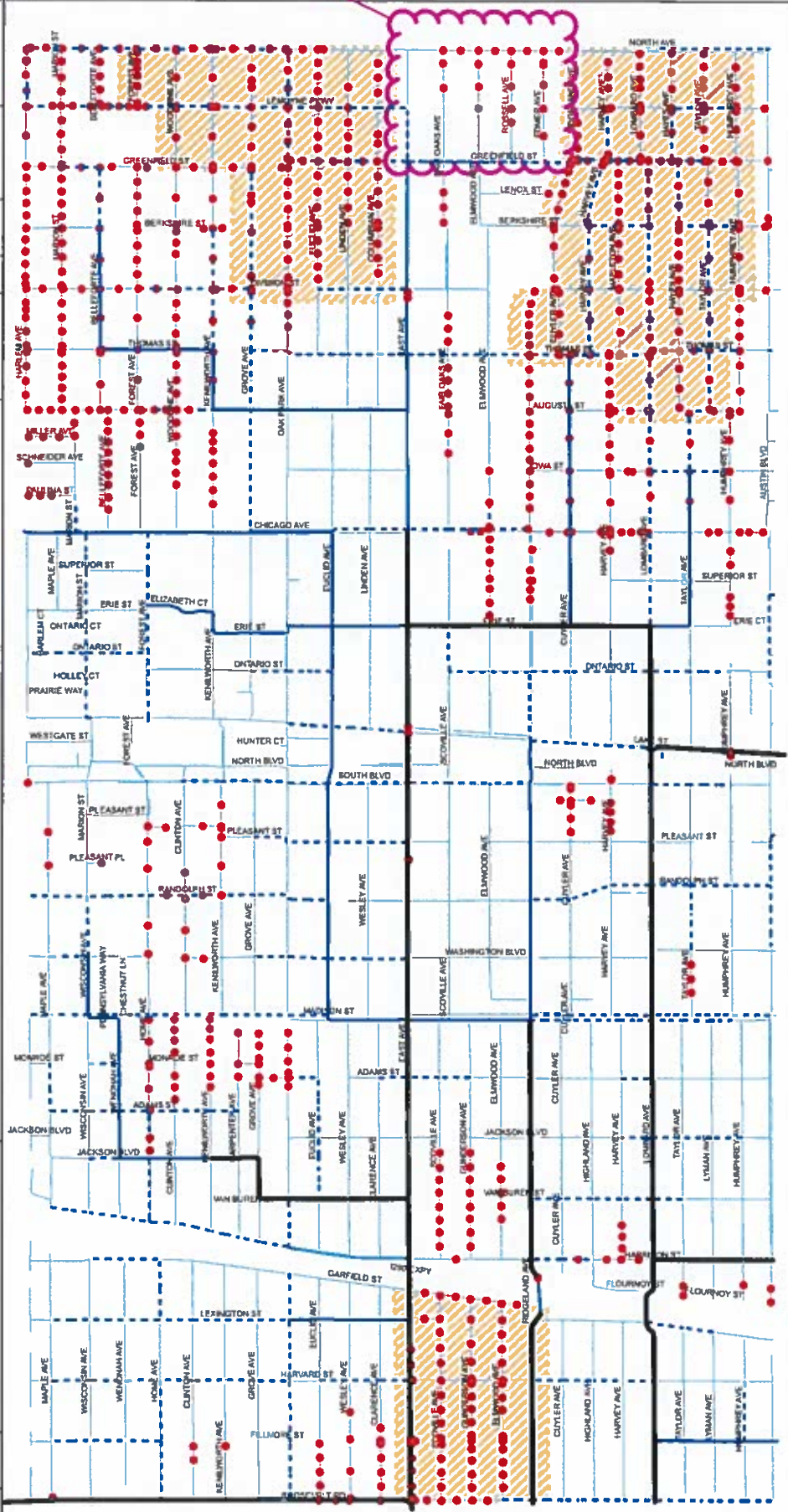


Village of Oak Park
Combined Sewer
Mapping and Modeling

Combined Sewer
Master Plan Report

February 2014

Figure 10:
April 2013
Level of Service
with Existing System



Legend

- Flood Risk
- ▨ Focus Areas
- Existing Sewer Diameter
 - 6 - 22 in.
 - - - 24 - 48 in.
 - 50 - 82 in.
 - 84 - 180 in.

0 550 1,100 Feet



Attachment 5-Sewer Model Report

To: Bill McKenna, PE
Village of Oak Park Public Works

From: Nicholas Stepina, PE, CFM
Chicago-N. Orleans St.

File: mem_lemoyne_local_analysis.docx

Date: June 24, 2019

Reference: LeMoynes Parkway Local Sewer Analysis

The *Combined Sewer System Master Plan Report* prepared for the Village of Oak Park by MWH (now Stantec) in February 2014 identified specific capital improvement projects that would result in a reduction in the risk of basement flooding within the community. Figure 22 from the report (attached) shows the location of these recommended projects. As the Village proceeds with their capital improvement program, they are now considering the construction of Project 107.

As described in the Master Plan Report, Project 107 includes the construction of about 1,500-feet of new 42-inch and 36-inch diameter combined sewer along LeMoynes Parkway from Edmer Avenue to East Avenue. The project would reduce the risk of basement flooding for over 40 buildings from a 2-year to a 10-year (or greater) level, and over 220 buildings from a 5-year to a 10-year (or greater) level. Project 107 was evaluated independent of any other improvements presented within the Master Plan Report.

The outlet of Project 107 is a drop manhole structure constructed as part of the 1937 East Avenue improvements. This structure may require replacement depending on whether the new connection can be made without compromising the structure. The benefit of connecting to this manhole is that the outlet is over 30-feet deep, which provides flexibility to construct the new sewer deep enough to avoid utility conflict.

Since the Master Plan Report was completed in 2014, the Village has continued with implementation of inlet control. A total of six new inlet restrictors have been installed within the drainage area contributing to Project 107. Given the new hydrologic conditions, Project 107 as presented in the Master Plan Report was further evaluated to confirm that it should still be considered a recommended project.

To confirm performance, the combined sewer system model was updated to include inlet restriction. Head-discharge curves representing inlet restrictors were added at subcatchment loading nodes. To avoid over-estimating the extent of inlet restriction, larger subcatchments were split into smaller pieces. In total, 31 subcatchments averaging 7.1-acres in the northeast part of the Village were split into 96 subcatchments averaging 2.3-acres. The greater resolution allowed simulation of inlet restriction on each block where it is installed.

Simulations were performed with 5-year and 10-year rainfall events, each event with full and baseflow boundary conditions as described in the Master Plan Report for a total of four scenarios. Two model networks with Project 107 were compared, one with inlet restriction and one without.

After hydrologic updates, it was confirmed that Project 107 performs equally well under current conditions.

Furthermore, after additional model testing it was found that Project 107 can perform as described in the Master Plan Report with reduced pipe diameters. There is no difference in flood risk results after reducing the 36-inch pipe to 30-inch diameter from Edmer Avenue to Elmwood Avenue, and reducing the 42-inch pipe to 36-inch diameter from Elmwood Avenue to East Avenue.

June 24, 2019

Bill McKenna

Page 2 of 2

Reference: LeMoynes Parkway Local Sewer Analysis

It is recommended that the Village proceed with the design of the 36-inch and 30-inch diameter configuration. We hope that this information is useful to the Village as it continues implementation of the combined sewer capital improvement program.

Stantec Consulting Services, Inc.



Nicholas Stepina, PE, CFM
Senior Hydraulic Engineer

Phone: 312-831-3090

Attachment: Oak Park Sewer Master Plan Report Figure 22.pdf

c. Thera Novotny, PE, PMP

Project area

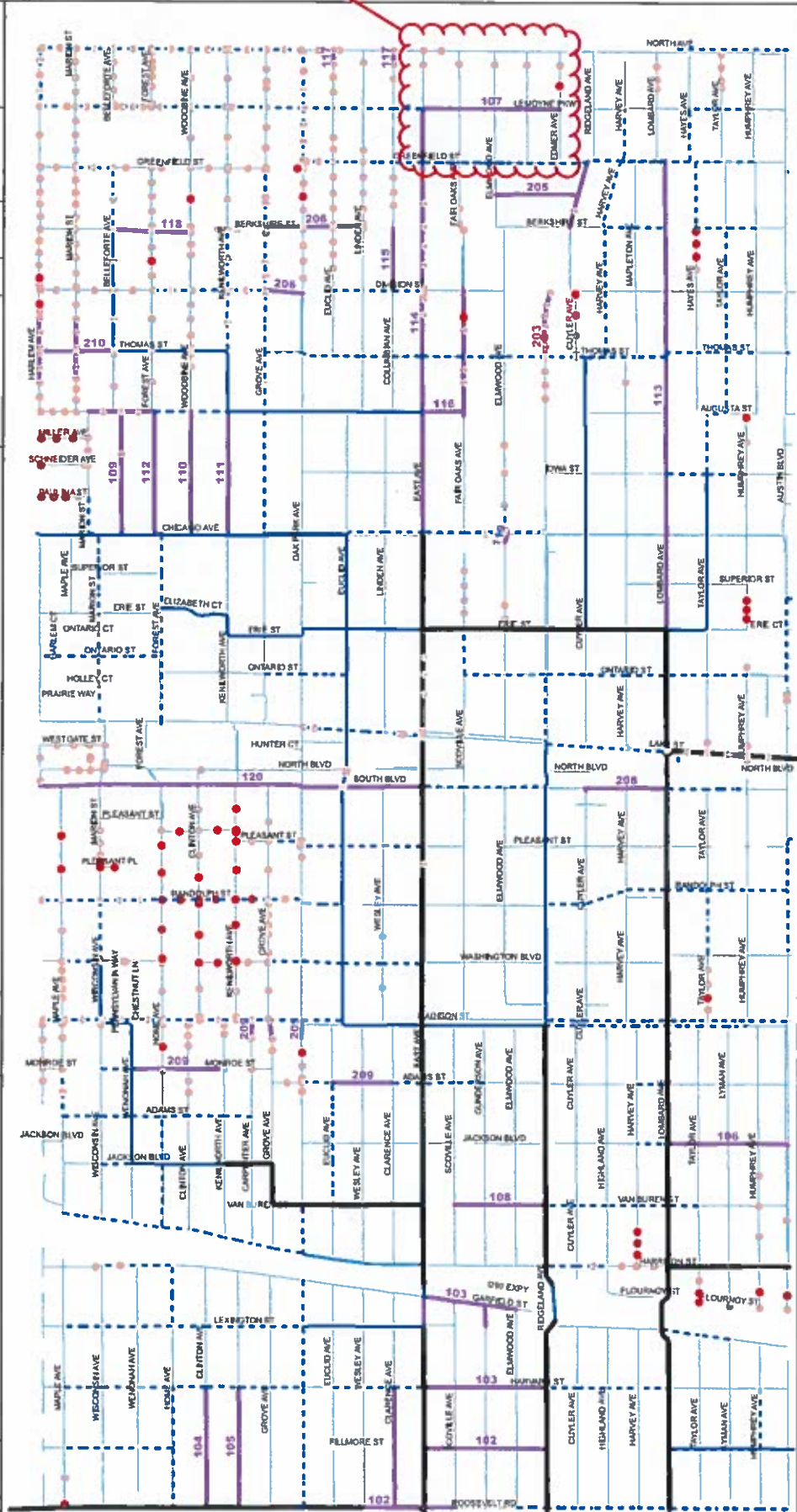


Village of Oak Park Combined Sewer Mapping and Modeling

Combined Sewer
Master Plan Report

February 2014

Figure 12:
Proposed Level of
Service with Sewer
Projects Only
and Base Flow
Outlet Conditions



Legend

- Projects
- 1yr Flood Risk
- 2yr Flood Risk
- 5yr Flood Risk
- 10yr Flood Risk

Existing Sewer Diameter

- 6 - 22 in.
- - - 24 - 48 in.
- 50 - 82 in.
- 84 - 180 in.

0 550 1,100 Feet



Table 4: Sewer Project Descriptions

| ID | Description | Justification |
|-----|--|--|
| 102 | Replacement of existing 18" sewer with new 30" sewer on Roosevelt Rd from Wesley Ave to Scoville Ave. New 30" and 24" relief sewer on Fillmore St from East Ave to Ridgeland Ave. Replacement of existing 12" sewer with new 15" and 18" sewers on Clarence Ave from Harvard St to Roosevelt Rd. | Project increases conveyance capacity to East Ave and Ridgeland Ave trunks, replaces undersized sewers on Clarence Ave. |
| 103 | Replacement of small diameter sewers with 24" and 18" sewers on Garfield St and East Ave. New 36" and 30" relief sewer on Harvard St from East Ave to Ridgeland Ave. | Project increases conveyance capacity to East Ave and Ridgeland trunks, replaces undersized sewers on Garfield Ave. |
| 104 | Replacement of existing 12" sewer on Clinton Ave from Harvard St to Roosevelt Rd with new 15" and 18" sewers. | Project replaces undersized 12" sewer. |
| 105 | Replacement of existing 12" sewer on Kenilworth Ave from Harvard St to Roosevelt Rd with new 15" and 18" sewers. | Project replaces undersized 12" sewer. |
| 106 | Replacement of existing sewers with new 36" - 24" sewers on Jackson Blvd from Austin Blvd to Lombard Ave. | Project replaces undersized collector sewer, increases conveyance to Lombard interceptor. |
| 107 | New 42" and 36" relief sewer on LeMoyne Pkwy from Edmer to East Ave. | Project relieves undersized sewers on Fair Oaks Ave, Elmwood Ave, Rossell Ave, and Edmer Ave. Functions as underground storage in surcharged trunk conditions. |
| 108 | New 30" and 24" relief sewer on Van Buren St from Scoville Ave to Ridgeland Ave. | Project relieves three 12" undersized sewers. |
| 109 | Replacement of existing 12" sewer on Belleforte Ave from Augusta St to Chicago Ave with a new 15" and 18" sewers. | Project replaces undersized 12" sewer. |
| 110 | Replacement of existing 12" sewer on Woodbine Ave from Augusta St to Chicago Ave with new 15" and 18" sewers. | Project replaces undersized 12" sewer. |
| 111 | Replacement of existing 12" sewer on Kenilworth Ave from Augusta St to Chicago Ave with new 15" and 18" sewers. | Project replaces undersized 12" sewer. |
| 112 | Replacement of existing sewers on Augusta St, Forest Ave, and Chicago Ave with new relief sewer discharging to existing junction chamber. | Project increases conveyance to Chicago Ave interceptor. |
| 113 | Replacement of existing trunk sewer on Lombard Ave from Greenfield St to Erie St. | Project increases conveyance to Lombard Ave interceptor. |
| 114 | Replacement of upstream section of East Ave trunk sewer from LeMoyne Pkwy to Chicago Ave. | Project increases upstream conveyance of East Ave trunk sewer and reduces pressurization during intense events. |
| 115 | Replacement of undersized sewer on Columbian Ave from Berkshire St to Division St. | Project replaces undersized 12" sewer. |

Table 5: Sewer Project Cost Summary

| ID | Length (ft) | Size (in) | Pipe/Manhole Cost | Restoration Cost | Estimated Total Construction Cost |
|-----|-------------|-----------|-------------------|------------------|-----------------------------------|
| | 40 | 36 | | | |
| | 1340 | 30 | | | |
| 102 | 1010 | 24 | \$ 1,149,000 | \$ 746,000 | \$ 1,927,000 |
| | 660 | 18 | | | |
| | 660 | 15 | | | |
| | 1010 | 24 | | | |
| 103 | 560 | 18 | \$ 1,008,000 | \$ 603,000 | \$ 1,643,000 |
| | 1000 | 36 | | | |
| | 320 | 30 | | | |
| 104 | 660 | 18 | \$ 374,000 | \$ 245,000 | \$ 619,000 |
| | 660 | 15 | | | |
| 105 | 660 | 18 | \$ 374,000 | \$ 245,000 | \$ 619,000 |
| | 660 | 15 | | | |
| | 360 | 36 | | | |
| 106 | 660 | 30 | \$ 677,000 | \$ 413,000 | \$ 1,106,000 |
| | 310 | 24 | | | |
| | 690 | 18 | | | |
| 107 | 810 | 42 | \$ 657,000 | \$ 345,000 | \$ 1,018,000 |
| | 710 | 36 | | | |
| 108 | 670 | 30 | \$ 344,000 | \$ 212,000 | \$ 556,000 |
| | 335 | 24 | | | |
| 109 | 660 | 18 | \$ 375,000 | \$ 245,000 | \$ 620,000 |
| | 660 | 15 | | | |
| 110 | 660 | 18 | \$ 375,000 | \$ 245,000 | \$ 620,000 |
| | 660 | 15 | | | |
| 111 | 660 | 18 | \$ 375,000 | \$ 245,000 | \$ 620,000 |
| | 660 | 15 | | | |
| | 80 | 36 | | | |
| 112 | 670 | 30 | \$ 727,000 | \$ 449,000 | \$ 1,176,000 |
| | 720 | 27 | | | |
| | 670 | 24 | | | |
| 113 | 5190 | 72 | \$ 5,100,000 | \$ 1,469,000 | \$ 6,569,000 |
| 114 | 4620 | 84 | \$ 5,324,040 | \$ 1,396,000 | \$ 6,721,000 |

Scoring

Benefit scores given to local and relief projects are shown in Table 6. Local and relief projects presented in this report are ranked in two ways; with a cost efficiency score and with a benefit score. Projects can first be evaluated and prioritized by their cost efficiency score. The cost efficiency score is shown as the Cost per Building Improved and is the total project cost shown divided by the number of buildings within all the subcatchments improved by that project. The number of buildings improved does not consider proposed level of protection, which varies from 5-year to 10-year.

Projects which have similar and acceptable cost efficiency scores can then be prioritized by their benefit score, which considers not only the final level of protection, but also the severity of existing flood risk improved upon.

The benefit score for each project is based on the improved basement flood risk for each impacted catchment. The score for each project is calculated as the average score of the catchments impacted by an improvement, weighted by the number of buildings in each catchment. For example, the score for Project 109 is a weighted average of a score of 7 for improving 26 buildings from a 2 year risk to a 10 year risk, and a score of 5 for improving 20 buildings from a 5 year risk to a 10 year risk, resulting in a final benefit score of 6.1. Table 6 summarizes benefit score assignment used in this analysis.

Table 6: Benefit score values assigned to each area improved

| Existing Protection | Proposed Protection | Score |
|---------------------|---------------------|-------|
| <1 year | 10 year | 10 |
| <1 year | 5 year | 9 |
| 1 year | 10 year | 8 |
| 1 year | 5 year | 7 |
| 2 year | 10 year | 6 |
| 2 year | 5 year | 5 |
| 5 year | 10 year | 4 |

Table 7: Sewer Project Scoring Summary

| ID | Existing Risk | Proposed Risk | Buildings | Benefit Score | Cost/Bldg Improved |
|-----|---------------|---------------|-----------|---------------|--------------------|
| 107 | 2 | 10 | 24 | 5.3 | \$ 3,700 |
| | 2 | >10 | 29 | | |
| | 5 | 10 | 1 | | |
| | 5 | >10 | 82 | | |
| | 10 | >10 | 140 | | |

Total = 276 Buildings

installation of restrictors in an area tributary to the East Avenue trunk, approximately north of Iowa Street and west of East Avenue.

Due to the low, flat topography in some parts of the Village, excessive surface storage depths caused by depressed ground surface elevations could encroach on structures and private property. As part of any restrictor installation program, a detailed review of existing topography and a block-by-block survey of street elevations must be performed to confirm that overland flooding problems are not created or made worse by the installation of the restrictors. The survey is highly recommended to identify local low elevations not shown on the topography in Figure 2.

To verify potentially problematic overland flow paths with an even greater level of confidence, an integrated catchment model could be produced. This would simultaneously model the existing Village sewer system with an explicit model of overland surface flows. Modeling the interaction of these two drainage systems is a better representation of reality and allows identification of conflicts with specific structures rather than the assumption that all structures in a flooded subcatchment are at risk.

Street sweeping and catch basin maintenance should be performed on a regular schedule in the inlet control area. Any additional restriction caused by leaf pack or restrictor clogging was not modeled, and has the potential to increase surface storage depths beyond those that the model suggests.

RECOMMENDED SEWER PROJECTS

While the basement flood risk in some areas can be improved by the recommendations above, new and replacement sewers are the most important part of the program recommended to meet the Village's performance objectives. Recommended projects are presented below in Table 8 with their Benefit Score and Cost per Building Improved as detailed previously in this report. As in Table 7, some of the projects in Table 8 are scored together with other projects. In these cases, both projects are required to achieve the score given in the table.

Table 8: Recommended sewer improvement projects and scoring. Projects 115, 117, 203, 205 and 206 require reduced HGL's in the northeast and northwest focus area to be effective. These five projects are scored together with Projects 113 and 114 as indicated and scores for each combination are not valid without each project.

| ID | Benefit Score | Cost/Bldg Improved | Estimated Total Cost | ID | Benefit Score | Cost/Bldg Improved | Estimated Total Cost |
|---------|---------------|--------------------|----------------------|-------------|---------------|--------------------|----------------------|
| 119 | 7.0 | \$ 2,300 | \$ 64,000 | 105 | 5.0 | \$ 9,500 | \$ 619,000 |
| 107 | 5.3 | \$ 3,700 | \$ 1,018,000 | 118 | 7.0 | \$ 11,400 | \$ 613,000 |
| 108 | 5.3 | \$ 3,800 | \$ 556,000 | 110 | 5.0 | \$ 13,500 | \$ 620,000 |
| 102 | 7.2 | \$ 4,000 | \$ 1,927,000 | 114+206 | 5.1 | \$ 13,600 | \$ 7,814,000 |
| 209 | 7.6 | \$ 5,300 | \$ 1,554,000 | 116 | 6.6 | \$ 13,700 | \$ 1,072,000 |
| 113 | 4.5 | \$ 5,400 | \$ 6,569,000 | 120 | 4.7 | \$ 14,700 | \$ 3,197,000 |
| 113+203 | 4.6 | \$ 5,700 | \$ 6,976,000 | 114+206+117 | 5.3 | \$ 15,400 | \$ 8,027,000 |
| 113+205 | 4.5 | \$ 6,100 | \$ 7,510,000 | 114+206+115 | 5.4 | \$ 16,600 | \$ 8,209,000 |
| 103 | 7.1 | \$ 7,200 | \$ 1,643,000 | 210 | 7.0 | \$ 17,900 | \$ 1,290,000 |
| 106 | 4.5 | \$ 7,400 | \$ 1,106,000 | 111 | 5.0 | \$ 20,700 | \$ 620,000 |
| 208 | 6.0 | \$ 8,400 | \$ 610,000 | 112+210 | 5.7 | \$ 23,500 | \$ 2,466,000 |
| 104 | 5.0 | \$ 9,500 | \$ 619,000 | 109 | 6.1 | \$ 23,800 | \$ 620,000 |

The key project for relief of the northeast focus area is Project 113. As suggested by Table 8, Project 113 not only relieves a significant portion of the Village on its own, it is also needed to create

Attachment 6- Village Board Resolution

RESOLUTION

A RESOLUTION AUTHORIZING THE SUBMISSION OF A METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO STORMWATER PARTNERSHIP PROGRAM APPLICATION FOR THE LEMOYNE STREET FLOOD MITIGATION PROJECT


BE IT RESOLVED by the President and Board of Trustees of the Village of Oak Park, Cook County, State of Illinois, in the exercise of their home rule powers, that the Village Manager or the Village Manager’s designee is authorized to submit an application for a Metropolitan Water Reclamation District of Greater Chicago Stormwater Partnership Program Application for the Lemoyne Street Flood Mitigation Project.

THIS RESOLUTION shall be in full force and effect immediately after its passage and approval as provided by law.

ADOPTED this 3rd day of February, 2020, pursuant to a roll call vote as follows:

| Voting | Aye | Nay | Abstain | Absent |
|---------------------------|-----|-----|---------|--------|
| President Abu-Taleb | ✓ | | | |
| Trustee Andrews | ✓ | | | |
| Trustee Boutet | ✓ | | | |
| Trustee Buchanan | ✓ | | | |
| Trustee Moroney | ✓ | | | |
| Trustee Taglia | ✓ | | | |
| Trustee Walker-Peddakotla | ✓ | | | |

APPROVED this 3rd day of February, 2020.


Anan Abu-Taleb, Village President

ATTEST


Vicki Scaman, Village Clerk