

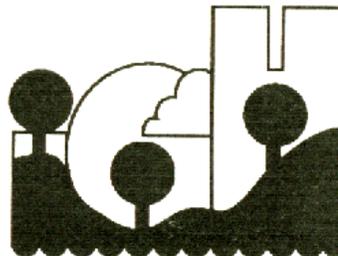
Feasibility Report

Bancroft Way Area Improvements

City of Inver Grove Heights, Minnesota

City Project No. 2016-09E
SEH No. INVER 138128 4.00

December 8, 2016



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Bancroft Way Area Improvements
Feasibility Report
City of Inver Grove Heights, Minnesota

City Project No. 2016-09E
SEH No. INVER 138128

December 8, 2016

I hereby certify that this report was prepared by me or under my direct supervision,
and that I am a duly Licensed Professional Engineer under the laws of the State of
Minnesota.



Greg Anderson, PE
Project Manager

Date: December 6, 2016

Lic. No.: 26859

Reviewed By: Dustin Cesafsky

Date: December 6, 2016

Short Elliott Hendrickson Inc.
3535 Vadnais Center Drive
St. Paul, MN 55110-5196
651.490.2000



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 Certification Page
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Feasibility Report

Bancroft Way Area Improvements

Prepared for Inver Grove Heights, Minnesota

1.0 Introduction

The City of Inver Grove Heights received a petition from thirty (30) residents on the Bancroft Way Project Area requesting improvements to their streets. Figure 1 shows the petitioning parcels. At their June 27, 2016 regular meeting the Inver Grove Heights City Council adopted Resolution No. 16-113 authorizing the preparation of a feasibility report for City Project No. 2016-09E: Bancroft Way Area Reconstruction.

This project will provide residential street and drainage improvements in the Bancroft Way neighborhoods. The proposed reconstruction project will include improvements to the streets, storm sewer, and overall stormwater management in the project areas. The streets included in this report are listed below:

- Bancroft Way, Baldwin Ave. to Baldwin Ave.
- Baldwin Ave., Babcock Trail to its terminus
- Barbara Ave., Bancroft Way to its terminus

The project area is shown on Figure 2, found in at the end of this report.

2.0 Existing Conditions

2.1 Streets

The streets in the Bancroft Way Project Area were constructed in 1994. The existing streets are bituminous surfaced with concrete surmountable curb & gutter. The street widths in the Bancroft Way Project Area are generally 37' face of curb to face of curb. These streets serve as local streets with relatively low traffic volumes. The existing pavement is showing significant signs of distress due to age, poor subgrade soils, excessive cracking, potholes and traffic. The bituminous pavement will be replaced on all project streets as part of this project. The existing curb & gutter will be completely replaced. There are no existing sidewalks or trails along these streets. There is an existing temporary cul-de-sac at the end of Barbara Avenue at address 7341 in which the city plans on replacing since there is no current plan to extend the road or develop the area to the south.

American Engineering Testing (AET) performed a series of 10 soil borings in August of 2015 in the Bancroft Way Project Area. The existing pavement and aggregate base thicknesses were noted as part of the soil boring process. The existing pavement thickness was found to range from 4.1-inches to 7.3-inches with most borings showing generally around 5-inch of bituminous pavement. The existing aggregate base thickness was found to be extremely variable with most borings not showing a distinct aggregate base layer. In general, the

underlying soils beneath the streets were found to consist primarily of fill overlying till and coarse alluvium (clayey and silty sands). The soils are frost susceptible and will not provide the subgrade stability necessary for a bituminous roadway.

2.1.1 Sanitary Sewer

The existing sanitary sewer mains run down the center of most of the Bancroft Way Project Area and consist of poly vinyl chloride (PVC) pipe. Figure 3 shows the existing sanitary sewer system in the project area.

Discussions with the Public Works Department indicated there are no known issues with the mains in this area. Based on the age and pipe material, as well as input from Public Works, the existing mains will remain in-place. The sanitary manholes in the Bancroft Way Project Area are in good condition but the deteriorating adjustment rings will need replacement.

2.1.2 Water Main

The existing water main in the project area is 8-inches in diameter and ductile iron pipe (DIP) material. Figure 3 shows the existing water main system in the project area. Discussions with the Public Works Department indicated there are no known issues with the mains in this area. Based on the age and pipe material, as well as input from Public Works, the existing mains will remain in-place. A field review found many of the gate valve boxes in the neighborhood are filled, bent, or broken and will need to be replaced.

2.1.3 Storm Sewer and Drainage System

The Bancroft Way Project Area includes three separate existing storm sewer system segments (see Figure 3). The first is located generally in the northwest portion of the project and collects runoff from several areas including: the Ballard private road system to the north; drainage from a low point located west of Babcock Trail; and drainage collected near the intersection of Bancroft Way and Baldwin Ave.

This first storm system also serves as the outlet for a depression/storage area located west of Baldwin and between the backyards of several residential properties and the pedestrian trail along Babcock. This backyard low area transfers stormwater drainage from along Babcock Trail to an 18-inch apron without standing water. No home flooding has been reported. This system routes to the northeast and discharges to a ponding area located north of Bancroft. Contours for the area suggest that the emergency overflow (EOF) elevation between the properties at 7219 and 7239 Baldwin could be close to or higher than the low openings on the adjacent homes. These areas will be surveyed to confirm elevations along with the overland flow route extending to the east along the north property line for the homes on Bancroft.

The second system is located in and drains the north and eastern portions of Bancroft Way. It discharges to the same ponding area to the north. No known concerns are present in this system, although during a site review of the area, we observed a potential issue for the EOF elevation between the properties at 7268 and 7272 Bancroft Way. It appears the EOF elevation could be close to or higher than the low openings on the adjacent homes. This area will be surveyed to confirm elevations. The pond inlet north of lot 7272 Bancroft Way has sediment plumes that will be reviewed for removal.

The third system is located at the intersection of Bancroft and Barbara Avenue and routes to the south along Barbara Avenue before turning to the east where it discharges to an existing ponding area. Again, we observed a potential issue for the EOF elevation between the properties at 7338 and 7346 Barbara Avenue. It appears the EOF elevation could be close to

or higher than the low openings on the adjacent homes. This area will be surveyed to confirm elevations.

A television inspection of all the storm sewer mains in the project area was completed in early September by American Environmental Services. A copy of the report and televising logs will be made available to the Engineering Division for review. This feasibility report was charged with reviewing the condition of the existing storm sewer mains and making a recommendation on any needed repairs. The televising found the storm sewer mains to be in good condition with all but one segment consisting of reinforced concrete pipe (RCP). Two sections of the storm sewer main directly east of Baldwin Avenue show cracks in the top of several pipe sections and some cracks at the spring line of a few pipe. The pipe sections with cracks are minimal and raise no concern for the functionality of the pipe. Design review has shown storm pipe may be undersized and will need further analysis in final design. The storm structure (catch basins and manholes) have been field inspected and found to be in poor condition.

We will review these areas with city staff prior to preparing the construction plans. The third pipe section of concern is a CMP pipe that is in the Babcock Trail ROW and lies under the bike trail and Babcock Trail itself. The CMP pipe is deformed in several areas between a flared end section (FES) and the manhole #108. This section should be considered for replacement and coordinated with Dakota County for funding and permitting.

3.0 Proposed Improvements

The proposed improvements are based on the results of the storm sewer televising reports, the geotechnical investigation & recommendations, a review of the as-built drawings for the project streets, input from City Staff and feedback received from residents on the resident questionnaire. During the final design phase and plan preparation, we will continue to work with City Staff on specific issues.

3.1 Streets

The original construction consisted of 4-inch bituminous on 6-inches Aggregate base on underlying soils. The improvements proposed for the project streets include a full pavement reconstruction. The method of improvement for a given block or section of street was determined based on the geotechnical recommendation, the existing pavement condition, existing curb type and amount of utility replacement needed. The recommendation for a full project reconstruction was recommended by AET in their October 2015 Geotechnical Report due to poor subgrade soils, and we concur.

The full reconstruction method will consist of a complete removal of the existing pavement and curb & gutter and replacement with a new street section. Based on the geotechnical report recommendations and Inver Grove Heights standards for local streets, the proposed pavement section will consist of 4 inches of bituminous pavement (placed in two 2-inch lifts) over an 6-inch layer of aggregate base, on a 24-inch layer of select granular borrow. Roadway geotechnical fabric will be placed below the sand base and subsurface drain tile will be installed at the bottom of the street section behind the curb per City standards. The new concrete curb and gutter is recommended to be B618 in design. The local streets are proposed to be built to a 36 foot width from face-of-curb to face-of-curb. The proposed typical street sections are shown on Figure 4. Table 1 summarizes the existing street widths, curb types and proposed improvement method.

B618 concrete curb & gutter is recommended as the new curb in the project area. B618 curb has a 6-inch high curb back that aids in controlling drainage in the street as well as helping the snow plow driver "find" the curb as the street is plowed during the winter. The current

surmountable curb has a more gradual back that isn't as detectable to the snow plow which allows the plow to sometimes drift past the curb and damage the yards. With the neighborhood being fully developed and all driveways in-place, the B618 curb can be installed and the driveway connections made. The existing surmountable curb is typically installed on new developments to allow flexibility in placing the new houses on the lots and locating the garage/driveway. The existing surmountable curb has a noticeable bump (typically 3 – 4.5 inches) when cars enter the driveway from the street. This bump is noticeable enough that cars need to slow to a near stop to enter the driveway. The proposed B618 curb has a much more gradual 1-1/4 inch rise at the driveway opening, creating a much more gentle driveway transition from the street. Residents on 60th Street and 47th Street Area reconstruction projects have commented on how much smoother their driveway entrance is compared to the surmountable curb in place before the project.

The Barbara Avenue temporary cul-de-sac is proposed to be built as a permanent 70-foot diameter cul-de-sac. Permanent right-of-way or easement will be identified during the design process (see Figure 7).

The project areas currently have sidewalks or trails. After reviewing the Cities Trail and Sidewalk Gap map there are no gaps in the existing City trail system that are identified to be improved with this project.

Table 1
Approximate Street Widths

Street Name	Existing Width (F-F)	Proposed Width (F-F)	Existing Curb & Gutter Type	Proposed Curb Type
Baldwin Ave.	37'	36'	Surmountable	B618
Bancroft Way	37'	36'	Surmountable	B618
Barbara Ave.	37'	36'	Surmountable	B618

Note: All new curb will be installed as B618 Curb and Gutter.

Residents have requested the project to be pavement rehabilitation only. Typically, these request are due to the desire to reduce the cost or assessments. As the geotechnical report has noted, the subgrade tests show frost susceptible, poor draining soils with silty clays. The limiting subgrade soils are recommended to be replaced with a select granular material that will be free draining and provide the structure support for the bituminous flexible pavement. In addition, the assessments for a partial reconstruction would be similar to that of a full reconstruction due to the higher 55% assessment rate. For this reason, replacing the pavement only is not considered a feasible option to meet the PMP.

3.2 Sanitary Sewer

The Bancroft Way Project Area existing PVC sanitary mains installed in 1992 are in good condition. The sanitary is to remain in place, as well as the service lines.

The existing castings on all the sanitary sewer manholes will be replaced as part of the improvements and adjusted to the new street elevations. For manholes with a significant number of rings, or that will not have room for two rings under the new casting, the structure will be reconstructed by adding or removing a precast upper barrel section. Infiltration/inflow (I/I) barriers will be installed on all manholes as well.

3.3 Water Main

The Bancroft Way Project Area existing ductile iron pipe (DIP) water main was installed in 1994. The main line pipe is anticipated to remain in place, as well as the service lines. Per conversation with the city, the hydrants are in good working condition and have recently been painted. The bolts and fittings on the water main should not require attention seeing the soils in the project area are not acidic or corrosive. Water main gate valve boxes will need to be replaced.

3.4 Storm Sewer and Drainage

The proposed storm sewer improvements are shown on Figure 6. In addition to the storm sewer repairs, this report includes replacement of all storm sewer catch basins and leads in the project streets, as well as adjustments to some backyard inlets identified during the field review. All existing 12-inch catch basin leads will be replaced with 15-inch pipe per city standard. The Engineering Division performed structural surveys to verify catch basin conditions. The undersized storm sewer will be evaluated in final design. Storm sewer upsizing and replacement coats have been included.

Potential drainage improvements have been identified to reduce the stormwater flows and frequency through the backyard areas along Baldwin Avenue. These improvements should be considered low to medium priority as there is an existing 18-inch apron that conveys the stormwater without any recognizable flooding occurrence. Rerouting the stormwater around would improve the situation.

Staff evaluated several options to improve (i.e., lower) the high water level in the backyard areas by expanding the existing storage area further west. Two ponding area alternates were evaluated for this approach that both involved expanding the low area to the west. The additional storage could potentially reduce the (relative) high water level slightly but would also involve the loss of trees and existing screening of the backyards from Babcock Trail. This would likely result in undesirable backyard conditions.

The recommended approach to reduce the volume of runoff entering the low area is to install an additional pipe section along the Babcock bike trail that will route the drainage from the south directly into the storm sewer system (bypassing the backyards in low flow conditions) as shown in Figure 6. The final drainage improvement recommendation to review emergency overflow (EOF) conditions was previously described in the existing conditions section. This review includes reviewing survey and low home opening information for the four locations shown in Figure 6 to confirm if adequate EOFs are preset to be protective of homes and structures.

The resident survey noted a sideyard inlet between 7259 and 7279 Bancroft Way sometimes cannot intake the storm run-off and backs up water on the lawns during significant events. Staff will review the capacity of the inlet and storm system in final design. Resident comments also noted a few backyard storm system inlet issues. The final design will include a full review of the original subdivision storm sewer design.

3.4.1 Water Quality Treatment

The project is subject to City of Inver Grove Heights stormwater treatment goals to provide infiltration of 1-inch of runoff from the contributing impervious street surfaces. The total volume goal for this approach is 11,300 cubic feet. A review of the project area for water

quality treatment features generally focusses on locations that meet three criteria: good soils; flat or mild slopes; and an adequate drainage area.

There are no clear locations along the roadway that have been identified as having good soils for infiltration. Following a review of the roadway opportunities, the water quality features (shown in Figure 6) included in the project or identified for further consideration are:

- The proposed roadway width will be reduced be at least 1 foot to a consistent 36 foot width. This will provide an approximate water quality volume credit of about 305 cubic feet.
- Two different sized basin options providing storm water detention and water quality treatment in the same location (West of Baldwin Avenue along the Babcock trail right-of-way):
 - Option 1A – A large storage basin could provide up to 12,000 cubic feet of water quality treatment credit.
 - Option 1B – A smaller storage basin could provide up to 2,600 cubic feet of water quality treatment credit.

(Note: resident input will be sought out for Option 1A and 1B concerning loss of tree screening may make this option unreasonable.)

The second phase of water quality improvements is to implement the City's roadside rain garden program within the project area. Residents are given the opportunity to have a rain garden installed in the boulevard and the City allocates a budget for each project to install these residential systems. The homeowner then agrees to complete minor maintenance (i.e. gardening and keep free of debris), while the City agrees to address major maintenance. An initial screening of the project area has been completed to help identify potential rain garden locations. That screening was based on the following criteria:

- Drainage area to the proposed location.
- Resident documented area of concern.
- Open, partially flat area. The topography and existing conditions were examined based on a preliminary assessment. If there seemed to be a relatively flat space that could accommodate a rain garden, it was given consideration.
- Soil permeability. Soil borings were taken in the project area in 2015. The boring logs were examined and consist generally of clays and silts and poorly drained soils. This would indicate that any rain gardens would be filtration systems constructed with under drains.

Figure 5 shows potential rain garden locations based on the criteria above. The locations were not ranked due to the limited opportunity already present in the project area. The neighborhood has shown a high interest in participating in the raingarden program, which can help the City meet water quality and volume reduction goals. A budget of \$48,000 will be available for up to eight (8) basins. These basins will treat stormwater by filtration.

One final area that will be addressed during this project will be to remove accumulated sediment near the outlet into the pond in the northeast portion of the project area. This basin receives drainage from both City and private residential areas. Sediment will need to be tested to determine the options for disposal.

3.4.2 Wetland Review

The area immediately east of Babcock Trail, and east of the existing recreational trail and other areas potentially requiring storm pipe improvements were examined for the presence of wetlands based on fieldwork and examination of off-site data sources. Off-site data sources include hydric soils mapping, National Wetland Inventory mapping and aerial imagery. The area immediately east of Babcock Trail was found to contain no wetlands. This area slopes to the east and is highly disturbed. Dominant vegetation here is Canada goldenrod, burdock, Canada thistle, and garlic mustard. Other areas examined are mowed residential lawn swales, which serve to direct stormwater to wetland areas and serve as EOF's for the storm sewer system.

4.0 Other Utilities

The proposed improvements will be coordinated with the private utility companies per the City's utility coordination plan. The intent would be to coordinate any private utility improvements during the project so that future disruptions of the newly constructed streets could be avoided.

Private obstructions in ROW, such as fences, landscaping, irrigation and invisible fence will be the responsibility of the owner to remove and replace at no cost to the City.

5.0 Right-of-Way

The construction limits of this project are anticipated to fall within the existing street ROW and no new easements or ROW are anticipated. Temporary construction easements may be needed to address the off-street drainage improvements.

6.0 Neighborhood Meeting

The Engineering Division will hold a neighborhood information meeting after the City Council receives the Feasibility Report and prior to the improvement hearing. At the neighborhood meeting, we will review the street condition analysis, the recommended improvement, the estimated costs and proposed preliminary assessments for the benefitting properties. Representatives from SEH will also attend the meeting to assist City Staff in answering questions, record resident comments and provide information from the report.

7.0 Permits and Approvals

The proposed improvements will require securing the following permits:

- MPCA – General Stormwater Permit for Construction Activities under the National Pollutant Discharge Elimination System (NPDES) program will be required by the contractor during construction activities.
- Dakota County work in ROW permit.
- An application for a No-Loss Determination is being prepared and will be submitted to the Wetland Conservation Act LGU in November 2016.

8.0 Estimated Costs

The total estimated cost for the project outlined in this report is \$2,172,982. The costs for the project are broken out into the components and summarized in the table below:

Table 2
Bancroft Way Area Improvements (2016-09E)

Improvements	Local Street (Reconstruction)
Street Improvements	\$1,887,667
Storm Sewer Improvements	\$222,801
Utility Improvements	\$62,514
Total	\$2,172,982

A detailed cost estimate has been prepared for the proposed improvements and is included in Appendix A of this report. These costs include the engineer's opinion of probable construction costs along with 10 percent for contingencies and 28 percent for indirect project costs including administrative, legal, fiscal, engineering, and capitalized interest. Easement acquisition costs have been included in the contingencies.

9.0 Financing

The City intends to fund the proposed improvements through various methods including the City's Pavement Management Program (PMP) Fund, special assessments and the City Utility funds.

Street and storm sewer costs will be funded by special assessments and the PMP Fund.

Table 3
Bancroft Area Improvements (2016-09E)

	Proposed Assessments	*Pavement Management Funds	Utility Funds	Total
Total	\$650,623	\$1,459,845	\$62,514	\$2,172,982

* Final City portion funds may include a combination of PMP and bonding.

10.0 Implementation

10.1 Assessments

The proposed street and drainage improvements are eligible for assessments according to the City's PMP Funding Policy. The policy includes obtaining a special benefit analysis conducted by an independent appraisal firm which takes into consideration the land use, area valuations, location, zoning and other characteristics within the project area to identify the special benefit to properties.

A preliminary assessment roll has been prepared and is attached. The roll will be made available at an informational meeting prior to the improvement hearing (see Appendix B for the preliminary assessment roll). The project area includes single-family lots, townhomes and City-owned parcels.

10.1.1 Combined Street and Storm Assessments

The parcel classification is single-family and non-single-family parcels for determining assessments. Single-family parcels are included in the street assessment if their main driveway accesses a street being improved. Non-single family lots (multi-family residential, townhomes, commercial, industrial and institutional properties) are assessed on a front foot basis. The equivalent front foot assessment rate for the single-family residential and twin-home properties is one-half of the non-single family properties.

10.2 Benefit Analysis

A special benefit analysis has been completed by an independent appraiser, Metzen Appraisals. The final report will be available for public viewing at the Engineering Division at City Hall prior to the public hearing and at the neighborhood meeting. The independent appraiser has reviewed the project and affected parcels to determine the following benefits to each parcel type as a result of the proposed improvements:

- Single Family Residential \$9,000 per parcel
- Townhouse \$2,500 per parcel

The special benefit is a recommendation by an independent appraiser for consideration by the Council. The preliminary assessment analysis will be completed by staff to identify a policy assessment amount.

A questionnaire was sent to residents to gather feedback on important items to incorporate into the Feasibility Report and the responses are tabulated in Appendix C. We received forty-one (41) responses that identified the following items:

- 16 properties with sump pumps, 7 never run, 9 run seasonally or all year round, and 5 properties would like a sump pump basket.
- 6 properties identified that they would like to change the width of the driveway opening (30 ft. max width allowed).
- 20 properties have irrigation systems.
- 4 residents expressed concern over the costs of a full reconstruction.
- 1 resident inquired about City policy on trash haulers and can they be reduced.
- 21 properties identified interest in the roadside rain garden program.
- 2 properties identified water service problems.
- Staff has contacted and had conversations with many of the survey respondents.

10.3 Project Schedule

The following schedule is proposed for the project:

- City Council Receives Feasibility Report/Schedules Improvement HearingDecember 12, 2016
- Neighborhood Informational Meeting.....January 10, 2016
- Public Improvement Hearing.....January 23, 2017
- Authorize Final Plans & Specs/Order ImprovementJanuary 23, 2017
- Approve Plans & Specs/Authorize Ad for Bid February 27, 2017
- Bid OpeningMarch 2017

- City Council Receives Bids/Schedules Assessment Hearing..... April 2017
- Neighborhood Informational Meeting..... April 2016
- Assessment Hearing/Award Project April/May 2017
- Begin Construction May/June 2017
- Substantial Completion August 31, 2017
- Final Completion September 30, 2017

11.0 Conclusion and Recommendations

This report outlines the recommended improvements for the proposed City Project No. 2016-09E, the Bancroft Area Project. This report also identifies the estimated cost for the recommended improvements as well as the approvals and permits necessary to proceed with the construction of the improvements.

11.1 Conclusions

As a result of this study, we conclude that:

- The proposed improvements are necessary to maintain the City's infrastructure based on the condition of the existing streets and infrastructure in the project area.
- The project is feasible from an engineering standpoint and cost effective, as portions of the existing infrastructure that are in good condition (PVC sanitary sewers and DIP water mains, storm sewer mains, curb & gutter, etc.) will be preserved where possible.

11.2 Recommendations

Based on the above conclusions, we recommend that:

- This report be reviewed by the City Council, City Staff and the consulting appraiser.
- The City Council accepts this report and schedule the Improvement Hearing to receive public comment and consider ordering the project.
- The project be completed under one contract in order to complete the work in an orderly and cost effective manner.
- The improvements proceed as outlined in this report.

List of Figures

Figure 1 – Petitioning Parcels

Figure 2 – Area Map

Figure 3 – Project Streets - Existing Conditions

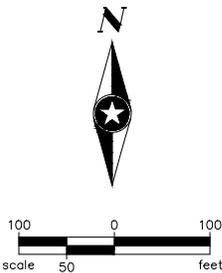
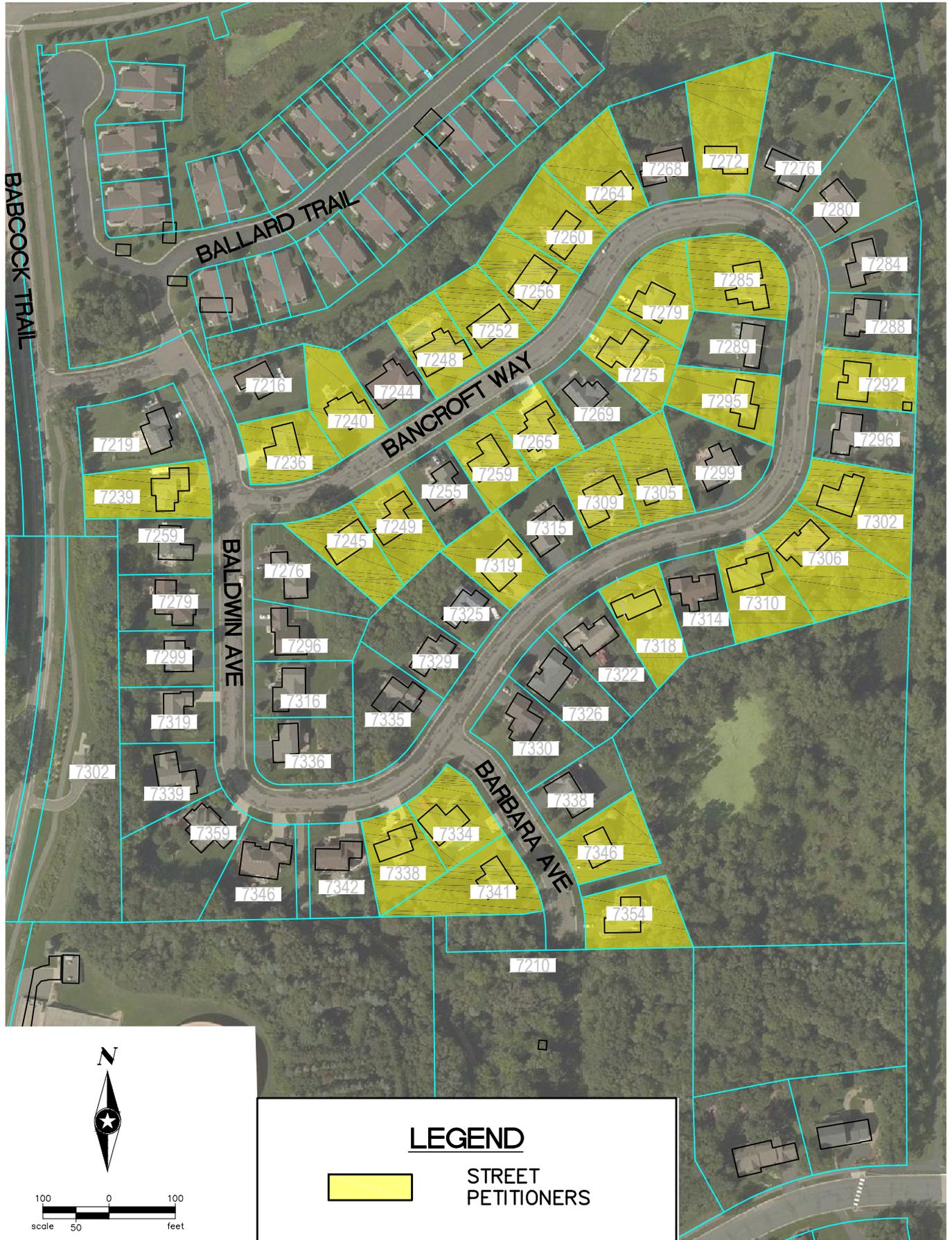
Figure 4 – Typical Sections

Figure 5 – Drainage Area

Figure 6 – Drainage Improvements

Figure 7 – Barbara Avenue Cul-de-sac

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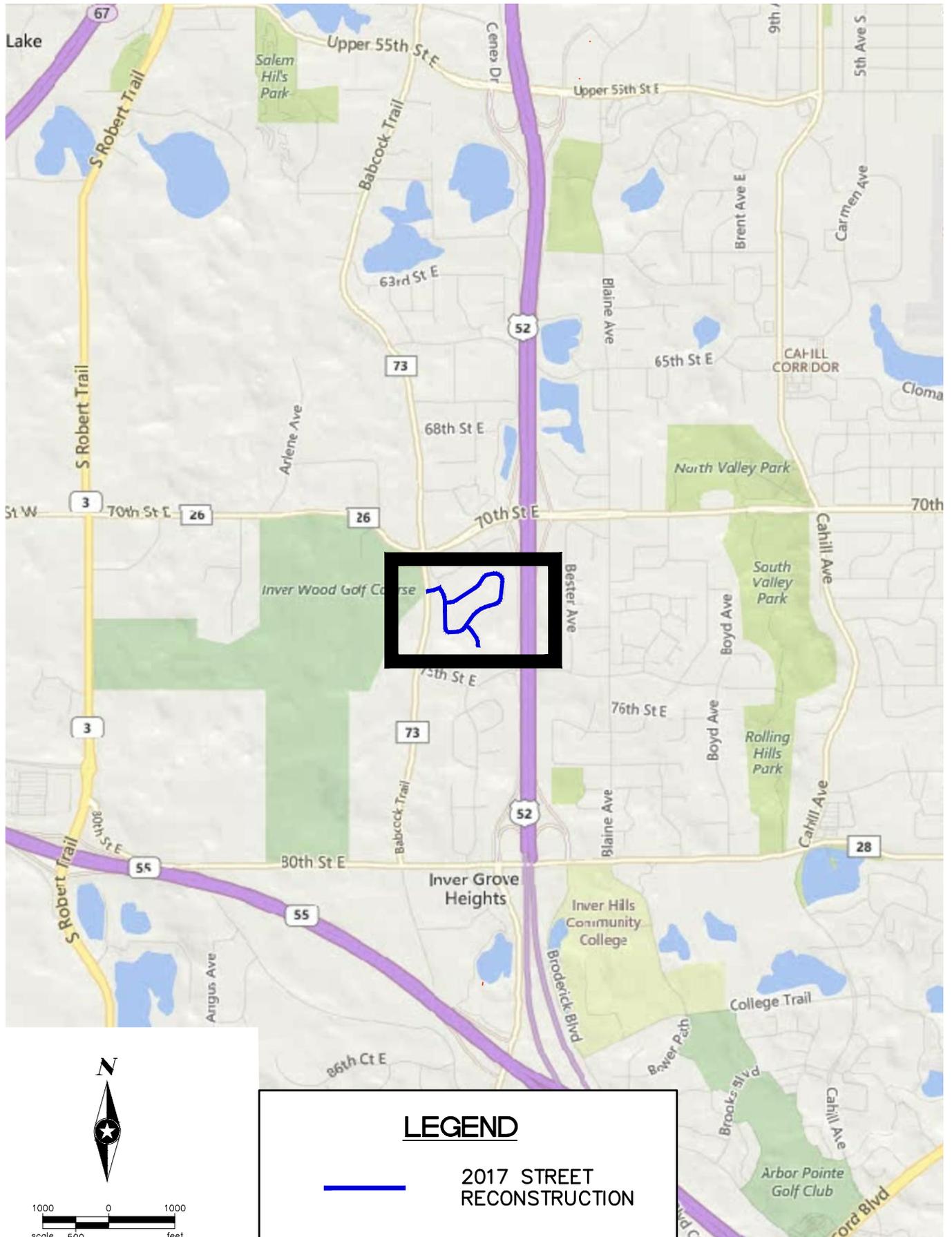
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**PETITIONING PARCELS
2017 STREET IMPROVEMENTS
INVER GROVE HEIGHTS, MINNESOTA**

**FIGURE
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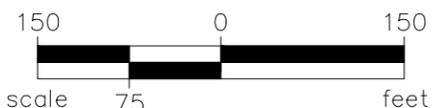
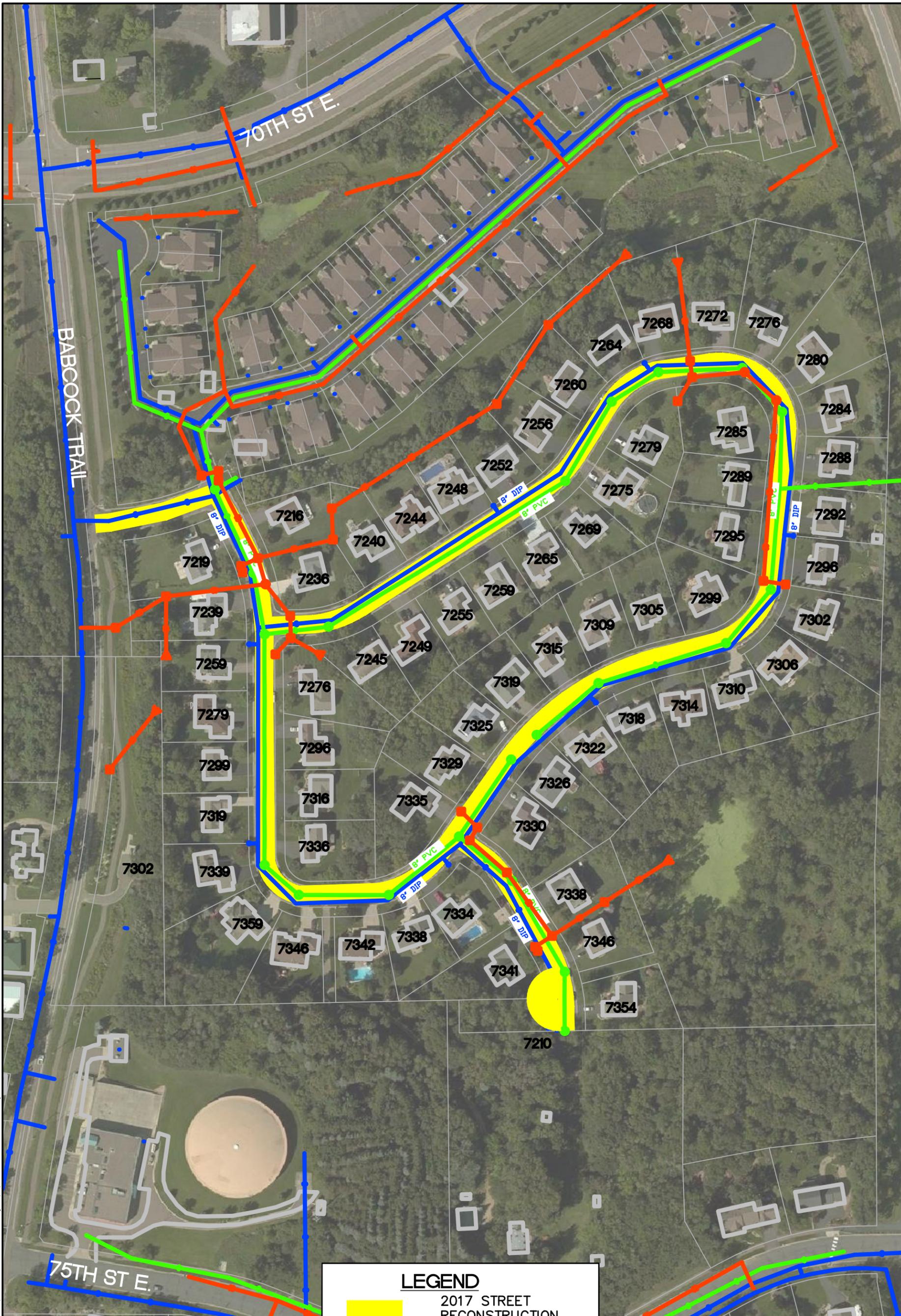
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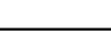
AREA MAP
2017 STREET IMPROVEMENTS
INVER GROVE HEIGHTS, MINNESOTA

FIGURE
NO. 2

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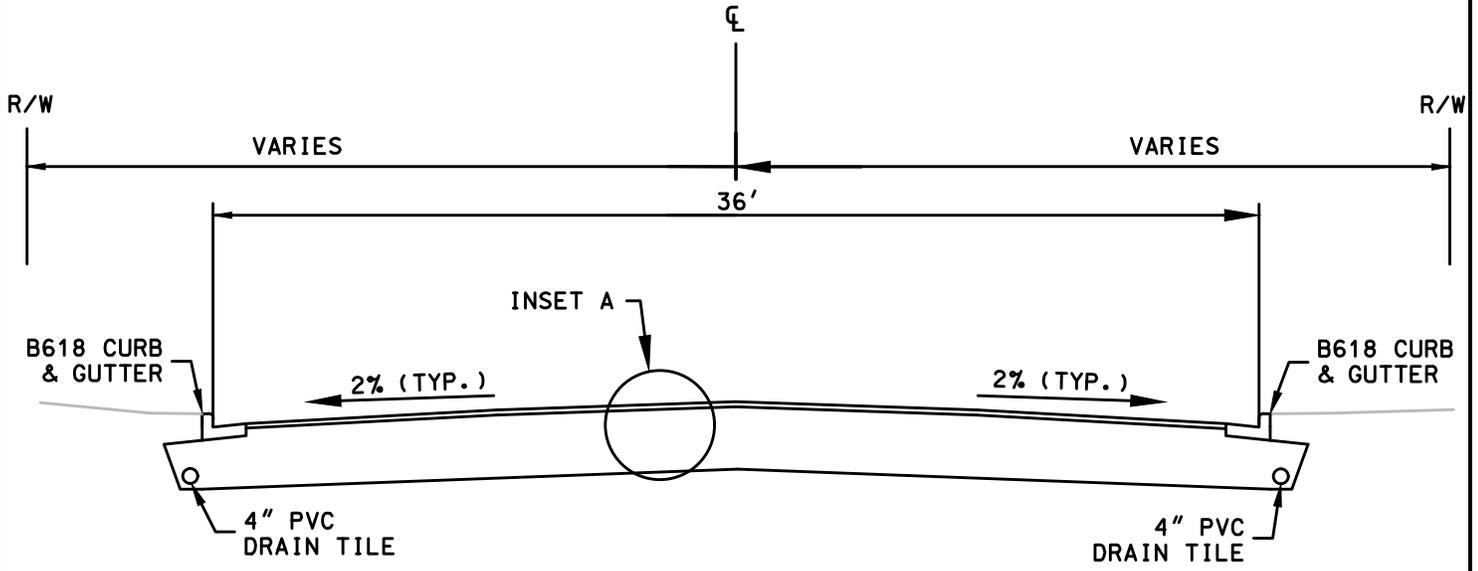
LEGEND	
	2017 STREET RECONSTRUCTION
	SANITARY SEWER
	STORM SEWER
	WATER LINE

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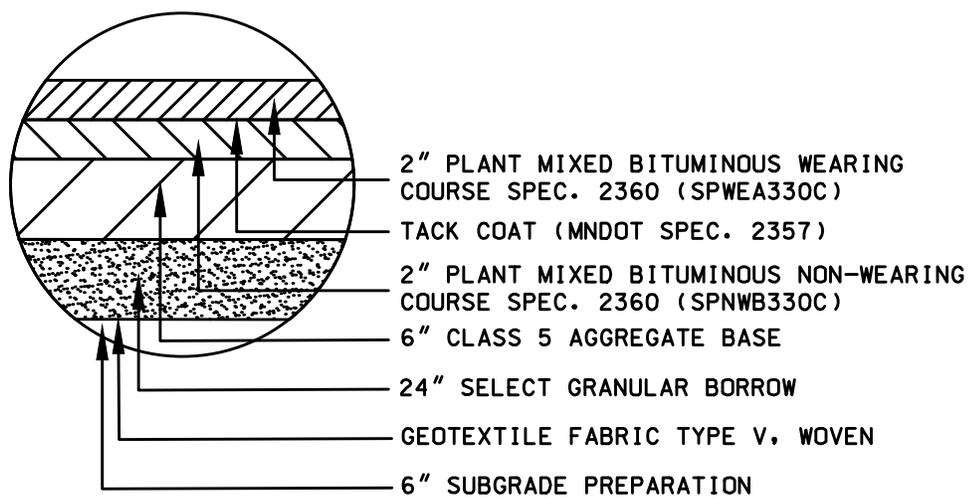
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PROJECT STREETS-EXISTING CONDITIONS
2017 STREET IMPROVEMENTS
INVER GROVE HEIGHTS, MINNESOTA

FIGURE
NO. 3



TYPICAL SECTION - RECONSTRUCTION
 BANCROFT WAY
 BALDWIN AVENUE
 BARBARA AVENUE



INSET A

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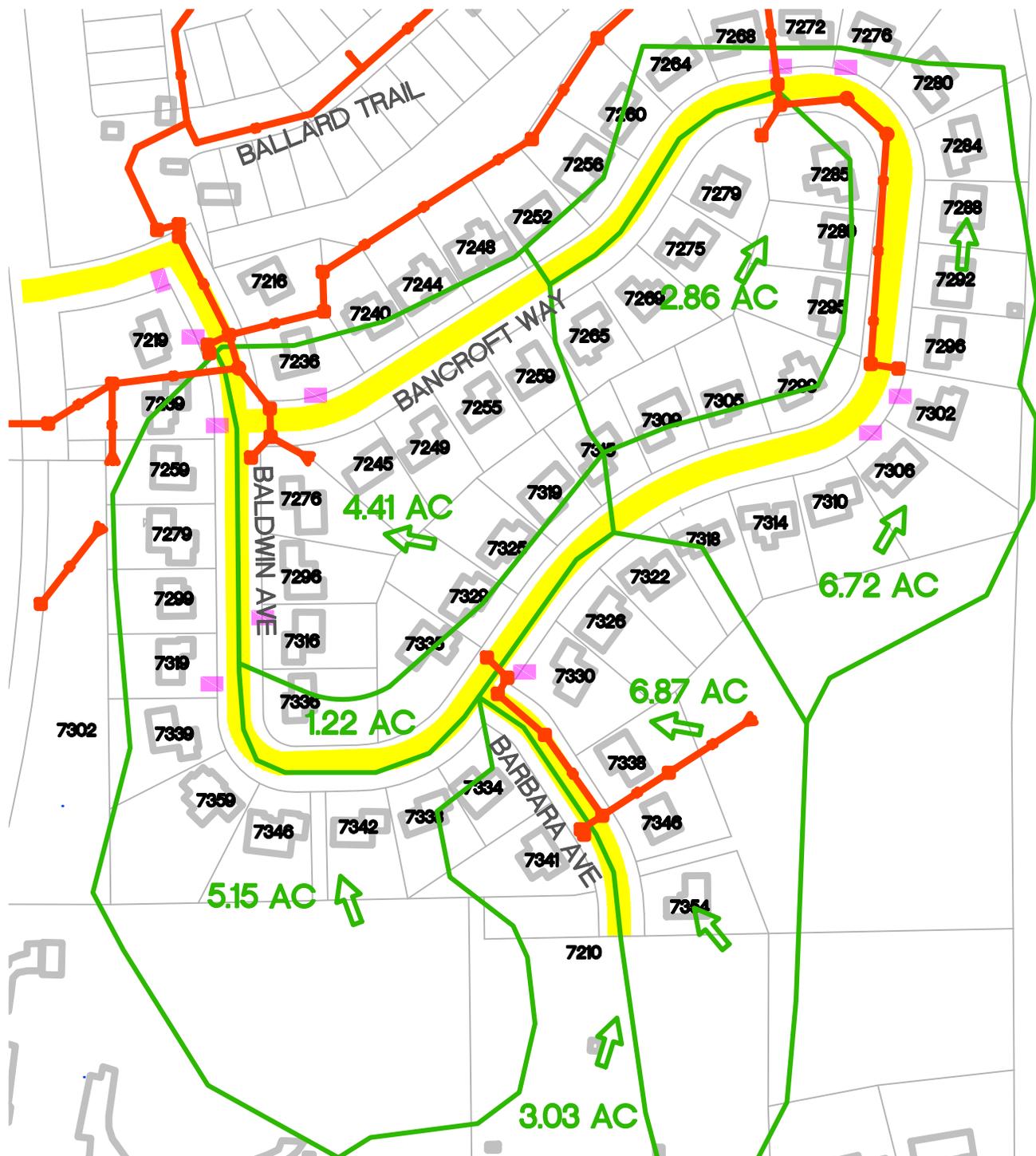
PHONE: 651.490.2000
 3535 VADNAIS CENTER DR.
 ST. PAUL, MN 55110-5196
 www.sehinc.com

FILE NO.
 138128
 DATE:
 12.5.16

TYPICAL SECTION
2017 STREET IMPROVEMENTS
INVER GROVE HEIGHTS, MINNESOTA

FIGURE
NO. 4

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LEGEND	
	2017 STREET RECONSTRUCTION
	POTENTIAL RAIN GARDEN LOCATION
	STORM SEWER
	DRAINAGE AREA



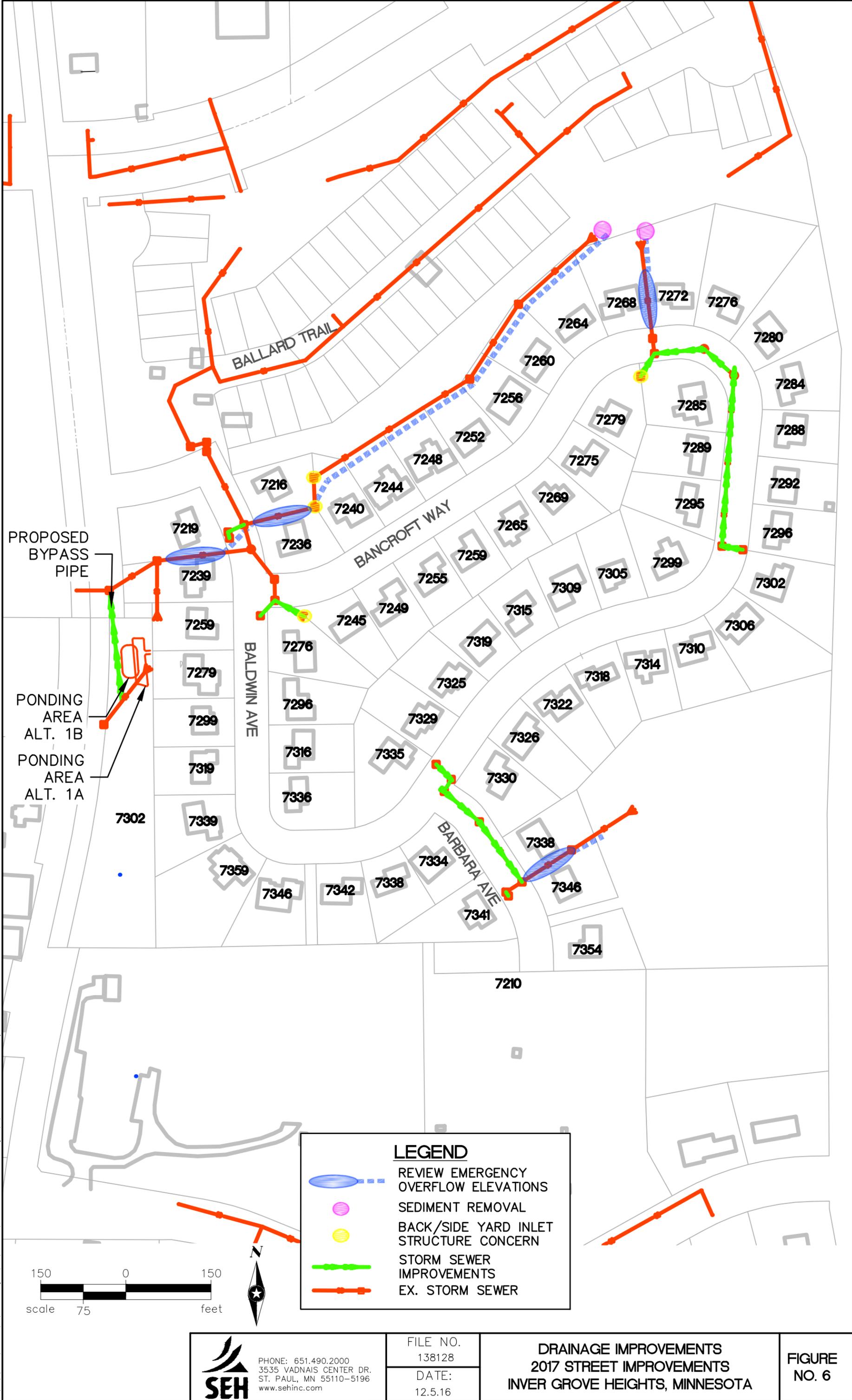
PHONE: 651.490.2000
 3535 VADNAIS CENTER DR.
 ST. PAUL, MN 55110-5196
 www.sehinc.com

FILE NO.
138128
 DATE:
12.5.16

DRAINAGE AREAS
 2017 STREET IMPROVEMENTS
 INVER GROVE HEIGHTS, MINNESOTA

FIGURE
NO. 5

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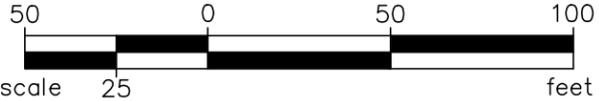


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LEGEND

 PROPOSED PERMANENT ROW - 680 SQFT



 PHONE: 651.490.2000
3535 VADNAIS CENTER DR.
ST. PAUL, MN 55110-5196
www.sehinc.com

FILE NO.
2016-09E
DATE:
12/6/16

**BARBARA AVE. CUL-DE-SAC
BANCROFT WAY AREA IMPROVEMENTS
INVER GROVE HEIGHTS, MINNESOTA**

**FIGURE
NO. 7**

Appendix A

Cost Estimate

ENGINEERS ESTIMATE

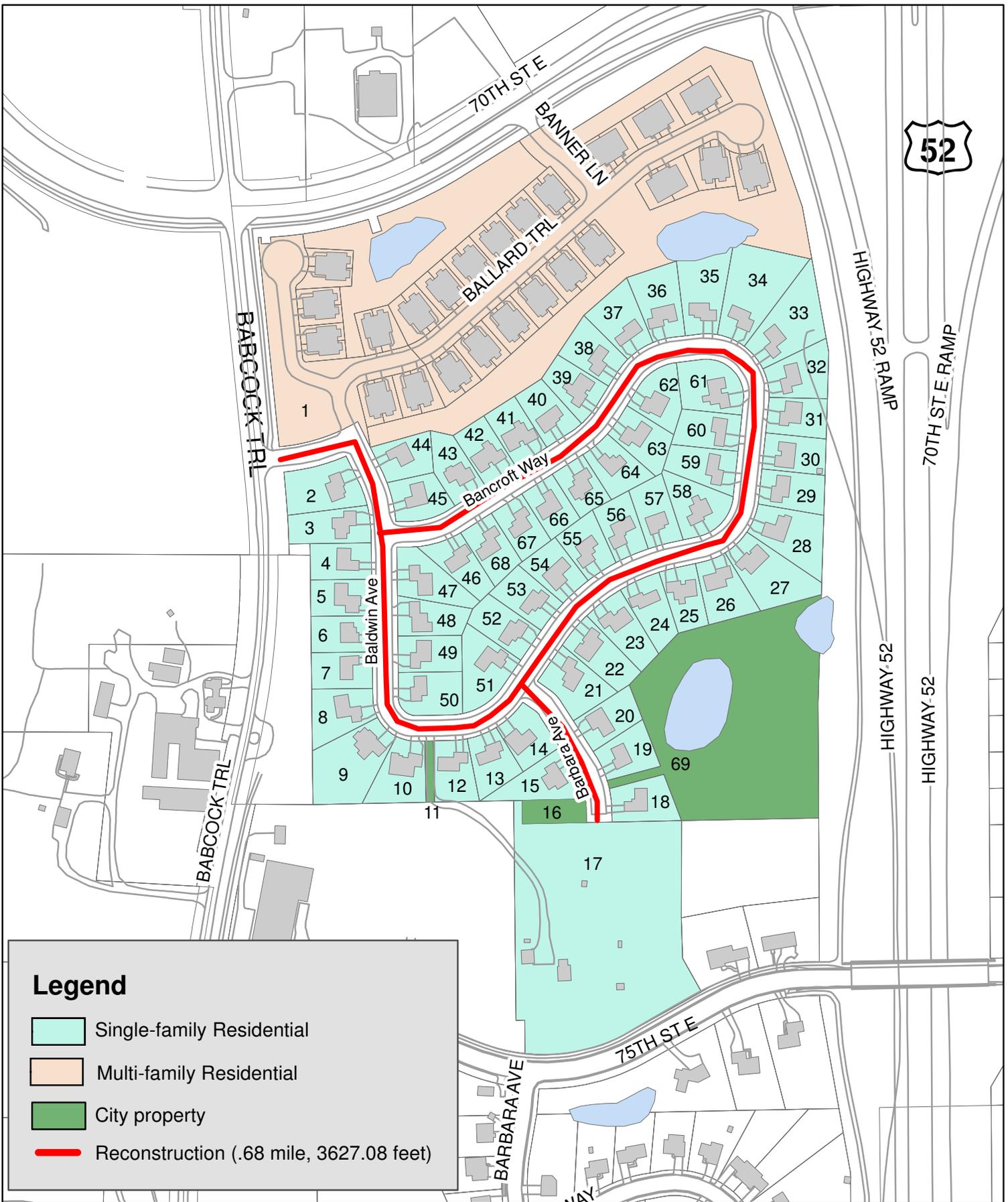
						Bancroft Way Area Improvements						
LINE	ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	2017 Bancroft Way Area Improvements (2016-09E)		BALDWIN AVE		BANCROFT WAY		BARBARA AVE	
					ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED
							QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
STREET IMPROVEMENTS												
1	2021.501	MOBILIZATION	LS	\$72,825.00	1	\$72,825.00	0.26	\$18,934.50	0.62	\$45,151.50	0.12	\$8,739.00
2	2031.501	FIELD OFFICE	EACH	\$4,000.00	1	\$4,000.00	0.26	\$1,040.00	0.62	\$2,480.00	0.12	\$480.00
3	2101.502	CLEARING	TREE	\$300.00	3	\$900.00	1	\$300.00	1	\$300.00	1	\$300.00
4	2101.507	GRUBBING	TREE	\$300.00	3	\$900.00	1	\$300.00	1	\$300.00	1	\$300.00
5	2104.501	REMOVE CURB AND GUTTER	LF	\$3.00	7,328	\$21,984.00	1782	\$5,346.00	4770	\$14,310.00	776	\$2,328.00
6	2104.501	REMOVE CATCH BASIN OR MANHOLE	EACH	\$300.00	8	\$2,400.00	2	\$600.00	4	\$1,200.00	2	\$600.00
7	2104.505	REMOVE BITUMINOUS DRIVEWAY OR TRAIL PAVEMENT	SY	\$3.00	2,240	\$6,720.00	440	\$1,320.00	1640	\$4,920.00	160	\$480.00
8	2104.505	REMOVE CONCRETE PAVEMENT	SY	\$6.00	352	\$2,112.00	132	\$792.00	220	\$1,320.00		
9	2104.523	SALVAGE SIGN TYPE C	EACH	\$25.00	5	\$125.00	3	\$75.00	2	\$50.00		
10	2105.501	COMMON EXCAVATION (EV) (P)	CY	\$9.00	11,420	\$102,780.00	2768	\$24,912.00	7409	\$66,681.00	1243	\$11,187.00
11	2105.507	SUBGRADE EXCAVATION (EV)	CY	\$7.00	200	\$1,400.00	50	\$350.00	120	\$840.00	30	\$210.00
12	2105.522	SELECT GRANULAR BORROW (CV)	CY	\$24.00	11,165	\$267,960.00	2706	\$64,944.00	7244	\$173,856.00	1215	\$29,160.00
13	2105.604	GEOTEXTILE FABRIC, TYPE V WOVEN	SY	\$4.00	13,479	\$53,916.00	3267	\$13,068.00	8745	\$34,980.00	1467	\$5,868.00
14	2123.610	STREET SWEEPING (WITH PICKUP BROOM)	HR	\$100.00	150	\$15,000.00	30	\$3,000.00	100	\$10,000.00	20	\$2,000.00
15	2130.601	WATER USAGE ALLOWANCE	LS	\$10,000.00	1	\$10,000.00	0.26	\$2,600.00	0.62	\$6,200.00	0.12	\$1,200.00
16	2211.501	AGGREGATE BASE (CV) CLASS 5	TON	\$12.00	2,295	\$27,540.00	557	\$6,684.00	1487	\$17,844.00	251	\$3,012.00
17	2331.604	BITUMINOUS PAVEMENT RELAMATION (P)	SF	\$1.50	124,576	\$186,864.00	30294	\$45,441.00	81090	\$121,635.00	13192	\$19,788.00
18	2360.501	TYPE SP 9.5 WEARING COURSE MIX (3,C)	TON	\$75.00	1,829	\$137,175.00	444	\$33,300.00	1186	\$88,950.00	199	\$14,925.00
19	2360.501	TYPE SP 12.5 NON WEAR COURSE MIX (3,C)	TON	\$70.00	1,829	\$128,030.00	444	\$31,080.00	1186	\$83,020.00	199	\$13,930.00
20	2360.501	TYPE SP 9.5 WEARING COURSE MIX (2,E), DRIVEWAY	TON	\$80.00	553	\$44,240.00	109	\$8,720.00	404	\$32,320.00	40	\$3,200.00
21	2502.541	4" PERF PVC PIPE DRAIN WITH CIRCULAR KNIT FILTER SOCK	LF	\$6.00	7,328	\$43,968.00	1782	\$10,692.00	4770	\$28,620.00	776	\$4,656.00
22	2531.501	CONCRETE CURB AND GUTTER DESIGN B618	LF	\$16.00	7,328	\$117,248.00	1782	\$28,512.00	4770	\$76,320.00	776	\$12,416.00
23	2531.501	CONCRETE CURB AND GUTTER (HAND POUR)	LF	\$20.00	150	\$3,000.00	50	\$1,000.00	50	\$1,000.00	50	\$1,000.00
24	2531.507	6" CONCRETE PAVEMENT	SY	\$30.00	352	\$10,560.00	132	\$3,960.00	220	\$6,600.00		
25	2531.618	PEDESTRIAN CURB RAMP	EACH	\$800.00	2	\$1,600.00	2	\$1,600.00				
26	2540.601	MAILBOX MAINTENANCE	LS	\$2,500.00	1	\$2,500.00	0.26	\$650.00	0.62	\$1,550.00	0.12	\$300.00
27	2563.601	TRAFFIC CONTROL ALLOWANCE	LS	\$12,500.00	1	\$12,500.00	0.3	\$3,250.00	0.6	\$7,750.00	0.1	\$1,500.00
28	2564.531	SIGN PANELS TYPE C	SF	\$70.00	57	\$3,990.00	38	\$2,660.00	15	\$1,050.00	4	\$280.00
29	2564.537	INSTALL SIGN TYPE SPECIAL	EACH	\$150.00	5	\$750.00	3	\$450.00	2	\$300.00		
30	2572.125	PRUNE TREES	HR	\$70.00	50	\$3,500.00	50	\$3,500.00				
31	2573.535	STABILIZED CONSTRUCTION EXIT	LS	\$5,000.00	1	\$5,000.00	0.26	\$1,300.00	0.62	\$3,100.00	0.12	\$600.00
32	2573.550	EROSION CONTROL SUPERVISOR	LS	\$5,000.00	1	\$5,000.00	0.26	\$1,300.00	0.62	\$3,100.00	0.12	\$600.00
33	2573.601	STORM WATER MANAGEMENT ALLOWANCE	LS	\$7,500.00	1	\$7,500.00	0.26	\$1,950.00	0.62	\$4,650.00	0.12	\$900.00
34	2574.525	BOULEVARD TOPSOIL BORROW (CV)	CY	\$30.00	1,567	\$47,010.00	380	\$11,400.00	1016	\$30,480.00	171	\$5,130.00
35	2575.560	FLEXTERRA HYDROMULCH (HYDRAULIC SOIL STAB. TYPE SPECIAL)	LB	\$3.00	4,850	\$14,550.00	1175	\$3,525.00	3150	\$9,450.00	525	\$1,575.00
36	2575.501	SEEDING (MIX 25-151)	ACRE	\$1,200.00	1.94	\$2,328.00	0.47	\$564.00	1.26	\$1,512.00	0.21	\$252.00
STREETS SUBTOTAL						\$1,367,875.00		\$339,119.50		\$881,839.50		\$146,916.00
10% CONTINGENCY						\$136,787.50		\$33,911.95		\$88,183.95		\$14,691.60
28% CONTINGENCY						\$383,005.00		\$94,953.46		\$246,915.06		\$41,136.48
TOTAL STREETS COSTS						\$1,887,667.50		\$467,984.91		\$1,216,938.51		\$202,744.08

ENGINEERS ESTIMATE

						Bancroft Way Area Improvements						
LINE	ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	2017 Bancroft Way Area Improvements (2016-09E)		BALDWIN AVE		BANCROFT WAY		BARBARA AVE	
					ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED
							QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
STORM SEWER IMPROVEMENTS												
37	2104.501	REMOVE SEWER PIPE (STORM)	LF	\$5.00	1,111	\$5,555.00	282	\$1,410.00	544	\$2,720.00	285	\$1,425.00
38	2104.509	REMOVE CASTING AND RINGS (STORM)	EACH	\$200.00	28	\$5,600.00	7	\$1,400.00	14	\$2,800.00	7	\$1,400.00
39	2501.602	15" RC PIPE APRON AND TRASH GUARD	EACH	\$1,000.00	1	\$1,000.00	1	\$1,000.00				
40	2501.602	UNCLASSIFIED EXCAVATION (SEDIMENT REMOVAL) (LV)	CY	\$40.00	100	\$4,000.00			100	\$4,000.00		
41	2502.521	4" PVC SUMP BASKET PIPE	LF	\$35.00	400	\$14,000.00	100	\$3,500.00	200	\$7,000.00	100	\$3,500.00
42	2503.541	15" RC PIPE SEWER DES 3006 CL V	LF	\$35.00	1,167	\$40,845.00	338	\$11,830.00	544	\$19,040.00	285	\$9,975.00
43	2503.602	CONNECT TO EXISTING STORM STRUCTURE	EACH	\$600.00	9	\$5,400.00	4	\$2,400.00	3	\$1,800.00	2	\$1,200.00
44	2503.602	CONNECT TO EXISTING STORM SEWER	EACH	\$500.00	9	\$4,500.00	4	\$2,000.00	3	\$1,500.00	2	\$1,000.00
45	2504.602	4"x4" TEE (DRAIN TILE TO PVC)	EACH	\$150.00	8	\$1,200.00	2	\$300.00	4	\$600.00	2	\$300.00
46	2504.602	CONSTRUCT BULKHEAD (STORM)	EACH	\$150.00	3	\$450.00	1	\$150.00	1	\$150.00	1	\$150.00
47	2506.502	CONSTRUCT DRAINAGE STRUCTURE 2' X 3' CB	EACH	\$1,100.00	6	\$6,600.00	3	\$3,300.00	1	\$1,100.00	2	\$2,200.00
48	2506.502	CONSTRUCT DRAINAGE STRUCTURE DES 27-4020	EACH	\$900.00	1	\$900.00			1	\$900.00		
49	2506.502	CONSTRUCT DRAINAGE STRUCTURE DES 48-4020	EACH	\$1,200.00	15	\$18,000.00	6	\$7,200.00	4	\$4,800.00	5	\$6,000.00
50	2506.521	INSTALL NEW RINGS AND CASTING (STORM)	EACH	\$200.00	24	\$4,800.00	7	\$1,400.00	10	\$2,000.00	7	\$1,400.00
51	2506.522	ADJUST CASTING (STORM)	EACH	\$600.00	4	\$2,400.00			4	\$2,400.00		
52	2506.602	CONSTRUCT DRAINAGE STRUCTURE (SUMP BASKET)	EACH	\$800.00	8	\$6,400.00	2	\$1,600.00	4	\$3,200.00	2	\$1,600.00
53	2506.602	RECONSTRUCT STORM STRUCTURE	EACH	\$2,000.00	3	\$6,000.00	2	\$4,000.00	1	\$2,000.00		
54	2573.502	SILT FENCE, TYPE MS	LF	\$2.00	900	\$1,800.00	300	\$600.00	400	\$800.00	200	\$400.00
55	2573.530	STORM DRAIN INLET PROTECTION (WIMCO)	EACH	\$300.00	24	\$7,200.00	7	\$2,100.00	10	\$3,000.00	7	\$2,100.00
56	2573.533	SEDIMENT CONTROL LOG TYPE COMPOST	LF	\$2.00	150	\$300.00	50	\$100.00	50	\$100.00	50	\$100.00
57	2574.525	FILTERED TOPSOIL BORROW (80/20)	CY	\$65.00	300	\$19,500.00	100	\$6,500.00	100	\$6,500.00	100	\$6,500.00
58	2575.513	MULCH MATERIAL TYPE 6, SHREDDED HARDWOOD	CY	\$50.00	100	\$5,000.00	34	\$1,700.00	33	\$1,650.00	33	\$1,650.00
STORM SUBTOTAL						\$161,450.00		\$52,490.00		\$68,060.00		\$40,900.00
10% CONTINGENCY						\$16,145.00		\$5,249.00		\$6,806.00		\$4,090.00
28% CONTINGENCY						\$45,206.00		\$14,697.20		\$19,056.80		\$11,452.00
TOTAL STORM COSTS						\$222,801.00		\$72,436.20		\$93,922.80		\$56,442.00
SANITARY SEWER IMPROVEMENTS												
59	2104.509	REMOVE CASTING AND RINGS (SANITARY)	EACH	\$200.00	21	\$4,200.00	14	\$2,800.00	4	\$800.00	3	\$600.00
60	2503.602	INSTALL NEW RINGS AND CASTING (SANITARY)	EACH	\$1,000.00	21	\$21,000.00	14	\$14,000.00	4	\$4,000.00	3	\$3,000.00
61	2503.606	SANITARY MANHOLE UMBRELLAS	EACH	\$100.00	21	\$2,100.00	14	\$1,400.00	4	\$400.00	3	\$300.00
SANITARY SUBTOTAL						\$27,300.00		\$18,200.00		\$5,200.00		\$3,900.00
10% CONTINGENCY						\$2,730.00		\$1,820.00		\$520.00		\$390.00
28% CONTINGENCY						\$7,644.00		\$5,096.00		\$1,456.00		\$1,092.00
TOTAL SANITARY COSTS						\$37,674.00		\$25,116.00		\$7,176.00		\$5,382.00
WATERMAIN IMPROVEMENTS												
62	2104.509	REMOVE GATE VALVE BOX (WATERMAIN)	EACH	\$200.00	18	\$3,600.00	6	\$1,200.00	9	\$1,800.00	3	\$600.00
63	2504.602	INSTALL GATE VALVE BOX (WATERMAIN)	EACH	\$800.00	18	\$14,400.00	6	\$4,800.00	9	\$7,200.00	3	\$2,400.00
WATERMAIN SUBTOTAL						\$18,000.00		\$6,000.00		\$9,000.00		\$3,000.00
10% CONTINGENCY						\$1,800.00		\$600.00		\$900.00		\$300.00
28% CONTINGENCY						\$5,040.00		\$1,680.00		\$2,520.00		\$840.00
TOTAL WATERMAIN COSTS						\$24,840.00		\$8,280.00		\$12,420.00		\$4,140.00
TOTAL PROJECT COSTS						\$2,172,982.50						

Appendix B

Draft Preliminary Assessment Map and Roll



Legend

- Single-family Residential
- Multi-family Residential
- City property
- Reconstruction (.68 mile, 3627.08 feet)



10/20/16

City Project No. 2016-09E
Bancroft Way Area Reconstruction
 Assessment Map



THIS DRAWING IS NEITHER A LEGALLY RECORDED MAP NOR A SURVEY AND IS NOT INTENDED TO BE USED AS ONE. THIS DRAWING IS A COMPILATION OF RECORDS, INFORMATION AND DATA LOCATED IN VARIOUS CITY, COUNTY AND STATE OFFICES AND OTHER SOURCES AND IS TO BE USED FOR REFERENCE PURPOSES ONLY. THE CITY OF INVER GROVE HEIGHTS IS NOT RESPONSIBLE FOR ANY INACCURACIES HEREIN CONTAINED.

**CITY PROJECT NO. 2016-09E - BANCROFT WAY AREA RECONSTRUCTION
PRELIMINARY ASSESSMENT ROLL**

MAP NO.	PID NO.	PROPERTY TYPE	OWNER NAME	HOUSE NO.	STREET	PER POLICY ASSESSMENT	SPECIAL BENEFIT ASSESSMENT CAP
1	204405001010	MFR	LYLE & ARDIS PIEPER	7020	BALLARD CT	\$954.86	\$2,500.00
1	204405001020	MFR	MICHAEL WEISMILLER	7030	BALLARD CT	\$954.86	\$2,500.00
1	204405001030	MFR	THOMAS SR & CINTHIA STANGL	7040	BALLARD CT	\$954.86	\$2,500.00
1	204405001040	MFR	ANN LEE	7050	BALLARD CT	\$954.86	\$2,500.00
1	204405001050	MFR	JAMES & MARGARET REED	7060	BALLARD CT	\$954.86	\$2,500.00
1	204405001060	MFR	WAYNE JR & SANDRA VANOSS	7070	BALLARD CT	\$954.86	\$2,500.00
1	204405002010	MFR	JON & BONNIE LESSARD	7177	BALLARD TRL	\$954.86	\$2,500.00
1	204405002020	MFR	DANIEL & CAROL DERBY	7173	BALLARD TRL	\$954.86	\$2,500.00
1	204405003010	MFR	CHARLES & KAREN OASE	7180	BALLARD TRL	\$954.86	\$2,500.00
1	204405003020	MFR	EDWARD & DOROTHEA GUTZMANN	7176	BALLARD TRL	\$954.86	\$2,500.00
1	204405003030	MFR	GLORIA JANTZEN	7172	BALLARD TRL	\$954.86	\$2,500.00
1	204405003040	MFR	EARL & MARY JO QUEHL TRUST	7168	BALLARD TRL	\$954.86	\$2,500.00
1	204405101010	MFR	PAUL & SHIRLEY MUELLER	7121	BALLARD TRL	\$954.86	\$2,500.00
1	204405101020	MFR	PAUL & CAROLE MARTIN	7117	BALLARD TRL	\$954.86	\$2,500.00
1	204405101030	MFR	CORRINE LEAFGREN	7113	BALLARD TRL	\$954.86	\$2,500.00
1	204405101040	MFR	GARY & NANCY S HOVEY	7109	BALLARD TRL	\$954.86	\$2,500.00
1	204405101050	MFR	ALBERT & EUGINA BAUCHER	7105	BALLARD TRL	\$954.86	\$2,500.00
1	204405101060	MFR	VALDIN & BONITA BUCHMEIER	7101	BALLARD TRL	\$954.86	\$2,500.00
1	204405102010	MFR	SANDRA J HUINKER	7098	BALLARD TRL	\$954.86	\$2,500.00
1	204405102020	MFR	HOWARD & JEANNE FRANSON	7102	BALLARD TRL	\$954.86	\$2,500.00
1	204405102030	MFR	HOLLAND & JANICE LAAK	7106	BALLARD TRL	\$954.86	\$2,500.00
1	204405102040	MFR	VERNON HOFFMAN & DEBBIE SCHAUMANN-HOFFMAN	7110	BALLARD TRL	\$954.86	\$2,500.00
1	204405102050	MFR	JAMES & SANDRA HILDEBRAND	7114	BALLARD TRL	\$954.86	\$2,500.00
1	204405102060	MFR	THOMAS STACK & MAUREEN QUINN TRUST	7116	BALLARD TRL	\$954.86	\$2,500.00
1	204405103010	MFR	DAVID HANSON TRUST	7120	BALLARD TRL	\$954.86	\$2,500.00
1	204405103020	MFR	LEONARD & DIANE MUNSON	7124	BALLARD TRL	\$954.86	\$2,500.00
1	204405103030	MFR	THOMAS & ANNETTE ADAM	7128	BALLARD TRL	\$954.86	\$2,500.00
1	204405103040	MFR	DONALD & JOANNE FROST	7132	BALLARD TRL	\$954.86	\$2,500.00
1	204405103050	MFR	INGRID EMERSON	7136	BALLARD TRL	\$954.86	\$2,500.00
1	204405103060	MFR	DOUGLAS & CONSTANC NELSON	7140	BALLARD TRL	\$954.86	\$2,500.00
1	204405103070	MFR	STEPHEN & JANE TSCHIDA	7144	BALLARD TRL	\$954.86	\$2,500.00
1	204405103080	MFR	LARRY & FRANCES BUTLER	7148	BALLARD TRL	\$954.86	\$2,500.00
1	204405103090	MFR	ROGER & JUDITH EICHELDINGER	7152	BALLARD TRL	\$954.86	\$2,500.00
1	204405103100	MFR	FORREST PAUL & SANDRA BOLLINGER	7156	BALLARD TRL	\$954.86	\$2,500.00
1	204405103110	MFR	JOHN & BARBARA HENKE	7160	BALLARD TRL	\$954.86	\$2,500.00
1	204405103120	MFR	NORMAN B & MARILYN J HANSEN	7164	BALLARD TRL	\$954.86	\$2,500.00
1	204405104010	MFR	RICHARD G & RITA M VOS	7169	BALLARD TRL	\$954.86	\$2,500.00
1	204405104020	MFR	JAMES W & PATRICIA A CLARKE	7165	BALLARD TRL	\$954.86	\$2,500.00
1	204405104030	MFR	RICHARD F & DIANE M ROSSI	7161	BALLARD TRL	\$954.86	\$2,500.00
1	204405104040	MFR	KRISTINE M BOLAND	7157	BALLARD TRL	\$954.86	\$2,500.00
1	204405104050	MFR	RONALD CARL & JUDITH KAY HANSON	7153	BALLARD TRL	\$954.86	\$2,500.00

**CITY PROJECT NO. 2016-09E - BANCROFT WAY AREA RECONSTRUCTION
PRELIMINARY ASSESSMENT ROLL**

MAP NO.	PID NO.	PROPERTY TYPE	OWNER NAME	HOUSE NO.	STREET	PER POLICY ASSESSMENT	SPECIAL BENEFIT ASSESSMENT CAP
1	204405104060	MFR	PATRICK M & JOAN M FARLEY	7149	BALLARD TRL	\$954.86	\$2,500.00
1	204405104070	MFR	RICHARD G LAMM & LESLIE DAVIS	7145	BALLARD TRL	\$954.86	\$2,500.00
1	204405104080	MFR	MATTHEW GREG JR DASOVIC & JEANNE SMITH	7141	BALLARD TRL	\$954.86	\$2,500.00
1	204405104090	MFR	PAUL A & KATHRYN M GEISS	7137	BALLARD TRL	\$954.86	\$2,500.00
1	204405104100	MFR	JEREMIAH J & PATRICIA LUCEY	7133	BALLARD TRL	\$954.86	\$2,500.00
1	204405104110	MFR	CARL H RUNBERG & KATHLEEN KENNY	7129	BALLARD TRL	\$954.86	\$2,500.00
1	204405104120	MFR	JANET TSTE SELL	7125	BALLARD TRL	\$954.86	\$2,500.00
2	203680003010	SFR	BRETT M ARNOLD & DIANE DEWOLFE	7219	BALDWIN AVE	\$10,354.47	\$9,000.00
3	203680003020	SFR	PAUL E & KATHLEEN A OBERG	7239	BALDWIN AVE	\$10,354.47	\$9,000.00
4	203680003030	SFR	MICHAEL & ELIZABETH ROHRER	7259	BALDWIN AVE	\$10,354.47	\$9,000.00
5	203680003040	SFR	TODD M & CANDACE J MATHIASON	7279	BALDWIN AVE	\$10,354.47	\$9,000.00
6	203680003050	SFR	CHARLES E & JEANNE T UNDERBAKKE	7299	BALDWIN AVE	\$10,354.47	\$9,000.00
7	203680003060	SFR	PATRICIA A GOGOLAKIS	7319	BALDWIN AVE	\$10,354.47	\$9,000.00
8	203680003070	SFR	MARK H & CYNTHIA M YARRINGTON	7339	BALDWIN AVE	\$10,354.47	\$9,000.00
9	203680003080	SFR	MARK E MOSVICK	7359	BALDWIN AVE	\$10,354.47	\$9,000.00
10	203680003090	SFR	JAMES G & CHRISTINE POLAK	7346	BANCROFT WAY	\$10,354.47	\$9,000.00
11	203680000010	CITY	CITY OF INVER GROVE HEIGHTS			\$3,959.18	N/A
12	203680004010	SFR	MARK & MICHELE THOMAS	7342	BANCROFT WAY	\$10,354.47	\$9,000.00
13	203680004020	SFR	BILLY H & JOYCE L WILMES	7338	BANCROFT WAY	\$10,354.47	\$9,000.00
14	203680004030	SFR	JEROME E & MICHELE C LARDANI	7334	BANCROFT WAY	\$10,354.47	\$9,000.00
15	203680004040	SFR	RICHARD R & LAURINE RUDIE	7341	BARBARA AVE	\$10,354.47	\$9,000.00
16	203680000040	SFR	CITY OF INVER GROVE HEIGHTS			\$11,871.86	N/A
17	200090032016	SFR	LEONARD P & MILDRED BELZ	7210	BABCOCK TRL	\$10,354.47	\$9,000.00
18	203680005010	SFR	MICHAEL & ANNEISE CALIGUIRE	7354	BARBARA AVE	\$10,354.47	\$9,000.00
19	203680001270	SFR	MARK E & NANCY C JOHNSON	7346	BARBARA AVE	\$10,354.47	\$9,000.00
20	203680001260	SFR	DEANNA M & LOTT O SOMVONG	7338	BARBARA AVE	\$10,354.47	\$9,000.00
21	203680001250	SFR	PETER R & MARY JO FORREST	7330	BANCROFT WAY	\$10,354.47	\$9,000.00
22	203680001240	SFR	JEFFREY D & AMY J HEIKKINEN	7326	BANCROFT WAY	\$10,354.47	\$9,000.00
23	203680001230	SFR	PAUL ROSS & TIMBERLY JOHNSON	7322	BANCROFT WAY	\$10,354.47	\$9,000.00
24	203680001220	SFR	TERRANCE E & CANDACE HEIMERL	7318	BANCROFT WAY	\$10,354.47	\$9,000.00
25	203680001210	SFR	NAKLA BLAIR	7314	BANCROFT WAY	\$10,354.47	\$9,000.00
26	203680001200	SFR	DENNIS P & DIANA L FAHEY	7310	BANCROFT WAY	\$10,354.47	\$9,000.00
27	203680001190	SFR	JOYCE MARIE MAZZITELLO	7306	BANCROFT WAY	\$10,354.47	\$9,000.00
28	203680001180	SFR	DIOMEDES & MARIA T AVILES	7302	BANCROFT WAY	\$10,354.47	\$9,000.00
29	203680001170	SFR	CALVIN G JOHNSON & TECHKLA HELSPER	7296	BANCROFT WAY	\$10,354.47	\$9,000.00
30	203680001160	SFR	TIMOTHY E & LORI J AHERN	7292	BANCROFT WAY	\$10,354.47	\$9,000.00
31	203680001150	SFR	JAYDEE D & SHANNON L BADE	7288	BANCROFT WAY	\$10,354.47	\$9,000.00
32	203680001140	SFR	RANDY VO & HEIN THI NGO	7284	BANCROFT WAY	\$10,354.47	\$9,000.00
33	203680001130	SFR	KAMRUL ISLAM	7280	BANCROFT WAY	\$10,354.47	\$9,000.00
34	203680001120	SFR	HARLAN L & MARY J CHRISTENSEN	7276	BANCROFT WAY	\$10,354.47	\$9,000.00
35	203680001110	SFR	LAYNE B & PATRICIA A BENDER	7272	BANCROFT WAY	\$10,354.47	\$9,000.00

**CITY PROJECT NO. 2016-09E - BANCROFT WAY AREA RECONSTRUCTION
PRELIMINARY ASSESSMENT ROLL**

MAP NO.	PID NO.	PROPERTY TYPE	OWNER NAME	HOUSE NO.	STREET	PER POLICY ASSESSMENT	SPECIAL BENEFIT ASSESSMENT CAP
36	203680001100	SFR	DARLENE C EDWARDS	7268	BANCROFT WAY	\$10,354.47	\$9,000.00
37	203680001090	SFR	JOHN P & CHRISTINE M GORMAN	7264	BANCROFT WAY	\$10,354.47	\$9,000.00
38	203680001080	SFR	KEVIN D & LINDA J MELCHERT	7260	BANCROFT WAY	\$10,354.47	\$9,000.00
39	203680001070	SFR	MICHAEL J & LYNNE A BATES	7256	BANCROFT WAY	\$10,354.47	\$9,000.00
40	203680001060	SFR	PATRICIA L KRUG	7252	BANCROFT WAY	\$10,354.47	\$9,000.00
41	203680001050	SFR	CLINTON J & BONNIE J JOHNSON	7248	BANCROFT WAY	\$10,354.47	\$9,000.00
42	203680001040	SFR	MICHAEL P & PATRICIA DANIELS	7244	BANCROFT WAY	\$10,354.47	\$9,000.00
43	203680001030	SFR	HANS P & JOANN D THOLEY	7240	BANCROFT WAY	\$10,354.47	\$9,000.00
44	203680001010	SFR	YOUANNES TAWFIK & RANDA HELMY WISSA	7216	BALDWIN AVE	\$10,354.47	\$9,000.00
45	203680001020	SFR	WILLIAM & SANDRA R NELSON	7236	BALDWIN AVE	\$10,354.47	\$9,000.00
46	203680002230	SFR	RICHARD J & RENEE F BRIGUET	7245	BANCROFT WAY	\$10,354.47	\$9,000.00
47	203680002220	SFR	ROY L DERRY & CAROLYN ANN OLSON	7276	BALDWIN AVE	\$10,354.47	\$9,000.00
48	203680002210	SFR	BE T NGUYEN	7296	BALDWIN AVE	\$10,354.47	\$9,000.00
49	203680002200	SFR	TIMOTHY & PENNY TURGEON	7316	BALDWIN AVE	\$10,354.47	\$9,000.00
50	203680002190	SFR	JAMES R & CINDY L JOHNSON	7336	BALDWIN AVE	\$10,354.47	\$9,000.00
51	203680002180	SFR	ROBERT M JR & LAURIE WOLFF	7335	BANCROFT WAY	\$10,354.47	\$9,000.00
52	203680002170	SFR	THEODORE A ZOCHERT & CONNIE FORNER	7329	BANCROFT WAY	\$10,354.47	\$9,000.00
53	203680002160	SFR	ELIZABETH & CORNELL CHUN	7325	BANCROFT WAY	\$10,354.47	\$9,000.00
54	203680002150	SFR	JEFFREY J & TERESA C GRUNDTNER	7319	BANCROFT WAY	\$10,354.47	\$9,000.00
55	203680002140	SFR	ROXANNE PENDERGRASS & CURT NGUYEN	7315	BANCROFT WAY	\$10,354.47	\$9,000.00
56	203680002130	SFR	KARL V & BARBARA M LUHR	7309	BANCROFT WAY	\$10,354.47	\$9,000.00
57	203680002120	SFR	THEODORE J & DEBRA A TRENZELUK	7305	BANCROFT WAY	\$10,354.47	\$9,000.00
58	203680002110	SFR	DAVID & JANE HOFFMAN	7299	BANCROFT WAY	\$10,354.47	\$9,000.00
59	203680002100	SFR	KALE & DEBORAH NERISON	7295	BANCROFT WAY	\$10,354.47	\$9,000.00
60	203680002090	SFR	RICHARD DEAN SCHREINER	7289	BANCROFT WAY	\$10,354.47	\$9,000.00
61	203680002080	SFR	MICHAEL J ERNST	7285	BANCROFT WAY	\$10,354.47	\$9,000.00
62	203680002070	SFR	JEREMIAH R & MARY KS HUGHES	7279	BANCROFT WAY	\$10,354.47	\$9,000.00
63	203680002060	SFR	DENNIS P & LESLEE M SUCHY	7275	BANCROFT WAY	\$10,354.47	\$9,000.00
64	203680002050	SFR	ANDREA J SIMONS	7269	BANCROFT WAY	\$10,354.47	\$9,000.00
65	203680002040	SFR	KEVIN C LAVOIE & PEGGY TREPTOW	7265	BANCROFT WAY	\$10,354.47	\$9,000.00
66	203680002030	SFR	BRIAN J FIER & GLORIA HOPP	7259	BANCROFT WAY	\$10,354.47	\$9,000.00
67	203680002020	SFR	DONALD J & ANITA J MYHRE	7255	BANCROFT WAY	\$10,354.47	\$9,000.00
68	203680002010	SFR	DARREN M & HOLLY J FICEK	7249	BANCROFT WAY	\$10,354.47	\$9,000.00
69	203680000020	CITY	CITY OF INVER GROVE HEIGHTS			\$3,959.16	N/A
						\$738,664.03	\$705,000.00

Appendix C

Neighborhood Completed Questionnaire Results

Location	Sump pump	Pump runs	Drains to	Sump Basket	Private utilities	Drainage issues	Drainage issues Comments	Neighborhood drainage issues	Rain gardens	Sewer service problems	Water service problems	Drivewat curb opening	Comments
Baldwin Ave	No				None	No			Yes	No	No	No	
Baldwin Ave	No				Irrigation system	No		Water drainage at the end of the street are usually filled with debris and need to be cleaned. Is that the homeowner's responsibility?	Yes	No	No	No	
Baldwin Ave	No				Irrigation system	No			Yes	No	No	No	
Baldwin Ave	No				None	No			Yes	No	No	Yes	
Baldwin Ave	Yes	All Year	Back yard	Yes	Irrigation system	No		The only issue I'm aware of is in my yard. Not sure if anyone else has the same issue. When they graded the yard it's quite severe so there are low spots that stay wet for quite some time. They also backfilled the yard with clay which also causes it to take a long time to dry out after a rain.	Yes	No	No	No	The cost involved in connecting my sump to a city drain would be the main issue. Not sure if that's feasible with how it's currently set up (out the back of the house). Thank you.
Baldwin Ave	Yes	All Year	Back yard	No	None	Yes	If my sump pump fails we have issues. The new project performed by the City of Inver Grove Heights on Babcock in 2007 caused large amounts of water to dump into my backyard. I never had an opportunity to attend meetings about the construction because we closed on the house in June of 2007. This is the exact time construction started. We do have a drainage culvert that takes the water dumped into our backyard but during large rainfalls it causes very large amounts of standing water in the backyard which results in high water levels under my home.		No	No	No	No	None
Baldwin Ave	Yes	Seasonally	Back yard	No	Irrigation system	Yes	Water pools in a low spot in back yard after heavy rain. It takes a couple of days to drain.		Yes	No	No	No	
Ballard Trail	No				Irrigation system	No			No	No	No	No	
Ballard Trail	No				Irrigation system	No			No	No	No	No	
Ballard Trail	No				Irrigation system	No			No	No	No	No	
Ballard Trail	No				None	No			No	No	No	No	
Ballard Trail	Yes	After rainfall	Storm sewer	No	Irrigation system	No			No	No	No	No	
Ballard Trail	Yes	Not at all	Storm sewer	No	Irrigation system	No			No	No	No	No	
Ballard Trail	Yes	Not at all	Back yard	No	Irrigation system	No		Not sure what this means	No	No	No	No	We live in a TH community with private roads. We are not sure if these question pertain to us.
Ballard Trail	Yes	Not at all		No	None	No			No	No	No	No	
Ballard Trail	Yes	Not at all	Left side of yard	Yes	Irrigation system	No			No	No	No	No	
Bancroft Way	Multiple	All Year	Back yard	No	None	No			No	No	Yes	No	Water pressure varies
Bancroft Way	No					No			No	No	No	No	
Bancroft Way	No				None	No			No	No	No	No	Thanks for fixing. The road is in bad shape!
Bancroft Way	No				Irrigation system	No			No	No	No	No	
Bancroft Way	No				None	No			Yes	No	No	No	
Bancroft Way	No				None	No	Even during very wet seasons and years, no issues have manifested.		No	No	Yes	Yes	Water supply on occasion has very high manganese and/or magnesium concentrations that will stain bath, sink, and tub fixtures (inadequate flushing?)
Bancroft Way	No				Irrigation system	No			No	No	No	No	All we are looking for is a new road in our resident area. No new curbs or new sewer system.
Bancroft Way	No				Irrigation system	No			No	No	No	No	I don't think we should have new gutters and sewer as this development is not that old, born in 1999 Thank you Jerome Ladarni
Bancroft Way	No				invisible fence			From the corner of Baldwin and Bancroft Way my house is lot #10 and do get a lot of rain water melting down the street and in front of the house because other houses are lots are higher my lot is lower/also between my house 7268 and 7272 neighbor sewer runs off into wetland swamp in rear of lots.	No	No	No	No	Really not for restructure of street/couldn't it just be repaved/very concerned about cost/assessment cost of this project/I'm single (the only breadwinner and I'm retired, this sounds like a very costly project into several thousands of dollars/myself and other neighbors already pay very high taxes. Concern/question- How much is covered by city gov't or some type of federal grant funds, Many people I've talked to in this neighbor are not in favor of such an expensive project!
Bancroft Way	No				None	No	Some neighbors sump pumps run very often. The reason: original topography and wasteful irrigation systems from their neighbors!		Yes	No	No	No	Does the city have a program to reduce the number of trash haulers in a neighborhood?
Bancroft Way	No				Irrigation system	No			Yes	No	No	No	Thanks for looking at our streets and these issues--the streets are really, really bad as you know.
Bancroft Way	Yes	After rainfall	Back yard	No	Irrigation system	No	N/A		Yes	No	No	No	
Bancroft Way	Yes	After rainfall	Back yard	No	None	No			No	No	No	No	
Bancroft Way	Yes	After rainfall /seasonally	Back yard	Yes	None	Yes	Slight erosion in backyard - during very heavy rainfall		Yes	No	No	No	
Bancroft Way	Yes	After rainfall, seasonally, winter	Basement	Yes	None	No			Yes	No	No	Yes	
Bancroft Way	Yes	All Year	Back yard	Yes	Irrigation system	Yes	\	Wet back border of our yard regularly because all block water flows along it	Yes	No	No	Yes	
Bancroft Way	Yes	Not at all	Basement	No	Irrigation system	No	Have storm sewer drain in back of house and with neighbors		Yes	No	No	No	water at times has a strong chlorine smell. Our water service piping in street can't be that old to need replacing. Your link to complete survey was not very user friendly, could of been worded differently

Location	Sump pump	Pump runs	Drains to	Sump Basket	Private utilities	Drainage issues	Drainage issues Comments	Neighborhood drainage issues	Rain gardens	Sewer service problems	Water service problems	Driveway curb opening	Comments
Bancroft Way	Yes	Not at all	Storm sewer	No	None	No			Yes	No	No	No	
Bancroft Way	Yes	Not at all	Back yard	No	None	No		None / Don't know of any drainage issues.	Yes	No	No	No	No.
Bancroft Way	Yes	Not at all	Back yard	No	None	No			Yes	No	No	No	
Bancroft Way	Yes		Right side of yard	No	Irrigation system	No			Yes				
Barbara Ave.	No				None	No			Yes	No	No	Yes	Would like to have more information.
Barbara Ave.	No				None	No			Yes	No	No	Yes	
Barbara Ave.	Yes	After rainfall	Left side of yard	No	Irrigation system	No			Yes	No	No	No	My sprinkler system runs along the turn around and I am concerned about it being damaged during the pavement management. Incidentally the turn around takes up approximately 30 feet of my lot. I am supposed to get this 30 feet returned to me when the street goes through. If this ever happens. Due to my advanced age I will need help in the spring to mark my sprinkler system. I am very sorry this response is later than you requested.