



FEASIBILITY REPORT

2018 Partial Street Reconstruction Project

CIRCLE PINES | ANOKA COUNTY, MINNESOTA

January 22, 2018

Prepared for:
City of Circle Pines
200 Civic Heights Circle
Circle Pines, MN 55014

WSB PROJECT NO. R-010953-000



FEASIBILITY REPORT

2018 PARTIAL STREET RECONSTRUCTION PROJECT

FOR THE
CITY OF CIRCLE PINES, MINNESOTA

January 23, 2018

Prepared By:





January 23, 2018

Mr. Patrick Antonen
City Administrator
City of Circle Pines
200 Civic Heights Circle
Circle Pines, MN 55014

Re: Feasibility Report
2018 Partial Street Reconstruction Project
City of Circle Pines, MN
WSB Project No. R-010953-000

Dear Mr. Antonen:

Transmitted herewith for your review is a feasibility report which addresses the improvements associated with the 2018 Partial Street Reconstruction Project. Streets included in the proposed improvements are: Little John Drive, Flowerfield Road, Forest Drive, Sherwood Court, Arthur Court, and Nottingham Drive.

We are available at your convenience to discuss this report. Please do not hesitate to contact me at 763-512-5257 if you have any questions regarding this report.

Sincerely,

WSB & Associates, Inc.

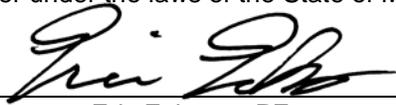
A handwritten signature in black ink, appearing to read "Eric Eckman". The signature is fluid and cursive, with a large initial "E" and "A".

Eric Eckman, PE
City Engineer / Project Manager

Enclosure

CERTIFICATION

I hereby certify that this plan, specification, or 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.

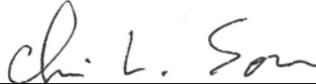


Eric Eckman, PE

Date: January 23, 2018

Lic. No. 49954

Quality Control Review By:



Christopher Sonmor

Date: January 23, 2018

Lic. No. 44599

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TITLE SHEET

LETTER OF TRANSMITTAL

CERTIFICATION SHEET

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1. EXECUTIVE SUMMARY

The 2018 Partial Street Reconstruction Project includes improvements for Little John Drive, Flowerfield Road, Forest Road, Sherwood Court, Arthur Court, and Nottingham Drive. The total length of these streets is approximately 0.96 miles. The project location can be seen in **Figure 1** of **Appendix A**.

The City's 2011 Pavement Management Report initially evaluated the condition of the City's street system and developed a Capital Improvement Plan (CIP) for future improvements. The streets within the proposed project area were rated "poor". Pavement cores were taken within these streets in November 2017 to determine the condition of the pavement and rehabilitation method. The pavement cores showed an average depth of three inches of bituminous pavement with four inches of Class 5 base.

The proposed improvements include a full-depth* pavement reclamation ("partial reconstruction") that will include subgrade excavation. The roadway will be reconstructed to three and one half inches of bituminous pavement with six inches of reclaimed material, with spot subgrade repair as needed. This will also include spot curb and gutter replacement throughout the project to help eliminate drainage and settlement issues.

Along with the proposed street improvements, the existing utilities were considered for replacement. Based on sewer televising, maintenance history, and age of the existing utilities, it was determined that the existing utilities are in good working condition and do not need to be replaced.

The total estimated project cost for the 2018 Partial Street Reconstruction Project is \$677,500. These costs include a 10% contingency and 25% indirect costs for legal, engineering, administrative, and financing costs. The project is proposed to be funded through the Street Reconstruction Fund and Special Assessments.

The City's current assessment policy consists of a flat and equal assessment rate per residential unit, for a partial street reconstruction rate at \$2,850 per unit. It is proposed to increase this amount by 5% to \$2,990 due to increases in construction cost and inflation.

City Street Funds will fund the remainder of the street improvement costs, outside of special assessments, and City utility funds will fund 100% of utility improvement costs if this is required.

The project is proposed for construction in the summer of 2018 and completed by fall 2018. The project is feasible, necessary, and cost-effective from an engineering standpoint and should be constructed as proposed herein.

2. INTRODUCTION

2.1 Authorization

On October 10, 2017, the City of Circle Pines City Council authorized the preparation of an engineering feasibility report for the 2018 Partial Street Reconstruction Project to, as a first step, include an evaluation of the pavement, rehabilitation method, and improvement costs for the streets within the following areas: Little John Drive, Flowerfield Road, Forest Road, Sherwood Court, Arthur Court, and Nottingham Drive.

2.2 Scope

After discussions with City staff and the City Council, it was decided to study the improvements for Little John Drive, Flowerfield Road, Forest Road, Sherwood Court, Arthur Court, and Nottingham Drive.

2.3 Data Available

Information and materials used in the preparation of this report include the following:

- 2011 Pavement Management Program, WSB, dated October 2011
- 2017 Pavement Forensic Report, WSB, dated November 3, 2017
- Field observations of the area
- Televising reports of the sanitary sewer system

2.4 Project Location

The project is located within the subdivision of Golden Lake Estates in the City of Circle Pines. The project includes several roadways in the following areas:

- Golden Lake Estates
 - Little John Drive
 - Flowerfield Road
 - Forest Road
 - Sherwood Court
 - Arthur Court
 - Nottingham Drive

The project area is shown on **Figure 2** of **Appendix A** of this report.

3. EXISTING CONDITIONS

3.1 Streets

Streets within the proposed improvement area are generally 33 feet wide with surmountable concrete curb and gutter. The streets were initially paved in 1979. The existing right-of-way width for the roadways is 60 feet, with an average bituminous width of 30 feet.

WSB completed a visual inspection and rated the streets in the subject area as part of the 2011 Pavement Management Program. The streets were then classified as “poor.” As a part of the 2018 Street Improvement Project Feasibility Report, a pavement forensic report was completed on the proposed streets to be included with this project. Bituminous pavement cores were taken and a visual inspection of the streets was used to evaluate the current condition. Pavement coring identifies what exists under the visible layer of the pavement and can give a wealth of information including depths of the pavement layers, signs of bonding or un-bonding, and distresses, that might not be visible from the road surface.

These streets are experiencing pavement failure in the form of alligator cracking, block cracking, edge cracking, longitudinal cracking, and transverse cracking. These characteristics are related to the age of the roadways, continuous traffic loadings, and general wear and tear on the roadways. Additional distresses include curb settlement and aging pavement patching.

Below are pictures of the existing condition of the roadways.



Flowerfield Road



Nottingham Drive



Arthur Court



Sherwood Court

A total of 11 pavement cores were completed within the project area and revealed the existing bituminous thicknesses ranged from 2.5 to 4.75 inches and the existing aggregate base thicknesses ranged from 2.5 to 4.5 inches. More data on the pavement conditions can be found in **Appendix D**.

Table 1 – 2018 Partial Street Reconstruction Project Bituminous Pavement Thickness			
Core Location Description	Pavement Core ID	Bituminous Depth	Aggregate Depth
		(Inches)	(Inches)
Little John Drive	1	3	3
Little John Drive	2	2.5	4.5
Nottingham Drive	3	3	4
Nottingham Drive	4	3.25	4
Arthur Court	5	4.75	3.5
Sherwood Court	6	2.75	2.5
Sherwood Court	7	3	4
Forest Road	8	3.5	4
Forest Road (cul- de-sac)	9	4.25	4
Forest Road	10	3.25	4
Flowerfield Road	11	3.25	4

3.2 Sanitary Sewer

Sanitary sewer mains are located on all streets within the project area and vary in size from eight (8)-inch PVC or 12-inch PVC pipe. Discussions with Public Works staff indicated the underground sanitary sewer within the project area are functioning adequately and are not in need of repair.

3.3 Watermain

Watermains are located on all the streets within the project area and vary in size from six (6)-inch to eight (8)-inch. Discussions with Public Works staff indicated the watermain and services within the project area are functioning adequately and are not in need of repair.

3.4 Storm Sewer / Drainage

Existing storm sewer within the project area consists of a reinforced concrete pipe system within the public right-of-way and drainage and utility easements. The system collects storm water runoff from the roadway and adjacent areas and connects to adjacent storm sewer systems that outlet to the nearby City parks. The storm sewer pipe systems within the street project area is in good condition, with the exception of a couple of the catch basins that will need adjustment ring replacement.

4. PROPOSED IMPROVEMENTS

4.1 Street Improvements

Based on visual inspections, pavement core analysis, and budgetary constraints, it is proposed to complete the following improvements in 2018 to improve the design strength of the street pavement and extend the life of the street.

It is proposed to complete a partial reconstruction with spot curb and gutter replacement on the entirety of the area. The pavement has deteriorated beyond the point where a mill and overlay would be suitable; these streets do not have sufficient thickness of the existing bituminous section to allow for effective milling. In addition, the integrity of the pavement has been compromised due to major settlements or frost heaves. It is recommended to remove the entire roadway pavement, correct the subgrade as needed, scarify the existing aggregate, and replace the roadway with new pavement. The streets will be constructed to the proposed street section with three and one-half inches of new bituminous pavement and six inches of aggregate base. The proposed street section can be seen in **Figure 3 of Appendix A**.

It is anticipated that this improvement will extend the life of the roadway, on average, 20 to 30 years with future preventative maintenance in place.

4.2 Storm Sewer / Drainage

Based on the neighborhood meeting, the residents identified several areas that are experiencing storm water pooling due to the curb line settling over time. There was also a storm structure that was identified that is said to be failing that will be rehabilitated as necessary. This will be further looked at during final design.

4.3 Permits and Approvals

Reconstruction of the roadways will disturb over one acre and will require a National Pollution Discharge Elimination Systems (NPDES) General Storm Water Permit that must be obtained by the City of Circle Pines from the Minnesota Pollution Control Agency (MPCA). MPCA rules for storm water management and erosion control will apply to the project.

Since the project proposes to remove and replace impervious surfaces, a City permit for storm water management will be required for the project. At a minimum, the City adopted ordinance for storm water management and erosion control will apply to the project. The City may also review the permit application for wetlands and floodplain issues.

4.3 Right-of-Way / Easements

It is anticipated that all work will take place within the existing roadway right-of-way or within existing drainage and utility easements. Additional right-of-way or easement acquisition is not expected to be needed to construct the project as proposed.

4.4 Detour Routes / Project Phasing

The project will require excavation and disposal of excess material from the existing street area and import of aggregate base and bituminous mixture to construct the new streets. This effort will require closing the roads at times throughout the project area. The roadway will be maintained to allow daily access for residents during construction.

5. FINANCING

5.1 Opinion of Probable Construction Cost

Detailed breakdowns of the Opinion of Probable Cost for the construction are included in **Appendix B**. The opinion of cost incorporated the construction costs experienced in the surrounding area during and includes a 10% contingency factor. Indirect costs are projected at 25% of the construction cost and include engineering, legal, financing, and administrative costs.

5.2 Funding Sources

The City's assessment policy is currently being revised to add a flat and equal assessment rate for partial reconstruction improvements. It is proposed to set this rate at \$2,990 per benefitting residential property for 2018.

The City street fund will fund the remainder of the street improvement costs. Corner lots are assessed as one unit on a street where they have their driveway or address on the street to be reconstructed.

Per the City's assessment policy, each townhome within the project area is proposed to be assessed at the same rate as a single-family residential unit.

A proposed assessment roll is included in **Appendix C** of this report along with an Assessment Map ID identifying the benefitting properties. The proposed Special Assessment calculations for benefitting properties are identified in the assessment roll.

Funding for the project is proposed to come from the Street Reconstruction Fund, Storm Sewer Enterprise Fund, and Special Assessments to benefitting properties as shown in **Table 2** below.

Table 2 – 2018 Partial Street Reconstruction Project Proposed Funding	
Funding Source	Total
Special Assessments	\$331,890
Street Reconstruction Fund	\$345,610
Total Funding	\$677,500

6. PROJECT SCHEDULE

The proposed schedule for this improvement project is as follows for construction to occur in 2018:

Phase 1 – Feasibility Report

City Council Authorizes Feasibility Study..... October 10, 2017
Survey, Geotech Evaluation October / November 2017
Public Information Meeting January 18, 2018
City Council Accepts Feasibility Report and
Sets Public Hearing Date January 23, 2018
Hold Public Hearing/Authorize Preparation of
Final Plans and Specifications.....February 13, 2018

Phase 2 – Final Design

Final Design February / March 2018
Public Informational Meeting March 2018
City Council Approves Plans / Authorizes Ad for Bid..... March 13, 2018
Open Bids April 2018
Award Contract May 2018

Phase 3 – Construction

Preconstruction Meeting June 2018
Public Informational Meeting (with Contractor)..... June 2018
Begin Construction..... June 2018
Substantial Completion August 2018
Final Completion (Final Lift of Bituminous Wear Course)..... September 2018
Assessment Hearing October 2018

7. FEASIBILITY AND RECOMMENDATION

The 2018 Partial Street Reconstruction Project includes 0.96 miles of roadway rehabilitation on Little John Drive, Flowerfield Road, Forest Road, Sherwood Court, Arthur Court, and Nottingham Drive. It is proposed that the streets be improved with a partial reconstruction over the existing roadway width, as identified in this report.

It is the recommendation of WSB & Associates, Inc. that the 2018 Partial Street Reconstruction Project is feasible, necessary, and cost-effective from an engineering standpoint. It is recommended to accept this feasibility report and call for a public hearing for the project in accordance with State Statutes.

APPENDIX A

Figure 1: Location Map
Figure 2: Project Area
Figure 3: Typical Section

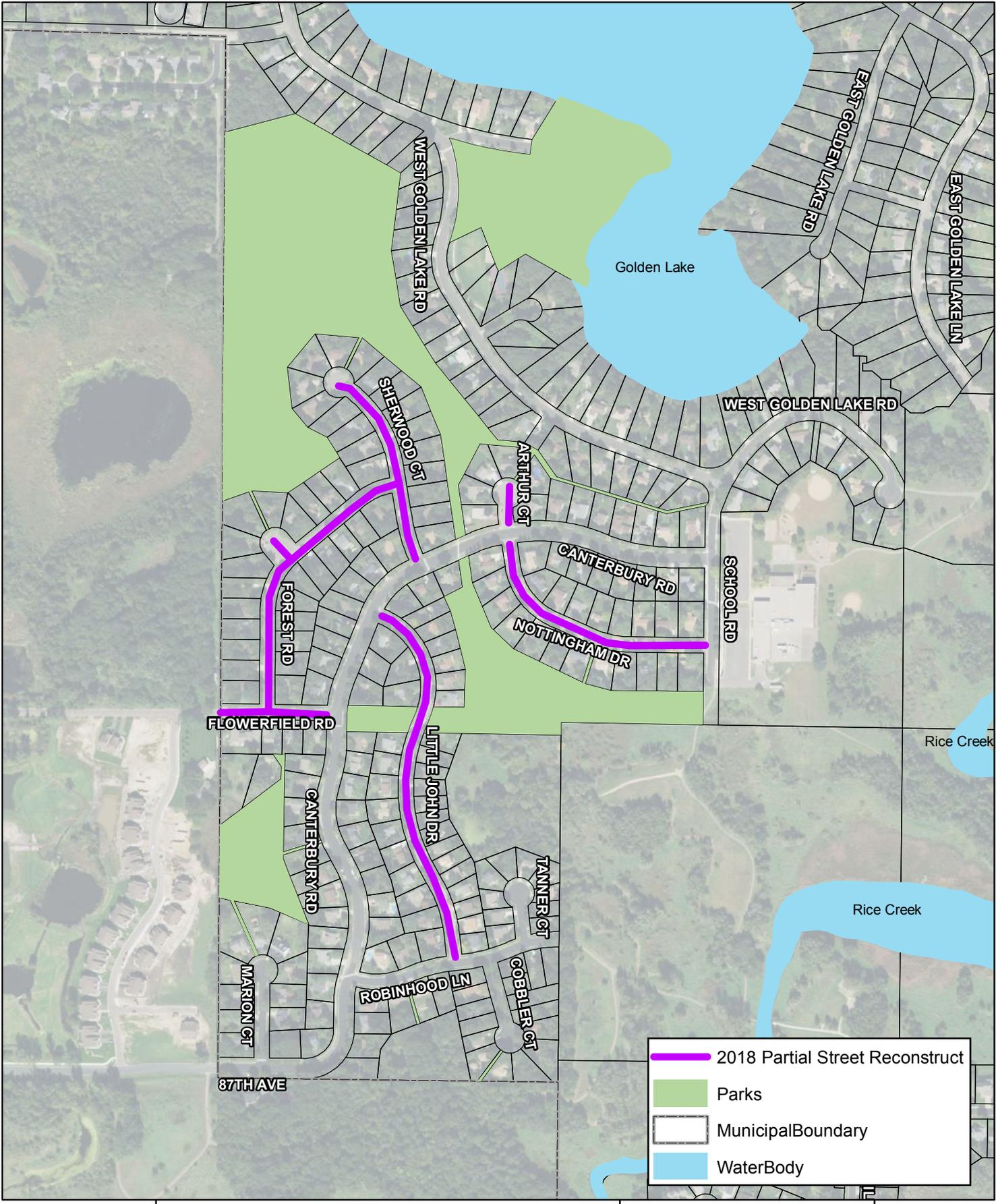
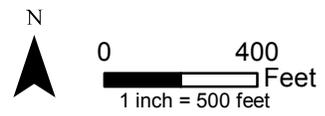
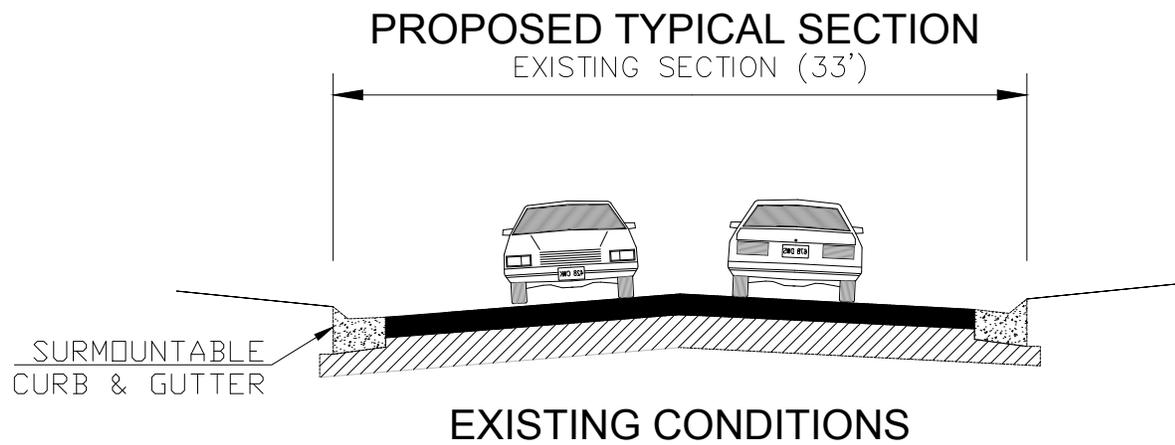
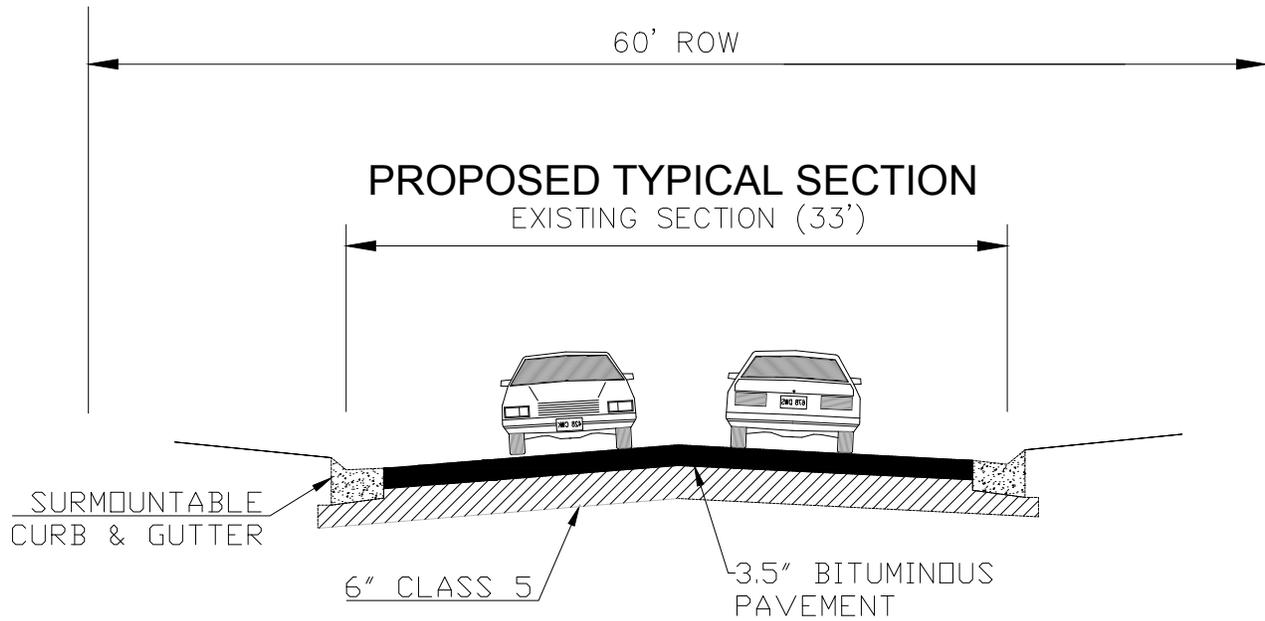


Figure 2 - Project Area
2018 Partial Reconstruction Project
City of Circle Pines





701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com

763-541-4800 • Fax 763-541-1700
INFRASTRUCTURE ■ ENGINEERING ■ PLANNING ■ CONSTRUCTION

2018 PARTIAL STREET
RECONSTRUCTION PROJECT

CIRCLE PINES, MINNESOTA



City of

CIRCLE PINES

December 18, 2017
Project No.010953-000

FIGURE

3

APPENDIX B
Opinion of Probable Cost

Opinion of Probable Cost

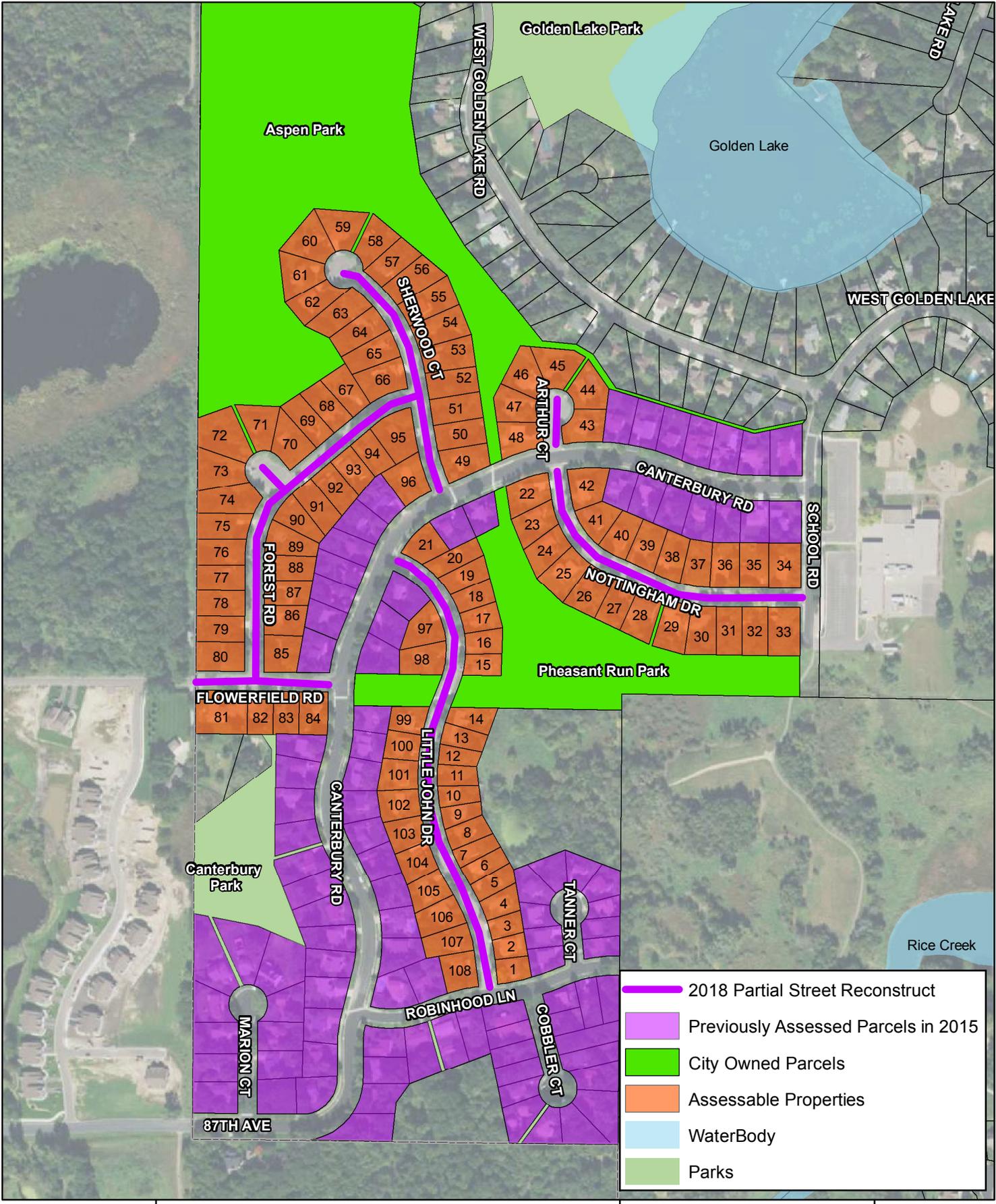
WSB Project: 2018 Street Reconstruction Project
Project Location: City of Circle Pines
WSB Project No: 010953-000

Design By: KLK
Checked By: EME
Date: 1/4/2018

Item No.	MN/DOT Specification No.	Description	Unit	Estimated Total Quantity	Unit Price	Estimated Total Cost
A - SURFACE IMPROVEMENTS						
1	2021.501	MOBILIZATION	L S	1	\$23,500.00	\$23,500.00
2	2104.501	REMOVE CURB AND GUTTER	L F	2,153	\$6.00	\$12,918.12
3	2104.513	SAWING BIT PAVEMENT (FULL DEPTH)	L F	316	\$2.50	\$790.00
4	2104.513	FULL DEPTH RECLAMATION	S Y	19,516	\$3.50	\$68,307.23
5	2105.501	COMMON EXCAVATION	C Y	1,566	\$10.00	\$15,657.80
6	2211.501	AGGREGATE BASE CLASS 5	TON	500	\$18.00	\$9,000.00
7	2211.607	SALVAGE AND PLACE AGGREGATE (CV)	C Y	3,332	\$10.00	\$33,324.66
8	2112.501	ROADWAY PREPARATION	RDST	51	\$200.00	\$10,164.00
9	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL	976	\$2.00	\$1,951.64
10	2360.501	TYPE SP 12.5 WEARING COURSE MIX (2,C) (1.5")	TON	1,654	\$64.00	\$105,856.68
11	2360.501	TYPE SP 12.5 NON-WEARING COURSE MIX (2,C) (2.0")	TON	2,205	\$64.00	\$141,142.24
12	2504.602	ADJUST VALVE BOX	EACH	5	\$250.00	\$1,250.00
13	2506.522	ADJUST FRAME AND RING CASTING	EACH	19	\$400.00	\$7,600.00
14	2531.501	CONCRETE CURB & GUTTER	L F	2,153	\$20.00	\$43,060.40
15	2563.601	TRAFFIC CONTROL	L S	1	\$7,500.00	\$7,500.00
16	2573.530	STORM DRAIN INLET PROTECTION	EACH	13	\$175.00	\$2,275.00
17	2575.505	SODDING TYPE LAWN (INCL. TOPSOIL AND FERT.)	S Y	1,148	\$4.50	\$5,167.25
18	2582.503	CROSSWALK MARKING-EPOXY	S F	200	\$16.00	\$3,200.00
Subtotal Estimated Construction Costs						\$492,700.00
10% Contingencies						\$49,300.00
Total Estimated Construction Costs						\$542,000.00
25% Engr., Fiscal, & Admin						\$135,500.00
A - SURFACE IMPROVEMENTS						\$677,500.00

APPENDIX C

**Figure 4: Assessment Map
Preliminary Assessment Roll**



-  2018 Partial Street Reconstruct
-  Previously Assessed Parcels in 2015
-  City Owned Parcels
-  Assessable Properties
-  WaterBody
-  Parks

Figure 4 - Assessment Map
 2018 Partial Reconstruction Project
 City of Circle Pines

N

 0 400
 1 inch = 400 feet



Preliminary Assessment Roll

WSB Project: 2018 Partial Reconstruction Project
 Project Location: City of Circle Pines
 WSB Project No.: 010953-000
 Date: 1/4/2018

Assessment Policy: \$2,990 per parcel
 Total Surface Improvement Cost: \$677,500.00
 Unit Assessment: \$2,990.00
 Assessable Units: 111

Map Id	Parcel Address	Parcel Owner	Parcel Owner Address	Units	Proposed Assessment
1	270 LITTLE JOHN DR	DAYAN ATHENA & ARCHIMEDES	270 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
2	272 LITTLE JOHN DR	MAYNARD KEVIN E & RUTH A	272 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
3	274 LITTLE JOHN DR	SCHNEIDER GENE	7726 N WILD TURKEY DR STURGIS SD	1	\$2,990.00
4	276 LITTLE JOHN DR	NORTHWICK BYRON	276 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
5	278 LITTLE JOHN DR	FLATGARD AARON L	278 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
6	280 LITTLE JOHN DR	SKILDUM KYLE	280 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
7	282 LITTLE JOHN DR	SCHUG AMANDA	282 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
8	284 LITTLE JOHN DR	LEWIS JACOB	284 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
9	286 LITTLE JOHN DR	NYAFI REBECCA O	286 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
10	288 LITTLE JOHN DR	KLEIN JEFFREY P & CAROL J	288 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
11	290 LITTLE JOHN DR	SOFIE RONALD	290 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
12	292 LITTLE JOHN DR	STIGEN GREGORY D & PATRICIA	292 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
13	294 LITTLE JOHN DR	NEUMANN RICHARD	294 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
14	296 LITTLE JOHN DR	WALTER GERALD	296 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
15	298 LITTLE JOHN DR	PIEN BENJAMIN	298 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
16	300 LITTLE JOHN DR	LIEN DAVID	300 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
17	302 LITTLE JOHN DR	HOFFMAN CATHERINE	302 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
18	304 LITTLE JOHN DR	CM MJ PROPERTIES LLC	5416 HIGHWOOD DR W EDINA MN	1	\$2,990.00
19	306 LITTLE JOHN DR	DIXEN ARVID	306 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
20	308 LITTLE JOHN DR	WALSH CHRISTOPHER J	30105 FIR TRAIL STACY MN	1	\$2,990.00
21	310 LITTLE JOHN DR	TIMM NIGEL	310 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
22	370 NOTTINGHAM DR	WYCHOR JAMES J II & DIANE	370 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
23	372 NOTTINGHAM DR	LEPPANEN JUSTIN	372 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
24	374 NOTTINGHAM DR	JACKSON LYNN A & MARY A	374 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
25	376 NOTTINGHAM DR	MILLER JOHN M	376 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
26	378 NOTTINGHAM DR	BLACKFORD BENJAMIN	378 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
27	380 NOTTINGHAM DR	SCHUETTE KELLY	380 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
28	382 NOTTINGHAM DR	PETERSON RONALD W & CECLIA	382 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
29	384 NOTTINGHAM DR	LENZ TRUSTEE VARLAND & LINCOLN TRUSTEE LANICE	384 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
30	386 NOTTINGHAM DR	THOME THOMAS B & P M	386 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
31	388 NOTTINGHAM DR	CULLEN MEGEN	388 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
32	390 NOTTINGHAM DR	ARNETT JOHN	390 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
33	392 NOTTINGHAM DR	MANTZ GREGORY	392 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
34	387 NOTTINGHAM DR	KELLY KATHERINE L	387 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
35	385 NOTTINGHAM DR	EKSTEDT PAUL	385 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
36	383 NOTTINGHAM DR	ZINGSHEIM BRANDON	383 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
37	381 NOTTINGHAM DR	JUDSON FRANCIS J & KELLY JO	381 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
38	379 NOTTINGHAM DR	MAYNARD JASON	379 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
39	377 NOTTINGHAM DR	JONES KENNETH D & GAIL M	377 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
40	375 NOTTINGHAM DR	JOHNSON RONALD & JANE	375 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
41	373 NOTTINGHAM DR	MCPMAHON AMY	373 NOTTINGHAM DR NE CIRCLE PINES MN	1	\$2,990.00
42	371 NOTTINGHAM DR	LIND JEFFREY V & CATHY A	371 NOTTINGHAM DR CIRCLE PINES MN	1	\$2,990.00
43	400 ARTHUR CT	HIATT BRIAN	400 ARTHUR CT CIRCLE PINES MN	1	\$2,990.00
44	402 ARTHUR CT	LESNAR TIMOTHY J & MARIA C	402 ARTHUR CT CIRCLE PINES MN	1	\$2,990.00

Preliminary Assessment Roll

WSB Project:	2018 Partial Reconstruction Project	Assessment Policy: \$2,990 per parcel
Project Location:	City of Circle Pines	Total Surface Improvement Cost: \$677,500.00
WSB Project No.:	010953-000	Unit Assessment: \$2,990.00
Date: 1/4/2018		Assessable Units: 111

Map Id	Parcel Address	Parcel Owner	Parcel Owner Address	Units	Proposed Assessment
45	404 ARTHUR CT	KERFELD GLENN & NANCY	404 ARTHUR CT CIRCLE PINES MN	1	\$2,990.00
46	405 ARTHUR CT	MUNSON MEGAN	405 ARTHUR CT CIRCLE PINES MN	1	\$2,990.00
47	403 ARTHUR CT	LOKOWICH SUSAN	403 ARTHUR CT CIRCLE PINES MN	1	\$2,990.00
48	401 ARTHUR CT	JOHNSON ROBERT E & GLORIA J	401 ARTHUR CT CIRCLE PINES MN	1	\$2,990.00
49	320 SHERWOOD CT	PETERSON BRUCE C	320 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
50	322 SHERWOOD CT	CARBERT FLOYD	322 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
51	324 SHERWOOD CT	MARIN JOSEPH	324 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
52	326 SHERWOOD CT	SIKORA CHARLES P & NANCY L	326 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
53	328 SHERWOOD CT	EBELING TIMOTHY A & VALERIE L	328 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
54	330 SHERWOOD CT	HOVE PAUL A	330 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
55	332 SHERWOOD CT	KORSMOE RICHARD A & TINA M	332 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
56	334 SHERWOOD CT	GREENSWEIG DANIEL & COLLEEN	334 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
57	336 SHERWOOD CT	CARLSEN STEVEN & CHRISTINE	336 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
58	338 SHERWOOD CT	THOMAS MICHAEL S & SUSAN R	338 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
59	337 SHERWOOD CT	MONROE CHARLES B & LESA W	337 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
60	335 SHERWOOD CT	HESS DONNA L & GRENDLER CLARE	335 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
61	333 SHERWOOD CT	LINDNER GARY C & KATHRYN E	333 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
62	331 SHERWOOD CT	WASHBURN MARC R & ANGELA L	331 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
63	329 SHERWOOD CT	ROOD RUSSELL M & NANCY G	329 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
64	327 SHERWOOD CT	JOHNSON DARRELL A & KAREN	327 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
65	325 SHERWOOD CT	SIVANICH DAVID & DONNA	325 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
66	369 FOREST DR	REICHENBACHER JASON	369 FOREST DR CIRCLE PINES MN	1	\$2,990.00
67	367 FOREST DR	MICHAELSON WAYNE A & TAMARA	367 FOREST DR CIRCLE PINES MN	1	\$2,990.00
68	365 FOREST DR	BURNS JOHN P & EUNICE N	365 FOREST DR CIRCLE PINES MN	1	\$2,990.00
69	363 FOREST DR	RICHTER DAVID W & DOREEN J	363 FOREST DR CIRCLE PINES MN	1	\$2,990.00
70	361 FOREST DR	BUNKOWSKE BONITA	361 FOREST DR CIRCLE PINES MN	1	\$2,990.00
71	359 FOREST DR	STEVERMER VANESSA E & COTTLE R	359 FOREST DR CIRCLE PINES MN	1	\$2,990.00
72	357 FOREST DR	LOFSTAD ERIC	357 FOREST DR CIRCLE PINES MN	1	\$2,990.00
73	355 FOREST DR	CURRIER TRUSTEE GUY & CURRIER TRUSTEE LAURA	355 FOREST DR CIRCLE PINES MN	1	\$2,990.00
74	353 FOREST DR	YONG PATRICK G	353 FOREST DR CIRCLE PINES MN	1	\$2,990.00
75	351 FOREST DR	ZABEL ANTHONY	351 FOREST DR CIRCLE PINES MN	1	\$2,990.00
76	349 FOREST DR	STARK JOSEPH	349 FOREST DR CIRCLE PINES MN	1	\$2,990.00
77	347 FOREST DR	WHITE PATRICIA C	347 FOREST DR CIRCLE PINES MN	1	\$2,990.00
78	345 FOREST DR	BEALKA STEPHEN J & KATHRYN	345 FOREST DR CIRCLE PINES MN	1	\$2,990.00
79	343 FOREST DR	BROWN THOMAS P & OLSON LISA E	343 FOREST DR CIRCLE PINES MN	1	\$2,990.00
80	341 FOREST DR	GERLACH STEVEN E & CHARDEL	341 FOREST DR CIRCLE PINES MN	1	\$2,990.00
81	360 FLOWERFIELD RD	GOERLITZ MARCUS	360 FLOWERFIELD RD CIRCLE PINES MN	1	\$2,990.00
82	362 FLOWERFIELD RD	CIARDELLI HEIKE	362 FLOWERFIELD RD CIRCLE PINES MN	1	\$2,990.00
83	364 FLOWERFIELD RD	TRIPPE JEFFREY	PO BOX 532 CIRCLE PINES MN	1	\$2,990.00
84	366 FLOWERFIELD RD	LUND MARY A	366 FLOWERFIELD RD CIRCLE PINES MN	1	\$2,990.00
85	340 FOREST DR	UNGER DANIEL	340 FOREST DR CIRCLE PINES MN	1	\$2,990.00
86	342 FOREST DR	LAPOINTE TROY	342 FOREST DRIVE CIRCLE PINES MN	1	\$2,990.00
87	344 FOREST DR	OTTO PAUL	344 FOREST DR CIRCLE PINES MN	1	\$2,990.00
88	346 FOREST DR	NORBERG DONNA	346 FOREST DR CIRCLE PINES MN	1	\$2,990.00

Preliminary Assessment Roll

WSB Project:	2018 Partial Reconstruction Project	Assessment Policy: \$2,990 per parcel
Project Location:	City of Circle Pines	Total Surface Improvement Cost: \$677,500.00
WSB Project No.:	010953-000	Unit Assessment: \$2,990.00
Date: 1/4/2018		Assessable Units: 111

Map Id	Parcel Address	Parcel Owner	Parcel Owner Address	Units	Proposed Assessment
89	348 FOREST DR	BALZA LAURA	348 FOREST DR CIRCLE PINES MN	1	\$2,990.00
90	350 FOREST DR	BIGHLEY GREGORY	350 FOREST DR CIRCLE PINES MN	1	\$2,990.00
91	352 FOREST DR	WILLIAMS SARAH	352 FOREST DR CIRCLE PINES MN	1	\$2,990.00
92	354 FOREST DR	ERICKSON JOLENE	354 FOREST DR CIRCLE PINES MN	1	\$2,990.00
93	356 FOREST DR	CAPOUCH KATHRYN	356 FOREST DR CIRCLE PINES MN	1	\$2,990.00
94	358 FOREST DR	ECKENROTH CHARLENE	PO BOX 501 CIRCLE PINES MN	1	\$2,990.00
95	323 SHERWOOD CT	SEVERSEIKE JEFFREY	323 SHERWOOD CT CIRCLE PINES MN	1	\$2,990.00
96	321 SHERWOOD CT	JOSTAD KIRK	2527 50TH ST GRANADA MN	1	\$2,990.00
97	293 LITTLE JOHN DR	JORGENSON STEPHEN & GLORIA	293 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
98	291 LITTLE JOHN DR	ERICKSON PAUL D & MARILYN L	291 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
99	289 LITTLE JOHN DR	MICHAUD ELIZABETH	289 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
100	287 LITTLE JOHN DR	KRZENSKI DEBRA K	287 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
101	285 LITTLE JOHN DR	COLE MARK W & DEBRA E	285 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
102	283 LITTLE JOHN DR	THAYER JAMES R & MARY M	283 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
103	281 LITTLE JOHN DR	HOVELSRUD JENS M & JILLANE K	281 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
104	279 LITTLE JOHN DR	GODDARD CURTIS F & JOAN D	279 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
105	277 LITTLE JOHN DR	LANGE JASON	277 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
106	275 LITTLE JOHN DR	GROSS WAYNE E & DOREEN M	275 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
107	273 LITTLE JOHN DR	PALUMBO NICK	273 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
108	271 LITTLE JOHN DR	SCOTT MICHAEL P & CHRISTINE	271 LITTLE JOHN DR CIRCLE PINES MN	1	\$2,990.00
109		CIRCLE PINES CITY OF	200 CIVIC HEIGHTS CIR CIRCLE PINES MN	1	\$2,990.00
110		CIRCLE PINES CITY OF	200 CIVIC HGHTS CIR CIRCLE PINES MN	1	\$2,990.00
111		CIRCLE PINES CITY OF	200 CIVIC HGTS CIR CIRCLE PINES MN	1	\$2,990.00

APPENDIX D
Pavement Forensics Data



Technical Memorandum

*To: Mr. Eric Eckman
Project Manager*

From: Sheue Torng Lee, EIT

Date: November 3, 2017

*Re: Pavement Coring Forensic Report
WSB Project Number: 010953*

Introduction

WSB & Associates is pleased to submit this pavement forensics report detailing the results of the pavement coring which were obtained on October 31st, 2017 on pavement within the City of Circle Pines. The various characteristics of the pavement cores were analyzed to assist in determining the appropriate pavement maintenance or rehabilitation method for each roadway segment.

A total of 11 pavement cores were taken within the roadway segments. The locations of the pavement cores are summarized in Figure 1 below and a summary of the pavement depths, conditions and underlying soil classifications are shown on Table 1 below. Pictures of the pavement cores and roadway surface are shown in Appendix A of this report.

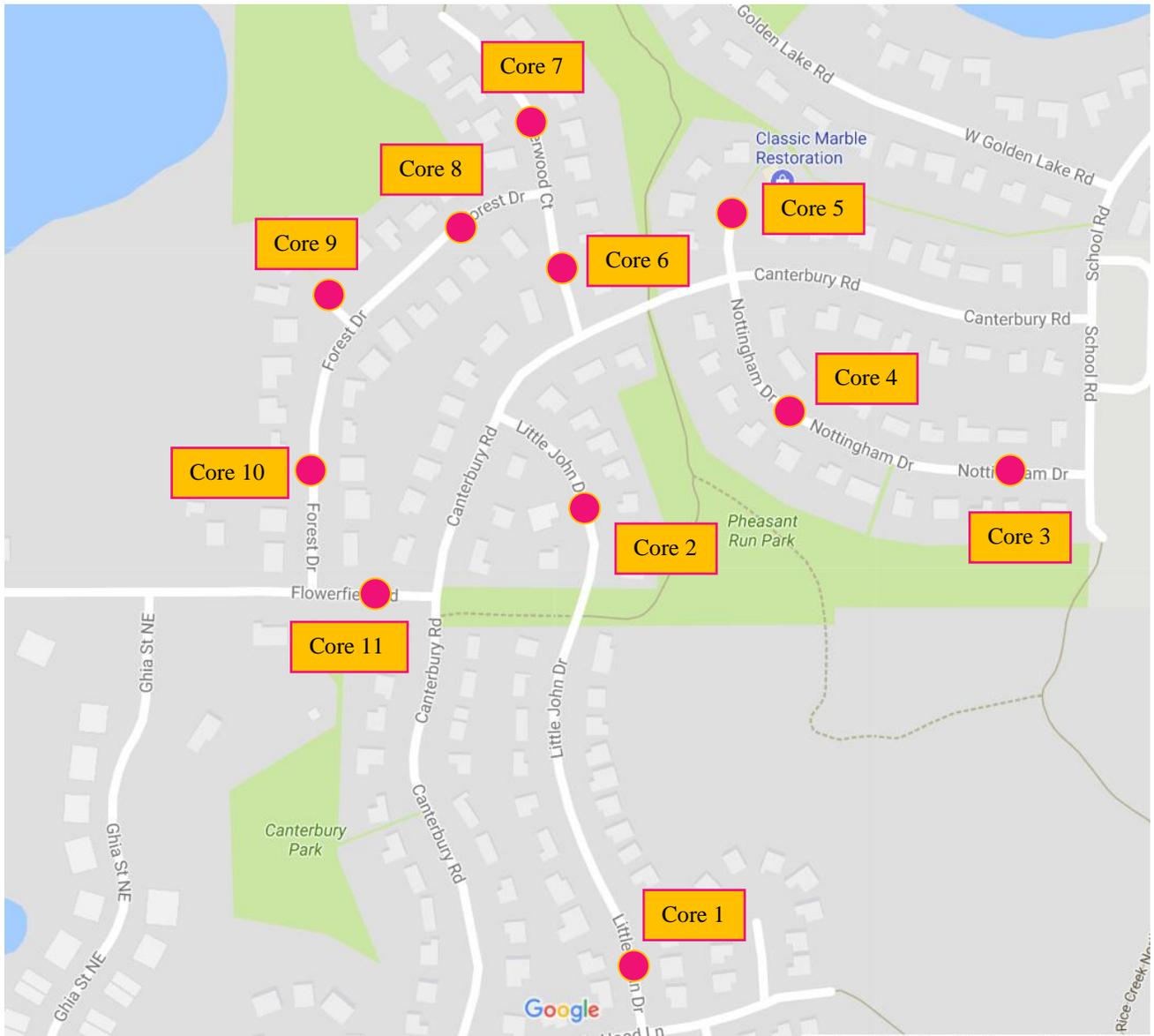


Figure 1. Pavement core locations taken within the City of Circle Pines.

Table 1. Pavement core information and recommended maintenance activity.

Core ID	Location	Bituminous Depth (inches)	Aggregate Depth (inches)	Recommended Maintenance Activity	Notes
1	Little John Drive	3	3	Reclamation	1" top lift. Core was in good condition.
2	Little John Drive	2.5	4.5	Reclamation	1" top lift. Bottom of the core deteriorated.
3	Nottingham Drive	3	4	Reclamation	Core was in good condition.
4	Nottingham Drive	3.25	4	Reclamation	1" top lift. Core was in good condition.
5	Arthur Court	4.75	3.5	Reclamation	2" top lift. Core was in good condition.
6	Sherwood Court	2.75	2.5	Reclamation	1" top lift. Core was in good condition.
7	Sherwood Court	3	4	Reclamation	1" top lift. Core was in good condition.
8	Forest Road	3.5	4	Reclamation	1" top lift. Core was in good condition.
9	Forest Road (Cul-de-sac)	4.25	4	Reclamation	1" top lift. Core was in good condition.
10	Forest Road	3.25	4	Reclamation	1.5" top lift. Core was in good condition.
11	Flowerfield Road	3.25	4	Reclamation	1" top lift. Bottom of the core deteriorated.

Mr. Eric Eckman
November 3, 2017

Summary of Findings and Recommendations

Several factors are considered when determining the number of pavement cores to be taken, including the pavement condition or visible distresses present on the pavement and the variability of the pavement depth as the cores are being completed. Pavement coring identifies what exists underneath the visible layer of the pavement and can give a lot of information including depths of the pavement layers, signs of bonding or debonding, and distresses that might not be visible from the road surface.

All the cores taken were in good condition but the pavement surface observed to be in poor condition with high severity alligator cracking and potholes. Underlying the bituminous pavement was gravel base, with subgrade material identified to be sandy soil. Pavement conditions were uniform around the neighborhood where all the cores were taken. Mill and overlay would not be recommended since the cracks will reflect through. Thus, we would recommend performing a reclamation on all the roads evaluated as a long-term solution.

Little John Drive

Pavement cores 1 and 2 were taken on Little John Drive with bituminous depths at 2.5 to 3 inches. Underlying the bituminous there were 4 inches of gravel. There were high severity alligator cracks observed on the pavement surface. Although pavement cores were in good condition and minor deterioration at the bottom, mill and overlay would not be recommended since the road was in poor condition covered with alligator cracking. It would be our recommendation to perform a reclamation on this road to remove all the distresses found.

Nottingham Drive

Pavement cores 3 and 4 were obtained on Nottingham Drive and had bituminous depths of 3 and 3.25 inches. There were high severity alligator cracks, which some had transformed into potholes, found on the pavement surface. The cores were in good condition but due to the distresses observed, we would recommend perform a reclamation on this road.

Arthur Court

Pavement core 5 was taken on the cul-de-sac at Arthur Court with a bituminous depth of 4.75 inches. There were 3.5 inches of gravel found. The core was in good condition but the road surface observed to be in bad shape. It would be our recommendation to perform a reclamation on this road.

Sherwood Court

Pavement cores 6 and 7 were taken on Sherwood Court and had bituminous depths ranging from 2.75 inches to 3 inches. There was more than 2.5 inches of gravel underlying the bituminous layer. It would be our recommendation to perform a reclamation since the road was in poor condition covered with high severity alligator cracking.

Forest Road

Pavement cores 8, 9, and 10 were taken on Forest Road, which one was taken on the cul-de-sac. The cores had bituminous depths ranging from 3.25 inches to 4.25 inches. There were 4 inches or more gravel found. Pavement surface observed to be in poor condition with high severity alligator cracks. It would be our recommendation to perform a reclamation.

Flowerfield Road

Pavement core 11 was taken on Flowerfield Road, with a bituminous depth of 3.25 inches. There were 4 inches of gravel found. It would be our recommendation to perform a reclamation since the road was in poor condition covered with patching and alligator cracking.

Mr. Eric Eckman
November 3, 2017

Appendix A

Circle Pines Pavement Coring Pictures

Core 1: Little John Drive



Core 2: Little John Drive



Core 3: Nottingham Drive



Core 4: Nottingham Drive



Mr. Eric Eckman
November 3, 2017

Core 5: Arthur Court



Core 6: Sherwood Court



Mr. Eric Eckman
November 3, 2017

Core 7: Sherwood Court



Core 8: Forest Road



Core 9: Forest Road (Cul-de-sac)



Core 10: Forest Road



Core 11: Flowerfield Road



APPENDIX E

Neighborhood Meeting – Resident Comment Cards



City of Circle Pines
Public Informational Meeting
Thursday, January 18, 2018
2018 Partial Street Improvement Project
WSB Project No. 10953

COMMENT CARD

Name Troy Lapointe Phone (763) 732-8488
Address 342 Forest Dr. E-Mail _____
City Circle Pines State MN Zip 55014

General Comments:

June 2nd - 1-year old birthday party

~ 75 guests coming, so ~ 30 cars?

Let me know if there will be

restricted parking on Forest Dr

June 2nd noon - 6pm.

Thank you!

Signature Troy Lapointe Date 1/18/18

Return to the City of Circle Pines
200 Civic Heights Circle
Circle Pines, MN 55014



**City of Circle Pines
Public Informational Meeting
Thursday, January 18, 2018
2018 Partial Street Improvement Project
WSB Project No. 10953**

COMMENT CARD

Name Chuck & Lesa Monroe Phone (763) 783-2467
Address 337 Sherwood Ct E-Mail clmonroe@comcast.net
City Circle Pines State MN Zip 55014

General Comments:

Will be having a graduation party in June - no
specific date yet

Signature Lesla W. Monroe Date 1-18-2018

Return to the City of Circle Pines
200 Civic Heights Circle
Circle Pines, MN 55014



City of Circle Pines
Public Informational Meeting
Thursday, January 18, 2018
2018 Partial Street Improvement Project
WSB Project No. 10953

COMMENT CARD

Name Curtis Goddard Phone (763) 300-3778
Address 279 Little John Drive E-Mail cjgoddard@cp.com
City Circle Pines State MN Zip 55014

General Comments:

Daycare at this Address

Hours: 6:30 Am

to
5:30 Pm

Own 31st Fifthwheel RV

Use every Friday to Sunday

from Memorial Day to Labor Day

Underground Irrigation System

Signature

Curtis Goddard

Date

1-18-18

Return to the City of Circle Pines
200 Civic Heights Circle
Circle Pines, MN 55014



City of Circle Pines
Public Informational Meeting
Thursday, January 18, 2018
2018 Partial Street Improvement Project
WSB Project No. 10953

COMMENT CARD

Name Tim Lesnar Phone (612) 250.0041
Address 402 ARTHUR Ct. E-Mail Tim.Lesnar@gmail.com
City CP State MN Zip _____

General Comments:

- ① Lawn irrigation in Rt of way.
- ② Driveway Replacement Available too?
- ③ Curb replacement at driveway to make for smoother entry?

Signature _____ Date _____

Return to the City of Circle Pines
200 Civic Heights Circle
Circle Pines, MN 55014



City of Circle Pines
Public Informational Meeting
Thursday, January 18, 2018
2018 Partial Street Improvement Project
WSB Project No. 10953

COMMENT CARD

Name Gail Jones Phone (763) 780-3665
Address 377 Nottingham Dr E-Mail K-r_jones@Comcast.net
City Circle Pines State MN Zip 55014

General Comments:

Water collects on the east end of Nottingham Dr
(Intersection of Nottingham & School road) N side

Nottingham is the route for parents dropping
their children off @ Golden Lake Elementary
There is often summer school @ Golden Lake Elementary

Signature

Gail Jones

Date

1-18-18

Return to the City of Circle Pines
200 Civic Heights Circle
Circle Pines, MN 55014