

Item 7b.

Sunfish Lake Engineer's Report for March 5, 2013

By: Don Sterna, PE, City Engineer

Date: March 1, 2013

1. Engineering Activities Undertaken in the Month of February

This past month was a slow month for engineering activities in the City as the following engineer's report indicates:

Sunfish Lake Water Quality Investigation – The Metropolitan Council's 2011 Water Quality report is available; however, they only published last year's results for Sunfish Lake and Horseshoe Lake. I think the reason the Hornbeam Lake was left out is the simple fact that there have not been any volunteers to sample this lake for the past few years. The results for both Sunfish Lake and Horseshoe Lake are attached to this report for your review. The sampling results showed that the overall water quality rating in Sunfish Lake rose one level in all three categories from C and B up to levels B and A from last year. The water quality is rated by levels of Phosphorus (TP), Chlorophyll-a (CLA), and total nitrogen (TKN) found in each lake based on the samples collected by volunteers. It is difficult to ascertain the exact reason why the water quality levels raised in 2011; however, the yearly fluctuations are more closely linked to weather conditions which vary from year to year than human interaction.

Inver Grove Heights Storm Sewer Improvement Cost Participation Update – In March, I anticipate to here back on the cost allocation study that the Watershed was performing on the pond outlet improvements proposed by the Watershed. The cost implications to Sunfish Lake will be reviewed and commented on once we receive the study.

Harmon Park Address Revision – I discussed this issue with County Emergency Dispatch, and they explained that it takes some time to be activated in their system. They are checking on their end to see where it is within their system. I will have a current update at the Council meeting.

2. Public Works' Activities Undertaken in the Month of February

2013 Street Seal Coat Improvements – The City received four quotes to complete street seal coating and crack sealing on City streets shown on the attached figure. Quotes were requested from four companies who specialize in this type of work. The four quotes we received are as follows:

1. Asphalt Surface Technologies Corp..... \$ 37,238.00
2. Pearson Bros Inc. \$ 38,478.40
3. Allied Blacktop Company \$ 49,832.40
4. Fahrner Asphalt Sealers LLC..... \$ 83,046.00

Attached is a Recommendation memo for the City Council to review and consider approving at the March Council Meeting. The attached memo also contains the bidding documents we received for your information.

The Capital Improvement Plan identified \$35,000 to complete this project; however, the area identified results in a slightly higher cost than originally estimated. With the low bids we received, we recommend completing all the streets as identified on the map. I am recommending that the City Council approve the quote from Asphalt Surface Technologies for \$37,238. Also, I am requesting the Council to allow for some construction contingency in case we see some additional work we want to accomplish while we have the contractor on site. Therefore, I am requesting the Council approve a cost not to exceed of \$40,000 for the project construction cost. The additional \$5,000 could be reallocated from the snow plow budget to cover the additional costs.

Snow Plowing Activity – The current snow plow expenditures through February 15, 2013, have been \$12,620 out of a budget of \$35,000. I know that there has been some additional snow plowing activity since then; however, I not sure what those costs are at this time. I did receive one concern on Grieve Glen Lake about the lack of removing the slush from the roadway when it has been melting. At the next warm snap I will have the contractor run through the City to remove the slushy areas. The snow plow contractor continues to monitor the roadway conditions and calls when we has seen road conditions that need attention before he proceeds with additional sanding and or plowing. Please let me know if you receive calls from residents regarding snow and ice removal concerns so I am able to notify the contractor and provide clear direction on what needs to be done.

3. Anticipated Engineering and Public Works' Activities for the Month of March

SWPPP Yearly Public Hearing – At the April Council Meeting, we will be holding our yearly Public Hearing discussing the Storm Water Pollution Prevention (SWPPP) review for the City. At that time, we will discuss the current SWPPP and present ways that both the City and Residents can help to continue the improvements in water quality and answer any questions from the public. Water quality improvements take years of continuous work, and at times such as in 2011, you will see improvements in water quality due to varying weather encountered outside of human control.

2013 Street Sign Quotes – As discussed at last month's meeting, the Council approved the request for quotes for street sign replacements up to a contract cost of \$5,000 which is in the City budget for this year. I was unable to finalize the quotes in February so I will be bringing these quotes to the April Council meeting for approval.

City Street Sweeping Quotes – I will be contacting several street sweepers to get quotes to perform spring, street cleaning for action at the April Council meeting.

2014 Street Reconstruction Project – As we discussed at last month's Council meeting, the 2013 CIP identified the need to reconstruct a portion of Windy Hill Road and Upper 55th Street along with milling and overlaying Windy Hill Court, Windy Hill Road, Upper 55th Street, and the western section of Angell Road in 2014. I would like to discuss this project this month in greater detail with the Council to receive input as how to proceed. If the project is to move forward, the next step would be to order a Feasibility Report. The Report would identify the options available to rehabilitate these roadways and the associated costs and available financing options to fund the project. As part of the Feasibility Study, we would hold a public meeting to discuss the findings, costs, and potential assessments to the abutting residents.

If the Council desires to move the project to the next phase, we would prepare a brief proposal that would identify the engineering costs for the feasibility report, plan preparation, and construction cost for the April Council meeting for approval.

City Maps Update – In March, I will be updating the City map to reflect the residential changes that took place. The new maps will be available at the April Council Meeting.

At this time, there are no other planned City engineering activities for the month of March.

The above constitutes the Engineering Report for the City of Sunfish Lake for March 5, 2013.

Respectfully submitted,

WSB & Associates, Inc.



Donald W. Sterna, PE
City Engineer

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Sunfish Lake [Sunfish Lake] (19-0050) City of Sunfish Lake

Sunfish Lake is located in the City of Sunfish Lake (Dakota County). The lake has a surface area of 49 acres and a maximum depth of 9.8 m (32 ft).

During each sampling event the lake was monitored for total phosphorus (TP), chlorophyll-a (CLA), and total kjeldahl nitrogen (TKN), and Secchi transparency, as well as the lake's perceived physical condition and recreational suitability.

2011 summer (May-September) data summary

<i>Parameter</i>	<i>Mean</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Grade</i>
TP (µg/l)	30.8	11.0	55.0	B
CLA (µg/l)	11.5	1.3	43.0	B
Secchi (m)	3.3	1.1	5.2	A
TKN (mg/l)	0.73	0.52	1.20	
<i>Lake Grade</i>				B

The lake received a lake grade of B for 2011. This was the first year in the lake's historical CAMP database that the lake has received an A grade for Secchi depth. Additional years of monitoring are suggested for continuing to build the water quality database so as to better understand the lake's water quality and determine potential water quality trends.

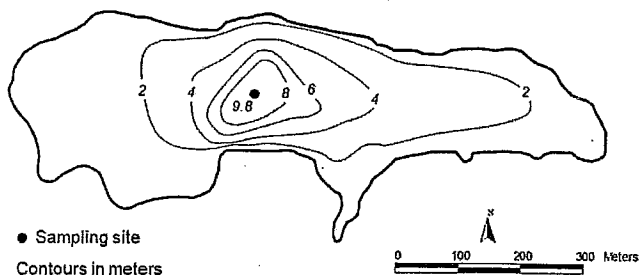
Throughout the monitoring period, the volunteer's opinions of the lake's physical condition and recreational suitability were ranked on a 1-to-5 scale. These user perception rankings are shown on the following page.

If you notice any errors in the lake's data or physical information, or are aware of any additional or missing information, please contact Brian Johnson of the Metropolitan Council at (651) 602-8743 or brian.johnson@metc.state.mn.us.

Sunfish Lake

Sunfish Lake, Dakota Co.

Lake ID: 190050-00
WMO: Lower Mississippi River
Volunteer: Jim Stowell



2011 Data

Date	Surf. Temp. (°C)	Bot. Temp. (°C)	Surf. DO (mg/l)	Bot. DO (mg/l)	CLA (µg/l)	Surf. TP (µg/l)	Bot. TP (µg/l)	Secchi (m)	PC (1-5)	RS (1-5)
4/24/2011	8.8				14	60		1.8	1	1
5/6/2011	14.1				3	25		3.1	1	1
5/22/2011	17.3				5.1	20		3.7	1	1
6/4/2011	20.4				4.3	22		4	3	2
6/12/2011	18.6				3.2	15		4.1	2	2
7/1/2011	27.4				2.7	11		5.2	2	2
7/17/2011	32.1				1.3	17		4.8	3	3
7/29/2011	27.8				1.3	25		4	2	2
8/11/2011	24.6				2.6	50		2.5	2	2
8/22/2011	25.8				43	51		1.9	4	3
9/10/2011	24.2				30	48		1.1	4	4
9/25/2011	15.6				30	55		1.5	2	3
10/4/2011	17.5				10	56		2.2	1	1
10/22/2011	11				11	113		2.6	2	2

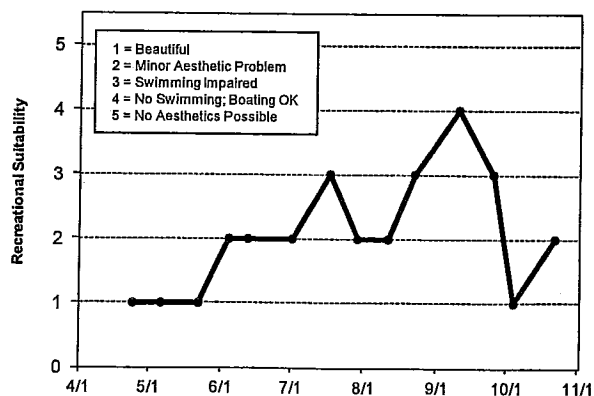
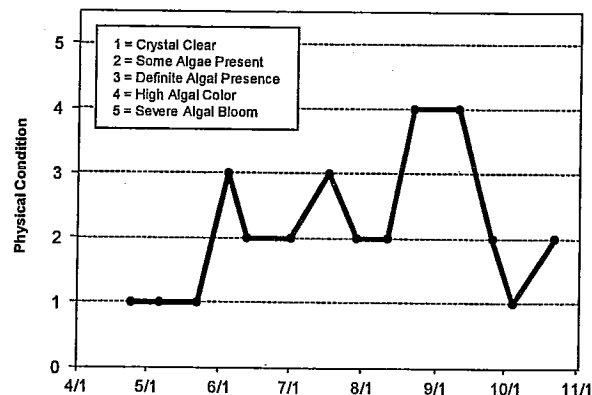
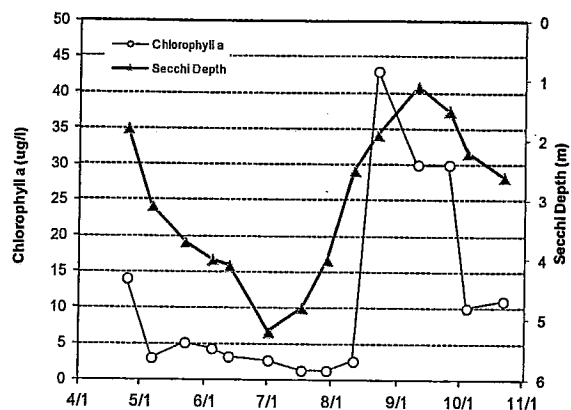
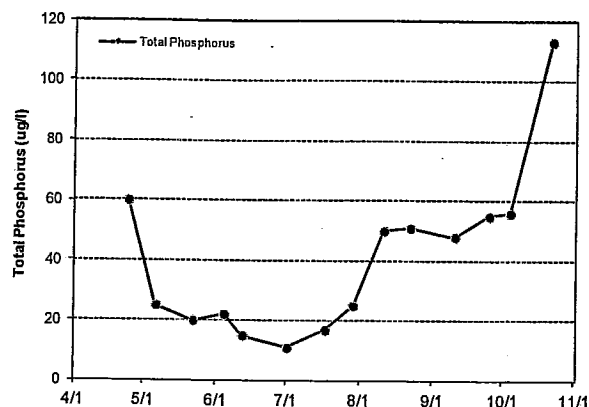
Lake Water Quality Grades Based on Summertime Averages

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total Phosphorus												
Chlorophyll a												
Secchi Depth												
Lake Grade												

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total Phosphorus												
Chlorophyll a												
Secchi Depth												
Lake Grade												

Year	2004	2005	2006	2007	2008	2009	2010	2011
Total Phosphorus								
Chlorophyll a								
Secchi Depth								
Lake Grade								

Source: Metropolitan Council and STORET data



Horseshoe Lake [Sunfish Lake] (19-0051) City of Sunfish Lake

Horseshoe Lake is a 16-acre lake located within the City of Sunfish Lake (Dakota County). There is very little morphological information available for the lake.

On each sampling day the lake was monitored for total phosphorus (TP), chlorophyll-a (CLA), total kjeldahl nitrogen (TKN), and Secchi transparency, as well as the lake's perceived physical condition and recreational suitability. The resulting data and graphs appear on the next page.

2011 summer (May-September) data summary

<i>Parameter</i>	<i>Mean</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Grade</i>
TP ($\mu\text{g/l}$)	22.6	18.0	28.0	A
CLA ($\mu\text{g/l}$)	4.3	2.2	7.5	A
Secchi (m)	+3.2	3.1	+3.2	A
TKN (mg/l)	0.60	0.50	0.68	
Lake Grade				A

The lake received a lake grade of A in 2011. However, the water clarity was better than the Secchi depth data would suggest since most of the measurements were made with the Secchi disk visible on the lake bottom. Therefore the Secchi depth mean is actually greater than shown above, and falls above the threshold for an A grade. Continued monitoring is recommended to increase the power for determining trends, and to continue to build the water quality database for this lake.

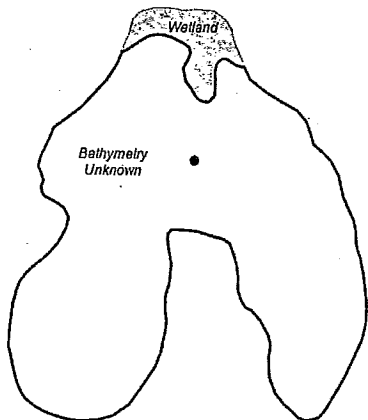
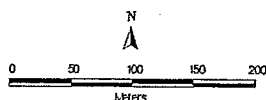
Throughout the monitoring period, the volunteer's opinions of the lake's physical condition and recreational suitability were ranked on a 1-to-5 scale. These user perception rankings are shown on the following page.

If you notice any errors in the lake's data or physical information, or are aware of any additional or missing information, please contact Brian Johnson of the Metropolitan Council at (651) 602-8743 or brian.johnson@metc.state.mn.us.

Horseshoe Lake Sunfish Lake, Dakota Co.

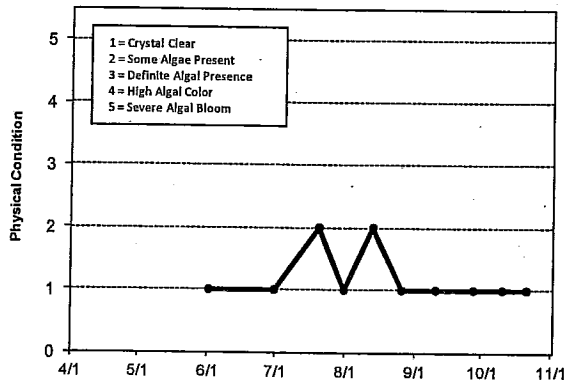
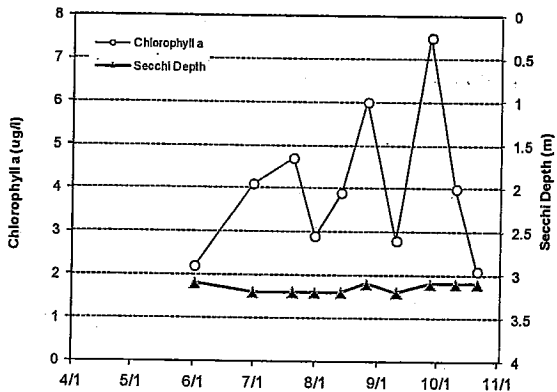
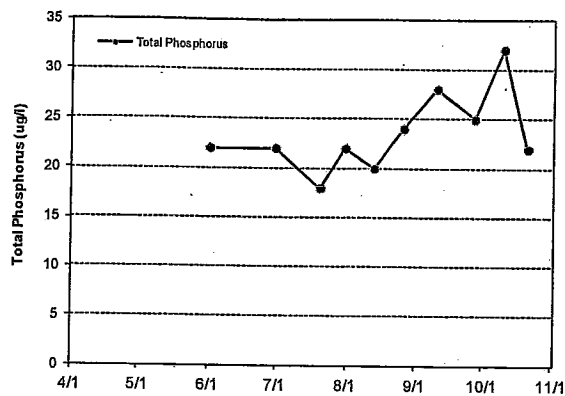
Lake ID: 190051-00
WMO: Lower Miss. River
Volunteer: Jim Naves

● Sampling site
Contours in meters



2011 Data

Date	Surf. Temp. (°C)	Bot. Temp. (°C)	Surf. DO (mg/l)	Bot. DO (mg/l)	CLA (µg/l)	Surf. TP (µg/l)	Bot. TP (µg/l)	Secchi (m)	PC (1-5)	RS (1-5)
6/1/2011	22.2				2.2	22		3.1	1	1
6/30/2011	25.8				4.1	22		3.2	1	1
7/20/2011	31.5				4.7	18		>3.2	2	1
7/31/2011	30.8				2.9	22		>3.2	1	1
8/13/2011	25.3				3.9	20		>3.2	2	1
8/26/2011	28				6	24		>3.1	1	1
9/10/2011	25.5				2.8	28		>3.2	1	1
9/27/2011	16.3				7.5	25		>3.1	1	1
10/10/2011	19.5				4	32		>3.1	1	1
10/21/2011	10.5				2.1	22		>3.1	1	1



Lake Water Quality Grades Based on Summertime Averages

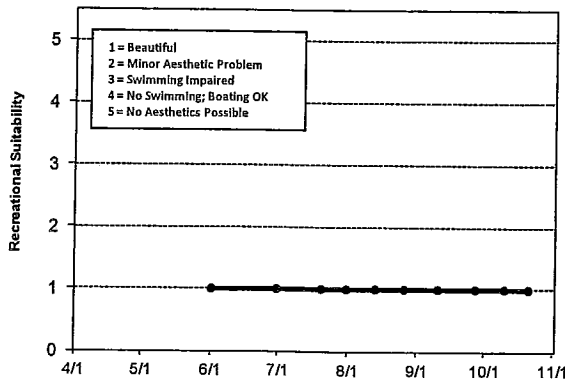
Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total Phosphorus												
Chlorophyll a												
Secchi Depth												
Lake Grade												

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total Phosphorus												
Chlorophyll a												
Secchi Depth												
Lake Grade												

Year	2004	2005	2006	2007	2008	2009	2010	2011
Total Phosphorus			C	C	A	B	C	A
Chlorophyll a			A	A	A	A	A	A
Secchi Depth			C	C	C	B	B*	A*
Lake Grade			B	B	B	B	B	A

* Secchi Disk
visible on lake
bottom

Source: Metropolitan Council and STORET data





February 28, 2013

Honorable Mayor and City Council
City of Sunfish Lake
1 Acorn Drive
Sunfish Lake, MN 55077

Re: 2012 Street Seal Coat Project Quotes
WSB Project No. 2182-00

Dear Mayor and Council Members:

The City received four quotes to complete street seal coating and crack sealing on City streets shown on the attached figure. Quotes were requested from four companies who specialize in this type of work. The four quotes we received are as follows:

1. Asphalt Surface Technologies Corp. \$ 37,238.00
2. Pearson Bros Inc. \$ 38,478.40
3. Allied Blacktop Company \$ 49,832.40
4. Fahrner Asphalt Sealers LLC \$ 83,046.00

These prices are similar to quotes received on similar projects bid in the metro last year. Asphalt Surface Technologies Corp. has completed this type of work in past years for several communities across the metro and has done a good job.

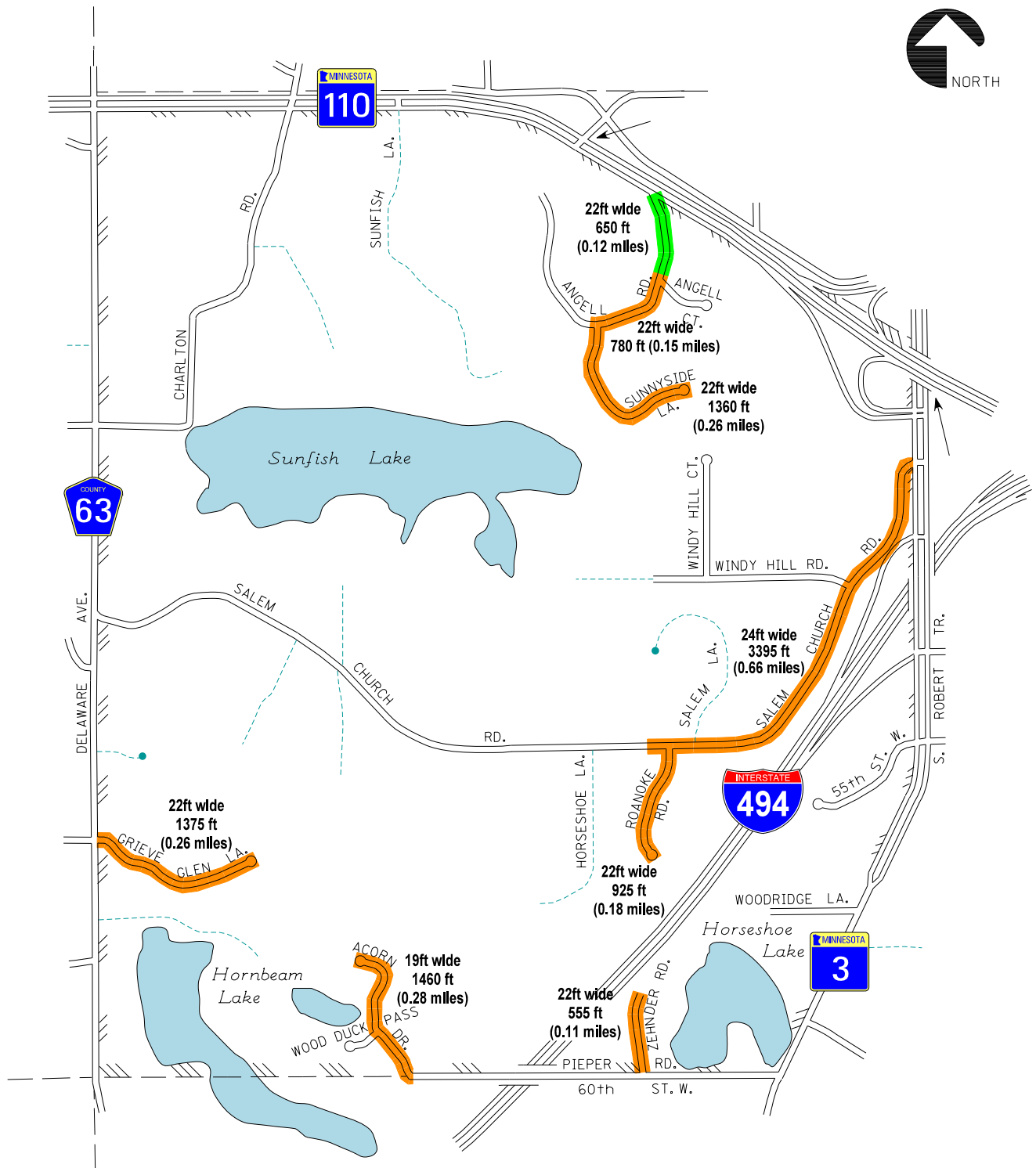
Engineering recommends award of this crack seal contract to Asphalt Surface Technologies Corp. in the amount of \$37,238. It should be noted that we based our bid quantities on areas we feel absolutely necessary to be completed this year. It is understood the Capital Improvement Plan identified \$35,000 to complete this project. With the low bids we received, we recommend completing all the streets as identified on the map. To accomplish this work and provide some construction contingency, we recommend council approve a cost not to exceed \$40,000 for the project construction cost.

Sincerely,

WSB & Associates, Inc.

Don Sterna, PE
City Engineer

Attached: Project Map, Bid Quotes



LEGEND

 Seal Coat

 Crack Fill & Seal Coat

Bidder: Asphalt Surface Technologies Corporation a/k/a Astech Corp.	
Address: P.O. Box 1025	Telephone No.: 320-363-8500
City, State, Zip: St. Cloud, MN 56302	Fax No.: 320-363-8700

PROPOSAL FORM
 2013 STREET SEAL COAT PROJECT
 CITY OF SUNFISH LAKE
 CITY PROJECT NO. 2013-01
 WSB PROJECT NO. 2182-00

CITY OF SUNFISH LAKE

Dear Council Members:

1. The following proposal is made for furnishing and installing all labor and materials necessary for the 2013 Street Seal Coat Project, for the City of Sunfish Lake, Minnesota.

2. The undersigned certifies that the Contract Documents listed in the Instructions to Bidders have been carefully examined, and that the site of the work has been personally inspected. The undersigned declares that the amount and nature of the work to be done is understood, and that at no time will misunderstanding of the Contract Documents be pleaded. On the basis of the Contract Documents, the undersigned proposes to furnish all necessary apparatus and other means of construction, to do all the work and furnish all the materials in the manner specified, and to accept as full compensation therefore the sum of the various products obtained by multiplying each unit price herein bid for the work or materials, by quantities thereof actually incorporated in the completed project, as determined by the Engineer. The undersigned understands that the quantities mentioned herein are approximate only, and are subject to increase or decrease, and hereby proposes to perform all work as either increased or decreased, in accordance with the provisions of the specification, at the unit prices bid in the following proposal schedule, unless such schedule designates lump sum bids.

3. PROPOSED SCHEDULE: The Bidder agrees to perform all work described in the specifications and shown on the plans for the following unit prices:

No.	Mat. No.	Item	Units	Quantity	Unit Price	Total Price
BASE BID						
1	2331.603	ROUT & SEAL BITUMINOUS PAVEMENT CRACKS	LIN FT	1500	\$ <u>1.20</u>	\$ <u>1,800.00</u>
2	2356.505	BITUMINOUS MATERIAL FOR SEAL COAT (CRS-2)	SQ YD	27260	\$ <u>1.30</u>	\$ <u>36,438.00</u>
Total BASE BID						\$ <u>37,238.00</u>
GRAND TOTAL BID						\$ <u>37,238.00</u>

4. The basis of award of the Contract will be determined based on the Grand Total Bid. The Owner reserves the right to delete any item prior to final contract.
5. The undersigned further proposes to execute the Contract Agreement and to furnish satisfactory bond within ten (10) days after notice of the award of contract has been received. The undersigned further proposes to begin work as specified, to complete the work on or before date specified, and to maintain at all times performance and payment bonds, approved by the Owner, in an amount equal to the total bid.
6. In submitting this proposal, it is understood that the right reserved by the Owner to reject any or all proposals and to waive informalities.

Official Address

P.O. Box 1025
St. Cloud, MN 56302

Firm Name Asphalt Surface Technologies
Corporation a/k/a Astech Corp

By Dale R. Strandberg
(An Authorized Signature)

Date: 2/27/13

Title Vice President

Bidder: <u>PEARSON Bros INC</u>	
Address: <u>11079 Lamont Ave NE</u>	Telephone No.: <u>763-391-6622</u>
City, State, Zip: <u>Hanover, MN 55341</u>	Fax No.: <u>763-391-6627</u>

PROPOSAL FORM
 2013 STREET SEAL COAT PROJECT
 CITY OF SUNFISH LAKE
 CITY PROJECT NO. 2013-01
 WSB PROJECT NO. 2182-00

CITY OF SUNFISH LAKE

Dear Council Members:

1. The following proposal is made for furnishing and installing all labor and materials necessary for the 2013 Street Seal Coat Project, for the City of Sunfish Lake, Minnesota.
2. The undersigned certifies that the Contract Documents listed in the Instructions to Bidders have been carefully examined, and that the site of the work has been personally inspected. The undersigned declares that the amount and nature of the work to be done is understood, and that at no time will misunderstanding of the Contract Documents be pleaded. On the basis of the Contract Documents, the undersigned proposes to furnish all necessary apparatus and other means of construction, to do all the work and furnish all the materials in the manner specified, and to accept as full compensation therefore the sum of the various products obtained by multiplying each unit price herein bid for the work or materials, by quantities thereof actually incorporated in the completed project, as determined by the Engineer. The undersigned understands that the quantities mentioned herein are approximate only, and are subject to increase or decrease, and hereby proposes to perform all work as either increased or decreased, in accordance with the provisions of the specification, at the unit prices bid in the following proposal schedule, unless such schedule designates lump sum bids.
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BASE BID						
1	2331.603	ROUT & SEAL BITUMINOUS PAVEMENT CRACKS	LIN FT	1500	\$ <u>1.30</u>	\$ <u>1,950.00</u>
2	2356.505	BITUMINOUS MATERIAL FOR SEAL COAT (CRS-2)	SQ YD	27260	\$ <u>1.34</u>	\$ <u>36,528.40</u>
Total BASE BID						\$ <u>38,478.40</u>
GRAND TOTAL BID						\$ <u>38,478.40</u>

4. The basis of award of the Contract will be determined based on the Grand Total Bid. The Owner reserves the right to delete any item prior to final contract.
5. The undersigned further proposes to execute the Contract Agreement and to furnish satisfactory bond within ten (10) days after notice of the award of contract has been received. The undersigned further proposes to begin work as specified, to complete the work on or before date specified, and to maintain at all times performance and payment bonds, approved by the Owner, in an amount equal to the total bid.
6. In submitting this proposal, it is understood that the right reserved by the Owner to reject any or all proposals and to waive informalities.

Official Address

11079 Lamont Ave NE
HANOVER, MN 55341

Firm Name

PEARSON BEOS INC

By

Jack E Pearson
(An Authorized Signature)

Date:

Feb 26 2013

Title

President

No.	Mat. No.	Item	Units	Quantity	Unit Price	Total Price
BASE BID						
1	2351.603	ROUT & SEAL BITUMINOUS PAVEMENT CRACKS	LIN FT	1500	\$ 1.60	\$ 2,400.00
2	2356.305	BITUMINOUS MATERIAL FOR SEAL COAT (CRS-2)	SQ YD	27260	\$ 1.74	\$ 47,432.40
Total BASE BID						\$ 49,832.40
GRAND TOTAL BID						\$ 49,832.40

4. The basis of award of the Contract will be determined based on the Grand Total Bid. The Owner reserves the right to delete any item prior to final contract.
5. The undersigned further proposes to execute this Contract Agreement and to furnish satisfactory bond within ten (10) days after notice of the award of contract has been received. The undersigned further proposes to begin work as specified, to complete the work on or before date specified, and to maintain at all times performance and payment bonds, approved by the Owner, in an amount equal to the total bid.
6. In submitting this proposal, it is understood that the right reserved by the Owner to reject any or all proposals and to waive informalities.

Official Address **Allied Blacktop Company**
10503 89th Avenue North
Maple Grove, MN 55369

Firm Name Allied Blacktop Company

By Peter M. Capistrant
(An Authorized Signature)

Date: February 28, 2013

Title Peter M. Capistrant, President

Bidder:	Fahrner Asphalt Sealers LLC	
Address:	6615 US HWY 12 W	Telephone No.: 715 874 6070
	Eau Claire WI 54702	
City, State, Zip:		Fax No.: 715 874 6717

PROPOSAL FORM
 2013 STREET SEAL COAT PROJECT
 CITY OF SUNFISH LAKE
 CITY PROJECT NO. 2013-01
 WSB PROJECT NO. 2182-00

CITY OF SUNFISH LAKE

Dear Council Members:

1. The following proposal is made for furnishing and installing all labor and materials necessary for the 2013 Street Seal Coat Project, for the City of Sunfish Lake, Minnesota.

2. The undersigned certifies that the Contract Documents listed in the Instructions to Bidders have been carefully examined, and that the site of the work has been personally inspected. The undersigned declares that the amount and nature of the work to be done is understood, and that at no time will misunderstanding of the Contract Documents be pleaded. On the basis of the Contract Documents, the undersigned proposes to furnish all necessary apparatus and other means of construction, to do all the work and furnish all the materials in the manner specified, and to accept as full compensation therefore the sum of the various products obtained by multiplying each unit price herein bid for the work or materials, by quantities thereof actually incorporated in the completed project, as determined by the Engineer. The undersigned understands that the quantities mentioned herein are approximate only, and are subject to increase or decrease, and hereby proposes to perform all work as either increased or decreased, in accordance with the provisions of the specification, at the unit prices bid in the following proposal schedule, unless such schedule designates lump sum bids.

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No.	Mat. No.	Item	Units	Quantity	Unit Price	Total Price
BASE BID						
1	2331.603	ROUT & SEAL BITUMINOUS PAVEMENT CRACKS	LIN FT	1500	\$ <u>3.57</u>	\$ <u>5,355.00</u>
2	2356.505	BITUMINOUS MATERIAL FOR SEAL COAT (CRS-2)	SQ YD	27260	\$ <u>2.85</u>	\$ <u>77,691.00</u>
Total BASE BID						\$ <u>83,046</u>
GRAND TOTAL BID						\$ <u>83,046</u>

4. The basis of award of the Contract will be determined based on the Grand Total Bid. The Owner reserves the right to delete any item prior to final contract.
5. The undersigned further proposes to execute the Contract Agreement and to furnish satisfactory bond within ten (10) days after notice of the award of contract has been received. The undersigned further proposes to begin work as specified, to complete the work on or before date specified, and to maintain at all times performance and payment bonds, approved by the Owner, in an amount equal to the total bid.
6. In submitting this proposal, it is understood that the right reserved by the Owner to reject any or all proposals and to waive informalities.

Official Address

6615 US Hwy 12 W
EAU CLAIRE, WI 54702

Date: 2/28/13

Firm Name _____

Fahrner Asphalt Sealers LLC

By 

(An Authorized Signature) Greg Kolodziej

Title Project Mgr