

# Duffy Engineering & Associates, Inc.

1424 2nd Street North, Sauk Rapids, MN 56379  
(320) 259-6575 • Fax: (320) 259-6991

4 - 20 - 04

Ms. Tersa Ebnet  
Avon State Bank  
P.O. Box 8  
Avon, MN 56310

Re: Home Inspection at 814 Chinook  
Avon, MN

Ms. Ebnet:

At your request, I made an on site inspection of the above home which is under construction but appears to be on hold at this time. You were specifically concerned about the East basement wall. My inspection found a number of Structural problems, which I've outlined below with a suggested corrective action.

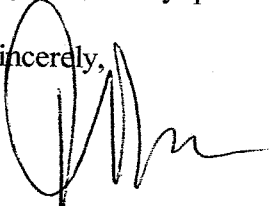
1. I inspected the entire basement wall system of the house. It consist of 12" non-reinforced standard masonry. The East wall of the basement block wall has cracked horizontally about halfway down the wall. This crack extends the entire length of the wall and opened up about  $\frac{1}{2}$ ". The wall leans into the basement space approximately 4 inches and may still be moving. There is no way to save this wall. The house will have to be shored up and the entire wall replaced down to the footing. This new 12" block wall should be reinforced with # 4 rebar at four foot on center the entire length of the wall. The earth backfill will have to be removed in order to complete the repairs. There is a real risk that the wall could collapse this spring if we have a lot of rain over a short period of time. It's imperative that it be addressed as soon as possible.
2. The West wall of the basement has a vertical crack about midway along the wall. This crack can be fixed without removing the wall. I would suggest as part of the fix that this wall be reinforced similar to the East wall as well.
3. The first floor framing consist of open web wood trusses supported on an interior beam line. This beam line is made up of multi-ply micro-laminated beams. I found several problems with this support system. The middle span is sagging. The existing beam is undersized and needs to have an additional column installed or the beam changed to a larger series member as the present 9  $\frac{1}{4}$ " micro-laminated beams are not adequate. The one end has a three-ply recessed 16" micro-laminated beam. They look to be older or used members and show signs of de-lamination. This should be looked at and corrected / replaced if need be.
4. The dormers on the second story have had the bottom chord of the trusses cut away and a 2 x 4 spliced on the backside. These trusses will not be warranted by the manufacture unless a certified fix is done. Some of these same trusses do not

bear on a wall and are toe nailed for support, which is not acceptable and will need to be corrected.

5. The deck along the front of the house is not attached to the vertical columns adequately and the 2 x 10 header is undersized and sagging. An additional 2 x 10 must be added and a positive attachment made to the columns.

In addition to these structural items the overall workmanship and layout do not meet accepted home construction standards. Walls are not plumb, trusses do not line up with the bearing walls below, the floor sheathing was not laid out properly and gaps have been filled in with narrow pieces of material etc. I believe the structure can be salvaged but it will take a lot of corrective action to get the foundation and framing to pass inspection. If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Terry W. Duffy', written over the word 'Sincerely,'.

Terry W. Duffy P.E.  
President

Amy Pogatchnik

From: Kathy Schulzetenberg (Dan Marthaler)  
Sent: Tuesday, August 14, 2007 1:06 PM  
To: Amy Pogatchnik  
Cc: Jodi Austing-Traut  
Subject: house AT 814 Chinook

On 9-14-07 I met with the owner [redacted] at 814 Chinook. The concrete contractors were installing a foundation wall on the south and north side. [redacted] showed me documentation from Duffy engineering on all the structural issues that need to be addressed. [redacted] claims he had no idea he needed a permit. After visiting with Jodi we agreed the contractors could continue with the foundation wall as they had already started and were following the guidelines from the engineer. Other than the foundation wall [redacted] was told no further work to proceed until the city has received all the documentation required to be able to issue a permit. The documentation needed but not limited to should be the same as required for a new dwelling. Floor plan for all levels, site plan (very important for zoning conformance), energy calculations, ventilation requirements, name of plumber, name of mechanical installer, and documentation showing how structural integrity will be met as per letter form Duffy Engineering. If you agree with this procedure please send a letter to [redacted] informing him as such.

Dan Marthaler  
City Building Official

8/14/2007

# LANDATA OF ST. CLOUD INC.

WM. F. LUNSER, L.S.  
2233 ROOSEVELT ROAD  
SUITE 10  
ST. CLOUD, MINNESOTA 56301  
612-251-2851

6-12-01

Jodi Austing, Clerk  
City of Avon  
Box 69  
Avon, MN 56310

Dear Ms Austing;

Pursuant to your request I have determined floor elevations of a home under construction at 814 Chinook Ave and a utility building at 830 Chinook Ave.


The House at 814 is of conventional full basement design and as of this date has no floor. The elevation of the top of footing on the inside of the block wall is 1123.28. Assuming a four inch concrete basement floor will follow, I anticipate the finished floor elevation will be 1123.51.

The utility building at 830 has a lowest floor elevation of 1124.00.

While this may be taken as my certification as to the existing elevations mentioned above, I am not in a position to certify whether or not the structures are in compliance with regulatory flood protection elevations. I do, however, enclose for your information Minnie Lake data gathered by Minnesota DNR as of March 22, 1993.

Please let me know if I can be of further assistance.

Respectfully,

  
William F. Lunser, L.S.  
Mn Reg No 9394

Enclosure

LAKE NAME: **McCormic** DNR ID#: 73-0273 LAKE SIZE (acres): 211  
OHW ELEV: 98.50 SHORELAND CLASSIFICATION: NE HIGHEST KNOWN ELEV: 98.75 (Date:4/15/85) HIGHEST RECORDED ELEV: 98.75 (04/15/85)  
RUNOUT ELEV: HIGHEST KNOWN ELEV: 98.75 (Date:4/15/85) HIGHEST RECORDED ELEV: 98.75 (04/15/85) NO. OF READINGS: 1  
LOWEST RECORDED ELEV: 98.75 (04/15/85) LAST READING: 98.75 (04/15/85) NO. OF READINGS: 1  
100YR LEVEL: REG. FLOOD PROT. ELEV.: 100YR LEVEL:

**BENCHMARKS**

BENCHMARK: Elevation: 100.00 Datum: ASSUM Source: DEH Date Set: 04/15/85  
Location: Quarter-Section: NENW Section: 24 Township: 126 Range: 34  
Description: Bent spk in W root of clump of 4 cottonwoods (1.0'-2.5') Located 125' E of outlet on S side of Rd.

LAKE NAME: **Melrose** DNR ID#: 73-0251 LAKE SIZE (acres): 75  
OHW ELEV: 1199.00 SHORELAND CLASSIFICATION: NE HIGHEST KNOWN ELEV: 1202.70 (Date:1965) HIGHEST RECORDED ELEV: 1197.00 (01/01/65)  
RUNOUT ELEV: 1199.00 HIGHEST KNOWN ELEV: 1202.70 (Date:1965) HIGHEST RECORDED ELEV: 1197.00 (01/01/65) NO. OF READINGS: 1  
LOWEST RECORDED ELEV: 1197.00 (01/01/65) LAST READING: 1197.00 (01/01/65) NO. OF READINGS: 1  
100YR LEVEL: 1202.20 REG. FLOOD PROT. ELEV.: 1203.20 10YR LEVEL: 1201.00

**BENCHMARKS**

BENCHMARK: Elevation: 1189.85 Datum: 1929 Source: Date Set:  
Location: Quarter-Section: SWSW Section: 35 Township: 126 Range: 33  
Description: 1935 Granite WPA plate into of N abutment of small dam Located 150' DS of Mill Pond Dam.

BENCHMARK: Elevation: 1208.12 Datum: 1929 Source: FIS Date Set:  
Location: Quarter-Section: NWSE Section: 34 Township: 126 Range: 33  
Description: Brass disk set in the SE wingwall of Co. Rd. 170 bridge over Melrose Lake (Mill Pond).  
CONTROL BM: Unknown

LAKE NAME: **Middle Spunk** DNR ID#: 73-0128 LAKE SIZE (acres): 242  
OHW ELEV: 1118.10 SHORELAND CLASSIFICATION: GD HIGHEST KNOWN ELEV: 1119.30 (Date:unknown) HIGHEST RECORDED ELEV: 1117.78 (10/09/91)  
RUNOUT ELEV: 1116.40 HIGHEST KNOWN ELEV: 1119.30 (Date:unknown) HIGHEST RECORDED ELEV: 1117.78 (10/09/91) NO. OF READINGS: 7  
LOWEST RECORDED ELEV: 1115.97 (09/02/88) LAST READING: 1117.18 (11/25/91) NO. OF READINGS: 7  
100YR LEVEL: REG. FLOOD PROT. ELEV.: 10YR LEVEL:

**BENCHMARKS**

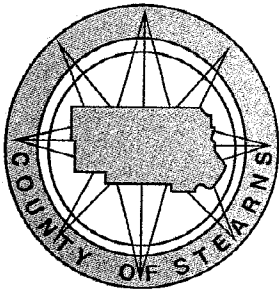
BENCHMARK: Elevation: 1122.33 Datum: 1929 Source: Date Set:  
Location: Quarter-Section: Section: 28 Township: 125 Range: 30  
Description: Disc in US headwall of box culvert thru CSAH 54

LAKE NAME: **Minnie** DNR ID#: 73-0129 LAKE SIZE (acres): 59  
OHW ELEV: 1123.70 SHORELAND CLASSIFICATION: RD HIGHEST KNOWN ELEV: 1123.70 (Date:Unknown) HIGHEST RECORDED ELEV: 1123.13 (05/18/76)  
RUNOUT ELEV: 1122.90 HIGHEST KNOWN ELEV: 1123.70 (Date:Unknown) HIGHEST RECORDED ELEV: 1123.13 (05/18/76) NO. OF READINGS: 14  
LOWEST RECORDED ELEV: 1121.70 (08/03/84) LAST READING: 1121.70 (08/03/84) NO. OF READINGS: 14  
100YR LEVEL: REG. FLOOD PROT. ELEV.: 10YR LEVEL:

**BENCHMARKS**

BENCHMARK: Elevation: 1124.71 Datum: 1929 Source: KDR Date Set: 06/07/76  
Location: Quarter-Section: NENE Section: 33 Township: 125 Range: 30  
Description: Downstream (west) top of 48" S.C. culvert under C.R. #9, between Minnie & Linneman Lakes.  
CONTROL BM: Big Spunk Lake Dam Plug=1120.13'.

BENCHMARK: Elevation: 1123.21 Datum: 1929 Source: KDR Date Set: 07/06/76  
Location: Quarter-Section: NWNE Section: 33 Township: 125 Range: 30  
Description: Top Upstream end of 24" S.C. culvert thru old alignment of C.R. 9, at outlet of Minnie Lake.  
CONTROL BM: Big Spunk Lake Dam Plug=1120.13



# COUNTY OF STEARNS

## *Environmental Services Department*

Administration Center Rm 343 • 705 Courthouse Square • St. Cloud, MN 56303  
320-656-3613 • Fax 320-656-6484 • 1-800-450-0852

July 24, 2008

Jodi Austing-Traut, Clerk/Treasurer  
City of Avon  
P. O. Box 69  
Avon, MN 56310

Re: Wetland Conservation Act—Request for Determination  
File Number 42-00-053

Dear Ms. Austing-Traut:

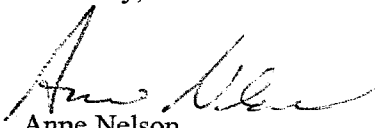
Stearns County Environmental Services wetland staff received a request to complete a wetland determination on a property in the City of Avon. The parcel ID number is 42.26262.030. The property is part of Government Lots 5 and 6, Section 28, T125N, R30W, City of Avon, Stearns County, Minnesota. The currently listed owner is [REDACTED]

A wetland specialist visited the sight on Wednesday, July 23, 2008. The specialist found that a driveway had been constructed near the west property line. Driveway construction had impacted approximately 400 square feet of wetland. Impacted wetland was located in the road ditch running along the north side of the property. The specialist also found evidence of tire ruts in the northern half of the property which is wetland. Disturbed areas were overgrown with wetland vegetation.

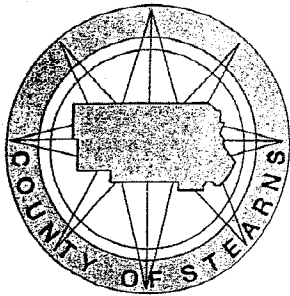
Due to wetland impact from driveway construction, the de minimis exemption from the replacement provisions of the Wetland Conservation Act shall be removed. No further impact to wetlands may occur unless and until a wetland replacement plan has been approved by the Stearns County Wetland Rules Committee.

Please call (320) 656-3613 if you have questions regarding this information.

Sincerely,

  
Anne Nelson  
Environmental Specialist

cc: [REDACTED]  
[REDACTED]  
[REDACTED]



# COUNTY OF STEARNS

## *Environmental Services Department*

Administration Center Rm 343 • 705 Courthouse Square • St. Cloud, MN 56303  
320-656-3613 • Fax 320-656-6484 • 1-800-450-0852

August 24, 2003

Ms. Teresa Ebnet  
Avon State Bank  
104 Avon Ave. N  
Avon, MN 56310

**RE: Parcel # 42.26262.030**

Dear Teresa,

An on-site review of the property in Section 28, Township 126 North, Range 31 West was completed on July 27, 2004. As we discussed at that time, the present driveway opening located on the north-central portion of the property is placed directly through a wetland. The driveway should be located on the western edge of the property to avoid any wetland impacts. Since the present wetland was cleared in the winter, the impacts have been minimal and the wetland vegetation should recover without any restoration.

Please be advised that wetland draining and filling activities are regulated by the Wetland Conservation Act (WCA), which is locally administered by Stearns County. By law, any new owners would be required to provide a replacement plan for any potential wetland impacts. The replacement plan would have to address the issue of "sequencing", which shows that steps have been taken to avoid and/or minimize impacts to the wetland. Mitigation of wetland impacts at a 2:1 ratio is required and may or may not be allowed if it can be proven that less obtrusive alternatives to the project exist. Please be advised that any unauthorized fill may be in violation of the Wetland Conservation Act and corrective action will be required.

If you have any questions, please contact our office.

Sincerely,

Joseph Wood  
Stearns County Environmental Services

*Handwritten notes:*  
This is a letter to the owner of the property...  
The driveway is located in a wetland...  
The driveway should be located on the western edge of the property...

CITY OF



P.O. BOX 69, AVON, MN 56310

July 23, 2008



RE: 814 Chinook

Dear Mr. Stoermann:

I am enclosing a packet of information regarding the house at 814 Chinook for your information. I would advise giving your realtor a copy of this information so he can distribute these documents to any potential buyers so they are aware of the issues with this house.

In this packet is a memo from Dan Lais from the DNR. He raised concerns that he felt should be looked into. I just want to make sure that any potential buyers are aware that they may be required to address certain concerns that are raised by Mr. Lais. I note the septic certificate is from 2000. I am not sure if the County will require this to be updated. The City may require something from the County stating that the septic system does meet County regulations.

After you and Teresa left the office on Wednesday I did look through the file one more time to try to find documentation that the elevation of the lowest floor has been brought above the Ordinary High Water Level. Teresa stated she remembers it being fixed but there is no documentation proving this was done. I am enclosing a copy from the former City Attorney, Donahue Novak stating that no further construction could be continued until the City had proof that the lowest floor was raised above the OHWL. If proof cannot be found regarding this problem the new owners may need to also have this inspected and remediated before any further building can continue.

Also, the letter Stearns County sent to Teresa regarding the driveway says that "any new owners would be required to provide a replacement plan for any potential wetland impacts." The driveway could be fine as it is right now but the new owners will need to contact Stearns County to see if any further work would need to be done on the wetland/driveway.

I just wanted to get this information to you so you were aware of what may be required by the County and the City for any further building to continue on the property if it is sold.

I will give a copy of this letter and all attachments to the members of the planning commission so they are aware of what is taking place with this property.

If you have any questions, please give me a call.

Thank you.

Very truly yours,

Amy Pogatchnik  
Zoning Administrator

Cc: Teresa Ebnet, Stearns Bank

(320) 356-7922      FAX (320) 356-2259

-An Equal Opportunity Employer~