Dean G. Sienko, M.D., M.S., Director



March 13, 2007



Danny Dunn 3009 Victor Rd. Lansing, MI 48911

> RE: Soil evaluation in Delhi Township, Section 33, Onondaga Road, Parcel ID 33-25-05-33-100-021, Application # 02-20-07-032.

Dear Mr. Dunn:

On March 6, 2007, a site evaluation was conducted to determine the soil conditions for the above referenced property for an on-site sewage treatment system. The results of the evaluations are enclosed in this letter.

Six backhoe cuts were made on the lot to find a suitable location for a sewage treatment system. Backhoe cuts 4 and 5 did not pass the minimum requirements for a <u>conventional</u> on-site wastewater treatment system. Soil conditions on these sites included a sandy loam to clay loam soil with evidence of a seasonal high water level at 18 inches below the ground surface as indicated by soil mottling. Conventional systems installed in such conditions may fail prematurely and pose serious health concerns. However, these backhoe cuts are suitable for the consideration of <u>engineered</u> wastewater treatment. A company from the county's approved Alternative Wastewater Design Consultant list must prepare a plan for this type of system for review by this office. Before a permit can be issued for both the wastewater system and water supply well the submitted plan must be approved by our office.

Backhoe cuts 1, 2, 3, and 6 are not suitable for a <u>conventional</u> or <u>engineered</u> wastewater treatment system. Soil conditions at these sites indicated a sandy loam to clay loam soil with seasonal high water level directly below the top soil as indicated by mottling. Systems installed in these conditions would fail prematurely and pose serious health concerns.

In closing, you are reminded to keep equipment off the area that was determined to be suitable for sewage disposal system. Protecting the natural condition of the soils is very important to the future operation of your system. If you have any questions or concerns, contact our office at (517)887-4312.

Sincerely,

Kandy Federe

Randy Fedewa Bureau of Environmental Health

RF/pm

CC: Delhi Township

Enclosure



APPLICAT	TION FOR SITE EVA	LUATION & PERMIT I	FOR SEW	AGE TREATMENT SYSTEM	AND/OR WELL
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Well	Permn	\$436.00	\$	eptic Repair/Replace	\$416.00
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Ingham County Equalization/Tax Mapping Viewer





SOIL EVALUATION DATA SHEET

Ingham County Health Department P.O. Box 30161 Lansing, MI 48909

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SOIL EVALUATION DATA SHEET

Ingham County Health Department P.O. Box 30161 Lansing, MI 48909

THIS RECORD SHALL NOT CONSTITUTE A PERMIT

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Road Location: Onondaga Rd

SOIL STRUCTURE KEY

1 = weak

3 = strong

2 = moderate

BK = blocky

PL = platy

GR = granular

M = massive

Test #		2	3	4	5
Type of Test	BH	·PG	BH	BH	BH
Depth	54"	60"	60"	48"	48 "
Each	0-12" TS	0-12"75	0-12" TS	0-12" TS	0-14"TS
test	12"-54" CL	12"-60" (L	12"-60"SL	12"-18"SL	14"-14" SL
hole	(MT) 14"	(MT) ja"	L, CL MIX	NMT	OT 18"
located		(Sector)	MD 13"	18"-48"(L	14"-48°CL
on					(C.I.
Plot					
Plan					
by					
number	8 V.				e A

SOIL REPORT KEY

S	Sand	SCL	Sandy Clay Loam	В	Hand Auger Boring
LS	Loamy Sand	SiCL	Silty Clay Loam	BH	Backhoe Cut
SL	Sandy Loam	CL	Clay Loam	TS	Top Soil
L	Loam	С	Clay	MT	Seasonal High Water Level (mottling)
Sil	Silty Loam	М	Muck	WL	Water Level Observed (saturation)
				NS	No Observed Seasonal High Water Level

Limitations of the site that affect use of on-site subsurface sewage disposal:

- Ø 1) Severely restrictive soil features.
 - Impervious layer within 48" of ground surface. 2)
- M 3) High seasonal water level.
- Wet depressions or poor surface drainage. \Box 4)
 - 5) Slope limitations (exceeds %).
 - Overflow of run-off water from adjacent higher areas. 6)
 - 7) Insufficient space for replacement of drainfield.
- 8) Insufficient isolation distance from

Comments:

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Observer: Sanitarian: Bandy Facture Date: 3-6-67