MCHENRY~LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

NATURAL RESOURCES INFORMATION REPORT 23-061-4521

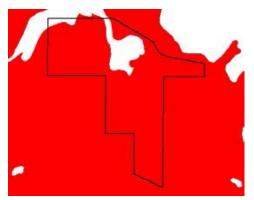
August 1, 2023



This report has been prepared for: Lennar Corporation

> Contact Person: Richard Murphy

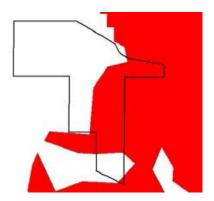
Executive Summary (Verbatim Excepts from NRI Report)



Basement Limitations

The NRCS Soils Survey indicates 118.32 acres or 88.47% of this parcel is composed of soils with a severe limitation for basements (red areas on map) and for slabs, due to water related limitations. The applicant indicated that the proposed dwellings would have basements. This can present problems for future property owners such as cracked foundations, wet basements, lowered structural integrity and high maintenance costs associated with these problems. It is recommended that the structures have crawl spaces instead of basements or at

the least, protective measures such as foundation drain tiles and sump pumps be utilized.

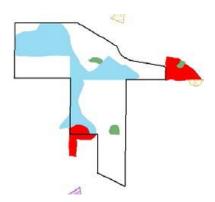


Sensitive Aquifer Recharge Areas (Includes the soil profile and underlying geology).

The Sensitive Aquifer Recharge Map indicates 41.88 acres of the parcel is within an area designated as Sensitive Aquifer Recharge (red areas on map).

Hydric Soils

The NRCS Soil Survey identifies 39.04 acres or 29.19% of the parcel as containing hydric soils (identified in red), 9.62 acres or 7.19% as containing organic soils (identified with hatching), and 52.91 acres or 39.56% as containing somewhat poorly drained soils (identified in blue). We recommend avoiding all organic soils and hydric soils, as they can cause future problems to homeowners.



Non-Inventoried Soils with Hydric Inclusions

The NRCS Wetlands Inventory identifies ... 42.06 as Non-Inventoried Soils with Hydric Inclusions (identified in blue) on the parcel.

Verbatim NRI Report Details

Soil Interpretations Explanation (p. 13)

3. **Severe or Very Severe**- This soil has one or more properties that are unfavorable for the rated use. These may include the following: steep slopes, bedrock near the surface, flooding, high shrink-swell potential, a seasonal high water table, or low strength. This degree of limitation generally requires major soil reclamation, special design, or intensive maintenance, which in most situations is difficult and costly.

BUILDING LIMITATIONS (p. 17).

<u>Building on Poorly Suited or Unsuitable Soils</u>: Can present problems to future property owners such as cracked foundations, wet basements, lowered structural integrity and high maintenance costs associated with these problems. The staff of McHenry County SWCD strongly urges scrutiny by the plat reviewers to avoid granting parcels with these soils exclusively. [And note the 88.47% "total severe" for either basements or slabs".]

Dwellings With or Without Basements - This applies to single-family houses of 3 stories or less.

Symbol	Slabs	Basements	Acres	Percent
103A	Severe	Severe	9.62	7.19%
219A	Severe	Severe	6.92	5.18%
232A	Severe	Severe	6.73	5.03%
298B	Severe	Severe	11.86	8.87%
323D2	Moderate	Moderate	5.35	4.00%
327B	Moderate	Slight	0.01	0.01%
330A	Severe	Severe	1.09	0.82%
523A	Severe	Severe	21.59	16.14%
526A	Severe	Severe	3.32	2.48%
530B	Severe	Severe	14.23	10.64%
530C2	Severe	Severe	1.59	1.19%
530C3	Severe	Severe	10.56	7.90%
557A	Severe	Severe	30.81	23.04%
791A	Moderate	Moderate	10.06	7.52%
Total Severe for Slabs			118.32	88.47%
Total Severe for Basements			118.32	88.47%

Building Limitations

Other Findings from the NRI Report.

Remnant Oak Woodlands. The McHenry County Conservation District's Remnant Oak Woodland Study indicates 35.60 acres of the parcel contains remnant oak woodlands.

Hydric Soils [29.19%]

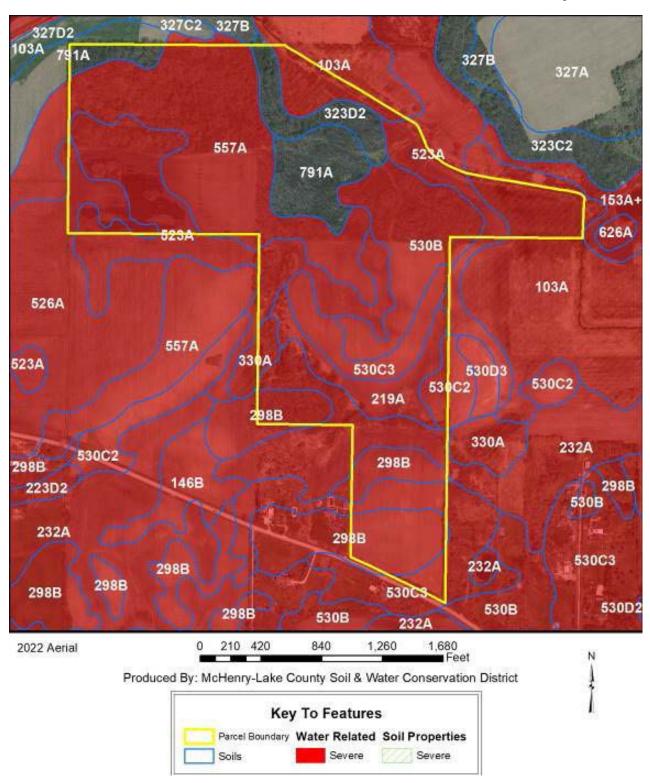
P. 34:

"For an intense land use, such as a subdivision, the McHenry County SWCD recommends the

following:

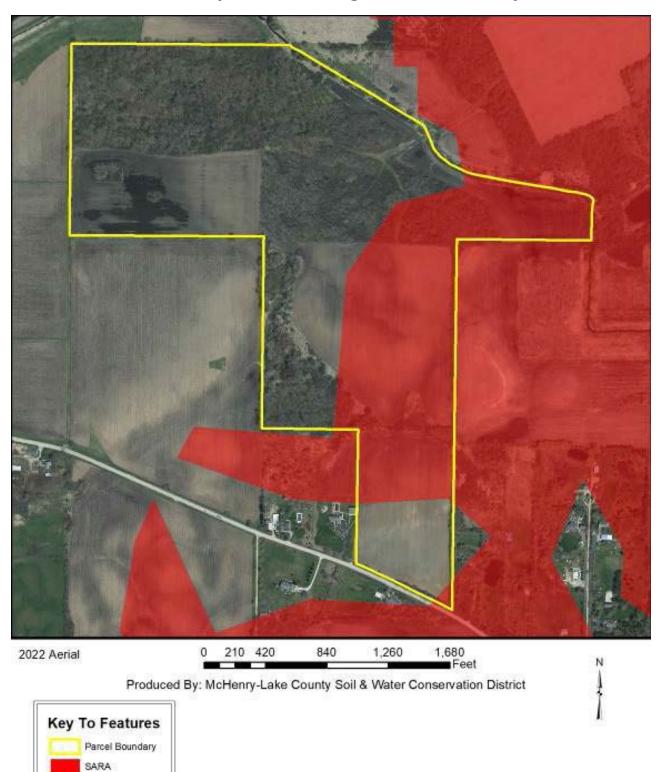
- 1. A topographical survey with 1 foot contour intervals to accurately define the flood area on the parcel.
- 2. An intensive soil survey to define most accurately the locations of the hydric soils and inclusions
- 3. A drainage tile survey on the area to locate the tiles that must be preserved."

See below for 2 Maps from NRI Report



"Severe Limitations" for Basements or Slabs-NRI Report

Building Limitations from MLSWCD 1: Virtually entire area other than remnant oak woodlands.



Sensitive Acquifier Recharge Area—NRI Report

Sensitive Aquifer Recharge Areas (SARA)