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March 4, 2020

Kristen Kapelanski
Department of Planning and
Economic Development
City of Rochester Hills
1000 Rochester Hills Drive
Rochester Hills, MI 48309-3033

**Subject: File No. 19-026 Hamlin Outdoor Storage;
Wetland Use Permit Review #4;
Plans received by the City of Rochester Hills on
February 27, 2020
ASTI File No. 9675-92**

Applicant: Wiegand Development

Dear Ms. Kapalanski:

The above referenced project proposes to construct a vehicular outdoor storage area on approximately 9.8 acres of land located along Hamlin Road, east of John R Road, and west of Dequindre Road.

ASTI has reviewed the site plans received by the City on February 27, 2020 (Current Plans) for conformance to the Wetland and Watercourse Protection Ordinance and the Natural Features Setback Ordinance and offers the following comments for your consideration.

COMMENTS

1. **Applicability of Chapter (§126-500).** The Wetland and Watercourse Protection Ordinance is applicable to the subject site because the subject site is not included within a site plan which has received final approval, or a preliminary subdivision plat which received approval prior to January 17, 1990, which approval remains in effect and in good standing and the proposed activity has not been previously authorized.
2. **Wetland and Watercourse Determinations (§126-531).** This Section lists specific requirements for completion of a Wetland and Watercourse Boundary Determination.
 - a. This review has been undertaken in the context of a Wetland and Watercourse Boundary Determination completed on the site by the Applicant's wetland consultant, Dortman Environmental, LLC. ASTI confirmed this wetland delineation in the field on October 31, 2019.

Three wetlands were identified on the property: Wetlands A, B, and C, and one watercourse, the Ladd Drain, all of which are regulated by the City and likely the Michigan Department of Environment, Great lakes, and Energy (EGLE). Portions of all on-site wetlands are proposed to be impacted this project.

Wetland Quality Assessments

Three wetlands were delineated on the property. Quality assessments are as follows:

Wetlands A and C

Wetlands A and C were of very similar ecological character, size, and in close proximity to each other. Thus, they will be discussed together for the purposes of this report. Located in the eastern portion of the property, Wetlands A and C are man-made forested wetlands dominated by vegetation of generally low ecological floristic quality. Vegetation within Wetlands A and C were dominated by the common native species of cottonwood (*Populus deltoides*), crack willow (*Salix fragilis*), and box elder (*Acer negundo*). Canopy cover within Wetlands A and C were estimated at 60-70%, and trees were generally young to moderately mature. Vegetation within the shrub layers of these two wetlands was dominated by the common native species of gray dogwood (*Cornus racemosa*) and the invasive species of glossy buckthorn (*Frangula alnus*). The herbaceous layers were sparse at the time of ASTI's inspection and were dominated by the invasive species of reed canary grass (*Phalaris arundinacea*). Mean vegetation cover within the entirety of Wetlands A and C were estimated at approximately 70% with an approximate total native species cover of 70% and approximate invasive species cover of 30%. Wetland hydrology appears to be driven by surface water and precipitation detainment; Wetlands A and C do not appear to be in direct contact with groundwater. Due to their small size, Wetlands A and C do not provide significant ground water filtration, groundwater recharge, or surface water detainment. Wetland soils were comprised of sandy and mucky loams and appeared to be relatively undisturbed since approximately 1997 based on historical aerial photography review. Wetlands A and C both appear to be the result of former industrial activities on the site prior to 2000. The vegetation within Wetlands A and C are dominated by common native species with significant invasive species inclusions. Wetlands A and C are of low floristic quality, do not provide significant water filtration or detainment, and are the result of former industrial activities on the property and thus, they should not be considered valuable natural resources to the City.

Wetland B

Wetland B is an emergent wetland located in the northwest portion of the property. Vegetation within Wetland B was dominated by the invasive species of reed canary grass. Supporting vegetation within Wetland B included native species such as cottonwood trees and saplings, box elder trees and saplings, red raspberry (*Rubus*

ideaus), and sand bar willow (*Salix interior*). Mean vegetation cover within the entirety of Wetland B was estimated at 100% with an approximate total native species cover of 30% and approximate invasive species cover of 70%. Wetland hydrology is supplied to Wetland B from precipitation and surface water detainment. Wetland B is directly connected to the Ladd Drain to the north/west. Wetland B provides direct surface water filtration and surface water detainment to storm flow prior to entering the Ladd Drain; but due to its small size, water treatment capabilities are low. The Ladd Drain, which borders Wetland B, is channelized throughout its course on the Property to allow faster, flashier flows; therefore, Wetland B does not appear to be able to capture any significant potential flooding events from the Ladd Drain. Wetland B does not appear to be in contact with ground water. Wetland B soils were comprised of sandy loams and appeared to be relatively undisturbed since approximately 1997 based on historical aerial photography review. Wetland B appears to be the result of former industrial activities on the site prior to 2000. The vegetation within Wetland B is dominated by invasive species with minimal native species inclusions. Wetland B is of low floristic quality, does not provide significant water filtration, flood storage capacity, or detainment, and is the result of former industrial activities on the property. However, Wetland B does provide some surface water treatment to storm flows prior to entering the Ladd Drain. Therefore, Wetland B should be considered a marginally valuable natural resource to the City.

3. **Use Permit Required (§126-561).** This Section establishes general parameters for activity requiring permits, as well as limitations on nonconforming activity. This review of the Current Plans has been undertaken in the context of those general parameters, as well as the specific requirements listed below.
 - a. On-site wetland appears to be shown accurately per on the Current Plans as well as all alpha-numeric wetland flagging as applied in the field, which is to ASTI's satisfaction. The Current Plans also indicate that the wetland delineation shown was completed on June 25, 2019 by the Applicant's wetland consultant, Dortman Environmental LLC, which is also to ASTI's satisfaction. The applicant is advised that wetland delineations are only considered valid by the City and EGLE for a period of three years past the completion date.
 - b. All wetland on-site and the Ladd Drain are regulated by the City and likely EGLE. Wetlands A and C are regulated by the City and likely EGLE because they are within 500 feet of the Ladd Drain; Wetland B is regulated by the City and likely EGLE because it is directly connected to the Ladd Drain. The Ladd Drain exhibited defined channel bed and banks and was flowing on the day of the site inspection and thus, meets the definition of a stream under Part 301, Inland Lakes and Streams.

- c. The Current Plans show the entirety of Wetland A (1,944 square feet) will be permanently impacted from the construction of the proposed parking area. Wetland A is of low ecological quality and function and is not a valuable resource to the City. Therefore, ASTI recommends that the City allow for the impacts to Wetland A as proposed on the Current Plans. All impacts to Wetland A are shown in square feet on the Current Plans to ASTI's satisfaction.
- d. The Current Plans show 1,542 square feet of temporary impacts to Wetland B will occur from the installation of 186 linear feet of 24-inch storm sewer pipe that stems from the proposed detention basin.

This proposed action qualifies for an exception to the Wetland Use Permit provided that: (1) a prior written notice is given to the City Engineer and written consent is obtained from the City Mayor prior to work commencing; (2) the work is conducted using best management practices (BMPs) to ensure flow and circulation patterns and chemical and biological characteristics of wetlands are not impacted; and (3) such that all impacts to the aquatic environment are minimized. BMPs must be implemented during the construction phase of the proposed project and any temporarily impacted areas must be restored to original grade with original soils or equivalent soils and seeded with a City-approved wetland seed mix. This is all shown on the Current Plans to ASTI's satisfaction.

This action will also require a Part 303, Wetlands Protection permit from EGLE, which must be obtained and submitted to the City for review prior to construction.

- e. The Current Plans show the entirety of Wetland C (1,985 square feet) will be permanently impacted from the construction of the proposed parking area. Wetland C is of low ecological quality and function and is not a valuable resource to the City. Therefore, ASTI recommends that the City allow for the impacts to Wetland C as proposed on the Current Plans. All impacts to Wetland C are shown in square feet on the Current Plans to ASTI's satisfaction.
4. **Use Permit Approval Criteria (§126-565).** This Section lists criteria that shall govern the approval or denial of an application for a Wetland Use Permit. The following items must be addressed on a revised and dated Wetland Use Permit application and additional documentation submitted for further review:
- a. A Wetland Use Permit from the City and likely an EGLE Part 303 Permit are required for this project as proposed. Once an EGLE permit is received by the applicant, it must be submitted to the City for review prior to construction.

5. **Natural Features Setback (§21.23).** This Section establishes the general requirements for Natural Features Setbacks and the review criteria for setback reductions and modifications.
- a. The Current Plans show all on-site Natural Features Setback areas and all proposed impacts to Natural Features Setback areas to ASTI's satisfaction.
 - b. All Natural Features Setback areas on-site were similar in ecological character and will be discussed together for the purposes of this report. Natural Features Setback areas on-site were dominated by invasive species such as smooth brome (*Bromus inermis*), garlic mustard (*Allaria petiolata*), Siberian elm (*Ulmus pumila*), teasel (*Dipsacus fullonum*), and smooth crabgrass (*Digitaria ischaemum*) with lesser inclusions of native species such as young to moderately mature box elder and cottonwood saplings, gray dogwood, and staghorn sumac (*Rhus typhina*). Total tree canopy was approximately 25%. The on-site Natural Features Setback areas on-site are dominated by invasive species (approximately 75% total coverage) and therefore low in ecological quality and function.
 - c. The Current Plans show that 195 linear feet of permanent impacts to Natural Features Setback associated with Wetland A will occur from the construction of the proposed parking lot. The Natural Features Setback areas on-site are of low ecological quality and function and offer little buffer quality to Wetland A. Thus, ASTI recommends the City allow for the proposed impacts.
 - d. The Current Plans show 52 linear feet of Natural Features Setback associated with Wetland B will be temporarily impacted from the installation of a storm water sewer line from the proposed detention basin in the northwest portion of the site.

This action would qualify for an exception to the Natural Features Setback ordinance provided that: (1) a prior written notice is given to the City Engineer and written consent is obtained from the City Mayor prior to work commencing; (2) the work is conducted using best management practices (BMPs) to ensure flow and circulation patterns and chemical and biological characteristics of wetlands are not impacted; and (3) such that all impacts to the aquatic environment are minimized. BMPs must be implemented during the construction phase of the proposed

project and any temporarily impacted areas must be restored to original grade with original soils or equivalent soils and seeded with a City-approved seed mix. This is all noted on the Current Plans to ASTI's satisfaction.

- e. The Current Plans show 177 linear feet of permanent impacts to Natural Features Setback associated with Wetland C will occur from the construction of the proposed parking lot. The Natural Features Setback areas on-site are of low ecological quality and function and offer little buffer quality to Wetland C. Thus, ASTI recommends the City allow for the proposed impacts.

RECOMMENDATION

ASTI recommends the City approve the Current Plans.

Respectfully submitted,

ASTI ENVIRONMENTAL



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