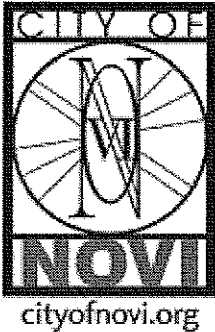


# MEMORANDUM



TO: MARK SPENCER, AICP, PLANNER  
FROM: DAVID BESCHKE, RLA, LANDSCAPE ARCHITECT  
SUBJECT: ELEVEN MILE AND BECK ROADS STUDY AREA  
ENVIRONMENTAL OVERVIEW  
DATE: APRIL 21, 2009

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The Eleven Mile and Beck Roads Study Area has many positive environmental features worth consideration for any rezoning or development that may be proposed. These features include wetlands, woodlands, habitat, river corridors and floodplains. Full scale on site investigations would be necessary for the entire study area in order to gather information necessary for a full environmental study. Below is a brief overview of some of the environmental assets of this study area. For the purposes of this overview, the entire study area has been divided into 3 property blocks for clarity. The northwest block (NW – approx. 97 acres) includes all property west of the ITC power corridor. The northeast block (NE – approx. 155 acres) includes all property east of the power corridor and north of Eleven Mile. The southeast block (SE – approx. 120 acres) includes all properties south of Eleven Mile.

## **City of Novi Regulated Wetland Map**

Novi's current Regulated Wetland Map indicates the presence of regulated wetland within all three blocks. The map serves as a guide indicating the likely presence of regulated wetlands. Any parcel that is proposed for development must first be field delineated for site wetlands to determine the true wetland boundaries.

Approximately 20% to 30% of the NW block contains regulated wetlands largely concentrated in 3 main areas. Approximately 30% to 40% of the NE block contains regulated wetlands largely concentrated in 3 main areas. The wetlands occur in 3 main areas, largely associated with multiple small streams that dissect the property. Approximately 20% to 30% of the SE block contains regulated wetlands largely concentrated in 3 main areas. While the property could potentially be developed, it is likely that existing wetlands would be disturbed and mitigation would be necessary. A small year-round pond exists at the northwest corner of the NE block. A more sizeable and deeper year-round pond exists at the northeast corner of the SE block.

Preliminary review by City of Novi staff and consultants indicate that the entirety of the study site does in fact indicate a greater area of wetlands than depicted on the Regulated Wetland Map. The site wetlands classifications vary throughout the property from emergent wetlands and shrub/scrub to wooded wetlands of high quality. Any proposed development on the subject site should be carefully considered in light of these environmental features.

### **City of Novi Regulated Woodland Map**

Novi's current Regulated Woodland Map shows that each block of the study area contains a level of regulated woodlands. The map serves as a guide indicating the likely presence of regulated woodlands. Any proposed development on the subject site should be carefully considered in light of these existing woodlands. Any parcel that is proposed for development must be field surveyed for all trees 8" and larger, as well as documenting all understory and lower vegetation to determine the true woodland boundaries. As such, the following data is offered as rough approximations for the area of regulated woodlands in each study area block.

Approximately 20% to 30% of the NW block contains regulated woodlands largely concentrated in 3 main areas. Approximately 40% to 50% of the NE block is regulated woodland that is largely one single forest centrally located on the parcel. Approximately 20% to 30% of the SW block is regulated woodlands. The SW block woodlands are concentrated to the westerly side of the block and are mainly one single forested area.

### **City of Novi Natural Features Habitat Map**

The City of Novi Natural Features Habitat Map identifies areas within the city that should be considered as having valuable natural features that support habitat for local flora and fauna. The map indicates that approximately 20 acres of the NE block is high quality habitat. An estimated 75 acres of the NE block are identified as habitat area. The NE block habitat is closely associated with the regulated woodlands, wetlands and streams. Approximately 50 acres of the SW block are identified as habitat. These areas are located more to the west and south of the property and are also closely associated with the site woodlands and wetlands.

### **Oakland County Green Infrastructure Project**

The recently completed Oakland County Green Infrastructure Visioning Project identified all interconnected networks of open spaces, natural areas and waterways within the county. The project focused on conservation values and the services provided by natural systems in concert with land development. A green infrastructure network is important as it supports native species, sustains natural ecological processes, maintains air and water resources, and contributes to our health and quality of life.

The visioning process included the classification of land areas utilizing the terms Hubs, Links or Sites. Hubs are larger environmental areas that anchor the green infrastructure network and provide an origin or destination for wildlife while helping to maintain natural ecological processes. Links are the connections that hold the network together and enable strong environmental functions. Sites are areas that serve as points of origin or destination within a green infrastructure network.

A large majority of the subject site has been identified by Oakland County as a Site, or quality environmental area and valuable portion of the interconnected environmental network. Approximately 70% to 80% of the NW and NE blocks have this designation. Approximately 60% to 70% of the SW block shares designation as a Site. In addition, stream corridors primarily on the NE and SE blocks have been designated as Links that allow for wildlife access between these area habitat Sites. In total, the entire subject area has very good potential for supporting a variety of wildlife due to its character and interconnectivity.

### **Oakland County Priority Green River Corridors**

Oakland County's Priority Green River Vision Map was unveiled in October of 2007. The map was part of a multi-disciplinary study intended to identify priority river corridors that provide significant wildlife habitat, biodiversity function, water quality protection, and community amenities including scenic, recreational, historical and cultural values. The value of riparian buffers and challenges to development implementation were considered. Although the site does have significant wetlands and streams/ county drains, no portion of the study area falls within identified Oakland County Priority Green River Corridors. The site does contribute to area groundwater through infiltration and serves as a headwater for area lakes, rivers and streams.

### **Federal Emergency Management Agency (FEMA) Floodplain**

FEMA floodplain mapping indicates that no floodplain exists on the NW block of the study area. The NE and SE blocks do have significant floodplains areas associated with the existing stream that flows from the north through the NE block, under Eleven Mile and onward through the SW block. For the floodplain area to be specifically delineated for the subject area, a detailed on site survey would be necessary. All site floodplains are designated AE, meaning areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Areas identified by FEMA mapping are federally regulated and identified floodplain areas cannot be disturbed without prior federal approval and without being mitigated. Mitigation typically occurs on the property to be developed. Due to the fact that the site floodplains are sizeable and wide spread, care must be taken for any proposed development plans that may affect site floodplain.