APPENDIX A

Wetland Report
PROJECT INFORMATION

The proposed project, referred to as the MS-MKE03 Data Center, is located on 315 acres (ac) within the Wisconsin Innovation Park, south of Braun Road, west of 90th Street, east of a Canadian Pacific Railroad line to the west and north of County KR (1st Street) in Mount Pleasant, Wisconsin (WI). The project site contains wetlands, some of which are connected with Lamparek Creek, which flows west-to-east, in the Pike River-Frontal Lake Michigan watershed and is within Hydrologic Unit Code (HUC) 0404000204.

PROJECT PURPOSE & NEED

The purpose of the MS-MKE03 Data Center project is to generate cloud storage and operational capacity in support of Microsoft’s platform. Microsoft offers a complete cloud platform that hosts applications, streamlines new application development, and integrates the cloud services needed to develop, test, deploy, and manage applications and online services, all while taking advantage of the efficiencies of cloud computing.

In the last few years, the workplace has shifted to a hybrid model which has led to a massive increase in the need for data storage. Microsoft (Applicant) develops, manufactures, licenses, and supports a range of services, devices, and software products and platforms. Its software products include operating systems for servers, personal computers, and intelligent devices; server applications for distributed computing environments; information worker productivity applications; business solution applications; high-performance computing applications; and software development tools. In the web search portal business, the Applicant provides access to the Internet and operates websites that provide access to a wide variety of online services. Competitors will primarily include other web search portal and online businesses.

The proposed site layout has been optimized to meet the needs of the facility’s operational requirements while minimizing site disturbance and disturbance to natural resources. Microsoft has committed to reducing the company’s operational carbon footprint by 75% by 2030. They have also added water to their long-standing carbon and energy commitments, launching a new water replenishment strategy to replace what their operations consume in water-stressed regions by the year 2030.

The absence of data centers in Wisconsin limits the expansion and advancement of the information technology industry in this region. The project is needed to address expanding customer demand for these services in the region as teleworking capacities, cloud-based storage and operating platforms, gaming and contactless living behaviors have increased in recent years. Because these projects usually take 18-24 months to design and construct, Microsoft is planning now for future growth. This data center design is advanced and is expected to provide optimal operational efficiencies.
Within Wisconsin, locations for a data center facility are mainly limited by access to fiber optic lines and adequate electrical power. Large scale data centers are concentrated where cloud and internet provider companies can best serve their customers. Wisconsin is a growing market for domestic fiber networks, with constantly growing demand for data centers spurred by the expansion of the market into the private sector.

Microsoft considered a number of factors in selecting the MS-MKE03 Data Center site. The project site’s location within the Tax Increment District #5 (TID 5), availability of adequate power, fiber, water and sewer infrastructure, and robust road network in proximity to regional transit corridors (i.e., Interstate 94), make it ideally suited to data center development and continued localized information technology industry growth. This aligns with the Village of Mount Pleasant, Racine County, and State of Wisconsin goals of creating a regional technology hub to support technological advancement and creation of living wage jobs in the area within which the project site is located.

**PROJECT DESCRIPTION**

The Applicant is proposing a data center development project that will be collectively known as the MS-MKE03 Data Center. The primary function of the data center campus is to provide an efficient, secure, climate-controlled environment to house and operate servers, communications, and data processing equipment inside the facility. The project includes one multi-story datacenter building (MKE03) with an attached administration/facility support area, and one single-story data center building (MKE04) along with security entrances, access roads, parking, a substation, and stormwater management/treatment facilities. Primary site access is limited to one secure location off of 90th Street with a secondary access point provided for the substation. Security fencing will be installed around the entire site.

**BUILDING FOOTPRINT**

In order to control the interior environment and meet operational specifications, the configuration of mechanical, electrical, and telecom infrastructure is a critical part of the design and influences building and equipment yard sizes and layouts. Server racks and equipment within the buildings are deployed from loading docks located between buildings with building length-width relationships driven by infrastructure routing along with server rack and equipment deployment and maintenance pathways and access considerations.

**BUILDING-TO-BUILDING RELATIONSHIP**

The MS-MKE03 project is based on an optimized design program with key building and support components being configured and constructed in a specific layout. This includes alignment of exterior equipment placement with the programmed interior functional spaces and equipment yards running parallel to the buildings to provide the shortest run of utilities from equipment to the building. The MKE04 building is perpendicular to MKE03 due to the size of the footprint required for the building (i.e., site dimensional
constraints). MKE04 and MKE03 are related facilities and there are a number of utility connections required between the two buildings. In addition, the combined administration and support facilities require these two buildings to be adjacent to each other to allow personnel and equipment to efficiently move between the two.

The underground utilities serving these facilities, including domestic and fire suppression water, sanitary sewer, industrial wastewater, fiber and electrical conduit, and stormwater utility infrastructure, and the required clearances amongst them greatly influence the relationship between buildings, roadways, and outdoor equipment. In general, utility-to-utility clearances of 5-ft, and building-to-outside electrical equipment/ancillary buildings (generators, switchgear) clearances of 20-ft to meet International Building & Fire Code requirements, are provided. Coolant water will be sourced from an existing water main and discharged into the existing sewer line. A 30-ft wide vehicular access road is provided around each building to allow for fire truck access and equipment delivery movements (crane loading). Fire trucks must be able to get within 150 feet of the buildings on every side to meet fire protection codes.

The underground utility infrastructure and the easements required for maintenance, including the local water/sewer/storm clearance regulations, along with building footprint requirements, affect the minimum pad site size and the space between buildings. The buildings are generally aligned to minimize the underground utility crossings, while also avoiding other environmentally sensitive features. By minimizing the underground utility crossings, the horizontal area needed to accommodate curves or corners in conduit and pressurized utility spacing is reduced.

**UTILITIES**

The Applicant has received confirmation that WEC Energy Group (We Energies)/American Transmission Company (ATC) will be responsible for design and construction of the substation co-located on the project site with the data center buildings. The substation pad serving the MKE03 and MKE04 buildings will be approximately 26 ac in size and will have a separate access road outside of the secured area to allow for maintenance. Permanent power for the onsite substation will be fed from the Mount Pleasant regional substation located to the west of the site through the construction of new 138kV transmission lines. The substation is sized to support at least 752 MW. The transmission to distribution (T-D) interconnection substation will be owned by We Energies. The high side busbar and breakers will be owned by ATC, while the distribution transformers will be owned by We Energies. A sanitary sewer line crosses the site within the electrical transmission easement. Water and gas lines are located around the perimeter of the site.

**PARKING**

The parking is calculated based on the Microsoft requirements for this type of building and local zoning requirements.
Project Execution

Methods

Site construction will include:

- Installation of erosion control measures and stormwater management best management practices.
- Grading of site and installation of utilities.
- Construction of buildings and substation (by others).

Materials

Materials utilized will include:

- Onsite soil for fill. There will be no offsite disposal of fill on this site.
- Gravel for laydown areas.
- Reinforced concrete pipes for stormwater conveyance.
- Riprap for pond outfall protection and inlet protection.

Equipment

Equipment utilized onsite during construction will include, but is not limited to:

- RT Cranes
- Crawler Cranes
- Tower Cranes
- Compactors
- Rollers
- Scrapers
- CAT and Pans
- Articulated Off-Road Trucks
- Excavators
- Bulldozers
- Loaders
- Skid steers
- Street Sweepers
- Semi-Tractor Dump Trucks
- Light Duty Pickup Trucks
- Concrete Mixer Trucks
- Mobile Concrete Batch Plant
- Mobile light towers
- Diesel powered generators.
- Person Lifts
- Water Trucks
Construction Schedule

The overall construction start date for mass grading operations associated with the construction of MS-MKE03 is expected to start on or about October 2, 2023. The overall construction end date for the final phases of construction is currently forecast to continue through mid-August 2027.

To be able to start mass grading by early October, the following precursor activities and durations would be expected:

1. Temporary Site Perimeter Fencing = June 1 - August 1, 2023
2. SWPPP/Erosion Control = July 1 - August 1, 2023
3. Install Construction Entrances = August 1 - August 15, 2023
4. Install Parking Pad/Haul Road = August 1 - October 1, 2023
5. Mass Grading = Start October 2, 2023

Erosion Control Measures

Erosion control measures utilized will be in compliance with the Wisconsin Construction Site Erosion Control Field Guide¹ and the DNR Storm Water Construction Technical Standards². Erosion control measures utilized during construction will include, but are not limited to:

- Track-out Control (off 90th Street) with wheel washes to prevent sediment and sediment laden run-off from leaving the site.
- Silt Fence (double around wetlands that are not filled).
- Temporary Construction Fences.
- Creek Checks (combination of CA-1 and RR-3 or 4).
- Sediment basins used during construction to reduce sediment leaving the site. Will be converted to permanent ponds after site stabilization.
- Diversion swales as feasible to intercept construction run-off and convey it to the basins. This minimizes the installation of underground pipes for construction and allows the erosion control measures to be monitored and maintained for the duration of construction.
- Erosion Mat & Seeding.
- Dust Control.

¹ NASECA, Wisconsin Construction Site Erosion Control Field Guide. October 2, 2019.
Concrete washouts to contain concrete waste.

Storm Sewer inlet protection (used at catch basins and curb inlets)

**Wetland Impacts Summary**

Permanent impacts to wetlands totaling 9.05 acres are proposed as part of the MS-MKE03 Project. Site wetlands were initially identified by TRC in 2018, and concurrence provided by both USACE and WDNR. In December 2022, Stantec completed a field wetland delineation, and concurrence was provided by WDNR after a site visit, on April 27, 2023. These regulatory concurrence letters are included as attachments as part of this permit application. The table below highlights the wetland impacts proposed for the MS-MKE03 project. Functional values for the seven wetlands proposed for impact will be analyzed by WDNR through the Wisconsin Rapid Assessment Methodology tool, as part of the permit application review.

**Table 1. Wetland Impacts Summary**

<table>
<thead>
<tr>
<th>Wetland Identification</th>
<th>Wetland Type</th>
<th>Type of Impact</th>
<th>Permanent Wetland Impacts</th>
<th>Mitigation Credits (2:1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10</td>
<td>Wet Meadow</td>
<td>Fill for substation pad site</td>
<td>0.27</td>
<td>0.27 = 0.54</td>
</tr>
<tr>
<td>W11</td>
<td>25% Fresh Wet Meadow/75% Shallow Marsh</td>
<td>Fill for laydown area and access road to substation</td>
<td>0.48/1.44</td>
<td>1.92 = 3.84</td>
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<tr>
<td>W12</td>
<td>Seasonally Flooded Basin</td>
<td>Fill for laydown area and access road to substation</td>
<td>4.84</td>
<td>4.84 = 9.68</td>
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<tr>
<td>W13</td>
<td>Fresh Wet Meadow</td>
<td>Fill for substation pad site</td>
<td>1.72</td>
<td>2.67 = 5.34</td>
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<tr>
<td>W53</td>
<td>10% Shrub Carr/90% Fresh Wet Meadow</td>
<td>Fill for substation pad site and access road around MKE03</td>
<td>0.02/0.19</td>
<td>0.21 = 0.42</td>
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<tr>
<td>W54</td>
<td>Fresh Wet Meadow</td>
<td>Fill for substation pad site and access road around MKE03</td>
<td>0.09</td>
<td>0.09 = 0.18</td>
</tr>
<tr>
<td><strong>Total Acres</strong></td>
<td></td>
<td></td>
<td><strong>9.05</strong></td>
<td><strong>20.00</strong></td>
</tr>
</tbody>
</table>

The Practicable Alternatives Analysis, included as part of this permit application, provides additional information on the avoidance, minimization, and mitigation considerations associated with the project.
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