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To: Jon Gumtow
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From: Mike Emmenegger
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File: [Redacted] Survey, Kohler Golf Course Project, Town of Wilson, Sheboygan County, Wisconsin

Date: September 24, 2014

Reference: [Redacted] Surveys, Kohler Golf Course Project, Town of Wilson, Sheboygan County, Wisconsin

OVERVIEW

In support of the proposed Kohler Golf Course Project (Project), Stantec Consulting Services Inc. (Stantec) completed a [Redacted] survey on Kohler Company owned property along the [Redacted] in Sheboygan County, Wisconsin. This memorandum presents the project description, objectives, methods, and results of the survey effort.

PROJECT DESCRIPTION

The Project Area consists of a 247-acre parcel located adjacent to Lake Michigan which is owned by Kohler. A 135-acre parcel owned by the State of Wisconsin, located adjacent to the west limits of the Kohler parcel is also being evaluated for alternative options for an entrance road and maintenance facility. Based on previous site evaluations, the Project Area consists of a mix of upland and wetland habitats including, [Redacted] old field, and pine plantations.

OBJECTIVES

According to Wisconsin Department of Natural Resource (WDNR) records, potential habitat exists along the [Redacted] for [Redacted] which is currently listed as a State-endangered species and has been documented within the general geographic area.

As part of the pre-construction and planning phase of the Project, a habitat assessment and pedestrian transect survey was completed to document the presence of the [Redacted] within the Project Area. The survey objectives were as follows:

- Perform a habitat assessment to determine the presence of suitable [Redacted] habitat.
- Document the presence or absence of [Redacted] within identified suitable habitat.
METHODS

WDNR Correspondence

Stantec corresponded with WDNR species expert Terrell Hyde. WDNR recommended completing a pedestrian transect survey within suitable habitat to detect species presence prior to September 15. Weather conditions prior to September 15 generally produce warmer daytime temperatures, which result in a higher rate of activity. WDNR State Conservationist, Jay Watson, accompanied Stantec’s field biologists during the site visit, providing survey and species identification assistance.

Pedestrian Transect Survey

The pedestrian transect survey was completed in suitable habitat within the Project Area. Suitable habitat consisted of habitat, present within the of the 247-acre parcel owned by Kohler. Element occurrences of the were previously documented by WDNR south of the Kohler property, within the Kohler-Andre State Park area. For this reason, only the Kohler property was surveyed. Use of the pedestrian transect survey method allowed biologists to cover large areas of suitable habitat while looking for on both the ground and during flight.

The pedestrian transect survey was conducted by two Stantec biologists and WDNR Conservation Biologist Jay Watson on Monday September 8, 2014. observed during the survey were netted using butterfly or invertebrate nets. Following capture, netted individuals were identified to species, photographed, and released. Locations of confirmed were mapped using a hand held GPS capable of sub-meter accuracy. Additional survey methods included using binoculars to examine detected on the ground for species identification.

RESULTS

The survey followed the within habitat, shown in Figure 1. The temperature during the survey event reached 73°F, with clear skies in the morning and partly to mostly cloudy skies in the afternoon. Wind speed was recorded at 5 to 13 mph.

were identified at several locations along the within the 247-acre Kohler owned portion of the Project Area (Figure 1). The were primarily detected within the habitat and in greater numbers where the widened in size, before transitioning to the community. Over 100 individuals were identified during this survey. Thirteen individuals were identified and mapped using GPS. The survey also mapped the presence of by large numbered groups of individuals, as follows: One area with over 20 confirmed was identified, one area with over 25 confirmed was identified, and one area with over 80 confirmed was identified. All three group identification areas were mapped using GPS (Figure 1).
CONCLUSION

This report summarizes the methods and results of a pedestrian transect survey for the [species] within the Kohler Golf Course Project Area. The [species] was documented at sixteen locations (135+ individuals), within the [habitat] of the Project Area. The [species] were present within the [habitat] located along the [habitat]. Greater numbers were identified in areas where the [habitat] became wider in size before transitioning into [habitat]. Suitable [habitat] exists along the entire [area] of the Project Area as well as adjacent to the north and south. Other [species] identified during the survey include the [species].

If you have any questions, or require any additional information, please call us at (920) 592-8400.

Sincerely,

STANTEC CONSULTING SERVICES INC.

[Signature]

Mike Emmenegger
Environmental Scientist
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Attachment: Survey Map
Photo Log

c. Jon Gumtow, Stantec
Bill Poole, Stantec
Seven figure pages and one page of photos were redacted since they contained information on species tracked by Wisconsin's Natural Heritage Inventory (NHI) program. This information is considered sensitive and is not subject to Wisconsin's Open Records Law (per s. 23.27, Wis. Stats.)