MEMO

To: John Gasior, Avon Law Director
From: Ryan E. Cummins, PE, CPESC
Date: January 23, 2019
CVE Project Number: 19097

Regarding: Lorain County Metro Parks
Jaycox Road Property
PP: 0400023107025
Soil Removal for Floodplain Expansion

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Background

The Lorain County Metro Parks (LCMP) owns a 57.12-acre parcel of land along Jaycox Road known as Permanent Parcel Number 0400023107025. The parcel lies to the northwest of the Jaycox Road and Riegelsberger Road intersection in the City of Avon. French Creek cuts across the property in a southeast to northwest direction. Approximately 700 feet north of the Jaycox & Riegelsberger intersection is the confluence of French Creek and Schwartz Creek.

The stream channels on the property appear to have been straightened over the years and exhibit suburban flow characteristics such as an incised bed and steep eroded banks. French Creek has a documented history of flooding over its banks on this parcel to the point that significant parts of the adjacent Kensington Park Estates Subdivision have been inundated during large storm events.

The parcel was sold to Lorain County Metro Parks in December of 2016 by the City of Avon with the understanding that various floodplain and water quality enhancement projects would be completed by LCMP. These projects would be for the benefit of associated ecosystems/habitats, the French Creek Watershed and most importantly the adjacent property owners. The City of Avon did retain a Right of First Refusal for the removal of any excavated soil materials via a separate agreement with LCMP executed in 2017.

Floodplain Expansion

Since purchasing the property LCMP has pursued permitting from the United States Army Corps of Engineers (Corps) to allow the creation of various wetland and stream mitigation areas. It is my understanding that during the Corps permitting process the ability of LCMP to perform floodplain expansion was diminished due to restrictions placed on the proposed site of LCMP projects by the Corps. However, LCMP has
continued to work toward and is closing in on being granted a Corps permit to create new wetland mitigation areas on the parcel. As such, LCMP has served notice to the City of Avon that if Avon wishes to extract soil materials from the site it must do so at this time prior to the areas being utilized for wetland creation after which the areas will not allowed to be disturbed again.

Separately, the City of Avon Administration was approached by KMU Trucking & Excavating Inc. (KMU) in November of 2018 stating that it has an opportunity to utilize approximately 50,000 cubic yards of earthen materials at a project site outside of Avon and outside of the French Creek Watershed. In addition, there would not be a cost to Avon for KMU to excavate and remove the materials provided the removal could occur during a window of time where KMU has use for the materials at that project site.

A review of the Jaycox Road site by Chagrin Valley Engineering as well as engineering consultants for LCMP indicate that space exists along the north side of French Creek, just west of the sharp bend in Jaycox Road, to provide for the removal of approximately 50,000 cubic yards of earthen materials without dramatically impacting the long-term use of the site by LCMP. The removal would be contiguous to the north bank of French Creek, occur above the ordinary highwater mark of the stream, be graded to provide positive drainage at all points and would create approximately 31 acre-feet of new floodplain storage volume directly adjacent to the stream. Creation of such an amount of new floodplain storage would be of substantial benefit to the health, safety and welfare of the adjacent property owners who have had to deal with severe flooding in the past. Exhibits depicting a sketch level site plan and sample cross-section of the proposed excavation area are attached for reference. Final grading plans and a Storm Water Pollution Prevention Plan will be developed upon City Council approval.

The excavation of earthen materials is an expensive process involving many large pieces of heavy equipment and substantial costs for trucking. The cost is also largely dependent on timing, as in the timing of having a spot to put the dirt once it has been excavated from a given site. The benefit of creating nearly 31 acre-feet of flood storage in a flood prone area is undeniable. Having the timing align so that the excavation does not derail LCMP plans, that a contractor has a need for the material in a location outside of the watershed, and that the substantial costs of excavation, trucking and placement of the materials are borne solely by the contractor makes the current proposal by KMU highly desirable in my opinion.
EXCAVATION AREA

AVERAGE WIDTH OF EXCAVATION APPROX. 230'

SAMPLE A SECTION

AVERAGE DEPTH OF EXCAVATION APPROX. 5'

S:1 TIP. SLOPE

% GRADE TYP.

Ex. Stream

Ex. Ground

Ex. Ground

EXCAVATION AREA

AVERAGE WIDTH OF EXCAVATION APPROX. 230'

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Ex. Stream

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AVERAGE DEPTH OF EXCAVATION APPROX. 5'

SUBJECT PARCEL:

P.P.#04-00-025-107-025
PROPERTY OWNER: LORAIN COUNTY METRO PARKS
CVE PROJECT No. 19097

CHAGRIN VALLEY ENGINEERING, LTD.

STREAM/WETLAND/FLOODPLAIN IMPROVEMENTS
SECTION EXHIBIT
KENNINGTON PARK
LORAIN COUNTY METRO PARKS
CITY OF AVON, COUNTY OF LORAIN, OHIO