

MEMO

TO:	Gene Williams Public Works Department 220 SE Green Street Lee's Summit, MO 64063
FROM:	Eric Shelton, PE & Emma Schneider, EI
RE:	The Retreat at Hook Farms 2 nd Plat – Conditional Letter of Map Revision based on Fill Lee's Summit, MO – 2021
DATE:	June 17, 2021
PROJECT #:	A19-4059

Description of Project:

The Retreat at Hook Farms 2nd Plat is a residential development located in Lee's Summit, Missouri north of SW Hook Road. Tributary M5 flows southeast to northwest on the north side of SW Hook Farms and backwater from Tributary M5 extends onto the east side of the proposed development. There are approximately four (4) lots on the west side of Tributary M5 that will be located partially within the Zone AE floodplain from Tributary M5. The development is located within Section 23, Township 47N, Range 32W. The developer, Hunt Midwest Real Estate Development, Inc., has requested Olsson to assist in obtaining a Conditional Letter of Map Revision based on Fill (CLOMR-F) from FEMA which would show that the lots are going to be removed from the floodplain. Removing the lots from the floodplain will require the placement of compacted fill to elevate the lowest lot elevation above the highest base flood elevation touching the lot.

Olsson requested all hydrologic and hydraulic data from FEMA and SEMA for Mouse Creek Tributary M5 until confluence with Mouse Creek and Mouse Creek until Scherer Parkway before starting this CLOMR-F. No data was provided by FEMA for this project. SEMA provided a HEC-RAS model originally developed by Black & Veatch in HEC-RAS 4.1.0. Olsson updated the model to run in HEC-RAS 5.0.7.

The model consists of five (5) plans:

- **HookFarmsNorth.p01 "Mouse Creek1":** Base model
- **HookFarmsNorth.p02 "Mouse Creek1_Improvements"**

- **HookFarmsNorth.p03 “Mouse Creek1_FullyDeveloped”**: A copy of Mouse Creek1 with a fully developed conditions upstream of the Hook Farms development. Steady flow file for 100-year event has been updated to reflect new flows.
- **HookFarmsNorth.p04 “Mouse Creek1_ExistingConditions”**: A copy of Mouse Creek1_FullyDeveloped with cross sections 7000 through 7015 updated to reflect existing conditions from survey.
- **HookFarmsNorth.p05 “Mouse Creek1_ProposedConditions”**: A copy of Mouse Creek1_ExistingConditions with cross sections 7000 through 7015 updated to reflect proposed grading.

Upon reviewing the Mouse Creek1_ExistingConditions results and the Mouse Creek1_ProposedConditions results show no rise occurs in a 100-year storm event due to the proposed grading being completed above the 100-year event water surface elevation.

Please advise if you have any questions.

Sincerely,



Eric Shelton, PE

