NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Flood Protection and Dam Safety 625 Broadway, Albany, New York 12233-3504 P: (518) 402-8185 | F: (518) 402-9029 www.dec.ny.gov

MEMORANDUM

TO:	Patrick Connally
FROM:	Geoff Golick
RE:	Carver Project, Town of Glen - Floodway Encroachment
DATE:	11/20/2023

The following summarizes Central Office's Floodplain Management staff review of the Carver Results Technical Note prepared by Ramboll for Ingalls & Associates, LLP. This review only contains an evaluation of the project solely based on Floodplain Management requirements within Part 60 of Title 44 of the Code of Federal Regulations (CFR) and the Town of Glen Local Law No. 5 of 2017 Flood Damage Prevention. Other NYSDEC program perspectives were not considered as part of this review.

The project, located in the Town of Glen, Montgomery County, NY, includes regrading, the placement of fill, and storage of materials. The project site is within the limits of the Mohawk River Zone AE Special Flood Hazard Area (SFHA) as shown on the Flood Insurance Rate Map (FIRM) panel 36057C0178E, dated 1/19/2018. This reach of the Mohawk River has the benefit of both a regulatory floodway and Base Flood Elevations (BFEs).

Development within the floodway is prohibited by the regulations in 44 CFR § 60.3(d) unless it can be demonstrated that the development will not increase flood levels during the base (100-year) flood.

44 CFR § 60.3(d)(3) states:

"The community shall prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge"

This clause requires the applicant to conduct an encroachment analysis known as a "norise" proving the floodway development will not increase water surface elevations (WSELs) during the 1% annual chance (100-year) flood by more than 0.00 ft. The Technical Note was prepared by Ramboll, provided to NYSDEC, and was reviewed as to whether the project meets the no-rise requirement.



The following items were reviewed by NYSDEC Floodplain Management:

- Carver Results Technical Note, dated 10/5/2023
- Grading Plan, dated 5/20/2022

Please note that the actual hydrologic and hydraulic models were not reviewed by NYSDEC, but only the Technical Note and screenshots of model geometry.

The information provided was checked for correctness and consistency by the Floodplain Management staff. The hydrologic and hydraulic methods were described in the Technical Note.

Ramboll obtained an unofficial copy of the FEMA MIKE 11 hydraulic model for the Mohawk River. The existing FEMA model originally developed in the 2007 version of IMKE 11 was duplicated in the 2022 update 1 of MIKE +. The Duplicate Effective model was revised to smooth and raise grade of the existing cross section 52 to create a Proposed Conditions model. The Proposed Conditions model also incorporated an additional cross section through the site at chainage 972042.22 as requested by NYSDEC Floodplain Management.

Table 1 of the Technical Note shows the differences in WSELs between the Duplicate Effective model and Proposed Conditions model. The table shows that the proposed development will not increase WSELs at any modeled cross section. As such, the floodway encroachment analysis is acceptable and meets the no-rise requirement of the floodplain management regulations.

The Town of Glen Floodplain Administrator should ensure that the materials stored in the floodway are anchored to prevent flotation such that the materials would not pose a risk to adjacent properties in the event of a flood. Before any work is done, a Floodplain Development Permit should be obtained from the Town of Glen.

Please do not hesitate to contact me if you have any questions regarding this review. I am available to discuss any questions or concerns.