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To: Village President & Board of Trustees c/o Art Osten, Interim Village Manager Dana McCarthy, Assistant Village Manager Village of Long Grove

Fr: Geoffrey L. Perry, P.E., Village Engineer

Date: November 3, 2023

Re: Ruth Barn & Archer School Relocation

Historical Society Property (338 Old McHenry Road)

Feasibility Study
Village of Long Grove

As part of the upcoming Village Hall expansion project, the Ruth Barn will need to be relocated. The Ruth Barn is currently east of Village Hall and within the footprint of the proposed building expansion. There are two separate locations contemplated for the relocation, (1) the Long Grove Historical Society property at 338 Historical Lane (adjacent to Stempel Parking lot) and (2) beside the Archer School north of Village Hall. In recent discussions, The Long Grove Historical Society has inquired on the possibility of moving the Ruth Barn and the Archer School (located northwest of Village Hall) to the Histocial Society Property. This memorandum summarizes a feasibility study completed for the relocation of both the Ruth Barn and Archer School to the Long Grove Historical Society property at 338 Historical Lane.

The following parameters and information was used in the feasibility study:

- Approximate property lines based on a Plat of Survey
- Western property line from ALTA/ACSM Land Title Survey, prepared by Compass Surveying Ltd. dated May 28, 2008, which was used in conjunction with the Stempel Parking Lot reconstruction project
- Septic plan, prepared by PAF & Associates, dated April 11, 1988
- Building setback lines per zoning code. Setbacks include a 15-foot side yard setback and 20-foot rear and front yard setback.
- Existing 100-Year regulatory floodplain, elevation ±722.5 feet per FEMA Flood Insurance Profiles
- Floodway limits per Lake County GIS Maps
- Wetland limits per Lake County GIS Maps
- Additional features including existing well and well separation radius, drain tile records, and Buffalo Creek limits are approximately shown for further clarification from the plan from PAF & Associates and other available records

The attached exhibit shows possible locations for the Archer School and Ruth Barn on the Historical Society Property. The locations have been chosen to maximize separation on the available open space, while limiting tree removal and avoiding encroachment on wetland and floodplain area.

Per Village Code (5-3-12), accessory structures must be located 20-feet from the principal structure. The barn and school have also been placed to meet the yard setbacks, as confirmed by the building department. Lastly, the Ruth Barn meets all Lake County Health Department Appendix D: Minimum Setback Distances from the existing septic system, including the 10-foot setback requirement from all adjacent septic laterals, based on the record plans. A field verification of the existing septic system is needed for confirmation. It shall be noted that the structures are being considered as Buildings Without Foundation Footing Drains.

While moving the Ruth Barn and Archer School to the downtown parcel is possible, there are many items that will require further evaluation and approval. A few of those items are:

- Relocating the Barn or School to the Historical Society property includes moving the structure through
  downtown which has overhead building utility services and the traffic signal at the intersection of Old
  McHenry Road and Robert Parker Coffin Road. As previously discussed, this will involve coordination with
  the utility companies, for temporary relocation, should the buildings be moved in-tact. There are also various
  other options for moving the buildings; see Memorandum dated October 24, 2023.
- The required wetland buffer on Historical Society Property is 50-feet (§505.01.B of the Lake County Watershed Development Ordinance ("WDO")), based on its size. As shown on the exhibit, the school and barn are both within the buffer. As 50% of the wetland buffer is not maintained, a variance from the WDO will be required. This variance would need to be approved by both the Village Board and the Lake County Stormwater Management Commission ("LCSMC").
  - Note: It is possible that wetland field mapping may decrease the size of the wetland, resulting in increased separation between the buildings and wetland; however, it is unlikely that the required buffer will be met.
- The conservancy district line is not clear per the provided records and will have to be accurately shown to confirm the 20-foot buffer yard setback and mitigation requirements (Village Code Section 7-5-7) per the Conservancy Scenic Corridor Committee ("CSCC").
- Tree removal including species, condition, size, and number of trees to be removed was not considered as part of this study and should be consulted with the Village Forester as part of any final plan.
- The buildings as presently shown also have minimal separation between each other, of 4.3 feet. The Village Building Department will need to evaluate this condition to determine code compliance.
- The Building Department should review all applicable zoning codes to this study prior to a final plan.
- This plan does not include modification to the existing septic system. If further evaluation of the site deems
  the septic system to need to be relocated / reconfigured, that can be done. This may be a potentially
  expensive endeavor; however, it could yield more area available for relocations.
  - Note: Cost and scope to relocate / reconfigure the septic system were not considered under this feasibility study. The exact location of the septic system and consultation with a septic contractor would be required should there be further investigation into this option.
- The parcel in question is part of an old Planned Unit Development (PUD) Red Oaks, which includes 338 Old McHenry Road, the Stempel parking lot, and the four additional lots near Old McHenry Road. The PUD has been quite distorted over time. For purposes of this study, B1 District setbacks were assumed. Moving the Ruth Barn and Archer School to the downtown site next to the Farmhouse would require amendment to the Rad Oaks PUD, as the original PUD requirements are not met including, but not limited to, exceeding the maximum 900 square feet allowed to be utilized for retail space.

## **Summary:**

Relocation of the Ruth Barn and Archer School to the Historical Society Property at 338 Historical Lane appears feasible. There are many considerations to whether these relocations are pursued, and we recommend a further evaluation into the zoning component of this option and confirmation of the items listed above.

The biggest engineering concern is the proximity of the school to the wetland. The Village Board should contemplate whether a variance would be granted for this project. If not, we recommend seeking alternative options for the relocation of the Ruth Barn.