



March 24, 2024

MILR, LLC C/O Gerald Jacobowitz, Esq. P.O. Box 366 Walden, NY 12586

RE: Wetland letter report for

Parcels: Section 29, Block 1, Lots 5.1, 5.2, 5.3, 5.4, 5.5 (5 lots)

Sheffield Gardens Town of Montgomery Orange County, NY

Dear Mr. Jacobowitz.

On November 20 and 21, 2021, a wetland delineation was conducted as requested on the above referenced five lots, a contiguous, combined property of approximately 53± acres. The site was walked and a field investigation completed to determine if there were any areas in question that met any of the definitions of regulated wetland areas by either the Army Corps of Engineers (ACOE) or the New York State Department of Environmental Conservation (NYSDEC).

Before conducting the field investigation, we reviewed online Federal and State aerial, soils, and remote wetland mappings of the referenced parcels. These sources assist in identifying if there are any remotely mapped wetlands on the property as well as any other areas where we should verify whether or not the field conditions match the mapped resources that we reviewed.

The online Federal remote mapping resources of the United States Fish and Wildlife agency (USFWS) National Wetland Inventory (NWI)¹, depicts wetlands on the easternmost portion of the property. NWI wetlands are identified on the NWI map by coded Cowardin classifications.² The mapped wetland features for this property are identified as a Cowardin coded PEM1Ed wetland with an included area of PFO1C wetland. "PEM1Ed" indicates areas of palustrine emergent vegetation (PEM) characterized by persistent vegetation (1) in areas that would be expected to exhibit seasonally flooded or saturated soils (E) that, historically, had been ditched and drained. "PFO1C" indicates areas of palustrine forest (PFO) of broad-leaved deciduous vegetation (1) in areas that are seasonally flooded (C). These features are shown on the

¹ The wetland information displayed on the USFWS NWI mapping website shows wetland type and extent using a biological definition of wetlands. There is no attempt on their website to define the actual limits of proprietary jurisdiction of any Federal, state, or local government, or to establish the geographical scope of the regulatory programs of government agencies. The FWS does not maintain, and is not responsible for the accuracy or completeness of the base cartographic information depicted on NWI maps. Please note that the NWI data being shown may be out of date. As of March, 2023, the USFWS is currently working to update their NWI data set, therefore recommends to verify NWI website maps with site visits to determine the actual extent of wetlands on a site.

² Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

attached USFWS NWI map. Presently, a body of open water has inundated a portion of the PEM1Ed NWI feature as shown on the NWI map.

The NYSDEC Environmental Mapper website shows there is one state mapped wetland (NYSDEC Freshwater Wetland WD-29) mapped on the property and two streams (Regulation Nos. 855.5-146 and 855.5-148) that exit, offsite, from wetlands on the property. All NYSDEC wetlands are bordered by a NYSDEC regulated 500-foot state checkzone³ as depicted for wetland WD-29 on the attached NYSDEC sourced figure. The two streams are designated as unregulated (Standard C - Class C) streams and are shown on the NYSDEC Environmental Mapper website as being located just beyond the project site boundaries.

Our field investigation was conducted in accordance to the 2012 Northcentral and Northeast Regional Supplement to the ACOE 1987 manual⁴. The upland and wetland areas on the property were determined by observing three parameters: plant species, soil types, and site hydrology, in accordance with that agency's guidelines. Any areas appearing to meet the conditions set forth by the guidelines were flagged and then marked on a wetland field map which shows approximately those areas of the property within which we observed wetland conditions. A copy of this topological map of the flagged wetland lines on the property has been previously emailed to your surveyor. That map may be used to aid in locating and surveying the actual location of our flagged wetland lines.

During our field investigation, we identified and delineated four wetland areas that were flagged by us⁵. The larger of the delineated site wetlands (incorporating the two areas flagged as Wetlands "C" and "D") is part of a more expansive wetland area (NYSDEC Wetland WD-29) from within which stream 855.5-146 originates. This unnamed stream flows north from NYSDEC Wetland WD-29, passing under Route 17K, to flow into the Wallkill River. A second stream (855.5-148) flows from an area southwest of Wetland "A" through offsite parcels. Both of these two streams form small tributaries to the Wallkill River, which is a regulated navigable Water of the United States (WOTUS). The Wallkill River watershed is located within the larger basin of the Hudson River. The fourth wetland area, Wetland "B," is flagged as an isolated wetland, also in the southwest corner of the property.

WETLAND	TYPE	SOIL	VEGETATION	HYDROLOGY	ACRES	JURISDICTION
А	Palustrine Forested	Canandaigua silt loam (Ca)	Trees and shrubs	Saturated	0.650	Federal
В	Palustrine Forested	Canandaigua silt loam (Ca)	Unvegetated	Inundated	0.274	Federal
С	Palustrine Forested	Erie gravelly silt loam (ErB)	Trees, shrubs, and emergents	Saturated	1.483	State and Federal
D	Lacustrine Littoral/Limnetic	Canandaigua silt loam (Ca)	Shrubs, emergents, and aquatics	Inundated	8.763	State and Federal

³ The "checkzone" is an area around a mapped NYSDEC wetland within which the actual wetland may occur. A project that may encroach into this area should have the actual wetland boundary determined on site. A validated field delineation aids in avoiding impacts in NYSDEC wetlands or their regulated 100-foot buffer zones.

⁴ ACOE, 1987, Corps of Engineers Wetlands Delineation Manual, 11 Technical Report Y-87-1.

⁵ ACOE Wetlands Delineation Map WL-1, Engineering & Surveying Properties.

A set of ACOE-compliant Wetland Determination Data Forms were created to characterize both an upland and a wetland plot within the property. These two sets of forms are attached to this letter. The set of forms generated for the wetland plot is representative of a shoreline portion of the most expansive of the wetlands on the site, Wetlands "C" and "D." The set of forms generated for the upland plot is representative of the deciduous forest present across the higher hilltop elevations of the site.

Vegetation

The most extensive area of wetland on site (Wetlands "C" and "D") is located within, or in proximity to, the greater extent of the NYSDEC wetland discussed above. This wetland includes areas of open-water flooded marshland, meadow wetland, and palustrine forest that drain via an offsite stream. An overstory tree canopy is present along the shoreline of much of this wetland, as shown on the attached NWI map. In those sections, pin oak (*Quercus palustris*) and red maple (*Acer rubrum*) are the primary constituents forming the tree canopy. The shrubs present were predominately silky dogwood (*Cornus amomum*), with a lesser observed presence of multiflora rose (*Rosa multiflora*) and winterberry (*Ilex verticillate*). Where the wetland is dominated by annual forms of emergent vegetation, the observed plant community consisted primarily of wrinkleleaf goldenrod (*Solidago rugosa*), broadleaf cattail (*Typha latifolia*), wood reed grass (*Cinna latifolia*), and halberd-leaf tearthumb (*Persicaria arifolia*). This vegetation is consistent with plants that are mostly recognized as facultative to obligate wetland trees, shrubs, forbs, and grasses.

The upland areas of the property consist of mature forest. The dominant trees throughout most of this largely forested site are red oak (*Quercus rubra*), American beech (*Fagus grandifolia*), sugar maple (*Acer saccharum*), and red maple. Also observed, but less frequently, were Eastern hophornbeam (*Ostrya virginiana*), sweet birch, and black cherry. Under this fully closed forest canopy, the understory was noted to be densely covered by the shade tolerant and invasive shrub, common privet (*Ligustrum vulgare*). The shrub layer also included some areas of multiflora rose, Allegheny blackberry (*Rubus allegheniensis*), and bush honeysuckles (*Lonicera* spp.). The herbaceous layer of vegetation consisted largely of the invasive non-native herb, garlic mustard (*Alliaria petiolata*). Japanese honeysuckle (*Lonicera japonica*) was observed, infrequently, throughout both the forested and shrubby areas of the site.

Soils

Both the Orange County Soil Survey and the United States Department of Agriculture (USDA) online web soil survey from the Natural Resources Conservation Service (NRCS)⁶ were reviewed to verify if there were any potential hydric (wetland) soils on the property. A copy of the USDA/NRCS Web Soil Survey for the property is included for your use. The mapped soil units for these parcels includes both non-hydric (upland) and potentially hydric soil ratings as shown on the attached Web Soil Survey map for this property. There is one upland soil identified on site. The upland soil is in the locations that are shown on the attached Web Soil Survey map as Pittsfield gravelly loams (Pt). There are three potentially hydric soils identified on the property, those that are shown with Map Unit names of: Ca (Canandaigua silt loams), ErB (Erie gravely silt loams), or UH(Udorthents).

The several soil samples taken by hand auguring within the wetland areas showed very poorly drained, saturated, soils that would have formed *in situ* in their concave landscape positions. The soil cores taken in the wetland areas during the field investigation were consistent with several field indicators of hydric soils as shown by example on the attached set of Wetland "D" Wetland Determination Data Forms, and therefore the areas flagged are considered to have wetland soils.

⁶ Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: http://websoilsurvey.sc.egov.usda.gov/. Accessed March 24, 2023.

Upland (dryland) soils on the property are areas of gravelly loam soil that formed, post-glaciation, in till deposits on gently sloping, to moderately steep, land on low hills of glaciated upland areas. These areas are characterized as having deep and well-drained soils. These soils do not maintain proper hydrology to be wetland soils as they dry out during the growing season.

Hydrology

As required by the 2012 Northcentral and Northeast Regional Supplement to the ACOE 1987 manual, the hydrology of the property was considered when defining the appropriate limits of any potential wetland areas.

Including the areas of open water and flooded areas of marshland associated with stream 855.5-146, and the wetlands and vernal pool associated with stream 855.5-148, the areas identified as wetland were observed to be bordered by soils that were seasonally wet throughout their areal extent during our site visits. Soils within the nearshore of the flooded marshland and pond in the eastern portion of the property were saturated, and most typically had a water table that was at or near the surface. Within the southwest portion of the property, direct input of rainfall and groundwater seepage from the surrounding higher terrain would be significant contributors to the hydrology of the stream and the two wetlands that are located there.

Conclusions

Based on the several sources of online federal and state agency materials that were reviewed, and the direct observations made by EA during the site visits, this site contains jurisdictional waters of the United States as determined by the presence of wetlands identified by the occurrence of hydrophytic vegetation, hydric soils, and wetland hydrology according to the three-parameter criterion established in the 1987 "Corps of Engineers Wetlands Delineation Manual." The site wetlands are adjacent to, or connected to, defined water bodies (the two onsite streams) that are part of a WOTUS tributary system (the Wallkill River).

Wetlands and streams such as these that are hydrologically connected to navigable waterways (elements of WOTUS) are subject to the regulatory jurisdiction of the ACOE per the provisions of Section 404 of the Clean Water Act. Prior to any disturbance of any portion of the site wetlands, pond, or stream areas therefore, a permit, or permits, may be required from the New York City office of the ACOE.

Some portions of the wetland areas of this property would be within the jurisdiction of the NYSDEC. The larger area of wetland (Wetland "C" and "D") is contiguous with portions of NYSDEC Wetland WD-29, and the boundaries of this wetland were validated by the NYSDEC on November 9, 2022. Therefore that wetland would be within the jurisdiction of the NYSDEC.

Ecological Analysis is grateful to have had this opportunity to be of service to you in evaluating this property. Feel free to call if you have any questions or if we can be of further assistance.

Sincerely yours,

Isl Bruce R. Friedmann

Bruce R. Friedmann Senior Environmental Scientist Ecological Analysis, LLC

Attachments:

USFWS NWI map for property locale NYSDEC Environmental Resource wetlands map for property locale USDA/NRCS Web Soil Survey map for property locale ACOE WetForm for Wetland "D" ACOE WetForm for UPLAND plot