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March 27, 2020

Ref: 26747.01

VIA ELECTRONIC MAIL

United States Army Corps of Engineers
New York District
Regulatory Branch
Jacob K. Javits Federal Building
26 Federal Plaza, Room 1937
New York, New York 10278-0090

Re: Request for Approved Jurisdictional Determination
Tam O'Shanter Country Club
74 Fruitledge Road
Glen Head, New York 11545

To Whom it May Concern:

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB) is serving as environmental consultant to Titan Golf, LLC, which is requesting an Approved Jurisdictional Determination (JD) for five (5) artificial ponds ("Ponds 1 through 5") on the 151±-acre Tam O'Shanter Country Club property, located at the above-referenced address (the "subject property"). The subject property is owned and operated by Titan Golf, LLC.

Ponds 1 through 5 were delineated by VHB on February 12, 2020, based upon an evaluation of vegetation, soils and hydrology in accordance with the procedures set forth in the 1987 United States Army Corps of Engineers (USACE) Wetland Delineation Manual and the 2012 USACE Regional Supplement for the Northcentral and Northeast Region. Based on the information presented in the enclosed Wetland Delineation Report, Ponds 1 through 5 are isolated, artificial structures with no hydrological connection to other surface waters, wetlands or other waters of the United States, pending U.S. Army Corps of Engineers review and concurrence. Accordingly, please accept this correspondence as a formal request for an Approved JD for the subject property and Ponds 1 through 5.

Engineers | Scientists | Planners | Designers

100 Motor Parkway
Suite 350
Hauppauge, New York 11788
P 631.787.3400
F 631.813.2545

For your records, contact information for the property owner are provided below:

Titan Golf, LLC
41 Bayard Street
New Brunswick, New Jersey 08901
Attn: Mr. Robert Weiss

Thank you for your cooperation in this matter. Please feel free to contact me at your earliest convenience at 631.787.3400 or at dkennedy@vhb.com if you require any additional information to process this request.

Sincerely,

VHB Engineering, Surveying and Landscape Architecture, P.C.

David Kennedy, MS, PWS, CE
Senior Environmental Scientist

Wetland Delineation Report

Tam O'Shanter Country Club

Village of Brookville, Town of Oyster Bay, Nassau County, New York

PREPARED FOR

Titan Golf, LLC c/o Mr. Robert Weiss
41 Bayard Street
New Brunswick, NJ 08901

PREPARED BY

VHB Engineering, Surveying,
Landscape Architecture and Geology,
P.C.
100 Motor Parkway, Suite 350
Hauppauge, New York 11788

March 27, 2020

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List of Appendices

1.0
Introduction

This Wetland Delineation Report has been prepared by VHB Engineering, Surveying, Landscape Architecture and Geology P.C. (VHB), for the 151±-acre Tam O'Shanter Country Club, located at 74 Fruitledge Road in the Village of Brookville, Town of Oyster Bay, Nassau County, New York (hereinafter, the "subject property") (see Appendix A, Figure 1). The subject property is identified on the Nassau County Land & Tax Map as Section 16 – Block C – Lots 386A, 386D, 386E, and 359. The subject property is owned by Titan Golf, LLC.

The subject property, with a topographic elevation ranging from approximately 200 to 290 feet above mean sea level (see Appendix A, Figure 3), is currently developed with a private country club consisting of an 18-hole golf course, clubhouse, tennis courts, swimming pool and associated amenities. As the majority of the subject property is occupied by the aforementioned golf course, the maintained turf grasses/landscaping of the fairways, roughs, tee boxes and putting greens are the predominant habitat at the subject property. The golf course is also improved with five artificial ponds, constructed for irrigation purposes and to serve as water hazards ("Ponds 1 through 5," See Appendix A, Figure 2). The boundaries of Ponds 1 through 5 were delineated by VHB on February 12, 2020.

This Wetland Delineation Report includes a description of existing conditions of the five ponds and the surrounding subject property, and provides a review of government agency maps and data pertaining to local surface waters and wetlands. Also included is a summary and supporting documentation for the delineation of the five ponds, as well as a justification for a proposed waters of the United States non-jurisdictional determination. This Wetland Delineation Report was prepared pursuant to the United States Army Corps of Engineers (USACE) guidance document entitled *Checklist of Information Included with Requests for Jurisdictional Determinations.*[1]

[1] United States Army corps of Engineers. 2014. *Checklist of Information Included with Requests for Jurisdictional Determinations. Available online at:* http://www.nan.usace.army.mil/Portals/37/docs/regulatory/Formdoc/JD%20Checklist.pdf Accessed February 13, 2020.

2.0
Background

Based on review of historical aerial photographs for the period from 1938 through 1957, the majority of the subject property was occupied by agricultural fields, and no ponds or other surface waters are evident (see historical aerial photographs in Appendix B). As visible in the 1966 aerial photograph, agricultural usage of the subject property had ceased between 1957 and 1966, and the agricultural fields visible in earlier aerial photographs had been converted to the existing 18-hole golf course. Ponds 3 and 4 are also visible in the 1966 aerial photograph. As evident in later aerial photographs, Pond 2 was constructed between 1966 and 1980, and Ponds 1 and 5 were constructed between 1994 and 2006.

According to golf course management, the five artificial ponds are utilized for irrigation purposes and as golf course water hazards. The pond bottoms are lined with an artificial, impermeable membrane and the ponds are periodically replenished with water from and on-site well. Although Ponds 1 through 5 are connected by a series of sub-grade pipes and pumps, the five ponds are otherwise isolated and do not drain offsite to other surface waters, wetlands or drainage networks. These conditions were confirmed in the field by VHB on February 12, 2020, when various pipe endings and artificial liners were observed at each of the five artificial ponds. Due to the presence of the artificial liners and golf course management practices, emergent, submergent and floating vegetation is virtually non-existent within the ponds. Consistent with the current golf course use, the vegetation surrounding the ponds is comprised of maintained turf grasses and associated golf course landscaping features. No streams, ditches, culverts or other potential connections to off-site surface waters wetlands or drainage networks were observed.

In summary, Ponds 1 through 5 are artificial features constructed between 1957 and 2006, in association with site usage as a golf course. As the primary purpose of the ponds is irrigation, the ponds are lined, periodically replenished with well water and are connected via sub-grade pipes and pumps. The five artificial ponds are otherwise isolated from other surface waters and wetlands in the general surrounding area.

3.0

Map Review and Wetland Delineation

Based on review of the New York State Department of Environmental Conservation (NYSDEC) Environmental Resource Mapper, Ponds 1 through 5 are not mapped and therefore are not regulated by the NYSDEC.[2] Further, there are no NYSDEC-mapped wetlands or surface waters within a 1,500-foot radius of the subject property. The nearest NYSDEC-regulated wetland is 3,146± feet to the northeast of the subject property (see Appendix A, Figure 4).

Ponds 1 through 5 are identified on the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps[3] as PUBHx (Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated) features. As defined by the NWI, the latter "Excavated" modifier is indicative of basins or channels that were "*excavated by humans*."[4] A summary of the five NWI features is provided on Table 1.

Table 1 – National Wetlands Inventory Summary

Pond Designation	Cowardin Class Code	Description	NWI Area (acres)*
Pond 1	PUBx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated	0.49
Pond 2	PUBx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated	0.46
Pond 3	PUBx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated	0.71
Pond 4	PUBx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated	1.48
Pond 5	PUBx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated	0.41

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[2] New York State Department of Environmental Conservation. 2019. Environmental Resource Mapper. Available online at: https://gisservices.dec.ny.gov/gis/erm/. Accessed February 19, 2020.
[3] United States Fish and Wildlife Service – National Wetlands Inventory Maps. 2019. Available online at: https://www.fws.gov/wetlands/Data/Mapper.html. Accessed February 19, 2020.
[4] United States Fish and Wildlife Service – National Wetlands Inventory. 2019. Wetland Classification Codes. Available online at: https://www.fws.gov/wetlands/data/wetland-codes.html. Accessed February 19, 2020.

*Pond areas as provided by the NWI.

The nearest off-site NWI feature is located 1,183± feet to the northwest of Pond 1 (see Appendix A, Figure 4). The feature appears to be an isolated, decorative pond situated on a residential property.

There are no National Hydrography Dataset (NHD) streams located within 1,500 feet of the subject property. The nearest NHD stream is located 3,619± feet to the south of the subject property (see Appendix A, Figure 4).

Review of the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey map data indicates there are four distinct soil units at the subject property, as shown on Table 2.

Table 2 – NRCS Soil Summary

Map Unit Symbol	Map Unit Name	Acres / Percent	Hydric Rating
MkA	Montauk loam, 0 to 3 percent slopes	103.5 / 69.8	No
MkB	Montauk loam, 3 to 8 percent slopes	8.2 / 5.5	No
MkC	Montauk loam, 8 to 15 percent slopes	23.4 / 15.8	No
UnB	Urban land-Montauk complex, 3 to 8 percent slopes	11.6 / 7.8	Yes
W	Water	1.7 / 1.1	No

As depicted on Figure 5 of Appendix A, the soils in the vicinity of Ponds 1 through 5 are composed of Montauk loam, 0 to 3 percent slopes (MkA). This soil type is not included on the National List of Hydric Soils.[5] As also shown on Figure 5, Ponds 2 ,3 and 4 are classified under the "Water" map unit.

As observed during the February 12, 2020 field survey, the vegetated upland areas of the subject property are comprised primarily of maintained/landscaped fairways, roughs and greens of the golf course. These habitats are representative of the Mowed Lawn and Mowed Lawn with Trees communities, as described in the New York Natural Heritage Program (NYNHP) publication "*Ecological Communities of New York State*" (ECNS).[6] The golf course ponds are representative of the ECNYS Farm Pond/Artificial Pond communities.

Ponds 1 through 5 were delineated by VHB wetland scientists on February 12, 2020, based upon an evaluation of vegetation, soils and hydrology, conducted in accordance with the procedures set forth in the 1987 USACE Wetland Delineation

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[5] Natural Resources Conservation Service – United States Department of Agriculture. 2018. Hydric Soils of the United States. Available online at: https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/. Accessed February 19, 2020.

[6] Edinger, G.J., Evans, D.J., Gebauer, S., Howard, T.G., Hunt, D.M., and Olivero, A.M. 2014. Ecological Communities of New York State. Second Edition. A revised and expended edition of Carol Reschke's Ecological Communities of New York State. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY.

Manual[7] and the 2012 USACE Regional Supplement for the Northcentral and Northeast Region.[8] During the delineation, numbered flags were placed around the pond boundaries. A summary of the wetland delineations is provided on Table 3.

Table 3 – Wetland Delineation Summary

Pond Designation	Number of Boundary Flags	Flag Designation Codes	Area (acres)
Pond 1	22	P1-100 to P1-121	0.54
Pond 2	20	P2-100 to P2-119	0.56
Pond 3	16	P3-100 to P3-115	0.81
Pond 4	24	P4-100 to P4-123	1.71
Pond 5	15	P5-100 to P5-114	0.46

For each of the five ponds, USACE Northcentral and Northeast Region wetland delineation data forms were completed for one wetland and one upland data plot (see Appendix C). The locations of the pond boundary flags were recorded with a global positioning system (GPS) unit in the field for placement on the site topographic survey (see Appendix D). Additionally, the GPS data was used to create individual Geographic Information System (GIS) maps showing the wetland boundary and the locations of the wetland and upland data plots for each pond (see Appendix A, Figures 6.1 through 6.5). Representative photographs of Ponds 1 through 5 and their associated data plots were taken at the time of the delineations (see Appendix E).

A summary of the delineations of Ponds 1 through 5, and other pertinent field observations, is provided below.

Pond 1

As noted during the delineation, the interior of Pond 1 is unvegetated and the pond bottom is lined with an impermeable membrane. Representative vegetation within the wetland data plot along the pond margin and is comprised of the upland (UPL) species hard fescue (*Festuca trachyphylla*) and the facultative upland (FACU) species chickweed (*Stellaria media*). In general, the pond margin is characterized by low species diversity and is dominated by maintained turf grasses, consistent with the subject property use as a golf course. The adjoining uplands are dominated by hard fescue and other turf grasses

Wetland soil profiles within Pond 1 exhibited layers featuring low chroma matrices (i.e., a chroma of 2 or less) measuring four inches or greater and starting within six inches of the soil surface, with distinct redox concentrations occurring in small quantities (i.e., 2% or more) along pore linings. These characteristics are indicative of wetland soil indicator S5: Sandy Redox, as described in the above-referenced USACE Regional Supplement.

▼

[7] Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

[8] United States Army Corps of Engineers Engineer Research and Development Center. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0).

Observed wetland hydrology indicators for Pond 1 include a high water table at approximately 6 inches below the surface and soil saturation to within 4 inches of the surface in soil borings. Additional observed hydrology indicators include oxidized rhizospheres on living roots, and the geomorphic position of the pond within a depression surrounded by higher terrains (berms). No natural inlets or outlets (e.g., creeks, streams, etc.) occur between the pond and any off-site surface waters, wetlands or drainage networks. Artificial inlets and outlets (e.g., pipes, storm drains) were observed between Pond 1 and the other four artificial ponds at the subject property, consistent with conditions reported by golf course management.

According to the soils and hydrology observed during the wetland delineation, Pond 1 has features that are consistent with two of the three parameters required by the USACE wetland definition. The USACE wetland vegetation parameter was not met for Pond 1, likely as a result of the highly maintained nature of the pond and pond margin associated with site usage as a golf course. Given these conditions, as well as the observed wetland hydrology and soils along the pond edge, VHB determined that wetland vegetation would likely occur under natural/undisturbed conditions.

Pond 2

As noted during the delineation, the interior of Pond 2 is unvegetated and the pond bottom is lined with an impermeable membrane. Vegetation within the wetland data plot is along the pond margin and is comprised of the upland (UPL) species hard fescue (*Festuca trachyphylla*). In general, the pond margin is characterized by low species diversity and dominated by maintained turf grasses, consistent with the subject property use as a golf course. The adjoining uplands are dominated by hard fescue and other turf grasses.

Wetland soil profiles within Pond 2 exhibited layers featuring low chroma matrices (i.e., a chroma of 2 or less) measuring two inches thick and occurring entirely within six inches of the soil surface. These characteristics are indicative of wetland soil indicator F3: Depleted Matrix, as described in the above-referenced USACE Regional Supplement.

Observed wetland hydrology indicators for Pond 2 include a high water table at approximately 5 inches below the surface and soil saturation to the surface of the soil borings. Additional observed hydrology indicators include the geomorphic position of the pond within a depression surrounded by higher terrains (berms). No natural inlets or outlets (e.g., creeks, streams, etc.) occur between the pond and any off-site surface waters, wetlands or drainage networks. Artificial inlets and outlets (e.g., pipes, storm drains) were observed between Pond 2 and the other four artificial ponds at the subject property, consistent with conditions reported by golf course management.

According to the soils and hydrology observed during the wetland delineation, Pond 2 has features that are consistent with two of the three parameters required by the USACE wetland definition. The USACE wetland vegetation parameter was not met for Pond 2, likely as a result of the highly maintained nature of the pond and pond margin associated with site usage as a golf course. Given these conditions, as well as

the observed wetland hydrology and soils along the pond edge, VHB determined that wetland vegetation would likely occur under natural/undisturbed conditions.

Pond 3

As noted during the delineation, the interior of the Pond 3 is unvegetated and the pond bottom is lined with an impermeable membrane. Vegetation within the wetland data plot is along the pond margin and is comprised of the upland (UPL) species hard fescue (*Festuca trachyphylla*). In general, the pond margin is characterized by low species diversity and dominated by maintained turf grasses, consistent with the subject property use as a golf course. The adjoining uplands are dominated by hard fescue and other turf grasses.

Wetland soil profiles within Pond 3 exhibited layers featuring low chroma matrices (i.e., a chroma of 2 or less), with two percent or more of redox concentrations occurring as soft masses and along pore linings, measuring nine inches thick and occurring within six inches of the soil surface. These characteristics are indicative of wetland soil indicator S5: Sandy Redox, as described in the above-referenced USACE Regional Supplement.

Observed wetland hydrology indicators for Pond 3 include a high water table at approximately 6 inches below the surface and soil saturation to within 4 inches of the surface. Additional observed hydrology indicators include an oxidized rhizosphere on living roots and the geomorphic position of the pond within a depression surrounded by higher terrains (berms). No natural inlets or outlets (e.g., creeks, streams, etc.) occur between the pond and any off-site surface waters, wetlands or drainage networks. Artificial inlets and outlets (e.g., pipes, storm drains) were observed between Pond 3 and the other four artificial ponds at the subject property, consistent with conditions reported by golf course management.

According to the soils and hydrology observed during the wetland delineation, Pond 3 has features that are consistent with two of the three parameters required by the USACE wetland definition. The USACE wetland vegetation parameter was not met for Pond 3, likely a result of the highly maintained nature of the pond and pond margin associated with site usage as a golf course. Given these conditions, as well as the observed wetland hydrology and soils along the pond edge, VHB determined that wetland vegetation would likely occur under natural/undisturbed conditions.

Pond 4

As noted during the delineation, the interior of Pond 4 is unvegetated and the pond is lined with an impermeable membrane. Vegetation within the wetland data plot is along the pond margin and is comprised of the upland (UPL) species hard fescue (*Festuca trachyphylla*). In general, the pond margin is characterized by low species diversity and dominated by maintained turf grasses, consistent with the subject property use as a golf course. The adjoining uplands are dominated by hard fescue and other turf grasses.

Wetland soil profiles within Pond 4 exhibited a four-inch thick layer located entirely within the upper 12 inches of the soil profile, with a matrix value of 3, a chroma of 2, and 15 percent redox concentrations. These characteristics are indicative of wetland

soil indicator F6: Redox Dark Surface, as described in the above-referenced USACE Regional Supplement.

Observed wetland hydrology indicators for Pond 4 include a high water table at approximately 9 inches below the surface and soil saturation within 7 inches of the surface of the soil borings. Additional observed hydrology indicators include the geomorphic position of the pond within a depression surrounded by higher terrains (berms). No natural inlets or outlets (e.g., creeks, streams, etc.) occur between the pond and any off-site surface waters, wetlands or drainage networks. Artificial inlets and outlets (e.g., pipes, storm drains) were observed between Pond 4 and the other four artificial ponds at the subject property, consistent with conditions reported by golf course management.

According to the soils and hydrology observed during the wetland delineation, Pond 4 has features that are consistent with two of the three parameters required by the USACE wetland definition. The USACE wetland vegetation parameter was not met for Pond 4, likely as a result of the highly maintained nature of the pond and pond margin associated with site usage as a golf course. Given these conditions, as well as the observed wetland hydrology and soils along the pond edge, VHB determined that vegetation would likely occur under natural/undisturbed conditions.

Pond 5

Though the interior of the pond is unvegetated, scattered patches of emergent wetland vegetation was observed along the pond margin. Observed vegetation in these areas includes the obligate (OBL) wetland species yellow iris (*Iris pseudacorus*) and pickerelweed (*Pontederia cordata*). The facultative (FAC) species sweet pepperbush (*clethra alnifolia*), and facultative upland (FACU) species red fescue (*Festuca rubra*) and northern red oak (*Quercus rubra*) were also observed along the pond margin. Overall, the wetland plant community is characterized by low species diversity, consistent with the subject property use as a golf course and the disturbed surroundings of Pond 5. The adjoining uplands are dominated by the upland (UPL) species hard fescue (*Festuca trachyphylla*) and other golf course turf grasses. the facultative upland (FACU) species northern read oak (*Quercus rubra*) and flowering dogwood (*Cornus florida*) are also present.

Wetland soil properties within Pond 5 exhibited low chroma matrices and redoximorphic features within 8 inches of soil surface. The observed properties do not align with wetland soil indicators of the above-described USACE Regional Supplement for the Northcentral and Northeast Region, though this is believed to be due to a disturbed soil profile resulting from golf course landscaping practices.

Observed wetland hydrology indicators for Pond 5 include a high water table at approximately 6 inches below the surface. Additional observed hydrology indicators include the geomorphic position of the pond within a depression surrounded by higher terrains (berms). No natural inlets or outlets (e.g., creeks, streams, etc.) occur between the pond and other off-site surface waters, wetlands or drainage networks. Artificial inlets and outlets (e.g., pipes, storm drains) were observed between Pond 5 and the other four artificial ponds at the subject property, consistent with conditions reported by golf course management.

According to the vegetation and hydrology observed during the wetland delineation, Pond 5 has features that are consistent with two of the three parameters required by the USACE wetland definition. The USACE wetland soils parameter was not met for Pond 5, likely as a result of the highly maintained nature of the pond and pond margin associated with site usage as a golf course. Given these conditions, as well as the observe wetland hydrology and vegetation along the pond edge, VHB determined that wetland soils would likely occur under natural/undisturbed conditions.

Beyond the five ponds delineated by VHB, no evidence of other surface waters or wetlands was observed during the field survey. Moreover, beyond the interconnection of the five ponds via a series of sub-grade pipes and pumps, no surficial or subsurface connections between Ponds 1 through 5 and other surface waters, wetlands or drainage networks were observed in the field.

4.0

Summary and Proposed Non-Jurisdictional Determination Justification

Based on the information and supporting documentation presented in Sections 1.0 through 3.0 of this report, Ponds 1 through 5 are artificial features constructed between 1957 and 2006 as irrigation ponds and golf course water hazards. Moreover, no surficial or subsurface connections exists between the five ponds and other surface waters, wetlands or drainage networks.

Pursuant to the pre-2015 waters of the United States regulations currently in effect, VHB understands that jurisdictional determinations are made on a case-by-case basis based on pre-2015 Supreme Court decisions and USACE guidance documents. In Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (the "SWANCC Decision," 2001), and Rapanos v. the United States (the "Rapanos Decision," 2006), the United States Supreme Court ruled that the USACE's jurisdiction over 'waters of the United States' under Section 404 of the Clean Water Act (CWA) does not extend to isolated wetlands. Further, the Supreme Court ruled that waters or wetlands that do not have a "significant nexus" to a traditional navigable waterway are isolated waters that should not be considered waters of the United States for the purposes of the CWA. Pursuant to the Rapanos Decision, a significant nexus exists when a wetland or waterbody, either by itself or in combination with other similar sites, significantly affects the physical, biological, and chemical integrity of a downstream navigable waterway. Significant nexus is further defined as "*having a significant effect on the chemical, physical or biological integrity of an interstate water, its tributaries or adjacent wetlands*."[9]

Based on the desktop review and field data presented in this report, Ponds 1 through 5 are isolated, artificial features that are connected to each other via subgrade pipes and pumps, but have no hydrological connection to other surface waters, wetlands, drainage networks or any waters of the United States. Accordingly, pursuant to the legal precedents of the SWANCC and Rapanos Decisions regarding isolated wetlands summarized above, it appears that the Ponds 1 through 5 would not be subject to

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[9] United States Environmental Protection Agency and United States Army Corps of Engineers. 2008. Clean Water Act Jurisdiction Following U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States.

USACE jurisdiction under Section 404 of the CWA, due to their isolated status and artificial origin.

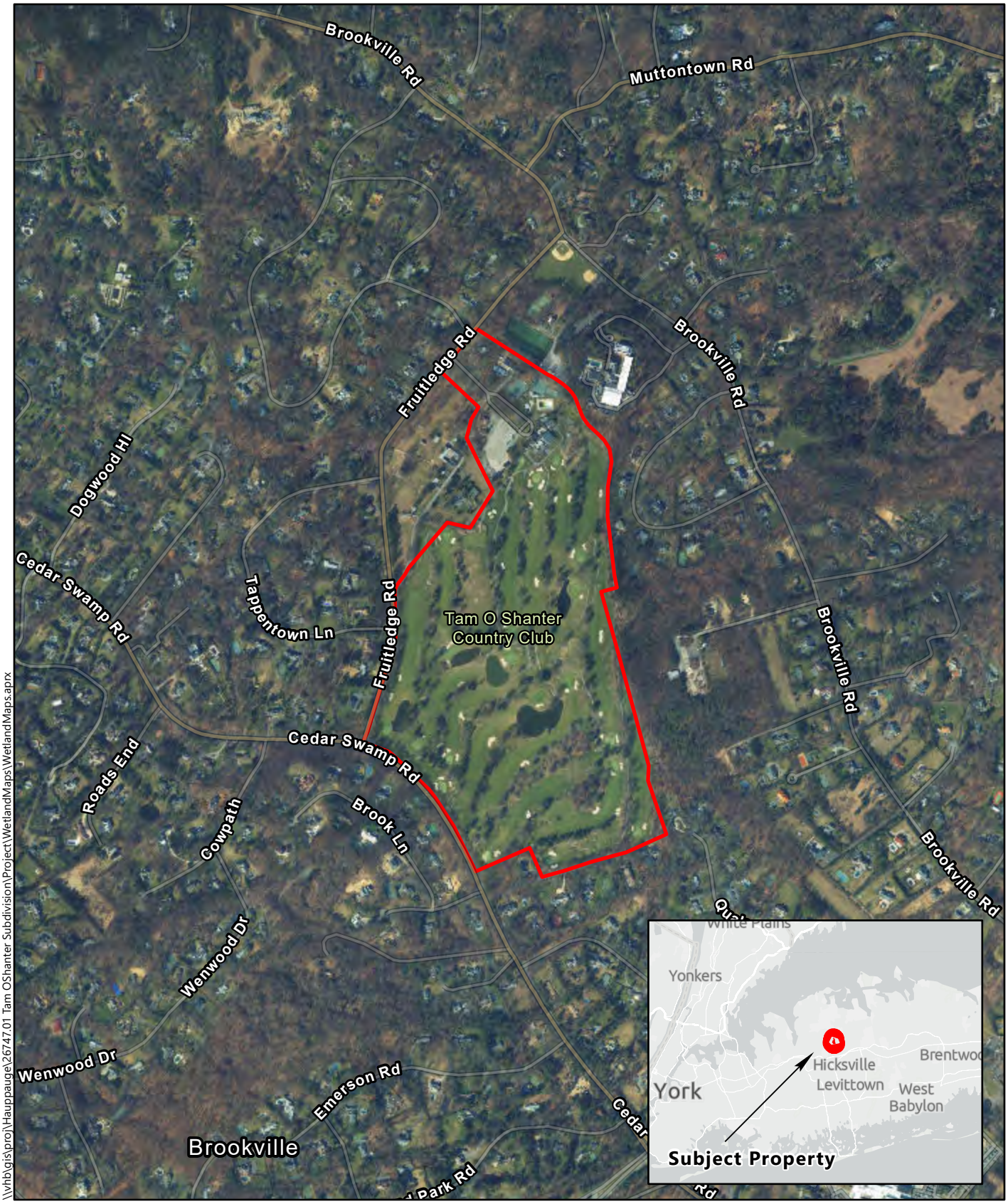
Notwithstanding the above, VHB is aware that on January 23, 2020, the U.S. Environmental Protection Agency (EPA) and the USACE finalized the Navigable Waters Protection Rule (NWPR) to define "Waters of the United States" and thereby establish federal regulatory authority under the Clean Water Act. VHB is further aware that the NWRP will go into effect 60 days after publication in the Federal Register.[10] Pursuant to NWRP §323.3(b)(8), the following are not considered jurisdictional waters:

> *"Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6)."*

Based on the information presented in this report, Ponds 1 through 5 are isolated, artificial irrigation ponds that are not impoundments of jurisdictional waters. Accordingly, should the NWPR be in effect at the time that a jurisdictional determination is rendered for the subject property, it appears that the Ponds 1 through 5 would not be subject to USACE jurisdiction pursuant to NWRP §323.3(b)(8).

[10] U.S. Environmental Protection Agency. The Navigable Waters Protection Rule (Step Two). Available online at: https://www.epa.gov/nwpr/navigable-waters-protection-rule-step-two-revise. Accessed March 4, 2020..

Appendix A



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0 500 1000 2000 Feet

Subject Property

Tam O'Shanter Golf Club | Brookville, NY

Site Location Map

74 Fruitledge Road
Village of Brookville, Town of Oyster Bay
Nassau County, New York

Source Info: ESRI (2019);

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0 250 500 1000 Feet

Subject Property

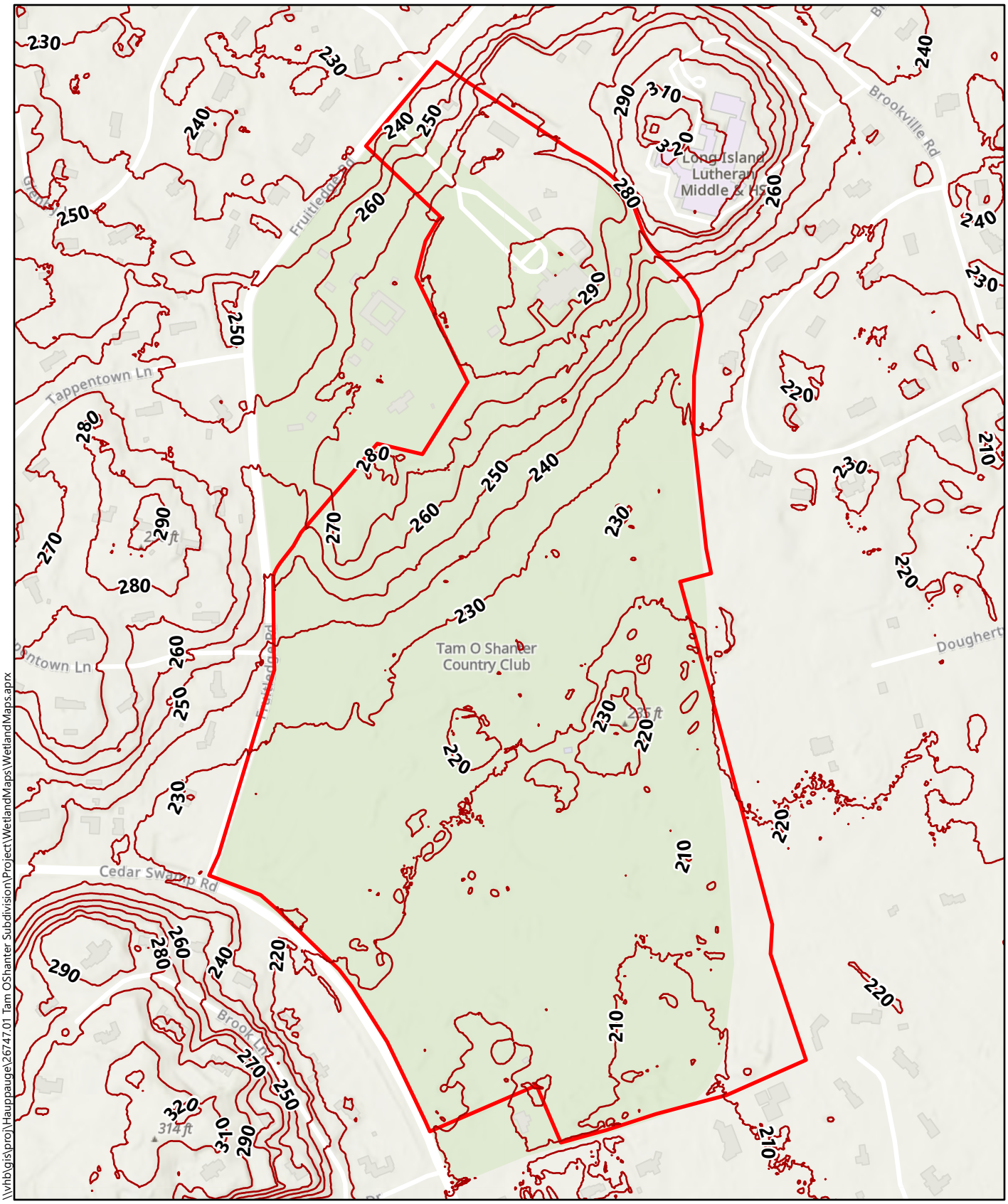
1 Pond Designation

Tam O'Shanter Golf Club | Brookville, NY

Aerial Imagery

74 Fruitledge Road
Village of Brookville, Town of Oyster Bay
Nassau County, New York

Source Info: ESRI (2019);



0 250 500 1000 Feet

Subject Property

10' Contour

Tam O'Shanter Golf Club | Brookville, NY

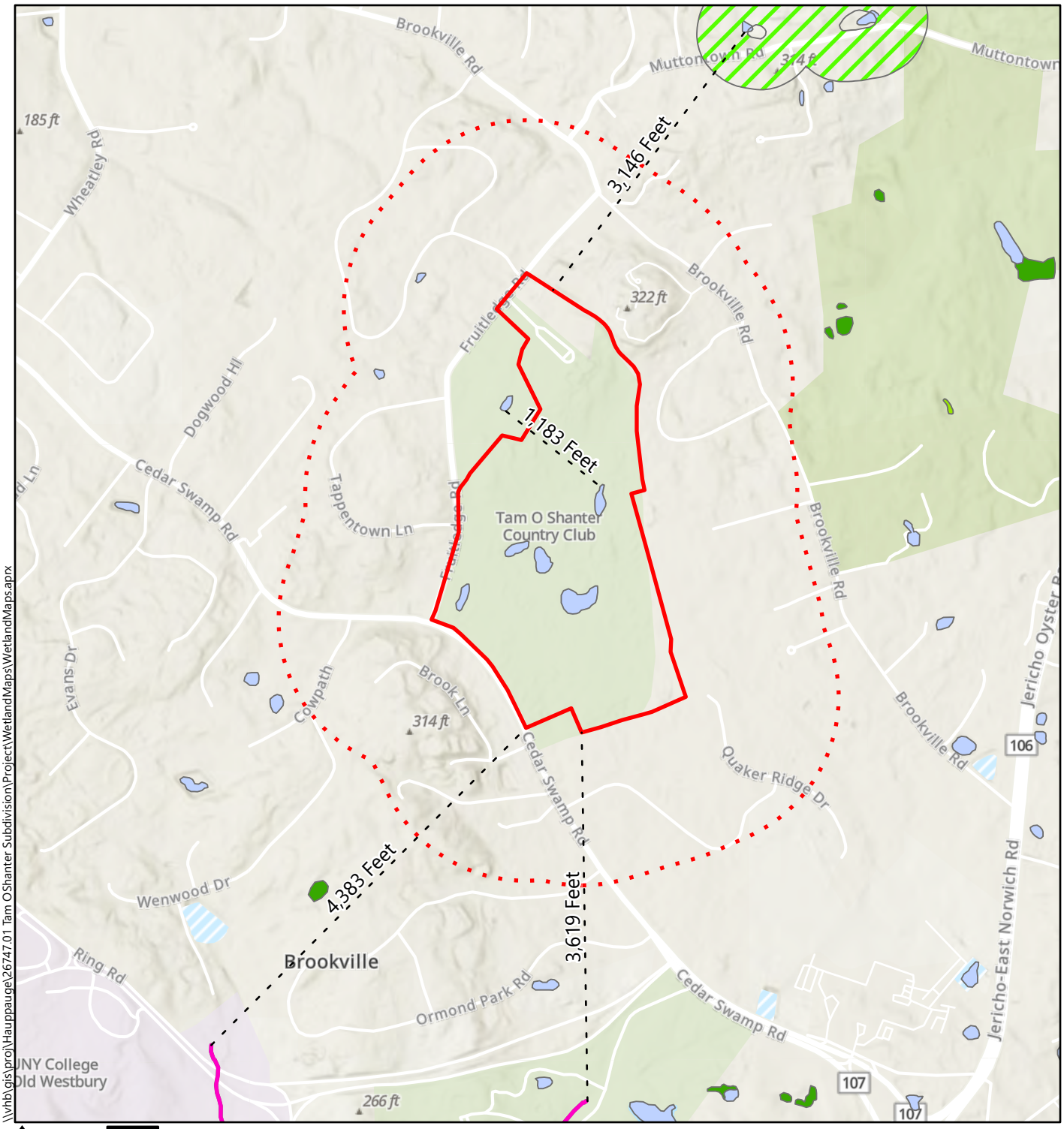
Topographic Map

74 Fruitledge Road

Village of Brookville, Town of Oyster Bay

Nassau County, New York

Source Info: Contours by USGS Long Island LiDAR Collection (2014);



0 500 1000 2000 Feet

Subject Property

1,500-foot Buffer

NYSDEC Freshwater Wetland Checkzone

Distances

NHD Streams

NWI Wetlands Classification

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Riverine

Other

Tam O'Shanter Golf Club | Brookville, NY

NWI, NYDEC and NHD Features Map

74 Fruitledge Road

Village of Brookville, Town of Oyster Bay

Nassau County, New York

Source Info: Cornell University Geospatial Information Repository (2013); United States Fish and Wildlife Service, National Wetlands Inventory (2019); United States Geological Survey, National Hydrography Dataset (2019);

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0 250 500 1000 Feet

Subject Property

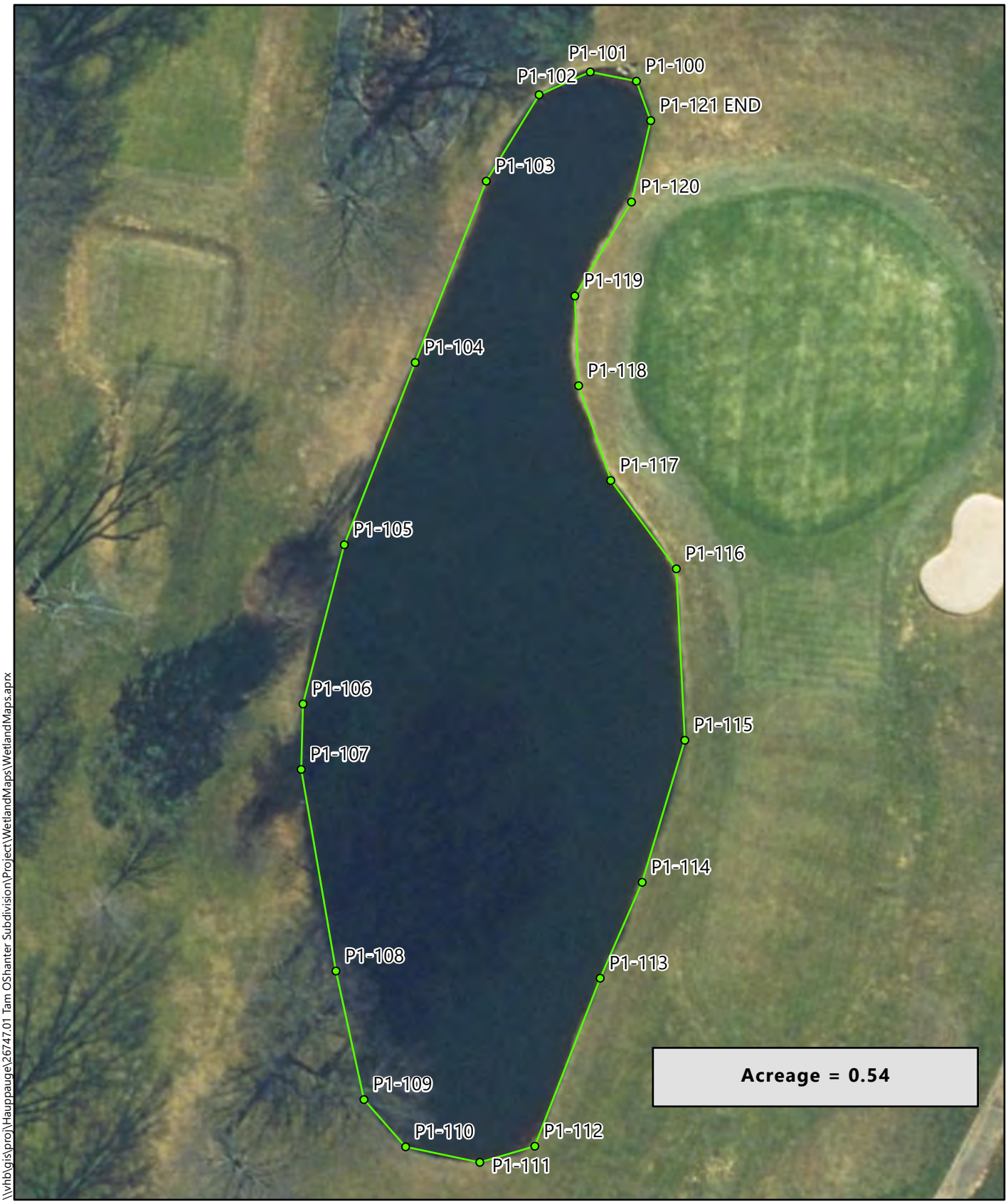
NRCS Soils Mapping Unit

Tam O'Shanter Golf Club | Brookville, NY

NRCS Soils Map

74 Fruitledge Road
Village of Brookville, Town of Oyster Bay
Nassau County, New York

Source Info: United States Department of Agriculture, Web Soil Survey (2019)



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0 25 50 100 Feet

Wetland Delineation Flags

Delineated Pond Boundary

Tam O'Shanter Golf Club | Brookville, NY

Pond 1 Delineation Map

74 Fruitledge Road
Village of Brookville, Town of Oyster Bay
Nassau County, New York

Source Info: ESRI (2019);
VHB Wetland Delineation February 12, 2020;

\\vhb\gis\proj\Hauppauge\26747.01 Tam OShanter Subdivision\Project\WetlandMaps\WetlandMaps.aprx

0 25 50 100 Feet

Wetland Delineation Flags

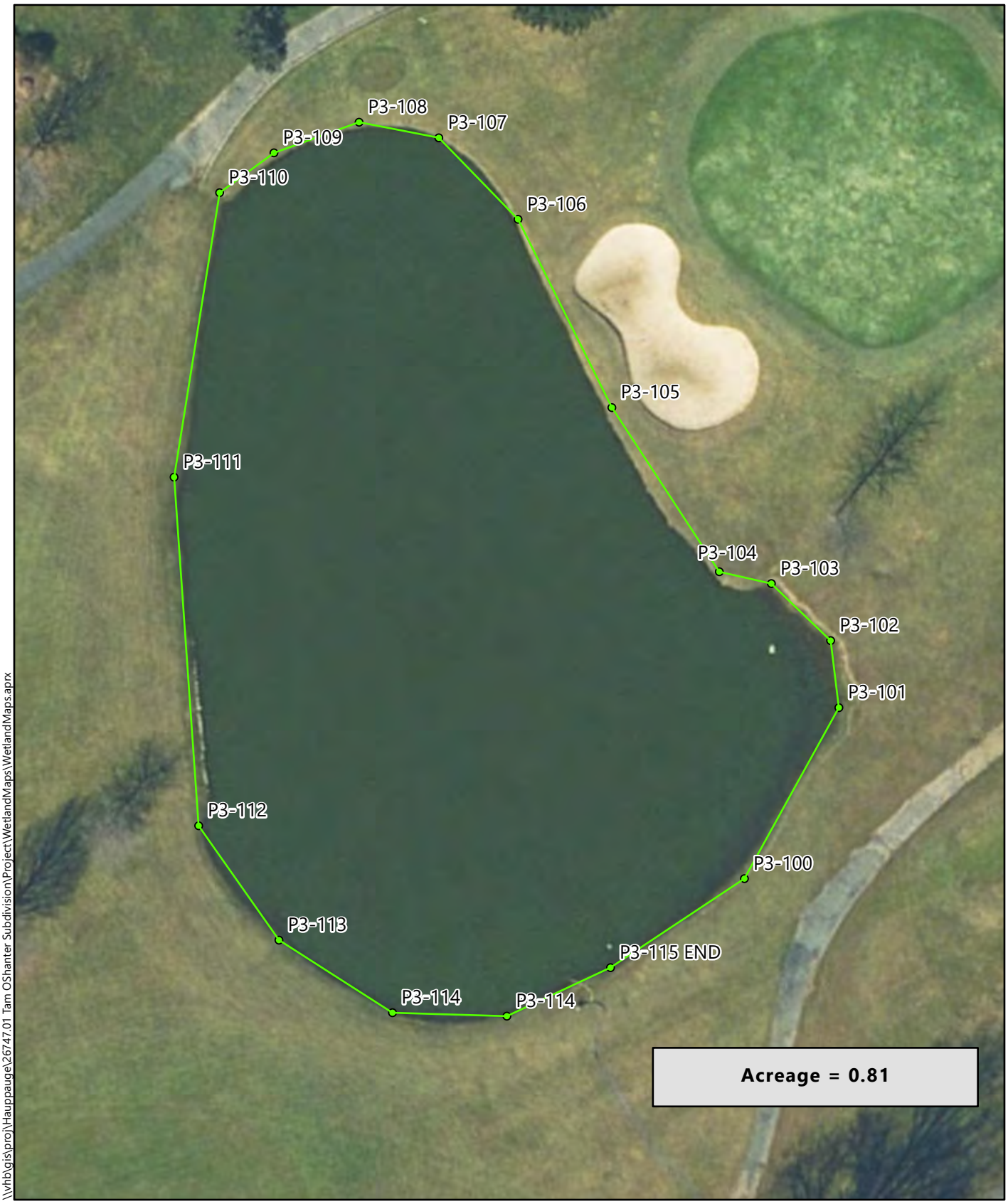
Delineated Pond Boundary

Tam O'Shanter Golf Club | Brookville, NY

Pond 2 Delineation Map

74 Fruitledge Road
Village of Brookville, Town of Oyster Bay
Nassau County, New York

Source Info: ESRI (2019);
VHB Wetland Delineation February 12, 2020;



\\vhb\gis\proj\Hauppauge\26747.01 Tam OShanter Subdivision\Project\WetlandMaps\WetlandMaps.aprx

0 25 50 100 Feet

Wetland Delineation Flags

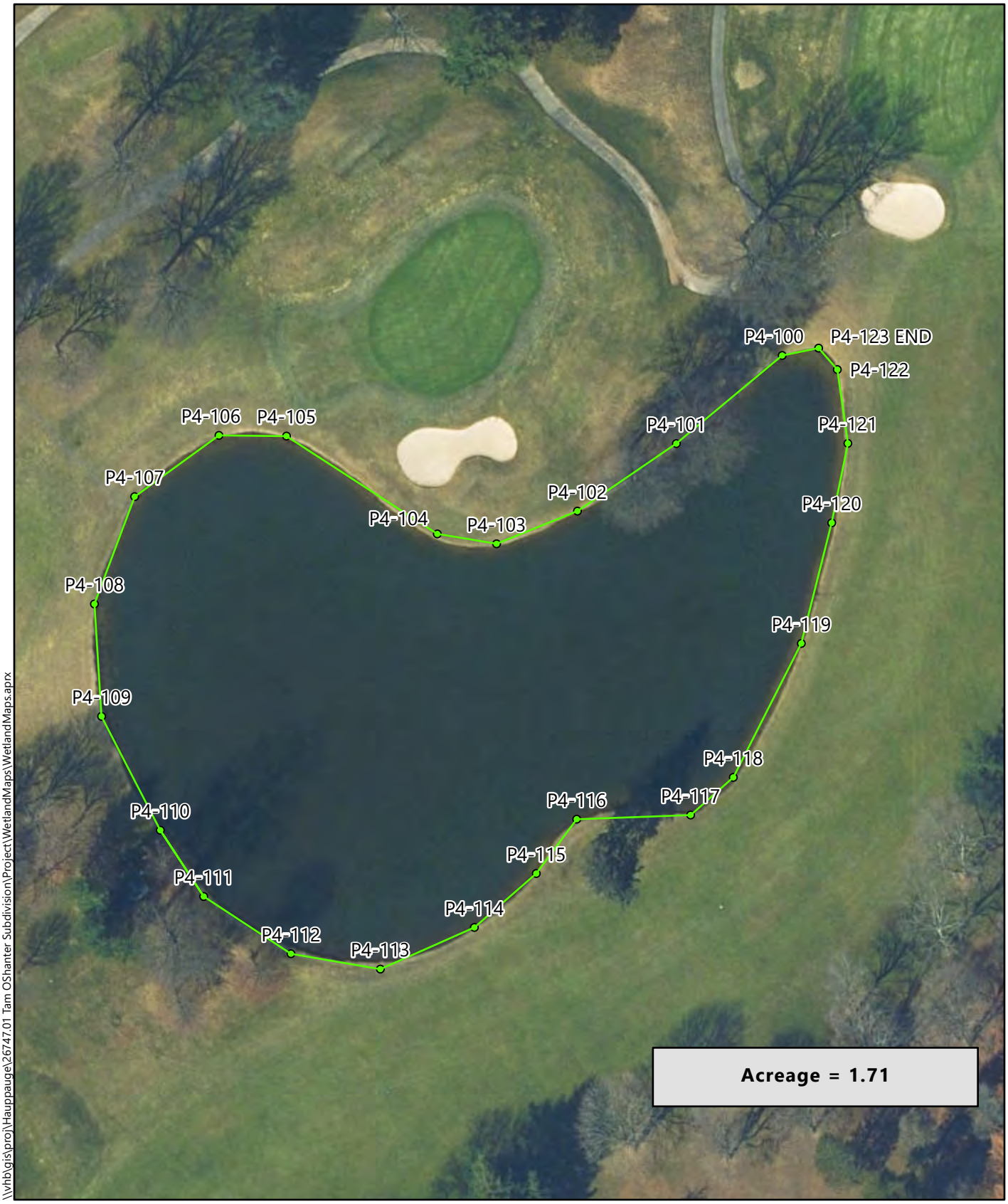
Delineated Pond Boundary

Tam O'Shanter Golf Club | Brookville, NY

Pond 3 Delineation Map

74 Fruitledge Road
Village of Brookville, Town of Oyster Bay
Nassau County, New York

Source Info: ESRI (2019);
VHB Wetland Delineation February 12, 2020;



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0 25 50 100 Feet

Wetland Delineation Flags

Delineated Pond Boundary

Tam O'Shanter Golf Club | Brookville, NY

Pond 4 Delineation Map

74 Fruitledge Road
Village of Brookville, Town of Oyster Bay
Nassau County, New York

Source Info: ESRI (2019);
VHB Wetland Delineation February 12, 2020;

\\vhb\gis\proj\Hauppauge\26747.01 Tam O'Shanter Subdivision\Project\WetlandMaps\WetlandMaps.aprx

0 25 50 100 Feet

Wetland Delineation Flags

Delineated Pond Boundary

Tam O'Shanter Golf Club | Brookville, NY

Pond 5 Delineation Map

74 Fruitledge Road
Village of Brookville, Town of Oyster Bay
Nassau County, New York

Source Info: ESRI (2019);
VHB Wetland Delineation February 12, 2020;

Appendix B

Tam Oshanter Club

74 Fruitledge Road

Brookville, NY 11545

Inquiry Number: 5418639.5

September 11, 2018

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

09/11/18

Site Name:

Tam Oshanter Club
74 Fruitledge Road
Brookville, NY 11545
EDR Inquiry # 5418639.5

Client Name:

Vanasse Hangen Brustlin, Inc.
100 Motor Parkway, Ste. 135
Hauppauge, NY 11788
Contact: Christopher Rooney

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2017	1"=750'	Flight Year: 2017	USDA/NAIP
2013	1"=750'	Flight Year: 2013	USDA/NAIP
2009	1"=750'	Flight Year: 2009	USDA/NAIP
2006	1"=750'	Flight Year: 2006	USDA/NAIP
1994	1"=750'	Acquisition Date: April 04, 1994	USGS/DOQQ
1985	1"=750'	Flight Date: March 16, 1985	USGS
1980	1"=750'	Flight Date: April 06, 1980	Aero
1966	1"=750'	Flight Date: February 23, 1966	USGS
1957	1"=750'	Flight Date: March 24, 1957	Jack
1953	1"=750'	Flight Date: December 26, 1953	USGS
1947	1"=750'	Flight Date: September 01, 1947	USDA
1938	1"=750'	Flight Date: August 03, 1938	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.


INQUIRY #: 5418639.5
YEAR: 2017
= 750'
N
EDR


INQUIRY #: 5418639.5
YEAR: 2013
= 750'
N
EDR


INQUIRY #: 5418639.5
YEAR: 2009
= 750'
N
EDR


INQUIRY #: 5418639.5
YEAR: 2006
= 750'
N
EDR


INQUIRY #: 5418639.5
YEAR: 1994
= 750'
N
EDR

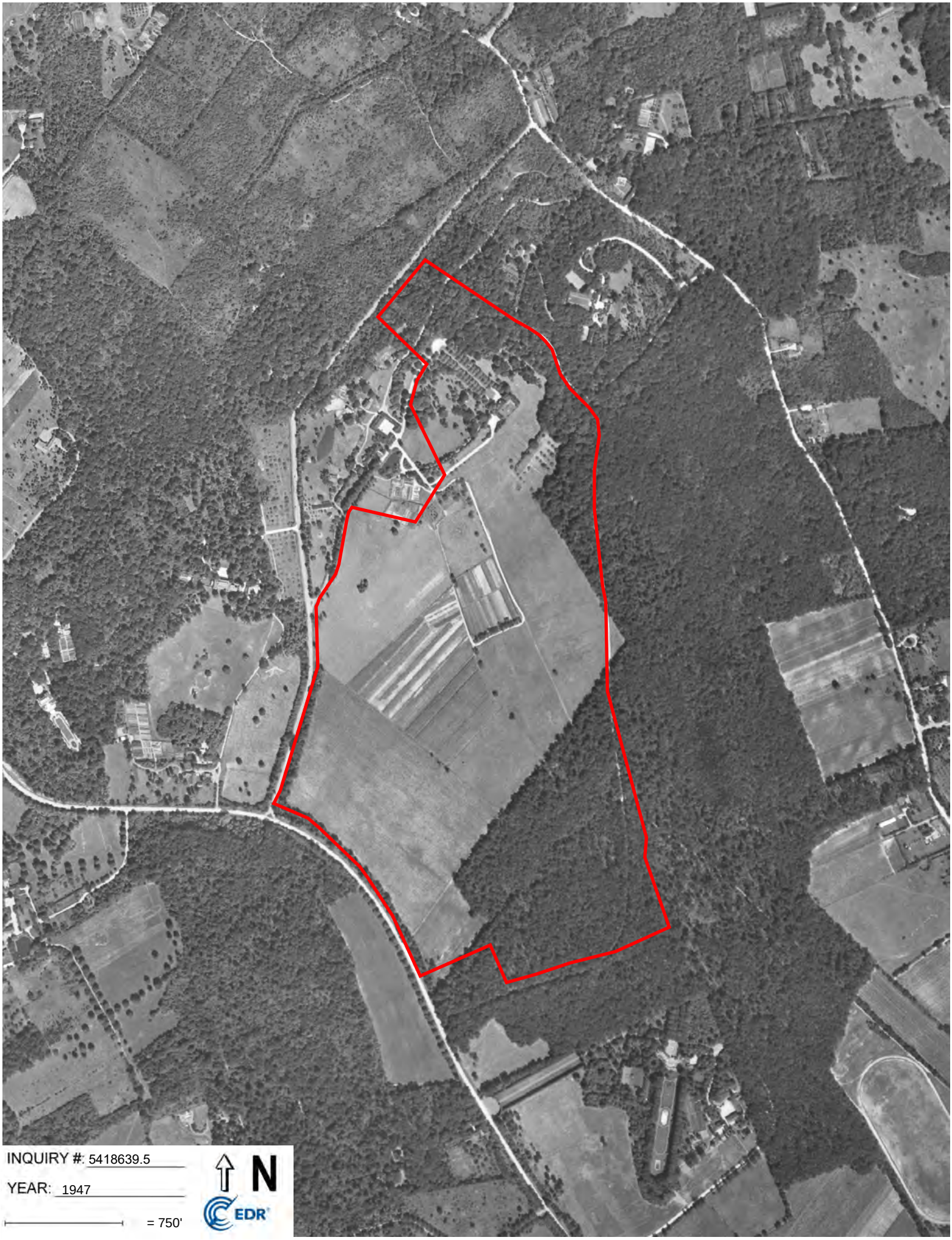

INQUIRY #: 5418639.5
YEAR: 1985
= 750'
N
EDR

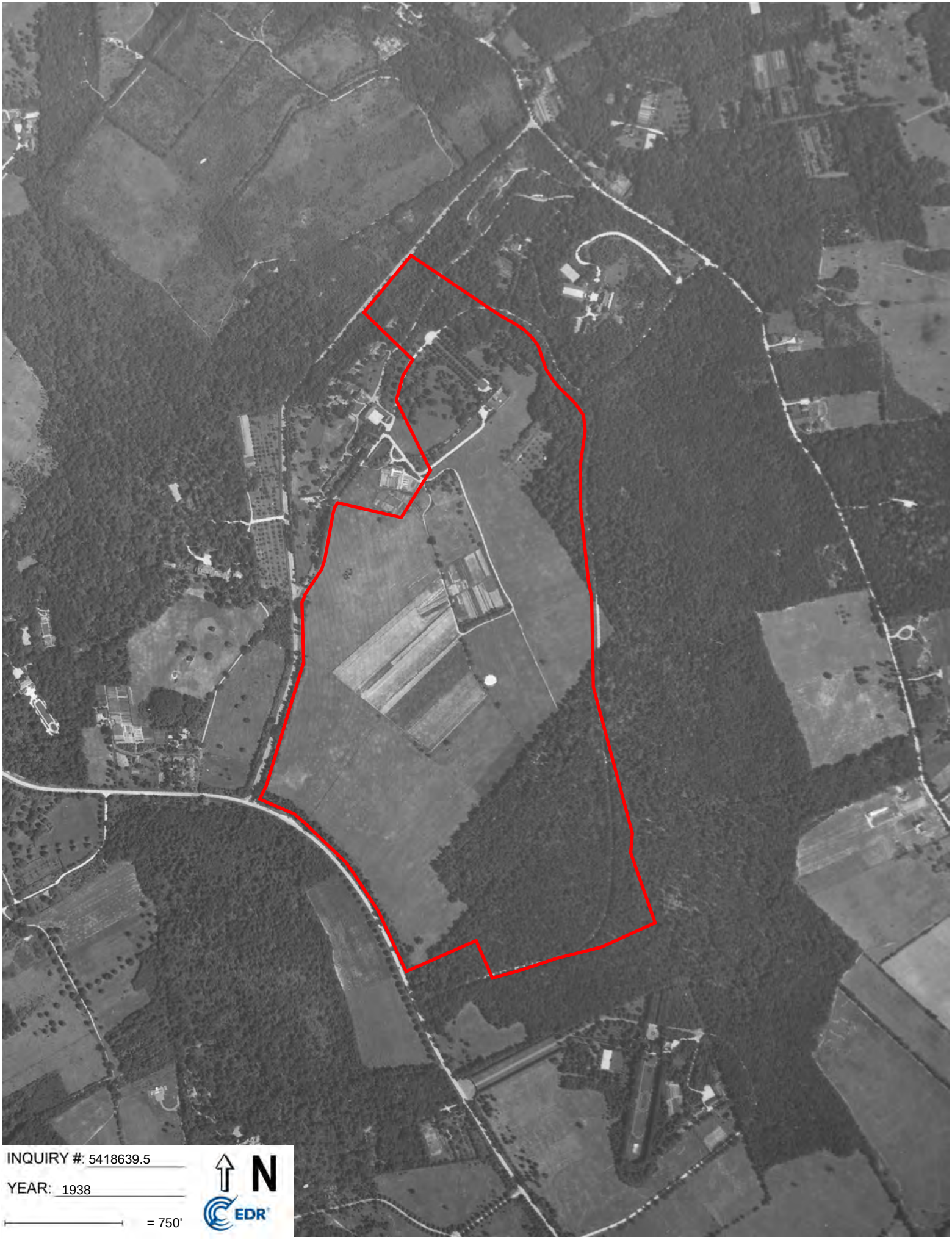

AGC
22-19
INQUIRY #: 5418639.5
YEAR: 1980
= 750'
N
EDR


INQUIRY #: 5418639.5
YEAR: 1966
= 750'
N
EDR


INQUIRY #: 5418639.5
YEAR: 1957
= 750'
N
EDR


INQUIRY #: 5418639.5
YEAR: 1953
= 750'
N
EDR


INQUIRY #: 5418639.5
YEAR: 1947
= 750'
N
EDR


INQUIRY #: 5418639.5
YEAR: 1938
= 750'
N
EDR

Appendix C

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Pond 1-UP

Project Site: Tam O'Shanter Golf Club | City/County: Oyster Bay / Nassau | Samp. Date: 2/12/2020

Applicant/Owner: Tam O'Shanter Golf Club | State: NY | Sampling Point: Pond 1-UP

Investigator(s): D. Kennedy, C. Hinton | Section, Township, Range: Village of Brookville, Nassau County, NY

Landform (hillslope, terrace, etc.): Terrace | Local relief (concave, convex, none): Flat | Slope (%): <1%

Subregion (LRR or MLRA): MLRA 149B | Lat: 40.81272 | Long: -73.55178 | Datum: GCS WGS 1984

Soil Map Unit: Montauk loam, 0 to 3 percent slopes (MkA) | NWI Class:

Are climatic/hydrologic conditions on the site typical for this time of year? Yes | Remarks:

Are Normal Circumstances present? No | If needed, explain any answers in Remarks:

Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? | Remarks: Disturbed/landscaped golf course

Are Vegetation No, Soil No, or Hydrology No naturally problematic? | Remarks:

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? No	Is This Sample Area Within a Wetland? No
Hydric Soil Present? No	
Wetland Hydrology Present? No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): N/A

Water Table Present? ___ Depth (inches): N/A

Saturation Present? ___ Depth (inches): N/A

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Other

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/4	100		N/A	N/A	N/A	SILTY CLAY LOAM	
12-22	10YR 4/3	85	10YR 5/6	15	C	M	FINE SANDY LOAM	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ___ Coast Prairie Redox (A16) (LRR K, L, R)
- ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ___ Dark Surface (S7) (LRR K, L, M)
- ___ Polyvalue Below Surface (S8) (LRR K, L)
- ___ Thin Dark Surface (S9) (LRR K, L)
- ___ Iron-Manganese Masses (F12) (LRR K, L, R)
- ___ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? No

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: Pond 1-UP

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dom. Sp?	Indicator Status
1. *Prunus serotina*	10.5	X	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	10	= Total Cover	

Sapling Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Festuca trachyphylla*	85.5	X	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85	= Total Cover	

Woody Vines (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

# Dominants OBL, FACW, FAC:	0	(A)
# Dominants across all strata:	2	(B)
% Dominants OBL, FACW, FAC:	0.00%	(A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	0	x 1 =	0
FACW	0	x 2 =	0
FAC	0	x 3 =	0
FACU	1	x 4 =	4
UPL	1	x 5 =	5
Sum:	2 (A)		9 (B)

Prevalence Index = B/A = 4.89

Hydrophytic Vegetation Indicators:

- ____ Dominance Test is > 50%
- ____ Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? No

Remarks: (If observed, list morphological adaptations below).

PHOTO LOG Report Sampling Point Pond 1-UP

Photo Number	Pond 1-UP-1
Photo Location	Pond 1-UP
Direction	E
Date	02/12/2020

Description:

Pond 1 upland sampling point

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Pond 1-WET

Project Site: Tam O'Shanter Golf Club | City/County: Oyster Bay / Nassau | Samp. Date: 2/12/2020

Applicant/Owner: Tam O'Shanter Golf Club | State: NY | Sampling Point: Pond 1-WET

Investigator(s): D. Kennedy, C. Hinton | Section, Township, Range: Village of Brookville, Nassau County, NY

Landform (hillslope, terrace, etc.): Toeslope | Local relief (concave, convex, none): Concave | Slope (%): 1-2%

Subregion (LRR or MLRA): MLRA 149B | Lat: 40.81271 | Long: -73.55182 | Datum: GCS WGS 1984

Soil Map Unit: Montauk loam, 0 to 3 percent slopes (MkA) | NWI Class: PUBHx

Are climatic/hydrologic conditions on the site typical for this time of year? Yes | Remarks:

Are Normal Circumstances present? No | If needed, explain any answers in Remarks:

Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? | Remarks: Pond edge vegetation is maintained golf course turf.

Are Vegetation No, Soil No, or Hydrology No naturally problematic? | Remarks:

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	No
Hydric Soil Present?	Yes
Wetland Hydrology Present?	Yes
Is This Sample Area Within a Wetland?	Yes

Remarks: Vegetation along the pond edge is comprised of upland turf grasses that are landscaped and maintained in association with site use as a golf course. Given the observed wetland hydrology and soils along the pond edge, wetland vegetation would likely occur under natural/undisturbed conditions.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B15)
	Water Marks (B1)		Hydrogen Sulfide Odor (C1)
	Sediment Deposits (B2)	X	Oxidized Rhizospheres on Living Roots (C3)
	Drift Deposits (B3)		Presence of Reduced Iron (C4)
	Algal Mat or Crust (B4)		Recent Iron Reduction in Tilled Soils (C6)
	Iron Deposits (B5)		Thin Muck Surface (C7)
	Inundation Visible on Aerial (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
X	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	
Water Table Present?	X	Depth (inches):	6
Saturation Present?	X	Depth (inches):	4

Wetland Hydrology Present? Yes

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Other

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	98	10YR 5/6	2	C	PL	LOAM	
8-11	10YR 3/2	100		N/A	N/A	N/A	FINE SANDY LOAM	
11-18	10YR 3/2	100		N/A	N/A	N/A	GRAVELLY SAND	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
X	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Indicators for Problematic Hydric Soils[3]:

	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	Coast Prairie Redox (A16) (LRR K, L, R)
	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Dark Surface (S7) (LRR K, L, M)
	Polyvalue Below Surface (S8) (LRR K, L)
	Thin Dark Surface (S9) (LRR K, L)
	Iron-Manganese Masses (F12) (LRR K, L, R)
	Piedmont Floodplain Soils (F19) (MLRA 149B)
	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Red Parent Material (F21)
	Very Shallow Dark Surface (TF12)
	Other (Explain in Remarks)

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: Pond 1-WET

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Sapling Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. Festuca trachyphylla	98	X	UPL
2. Stellaria media	3		FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	101	= Total Cover	

Woody Vines (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

# Dominants OBL, FACW, FAC:	0	(A)
# Dominants across all strata:	1	(B)
% Dominants OBL, FACW, FAC:	0.00%	(A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	0	x 1 =	0
FACW	0	x 2 =	0
FAC	0	x 3 =	0
FACU	1	x 4 =	4
UPL	1	x 5 =	5
Sum:	2 (A)		9 (B)

Prevalence Index = B/A = 4.97

Hydrophytic Vegetation Indicators:

- ____ Dominance Test is > 50%
- ____ Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? No

Remarks: (If observed, list morphological adaptations below).

Vegetation along the pond edge is comprised of upland turf grasses that are landscaped and maintained in association with site use as a golf course. Given the observed wetland hydrology and soils along the pond edge, wetland vegetation would likely occur under natural/undisturbed conditions.

PHOTO LOG Report Sampling Point Pond 1-WET

Photo Number	Pond 1-WET-1
Photo Location	Pond 1-WET
Direction	SW
Date	02/12/2020

Description: Pond 1 wetland sampling point

Photo Number	Pond 1-WET-2
Photo Location	Pond 1-WET
Direction	NA
Date	02/12/2020

Description: Wetland soil profile

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Pond 2-UP

Project Site: Tam O'Shanter Golf Club | City/County: Oyster Bay / Nassau | Samp. Date: 2/12/2020

Applicant/Owner: Tam O'Shanter Golf Club | State: NY | Sampling Point: Pond 2-UP

Investigator(s): D. Kennedy, C. Hinton | Section, Township, Range: Village of Brookville, Nassau County, NY

Landform (hillslope, terrace, etc.): Swell | Local relief (concave, convex, none): Undulating | Slope (%): <1%

Subregion (LRR or MLRA): MLRA 149B | Lat: 40.81084 | Long: -73.55475 | Datum: GCS WGS 1984

Soil Map Unit: Montauk loam, 0 to 3 percent slopes (MkA) | NWI Class:

Are climatic/hydrologic conditions on the site typical for this time of year? Yes | Remarks:

Are Normal Circumstances present? No | If needed, explain any answers in Remarks:

Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? | Remarks: Golf course turf and landscaping

Are Vegetation No, Soil No, or Hydrology No naturally problematic? | Remarks:

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? No	Is This Sample Area Within a Wetland? No
Hydric Soil Present? No	
Wetland Hydrology Present? No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): N/A

Water Table Present? ___ Depth (inches): N/A

Saturation Present? ___ Depth (inches): N/A

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Other

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/4	100		N/A	N/A	N/A	FINE SANDY LOAM	
7-19	10YR 4/4	100		N/A	N/A	N/A	GRAVELLY COARSE SANDY LOAM	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ___ Coast Prairie Redox (A16) (LRR K, L, R)
- ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ___ Dark Surface (S7) (LRR K, L, M)
- ___ Polyvalue Below Surface (S8) (LRR K, L)
- ___ Thin Dark Surface (S9) (LRR K, L)
- ___ Iron-Manganese Masses (F12) (LRR K, L, R)
- ___ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? No

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: Pond 2-UP

		Absolute % Cover	Dom. Sp?	Indicator Status
Tree Stratum	(Plot size: 30 ft)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
		0	= Total Cover	
Sapling Stratum	(Plot size: 30 ft)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
		0	= Total Cover	
Shrub Stratum	(Plot size: 15 ft)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
		0	= Total Cover	
Herb Stratum	(Plot size: 5 ft)			
1.	Festuca trachyphylla	85.5	X	UPL
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		85	= Total Cover	
Woody Vines	(Plot size: 30 ft)			
1.				
2.				
3.				
4.				
5.				
		0	= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 0 (A)

Dominants across all strata: 1 (B)

% Dominants OBL, FACW, FAC: 0.00% (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	0	x 1 =	0
FACW	0	x 2 =	0
FAC	0	x 3 =	0
FACU	0	x 4 =	0
UPL	1	x 5 =	5
Sum:	1 (A)		5 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? No

Remarks: (If observed, list morphological adaptations below).

PHOTO LOG Report Sampling Point Pond 2-UP

Photo Number	Pond 2-UP-1
Photo Location	Pond 2-UP
Direction	S
Date	02/12/2020

Description:

Pond 2 upland sampling point

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Pond 2-WET

Project Site: Tam O'Shanter Golf Club | City/County: Oyster Bay / Nassau | Samp. Date: 2/12/2020
Applicant/Owner: Tam O'Shanter Golf Club | State: NY | Sampling Point: Pond 2-WET
Investigator(s): D. Kennedy, C. Hinton | Section, Township, Range: Village of Brookville, Nassau County, NY
Landform (hillslope, terrace, etc.): Bench | Local relief (concave, convex, none): Undulating | Slope (%): <1%
Subregion (LRR or MLRA): MLRA 149B | Lat: 40.81086 | Long: -73.55479 | Datum: GCS WGS 1984
Soil Map Unit: Montauk loam, 0 to 3 percent slopes (MkA) | NWI Class: PUBHx
Are climatic/hydrologic conditions on the site typical for this time of year? Yes | Remarks:
Are Normal Circumstances present? No | If needed, explain any answers in Remarks:
Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? | Remarks: Pond edge vegetation is maintained golf course turf.
Are Vegetation No, Soil No, or Hydrology No naturally problematic? | Remarks:

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	No
Hydric Soil Present?	Yes
Wetland Hydrology Present?	Yes
Is This Sample Area Within a Wetland?	Yes

Remarks: Vegetation along the pond edge is comprised of upland turf grasses that are landscaped and maintained in association with site use as a golf course. Given the observed wetland hydrology and soils along the pond edge, wetland vegetation would likely occur under natural/undisturbed conditions.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B15)
	Water Marks (B1)		Hydrogen Sulfide Odor (C1)
	Sediment Deposits (B2)		Oxidized Rhizospheres on Living Roots (C3)
	Drift Deposits (B3)		Presence of Reduced Iron (C4)
	Algal Mat or Crust (B4)		Recent Iron Reduction in Tilled Soils (C6)
	Iron Deposits (B5)		Thin Muck Surface (C7)
	Inundation Visible on Aerial (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
X	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	N/A
Water Table Present?	X	Depth (inches):	5
Saturation Present?	X	Depth (inches):	Surface

Wetland Hydrology Present? Yes

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Other

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 2.5/2	100		N/A	N/A	N/A	SILT LOAM	
2-5	7.5YR 3/1	100		N/A	N/A	N/A	SANDY CLAY	
5-16	7.5YR 3/1	100		N/A	N/A	N/A	GRAVELLY COARSE SANDY LOAM	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.
[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)	X	Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Indicators for Problematic Hydric Soils[3]:

	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	Coast Prairie Redox (A16) (LRR K, L, R)
	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Dark Surface (S7) (LRR K, L, M)
	Polyvalue Below Surface (S8) (LRR K, L)
	Thin Dark Surface (S9) (LRR K, L)
	Iron-Manganese Masses (F12) (LRR K, L, R)
	Piedmont Floodplain Soils (F19) (MLRA 149B)
	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Red Parent Material (F21)
	Very Shallow Dark Surface (TF12)
	Other (Explain in Remarks)

Restrictive Layer (if observed):
Type:
Depth (inches):

Hydric Soil Present? Yes

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: Pond 2-WET

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Sapling Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. Festuca trachyphylla	98	X	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	98	= Total Cover	

Woody Vines (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 0 (A)

Dominants across all strata: 1 (B)

% Dominants OBL, FACW, FAC: 0.00% (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	0	x 1 =	0
FACW	0	x 2 =	0
FAC	0	x 3 =	0
FACU	0	x 4 =	0
UPL	1	x 5 =	5
Sum:	1 (A)		5 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? No

Remarks: (If observed, list morphological adaptations below).

Vegetation along the pond edge is comprised of upland turf grasses that are landscaped and maintained in association with site use as a golf course. Given the observed wetland hydrology and soils along the pond edge, wetland vegetation would likely occur under natural/undisturbed conditions.

PHOTO LOG Report Sampling Point Pond 2-WET

Photo Number	Pond 2-WET-1
Photo Location	Pond 2-WET
Direction	N
Date	02/12/2020

Description:

Pond 2 wetland sampling point

Photo Number	Pond 2-WET-2
Photo Location	Pond 2-WET
Direction	NA
Date	02/12/2020

Description: Wetland soil profile

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Pond 3-UP

Project Site: Tam O'Shanter Golf Club | City/County: Oyster Bay / Nassau | Samp. Date: 2/12/2020
Applicant/Owner: Tam O'Shanter Golf Club | State: NY | Sampling Point: Pond 3-UP
Investigator(s): D. Kennedy, C. Hinton | Section, Township, Range: Village of Brookville, Nassau County, NY
Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): Flat | Slope (%): <1%
Subregion (LRR or MLRA): MLRA 149B | Lat: 40.81037 | Long: -73.55364 | Datum: GCS WGS 1984
Soil Map Unit: Montauk loam, 0 to 3 percent slopes (MkA) | NWI Class:
Are climatic/hydrologic conditions on the site typical for this time of year? Yes | Remarks:
Are Normal Circumstances present? No | If needed, explain any answers in Remarks:
Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? | Remarks: Golf course turf and landscaping
Are Vegetation No, Soil No, or Hydrology No naturally problematic? | Remarks:

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? No	Is This Sample Area Within a Wetland? No
Hydric Soil Present? No	
Wetland Hydrology Present? No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	N/A
Water Table Present?		Depth (inches):	N/A
Saturation Present?		Depth (inches):	N/A

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Other

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-19	10YR 3/3	85	10YR 5/6	15	C	M	CLAY LOAM	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.
[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ___ Coast Prairie Redox (A16) (LRR K, L, R)
- ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ___ Dark Surface (S7) (LRR K, L, M)
- ___ Polyvalue Below Surface (S8) (LRR K, L)
- ___ Thin Dark Surface (S9) (LRR K, L)
- ___ Iron-Manganese Masses (F12) (LRR K, L, R)
- ___ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

Restrictive Layer (if observed):
Type:
Depth (inches):

Hydric Soil Present? No

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: Pond 3-UP

		Absolute % Cover	Dom. Sp?	Indicator Status
Tree Stratum	(Plot size: 30 ft)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
		0	= Total Cover	
Sapling Stratum	(Plot size: 30 ft)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
		0	= Total Cover	
Shrub Stratum	(Plot size: 15 ft)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
		0	= Total Cover	
Herb Stratum	(Plot size: 5 ft)			
1.	Festuca trachyphylla	85.5	X	UPL
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		85	= Total Cover	
Woody Vines	(Plot size: 30 ft)			
1.				
2.				
3.				
4.				
5.				
		0	= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 0 (A)

Dominants across all strata: 1 (B)

% Dominants OBL, FACW, FAC: 0.00% (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	0	x 1 =	0
FACW	0	x 2 =	0
FAC	0	x 3 =	0
FACU	0	x 4 =	0
UPL	1	x 5 =	5
Sum:	1 (A)		5 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

____ Dominance Test is > 50%

____ Prevalence Index is <= 3.0

____ Problematic Hydrophytic Vegetation[1] (explain)

____ Rapid Test for Hydrophytic Vegetation

____ Morphological Adaptations

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? No

Remarks: (If observed, list morphological adaptations below).

PHOTO LOG Report Sampling Point Pond 3-UP

Photo Number	Pond 3-UP-1
Photo Location	Pond 3-UP
Direction	SE
Date	02/12/2020

Description:

Pond 3 upland sampling point

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Pond 3-WET

Project Site: Tam O'Shanter Golf Club | City/County: Oyster Bay / Nassau | Samp. Date: 2/12/2020
Applicant/Owner: Tam O'Shanter Golf Club | State: NY | Sampling Point: Pond 3-WET
Investigator(s): D. Kennedy, C. Hinton | Section, Township, Range: Village of Brookville, Nassau County, NY
Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): Flat | Slope (%): <1%
Subregion (LRR or MLRA): MLRA 149B | Lat: 40.81040 | Long: -73.55368 | Datum: GCS WGS 1984
Soil Map Unit: Montauk loam, 0 to 3 percent slopes (MkA) | NWI Class: PUBHx
Are climatic/hydrologic conditions on the site typical for this time of year? Yes | Remarks:
Are Normal Circumstances present? No | If needed, explain any answers in Remarks:
Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? | Remarks: Pond edge vegetation is maintained golf course turf.
Are Vegetation No, Soil No, or Hydrology No naturally problematic? | Remarks:

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	No	Is This Sample Area Within a Wetland? Yes
Hydric Soil Present?	Yes	
Wetland Hydrology Present?	Yes	

Remarks:
Vegetation along the pond edge is comprised of upland turf grasses that are landscaped and maintained in association with site use as a golf course. Given the observed wetland hydrology and soils along the pond edge, wetland vegetation would likely occur under natural/undisturbed conditions.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

	Surface Water (A1)		Water-Stained Leaves (B9)		Surface Soil Cracks (B6)
X	High Water Table (A2)		Aquatic Fauna (B13)		Drainage Patterns (B10)
X	Saturation (A3)		Marl Deposits (B15)		Moss Trim Lines (B16)
	Water Marks (B1)		Hydrogen Sulfide Odor (C1)		Dry-Season Water Table (C2)
	Sediment Deposits (B2)	X	Oxidized Rhizospheres on Living Roots (C3)		Crayfish Burrows (C8)
	Drift Deposits (B3)		Presence of Reduced Iron (C4)		Saturation Visible on Aerial (C9)
	Algal Mat or Crust (B4)		Recent Iron Reduction in Tilled Soils (C6)		Stunted or Stressed Plants (D1)
	Iron Deposits (B5)		Thin Muck Surface (C7)	X	Geomorphic Position (D2)
	Inundation Visible on Aerial (B7)		Other (Explain in Remarks)		Shallow Aquitard (D3)
	Sparsely Vegetated Concave Surface (B8)				Microtopographic Relief (D4)
					FAC-Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?		Depth (inches):	N/A
Water Table Present?	X	Depth (inches):	6
Saturation Present?	X	Depth (inches):	4

Wetland Hydrology Present? Yes

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Other

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/2	98	10YR 5/6	2	C	M,PL	SILT LOAM	
9-22	10YR 4/3	75	10YR 5/8	25	C	M	GRAVELLY LOAM	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.
[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
X	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Indicators for Problematic Hydric Soils[3]:

	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	Coast Prairie Redox (A16) (LRR K, L, R)
	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Dark Surface (S7) (LRR K, L, M)
	Polyvalue Below Surface (S8) (LRR K, L)
	Thin Dark Surface (S9) (LRR K, L)
	Iron-Manganese Masses (F12) (LRR K, L, R)
	Piedmont Floodplain Soils (F19) (MLRA 149B)
	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Red Parent Material (F21)
	Very Shallow Dark Surface (TF12)
	Other (Explain in Remarks)

Restrictive Layer (if observed):
Type:
Depth (inches):

Hydric Soil Present? Yes

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: Pond 3-WET

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Sapling Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. Festuca trachyphylla	98	X	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	98	= Total Cover	

Woody Vines (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 0 (A)

Dominants across all strata: 1 (B)

% Dominants OBL, FACW, FAC: 0.00% (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	0	x 1 =	0
FACW	0	x 2 =	0
FAC	0	x 3 =	0
FACU	0	x 4 =	0
UPL	1	x 5 =	5
Sum:	1 (A)		5 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? No

Remarks: (If observed, list morphological adaptations below).

Vegetation along the pond edge is comprised of upland turf grasses that are landscaped and maintained in association with site use as a golf course. Given the observed wetland hydrology and soils along the pond edge, wetland vegetation would likely occur under natural/undisturbed conditions.

PHOTO LOG Report Sampling Point Pond 3-WET

Photo Number	Pond 3-WET-1
Photo Location	Pond 3-WET
Direction	W
Date	02/12/2020

Description:

Pond 3

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Pond 4-UP

Project Site: Tam O'Shanter Golf Club | City/County: Oyster Bay / Nassau | Samp. Date: 2/12/2020

Applicant/Owner: | State: NY | Sampling Point: Pond 4-UP

Investigator(s): | Section, Township, Range:

Landform (hillslope, terrace, etc.): Terrace | Local relief (concave, convex, none): Flat | Slope (%): <1%

Subregion (LRR or MLRA): MLRA 149B | Lat: 40.81008 | Long: -73.55202 | Datum:

Soil Map Unit: | NWI Class:

Are climatic/hydrologic conditions on the site typical for this time of year? Yes | Remarks:

Are Normal Circumstances present? No | If needed, explain any answers in Remarks:

Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? | Remarks: Golf course turf and landscaping

Are Vegetation No, Soil No, or Hydrology No naturally problematic? | Remarks:

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? No	Is This Sample Area Within a Wetland? No
Hydric Soil Present? No	
Wetland Hydrology Present? No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): N/A

Water Table Present? ___ Depth (inches): N/A

Saturation Present? ___ Depth (inches): N/A

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR_3/4	100		N/A	N/A	N/A	GRAVELLY COARSE SANDY LOAM	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ___ Coast Prairie Redox (A16) (LRR K, L, R)
- ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ___ Dark Surface (S7) (LRR K, L, M)
- ___ Polyvalue Below Surface (S8) (LRR K, L)
- ___ Thin Dark Surface (S9) (LRR K, L)
- ___ Iron-Manganese Masses (F12) (LRR K, L, R)
- ___ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? No

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: Pond 4-UP

		Absolute % Cover	Dom. Sp?	Indicator Status
Tree Stratum	(Plot size: 30 ft)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
		0	= Total Cover	
Sapling Stratum	(Plot size: 30 ft)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
		0	= Total Cover	
Shrub Stratum	(Plot size: 15 ft)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
		0	= Total Cover	
Herb Stratum	(Plot size: 5 ft)			
1.	Festuca trachyphylla	98	X	UPL
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		98	= Total Cover	
Woody Vines	(Plot size: 30 ft)			
1.				
2.				
3.				
4.				
5.				
		0	= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 0 (A)

Dominants across all strata: 1 (B)

% Dominants OBL, FACW, FAC: 0.00% (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	0	x 1 =	0
FACW	0	x 2 =	0
FAC	0	x 3 =	0
FACU	0	x 4 =	0
UPL	1	x 5 =	5
Sum:	1 (A)		5 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? No

Remarks: (If observed, list morphological adaptations below).

PHOTO LOG Report Sampling Point Pond 4-UP

Photo Number	Pond 4-UP-1
Photo Location	Pond 4-UP
Direction	NE
Date	02/12/2020

Description:

Pond 4 upland sampling point

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Pond 4-WET

Project Site: Tam O'Shanter Golf Club | City/County: Oyster Bay / Nassau | Samp. Date: 2/12/2020
Applicant/Owner: Tam O'Shanter Golf Club | State: NY | Sampling Point: Pond 4-WET
Investigator(s): D. Kennedy, C. Hinton | Section, Township, Range: Village of Brookville, Nassau County, NY
Landform (hillslope, terrace, etc.): Toeslope | Local relief (concave, convex, none): Concave | Slope (%): 3-5%
Subregion (LRR or MLRA): MLRA 149B | Lat: 40.80997 | Long: -73.55204 | Datum: GCS WGS 1984
Soil Map Unit: Montauk loam, 0 to 3 percent slopes (MkA) | NWI Class: PUBHx
Are climatic/hydrologic conditions on the site typical for this time of year? Yes | Remarks:
Are Normal Circumstances present? No | If needed, explain any answers in Remarks:
Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? | Remarks: Pond edge vegetation is maintained golf course turf.
Are Vegetation No, Soil No, or Hydrology No naturally problematic? | Remarks:

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	No
Hydric Soil Present?	Yes
Wetland Hydrology Present?	Yes
Is This Sample Area Within a Wetland?	Yes

Remarks: Vegetation along the pond edge is comprised of upland turf grasses that are landscaped and maintained in association with site use as a golf course. Given the observed wetland hydrology and soils along the pond edge, wetland vegetation would likely occur under natural/undisturbed conditions.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B15)
	Water Marks (B1)		Hydrogen Sulfide Odor (C1)
	Sediment Deposits (B2)		Oxidized Rhizospheres on Living Roots (C3)
	Drift Deposits (B3)		Presence of Reduced Iron (C4)
	Algal Mat or Crust (B4)		Recent Iron Reduction in Tilled Soils (C6)
	Iron Deposits (B5)		Thin Muck Surface (C7)
	Inundation Visible on Aerial (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
X	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	N/A
Water Table Present?	X	Depth (inches):	9
Saturation Present?	X	Depth (inches):	7

Wetland Hydrology Present? Yes

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Other

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/3	100		N/A	N/A	N/A	SILTY CLAY	
4-8	10YR 3/2	85	7.5YR 4/6	15	C	PL	GRAVELLY LOAMY FINE SAND	
8-21	10YR 4/2	100		N/A	N/A	N/A	GRAVELLY LOAMY COARSE SAND	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)	X	Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Indicators for Problematic Hydric Soils[3]:

	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	Coast Prairie Redox (A16) (LRR K, L, R)
	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Dark Surface (S7) (LRR K, L, M)
	Polyvalue Below Surface (S8) (LRR K, L)
	Thin Dark Surface (S9) (LRR K, L)
	Iron-Manganese Masses (F12) (LRR K, L, R)
	Piedmont Floodplain Soils (F19) (MLRA 149B)
	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Red Parent Material (F21)
	Very Shallow Dark Surface (TF12)
	Other (Explain in Remarks)

Restrictive Layer (if observed):
Type:
Depth (inches):

Hydric Soil Present? Yes

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: Pond 4-WET

	Absolute % Cover	Dom. Sp?	Indicator Status
Tree Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	
Sapling Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	
Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Festuca trachyphylla	98	X	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	98	= Total Cover	
Woody Vines (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 0 (A)

Dominants across all strata: 1 (B)

% Dominants OBL, FACW, FAC: 0.00% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	0 x 1 =	0
FACW	0 x 2 =	0
FAC	0 x 3 =	0
FACU	0 x 4 =	0
UPL	1 x 5 =	5
Sum:	1 (A)	5 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

____ Dominance Test is > 50%

____ Prevalence Index is <= 3.0

____ Problematic Hydrophytic Vegetation[1] (explain)

____ Rapid Test for Hydrophytic Vegetation

____ Morphological Adaptations

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? No

Remarks: (If observed, list morphological adaptations below).

Vegetation along the pond edge is comprised of upland turf grasses that are landscaped and maintained in association with site use as a golf course. Given the observed wetland hydrology and soils along the pond edge, wetland vegetation would likely occur under natural/undisturbed conditions.

PHOTO LOG Report Sampling Point Pond 4-WET

Photo Number	Pond 4-WET-1
Photo Location	Pond 4-WET
Direction	S
Date	02/12/2020

Description:

Pond 4

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Pond 5-UP

Project Site: Tam O'Shanter Golf Club | City/County: Oyster Bay / Nassau | Samp. Date: 2/12/2020

Applicant/Owner: Tam O'Shanter Golf Club | State: NY | Sampling Point: Pond 5-UP

Investigator(s): D. Kennedy, C. Hinton | Section, Township, Range: Village of Brookville, Nassau County, NY

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): Flat | Slope (%): <1%

Subregion (LRR or MLRA): MLRA 149B | Lat: 40.80944 | Long: -73.55663 | Datum: GCS WGS 1984

Soil Map Unit: Montauk loam, 0 to 3 percent slopes (MkA) | NWI Class:

Are climatic/hydrologic conditions on the site typical for this time of year? Yes | Remarks:

Are Normal Circumstances present? No | If needed, explain any answers in Remarks:

Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? | Remarks: Golf course turf and landscaping

Are Vegetation No, Soil No, or Hydrology No naturally problematic? | Remarks:

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? No	Is This Sample Area Within a Wetland? No
Hydric Soil Present? No	
Wetland Hydrology Present? No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): N/A

Water Table Present? ___ Depth (inches): N/A

Saturation Present? ___ Depth (inches): N/A

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Other

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 4/4	100		N/A	N/A	N/A	CLAY LOAM	
9-18	7.5YR 4/6	100		N/A	N/A	N/A	SANDY CLAY LOAM	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ___ Coast Prairie Redox (A16) (LRR K, L, R)
- ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ___ Dark Surface (S7) (LRR K, L, M)
- ___ Polyvalue Below Surface (S8) (LRR K, L)
- ___ Thin Dark Surface (S9) (LRR K, L)
- ___ Iron-Manganese Masses (F12) (LRR K, L, R)
- ___ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? No

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: Pond 5-UP

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dom. Sp?	Indicator Status
1. Quercus rubra	38	X	FACU
2. Cornus florida	10.5	X	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	48	= Total Cover	

Sapling Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. Festuca trachyphylla	85.5	X	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85	= Total Cover	

Woody Vines (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 0 (A)

Dominants across all strata: 3 (B)

% Dominants OBL, FACW, FAC: 0.00% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	0	x 1 = 0
FACW	0	x 2 = 0
FAC	0	x 3 = 0
FACU	2	x 4 = 8
UPL	1	x 5 = 5
Sum:	3 (A)	13 (B)

Prevalence Index = B/A = 4.64

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? No

Remarks: (If observed, list morphological adaptations below).

PHOTO LOG Report Sampling Point Pond 5-UP

Photo Number	Pond 5-UP-1
Photo Location	Pond 5-UP
Direction	SE
Date	02/12/2020

Description:

Pond 5 upland sampling point

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Pond 5-WET

Project Site: Tam O'Shanter Golf Club | City/County: Oyster Bay / Nassau | Samp. Date: 2/12/2020

Applicant/Owner: Tam O'Shanter Golf Club | State: NY | Sampling Point: Pond 5-WET

Investigator(s): D. Kennedy, C. Hinton | Section, Township, Range: Village of Brookville, Nassau County, NY

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): Flat | Slope (%): <1%

Subregion (LRR or MLRA): MLRA 149B | Lat: 40.80947 | Long: -73.55678 | Datum: GCS WGS 1984

Soil Map Unit: Montauk loam, 0 to 3 percent slopes (MkA) | NWI Class: PUBHx

Are climatic/hydrologic conditions on the site typical for this time of year? Yes | Remarks:

Are Normal Circumstances present? Yes | If needed, explain any answers in Remarks:

Are Vegetation No, Soil Yes, or Hydrology No significantly disturbed? | Remarks: Disturbed soil profile

Are Vegetation No, Soil No, or Hydrology No naturally problematic? | Remarks:

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes	Is This Sample Area Within a Wetland? Yes
Hydric Soil Present? Yes	
Wetland Hydrology Present? Yes	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

	Surface Water (A1)	Water-Stained Leaves (B9)
X	High Water Table (A2)	Aquatic Fauna (B13)
	Saturation (A3)	Marl Deposits (B15)
	Water Marks (B1)	Hydrogen Sulfide Odor (C1)
	Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)
	Drift Deposits (B3)	Presence of Reduced Iron (C4)
	Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)
	Iron Deposits (B5)	Thin Muck Surface (C7)
	Inundation Visible on Aerial (B7)	Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
X	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? | Depth (inches): N/A

Water Table Present? X | Depth (inches): 6

Saturation Present? | Depth (inches): N/A

Wetland Hydrology Present? Yes

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Other

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/4	100		N/A	N/A	N/A	SANDY CLAY LOAM	
4-8	10YR 4/4	90	7.5YR 4/6	10	C	M,PL	GRAVELLY SANDY CLAY	
8-18	10YR 3/1	90	10YR 4/3	10	C	M	SANDY CLAY	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

	Histosol (A1)	Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)	Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)
	Thick Dark Surface (A12)	Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)	Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)	
	Sandy Redox (S5)	
	Stripped Matrix (S6)	
	Dark Surface (S7) (LRR R, MLRA 149B)	

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Indicators for Problematic Hydric Soils[3]:

	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	Coast Prairie Redox (A16) (LRR K, L, R)
	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Dark Surface (S7) (LRR K, L, M)
	Polyvalue Below Surface (S8) (LRR K, L)
	Thin Dark Surface (S9) (LRR K, L)
	Iron-Manganese Masses (F12) (LRR K, L, R)
	Piedmont Floodplain Soils (F19) (MLRA 149B)
	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Red Parent Material (F21)
	Very Shallow Dark Surface (TF12)
X	Other (Explain in Remarks)

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes

Remarks: Soil profile disturbed due to golf course landscaping practices. Low chroma matrix with redoximorphic features within 8 inches of soil surface, along with water table at six inches is indicative of hydric soil profile within disturbed soils.

VEGETATION - Use scientific names of plants.

Sampling Point: Pond 5-WET

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dom. Sp?	Indicator Status
1. Quercus rubra	10.5	X	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	10	= Total Cover	
Sapling Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	
Shrub Stratum (Plot size: 15 ft)			
1. Clethra alnifolia	20.5	X	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	20	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Iris pseudacorus	20.5	X	OBL
2. Pontederia cordata	10.5	X	OBL
3. Festuca rubra	3		FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	34	= Total Cover	
Woody Vines (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 3 (A)

Dominants across all strata: 4 (B)

% Dominants OBL, FACW, FAC: 75.00% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	2	x 1 = 2
FACW	0	x 2 = 0
FAC	1	x 3 = 3
FACU	2	x 4 = 8
UPL	0	x 5 = 0
Sum:	5 (A)	13 (B)

Prevalence Index = B/A = 2.25

Hydrophytic Vegetation Indicators:

- X Dominance Test is > 50%
- X Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes

Remarks: (If observed, list morphological adaptations below).

PHOTO LOG Report Sampling Point Pond 5-WET

Photo Number	Pond 5-WET-1
Photo Location	Pond 5-WET
Direction	W
Date	02/12/2020

Description:

Pond 5 shoreline wetland vegetation

Photo Number	Pond 5-WET-2
Photo Location	Pond 5-WET
Direction	NA
Date	02/12/2020

Description:

Pond 5 soil profile

Appendix D

Legend

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- HH HAND HOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- BOLLARD w/LIGHT
- STREET SIGN
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- GUY WIRE
- MONITORING WELL
- FLOOD LIGHT
- WELL
- WF P1-100 WETLAND FLAG / NUMBER
- FF FINISHED FLOOR ELEVATION
- DYL DOUBLE YELLOW LINE
- DWL DASHED WHITE LINE
- SYL SINGLE YELLOW LINE
- LSA LANDSCAPED AREA
- EOP EDGE OF PAVEMENT
- CC CONCRETE CURB
- BC BITUMINOUS CURB
- GUARD RAIL
- CHAIN LINK FENCE
- STOCKADE FENCE
- OHW OVERHEAD WIRE
- TREE LINE

General Notes:

THIS SURVEY IS BASED UPON FIELD INVESTIGATIONS AND SURVEYS CONDUCTED BY VHB ENDING ON OCTOBER, 2018 AND UPDATED ON 2/29/2020 BY AND/OR UNDER THE DIRECT SUPERVISION OF THE SIGNED LICENSED SURVEYOR.

1. THE HORIZONTAL DATUM IS THE NORTH AMERICAN DATUM OF 1983 (CORS – EPOCH 2011)) THE PROJECTION IS NEW YORK – LONG ISLAND (3104).
2. THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ALL UNITS SHOWN HEREON ARE US SURVEY FEET, IN WHOLE OR DECIMAL VALUES. 1 METER = 39.37/12 SURVEY FEET.
4. THE SYMBOLS SHOWN ON THIS SURVEY, INCLUDING TREES, ARE REPRESENTATIONAL BASED UPON A SINGLE SURVEY POINT AND DO NOT REPRESENT THE ACTUAL DIMENSION OF THE OBJECT
5. THE PROPERTY IN QUESTION (PIQ) IS LOCATED OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS DEIPICTED ON THE FIRMS 36059C0133G & 36059C0145G EFFECTIVE DATE 9/11/2009 (NOT PRINTED)
6. WETLAND BOUNDARY AS DELINEATED BY VHB ENGINEERING, SURVEYING, LANDSCAPE ARCHITECTURE AND GEOLOGY, P.C., ON FEBRUARY 12, 2020. SURVEYD ON FEBRUARY 24, 2020 BY VHB.

Boundary Notes:

THIS SURVEY IS HEREBY CERTIFIED TO:

- TITAN TAM, LLC, A NEW JERSEY LIMITED LIABILITY COMPANY,
- SEGME TAM LLC, A NEW JERSEY LIMITED LIABILITY COMPANY,
- INTERIM ASSET FUNCING LLC. ITS SUCCESSORS AND/OR ASSIGNS.
- METROPOLITAN ABSTRACT CORPORATION,
- GIORDANO AND HALLERAN & CIESLA, P.C.

CERTIFICATE OF TITLE: METROPOLITAN ABSTRACT CORPORATION, TITLE NO. N349541

TITLE VESTED IN: TAM O'SHANTER CLUB, INC.

SCHEDULE A -- SOURCE OF TITLE: METROPOLITAN ABSTRACT CORPORATION, TITLE NO. N349541

- 74 FRUITLEDGE ROAD, BROOKVILLE, NEW YORK, SECTION 16, BLOCK C
- LOT # 359,386A,386D & 386E
- DEED BETWEEN BARBARA BEANCY AND TOM O'SHANTER CLUB, INC. DATED JUNE 30, 1992, RECORDED NOVEMBER 19, 1992 IN BOOK 10225, VOL 937

SCHEDULE B II – EXCEPTIONS:

1. EXCEPTIONS 1-3 (NOT SURVEY RELATED)
   - I. 4(a) WATER EASEMENT RECORDED IN BOOK 7018, PG. 197. POLICY WILL INSURE NO PORTION OF THE IMPROVEMENTS LIE WITHIN THE AFFECTED EASEMENT AREA. (PLOTTED)
   - II. 4(b) RIGHTS AND EASEMENTS ACQUIRED BY THE UNITED STATES OF AMERICA AS SET FORTH IN THE FOLLOWING INSTRUMENTS:
     - (a) ORDER FOR IMMEDIATE POSSESSION RECORDED IN LIBER 5544, PAGE 314 (WESTERLY SIDE OF CEDAR SWAMP)
     - (b) ORDER FOR IMMEDIATE POSSESSION RECORDED IN LIBER 5658, PAGE 566 (WESTERLY SIDE OF CEDAR SWAMP)
     - (c) DECLARATION OF TAKING RECORDED IN LIBER 5710, PAGE 566 (WESTERLY SIDE OF CEDAR SWAMP)
     - (d) AMENDMENT NUMBER 1 TO DECLARATION OF TAKING IN LIBER 5910, PAGE 130 (PLOTTED)
     - (e) AMENDMENT TO DECLARATION OF TAKING IN LIBER 6006, PAGE 129 (PLOTTED)
   - III. 4(c) TELECOM EASEMENT AGREEMENT RECORDED IN BOOK 13431, PG. 111 AND ASSIGNMENT AND ASSUMPTION OF LEASE AGREEMENT IN VOL 13431, PG 126 (PLOTTED)
   - IV. 4(d) SECOND ASSIGNMENT AND ASSUMPTION OF LEASE AGREEMENT IN VOL. 13497, PG 382 FROM LANDMARK INFRASTRUCTURE HOLDING COMPANY LLC TO LD ACQUISITION COMPANY 14 LLC (NOT PROTRACTIBLE)
   - V. 4(e) MEMORANDUM OF BUILDING AND ROOFTOP LEASE AGREEMENT RECORDED IN VOL. 13403, PG.472 (NOT PROTRACTIBLE)
   - VI. EXCEPTIONS 5-13 (NOT SURVEY RELATED)
   - VII. 14. SURVEY MADE BY O'CONNOR-PETITO, LLP DATED DECEMBER 15, 2006 AND UPDATED MAY 31, 2017, SHOWS PREMISES IMPROVED BY A BRICK ONE (1) AND TWO (2) STORY CLUBHOUSE WITH A TWO (2) AND ONE (1) STORY BUILDING TO ITS EASTERLY SIDE. ONE (1) STORY BRICK BUILDING TO THE SOUTHWESTERLY SIDE OF CLUBHOUSE. VARIOUS BUILDINGS AND SHEDS SHOWN TO THE WESTERLY SIDE. VARIOUS ONE (1) STORY BRICK BUILDINGS, CONCRETE PATIO, INGROUND POOL AND SIX (6) TENNIS COURTS SHOWN TO NORTHEASTERLY PORTIONS OF PREMISES. CONCRETE BLOCK ONE (1) STORY GARAGES, GREEN-HOUSES AND STORAGE CONTAINER SHOWN TO NORTHERLY PORTION OF PREMISES. TWO (2) STORY FRAME RESIDENCE WITH CONCRETE PATIO AND SHED BEHIND, SHOWN TO NORTHERLY PORTION OF PREMISES. SOUTHERLY PORTION OF PREMISES IS A GOLF COURSE. ASPHALT PARKING LOT, WALKS, ASPHALT AREAS, BELGIAN BLOCK CURBS, FENCES, TIMBER RETAINING WALLS, PLANTERS AND BRICK RETAINING WALLS SHOWN ALONG PORTIONS OF PREMISES. UTILITY POLES WITH OVERHEAD WIRES SHOWN ALONG PORTIONS OF PREMISES AND EXTENDING TO BUILDINGS. VARIATIONS SHOWN BETWEEN FENCES, DRIVEWAY, CURBS AND PARTS OF RECORD LINES. NO OTHER VARIATIONS OR ENCROACHMENTS.

FOR BOUNDARY PERIMETER DETAIL AND SITE IMPROVEMENTS SEE SHEETS 2 AND 3

PARCEL DATA	
AREA	= 6,482,509 SF/148.82 ACRES

200 0 200 400
SCALE IN FEET

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Engineering, Surveying, Landscape Architecture and Geology, PC

100 Motor Parkway
Suite 135
Hauppauge, NY 11788
631.787.3400

Survey of Property of Tam O'Shanter Golf Course Situated at, Inc. Village of Brookville Town of Oyster Bay Nassau County, New York

N.C.T.M. NO. SEC.16 BLK.C LOTS 386A, 386D, 386E and 359
74 Fruitledge Rd
Glen Head, NY 11545

No.	Revision	Date	Apprvd.
1	Added Wetlands / Misc Topo / Notes	March 20, 2020	

Designed by | Checked by

Issued for | Date

December 5, 2018

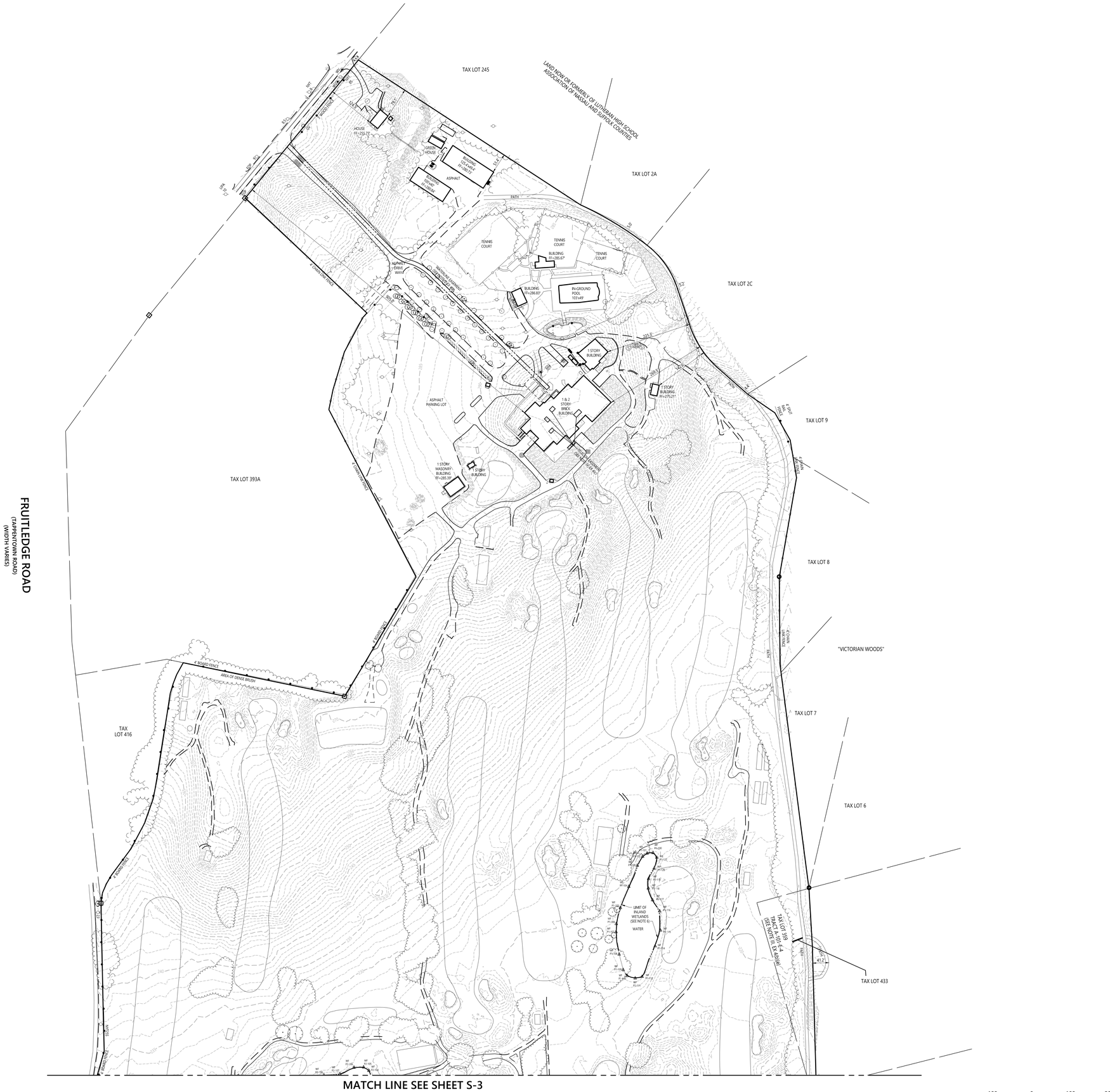
Drawing Title
Overall Boundary

Drawing Number
S-1

Sheet 1 of 3

J R LEMUEL MORRISON
NYS LIC. NO. 50404

Project Number
26747.00



Legend

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- HH — HAND HOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- BOLLARD w/LIGHT
- STREET SIGN
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- GUY WIRE
- MONITORING WELL
- FLOOD LIGHT
- W — WELL
- WF P1-100 — WETLAND FLAG / NUMBER
- FF — FINISHED FLOOR ELEVATION
- DYL — DOUBLE YELLOW LINE
- DWL — DASHED WHITE LINE
- SYL — SINGLE YELLOW LINE
- LSA — LANDSCAPED AREA
- EOP — EDGE OF PAVEMENT
- CC — CONCRETE CURB
- BC — BITUMINOUS CURB
- GUARD RAIL
- CHAIN LINK FENCE
- STOCKADE FENCE
- OHW — OVERHEAD WIRE
- TREE LINE

100 0 100 200
SCALE IN FEET

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100 Motor Parkway
Suite 135
Hauppauge, NY 11788
631.787.3400

Survey of Property of Tam O'Shanter Golf Course Situated at, Inc. Village of Brookville Town of Oyster Bay Nassau County, New York

N.C.T.M. NO. SEC.16 BLK.C LOTS 386A, 386D, 386E and 359
74 Fruitledge Rd
Glen Head, NY 11545

No.	Revision	Date	Appvd.
1	Added Wetlands / Misc Topo / Notes	March 20, 2020	

Designed by | Checked by

Issued for | Date

December 5, 2018

Drawing Title
Topographic Plan

Drawing Number
S-2

Sheet 2 of 3

Project Number
26747.00

J R LEMUEL MORRISON
NYS LIC. NO. 50404

N

MATCH LINE SEE SHEET S-2

Legend

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- HH — HAND HOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
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- MONITORING WELL
- FLOOD LIGHT
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- WF P1-100 — WETLAND FLAG / NUMBER
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- DYL — DOUBLE YELLOW LINE
- DWL — DASHED WHITE LINE
- SYL — SINGLE YELLOW LINE
- LSA — LANDSCAPED AREA
- EOP — EDGE OF PAVEMENT
- CC — CONCRETE CURB
- BC — BITUMINOUS CURB
- GUARD RAIL
- CHAIN LINK FENCE
- STOCKADE FENCE
- OHW — OVERHEAD WIRE
- TREE LINE

100 0 100 200
SCALE IN FEET

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Hauppauge, NY 11788
631.787.3400

Survey of Property of Tam O'Shanter Golf Course Situated at, Inc. Village of Brookville Town of Oyster Bay Nassau County, New York

N.C.T.M. NO. SEC.16 BLK.C LOTS 386A, 386D, 386E and 359
74 Fruitledge Rd
Glen Head, NY 11545

No.	Revision	Date	Apprd.

Designed by | Checked by

Issued for | Date

December 5, 2018

Drawing Title
Topographic Plan

Drawing Number
S-3

Sheet 3 of 3

Project Number
26747.00

STATE OF NEW YORK — 50404 — LICENSED LAND SURVEYOR

J R LEMUEL MORRISON
NYS LIC. NO. 50404

Appendix E

\\vhb\gis\proj\Hauppauge\26747.01 Tam OShanter Subdivision\Project\WetlandMaps\WetlandMaps.aprx

0 250 500 1000 Feet

Subject Property

1 Pond Designation

1 Photograph Location and Direction

Tam O'Shanter Golf Club | Brookville, NY

Photograph Location Map

74 Fruitledge Road

Village of Brookville, Town of Oyster Bay

Nassau County, New York

Source Info: VHB Site Visit, February 12, 2020

Photograph 1: View of Pond 1, facing south (February 12, 2020).

Photograph 2: View of Pond 2, facing southwest (February 12, 2020).

Photograph 3: View of Pond 3, facing south (February 12, 2020).

Photograph 4: View of Pond 4, facing southwest (February 12, 2020).

Photograph 5: View of Pond 5, facing north (February 12, 2020).

Appendix F

TITAN GOLF LLC

February 27, 2020

Mr. Ronald Pinzon
Chief, Eastern Permit Section
New York District
United States Army Corps of Engineers
26 Federal Plaza, Room 1937
New York, NY 10278-0090

Re: Tam O'Shanter Golf Club
74 Fruitledge Road
Village of Brookville
Nassau County, New York

Dear Mr. Pinzon:

As owner of the above-referenced property and the permit applicant, please accept this letter as authorization for VHB Engineering, Surveying, Landscape Architecture and Geology, P.C., with offices at 100 Motor Parkway, Suite 350, Hauppauge, New York 11788, to serve as the agent in the filing and processing of all documentation related to the above-referenced matter. Your cooperation is greatly appreciated.

Sincerely,

Robert Weiss
Managing Member

41 Bayard Street • New Brunswick • New Jersey 08901 • 732-418-1777 • Info@titangolfclubs.com