DATE:	FEE: <u>\$</u>	CK #:	A	PP #:
PROPERTY ADDRESS:				
NAME OF APPLICANT:				
MAILING ADDRESS:				
EMAIL ADDRESS:			_ TELEPHONE # _	
NAME OF OWNER:				
MAILING ADDRESS:				
EMAIL ADDRESS:			_ TELEPHONE # _	
NOTE: ATTACH A WRITTE INCLUDING THE ABILITY TO				TT FOR THE OWNER,
DESCRIBE THE SPECIFIC ACTIVITIES" AS DEFINED IN REMOVE MATERIAL FROM; ALTER; F) POLLUTE;	N SECTION 6 OF THE	SIMSBURY INLAND W L IN OR DISCHARGE TO	ETLANDS REGUL	LATIONS, SUCH AS: A)
CERTIFICATIONS AND PE As owner, I hereby give p Watercourses Agency, their A necessary to evaluate this app I hereby certify that all states Any permit issued shall be co changed situation shall requir	ermission to the Town Agents, or Town Staff to lication and ongoing wo ments herein are true to ontingent upon field con	o enter upon my land to rk, subject to twenty-for the best of my knowled ditions and activities b	o make observation to make observation of the control of the contr	ons and tests as may be f such entry/testing.  de by me or my agents. d as indicated herein. A
I certify that I have the author	rity to sign this applicati	on.		
Josh Nebe	05/17/2023	God Nah	Owner	05/17/2023
Signature of Owner	Date	Signature and Titl	e of Applicant	Date
Telephone (860) 658-3245 Facsimile (860) 658-3206	พพ	w.simsbury-ct.gov		933 Hopmeadow Street Simsbury, CT 06070

1 of 4

#### INSTRUCTIONS FOR APPLICANT

Any person seeking a permit to carry out a regulated activity on property which has been designated an inland wetland or watercourse by the Conservation Commission or within the 100-foot regulated buffer area of a designated inland wetland or watercourse must complete and submit the Inland Wetlands Permit Application to the Planning Department.

Submission shall occur by the day before a regular meeting of the Conservation Commission. (See Section 5 of the Inland Wetlands and Watercourses Regulations of the Town of Simsbury.) Application will be heard at the following meeting, after petition period.

The original application shall be submitted with five (5) copies. Maps on sheets larger than 11"x14" shall be submitted in at least three (3) copies. Additional copies of site plans may be required. PDFs of the maps, if available, should be submitted, as well. PDFs can be emailed to jhollis@simsbury-ct.gov.

A filing fee shall accompany the application, as required by the Land Use Application Fees schedule. Please consult with the Planning Office for specific fee determination.

The following information shall be provided on white paper (8 ½"x11") and typewritten. Reproduce the following questions along with the answer and attach to the application.

- 1. *In the case of a public hearing or map amendment*, list on a separate sheet of paper the names and addresses of all abutting property owners and property owners within 100 feet of all property lines. Identify on one of the attached maps.
- 2. Describe the site and the regulated area or wetlands/watercourses involved:
  - a. General site conditions, including vegetation and general soil conditions.
  - b. Size of wetland within site or distance of the activity from the wetland.
  - c. Size of total contiguous wetland.
  - d. Position relative to other wetlands on site.
  - e. Type of wetland characterized by vegetative and soil type and/or watercourse, such as: 1) open/deep fresh water pond or lake; 2) shallow marsh; 3) seasonally flooded basins and flats; 4) meadow; 5) shrub swamp; 6) wooded swamp; 7) bog; 8) kettle; 9) stream type; 10) other.

- 3. Depth to water table, depth to mottled soil, and seasonal variation of water table.
- 4. Describe the immediate impact on the wetlands and watercourses, including, but not limited to:
  - a. Quantities, by volume and area disturbed, of materials to be removed, deposited, or altered.
  - b. Kinds of materials by soil types and vegetative classifications, and materials classification to be removed, deposited, or altered.
  - c. Percent of wetlands/watercourses disturbed or altered to total area of wetlands/watercourses on the parcel.
- 5. Describe the related construction activities and their impact on:
  - a. Area and location of wetlands and watercourses.
  - b. Types and amounts of vegetation.
  - c. Surface and groundwater.
  - d. Visual impacts.
  - e. Wildlife habitats.
- 6. Describe the long term or permanent impact of the activity(ies) on environmental aspects, such as the surface and groundwater quality, storm water runoff, visual impact(s), or wildlife habitats on:
  - a. Wetlands and/or watercourses.
  - b. Abutting riparian properties and/or wetlands and/or watercourses.
- 7. Identify sedimentation and erosion control measures to be used.
- 8. Identify alternatives to the proposed activity that were considered, including alternative sites and why this one was chosen.
- 9. Estimate cost of work and time for completion.
- 10. Attach drainage calculations and other reports as indicated to substantiate the statements made above.

#### 11. REQUIRED MAPS

a. Attach a <u>vicinity map</u> on an 8 ½"x11" sheet at scale 1"=200' or 1'=800' (depending upon the size of the parcel) showing the general location of the area in which the regulated activity is proposed. The map should be in sufficient detail to allow the identification of the property on the official Inland Wetlands and Watercourses map. A guide to the kinds of information to be shown is available in the Planning Department at the Town Hall.

#### b. Site Plan(s) showing:

- i. The topography showing contours at intervals of not more than two (2) feet and a minimum of two (2) contour marks per ten (10) acres at a scale of 1"=100' or 1"=40' (whichever is more appropriate).
- ii. Location of existing watercourses and/or ponds.
- iii. Location of regulated activity.
- iv. Proposed grading and/or filling.
- v. Proposed drainage, site utilities, wells, etc.
- vi. Sedimentation and erosion control measures.

#### 12. The Applicant shall certify whether:

- a. Any portion of the property on which the regulated activity is proposed is located within 500 feet of the boundary of an adjoining municipality.
- b. Traffic attributable to the completed project on the site will use streets within the adjoining municipality to enter or exit the site.
- c. Sewer or water drainage from the project site will flow through and affect the sewage or drainage system within the adjoining municipality or
- d. Water runoff from the improved site will affect streets or other municipal or private property within the adjoining municipality.
- e. Documentation that notice of the pending application was provided to the adjacent municipality (certified mail, return receipt requested) on the same day of filing an inland wetland permit application with the Town of Simsbury.
- f. The property is subject to a conservation restriction or preservation restriction, and, if so, what party or parties are holders thereof or intended to be benefitted thereby.

ALL INFORMATION MUST BE COMPLETED TO THE EXTENT INDICATED BY THE COMMISSION BEFORE ANY ACTION IS TAKEN ON THE PERMIT APPLICATION. INCOMPLETE APPLICATIONS WILL BE DENIED. ADDITIONAL INFORMATION MAY BE REQUIRED BY THE COMMISSION.

THE <u>APPLICANT</u> AND/OR <u>AUTHORIZED AGENT</u> SHOULD ATTEND THE CONSERVATION COMMISSION/INLAND WETLANDS & WATERCOURSES AGENCY MEETING IN ORDER FOR A DECISION TO BE RENDERED. IF APPLICANT OR AGENT DOES NOT ATTEND, AND QUESTIONS ARISE, DECISION ON APPLICATION MAY BE DEFERRED OR DENIED.

#### **Town of Simsbury Inland Wetlands Permit Application Answers**

Applicant: Rourk and Hannah Marlow

Address: 25 Orchard Ln, Simsbury, CT 06070

Date: May 15, 2023

To whom it may concern, please see below for the applicable answered questions for Inland Wetlands application related to the proposed inground pool construction at 25 orchard In. For additional information please see attached sheets for a letter from the pool contractor.

**Question 1:** In the case of a public hearing or map amendment, list on a separate sheet of paper the names and addresses of all abutting property owners and property owners within 100 feet of all property lines. Identify on one of the attached maps.

Answer 1: Abutting property owners are Francine B & Farmer Ann Oates (27 Overlook Terrace); and Nacny & Craig Dennen (21 Orchard Ln).

\_\_\_\_\_\_

Question 2: Describe the site and the regulated area or wetlands/watercourses involved:

- a. General site conditions, including vegetation and general soil conditions.
- b. Size of wetland within site or distance of the activity from the wetland.
- c. Size of total contiguous wetland.
- d. Position relative to other wetlands on site.
- e. Type of wetland characterized by vegetative and soil type and/or watercourse, such
- as: 1) open/deep fresh water pond or lake; 2) shallow marsh; 3) seasonally flooded basins and flats; 4) meadow; 5) shrub swamp; 6) wooded swamp; 7) bog; 8) kettle;
- 9) stream type; 10) other.

#### Answer 2:

- a) Please refer to the attached soil scientist report by Scott D. Stevens, Dated April 14, 2023 for specific inland wetlands information.
- b) 5'-0'' +/- at the closest location. Please refer to the attached survey plan.
- c) Please refer to the attached soil scientist report by Scott D. Stevens, Dated April 14, 2023 for specific inland wetlands information.
- d) Please refer to the attached soil scientist report by Scott D. Stevens, Dated April 14, 2023 for specific inland wetlands information.
- e) Please refer to the attached soil scientist report by Scott D. Stevens, Dated April 14, 2023 for specific inland wetlands information.

Question 3: Depth to water table, depth to mottled soil, and seasonal variation of water table.

<u>Answer 3:</u> Please refer to the attached soil scientist report by Scott D. Stevens, Dated April 14, 2023 for specific inland wetlands information.

**Question 4:** Describe the immediate impact on the wetlands and watercourses, including, but not limited to:

- a. Quantities, by volume and area disturbed, of materials to be removed, deposited, or altered.
- b. Kinds of materials by soil types and vegetative classifications, and materials classification to be removed, deposited, or altered.
- c. Percent of wetlands/watercourses disturbed or altered to total area of wetlands/watercourses on the parcel.

<u>Answer 4:</u> Please see attached letter from the pool contractor (Pioneer Valley Fiberglass Pools) on means and methods that will be used to ensure that there is no negative impact to the regulated area.

**Question 5**: Describe the related construction activities and their impact on:

- a. Area and location of wetlands and watercourses.
- b. Types and amounts of vegetation.
- c. Surface and groundwater.
- d. Visual impacts.
- e. Wildlife habitats.

<u>Answer 5:</u> Please see attached letter from the pool contractor (Pioneer Valley Fiberglass Pools) on means and methods that will be used to ensure that there is no negative impact to the regulated area.

\_\_\_\_\_

**Question 6:** Describe the long term or permanent impact of the activity(ies) on environmental aspects, such as the surface and groundwater quality, storm water runoff, visual impact(s), or wildlife habitats on:

- a. Wetlands and/or watercourses.
- b. Abutting riparian properties and/or wetlands and/or watercourses.

<u>Answer 6:</u> Please see attached letter from the pool contractor (Pioneer Valley Fiberglass Pools) on means and methods that will be used to ensure that there is no negative impact to the regulated area.

\_\_\_\_\_

**Question 7:** Identify sedimentation and erosion control measures to be used.

<u>Answer 7</u>: Please see attached letter from the pool contractor (Pioneer Valley Fiberglass Pools) on means and methods that will be used to ensure that there is no negative impact to the regulated area.

\_\_\_\_\_\_

**Question 8:** Identify alternatives to the proposed activity that were considered, including alternative sites and why this one was chosen.

Answer 8: The exact proposed pool location was chosen to remain as far away as possible from the wetlands while adhering to the 12'-0" set back from the porch (livable space) and 25'-0" from the well. If it is decided during permitting that we can move the pool closer to the porch, we will shift the pool as far as possible from the wetlands.

**Question 9:** Estimate cost of work and time for completion.

Answer 9: Estimated Cost: \$85,350. Time to complete: 2 - weeks.



May 12, 2023

To: Town of Simsbury Conservation Commission Re: Swimming Pool Installation at 25 Orchard Lane

To Whom It May Concern,

The information below pertains to the Wetlands application for 25 Orchard Lane. The application has been filed by Pioneer Valley Fiberglass Pools & Spas ("PVF Pools") on behalf of the homeowners, Rourk and Hannah Marlow. The application is being filed per the request of the Town of Simsbury to ensure wetlands compliance.

#### **At A Glance**

**Homeowner:** Rourk & Hannah Marlow **Address:** 25 Orchard Lane, Simsbury

**Phone:** 518-353-8334

**Project:** Installation of 30' x 15-6' fiberglass pool with Automatic Retractable Safety Cover

**Location:** Reference submitted site plan **Materials:** All trucked away by PVF Pools

### Significant Event Q & A

- 1. Will the proposed activity change the natural channel or inhibit the natural dynamics of a watercourse system? No
- 2. Will the proposed activity cause any decrease in the natural capacity of a wetlands or watercourse to: support desirable fisheries, wildlife, or other biological life; prevent flooding; supply water; assimilate waste; facilitate drainage; or provide recreation or open space? No
- 3. Will the proposed activity cause turbidity, siltation or sedimentation in a wetlands or watercourse? No
- 4. Will the proposed activity diminish the flow of a natural watercourse or the groundwater levels of the regulated area? No
- 5. Will the proposed activity cause or have the potential of causing pollution of groundwater, a wetlands, or watercourse? No
- 6. Will the proposed activity create conditions that may adversely affect the health, welfare and safety of any individual or the community? No
- 7. Will the proposed activity destroy a wetlands or watercourse? No
- 8. Will the proposed activity have a major effect or substantial impact on the area for which this application has been filed or on another part of a wetlands or watercourse? No

#### **Construction Approach**

Throughout the construction process at 25 Orchard Lane, PVF Pools will use the utmost care to ensure there is zero impact to the nearby wetland area. The following is an explanation of the various phases of the construction process, the safeguards that will be in place to protect the regulated area, and the type of equipment which will be used for the construction of the inground fiberglass swimming pool.

#### Phase 1- Excavation

Prior to the start of any excavation, PVF Pools will meet all CT Guidelines for Erosion and Sediment Controls. PVF Pools will properly erect silt fence and place hay bales as needed to stop any erosion into the wetland area/buffer. The silt fence will be carefully toed in, and hay bales will be staked into the ground with wooden plow stakes.

Excavation of the pool will be done by PVF Pools. We use no subcontractors for excavation, therefore we are able to better control the project and ensure all workers are aware of the nearby wetland buffers. A steel tracked excavator will be used during the excavation phase. PVF Pools has an in-house mechanic who meticulously goes through the machine, to ensure there are no oil leaks or leaking hydraulic hoses, on a regular basis.

To reduce risk of erosion, all excess material during excavation will be hauled away, not stock-piled onsite. As the pool is being dug the material is loaded directly into a truck without the material ever hitting the ground. This excess material will be hauled away by a tri-axle dump truck.

#### Phase 2 – Pool Shell installation

During this phase of construction, our excavator will carry the pool to the hole-side and lower it into the excavated hole.

#### Phase 3 - Electrical Work

A mini excavator with a 1' wide bucket and rubber tracks will be used to dig the trench for the electrical conduit from the house to the equipment.

#### Phase 4 - Plumbing

No equipment will be used during this phase.

#### Phase 5 - Backfill Stage

A skid-steer will be used to backfill around the pool with 3/8" gravel.

#### Phase 6 – Pool Backfill

To backfill the pool, we will use a tracked skid steer. This machine has rubber tracks on it to minimize impact on any areas where it travels. Any sand needed to backfill the pool will be brought in by a triaxle dump truck and spread immediately, no stock piling of material will be necessary.

#### Phase 7 – Auto Cover Installation

The auto cover tracks are installed atop the pool shell rim and the cover box outside the deep end of the pool. All components are properly bonded by the electrician.

#### Phase 8 – Concrete Collar

After the pool is backfilled, the concrete collar will be poured. For this, a concrete truck will access the property to pour the concrete. Once the concrete is completed, we will come back to rough grade the yard. To do this grading we will bring in the rubber-tracked skid steer again. The homeowner will be responsible for spreading topsoil and seeding, but the silt fence and hay bales will stay in place until grass is established.

#### Phase 9 - Pool Operation/Maintenance

Ongoing pool operation and maintenance will have no impact to the property or wetlands.

In conclusion, PVF Pools will exercise a tremendous amount of care to ensure that there is no negative impact to the regulated area throughout the construction process. The biggest reason we can ensure this is that we unprecedently haul away ALL material leaving only a virgin ground hole. We have been installing inground pools for 22 years with many of them being within regulated wetlands area.

PVF Pools has successfully sought multiple permits with similar or greater wetland intrusion in Connecticut and Massachusetts. All such jobs were executed professionally and flawlessly.

If you have any questions, please feel free to contact Jake Labonte, Construction Foreman, on his personal cell phone day or night at (413) 539-4064 or myself at (413) 222-3345.

Sincerely,

Clarence Kaye, Owner

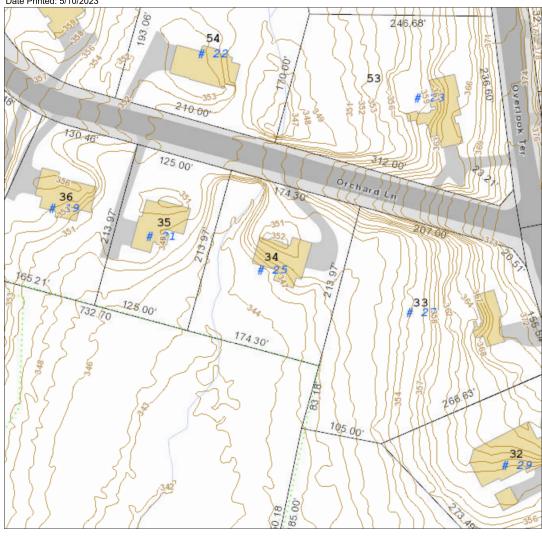
lem E Kary

5/10/23, 11:15 AM Print Map

## **Town of Simsbury** Geographic Information System (GIS)



Date Printed: 5/10/2023



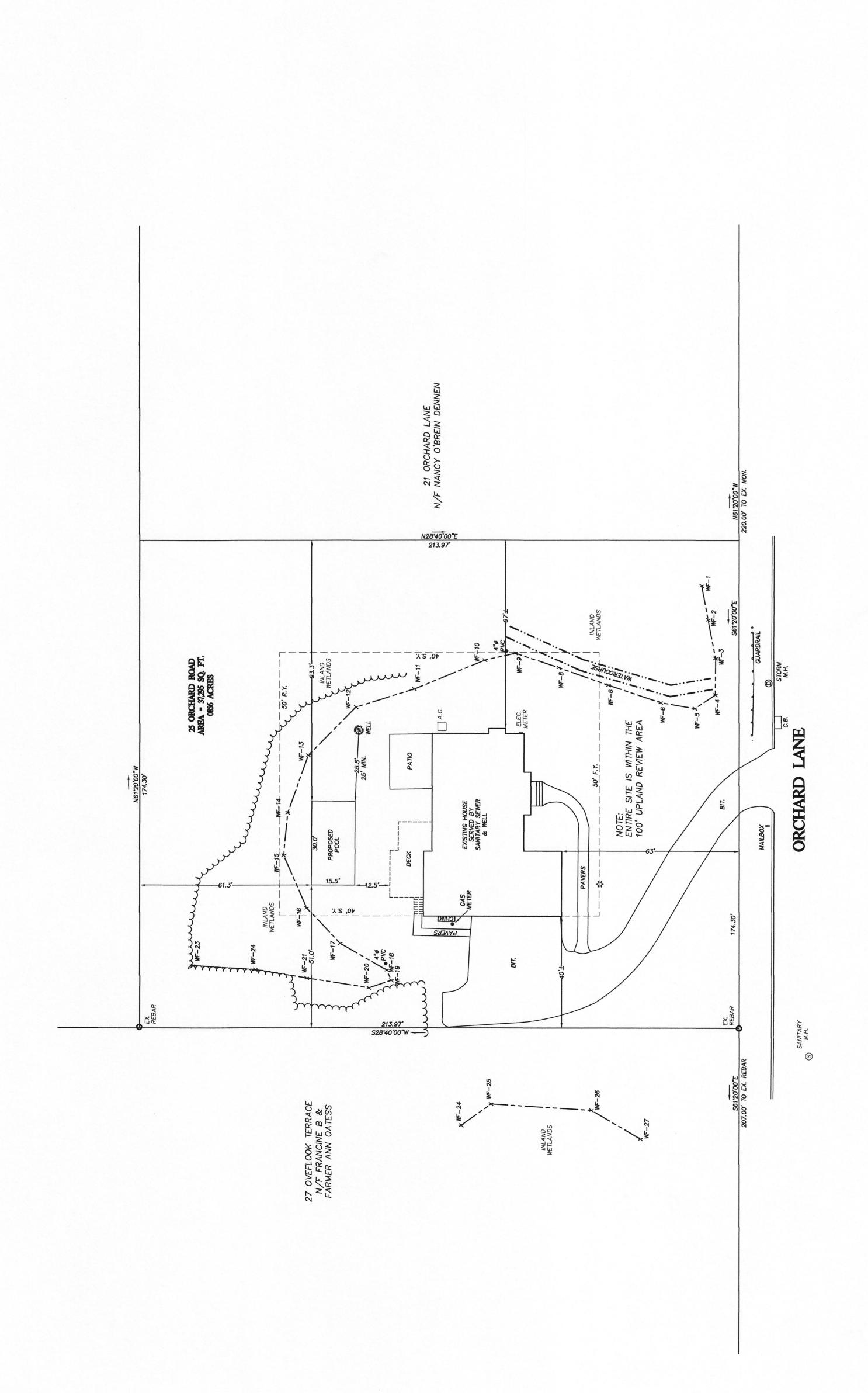
#### **MAP DISCLAIMER - NOTICE OF LIABILITY**

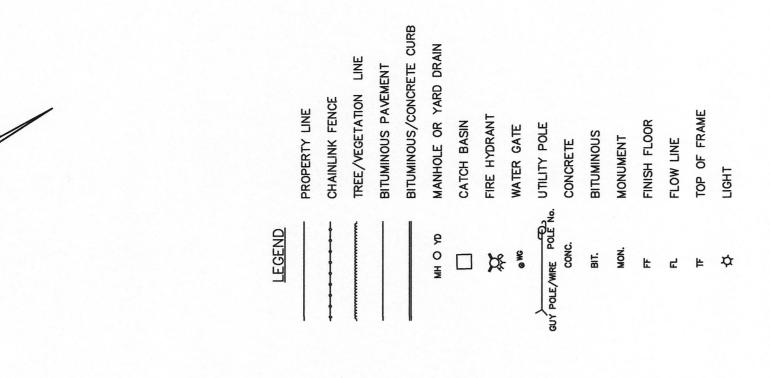
This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Simsbury and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 100 feet









# MAP REFERENCES:

1. "TALCOTT VIEW LAND SUBDIVISION DATE 3-7-55 SCALE 1"=100' PROPERTY OF ANTHONY J & ROSE ROSE SIMSBURY, CONNECTICUT OFFICE OF ARTHUR F HOFFAMN HARTFORD, CONN."

THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20–300b–1 THROUGH 20–300b–20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS PREPARED AND ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

THE TYPE OF SURVEY PERFORMED IS AN IMPROVEMENT LOCATION SURVEY.

BOUNDARY DETERMINATION CATEGORY—RESURVEY BASED ON A DEPENDENT RESURVEY.

THIS PLAN CONFORMS TO HORIZONTAL ACCURACY CLASS A—2.

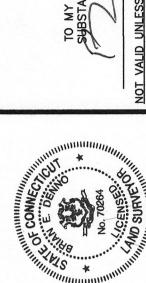
HORIZONTAL DATUM IS BASED ON MAP REFERENCE.

WETLANDS IDENTIFIED IN THE FIELD BY SCOTT STEVENS A REGISTERED SOILS SCIENTIST WITH SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. AND LOCATED BY DENNO LAND SURVEYING. SURVEY NOTES:

REVISIONS:

CONNECTION CONNECTION OF CONNE	* * * * * * * * * * * * * * * * * * *	ON CENSES	
SCALE	6-		20 ft.

GRAPHIC



NOT VALID UNLESS LIVE SIGNATURE AND EMBOSSED SEAL IS AFFIXED DENNO LAND SURVEYING & CONSULTING, LLC 2 TUNXIS RD STE. 214 TARIFFVILLE, CT 06081 TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

HANNAH E. MARLOW & ROURK J. MARLOW

25 ORCHARD LANE
STATE
ST

UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROL TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE, ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO THIS SURVEYOR. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION.

## SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. 95 Silo Drive \* Rocky Hill \* Connecticut \* 06067 \* (203) 272-7837 \* ssesinc@yahoo.com

Rourk & Hannah Marlow	<b>SSES Job No:</b> 2023-12-CT-SIM
25 Orchard Lane	Client Job No:
Simsbury, CT 06070	
	Site Inspection Date: April 14, 2023
PO JECT TITLE AND LOCATION:	25 Orchard Lane, Simsbury, CT
ROJECT TITLE AND LOCATION:	+/- 0.85 Acres
ENTIFICATION OF WET AND AND W	
ENTIFICATION OF WETLANDS AND WA	
	ES PRESENT ON PROPERTY: Yes XX No
Wetlands: Inland Wetlands	XX Watercourses: Streams XX
Tidal Wetlands Remarks:	Waterbodies
	NAME AND
EGETATION COMMUNITIES PRESENT I	한 생님이 아니는 이번 하다 내가 나가 있는데 하는 사람들이 하는 사람들이 하는 것이다.
Forest_XX_ Sapling/Shrub_XX_	Wet Meadow Marsh Field/Lawn XX
DIL MOISTURE CONDITION	WINTER CONDITIONS
Dry	Frost Depth: inches
Moist XX	Snow Depth: inches
Wet	
	u o uo
ervice and the State Soil Legend were usendersigned Registered Soil Scientist. A sk wetland markers, watercourses and soil t fter the wetland boundary and/or watercou commended that a copy of the survey ma	roperative Soil Survey, USDA, Natural Resources Conservation and in this investigation. The investigation was conducted by the retch map showing wetland boundaries and the numbering sequencypes in both wetland and non-wetlands are included with this reportures flags have been located/plotted by the surveyor, it is p be sent to our firm for review. All wetland boundary lines Soil Scientist are subject to change until officially adopted by local,
espectfully Submitted by	
espectfully Submitted by OIL SCIENCE AND ENVIRONMEI	NTAL SERVICES, INC.
	NTAL SERVICES, INC.

#### SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

95 Silo Drive \* Rocky Hill \* Connecticut \* 06067 \* (203) 272-7837 \* ssesinc@yahoo.com

ROJECT TITLE AND LOCATION:	25 Orchard Lane, Simsbury, CT	
UMBERING SEQUENCE OF WETLAN	ND BOUNDARY LINE MARKERS:	
WF# 1 thru 23 24 thru 28		
Plot and locate watercourse as show	n on sketch map.	

#### **WETLAND SOILS**

- Aq Aquents This is a poorly to very poorly drained, disturbed soil where two or more feet of the original soil surface has been altered by filling, excavation and/or grading. Aquents are characterized by a seasonal to prolonged high groundwater table at or near the ground surface. Aquents are capable of supporting a prevalence of hydrophytic plants.
- 5 <u>Wilbraham silt loam</u> (Aquic Dystrudepts) This is a deep, poorly drained, reddish-colored, loamy glacial till soil that developed in a friable solum overlying dense, basal till (hardpan). The till was derived from sandstone, shale and basalt. The hardpan is within 20 to 30 inches of the soil surface. Wilbraham soils occur on glaciated plains, hills and ridges.
- Wilbraham and Menlo soils, extremely stony (Aquic Dystrudepts & Histic Humaquepts) These are deep, poorly drained and very poorly drained, reddish-colored, loamy textured, glacial till soils that developed over dense, basal till. The till was derived from sandstone, shale and basalt. The hardpan is within 20 to 30 inches of the soil surface. These soils occur on glaciated plains, hills and ridges.

#### **NON-WETLAND SOILS**

- Rainbow silt loam (Aquic Dystrudepts) This is a deep, moderately well drained, glacial till soil that developed in a friable, silty textured, eolian (windblown) mantle overlying dense, coarse-loamy textured, basal till (hardpan). The till was derived from schist, gneiss, sandstone and basalt. Rainbow soils occur on glaciated plains, hills and ridges. The hardpan is within 20 to 40 inches of the soil surface.
- Broadbrook silt loam (Oxyaquic Dystrudepts) This is a deep, well drained, glacial till soil that developed in a friable, silty, eolian (windblown) solum overlying dense, coarse-loamy basal till (hardpan). The till was derived from sanstone, basalt, schist and gneiss. Typical depth to hardpan is 30-40 inches. Broadbrook soils occur on glaciated plains, hills and ridges.
- 306 <u>Udorthents-Urban land complex</u> This map unit consists of extensive areas where soils have been disturbed from land development along with large areas of impervious surfaces associated with streets, parking lots, buildings and other structures.
- 308 <u>Udorthents, smoothed</u> This is a well drained to moderately well drained soil area that has had two or more feet of the original soil surface altered by filling, excavation or grading activities. Udorthents, smoothed soils commonly occur on leveled land and fill landforms.

#### SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

95 Silo Drive \* Rocky Hill \* Connecticut \* 06067 \* (203) 272-7837 \* ssesinc@yahoo.com

## DEFINITIONS AND METHODOLOGY FOR IDENTIFICATION OF STATE REGULATED WETLANDS & WATERCOURSES

Wetlands and watercourses are regulated in the State of Connecticut by the Connecticut General Statutes, Chapter 440, sections 22a-28 to 22a-45. The Statutes are divided into the Inland Wetlands and Watercourses Act (sections 22a-36 to 22a-45) and the Tidal Wetlands Act (sections 22a-28 to 22a-35). Inland Wetlands "means land, including submerged land, not regulated pursuant to sections 22a-28 to 22a-35, inclusive, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, of the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture" section 22a-38(15).

Watercourses "means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private which are contained within, flow through or border upon this state or any portion thereof, not regulated pursuant to sections 22a-28 to 22a-35, inclusive. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation" section.22a-38(16). Tidal Wetlands are defined as "those areas which border on or lie beneath tidal waters, such as, but not limited to banks, bogs, salt marsh, swamps, meadows, flats, or other low lands subject to tidal action, including those areas now or formerly connected to tidal waters, and whose surface is at or below an elevation of one foot above local extreme high water; and upon which may grow or be capable of growing some, but not necessarily all of the following:" (includes plant list) section 22a-29(2).

#### METHODOLOGY FOR IDENTIFICATION OF SOILS, WETLANDS & WATERCOURSES

- 1) <u>SOILS IDENTIFICATION</u>: Soils are investigated by digging test holes with a spade and auger. Test holes are typically dug to depths of between 15 and 40 inches. Based on soil features, including coloration patterns, texture and depths to restrictive layers, the soils are identified by soil series name utilizing the classification system of the National Cooperative Soil Survey. Soil series map numbers correspond with the State Soil Map Legend established by USDA, NRCS in the State of Connecticut Soil Survey. For further soils information, refer to the NRCS website for CT: www.ct.nrcs.usda.gov
- 2) <u>INLAND WETLAND DELINEATION</u>: Soil test holes and borings are made in selected areas in order to determine the lateral extent of Inland Wetlands. The boundaries of the Inland Wetlands are identified in the field and delineated with consecutively numbered survey tapes, unless instructed by the client to only map wetland boundaries for planning purposes. The approximate locations of the wetland boundaries are hand drawn onto a map and are included with the wetlands report.
- 3) <u>IDENTIFICATION OF WATERCOURSES</u>: Very often the locations of ponds, streams and rivers are already shown on a survey map. If a watercourse is absent from a survey map, then survey tapes, labeled "watercourse" or "intermittent watercourse" are placed along the channel and the approximate location of the watercourse is also sketched onto the map.
- 4) **TIDAL WETLANDS DELINEATION**: Tidal Wetlands are identified based on a predominance of tidal wetland plants and observation of physical markings or water laid deposits resulting from tidal action. Tidal Wetland boundaries are delineated by locating the upland limits of those plants listed in section 22a-29(2) to the extent that these plants reflect inundation by tides.

