

Vermont Golf Course Pesticide Use Application

| | |
|---|--|
| Golf Course Name: | Honey Pond Farm |
| Contact's Name: | David Reasoner |
| Phone Number: | 646-382-3868 |
| Email address: | Dreasoner@rcc1890.com |
| Physical (E911) address: | 520 South Street, Middletown Springs, Vermont, 05757 |
| Mailing address (if different): | 10 Spruce Rd, Saddle River, NJ 07458 |
| <p>GENERAL DESCRIPTION of the golf course (use additional sheet if needed):</p> <p>The Golf Course is a unique design with 3 green complexes, 1 Fairway, and 18 tees.</p> | |
| <input checked="" type="checkbox"/> | Include a MAPPED SITE PLAN of the golf course per the Vermont Rule for Control of Pesticides (the Rule) 6.05 (d) (3). |
| <input checked="" type="checkbox"/> | Include a INTEGRATED PEST MANAGEMENT (IPM) PLAN for the golf course per the Vermont Rule for Control of Pesticides 6.05 (d) (4). |
| <input checked="" type="checkbox"/> | Include a NUTRIENT MANAGEMENT PLAN (NMP) for the golf course per the Vermont Rule for Control of Pesticides 6.05 (d) (5). |
| <input checked="" type="checkbox"/> | Information on PESTICIDES BEING REQUESTED for use on the golf course per the Vermont Rule for Control of Pesticides 6.05 (d) (6). |

*All initial applications shall be published by the Secretary for a **30-day comment period** prior to any issuance of a permit (Vermont Rule for Control of Pesticides 6.05 (d) (7)).*

Owner Signature: David Reasoner Digitally signed by David Reasoner
 Date: 2024.06.10 14:58:07 -04'00' Date: 6/10/24

(3) The mapped site plan provided to the Secretary include: The Tees

Greens & Fairways All surface Waters

All public water sources or portable water sources on or within 200 feet of an abutting property line.

Honey Pond Farm- Site map



14 & 18

3

North Green

Office & Storage

7

17

11

12

10

9

Halfway

15

6

1st Tee

4

16

13

West Green

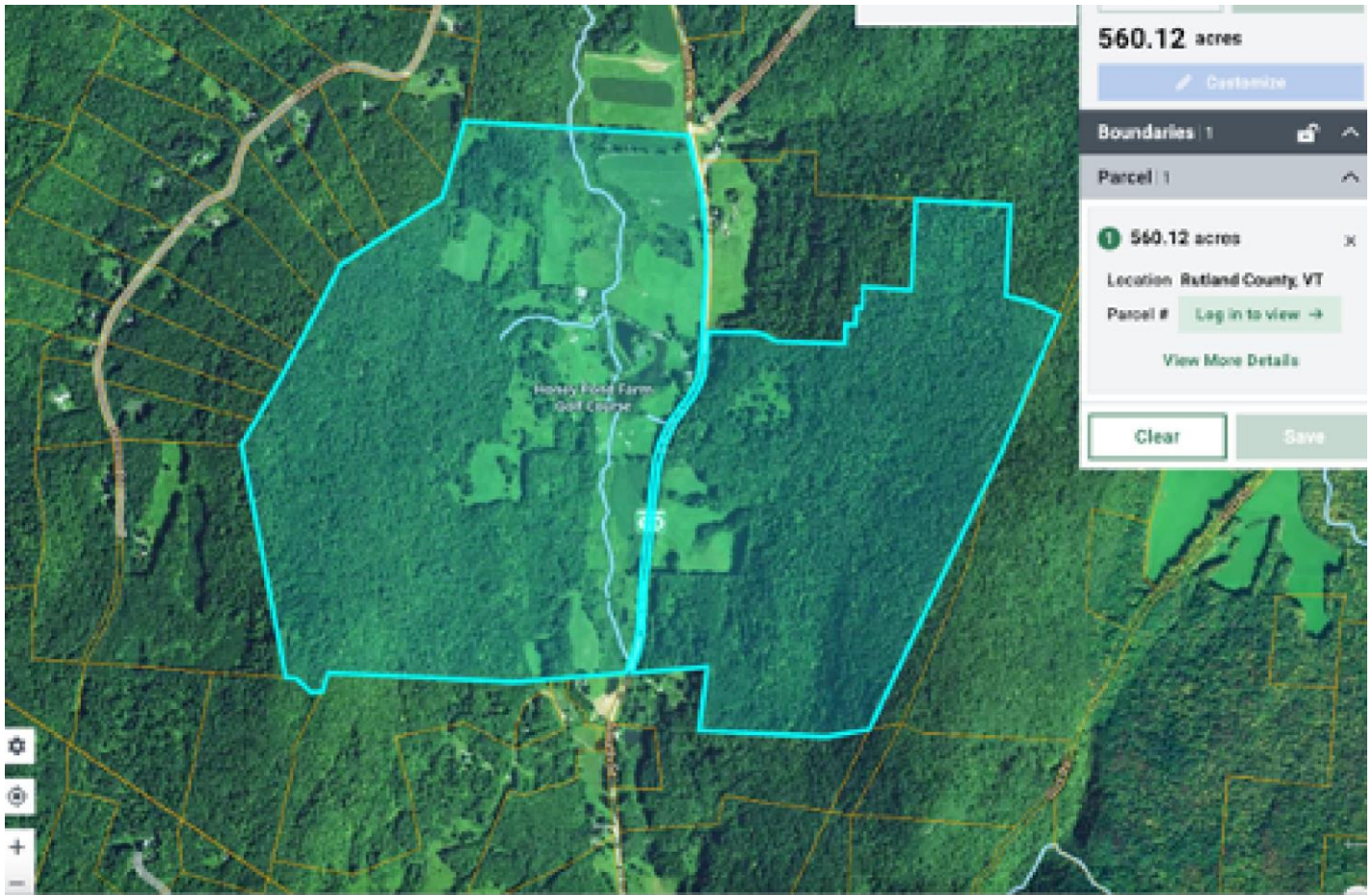
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5

South Green

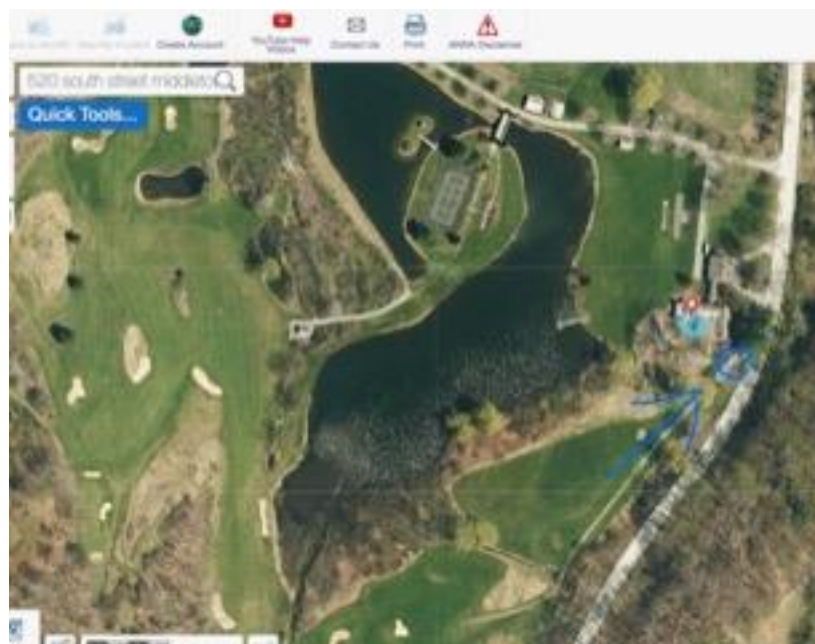
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D. Property Boundary Lines



Well Location:

- Well is located in the front yard just to the right of the house. Please see map below with X and Arrow to point out well locations.



E. Buildings & Descriptions:

- Maintenance Barn:
 - Storage of equipment
- Superintendent's Office
 - Small shed with desk & storage
- Halfway House:
 - Small shed with deck & storage

G: Surface acreage and Pond depth

- Surface acreage: 4.16
- Ave Pond Depth: 4 feet



H. Soil Map from NRCS - Honey Pond Farm



Rutland County, Vermont (VT021)

Rutland County, Vermont (VT021) 

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|-----------------|--|--------------|----------------|
| 12F | Taconic-Hubbardton-Macomber complex, 25 to 80 percent slopes, very rocky | 0.1 | 0.1% |
| 21 | Rippowam fine sandy loam | 2.1 | 1.6% |
| 42D | Macomber-Taconic complex, 15 to 25 percent slopes, rocky | 7.7 | 5.9% |
| 42F | Macomber-Taconic complex, 25 to 80 percent slopes, rocky | 11.2 | 8.6% |
| 44C | Dutchess silt loam, 8 to 15 percent slopes | 1.8 | 1.4% |

Map Unit Legend



| | | | |
|-----|--|------|-------|
| 44D | Dutchess silt loam, 15 to 25 percent slopes | 21.2 | 16.2% |
| 47C | Dutchess silt loam, 8 to 15 percent slopes, very stony | 5.4 | 4.1% |
| 47D | Dutchess silt loam, 15 to 25 percent slopes, very stony | 7.1 | 5.4% |
| 47E | Dutchess silt loam, 25 to 60 percent <small>Display map unit description</small> very stony | 13.2 | 10.1% |
| 62 | Enosburg loamy fine sand | 2.3 | 1.8% |
| 71A | Castile gravelly fine sandy loam, 0 to 3 percent slopes | 8.8 | 6.8% |
| 73 | Scarboro muck, 0 to 3 percent slopes | 7.9 | 6.1% |

Map Unit Legend

percent slopes

| | | | |
|-----|---|------|-------|
| 73 | Scarboro muck, 0 to 3 percent slopes | 7.9 | 6.1% |
| 97B | Warwick- Quonset complex, 3 to 8 percent slopes | 27.4 | 21.0% |
| 97C | Warwick- Quonset complex, 8 to 15 percent slopes | 3.2 | 2.4% |
| 97D | Warwick- Quonset complex, 15 to 25 percent slopes | 0.0 | 0.0% |
| 98E | Quonset- Warwick complex, 25 to 45 percent slopes | 6.7 | 5.1% |
| W | Water | 4.4 | 3.4% |

I. Square Footage of Greens & Tees

a. *Within 100 feet of surface water

Greens:

*West Green: 2,988

North Green: 3,467

*South Green: 2,607

Tees:

| | |
|-----|------|
| 1. | 36 |
| 2. | 64* |
| 3. | 80 |
| 4. | 50* |
| 5. | 60 |
| 6. | 25 |
| 7. | 49* |
| 8. | 120 |
| 9. | 35* |
| 10. | 35 |
| 11. | 49* |
| 12. | 80 |
| 13. | 35 |
| 14. | 50 |
| 15. | 210* |
| 16. | 25 |
| 17. | 49* |
| 18. | 40 |

J. Approximate acres of Fairways & Rough: 10

K. Proper distances from all buffer zones will be maintained during application of all products as required.

Integrated Pest Management Plan for Honey Pond Farm

A. General Statement of Policy and Goals: Our goal at Honey Pond Farm is to maintain a healthy, aesthetically pleasing golf course environment while minimizing the use of pesticides and protecting human health and the environment. We are committed to implementing Integrated Pest Management practices that emphasize prevention, monitoring, and the use of environmentally sustainable pest control strategies.

B. Identification of Species, Maintenance Frequency, and Non-Chemical Control Options:

1. **Species to be Maintained:** Kentucky bluegrass, perennial ryegrass, fine and tall fescues, creeping bentgrass, and native Vermont wildflowers and shrubs.
2. **Scheduled Frequency and Method of Maintenance:**
 - Mowing: Regular mowing as needed to maintain turf height at optimal levels.
 - Fertilization: Seasonal fertilization based on soil testing and nutrient requirements.
 - Aeration: Annual core aeration to improve soil health and reduce thatch.
 - Irrigation: Efficient irrigation practices to ensure proper hydration of turfgrass.
3. **Non-Chemical Control Options:**
 - Cultural Practices: Proper mowing height, irrigation management, and soil aeration.
 - Mechanical Control: Hand-picking weeds, using weed trimmers, and manual removal of pests where feasible.
 - Biological Control: Encouraging natural predators and beneficial organisms to control pests.

C. Biological and Cultural Pest Management Strategies:

- **Cultural Practices:** Regular monitoring for pest populations and environmental conditions that favor pests. Adjusting irrigation schedules to minimize fungal diseases. Utilizing appropriate grass species for Vermont's climate.
- **Biological Controls:** Introducing beneficial insects like ladybugs for aphid control. Incorporating nematodes to manage soil pests.
- **Pest Thresholds:** Action thresholds based on pest monitoring data to determine when intervention is necessary.

D. Pesticide Storage and Handling:

- Pesticides will be stored in a secure, designated area away from water sources.
- Handling will adhere strictly to manufacturer instructions and state regulations.
- Spill Response Plan:
 - In the event of a pesticide spill at Honey Pond Farm, our response plan emphasizes rapid action and comprehensive safety measures. Upon discovery of the spill, the first step is to immediately alert all personnel and visitors in the vicinity, ensuring they evacuate to a safe distance away from the affected area.

Simultaneously, the spill site will be secured to prevent further contamination, and appropriate PPE will be worn by trained personnel tasked with containment.

The spill containment process involves deploying absorbent materials such as spill pillows or absorbent granules to minimize the spread of the pesticide. Contaminated materials will be carefully collected and placed into designated hazardous waste containers for proper disposal, adhering strictly to state and federal regulations. Emergency contacts, including local authorities and environmental agencies, will be notified promptly to report the incident and coordinate additional support if necessary. Post-spill, thorough decontamination of equipment and affected surfaces will be conducted to mitigate any residual risks, followed by monitoring and assessment to ensure the restoration of environmental quality in accordance with regulatory standards. Regular training and drills will be conducted to uphold readiness and ensure swift and effective response to any future pesticide spills.

E. Irrigation Practices:

- Utilization of a modern irrigation system equipped with moisture sensors and weather data to optimize water usage.
- Irrigation scheduling adjusted seasonally and based on real-time weather conditions to minimize water waste.
- Use of projected evapotranspiration rates with crop coefficients of no more than 75%.

F. Unique Features to Minimize Pest Pressure:

- Implementation of native plantings to enhance biodiversity and reduce pest susceptibility.
- Utilization of integrated pest monitoring techniques such as pheromone traps and visual inspection to detect pests early.

G. Establishment of Buffers:

- Buffers are established around water bodies, including ponds and streams, to protect surface water and groundwater from potential pesticide runoff.
- Buffer zones are planted with native vegetation to enhance natural filtration and reduce runoff.

This Integrated Pest Management Plan will be reviewed annually and adjusted as necessary based on monitoring results, technological advancements, and regulatory changes. By implementing these strategies, Honey Pond Farm aims to maintain a healthy, sustainable environment for our golfers, staff, and the community of Vermont.

Nutrient Management Plan for Honey Pond Farm

A. Goals of the Nutrient Management Plan: The primary goal of the nutrient management plan at Honey Pond Farm is to optimize turfgrass health and playing conditions while minimizing nutrient runoff and leaching into groundwater. Specifically, the objectives include:

- Ensuring adequate nutrient availability for optimal turf growth and color.
- Preventing nutrient excesses that can contribute to environmental degradation.
- Implementing sustainable practices that align with Vermont's environmental regulations and guidelines.

B. Areas for Nutrient Application: Nutrient applications will be targeted to the following areas of the golf course:

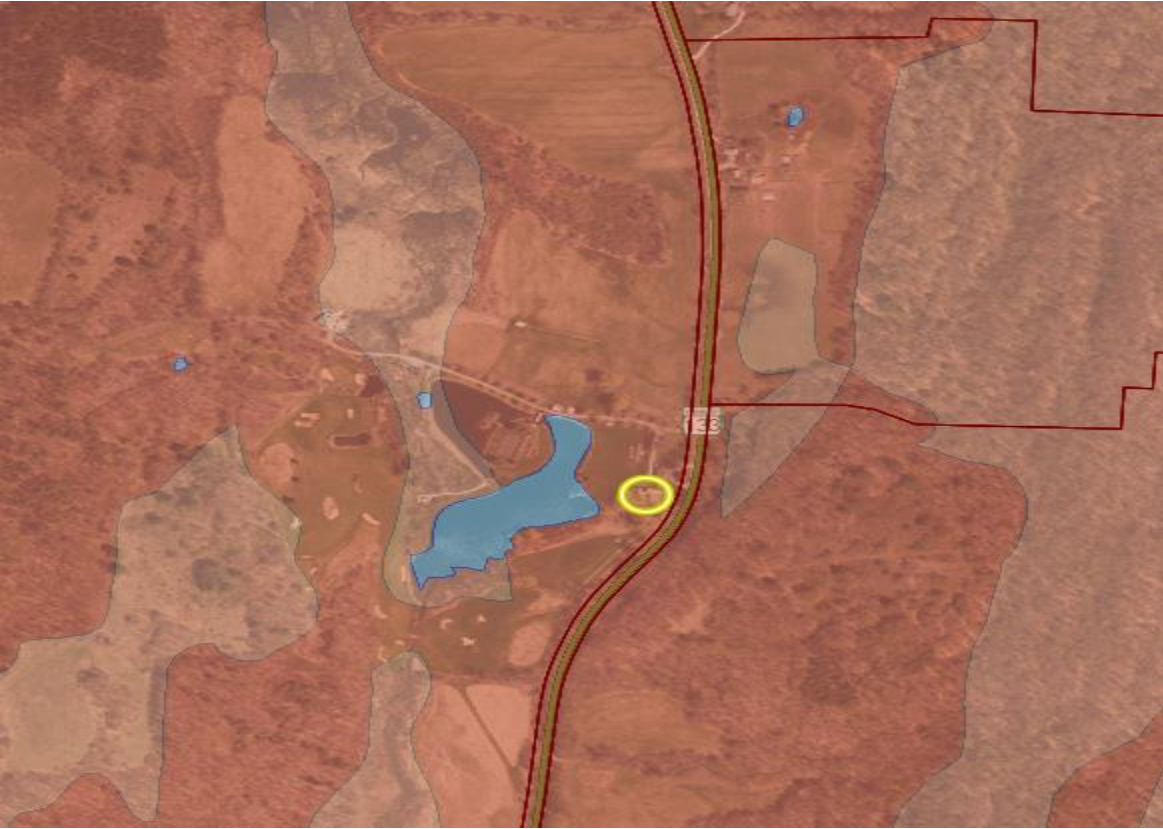
1. **Greens:** These areas will receive precise nutrient applications tailored to their specific requirements for smooth putting surfaces and consistent green color.
2. **Tees:** Nutrient applications on tees will focus on maintaining turf health and durability to withstand frequent play.
3. **Fairways:** Nutrient management on fairways will promote uniform growth and recovery from wear, balancing aesthetics with playability.
4. **Roughs:** Nutrient inputs to rough areas will be managed to support healthy growth while minimizing mowing frequency and water usage.

C. Process for Interpreting Soil Test Results:

1. **Soil Sampling:** Regular soil sampling will be conducted across different sections of the golf course. Samples will be collected according to a grid-based or zone sampling approach to accurately represent variability in soil conditions.
2. **Analysis and Interpretation:** Soil test results will be analyzed based on accepted recommendations from universities or agencies such as the University of Vermont Extension Service or the Vermont Agency of Agriculture. Parameters considered will include pH, organic matter content, nutrient levels (nitrogen, phosphorus, potassium, etc.), and the Nitrate Leaching Index (NLI). Map shown below.
3. **Nutrient Application Adjustments:** Nutrient applications will be adjusted based on soil test results and NLI calculations to ensure that nutrient inputs match the actual requirements of the turfgrass without exceeding optimal levels that could lead to environmental impacts.
4. **Record Keeping:** Detailed records of soil test results, nutrient applications, and any adjustments made will be maintained to track trends over time and support decision-making for future nutrient management practices.

By adhering to this Nutrient Management Plan, Honey Pond Farm Golf Course aims to maintain high-quality playing surfaces while protecting the surrounding environment and complying with Vermont's agricultural and environmental regulations. Regular monitoring and adjustments will ensure that nutrient management practices remain effective and sustainable over the long term.

Nitrate Leaching Index Map:



| Honey Pond Farm- List of Pesticides and Fertilizers | | | | | |
|---|---|--|---------------------------|--|-------|
| Name: | Active ingredient | EPA REGISTRATION NUMBERS | LOCATIONS | Target Pest | Acres |
| Chipco 26019 | IPRODIONE | 432-888 | Greens, Tees, Fairways | Dollar spot, brown patch, snow mold | 6 |
| 25-0-5 W/ Dimension | Chlorantraniliprole & Dithiopyr | 961-427 | Tees, Fairways and Roughs | Grassy weeds and Grubs | 10 |
| Daconil Zinc | Chlorothalonil | 50534-211-100 | Greens | Dollar Spot, Brown Patch, Anthracnose, Alge, snow mold | 0.25 |
| 3336 | THIOPHANTE | 1001-89 | Greens and Fairways | Dollar spot, brownpatch, snow mold | 5.5 |
| Phosphite- Fertilizer | Mono-and dipotassium salts of Phosphorous Acid* | 68573-2 | Greens and Fairways | Turf Health, Pythum | 5.5 |
| Chipco 26019 | SAME AS ABOVE | 432-888 | Greens , Tees, Fairways | Dollar spot, brown patch, snow mold | 6 |
| TURFCIDE PCNB | Pentachloronitrobenzene | 5481-8992 | Greens, tees, Fairways | Snow Mold | 6 |
| Nitrogen (calcium nitrate) | Non Pesticide- Fertilizer | N/A | GREENS, TEES, FAIRWAYS | General Turf health | 10 |
| Potassium (0-0-50) | Potassium Sulfate (Fertilizer) | N/A | GREENS | General Turf Health | 0.25 |
| Others pre-screened items we would like to be approved for: | | | | | |
| FUNGICIDES, BACTERICIDES, ALGAECIDES | HERBICIDES | INSECTICIDES | PGRs | | |
| <i>Bacillus licheniformis</i> | benefin | abamectin | 3-indolbutyric acid (IBA) | | |
| <i>Bacillus subtilis</i> | carfentrazone-ethyl | allyl isothiocyanate | cytokinin (kinetin) | | |
| chloroneb | dithiopyr | <i>Bacillus thuringiensis var. ku</i> | gibberellic acid | | |
| chlorothalonil | fenoxaprop-ethyl | <i>Beauveria bassiana</i> | | | |
| copper hydroxide | fluazifop | bifenthrin | | | |
| cyazofamid | flumioxazin | <i>Burkholderia spp. (cells and ferm. media)</i> | | | |
| fluazinam | isoxaben | capsaicin | | | |
| fludioxonil | MCPA ester | cyfluthrin | | | |
| hydrogen dioxide | oryzalin | cypermethrin | | | |
| hydrogen peroxide | pendimethalin | deltamethrin | | | |
| iprodione | prodiamine | indoxacarb | | | |
| mancozeb | pyraflufen-ethyl | lambda-cyhalothrin | | | |
| mefentrifluconazole | trifluralin | novaluron | | | |
| mineral oil | <i>Steinernema carpocapsae</i> | | | | |
| Oregano oil (<i>Origanum vulgare</i>) | | | | | |
| PCNB | | | | | |
| peroxyacetic acid | | | | | |
| potassium salts of phosphorous acid | | | | | |
| <i>Pseudomonas chlororaphis</i> strain AFS009 | | | | | |
| pyraclostrobin | | | | | |
| <i>Reynoutria schalinensis</i> extract | | | | | |
| sodium bicarbonate | | | | | |
| sodium carbonate peroxyhydrate | | | | | |
| sodium percarbonate | | | | | |
| <i>Streptomyces lydicus</i> | | | | | |
| sulfur | | | | | |
| thiophanate-methyl | | | | | |
| <i>Trichoderma harzianum ssp.</i> | | | | | |
| <i>Trichoderma virens ssp.</i> | | | | | |
| trifloxystrobin | | | | | |
| vinclozalin | | | | | |

