To: Board of Appeals

From: Planning Board

Date: December XX, 2024

Re: CASE: 4142 Landers Farm LLC

PETITIONER: LOCATION: ZONE: TITLE REFERENCE:	Landers LLC Off Hedges Pond Road Rural Residential (RR) Plymouth County Registry of	CASE: 4142 PLAT: 61 LOTS: 33-2 and 33-3 Deeds, Book 20675, Page 87
STREET CLASS:	Minor,	
REQUEST:	Special Permit per Section 205-18 F subject to EDC for gravel removal in excess of 10 cubic yards. ¹	
PURPOSE:	To remove 2,007,086 cubic yards of gravel in order to construct cranberry beds and a second reservoir/tailwater recovery pond.	
LOT TYPE:	Regular	
SUBMISSION REQUIREMENTS		
LOCUS MAP	YES	
ACTUAL LOT SHAPE & SIZE YES		
EXISTING CONDITIONS		
ADJACENT LOTS	YES	

At a meeting on December XX, 2024, the Planning Board VOTED (X-X) to make the following findings and recommendation.

SUBMISSIONS:

- Submittal Letter from GAF Engineering, Inc. dated October 18, 2024
- Zoning Board of Appeals Petition Application (undated)
- Zoning Permit Denial dated August 27, 2024
- Environmental Impact Statement & Narrative dated October 16, 2024
- Plans entitled "Landers Farm, LLC Plan to Accompany Earth Removal Permit", Plymouth Massachusetts, prepared by GAF Engineering, Inc. and dated Oct. 9, 2024

ASSOCIATED HISTORY:

¹ 2018 Zoning Bylaw in effect.

In 2002, (ZBA Case #3086), special permits were granted for the removal of 533,349 cubic yards of earth to construct a tail water recover pond.

In December of 2004, the property owner approached the Town for expansion of the cranberry bog operations at this location. The petitioner subsequently withdrew in order to address several questions that were raised by the ZBA at the time. A master plan of the subject property and the P.A. Landers adjacent properties was produced as part of the subsequent filing. The master plan depicts an expansion of the bogs on the subject property over several years, in multiple phases, expanding onto Map 60, Lot 1 and Map 61, Lot 33 (both owned by P.A. Landers, Inc.). The total area of land shown on the master plan is approximately 207.74 acres. The Planning Board noted that viewsheds of the existing woodlands and bogs from the adjacent residential properties to the north should be considered as the future phasing is reviewed.

In 2005 (ZBA Case 3288), a modification of ZBA Case 3086 was granted allowing for the removal of an additional 580,245 cubic yards of gravel for the construction of 3.09 acres of cranberry bogs. Note the cranberry bogs were never constructed and a solar array has since been constructed on this site (see below).

After 2005, without permits (listed on plans as Phase 2 on various plans), the removal of 438,386 cubic yards of material occurred for the construction of 3.66 acres of cranberry bogs.

In 2009 (ZBA Case 3515), a modification of ZBA Cases 3086 and 3288 was granted allowing for the removal of an additional 1,037,586 cubic yards of gravel for the construction of 2.23 acres of bogs. This decision acknowledged and we assume allowed the 438,386 cubic yards removed as part of Phase 2 noted above.

In 2010 (ZBA Case 3606), a request to construct two (328 foot height) wind turbine towers was withdrawn.

In 2012 (ZBA Case 3654), a special permit was granted for the construction of one 213 foot high wind turbine tower. No construction occurred and the permit has expired.

In 2019 (ZBA Case 3955), a special permit was granted to waive the 200' buffer required for a 3 MW ground-mounted solar photovoltaic facility, consisting of approximately 7,398 panels. Subsequently, as a field change, the Building Commissioner allowing the solar arrays to be moved from the side slope to the location of the earth removal associated with ZBA Case 3086.

In 2020, during the as-built process, the removal of an additional 110,850 cubic yards of gravel beyond that authorized by the ZBA was identified. The Building Commissioner authorized this additional earth removal as a field change.

In total 2,970,410 cubic yards of earth have been removed to date. In all cases the petitioner gifted the town 10 cents a cubic yard for road maintenance.

FINDINGS:

- 1. The property is question is located off Hedges Pond Road within the Rural Residential (RR) District. A small portion of the property is located within a Aquifer Protection District Zone II. The site is not located within areas mapped for Habitat for Rare and Endangered Species or flood plains,
- 2. The petitioner is seeking a Special Permit under the Zoning Bylaw in effect in 2018 to remove 2,007,086 cubic yards of gravel. The property owner utilized the state's liberal zoning protection laws to freeze the land's zoning provisions. Therefore, the project is not subject to the current earth removal bylaw. Chapter 40A Section 6 states that if a preliminary plan followed within seven months by a definitive plan, is submitted to a planning board for approval under the subdivision control law before the effective date of a by-law, the **land** shown on such plan shall be governed by the; applicable provisions of the zoning by-law in effect at the time of the first such submission if such definitive plan is finally approved, for **eight years** from the date of the endorsement of such approval. The land in question is shown on a definitive plan approved by the Planning Board on March 12, 2018.
- 3. The agricultural exemption included in MGL c. 40A (the Zoning Act), provides broad protections and exemptions to agricultural uses. Per the "Handbook of Massachusetts Land Use and Planning Law" Section 4.03 Agricultural Uses, case law states that the exemption standard also applies to **uses accessory or incidental** to the principal agricultural use. Some have argued that the earth removal is accessory and incidental to the principal use. However, there is no guarantee that an exempt agricultural use will actually be created after the earth is removed. Therefore, the earth removal is treated as a primary use subject to a special permit review by the Zoning Board of Appeals.

2018 - REVIEW UNDER ENVIRONMENTAL DESIGN CONDITIONS

Natural Features Conservation

The 2018 Zoning Bylaw notes sand and gravel quarries and similar extractive industries, as a special permit use in the RR Zoning subject to § 205-18. Section 205-15 D (Grading and topography). Section 205-15(D) states that efforts shall be taken to maintain the continuity of the natural topography when building on any site. Cut and fill shall be avoided in all instances possible and structures shall be designed and sited to fit naturally into the topography rather than radically altering the topography to conform to structures or other site appurtenances.

Phasing

The Petitioner states that project is intended to be constructed in phases over a 6-8-year time frame resulting in the removal of approximately 2,007,086 cubic yards of material.

Phase I will consist of constructing the reservoir/tailwater pond and access roads. Phase 1 is located nearest to the project site's Hedges Pond Road access point. Phase 1 area is 25.43 acres in size. A total of 1,480,853cy will be removed over a 5-6-year period.

Phase II will consist of reconstructing and replanting the existing 4.5-acre cranberry bog and constructing access roads. This bog will also be enlarged by 3.38 acres to a finished size of 7.88 acres. Phase 2 is 20.32 acres in size. A total of 176,965 cy will be removed over a 1-2-year period.

Phase III will consist of constructing a new cranberry bog totaling 5.85 acres with access roads. When completed there will be a total of 26.43 acres of cranberry bog. Phase 3 is 24.30 acres in size. A total of 349,468 cy will be removed over a 1-2-year period.

Approximately, 70 acres of land will be disturbed to construct just 9 more acres of bogs and a 6 acres recovery pond. Many of the cuts in the natural topography are in the 20 foot range with cuts exceeding 34 feet in Bog Section B and in excess of 80 feet in the tailwater recovery pond area. Final slopes shown on the plan do not exceed 1 :3 or 33%.

The Petitioner is only proposing to stabilize interior and exterior slopes with erosion control blankets and seed or hydro seed.

The Petitioner states that the need for erosion control during construction **is unlikely** as the reservoir and each cranberry bed section are to be excavated into the surrounding land. This is unacceptable. Erosion control measures are needed for any area that will remain unvegetated for a period of a month or more.

It is likely that some activity will occur within areas under the jurisdiction of the Conservation Commission. The applicant should file a request for Determination of Applicability to determine Commission jurisdiction and impacts to the interests of resource areas covered by the Wetlands Protection Act and the Town's Wetlands Bylaw.

Relation to the Surroundings

The subject property is located in close proximity to Quail Run and Great Woods Road. Nine homes are located within 50 to 300 feet of the site as well as a number of other dwellings located within the same vicinity.

Vehicular and Pedestrian Circulation

No pedestrian access is associated with the project.

The petitioner states that the earth removal project is estimated to require 55 vehicle trips per day during initial construction and gravel removal operations. Most of these vehicle trips will consist of dump trailers (provided that 40 loads per day are authorized for removal). The

remaining 15 vehicle trips will consist of employee vehicle trips and other constructionrelated activities.

A roughly estimated minimum 74,300+ vehicle trips may be required for the gravel removal (assuming 27 cubic yards per truckload), or 148,700 truck trips including empty and full vehicles.

A traffic study was prepared under contract with the Massachusetts Department of Transportation (MassDOT) through the Old Colony MPO's FFY 2025 Unified Planning Work Program. The study includes an analysis of the peak hour turning movement counts along with peak hour level of service reports for the intersection for the intersection of Route State Road at Hedges Pond Road and Old County Road in October 2024.

State Road northbound and southbound operate at acceptable levels of service but the approach streets (Hedges Pond Road and Old County Road) experience delays during the peak demand hours, with levels of service of E and F on those approaches.

The 10-year crash history at this location, from January 1, 2014 through to the present consistently reveals an average of 3 crashes per year, with a decreasing trend over the 10-year period. Most of these crashes are minor, with only one crash reported as resulting in a serious injury.

While it is not reflected in the crash history, this is an area of safety concern for vulnerable road users. Land uses (CVS, Mary Lou's, restaurants, etc.) on the western side of State Road have the potential to generate safety issues for vulnerable road users (especially pedestrian). Prevailing travel speeds through this corridor are relatively high for an area where pedestrian crossings could be present.

Siting & Design of Structures

Except for cranberry bogs and tailwater ponds, no new significant structures are proposed as a part of the gravel removal project. All other necessary state and local permits must be issued prior to the commencement of excavation.

Surface Water Drainage

The applicant has not provided a storm drainage report and drainage calculations that wis needed to document compliance with all Massachusetts Stormwater Regulations and the Town of Plymouth Drainage Guide.

Utilities

No major changes to the utilities in the area are proposed for earth removal.

Signs

Temporary signs warning traffic of truck entry have not been proposed on the plans for safety.

ADVISORY REPORTS:

Inspectional Services Memo dated November 14, 2024 Conservation Commission Memo dated November 21, 2024 Department of Public Works Memo dated November 18, 2024

RECOMMENDATION:

The Planning Board recommends DENIAL of the special permit for the following reasons:

- 1. The proposed earth removal activity is appropriate to the zone but not this specific site, as it is surrounded and is within close proximity to residential neighborhoods. A mining operation that will occur over 6 to 8 years or even longer is not appropriate for an area adjacent to residential neighborhoods.
- 2. There will be a clear hazard to both pedestrians and vehicles. The hauling route proposed is not appropriate for the activity as the Hedges Pond Road and Old County Road intersection with State Road operate at level of services E and F during the peak demand hours. In addition, this is an area of safety concern for vulnerable road users especially pedestrians.
- 3. The removal of 2,007,086 of earth to construct 9.23 acres of additional cranberry bogs will radically alter the sites topography and the design does not fit in any way into the site natural topography.
- 4. With cuts in the natural topography in excess of 80 feet efforts have not been taken to maintain the continuity of the natural topography
- 5. There will be a clear nuisance and adverse effect upon the neighborhood. The noise, vibration and dust that are natural consequences of such earth removal operations over a 6 to 8 year duration will negatively impact the health, safety and welfare of abutting homes.

POSSIBLE CONDITIONS:

NOTE: Although the Planning Board does not support the Petition as presented, the following conditions are recommended by staff and have been agreed to by the Petitioner in the event that the Board of Appeals chooses to grant the petition. <u>These conditions are provided for assistance only, and do NOT represent a difference of opinion from staff with that of the Planning Board.</u>

- 1. Prior to the start of excavation at the site:
 - a. The Petitioner shall post a performance guarantee to protect Hedges Pond Road from damage caused by outgoing loaded trucks. The performance guarantee is to be in a form acceptable to the Building Commissioner upon consulting with the Director of

Public Works. The Board of Appeals agrees to terminate the performance guarantee upon completion of earth removal activities if Hedges Pond Road has not been damaged thereby.

- b. The Petitioner must prepare an erosion control plan (and dust suppression measures) to be submitted to the Building Commissioner. Any exposed banks created by the excavation should be hydro-seeded or otherwise stabilized in a manner acceptable to the Building Commissioner and maintained for three years.
- c. Evidence of recording of this Special Permit at the Plymouth County Registry of Deeds shall be presented to the Building Inspector, and the plans shall be recorded with the Special Permit.
- d. Temporary signs warning traffic of truck entry shall be installed for safety as determined by the Police Department and will be approved by the Director of Inspectional Services.
- 2. A limit of 40 truck trips per day will be the maximum allowed for all earth removal operations for this project.
- 3. The excavation and trucking of material and/or noise generated by the excavation and trucking of material shall be limited to Monday through Friday. The hours of operation shall be limited to 7:00 AM to 4:00 PM. No excavation activities shall be permitted on holidays.
- 4. Access to the site for periodic inspections by the Town or its designated representative, and to cover the costs of said inspections through the contingency account managed by the Planning Department. All funds not expended during the construction project shall be refunded upon satisfaction of all conditions and completion of the work.
- 5. The Petitioner shall be responsible for the clearing of any sand that accumulates on the truck route as a result of the excavation of material on a daily basis.
- 6. The Petitioner shall provide an "as-built" survey which verifies that no more than 2,007,086 cubic yards of material were removed.
- 7. At no time shall more than five acres of the site be exposed. The Petitioner shall loam and seed any portions of the site that are not under construction after earth removal activities have ceased for a period of six (6) months.
- 8. Erosion control measures are needed for any area that will remain unvegetated for a period of 4 week or more.

- 9. During construction, monthly statements are to be submitted by the Petitioner to the Building Commissioner from a Registered Professional Engineer stating that the provisions of the Special Permit are being followed.
- 10. Once the work has commenced, it shall be completed within two (2) years from start of excavation. After the two (2) year timeframe, unless extended by the Board of Appeals, this Special Permit shall expire and all gravel removal shall cease.
- 11. If all of the above noted conditions are not adhered to, the Building Commissioner may cause all excavation work to cease until the problems identified are corrected.