

STATE OF VERMONT

ENVIRONMENTAL COURT

Appeal of Albert, et al. } } Docket No. 110-6-03 Vtec  
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Decision and Order

Appellants Gail Albert, Carol Boyd, Susan W. Dixon, Marian Feldman, Alfred W. Hoadley, Beverly Jacobson, Chris Johnson, Crea Lintilhac, Susan Moraska, Laurel Neme, Robert Platt, Thea Platt, Andrea Van Hoven, Carolynne R. Wang, and Deane Wang appealed from a decision of the Planning Commission of the Town of Shelburne, granting approval to a Planned Residential Development off U.S. Route 7. Appellants are represented by Stephanie J. Kaplan, Esq.; Appellee-Applicant Ethan Allen Holdings, LLC, is represented by Edward D. Fitzpatrick, Esq.; and the Town of Shelburne is represented by Jill E. Spinelli, Esq. An evidentiary hearing was held in this matter before Merideth Wright, Environmental Judge. A site visit was taken in advance of the hearing, with the parties and their representatives. The parties were given the opportunity to submit written memoranda and requests for findings. Upon consideration of the evidence as illustrated by the site visit, and of the written memoranda and requests for findings filed by the parties, the Court finds and concludes as follows.

Appellee-Applicant Ethan Allen Holdings, LLC, seeks approval of a 62-unit Planned Residential Development (PRD), to be known as “Rice Woods,” to be constructed in phases over approximately three years, on a 33.71-acre<sup>1[1]</sup> parcel of land owned by Rice Lumber Inc. and Rice Realty Company in the Residential-Commercial zoning district of the Town of Shelburne. In addition to the application as originally presented to the Planning Commission, Appellee-Applicant proposes to incorporate the conditions imposed by the Planning Commission into its application to be considered by the Court, as set out in Exhibit 5.

No historic sites or resources are located on or near the project property. U.S. Route 7 is a principal arterial highway for the region. Commercial and residential uses line this segment of Route 7 and are visible from Route 7. The Rice Lumber lumberyard and its associated buildings and parking area is located between the northerly portion of the project property and Route 7. A large commercial development is located immediately north of the project property along Route 7. Residential developments are located north of the project property, with access from Route 7, and also to the northwest of the project property down at the level of Shelburne Bay. Harbor Industries, an industrial/commercial use, is located to the southwest of the project property, north of the

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<sup>1[1]</sup> The area calculations are based on the configuration of the property after the widening of Route 7.

intersection of the LaPlatte River with Route 7. Immediately adjacent to the west of the project property is an undeveloped narrow parcel of property containing a steep cliff that drops off to a much lower elevation than the project property. That adjacent cliff property is bounded on its west by the railroad; beyond the railroad farther to the west are the natural areas associated with the LaPlatte River basin, some of which are held by The Nature Conservancy.

The project property is undeveloped; some portion of it, especially in its southerly end, was used or attempted to be used for agriculture at some time in the past. The project property appears to be located outside the LaPlatte Greenway Map (Comprehensive Plan, Map 6), but adjacent to its easterly edge. The Natural Features Map (Comprehensive Plan, Map 4) indicates the presence of two natural features on or near the project property, represented by dots; the map does not specify what these natural features are, whether they are on the project property or on the adjacent temperate calcareous cliff, or whether they represent the category of 'rare, threatened or endangered species' or 'natural community.' The similar 'Town of Shelburne Significant Habitat Map' prepared by Vermont Fish and Wildlife Department (Exhibit I), which appears to be the basis for the information displayed on the 'Natural Features Map,' has a more explanatory legend but does not locate or identify the specific features represented by the two hexagonal dots.

The PRD that is the subject of the application before the Court is proposed to consist of 37 multi-family units (in 14 buildings each with two or three units) on a 6.98-acre parcel at the southerly end of the project property, together with 25 single-family houses on the northerly portion of the project property, each on its own approximately half-acre lot. The project will utilize municipal water and sewer services. Rice Lumber Inc. and Rice Realty Company propose to retain two commercial lots adjacent to and westerly of U.S. Route 7 (Shelburne Road) that are not part of the PRD project property.

The project property is located westerly and southerly of the two retained lots, with access to Route 7 by two new 26-foot-wide public streets, forming a loop. One, known as Carroll Drive, runs along the southerly edge of the Rice Realty Company commercial parcel, and makes a right turn to run to the north along the center of the project property, to serve the proposed single family lots, ending in a 60-foot-radius turnaround or cul-de-sac. The other, known as Rice Lane, runs along the northerly edge of and curves behind the Rice Lumber commercial parcel, making a T intersection with Carroll Drive between proposed single-family lots 22 and 23. The intersection of Rice Lane with Route 7 is a signalized intersection also used by the commercial development to the north. A private 24-foot-wide road known as Dennison Circle is proposed to serve the multi-family lot; it forms its own loop to the south of the east-west segment of Carroll Drive, and has access onto Carroll Drive in two places. Sidewalks are proposed to be provided along one side of all project roadways out to Route 7 at both intersections.

A small recreation area with a pool<sup>2[2]</sup> is proposed to be located in a lot located directly across Carroll Drive from the multi-unit parcel and directly to the south of single-family Lot 17; a second small parcel of open land equivalent in size to a single-family lot is located between unit 31 of the multi-family units and Lot 16, the most southwesterly of the proposed single-family lots. Including the two recreation 'lot-equivalents,' a total of 11.62 acres of common land open space is proposed to be located around the perimeter of the multi-unit parcel, around the perimeter of the group of single-family lots, and in the area to the north of Rice Lane. Taken together, we will refer to it as "the perimeter open space." It is designed to satisfy the 50-foot setback requirement for rear yards at the periphery of a PRD, together with the on-lot setbacks in the case of single-family lots 2 and 3. Zoning Bylaws, §1630.2.3. Appellee-Applicant proposes in §§4.5 and 4.1(v) of the Declaration of Covenants that use of the perimeter open space be limited to members of the homeowners' association, that it be limited to walking and nature study, and that all pets must be carried or leashed within that area. As shown on Exhibit 76, the portion of the perimeter open space between the rear of the westerly single-family lots or multi-family lot and the westerly edge of the property is approximately 6.45 acres in area. For the purposes of this discussion, we will refer to this 6.45-acre area as the "westerly buffer area."

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<sup>2[2]</sup> A pool is not shown on the plans but is referred to in the Declaration of Covenants.

The proposed PRD leaves approximately 34.5% of the project property undeveloped, in compliance with the minimum of 33% of open space required for PRDs smaller than 50 acres in total area. Appellee-Applicant is willing to enter into an open space agreement with the Town, governing public access to and restrictions upon the use of the open space on the project property. However, as discussed below, the need to protect the adjacent temperate calcareous cliff from excessive public access suggests that this standard open space agreement may not be appropriate in this instance.

In addition, as shown in the key of the site plans in evidence as Exhibits 6.1 and 10, Appellee-Applicant proposes that clearing of trees within the individual single-family lots and in the perimeter open space be restricted in several respects. Within the perimeter open space, Appellee-Applicant proposes a so-called no-cut zone, although §4.5 of the Declaration of Covenants allows the lot owners and the Association to remove “dead or decaying trees.” Within the 15-foot side and rear yard setbacks of the single-family lots, Appellee-Applicant proposes that no trees be cut that are larger than 2” in diameter at breast height (DBH). Appellee-Applicant proposes a so called ‘selective clearing zone’ within the 30-foot front setbacks of the single family lots and the roadside setbacks of the multi-family lot, in which trees are to be saved “whenever possible,” that is, other than if they are removed to install driveways and other lot infrastructure. Appellee-Applicant intends to retain trees in the front yard setbacks to satisfy the requirement to establish street trees within the forested area of the development, and

proposes to plant a double line of Austrian pines along Rice Lane and red maples along both Rice Lane and Carroll Drive. The landscape plan does not involve the use of invasive or non-native vegetation.

Appellee-Applicant also proposes a building restriction for the building envelope within the setbacks on the single-family lots, so that the amount that may be cleared is limited to three times the building footprint, or two-tenths of an acre, whichever is smaller. These clearing limitations are not specified in the Declaration of Covenants; rather, §13.1 of the Declaration merely requires the property to be “used and conveyed” in accordance with the various permits and approvals applicable to it, and §4.4 requires each lot owner to “comply with all applicable permits, codes, laws, ordinance, rules, and regulations, of the State of Vermont and Town of Shelburne affecting the use of the lots and the common elements.”

The project property occupies a hill above and to the west of Route 7, which in that location runs at an elevation of about 180 feet above sea level. The highest point on the project property is in the northwesterly portion of the site at about 270 feet above sea level. The property slopes up from Route 7 to a divide running in a north-south direction as shown on the pre-development drainage plan (Exhibit 6.27). The pre-development divide runs from the northerly property boundary in the middle of proposed single-family Lot 3, through the northwesterly side of the road turnaround, through the front of Lot 5 and the middle of Lots 6, 7, and 8, to the high point at the rear of Lot 9. The pre-

development divide skirts the rear of Lots 9, 10, and 11, and then cuts diagonally towards the southeast through Lots 12, 13 and 14. From that divide the property slopes westerly to the westerly boundary of the project property, which runs along the top of a steep cliff, at an elevation of about 250 feet above sea level. Just to the west of the project property, the cliff face drops fairly precipitously down to an elevation of about 130 feet above sea level (which is the most westerly line of elevation shown on the site plan exhibits), near the railroad line and near the LaPlatte River, close to the river's mouth at the south end of Shelburne Bay. This cliff features some vertical faces of approximately sixty feet in height, as well as many portions with step-like smaller rises of approximately ten to thirty feet in height, and many narrow ledges. The project property is located at the eastern side of an extensive forest and wetland natural area in Shelburne. Across Route 7 from the project property are woods and fields interspersed with commercial and residential development. To the west, a substantial portion of the LaPlatte River floodplain forest, marsh, and clayplain forest are lands conserved by private organizations or by the Town.

An extensive view of Shelburne Bay and the LaPlatte River valley is visible from the cliff edge at the westerly boundary of the project property. However, due to the location of the proposed single-family lots and the heavily wooded nature of the westerly buffer area, the view cannot be seen from the proposed single-family lots, and single-family houses on those lots would not be visible from areas below and to the west.

The bedrock of the project property hill and the adjacent cliff is composed of Winooski Dolomite and Monkton Quartzite, characteristic of the Champlain Valley. This calcium-rich (calcareous) rock and its associated soils has a higher pH (more basic) and sustains a different range of typical plants than in the more acidic soils typical of upland forested regions of Vermont.

The property is heavily wooded and the soils are shallow to bedrock, with areas of exposed bedrock or 'ledge' outcroppings up to approximately 6 feet in height, located primarily within the westerly buffer area and in the rear of the westerly single-family lots. To the extent that the rock outcroppings are located in the westerly buffer area and in the rear and side setbacks of the single family lots, they will not be blasted or removed by the proposed development.

The soils on the project property originated as glacial till. They are generally shallow to bedrock and well-drained and therefore are fragile and susceptible to erosion. They are classified as severely limited for agricultural use and would not be suited to the construction of on-site residential waste disposal systems. However, the proposed PRD is served by the municipal sewer and water supply system and does not rely on the local soils for wastewater disposal.

To avoid undue erosion during construction, the proposed erosion control plan provides that the smallest practical area of land will be exposed at any one time within the development; the exposure will be kept to the shortest practical period of time; land will

not be exposed during the winter months; and the sedimentation detention areas will be installed before and maintained during construction and will continue to be maintained after the project is completed. As Appellee-Applicant does not propose to undertake the construction of house sites on the single-family lots, the Declaration of Covenants will have to be amended to address the commitment of any lot purchasers to similar erosion control practices during construction on the single-family lots.

With municipal water and sewer service, and with the erosion control plan proposed to be implemented during construction, the soils located on the project property are suitable for the proposed development<sup>3[3]</sup> and for the density to be constructed on the property. No topsoil, sand or gravel will be removed from the project property. The project property contains two Class III wetland areas, both in the easterly portion of the property. One is located at the northeast corner of the project property next to Route 7; the other is located near the southern access road. The project is designed to avoid any impact on the Class III wetlands. An endangered plant known as Torrey's rush (*Juncus torreyi*) is located in the wetlands in the northeast corner of the project property and is protected by the design of the project roadway.

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<sup>3[3]</sup> The protection of some portion of the westerly buffer area from public access required to protect the adjacent temperate calcareous cliff habitat will also protect the fragile soils at the rock outcroppings within that area from erosion due to excessive foot traffic.

Appellee-Applicant does not propose to develop the individual single-family house sites, but rather proposes only to put in the roadways and the water and sewer lines and other infrastructure for the single-family portion of the proposed PRD. Construction of the multi-family part of the project and the roadways and other infrastructure to serve the single-family lots will require some amount of blasting and some amount of fill materials.

As discussed further below, the location of the roadway and the lot layout in the single-family portion of the project will need to be redesigned to give due regard to the preservation and protection of existing trees, rock outcroppings and other natural resources. Once the location of the proposed roadway is realigned in relation to the vegetation proposed to be saved, modern blasting techniques should enable the blasting needed for the proposed roadway to be conducted so as to minimize or avoid damage to that surrounding vegetation, by shaping and directing the charge away from the area to be saved. However, as Appellee-Applicant does not propose to undertake the construction of house sites on the single-family lots, the Declaration of Covenants will have to be amended to address the commitment of any lot purchasers to similar blasting practices during construction on the single-family lots. Moreover, in connection with giving due regard to the preservation of the adjacent temperate calcareous cliff as viable bobcat habitat, the blasting required in any given year will have to be scheduled in consultation with wildlife consultants to occur at a time of year (probably in summer) and for the minimum total necessary duration to minimize adverse effects on the bobcat life cycle.

Rock recovered from blasting will be used for fill as needed in the roadway areas, and additional fill will be brought onto the project property for that construction. No stumps, wood, roots or other fibrous materials or refuse will be used as fill. The proposal does not address the source of fill materials; to avoid an adverse effect on the characteristic plant communities in the areas on the site on which they are to be preserved, any such fill in areas capable of leaching onto those area will have to be drawn from limestone (dolomite) sources matched in acid-base and other characteristics to the soil or rock occurring on the property. Moreover, as Appellee-Applicant does not propose to undertake the construction of house sites on the single-family lots, the Declaration of Covenants will have to be amended to restrict any lot purchasers to the use of similar fill materials during construction on the single-family lots.

Appellee-Applicant proposes to limit the introduction of topsoil on the single family lots to the area in the interior of the lots and to require any such fill to be feathered or graded so as not to affect the existing vegetation to be preserved in the setbacks or non-cut areas on those lots. If properly feathered to zero at the non-cut buffers or setback areas, the introduction of this volume of top soil at the project property will not adversely affect the existing plants within the single-family lots, so long as the acid-base balance and other characteristics of the fill are compatible with the soil on site.

No brooks, streams or water bodies are located on the project property. The primary sources of water to sustain the vegetation on the project property and the adjacent

temperate calcareous cliff are direct precipitation and snow melt, from which the water either infiltrates vertically downward into cracks and fissures in the rock, or runs across the surface of the rock within the very shallow soils. Because the project property's soils are so shallow, there is little groundwater in the sense of a saturated soil layer, so that the expected changes in the flow of stormwater after development would not affect the ability of the protected vegetation or the adjacent temperate calcareous cliff habitat to continue to thrive after development. Similarly, the blasting proposed for the road as it is currently laid out is not expected to affect the supply of water to the rock outcroppings in the westerly buffer area or to the adjacent temperate calcareous cliff. However, as Appellee-Applicant does not propose to undertake the construction of house sites on the single-family lots, and as the lot layout for those single-family lots will have to be revised, the Declaration of Covenants will have to be amended to require any lot purchasers to show that any blasting desired for any specific lot also will not affect the supply of water to the westerly buffer area or to the adjacent temperate calcareous cliff. Lot purchasers should be advised that they will have to obtain municipal approval of blasting and basement construction on the individual lots, and that any blasting will have to be scheduled annually for the property as a whole as discussed above.

Several different vegetation communities exist on the project property; the more northerly and westerly portion of the project property shows an unusually high diversity of plant species characteristic of the calcareous bedrock and warmer, shallow soils of this

location.

The southerly portion of the property proposed as the multi-unit lot is the most disturbed and least mature of the plant communities. No rare, threatened, endangered or uncommon plant species in the multi-family portion of the project property. It consists largely of successional vegetation communities in transition from old farm field use towards the type of Mesic Maple-Ash-Hickory-Oak forest located on shallow soils over calcareous bedrock, known as Transition Hardwood Limestone Forest.

The east-facing slopes of the remainder of the project property, roughly easterly of the elevation line 235<sup>4[4]</sup> are similarly transitional, with fast-growing, non-native species such as buckthorn and honeysuckle in the understory. In the areas of single family Lots 17 through 22, the forest growth consists of red oak, white oak, ash and maple. Similarly, on the other side of the proposed development roadway, the area of single-family Lots 16 to 11 is primarily a hardwood forest, with some history of logging and an understory containing buckthorn and honeysuckle.

The most northerly portion of the project, from Lot 23 northerly to Lot 2 and from Lot 2 westerly into the northwest corner of the project property, is a hemlock forest with 90 percent of the tree cover consisting of hemlock.

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<sup>4[4]</sup> The rough divisions between the natural areas on the site were described in evidence by lot number but are approximated well by the elevation line on the plan at 235 feet above sea level.

The remainder of the project property contains an unusually fine example of a mature Dry Oak-Hickory-Hophornbeam forest, with a diverse population of unusual ferns, wildflowers, and other plants characteristic of the calcareous rock outcroppings within that forest, and a population of eighteen yellow oak (chinquapin oak) trees (*Quercus muhlenbergii*) which is an uncommon tree in Vermont, close to the most northerly extent of its range. Subsequent to the design phase of this project, the yellow oaks larger than 2 inches in diameter have been mapped on Exhibit 10. The Dry Oak-Hickory-Hophornbeam forest area has not been mapped on the property, but it extends roughly from the points on Lots 20, 21, 22, 23, 24, 25, 1, and 2, westerly to the edge of the cliff, including some portion of lots 13 and 14 . That is, it is located in the area roughly approximated by the area westerly of the elevation line of 235 feet above sea level.

From the rear of Lot 9 to the west are a series of low rock outcroppings approximately 3 to 6 feet in height. The rock outcroppings are in a series roughly parallel to the property line behind behinds Lots 6 through 10 in particular. The rock outcroppings have not been mapped on the project property.

A rare plant known as *Arabis divaricarpa* is found to the west of Lot 8, in the proposed westerly buffer area. Another rare plant, *Solidago squarrosa*, is found in the proposed westerly buffer area near the cliffs abutting the project property. Other uncommon plants characteristic of this natural area, including wall-rue, purple cliff-brake, and smooth cliff-brake, are located in the rock outcroppings in the westerly buffer area or

on the adjacent calcareous cliff property to the west of the project property. The unusual mosses, ferns and other plants characteristic of the rock outcroppings in the westerly buffer area are particularly susceptible to damage from foot traffic and climbing on the outcroppings and cliff walls where they grow.

Yellow oak occurs more frequently in the Champlain Valley of Vermont than elsewhere in New England, in northern New York, or in Quebec, due to its preference for relatively warm locations on limestone and other calcareous soils. In Vermont, it occurs sporadically on warm, southwest- to west-facing slopes, in dry soils on calcareous bedrock, in the Champlain Valley (and also in the extreme southwestern corner of the state in Pownal). Even small populations of yellow oak trees are uncommon in Vermont, as it is at the northeasterly extent of its range, although it is not rare, threatened or endangered.

Approximately forty occurrences of groups of yellow oak trees have been reported to the Vermont Natural Heritage and Non-Game Program, including in Charlotte, Ferrisburgh, Burlington, Colchester and Milton. Most of the yellow oak populations in Vermont contain under ten trees; smaller than the population of eighteen found on the project property. Only four or five sites have more than 20 individuals; a larger population is important to conserve genetic diversity and the health of the population that results from such genetic diversity

The eighteen yellow oak trees on the property larger than 2 inches in diameter<sup>5[5]</sup>

are located as shown on Exhibit 10. They are distributed on the project property in a rough S shape, extending from the front of lots 20-21 westerly to lot 10 and in the westerly buffer area, curving back through lots 8, 7, 24 and 6 to lots 3 and 4 in the area of the proposed road turnaround in the most northerly portion of the project property. Seven of the trees are located in the proposed westerly buffer area and eleven are in the proposed development area. Of the eleven in the development area, three (identified as O, P, and Q on Exhibit 10) would be removed in the construction of the roadway and a fourth (the largest one, with a diameter of 20", identified as N at the front of Lot 6) is probably located too close to the proposed road to survive. Six of the remaining seven trees in the development area are located within or immediately adjacent to side setbacks on individual single-family lots. Each of the yellow oak trees greater than 2" in diameter is proposed to be protected by a 20-foot radius (40-foot diameter) "no-cut" zone around the specific tree. Although the yellow oaks were mapped on the project property and are proposed to be preserved by a 20-foot-radius no-cut zone around each tree, neither the road nor the single-family lot layout were designed to minimize disturbance to the yellow oaks, the rock outcroppings or the Dry Oak-Hickory-Hophornbeam forest.

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<sup>5[5]</sup> In addition, seedlings of yellow oak exist in the area proposed for the westerly buffer, but seedling or sapling locations have not been mapped. The existence of seedlings shows that the yellow oak population is a healthy one, but it will only regenerate if the yellow oaks of less than 2" DBH are also allowed to grow.

Moreover, on shallow soil the roots of the yellow oaks and other trees may extend horizontally far beyond the protected distance, so that grading and compaction of the soil near the trees from the use of heavy construction equipment may harm the trees' roots and cause the trees to decline over time, especially those located adjacent to the proposed roadways.

The project property is immediately adjacent to another high-quality example of an unusual natural community: the 'Temperate Calcareous Cliff.' This natural community occurs on limestone, dolomite, marble, or calcareous schist cliffs at lower elevations in the warmer regions of Vermont such as the Champlain Valley. They are vertical or nearly vertical and are sparsely vegetated, but because calcium-rich rocks weather faster than other kinds of rocks there is greater potential for soil development in cracks and on ledges. These cliffs have high plant diversity with uncommon herbs growing on the rock faces as the most prominent plants. Small trees and shrubs grow occasionally on ledges or in cracks where more soil has accumulated.

The project property itself provides habitat for a variety of wildlife, including turkey, grouse, cottontail rabbit, squirrels and other rodents, red fox, and deer. The nuts and acorns (mast) produced by the Dry Oak-Hickory-Hophornbeam forest are particularly important as a food source for some of these species. Some of these species are prey species for bobcats. The wildlife species using the project property are not rare, threatened or endangered.

A viable population of bobcats lives and reproduces within the Town of Shelburne. The existing mosaic of natural areas is able to support a wide-ranging bobcat population, due to the permeability of the landscape, that is, where the wildlife is able to move within the landscape to the extent it needs to access all portions of its habitat. The population of bobcats in Shelburne is able to cross Route 7 to access the LaPlatte River natural areas and the cliff adjacent to the project property. This occurs primarily where the LaPlatte River crosses under Route 7, although animals do cross Route 7 elsewhere where there is adequate cover on both sides of the road. Bobcats and other wide-ranging animals will continue to be able to access the cliff adjacent to the project property, and the project property itself, at the LaPlatte River or by traveling along the southern boundary of the project property and Harbour Industries to the base of the cliff, or by using the perimeter open space along the edges of the project property to the top of the cliff.

In the eastern part of Shelburne, bobcat are observed close to human habitation in places in which there is sufficient nearby cover, such as dense woods, to provide an escape route. Bobcats can coexist with humans as long as there are core areas that offer a safe retreat or refuge from human activities, such as cliffs (with ledges) or dense coniferous bogs and swamps. In human-dominated landscapes, bobcats' need for this type of security and privacy is higher than in wilder areas. It is the existence of good security habitat, as well as food and living habitat, that makes it possible for bobcats to survive and thrive in this part of Shelburne. The western part of Shelburne has very few

areas of the type of dense cover that bobcats would need to provide those functions otherwise provided by the temperate calcareous cliff adjacent to the project property. In the LaPlatte River basin, there are patches of coarse woody debris that could be used as denning habitat, but it is not abundant, and a great deal of use by deer has thinned the understory in that area.

The adjacent temperate calcareous cliff is in current use by bobcats as shown by the characteristic scratches, scrapes, scent markings and scat observed by trained observers over time at places below and along the cliff trails and shelves, and as shown by the bobcats photographed by automatic cameras at the cliff habitat. It provides extraordinary habitat for bobcats because of its proximity to the diverse habitats and plant community types found on the project property to the east and in the natural areas at the base of the cliff to the west and the south, and because of the cliff's suitability as refuge habitat.

The temperate calcareous cliff adjacent to the project property provides an ideal core refuge habitat for bobcats, protecting them from human activities and from other animals. The cliff provides many narrow and inaccessible areas of ledge outcrops and chambers that can be accessed only by bobcats, as they are capable of jumping to and landing on them with accuracy. Broken rock or talus on the cliff creates a complex of structures that only bobcat can reach, including denning sites, resting ledges, and narrow outcrop pathways or 'cat walks' on the cliff facade itself.

The adjacent temperate calcareous cliff is particularly important to the Shelburne bobcat population in the winter and spring. In winter, bobcats must rest and warm themselves in the sun, when available, in a safe place, so as to minimize their expenditure of energy on flight from threats or on keeping warm. South- and west-facing cliffs, such as the adjacent temperate calcareous cliff, are ideal for this wintertime energy-saving thermoregulation. Severe winter conditions with deep snow and cold also restrict bobcats' hunting mobility and food intake. The relatively safe and warm resting refugia provided by the adjacent temperate calcareous cliff are particularly important for females and for juveniles, with limited energy reserves. The cliffs also provide natal denning habitat in the spring, and a safe refuge from human disturbance and from predators such as dogs, coyotes, and possibly fishers (that is, fisher cats) as well.

Cliffs such as the adjacent temperate calcareous cliff also provide an important social and communication function for bobcats. Bobcats communicate by scent marking, which communicates information such as their identity, location in time and space, and social and sexual status, necessary for mating and avoidance functions. The scent markings repeatedly found in the same locations on the cliff trails indicate the presence of resident animals using the adjacent temperate calcareous cliff to communicate with other resident animals whose home ranges overlap. In late February and March, the adjacent temperate calcareous cliff is important to provide rendezvous sites for males and females, especially within the cliffy refugia associated with females. In late April to mid-June, these

areas are used for safe natal and rearing dens.

If areas immediately adjacent to the cliff, either at the base of the cliff or at the top of the cliff, are put into use for recreation by humans and pets, the value of the adjacent calcareous cliff as bobcat habitat will decline because it will no longer be available as a safe escape refuge. As discussed below, the lot layout of the single-family portion of the project will have to be redesigned to better take account of and protect the yellow oaks and the rock outcroppings on the project property, and the size and shape of the westerly buffer may change<sup>6[6]</sup> in connection with that effort. In any event, without some effective restriction of the westerly buffer area from use by the residents, visitors and pets associated with the proposed PRD once it is occupied, the design and lot layout of the proposed PRD will not adequately protect the essential wildlife habitat function of the adjacent calcareous cliff.

On the other hand, during construction, given the description of the life cycle of bobcat and their increased vulnerability to disturbance in the winter and spring, it is probable that a construction schedule could be developed, in consultation with wildlife experts, to restrict the timing of blasting and the timing of use of heavy machinery on the project property to those times of the year when it would not cause the bobcats to abandon their use of the adjacent property as habitat for refuge, for interaction, or for

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<sup>6[6]</sup> It need not necessarily be larger in area, but may have a different configuration and may have to be protected from human and pet use by some type of fencing.

reproduction and raising young.

To obtain final plat approval in the present proceeding the proposed PRD must comply with the applicable provisions of the subdivision regulations, and any provisions of the zoning regulations, municipal plan, or other regulations made applicable to the proposed PRD through the subdivision regulations. As the Shelburne ordinances do not adopt the criteria of the state's land use law, Act 250 (10 V.S.A. Chapter 151), the fact that the project has received an Act 250 permit is not dispositive of the analysis under the municipal ordinances and plan.

Section 800(1) of the Subdivision Regulations requires the Planning Commission, and hence this Court in this de novo appeal, to evaluate “[w]hether the land is unsuitable for subdivision or development due to flooding, improper drainage, steep slopes, rock formations, adverse earth formations or topography, utility easements or other features which will reasonably be harmful to the safety, health and general welfare of the present or future inhabitants of the subdivision and/or its surrounding areas.”

Because the proposed PRD is supplied with municipal water supply and sewage disposal services, if it had an improved lot layout (see §§800(2), (3), (7) and (8) discussed below) and appropriate erosion control and blasting control during construction,

the land itself is suitable for development, despite its challenges due to rock formations and topography. That is, with appropriate PRD design, the existence of these features would not be harmful to the safety, health and general welfare of the inhabitants<sup>7[7]</sup> of the PRD or its surrounding areas.

Section 800(2) of the Subdivision Regulations requires the Planning Commission, and hence this Court in this de novo appeal, to evaluate “[w]hether the proposal includes due regard for the preservation and protection of existing features, trees, scenic points, brooks, streams, rock outcroppings, water bodies, other natural resources and historical resources.” Section 800(7) also requires consideration of “whether the proposed development is compatible with surrounding properties.” Section 810(1) requires, with respect to existing features, that the “preservation of site amenities such as trees, brooks or drainageways, historic sites, unique geologic features or any other unusual features, which the Commission feels are an asset to the site and/or community, shall be effected

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<sup>7[7]</sup> The term “inhabitants,” as used in the context of the phrase “safety, health and general welfare of the inhabitants,” cannot be construed, as Appellants argue, to include the “wildlife that uses the project property and its surrounding areas.” The phrase “safety, health and general welfare” is used to refer to people, as in, e.g., Subdivision Regulations §1060 and 24 V.S.A. §4411(a), and 4302(a), as contrasted with provisions for the protection of wildlife or wildlife habitat, as in, e.g., 24 V.S.A. §4302(c)(6); Comprehensive Plan: Natural and Visual Resources and Land Conservation Objective 2.

insofar as possible through harmonious design and appropriate construction methods.”

The single-family portion of the proposed PRD does not include due regard for the preservation and protection of existing trees on the project property, or of existing wildlife habitat on the adjacent property<sup>8[8]</sup> to the west. For that reason, as currently designed, the proposed development also is not compatible with the adjacent property to the west and does not preserve the site amenities required by §810(1). It may or may not include due regard for the preservation and protection of existing rock outcroppings on the project property, as the outcroppings are asserted to be largely located in the westerly buffer area, but as they are not mapped or diagramed on any site plan, it is difficult to tell where they are in relation to the existing lot layout, which itself will have to be redesigned. In any event, without additional restriction of the use of the westerly buffer area and without a redesign of the lot layout of the single-family PRD lots, the proposed PRD does not meet the requirements of §800(2) (or §800(7)).

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<sup>8[8]</sup> Nothing in the text of §800(2) limits the evaluation to existing features on the project property. That is, for example, if a project were proposed for the shores of Lake Champlain or Shelburne Pond, or adjacent to a protected wetland, under this language it would be necessary to analyze whether the proposal included due regard for the preservation and protection of those resources. See also §800(7).

It is important to note that these sections do not require any absolute level of preservation or protection of any existing features, whether they are trees, rock outcroppings, or a temperate calcareous cliff wildlife habitat. It only requires the proposed PRD to take the preservation or protection of these features into consideration in the design of the project, and to give them an appropriate level of protection. It may be that a roadway for the project cannot be designed without removal of certain trees. It may be that some of the rock outcroppings are more important to protect than others. It may be that some portion of the westerly buffer area closest to the cliff edge should be fenced to preclude access, but that other portions of the redesigned buffer area would not need such limitation. It may be possible to design the lot layout so that more of the yellow oak trees and saplings are located in a 'no-cut' area or in the rear of fewer or differently-shaped single-family lots. It may not be necessary to preserve all the yellow oak trees or all the rock outcroppings and their plant communities, but they first need to be mapped and the single-family area of the subdivision needs to be designed with a lot layout and a road or driveway layout that gives due regard to their locations. All that the Court can determine from the evidence in the present proceeding is that the road location and lot layout of the proposed PRD has not sufficiently taken into consideration the preservation or protection of the existing yellow oak trees and sapling (regeneration) areas, the rock outcroppings and their associated uncommon plant life, or the adjacent temperate calcareous cliff wildlife habitat.

Section 800(3) of the Subdivision Regulations requires the Planning Commission, and hence this Court in this de novo appeal, to evaluate “[w]hether the proposal includes sufficient open space for active and passive recreation.”

If all the perimeter open space, including the westerly buffer area, were available for recreation, the project property would meet this criterion. However, the need to redesign the road location and the single-family area lot layout and to protect the adjacent calcareous cliff habitat and the rock outcroppings, as discussed above, will require a reassessment of whether the redesigned project contains sufficient open space for active and passive recreation to serve the number of people anticipated to reside in the redesigned project. It is possible that additional area for active recreation in the vicinity of the proposed ‘pool’ lot would be needed to offset the unavailability of some of the westerly buffer area.

Section 800(8) of the Subdivision Regulations requires the Planning Commission, and hence this Court in this de novo appeal, to evaluate “[w]hether the site is suitable for the proposed density.”

The proposed multi-family portion of the PRD is suitable for the proposed density of 37 units, if sufficient open space is reserved on the remainder of the project property for those residents and the residents of the single-family portion of the property to use for

their recreational needs. However, as the project will need to be redesigned to reserve a westerly buffer area sufficient to prohibit residents and their pets from access to the cliff edge, and as the yellow oak and rock outcrop areas will need to be mapped and the single-family area will need to be redesigned to take account of their appropriate preservation, it may be necessary to reserve additional recreational space within the current single family lot area or along the easterly or northerly project boundaries for the recreational needs of the residents living on the resulting number of redesigned lots.

As now designed, the site cannot support the proposed density of single-family lots within the single-family area of the PRD, as that density does not include due regard for the natural features as discussed above. However, Appellee-Applicant is entitled to propose as much density as the site can support. It will be possible to redesign the single-family portion of the PRD to provide a road and lot layout, an appropriate number of single-family lots, an appropriate amount of recreational open space, and the appropriate protection of those natural features.

Section 810(2) of the Subdivision Regulations requires that “[1]and shall be subdivided and improved in reasonable conformity to existing topography in order to minimize grading, cut and fill; and to retain, insofar as possible, the natural contours, so as to limit stormwater runoff and conserve the natural cover and soil.”

Once the natural features are located on the project property, it may be possible to

lay out the project roadway for the single-family lot area to reduce the need for blasting, and for cut and fill from that required under the present plan. This section only requires reasonable uniformity with the existing topography. It is designed to limit stormwater runoff so that the natural cover and soil is not lost to erosion.

As discussed above with respect to blasting and erosion control, as Appellee-Applicant does not propose to undertake the construction of house sites on the single-family lots, the Declaration of Covenants will have to be amended to address the commitment of any lot purchasers to similar conformity to the existing topography as is required by this section for the PRD as a whole.

Section 810(4) of the Subdivision Regulations requires that “suitable hardwood shade trees shall be planted at 60-foot intervals, on the average, along both sides of streets or private ways where there are or otherwise would be no trees. All trees shall measure at least 2½ inches in diameter measured at a point one foot above finished grade level.”

Appellee-Applicant proposes to plant suitable trees along Rice Lane and Carroll Drive where there are no trees. Appellee-Applicant also proposes to save trees adjacent to the proposed street in the single-family area, to meet this requirement. However, the only directive regarding the area along the frontage of the lots is that it is a so-called “selective clearing zone” in which the trees are to be saved “whenever possible.” In

order to assure that this requirement is met along the redesigned project roadway, it will be necessary for Appellee-Applicant to identify the specific trees that are proposed to be retained to meet this requirement, and to provide for their retention and preservation in the project plans.

Section 800(5) of the Subdivision Regulations requires the Planning Commission, and hence this Court in this de novo appeal, to evaluate “[w]hether the proposed development is in compliance with the . . . Zoning Bylaws and any other bylaws then in effect.” No party suggests that any bylaws other than the zoning (and subdivision) bylaws are applicable.

Section 1630.1.3 of the Zoning Bylaws requires that a PRD “proposal shall be an effective and unified treatment of the development possibilities on the project site, and [that] the proposed development plan makes appropriate provision for the preservation of . . . soils unsuitable for development, forested areas, agricultural lands, significant views, and unique, natural and man-made features.”

As discussed above in relation to §800(2) of the Subdivision Regulations, the proposed PRD does not make appropriate provision for the preservation of forested areas on the site, of the rock outcroppings on the site, or of the important adjacent temperate calcareous cliff habitat.

Section 1630.3.4 of the Zoning Bylaws requires that “[o]pen space within PRDs should preserve agricultural, recreational or natural resources, or serve as buffers to adjoining areas. Land set aside as open space should be of a size, type and location to meet its intended use.”

As discussed above in relation to §§800(3) and (8) of the Subdivision Regulations, the land set aside as open space in the proposed PRD does not succeed at meeting all three of its intended uses of providing recreational resources, preserving natural resources, and serving as a buffer to the adjacent temperate calcareous cliff.

Section 1630.3.4(a) and (d) of the Zoning Bylaws provide that open space within a PRD “may be set aside as common land, as a separate undevelopable lot, or as a portion of a single lot<sup>9[9]</sup>,” and that it “should be protected through appropriate legal mechanisms such as dedication of development rights, conservation easements or similar mechanisms. . . .” Much of the open space within the proposed PRD is set aside as

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<sup>9[9]</sup> Appellee-Applicant’s application assumes that this allows the setbacks within all of the individual single-family lots to be counted towards the open space for the PRD as a whole. Even if this interpretation of “within a single lot” is correct, the single-family ownership of the setbacks in which yellow oak trees are located is not necessarily “consistent with the best means of maintaining the resources on the site” as required by this section. However, any analysis of the open space proposed by the redesigned lot layout required by this decision is not now before the Court.

common land, meeting subsection (a). However, because it is only protected through the Declaration of Covenants, which themselves can be amended by the future homeowners' association, it may not be sufficiently protected through appropriate legal mechanisms. It may be sufficient to clarify in the Declaration that certain requirements are incorporated in the permits for the project and cannot be amended by the association without the grant of a related permit amendment by the DRB.

Section 800(5) of the Subdivision Regulations also requires the Planning Commission, and hence this Court in this de novo appeal, to evaluate “[w]hether the proposed development is in compliance with the Shelburne Comprehensive Plan . . . .” Because the provisions of the Comprehensive Plan have been incorporated in the bylaws through §800(5), they are applicable to the proposed development. However, only specific provisions of a plan are enforceable in this way; nonregulatory statements in a town plan are not enforceable in this way unless more specific zoning or subdivision regulations implement those statements. In re: Appeal of Agnes Mitchell Trust, Docket No. 47-4-01 Vtec (Vt. Envtl. Ct., February 26, 2002), slip op. at 6-7 (citing Kalakowski v. John A. Russell Corporation, 137 Vt. 219, 225-26 (1979)). See also In re Molgano, 163 Vt. 25, 30-31 (1994) (under Act 250, zoning bylaws must be used to interpret the meaning of a town plan, to avoid giving “nonregulatory abstractions” in the town plan the “legal force of zoning laws.”); In re: Appeal of Andersen, Docket No. E95-075 (March

25, 1996), slip op. at 2.

Appellants ask the Court to apply Objectives 1, 2, 3, and 4 in the “Rural Land Use” section beginning on page 9 of Volume II of the Comprehensive Plan, and to apply Objectives 2, 3, 4, 5, and 8 in the “Natural and Visual Resources and Land Conservation” section beginning on page 13. Appellee-Applicant argues that because the project property is located in the Residential-Commercial zoning district and not in either of the two “Rural” zoning districts, the “Rural Land Use” section of the Comprehensive Plan is not applicable.

However, in Part II of the Comprehensive Plan the entire town is first<sup>10[10]</sup> analyzed in terms of only four categories of land use: Village; Rural; Route 7 North Corridor; and Natural and Visual Resources and Land Conservation. These four categories are functional categories, not specifically linked to specific zoning districts. That is, these goals and objectives and implementation discussions are applicable to any locations within the Town that functionally contain the resources discussed.

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<sup>10[10]</sup> Part II goes on to discuss the goals and objectives for the recreation, housing, transportation and energy needs of the town, also without regard to specific zoning districts.

Comprehensive Plan “Rural Land Use” Objective 1 states that “[l]ocations within the Town that contain important natural resources, including, but not limited to . . . forests, significant natural areas, [and] critical wildlife habitat . . . shall be identified and protected from unwise development.” This objective requires a two-step process: that the locations of important natural resources be identified, and that they be protected from unwise development. However, although the “Natural Features” Map (Map 4 in the Comprehensive Plan) shows two dots<sup>11[11]</sup> in the approximate location of the project property and the adjacent temperate calcareous cliff, it is not possible to determine from the map and the associated discussion in the text of the Comprehensive Plan what natural features are identified by the two dots, or their exact location. Without specification in the Comprehensive Plan itself, Rural Lands Objective 1 remains a nonregulatory provision, simply exhorting the town to implement specific mechanisms to identify such features and to protect them from development. It cannot be applied to this application through §800(5) of the Subdivision Regulations.

Comprehensive Plan “Rural Land Use” Objective 2 states that resources identified on the Natural Resources and Inventory Map “shall be conserved to the greatest extent reasonably possible in the course of review and approval of land subdivision and

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<sup>11[11]</sup> In the legend of Map 4, a dot represents a “rare, threatened or endangered species or natural community.”

development applications.” For the same reasons, assuming the map referred to in this objective is Map 4 of the Plan, because the map and the plan discussion, taken together, do not identify the particular natural features, it also remains a nonregulatory provision that cannot be applied to this application.

Comprehensive Plan “Rural Land Use” Objective 3 states: that “[a] clustered pattern of development which conserves the rural character and open land for uses such as agriculture and recreation by requiring creative and innovative subdivision arrangements in a pattern which is sensitive to the environment shall be encouraged.” This is another provision that is merely hortatory and cannot be applied to this application through §800(5) of the Subdivision Regulations. However, this objective has been carried out in the provisions of the Zoning Bylaws applicable to PRDs and in the Subdivision Regulations applied to this application as discussed extensively above.

Comprehensive Plan “Natural & Visual Resources and Land Conservation” Objective 2 requires that “[w]ildlife habitat shall be protected, especially in contiguous locations, to provide support for a healthy and diverse population of the native land and water based plants and animals.”

As discussed above, the proposed PRD does not provide protection for the essential bobcat habitat on the adjacent calcareous cliff and fails to meet this objective.

Comprehensive Plan “Natural & Visual Resources and Land Conservation”

Objective 3 states that “[t]he alteration or disturbance of significant natural areas shall be minimized, and such areas shall be reasonably available to appropriate public access.”

As discussed above, the proposed PRD does not minimize the alteration or disturbance of the Dry Oak-Hickory-Hophornbeam forest and particularly the yellow oak and rock outcropping features within that forest, nor does it minimize the disturbance of the adjacent calcareous cliff. Public access to near the cliff edge is not appropriate, given the importance of the cliff habitat in the bobcat life cycle.

Comprehensive Plan “Natural & Visual Resources and Land Conservation”

Objective 4 states that “[I]and use practices and development shall be conducted in such a way that . . . viable habitat conditions for . . . terrestrial wildlife are maintained or improved.”

As discussed above with regard to §§800(2) and 800(7) of the Subdivision Regulations, the proposed PRD design does not maintain viable habitat conditions for bobcat use of the important adjacent temperate calcareous cliff habitat, and therefore also does not comply with this objective of the Comprehensive Plan. It remains possible that a redesign of the single-family lot area of the proposed PRD and of the westerly buffer area could produce a proposal that could comply with this objective, but such a proposal is

not before the Court for review in the present appeal.

Comprehensive Plan “Natural & Visual Resources and Land Conservation” Objective 5 provides that “[t]here shall be no development which would cause alterations to the Town’s open lands, . . . ridgelines or roadside views in such a way that would intrude upon or diminish the scenic beauty of Shelburne.” Appellants argue that this objective applies to alterations of the beauty of the forest and plant communities on the site itself. However, the term ‘beauty’ is modified in this objective by the term ‘scenic,’ and must be interpreted in light of the analysis of ‘visual resources’ in Part I of the Comprehensive Plan (at pages 23-24).

The Comprehensive Plan discusses conserving the Town’s ‘visual resources’ in terms of an inventory of important views within the Town and from Lake Champlain back towards the Town. These include landscape views from public roads and significant vantage points. The proposed PRD does not intrude upon or diminish the scenic beauty of Shelburne, as the westerly buffer area protects views of the adjacent cliff and cliff edge (ridgeline) from lands in the LaPlatte River Valley and from the lake, to the west and below the project property. The potential view from the cliff edge on the project property out over the valley and the lake is also preserved by the proposal, as the vantage

point<sup>12[12]</sup> is located in the westerly buffer area and will not be developed. In addition the development is adequately screened from Route 7, which itself is sufficiently developed in the foreground and middleground of this view so that even if more houses on the easterly hillside of the development could be seen from Route 7, it would not diminish the scenic beauty of Shelburne.

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<sup>12[12]</sup> Indeed, any redesign of this area will also have to address the tension between the development pressure caused by the existence of this vantage point and the need to protect the adjacent temperate calcareous cliff for wildlife habitat, to protect the view of the cliff edge from below and to the west, and the need to preserve the rock outcroppings near the vantage point.

Comprehensive Plan “Natural & Visual Resources and Land Conservation”

Objective 8 states that “[d]evelopment in forested areas shall include a forest management plan.”

Appellee-Applicant argues that the site plans showing areas of cutting restrictions, read together with the Declaration of Covenants applicable to the homeowners’ association (the Declaration of Covenants, Exhibit 11, especially §4.5 and see also §§10.1, 10.2, 13.1 and 13.6), should suffice as the “forest management plan” required by this section. However, they do not constitute a forest management plan, primarily because they do not include any statement of the outcome (goals and objectives) sought to be accomplished by the management of the forested areas on the project property, any description or inventory of the forested elements of the property subject to the plan, any statement of actions to be taken or to be prohibited and the legal or management mechanism for doing so, or any statement of the monitoring to be undertaken to determine if the plan is achieving the desired outcome or whether it needs to be changed to accomplish that result. The so-called cutting restrictions shown on the site plans are not sufficiently defined as to who determines when it is ‘possible’ to save trees in the front buffers, or who determine what trees are ‘dead or decaying’ and when or from where they may be cleared in the side or rear buffers or in the common area, or whether in certain areas of the westerly buffer area it may be necessary to preserve saplings or seedlings of certain species such as the yellow oaks even though they may be smaller than 2” in diameter.

Moreover, nothing in the Declaration of Covenants specifically governs forest management; it simply requires that the property may be used only in accordance with the permits applicable to the property, which does not provide sufficient guidance to the property owners or the association or their contractors when the permits themselves do not include a forest management plan, and in any event the Declaration can be amended by the Association and unilaterally by Appellee-Applicant.

Accordingly, the proposed PRD does not meet this requirement of the Comprehensive Plan.

Based on the foregoing, it is hereby ORDERED and ADJUDGED that the multi-unit area of the proposed Planned Residential Development, together with the proposed recreational lot adjacent to proposed single-family lot 17, and together with the east-west segment of Carroll Drive and the associated stormwater detention area and other infrastructure to serve the multi-unit area, is approved, except that a schedule for the timing of any blasting and heavy site work shall be developed and approved taking into account the use of the adjacent calcareous cliff in the bobcat life cycle. The remainder of the proposed PRD is denied without prejudice to its redesign and subsequent applications for approval of the proposed single-family lot area and its associated roadway and infrastructure, for the reasons discussed above.

Any party wishing a judgment order under V.R.C.P. 58 in addition to the present decision and order may submit one for the Court's consideration, approved as to form by the parties, on or before August 25, 2005.

Dated at Berlin, Vermont, this 8<sup>th</sup> day of August, 2005.

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Merideth Wright  
Environmental Judge

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