

December 21st, 2023

BY HAND

Theo Kindermans, Chair
Zoning Board of Appeals
Town of Concord
22 Monument Square
Concord, Massachusetts 01742

Re: Application for Comprehensive Permit
Applicant: Thoreau Residences LLC
Project: The Residences at Thoreau
Owner: Thoreau Real Estate LLC
Property: 275 Forest Ridge Road, Concord, MA 01742

Dear Chair Kindermans and other Board of Appeals Members:

I am pleased to submit the following Comprehensive Permit Application, on behalf of Thoreau Residences LLC, for our proposed residential community - The Residences at Thoreau. Our community consists of 216 rental units located across three buildings on a 13.08± acre portion of the existing Thoreau Club site at 275 Forest Ridge Road in Concord. The attached Application and supporting documentation illustrate the Project's programming, design, and engineering, as well as its alignment with local housing goals, planning efforts, and community needs.

The project is designed to reinforce the historic character of Concord with a composition that echoes the prevalent colonial and colonial revival language of the Town's historic buildings. 275 Forest Ridge Road borders The Prescott, a successful 350-unit project built under Chapter 40B, and The Residences at Thoreau plans to continue this success right next door.

On behalf of Thoreau Residences LLC and its project team, we look forward to working with the Zoning Board of Appeals, other Town officials, and the public in the review process for this Application. We believe this project will provide the community with diverse housing options in a design that exemplifies Concord's rich history and values. Thank you in advance for your consideration and for the opportunity to contribute positively to the continued growth and prosperity of the Concord community.

Sincerely,



J.B. Gough
Managing Partner

cc: Kerry Lafleur, Town Manager
Henry Dane, Chair, Select Board
Megan Zammuto, Interim Director of Planning & Land Management
Elizabeth Hughes, Town Planner
Kaari Mai Tari, Town Clerk



Comprehensive Permit Application

Filed Pursuant to M.G.L. c.40B, §§ 20-23, and 760 CMR 56.00 et seq:



The Residences at Thoreau

275 Forest Ridge Road, Concord, MA 01742

(A 13.08 acre subdivision of Property currently owned by The Thoreau Club)

Submitted By:

Thoreau Residences LLC (the “Applicant”)

December 21st, 2023

I. Applicant and Project Summary, Local Need, Applicant Eligibility and Comprehensive Permit Request

- A. Applicant Overview
- B. Comprehensive Project Summary
- C. The Need for Affordable Rental Housing in Concord
- D. Certification of Applicant Eligibility
- E. Comprehensive Permit Request

II. Jurisdictional Requirements

- A. The Applicant
- B. Evidence of Site Control
- C. Evidence of Project Eligibility

III. Detailed Site Overview & Existing Conditions Report

- A. Site Overview, Location, Access, and Topographical Features
- B. Site and Building Design: Methodology and Approach
- C. Utility Overview
- D. Traffic and Parking Summary
- E. Stormwater Management Summary
- F. Wetland, Habitat, and Groundwater Considerations
- G. Sustainability Considerations

IV. Exhibits, Attachments, and Commentary

- A. Zoning Board of Appeals General Application
- B. Site Aerial and Photographs
- C. Preliminary Site Plans: Civil, Architectural, and Landscaping
- D. Tabulation Summaries
- E. Project Eligibility Letter
- F. Entity Information of the Applicant
- G. Evidence of Site Control
- H. Development Team Overview
- I. List of Project Waivers
- J. Wetland, Habitat, and Groundwater Maps and Exhibits
- K. Stormwater Management Report
- L. Traffic Impact Study
- M. Certified Abutters List



I. Applicant and Project Summary, Local Need, Applicant Eligibility and Comprehensive Permit Request

A. Applicant Overview

The applicant for this project is Thoreau Residences LLC, which is a single purpose entity under the control of Thoreau Real Estate LLC, an affiliate of Pinebrook Group LLC (“Pinebrook”). This entity will adhere to the limited dividend requirements and has the necessary qualifications to handle the planning and development of multifamily housing in accordance with Chapter 40B in Concord, MA. Pinebrook, under the leadership of its Managing Partners, J.B. Gough and Malachy Burke, purchased The Thoreau Club in May 2022, and plans to only add to this community staple with a beautiful multifamily housing complex to the north of the Club. Pinebrook has put together a highly-accomplished development team possessing considerable experience designing, permitting, and executing numerous multifamily and Chapter 40B development projects.

B. Comprehensive Project Summary

The Project, known as The Residences at Thoreau, is a proposed Chapter 40B multifamily development project in West Concord off of Forest Ridge Road near the town borders of Concord and Maynard. The community consists of 216 rental apartment units located on a 13.08± acre parcel (the “Site” or the “Property”) on the northern portion of the 33.2± acre parcel numbered 275 Forest Ridge Road. 275 Forest Ridge Road is the current home of The Thoreau Club, a multi-purpose health club providing tennis, fitness, group exercise, personal training, swimming, and community events to the Town of Concord and greater Boston’s surrounding communities.

The project site is surrounded by three other residential communities, which have all been constructed within the last twelve years. Directly to the southwest of the property, The Prescott at Concord, located at 1 Nathan Pratt Drive, is another Chapter 40B project delivered in 2012. The community consists of 350 rental apartment units across 11 three-story buildings, including 48 two-story townhome units. Further, to the northwest of the site, located on Black Birch Lane, is Black Birch II, an over-55 planned residential development community consisting of 15 single family detached and carriage-style homes, as well as 5 attached duplex townhouses providing an additional 10 units. Finally, to the west of the property, located on Sweet Birch Lane, sits an additional 8 single family detached homes, as well as 4 attached duplex townhouses providing an additional 8 units, all constructed as the second phase of the Black Birch II planned residential development.



The Residences at Thoreau proposed project will be a brand new development of land currently occupied by fields and forestry, and the development will not disrupt, displace, or terminate any of the core operations at The Thoreau Club. The community will be developed by Pinebrook through the Applicant, Thoreau Residences LLC. The site will consist of three separate, complimentary buildings joined together by open space at the interior of the site that will greatly enhance the sense of community among residents. Each building will be three stories in height, and there will be no underground levels as all parking will be above-ground and will wrap around each building. The project includes a total of 397 surface parking spaces, including 12 accessible spaces, which provides an average of 1.84 spaces per unit.

The Residences at Thoreau project is in alignment with many of the Town of Concord's goals and objectives. The goals and objectives achieved through this development include, but are not limited to:

- **Housing Goals** - The creation of 216 units of multifamily rental housing, including 54 units that will be deemed affordable housing units available to households earning no more than 80% of the area median income (AMI) as determined by the Boston-Cambridge-Quincy, MA HUD Metro Fair Market Rents (FMR) area. This development will broaden the availability of diverse housing options in Concord, including a wide range of options for families, with more than 57% of the units consisting of 2 and 3 bedrooms. Furthermore, the development team is committed to addressing issues of climate change from both the perspective of adaptation and resilience as outlined in the Town of Concord's Housing Production Plan (HPP) FY 2023-2028.
- **Sustainability Goals** - This project is committed to using natural resources wisely. The project and its development team will practice low impact development techniques wherever possible and will use substantial efforts to reduce waste and pollution through efficient use of land, energy, water and materials. Furthermore, all housing units in the development will be Energy Star Efficient. This designation includes tight construction and duct systems, properly installed insulation, high performance windows, efficient heating and cooling equipment, and Energy Star certified lighting and appliances. Additionally, the development is committed to using renewable energy sources and recycled materials where possible and is dedicated to waste reduction and conservation of resources.

The project will also have many other community benefits including:

- Continued public access to walking trails located within the property and the adjacent areas, including trails linking to The Thoreau Club's property.



- Continued operations of The Thoreau Club, a community focused multi-sport health and racquet club located on the neighboring parcel.
- As a multifamily residential development, The Residences at Thoreau will provide the Town of Concord with the opportunity to leverage the MassWorks Infrastructure Program and other grants through the Commonwealth's Community One Stop for Growth due to the fact that multifamily housing directly contributes to the goals of housing production and economic development, which are central to the MassWorks Infrastructure Program.

Below is a summary of the proposed site program, including the overall unit mix as well as the bedroom counts in each of the three proposed buildings. A summary of building area gross square footage is also included.

Site Program Overview					
Bedroom Type	Building A	Building B	Building C	Total	Unit Mix (%)
1-Bedroom Units	36	22	34	92	42.6%
2-Bedroom Units	32	38	32	102	47.2%
3-Bedroom Units	16	0	6	22	10.2%
Total	84	60	72	216	100.0%
Gross Square Footage	95,957	67,704	77,944	241,605	

Note: The 241,605 gross square footage of building area will be constructed only on the 13.08± acre parcel currently included in the 33.05± acres owned by Thoreau Real Estate LLC at 275 Forest Ridge Road, Concord, MA 01742 (Parcel ID: 2970-1-5). A breakdown of building area and impervious surface area is included later in this application.



Site Program Affordability Analysis

Bedroom Type	Unit Type	# Units	Avg. Sq. Ft. per Unit
1-Bedroom Units	Affordable	21	743
2-Bedroom Units	Affordable	27	1,068
3-Bedroom Units	Affordable	6	1,308
1-Bedroom Units	Market	71	743
2-Bedroom Units	Market	75	1,068
3-Bedroom Units	Market	16	1,308
Total Affordable Units	54	25.0%	
Total Market Units	162	75.0%	
Total Units	216	100.0%	

Note: The 54 affordable units, representing 25% of all proposed units, will be rented only to residences earning no more than 80% of the area median income (AMI) with rental rates determined in accordance with the Boston-Cambridge-Quincy, MA HUD Metro Fair Market Rents (FMR) area.

The attachments in **Section IV.C** of this application detail the specific plans and specifications of the proposed multifamily development named The Residences at Thoreau. Together the “Site Plans” consist of the following prepared by various members of the Development Team:

- The “Architectural Plans” prepared by The Architectural Team, Inc. outline the structural layout, exterior designs, and elevations of The Residences at Thoreau. The Architectural plans are titled “Thoreau Club Housing Design Set.”
- The “Civil Plans” prepared by Allen & Major Associates, Inc. outline the preliminary civil engineering plans that will dictate the manner in which The Residences at Thoreau will be constructed. The Civil Plans are titled “Multi-Family Site Development: Residences at Thoreau.”
- The “Landscaping Plans” prepared by Copley Wolff Design Group, Inc. outline the preliminary approach to landscape structure and design for The Residences at Thoreau. The Landscaping Plans are outlined on sheets L-000, L-100, and L-100 at the end of the Civil Plans.



C. The Need for Affordable Rental Housing in Concord

According to the most recent publishing of the Subsidized Housing Inventory (SHI) by the Executive Office of Housing and Livable Communities (EOHLC), Concord has 715 units classified as low or moderate income housing units. This falls below the 10% requirement under Chapter 40B and the Chapter 40B Regulations.

The Residences at Thoreau project will have 216 units of housing, all of which will count towards the Town of Concord's SHI count. This project will allow Concord not only to surpass the 10% minimum threshold requirement under Chapter 40B, thereby meeting the State's requirements, but also to remain compliant above this 10% threshold for years to come.

Furthermore, this project introduces a diverse set of rental housing options across 216 units, more than 57% of which are 2 and 3 bedroom units designed for families. This helps Concord achieve a wide range of housing goals as set forth in the most recently published Housing Production Plan (FY 2023-2028) including:

- Achieving and maintaining the state goal under Chapter 40B of having at least 10% of Concord's year-round housing units counted towards the Subsidized Housing Inventory.
- Expanding the range of affordable housing options available in Concord.
- Increasing the variety of rental housing options, especially for families.
- Promotion of the protection of natural resources and climate change adaptation and resilience.
- Fostering diversity, equity, and inclusion in the Concord community through the creation of affordable family housing units.

The location of The Residences at Thoreau is central to the project and will serve the Town well in meeting the needs of the community. The property is adjacent to The Prescott, a successful 40B development located at 1 Nathan Pratt Drive in Concord. This allows The Residences at Thoreau to serve as a continuation of an already successful area for 40B housing development without further disturbing the Concord community. Additionally, this project is located next to The Thoreau Club, a year-round multi-sport health and fitness club. The Thoreau Club is a major commercial facility with as many as X campers, Y families at the pool, and Z tennis and fitness goers at peak times in the summer. The addition of additional housing units will have a minimal impact on the area, which already experiences an influx of community members in and throughout the premises year-round. Moreover, many of the surrounding lots that touch the property including parcels with ID's 2970-1-7 (known as 27X Forest Ridge



Road), 2970-1-10 (known as 8X Forest Ridge Road), 2970-1-6 (known as 10X Forest Ridge Road), and 2970-1-9 (known as 9 Forest Ridge Road) are owned by the Town of Concord as marked at municipal conservation land. This significantly reduces the number of abutters immediately next to the site in which this project will be constructed, allowing for fewer community members to experience any impacts from the development of the apartments.

D. Certification of Applicant Eligibility

The Applicant hereby certifies that it is eligible to proceed with the Project under the rules and regulations of Chapter 40B. The Applicant certifies that:

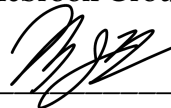
1. The Applicant is a Limited Dividend Organization and will abide by all regulations and restrictions imposed under this designation in accordance with Massachusetts' Chapter 40B guidelines.
2. The Project has received its letter of Project Eligibility from MassHousing and is thus eligible to receive funding for a Chapter 40B project.
3. The Applicant possesses sufficient control of the Site to be eligible to proceed with the Project under the rules and regulations of Chapter 40B.

E. Comprehensive Permit Request

The plans, renderings, drawings and reports pertinent to the Project, which may be supplemented during the hearing process, are outlined in detail in later sections of this Application. The Applicant looks forward to discussing these materials and the Project as a whole, a development which will compliment Concord's rich history while providing the Town, as well as the Commonwealth, with much needed inclusive and affordable housing. The Applicant kindly requests that the Zoning Board of Appeals open the public hearing pursuant to the rules and regulations of Chapter 40B.

Respectfully submitted,

Thoreau Residences LLC
By its Manager,
Pinebrook Group LLC



By: Malachy Burke, duly authorized.



II. Jurisdictional Requirements

A. The Applicant

The Applicant, Thoreau Residences LLC, together with its affiliate Pinebrook Group LLC, is a private equity real estate group which invests in, owns, develops, and manages real estate across various asset classes. Pinebrook specializes in unique investment projects where creativity and expertise can drive value and create vibrant, inclusive, and welcoming properties that enhance the communities in which it operates.

The Applicant certifies that it will adhere to all rules and regulations as established under Chapter 40B, and that it possesses the necessary site control and eligibility from MassHousing, as outlined below, to proceed with the Project.

B. Evidence of Site Control

The Applicant, as part of its project eligibility application to MassHousing, submitted the necessary documentation to evidence its sufficient control of the Property. For reference, a copy of the Property Deed serves as evidence of site control by Thoreau Real Estate LLC and is attached hereto in Section IV.G. Further, a copy of the Operating Agreement between Thoreau Real Estate LLC and Thoreau Residences LLC, as evidence of this site control transferred to the Applicant, is also attached hereto in Section IV.G.

C. Evidence of Project Eligibility

On December 20th, 2023, MassHousing issued its written letter certifying the eligibility of the Project under the rules and regulations of Chapter 40B. A copy of this eligibility letter from MassHousing is attached in Section IV.E herein.

III. Detailed Site Overview & Existing Conditions Report

A. Site Overview, Location, Access, and Topographical Features

The Residences at Thoreau development site sits towards the end of Forest Ridge Road in West Concord near the town borders of Concord, Acton, and Maynard. Forest Ridge Road is a private road that begins from Main Street (Route 62) across from the Valley Sports Arena and



dead ends at the driveway to The Thoreau Club. Along Forest Ridge Road is located the Minute Man Arc office and community center, the Riverbend condominium complex, and relatively new residential developments on Black Birch Lane and Sweet Birch Lane. The specific project site for The Residences at Thoreau is bound by forestry to the immediate north, The Thoreau Club to the south, and residential neighborhoods to the east and west. To the east of the site, separated by conservation land owned by the Town of Concord, is Border Road, which has a handful of single family residences. To the west and southwest of the project site is the new planned residential development community, Black Birch II, which developed single family and attached duplex townhomes on Black Birch Lane and Sweet Birch Lane in 2016 and 2018, respectively. Immediately on the other side of Sweet Birch Lane is Nathan Pratt Drive, which is home to The Prescott at Concord (“The Prescott”). The Prescott is a 350-unit Chapter 40B multifamily residential development built in 2012. These 350 units are spread throughout 11 three-story buildings, as well as throughout two-story townhome structures containing 48 of the units.

While the site of The Residences at Thoreau is tucked away on the outskirts of the Town of Concord, the location is still very suitable for residential projects, as further evidenced by the numerous residential developments described above in the site’s immediate vicinity. Just a half mile away from the site is the Powder Mill Plaza, which provides essential amenities such as a Stop & Shop grocery store, a Walgreens Pharmacy, and an urgent care center. The site also offers banks, a few restaurants, and a dry cleaner. At the foot of Forest Ridge Road is Valley Sports Arena, which provides access to hockey lessons and league play, as well as ice skating lessons for kids and adults of all ages. The Residences at Thoreau site is also a six-minute drive (two and a half miles by car) from the West Concord MBTA station which provides direct access to Boston’s North Station via the Fitchburg Commuter Rail line. Two minutes further down Main Street (Route 62) and residents would arrive at Route 2, one of the main state highways in Massachusetts providing easy access into downtown Boston. Other local amenities within four miles by car from the project site include Concord Country Club, Emerson Hospital, Thoreau Elementary School, the Baker Avenue Office Park, Concord Montessori School, Concord Middle School, and a handful of other grocery stores.

The Residences at Thoreau project site is specifically located on a 13.08± acre parcel that is part of the larger 33.2± acre parcel currently home to The Thoreau Club in West Concord. Located at 275 Forest Ridge Road, The Thoreau Club property consists of a 43,000± sq. ft. clubhouse, eleven tennis courts, three swimming pools, and a 12,000± sq. ft. building used for club events and corporate outings. The current owner of The Thoreau Club’s 33.2± acre parcel is Thoreau Real Estate LLC, an affiliate of Pinebrook Group LLC, who acquired the Club and its land in May 2022. The intent is to subdivide the lot into two separate parcels, one parcel for the continued use of The Thoreau Club and its core operations, and the second parcel for the



residential development. The property sits within the Limited Industrial Park #2 district, which does not permit multifamily residential use by right under the Town of Concord Zoning Bylaw. However, The Thoreau Club property used to be a much larger site. Within the last several years, however, portions of its land were sold and granted special permits to construct two planned residential developments. These special permits resulted in the creation of the residential communities on Black Birch Lane and Sweet Birch Lane. So while the Zoning Bylaw does not permit residential uses by right, the precedent for residential development in this area of West Concord is strong.

The parcel is primarily wooded with some open space dedicated to a current day-camp with outdoor amenities including a pool and play fields. The site slopes from elevation 204.0 in the northeast corner of the parcel to elevation 172.00 in the center of the open space. The current site soils are classified as Hinckley loamy sand, 3 to 8 percent slopes, Hinckley loamy sand, 8 to 15 percent slopes and Hinckley loamy sand, 15 to 25 percent slopes. Based on the United States Department of Agriculture Soils Report these types of soils are considered Type “A” soils which have a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

The project site is well served by existing utility infrastructure located within Forest Ridge Road. The project will utilize municipal water, gas, telecommunications, and electricity. Sewer will be managed via an on-site wastewater treatment system and will not connect to the municipal sewer system. Stormwater will be handled and managed on site through the use of best management practices as outlined in the MassDEP Stormwater Handbook and Town of Concord regulations.

Construction period impacts will be temporary and minor, such as traffic, noise, and equipment emissions. The proponent will implement a construction management plan (CMP) to minimize disturbances. The proponent will also implement an Operations & Maintenance Plan (O&M) and Long Term Pollution Prevention Plan (LTPPP) to provide for inspection and maintenance of structural Best Management Practices and for measures to prevent pollution associated with the project.

The Applicant herein has requested certain waivers to the requirements outlined in the Town of Concord Zoning Bylaw, which can be found in detail in Section IV.I.



B. Site and Building Design: Methodology and Approach

The proposed Thoreau club housing features three residential buildings that are arranged around large courtyards. The layout and massing of the buildings are designed such that it provides a sense of order to the users and surroundings.

The architectural character of the buildings reinforces the historic character of Concord with a composition that echoes the prevalent colonial and colonial revival language of the town's historic buildings.

The main massing and the character are conceived to become a welcoming large house or an inn in the Colonial Revival tradition. The main arrival massing is set on axis to the road providing a picturesque quality with a clear central figure and the splaying wings on either side. The main entry is emphasized with a pedimented doorway and a continuous porch that wraps the front facade. Pedimented pavilions at either end bookend the building and these allow for seating or an area for outdoor entertaining. All the buildings are fully elevated with unit entrances facing the street creating an active pedestrian realm and opportunity for contact and exchange. The form and scale of the buildings respond to the immediate context harmoniously and design elements like balconies, rhythmically disposed further modulates the building scale while capturing views of the surrounding green.

The formal expression with the broad pillars, large shuttered windows, and dormers and chimneys create a beautiful view and provide a warm and robust presence to the site. With these classical details and proportions, the design takes on the traditional aesthetic of Concord. The brick chimney - a direct reference to much admired historical buildings in Concord—provides a strong vertical counterpoint to the powerful base. The architectural character applies a system of balance, proportion, and material expression such that buildings dialogue in a common rhythm. The siding on the buildings is beveled clapboard responding to the local Concord style with details like pilasters creating a public scale.

The parking spaces are nestled into the landscape. The height of the buildings is generally compatible with the existing surrounding structures and is zoning compliant, in tandem with its neighbors and aligning with the larger context.

C. Utility Overview

The site is serviced by municipal water, on-site septic system, natural gas, underground electric, telephone and cable. All utilities are currently available within Forest Ridge Road. The project will require a private wastewater treatment facility with subsurface effluent disposal that will



treat approximately 50,000 gallons per day of Title 5 flow. This will require permitting through MassDEP and require BRP WP 83 Application to Prepare a Hydrogeological Evaluation and a BRP WP 79 Individual Permit for Groundwater Discharge from Sewage Treatment Plant.

D. Traffic and Parking Summary

A Traffic Impact and Access Study dated December 2023 was prepared by MDM Transportation Consultants, Inc. (MDM). The TIAS report documents existing operational and safety-related characteristics of roadways serving the development Site, estimates future year operating characteristics of these roadways independent of the development, estimates development-related trip generation, and identifies incremental impacts of Site-related traffic. The TIAS was prepared in accordance with requirements and standards for the preparation of traffic studies as jointly issued by the Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs/ Massachusetts Department of Transportation (EEA/MassDOT). The TIAS found that the proposed residential development is expected to generate approximately 80 vehicle trips during the weekday morning peak hour (18 entering and 62 exiting), 84 vehicle trips during the weekday evening peak hour (51 entering and 33 exiting) and approximately 980 vehicle trips on a weekday.

The TIAS concluded that the proposed residential development will be accommodated well within capacity of Main Street, Forest Ridge Road and the adjacent intersections with no discernable impact to traffic flow and at operating levels compared to No-Build conditions. Accordingly, no off-site roadway improvements are warranted to accommodate the project. The available sight lines at the Site Driveway intersection with Forest Ridge Road will exceed the recommended sight line requirements from AASHTO. The proposed parking supply, while less than the zoning requirement, will be adequate to accommodate the peak parking demands for the Site. Access/egress improvements, pedestrian accommodations, and TDM program as outlined in the Conclusions and Recommendations described in the TIAS will establish a framework of minimizing Site traffic impacts by encouraging non-motorized travel modes and pedestrian accommodation that is compatible with other projects in the area.

Section IV.L contains the submitted Traffic Study outlining these considerations in greater detail.

E. Stormwater Management Summary

The existing site has a limited stormwater management system and the majority of the stormwater discharges via sheet flows unmitigated to the east of the parcel toward the abutting



parcel. The submitted Stormwater Report shows by means of narrative, calculations, and exhibits that there is no increase in peak rate of runoff from the site at each of the study points for all design storm events. The stormwater management system (SMS) will incorporate structural and non structural Best Management Practices to provide stormwater quality treatment and conveyance. The Concord Stormwater Regulations require the project meet the performance standards of the Massachusetts Stormwater Management Policy which are implemented as part of the overall stormwater management plan for the proposed project. The goal of these standards is to improve water quality and protect the waters of the Commonwealth from adverse impacts due to development. The performance standards are met by implementing appropriate Best Management Practices (BMPs) as outlined in the MassDEP Stormwater Management Handbook, volumes one and two. BMPs implemented in the design will include: parking area and street sweeping, catch basins with deep sumps (48" minimum sump) and hoods, stormwater infiltration systems with pretreatment and water quality inlets (Contech CDS or approved equal).

Section IV.K contains the submitted Stormwater Report outlining these considerations in greater detail.

F. Wetland, Habitat, and Groundwater Considerations

The project site is not located in any wetland areas or wetland buffer zones. According to MassWildlife's Natural Heritage Atlas, the project site does not have any areas designated as Priority Habitat of Rare Species, Estimated Habitat of Rare Wildlife, or Certified Vernal Pools located on the property. Furthermore, as designated by the Secretary of Energy and Environmental Affairs, the project site does not fall within any Areas of Critical Environmental Concern.

As noted previously, the Project will require a private wastewater treatment facility with subsurface effluent disposal that will treat approximately 50,000 gallons per day of Title 5 flow. This system will meet all specifications and design standards required for permitting from MassDEP. Per the United States Department of Agriculture Soils Report, the soils on site are considered Type "A" soils, which have a high infiltration rate when wet as well as a high rate of water transmission. As such, the Project team is confident in the perc rates and the overall viability of a traditional, high quality wastewater treatment facility at the Site.

To disperse and treat the effluent disposal, an approximately 30,000 sq. ft. leaching field will be constructed in the northern portion of the Site, as shown in the plans attached to this Application. While a portion of the project site is located within the Groundwater Conservancy overlay district as established by the Town of Concord Zoning Bylaw, it is



important to note that the leaching field created for the Site will be located outside of this district.

Section IV.J contains maps and exhibits highlighting the above described features of the site.

G. Sustainability Considerations

The proposed Project is not expected to have any significant environmental impacts. Unavoidable impacts will be appropriately mitigated and include minor increases in trip generation and increases in impervious surface which will be mitigated through improved stormwater management and environmentally sensitive site design. The Project will not directly affect any Bordering Vegetated Wetlands or rare species habitat. The site does partially lie within the Concord Groundwater Conservation District (MassDEP Zone II) which has prohibitions to only that portion of the lot within this district/boundary.

This development will preserve much of the open space in the area around the property. The project and its development team will practice low impact development techniques wherever possible and will use substantial efforts to reduce waste and pollution through efficient use of land, energy, water and materials. All housing units in the development will be Energy Star Efficient. This designation includes tight construction and duct systems, properly installed insulation, high performance windows, efficient heating and cooling equipment, and Energy Star certified lighting and appliances. Furthermore the development is committed to using renewable energy sources and recycled materials where possible and is dedicated to waste reduction and conservation of resources. In alignment with Concord's Climate Action and Resilience Plan, the developer will explore and make best efforts to construct an all electric building, achieve high energy efficiency, achieve high standards for sustainability and resilient design, and contribute in a positive way to the new era of construction and development in Concord. Additionally, the development is committed to exploring electric vehicle charging stations, electrification of the structures such that no fossil fuels are used to heat and cool the buildings, and rooftop solar panels as well as batteries designed to reduce electricity consumption during peak hours of demand.



IV. Exhibits, Attachments, and Commentary

A. Zoning Board of Appeals General Application

Attached hereto below, please find the Zoning Board of Appeals Application entitled *General Application*, populated to reflect a Comprehensive Permit application.

