Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only *Executive Office of Environmental Affairs*
EOEA No.: 13451 R
MEPA Analyst: Bill Gage
Phone: 617-626-1025

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: School Street on-site Sewage Treatment Facility and Dandelion Village Development		
Street: School Street (Assessors Map: Map 65 Parcel 11)		
Municipality: Southborough	Watershed: Concord River	
Universal Tranverse Mercator Coordinates:	Latitude: 42° 18' 46" N Longitude: 71° 31' 43" W	
Estimated commencement date: July 1, 2005	Estimated completion date: July 1, 2006 (Phase I)	
Approximate cost: $18 million ($2 million for Phase I Sewage Treatment Plant)	Status of project design: 50% of Phase I complete	
Proponent: Security Realty Trust		
Street: 303 Worcester Road		
Municipality: Framingham	State: MA	Zip Code: 01701
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Desheng Wang		
Firm/Agency: Carr Research Laboratory, Inc.	Street: 251 W. Central St., D-36	
Municipality: Natick	State: MA	Zip Code: 01760
Phone: 508-651-7027	Fax: 508-647-4737	E-mail: deshengw@yahoo.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? ☐Yes ☒No

Has this project been filed with MEPA before? ☐Yes (EOEA No._____) ☒No

Has any project on this site been filed with MEPA before? ☐Yes (EOEA No._____) ☒No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8))	☐Yes	☒No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes	☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☐Yes	☒No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes	☒No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):_____N/A

Are you requesting coordinated review with any other federal, state, regional, or local agency?
☐ Yes (Specify ____ _____) ☒ No

List Local or Federal Permits and Approvals: NPDES Construction Permit

MA DEP BRP WP 06 – Major Groundwater Discharge Permit – review pending
Town of Southboro Conservation Commission – Negative Determination of Applicability (Phase I)
Wetland Protection Act Order of Conditions (Phase III)
Town of Southboro Planning Board (Part of Phase II and Phase III)

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

☒ Land	☐ Rare Species	☐ Wetlands, Waterways, & Tidelands
☐ Water	☒ Wastewater	☐ Transportation
☐ Energy	☐ Air	☐ Solid & Hazardous Waste
☐ ACEC	☐ Regulations	☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	57.2		
New acres of land altered		19.07	
Acres of impervious area	0	9.98	9.98
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	0	255,500	255,500
Number of housing units	0	37 (SFH)+150 (EH) or Condo	37(SFH)+150 (EH) or condo
Maximum height (in feet)	0	35	35
TRANSPORTATION			
Vehicle trips per day[ξ]	/	876 - 1167	876 - 1167
Parking spaces	/	226	226

State Permits & Approvals

- ☐ Order of Conditions
- ☐ Superseding Order of Conditions
- ☐ Chapter 91 License
- ☐ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☐ Other Permits (*including Legislative Approvals*) – Specify:

[ξ] Institute of Transportation Engineers (ITE) *Trip Generation*, 7th Edition: Single Family Detached Housing (210) = 9.57; Retirement Community (250) = 3.48.

WATER/WASTEWATER			
Gallons/day (GPD) of water use	/	88,000	88,000
GPD water withdrawal	/	N/A	N/A
GPD wastewater generation/ treatment	/	80,000	80,000
Length of water/sewer mains (in miles)	/	4 (water + sewer)	4

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

☐Yes (Specify_____) ☒No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

☐Yes (Specify_____) ☒No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

☐Yes (Specify_____) ☒No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐Yes (Specify_____) ☒No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

☐Yes (Specify_____) ☒No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

☐Yes (Specify_____) ☒No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

(a) Description of the Project Site

The project site consists of a total of 57.2 acres of land near downtown of Town of Southborough. The entire project will be developed in three Phases: **Phase I**: a tertiary private sewage treatment facility (PSTF) on 3.42 acres of land off School Street in Southborough; **Phase II:** 37 single family house (23.32 acres) on existing format lots located on Overlook Drive, Mainstone Road, and Framingham Road; **Phase III**: 150 units of Elderly Housing Complex (30.46 acres) located off Newton Street. See attached USGS locus map (Figure 1) and MGIS aerophoto (Figure 2) for general location and the project site plan for details.

There is a 10-ft sewer easement across the railroad tracks of CSX, which connects Phases II and III with Phase I. An 8-inch sewer line has been installed in a 10-inch steel case under the railroad

easement. See the as-built railroad-crossing plan (Figure 6) for details. Most of the sewage will be generated and transported from east of the railroad (Phases II and III) to the treatment and disposal site through this easement. The locations of single family houses and preliminary design of the elderly housing are illustrated in assessors' map (Figure 3) and Dandelion Village Development Plan (Figure 7, Elderly Housing).

Phase I of the project is limited to the wastewater treatment plant only (See Figures 4, 4A, and 5). The treatment plant is also reserved some capacity for possible use by Town Office and the Community Center as needed and agreed mutually.

The Phase I site is located to the north of Route 30 (Main Street), between School Street and CSX railroad, to the south of the wastewater treatment facility for St. Mark's School. The site consists of Merrimac soil (NRCS Hydrologic Class A soil), well-drained gravelly sand. The underlying bedrock is Westboro formation bedrock, which would be more than 40 ft below ground surface. The bedrock was formed during the Proterozoic Z age (620 million years ago); and is made of quartzite, schist, calc-silicate quartzite and amphibolite. The land uses of property consist of open field, shrubs, and clustered woods. Four abandoned old sewage leaching pits are located in the middle east of the property, which is fenced and covered by secondary growth of shrubs. This area will be cleaned up and used as part of new leaching field #1. Historic record review shows that the abandoned leaching pits were designed and constructed in 1971. The leaching pits stopped operation about 20 years ago in 1980s. A general plant list was documented during my site inspection for the site and its vicinity as shown in Table 1. It can be seen that the dominant plants are upland species.

Table 1. General Plant List

Trees:
White pine, white oak, red oak, red maple, white ash, Norway maple

Shrubs:
Hollow-stemmed honey suckle, stag-horn sumac, pin cherry, Russian olive, bittersweet vine, multiflora rose, Japanese barberry, willow, silky dogwood, steeple bush, poison ivy

Herbs:
Vetch, pokeweed, golden rod, hair cap moss, non-sphagnum moss, Japanese knotweed, millet, Virginia creeper.

The site surface hydrology drains from southwest to northeast, ultimately to Sudbury River Reservoir. The closest wetland is located about 280 ft to the north of the property; and over 300 ft from the proposed soil absorption system (SAS). No streams or rivers are located within 200 ft of the property. The area is not located in a 500-year or a 100-year floodplain according to MSGIS and FEMA flood insurance study. Southborough Conservation Commission made a negative determination on June 3, 2004 for the proposed project. No further conservation commission filing will be needed in the later process for Phase I.

Phase II is located in the existing residential subdivision, a total of 23.32 acres zoned as Residential B. See attached Assessor's Map. Lots belonging to this project are marked with a black dot each. Twelve

(12) ANR lots is located off Overlook Drive; nine (9) ANR lots off Framingham Road, and fifteen (16) lots off Mainstone Road. All lots are currently vacant.

Phase III is located off Newton Street. A total of 30.46 acres of land zoned as Residential B: 7.57 acres to the west of Newton Street; 22.89 acres to the east of Newton Street. The land is currently wooded.

Tables 1 and 2 summarize the land uses for existing and proposed conditions.

Table 1. Existing Land Use Table

Phase	Development	Total acres	Building Sq. ft	Pavement Sq. ft	Lawn Sq. ft	Woods Sq. ft	Total Sq. ft
Phase I	Open Hay F.	3.42	0	0	130680	18295.2	148975.2
Phase II	Open format lot	23.32	0	0	0	1015819	1015819
Phase III	woods	30.46	0	0	0	1326838	1326838
Total		57.2	0	0	130680	2360952	2491632
Total disturbance, acre			3.00				

Table 2. Proposed Land Use Table

Phase	Development	Total acres	Building Sq. ft	Pavement Sq. ft	Lawn Sq. ft	Woods Sq. ft	Total Sq. ft
Phase I	PWTF	3.42	1500	1550	84070	61855.2	148975.2
Phase II	SFH	23.32	74000	40700	222000	679119.2	1015819
Phase III	EH	30.46	180000	137000	90000	919837.6	1326838
Total		57.2	255500	179250	396070	1660812	2491632
Total disturbance, acre			19.07				

(b) Alternative Analysis

The entire project will consist of residential buildings, which generate up to 80,000 gpd of domestic wastewater per 310 CMR 15.203. There is no public domestic sewer in the Town of Southborough. The area of subdivision has very low permeable soil and cannot meet the percolation requirements in 310 CMR 15.00. Therefore, the project proponent will have to build a PSTF on-site. The PSTF will be a tertiary treatment system consisting of a Lotus system, dual dyna sand filters, and disposal fields. See attached Figure for schematic layout. The sewage sources include single-family houses, elderly housing, and possible from existing office complex, etc. if needed in the future. The facility will provide wastewater treatment functions to domestic sewage only. Table 3 summarizes the planned usage of the development for the treatment facility.

Table 3. Summary of proposed project and sewage rate

Land use	Sewage flow rate, gpd	Subtotal sewage rate, gpd	Remarks
Elderly housing, 150 units	150 per unit (Alternative 330 per unit)	22,500 (49,500)	30.46 acres

Single family houses, 37 lots Overlook Dr.	660 per lot	24,420	25000 sq. ft lot
Office, 160,000 sq. ft.	75 per 1000 sq. ft	12,000	Town, as needed at emergency
Community Center + others		3920	52,500 sq. ft, as agreed mutually
Total		62,840-80,000	Under no circumstances, the total sewage rate will not exceed 80,000 gpd

Phase III may be constructed as regular condominium. In this case, the sewage discharge rate from Phase III will be 49,500 gpd compared with elderly housing of 22,500 gpd. The Phase I treatment facility design has considered this scenario.

(c) Mitigation

In order to minimize the impact on environment, the highest water quality standards have been adopted in choosing the wastewater treatment. Tertiary treatment standard will be met before the treated water is further treated by soil absorption system building very permeable gravely sand. The site hosting the treatment facility and SAS, as described above, is currently open field, which will be mostly maintained as so under the post-development condition. The groundwater recharge will not have negative impact to the environment. At the current stage the treatment plant will not generate significant solid waste. The impact on traffic, energy, air quality, wildlife habitat, wetland, water supply, as discussed in the related section of ENF, will be negligible.

During Phase II development, sediment and erosion control measures including hay bales, silt fence, silt bags in existing road catchbasins will installed during construction of all existing house lots.

A more detailed Phase III site plan will incorporate stormwater management system to meet current town, state, and Federal rules and regulations. Given this phase of development will have to rely on the approval of the PSTF, therefore, only the preliminary site layout is prepared for the ENF review. More definite plan will be prepared later for approval.

No ENF review thresholds except for land (9.98 acres of impervious area for all three phases) wastewater (80,000 gpd) will be exceeded by this project as shown in ENF. Therefore, mitigation under other local, state, and Federal rules and regulations will be implemented on site adequately to protect the environment, which will include stormwater management system, sediment and erosion control measures, any other mitigation measures deemed necessary by the Southborough Planning Board, and/or Conservation Commission.