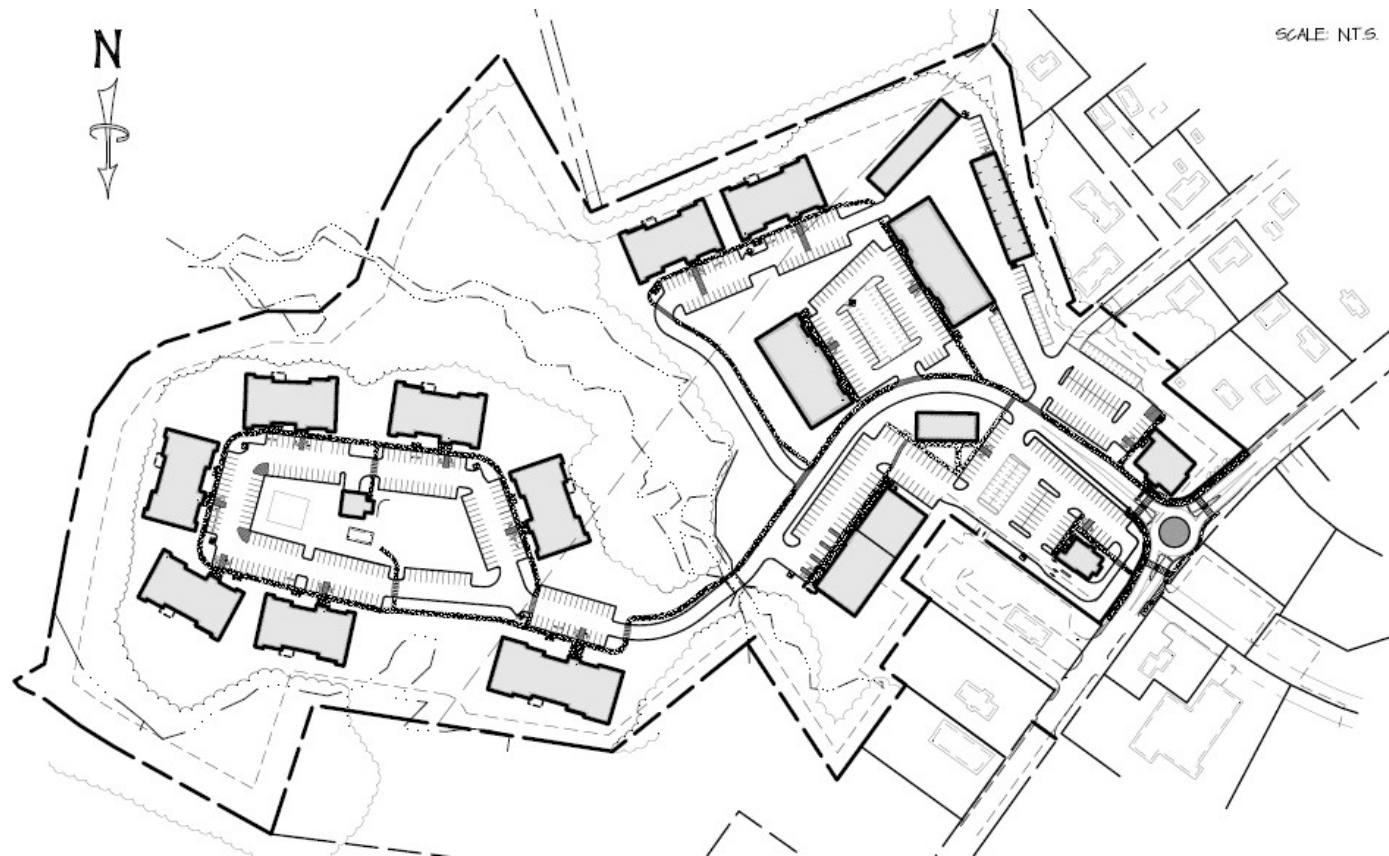




Known for excellence. Built on trust.

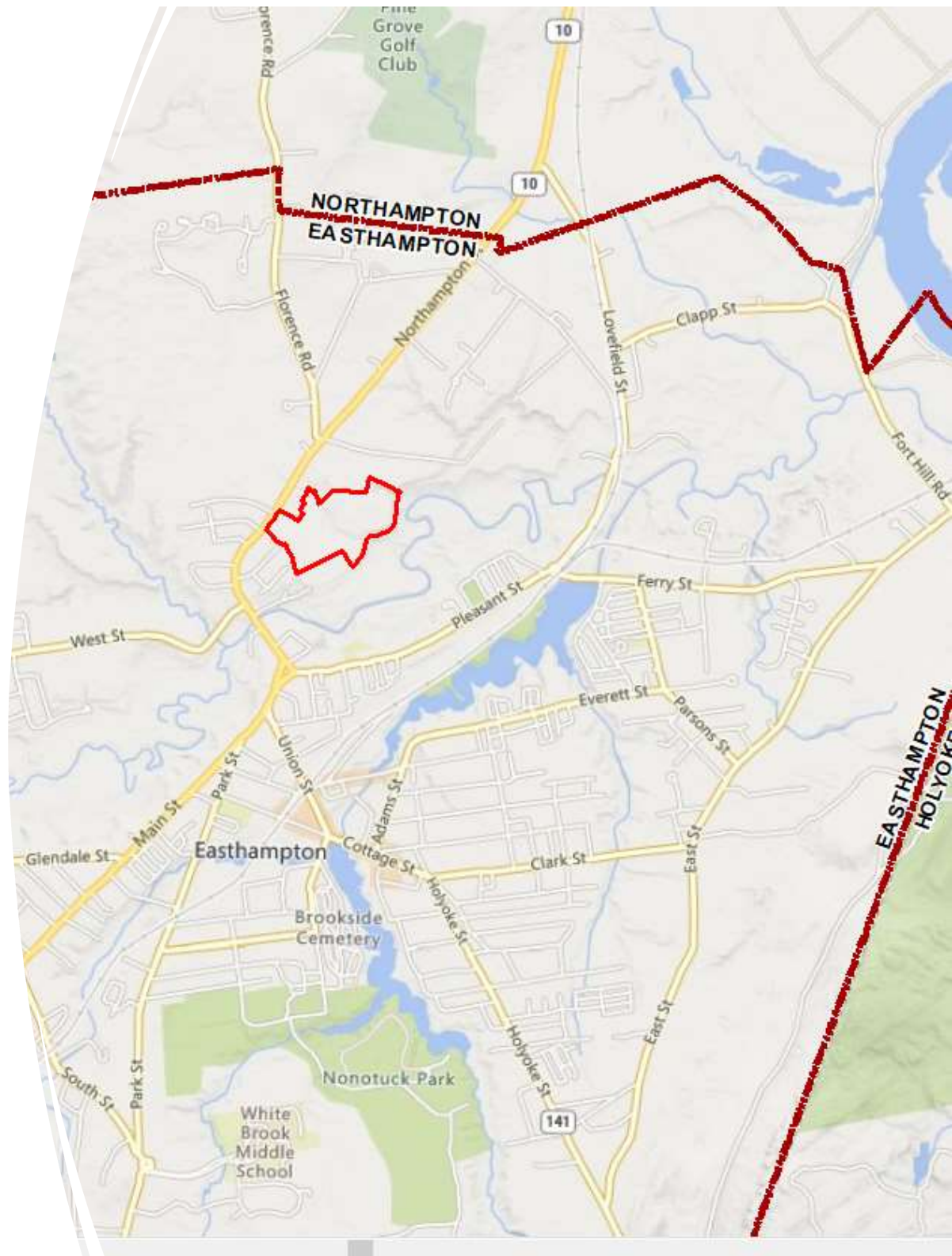
Sierra Vista Commons Project

EEA File No. 16729
July 20, 2023



Project Location

93, 95, 97
Northampton
Street (Route 10)
Easthampton,
MA



Project Overview



- **Purpose**
 - Create a variety of affordable and mixed-income housing
 - Redevelop underutilized properties to create infill development within existing residential areas
 - Develop a mixed-income and mixed-use neighborhood

MEPA Thresholds

Land Alteration Thresholds

(301 CMR 11.03(1)):

- **(a)(2): Creation of 10 or more acres of impervious cover**
 - (b)(2): Creation of 5 or more acres of impervious cover
 - (b)(4): Conversion of land in active agricultural use to nonagricultural use, provided the land includes soils classified as prime, state important, or unique by the USDA

Transportation Thresholds

(301 CMR 11.03(6)):

- **(a)(6): Generation of 3,000 or more New average daily trips (adt) on roadways providing access to a single location**
 - (b)(13): Generation of 2,000 or more New adt on roadways providing access to a single location
 - (b)(14): Generation of 1,000 or more New adt on roadways providing access to a single location and construction of 150 or more New parking spaces at a single location
 - (b)(15): Construction of 300 or more New parking spaces at a single location

State Agency Permits and Reviews

Permit

Massachusetts Department of Transportation (MassDOT)

- Vehicular Access Permit

Review

Massachusetts Historical Commission (MHC)

- Project Notification Form (PNF) submitted November 2022
- Response issued December 21, 2022 finding:
 - *"This Project is unlikely to affect significant historic or archaeological resources."*

Review

Massachusetts Endangered Species Act (MESA)

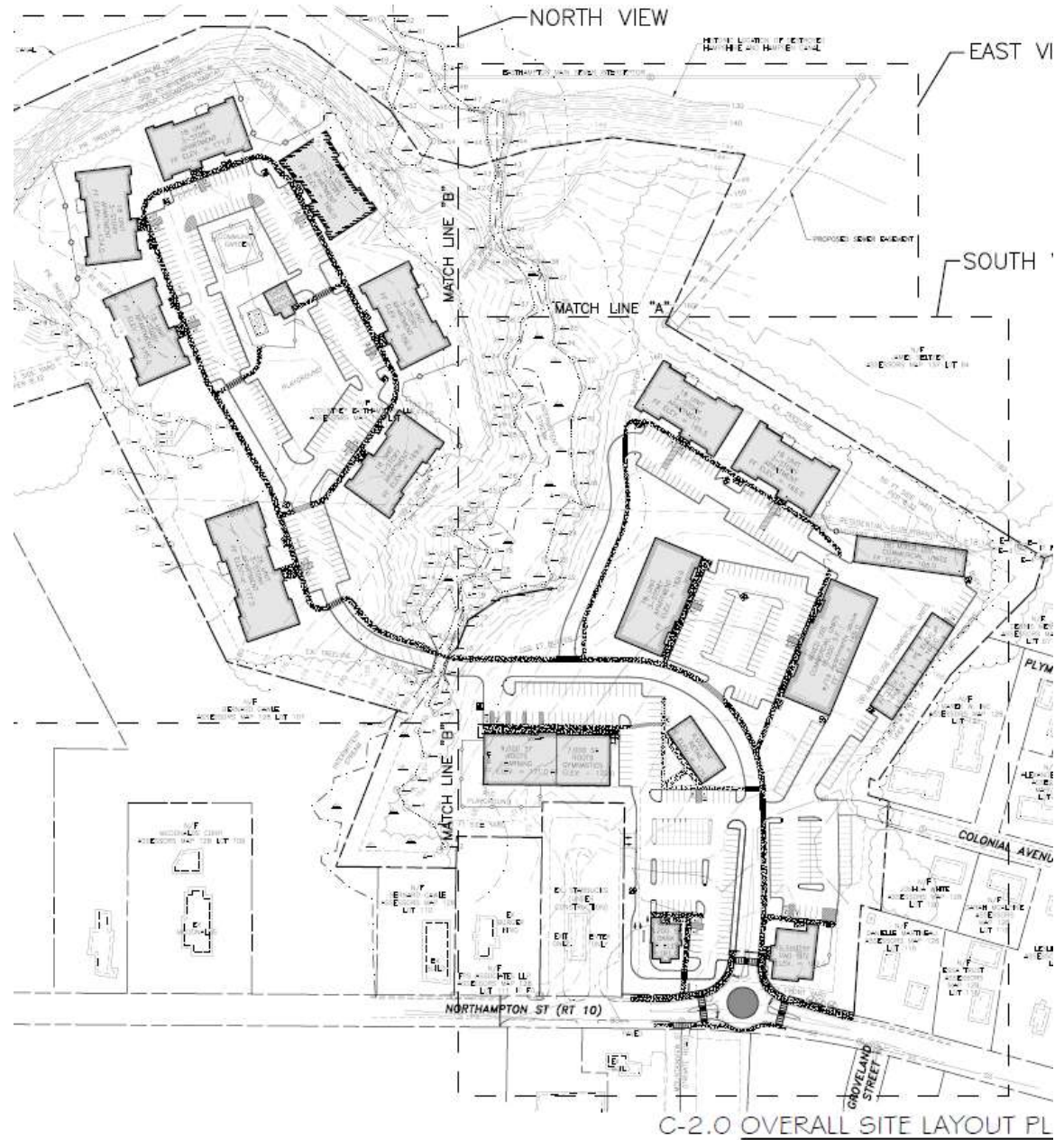
- MESA Project Review Checklist submitted November 2022
 - Response issued December 15, 2022 finding:
 - *This Project, as currently proposed, will not results in a prohibited Take of state-listed rare species.*
-

Existing Conditions

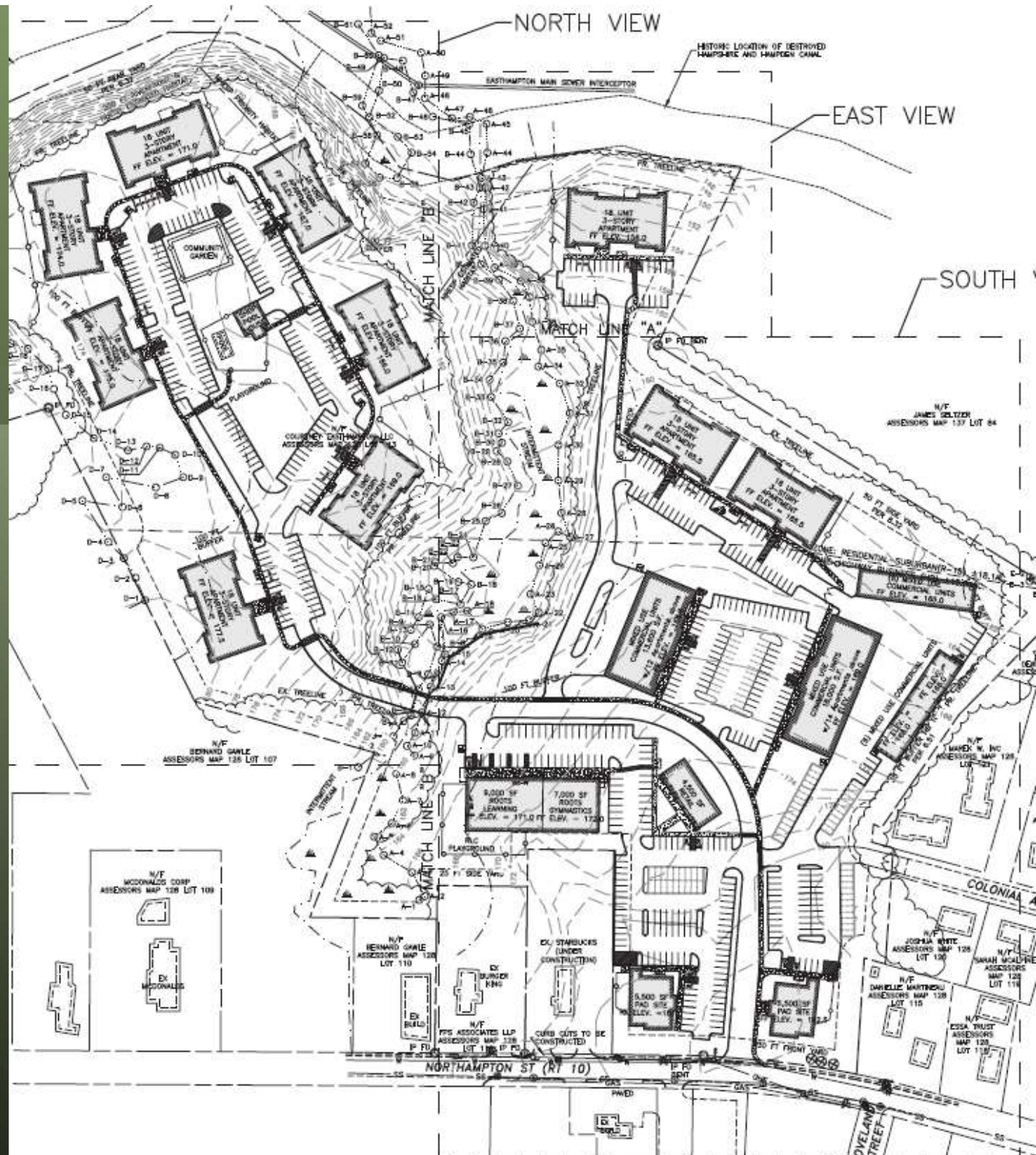


Proposed Project

- Phase 1
 - Daycare Facility
 - Gymnastics Center
- Phase 2
 - 3 mid-rise (3-story) apartment buildings
- Phase 3
 - 4 mid-rise apartment buildings
 - Bank
 - Stand-alone small retail
- Phase 4
 - Sit-down Restaurant
 - 2 Warehouse/Storage Contractor Units
 - Mixed-use Retail/Office building with Apartments Above
 - 3 Mid-rise Apartment Buildings



Design Revisions To-Date



Proposed Impacts

Land

- 21.5 acres to be Developed
 - 12.4 acres Impervious Cover
 - 4.1 acres building footprint
 - 1.3 acres internal roadways
 - 7.0 acres parking and other paved areas
 - 9.1 acres Other Altered
- 11.5 acres Undeveloped

Structures

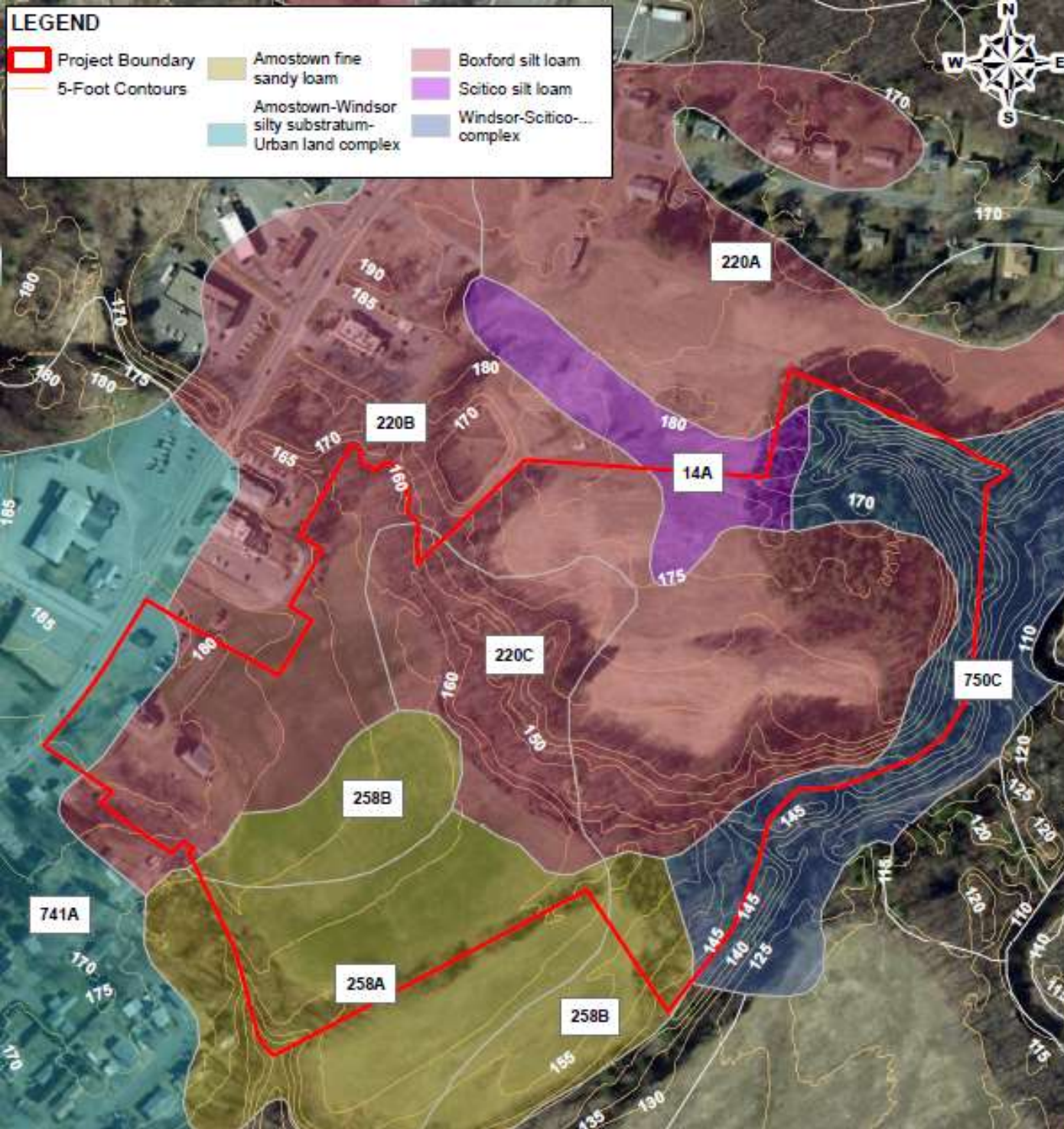
- 422,000 Gross Square Footage
- 202 apartments
- 35' Maximum Height

Transportation

- 4,382 Vehicle Trips per Day
- 510 Parking Spaces

Wastewater

- 68,820 gal/day water use & wastewater generation



- Topography:
 - Regrading of approximately 0-2 feet through development area
 - Overall, grades remaining similar to existing conditions
 - Limited grading within existing steep slopes
- Geology:
 - No change to underlying geology proposed
- Soils:
 - Most of the Site mapped as farmland soils except for Scitico silt loam (purple) & Windsor-Scitico-Amostown complex (blue)
 - Topsoil will be stockpiled for reuse onsite within restored and landscaped areas. Excess soil will be sold locally

Topography, Geology, & Soils

Open Space, Scenic Qualities, and Recreational Resources



Rare Species and Wildlife



Rare Species

No Take Determination from NHESP



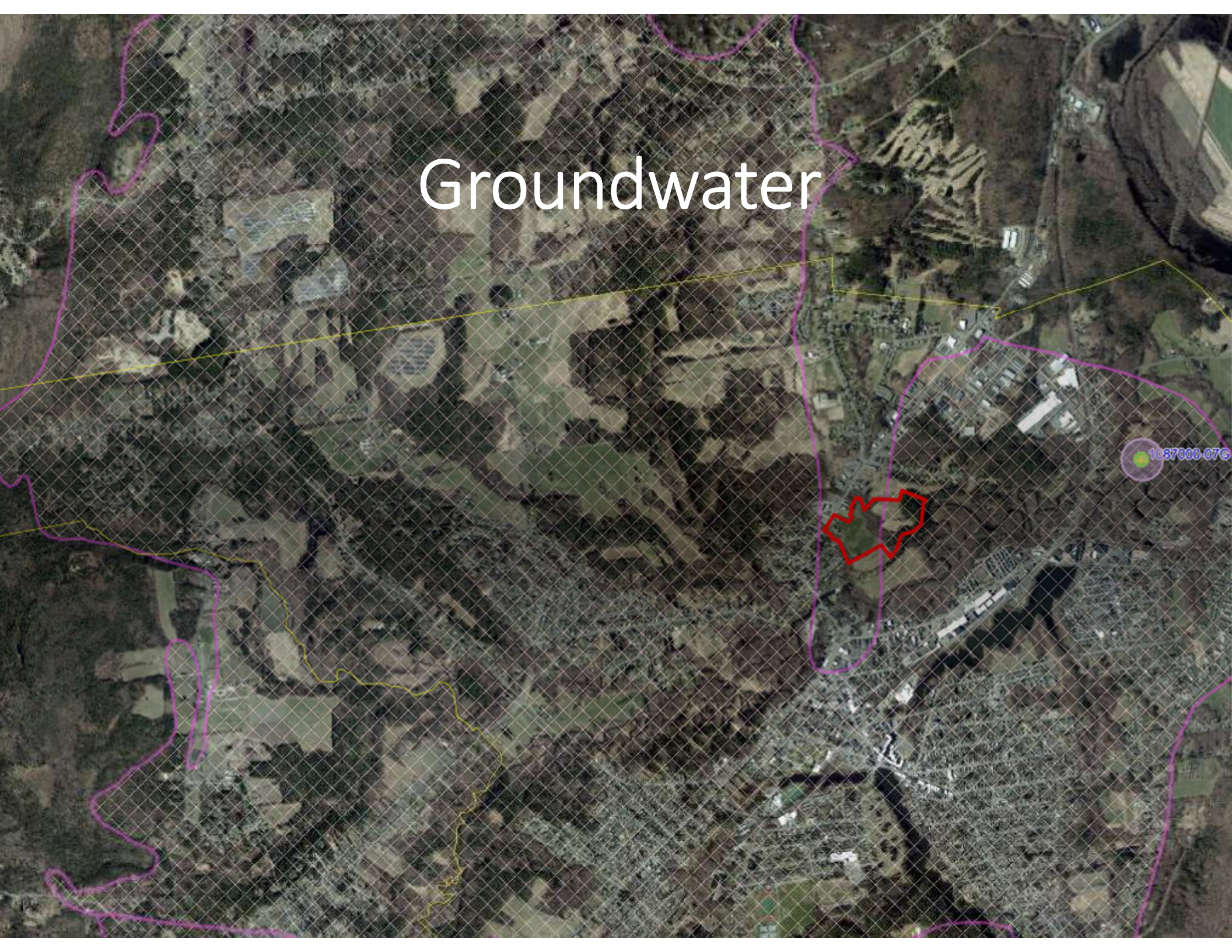
Other Species

Human commensals

Approximately 28% of site left undeveloped

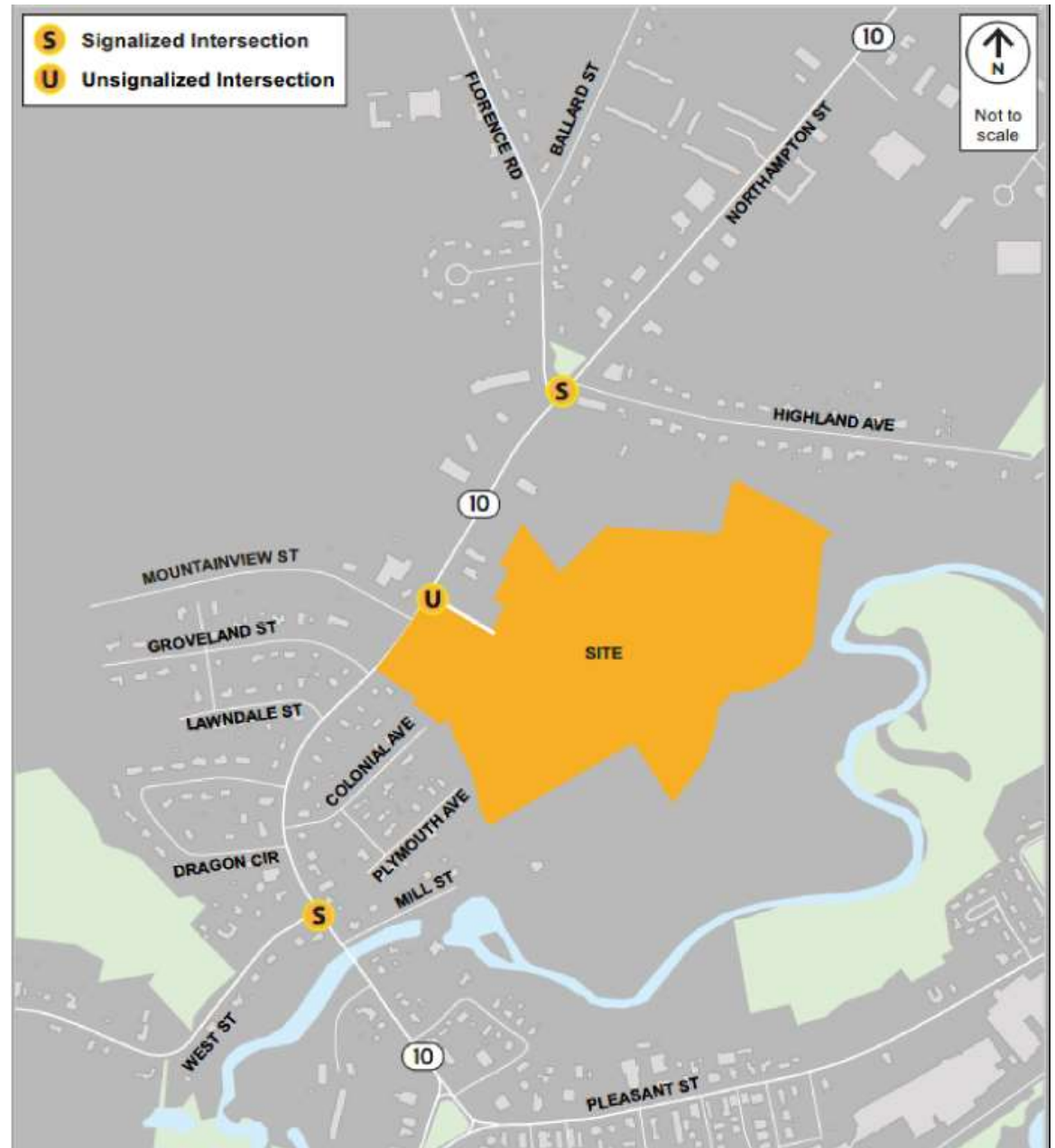
Loss of habitat for some species

Groundwater



Traffic

- Construction of 510 parking spaces
- Generation of 373 new vehicle trips during AM peak hours and 525 during PM peak hours
- Generation of 4,382 vehicle trips per day



Traffic

Intersection	Existing (2023) LOS	No-Build (2030) LOS	Build (2030) LOS	Build- Mitigated (2030) Signalized	Build- Mitigated (2030) Roundabout
Northampton St / Florence Rd / Highland Ave	AM Peak = D PM Peak = E	AM Peak = E PM Peak = F	AM Peak = E PM Peak = F		AM Peak = D PM Peak = E
Northampton St / West St	AM Peak = B PM Peak = D	AM Peak = C PM Peak = E	AM Peak = E PM Peak = F		AM Peak = C PM Peak = D
Northampton St / Site Driveway	N/A	N/A	AM Peak = F PM Peak = F	AM Peak = B PM Peak = B	AM Peak = C PM Peak = D

Transit, Pedestrian, and Bicycle Access



Utilities & Solid Waste

Stormwater

- Deep-sump, hooded catch basins to capture runoff from impervious cover and provide pre-treatment
- Peak flow attenuation provided through use of infiltration and detention basins
- Infiltration basins support groundwater recharge
- 90% total suspended solids (TSS) removal through treatment train with separators with detention basins with sediment forebays
- Phosphorus removal obtained via infiltration basins
- Construction Phase governed by SWPPP
- Long term maintenance required per prepared O&M plan

Solid Waste & Recycling

- Commercial waste management company to be contracted.
- Recycling & trash pickup to occur within development

Water & Wastewater

- Projected use/generation of 68,820 gal/day
- Approximately 1.8% of total allowable City use for sewer and water
- City has approximately 58% of water and 34% of sewer capacity available
- Fee for use

Natural Gas

- Within moratorium area; no capacity available

Electricity & Telecommunication

- Provider capacity available



High Risk from Urban Flooding

- Tier II Modeling Recommended
- Planning Horizon of 24-hour, 10-year (10% annual chance) storm event with 2070 precipitation depths
- Reduced peak stormwater runoff flow rate (cfs) and volume (acre-feet)



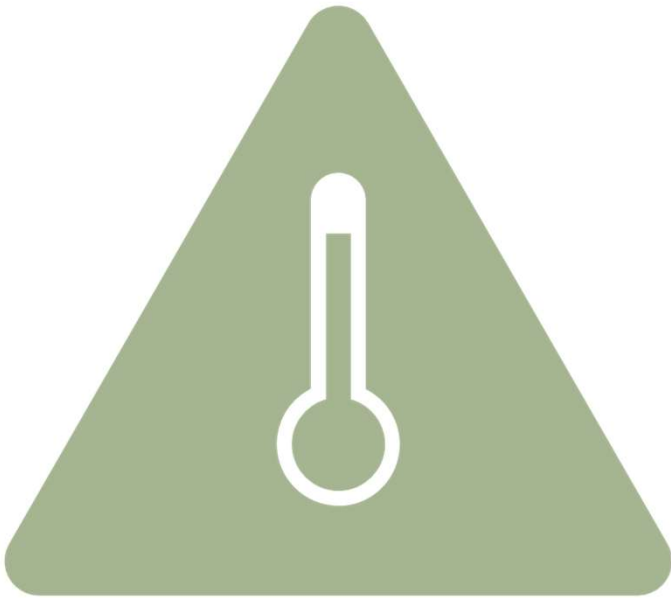
High Risk from Extreme Heat

- Tier II Modeling Recommended
- Planning Horizon of 50th percentile of 2070 conditions
- Increased average temperatures and heat waves
- Decreased winter temperatures

Climate Change

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Extreme Heat Mitigation



- Protection of the Environment:
 - Limited overall tree removal and specifically around wetlands and the intermittent stream
 - Locating stormwater basins to provide at least partial shading of the basins
 - Avoiding alteration to the Riverfront Area and other wetlands
- Protection of Residents & Guests:
 - Limiting overall proposed paving by designating at least 75 parking spaces to be “on demand”
 - Planting and maintaining shade trees
 - Outdoor recreational spaces including a swimming pool

Greenhouse Gas Emissions – Commercial Buildings



Base Case: 2023 Stretch Code



Mitigation Case: Base Case + 15 Points

Energy efficient windows and building envelope
Higher-efficiency HVAC, water heating, and lighting
Energy STAR equipment and appliances
Water conserving fixtures
Rooftop solar panels



Conclusion: Mitigation Case reduces emissions 13-20% per building

Greenhouse Gas Emissions – Residential Buildings

20% EV-ready parking spaces

Heat or Energy recovery ventilation systems

Installing continuous, high-insulating materials in the ceilings, floors, and walls

Installing triple-pane, Low-E windows

Installing air-source heat pumps

Using high-efficiency, propane, storage hot water heaters

Installing high-efficiency appliances

Using LED interior lighting

Installing low-flow water fixtures

Installing rooftop solar panels

Greenhouse Gas Emissions & Air Quality- Traffic

- Transportation Demand Management Strategies:
 - Two electric vehicle charging stations with designated parking spaces at each residential building
 - Designing development to be walking and biking friendly by incorporating wider-than-required sidewalks and speed humps at critical road crossings
 - Providing bicycle racks at residential and commercial buildings
 - Considering how tenants may incorporate additional trip reduction strategies
 - Considering a park-and-ride lot, if the bus route is changed to provide service along Route 10
- Improved traffic signal re-timing at the two study intersections
- Informing tenants of vehicle anti-idling laws and contacting appropriate enforcement agencies of violations

Construction Related Impact Mitigation

Air Quality

Limiting idling times to less than 5 minutes

Requiring ultra-low sulfur diesel fuel

Minimizing fugitive dust by phasing construction, using BMPs such as erosion controls, and surface wetting

Conducting street sweeping as necessary

Installing stabilized construction entrances

Covering waste containers, dump trucks, and stabilizing exposed soils

Noise

Limiting construction to normal working hours

Requiring appropriate mufflers for the vehicle or equipment

Using muffling enclosures on continuously running equipment

Scheduling work to maintain relatively uniform noise and timing the noisiest work to the loudest times of day, as possible

Adhering to anti-idling requirements

Locating the loudest equipment away from residential property boundaries to the extent practicable.

Historical & Archaeological Resources



Inventoried Property onsite removed in 2022

- MHC determined removal was “unlikely to affect significant historical or archaeological resources”
- Easthampton Historical Commission approved demolition under the Demolition Delay Ordinance for buildings over 50 years old

Environmental Justice & Public Health

Income-based Environmental Justice Populations:

- Census Tract 8223 Block Groups 2 and 4
- Census Tract 8224.02 Block Groups 1 and 5

Existing Unfair Environmental Justice Burden:

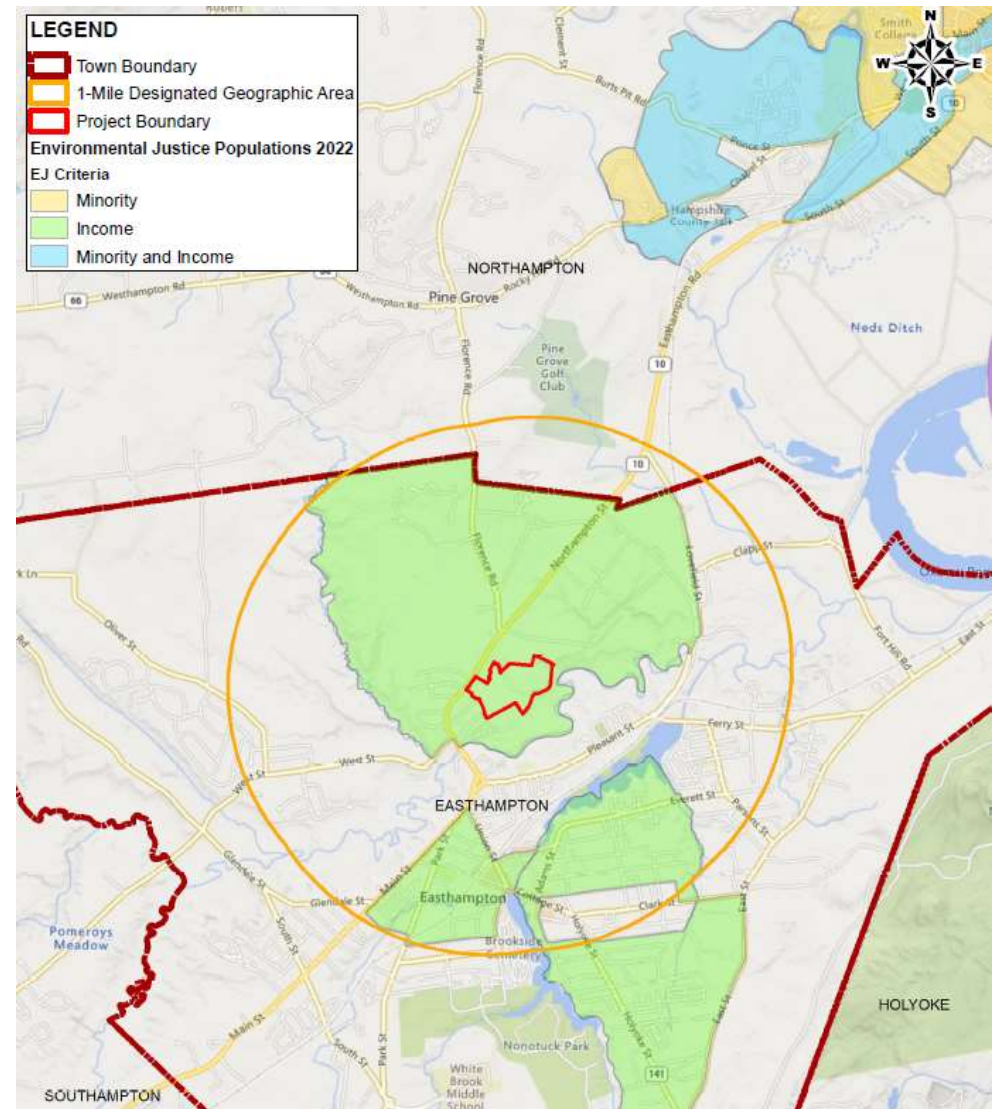
- Elevated Blood Lead Levels >110% state average

Environmental Burden:

- Similar impact on EJ and non-EJ communities

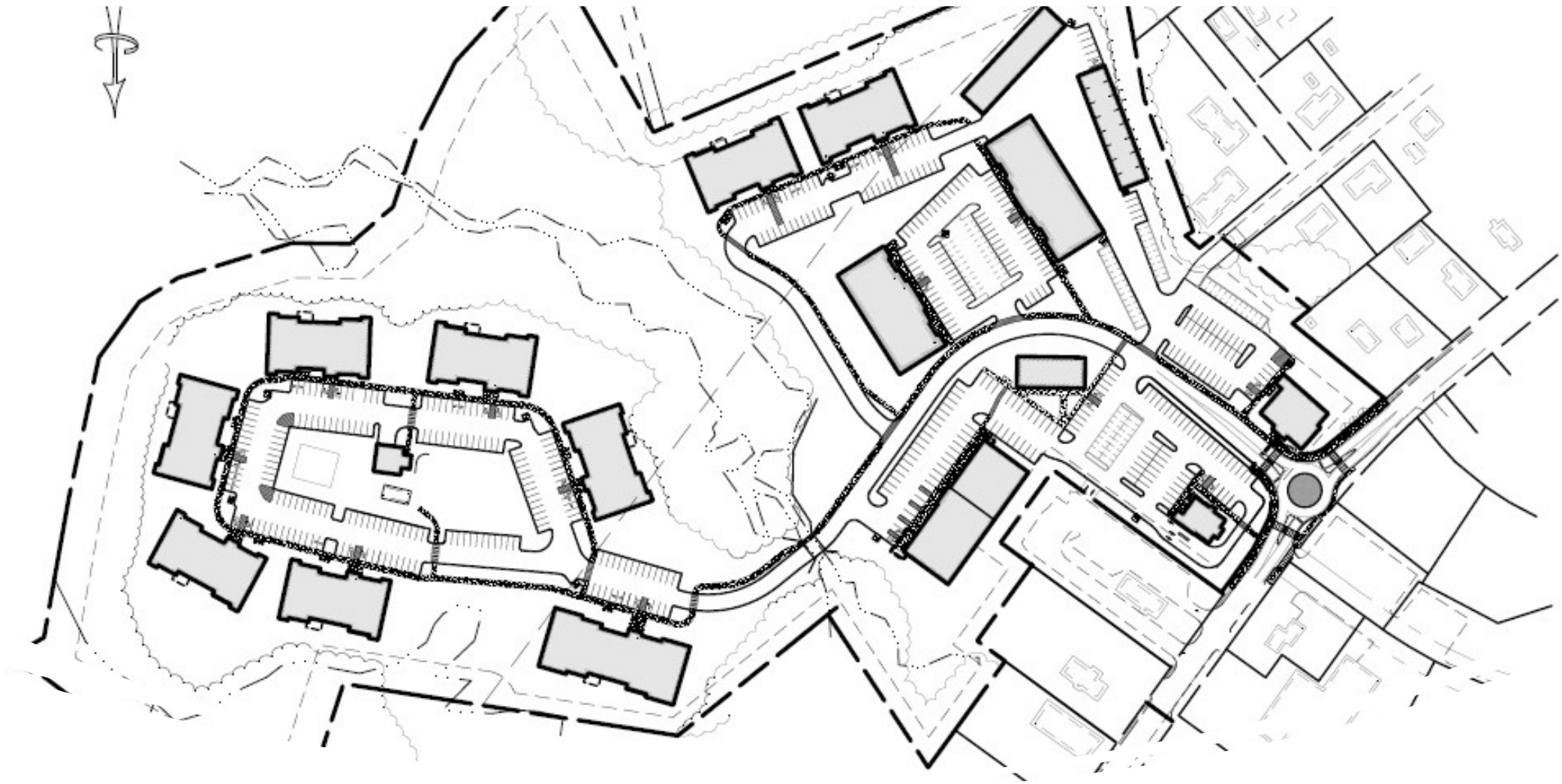
Environmental Benefits:

- More lead-free housing stock
- Access to clean natural resources
- Access to renewable energy sources
- Access to playgrounds and other constructed outdoor recreational facilities



Summary of Mitigation Measures

- Transportation
 - Design of traffic signal or roundabout at Site access and Northampton Street with pedestrian crosswalks. Potential funding of construction.
 - Easement or property rights granted to MassDOT for approximately 4,500 SF of the Site to facilitate Site access intersection.
 - Construction of “walking-friendly” development.
 - Electric vehicle charging at each apartment building; 20% of residential parking spaces will be electric-ready.
 - Design of improved traffic signal retiming at study intersections.
 - Bicycle racks provided at residential and commercial buildings
 - Tenant education regarding MA anti-idling law
 - Consideration of Park-and-Ride lot if PVTa bus route revised to pass the Site
 - Street width designed to be the minimum allowed to minimize additional impervious cover.
 - Subset of parking spaces designated to be built “on demand” and those areas will be maintained as vegetated until they are necessary
 - Open Space, Land Use, and Sustainability
 - Properly install and maintain erosion and sedimentation controls during construction
 - Re-use farmland soils onsite and sell excess soils locally
 - Install downcast, full-cut-off exterior lighting compliant with Dark Sky standards
 - Plant and maintain at least 190 trees and use conservation or wildlife seed mix near wetland areas
 - Install and maintain at least 35-foot-wide vegetative strips with at least 50% evergreen trees along residential property boundaries
 - Avoid direct wetland impacts and meet stream crossing standards
 - Meet or exceed 2023 Stretch Code efficiency standards
 - Install solar on residential and several commercial buildings
 - Pursue a Passive House evaluation to be performed by utility on residential buildings
 - Housing
 - Deed-restrict affordable housing units
-



Thank you!

- Questions?
 - Adrienne Dunk - Adrienne.dunk@gza.com
- Comment deadline: August 9, 2023
 - Nick Moreno - Nicholas.Moreno@mass.gov
 - Eeaonline.eea.state.ma.us/EEA/MEPA-eMonitor/home