Mitigation Conditions for Heritage Landing 40B Application

Issue Area	Mitigation Condition	Harm if Not Addressed
Light Pollution	(1) All lighting shall comply with the International Dark-Sky Association (IDA) Fixture Seal of Approval program certification standards, per Sec 381-40 and 196-3-6 requirements. (2) A photometric lighting plan shall be submitted that indicates the luminaires, their illuminance and product codes throughout the site and abutting ways/properties. (3) The plan will utilize fully shielded fixtures for all luminaires, use the lowest possible illuminance when lighting is warranted, use a color temperature (CCT) with a preference for 2000-2500K and a maximum of 2700 K. (4) No lighting shall create conditions of glare within the development or for adjacent properties and roadways. (5) No uplighting is permitted. (6) Lights may not be directed into adjacent properties so as to create conditions of light trespass and environmental pollution. (7) The plan shall indicate the lights hours of operation. Design will incorporate timers to turn off all nonresidential lighting 2 hours after dusk or 10PM, whichever is earlier. (8) Exterior illumination of signs shall be so shaded, shielded or directed as to create minimum ambient light, and so as not to reflect or shine on or into neighboring premises or into any public street.	A significant part of the research at the MIT facilities depends on dark skies. The Project site has the potential to be the most concentrated source of light pollution as compared to all of the other residential areas surrounding the Facilities Site. This light pollution also has additional negative environmental impact, particularly in relation to endangered wildlife.
Radio Frequency Interference	Developer must include restrictive convents in the Condominium Documents that require the following: • The Condominium Association will incorporate a point of contact to augment communication between Haystack and the unit owners. • Haystack will provide proposed restrictions regarding the use of home electronics that could pose RF interference to the work being performed at the Haystack site. These proposed restrictions will be reasonable in nature and will be subject to periodic update as needed as home electronic devices develop and change. This communication will occur though the established points of contract described above. • The Condominium documents will articulate that the work being performed at the Haystack site is of critical scientific and national importance, and the unit owners shall provide reasonable cooperation with the requirements of Haystack so as to prevent RF interference with Haystack's work. This cooperation will include: If Haystack detects objectionable RF interference coming from the Project, the Association and the unit owners agree to cooperate with Haystack in identifying the source of the interference. If a household appliance or device is found to be producing such RF interference, Haystack will repair or replace the appliance with one that does not generate such RF interference but provides equal or greater usefulness and features, at no cost to the homeowner.	An increase in radio frequency interference can be expected from the Project Site. A single device emitting at the FCC limit from the distance of the project site is roughly 1 trillion times stronger than objects being studied at MIT facilities. Such concentrated interference will likely compromise sensitive measurements at MIT facilities. Interference from consumer devices will jump 5x upon occupancy unless the developer will require condo owners to use devices that pose a lower risk.
Access to MIT Property	Require fencing at common boundary line of the development property and MIT property, subject to requirements of the NHESP and the Groton Conservation Commission.	MIT property abutting the Project Site includes many trails which are used by the public. Additionally, MIT property is in places steeply sloped and without access roads suitable for emergency vehicles. With an increase in population from the Project Site, the potential for misuse of the trails, creating increased risks to public safety of trail users, also increases.