



Town of Nahant
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June 12, 2020

BY U.S. MAIL AND EMAIL

Kathleen Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office, Erin Flaherty
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: **Northeastern University Coastal Sustainability Institute; EEA No. 16046**

Dear Secretary Theoharides:

The following are comments by the Town of Nahant (the “Town”) on the Final Environmental Impact Report (“FEIR”) for the proposed Coastal Sustainability Institute (“CSI”) project on the Northeastern University Marine Science Center (“NEU”) campus in Nahant, including proposed seawater system upgrades (collectively, the “Project”). The Town is disappointed that its concerns, including but not limited to, potential damage to the Town’s valuable infrastructure, an oversized intake system and adverse impacts on a potentially archeological significant site have not been addressed by NEU. Therefore, it is the opinion of the Town that the FEIR is inadequate and must be supplemented.

I. BACKGROUND.

In January of 2018, NEU filed an ENF, intending to upgrade its seawater intake system to 2,400 gpm (EEA# 15793). This ENF was withdrawn upon direction by MEPA and NEU was instructed to file for the Project as a whole. Additionally, in 2018, NEU completed a study, funded by a Coastal Resiliency Grant from Massachusetts Office of Coastal Zone Management (CZM), of a proposed cobble berm construction project at Canoe Beach, which abuts the structures on the Property. NEU conducted that study in consultation with CZM, MEPA and the Department of Environmental Protection (“DEP”). On May 31, 2019, NEU filed an ENF describing the proposed Project as redesigning the current seawater intake system to increase its capacity (the intake and effluence will increase from an average of 291 gpm to 600 gpm – or more due to the size of the proposed piping), constructing a new pump house, new parking and a new 55,000 sf building on top of the existing Murphy Bunker at the property.

The Town submitted comments on July 23, 2019 expressing concerns related to the size of the intake pipes, increased traffic, degradation of infrastructure, environmental impacts and the destruction of historic resources. Many of these concerns were dismissed by

NEU as beyond the scope of the Certificate or still remain. The Town additionally commented on the DEIR on January 3, 2020 bringing up many of the same concerns as they had not been addressed. In the opinion of the Town, NEU simply dismissed the Town's, and many other stakeholder concerns yet again with the submittal of the FEIR.

In short, NEU fails to consider less environmentally damaging alternatives (even those already addressed by the Town in comment letters) because their desire for a large building seems to be the priority. Alternatives seem to be overlooked because the size of the building cannot be compromised. By contrast, the Town feels that the protection of the property should be of more importance and the size of the building, thus the potential alternative locations, should be what is compromised. Furthermore, the Town has been informed that NEU has not completed the MHC-required archaeological survey and cultural resources consultation which are necessary for a review of the environmental impacts of the Project under MEPA.

II. INADEQUACIES OF THE FEIR

A. Infrastructure and Traffic Concerns.

As detailed in previous comment letters Nahant is the smallest municipality in the Commonwealth with land area at just one square mile of primarily residential use and deriving approximately 95% of its tax base from residential properties. The Town has never seen a development of such magnitude. There are serious infrastructure concerns due to the proposed Project such as sewer upgrades and road improvements that must be addressed and mitigated by NEU. As an initial comment, the Town is not satisfied with NEU's response to these concerns. Sewer lines, water lines and roads are valuable assets and are threatened by the construction and use of the Project which are not considered by NEU through the ENF, DEIR or FEIR. The review under MEPA is meant to be a comprehensive review and in this instance, the comprehensive impact of the Project to Nahant's infrastructure should be considered.

The Town has a serious, viable concern regarding its aging infrastructure, and its ability to support this large-scale Project. For example, the increased volume of sewerage documented by the proposed Project has been reviewed by the Town's sewer pump station operation and maintenance contractor and due to the proposed increase expected from the Project, an increase in 2 of the 3 force pumps is recommended in order to provide additional capacity. Furthermore, the force main pipe from Wharf Street to Ward Road and the force main pipe from Ward Road to Lynn Water and Sewer Treatment Plan are known to need significant repairs or replacement. Over the last several years, the Town has experienced multiple breaks and emergency repairs on the force main, one of which cost roughly \$1.2 million. We have experienced 3 emergency repairs in just the last 2 years. While it is clear this is a significant concern for the Town, NEU dismisses the concern by stating that "[a]s a regular customer, NU contributes to the infrastructure improvement funds assessed by the town through regular payment." (FEIR, Section 10, Comment BOS 08). First, this statement is incorrect as the debt from the borrowing for the cost of these repairs has been shifted from the Town's enterprise account to the tax base. The cost is not distributed through water and

sewer bills and thus, because NEU is exempted from real estate tax, they do not contribute to these costs yet add the most extra burden. Secondly, if the costs were to be distributed through the enterprise account, the rate per gallon is the same for all customers. In other words, the costs are regressive and NEU cannot be considered a “regular customer” considering the impact this one “customer” can potentially have on the system. The statement proffered from NEU is dismissive and does not address the concern that a large development such as this will severely compromise the Town ageing infrastructure.

It is undeniable that the Town’s roads are not equipped to handle a development project of this size. It has previously been determined through a 5-year paving plan that many of the Town roads were in desperate need of repair. Specifically, the current backlog of outstanding repairs as of January 2019 is \$1,485,092. The Town is concerned about the impact of construction vehicles on our already damaged roadways and once the Project is constructed, with over 90 additional parking spaces, traffic is expected to double. The Town has suggested that NEU seek a reduction in parking and utilize electric shuttle service but again, this concern and possible solution has simply been dismissed. With climate change impacts at the forefront of this project’s mission, a significant plan to decrease carbon emissions should be a requirement of their own.

B. NEU Failed to Adequately Consider Alternatives.

With regard to alternatives, NEU, through the FEIR still does not fully consider Alternatives 1 and 2. Additionally, it is clear that locating the expansion behind the Edwards Laboratory building was never considered, and has been summarily dismissed by NEU.

It also appears that the relocation of the geothermal field was never considered. Instead of considering a relocation or explaining why a relocation cannot be achieved, NEU simply responds “[t]he current location proposed for the geothermal field is the only practicable location available.” (FEIR, Section 10, Comment BOS 05). That statement clearly requires support which is absent.

Alternative #1 would create 10 percent less impervious new area as compared to the NEU-preferred alternative. NEU has rejected Alternative #1 by stating: “Alternative #1’s lower base elevation (El. 18’) and proximity to the floodplain make this alternative much more vulnerable to the effects of sea level rise and particularly, flooding from coastal storms.” (FEIR, Section 10, Comment BOS 05). First, elevation 18’ does not preclude construction, the whole purpose of an alternatives analysis is to determine what proposal would be the least impactful on the environment. Second, it is important to note that Alternative #1, will result in a total land alteration of 3.86 acres whereby the NEU-preferred alternative would be 5.92 acres. Third, NEU has ignored the Secretary’s request to explore coastal resiliency. Further, the entire site is located in an environmentally sensitive area and is potentially subject to flooding. That is why NEU, in 2018, completed a study of a proposed cobble berm construction project at Canoe Beach, which abuts the structures on the Property.

NEU has not shown, or apparently even considered, whether a geothermal heating and cooling system could be installed in the area between the Edwards Building and Murphy

Bunker and/or in and around Edwards Building. Instead, NEU simply responds “[t]he current location proposed for the geothermal field is the only practicable location.” (FEIR, Section 10, Comment BOS 06). That, in no way possible “addresses” the concern of the Town as to why other alternatives are not possible. It begs the question as to why NEU is able to make the statement that the current location is the only practicable location without support. There are other locations, for example, the proposed geothermal wellfield can be located in the area east of the Murphy Bunker, in the areas between the Edwards Building and Murphy Bunker (Zone AO) and north of the Edwards Building. These areas provide more than enough space to accommodate NEU’s wellfield proposal.

With regard to Alternative #2, NEU responds to the Town’s concern citing wetland regulation concerns and also floodplain issues. (FEIR, Section 10, Comment BOS 06). Again, the Town’s comments are dismissed without support. Projects will often need approval from the Conservation Commission and it is common for a project such as this one, that abuts the Atlantic Ocean, to need some approval(s) from the Conservation Commission pursuant to the Wetland Protection Act (“WPA”) and/or the local wetland protection bylaw.

The failure of NEU to seriously consider Alternatives #1 and #2 and/or the relocation of the geothermal field require that a supplemental information be required to assess actual consideration of less environmentally damaging alternatives.

C. Coastal Resiliency has not been Addressed.

Notwithstanding alternatives listed above, it is important to note that the coastal bank at 40 Steps Beach has experienced significant erosion from past winter storms and must be restored. Without restoration, further erosion and potential failure will lead to essential infrastructure becoming compromised. The Town has been informed that the cost of a coastal bank restoration project at 40 Steps Beach is between \$300,000 and \$1 million dependent on the design.

Additionally, NEU does not provide a valid reason as to why it will not stabilize the vulnerable and eroding coastal dune at Canoe Beach, even though the Secretary addresses this lack of information in the DEIR Certificate. NEU obtained a grant from CZM for approximately \$203,000.00 to investigate stabilizing the coastal bank yet, NEU and has nothing to show for the public money it obtained and apparently has no plans for stabilization. As part of the alternatives analysis, the Secretary required NEU to study alternatives regarding improvements to the resiliency of Canoe Beach yet NEU has apparently also ignored the concerns of the Secretary as this is not addressed.

Instead of restoring and protecting Canoe Beach (along with the access to the NEU site), NEU proposes for the first-time, the relocation of the electric and water lines from Nahant Road to the south side of its property while leaving the sewer line, underground gas line and access road in place and vulnerable. This does not make sense and depicts the fact that NEU is not taking climate resiliency seriously. While details are scant, it appears that NEU is proposing to construct the new water line connection at Swallow Cave Road which will traverse along the south of the site to reach the proposed CSI building and to install a new electric service at the southern end of the site. With the information provided, it is

impossible to determine wetland impacts as the size of the piping and trenching is not provided. Additionally, the details on the need for these utilities to be relocated are absent or insufficient at best. Removing the utilities from this area seems to be an attempt to lessen vulnerability by lessening what is at risk. However, the threat does not decrease and utilities are not the only items worth protection. It is an obvious maneuver attempting to eliminate the segmentation issue raised in previous comments.

D. The Proposed Intake System is Out of Scale with the Stated Needs.

NEU is proposing an intake system that is simply larger than necessary. The result of this proposed system is the disturbance of 11,586 sf of wetland resources (temporarily) and over 2,000 sf permanently. (FEIR, 1-16). As noted in the Town's comments on NEU's ENF and DEIR, the Town is concerned regarding the size of the proposed two new 14-inch diameter HDPE intake pipes that will replace the two existing 6-inch diameter HDPE pipes. These proposed pipes appear to be oversized for the proposed intake of 600 gpm and are more suited for a 2,400 gpm intake system (which was previously proposed and withdrawn). Also, while NEU claims that the proposed intake system will be limited to 600 gpm, submittals associated with the ENF reveal that NEU modeled up to a 2,400 gpm intake system. NEU should be forthcoming in its intent to increase the intake system or design the system intake pipes for a 600 gpm intake system. This concern is still not addressed and is again dismissed by NEU whereby they state: "[t]he proposed system includes two 1,200 gallon per minute (GPM) pumps, with only one in operation at any given time. The Best Efficiency Point (BEP) of the pumps is between 40 and 80 percent. The proposed operating capacity of the system will not exceed 600 gpm." (FEIR, Section 10, Comment BOS 12). This comment not only does not address the concern, it makes no sense as the 1,200 gpm pump can double the intake design. What are the guarantees by NEU that the system will not increase to 1,200 gpm or over? Surely their statement cannot qualify as a guarantee to the Town.

Moreover, NEU has not provided any details as to why the increased intake system is necessary and why alternatives have not been considered such as utilizing existing pipes and pumps which would result less environmentally damaging impacts.

E. The Impact to Archeological and Historic Resources has not been Addressed.

The Town further notes that its concerns regarding the partial demolition of the Murphy Bunker and the impact to archeological resources have not been addressed and cannot be addressed at this time as the Massachusetts Historical Commission ("MHC") investigation and review has not been completed.

In fact, the MHC, in comments on the ENF determined that the project as currently designed will have significant adverse historic impacts and may potentially have significant adverse archaeological impacts. Then, in its review of the NEU DEIR, the MHC submitted further comments noting that NEU must complete an archaeological survey and must engage in consultation with MHC to avoid, minimize, or mitigate adverse historic impacts on the Murphy Bunker as well as impacts on any archaeological resources caused by the proposed geothermal wellfield. These comments were supported by the Secretary's Certificate on the ENF. However,

the DEIR made no reference to the required progress on any of these investigations and the MHC found that the DEIR provided inadequate information to evaluate alternatives to avoid historic and archaeological resources. It is concerning to the Town since the ENF was filed (almost a year ago), there has been no substantive progress on these issues and that a MHC archaeological investigation permit was recently (April, 2020) approved.

Additionally, it has been brought to the attention of the Town that NEU has already disturbed one of the three areas of potential archaeological resources to survey. In February and March of 2020 NEU drilled at least one geothermal test well (and possibly 2 additional test wells) thereby disturbing the area slated for an archeological survey. Therefore any results of the investigation in this area would be suspect. Further, without the required investigations and analyses being completed, the FEIR should not be considered adequate as the Secretary will be unable to determine impacts and alternatives and measures to avoid, minimize, or mitigate such impacts.

E. Article 97 Implications.

The Town of Nahant has moved to intervene in the Superior Court litigation between NEU and the Nahant Preservation Trust to bring its own Article 97 claims against NEU. The Town is seeking to protect the wildlife preserve (located on top of and to the east of the Murphy Bunker) from development as it was dedicated by NEU for public use and the public accepted that dedication creating protected Article 97 land. The Town additionally claims that the Town relied on NEU's creation of the wildlife preserve public parkland when it created, designed and dedicated the Town-owned Lodge Park that makes up the balance of East Point. As the Town relied on NEU's actions and statements, the Town is claiming that NEU is now estopped from destroying the wildlife meadow. This Motion to Intervene has not, at this time, been opposed (due to the Covid-19 pandemic, the time for NEU to respond to the Town's motion to intervene has tolled).

This litigation is pertinent as it is ongoing and a potential result would confirm that NEU has dedicated the land to the public and that the public accepted the Project site as Article 97 land, and therefore, the Project could not move forward without compliance with the Executive Office of Energy and Environmental Affairs' ("EOEEA") "Article 97 Land Disposition Policy," and an act of the Legislature. Therefore, it is the Town's opinion that the final Certificate on the FEIR should not be issued while the litigation is pending and the Article 97 issue has not been fully adjudicated and resolved.

III. CONCLUSION

As described above, the Town concerns are well founded regarding the Project and its alternatives with a majority of the concerns dismissed or unaddressed and therefore, the Town respectfully requests that the Secretary require that NEU file supplemental information, and not simply dismissing, the Town's concerns. The Town further requests that any issuance of a Certificate on the FEIR be postponed until the Article 97 issue is resolved by the courts.

Very truly yours,

Town of Nahant Board of Selectmen,

By,



Antonio Barletta, Town Administrator

cc: MEPA Project Notice List (by electronic mail)

