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May 15, 2009

CERTIFICATE OF THE SECRETARY OF ENERGY & ENVIRONMENTAL AFFAIRS ON THE NOTICE OF PROJECT CHANGE

PROJECT NAME: PROJECT MUNICIPALITY: PROJECT WATERSHED: EOEA NUMBER: PROJECT PROPONENT: Highland Commons Hudson and Berlin Concord (Assabet) 13795 Sullivan Hayes Companies Northeast, LLC/Benderson Properties Development, LLC April 8, 2009

DATE NOTICED IN MONITOR: Ap

Pursuant to the Massachusetts Environmental Policy Act (G.L. c. 30, ss. 61-621) and Section 11.10 of the MEPA regulations (301 CMR 11.00), I have reviewed the Expanded Notice of Project Change (Expanded NPC) submitted on this project and hereby determine that it **requires** the preparation of a Supplemental Environmental Impact Report (EIR). The Expanded NPC updates the information reviewed in the Proponent's previous Single Environmental Impact Report for this project and provides additional information regarding the Proponent's proposed greenhouse gas (GHG) emissions mitigation measures, parking plan and transportation demand management (TDM) measures.

Original Project Description and MEPA History

The project was the subject of an Expanded Environmental Notification Form (Expanded ENF) in May, 2006 and a Single Environmental Impact Report (Single EIR) in September, 2006. As originally proposed, the project entailed the development of a commercial shopping center and hotel on a site located in the extreme western part of Hudson south of Coolidge Street (Route 62) and approximately 1/3 of a mile east of the I-495 Exit 26 interchange.

The project site encompasses 161 acres straddling the Hudson/Berlin municipal boundary. The site's primary roadway frontage is on Coolidge Street in Hudson. In the vicinity

of the site, Coolidge Street is a numbered state highway (Route 62) but is under the jurisdiction of the Town of Hudson. The portion of the project site in Berlin has frontage on Gates Pond Road, a local roadway. Hog Brook passes through the north central part of the site and also forms the northeast and east boundary of the site. An unnamed tributary to Hog Brook forms the southeast boundary of the site in Berlin. In 1989-90, a hotel and industrial park development was proposed on part of the site under the name "Metro-West Business Park". The project underwent MEPA review (EEA #7574), but was never constructed.

The project was proposed to be constructed in two phases. Phase 1 would involve construction of a shopping center on the easterly portion of the Hudson site with approximately 338,018 square feet (sf) of commercial building area and a 1,706 sf wastewater treatment plant building. The removal and reconstruction of a municipal water supply tank was also planned as part of Phase 1 of the project. Phase 2 of the project would involve construction of an approximately 133,000 sf hotel with approximately 222 rooms on the westerly portion of the Hudson site and an internal connector road between the two phases of the project.

Only the Hudson portion of the site was proposed to be developed during the review of the Expanded ENF and Single EIR; there were no specific plans for development of the site area in Berlin. However, based on the existing Town of Berlin zoning and the topographic characteristics of this portion of the site, a residential subdivision with approximately 30 single family homes could be developed. The Single EIR considered the traffic and wastewater impacts that would be associated with this potential future development. The proponent stated in the Single EIR that it would file a NPC with the MEPA office when development plans for the Berlin site were confirmed.

Jurisdiction and Permitting Requirements

The project underwent MEPA review and required the preparation of an EIR pursuant to Section 11.03(1)(a)(1) and 11.03(1)(a)(2) of the MEPA regulations, because it was estimated to result in the direct alteration of more than 50 acres of land and the creation of more than 10 acres of new impervious surface; and Section 11.03(6)(a)(6) and 11.03(6)(a)(7), because the project was estimated to result in more than 3,000 new average daily trips (adt) and require the construction of more than 1,000 new parking spaces. The project also exceeded the following ENF review thresholds: Section 11.03(3)(b)(1)(f) (alteration of more than $\frac{1}{2}$ an acre of any other wetlands) and Section 11.03(5)(b)(3)(c) and Section 11.03(5)(b)(4)(c)(ii) (the construction of more than half a mile of new sewer main and discharge more than 50,000 gallons per day (gpd) of wastewater to groundwater).

The project requires the following permits and/or review: a National Pollutant Discharge and Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency (EPA); a Groundwater Discharge Permit and a Sewer Extension/Connection Permit from the Department of Environmental Protection (MassDEP); a Traffic Signal Control Permit from the Massachusetts Highway Department (MassHighway); review from the Massachusetts Historical Commission (MHC); and Site Plan Approval from the Hudson Planning Board. I note that the project requires additional approval from the Hudson Conservation Commission through an amended Order of Conditions, and an Order of Conditions

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from the Berlin Conservation Commission (and on appeal only, a Superseding Order of Conditions from MassDEP). The project is also subject to the EEA Greenhouse Gas (GHG) Emissions Policy and Protocol.

Because the proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that may cause significant Damage to the Environment and that are within the subject matter of required or potentially required state permits. In this case, MEPA jurisdiction extends to land alteration, stormwater, transportation, wetlands, wastewater, historic resources and greenhouse gas emissions.

Description of Project Change

In the Expanded NPC, the proponent describes proposed changes to the project focusing on Phase 1A (the replacement of the 133,000 square feet (sf) hotel with a 118,000 sf retail store on the Town line and Phase 2 (the construction of approximately 422,000 of retail space and the redevelopment of an existing office building into a 29,400 sf two-story building).

As indicated above, at the time of the original MEPA filing, the Berlin portion of the site was zoned for residential use only. On May 14, 2008, after construction of the Project in Hudson had already commenced, Berlin Town Meeting approved a zoning change for 84+ acres of the Project Site in Berlin from residential to commercial, to allow for a larger unified shopping center complex in conjunction with the Hudson portion of the development. The Expanded NPC includes a Conceptual Site Plan – 2009 that depicts the site divided into four quadrants – Hudson East, Hudson West, Berlin East, and Berlin West.

Phase 1 - Hudson East

All of the development within the Hudson East portion of the site is currently under construction. There are no significant changes to what was presented previously in the MEPA documents. The Hudson East portion of the Highland Commons project, which has received its MEPA Certification, is referred to as Phase 1 of the Project. While the disclosure of the impacts associated with this portion of the Project Site are included as they pertain to the cumulative impacts of the entire Project, Phase 1 issues were not revisited in the Expanded NPC.

Phase 1A – Hudson West

A Phase 1A has been added since the filing of the Single EIR for a Project modification proposed within the Hudson West portion of the site. Phase 1A represents the modification to the Project consisting of the elimination of the previously reviewed 133,000 sf hotel in Hudson for a 118,000 sf retail store that will straddle the Hudson/Berlin town line. Approximately 54,420 sf of the building will be located in Hudson and 63,580 sf will be located in Berlin. Additionally, this aspect of the Project will include an eight-pump fueling station associated with the retail store and land in Hudson.

Phase 2- Berlin East and Berlin West

Phase 2 represents the remainder of the development predominantly within the Town of Berlin (Berlin East and Berlin West) with the exception of a 3,776 sf existing building housing a bank in Hudson located off the west entrance drive. The revised Phase 2 presented in the Expanded NPC results in the elimination of the conceptual residential subdivision and instead includes 422,000+ sf of retail space and the redevelopment of an existing 16,700+ sf office building into a 29,400+ sf two-story office building.

Request for a Single EIR

In accordance with Section 11.05(7) of the MEPA regulations, the proponent has submitted an Expanded NPC with a request that I allow the proponent to fulfill its EIR obligations under MEPA with a Single EIR, rather than require the usual two-step Draft and Final EIR process. The Expanded NPC received an extended public comment period pursuant to Section 11.06(1) of the MEPA regulations. I have reviewed the proponent's request for a Single EIR in accordance with Section 11.06(8) of the MEPA regulations, and I hereby find that the Expanded NPC meets the regulatory standards. I will therefore allow the proponent to prepare a Single EIR in fulfillment of the requirements of Section 11.03 of the MEPA regulations.

Review of the Expanded NPC and SCOPE

General

As modified by this Certificate, the proponent should prepare the Supplemental Single EIR (SEIR) in accordance with the general guidelines for outline and content found in Section 11.07 of the MEPA regulations. While I am allowing the proponent to proceed to the preparation of an SEIR, I note the requests for additional information to assist State agencies with future permitting processes. I anticipate that the SEIR will respond to the Scope outlined below with sufficient detail to address the requests of State agencies. I retain my authority to require further review in the form of a Supplemental Environmental Impact Report if issues outlined in this Scope and in comments are not thoroughly addressed in the SEIR.

Comments/Circulation

The SEIR should contain a copy of this Certificate and a copy of each comment letter received. The SEIR should respond fully to each substantive comment received to the extent that it is within MEPA jurisdiction. The SEIR should present additional technical analyses and/or narrative as necessary to respond to the concerns raised.

The proponent should circulate the SEIR in accordance with Section 11.01(1) of the MEPA regulations; to those who commented on the Expanded NPC; to municipal officials in the Towns of Hudson and Berlin; and to any state and federal agencies from which the proponent will potentially seek permits or approvals. In addition, copies of the SEIR should be made available at the Hudson and Berlin public libraries.

Permitting and Consistency

The Expanded NPC contained a description of the project and a characterization of the existing and proposed project site conditions. The Expanded NPC included a summary of required permit approvals, and a summary table comparing potential environmental impacts between the Approved Project and the Project Change. The Expanded NPC outlined a project phasing scheme and construction sequencing program.

The SEIR should demonstrate that the project will meet applicable performance standards. In accordance with Executive Order No. 385, "Planning for Growth" and Section 11.03(3)(a) of the MEPA regulations, the SEIR should discuss the consistency of the project with the local and regional growth management and open space plans. The SEIR should also discuss the consistency of project design with any applicable state policies. The proponent should also provide an update on any local permitting process for the project.

<u>Alternatives</u>

The Expanded NPC explored the following project alternatives: a No-Build Alternative, a Previously MEPA Review Site Layout Alternative, and a Preferred Alternative and assessed the environmental impacts associated with each. The Expanded NPC included a table that effectively allowed for comparison of the project alternatives, demonstrating that the Preferred Alternative will avoid, minimize and mitigate damage to the environment as mandated in the MEPA regulations.

I commend the Proponent for evaluating the potential to incorporate Low Impact Development (LID) techniques into the project's design. However, I encourage the proponent to consider further LID techniques with the Preferred Alternative in the SEIR that incorporate more Best Management Practices (BMPs) and can reduce impacts to land and water resources by conserving natural systems and hydrologic functions. The primary tools of LID are landscaping features and naturally vegetated areas, which encourage detention, infiltration and filtration of stormwater on-site. Other tools include water conservation and use of pervious surfaces. Clustering of buildings is an example of how LID can preserve open space and minimize land disturbance. LID can also protect natural resources by incorporating wetlands, stream buffers, and mature forests as project design features. For more information on LID, visit http://www.mass.gov/envir/lid/. Other LID resources include the national LID manual (Low Impact Development Design Strategies: An Integrated Design Approach), which can be found on the EPA website at: http://www.epa.gov/owow/nps/lid/. The SEIR should include a discussion of any new LID measures that the proponent could incorporate into project design. The Organization for the Assabet River (OAR) has provided detailed comments related to low impact design techniques that the Proponent should address in the SEIR.

Land Alteration

The Expanded NPC provided site plans of existing and proposed grades depicting conceptual cuts and fills necessary to achieve the project. The Expanded NPC described how project design was advanced in a manner that reduced the overall project footprint, retained

vegetated areas, and reduced impervious area. This narrative and supporting graphics demonstrated that building layout, parking areas and stormwater management features were located in a way that minimized project impacts.

Stormwater

The Expanded NPC contained an analysis of existing and proposed drainage conditions, and presented pre- and post-development runoff calculations. Development of the site will include the installation of a stormwater management system that will fully comply with DEP's Stormwater Management Policy. The Expanded NPC presented a detailed stormwater management plan to address post-development runoff and outlined how the project complies with each of the Policy's standards. The stormwater management system will feature three wet bottom retention/detention ponds with sediment forebays that will receive runoff from pavement and surface areas; four sub-grade infiltration galleries to accept and recharge roof runoff to ground water; two water quality filters; deep hooded inlet sumps with oil absorbent booms; and level lip spreaders. Non-structural BMPs include street and parking lot sweeping protocols.

The comment letter from OAR described that during construction of Phase 1 of the project in Hudson, there were two major failures of a sediment forebay, resulting in the release of large quantities of very fine silt into Hog Brook, Tripp's Pond and the Assabet River. However, there is no mention of these events in the Expanded NPC. The SEIR should include a description of the problem that occurred, the causes, and what steps have been taken to ensure that a similar problem does not occur in subsequent phases of construction. The SEIR should investigate the feasibility of installing a sediment monitoring system on Hog Brook during the construction phase so that the occurrence and causes of such problems can be more quickly understood, prevented and remediated. I am also requesting that the SEIR evaluate the use of white roofs on all buildings. This will reduce the energy use in the buildings and heat island effect of the project site. It will also reduce the temperature of the stormwater runoff which may help protect the habitat quality of Hog Brook and its tributaries.

Although portions of the roadway stormwater drainage system for the Hudson side of the project have been constructed, MassDEP has advised in its comment letter that the Proponent should prepare and submit to both the Hudson and the Berlin Conservation Commissions a comprehensive Stormwater Report Checklist and Certification Form.

Wetlands

The project site contains several wetlands associated with Hog Brook and an unnamed tributary to the Hog Brook. Portions of the proposed work will occur within Riverfront Area, Bank and the 100-foot wetland buffer zone as defined under 310 CMR 10.58 of the wetlands regulations. While much of the work proposed in Riverfront Area is related to restoration of degraded areas, any work in Riverfront Area that does not qualify as a limited project under 310 CMR 10.53 or is not eligible under 310 CMR 10.58(5) will be subject to an alternatives analysis under 310 CMR 10.58(4). The Proponent should consult with MassDEP on this issue. The SEIR should contain any updates on this issue.

Transportation

The Expanded NPC includes a Traffic Impact and Access Study that was prepared in accordance with the Executive Office of Energy and Environmental Affairs (EEA)/Executive Office of Transportation (EOT) guidelines. The traffic impact analysis and proposed mitigation were developed in coordination with the Massachusetts Highway Department (MHD) and local officials. The project change requires an amended Highway Access Permit from the Massachusetts Highway Department (MassHighway) for the construction of improvements at the I-495 / Route 62 interchange. An Amendment to Highway Access Permit Permit No. 3-2007-0048 will be filed with MassHighway at the conclusion of the MEPA review process.

According to the information submitted in the Expanded NPC, the full build-out of the Project is expected to generate 27,390 (13,695 entering/ 13,695 exiting) new daily trips and 2,505 (1,210 entering/1,295 exiting) new weekday evening peak hour trips. On a Saturday, the full build-out of the Project is expected to generate 34,490 (17,245 entering/17,245 exiting) new daily trips and 3,415 (1,785 entering/1,630 exiting) new midday peak hour trips.

According to the Expanded NPC, the full build-out is expected to generated 12,360 (6,180 entering/6,180 exiting) additional daily trips and 1,125 (540 entering/585 exiting) additional weekday evening peak hour trips. Compared to the previously approved portion of the project, on a Saturday, the project is projected to generate 14,010 (7,005 entering/7,005 exiting) additional daily trips and 1,445 (750 entering/695 exiting) additional peak hour trips.

However, MassHighway has stated in its comments that the project change will generate approximately 13,210 additional vehicle trips per day on an average weekday when compared to the previously approved development program, with 1,215 additional trips in the evening peak hour. MassHighway has also stated that the project change will generate approximately 16,220 additional vehicle trips per day on a Saturday, with 1,675 additional trips during the Saturday peak hour. The trip generation for the retail portion of the full development program was reduced by 10 percent to account for pass-by and diverted link trips from I-495. The SEIR must explain these apparent discrepancies and address the methodology concerns raised in MasHighway's comments.

Because of the impact from the project, the proponent is proposing mitigation at two intersections under MassHighway jurisdiction: Route 62 at I-495 Northbound Ramps and Route 62 at I-495 Southbound Ramps. In addition, the proponent is proposing mitigation at the Route 62 / Gates Pond Road intersection, which is approximately 300 feet east of the I-495 Northbound Ramps. The mitigation proposed in the Expanded NPC is in addition to the mitigation that was proposed as part of the previously approved project (construction of the previously approved mitigation is currently underway).

Phase 1 Improvements:

The Proponent has committed to several intersection improvements in connection with the Project, which are described in detail in the "Planned Area Roadway Improvements" section of this chapter. These improvements have been developed as part of the Expanded ENF and SEIR filed for the entire project in 2006, as well as in consultation with MassHighway and the towns

of Hudson and Berlin. The Proponent has committed to implement improvement measures or provide full design plans and/or funding for improvements at the following locations in conjunction with Phase 1 of the Project:

- Route 62 at the I-495 Southbound Ramps
- Route 62 at the I-495 Northbound Ramps
- Route 62 at Central Street
- Route 85 at Packard Street and Cox Street (design plans only)
- The Hudson Rotary (funding only)
- Route 62 at Sawyer Hill Road
- Gates Pond Road (funding for traffic calming study and implementation)

Phase 2 Improvements:

The Proponent has identified additional roadway and intersection improvements that will be necessary to mitigate the additional Phase 2 Project-related traffic to be generated by the full build-out of the Project, as described in this Expanded NPC. The Proponent proposes to implement additional roadway and intersection improvements, financial contribution, or safety improvements at the following locations:

- Route 62 at I-495 Southbound Ramps
- Route 62 at I-495 Northbound Ramps
- Route 62 at Gates Pond Road
- Traffic Signal Coordination

Due to the distance between the three proposed signalized intersections along Route 62 listed above (Route 62/I-495 Southbound Ramps, Route 62/I-495 northbound Ramps, and Route 62/Gates Pond Road), the Proponent proposes to implement a coordinated traffic signal system for these intersections to ensure safe and efficient traffic flow along Route 62 in the vicinity of I-495.

- Gates Pond Road
- Route 62 at Sawyer Hill Road

MassHighway has expressed concerns in its comment letter about the Proponent's proposal to install a traffic signal at the intersection of Route 62 and Gates Pond Road. MassHighway states that with the proximity of this intersection to the I-495 Northbound Ramps, this new signal could cause traffic congestion on the ramp. The SEIR should consider alternatives that do not require the installation of a full traffic signal. MassHighway has stated that the right turn from the I-495 Northbound Ramp at Route 62 was analyzed with the right turn on red (RTOR) allowed, however with the proposed lane use on the ramp, MassHighway would not permit RTOR's for that movement at this intersection.

Additionally, the Proponent has proposed to install a traffic signal at the intersection of Route 62 and the I-495 Southbound Ramps. The traffic signal warrant analysis presented in the Expanded NPC shows that the intersection does not meet Warrant 1 (Eight-Hour Vehicular Volume). MassHighway has stated that a traffic signal should not be installed at this location until it is determined to be warranted and desirable by MassHighway. The Proponent should address each of these comments in the SEIR and continue to work closely with MassHighway to design an acceptable traffic mitigation proposal.

Transportation Demand Management

The Expanded NPC also outlines proposed Transportation Demand Management (TDM) strategies that the proponent will encourage its tenants to implement to reduce vehicular traffic to and from the site. Measures outlined in the Expanded NPC include the promotion of ridesharing and the provision of on-site services that will be provided to decrease employee mid-day tripmaking. The SEIR should discuss whether the project is required to comply with the Massachusetts Rideshare Regulation (310 CMR 7.16). The proponent notes that TDM measures are generally less effective at retail developments than at office developments. With this in mind, the proponent should focus its efforts on providing effective pedestrian, bicycle and public transit connections to the development so that employees and other users have a variety of transit options. In addition, MassDEP has suggested several options that the SEIR should consider, specifically:

- *Bicycle Incentives.* The project proponent should request that the future tenants of the project install showers and clothing lockers and provide other enhancements for employees, such as bicycle helmets, locks and store coupons, to increase employee bicycle use to the site.
- *Incentives to Shoppers.* MassDEP recommends that the Proponent explore ways to encourage shoppers to use transit or carpool to the proposed project, including offering discounts to customers who come to the retail establishment in a carpool, by transit or another method. Some other projects in Massachusetts have instituted these incentives to discourage drive-alone commuting.

The project will have an onsite network of sidewalks and crosswalks to promote pedestrian activity throughout the development. The SEIR should also consider installing additional sidewalks along the road connecting Retail Buildings K and I with Retail Buildings M, N, W, and the other buildings in that area of the project. The walkways should be well lit and designed with canopies or plantings to shade shoppers from the sun or poor weather conditions. Pedestrian use should also be enhanced with more sidewalks within the site with Retail Buildings M, N, and W.

Parking [Varking]

According to the Expanded NPC, there will be 2,912 parking spaces provided for the retail component of the project and 150 parking spaces provided for the office component. This is an increase of 1,814 parking spaces for the retail component and 150 for the office component as compared to the previously presented project. In the SEIR, the proponent should discuss the project's required parking as determined by the local approval process for the project, and should consider the feasibility of reducing the amount of onsite parking. I strongly encourage the proponent to reduce parking to the minimum amount necessary under local zoning.

Greenhouse Gas (GHG) Emissions

The Expanded NPC included a preliminary GHG emissions analysis performed in conformance with MEPA's Greenhouse Gas Emissions Policy and Protocol (the Policy). The Policy requires projects to quantify carbon dioxide (CO₂) emissions and identify measures to avoid, minimize or mitigate such emissions. The GHG analysis evaluated CO₂ emissions for

three alternatives as required by the Policy, including: 1) a Base Case corresponding to the 7th Edition of the Massachusetts Building Code with the 2006 and 2007 International Energy Conservation Code (IECC) supplements; 2) a Preferred Alternative, which included some energy saving design features; and 3) a Mitigation Alternative, which included additional energy saving elements. The Proponent used the e-Quest Model to perform the GHG analysis and has committed to constructing the project in accordance with those energy saving measures modeled in the Build Alternative plus Greater Mitigations (Mitigation Alternative). The Expanded NPC provided several tables outlining GHG reduction measures associated with project siting, building design and operations, and transportation that were considered as part of the project.

The GHG assessment quantifies the impact of specific sustainable Project elements that provide GHG emissions benefits (reductions), as required by the Policy. The overall sustainable design goals and specific sustainable design and operational measures presented in the Expanded NPC state that the Proponent is committed to a reduction in project-related GHG emissions including:

- An overall seventeen percent (17%) in the Project's stationary source GHG emissions; and
- An overall three and half percent (3.5%) reduction in mobile source GHG emissions.

According to the Expanded NPC, the GHG assessment is based upon the best information that is available at the current planning phase. The results demonstrate that the Project can meet the commitment to a 17% reduction in stationary source GHG emissions. The Proponent has requested the right to substitute comparable GHG reduction measures to help the Project reach the 17% GHG reduction commitment for those portions of the Project Change where tenant/users are not yet identified.

The GHG mitigation analysis is presented as a Build with Improvements/Preferred and Build with Improvements Plus/Alternative format. The Build with Improvements mitigation measures include roof design, insulation, glazing, HVAC, lighting, and system controls, and is estimated to reduce emissions by approximately 398 tons per year (tpy), an 8.1% reduction over baseline. MassDEP has requested in its comment letter that the simulation of the e-Quest modeling should be rechecked. The SEIR should include both analysis and actual e-Quest printout for each alternative. The Build with Plus/Alternative measures will reduce CO₂ emissions 828.5 tpy, which is an additional 9% reduction over the baseline. However, the report included in the Expanded NPC is not sufficiently clear on the source of those proposed reductions. Therefore, the SEIR must clarify this data in a manner consistent with the Policy.

The proponent's commitment that it will achieve a 17% GHG reduction is commendable, but in order to be evaluated and determined to be realistic the SEIR must include further documentation. Specifically, the reduction associated with Energy Star appliances and office equipment should be supported in the SEIR with a more detailed analysis that will show and justify the assumed increase of the electrical load to which the 10% increased efficiency of the Energy Star units is applied. In addition, the U-values for the windows and the estimated overall average lighting power level resulting from the combination of these exemplary measures should be provided in the SEIR.

I note the Proponent's commitment to energy efficiency design. As part of the SEIR, the Proponent should clarify several items as identified by MassDEP and the Department of Energy

NPC Certificate

Resources (DOER) comment letter and further refine the GHG analysis to evaluate additional opportunities for GHG mitigation. I encourage the Proponent to reconsider going beyond code with building envelope energy efficiency measures. Specifically, there are several ways the proponent should consider as additional mitigation measures or means to achieve the mitigation commitments if the Energy Star appliance/office equipment reductions are not achieved. The base code compliant minimum EER for the HVAC is 9.5. The preferred alternative EER of 11.5 represents a 21% improvement. However, there are Energy Star rated units available in this capacity range with an EER of 14.3 (an increase of 50%). Because the proponent intends to emphasize the benefits of Energy Star rated equipment to the prospective tenants, the proponent should consider implementing the same standard to the HVAC units, which are much more energy intensive. The project should also consider promoting trial use of LED fixtures, which require up to 70% less energy to provide illumination equivalent to a T5 fixture. Also, all supply duct joints should be leak checked prior to insulating.

I note that the Expanded NPC contained an analysis of the future potential for the use of solar photovoltaic (PV) systems on new buildings constructed as part of the project. However, the project has not committed to actually implementing these systems at the current time. I urge the proponent to consider making such a commitment. At a minimum, the SEIR should include an assessment of the technical and cost feasibility of implementing solar or other alternative energy sources for the project, and it should explore opportunities to purchase power generated by renewable energy sources for a portion of the electricity use on the site. The SEIR must also present an analysis of the GHG emissions reductions that could be achieved through the use of potential solar PV systems or by green power purchasing.

Mobile source emissions were modeled using data gathered as part of the mesoscale study. The GHG analysis estimated CO₂ emissions for the existing conditions, 2009 Conditions, 2014 No-Build conditions, the 2014 Build conditions, and the 2014 Build plus Greater Mitigations condition. The 2009 Conditions are estimated to have approximately 39,557.9 tpy of CO₂ attributable to traffic (the Base Case). The 2014 No-Build conditions are estimated to have approximately 43,083.9 tpy of CO₂ attributable to an increase in traffic due to growth in the area. Under the 2014 Build conditions, the total mobile source project will emissions (Existing plus Project Emissions) were estimated to be 98,543.9 tpy of CO₂, within the project study area. Under the 2014 Build with Mitigation conditions, the emissions were estimated to be 95,084.9 tpy of CO₂, within the project study area. This results in a decrease of 3,459 tons per year in mobile source CO₂ emissions as compared to the 2014 Build Condition, which appears to result in a reduction of mobile source GHG emissions of 3.5%.

The SEIR should clarify which TDM measures were modeled as part of the mobile source GHG analysis and specify what measures are driving the results of the mobile source GHG emissions analysis.

Mitigation / Draft Section 61 Findings

The SEIR should contain a separate chapter on mitigation measures. This chapter should also include separate permit-specific updated draft Section 61 Findings for each State agency that will issue permits for the project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

an A. Bowles, Secretary

<u>May 15, 2009</u> Date

Comments received:

- 04/29/09Town of Hudson05/08/09Department of Environmental Protection CERO05/08/09Organization for the Assabet River
- 05/08/09 Massachusetts Highway Department

IAB/ACC/acc