



*The Commonwealth of Massachusetts*  
*Executive Office of Energy and Environmental*  
*Affairs*

*100 Cambridge Street, Suite 900*  
*Boston, MA 02114*

Charles D. Baker  
GOVERNOR

Karyn E. Polito  
LIEUTENANT GOVERNOR

Matthew A. Beaton  
SECRETARY

Tel: (617) 626-1000  
Fax: (617) 626-1181  
<http://www.mass.gov/envir>

August 5, 2016

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS  
ON THE  
SECOND NOTICE OF PROJECT CHANGE

PROJECT NAME : Kendall Square Urban Renewal Project (KSURP) -  
Amendment #10  
PROJECT MUNICIPALITY : Cambridge (Kendall Square)  
PROJECT WATERSHED : Boston Harbor (Charles River)  
EEA NUMBER : 1891  
PROJECT PROPONENT : Cambridge Redevelopment Authority  
DATE NOTICED IN MONITOR : July 6, 2016

Pursuant to the Massachusetts Environmental Policy Act (MEPA, M.G.L. c.30, ss.61-62I) and Section 11.17 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) submitted for this project and hereby determine that it **does not require** an Environmental Impact Report (EIR).

Second Notice of Project Change Description

On November 25, 2015, I issued a Certificate on the Single Environmental Impact Report (Single EIR) for this project, which acknowledged that certain aspects of the mitigation package were conceptual, and required that the Cambridge Redevelopment Authority (Proponent) submit a NPC to the MEPA Office prior to July 1, 2016 that includes a draft Memorandum of Understanding (MOU) between key project stakeholders that will identify funding commitments and guide development of transit related mitigation measures. The Second NPC includes the

required draft MOU and describes changes to the building program and building massing that has occurred since the Single EIR was filed.

### Original Project Description and MEPA Procedural History

The Kendall Square Urban Renewal Project (KSURP) was created by the Proponent in 1965. The KSURP regulates the level of development through a cap on aggregate Gross Floor Area (GFA) of all land uses in the KSURP area. The level of development is further restricted through land use controls, including identification of Floor Area Ratios (FARs). The KSURP initially consisted of construction of up to 14 buildings totaling approximately 2.77 million gross square feet (GSF), three parking garages, open space, and other public improvements. The project was the subject of previous review under MEPA beginning with an Environmental Notification Form (ENF) in 1975, and followed by Draft and Final EIRs in 1977 and 1978 respectively, both of which were found to be adequate. Five NPCs were filed since 1978. The NPCs adjusted the permitted mix of uses within the area, increased the maximum allowed GFA within the area, and extended the term of the KSURP. None of the NPCs required further MEPA review.

The first NPC for this project (KSURP Amendment No. 10) was submitted to the MEPA Office in April 2015. The extensive and detailed NPC included a request that I allow submission of a Single EIR. In a Certificate issued May 29, 2015, I granted the request for a Single EIR. The Scope for the SEIR requested further information on specific mitigation to address impacts on transit service and capacity. The Proponent filed a Single EIR for the project on October 15, 2015. On November 25, 2016 I issued a Certificate that determined the Single EIR adequately and property complied with MEPA and its implementing regulations. As noted above, the Certificate required that the Proponent file a Second NPC, including a draft MOU, for public review and comment.

### Project Change Description and Environmental Impacts

As described in the Second NPC, the development program for Amendment 10 to the KSURP consists of the addition of 1,125,200 sf of net new commercial office and residential development. This represents an increase of approximately 90,600 net new gross square feet compared to the project reviewed in the Single EIR. It includes approximately 30,000 sf of new ground-floor retail space which is exempted from the GFA cap in order to incentivize ground floor retail and balance commercial and residential uses<sup>1</sup>. As such, the analysis of environmental impacts presented in the Second NPC is based on the maximum amount of development that could be permitted in accordance with this project.

The Second NPC indicates that the changes to the building program and massing are necessary to comply with the requirements of Article 14 of the Cambridge Zoning Ordinance which was approved by Cambridge City Council following MEPA review of the Single EIR. The project changes will generally result in a reduction in office and retail space, an increase in

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<sup>1</sup> The proposed KSURP area GFA cap associated with this NPC is 4,273,000 square feet of development. This excludes the exempted 52,600 sf (previously 19,500 sf) of Innovation Space and 30,000 sf (previously 20,000 sf) of ground floor retail space; however, this development was included in the analysis of environmental impacts.

overall vehicle parking, an increase in innovation space, and changes to building massing and project phasing. The Second NPC does not change the completion date for the full build-out of the KSURP (2030). According to the Second NPC, the project change does not change the boundaries of the KSURP area; however the Three Cambridge Center site and associated development has been eliminated from the project and Fourteen Cambridge Center has been added to the project. Key elements of the Second NPC include the following:

- Replacement of the proposed residential building at Eleven Cambridge Center with an office building (site location now referred to as 145 Broadway);
- Replacement of the proposed office building at Cambridge Center North Garage with two residential buildings;
- Elimination of the Three Cambridge Center mixed-use building;
- Addition of Fourteen Cambridge Center site for construction of an office building (site location now referred to as 250 Binney Street);
- Creation of Innovation Space within an existing office building at 255 Main Street (previously referred to as One Cambridge Center);
- Slight reduction in the Broad Institute Office Conversion (from approximately 15,100 sf to 14,000 sf); and
- Inclusion of the draft MOU for public review and comment.

Specifically, the project consists of the following project components:

- **Phase 1A – Office Building A - 145 Broadway:** Demolition of existing structure. Proposed 20-story commercial office building (384,236 sf) with ground-floor retail space (10,000 sf).
- **Phase 1B – Residential Building South – Cambridge Center North Garage, south portion:** Proposed 33-story residential building (350,000 sf and up to 464 units) over the south portion of the existing Cambridge Center North [Parking] Garage.
- **Phase 2A – Office Building B – 250 Binney Street:** Demolition of existing structure. Proposed 15-story office building (358,176 sf) with ground-floor retail space (20,000 sf).
- **Phase 2B – Residential Building North – Cambridge Center North Garage, north portion:** Proposed 12-story residential building (70,000 sf and up to 96 units) over the north portion of the existing Cambridge Center North [Parking] Garage.
- **Innovation Space Conversion – 255 Main Street/One Cambridge Center:** Renovations to existing structure to provide approximately 105,200 sf of Innovation Space distributed across several floors.

The project continues to include a 60,000 sf commercial office addition at the existing Whitehead Institute building at Nine Cambridge Center and the conversion of 14,000 sf

(previously 15,100 sf) of mechanical space into commercial office space at the Broad Institute at 75 Ames Street.

As described in the Second NPC, the project will continue to be developed in two phases (Phase 1 and 2). Phase 1 will include two sub-phases (Phase 1A and 1B). Phase 1A will consist of the demolition of the existing Eleven Cambridge Center commercial office building and construction of Office Building A. Phase 1B will include construction of Residential Building South on top of the North Garage along Broadway. As described in the Second NPC, the Phase 2 (Three Cambridge Center mixed-use development) has been revised and separated into two sub-phases (Phase 2A and 2B). Phase 2A will now include demolition of the existing Fourteen Cambridge Center commercial office building and construction of Office Building B. Phase 2B will include redevelopment of the North Garage along Binney Street with Residential Building North. The development of innovation space at One Cambridge Center will occur concurrently with the development of proposed commercial space, in accordance with the City's zoning requirements.

According to the Second NPC, the project may result in the following environmental impacts compared to the project as reviewed in the Single EIR:

	<b>Amendment 10: Previously Reviewed (Single EIR)</b>	<b>Net Change</b>	<b>Amendment 10: Proposed Project 500 sf) of In</b>
<b>Gross Square Footage (GSF)<sup>2</sup></b>	1,034,600	+ 90,600 GSF	1,125,200
<b>Housing Units</b>	Up to 560 units	No change	Up to 560 units
<b>Vehicle Trips Per Day (unadjusted)</b>	10,512 adt	+238 adt	10,750 adt
<b>Vehicle Trip Per Day (adjusted)</b>	3,638 adt	+82 adt	3,720 adt
<b>Parking Spaces</b>	740 spaces	+69 spaces	809 spaces
<b>Work within Filled Tidelands</b>	176,707 sf	No change	176,707 sf
<b>Water Use</b>	0.12 mgd	11,917 gpd	0.13 mgd
<b>Wastewater Generation</b>	0.13 mgd	10,834 gpd	0.14 mgd

### Permitting and Jurisdiction

The original KSURP project was subject to a mandatory EIR pursuant to Sections 11.03(1)(a)(2) and 11.03(6)(a)(6) of the MEPA regulations because it required State Agency Action(s), and was expected to create more than 10 acres of new impervious surface, and generate more than 3,000 new average daily vehicle trips (adt).

<sup>2</sup> Represents total square footage, including exempted retail space. Does not include Innovation Space conversion.

The KSURP – Amendment 10 project is subject to a mandatory EIR as a stand-alone project pursuant to Section 11.03(6)(a)(6) of the MEPA regulations because it requires a State Agency Action and, on its own, will generate greater than 3,000 new adt on roadways providing access to a single location. Traffic generation will exceed the EIR threshold even when adjusted to account for mode share. The project requires an approval of an Urban Renewal Plan Amendment from the Massachusetts Department of Housing and Community Development (DHCD). The project may also require an Air Quality Permit from the Massachusetts Department of Environmental Protection (MassDEP). The Urban Renewal Plan Amendment also requires approval by the CRA and Cambridge City Council. Components of the project will also require review and Infill Development Concept Plan approval as a Special Permit by the Cambridge Planning Board. The project was subject to review under the May 2010 MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol (“the Policy”). According to the Second NPC, the proposed project changes do not meet or exceed any new MEPA review thresholds compared to those contemplated in the previous Single EIR filing

Because the project is not seeking Financial Assistance from the Commonwealth, MEPA jurisdiction is limited to those aspects of the project that are within the subject matter of required, or potentially required, State Agency Actions and that may cause Damage to the Environment as defined in the MEPA regulations. However, the subject matter of the Urban Renewal Plan approval and associated regulations (760 CMR 12.00) is sufficiently broad to confer the equivalent of broad scope jurisdiction over the potential environmental impacts of the project. Therefore, MEPA jurisdiction is broad in scope and extends to all aspects of a project that are likely, directly or indirectly, to cause Damage to the Environment, as defined in the MEPA regulations.

### Review of the Second NPC

The Second NPC included a description of the project reviewed in the Single EIR and the currently proposed project, included project plans, and discussed the significance of the project changes as listed in 301 CMR 11.10(6). It included a copy of the draft MOU and revised Draft Section 61 Findings for use by State Agencies. The Second NPC provided an update on agency coordination and public outreach that occurred since the Certificate was issued on the Single EIR. It provided a technical appendix which updated the traffic analysis and an updated GHG analysis. It described the planning process and the recently enacted zoning ordinance which provides context for the proposed changes.

### *Traffic and Transportation*

According to the Second NPC, the impacts of the project change are nearly identical, or in some cases modestly lower than the previously reviewed project during peak hours. The project change does not result in revisions to the proposed access scheme or proposed mitigation measures. Based on this, the Second NPC indicates that the Transportation Study presented in the Single EIR continues to provide an accurate assessment of potential transportation related impacts associated with the project as currently proposed. Comments from MassDOT confirm this approach and indicate that no additional transportation-related mitigation is necessary based on the proposed project changes.

### *Trip Generation and Parking*

According to the Second NPC, while the proposed building program has increased by approximately 90,600 sf, the overall trip generation has remained relatively constant compared to the project as last reviewed. The proposed project will generate approximately 238 additional unadjusted adt (10,750 total adt) or 82 additional adjusted adt (3,720 total adt) than the previously reviewed project during an average weekday. During the morning peak hour, the project change will generate approximately 40 additional unadjusted adt (1,224 total adt) or 11 additional adjusted adt (401 total adt). Trip generation is anticipated to decrease during the evening peak hour by 17 unadjusted adt (1,289 total adt) and by 5 adjusted adt (439 adt total). The adjusted trip generation calculations reflect credits allowed for pass-by trips and mode share based on rates derived from the Proponent's existing traffic monitoring program. When the adjusted trips are added to the expected future traffic as projected in 2010 when the project was last reviewed under MEPA (Amendment No.8), traffic generation is estimated at 17,434 adt, which is less than the originally projected 19,300 vehicle trips.

The Second NPC provided updated parking calculations based on the revised development program and described the methodology and assumptions used to estimate parking demand. The project change includes construction of approximately 69 net new additional parking spaces than previously proposed (809 net new parking spaces proposed in total). When added to the existing 2,708 parking spaces that have been built, this results in a total of 3,517 parking spaces. This is below the total maximum off-street parking (3,545 parking spaces) reviewed during KSURP Amendment No. 3. As previously proposed, all new parking will be located in parking structures. I refer the Proponent to comments from the City which request the Proponent consider a reduction in the proposed parking supply. I encourage the Proponent to re-evaluate the proposed number of parking spaces during the local permitting process.

### *Memorandum of Understanding (MOU)/Kendall Square Transit Enhancement Program (KSTEP)*

The Certificate on the Single EIR required that the Proponent continue to advance the Kendall Square Transit Enhancement Program (KSTEP) through development and execution of a MOU with MassDOT, MBTA, the City, and other stakeholders. The Redeveloper is a concurring party to the MOU. The MOU outlines the process that will lead to identifying and coordinating specific measures to be developed and implemented over the next 15 years.

As described in the draft MOU, the Proponent, in coordination with the City and other parties to the MOU, will establish and maintain a transit fund (KSTEP Fund) to implement transit improvement projects in the Kendall Square area. The KSTEP will include major short term and long term transportation initiatives identified by a Working Group to be comprised of the parties to the MOU, additional contributors to the KSTEP Fund, and other stakeholders. The draft MOU identifies the following criteria to be used by the Working Group when establishing project priorities and funding allocations:

- Measurable improvements to transit service levels in the Kendall Square area, including connections to and from transit service in the Kendall Square area;
- Ability to leverage multiple layers of available public and private funds and remain long-term economically sustainable from a capital and operational perspective; and
- A high level of utility from a broad mobility perspective.

The Proponent will release funds to implement transportation initiatives after concurring and obtaining approval from the City Manager. The KSTEP Fund may receive additional funding from other developments and the draft MOU provided a funding formula to determine the appropriate payment amount. The formula is primarily based on proposed commercial square footage (to incentivize residential space), daily transit trips generated, and the fare recovery gap per trip. Based on the formula, the Redeveloper (Boston Properties) will contribute an initial payment of \$6 million prior to the issuance of any building permit for new commercial development.

Short-term transit enhancements will be identified by the Working Group prior to the initial payment, and will be funded by up to one-third of the KSTEP funds. The draft MOU indicates such projects may include the following:

- Capital investment for additional MBTA bus service to Kendall Square from under-served corridors and may include new routes;
- Capital investment for additional EZ Ride bus service to address commuter peak periods, additional routes to unserved corridors, and/or expansion of off peak service; and/or
- Capital improvements to the existing transit infrastructure at Kendall Station, including increased station capacity by expanding passenger waiting areas, or similar enhancements, improved Kendall Square station transit information, resiliency measures, and/or improved bus connectivity.

Longer term funding allocations for enhanced transit service to Kendall Square will be identified by the Working Group within one year from the initial payment. The draft MOU identifies the following potential long-term projects:

- Operating and capital support for new ground transportation via non-MBTA shuttles and/or MBTA buses or Bus Rapid Transit aimed at facilitating access between Kendall Square and Central Square, Sullivan Square, Union Square, Longwood Medical Area, North Station, or other locations with a demonstrated need for access to/from Kendall Square;
- Red Line modernization and improvements, including signal, track, station, and other technology improvements designed to increase capacity and reliability especially at peak-of-the-peak, including enhancing headways (time between service) and other improvements that will impact the quality and capacity of transit service and the customer experience; and/or

- Other strategic investments that are consistent with the above-referenced considerations, and with the 2030 and 2040 transportation planning efforts, including feasibility investigations and potential capital investments toward new transit service benefitting the Kendall Square area.

Comments from MassDOT, MAPC, and the City support the Proponent and Redeveloper's efforts to establish a comprehensive and creative solution that will identify and fund transit improvements within the KSURP and do not identify additional issues to be evaluated through the preparation of a Supplemental EIR. I expect that the Proponent and Redeveloper will continue to work with MassDOT, MBTA, the City, and other stakeholders to finalize the MOU. The draft MOU indicates that metrics to measure the effectiveness of the KSTEP will be developed within two years of the initial payment. I expect that the Proponent will coordinate this evaluation with MassDOT, MBTA, the City, and other stakeholders, and revise the KSTEP as necessary to address any identified deficiencies. The Final MOU should be provided to the MEPA Office for inclusion in the project file and publication of its availability in the Environmental Monitor. Failure to finalize the MOU and implement associated transit improvements in conjunction with project development would require the filing of a NPC.

#### *Wastewater and Water Supply*

According to the Second NPC, the project will generate a total new wastewater flow of 143,419 gpd, which represents an increase of 10,834 gpd compared to the project reviewed in the Single EIR. The Second NPC continues to acknowledge the need to mitigate Infiltration/Inflow (I/I) to mitigate potential impacts to the sewer system. Based on the project's updated wastewater generation, the Proponent is responsible for removing approximately 573,676 gpd of I/I; approximately 43,336 gpd more than the previously reviewed value. The Second NPC indicates that these requirements will be addressed by coordinating with the City's Department of Public Works (DPW) to either correct I/I issues within the KSURP area or by funding other I/I reduction projects. According to the Second NPC, the Proponent is in the process of evaluating several potential I/I mitigation projects identified and suggested by the DPW. The Proponent should continue coordinating with the DPW as the project progresses.

As described in the Second NPC, the project will require approximately 157,761 gpd of net new potable water; which represents an additional 11,917 gpd. The Second NPC indicates that the water demand estimates may be conservative as they do not include the water conservation measures that the Proponent will employ to reduce water consumption, such as low flow plumbing fixtures, use of native vegetation, and minimal/efficient irrigation systems. The Second NPC indicates the Proponent will continue to explore the viability of alternate water sources such as water reuse systems, rainwater harvesting, and xeriscaping. I refer the Proponent to comments from the CRWA and encourage the Proponent to continue evaluating sustainable and efficient water supply and wastewater systems at the building and site-level.

#### *Stormwater*

The Second NPC indicates that the project will meet stormwater and water quality requirements by increasing the net pervious area, pretreating surface runoff for pollutants, maximizing the amount of runoff infiltrated to groundwater, and the use of structural water



quality units. The Second NPC also indicates that a new goal of the project change is to develop a district level stormwater management approach; this integrated approach will be an improvement to individual project and site based stormwater management. The district-level stormwater management plan will include the redevelopment of the Sixth Street corridor to improve the hydrologic connection of the entire project site. I refer the Proponent to comments from the CRWA which request additional information regarding the Sixth Street corridor re-design, the type of best management practices proposed, and how the corridor fits into the larger District-Level Stormwater Management Plan. I expect that the Proponent will coordinate with CRWA as this component of the project progresses.

The Second NPC indicates that the Proponent is exploring the feasibility of constructing permeable pavement over the previously impervious roadway and pedestrian areas that service the project site. These infiltration systems will be designed to drain within 72 hours of each precipitation event, and the infiltration capacity will be equal to almost two inches of runoff over the entire project site. Based on this, the Second NPC indicates that greater levels of phosphorus will be removed with the project change compared to the previous project and that the project will comply with the phosphorous removal Total Maximum Daily Load (TMDL) requirements. I refer the Proponent to comments from CRWA which request additional information regarding the location of permeable pavement, stormwater calculations, and phosphorous reduction. I encourage the Proponent to consult with CRWA during the project design process and to consider the use of native vegetation to supplement the permeable pavement infiltration system.

### *Air Quality*

According to the Second NPC, the project change will not significantly change air emissions or mobile GHG emissions as previously reported in the Single EIR. Air quality and mobile GHG emissions will be minimized through the implementation of the traffic mitigation measures, including a robust Transportation Demand Management plan as originally described in the Single EIR.

### *Greenhouse Gas Emissions*

The original project was subject to review under the May 2010 MEPA GHG Policy and it was subject to the Massachusetts Stretch Energy Code (Stretch Code) adopted by the City of Cambridge. The Policy requires projects to quantify carbon dioxide (CO<sub>2</sub>) emissions and identify measures to avoid, minimize or mitigate such emissions. The Second NPC included an updated GHG assessment to reflect the revised building program and massing. The GHG analysis evaluated CO<sub>2</sub> emissions for two alternatives as required by the Policy including 1) a Base Case and 2) a Preferred Alternative that includes additional energy saving measures and, at a minimum, complies with the Stretch Code. The updated analysis used the eQUEST, version 3.64, modeling software to perform the GHG analysis and included modeling assumptions and emissions rates.

At the time of the filing of the previous Single EIR, the building code is the Massachusetts Building Code 8th Edition; however, the City has adopted the Stretch Code. The current Stretch Code requires energy efficiencies of 20 percent better than American Society of

Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2007 and requires modeling of base and proposed cases based on the methodology as defined in ASHRAE 90.1-2007 (Appendix G). Based on this, ASHRAE 90.1-2007 was applied to define the Base Case. The Second NPC also compared the proposed energy efficiency with the requirements of ASHRAE 90.1-2010 to demonstrate how the project would meet the future potential Stretch Energy Code. The Preferred Alternative is expected to meet the current Stretch Energy Code. Mobile GHG emissions were estimated using the standard methodology in the EEA/MassDOT Guidelines for EIR/EIS Traffic Impact Assessments and EPA's MOVES2014 emission factors. Potential project-related mobile GHG emissions were compared for the 2014 Existing Condition, the 2024 No-Build Condition, the 2024 Build Condition, and the 2024 Build with Mitigation Condition. The revised analysis indicates that the Base Case for the entire project will generate approximately 8,153 tons per year (tpy) of GHG emissions, consisting of 7,107 tpy of stationary source emissions and 1,046 tpy of mobile source emissions. The Preferred Alternative will reduce stationary source emissions by 1,448 tpy, an approximately 20 percent reduction, and will reduce mobile source emissions by 105 tpd, a 10 percent reduction. Overall emissions will be reduced by 1,553 tpy for an approximate 19 percent reduction.

I continue to commend the Proponent's commitment to creating a sustainable development and its efforts to address climate change impacts in coordination with the City and other stakeholder groups. Although energy efficiency components for each building will vary, the Second NPC summarizes the stationary source energy conservation measures. They include high performance buildings with double pane curtainwalls and insulation, improved lighting power density (LPD), variable volume condensing and chilled hot water pumping, high efficiency centrifugal chillers, variable frequency drives (VFD) on cooling tower fans and higher efficiency cold water Delta T system, 96-percent efficiency condensing gas-fired hot water boilers, high efficiency water source heat pumps, high efficiency energy recovery ventilator, differential CO<sub>2</sub>-based demand control ventilation for offices, and CO control and variable air volume (VAV) for underground garage fans. I note the GHG analysis assumed implementation of a number of local intersection operation improvements, bicycle and pedestrian enhancements, and the TDM Plan. I note that the Proponent has not committed to specific intersection improvements or bicycle and pedestrian enhancements. I expect that the Proponent's self-certification will confirm that these or equivalent reduction measures have been implemented to demonstrate a commensurate GHG reduction.

The Second NPC indicates that the cogeneration facility located at Fourteen Cambridge Center will be utilized as an energy source for the Office Building B. According to the Second NPC, an additional 1,636 tpy of CO<sub>2</sub> could be reduced by implementation of this measure which would result in a project with less stationary source GHG emissions than the previously reviewed project. This was not included as a mitigation measure, nor committed to in the draft self-certification letter. Given the significant GHG reduction benefit it provides, I encourage the Proponent to implement this as a mitigation measure. I also encourage further consideration of connecting additional buildings to this cogeneration facility and refer the Proponent to DOER's comment letters for additional guidance on this issue.

The purchase of energy from the Veolia (f/k/a Dalkia) Cambridge Combined Heat and Power (CHP) district steam network represents another significant opportunity to reduce GHG

emissions. According to DOER, the proposed mitigation measures represent a 19 percent reduction in source energy; however using the district steam network for both heating and cooling would result in a 139 percent reduction in source energy. Given the significant GHG reductions associated with this potential measure, I expect the Proponent to continue evaluating use of the district steam system. In addition, I encourage the Proponent to work with DOER to consider how identified constraints may be addressed.

According to the Second NPC, an additional 570 tpy of CO<sub>2</sub> could be reduced by installing solar on the available rooftop space of the proposed buildings. The Second NPC analyzed the viability of a roof-mounted solar photovoltaic (PV) system for the buildings and determined that the project is too conceptual to commit to this measure. In the Second NPC, the Proponent continues to commit to making the rooftops solar-ready. I encourage the Proponent to continue to evaluate this measure as project design progresses.

### *Climate Change Adaptation and Resiliency*

The Second NPC continues to reiterate the importance of planning for climate change impacts and resiliency resulting from sea level rise, increased storm frequency and duration, and extreme temperature events. As part of the previously reviewed project, the Proponent committed to aid the MBTA with improving the resiliency of the MBTA Kendall Square Station. With the removal of the Three Cambridge Center building from the project; the Proponent has eliminated this commitment as the project will no longer impact areas adjacent to the Kendall Square Station. The Second NPC indicates that the remainder of the proposed changes are consistent with the previously reviewed project and that the Proponent remains committed to identifying and adapting to climate change impacts. I encourage the future Working Group to consider projects which will improve the coastal resiliency of the Kendall Square station as the station could be vulnerable to flooding in the future which could affect accessibility to transit.

The Second NPC indicated that the City of Cambridge has been finalizing the Climate Change Vulnerability assessment since the Certificate on the Single EIR was issued. Using conservative modeling, the Second NPC indicates that the KSURP area has a 0.2-0.5 percent chance of experiencing flooding due to sea level rise in the year 2070, with an estimated sea level rise value of 3.2 feet. I refer the Proponent to comments from the City of Cambridge which provide clarification regarding flood risks related to storm surge in the project area (particularly along Broadway) and I expect that the Proponent will work with the City to address these risks in the design of the project.

### *Hazardous Materials & Solid Waste*

The Second NPC indicates that the proposed project changes (specifically, the addition of the 14 Cambridge Center site) remain consistent with potential impacts as identified in the Single EIR. As each project component proceeds, it will be required to adhere to applicable hazardous materials regulations. The Second NPC reiterated potential mitigation measures that may be implemented depending on the results of environmental investigations including protective barriers and vapor mitigation systems.

*Landlocked Tidelands*

According to the Second NPC, the amount of work within landlocked tidelands has not changed since the previously reviewed project. However, the project change has adjusted the proposed nature of work within the landlocked tidelands for the Eleven Cambridge Center and North Garage sites, as described below.

<b>Project Component</b>	<b>Total Area within Tidelands</b>	<b>Nature of Work as Currently Proposed</b>
Cambridge Center North Garage	60,288 sf	Construction of two residential buildings stop the existing North Garage and outdoor public open space improvements
Eleven Cambridge Center / Office Building A	28,600 sf	Redevelopment into an office building with ground-floor retail
Broad Institute Conversion	64,230sf	Conversion of mechanical space to commercial office space
<b>Total</b>	<b>153,118 sf</b>	

While the project has adjusted the permitted mix of uses within landlocked tidelands, the project does not involve any significant changes to the public benefit commitments as previously identified in the Single EIR. The only change is de minimus and involves the elimination of the Winter Garden. The Winter Garden was previously proposed to replace the existing public park located along Broadway as part of the Cambridge Center North Garage Buildings. The current project proposes to maintain and improve the existing public park as part of the North Garage Residential Building North. Additionally, the proposed project will provide for additional public open space on the roof of the North Garage. With this additional public benefit, I find that the Public Benefit Determination issued on December 23, 2015 remains applicable to the project as currently proposed.

*Construction Period Impacts*

The Second NPC indicated that temporary construction impacts associated with the project change are consistent with those identified in the Single EIR. As identified in the Single EIR, a Construction Management Plan (CMP) will be prepared for each project component to identify temporary construction period impacts, mitigation measures, road closures, detours, and staging. Mitigation measures to be included in the CMP include: erosion and sedimentation control, identification of designated truck routes, maintenance and protection of pedestrian and bicycle accommodations, dust suppression, covering trucks used for transportation of construction debris, daily cleaning of streets and sidewalks, and construction noise mitigation measures.

### Mitigation/Draft Section 61 Findings

The Second NPC included an updated summary of potential mitigation measures to avoid, minimize, and/or mitigate environmental impacts. The Proponent and/or Redeveloper have committed to implement the following measures to avoid, minimize, and mitigate environmental impacts:

#### *Traffic/Transportation*

- The Proponent will continue to conduct annual traffic monitoring and employee survey program to evaluate the success of the TDM program and accuracy of trip and traffic projections, and adjust mitigation as necessary.

#### *Vehicular Access and Circulation Improvements*

- Analyze and propose adjustments to signal timing and phasing for study area local intersections, as appropriate, in coordination with the City.

#### *Public Transit Improvements*

- Establish the KSTEP in coordination with MassDOT, the MBTA, and the City through the establishment of an MOU, or similar document.
- Redeveloper will provide an initial payment of \$6 million to fund transit improvements.
- Implement the project-related improvement projects, program, and/or service improvements identified in the KSTEP, in coordination with MassDOT, the MBTA, and the City.
- Proponent will study and partially fund the increase in EZRide Shuttle service. Proponent will work with the Charles River TMA to devise a plan as to how the EZRide service can best serve the community in the future and provide support to the expansion of the EZRide service, including but not limited to: decreasing headways, increasing bus fleet, and optimizing bus routes.
- Implement local roadway intersection signal improvements, which will decrease delay at specific intersections the MBTA busses pass through (including Bus Routes 64, 68, 85, and EZRide at the intersections of Broadway at Galileo Galilei Way and Main Street at Galileo Galilei Way/Vasser Street, respectively).

#### *Pedestrian and Bicycle Access and Circulation Improvements*

- Review all pedestrian crossings and study area intersections and evaluate potential improvements to accommodate pedestrians, in coordination with the City.
- Improve the Sixth Street Connector.
- Incorporate a new mid-block pedestrian connection on Broadway between the Cambridge Center North Garage Office Buildings and Danny Lewin Park.
- Enhance the Main Street streetscape from Ames Street to Galileo Galilei Way.
- Enhance the Broadway streetscape from Ames Street to Galileo Galilei Way.
- Enhance the Binney Street and Galileo Galilei Way streetscape from Sixth Street to Broadway.

- Donate two sites for hubway bicycle sharing stations (at Office Building B and Innovation Space Conversion).
- Review and evaluate potential bicycle improvements to connect each project component to other area wide improvements, in coordination with the City.
- Provide approximately 800 bicycle long-term storage spaces for residents/tenants and provide approximately 142 short-term bicycle exterior parking spaces.
- Explore opportunities to create a full service bike station within the area.

### *GHG Emissions*

- Measures to avoid, minimize, or mitigate GHG emissions include:
  - Improved Glazing Properties;
  - Improved Roof Insulation;
  - Improved Exterior Wall Insulation;
  - Improved Interior LPD;
  - Low-flow Water Fixtures and High- Efficiency Domestic Water Heater;
  - Variable Volume Condensing and Chilled, and Hot Water Pumping;
  - High-Efficiency Centrifugal Chillers;
  - VFD on Cooling Tower Fans and Higher CW Delta T
  - High-Efficiency Condensing Gas-Fired Hot Water Boilers;
  - High-Efficiency Water Source Heat Pumps;
  - High-Efficiency Energy Recovery Ventilator;
  - Differential CO<sub>2</sub> Based DCV for Offices;
  - CO Control and VFD for Underground Garage Fans; and
  - “Solar Ready” building roofs.
- The technical feasibility, cost and benefit of addition of the following measures will be evaluated during final design:
  - Rooftop Solar PV installation;
  - Potential connection of Office Building B to cogeneration facility located at Fourteen Cambridge Center.
- Provide Tenant Design and Construction Guidelines to potential office and retail tenants as a guide to use when fitting out their space. Guidelines will include:
  - Descriptions of sustainable design, construction and operations features of the buildings, including resource conservation goals and features for tenant fit-out spaces (e.g., low-flow plumbing fixtures, sub-metered systems, lighting controls);
  - Encourage tenant commitments for meeting various energy and water conservation goals;

- Descriptions of current regulatory requirements that pertain to leasable spaces;
  - Strategies for improving energy efficiency, including recommendations for HVAC equipment, lighting controls, and low-flow and high-efficiency plumbing fixtures;
  - Waste reduction goals and recycling facilities/programs;
  - Green cleaning policies/guidelines;
  - Project-wide features that aim to encourage alternative transportation and TDM measures; and,
  - Information on how to train/inform maintenance staff and employees on sustainable operation and design features.
- Implement TDM Program, including a car sharing program, MBTA transit pass subsidy, free rides on some existing shuttle routes, parking pricing, Hubway pass subsidy, provision of eight parking spaces in East Garage for ZipCar care share parking, preferential parking for carpool and vanpool participants, preferential parking for designated Electronic Vehicles (EV) and alternative fuel vehicles, transportation coordinator, and provision of “real-time” transportation information in all new and renovated lobbies and at select public plazas on the project site. The Proponent will continue to participate in the Charles River TMA.
  - The project will be designed to meet the applicable version of the Stretch Code in effect at the time of construction.
  - The Proponent will submit a post-construction self-certification document to the MEPA Office which will be signed by an appropriate professional (e.g., engineer, architect, transportation planner, general contractor) and indicate that all of the required mitigation measures, or their equivalent, have been completed for each project component. The certification should be supported by plans that clearly illustrate what type of GHG mitigation measures have been incorporated into the project. For those measures that are operational in nature (i.e. TDM, recycling, parking management), the Proponent should provide an updated plan identifying the measures, the schedule for implementation and how progress towards achieving the measures will be obtained.

#### *Water and Wastewater*

- Coordinate with the City to correct I/I issues in the vicinity of the Project or providing funding for projects that the City is performing to reduce I/I.
- The project will include water use reduction strategies to achieve a 20% reduction in water use. The reduction in water use will also reduce wastewater generation.

#### *Stormwater*

- The project will mitigate stormwater effluent from the post-development, 25-year design storm to the rates of the pre-development, 2-year design storm and reduce TSS by 80% from the pre-development condition.

- The stormwater management system will treat runoff to meet the Charles River phosphorous removal TMDL (65%) and will maximize infiltration to the local groundwater.
- Redevelopment of the Sixth Street corridor to improve the hydrologic condition of the project site.
- Proponent will work with the City to evaluate a district-wide stormwater management solution that will treat stormwater runoff beyond the scope of individual project components.
- Use of green roofs and continued evaluation of permeable pavement in project design.

#### *Climate Adaptation and Resiliency Measures*

- The Proponent and/or Redeveloper will continue to evaluate and implement (as appropriate) the following measures:
  - Potential Site Design Measures: increased pervious surfaces on the ground level, green roofs, increased tree plantings and landscaping, use of native vegetation to minimize irrigation requirements, implementation of efficient irrigation system, rainwater harvesting, xeriscaping, and use of portable flood protection systems.
  - Potential Building Design Measures: Locating critical infrastructure above the first floor level, limiting basement areas, evaluating raised finish floor elevations, and potential use of flood-resistant building materials.
- Proponent will continue to coordinate with DPW to evaluate appropriate methods to address inland flooding in the KSURP area, which may include the improvement of stormwater infrastructure adjacent to the site.

#### *Hazardous Waste*

- Develop a Release Abatement Measure (RAM) Plan to manage contaminated soil and/or groundwater (if encountered) and implement measures as required to reduce the risk of exposure of contaminants at each project component.
- Perform Vapor Intrusion (VI) evaluations in accordance with MassDEP guidelines and design and implement a vapor mitigation system (if required).
- Use of protective barriers in landscaped areas and exterior hardscape areas to mitigate risk of direct contact with contaminated soils.

#### *Construction Period*

- Development of a Construction Management Plan (CMP) for each project component including: erosion and sedimentation control, identification of designated truck routes, maintenance and protection of pedestrian and bicycle accommodations, dust suppression, covering trucks used for transportation of construction debris, daily cleaning of streets and sidewalks, and noise mitigation measures.
- Divert 100 percent of paper, corrugated cardboard, glass, plastic, and metal and a minimum of 75 percent of construction and demolition waste from landfills.



Conclusion

The Second NPC has sufficiently defined the nature and general elements of the project for the purposes of MEPA review and demonstrated that the project's environmental impacts will be avoided, minimized and/or mitigated to the extent practicable. Based on the information presented in the Second NPC and after consultation with State Agencies, I find that no further MEPA review is required at this time. Remaining issues can be addressed through the local, state and federal permitting and review processes. In the event that the draft MOU is not finalized, the Proponent should file a NPC to address alternative approaches to implement transportation improvements, including transit capacity and service improvements.

The Proponent and State Agencies should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.



August 5, 2016

Date

Matthew A. Beaton

## Comments received:

07/25/2016	Metropolitan Area Planning Council (MAPC)
07/26/2016	Massachusetts Water Resources Authority (MWRA)
07/26/2016	Stephen H. Kaiser
07/26/2016	Charles River Watershed Association (CRWA)
07/26/2016	Massachusetts Department of Transportation (MassDOT)
07/26/2016	City of Cambridge
07/28/2016	Massachusetts Department of Energy Resources (DOER)

MAB/PRC/prc