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CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Seaport Square
PROJECT MUNICIPALITY : Boston
PROJECT WATERSHED : Boston Harbor
EEA NUMBER : 14255
PROJECT PROPONENT : Seaport Square Development Company LLC
DATE NOTICED IN MONITOR : May 9, 2018

Pursuant to the Massachusetts Environmental Policy Act (M.G. L. c. 30, ss. 61-62I) and Section 11.08 of the MEPA regulations (301 CMR 11.00), I have reviewed the Final Supplemental Environmental Impact Report (FSEIR) and hereby determine that it **adequately and properly complies** with MEPA and its implementing regulations.

Project Description

The project is a mixed-use development of approximately 7.6 million square feet (sf) in 20 development blocks on a 23-acre site. As shown in Table 1, the project will include 1.12 million sf of retail and entertainment space; 3.2 million sf of residential space; 2.78 million sf of office and research space; 470,800 sf of hotel space; and 19,700 sf of civic/educational space. Performing Arts uses, totaling 750 seats of audience capacity, will replace a portion of the retail or office/research space, depending on the final use program. The project will provide approximately 5,500 underground parking spaces and over 500 on-street spaces.

Table 1

Block	Total (GFA)	Retail / Entertainment /Performing Arts** (GFA)	Residential (GFA)	Office / Research / Performing Arts** (GFA)	Hotel (GFA)	Civic / Educational (GFA)
Block A	85,800	-	-	-	83,800	2,000
Block B	980,000	230,000	750,000	-	-	-
Block C						
Block D*	499,400	69,400	-	425,000	-	5,000
Block F* (including District Hall already constructed)	42,000	40,500	-	-	-	1,500
Block G*	671,800	85,800	581,000	-	-	5,000
Block H	22,400	-	-	16,200	-	6,200
Block J	99,000	-	-	-	99,000	-
Block K	298,732	23,732	275,000	-	-	-
Block L1	455,300	20,925	-	434,375	-	-
Block L2	432,038	59,638	-	372,400	-	-
Block L3*	417,000	54,000	363,000	-	-	-
Block L4*	523,540	81,000	-	442,540	-	-
Block L5*	707,000	107,000	-	600,000	-	-
Block L6*	338,000	50,000	-	-	288,000	-
Block M1	1,012,000	125,000	887,000	-	-	-
Block M2						
Block N*	422,000	72,000	350,000	-	-	-
Block P*	591,000	100,000	-	491,000	-	-
Block Q*	4,000	4,000	-	-	-	-
Total	7,601,010	1,122,995	3,206,000	2,781,515	470,800	19,700

* Development Blocks included in the NPC Project

Approximately 3.4 million sf of buildings and structures that were previously reviewed under MEPA in 2010 have either been constructed or are under construction, including 11 buildings and five underground parking garages with 2,104 spaces. Several new public spaces have been completed, including the 0.85-acre Seaport Common, the District Hall innovation center, the 0.75-acre Sea Green Park, a portion of the 17,000-sf Courthouse Square, and a visitor's center.

Project components currently under MEPA review were described in the Notice of Project Change (NPC) filed in April 2017 ("NPC Project") and are identified in Table 1 with asterisks. The NPC Project includes approximately 4.2 million sf of gross floor area (gfa), increasing the size of the development from 6.3 million sf proposed in 2010 to 7.6 million sf.

The NPC project includes nine buildings on ten development blocks covering a 13-acre portion of the overall project site. Each office or residential building will have public uses on the ground floor, such as retail, entertainment, restaurant, or cultural or civic uses. Including the proposed hotels, the project will provide over 1.5 million sf of publicly-accessible interior uses. The NPC Project will include Harbor Way, a linear pedestrian and bicycle path through the project site from Summer Street to Northern Boulevard and the Boston Harbor waterfront via a mid-block crossing of Seaport Boulevard. The Summer Street Steps, to be located between Blocks N and P, will establish a bicycle and pedestrian connection between the project site and the elevated grade of Summer Street. When completed, the project will provide approximately 9.2 acres of open space, including privately-owned streets open to the public; of this area, 7.8 acres (34 percent of the privately-owned project site) will be devoted to pedestrian-only open space. The project includes the construction of a new MBTA Silver Line head house adjacent to Seaport Common and streetscape improvements.

The project will continue to be constructed in phases. The FSEIR provided an updated construction schedule reflecting slightly later completion dates for Phases 5 through 8 and revised phasing for Blocks D and L4:

- Phase 0 (completed in 2013): Block Q, District Hall
- Phase 1 (completed in 2015): Blocks A, K, and L1
- Phase 2 (completed in 2016): Block H, Seaport Common
- Phase 3 (to be completed in 2017): Blocks B, C and J
- Phase 4 (to be completed in 2018): Block L2
- Phase 5 (to be completed in 2020): Block M
- Phase 6 (to be completed in 2021): Blocks L4, F and N or P
- Phase 7 (to be completed in 2022): Blocks D, L3, L5 and L6
- Phase 8 (to be completed in 2023): Blocks G and N or P

Since the DSEIR was filed, Amazon announced an expansion in the Seaport District. Amazon will occupy the building proposed on Block L4. The Executive Office of Housing and Economic Development (EOHED), MassDOT, the Proponent and Amazon entered into an agreement¹ on April 25, 2018 to support the expansion which includes a commitment by the state to construct public infrastructure projects.

Project Site

The overall project site covers 23 acres in an L-shaped set of development parcels generally located in an area bounded by Northern Avenue, Seaport Boulevard, B Street, Congress Street, Summer Street, Boston Wharf Road, and Sleeper Street. As noted above, it includes development parcels completed or under construction that were previously reviewed as part of the 2010 Project. Most of the site east of Boston Wharf Road consists of surface parking lots.

¹ “Commitment for Commonwealth Funding, Amazon Expansion, Seaport Square, Boston” dated April 25, 2018.

The NPC Project includes 10 parcels over 13 acres within the original project site. Blocks D, F and G are located between Northern Avenue and Seaport Boulevard. Blocks L3-L6 are bounded by Autumn Lane, East Service Road, Congress Street and Boston Wharf Road. Parcel Q is located adjacent to and west of the L Block parcels. Blocks N and P are bounded by Congress Street, Summer Street and Boston Wharf Road. A 2,469-sf parcel located between the current end of Farnsworth Street and Seaport Boulevard was conveyed by the Massachusetts Bay Transportation Authority (MBTA) to the Boston Planning and Development Agency (BPDA) and then licensed to the Proponent. A 3,614-sf parcel located between Blocks J and K is owned by the MBTA. Portions of Blocks P and G are owned by the Massachusetts Department of Transportation (MassDOT) and will be acquired by the Proponent.

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) (number 25025C0081J, effective March 16, 2016) approximately four acres of the NPC Project site are located within the 100-year floodplain with a Base Flood Elevation (BFE) of 10 ft NAVD 88.

Environmental Impacts and Mitigation

The NPC Project will generate approximately 62,402 new unadjusted average daily trips (adt). Adjusted for mode share and pass-by trips, the NPC Project will generate 25,570 pedestrian/bicycle trips, 29,074 transit trips, and 14,660 vehicle trips (including shuttle trips) on a daily basis. It will construct non-water dependent uses on filled tidelands, including 9,750 sf of tidelands subject to Chapter 91 (c. 91) licensing and impact approximately four acres of Land Subject to Coastal Storm Flowage (LSCSF). Compared to the 2010 Project, the NPC Project will increase water use by 361,907 gpd and generate an additional 329,006 gpd. It will generate Greenhouse Gas (GHG) emissions associated with the use of buildings and vehicular traffic to and from the site.

The NPC Project will mitigate its vehicle trip generation by providing new pedestrian and bicycle facilities, roadway mitigation, including pavement markings and signal timing adjustments, and implementing Transportation Demand Management (TDM) measures to minimize single-occupancy vehicle (SOV) trips. It will provide approximately seven acres of public open space and ground-level interior uses that will be open to the public. It will construct new stormwater management systems to protect water quality. The buildings will include energy-efficiency design measures to mitigate GHG impacts. The mitigation measures for impacts associated with the 2010 Project were identified in the Certificate on the FEIR, which was issued on August 13, 2010, and identified in Section 61 Findings.

Jurisdiction and Permitting

The overall project is subject to environmental review and the preparation of a mandatory EIR pursuant to the following sections of the MEPA regulations: 301 CMR 11.03(3)(a)(5), because it involves a new non-water dependent use on greater than one acre of tidelands; 301 CMR 11.03(6)(a)(6), because it will generate more than 3,000 new average daily trips (adt); and 301 CMR 11.03(6)(a)(7), because it proposes the construction of more than 1,000 new parking spaces. In addition, the overall project exceeds the following Environmental Notification Form

(ENF) thresholds: 301 CMR 11.03(5)(b)(4)(a), new discharge of more than 100,000 gallons per day (gpd) of wastewater to a sewer system and 301 CMR 11.03(10)(b)(1), demolition of a historic structure listed in the State Register of Historic Places. The NPC Project exceeds the EIR threshold at 301 CMR 11.03(6)(a)(6), generation of 3,000 or more new adt (62,402 adt).

The overall project requires a c. 91 License and possibly an Air Plan Approval from the Department of Environmental Protection (MassDEP); a Vehicular Access Permit, approval for a proposed change in designation of a “no-access” area, and compliance with MGL c. 40, Section 54A from MassDOT; approvals related to the connection of a new head house to the Silver Line from the MBTA; a Sewer Use Discharge Permit and a Construction Dewatering Permit from the Massachusetts Water Resources Authority (MWRA); a Height Restriction Notice from the Massachusetts Aeronautics Commission (MAC); and review by the Massachusetts Historical Commission (MHC). Because the entire project site is located within tidelands, including landlocked tidelands, the project will require a Public Benefits Determination (PBD). The project is also subject to the MEPA Greenhouse Gas Emissions Policy and Protocol (GHG Policy). The project requires Land Transfers from MassDOT for a 22,162-sf air rights parcel on Block G and a 236-sf parcel on Block G.

The project requires an Order of Conditions from the Boston Conservation Commission (and, upon appeal only, a Superseding Order of Conditions (SOC) from MassDEP); Article 80B Large Project Review and Article 80C Planned Development Area Review from the BPDA; review and approval from the Boston Civic Design Commission; review from the Boston Landmarks Commission; Parking Freeze Permits from the Boston Air Pollution Control Commission; and a Transportation Access Plan Agreement (TAPA) from the Boston Transportation Department (BTD). It requires a National Pollutant Discharge Elimination System (NPDES) General Permit from the U.S. Environmental Protection Agency (EPA) and a Height Restriction Notice and Section 19 Determination from the Federal Aviation Administration (FAA).

The project will receive Financial Assistance from the Commonwealth, may involve Land Transfers from the MBTA and/or MassDOT, and requires numerous Permits and approvals such that the subject matter of required state permits is equivalent to full scope jurisdiction. As a result, MEPA jurisdiction is broad in scope and applies to all aspects of the project that may, directly or indirectly, cause Damage to the Environment as defined in the MEPA regulations.

Review of the FSEIR

The FSEIR was generally responsive to the Scope included in the Certificate on the DSEIR. It included a description of the project and included plans of the proposed buildings, roadway and pedestrian and bicycle improvements, and open space areas. It provided additional analyses of future conditions of the public transportation system serving the Seaport area, a supplemental GHG analysis and included a Response to Comments received on the DSEIR. During the review period, the Proponent circulated revised mitigation commitments and draft Section 61 Findings that reflect the agreement by the state to fund and implement all or portions of certain transportation improvements that the Proponent had committed to undertake in the DSEIR.

Traffic and Transportation

The overall project will generate 93,446 adt, including 62,402 adt associated with the NPC Project, based on trip generation estimates derived from the 10th edition of the *Trip Generation* handbook published by the Institute of Transportation Engineers (ITE). Adjusted for mode share, the project will generate 29,074 transit trips, 25,570 walking/bicycling trips and 14,660 vehicular trips. The FSEIR provided a more detailed analysis of existing (2016), 2024 No Build, and 2024 Build conditions for public transportation service in the Seaport district and identified potential transit mitigation measures to reduce overcrowding and improve operations.

Transportation Mitigation

During the review period, the Proponent provided revised draft Section 61 Findings reflecting the Commonwealth's participation in funding and implementing some of the transportation mitigation commitments the Proponent proposed to undertake in the DSEIR. The phasing, financing and implementation of these measures are listed in the Mitigation/Draft Section 61 Findings section of this Certificate. According to the Commitment for Commonwealth Funding, the Proponent is responsible for the design of the mitigation measures and for funding any costs in excess of the \$20 million to be provided by the Commonwealth. Because the implementation of these measures will require close coordination among the Proponent, MassDOT, MBTA and the City of Boston, Final Section 61 Findings issued by MassDOT should detail the procedures that will be used to ensure that the mitigation measures are designed and constructed in accordance with the FSEIR and the Commitment for Commonwealth Funding. The procedures should include a schedule for regular reporting of the progress of the design and construction of the mitigation measures and funding sources. The procedures, and annual updates, should be provided to the MEPA Office and noticed in the Environmental Monitor.

Public Transportation

The Certificate on the DSEIR required that the Proponent provide a comprehensive analysis of the project's impacts on the public transportation system serving the site and evaluate mitigation measures for adding capacity and improving performance under future conditions. The FSEIR reviewed the capacity of the Silver Line and MBTA Bus Routes 4, 7, 448, 449 and 459. The Silver Line and Bus Route 7 provide all day service; Bus Route 4 provides peak hour service only and Bus Routes 448, 449 and 459 are express routes with infrequent service between Downtown Boston and the North Shore. According to the FSEIR, the Silver Line and all bus routes operate below capacity under existing conditions.

The 2024 No Build condition includes added transit trips from 15 development projects in the Seaport, including components of the overall project that were previously reviewed by MEPA in 2010. These projects are expected to add 27,986 transit trips by 2024, a 13.5 percent annual growth rate. According to the FSEIR, this growth rate is consistent with the long-term (through the year 2040) annual growth rate of 3 percent projected by the Central Planning Transportation Staff (CTPS). The analysis in the FSEIR included expanded Silver Line service to Chelsea (Silver Line Gateway), which is expected to add 8,730 trips (2,500 net new trips) to

the Silver Line. Four new busses will be added to the Silver Line during peak hours to accommodate the additional ridership; however, the capacity of the Silver Line in the Seaport area is not expected to increase because of the longer travel times and additional demand associated with the expansion. The analysis demonstrated that under No Build 2024 conditions, most Silver Line busses operating between 6:00 AM and 11:00 PM will be above the planning capacity in at least one direction. Off-peak busses are expected to operate normally because of additional available capacity above the planning capacity, but peak period conditions are expected to include overcrowding that may lead passengers to use other modes of transportation. According to the analysis, Bus Route 4 will experience overcrowding in the No Build 2024 condition, with three bus trips expected to exceed capacity in the PM peak period.

The Build 2024 condition includes an additional 29,074 transit trips associated with the NPC Project, of which 88 percent (25,584 trips) are expected to be taken on the Silver Line, 8 percent will involve walking to and from the Red Line and Commuter Rail at South Station and 4 percent will use Bus Route 4. In the Build 2024 scenario, the Silver Line is expected to operate above capacity in at least one direction from 5:00 AM to 11:00 PM, with increased overcrowding throughout the day, particularly during the off-peak hours when fewer busses operate. Compared to the No Build 2024 condition, four additional busses on Route 4 will exceed capacity, including one in the AM peak period and three in the PM peak period.

Potential Transit Mitigation Measures

The FSEIR identified four mitigation measures that could improve transit operations in the Seaport and estimated the incremental and cumulative effect of the improvements on the capacity of the Silver Line and bus routes. According to the analysis presented in the FSEIR, implementation of all four of the measures would increase the capacity of the Silver Line for most of the day; however, the morning and evening peak hours would continue to operate below MBTA service standards.

According to the FSEIR, one measure that could be implemented without significant cost would involve altering the route of Silver Line Route 1 to use the Interstate-90 on-ramp near the Massachusetts State Police Station E-4, which currently is not open to general traffic. This measure could save 4 to 10 minutes per outbound trip and add 1 to 3 additional round trips per hour. MassDOT and the MBTA have studied the feasibility of this measure and have identified safety concerns with the use of the ramp that must be addressed prior to implementation.

Another option for addressing predicted overcrowding during off-peak hours under the No Build 2024 and Build 2024 conditions, would involve extending the peak-period level of service to non-peak hours. This measure would not require the acquisition of new busses, but additional drivers would be necessary to provide the additional service. According to the FSEIR, this measure alone could increase the capacity of the Silver Line by approximately 1,000 trips during off-peak hours.

The MBTA has a stock of 31 dual-mode articulated busses, of which 21 are in operation on the Silver Line during peak periods. According to the FSEIR, the use of six additional busses during peak periods on the Silver Line between South Station and Silver Line Way would

increase the planning capacity by approximately 1,950 passengers per hour. Implementation of this measure would also require additional drivers. Without the procurement of additional busses, four of the 31 busses would be available on a standby basis in case one of the busses becomes disabled. As noted by MassDOT, the MBTA has considered a similar concept as part of its process for planning and procuring the next generation of the Silver Line fleet.

Finally, the FSEIR estimated the extent to which project-generated transit trips would be redirected from the Silver Line to Bus Route 7 if a Bus Rapid Transit (BRT) lane were constructed on Summer Street. The BRT lane would significantly lower headways, resulting in an additional 1 to 2 bus trips per hour during peak periods. Based on the increased capacity and improved service, all of the transit trips generated by Blocks N and P and 25 percent of the trips associated with Blocks L5 and L6 would be expected to use Bus Route 7. As a result, the percentage of project-generated transit trips using the Silver Line would drop from 88 percent to 56.8 percent, which would free up capacity on the Silver Line. The Proponent is funding a study of the feasibility of a Summer Street BRT lane, but has not proposed to fund its construction and no timetable has been set for its implementation.

The Proponent has committed to providing MassDOT with \$2.88 million over three years to fund Silver Line capacity improvements. The funds could be used toward implementation of the measures identified above or for other projects consistent with the MBTA's planning priorities for the Silver Line. The Proponent has proposed to commence the schedule of payments upon completion of the 6.3 million sf of development reviewed in 2010. The NPC Project includes changes to portions of the project reviewed in 2010 and conditions on the Silver Line have changed since that time. MassDOT's s. 61 Findings should include a schedule for the commencement of these payments based on monitoring of impacts, intermediate thresholds based on development build-out and/or other appropriate milestones. As a result, payments may be required sooner than proposed by the Proponent. A schedule for commencing the payments based on monitoring may be necessary in order to ensure that the Proponent meets its obligations to minimize and mitigate the impacts of the project. This may also provide the MBTA with greater flexibility for selecting and implementing capacity improvement projects in a timely way.

Roadway Design

Massport's comments express continued concern that some of the streets may not be designed to safely accommodate truck traffic, in particular, trucks destined to Massport's Conley Container Terminal and other marine industrial uses in the South Boston Designated Port Area (DPA) and the Raymond L. Flynn Marine Park (RLFMP). According to Massport, 11-ft travel lanes should be provided along Northern Avenue and Seaport Boulevard to accommodate a significant portion of 6,000 truck trips per day between the marine industrial area and the interstate highway system. The need for adequate roadway infrastructure to accommodate truck traffic was identified in the City's Master Plan Update for the RLFMP (2017) and the South Boston Waterfront Sustainable Transportation Plan (2015). I note that the South Boston Transportation Plan includes a proposal to open the Haul Road to general traffic. If this measure were to be pursued, the importance of adequate roadway infrastructure for trucks within the District, and particularly on Seaport Boulevard and Northern Avenue, would be heightened.

The Proponent has coordinated with the City of Boston on the design of City street improvements with the goal of accommodating multiple modes of transportation, including bicycling and walking. I urge the City and Proponent to consult with Massport to ensure that the streets are designed consistent with the Master Plan Update and the Transportation Plan and to safely accommodate the heavy truck traffic that will travel on these streets throughout the day.

Greenhouse Gas Emissions

The FSEIR provided the results of a revised energy use and GHG emissions analysis of the proposed building types based on the 9th Edition of the Massachusetts Building Code, which became effective on January 1, 2018.² As requested in the Scope, the FSEIR compared the energy use and GHG emissions of the building envelopes with proposed window-to-wall ratios (WTW) to buildings with Building Code-level WTW ratios, and evaluated energy use and GHG emissions for residential and hotel buildings designed according to Passive house standards.

The revised analysis compared a Base Case for each of the four building types (office, office/lab, residential and hotel) designed to meet Building Code requirements. The Base Case was compared to a Proposed Case that includes various energy conservation measures. The energy modelling produced the following results for each building type:

Building Prototype	Proposed Case Improvement Over Base Case	
	Energy Use Index (EUI, kBtu/sf-yr) Reduction	GHG (tpy) Reduction
Office	14%	10%
Office with Laboratory	27%	19%
Hotel	16%	9%
Residential	17%	7%

Because the City of Boston has adopted the Stretch Energy Code (Stretch Code) which requires buildings to be at least 10 percent lower energy on an EUI basis than a Code-compliant (Base Case) building. Therefore, the buildings above would already be required to achieve a 10% EUI reduction from ASHRAE 90.1 2013.

Based on the modelling results summarized above, stationary-source GHG emissions on a project-wide basis under the Base Case would be 29,919 tons per year (tpy). The Proposed Case includes GHG mitigation measures that would reduce emissions to 25,394 tpy (15 percent). Total GHG emissions of the Proposed Case will be 25,394 tpy, a reduction of 4,525 tpy (15 percent) compared to the Base Case. Accordingly, the total project is committed to reduce stationary source (building related) emissions 15% lower than ASHRAE 90.1 2013 with Massachusetts Amendments. The GHG mitigation measures incorporated into the building designs are listed in the Mitigation/Draft Section 61 Findings section below. Mobile-source GHG emissions based on the implementation of all TDM, transit and roadway mitigation

² Building Code is based on ASHRAE 90.1 2013 with Massachusetts amendments. Massachusetts amendments require certain improvements in HVAC and lighting.

measures will be 926 tpy. The Proponent did not provide a comparison of Proposed Case and Base Case emissions from mobile sources; mitigation was incorporated into the Base Case. The project's total GHG emissions from both stationary and mobile sources will be 26,320 tpy.

The proposed building designs include WTW ratios that are higher than Building Code-level ratios and glass curtain wall and spandrel construction. The lower efficiency building envelope is offset through adoption of other efficiency measures. As required by the Scope, the FSEIR compared the proposed building designs to buildings consistent with the thresholds of the Building Code. The Proponent's analysis determined that the project building envelopes would be 5 percent lower-performing to 20 percent higher-performing compared to the Building Code threshold.

This planned envelope performance contrasts with the data provided in the Proponent's concurrent Article 37 Submission Report filed with the City of Boston for Block L4. The report shows an aggregate vertical envelope performance approximately 19 percent lower performing than the Building Code threshold. The Article 37 Report also indicates a different roof treatment for the Block L4 building that is less efficient than that modelled in the FSEIR analysis.

DOER estimates that up to 90 percent of the reduction in GHG emissions beyond that achieved by meeting Building Code requirements will be attributable to improvements undertaken by tenants, including laboratory heat recovery, equipment power use reduction, and lighting power use reduction. For example, the FSEIR documented that the 27 percent reduction in energy use of the Proposed Case office/laboratory buildings is due to the use of heat recovery in laboratory space. According to the FSEIR, the amount of laboratory space to be constructed is dependent on market demand. The Article 37 Report for Block L4 includes less lab space than that presented in the FSEIR.

The lower energy efficiency of Block L4 can be offset through improved efficiency of other project buildings; however, it is illustrative of concerns identified above regarding the envelope performance and dependence upon measures associated with lab space to achieve identified reductions in GHG emissions. If building design were to continue along this trend, additional mitigation measures for the project would be required to achieve the identified 15 percent reduction in GHG emissions. Based on the foregoing, I am requiring the Proponent to track and report on the project's progress in achieving its mitigation requirements and, if necessary, identify additional mitigation commitments.

Passive Design

As required in the Scope, the FSEIR included an evaluation of energy savings that could be realized through the use of Passive design in the residential and/or hotel buildings. The analysis, including supplemental information provided during the review period,³ indicated that buildings designed in accordance with Passive design standards could achieve energy savings of approximately 75 percent and GHG emissions reductions of 70 percent compared to the Base Case design. DOER has estimated that Passive design techniques would yield significantly

³ Email from Don Michael of Epsilon Associates dated June 8, 2018.

larger GHG offsets. I strongly encourage the Proponent to continue its evaluation of the benefits and feasibility of Passive design and to incorporate a Passive building into the project.

Tidelands and Public Benefits Determination

The entire 23-acre site is located on filled tidelands including five blocks that are within c. 91 jurisdiction. It is subject to the requirements of the South Boston Waterfront Municipal Harbor Plan (MHP) and will require a Public Benefits Determination (PBD). The project has received c. 91 Licenses for Blocks A, B, H and M and will seek a License for Block G. The FSEIR provided a tabulation of the open space required in accordance with the MHP. According to the FSEIR, the project has or will construct 119,045 sf (2.74 acres) in excess of the amount required by the MHP, including parks, plazas and pedestrian facilities. As part of the c. 91 licensing process, MassDEP will certify that the project has complied with the open space requirements of the MHP. Comments from the Boston Parks and Recreation Commission (BPRC) seek clarification of the nature of the open space included in the Proponent's tabulation, including the area of vehicular streets and plazas associated with ground floor uses of adjacent buildings. BPRC's analysis indicates that green, landscaped areas previously contemplated have been replaced in the project design by hardscaped areas. As part of its final design process and any remaining permitting and review of the project by MassDEP and the City of Boston, the Proponent should consider opportunities for providing more landscaping and lawn areas.

The owners of the development blocks will be required to maintain the public realm and open space. An Owners' Association has been established for the current building owners and will be expanded or modified to include subsequent owners. According to the FSEIR, the Owners' Association and BPDA will jointly determine a mechanism to permanently dedicate Seaport Common, Sea Green and Harbor Square for open space uses.

The FSEIR provided an updated analysis of public benefits associated with the NPC Project. I will issue a PBD within 30 days of the issuance of the Certificate on the FSEIR.

Mitigation and Draft Section 61 Findings

The FSEIR provided draft Section 61 Findings for use by State Agencies. The Section 61 Findings should be revised in response to this Certificate and provided to State Agencies to assist in the permitting process and issuance of final Section 61 Findings. The Proponent will provide a GHG self-certification document to the MEPA Office that is signed by an appropriate professional (e.g., engineer, architect, transportation planner, general contractor) and indicates that all of the required mitigation measures, or their equivalent, have been completed for each building and include a running tally of the progress of the Proponent's GHG mitigation commitments. The certification will 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, the Proponent will provide an updated plan identifying the measures, the schedule for implementation, and a description of how progress towards achieving the measures will be obtained.

In addition to the GHG self-certification, because of the uncertainty surrounding the final design and uses of each building and the ability for the project to meet its overall GHG mitigation commitment, I am requiring the Proponent to submit GHG reports for each building upon the finalization of its design and prior to commencement of construction. The reports should include the anticipated energy use and GHG emissions for the building and a running tally of the project's GHG emissions for all buildings that have been constructed. Each submittal should provide a status report on the project's progress toward meeting its commitment to reduce total building emissions by 15 percent lower than Baseline of ASHRAE 90.1 2013 with Massachusetts Amendments. If reports identify the need to incorporate additional mitigation measures, a detailed plan should be provided with conceptual design of subsequent buildings and their energy systems to achieve the project-wide GHG mitigation commitment.

Transportation

The measures identified in the table below shall be provided in accordance with the Commitment for Commonwealth Funding. The Proponent is responsible for the design of the mitigation measures and for funding any costs in excess of the \$20 million provided by the Commonwealth.

Mitigation Measure	Completion
Courthouse Station head house construction	Prior to completion of Block D, subject to MBTA construction schedule
Summer Street mid-block pedestrian crossing and Mobility MicroHUB	Later of Block N or Block P, subject to MassDOT/City of Boston construction schedule
Congress Street signal and pedestrian and bicycle improvements	Latest of Blocks L5, L6, N or P subject to MassDOT/City of Boston schedule
West Service Road bicycle improvements	Prior to completion of Block L4 subject to MassDOT/City of Boston schedule
Boston Wharf Road pedestrian, bicycle and resilience improvements	Later of Block L3 or L5 subject to MassDOT/City of Boston schedule
East Service Road pedestrian and resilience improvements	Later of Block L4 or L6 subject to MassDOT/City of Boston schedule

In addition to funding costs in excess of \$20 million, the following mitigation measures will be provided by the Proponent.

Mitigation Measure	Completion
Funding for Silver Line capacity improvements (\$2.9 million) to MassDOT	\$960,000 per year for three years beginning upon impact determination as will be detailed by MassDOT
Funding for Northern Avenue Bridge reconstruction (\$2 million) to the City of Boston	Upon completion of the first NPC Block or as otherwise agreed to by the City of Boston
Seaport Boulevard signal, bicycle, bus, and public realm	Complete by 2018

Transportation Demand Management (TDM)

The Project includes a mix of residential, office and retail uses that will encourage the use of alternate modes of transportation, including public transportation, bicycling and walking. The project will implement a TDM plan to encourage alternative modes of travel to and from the site. As noted by MassDOT in its comment letter, the Proponent will be held to a high standard for transit promotion and TDM based on the project's potential impacts on transit capacity and ability to meet projected demand. The Proponent had previously identified the following list of TDM commitments in the DSEIR:

- Designate a full-time on-site Transportation Coordinator to oversee parking and loading operations;
- Promote and incentivize the use of alternate modes of transportation to the site, develop an information packet for new employees/residents that details transportation options;
- Provide an annual, or more frequent, bulletin summarizing transit, ride-sharing, bicycling, alternative work schedules, and other travel options;
- Provide real-time transit information and information about travel options for residents, employees and visitors on a web page and in building lobbies;
- Join the Seaport Transportation Management Association (TMA) and A Better City TMA on behalf of commercial tenants and residents;
- Provide bike and pedestrian information on the Project web site;
- Provide secure bicycle parking for building occupants;
- Provide lockers and showers for employees who walk or bike to work;
- Provide exterior bike racks for visitors to the site;
- Install Hubway stations adjacent to every commercial building;
- Encourage tenants to provide a "Guaranteed Ride Home" for those commuting by bicycle or on foot;
- Provide one free annual MBTA subway pass for each residential unit during the first year of operation;
- Encourage employers to subsidize employees' purchase of transit passes;

- Promote on-site purchase of MBTA passes and implementation of a payroll deduction program for public transportation expenses;
- Assist hotel operators in arranging for short-term transit passes for guests;
- Encourage hotel operators to provide loaner umbrellas for guests;
- Provide electric vehicle (EV) charging stations to accommodate 5 percent of the total parking and infrastructure to increase EV charging stations to 15 percent of total parking spaces;
- Designate up to 5 percent of parking spaces as preferred parking for low emissions vehicles;
- Encourage tenants to use airport shuttle services;
- Promote carpooling and vanpooling;
- Encourage tenants to use internal and on-line ride-matching services;
- Explore the feasibility of providing parking spaces for a car sharing service; and
- Provide dedicated pick-up/drop-off areas at the front entrances of buildings to facilitate safe and efficient use of ridesharing and shuttle bus services.

Transportation Monitoring

In the DSEIR, the Proponent committed to conduct transportation studies at build out of 3 million sf, 5 million sf and upon project completion. The reports will include vehicle capacity analyses, transit survey and capacity analysis, and a summary of the TDM and the effectiveness of each measure. The reports will include engineering and technical evaluations to improve signal timing as needed, and propose corrective measures if deficiencies in access to the site are observed or if transit usage or roadway congestion exceeds transportation study projections.

Public Realm

Block	Proposed Public Realm Improvements and Benefits
Early Action	-Seaport Boulevard and Northern Avenue corridor improvements (start prior to completion of the earliest of Blocks D, F and/or G) -MBTA Silver Line head house on Block F (start prior to completion of Block D subject to MBTA construction schedule) -Bicycle improvements on West Service Road and bike lanes from Congress Street to Melcher Street Extension (start prior to completion of Block L4 subject to MassDOT/City of Boston schedule)
Block D	-Fan Pier Blvd Extension (upon completion of earlier of Block C or Block D) -Sidewalk Improvements (adjacent portions of Northern Ave, Seaport Blvd, Fan Pier Blvd) -Pier Street (between Block D and Block F) -Northern Avenue Improvements (area adjacent to Block) -5,000 sf of civic/educational use -Public parking -Advance design of planned Summer St/Massport Haul Rd/Drydock Ave/Pappas Way Connector connection to 25% (upon completion of the earlier of Block D or Block G)

Block F (additional improvements to be constructed as part of NPC Project)	-Innovation Center -Seaport Common expansion to approximately 40,000 sf -Pedestrian only Harbor Way segment between F & G Blocks -Seaport Boulevard Improvements (area adjacent to Block and corresponding median) -Northern Avenue Improvements (area adjacent to Block) -Harbor Way segment between Seaport Blvd and Northern Ave (upon completion of the earlier of Block F or Block G) -Minimum 1,500 GSF Civic Space
Block G	-Approximately 5,000 sf of civic space -Pedestrian only Harbor Way segment between Seaport Boulevard and Northern Avenue (upon completion of the earlier of Block F or Block G) -Seaport Boulevard Improvements (area adjacent to Block and corresponding median) -Sidewalk Improvements (adjacent portions of Northern Ave and Pier Four Blvd) -Northern Avenue Improvements (area adjacent to Block) -Public parking -Advance design of planned Summer St/Massport Haul Rd/Drydock Ave/Pappas Way Connector connection to 25%(upon completion of the earlier of Block D or Block G)
Blocks L3-L6	-Harbor Way and Harbor Square park (upon completion of the earliest of Blocks L3 and L5 or L4 and L6) -Sidewalk Improvements (adjacent portions of Autumn Lane) -Public art and/or landscaping installations -Public parking -Mid-Block Pedestrian Crossing to the Summer Street Steps -Bicycle, pedestrian and resiliency improvements on Boston Wharf Road from Congress Street to Seaport Boulevard -Fort Point Community Theater (unless this is included with the SeaPAC on block P) -Incubator Retail Pop-up Space
Block N	-Summer Street Steps (upon completion of Blocks N or P, whichever is later) -Sidewalk Improvements (adjacent portions of Congress St, West Service Rd, Summer St) -Bicycle Improvements on West Service Road to Melcher Street Extension
Block P	-Sidewalk improvements (Congress St and Summer St) -Summer Street Steps (upon completion of Blocks N or P, whichever is earlier)
Block Q	-Sidewalk improvements (Stillings Extension and Boston Wharf Road), (already constructed) -Active recreational space (already constructed)

Tidelands and Open Space

- Provide ground-floor Facilities of Public Accommodation (FPA) such as retail and restaurant uses;
- Provide \$1 million toward the maintenance and operating costs of Martin's Park; and
- Provide the following parkland and pedestrian-only space:
 - Streetscape improvements along Seaport Boulevard (NPC Project);

- Seaport Common on Block F (completed as part of 2010 Project);
- Sea Green on Block Q (completed as part of 2010 Project);
- Harbor Way between Summer Street and Northern Avenue (NPC Project);
- Harbor Square within Blocks L3-L6 (NPC Project);
- Block M Courtyard (NPC Project); and
- Courthouse Square on Blocks B and C (to be constructed as part of the 2010 Project).

GHG

The following mitigation measures were identified in the FSEIR:

- High performance building envelopes (shell performance exceeding Code) for all buildings;
- Light or reflective or green roofing;
- High efficiency mechanical equipment for all buildings;
- Premium efficiency guest room heat pumps in the hotels;
- Heat recovery in the hotel and residential buildings and the lab subsystems of the office/lab buildings;
- Room occupancy sensors in the appropriate common spaces of all buildings;
- Guest room occupancy monitors in the hotels;
- Demand-controlled ventilation in the appropriate spaces of the Office building and parking garages;
- Reduced interior and garage lighting power densities;
- Daylighting controls in the Office building;
- High performance exterior lighting;
- Energy management systems in each building;
- Energy Star appliances and electronics required, where available; Proponent will fit out residential spaces with Energy Star appliances;
- Low-flow and water-efficient plumbing fixtures in all buildings;
- Enhanced building commissioning;
- Seaport Tenant Sustainable Design Guidelines that promote sustainability and energy-efficient choices for tenant fit-out and operation;
- Recycling collection areas in all buildings; and
- Construction waste recycling.

Stormwater and Infrastructure

- A stormwater management system meeting MassDEP's Stormwater Management Standards, including deep-sump, hooded catch basins, water quality inlets, and underground infiltration and detention systems;
- Installation of water-conserving plumbing fixtures; and
- A financial contribution to the Boston Water and Sewer Commission (BWSC) to support the removal of 4 gallons of infiltration and inflow (I/I) for every gallon of project-related wastewater flow introduced into the system

Climate Change

- Critical infrastructure and lobbies will be located above flood level;
- Movable or permanent flood barriers will be used to prevent flood waters from entering the parking garages and other low-lying portions of the site;
- Ground floor ceilings will be higher to allow for future flexibility in the use of ground-level space;
- Water-tight conduits will be installed;
- Building resilience will be enhanced with back-up outlet circuits, high performance buildings, and cool rooms;
- Salt-tolerant and drought-resistant plants;
- Non-potable water will be used for irrigation; and
- The project will employ measures to conserve water, such as water conserving-plumbing and grey water reuse.

Construction Period

- Develop a Stormwater Pollution Prevention Plan (SWPP), including the use of erosion control barriers and other BMPs, to protect water quality;
- Employ an environmental monitor to inspect erosion control measures;
- Minimize dust by using wet suppression, washing vehicles before they leave the site, covering dump trucks leaving the site, and periodic street cleaning;
- Encourage contractors to use equipment manufactured to Tier 4 emissions standards, using ultra-low sulfur diesel fuel, limit vehicle idling, and store aggregate materials away from areas of greatest pedestrian activity;
- Minimize noise impacts of the project by scheduling construction activities during periods of high ambient noise levels, install mufflers and/or muffling enclosures on continuously running equipment, selecting the quietest equipment when possible and locating noisy equipment away from sensitive receptors;
- Implement a Construction Waste management Plan with a commitment of recycling or salvaging the maximum possible of non-hazardous construction and demolition waste;
- Install fencing, barricades, signage, walkways, and/or lighting to ensure safe pedestrian access around the site; and
- Implement a Traffic Management Plan, including use of designated truck routes, prohibiting use of residential streets by trucks, and minimizing street closures.

Conclusion

Based on a review of the FSEIR and comment letters, and in consultation with State Agencies, I find that the FSEIR adequately and properly complies with MEPA and its implementing regulations. The project may proceed to permitting. State Agencies and the Proponent should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.



June 15, 2018

Date

Matthew A. Beaton

Comments received:

06/04/2018 Douglas M. Husid on behalf of the Proponent
06/08/2018 Massachusetts Port Authority (Massport)
06/08/2018 Department of Energy Resources (DOER)
06/08/2018 Massachusetts Department of Transportation (MassDOT)
06/08/2018 Boston Parks and Recreation Department

MAB/AJS/ajs