



*The Commonwealth of Massachusetts*  
*Executive Office of Energy and Environmental Affairs*  
*100 Cambridge Street, Suite 900*  
*Boston, MA 02114*

Deval L. Patrick  
GOVERNOR

Timothy P. Murray  
LIEUTENANT GOVERNOR

Ian A. Bowles  
SECRETARY

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

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CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS  
ON THE  
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Assembly Square Mixed-Use Redevelopment  
PROJECT MUNICIPALITY : Somerville  
PROJECT WATERSHED : Boston Harbor  
EOEA NUMBER : 13989  
PROJECT PROPONENT : **Federal Realty** Investment Trust  
DATE NOTICED IN MONITOR : June 11, 2008

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.08 of the MEPA regulations (301 CMR 11.00), I hereby determine that the Draft Environmental Impact Report (EIR) submitted on this project **adequately and properly complies** with MEPA and its implementing regulations. The proponent may prepare and submit the Final EIR for review.

Project Description

This project consists of a \$1.3 billion mixed-use redevelopment of a 50.2 acre site within Assembly Square in Somerville. The proposed redevelopment includes approximately 2,100 residential units, 1.75 million square feet (sf) of office space and 852,000 sf of retail space (including a 340,000 sf IKEA home furnishings store, a restaurant and a cinema) and a 200-room hotel. Residential and smaller scale retail and restaurant uses will be located on the waterfront portion of the site. Office uses are proposed within the central part of the site. The proposal relocates the IKEA store proposed as part of the IKEA at Assembly Square project (EOEA #12672) from a waterfront location to the southern end of the site near the Orange Line tracks and closer to Interstate-93. The project will include the re-construction and extension of Assembly

Square Drive and construction of an internal street network designed to provide walkable blocks with an active pedestrian environment. It includes the construction of 9,174 parking spaces consisting of structured, on-street and surface parking. It will require the removal and demolition of several existing industrial buildings and the reconfiguration of existing parking lots.

The project will be constructed in several phases. The first phase consists of the construction of the IKEA store and a 7,000 square foot restaurant on a 19.5 acre parcel. The Draft EIR does not describe subsequent phases in detail. It indicates that the project will be built out in completed sections over 10 to 15 years and that the first phase of the mixed-use development will be focused around Main Street. The project is based on four key principles that are consistent with the City's long-standing goals for the Assembly Square District: improved access to the Mystic River, transit-oriented planning, mixed-use development, and pedestrian oriented public places and streets. The project includes a commitment to expand parkland along the Mystic River Reservation and to construct bicycle and pedestrian paths along the River and to the River from adjacent neighborhoods. It includes a \$15 million contribution towards the design and construction of an Orange Line station adjacent to Building A1 on the eastern edge of the site.<sup>1</sup>

The site consists of 50.2 acres, made up of approximately 20 separate parcels, within Assembly Square. It is bounded by the Mystic River Reservation to the north, the Orange Line tracks and Draw 7 Park to the east, Assembly Square Drive (also referred to as Sturtevant Street) and the existing Home Depot, Assembly Square Marketplace and other businesses to the south and the west, and by Route 28 and Interstate-93 to the west and northwest. It includes direct access to Route 28 via an existing access drive. The site currently includes retail/entertainment, industrial and commercial uses as well as vacant lots and surface parking lots. The site is in close proximity to two Somerville neighborhoods, the Ten Hills area and East Somerville. The entire project site has been altered over time and it contains 26.1 acres of impervious area. The site has been regulated under the Massachusetts Contingency Plan (MCP) and remediation has been completed or is ongoing at multiple parcels within the project area. Access to the Mystic River Reservation and Draw 7 Park are limited due to poor site conditions and a lack of connectivity to adjacent parks. Two buildings on the site are listed in the Inventory of Historic and Archaeological Assets of the Commonwealth. The site contains 15.8 acres of Commonwealth and private filled tidelands. The 100-foot buffer zone associated with the Mystic River extends onto portions of the northern boundary of the project site.

### Permits and Jurisdiction

The project is undergoing MEPA review and subject to preparation of a mandatory EIR pursuant to Section 11.03 (1)(a)(2), (3)(a)(5), (6)(a)(6) and (6)(a)(7) because it requires a state permit and will create more than 10 acres of new, impervious area, alter more than one acre of tidelands for non-water dependent use, generate 3,000 or more new average daily vehicle trips (adt) providing access to a single location and will construct 1,000 or more new parking spaces at a single location. The project requires a Chapter 91 License, a 401 Water Quality Certificate and a

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<sup>1</sup> The Massachusetts Bay Transportation Authority (MBTA) will manage design and construction of the Orange Line Station. If the project is subject to MEPA review, it will undergo an independent review.

Sewer Connection Permit from the Department of Environmental Protection (MassDEP). It requires land dispositions and approval/review of roadway improvements on state parkways, including a Construction Permit, from the Department of Conservation and Recreation (DCR), review by the Massachusetts Historical Commission (MHC) and an 8M Permit from the Massachusetts Water Resources Authority (MWRA). It requires consent to construct on former railroad property from the Executive Office of Transportation and Public Works (EOTPW). It requires approval of a Minor Modification to the 2002 Major Plan Change to the 1980 Revitalization Plan from the Department of Housing and Community Development (DHCD), and the Somerville Redevelopment Authority (SRA).

In addition, it requires a Non Point Source Discharge Elimination System (NPDES) permit for Stormwater Discharge and a NPDES Remediation General Permit (RGP) from the U. S. Environmental Protection Agency (EPA). It requires a Category II Programmatic General Permit under Section 10 and Section 404 from the U. S. Army Corps of Engineers (ACOE). Also, it requires a Land Disposition Agreement with the Somerville Redevelopment Authority (SRA) and an Order of Conditions from the Somerville Conservation Commission.

Phase I of the project requires a Chapter 91 License, a Sewer Connection Permit, an 8M Permit from the Massachusetts Water Resources Authority (MWRA) and consent to construct on former railroad property. It requires a NPDES Permit for Stormwater Discharge and a NPDES RGP. The project also requires a Land Disposition Agreement with the SRA and an Order of Conditions. Mitigation associated with Phase I requires construction easements and a permanent drainage easement from DCR.

Because the proponent may seek financial assistance from the Commonwealth for the project, MEPA jurisdiction is broad in scope and extends to all aspects of the project that may cause significant Damage to the Environment. These include traffic/transportation, tidelands, wetlands, drainage, water quality, wastewater, water use, contaminated soils and historic resources.

### MEPA Review of Previous Redevelopment Proposals and Procedural History

The redevelopment of this site has long been a priority for the City and its development has been guided by multiple planning efforts. Several proposals for redevelopment of the site have undergone MEPA review including, but not limited to, IKEA at Assembly Square (EOEA # 2672) and the New Main Street Development (EOEA #13649). IKEA at Assembly Square included the construction of a 277,000 sf IKEA abutting the Mystic River Reservation, 29,000 sf of additional retail, 204,000 sf of office space and 27,500 sf of restaurant space. The Final EIR was found to adequately and properly comply with MEPA and its implementing regulations and state permits were issued for the project. Administrative and judicial appeals were filed against state and local permits and approvals, including an appeal of the Chapter 91 License, which is under review. An ENF was filed for the New Main Street Development (EOEA #13649), by the same project proponent, Federal Realty Investment Trust (FRIT), in 2005. This proposal included the construction of four mixed-use buildings containing 42,000 sf of ground level retail, 60,000 sf of office space and 239 residential units. The project was proposed adjacent to the westerly edge

of the IKEA at Assembly Square site and included construction of a roadway that is the basis for the currently proposed Assembly Square Drive.

Subsequent to the New Street Development filing, FRIT acquired additional parcels within Assembly Square and expanded its redevelopment plans. It has collaborated with the City, IKEA and the Mystic View Task Force (MVTF) on a long-term vision for redevelopment that includes the re-located IKEA. These efforts have led to a legal settlement between the project proponent, IKEA and the MVTF, a copy of which was provided during the review of the Expanded ENF and is included in the MEPA file on this project. This agreement establishes goals and mitigation commitments for the revitalization of the Assembly Square area as a transit-oriented, mixed-use development.

Because the current project proposal entails a significantly expanded project site and a significant increase in office, residential and retail use, and associated impacts, the proponent filed a new ENF for the project. The Expanded ENF and Phase I Waiver Request were filed with MEPA in March 2007. A Certificate on the Expanded ENF was issued on April 13, 2007 which included the Scope for the Draft EIR and proposed to grant the Phase 1 Waiver. A Final Record of Decision (FROD) was issued on June 7, 2007 granting the Phase 1 Waiver for construction of the IKEA store, a 7,000 sf restaurant and the new stormwater outfall south of the Amelia Earhart Dam. The FROD includes a condition that the EIR provide status reports and assess impacts associated with Phase 1.

### Review of the Draft EIR

The EIR includes a thorough description of the entire project and all project elements, including Phase I. The Draft EIR includes existing and proposed conditions plans illustrating resources, abutting land uses and infrastructure for the entire project area. The EIR includes a site circulation plan illustrating how motor vehicles, pedestrians and cyclists will be accommodated on the site. The Draft EIR describes each state permit or state agency action required for the project and each phase of the project and the project's consistency with applicable performance standards. As required by the Phase I FROD, the Draft EIR provides an update on Phase I including status of the project and completion of permitting requirements and other mitigation. The EIR discusses the consistency of the project with local, state and regional land use plans and highlights the project's consistency with the Commonwealth's Sustainable Development Principles. The Draft EIR identifies targets related to long-term development of the site which are identified in the MVTF settlement agreement. It indicates that the long-term development for the entire Assembly Square District may include up to 3 million sf of residential development, 5 million sf of office uses, 1 million sf of retail, restaurant and entertainment uses and 1 million sf of flex space which can be programmed for office, hospitality and civic uses. In addition, it references establishment of a cap to limit on the district of 55,000 vehicle trips per day (tpd) The Draft EIR does not provide any additional information regarding long-term redevelopment plans for abutting uses (such as the Assembly Square Marketplace) under the proponent's control.

### *Alternatives Analysis*

The alternatives analysis consists of a comparison of the No Build, the Preferred Alternative and a Compiled Alternative. The Compiled Alternative consists of a compilation of the three most recent development projects proposed for the site including the waterfront IKEA Development (EEA #12672), the Yard 21/Sturtevant Partnership Plan (which was not reviewed by MEPA) and the Main Street Development (EEA #13649) consisting of residential, retail and office uses. The Compiled Alternative consists of 1,099 residential units, 675,800 sf of retail uses and 2.3 million sf of office uses. The Preferred Alternative removes the IKEA from the waterfront, adds a significant amount of residential units (1,001 units), a 200-room hotel, an additional 176,200 sf of retail and a reduces office uses by 553,800 sf compared to the Compiled Alternative. The Preferred Alternative increases water demand, wastewater generation and includes an additional 1,160 parking spaces. The new stormwater outfall will provide significant improvements for management and treatment of stormwater on the site but is also associated with an increase in wetlands impacts. Traffic generation associated with the Preferred Alternative, when adjusted for transit use, shared trips and pass-by trips, is lowered by approximately 545 adt when compared to the Compiled Alternative.

Although the alternatives analysis provides a comparison of impacts associated with the Compiled Alternative and the Preferred Alternative, it does not directly respond to the Scope which required the proponent to evaluate an alternative site layout that would further minimize impacts to environmental resources while maximizing the public benefits, including open space and access to the waterfront, of the project. The Draft EIR asserts that the project, as proposed, minimizes impacts to environmental resources while maximizing the public benefits. I note that the removal of A Street from the waterfront is a positive improvement. Based on comments from DCR and MassDEP, the proponent will be required to explore an alternative site layout that will further minimize impacts on state parkland while increasing mitigation for associated impacts.

### *Sustainable Design and Greenhouse Gas (GHG) Emissions*

The project was filed prior to the effective date of the MEPA Greenhouse Gas Emissions Policy and Protocol and therefore is not subject to it; however, the Draft EIR identifies the proponent's commitment to minimize the environmental footprint of this project. I am pleased that, in response to the Certificate on the ENF which encouraged the proponent to develop an alternative that includes a significant investment in renewable energy technology, the Draft EIR indicates the proponent is evaluating the feasibility of co-generation for the site. MassDEP comments indicate that co-generation can significantly reduce GHG emissions compared to separate boilers/chillers for buildings and residential units. Centralized operations and maintenance, fuel flexibility and increased usable building space are additional benefits of co-generation.

The Draft EIR indicates that the proponent intends to pursue certification by the Leadership in Energy and Environmental Design for Neighborhood Developments (LEED-ND) for the project and that the IKEA building will be constructed consistent with the Massachusetts LEED Plus Standard (as required by the Phase 1 Waiver). The Draft EIR notes that solar

domestic hot water and photovoltaic systems could be incorporated into building designs. In addition, the proponent will develop comprehensive guidelines to address, inform, and track the progress of the project design team, future building developers and project tenants with respect to sustainable design and construction. The proponent will work with tenants to encourage them to build out with an emphasis on sustainability and energy efficiency, including incorporation of passive heating, cooling, and ventilation; and the potential for high-albedo roofing materials, interior daylighting through floor plates, skylights, lightwells, insulation, window glazing, and use of recycled materials, high efficiency HVAC systems, peak shaving, motion detectors, lighting and climate controls, and commissioning.

The Draft EIR identifies how Low Impact Development (LID) techniques have been incorporated into the site design and individual building design. For Phase 1, these include a rain garden along G Street, a green roof on the IKEA building and structured parking. For the project as a whole, structured parking is proposed to minimize the amount of impervious surfaces associated with the project and the proponent indicates that construction of green roofs, reuse of rain water and other LID techniques are being considered.

I strongly encourage the proponent to include an alternative with co-generation in the Final EIR, including an appropriate level of detail, so that it may be vetted and reviewed by the agencies as part of the Final EIR process. In addition, I expect the proponent will carefully consider the thoughtful and constructive comments from MassDEP and others regarding the project's ability to further minimize GHG emissions and further incorporate LID into the site design.

#### *Traffic Analysis*

The Draft EIR includes an updated and revised traffic study. The Draft EIR describes how access will be provided to the site and identifies on-site and off-site traffic improvements including modified signals and intersections as well as a U-turn underpass ramp extending from Mystic Avenue northbound to Mystic Avenue southbound just south of Route 28. These improvements, with the exception of the U-Turn underpass, are a condition of the Phase 1 Waiver and are detailed in the FROD. The project includes construction of 9,174 parking spaces, including 7,650 spaces in structured parking and the remainder as surface/on-street parking. Roadway improvements and signal modifications will require review and approval by DCR and MassHighway.

According to comments from the Executive Office of Transportation and Public Works (EOTPW), the traffic analysis generally conforms to the Executive Office of Energy and Environmental Affairs (EEA)/EOTPW Guidelines for EIR/EIS Traffic Impact Assessment. For each phase of the project, the traffic analysis identifies existing conditions, assesses trip generation (including any trips generated by the proposed Orange Line Station) and identifies how the project will affect traffic conditions through a Level of Service (LOS) analysis. The traffic analysis clearly describes the methodologies used to develop the information and provides supporting documentation. The study identifies trip generation, analyzes impacts and provides a level-of-service (LOS) analysis for the following phases:

**Phase 1 Waiver (2011):** IKEA and a 7,000 sf restaurant

**Mid-Term Phase (2014):** Mixed Use Development prior to opening of the Orange Line Station including 423,960 sf of retail and 2,100 residential units

**Long-Term Phase (2018):** Mixed Use Development with Orange Line Station including 1.75 million sf of office space, 852,000 sf of retail and 2,100 residential units

The analysis indicates that the project will generate approximately 45,450<sup>2</sup> unadjusted adt on an average weekday at full build-out and 44,470 adt on an average Saturday. When adjusted for transit/bike/walk trips, pass-by trips and shared trips, adt is estimated at 24,810 on an average weekday and 24,720 on an average Saturday. The analysis also identifies increases in IKEA traffic associated with major sales events.

The LOS analysis reflects existing congested conditions within the study area, identifies how the project will impact specific intersections and, where appropriate, proposes mitigation. It identifies significant congestion at the following intersections: Route I-93/Route 28/Mystic Avenue, Route 28/Assembly Square Drive/Middlesex Avenue, Route 28/Broadway, Lombardi Street/Broadway Street and within Sullivan Square and Wellington Circle. The Draft EIR describes further improvements to the Mount Vernon Street/Lombardi Street at Broadway/Mystic Avenue Southbound/Assembly Square Drive intersections. It indicates that MassHighway improvements to the I-93 interchange with Route 28 (Fellsway) and Route 38 (Mystic Avenue) are in the early conceptual design stage due to funding issues and is a long-term improvement project that will not be completed prior to construction of the proposed project. It indicates that the City is pursuing studies to advance the design of these improvements.

As required, the proponent expanded the study area to encompass Sullivan Square and Wellington Circle. The proponent has coordinated with the City of Boston to ensure that its data collection supports the City's current planning efforts for Sullivan Square. In addition, the proponent met with the City of Medford to discuss the traffic analysis. The traffic analysis indicates that the intersections within Sullivan Square and Wellington Circle will operate under severely constrained conditions in the No-Build and all Build scenarios. The proponent has not identified mitigation for these intersections because it asserts that its contribution to volume at these locations is minimal (on the order of 1 to 3% during peak periods). The Draft EIR does not analyze the benefits and/or impacts of mitigation on these areas.

The Draft EIR includes a commitment to long-term traffic monitoring consistent with the proponent's settlement agreement with the MVTF that vehicle trips will not exceed 55,000 trips per day (tpd). This monitoring will assist state agencies and the City in evaluating the actual traffic impacts associated with each phase of development and the effectiveness of the mitigation. The Draft EIR indicates that continuous traffic monitors will be installed as part of roadway improvement projects at eight locations within or adjacent to the project site and the proponent will provide traffic monitoring data to the City of Somerville and other interested agencies. In addition, for the first two years after the issuance of a Certificate of Occupancy for IKEA, the proponent will provide, on a semi-annual basis, a LOS analysis based on traffic monitoring during the months of April and October. For intersections with an overall LOS of D, the proponent will collect additional information and recommend actions to improve intersection operations.

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<sup>2</sup> This is a slight increase of 550 trips from 44,900 identified in the Expanded ENF.

The Draft EIR does not specifically identify how mitigation within the state parkway layout will conform with DCR standards and the Historic Parkway Guidelines, including but not limited to, provisions for lane, median and shoulder widths and bicycle lanes and sidewalks. It does not include an analysis of truck traffic and associated impacts, a parking needs assessment or address whether the proponent will provide water transportation, which it is required to fund as part of the settlement agreement with the MVTF.

Comments from DCR and MAPC identify a number of concerns with the traffic analysis that should be addressed by the proponent and suggest improvements to proposed mitigation. Comments from MassHighway indicate that it has reviewed plans for proposed signal improvements and that these proposed changes are adequate to address MassHighway concerns. Comments from the City of Medford indicate that the trip distribution and transit share should be re-evaluated and the proponent should identify mitigation to address its impact on Wellington Circle.

### *Air Quality*

In accordance with the State Implementation Plan (SIP) for ozone attainment, the proponent conducted a mesoscale analysis for each of the respective development scenarios. The results indicate that, for each of the successive Build scenarios, VOCs and NOx emissions increase when compared with the No-Build scenario. Because VOC emissions are greater than the No Build scenario, the proponent is required to provide mitigation for air quality impacts including the development of a Transportation Demand Management (TDM) program.

### *Traffic and Air Quality Mitigation*

The Draft EIR describes the proponent's commitment to a TDM program, including the formation and funding of a Transportation Management Association (TMA) supported by the traffic monitoring program. It indicates that the proponent will, through the TMA, identify an on-site TDM coordinator, provide commuter information at a central location, and facilitate bicycle and pedestrian travel through physical measures such as bicycle parking and adequate sidewalks and crosswalks. The Draft EIR provides a detailed description of the TDM program for Phase 1. The TDM program for the mixed use development is described only in general terms; however, I note that the TMA is intended to direct the overall TDM program for the site and that its role is strengthened by the cap on vehicle trips.

The Draft EIR reiterates that the proponent and IKEA are contributing a total of \$15 million (\$5 million from IKEA and \$10 million from FRIT) towards the design and construction of a new Massachusetts Bay Transportation Authority (MBTA) station on the Orange Line and identifies federal authorization of \$25 million through SAFETEA-LU. To improve transit access in the short-term, the proponent proposes to provide shuttle service from the Orange Line (at Wellington Station or Sullivan Station) to the site on weekends and two weekdays. The Draft EIR does not provide a schedule or describe the basis for its limited operation. MBTA comments describe its efforts to meet the 2013 schedule and its intention to ensure the station design is developed in full coordination with the developer, stakeholders from the City of Somerville, neighborhood organizations and residents. The MBTA indicates that it has submitted a Request to



Enter Preliminary Engineering under the Federal Transit Administration's New Starts Program.

The Draft EIR clearly illustrates improved bicycle and pedestrian access to and through the site. Installation of crosswalks and protected pedestrian phase signals at the Assembly Square/Route 28 intersection and connection of the bike path from the Ten Hills neighborhood underneath Route 28 to the Mystic River Reservation, which is a condition of the Phase 1 Waiver, will significantly improve safety and access to the northern area of the site and to the waterfront. Improvements at the Mount Vernon Street/Lombardi Street at Broadway/Mystic Avenue Southbound/Assembly Square Drive intersections will significantly improve access to the site at its southern end. In addition, a letter from FRIT dated August 14, 2008 identifies its commitment to construct a multi-use path from the southern entrance at Assembly Square Drive to Draw Seven Park consistent with its agreements with the Mystic River Task Force and strong community interest. In addition, improvements to the Kensington Street crossing are intended to enhance access to the middle of the site from the adjacent neighborhood.

The Draft EIR does not include a parking analysis, identify parking ratios nor does the document demonstrate that the parking supply is appropriate for a mixed-use development planned in conjunction with high quality transit access.

Comments from MassDEP, DCR and MAPC and many individual commentors express the importance of addressing parking supply and TDM in more detail to discourage vehicle trips and support transit, walking and bicycling. Comments from many residents and organizations, including Walk Boston, continue to emphasize the importance of creating a safe pedestrian and bicycle network and specifically urge the proponent to make a firm commitment to construction of the multi-use path from the southern end of Assembly Square Drive to Draw 7 Park. In addition, many commentors continue to lobby for a second head house and provision of access to Draw 7 park at the MBTA Station.

### *Tidelands*

The project provides an important opportunity to expand and enliven the Assembly Square waterfront and to enhance existing waterfront open spaces. The project includes approximately 15.8 acres of non-water dependent use of public and private tidelands. All or parts of 10 buildings, (including the IKEA building) as well as open space, street, and sidewalks are proposed within areas subject to chapter 91 jurisdiction. The Draft EIR indicates that public access to the waterfront, improvements to existing waterfront parks, including connectivity along the Mystic River and provision of high quality public open space will be a priority in the planning for this area. It identifies associated chapter 91 dimensional and use requirements including requirements for open space, water dependent activities, building heights and setbacks, and consistency with the prohibition of non-water dependent uses within the Water Dependent Use Zone (WDUZ). The Draft EIR includes a shadow study that models shadow impacts on the Mystic River Reservation and Draw Seven Park and shows potentially significant impacts on both parks in the afternoon for the September 21 scenario and in the morning and afternoon for the December 21 scenario.

Comments from MassDEP indicate that the Draft EIR demonstrates compliance with the setback requirements for projects on filled tidelands and that it appears the project is consistent with the site coverage provisions of the Waterways Regulations. The Draft EIR includes a plan

that depicts the maximum allowable building heights on filled tidelands (Figure 9.8); however, the Draft EIR does not identify the actual heights of proposed buildings or describe how the study was conducted. The Draft EIR indicates that the project will be designed to provide Facilities of Public Accommodation (FPA) within the ground floor of buildings on Commonwealth tidelands; however, it does not provide any details regarding the type and location of FPAs. Additional information is needed to effectively evaluate the project's consistency with the Waterways Regulations including proposed building heights and FPAs.

#### *Open Space and Article 97 Land*

The project provides an important opportunity to expand and enhance existing open space within the Assembly Square District and provide regional bicycle and pedestrian connections along the Mystic River. The Draft EIR describes short- and long-term impacts on parkland including construction period impacts associated with the installation of storm drain lines, construction of access roads and buildings adjacent to the Mystic River Reservation, transfer of state park land and shadow impacts from proposed buildings. The Draft EIR identifies the amount of land dedicated to different types of open space on a project-wide basis. It indicates that the project will include 4.6 acres of parks and 4.9 acres of sidewalks and smaller open spaces. It provides descriptions and renderings of the proposed open spaces and identifies them on project plans. In addition, the Draft EIR clearly illustrates how access to the Mystic River Reservation and Draw 7 Park will be improved from the site and from adjacent neighborhoods.

In addition, the Draft EIR identifies the property interests it requires from DCR, including transfer of DCR land which is currently used for a boat storage area associated with the Winter Hill Yacht Club in exchange for a 1.8-acre parcel adjacent to the Mystic River Reservation intended for the development of Riverside Park. It indicates that the proponent will fund the design and construction of the Riverfront Park, design and construction of the multi-use path underneath the Fellsway/Route 28 (as required by the Phase 1 Record of Decision) and construct a new entrance to Draw 7 Park. As noted previously, the August 14 letter from FRIT describes its commitment to design and construct an additional multi-use path through the site.

The Draft EIR does not describe plans to enhance the existing Mystic River Reservation or address restoration of Draw 7 Park. It does not adequately describe impacts to the Fellsway associated with the Ten Hills I/I mitigation or indicate how these impacts will be minimized and mitigated. It generally addresses the EEA Article 97 Policy but does not directly address how the proposed compensatory parkland meets EEA standards nor does it include a draft land disposition agreement for use by the Division of Capital Asset Management (DCAM) or a Memorandum of Agreement (MOA) with DCR to specifically identify park improvements and enhancements and long-term maintenance. The shadow analysis clearly shows impacts to parkland and tidelands from the proposed buildings; however, the Draft EIR does not include any discussion of how the project is or will be designed to minimize these impacts. In addition, the Draft EIR identifies park related funding commitments that were developed with the City of Somerville but does not describe specifically how these funds will be used.

Comments from DCR identify the need for additional information to fully understand the impacts of the project and indicate that significant additional mitigation is appropriate including restoration of the Mystic River Reservation, design and construction for the restoration of Draw

Seven Park, development of the relocated driveway easement to Draw Seven Park along C Street as public access to the park, development of a pedestrian/bicycle connection between Draw Seven Park and Route 99 and restoration of the portion of the Fellsway impacted by the proposed I/I mitigation adjacent to the Ten Hills neighborhood.

### *Wetlands and Drainage*

The project, as currently proposed, includes alteration of coastal bank and inland bank and work within the Riverfront Area and 100-foot buffer zone. Wetland alterations are associated with the construction of the new stormwater outfall. In addition, the construction of Assembly Square Drive includes work within the buffer zone to wetlands. The EIR includes plans that clearly delineate all applicable resource area boundaries and quantify the project's estimated impact on each resource area, including impacts associated with the proposed stormwater outfall. Consistency with the Wetlands Protection Act will be evaluated by the Conservation Commission as part of the local permitting of the project. An Order of Conditions for construction of Assembly Square Drive was issued on January 24, 2008 and an Order of Conditions to conduct geotechnical borings for the proposed outfall was issued on April 22, 2008.

The EIR includes a stormwater management plan and asserts that the source controls, pollution prevention measures, erosion and sediment controls and the drainage system will comply with the MassDEP Stormwater Management Policy and standards for water quality and quantity both during construction and post-development. The Draft EIR identifies pre- and post-construction peak rates and demonstrates that, with the exception of the new outfall, rates will be at or below existing conditions. The Draft EIR does not analyze impacts on water quality or temperature associated with the proposed stormwater discharge to the Mystic River nor does it address how flows will be managed during high tides and/or severe storm events. Comments from MassDEP and the Somerville Conservation Commission indicate that design changes are necessary to minimize impacts to resource areas.

### *Water Supply*

Estimates for water use have been revised since the filing of the Expanded ENF and indicate that water use has decreased to 707,436 gpd. Water will be supplied by the MWRA through the municipal distribution system. The project will replace most of the existing water mains and create a looped water distribution system. The Draft EIR indicates that the distribution system will have sufficient capacity for maximum day demands and will provide 3,500 gallons per minute (GPM) for fire demands. Water pressure will meet the minimum required range of 35 pounds PSI to 60 PSI. The Draft EIR identifies water conservation measures that are being considered for incorporation into the project design as part of an overall effort to construct sustainable buildings. These include efficient heating and cooling systems, low-flow plumbing fixtures, rainwater collection cisterns and drought tolerant landscaping. In addition, the project may include sub metering on all residential units to encourage water conservation.

Comments from MassDEP urge the proponent to incorporate water conservation measures aggressively to minimize the high water demand associated with this project.

*Wastewater*

The Draft EIR indicates that wastewater generation estimates have decreased based on revisions to the building program. The Expanded ENF indicated that the project would generate an additional 919,249 gpd of wastewater and would have a peak flow of approximately 3.73 million gpd (mgd). The Draft EIR indicates that the project will generate an additional 690,285 gpd, including 38,000 gpd for Phase 1, and will have a peak flow of 2.8 mgd. The project requires a Sewer Extension/Connection Permit from MassDEP because it will generate more than 50,000 gpd and consists of extending the sewer by at least 1,000 feet. Site, roadway and utility improvements will consist of work over MWRA easements and will require 8M Permits from the MWRA.

The existing sewer system is owned by the City of Somerville and all sewage is conveyed through the municipal system to the MWRA system for treatment and discharge at the Deer Island treatment plant. The project includes installation of over two miles of proposed sewer mains, ranging in size from eight inches to eighteen inches in diameter, and manholes to service the proposed buildings. The main trunk line for the project will be located in the right of way of Assembly Square Drive from B Street to North Union Street. Sewer improvements within North Union Street are sized to handle Assembly Square sewer flows and existing East Somerville sewer flows. Flows will be collected in a proposed drop sewer manhole that will be constructed adjacent to the City's regulator manhole and over the existing 24-inch sewer. The flows will discharge from there into the City's regulator manhole through an 18-inch sewer pipe that will connect to the MWRA-16 manhole and then into the Somerville Medford Branch Sewer.

The Draft EIR identifies measures the proponent will take to remove extraneous flow (Infiltration and Inflow (I/I)) from the MWRA system on a 4:1 basis and describes how the mitigation will minimize impacts to the MWRA Somerville Marginal Conduit (SMC) CSO Treatment Facility conveyance pipe and outfalls. Based on the revised figures, and accounting for existing wastewater flows, the proponent will need to remove 99,864 gpd for Phase 1 and a total of 2.76 mgd for full build-out of the project. The Draft EIR indicates that this commitment will be met through replacement of existing sewers on-site and the proposed off-site Ten Hills stormwater separation project. Mitigation for Phase 1 will be provided through the replacement of drains and sewers along Governor Winthrop Road within the west side of the Ten Hills neighborhood. Mitigation for full build-out will include replacement of drains and sewers within Puritan, Putnam, Ten Hills, Chestnut, Melville and Temple Roads within the west side of the Ten Hills neighborhood. The Draft EIR indicates that total reductions associated with this mitigation are 4.56 mgd.

Comments from MassDEP indicate that calculations of I/I reductions were not conducted consistent with its policies and may not achieve the level of reductions identified by the proponent. MWRA comments express support for the mitigation because it will reduce stormwater flows to the SMC, relieve peak hydraulic grade line conditions that contribute to backwater effects in the SMC and may provide measurable improvement of hydraulic conditions in the MWRA outfall by reducing the volume of treated CSO.

### *Historic Resources*

The Draft EIR provides historical information, identifies impacts and provides photos of the structures in the EIR. The project includes demolition of two buildings that are listed in the Inventory of Historic and Archaeological Assets of the Commonwealth. These include the 1925 East Somerville Locomotive Shop and the 1941 Sears Roebuck and Company Warehouse. The project is subject to review by MHC. These buildings and the Assembly Square area are listed in the MHC Inventory of Historic and Archaeological Assets of the Commonwealth. A letter from MHC is included in the Draft EIR indicating that the project is unlikely to affect historic or archaeological resources and that no further review is required. An April 27, 2007 letter from the Somerville Historic Preservation Commission indicates that the buildings remaining on the Assembly Square site are not of historic or architectural interest and that the Commission would allow the Assembly Square area to be exempt from the Demolition Review Ordinance.

Comments on the Draft EIR do not request additional information regarding historic or archaeological resources.

### *Contaminated Soils*

As noted previously, this project is planned on a brownfields site and presents an important opportunity to remediate and revitalize the site. As required, the Draft EIR identifies contaminated sites and provides an update on their status consistent with the Massachusetts Contingency Plan (MCP). The Draft EIR identifies 14 Release Tracking Numbers (RTN) for the site. It indicates that contamination is primarily associated with the storage and handling of oils used at former commercial businesses or which were stored for wholesale distribution. One of the RTN's is associated with metals in fill materials. Only two of the sites have not obtained a Response Action Outcome (RAO), one of which is associated with the IKEA development. Two sites (100 Foley Street and 74 Foley Street), which contain residual oil and hazardous materials, are subject to Activity and Use Limitations (AUL).

The Draft EIR indicates that new construction will require soil removal and may affect areas of soil contamination. It indicates that the project will be constructed consistent with MCP and Hazardous Waste Regulations (310 CMR 30.000) requirements. Construction will require amendments to existing RAOs and activity and use limitations and additional risk assessment will be conducted as necessary. The Draft EIR indicates that Phase I Reports have been completed for the open RTNs. A Phase II Comprehensive Site Assessment and Method III Risk Assessment are being developed for Phase 1.

### *Construction Period Impacts*

The EIR includes a discussion of construction phasing and identifies general measures to avoid or eliminate these impacts. The Draft EIR indicates that construction vehicles will be encouraged to use I-93, will be prohibited from idling excessively and all construction-related parking and staging will occur within the site. In addition, it indicates that the proponent is committed to diverting 75% of construction and demolition debris from the site for reuse. It does not specifically address the impacts of truck traffic on adjacent roadways and land uses, including the Mystic River Reservation, or identify how these impacts will be minimized and mitigated. It indicates that IKEA will participate in the Clean Construction Initiative to minimize the air quality

impacts of construction vehicles but it does not include a commitment for the mixed use development. Hay bale barriers or compost socks and, where necessary, silt fencing will be used to control sediments. Catch basins will be protected and diversion channels will be constructed to collect runoff and direct it to temporary sedimentation basins or catch basins. Slope stabilization will be implemented within fourteen days after grading or construction activities have ceased.

### *Mitigation*

The Draft EIR includes a separate chapter on mitigation measures. It identifies Draft Section 61 Finding for state permits that include commitments to mitigation. The Draft EIR does not contain estimates of the individual costs of the proposed mitigation or identify a schedule for implementation. Comments from DCR note that the Draft Section 61 Findings for DCR only address traffic issues and need to be revised to incorporate parkland related mitigation.

### Conclusion

Comments on the Draft EIR, including comments from Somerville Mayor Joseph A. Curtatone and Senator Patricia Jehlen identify strong support for the project and identify significant progress in addressing environmental and community concerns. Senator Jehlen also indicates her strong support for a second head house for the Orange Line and development of a local jobs agreement to ensure Somerville residents share in the economic benefits of the project while minimizing employee-related traffic generation. These comments are consistent with those of many organizations and residents who commented on this project. Although many comments identify issues that need further analysis and resolution, it is clear that the proponent has worked constructively with the City, state agencies and advocacy groups to address issues and respond to concerns. I commend the proponent for their efforts. Comments from advocacy organizations and Somerville residents urge the proponent to maintain and increase focus on reducing traffic associated with the project and improving bicycle and pedestrian conditions. Based on a review of the Scope, the Draft EIR submitted in response and comment letters, I hereby determine that the Draft EIR submitted on this project adequately and properly complies with MEPA and its implementing regulations. The following Scope address issues that should be resolved in the Final EIR.

### **Scope for the Final EIR**

#### Alternatives Analysis

Comment letters from DCR and MassDEP indicate that the proponent should reconsider the inclusion of Retail Building I within the site design. State agencies have expressed concern that the building, which is adjacent to Riverside Park, encroaches upon public parkland, diminishes the park for use as public open space. Elimination of this building would provide a larger and more cohesive recreational area north of Assembly Square Drive and reduce impervious surfaces associated with the project. In addition, the proponent should consider how it can

improve several of the proposed open spaces, including the open space along G Street, which are surrounded by roadways and/or buildings and appear isolated from the waterfront. The Final EIR should include analysis of an alternative site layout that removes Retail Building I from the design and better integrates other proposed open spaces to the waterfront. The proponent should consult with DCR and MassDEP regarding development of this alternative.

### Sustainable Design

The recent enactment of comprehensive energy reform and economy-wide greenhouse gas regulatory mandates in Massachusetts is a clear indication that the Commonwealth understands the risks posed by global climate change and is committed to ensuring that Massachusetts does its part to reduce its greenhouse gas emissions. This law will require that the Commonwealth take a hard look at all sources of GHG emissions and take effective steps to minimize contributions from each sector. Because this project will be phased over many years, the proponent should anticipate that future phases of the project may be subject to requirements to reduce GHG emissions consistent with the new legislation. Although this project is not subject to the GHG emissions policy, I am convinced that the proponent will honor its commitment to sustainability with a more detailed description of measures it will implement to reduce GHG emissions in the Final EIR and consider establishing a target for reductions in project-wide GHG emissions that will be achieved for each phase.

As a master developer, the proponent has significant control over the project build out and an opportunity to maximize GHG emissions reductions as result of innovations and economies of scale. To the extent that the proponent's efforts focus on a building by building approach, these opportunities would be lost. MassDEP comments note the economic benefits achievable for high performance buildings including a report by the New Buildings Institute (NBI) that indicates that building performance averages are 25-30 percent more efficient for LEED certified buildings than non-LEED buildings, and gold-platinum LEED rated buildings are 45 percent better than the national average.

As noted previously, I strongly encourage the proponent to analyze the feasibility of co-generation in the Final EIR and, if feasible, incorporate it into the project design. This should include an appropriate level of detail, so that it may be vetted and reviewed by the agencies as part of the Final EIR process, and the proponent should identify the extent to which this will be a component of the project design.

In addition, the proponent should carefully consider all the comments regarding pedestrian and bicycle access and support of TDM measures to mitigate for the project's transportation related GHG emissions. The provision of transit infrastructure at the site is a critical piece of mitigation for this project but it will only be effective if supported by effective incentives for transit use, a strong pedestrian and bicycle network and effective parking strategies.

### Traffic and Transportation

#### *Traffic*

Although the traffic analysis is a detailed and thorough document, it generated significant

comments, including detailed comments from DCR and MAPC, that warrant thoughtful responses. The transportation appendices provide additional information regarding the development of trip generation and trip distribution that should be described in more detail in the text of the Final EIR. The Final EIR should include a response to all traffic-related comments and specifically address questions raised regarding the accuracy of the existing conditions and No Build Scenario and trip distribution for Wellington Circle. The Final EIR should include a table that shows the total volume and total percentage of the project's contribution to Wellington Circle in addition to peak period contributions. The Final EIR should also assess any impacts/benefits of proposed mitigation on Sullivan Square and Wellington Circle. The Final EIR should address why the LOS analysis shows a decrease in LOS related to the Mount Vernon Street/Lombardi Street at Broadway/Mystic Avenue Southbound/Assembly Square Drive intersections improvements. In addition, the queue analyses should be reprinted and include identification of available storage lengths.

The Draft EIR does not identify the volume of truck trips associated with phases of the development and full build out of the development and indicates that truck volumes during construction are difficult to identify. The Final EIR should identify the amount of truck trips associated with each phase of development, identify proposed truck routes and indicate whether delivery hours will be limited to minimize impacts to traffic congestion and residences. It should respond to the MassDEP comment encouraging the proponent to consider participation in the SmartWay Transport Partnership as a means of reducing truck trips.

DCR and MAPC note that the Draft EIR does not provide crash rate data for the Route 28/Interstate Route 93 off-ramp, or the Route 28/Route 16 intersection in the vicinity of Wellington Circle. Both DCR and MAPC identify the need to further assess what is contributing to the high number of accidents at this location and to confirm that the proposed improvements will address it effectively. The Final EIR should include a detailed safety analysis for these locations including provision of existing accident data for these locations and assessment of the causes. The Final EIR should identify appropriate mitigation based on project's contribution to traffic at these locations. MAPC notes that 2006 crash information is available and should be used and supplemented with state and local police records if necessary to determine precise locations and causes of accidents.

Comments from DCR indicate that, during project permitting, it will require the proponent to evaluate alternatives to the proposed left turn lane on Assembly Square Drive. DCR also identifies concern with the pedestrian walk times at this location and will requests additional analysis of the use of mast arms at the Fellsway/Mystic Avenue intersection. The Final EIR should reflect consideration of alternatives and identify in the Final EIR any changes resulting from the permitting consultations. In addition, the Final EIR should identify how mitigation within the state parkway layout will conform with DCR standards and the Historic Parkway Guidelines, including but not limited to, provisions for lane, median and shoulder widths and bicycle lanes and sidewalks.

Comments from East Somerville Main Streets indicate that the Lombardi Street improvements should be coordinated with planned East Broadway streetscape improvements.



The Final EIR should include a commitment to provide traffic monitoring data for all phases to DCR and MassHighway and should include provisions to re-assess the effectiveness of traffic mitigation based on the data.

### *Transportation Demand Management*

The Final EIR should provide an update on planning related to the Orange Line Station. The MBTA will manage design and construction of the Orange Line Station and its process will include opportunities for public review and comment. If the project is subject to MEPA review, it will undergo an independent review. The Draft EIR indicates that 200 spaces will be provided for users of the Orange Line Station. MAPC comments indicate that the Central Transportation Planning Staff (CTPS) is working with EOTPW to provide ridership forecasts for the Orange Line Station. The Final EIR should include a review of these forecasts to verify its assumptions regarding transit mode shares and trip generation associated with the Orange Line Station.

More detailed commitments to TDM are necessary to ensure the project can, at a minimum, meet the mode shares identified in the traffic analysis. These should include expanding shuttle bus service, identification of locations for bike racks, car sharing spaces, commuter stations and bus stops as well as a parking analysis. In addition, the proponent should consult with the MBTA regarding provision of adequate infrastructure for existing bus service and Phase 2 of the Urban Ring to further maximize transit trips to and from the site. The Final EIR should identify bus routes and bus stops. Several commentors, including MassDEP, question the effectiveness of a four day shuttle service, particularly for retail customers. The proponent should consider expanding it to provide daily service and should provide a proposed schedule in the Final EIR.

Comments from Walk Boston identify several positive aspects of the proposed design and request additional information regarding pedestrian patterns and the pedestrian environment. I encourage the proponent to seek the expertise of Walk Boston to support the proponent's commitment to create pedestrian oriented public places and streets that encourage walking. The Final EIR should provide on-site pedestrian volume projections and distributions to assist in further refining the design of the project.

Many commentors express concern that access from East Somerville, directly adjacent to I-93, is limited to the southern and northern gateways to the project and the proposed Mystic Avenue/Kensington Street crosswalk improvements. They also identify concerns with pedestrian safety at existing intersections. The Kensington Avenue crossing will be improved by restriping the crosswalks and installing advanced crossing flashing beacons with a passive pedestrian/bicyclist actuation system. Although this proposal represents an improvement to existing conditions, the Final EIR should evaluate other improvements that could increase safety including lighting to improve visibility and safety and installation of a traffic signal to provide a protected crossing. Consideration of a traffic signal at this location should identify potential impacts to traffic flow. In addition, the proponent should consult with DCR regarding enhancement to the Route 28/Broadway intersection by updating current pedestrian signals with countdown lights.

The MVTF settlement agreement identifies a commitment to fund, in the amount of \$150,000, the design and construction of water transportation infrastructure. The EIR should

address any plans for expansion of water transportation in this area, address its consistency with the Waterways Regulations and identify impacts to wetland resource areas.

### *Parking*

The project includes construction of 9,174 parking spaces, including 7,650 spaces in structured parking and the remainder as surface/on-street parking. The EIR should include a parking needs assessment and demonstrate that the parking supply is appropriate for a mixed-use development planned in conjunction with high quality transit access. It should explain the nature of the on-site parking (i.e. commercial/visitor, underground/surface, long-term/short-term), identify turnover rates for employees and others and include an analysis of parking supply, demand and pricing in the project area. It should identify how parking for the Orange Line Station will be managed. The Final EIR should maximize opportunities for shared parking and consider a pricing strategy that will discourage vehicle trips and encourage transit use. I note this requirement is consistent with the MVTF settlement agreement.

### Air Quality

The settlement agreement with MVTF required the proponent to fund a health impact study to assess the impact of transportation related particulate matter on area neighborhoods. The study was not completed prior to the submission of the Draft EIR; however, the project consultant did submit the study as a comment letter on the Draft EIR. Although the research appears to indicate that the impacts of this project are very small when compared to existing traffic levels on I-93, it underscores the importance of minimizing vehicle related air pollution. The Final EIR should include a summary of the study.

### Chapter 91

The Final EIR should provide additional information to assist MassDEP in determining that the project is being developed consistent with the Waterways Regulations. MassDEP comments note that open space should be designed to be functionally compatible with the DCR parkland and landscaped to enhance access to the Mystic River and indicate that some of the open spaces on Commonwealth tidelands, such as G Street parkland and areas exterior to the restaurant, appear isolated from waterfront parkland and surrounded by buildings and roadways. The Final EIR should provide more information on landscaping, streetscape-level programming, and/or other creative treatments of these areas to enhance their use by the public.

The Final EIR should identify responsibility for achieving consistency with the watershed activation and Commonwealth tideland open space standards for Riverside Park, including provision for landscaping, pathways, water-based facilities and other public amenities.

The Final EIR should include a plan that identifies maximum allowable and proposed building heights and a revised shadow study consistent with the plan to support evaluation of shadow impacts on adjacent parkland and waterfront areas. The Final EIR should provide background information and assumptions used to develop the shadow study.

MassDEP comments also note the requirements to provide Facilities of Public Accommodation (FPAs) on filled Commonwealth tidelands. The Final EIR should describe, at a conceptual level at a minimum, how interior uses will be designed to attract the public, particularly on the waterfront portion of the site. This could include uses that support waterfront parkland, water-based activities or provide community space

In addition, these comments indicate that, pursuant to 310 CMR 9.36(3), the project shall not disrupt existing water-dependent uses significantly near the project site. The Final EIR should address any impacts to existing water-dependent uses, including the Winter Hill Yacht Club and the waterfront park resulting from this proposed exchange, and describe appropriate mitigation measures.

### Open Space and Article 97 Land

As noted previously, the project provides an important opportunity to expand access to the waterfront, enhance existing parkland and create regional bicycle and pedestrian connections along the Mystic River. The Draft EIR provides an overview of short-term and long-term impacts to state parkland and identifies property interests the proponent is seeking from DCR. The property interests include: a drainage easement in Draw Seven Park for construction of the stormwater outfall; a drainage easement along the western portion of the Fellsway DCR's Right of Way (ROW) for the drainage pipe associated with I/I mitigation; relocation of an existing 1.2 acre driveway easement within Foley Street that connects to the boat storage easement area which will be abandoned and modified in exchange for a 1.2- acre easement along C Street providing direct access to Draw Seven Park; and transfer of a 1.5-acre DCR parcel that currently provides boat storage in exchange for the 1.8-acre Riverside Park parcel.

The Final EIR should further describe impacts to parkland, including shadow impacts associated with proposed building heights and impacts to the Fellsway associated with the Ten Hills I/I mitigation including the potential loss of public shade trees along the parkway and describe how these impacts will be mitigated. It should include a detailed analysis of the project's consistency with the EOEI Article 97 Policy and address the Policy's requirements for an alternatives analysis, compensatory parkland and the provision for an environmental site assessment that shows the land is suitable for passive and active parkland uses prior to conveyance. Comments from DCR note that the proponent may have mistakenly characterized a portion of the parcel providing boat storage as a portion of the driveway easement. Accordingly, the disposition could result in a net loss of land to the Commonwealth of Massachusetts which would be inconsistent with the Article 97 Policy. The Final EIR should include a revised figure that accurately illustrates ownership interests. In addition, it should include a plan illustrating the reconstructed entrance to Draw Seven Park, the intersection and adjacent parkland.

DCR comments express concern with the land transfer's impact on parking for current and future park users. DCR notes that the DCR land that will be transferred to the proponent has provided parking for Draw Seven Park during a portion of the year. The scale of the project, coupled with the improvements to the Mystic River Reservation, will likely increase demand for

public parking, potentially creating conflicts between park users and residents. The proponent should identify how parking uses can be reserved within the site.

The Final EIR should identify additional parkland mitigation including enhancement of the Mystic River Reservation from the Route 28 bridge to Draw Seven Park, design and construction for the restoration of Draw Seven Park, development of the relocated Driveway Easement for Draw Seven Park to ensure it is clearly identified as public access to the park, development of a pedestrian/bicycle connection between Draw Seven Park and Route 99 and restoration of the Fellsway where it is impacted by the proposed I/I mitigation adjacent to the Ten Hills neighborhood.

Previous DCR comments recommended the development of a formal agreement between the proponent and DCR addressing the land transfer, park enhancements and long-term maintenance and stewardship of this parkland. Legislation authorizing the land transfers establishes a process for the land exchange that references a land disposition agreement for use by the Division of Capital Asset Management (DCAM), a Memorandum of Agreement detailing mitigation commitments and a DCR exchange plan. Agreements should identify responsibility for design and construction of parks and park enhancements and should identify how funds for improvements and mitigation will be directed. DCR comments note that mitigation related to land interests should be identified separately from mitigation for other project-related impacts to parkland. To ensure that parkland mitigation is subject to adequate MEPA review, draft agreements and plans should be included in the Final EIR. This information is critical to the review of the Final EIR and a failure to submit a draft agreement will likely result in the requirement of a Supplemental EIR. The proponent should consult extensively with DCR prior to submitting the Final EIR.

#### Wetlands and Drainage

MassDEP and MWRA strongly support the proponent's commitment to and progress on designing and permitting the 72-inch storm drain outfall to the tidal waters of the Mystic River at Draw 7 Park. The project and the proposed outfall can be designed to support the water quality goals for the Mystic River. The EIR should analyze impacts associated with the proposed stormwater discharges to the Mystic River including the impacts on water quality and temperature and further refine the design of the outfall. The proponent should consult with MassDEP and the Somerville Conservation Commission regarding their comments on the design of the outfall and examination of an alternative location. MassDEP indicates that design of the riprap pad is not consistent with state regulations because it consists of alteration of wetlands to provide stormwater management. The Final EIR should identify how flows will be managed during high tides and/or severe storm events. MassDEP also requests a detailed schedule for construction of the new outfall and tributary storm drain systems and the closing of the existing 36-inch storm drain connection to the MWRA's SMC, relative to construction and occupancy of Phase I and full-build redevelopment. MWRA comments request the proponent and/or City of Somerville evaluate whether a larger outfall could accommodate further diversion of stormwater from the SMC.

To support improved water quality, MassDEP requests that the proponent refine the stormwater management plan in the Final EIR to more directly address the water quality conditions in the Mystic River, and adhere more closely to the wetland regulations for stormwater management, including requirements for runoff from land uses with higher potential pollutant

loads (vehicle parking that generates more than 1,000 vehicle trips per day) and critical areas. Comments from MassDEP, DCR and the Somerville Conservation Commission urge the proponent to more aggressively incorporate LID into the project design consistent with the wetlands regulations for stormwater. These comments acknowledge that large scale infiltration of stormwater is not viable given the historic contamination of the site; however, the construction of green roofs and use of filter strips and tree planters can further minimize impervious surfaces, help slow stormwater discharge and provide additional water quality improvements. In addition, increased bioretention dispersed across the project at grade level could substitute fully or partially for the proposed subsurface detention system and proprietary separators and will more closely mimic natural hydrology. The Final EIR should identify LID techniques that will be incorporated into the project.

The Final EIR should identify any wetlands impacts associated with the Ten Hills stormwater separation project.

#### Contaminated Soils

The Final EIR should provide an update on progress relative to developing RAOs and should provide a plan that shows the location of contaminated sites relative to project infrastructure including stormwater infrastructure.

#### Wastewater

I/I mitigation will be provided through on-site and off-site system improvements. MassDEP comments indicate that the benefits of the Ten Hills I/I mitigation may be overstated because they are based on instantaneous peak flows rather than the volume associated with the 1 year, 6-hour design storm. The proponent should work with MassDEP to refine its mitigation plan for Phase I and full build-out. MWRA comments also note that the basis for the estimates is not clearly detailed. The Final EIR should propose a flow monitoring program to verify the efficacy of the stages of sewer and storm drain construction and resulting I/I removal and to confirm that the flow offset predictions will be achieved for Phase I and for full-build. In addition, MassDEP comments note that use of an average infiltration estimate for the existing sewer system to estimate the I/I benefits of sewer replacement is reasonable; however, it should be documented in the Final EIR and use of site-specific information to quantify I/I may yield higher removals from the on-site system improvements.

The Final EIR should include a schedule that identifies the specific milestones for implementing the I/I mitigation and should identify any plans for redirecting stormwater. In addition, MWRA requests that the Final EIR include additional information regarding City of Somerville studies that have been conducted on the condition of the sewers and storm drains in the Ten Hills west area and associated I/I levels.

#### Construction Period Impacts

The Final EIR should include a more detailed construction mitigation plan including the SWPPP. It should identify an approach for managing traffic during construction, particularly for

construction related to roadway mitigation and identify potential impacts to DCR roadways. This section should address the construction-related comments provided by DCR.

Because of this project's location in close proximity to dense, urban neighborhoods, I expect the proponent will participate in DEP's Clean Air Construction Initiative for the full build-out of the site in addition to the IKEA construction. The Final EIR should include a commitment to participate in this program and describe the specific measures that will be employed including retrofitting of construction equipment with EPA certified emission control devices and use of on-road Low Sulfur Diesel Fuel (LSD) for both IKEA and the full build-out. The proponent should refer to the MassDEP guidance document, *Diesel Engine Retrofits in the Construction Industry – A How to Guide*, which is available on MassDEP's website at <http://www.mass.gov/dep/air/diesel/conretro.doc>.

### Response to Comments

To ensure that the issues raised by commentors are addressed, the Final EIR should include a response to comments. This directive is not intended to, and shall not be construed to, enlarge the scope of the Final EIR beyond what has been expressly identified in the initial scoping Certificate or this Certificate. The Final EIR should include a copy of this Certificate and a copy of each comment letter received. I defer to the proponent as it develops the format for this section, but it should provide clear answers to questions raised.

### Mitigation

The Final EIR should include an updated chapter on mitigation measures and revised Draft Section 61 Findings for all state permits. The Final EIR should include a summary table of mitigation measures that clearly identifies the cost of mitigation measures, schedule for implementation of mitigation and identifies the party responsible for mitigation. In addition, MassDEP comments request a detailed schedule for implementation of the I/I mitigation and construction of the new outfall and closing of the existing 36-inch storm drain connection to the MWRA's SMC.

### Circulation

The Final EIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to any state agencies from which the proponent will seek permits or approvals, to the list of "comments received" below, and to Somerville officials. Copies should also be sent to officials in Boston, Cambridge, Medford and Everett. A copy of the Final EIR should be made available for review at the Somerville, Boston, Cambridge, Medford and Everett public library.

August 15, 2008

Date



Ian A. Bowles

## Comments Received:

8/8/08 Department of Conservation and Recreation (DCR)  
8/8/08 Department of Environmental Protection/Northeast Regional Office  
(MassDEP/NERO)  
8/8/08 Executive Office of Transportation (EOT)  
8/7/08 Massachusetts Bay Transportation Authority (MBTA)  
8/8/08 Massachusetts Water Resources Authority (MWRA)  
8/6/08 Senator Patricia D. Jehlen  
8/4/08 City of Somerville/Mayor Joseph A. Curtatone  
8/6/08 Alderman William Roche, City of Somerville  
8/6/08 Alderman Dennis Sullivan, City of Somerville  
8/7/08 City of Somerville/Arts Council  
8/6/08 City of Somerville/Conservation Commission  
8/6/08 Somerville Redevelopment Authority (SRA)  
7/30/08 City of Medford/Office of Community Development  
6/27/08 Charlestown Waterfront Coalition  
8/5/08 East Somerville Neighbors for Change  
8/13/08 East Somerville Main Streets  
8/8/08 Environmental Health and Engineering, Inc.  
8/8/08 Metropolitan Area Planning Council (MAPC)  
8/8/08 Mystic River Watershed Association (MRWA)  
8/7/08 Walk Boston  
8/8/08 Somerville Chamber of Commerce  
8/12/08 Jamy Medeja and James Tatosky for the Winter Hill Yacht Club  
8/6/08 Anne and Butch Beckmann  
8/8/08 Thomas Bent, Bent Electrical Contractors Inc.  
8/8/08 Fred Berman and Lori Segall  
8/8/08 Jane Fair Bestor  
8/8/08 Ronald Bonney  
8/6/08 Stephen R. Burt, Housing Options Inc.  
8/10/08 David Dahlbacka  
8/8/08 Leanne Darrigo  
8/5/08 Benjamin Echevarria  
8/4/08 Benjamin Echevarria Jr.  
8/6/08 Jennifer Fuchel  
8/5/08 Tracie Gillespie  
8/5/08 Sarah Hutt  
8/8/08 Robert M. Kou, JE Jacobs  
7/5/08 Alan R. Krivelow, ABM Janitorial Services  
8/8/08 Sandra L. McGoldrick  
8/8/08 Lynn McWhood  
8/8/08 Anthony M. Moccia, Eckert Seamans  
8/8/08 Alan Moore  
8/8/08 Ellin Reisner  
8/6/08 Manuel C. Reynoso and Mary B. Dean-Reynoso, MCR Construction, Inc.  
8/5/08 Ruth Ronen

8/8/08 William Shelton  
8/8/08 **Paul Trane, Telecommunications Insight Group**  
6/27/08 Peter Tsouhianis  
8/8/08 Wig Zamore  
8/10/08 **Wig Zamore (second letter)**

IAB/CDB/cdb