

# ***1.0 PROJECT SUMMARY***

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## **1.1 PROJECT IDENTIFICATION**

Project Name: Hamilton Canal District, EEA #14240

Address/Location: Hamilton Canal District, bordered by Jackson, Revere, Middlesex, and Dutton Streets in Lowell, MA

## **1.2 PROJECT SUMMARY**

In June 2006, the City of Lowell issued a solicitation for a master developer to design, entitle, market, and develop the portion of land described above. After a two-phase qualification process, the Trinity Hamilton Canal Limited Partnership (THCLP) team (“the proponent”) was selected by the City to become the master developer of the site.

Through a master planning process, the proponent developed a transit-oriented, mixed-use, design scheme that will solidify the tax base, strengthen and diversify its downtown market, and bring more employment opportunities to the area. It will also create up to 700 units of market rate and affordable housing, which will help the City of Lowell meet the overall regional housing demand for urban neighborhood living. The project will increase the tax base and the number of jobs in the City.

The site is approximately 13 acres of underutilized, vacant property, located in the heart of Lowell’s downtown and divided into three sections by the Pawtucket and Hamilton Canals. The total project build out will be approximately 1,872,295 square feet (sf), with a mix of uses, which include up to 425,000 sf of commercial, up to 55,000 sf of retail space, and mixed-income housing units, including artist live/work lofts, open space, and a parking garage.

Key goals of the project will include:

- Develop an exciting new extension of Downtown Lowell to support new local residents and employees;
- Provide a viable, safe, and comfortable pedestrian experience that links the Gallagher Transportation Terminal to Downtown Lowell;
- Develop a new signature site that builds upon the successful loft reconstruction downtown, while including a variety of old and new buildings that will complement the existing historic fabric;
- Successfully develop a residential component that appeals to consumers seeking an urban experience with access to Downtown Lowell, rail access to Boston, or highway access to the Route 3 and Interstate 495 corridors;

- Create a new place that respects the urban character of the City with buildings that meet the sidewalks and active first-floor uses;
- Acknowledge and reflect the historic canals as a significant amenity, which is integral to the project site;
- Continue to making this area of the City even safer by creating and active street presence, and encouraging a significant population who will provide “eyes on the street” during both day and evening hours;
- Support significant pedestrian amenities including upgrades to streets, sidewalks, street trees, and lighting;
- Develop sites around the canal walks that will make the walkways more inviting and interesting while also creating origins and destinations along the walkways;
- Significantly increase the City’s employment base and tax revenues from the project site;
- Integrate the project with related planning and development initiatives and/or projects in the area including the upgrading of Middlesex Street, improvements of pedestrian connections to the Gallagher Transportation Terminal, the development of canal walks, as well as the proposed expansion of the existing historic trolley system to support downtown circulation;
- Incorporate planning for energy efficiency and sustainability in the redevelopment of the site, including where feasible, the use of renewable energy sources, green building construction, and operational standards.

The project also proposes to include an art gallery space and artists live/sell housing as part of the redevelopment of the Appleton Mills complex and a potential location for a 450-seat theater. The proponent has also proposed traffic improvements that will not only enhance the flow of traffic in and out of the site, but throughout adjacent intersections.

### 1.3 LIST OF PERMITS AND APPROVALS

<u>AGENCY</u>	<u>PERMIT/APPROVAL</u>
<b>FEDERAL</b>	
Environmental Protection Agency	NPDES General Permit for Stormwater Discharge NPDES General Permit for Dewatering Remediation General Permit
Federal Aviation Administration	Notification (Construction Cranes)
Federal Energy Regulatory Commission	Design Review of Bridge Crossings
National Park Service	Ground Lease/Easements Section 106 Review

National Environmental Policy Act	Environmental Assessment (NPS Action)
<b>STATE</b>	
Commonwealth of Massachusetts Massachusetts Executive Office of Energy and Environmental Affairs	Article 97 Legislation  MEPA Certificate
Department of Conservation and Recreation/ Division of Capital Asset Management Department of Environmental Protection	Land Transfers for public infrastructure Notice of Demolition Notice of Construction 21E- RAO Plan 21E- RAM Plan Sewer Connection Permits Backflow Preventer Permit Chapter 91 Licenses
Department of Public Safety Executive Office of Transportation and Public Works/MassHighway Department	Asbestos Removal Notification Approval of Elevator Inspectors  Vehicular Access Permit Chapter 40 Section 54a Approval
Department of Housing and Community Development- Division of Community Services Massachusetts Historical Commission	Urban Renewal Plan Amendment Historic Tax Credits Memorandum of Agreement
<b>LOCAL</b>	
Lowell Conservation Commission Lowell Historic Board	Orders of Conditions Design Review
Lowell Planning Board	Zoning Ordinance Approval Zoning Ordinance Recommendation Urban Renewal Plan Recommendation
Lowell City Council	Zoning Ordinance Approval Urban Renewal Plan Approval
Lowell Public Works Department	Specific Repair/Street Layout Plan Construction Management Plan Street Opening Permit
Lowell Regional Wastewater Utility Lowell Regional Water Utility Lowell Inspectional Services Department	Sewer Connection Permit Water Connection Permit Demolition Permit

Building Permit  
Plumbing/Gas Permit  
Certificate of Occupancy

## 1.4 PROJECT TEAM

Developer: TRINITY HAMILTON CANAL  
LIMITED PARTNERSHIP  
40 Court Street, 8<sup>th</sup> Floor  
Boston, MA 02108  
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Contact: James Keefe

Planning/Approvals: FORT POINT ASSOCIATES, INC.  
33 Union Street  
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Boston, MA 02108  
Tel: 617-357-7044  
Contact: Jamie Fay

Architect: ICON ARCHITECTURE, INC.  
38 Chauncy Street  
Boston, MA 02111  
Tel: 617-451-3333  
Contact: Nancy Ludwig

Legal Counsel: WILMERHALE  
60 State Street  
Boston, MA 02109  
Tel: 617-526-6216  
Contact: Katharine Bachman

Civil: MERIDIAN ASSOCIATES, INC.  
152 Conant Street  
Beverly, MA 01915  
Tel: 978-299-0447  
Contact: Charles Wear

Environmental/Geotechnical: MCPHAIL ASSOCIATES, INC.  
30 Norfolk Street  
Cambridge, MA 02139  
Tel: 617-868-1420  
Contact: Ambrose Donovan

Transportation & Traffic Engineering:	WOODLAND DESIGN GROUP, INC. 5 Dartmouth Drive, Suite 301 Auburn, NH 03032 Tel: 603-641-9500 Contact: Rob Woodland
Historic Preservation:	EPSILON ASSOCIATES, INC. 3 Clock Tower Place, Suite 250 Maynard, MA 01754 Tel: 978-897-7100 Contact: Maureen Cavanaugh
Property Management:	WINN RESIDENTIAL 6 Faneuil Hall Marketplace Boston, MA 02109 Tel: 617-724-4500 Contact: Marty Raffol

## 1.5 PROJECT CHANGES SINCE DEIR AND ALTERNATIVES ANALYSIS

The proponent filed a Draft Environmental Impact Report (DEIR) with the Executive Office of Energy and Environmental Affairs (EEA) on December 30, 2008. A certificate on the DEIR was issued by Massachusetts Environmental Policy Act Office (MEPA) on February 13, 2009.

The proponent has had several meetings with various agencies and made additional commitments since the filing of the DEIR, based on the MEPA Certificate and comments received. The following changes were incorporated into the project and are explained further throughout this Final Environmental Impact Report (FEIR): an update on the status of the Article 97 land disposition agreement with the Department of Conservation and Recreation (DCR) and associated Department of Capital Asset Management (DCAM) conveyance; additional information on building heating and cooling systems; an explanation of the likely sources of renewable energy to be used to meet the goal of 5% of on-site electrical consumption; additional TDM measures; additional details on the proposed pedestrian access plan; more detail on the Stormwater Pollution Prevention Plan (SWPPP); the most up to date version of the Memorandum of Agreement (MOA) between the Lowell National Historic Park (LNHP), the City of Lowell, the Massachusetts Historical Commission (MHC) and the proponent; estimated wastewater flows for each phase of the project calculated in accordance with DEP regulations; and additional information regarding the evaluation of the migration pathways for volatile organic compounds (VOCs) and potential indoor air quality impacts.

A summary of mitigation measures relating to sustainable design, LID, GHG, and historic resources, infrastructure, and other environmental issues can be found below.

## **1.6 SUMMARY OF MITIGATION MEASURES**

Overall, the project will result in significant positive benefits to both the public and the environment. The project has been designed to minimize environmental impacts to the greatest extent possible. The proponent is committed to revitalizing an abandoned, blighted, section of the City of Lowell. More detail on mitigation measures may be found in Chapter 8, Mitigation Measures.

The project will incorporate numerous sustainable design features. Construction of the project will avoid significant negative impacts to the environment. The major environmental issues are summarized below:

### **1.6.1 SUSTAINABLE DESIGN**

The proponent has designed the project to be LEED ND certifiable under the United States Green Building Council (USGBC). The proponent anticipates that the project would be certifiable at the gold level for LEED ND. Thirty percent (30%) of the gross square footage (gsf) will be LEED NC, certified at a silver level. The proponent has committed to green roofs on 30% of the total roof area of the project. Reflective white roofs will be used on all buildings that do not have a green roof. This will increase the reflection of sunlight and will help maintain a cooler building temperature in the summer, hence, reducing energy use. Although a final mechanical equipment list is not available for individual buildings in the project due to the fact that the project is still in the conceptual design phase, the proponent has developed with a list of very high efficiency HVAC equipment to be used in the project by type of building use.. More detail can be found in Chapter 5, Environmental Issues, and Appendix F, Greenhouse Gas Analysis.

### **1.6.2 LOW-IMPACT DEVELOPMENT**

The proponent has developed a thorough list of low-impact development (LID) measures to incorporate into the project design. Specifically, the proponent is proposing eight Stormceptors, or vortex units, for the project. The proponent has revised the plans to depict three models of Stormceptor units which are STC 3600, STC 1800, and STC 900. Stormceptors have been designed to achieve a total suspended solid (TSS) removal rate of 77%. Typical details of the Stormceptors can be found in Appendix E, Stormwater. The proponent also included more detail on the Stormwater Pollution Prevention Plan which can also be found in Appendix E. More detail regarding other LID techniques utilized on this project can be found in Chapter 7, Infrastructure.

### **1.6.3 GREENHOUSE GAS EMISSIONS**

The proponent has updated the greenhouse gas (GHG) analysis from the one that was presented in the DEIR. The proponent revised the analysis using the most recent version of the Massachusetts Building Code (October 18th, 2008, 7th Edition MA Building Code) as the base case.

Base case electrical use is lower due to the greater energy efficiency requirements of the most recent code. The base case gas use is now slightly higher because the proponent corrected an error in the DEIR analysis that assumed a base case boiler efficiency that was higher than the minimum specified in the code. The proponent has also developed a list of proposed very high-efficiency HVAC systems. More detail can be found in Chapter 5, Environmental Issues, and Appendix F, Greenhouse Gas Analysis.

The Project is committed to generating 5% of its electricity from renewable sources, including the potential to utilize photo-voltaic (PV) systems, solar thermal, geothermal, wind and hydro-electric sources. See Chapter 5.52 for more detail..

### **1.6.4 TRANSPORTATION**

The proponent has committed to several transportation demand management measures (TDM) as a way to reduce overall vehicular trips in and out of the site. The proponent will provide preferred parking for employees utilize carpools/vanpools; dedicate at least one parking space for a third-party vendor such as Zip-car; advocate for the establishment of a TMA; provide secure bicycle storage, develop live/work units; and designate an on-site transportation coordinator. The proponent will encourage tenant-employers to subsidize transit passes, allow the use of pre-tax dollars for non-single occupancy vehicle commuting costs; provide a guaranteed ride home program; join MassRide and utilize existing ride share-matching programs. The proponent has met with the Lowell Regional Transit Authority (LRTA) to discuss potential bus route modifications to enhance access to the site and will be providing a dedicated right of way for the expansion of the existing trolley service. See Chapters 4 and 5 for more detail.

### **1.6.5 HISTORIC**

The proponent and the LNHP prepared a Memorandum of Agreement (MOA), which has been reviewed by the parties to the agreement. This MOA includes measures to mitigate the project's adverse impacts on historic structures by providing guidance on the rehabilitation of historic structures, open space and public realm improvements, and design review of new construction. Other specific mitigation measures are as follows: attention to the design character of the replacement bridges over the Pawtucket and Hamilton Canals; rehabilitation of the Appleton Manufacturing Company overhead pedestrian bridge and the two pedestrian bridges from the

Appleton Mill to Jackson Street, and the commitment that Phase one will have no adverse effect or will not result in the demolition of the raceway and waterwheel in the eastern end/rear ell of Mill No. 1 of Appleton Mills and will not preclude the future reuse of these structures for hydroelectric power. See Chapter 6, Historic Resources and Preservation for more detail regarding the project's impacts on historic resources, and Appendix H for a copy of the MOA.

### **1.6.6 INFRASTRUCTURE**

The proponent intends to implement several LID techniques into the project design in order to reduce imperviousness, reduce off-site runoff to ensure sufficient groundwater recharge, and provide erosion and sediment control. These techniques include filtering rain gardens, green roofs, rain water harvesting facilities, stormceptors, and deep sump catch basins.

The proponent will abandon in place the existing wastewater infrastructure of the redevelopment site and replace the combined system with separate storm and sanitary sewers. The proponent has estimated the sewer flows for each phase of the project in accordance with DEP regulations. These calculations can be found in Chapter 7, Infrastructure.

### **1.6.7 ENVIRONMENTAL**

The project is the location of multiple Massachusetts Contingency Plan (MCP) release tracking numbers (RTNs). Excavation and handling of contaminated soils, as well as dewatering and discharge activities, will be conducted per the requirements of a Release Abatement Measure (RAM) Plan and a soil management plan prepared in accordance with the MCP, as well as any existing Activity and Use Limitations (AULs) that have been implemented to date. Dewatering and discharge activities will also be conducted per the requirements of the U.S. Environmental Protection Agency (EPA) Remediation General Permits (RGP) or other dewatering permits as applicable.