



Development Impact Report – E. Measures to Mitigate Impacts

Parker Street Affordable Housing

99 Parker Street, Acton, MA

March 4, 2010

The following brief descriptions are provided to summarize the measures that will be taken to mitigate development impact to the project site and adjacent properties.

Prevent surface water contamination:

We do not anticipate any significant adverse impacts to existing surface water quality as a result of the project. Best management practices in compliance with MA DEP Stormwater Regulations including vegetated filter strips, bioretention cells (rain gardens), pocket wetlands, infiltration, etc will all aid in protecting surface water quality values of the Site. The project as proposed has been approved by the town of Acton Conservation Commission via and Order of Conditions (MassDEP File No. 85-1027) dated September 2, 2009.

Prevent groundwater contamination:

We do not anticipate any significant adverse impacts to existing subsurface water quality as a result of the project. Best management practices including vegetated filter strips, bioretention cells (rain gardens), pocket wetlands, infiltration, etc will all aid in protecting subsurface water quality values of the Site. Meridian Associates, Inc. (MAI) has determined that seasonal high groundwater does not exist within 24” of recharge basin bottoms.

Maximize groundwater recharge:

Based on the Massachusetts Stormwater regulations we are required to recharge approximately 480 cubic feet of stormwater. The 480 cubic feet has been calculated dependent on the amount of impervious surfaces we are generating for the proposed project, as well as the underlying soil types. By implementation of the bioretention cells (rain gardens) and pocket wetlands, we are providing 494 cubic feet of groundwater recharge volume, thus exceeding the requirement and maximizing the groundwater recharge. The project as designed, complies with the requirements of the MassDEP Stormwater regulations.

Prevent erosion and sedimentation:

Erosion control measures will be integrated into the project design to prevent erosion and resultant sedimentation of receiving wetland areas. Measures to be utilized during construction include erosion control barriers, haybales or “silt socks”, checkdams, temporary seeding of disturbed areas and a stabilized construction entrance. Permanent measures to control erosion and prevent sedimentation are presented as part of the stormwater management system design. The notes section of the Erosion & Sediment Control plan, sheet 9 of 11 contains a list of the proposed erosion control and stabilization protection measures.

Maintain slope stability:

Any areas which have a temporary slope equal to or steeper three (3) horizontal to one (1) vertical (3:1) up to slopes of two (2) horizontal to one (1) vertical (2:1) shall be covered with



jute matting following hydro-seeding. Jute matting shall be installed according to manufacturer guidelines. Precautions shall be taken to minimize disturbance of the hydro-seed when installing the jute matting.

Any areas which have a temporary slope equal to or steeper than two (2) horizontal to one (1) vertical (2:1) shall be covered with erosion control blankets immediately after the hydro-seeding is completed. The blankets shall be stapled in place per manufacturer guidelines. Precautions shall be taken to minimize disturbance of the hydro-seed when installing the erosion control blankets.

Design the project to conserve energy:

It is assumed that the affordable units will be modern and energy efficient units that have lighting fixtures with energy saving lamps, “energy star” rated appliances, low energy windows, and rated insulation.

Preserve wildlife habitat:

Based on a review of the Massachusetts Natural Heritage Atlas 13th Edition, Effective October 1, 2008, the project site is not located within a Natural Heritage Priority Habitat of Rare Species, Estimated Habitat of Rare Wildlife, or Certified Vernal Pool. Any wildlife that may be associated with the wetland will not be disturbed as the project does not disturb the wetland.

Preserve wetlands:

A wetland area bisects the site and has been delineated by Mason Associates. This wetland area qualifies as bordering vegetated wetland which is a Resource Areas subject to protection under the Wetland Protection Act. Accordingly, a Notice of Intent was submitted to the Acton Conservation Commission and the Massachusetts DEP for the proposed project. An order of Conditions, MassDEP file No. 85-1027, has been issued for the project as proposed. The project does not disturb the existing wetlands on-site. In fact, the driveway crossing spans the wetland area and has an open grating to provide light and a water source to the wetland below.

Ensure compatibility with the surrounding land uses:

The project is located in a Residential Zone and will remain a residential use. The site includes 5 residential units, an access driveway, and landscaping features. The intent of the project is to maintain a residential use at this property and to provide affordable housing for the Town.

Control peak runoff from the site so that the post-development rate of runoff will be no greater than the predevelopment rate of runoff for the 10-yr storm event:

The project as designed will mitigate the proposed post-development peak rates of runoff for the 2-yr, 10-yr, 25-yr, and 100-yr storm events. The proposed stormwater management system consists of rain gardens and pocket wetlands to help mitigate runoff and complies with the MADEP Stormwater regulations as designed.



Preserve historically significant structures and features on site:

There are presently no historically significant structures and features located within the site.

To mitigate the impact of the traffic generated by the development:

The proposed project consists of five units of affordable housing. The number of vehicular trips generated by this type of use is anticipated to be less than 50 per day and will not significantly impact the overall traffic conditions in the surrounding area.