

**Exhibit \_\_\_\_\_**  
**Woodmere at Brush Hill**  
**Construction Management & Phasing Plan**

**Introduction:**

Northland Residential Corporation (NRC) proposes to develop a 36 unit residential townhouse community located on the St. Pius Rectory property at 865 Brush Hill Road. Access to this project will be from the existing driveway entrance along the property's Brush Hill Road frontage.

Construction of this project will be managed so as to minimize impacts to the community, abutting property owners and local resource areas. As part of the construction process, NRC has developed this Construction Management & Phasing Plan (this "Construction Management Plan") as a management guideline and tool for all aspects of the development of this project.

This Construction Management Plan will provide guidance to all contractors working on the project. It will be the responsibility of the contractors to become familiar with these guidelines as well as the guidelines set forth in the Storm Water Pollution Prevention Plan (SWPPP). In addition, the NRC owner's representative and the general contractor will be responsible for overseeing all work on the project to control and mitigate impacts to the surrounding community and direct abutters from the construction activities. Once the NRC project management team is in place, it will inform the Town of the responsible individuals for this project and provide phone numbers and 24/7 contact information, etc. in order for them to be contacted.

As soon as all regulatory permits required to develop this project are obtained, the owner's representative and general contractor will begin site preparation work for the project. This Construction Management Plan is intended to create guidelines and be a flexible document. As necessary, it will be reviewed and updated, based upon the applicable requirements of the permits and a detailed review of the onsite conditions by all members of the NRC construction team, with input from appropriate Town officials and agencies. It is estimated that site work will begin in the third quarter of 2015.

**Pre-Construction Site Coordination:**

All construction management issues that relate to the scope of work will be addressed during the bidding phase of the project. This will include site visits to review specific existing conditions and the required control measures dealing with tree protection and environmental considerations. Pre-construction meetings will be held with all parties involved with this project including the Town Engineering, Fire, Police and Planning Departments, and local utility companies. In addition, all abutting property owners, as well as members of the Brush Hill Neighborhood Association will be notified by email **48 hours prior to** commencement of site work, particularly work involving tree clearing. It is at these meetings that responsible parties for all construction activities will be identified and their contact information will be forwarded to the appropriate Town authorities.

Prior to site mobilization, an on site meeting will be held with the site subcontractor, the architect, the arborist and McKenzie Engineering to review the scope of the Tree Preservation & Protection Plan and to establish and coordinate the Temporary Construction Fencing Program.

After the project team is familiarized with the site and the construction program, the Tree Preservation & Protection Plan, the Storm Water Pollution Prevention Plan and the Temporary Construction Fencing Program will be implemented. These documents provide controls to protect trees to be saved during site construction, to provide and establish erosion controls and to provide temporary drainage structures for sedimentation and storm water management.

## **Initial Construction Activities**

### **Project Access:**

The primary access route for construction vehicles to the site will be from Route I-93 onto Route 138 northbound into Milton. Trucks will then turn left either onto Neponset Valley Parkway or onto Bradlee Road, then to Brush Hill Road and into the site. Efforts will be made to minimize trips during peak traffic times. Efforts will also be made to vary the route between Neponset Valley Parkway and Bradlee Road in order to minimize the impact of such traffic on the surface of these roadways, themselves. Truck routes and timing will be selected to avoid conflicts with school bus transportation including bus stops and major bus routes as identified by the school department.

### **Work Hours:**

Hours of operation will be 7 am to 6 pm daily, Monday through Friday and, Saturdays from 7 am to 3 pm. Wherever possible, deliveries will be made after the morning commuting hours and before the afternoon commuting hours.

### **Employee Parking:**

Construction parking will be on site under the control of the owner's representative and general contractor, who will provide an onsite employee parking area. No employees of either the general contractor or the subcontractors will be permitted to park on public roadways surrounding the project. All construction workers will be onsite by 7 am and most will leave the site prior to peak afternoon traffic periods. An orientation will take place with all employees to review safety, routes to and from the site, hours of operations, lunch trash disposal and noise controls.

### **Project Construction Controls:**

NRC will have an onsite representative (the owner's representative) present during construction. The owner's representative is responsible for managing the general contractor, who, in turn oversees construction during the entire time of the project, from the initial pre-construction meeting to the final walk through with the owner. The owner's representative is also the liaison to the Town, property abutters and representatives of the Brush Hill Road Neighborhood Association. In accordance with the project approvals, the owner's representative will provide to appropriate Town agencies and officials written reports on the progress of construction and an

update on prospective construction activities on a quarterly basis, which will be posted on the Town's website.

Communication between the design team, consisting of the project architects, project site/civil engineers, project structural/geotechnical engineers, arborist, etc., the construction team, including the general contractor's staff, site contractor, sub-contractors, trades, etc., and NRC, is established early in the project timetable. As the project develops in pre-construction, the owner's representative and the general contractor are involved on a weekly basis along with the entire project team. The final construction documents and plans are developed with input from the project team and, as approvals are obtained, the Bid process is initiated with approved work packages. This involves communications with the subcontractor market to identify all project specific issues as well as the scope of work. Just prior to the start of construction, a partnering meeting is conducted involving all members of the total project team. The project is reviewed in its entirety and goals are set by the team and monitored throughout construction.

#### **Tree Protection:**

Protective fencing will be placed around all trees that are planned to be saved as shown in the Tree Preservation & Protection Plan. NRC will implement the requirements of Tree Preservation & Protection Plan prior to mobilizing on the site. This includes pruning of branches and roots as necessary, fertilization, and clearing of adjacent trees not to be preserved in order to erect protective chain link fence and flagging, all of which will be performed under the supervision of the licensed arborist. A meeting will take place at the site with the arborist, McKenzie Engineering, Town officials and the contractors to review and adopt the plan in accordance with the Special Permit and Site Plan Approval.

#### **Erosion Control:**

Concurrent with implementation of the Tree Preservation & Protection Plan, the general contractor and the site contractor will review the Storm Water Pollution Prevention Plan (SWPPP) and prepare the NPDES permit application for submission to EPA. Prior to the beginning of any construction activities, silt fences and staked haybale barriers will be installed, as shown on the plans and in accordance with the SWPPP. The erosion control barriers will be inspected on a regular basis and after periods of rains of one half inch or more. During excavation and rough grading, siltation basins and temporary drainage swales will be constructed to direct runoff from disturbed areas and reduce the amount of runoff from the construction areas. Where water flow is concentrated, crushed stone check dams will be installed as well as haybale check dams, as required. Stockpiled materials will be properly stabilized as required in the SWPPP.

#### **Construction Staging:**

Once the Tree Preservation & Protection Plan and SWPPP are in place, temporary construction staging areas will be established within the area of each building pod ("residential zone") that will go under active construction. Site clearing and the installation of temporary construction entrances to each residential zone will be undertaken, with care given to maintain the requirements of the Tree Preservation & Protection Plan and the SWPPP. Any required demolition of the existing Building structures (notably, the service wing of the Dupee House) will occur in accordance with the applicable local and state regulations.

Concurrently with the installation of project infrastructure, including roadways and utilities, connections to the municipal water systems within Brush Hill Road and Cushing Road will be undertaken. During work on the new water system, adequate water service and fire protection will be maintained within the surrounding community, in consultation with appropriate Town agencies and officials.

### **Temporary Utility Setups:**

Any temporary utility connections that are required will be installed to insure that water and other services are available to the neighborhood during construction. The owner's representative and general contractor will coordinate these efforts as required to insure uninterrupted service.

### **Construction Phase:**

#### **Site Development Phase:**

It is envisioned that the first phase of construction will involve clearing, grading and associated site infrastructure work necessary to complete Roads A, B & C to a 'binder stage'. This work will involve tying into existing utilities in Brush Hill and Cushing Roads (sewer, water, gas and electric), widening and re-establishment of the existing entry on Brush Hill Road and the removal of brush, vines and dead trees on and behind the existing Brush Hill stone wall. Rough grading and tree removal associated with this work will be conducted in accordance with the SWPPP and the Tree Preservation & Protection Plan. Protective fencing will be placed around all trees that are to remain. This fencing will be inspected on a regular basis in order to insure maximum tree protection.

#### **Earth Deposit and Removal:**

Due to the topography of the site and the provision of underground storm water facilities, both the import and export of soil will be required during project construction. Based on an engineering analysis of the site we project the following:

<b>Construction Activity</b>	<b>Cut (CY)</b>	<b>Fill (CY)</b>	<b>Total Import/Export Volume (CY)</b>
Roadway construction	60.6	5371	5310.4
Drainage infrastructure	799.5	88.8	-710.7
Total Roadway Construction			4599.7
Building 1	449.5	1657.7	1208.2
Building 2	495.5	1792.8	1297.3
Building 3	524.1	1059.2	535.1
Building 4	1063.8	1205.1	141.3
Building 5	47.1	716.4	669.3
Building 6	69.8	681.7	611.9
Building 7	272.6	1156.9	884.3
Building 8	0.0	1561.9	1561.9
Building 9	257.8	1208.4	950.6

Building 10	1633.4	511.3	-1122.1
Building 11	1297.5	1057.9	-239.6
Building 12	642.8	843.1	200.3
Building 13	532.8	1008.4	475.6
Building 14	117.8	934.0	816.2
Building 15 (Dupee House)	0.0	618.5	618.5
Total Building Pod Construction			8609.3
Overall Site Total			13,209 Import

Wherever practical, earth materials will be re-utilized on the site. All excess material that cannot be used on-site will be transported offsite. The delivery and/or removal of materials will extend over the two year construction period. The removal of excess materials will primarily occur between 9 am and 2 pm to avoid impacting traffic during the morning and afternoon peak times. Operating times and routes for school buses will be avoided during the early morning and mid-afternoon bus travel periods.

#### **Site Clearing:**

Clearing and grubbing will proceed initially along the proposed access roads and then on a building pod by building pod basis. In no instance shall the site be ‘clear cut’ and only clearing necessary for that the efficient management and completion of each building pod will be undertaken. Silt fencing, temporary drainage swales, haybale check dams and staked haybales etc. will be installed as shown on the plans to prevent sediment runoff and define the limits of work. All stockpiled soil shall be stabilized. Permanent slopes with gradients in excess of three-foot horizontal to one-foot vertical will be stabilized with erosion control fabric.

All vegetative debris will be chipped on site except for the logs hauled off as marketable lumber. Stumps will be removed or ground up on site. Wood chip material will be used for erosion controls on exposed slopes prior to their stabilization by revegetation. The loam will be stripped, screened and stockpiled as the site construction progresses. At the designated areas containing trees to be preserved, where foundation cuts are in close proximity to the root structure of the trees, an earth retention system will be used to minimize any movement of the root structure, this will depend on the depth of the cut and the proximity of the base of the tree. Typically, if a 45 degree angle can be achieved from the drip edge of the tree to the bottom of footing, earth retention will not be required, however, erosion of the slope will be prevented under direction of the arborist.

#### **Foundations:**

The construction of each building pod will be subject to the issuance of building permits by the Building Commissioner. Once building permits are obtained, placement of building pod foundations will be located by survey prior to the commencement of excavation. As an additional protection, and to ensure that the building pods are located in accordance with the approved site plan, the excavated foundation hole and footings will be ‘pinned’ by survey and an “as-built survey plan” shall be provided to the Building Department prior to the request for the “Foundation Inspection”. This strict protocol is required to insure that each building pod has

been placed in substantial conformity with the approved Special Permit documents and that the required side line and buffer line setback dimensions are met.

**Stormwater:**

Storm water runoff will be controlled using a combination of temporary drainage structures prior to the installation of the proposed systems in accordance with the SWPPP. Existing and proposed catch basin inlets shall be protected using sediment traps, silt sacks, and staked haybales. All stormwater control systems will be inspected and maintained routinely to ensure that the system is functioning correctly throughout the construction process.

**Utilities:**

Site utilities, including any temporary service connections, will be constructed in a coordinated fashion so as not to impede or interrupt services including, storm drainage and sewer supporting each area. The owner's representative and general contractor will coordinate the installation of all drainage, water and sewer installations as well as all private utility services (gas, telephone, cable, electric, etc.). Site utilities, including storm drainage, sewer and water, will be installed as the site development progresses.

**Building Construction Phase:**

The progress of building pod construction will follow market conditions. Build out of the site will begin with Building Pod #1 and proceed around the site in a counter clockwise fashion. It is anticipated that no more than four building pods will be actively under construction at any given point of time with, for example, one building pod being weather tight with interior buildout (finishes) work progressing with the fourth building pod being at foundation/framing stage of work. A nine month build cycle is projected for each building pod. Building pod site grading and landscape work will take place simultaneously with the buildout of the individual units, adjusted for weather/seasonality issues.

The renovation and rehabilitation of the Dupee House will commence in late fall 2015, with the demolition of the service wing, gutting of the interior and the removal and replacement of the windows, all in order to improve and clean up the appearance of the building.

Full Project buildout is projected at 36 months, weather and market conditions permitting.

**Project Buildout and Phasing Schedule:**

The attached buildout and phasing schedule outline an approximate schedule for completion of the project.