CONSTRUCTION PERIOD POLLUTION PREVENTION PLAN

Center & Main
1440 Main Street
Concord, Massachusetts

November 12, 2019

Applicant
Symes Development & Permitting, LLC
50 Dodge Street
Beverly, MA 01915

Prepared By
Williams & Sparages, LLC
189 North Main Street, Suite 101
Middleton, MA 01949
Ph: 978-539-8088
Fax: 978-539-8200
www.wsengineers.com

W&S Project Data
CONC-0020
p:\CONC-0020(1440 main street)\drainage\construction PPP_Report conc 2.docx

WILLIAMS & SPARAGES
ENGINEERS | PLANNERS | SURVEYORS

TABLE OF CONTENTS

1 | Construction Period Pollution Prevention Plan & Erosion & Sediment Control

This Construction Period Pollution Prevention Plan and Erosion and Sediment Control Plan is prepared to comply with the provisions set forth in the Massachusetts Department of Environmental Protection (DEP) Stormwater Management Standards.

1.1 Site Description

Project name and location
Center & Main
A Planned Residential Development
1440 Main Street
Concord, Massachusetts

Applicant Name and Address
Symes Development & Permitting, LLC
50 Dodge Street, Suite 202
Beverly, MA 01915

Description (Purpose and Types of Soil Disturbing Activities)
Project involves removing two existing residential structures and constructing a new residential cluster development including an ANR frontage lot on Highland Street. Removal of existing vegetation and proposed cuts and fills will be conducted to properly grade the site for the intended use. Excess material will be removed from site following installation of foundations and access/egress drives. Activities to also include installation of materials and structures associated with an onsite private sewage disposal system along with decentralized subsurface infiltration systems to control and recharge stormwater runoff.

Soil disturbing activities include: Clearing and grubbing; installation of erosion and sediment control device; cut and fill; installation of onsite private sewage disposal system; installation of decentralized subsurface infiltration systems to control and recharge stormwater runoff. pavement installation; utility installation; building construction; stormwater management systems and preparation for final loaming, seeding and installation of required Landscaping.

Site Area
The site is 9.2 acres of which 7. acres will be disturbed by construction activities.

General Sequence of Major Activities

1. Construct Dwelling on ANR lot for current Owner to relocate.
2. Install tree protection devices within open space
3. construction entrance
4. Install erosion control devices
5. Raze existing Structures of Owner.
6. Clearing, cutting and grubbing
7. Rough grading of cuts and fills and removal of excess material from site
8. Water Main Installation
9. Install onsite Sewage Disposal System
10. Underground Utility Installation
11. Stabilize perimeter cut slopes with vegetation and erosion controls.
12. Install limited landscaping items in select areas along perimeter.
13. Install stormwater Management systems.
14. Gravel and pavement binder course installation
15. Phased pad site preparation for each dwelling unit
16. Curbing and sidewalk construction
17. Finished grading and slope stabilization
18. Finished Paving
19. Loam and seed all disturbed areas
20. Final cleanup including inspection and cleanout of all stormwater structures

Name of Receiving Waters

The Assabet River Watershed

1.2 Erosion and Sediment Controls

In order to limit the amount of erosion and sedimentation that takes place during and after construction, it is important to implement a management plan, which will protect and limit the amount of land area that is devoid of vegetation at any given time.

Prior to Construction

Prior to start of construction activities, the owner, builder, and site contractor shall clearly identify areas that may be affected by the proposed clearing and earth moving activities by reviewing the approved grading plan as part of an initial site visit. During the site visit, the limit of work line shall be reviewed to confirm the type of erosion control measure to be used to protect downstream wetland resources and abutting property. Limits of tree clearing shall be verified during the initial site visit with emphasis on identifying "save areas" for existing trees and vegetation where practicable.

Erosion and Sediment Control Device

Silt fence and bales are proposed as the primary erosion control device for this project (see details provided on PRD plan specific to the Town of Concord). It is important for the owner, builder, and/or site contractor to have access to a supply of compost BMPs should the need arise for additional erosion and sediment control measures. An erosion control fiber roll or approved equal may be used along a slope and/or together with silt fence to protect against concentrated stormwater runoff over exposed surfaces. Erosion and sediment control devices shall be inspected every 7 days or within 24-hours of a 1/2-inch (or greater) rainfall event to ensure that they are operating properly. Should sediment levels begin to build up on the erosion control devices, it may be necessary to remove the accumulated

sediment to ensure that the erosion control devices continue to operate as designed. Sediment shall be removed when it reaches one third the height of the fence.

Earth-moving Activities

After trees and other vegetation are cleared, earth-moving (or grading) activities can begin. The approved grading plan shall be used to help guide the site contractor during regrading activities. Often times it is helpful to have a land surveyor establish benchmark elevations and/or lines of grade to aid the site contractor during regrading activities. This is the time during which the site is most vulnerable to erosion. Therefore, it is important for the site contractor to finalize grading activities as soon as practicable following land clearing. Areas than remain exposed longer than 30 working days in an interim condition shall be stabilized in a temporary fashion. Once final grades have been established, permanent vegetation can be established.

Temporary Seeding

During construction it may be necessary to temporarily stabilize areas that will not be brought to final grade for a period longer than 30 working days. Temporary seeding is accomplished using fast-growing grass seed species such as ryegrass. Seeding shall be performed in accordance with the recommendations of the landscape architect.

Permanent Seeding & Plantings

Once final grades have been established and the weather permits, every effort shall be made to establish permanent vegetation on disturbed and exposed areas. In addition to grass seed, tree and shrub plantings shall be an integral part of the permanent stabilization plan. Consultation with the Registered Landscape Architect is required relative to permanent seeding and plantings per approved Landscape Plan.

Care shall be taken by the landscape architect, owner, builder, and/or site contractor to select trees, shrubs, and seed mixes that are best suited to the soil conditions on the site. Soil moisture, depth to seasonal groundwater, and exposure to sunlight shall be carefully considered when selecting species. In recent years, the emphasis on using plant species native to Massachusetts has grown. Information on the use of non-native and native species can be found on the web and in many local nursery catalogs.

Structural Practices

The location and types of erosion controls are identified on the SWPPP. Controls shall be installed as shown on the approved SWPPP per Town of Concord details to help prevent erosion and sedimentation of the downstream isolated wetland identified on the project.

Catch Basins identified on the Plan shall be fitted with a siltsack or approved equal during construction to prevent the accumulation of sediments in the catch basin sump. Catch Basins shall be cleaned as specified in the Long Term Pollution Prevention Plan or the Long Term Operation and Maintenance Plan.

Stormwater Management

The stormwater runoff shall be managed through the use of several best management practices:

Deep Sump Catch Basin with Hood/Trap;
Contech Units
Isolator Rows
Subsurface Infiltration Chambers;

1.3 Other Controls

Waste Materials

All waste materials shall be collected and stored in secure metal dumpsters rented from a licensed solid waste management company in Massachusetts. The dumpsters shall meet all local and state solid waste management regulations as outlined in 310 CMR 19.00. All trash and construction debris generated on site shall be disposed of in the dumpsters. The dumpsters shall be emptied as often as necessary during construction and transferred to an approved solid waste facility licensed to accept municipal solid waste and/or construction and demolition debris. No construction waste shall be buried on site. All personnel shall be instructed regarding the correct procedure for waste disposal.

Hazardous Waste

All hazardous waste materials shall be disposed of in a manner specified by local or State regulation or by the manufacturer. Site personnel shall be instructed in these practices.

Sanitary Waste

All sanitary shall be collected from portable units, as needed, by a licensed septage hauler in Massachusetts, in accordance with the requirements of the local Board of Health.

Offsite Vehicle Tracking

Construction entrance and exit shall be via Main Street – See Construction Plan & SWPPP located in Appendix.

1.4 Timing of Controls/Measures

As indicated in the Sequence of Major Activities, the installation of erosion and sediment control devices shall be in place prior to earth excavating activities.

1.5 Certification of Compliance with Federal, State, and Local Regulations

The Construction Period Pollution Prevention Plan reflects the requirements of the Massachusetts Wetlands Protection Act (310 CMR 10.00). There is no bordering vegetated wetland filling associated with this project. The filling of up to 5,000 square feet of Isolated Wetland is proposed.

Applicant shall also become familiar with Local stormwater regulations and procedures of the Town of Concord General Bylaws. Applicant shall also review guidelines and standards available from the Engineering Division of the Concord Public Works.

1.6 Maintenance and Inspection Procedures

Erosion and Sediment Control Inspection and Maintenance Practices

The following items represent the inspection and maintenance practices that will be used to maintain sediment and erosion control.

1. All control measures shall be inspected at least once every fourteen (14) days and following any storm event of 0.5 inches or greater.
2. All measures shall be maintained in good working order; if a repair is necessary, it shall be initiated within 24 hours of the report.
3. Built up sediment shall be removed from silt fencing when it has reached one-third the height of the fence.
4. Silt fence shall be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly set in the ground.
5. The catch basin grates shall be inspected for grate elevation relative to current surface condition; condition of silt sack, and degree to which sediment has accumulated on the grate and in the sump of the catch basin.
6. Temporary and permanent seeding and any plantings shall be inspected for bare spots, washouts, and healthy growth.
7. A maintenance inspection report shall be prepared following each inspection. A copy of the form to be completed by the inspector is attached to this document.
8. Symes Development & Permitting, LLC shall select three individuals who will be responsible for inspections, maintenance and repair activities as well as who shall be responsible for filling out the inspection and maintenance report.
9. Personnel selected for inspection and maintenance responsibilities shall receive training from Symes Development & Permitting, LLC or their designated representative. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment control devices used on site in good working order.

1.7 Non Stormwater Discharges

It is expected that the following non-stormwater discharges will occur from the site during the construction period

1. Water from water line flushing.
2. Pavement wash waters.

All non-stormwater discharges shall be directed to the proposed site BMPs prior to discharge.

1.8 Inventory for Pollution Prevention Plan

The materials or substances listed below are expected to be present on site during construction

1. Concrete
2. Wood
3. Masonry Block
4. Residential Building Materials
5. Fiber Glass Insulation
6. Fertilizers
7. Petroleum Based Products
8. Cleaning Solvents
9. Paints (enamel and latex)
10. Tar
11. Waterproofing Materials

1.9 Spill Prevention

Material Management Practices

The following are the material management practices that shall be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff.

Good Housekeeping

The following good housekeeping practices will be followed on site during the construction project.

1. A concerted effort shall be made to store only enough product required to complete a particular task.
2. All materials stored on site shall be stored in a neat and orderly fashion in their appropriate containers and, if possible, under a roof or other secure enclosure.
3. Products shall be kept in their original containers with the original manufacturer's label.
4. Substances shall not be mixed with one another unless recommended by the manufacturer.
5. Whenever possible, all of a product shall be used up before disposing of the container.
6. Manufacturer's recommendations for proper use and disposal shall be followed.
7. The site superintendent shall perform a daily site inspection to ensure proper use and disposal of materials on site.

Hazardous Products

The following practices are intended to reduce the risks associated with hazardous materials.

1. Products shall be kept in original containers unless they are not resealable.
2. Where feasible, the original labels and material safety data shall be retained, whereas they contain important product information.
3. If surplus product must be disposed, follow manufacturer's or local and state recommended methods for proper disposal.

Product Specific Practices

The following product specific practices shall be followed on site:

Petroleum Products

All on site vehicles shall be monitored for leaks and receive regular preventative maintenance to reduce the risk of leakage. Petroleum products shall be stored in tightly sealed containers which are clearly labeled. Any bituminous concrete or asphalt substances used on site shall be applied according to the manufacturer's recommendations.

Fertilizers
Fertilizers shall be applied in the minimum amounts recommended by the manufacturer. Once applied, fertilizers shall be worked into the soil to limit exposure to stormwater. Storage shall be in a covered shed or trailer. The contents of any partially used bags of fertilizers shall be transferred to a sealable plastic bag or bin to avoid spills. Fertilizers shall be applied in the minimum amounts recommended by the manufacturer. Once applied, fertilizers shall be worked into the soil to limit exposure to stormwater. Storage shall be in a covered shed or trailer. The contents of any partially used bags of fertilizers shall be transferred to a sealable plastic bag or bin to avoid spills.

Paints
All containers shall be tightly sealed and stored when not required for use. Excess paint shall not be discharged into any catch basin, drain manhole, or any portion of the stormwater management system. Excess paint shall be properly disposed of according to manufacturer's recommendations or State and local regulations.

Concrete Trucks
Concrete trucks shall not be allowed to wash out or discharge surplus concrete or drum wash water on site.

Spill Control Practices
In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices shall be followed for spill prevention and cleanup:

1. Manufacturer's recommended methods for cleanup shall be readily available at the on site trailer and site personnel shall be made aware of the procedures and the location of the information.
2. Materials and equipment necessary for spill cleanup shall be kept in the material storage area on site. Equipment and materials shall include, but not be limited to
3. brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
4. All spills shall be cleaned up immediately after discovery.
5. The spill area shall be kept well ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
6. Spills of toxic or hazardous material shall be reported to the appropriate State and/or local authority in accordance with local and/or State regulations.
7. The spill prevention plan shall be adjusted to include measures to prevent a particular type of spill from reoccurring and how to clean up the spill if there is another occurrence. A description of the spill, what caused it, and the cleanup measures shall also be included.
8. Symes Development & Permitting, LLC or their assigned designee shall be the spill prevention and cleanup coordinator. Symes Development & Permitting, LLC shall designate at least three other site personnel who will be trained in the spill control practices identified above.

1.10 Pollution Prevention Plan Certificate

I certify under penalty of law that this document and all its attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed:_____Date:_____
Symes Development & Permitting, LLC

2 | Earth Removal

Earth removal, in excess of 1,000 cubic yards from the site onto a public way, is subject conditions within an Earth Removal Special Permit. Transfer of material within common parcels without travel onto a public way is permitted without special permit per the Zoning Bylaw.

Trucking Plan – Patriot Excavating Corporation

Patriot Excavating Corporation
982 Main St.
Acton, MA 01720
978-263-1123
FAX: 978-263-1143
patriotexcavating@comcast.net

October 7, 2019

Mr. Jeff Rhuda
Symes Development & Permitting, LLC
50 Dodge St.
Beverly, MA 01915

RE: Center & Main, 1440 Main St., Concord, Massachusetts

TRUCKING PLAN

Dear Mr. Rhuda:

We were pleased to submit our preliminary proposal for the site work at the above-referenced property, according to the following plans and specifications:

Site plans, 1440 Main St., Concord, MA; by Williams & Sparages, 189 North Main St., Suite 101, Middleton, MA 01949; dated December 6, 2018; revised March 12, 2019, March 28, 2019 and June 14, 2019; Sheets 1-12 of 12.

Our takeoff and analysis concluded there is approximately 17,000 yards of export material on site, 4,000 yards of fine gravel/sand and 13,000 yards of topsoil loam. Each trailer holds between 26-30 yards of material, therefore the expected trailer traffic for the export is 607 trailer loads (17,000/28). We have the capacity to load approximately 36 trailers a day (1,008 yards), so actual trucking days would be approximately 17 days. It should be noted the 17 days are not contiguous as earth moving will dictate the timeline.

Timber hauling would consist of approximately 24 trailer trucks and approximately six trucks of chips. This hauling would not be concurrent with the soil hauling as timber removal.

The most likely destination for the export is DH Loam located at 2352 Main Street, Concord, MA. This would entail a trip on Route 62 of 1.7 miles. Alternatively the other recipient would be Lombardo Loam, 30 Stow Street, Acton MA. This would be a similar route westerly on Main Street out of Concord.

Rules we would adhere to:

1. All pickups to and from the construction site shall be made on the actual jobsite property, there will be no parking on Main Street or Highland Street.

2. Soil and timber hauling would not be before 9:00AM or after 3:00PM.

3. No deliveries or pickups shall be made on Sundays or Federal Holidays.

4. Delivery and/or trucking vehicles shall shut off their engines whenever practical. No idling on site for more than 10 minutes shall be permitted.

5. All vehicles entering and exiting the property shall take reasonable measures to reduce dust and dirt from tires and roadway.

6. All delivery vehicles shall be mindful and respectful of the surrounding neighborhood at all times and obey posted speed limits.

7. All soil & timber hauling in Concord would be restricted to Route 62 and Route 2.

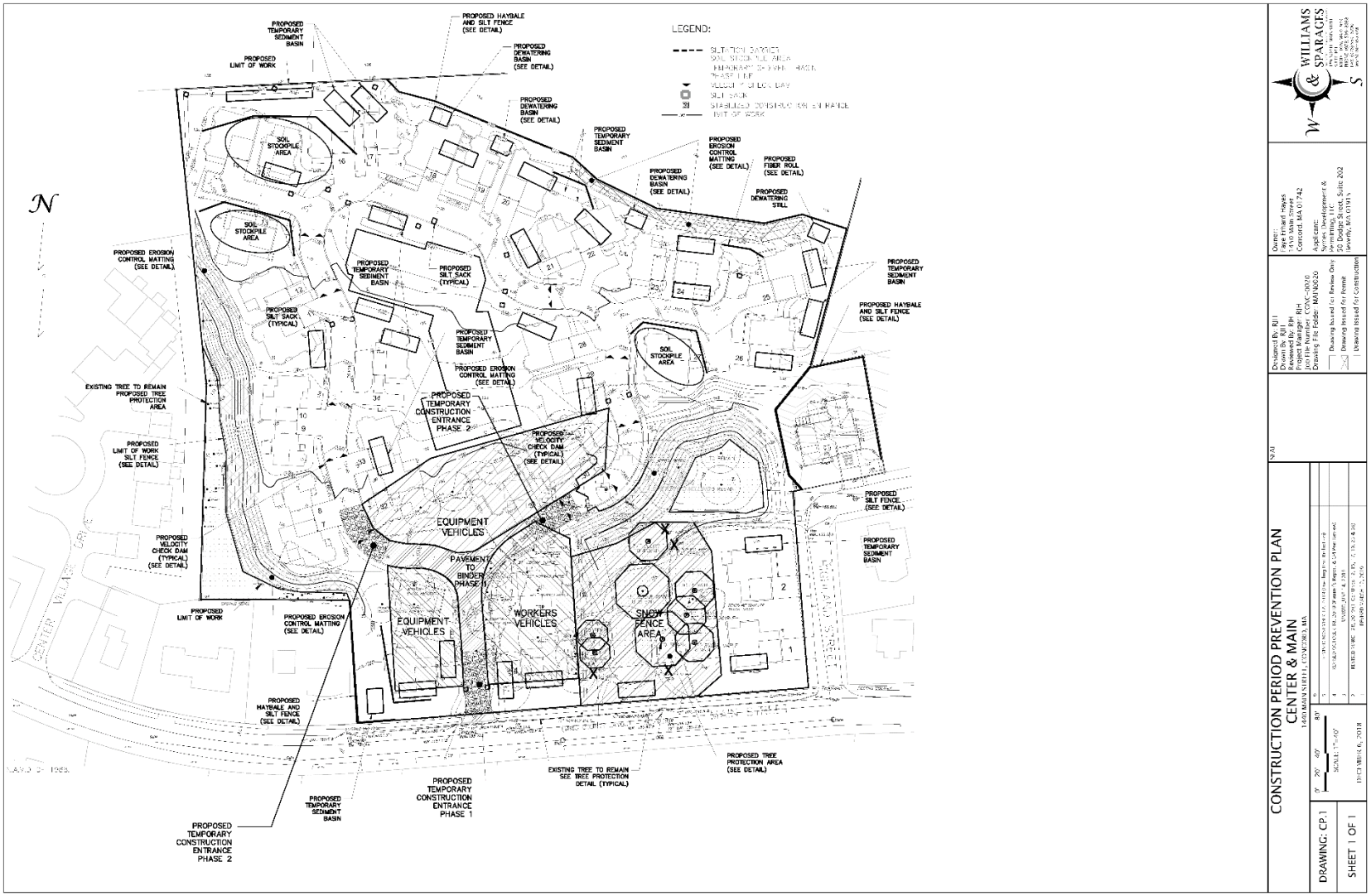
Should you have any questions, please do not hesitate to call.

Sincerely,

A.J. Pittorino, 978-815-3732
Patriot Excavating Corporation

Appendix A – Site Maps

Construction Plan – To Compliment Trucking Plan



Soil Observation Locations - Existing Watershed Map