Milton Woods

Construction Management Plan

Prepared for:

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January 19, 2017
Introduction

Pulte Homes of New England, LLC (“Pulte”) is purchasing a parcel associated with the Milton Woods development. The subject property (the “Site”) is shown on the Milton Assessors Map as Section K, Block 6, Lot 2.

The development will consist of 23 single family housing units as a cluster development. The project will also include the construction of onsite roadways, utilities, and stormwater infrastructure. This Construction Management Plan (CMP) will highlight several key items associated with the construction of the project.

The project will be subject to and adhere to the requirements of the EPA Construction General Permit (CGP). A full Stormwater Pollution Prevention Plan (SWPPP) in compliance with the CGP will be prepared prior to construction.

Project Location

The project is located to the East of Unquity Road at 175 Governor Stoughton Lane.
**Site Mobilization**

Prior to construction survey crews will establish the limits of clearing and perimeter erosion controls (straw wattles and silt fence) location. Once perimeter erosion controls within the 100-foot buffer are established they will be inspected by the Milton Conservation Commission or their assigned representative and some site clearing will commence.

Tree clearing equipment will initially access the site from Governor Stoughton Lane.

**Construction Sequencing**

The project is anticipated to occur in two (2) pavement sequences. These sequences are generally described below and further outlined on the enclosed Overall Sequencing Exhibit.

- Sequence 1 will include the staking of the limits of tree clearing along the site perimeter. Orange constructions fence will be installed along the no cut buffer in the rear of lots 13 through 23. Erosion control devices in the location as shown on the plans will be installed. Trees along the upside of the limit of work will be removed if necessary for the installation of the erosion control.

  Tree clearing and grubbing equipment will be mobilized. Initially, the equipment will be off-loaded at the Northwest end of Governor Stoughton Lane and then will be driven down Governor Stoughton Lane to the site. Tree cutting, stumping, and grubbing will be performed for the entire site. The initial phase areas, the proposed roadway, lots that will require blasting for house construction and significant fill lots will be stripped. Loam will be stockpiled in areas as shown on the plans and will be outside of the 100-foot buffer zone.

  The contractor shall create a haul road to Unquity Road as soon as practical to eliminate the need to use Governor Stoughton Lane for access. The rough elevation of the road will be established. Soil generated from this activity shall be used to create sedimentation basins or be placed in intended fill areas to minimize the need for stockpiling. The subgrade of the roadway will be established between stations 0+00 and 9+00. Confining berms will be constructed along the sides of the roadway and other areas as needed to control erosion. The water and sewer mains will be extended. Utilities in the roadway between stations 0+00 and 9+00 will be installed.

  The roadway base course and binder pavement shall be installed as soon as practical. Side slopes shall be stabilized. House construction will begin on proposed model home lots (1, 2, and 3). Areas will be stabilized as soon as practical. Erosion control devices and temporary sediment basins will be maintained until contributing watersheds are stabilized. Temporary sediment basins will be converted to final storm water basins.

- Sequence 2 will include the establishment of the road subgrade between station 9+00 and the end of the roadway. Confining berms will be constructed along the sides of the roadway and other areas as needed to control erosion. Water, sewer and other utilities will be extended to Governor Stoughton Lane. Construction on lots 4 through 23 will begin.

  The roadway base course and binder pavement will be installed as soon as practical. The side slopes will be stabilized. Areas will be stabilized as soon as practical. Erosion control devices and temporary sediment basins will be maintained until contributing watersheds are stabilized. Temporary sediment basins will be converted to final storm water basins.
The overall sequencing outlined herein is intended to provide a general indication of the expected order of construction. However, the developer intends to work concurrently in multiple areas of work at the same time as necessary for construction and earthwork activities to ensure that construction is completed in an efficient manner. The developer intends to stabilize and restore the land as soon as practical after it is graded and all work is completed within that area.

**Preliminary Construction Schedule**

<table>
<thead>
<tr>
<th>Task</th>
<th>Approximate Start</th>
<th>Approximate Duration</th>
<th>Approximate Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence 1 &amp; 2</td>
<td>3Q 2017</td>
<td>36 Months</td>
<td>3Q 2020</td>
</tr>
</tbody>
</table>

- All durations will adjust to reflect site development efficiencies and real estate market conditions.
- This Preliminary Construction Schedule is intended to provide a general indication of expected order and timing of construction activities associated with land development, however, the Developer intends to work concurrently in multiple areas at the same time.
- Each sequence may be broken down further as more detailed construction sequencing plans are developed as part of the SWPPP.

**Earthwork**

In general after stripping of existing topsoil the overall earthwork across the site is a net export. Cut volume generated as part of the roadway work will be utilized for fill elsewhere on site. Excess fill material will be removed from the site via the proposed haul route (Exhibit 1). Based upon initial geotechnical investigations, bedrock was generally encountered between 8 and 15 feet below existing grade. Bedrock is anticipated to be encountered in some areas of the site and limited blasting is expected.

In the event that blasting will be necessary, the following summary illustrates the blasting process. Any and all blasting will be performed in strict conformance with the state regulations (527 CMR 1.00, 13.00) and under the direction of the requirements of the Town of Milton Fire Department through Chief John Grant of the Milton Fire Department. The blasting process is highly regulated at the federal and state levels as well through the local Fire Department. Procedurally, the Milton Fire Department issues a Permit to Blast. The permit is issued only if all the correct planning has taken place and all other conditions of 527 CMR 1.00 have been met. The company performing the work is required to offer all properties located within 250 feet of any blasting a free, pre-blast survey of their property at the developer’s expense. The purpose of the pre-blast survey is to document the condition of these properties prior to any blasting taking place.

Allowable vibration and noise levels are established and seismographs are installed to record vibration levels by regulation under 527 CMR 1.00 Section 65.9.14.4. According to information provided by the Massachusetts Department of Fire Services, “the limits set for blasting noise and vibration are conservative and are below the threshold of where damage is known to occur. The limits set in 527 CMR 1.00 are the result of years of study and research by universities and the Federal Government.” See “Facts About Blasting for Massachusetts Property Owners,” prepared by the Massachusetts Department of Fire Services found at the following web address: [http://www.mass.gov/eopss/docs/dfs/osfm/forms/blasting-prop-owners.pdf](http://www.mass.gov/eopss/docs/dfs/osfm/forms/blasting-prop-owners.pdf) This article is enclosed as Exhibit 2. The licensed blasting contractor is required to keep a log of all blast activity and is required to carry at a minimum a $1,000,000 per incident liability policy. In the event that a property owner had
suffered damage by the blasting operations, a complaint form is filed with the Milton Fire Department and the State Fire Marshall. The blasting contractor is required to respond to all complaints within 30 days. Any and all blasting will take place in accordance with all applicable federal, state and local requirements.

**Construction Operations**

Below is a list of general construction operations and procedures to be followed throughout the course of construction.

**Construction Hours:** Hours of operation will adhere to the Town of Milton’s restrictions of Monday-Friday 7:00 AM to 6:00 PM and Saturdays from 7:00 AM to 6:00 PM. No construction activities will occur on Sundays or holidays unless approval has been sought and received from the Town of Milton.

**Non-Stormwater:** The following non-storm water discharges from Pulte’s construction activity are authorized, provided that, with the exception of water used to control dust and to irrigate areas to be vegetatively stabilized, these discharges are not routed to areas of exposed soil on the site and Pulte will comply with any applicable requirements for these discharges in Part 2 of the CGP:

- Discharges from emergency fire-fighting activities;
- Fire hydrant flushings (subject to Fire/water Department approval);
- Landscape irrigation;
- Water used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;
- Water used to control dust;
- Potable water including uncontaminated water line flushings;
- Routine external building wash down that does not use detergents;
- Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used. Pulte is prohibited from directing pavement wash waters directly into any surface water, storm drain inlet, or storm water conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;
- Uncontaminated air conditioning or compressor condensate;
- Uncontaminated, non-turbid discharges of ground water or spring water;
- Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated ground water; and
- Construction dewatering water that has been treated by an appropriate control under Part 2.1.3.4 of the CGP.

Pulte is prohibited from discharging the following from the site:

- Wastewater from washout of concrete, unless managed by appropriate controls;
- Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, unless managed by appropriate controls;
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
- Soaps, solvents, or detergents used in vehicle and equipment washing; and
- Toxic or hazardous substances from a spill or other release.

Non-storm water management BMPs involve good housekeeping practices to reduce or prevent unauthorized non-storm water discharges from entering the storm drain and source control of potential pollutants to reduce or prevent them from coming into contact with both non-storm water and storm water runoff.

**Erosion Controls:**

The selection, installation, and maintenance of soil erosion and sediment control BMPs must use good engineering practices and follow manufacturer's specifications. Pulte shall install all storm water controls in accordance with good engineering practices, including applicable design specifications. All temporary sediment and erosion control measures will be repaired or replaced in compliance with the SWPPP, but at no time should a repair extend beyond seven (7) calendar days.

At a minimum, all erosion and sediment control practices should be installed and maintained to the standards set forth in the SWPPP and in the site engineering plans. Areas that will not be paved or covered with non-erosive material should be stabilized using procedures in substantial conformance with the SWPPP and site engineering plans. The installation of any additional erosion and sediment control measures will be completed as necessary.

The appropriate soil erosion and sediment controls should be implemented on site and modified to reflect the current phase of construction. Erosion controls should be the primary BMPs implemented and maintained onsite, with sediment control implemented as the secondary BMP. The following erosion and sediment controls are anticipated to be used during construction:

- Minimization of disturbed areas and preservation of existing vegetative buffers
- Erosion control blankets
- Minimize soil compaction
- Preservation of topsoil
- Sediment basins
- Storm drain inlet protection
- Straw wattles and silt fence
- Stabilized channels / diversion Swales
- Stone check dams
- Earth dikes
- Dust suppression
Stabilization Controls: A fundamental principal for preventing erosion and controlling sedimentation is to minimize the extent of land disturbance. For areas where disturbances cannot be avoided, rapid stabilization of the surface is the most effective method of controlling erosion. Areas that are disturbed during construction activity must be stabilized as soon as practicable. A land surface that is stabilized resists the erosive action of storm water runoff.

Pulte will initiate soil stabilization measures whenever earth-disturbing activities have permanently or temporarily ceased on any portion of the site. Earth-disturbing activities have permanently ceased when clearing and excavation within any area of the construction site that will not include permanent structures has been completed. Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of fourteen (14) or more calendar days, but such activities will resume in the future.

The fourteen (14) calendar day timeframe begins as soon as Pulte knows that construction work on a portion of the site will temporarily cease. For the purposes of this project, Pulte considers any of the following types of activities to constitute the initiation of stabilization, this list is not exhaustive:

1. Preparing the soil for vegetative or non-vegetative stabilization;
2. Applying mulch or other non-vegetative product to the exposed area;
3. Seeding or planting the exposed area;
4. Starting any of the activities in #1 – 3 on a portion of the area to be stabilized, but not on the entire area; and
5. Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization in Parts 2.2.1.2 and 2.2.1.3 of the CGP.

Temporary vegetative cover may be established using hydro seeding for areas of exposed soil where construction will cease for more than fourteen (14) days. Hydroseeding may consist of wood fibers, seed, polymers and/or stabilizing emulsion. A record of the dates when major grading activities occur, when construction activities cease on a portion of the site, and when stabilization measures are initiated are to be included in the SWPPP.

Dust and Wind Controls: Dust control shall be implemented on site as necessary. Repetitive treatment shall be applied as needed to accomplish control when temporary dust control measures are used. At least one mobile unit should be available to distribute water to control dust on the project area. Each mobile unit will be equipped with a positive shutoff valve to prevent over watering. If field observations indicate that additional protection from wind erosion (in addition to, or in place of watering) is necessary, alternative dust suppressant controls should be implemented. The following list of control measures may be implemented on site to limit the generation of dust as needed:

- Sprinkling - Vegetative Cover
- Mulch - Spray-On Soil Treatments
- Tillage – Stone
Street cleaning should also be used as necessary to control dust. Paved areas that have soil on them from the construction site should be cleaned as needed, utilizing a street sweeper or bucket-type end loader or scraper.

**Stockpiled Soil:**

Topsoil and borrow stripped from the site shall be stockpiled in areas that will not interfere with construction phases and will be maintained at least fifteen (15) feet away from areas of concentrated flows or pavement. A silt fence (or equivalent) shall be installed around the perimeter of each stockpile. Soil stockpiles should be stabilized in accordance with soil stabilization controls outlined herein.

**Anti-Tracking:**

The site shall be managed to minimize the amount of dirt, mud, or dust that is generated and can thus be tracked or blown off the site. Pulte shall provide a stabilized construction entrance(s) to reduce off-site tracking, and if necessary a stabilized entrance will be installed at individual lots. The stabilized exits will be a least fifty (50) feet long, a minimum of twenty (20) feet wide, flared at the end closest to the paved road, and will consist of a 12-inch-thick layer of crushed stone (2-4 inches in diameter). The crushed stone will be placed over a layer of geotextile filter fabric to reduce the migration of sediment from the underlying soil. Plastic mesh fence may be installed along the length of the construction exit to keep construction vehicles and equipment on the stone anti-tracking pads.

Maintenance may include top dressing the stabilized entrance with additional stone and removing top layers of stone and sediment, as needed. Vehicles hauling erodible material to and from the construction site should be covered with a tarp. If necessary, rumble strips and wheel washes shall be used in problem areas with fine grained soils or where off-site tracking cannot be controlled by a stabilized construction entrance and sweeping alone.

All dirt and/or debris tracked or transported to off-site paved surfaces shall be removed as needed by hand sweeping or mechanized sweeper. Washing of sediment from the right-of-way to downstream conveyances shall be prohibited.

At a minimum Pulte shall implement the following:

- Restrict vehicle use to properly designated exit points;
- Use appropriate stabilization techniques at all points that exit onto paved roads so that sediment removal occurs prior to vehicle exit;
- Where necessary, use additional controls to remove sediment from vehicle tires prior to exit; and
- Where sediment has been tracked-out from the site onto the surface of off-site streets, other paved areas, and sidewalks, Pulte must remove the deposited sediment by the end of the same work day in which the track-out occurs or by the end of the next work day if track-out occurs on a non-work day. Pulte must remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. Pulte and their...
subcontractors are prohibited from hosing or sweeping tracked out sediment into any storm water conveyance.

Materials Storage: The following good housekeeping practices should be followed on site during the construction project:

- An effort should be made to store only enough product required to do the job.
- All materials stored on site should be stored in a neat, orderly manner in their appropriate containers and adequately protected from the environment.
- Products should be kept in their original containers with the original manufacturer’s label.
- Substances should not be mixed with one another unless recommended by the manufacturer.
- Operations should be observed as necessary to ensure proper use and disposal of materials on site.
- Whenever possible, all of a product should be used up before disposing of the container.

Manufacturer’s recommendations for proper use and disposal should be followed.

Trailer storage may be appropriate for materials that may be potential contaminants or otherwise hazardous. If utilized, trailers shall be placed on a temporary bituminous pad.

For Building Products: Store in designated storage areas and provide either a cover (e.g., plastic sheeting or temporary roofs) to prevent these products from coming into contact with rainwater, or a similarly effective means designed to prevent the discharge of pollutants from these areas.

For Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials: Store in designated storage areas and provide either a cover (e.g., plastic sheeting or temporary roofs) to prevent these chemicals from coming into contact with rainwater, or a similarly effective means designed to prevent the discharge of pollutants from these areas. Pulte must also comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label.

For Diesel Fuel, Oil, Hydraulic Fluids, other Petroleum Products, and Other Chemicals: Store chemicals in water-tight containers, and provide either a cover (e.g., plastic sheeting or temporary roofs) to prevent these containers from coming into contact with rainwater, or a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., spill kits), or provide secondary containment (e.g., spill berms, spill containment pallets). Spills must be cleaned up immediately, using dry clean-up methods where possible. Do not clean the surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of a discharge.
Concrete waste or washout: Concrete waste or washout should not be allowed in the street or allowed to reach a storm water drainage system or watercourse. Concrete washout should be completed off site, or if allowed on site by Pulte, concrete washout should be contained and completed in a designated location.

Paint and Paint Waste Management: Materials and/or contaminants (including paint and paint waste) should be stored and disposed in a manner that minimizes the potential to discharge into storm drains or watercourses. An on-site area should be designated for material delivery and storage. All materials kept on site should be stored in their original containers with legible labels, and if possible under a roof or other enclosure. Labels should be replaced if damaged or difficult to read. MSDS should be available for referencing clean-up procedures. Any release of chemicals/contaminants should be immediately cleaned up and disposed of properly. Contractors should immediately report all spills as outlined in the SWPPP.

Solid Waste Management: Solid waste materials including trash, construction debris, excess construction materials, machinery, tools and other items will be collected and disposed of offsite. The trade/contractor is responsible to acquire the permit required for such disposal. Burning on site will not be permitted. No solid materials, including building materials, shall be discharged to Waters of the State, except as authorized by a Section 404 permit. All waste materials should be collected and stored in approved receptacles. No wastes should be placed in any location other than in the approved containers appropriate for the materials being discarded. There should be no liquid wastes deposited into dumpsters or other containers which may leak. Receptacles with deficiencies should be replaced as soon as possible and the appropriate clean-up procedure should take place, if necessary. Construction waste material is not to be buried on site. Waste disposal should comply with all local, State, and Federal regulations.

Hazardous materials and all other material on site should be stored in accordance with manufacturer or Material Safety Data Sheet (MSDS) specifications. When disposing of hazardous materials, follow manufacturer, local, or State recommended methods.

Collection and disposal of solid waste during construction will be provided by a licensed contractor. The private contractor will obtain any necessary permits for removal and transport of rubbish from the Town of Milton.

It is expected that cleanup on on-site debris will be conducted on at least a weekly basis.

Sanitary Waste: To the extent practicable, portable sanitary stations should be located in an area that does not drain to any protected natural areas, Waters of the State, or storm water structures and should be anchored to the ground to prevent against tipping over, if necessary. Portable sanitary stations located on impervious surfaces should be placed on top of a secondary containment device, or be surrounded by a control device (e.g., gravel-bag berm).
Contractors should not create or allow unsanitary conditions. Sanitary waste should be disposed of in accordance with applicable State and/or local regulations.

Portable toilets service will be provided by a licensed contractor.

**Paving Operations:**

In order to reduce the potential for the transport of pollutants in storm water runoff from paving operations, catch basin filters, or other appropriate BMPs will be utilized to trap pollutants. Any pavement cutting waste or slurries, generated by pavement cutting activities, shall be shoveled and/or vacuumed up and disposed of immediately.

**Vehicle Operations:**

On-site vehicle and equipment washing is not permitted unless an exception is granted as outlined in the SWPPP. Vehicle cleaning shall use dry methods such as wiping down in lieu of water washing on-site. If and when permitted, on-site vehicle washing will be carefully managed and performed at the designated cleaning area shown on the BMP Map included in the SWPPP.

When not in use, vehicles utilized in the site preparation operations should be stored in a designated area away from any natural or created watercourse, pond, drainage-way or storm drain. Vehicle maintenance (including both routine maintenance as well as on-site repairs) should be made within a designated containment area to prevent the migration of fluids (oil, antifreeze, etc.) into watercourses, wetlands or storm drains. Drip pans or absorbent pads should be used for all vehicle and equipment maintenance activities that involve grease, oil, solvents, or other vehicle fluids. Construction vehicles should be inspected frequently to identify any leaks; leaks should be repaired immediately or the vehicle should be removed from site. Dispose of all used oil, antifreeze, solvents and other vehicle-related chemicals in accordance with Federal, State, or local regulations and per MSDS and/or manufacturer instructions. Contractors should immediately report spills in accordance with the SWPPP.

Fueling and maintenance of vehicles shall occur outside the 100-foot buffer zone to resource areas and vernal pools.

Contractor parking is not permitted along either Unquity Road or Governor Stoughton Lane.

**Dewatering:**

Pulte is prohibited from discharging ground water or accumulated storm water that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls. Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control. During dewatering/pumping operations, only uncontaminated water should be allowed to discharge to protected natural areas, Waters of the State, or to a storm sewer system (in accordance with local permits). Inlet hoses should be placed in a stabilized sump pit or floated at the surface of the water in order to limit the amount of sediment intake. Pumping operations may be discharged to a stabilized area with a sediment filter bag. Pulte shall also meet the following requirements for dewatering activities:
• Do not discharge visible floating solids or foam;
• Use an oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials;
• To the extent feasible, utilize vegetated, upland areas of the site to infiltrate dewatering water before discharge. In no case will surface waters be considered part of the treatment area;
• At all points where dewatering water is discharged, comply with the velocity dissipation requirements;
• With backwash water, either haul it away for disposal or return it to the beginning of the treatment process; and
• Replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer’s specifications.

**Maintenance of BMPs:**

Maintenance of the BMPs incorporated into this project should be performed as needed to assure their continued effectiveness. This includes prompt and effective repair and/or replacement of deficient BMPs. The following is a description of procedures that should be used to maintain, in good and effective operating conditions, erosion and sediment control measures and other protective measures identified in this CMP and further outlined in the SWPPP. If construction necessitates removal of any erosion or sediment control device, such device shall be replaced at the end of the working day or prior to a storm event.

**Stabilized Construction Entrance:** The entrances should be maintained to prevent tracking of sediment onto public streets. Maintenance includes top dressing with additional stone and removing top layers of stone and sediment. The sediment tracked onto the public right-of-way should be removed immediately.

**Sediment Filter Bags and De-Watering Treatment Swales:** Sediment filter bags should be installed on pump outlet hoses that discharge off-site, and should be placed in an area that allows for the bag to be removed without producing a sediment discharge. Inlet or intake hoses shall be placed in a stabilized sump pit. If required, jute and flocculent placed in treatment swales should be monitored for effectiveness, and replaced as needed to maintain a sediment-free storm water discharge. Soil tests shall be conducted in the field to determine polymer type.

**Concrete Washout Area:** Existing facilities should be cleaned out, or new facilities should be constructed and operational once the existing washout is at 75% capacity. Washouts should be inspected frequently to ensure that impermeable linings (as applicable) are intact and sidewalls have not been damaged by construction activities. When the washout area is adjacent to a paved road, the paved road should be inspected for accumulated concrete waste. Any accumulated concrete waste on the road, curb, or gutter should be removed and disposed of properly.
**Erosion Control Blanket:** The blanket and staples should be inspected frequently and shall be installed to standard practices, unless otherwise instructed by the manufacturer. Erosion occurring underneath the blanket should be backfilled and seeded with the appropriate seed mix. Additional BMPs may need to be installed to reduce erosion under the blanket.

**Vegetative Soil Erosion Measures:** The vegetative growth of temporary and permanent seeding, vegetative filters, etc., shall be maintained periodically and supplied adequate watering and fertilizer. Reseed as necessary where vegetation establishment is poor.

**Silt Fence:** Silt fences should be inspected regularly for undercutting where the fence meets the ground, overtopping, and tears along the length of the fence. Deficiencies should be repaired immediately. Remove accumulated sediments from the fence base when the sediment reaches one-half the fence height. During final stabilization, properly dispose of any sediment that has accumulated on the silt fence. Alternative BMPs (e.g. wattles, run off controls, etc.) should be considered for areas where silt fence continually fails.

**Composite Filter Sock:** Sock barriers should be inspected frequently for damage, decomposition, undercutting, end runs and movement. Sediment should be removed and the barrier restored to its original condition when the sediment has accumulated to two-thirds the barrier height. Removed sediment should be deposited in a suitable area in such a manner that it will not erode into the drainage system.

**Catch Basin and Inlet Filters:** Inlet filters should be inspected for proper filtering. If filter bags are used, remove sediment from the filter bags when 50% of the storage volume has been filled, unless otherwise instructed by the manufacturer. Remove trash and debris during inspections. Accumulated material in the filters should be disposed of properly. Do not puncture holes in filters if ponding occurs.

**Mulching:** Mulched areas should be inspected periodically to check for rill erosion. Where erosion is observed, additional mulch should be applied. If washouts or breakage occur, re-install netting as necessary after repairing damage to the slope.

**Inspections:** Pulte shall provide a qualified person as defined in the SWPPP who will be responsible for conducting site inspections in compliance with the CGP. Within 24 hours after each inspection, a Site Inspection Report (SIR) will be prepared by the person who performed the inspection. The inspection reports will be maintained on site as part of the SWPPP.

At a minimum, Pulte must conduct a site inspection at least once every seven (7) calendar days.

**Corrective Actions:** When a corrective action is noted in an SIR Pulte will immediately take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up
any contaminated surfaces so that the material will not discharge in subsequent storm events.

In this context, the term “immediately” means on the same day a condition requiring corrective action is found. However, if the problem is identified at a time in the work day when it is too late to initiate corrective action, the initiation of corrective action must begin on the following work day.

For any of the following conditions on site, Pulte must install a new or modified control and make it operational, or complete the repair, by no later than seven (7) calendar days from the time of discovery. If it is infeasible to complete the installation or repair within seven (7) calendar days, Pulte must document why it is infeasible to complete the installation or repair within the seven (7) calendar day timeframe and document the schedule for installing the storm water control(s) and making it operational as soon as practicable:

- A required storm water control was never installed, was installed incorrectly, or is not performing in accordance with the requirements of the SWPPP.
- Pulte becomes aware that the storm water controls they installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1 of the CGP. In this case, Pulte must notify the EPA Regional Office by the end of the next work day.
- One of the prohibited discharges in Part 2.3.1 of the CGP is occurring or has occurred.

**Contractor Compliance:**

Pursuant to their individual contracts with Pulte Homes, contractors at the project site are responsible for compliance with this CMP, the CGP, the SWPPP, and all other water quality rules and regulations applicable to their activities. Specifically, all contractors must abide by the SWPPP and must implement and maintain the BMPs relevant to their activities as directed by a Pulte authorized representative, and in light of the overriding goal of reducing or eliminating pollutant discharges to receiving waters.

**Delivery/Trucking:**

Delivery traffic for the project will enter the site from Unquity Road.

Signage will be added specifically prohibiting heavy equipment from accessing the site from Governor Stoughton Lane. Limited access to the site from Governor Stoughton Lane will be necessary until the site access from Unquity Road is established. The Contractor should create site access from Unquity Road as soon as possible.

**Site Signage:**

Appropriate signage will be installed inside the project limits. The signage will identify the site as well as construction entrances. Signage will also identify the trailer, welcome center and any potential job site hazards (i.e. hard hats required). Signs containing the DEP file number and CGP tracking number will be posted.
**Record Keeping:** The CGP requires that records be retained as part of the SWPPP. The records should include the dates of major grading activities, cessation and initiation of construction activities, and initiation of stabilization measures.

**Spill Prevention and Response**

Manufacturer’s recommended methods for spill clean-up should be available and site personnel should be made aware of the procedures and the location of the information and clean-up supplies. Materials and equipment necessary for spill clean-up should be kept in the material storage area on site. The material storage area (and spill clean-up kit) should be clearly identified by signage affixed in a conspicuous location. Equipment and materials should include, but are not limited to:

- First aid kit;
- Emergency handbook;
- Spill emergency contact information;
- Spill documentation forms;
- Disposable respirator/dust mask;
- Rake;
- Broom;
- Dust pan;
- Mop;
- Flat blade shovel;
- 5 Gallon bucket;
- Rags;
- Goggles;
- Protective clothing (i.e. arm guards, Tyvek® suit, or other means to protect personnel during spill clean-up);
- Hand wipes;
- Cat litter;
- Sand;
- Sawdust;
- Oil/Fuel Spill Kit (manufactured by New Pig or equivalent);
  - 50 Gallon plastic and/or metal trash containers (drums) specifically for this purpose (labeled “Spills Only”);
  - 2 Bags of universal granular absorbent;
  - 4 Sorbent Socks;
  - 10 Oil-absorbent sheets/pads (diapers);
  - 4 Disposal bags with ties;
  - 4 Pairs of rubber gloves;
  - 4 Pairs of nitrile gloves;
- Proper signage for identification of the spill kit storage location and the location of the spill.

Discharges of a hazardous substance or oil caused by a spill (e.g., a spill of oil into a separate storm sewer or Waters of the State) are not authorized by the CGP. If a spill occurs, spill response procedures shall be followed as outlined in the SWPPP. The construction site should have the capacity to control, contain, and remove spills, if they occur. Spills should be cleaned up immediately (after discovery) in accordance with MSDS and should not be buried on site or washed into storm sewer drainage inlets, drainage-ways, or Waters of the State.
Spills in excess of Federal Reportable Quantities (as established under 40 CFR Parts 110, 117, or 302), should be reported to the National Response Center by calling (800) 424-8802. MSDS often include information on Federal Reportable Quantities for materials. Spills of toxic or hazardous materials should be reported to the appropriate state or local government agency, as required. When cleaning up a spill, the area should be kept well ventilated and appropriate personal protective equipment should be used to minimize injury from contact with a hazardous substance.

In addition to the good housekeeping and other management practices discussed in the previous sections of this CMP, the following minimum practices should be followed to reduce the risk of spills:

- On-site vehicles should be monitored for leaks and should receive regular preventative maintenance to reduce the chance of leakage.

- Petroleum products should be stored in tightly sealed and clearly labeled containers.

Contractors should follow the manufacturer’s recommendations for proper use, storage, and disposal of materials. Excess materials should be disposed of according to the manufacturer’s instructions or state and local regulations, and should not be discharged to the storm sewer or water body.

As required by the conditions of the CGP, all spills shall be recorded and documented within the SWPPP. Detailed reports including the date and time of the incident, location, volume and contents of the spill, weather conditions, response procedures, parties notified, recommended revisions to the proposed storm water pollution prevention controls, operating procedures, and/or equipment needed to prevent recurrence shall be maintained.

Emergency Contacts

For Land Development Related Issues:
Pulte Homes of New England LLC
John Engdahl
115 Flanders Road, Suite 200
Westborough, MA 01581
(c) 508-962-9700
John.engdahl@pulte.com

For Building Construction Related Issues:
Pulte Homes of New England LLC
Jeff Johnston
115 Flanders Road, Suite 200
Westborough, MA 01581
(c) 508-509-7182
jeff.johnston@pulte.com
EXHIBITS

Exhibit 1 – Proposed Truck Hauling Route
Exhibit 2 – Blasting Reference
Facts About Blasting for Massachusetts Property Owners

WARNING
BLASTING IN PROGRESS

DANGER
BLASTING AHEAD

www.mass.gov/dfs

Department of Fire Services
Division of Fire Safety
P. O. Box 1025 - State Road
Stow, Massachusetts 01775
978-567-3375 • Fax 978-567-3199
Blasting Facts

- The Institute of Makers of Explosives (IME) reports that in 2012 over 12 million pounds of commercial explosives were sold for use in Massachusetts.
- Explosives are used directly or indirectly in almost every aspect of our lives. Car, trucks, roads, bridges, homes, and office buildings are all built with products that had their origins with explosives. Even baby powder has its origin with explosives!
- Mining and construction are the two most common uses of explosives.

Blasting Regulations

Commercial explosives and the blasting industry are regulated by a number of state and federal agencies. In Massachusetts, 527 CMR 1.00 is the primary regulation that applies to explosives licensing, permitting, storage, sales, use, transportation, and manufacture. 527 CMR 1.00 is administered through the Department of Fire Services, Division of Fire Safety.

Federal agencies that regulate explosives include:

- Alcohol, Tobacco, Firearms and Explosives (ATF) – sales and storage
- Department of Transportation (DOT) – transportation
- Occupational Safety and Health Administration (OSHA) – construction use and handling
- Mining Safety and Health Administration (MSHA) – mining use and handling
Massachusetts Regulations

527 CMR 1.00
Key Parts of the Regulation

Section 1.12.8.39.1 Licenses, Permits, Certificates

- Certificate of Competency
- Explosives Users Certificate
- Use and Handling Permit
- Sale of Explosive Material

Section 65.9.1 Storage

Section 65.9.1 Transportation

Section 65 Use of Explosive Materials (Blasting)

- Blast Analysis
- Blast Design Plan
- Allowable Limits of Effects of Blasting
- Preblast Inspection Surveys
- Blasting Damage Complaint

Section 65.9.15.1.1.3 Pre/Post Blast Inspection Waiver

Section 65.9.18 Blasting Regulatory Review Form (FP-296)

Important parts of 527 CMR 1.00 for the homeowner to be aware of:

Section 65.9.8 Blast Analysis

A document from the blasting company considering the effects of blasting on adjacent properties.

Section 65.9.8.3 Blast Design Plan

The blast design plan describes the design of the initial blasts and all the necessary safety precautions that will be taken.
Section 65.9.15 Preblast Inspection Surveys
When blasting takes place within 250 feet of a property not owned or controlled by the project, a free survey must be offered to the property owner.

NFPA 495, 2013 Edition Warnings
The blaster must sound warnings when ready to fire a blast.

NFPA 495, 2013 Edition, Chapter 11
Allowable Limits of Effects of Blasting
Limits that are set for vibration and noise that result from a blast. 527 CMR 1.00 Section 65.9.14.4 contains the requirements for the use of a seismograph.

Section 65.9.18 Blasting Regulatory Review
If a property owner thinks that damage occurred as a result of blasting, they should file a regulatory review form with the fire department within 30 days of the blasting.

A Few Things To Remember

If a blasting project is planned near your property, take a close look at your home or business. You may be surprised at how many cracks in walls, floors, and ceilings already exist just from seasonal changes in humidity, age, and normal wear and tear. Most property owners don’t notice these cracks until after blasting has started and mistake them for blasting damage.

The limits set for blasting noise and vibration are conservative and are below the threshold of where damage is known to occur.

The limits set in 527 CMR 1.00 are the result of years of study and research by universities and the Federal Government. The United States Bureau of Mines (USBM) RI 8507 Report is the primary source for establishing noise and vibration damage levels.
Who Do You Contact?

In Massachusetts there are two places to go for blasting help.

Local fire departments issue a *Permit to Blast*. The permit is issued only if all the correct planning has taken place and all other conditions of 527 CMR 1.00 have been met.

Through the Department of Fire Services, the Division of Fire Safety issues *Blasting Certificates of Competency* and *Explosives Users Certificates* to blasters and blasting companies. Local fire departments will not issue a blasting permit without these documents. The certificates document that the blaster is competent to conduct blasting operations, and that his company has shown evidence of both bonding and the required insurance.

Other Blasting Information

How is blasting noise and vibration measured?

A seismograph is used to measure blasting noise and vibration. Seismographs are set up next to the closest structure to the blast site. The machines record the ground vibration and noise generated by the blast. The information is used to determine if the blast has exceeded limits set in the regulations.

Does the blaster keep records?

The blaster is required to keep detailed records of each blast. The records contain the size, time, and location of the blast, the amount of explosives used, and the results of the seismograph monitoring.

Will you hear or feel the blast?

You may hear or feel a blast depending on your distance from the blasting site. Humans are sensitive to noise and sound. What you feel does not necessarily mean that damage is occurring. Let the blasting company know if you are being startled or if you have other concerns about what is taking place.
What if I am sure that blasting damage has occurred?
If you feel that damage has occurred to your property, fill out a *Blasting Regulatory Review Form*. The form (FP-296) is available from the local fire department (and on the DFS website under *Fire Prevention Forms*), and must be submitted to the local fire department within 30 days of the blasting incident. The blasting company will then be required to submit records to the fire department for the blasts in question. The records will be reviewed by both the fire department and the Division of Fire Safety for any violations of the regulations. The blasting company, or its insurance company, is also required to respond to the claimant and to investigate the claim.

What precautions can be taken before blasting starts?
If you are offered a preblast survey, accept the offer. The survey is an inventory of existing conditions of the property. It is also an opportunity for the property owner to ask questions and the blasting company to educate citizens. If you have any concerns or questions, raise them during the preblast survey. The blasting company should be ready and willing to answer questions and address concerns.
Useful Numbers

Department of Fire Services - Stow Headquarters
P. O. Box 1025 – State Road, Stow, MA 01775
(978) 567-3100
www.mass.gov/dfs

Department of Fire Services - Springfield Campus
P. O. Box 51025 - 100 Grochmal Avenue
Springfield, MA 01151-1055
(978) 567-3100, Fax (978) 567-3819

Division of Fire Safety
Main Telephone: (978) 567-3375, Fax: (978) 567-3199
  • Code Compliance & Enforcement Unit - Stow
    Telephone: (978) 567-3375, Fax: (978) 567-3199
  • Code Compliance & Enforcement Unit - Springfield
    Telephone: (978) 567-3813, Fax: (978) 567-3819
Contact your local fire department at:

www.mass.gov/dfs

Division of Fire Safety
P. O. Box 1025 - State Road
Stow, Massachusetts  01775
978-567-3375 • Fax 978-567-3199