Civil Engineers ♦ Land Surveyors ♦ Landscape Architects

March 30, 2020

Karen Joseph, Town Planner Town of Scituate 610 Chief Justice Cushing Highway Scituate, MA 02066

RE: Engineering Review SWPPP

483 Country Way Residential Compound

Dear Members of the Board:

The following are plan revisions and responses to comments from Chessia Consulting Services LLC Peer Review letter dated March 30, 2020. We have utilized Chessia Consulting LLC's Word doc for clarity. Mr Chessia's comments are noted in black and Grady Consulting responses and plan changes and responses are in blue.

Plans:

 "Special Permit Plan Residential Compound Development Subdivision 0 & 483 Country Way Scituate Massachusetts" dated April 25, 2019, last revised March 12, 2020 prepared by Grady Consulting, LLC consisting of 16 Sheets. (Plans)

Reports/Data:

• "Stormwater Pollution Prevention Plan (SWPPP) for Construction Activities At Special Permit Plan Residential Compound Development Subdivision 0 & 483 Country Way Scituate MA 02066" prepared by Grady Consulting, LLC dated 11/11/2019. (no revision date)

My review follows the protocol listed in the EPA SWPPP template which is based on the Construction General Permit (CGP) and references data published on-line by the EPA. Data associated with the Plans is included under the comments on the SWPPP template requirements.

Current comments are in *italic type* following my initial comment. My comments follow: General:

Specific Construction Phase Plans should be included in the SWPPP. *Satisfied*.

Specific dates for the proposed measures should be listed. It appears that everything would be accomplished on 3/2/2020.

The date has been changed to 6-1-2020.

Section 1: Contact Information/Responsable Parties

1.1 Operator(s) / Subcontractor(s)

Operator data is complete. Data on the any Sub - Contractors is to be determined. The 24 hour contact has been listed as Bradford Merritt.

Comment remains, the sub-contractor has not been selected.

1.2 Stormwater Team

Stormwater team data is complete, although no contractor has been selected. I recommend that this data be added prior to the start of construction.

Above recommendation remains.

2.1 Project Site Information

This section is complete.

2.2 Discharge Information

This section should include the tributary intermittent stream and the ultimate receptor. Runoff from the project site will flow into this stream ultimately and it is unlikely that all construction phase runoff will be entirely contained.

Satisfied, runoff would ultimately flow to the Gulf River.

2.3 Nature of the Construction Activities

This section is generally complete. It is likely that support activities will be required and they should be listed in this section.

As noted previously it is likely that staging areas, material storage areas, stockpile areas, etc. would be required and should be listed in this section. The plans do indicate a staging/stockpile area with storage and a dumpster.

2.4 Sequence and Estimated Dates of Construction Activities

Construction sequences for two phases of construction is included in the SWPPP. There should be specific plans for each phase. I recommend that the plans include only the infrastructure proposed in that phase together with all erosion and sedimentation protections. The plan provided only indicates a tracking pad and perimeter controls.

The cleared area should not include the individual lots until ready for development and Phase II should include clearing of the lots as needed. The time line for proposed construction should include consideration of weather conditions for site stabilization, paving, etc.

Plans for construction phasing have been added to the Plan set and address the above issues for Phase 1. Phase 2 should include a silt sock between the development area on the lots and the infiltration basin. In addition, controls between the roadway and the lots on the upgradient side should be added. It is likely that a small trench with a sediment barrier would be sufficient on this site. The lot construction phase should address

construction parking as there are frequently many trucks parked on the shoulders or in the disturbed area in front of the lots. This leads to considerable tracking of sediment into the roadway and can result in insufficient emergency access to houses if parking is in the roadway.

Additional silt fence has been added to the plan(sh17) on lots 1, 2 & 3 to remove silt from migrating to roadway. Parking spaces for up to 5 vehicles has been shown on each lot. There is sufficient spaces to park for 25 contractor vehicles at 1 time as shown.

2.5 Authorized Non-Stormwater Discharges

This section is complete.

2.6 Site Maps

Site Maps have been provided. As noted I recommend that specific sediment and erosion control plans be provided for each of the two phases. Areas for staging, stockpiles, temporary basins, and all proposed measures for sediment and erosion control, etc. should be indicated on the plans. The list included in the SWPPP template should be reviewed and the required data listed.

Refer to 2.4 regarding plan comments.

3.1 Endangered Species Protection

It is unlikely that the project would impact endangered species. A copy of a letter from the USDA Fish and Wildlife Service is included in the SWPPP. This requirement has been met.

3.2 Historic Preservation

This section indicates that prior surveys have been performed.

3.3 Safe Drinking Water Act Underground Injection Control Requirements

It is unclear if the chambers proposed for roof systems would be included under this section.

Section 4 Erosion and Sediment Controls

4.1 Natural Buffers or Equivalent Sediment Controls

It is proposed to maintain a minimum of a 50 foot natural buffer to wetland resource areas. This should be checked on the SWPPP form.

4.2 Perimeter Controls

It is proposed to install a 12" compost tube mulch sock for perimeter sediment control. The detail specifies 12-18" compost tube mulch sock. Data should be consistent. *Satisfied*.

4.3 Sediment Track-Out

This section is generally complete, a tracking pad is proposed at the site entrance. I recommend that the SWPPP also identify that tracking pads will be used for individual

lot construction after the access drive is paved and include a detail if different from the roadway tracking pad.

Satisfied, tracking pads are indicated on the Phase 2 plans.

4.4 Stockpiled Sediment or Soil

This section should specify seeding or otherwise protecting pile from erosion if unused for 14 days. The location(s) of stockpiles should be indicated on the plans. *Satisfied*.

4.5 Minimize Dust

Dust control is listed as application of water from a water truck. I note that stump grindings over disturbed areas could also be utilized as there will likely be stumps available and stump grindings provide an excellent cover for exposed soils.

4.6 Steep Slopes

There is a steep slope at the entrance and there are steep slopes are associated with stormwater basins. There will also be temporary steep slopes associated with stockpiles. The SWPPP should identify the location of and measures to protect these slopes. *No further comment.*

4.7 Topsoil

The plans should identify stockpile location(s) for topsoil. Controls should include temporary seeding. It is unlikely topsoil will be reused prior to the time required for stabilization under the CGP.

The location of stockpiles has been added to the Construction Phasing Plans. A note specifies that the piles should be seeded.

4.8 Soil Compaction

This section only discusses soil compaction of infiltration basins. The plans should identify location were heavy equipment should not operate. A discussion of general site compaction should also be included. *Satisfied*.

4.9 Storm Drain Inlets

It is proposed to install silt sacks in catch basins. The SWPPP should include a more detailed inspection and maintenance schedule than listed. *Satisfied*.

4.10 Stormwater Conveyance Channels

The SWPPP references the plans for maintenance but there is no data on the plans. *Satisfied*.

4.11 Sediment Basins

No sediment basins are indicated on the plans. The permanent infiltration basin and subsurface infiltration system should not be used for temporary sediment controls. More data on sizing, location, etc. should be provided.

Satisfied.

4.12 Chemical Treatment.

Chemical treatment is not proposed to be used on the site.

4.13 Dewatering Practices

This section should be completed rather than referencing the CGP and deferring to the contractor.

Satisfied.

4.14 Other Stormwater Controls

None included.

4.15 Site Stabilization (listed as 4.4)

This section should include requirements for non-growing periods and optimal planting times. Measures for stabilization during winter periods, etc. should be described. *Generally addressed, I did not find the note in the Response in the SWPPP.* The note is on sheet 17 of the plans which is part of the SWPPP.

Section 5 Pollution Prevention Standards

5.1 Potential Sources of Pollution

This section is complete except for identifying staging and storage areas on the site plans. *Satisfied*.

5.2 Spill Prevention and Response

This section is complete.

5.3 Fueling and Maintenance of Vehicles

Generally complete but not indicated on the plans.

Satisfied fueling would occur in the staging area.

5.4 Washing of Equipment and Vehicles

No vehicle or equipment washing is proposed.

5.5 Storage, Handling and Disposal of Building Products, Materials, and Wastes

This section is generally complete except as noted below. As previously noted the plans should identify areas for storage, staging, etc. *Satisfied*.

5.5.1 Building Products.

This section is complete except for the location of the storage container(s) on the plans.

Satisfied.

5.5.2 Pesticides, Herbicides, Insecticides, Fertilizers and Landscape Materials.

Pesticides and Herbicides are not proposed to be stored on-site.

5.5.3 Diesel Fuel, Oil Hydraulic Fluids, Other Petroleum Products and Other Chemicals

The proposed staging refueling area(s) should be identified on the Construction Plan otherwise complete.

The response indicates refueling would occur in the staging area.

5.5.4 Hazardous and Toxic Waste

Hazardous or toxic waste is not to be stored on-site according to the SWPPP.

5.5.5 Construction and Domestic Waste.

Generally satisfactory, I recommend that a designated dumpster storage area be identified on the plans for the site construction phase. It is also likely that each house or group of houses would have dumpsters for construction waste, this should be noted in the SWPPP.

Satisfied.

5.5.6 Sanitary Waste

Generally satisfactory, I recommend that a designated porta-potti area be identified on the plans for the site construction phase. It is also likely that each house or group of houses would have a porta potti, these should be in accessible locations likely closer to the roadway. I recommend some description of where they are placed be included in the SWPPP.

Satisfied.

5.6 Washing of Applicators and Containers used for Paint, Concrete or other Materials This section states that subcontractors are to submit information regarding washing applicators, etc. The Board could require that the SWPPP be updated with this data when available. I recommend that concrete washout areas be identified on the plans. *Satisfied*.

5.7 Fertilizers

This section is complete, no products are to be stored on-site.

5.8 Other Pollution Prevention Practices

No additional means of pollution prevention are proposed, if proposed in the future the SWPPP should be updated.

Section 6 Inspection, Maintenance, and Corrective Action

6.1 Inspection Personnel and Procedures.

The inspector is listed as "To Be Determined". I recommend that an independent qualified person perform the inspections and that a Professional Engineer oversee the project.

Recommendation remains, the Board could include this as a condition if the project is approved.

Frequency of inspection is consistent with SWPPP requirements. I recommend that an inspection be required by the Board if there is .5" of rain or greater, at least until it has been established that the site is stable enough to prevent erosion.

Recommendation remains, the Board could include this as a condition if the project is approved.

Inspection Report Forms are included in the SWPPP, I recommend that Tabs be labeled consistent with the SWPPP form.

No further comment.

6.2 Corrective Action

Corrective Action Forms are included in the SWPPP, I recommend that Tabs be labeled consistent with the SWPPP form.

No further comment.

6.3 Delegation of Authority

Blank Delegation of Authority Forms are included in the SWPPP, I recommend that Tabs be labeled consistent with the SWPPP form.

No further comment.

Section 7 Training

The training log form has been included in the SWPPP.

Section 8 Certification and Notification.

A Certification Form is in the SWPPP.

Miscellaneous Issues.

After Town approval the EPA NOI should be submitted and included in the SWPPP. Recommendation remains, the Board could include this as a condition if the project is approved.

Any subcontractors, etc. and all signatures required for various forms should be completed in the SWPPP.

Recommendation remains, the Board could include this as a condition if the project is approved.

I recommend that the final SWPPP include copies of local approvals as applicable. Recommendation remains, the Board could include this as a condition if the project is approved.

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

Sincerely, GRADY CONSULTING, L.L.C.

Kevin Grady, P.E. Principal Engineer