

April 22, 2021

Hingham Planning Board
210 Central Street
Hingham, MA 02043

RE: Definitive Subdivision Plan – (#101 Gardner Street)
Applicant – Boston Golf Club

Dear Board Members:

On behalf of the applicant, Grady Consulting, LLC hereby submits the revised Definitive Subdivision Plan and response to comments. The plans were revised in response to comments from Amory Engineers, P.C., in a letter dated, April 13, 2021, to the Hingham Planning Board. The revisions are as follows:

Comments from Amory Engineers, P.C., are shown in *Italic* font and response to comments from Grady Consulting are shown in **Bold** font.

Compliance with the Planning Board Rules and Regulations

- 1. We note that no waivers have been requested from the Planning Board Rules and Regulations.*

No comment.

- 2. R&R §3.C.2(a) requires two permanent benchmarks to be shown on the plan. One, temporary benchmark (nail in driveway) is shown.*

Two permanent benchmarks shall be set and shown on the plan.

- 3. R&R §4.B(4)(b) requires sloped granite curbing around the inside island of a cul-de-sac turnaround. Cape Cod berms are proposed.*

The plan has been revised to propose sloped granite curbing around the inside of the cul-de-sac turnaround.

- 4. As noted above, no proposed natural gas service is shown on the plans. If proposed, it should be shown in accordance with R&R §4.L(1).*

There is no proposed natural gas service.

- 5. In accordance with R&R §4.L(6) documentation should be provided to verify that there will be adequate water supply for domestic use and fire flow.*

Grady Consulting is currently working with Russell Tierney from Weir River Water System to provide documentation that there will be adequate water supply and fire flow.

6. *R&R §4.L(7)a. requires a ten foot wide electric easement around all Hingham Municipal Lighting Plant (HMLP) infrastructure. The Applicant should coordinate with HMLP as necessary.*

Grady Consulting is coordinating with Stephen Girardi, Chief Engineer of HMLP. Once we receive final approvals from the Planning Board HMLP can complete their design and prepare the easement for recording.

7. *R&R §5.L1(4) requires HDPE drain pipe to have rubber gaskets. A detail should be provided specifying rubber gaskets for the drain pipe as well as the bedding requirements of §5.I2.*

A drainage trench detail has been added to sheet 12 of the plan as requested.

8. *R&R §5.L1(5) and §5.T3(6) require granite curb inlets with transition curbs at all catchbasins unless the Board approves the omission of the curb inlets.*

Granite curb inlets with transitions have been added to the plan and details have been added to sheet 8 as requested.

9. *R&R §5.L1(9) requires all drain outfalls to end in a concrete or masonry headwall. A flared end section is proposed. If the Board approves the use of the flared end section, for durability, we recommend a reinforced concrete flared end section rather than HDPE.*

A concrete headwall has been added to the plan and detail added to sheet 10 as requested.

10. *R&R §5.R1(6) requires catch basins to be five feet in diameter and 8'-6" deep. The proposed catch basins are four foot diameter with a four foot sump, which is MassDOT and industry standard.*

The catch basin detail has been revised to specify 5' inside diameter and 8'-6" deep minimum as required.

11. *The Typical Water Trench Detail on Sheet 11 should specify the bedding and zone around the pipe to be sand in accordance with R&R §5.B3.*

The Water Trench Detail has been revised as requested.

12. *The Typical Roadway Sections on Sheet 11 should specify the gravel*

subbase material to meet the requirements of M1.03.1 in accordance with R&R §5.J3. The Sections should also show the grass strips to slope toward the roadway in accordance with R&R §5.A4(1).

The Typical Roadway has been revised as requested.

13. *The Board should determine whether street lighting should be included in the subdivision(R&R §5.X3).*

No comment.

14. *The plans should show a ten foot wide street tree planting strip in accordance with R&R §5.B4.*

A 10' Wide Street Tree Planting Area has been added to sheet 9 as requested.

15. *A bound/monument detail should be shown on the plans.*

A bound/monument detail has been added to sheet 12 as requested.

16. *Street name and stop signs should be shown on the plans in accordance with R&R §5.D4.*

A street name and stop sign detail has been added to sheet 12 as requested.

General, Utilities, Stormwater & Erosion Control

1. *The roofs of the proposed houses have been broken out of the overall site post- development drainage/ HydroCAD calculations and analyzed separately. These should be included in the overall post-development site analysis. We also request that a separate analysis be run to show what would happen if the proposed drywells for roof runoff were to fail. We believe that drywells for roof runoff are a beneficial best management practice but failure of these systems would not be surprising and we want to make sure that failure of these systems would not cause increased runoff to adjacent properties.*

A separate analysis has been run to show what would happen if the proposed drywells were to fail and is included with these revisions.

2. *We note that the overall site post-development analysis is based on proposed grading as shown on the plans, including lot development. There are low areas on the proposed lots that are modeled as infiltration areas. These low areas will need to be maintained and proposed lot grading will need to be per plan to ensure that post development runoff is mitigated as proposed.*

The low areas shall be maintained and proposed grading for low areas shall be per plan or equivalent storage volume provided to mitigate post development runoff.

3. *Additional soil testing on site is required. There are no test holes at the location of the proposed infiltration basin or the roof drywells. The groundwater elevation at the proposed infiltration basin is shown to be El. 125.9 on the Basin Detail (Sheet 10) and it is noted that the elevation is taken from test hole #1, however, test hole #1 was only excavated to El. 126.4 according to the test hole logs on Sheet 12. Additional test holes are also required for septic system design.*

Soils testing for the proposed infiltration basin and drywells is scheduled for April 29, 2021. The groundwater elevation in the location of the proposed infiltration basin will be determined at that time. Additional soils testing will be conducted in the locations of the proposed septic systems as well. Grady Consulting is confident the soil conditions throughout the site will be consistent with the existing soils testing already conducted.

4. *The Dry Well for Roof Drains detail on Sheet 12 shows 2'-5" of stone surrounding the concrete chambers but only 2 feet of stone is modeled in the calculations. The detail also specifies filter fabric to be installed below the stone under the chambers, which is not required, nor recommended.*

The detail has been revised to show 2 feet of stone as modeled and the filter fabric has been removed under the system as requested.

5. *We question the required recharge volume and water quality volume calculations in the Stormwater Report. The calculated recharge and water quality volumes are based on an impervious area of 19,189 square feet (s.f.) but the total post-development increase in impervious area taken from the HydroCAD calculations is 31,022 s.f. The proposed paved area from the HydroCAD calculations is 23,867 s.f. With these figures, the required recharge volume would be 1,193 cubic feet (c.f.) and the required water quality volume would be 1,989 c.f. We note that the infiltration basin has sufficient capacity to satisfy both of these volume requirements.*

The calculations have been revised as requested.

6. *The long term Operation and Maintenance Plan for the stormwater system specifies quarterly inspections for the sediment forebay and infiltration basin but the inspection checklist notes yearly inspections.*

These should be consistent.

The operation and maintenance plan has been revised as requested.

7. *In order to limit infiltration through the sediment forebay we recommend that the bottom of the forebay have 8- to 12-inches of loam.*
The Basin Detail on sheet 10 has been revised to propose 8 to 12 inches of loam on the bottom of the sediment forebay as requested.
8. *The fifth paragraph in the Phase I Construction Sequence on Sheet 12, which states "Grade temporary shoulder and install water line," should be moved and combined with the ninth paragraph related to utility installation.*
The Phase I Construction Sequence on sheet 12 has been revised as requested.
9. *Sheet 8 of the plan set should specify that silt sacks are to be installed in the catch basins.*
The Erosion and Sediment Control Plan has been revised to specify that silt sacks are to be installed in the catch basins as requested.
10. *Septic Design calculations for a four bedroom and six bedroom dwelling are included on Sheet 12. Only Lot 2 has the required lot area to support the six bedroom dwelling. With a six bedroom dwelling on Lot 2 and four bedroom dwellings on Lots 1 and 3, the lot areas comply with Title 5 and the Hingham Board of Health Supplementary Rules and Regulations for the Disposal of Sanitary Sewage.*
This is correct. Lot 2 has the required lot area for a maximum of six bedrooms and Lots 1 and 3 have the required lot area for a maximum of four bedrooms.
11. *The proposed reserve leaching area for the dwelling on Lot 1 is shown to be located within the low area on the lot where stormwater is directed and infiltrated. This should be removed away from the low area.*
The reserve area has been relocated as requested.
12. *There is an existing well on the property with a note stating that it is disconnected. Because the site is within a Zone II of a public well, we recommend that the well be decommissioned (sealed) by a Massachusetts Certified Well Driller to insure that well is appropriately sealed.*
The existing well shall be decommissioned by a Massachusetts Certified Well Driller to insure that well is appropriately sealed. A

note has been added to sheet 5 of the plan.

13. There is an existing well shown on the property at 111 Gardner Street and the note on the plan indicates that it could be either an irrigation or potable well. If this is a potable well, the proposed septic system on Lot 3 would need to be moved outside the 250 foot radius from the well.

The proposed septic system for Lot 3 has been relocated outside the 250 foot radius as requested.

14. The radius label for the curve on the west side of the cul-de-sac turnaround is missing.

The radius labels for the cul-de-sac turnaround are shown on sheet 4 and are 60 feet for the outside of the cul-de-sac and 40 feet for the inside of the cul-de-sac.

15. A note should be added to water details on Sheet 11 specifying compliance with the standards and regulations of the Weir River Water System.

A note has been added to the water details on sheet 11 as requested.

16. Based on the sight distance triangle sketch on Sheet 12 it appears that some trees may need to be trimmed to provide the required sight distance. This should be specified on the plans.

It is not anticipated that any trimming will be required as there are no low-lying limbs on the existing trees.

If you have any questions please do not hesitate to contact us.

Sincerely,

GRADY CONSULTING, L.L.C.



Paul Seaberg
Project Manager