



**Peer Review for Phase II & III
Bay Pointe Club, LLC
Bay Point Drive
By Charles L Rowley, PE, PLS
Consulting Engineer & Land Surveyor
July 24, 2021**

**PRINCIPE ENGINEERING, INC.
RESPONSE TO COMMENTS
July 24, 2021**

Plans:

1. Cover Sheet: Note that the waiver request for road profile grades less than 0.75% is not needed since all grades for Starboard Drive and Beacon Street are above the minimum grade allowed.

RESPONSE:

The above-mentioned note has been removed from the cover sheet.

Definitive Plan, Sheets R-1-R-3.

1. All street lines should be solid lines as they separate out the three lots being defined by this set of plans.

RESPONSE:

Waterman Survey to draft these registry plans per the registry requirements.

2. A note should be added to each sheet indicating that the subdivision is under a separate covenant to be recorded herewith. The covenant should stay in place until such time as other forms of security are presented to the Planning Board for approval and approved. The covenant may be replaced in whole or in part as selected by the applicant.

RESPONSE:

The note mentioned above has been added to the registry plans.

3. No Plans shall be stamped and signed by a registered professional surveyor.

RESPONSE:

Waterman survey to stamp after final registry plans are developed

4. On Sheet R-3 indicate the abutter to Starboard Drive near the cul-de-sac.

RESPONSE:

The abutter has been indicated on page R3 of the plan set.

5. Infiltration basin No. 4 needs to be included on the plan along with its easement definition and area.

RESPONSE:

The easement has been added and is shown on plan page R2 and labeled "Drainage Easement 1".

6. There will need to be an easement granted from the Golf Club to the Condominium for access across its land at the beginning of Starboard Drive to Phases II and III.

RESPONSE:

The new layout of Starboard drive connects to the existing layout of Bay Pointe Drive as shown on the new registry plans which wont require an easement here.

Site Plans:

1. General: There were no landscaping plans included with the plan set. If the same type of overall landscaping features will be used for Phases II and III as were used in Phase I, those plans may be used but should be filed as for Phases II and III.

RESPONSE:

BETA Is producing landscape plans per original approval to keep streetscape similar to previous approval.

2. As with Phase I, there needs to be an area or areas set aside for mailboxes. The area should include sufficient parking for residents to receive or drop off mail without unduly blocking the driving surface of either Starboard Drive or Beacon Street.

RESPONSE:

A mailbox area has been added in a location chosen by the owner on the cul-de-sac located on Starboard Drive.

Sheet 8 of 21

1. Again, contours are incomplete with some being labeled and some not. Finish grading requires adequate detail to avoid issues where water may collect or discharge in unwanted directions. Arbitrary one-foot contours are not acceptable.

RESPONSE:

All contours have been labeled to clarify the proposed grading plans.

2. The division lines for Phase II and Phase III should be added to the plans. A check should be made to ensure that the Phase lines do not go through buildings.

RESPONSE:

Phase II and Phase III are differentiated on page 6 of 21 of the plan set. The line differentiating them has been adjusted to not go through any proposed structures.

3. Why do some buildings have a difference in elevation between basement slab and top of foundation of 8 feet and others of only 7.5 feet? Please explain.

RESPONSE:

All buildings have been changed to show a 7.5' difference between basement slab and top of foundation.

Sheet 9 of 21

1. The 34 contour between roadway baseline stations 12+0 and 13+0 is not correct. Its location should be compared to the road profile plan and adjusted accordingly.

RESPONSE:

The plan view has been updated to reflect how the profile shows the 34 contour between stations 12+0 and 13+0.

2. The 31 contour needs to be added to the plan in and around baseline station 11+0.

RESPONSE:

A 31 contour has been added to clarify how the grading is intended around station 11+0 per the presented road profiles.

3. The existing contour lines in and around buildings 44-46 are running into each other making it difficult to see what the finish grades should be.

RESPONSE:

The contours have been left as they are, as they have been determined necessary to show the existing elevations in the subject area.

4. The 35 contour needs to be added in the vicinity of baseline station 7+0. It needs to fit with contour 36 in front of units 67 and 68. The same is true for contour 33 between baseline stations 8+50 and 10+0. The change from contour 32 to contour 34 needs to be more detailed.

RESPONSE:

A 35 and a 31 contour have been added for clarity per the presented road profiles.

5. The pitch of the cul-de-sac appears to be excessive, dropping from elevation 42 to just over 40.25 in 33 feet. Contours 43 and 41 would be recommended for this area to fit the cul-de-sac grading better near the 8- unit building.

RESPONSE:

The existing 5.3% slope has been reduced to 3% slope by bringing the catch basin covers up to elevation 41 from elevation 40.25.

6. There are no return radii on the entrance driveway to the 8-unit building and the driveway is only 15 feet wide, not enough to safely accommodate 2-way traffic. A width of 20 feet is recommended.

RESPONSE:

The proposed driveway has been expanded to 20' to safely accommodate 2-way traffic. The radii have been shown for the proposed driveway.

Sheet 11 of 21

1. A detail of the two proposed light poles at the intersections of Beacon Street and Starboard Drive should be shown on the site plans. Lighting of the intersections should be sufficient for safety but not such that it will cause unnecessary spillover into adjacent residences.

RESPONSE:

A detail showing a typical lighting post has been added to the detail sheets.

Sheet 12 of 21

1. A direct discharge line from DMH 28 to infiltration basin No. 5 would save approximately 83 feet of pipe and would not require a connection to DMH 29. An additional flared end section would be needed for the pipe.

RESPONSE:

A direct line has been presented to the owner and the decision has been made to have the pipe remain as DMH 29 contains the water quality unit and would be more cost effective to keep the 83' of pipe than add a new water quality unit.

Sheet 14 of 21

1. Contour 34 on the plan view does not match the location of contour 34 in the profile view. The profile grade should be checked as well. It is not correct between baseline stations 12+0 and 15+0.

RESPONSE:

The plan view has been updated to reflect the contours position as presented in the profile view. The slope along the curve of the profile on page 14 of 21 from stations 12+0 to 15+0 is 4%. However, since this is a vertical curve, the slope is measured from the projection of the curve and therefore has a slope of 4.41% and is correct on the current plan.

Sheet 15 of 21

1. The labeling is upside down at baseline stations 1+50 and 7+50. Please revise.

RESPONSE:

The labeling has been correctly shown.

2. Where is contour 37 between Beacon Street and Starboard Drive.?

RESPONSE:

A contour 37 has been added to the plan view to reflect the contour's position in profile view.

Sheet 18 of 21

1. The sheet depicts a construction entrance detail but there is no indication as to where it will be but is presumed to be at the turn of Bay Pointe Drive. It should be noted on the site plan.

RESPONSE:

A construction entrance has been added to the plan view at the turn of Bay Pointe Drive.

Sheet 20 of 21

1. The rip rap stone sizes have not been corrected as requested in the initial review. The use of 1” stone is not accepted.

RESPONSE:

As previously approved, on sheet 20 of 21, the table indicates 1” stone is for the bedding only. The rip rap stone sized are shown in the table on page 20 of 21 and are taken from and approved by M02.02.4.

Sheet 21 of 21

1. The doghouse detail of a sewer manhole and the detail for a standard sewer manhole appear to be conflicting. The understanding is that the doghouse structure will be used to connect the new sewer force main with the existing one and not a gravity sewer line. Any valving required for the force main connection should be shown with appropriate anchoring details for valves.

RESPONSE:

Contractor to provide shop drawing details for review prior to any construction, similar to the new pump station details from boydco.

2. The detail for the infiltration basin needs clarification for the engineered soil that will be used in each. The engineered soil should be used in the bottom and sides of each basin as follows:
Infiltration Basin No. 4 To elevation 35.0
Infiltration Basin No. 5 To elevation 25.5. The depth of the engineered soil needs to be indicated as well.
Other areas of disturbance at each basin should be dressed with 6 inches of loam and seed.

RESPONSE:

Elevations are currently on the plan that depict top and bottom of basin elevations. An additional row has been added to the table showing the elevation of the bottom of the engineered soil mix for both infiltration basins 4 and 5.

3. There is no emergency spillway shown for infiltration basin No. 4. It should be added to the site plans where appropriate with grading adjusted as needed.

RESPONSE:

An emergency spillway for infiltration basin No.4 is present on the plan. No changes are necessary.

Drainage Calculations

The drainage calculations as submitted are acceptable using an infiltration rate of 8 inches per hour with the stipulation that engineered top soil in direct contact with the permeable underlying sand will be used as noted above.

The test pit information for the soils conditions at each infiltration basin should be noted on the plans. Each should be labeled with a notation as to which soil layer will be next to the engineered soils described above.

RESPONSE:

Note is currently on plans on sheet 21 of 21, and note indicates excavation limits to be approved by engineer, along with elevation of bottom of basin. The current design has the bottom of the basin within the sandy "C" horizon soils as designed. Therefore, no changes are necessary.