

RESPONSES TO CHARLES ROWLEY, PE, PLS COMMENTS  
BAY POINTE CEDA; WAREHAM, MA  
DECEMBER 8, 2021

General:

1. After discussion with the applicant, Town Planner Ken Buckland, Town Counsel Richard Bowen and Assistant Town Planner Aaron Shaheen it was decided that a revised purchase and sale document should be executed for the property.  
*RESPONSE: Under separate cover (Timothy Fay, Stonestreet).*
2. The original Special Permit did not include the CEDA property. To do so under a modification of the Special Permit requires that the purchase and sale document include specific language that would technically tie the two properties together. The revised document is to be filed with the project proposal. Receipt of this document has not been confirmed.  
*RESPONSE: Under separate cover (Timothy Fay, Stonestreet).*
3. It is assumed that this project, if part of the Special Permit, would relate only to the residential uses proposed. The golf course was purposely set apart from Phases I, II and III. This phase, however, will have golf related uses on the same parcel of land. Will there need to be any specific changes as to use of the site? How are limits of liability to be determined?  
*RESPONSE: Under separate cover (Timothy Fay, Stonestreet).*
4. The written documents required by Section 580.6(a-d) of the Zoning By-Law were not included in the materials received for review.  
*RESPONSE: Updated impact statement attached.*
5. In addition to the 28 units of housing in Phase I of the Special Permit, 52 new units will now be discharging sewer flow to the existing sewer pump station that also includes the Bay Pointe Condominiums. A calculation of current pump capacity for this additional flow should be submitted. This is unrelated to the capacity of flow that was approved by the Sewer Commissioners.  
*RESPONSE: Capacity has been verified, provided under separate cover.*
6. The Onset Fire Department should be given the plan set for review and comment.  
*RESPONSE: Agreed.*

Plans:

Sheet 2 of 8

1. The perimeter metes and bounds should be shown on the plan of existing conditions, sheet 2 of 8.  
*RESPONSE: Metes and bounds have been shown on this sheet.*
2. Unit Density for the project is 6,281 s.f./unit. Phases I, II, and III have a unit density of 71,634 s.f./ unit based on the approved Phase I plans. This latter density has not changed for Phases II and III.  
*RESPONSE: None required.*
3. The plan shows two parking areas, one for the golf "Pro Shop" and one that is presumed to be parking for the pavilion that is situated on the opposite side of Bay Pointe Drive.  
*RESPONSE: None required.*

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4. A portion of the lot shown is in the MR-30 zoning district but is not included within the proposed development area. Except for the paved parking areas and existing building, the lot is wooded with a significant stand of white pine and understory vegetation. There are no wetlands on the lot.  
*RESPONSE: None required.*

Sheet 3 of 8

1. The original sheet was dated October 1, 2021 and has been updated to November 4, 2021 with some revised information.  
*RESPONSE: None required.*
2. The plan shows the location of seven proposed buildings with a total of 121 parking spaces if garage spaces are included in the count. A total of 23 garage spaces are proposed. It is unclear as to how the parking summary was arrived at as shown. The total number of one-bedroom units and two-bedroom units should be identified.  
*RESPONSE: There are a total of 52 units in 7 buildings. Three of the buildings (A, B, & C) have both one car garages and a driveway that allows for at least one additional parking space, for a total of 46 spaces (equaling two per unit). Buildings D, E, F & G each have two exterior parking spaces provided per unit (58 spaces total). There are an additional seventeen parking spaces located adjacent to Building C, nine spaces located adjacent to Building A and another seven spaces adjacent to Building B that could be utilized by visitors. This provides for a total of 137 spaces (33 visitor and 104 resident = 2/unit). Updated architectural plans will be provided to show the number of bedrooms.*
3. Visitor spaces should be identified on the plan and should be separate from spaces directly in front of garages.  
*RESPONSE: Visitor spaces have been identified separately. However, residents may allow their visitors to park in their driveway/garages if they choose.*
4. The project site access is via two driveway cuts on Bay Pointe Drive. The first driveway is intended to be one way in for Buildings A and B. The second driveway is for two-way traffic. Part of the driving lane for these parking spaces is located within the layout of Bay Pointe Drive. As such, it does not qualify as off-street parking. The curb radii should be at 20 feet for all such returns.  
*RESPONSE: The parking spaces are not located in the access easement and the access easement allows for vehicular movement within the development.*
5. A turning template for a single unit 20-foot wheelbase was placed at each of these two driveways. The template shows that the entrances will not be accessible to emergency vehicles except for a right angle turn at the second entrance. An ambulance may be able to turn but fire apparatus of any size would need to be staged on Bay Pointe Drive.  
*RESPONSE: Coordination with the Fire Department has been initiated. Any changes necessary will be done.*
6. Parking spaces are shown as 9' x 18'. Section 933.1 of the Zoning By-Law requires spaces to be 9.5' x 19' with parallel spaces at 9' x 22'.  
*RESPONSE: A waiver from the 90-degree parking space size is requested. The reduction in size is consistent with a more typical standard of 9'x18' spaces, which is large enough for the anticipated vehicles expected in this private development, and reduces impervious surfaces. The reduction in pavement adheres to Low Impact Development*

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*(LID) standards, allowing for greater site recharge, higher consistency to existing conditions for stormwater patterns and less need for stormwater treatment.*

7. No handicap spaces are shown.  
*RESPONSE: As the buildings are not ADA, then exterior provisions for access are not required.*
8. The site plan shows that the golf shop and related parking are also on the site. The same parking space dimensions need to be applied here as well.  
*RESPONSE: A waiver from the 90-degree parking space size is requested. The reduction in size is consistent with a more typical standard of 9'x18' spaces, which is large enough for the anticipated vehicles expected in this private development, and reduces impervious surfaces. The reduction in pavement adheres to Low Impact Development (LID) standards, allowing for greater site recharge, higher consistency to existing conditions for stormwater patterns and less need for stormwater treatment.*
9. The minimum garage pavement width should be shown.  
*RESPONSE: A typical driveway width has been added to each building with driveways.*
10. The backing area for the first unit in Building A is too small and too close to the building to be of use.  
*RESPONSE: This backing area has been eliminated as it is not necessary.*
11. Are there any plans to connect the 52 units to that portion of the site designated as the golf shop and parking via sidewalks? If so, they should be shown on the plan.  
*RESPONSE: There is no connection proposed specifically to connect the 52 units to the golf shop, etc. However, a cart path to connect the portions of the gold course on either side of Bay Pointe Drive has been shown.*
12. There are no trash facilities shown.  
*RESPONSE: As is done on the rest of the development, trash pickup will be individually by unit.*
13. There is no mail delivery area shown.  
*RESPONSE: A common mailbox location has been shown.*
14. Provisions for snow removal should be shown.  
*RESPONSE: Various options are available for this private site, including complete removal or storage at a location such as the adjacent parking lot for the club house, which is not utilized during the winter months.*
15. Some pavement berms are noted as "bituminous berms". It is assumed to mean Cape Cod berms and not bituminous curb which would not be recommended. Some intermediate spaces between parking stalls appear to have curbs but not all. Please explain. Are these areas raised?  
*RESPONSE: The notation has been revised to clarify that the "bituminous berm" is in fact "Cape Cod berm". The driveways do not have berm, but the other parking spaces do, in order to provide protection for the proposed landscape materials.*

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16. The plan should be submitted to the Onset Fire Department for review and comment.  
*RESPONSE: See response to General Comment #6.*

Sheet 4 of 8

1. Sheet 4 shows the proposed grading of the site and the area surrounding the site to the east. Limits of work should be identified and shown on the plan.  
*RESPONSE: A limit of disturbance line (labeled "Limit of Disturbance" and shown as a dashed line) is, and was, shown on Sheet 4 of 8.*
2. The plan shows new grading at 1-foot intervals. Based on the contours shown there are some areas where surface runoff may have a tendency to pond.
  - a. In front of the last unit in Building B where the garage floor is at elevation 37 and the nearest catch basin rim grade is 37.37.
  - b. In front of Building F where runoff may be trapped behind the curb lines.  
*RESPONSE: Additional spot grades and a change in the garage elevations for Building B have been made.*
3. The grading of Bay Pointe Drive and the two entrance points for the project should be checked to ensure that no runoff from Bay Pointe Drive enters the site or is otherwise captured with suitable catch basins.  
*RESPONSE: The grading on Bay Pointe Drive was checked and no stormwater will enter the CEDA site from the road.*
4. The project shows three proposed retaining walls that are necessary for site grading. Proposed top of wall elevations should be shown in each case.  
*RESPONSE: As noted on the plans, the top of wall elevation is not consistent and will vary. Top of wall will be within 2-4" of the contours shown on the plan.*
5. The grading and proximity of the buildings to such as property boundaries, sidewalks and driveways show that there is very little space dedicated to outside activities. One common area is shown adjacent to Building C where the grading is relatively steep.  
*RESPONSE: The development as a whole has numerous opportunities for outside activities.*
6. Buildings E and F are shown with walk-out elevations as grade. Drainage swales and slopes to the sediment forebay areas are close by with limited level areas near the buildings. At the end of Building E the distance from walkout to beginning of slope is only 3 feet. The same occurs for the first unit of Building F.  
*RESPONSE: None required.*
7. Paved waterways are shown as the means by which roof runoff and pavement runoff will be conveyed to the drainage system. It is recommended that this runoff be intercepted by catch basins prior to reaching the end of the paved waterways.
  - a. In the southeast corner of the site the rim grade of a proposed basin is at elevation 27.80. The adjacent contour is at elevation 28. There is potential for clogging of this basin from grass clippings and other natural litter that could cause the basin to overtop and flow onto abutting land. This can be avoided by collecting the runoff prior to reaching the low point as shown.
  - b. At the northeast corner between Buildings F and G there is a wide paved waterway that leads to a sediment area. With a proposed drainage line in the vicinity, a catch

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basin could be placed at the entrance of the paved waterway to intercept the surface runoff and reduce the impact on the landscaped grass areas.

- c. The grading and orientation of the paved waterway near the northerly entrance drive should also include a catch basin and pipe to reduce the impact of runoff toward the parking area and nearby retaining wall.

If the pipe end is turned toward the swale that parallels the parking area there will be less chance of flow entering the parking surface.

*RESPONSE: (a) The soils on this site are excessively drained with a 10'+ water table, and therefore, it is unlikely that there will be any ponding of stormwater on non-paved surfaces. The type of catch basin proposed in this location will have a domed top which will assist in preventing clogging, and additional provision have been made to infiltrate the flows as much as possible. (b) A catch basin has been added, although non-structural methods for transporting surface flows are considered more environmentally-friendly and are less expensive to install and maintain. (c) A catch basin in this location is not the preferred method for channeling surface flows. Non-structural methods are considered more environmentally-friendly and are less expensive to install and maintain, and in this location in particular, allows for additional infiltration/recharge, reducing stormwater volumes and increasing treatment for water quality.*

8. There is no indication that roof runoff is collected but is allowed to flow over ground. Where this takes place could impact parking spaces, sidewalks or garage spaces.

*RESPONSE: The soils on this site are excessively drained with a 10'+ water table, and therefore, it is unlikely that there will be any ponding of stormwater on non-paved surfaces. Where possible, downspouts from the units will be directed to discharge away from paved surfaces.*

9. Sidewalks are shown as 4.5 feet wide including the curb. Curb stops should be place in each parking space to prevent bumper overhang into the walking area of the sidewalks. No handicap ramps are shown.

*RESPONSE: Curbing used with car stops is redundant and not recommended, especially as this impacts snow removal.*

10. Include curbing and stop sign symbols in the legends and abbreviations.

*RESPONSE: The legends and abbreviations have been updated.*

11. No exterior lighting is shown for parking areas and sidewalks.

*RESPONSE: Lighting will be building mounted and shown on the architectural plans.*

Sheet 5 of 8

1. The trench detail should include how pavement sections will be addressed.

*RESPONSE: Additional details have been added.*

Sheet 6 of 8

1. This sheet shows a stockpile detail and construction entrance detail but it is not identified as to where these will be on site.

*RESPONSE: Locations will/have been added.*

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Sheet 7 of 8

1. Sheet shows a stop sign detail but the locations are not noted on the site plan except by symbol that is unidentified.  
*RESPONSE: Stop signs were, and are, shown on sheet 3 of 8 with labels.*

Sheet 8 of 8

1. Flared End detail should show stone placed under the flared end for a distance of at least 2 feet to eliminate scouring at the flared end. Geotextile fabric should be placed *under the stone to prevent erosion of soil.*  
*RESPONSE: Additional details have been added.*
2. The catch basin detail should show the 12" elbow for discharge pipe a minimum of 12" below the flow line of the pipe. The structure should be set on a 6" thick bed of 1-1/2" crushed stone.  
*RESPONSE: Additional details have been added.*
3. The precast manhole detail should have the same boxed note shown for the catch basin. The structure should be set on a similar bed of crushed stone. The note regarding stone is acknowledged but it should be shown on the details as well.  
*RESPONSE: Additional details have been added.*
4. A sidewalk detail should be shown along with handicap details.  
*RESPONSE: Additional sidewalk details have been added. No handicap details are necessary.*
5. A paved waterway detail should be shown.  
*RESPONSE: Additional details have been added.*
6. If roof runoff is to be collected, piping details should be shown.  
*RESPONSE: Roof runoff is not proposed to be collected.*

Landscape Plans

1. The plan suggests that much of the landscape features are around the perimeter with very little associated with the buildings. Some islands associated with parking spaces have a single tree and others have no landscaping at all.  
*RESPONSE: The landscape plans have been updated. However, as shown on the landscape plans, some of the islands contain underground utilities and trees cannot be installed above the utilities.*
2. The plans include several details for a variety of fencing near the retaining walls. The fences for the walls that are more than 4 feet in height need to be of a safety type design but also that will provide some viewing. This is especially true of the walls near Building E and Building G where the walls are close.  
*RESPONSE: The two retaining walls that are adjacent to less pleasant views (parking lot or large off-site building) are indicated to have screen fencing to block the view, whereas the retaining wall that abuts the existing woodland area is indicated to provide a fence for safety purposes and not to block the view. The height of the walls do not exceed 4 feet.*

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3. The plans show a variety of surfaces, porches and entries. How will they be incorporated into the final construction so as to provide a variety as is implied by the details?

*RESPONSE: The landscape plans have been updated. Typical methods for indicating surface types (hatching, blow-ups, measurement, labels, etc.) have been used to differentiate surface materials.*

4. Landscape plantings appear to have a significant variety of plants and species but there is no information as to areas to be defined by loam and seed or to how adjacent areas will be protected against erosion.

*RESPONSE: The landscape plans have been updated. Typical methods for indicating surface types (hatching, blow-ups, measurement, labels, etc.) have been used to differentiate surface materials.*

Stormwater Report

1. The report is dated August 27, 2021 and has been completed to include the 2-year, 10-year, 25-year and 100-year storm events.

*RESPONSE: None required.*

2. The pre-construction conditions show a single discharge point that is off site near the Green Links Condominium property (Assessors Map 9, Lot 1005. Currently much of the runoff is overland flow that is intercepted by natural cover prior to leaving the site. This would include the existing paved area even though the vegetated buffer to Green Links is limited.

*RESPONSE: The discharge point of the proposed basin directs flows to a "densely wooded" area downslope of any buildings within the Green Links Condominium property and towards an area with limited development potential. No impacts to adjacent properties are anticipated.*

3. There are two concerns with respect to the design of the infiltration area that intercepts all of the project runoff.

- a. A berm set at elevation 25 is designed against the boundary of the Green Links Condominium property where a residential building is located. The berm varies in height from 1 to 4 feet above the existing grade. There is no provision in the cross section of the berm to prevent stormwater from pushing through during large storm events and eroding the bank along the property boundary.

- b. The point of discharge for the stormwater is at a lower elevation where, during the 100-year storm event the spillway will be discharging water in the direction of areas off site that historically have flooded. While the report suggests that overall, runoff is somewhat reduced, it is nevertheless discharged at a single point rather than as sheet flow over the existing ground.

*RESPONSE: It is not anticipated that a berm of this minimal height and with a width of 26 feet would erode in the manner indicated. However, this will be further reviewed and, if necessary, an impervious barrier will be indicated to be inserted into the detail.*

4. For the reasons cited above it is recommended that the design incorporate some amount of sub-surface infiltration that will reduce the impact downstream and reduce the peak elevation of runoff during the 100-year event. The peak elevation is calculated at 24.14 which is less than 12 inches below the top of the berm. Test pit logs indicate

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that ground water is 10 feet below the surface of the ground which should give sufficient depth to incorporate sub-surface infiltration construction.

*RESPONSE: (a) The soils on this site are excessively drained with a 10'+ water table, and therefore, the basin was designed as an infiltration basin with two sediment forebays and a long swale, all of which infiltrate stormwater into the ground. This is also why provisions for structural transport methods (catch basin and piping) were minimized. Adding a subdrain will not reduce the peak elevation, and a 10.32-inch freeboard for the 100-year storm is a reasonable engineering solution. (b) The discharge point of the proposed basin directs flows to a "densely wooded" area downslope of any buildings within the Green Links Condominium property and towards an area with limited development potential. No impacts to adjacent properties are anticipated.*

5. The Stormwater Report should include reference to the meeting all of the Stormwater Standards and there should be an Operation and Maintenance Report for during construction and post-construction conditions citing who will be responsible for implementation.

*RESPONSE: The Stormwater Report will be updated with references and an O&M for construction and post-construction conditions.*

Traffic Report

1. The report lists 94 units of mixed residential housing as part of the golf course property. This was reported as being in error at the public hearing held on November 22, 2021 and should be 84 units.  
*RESPONSE: See BETA letter, attached.*
2. The report only gives trip generation numbers for the proposed development and does not include the numbers that would be associated with the 84 units of housing in Phases I, II and III, the existing condominiums at the end of Cahoon Road or any of the traffic generated by golf course activities. Total numbers would be more relevant to the amount of traffic anticipated entering and leaving Bay Point Drive.  
*RESPONSE: See BETA letter, attached.*
3. The original traffic volume report from Mass DOT for Onset Avenue is now 8 years old and was taken in August of 2013. Later data was taken in August, 2019 after the beginning of the Covid pandemic and may suggest the reason for the numbers being lower than in 2013. It is more realistic to expect traffic volumes to resume and get greater as the concerns from the pandemic are reduced and more normal activity resumes. What would be the expectations if projections ahead 5 or 6 years from 2013 data were included under normal circumstances?  
*RESPONSE: See BETA letter, attached.*
4. The only recommendation for improvements at the intersection of Bay Pointe Drive and Onset Avenue is for a painted stop line. It is recommended that any landscaping that may ultimately be done at this intersection include the submittal of a plan to the Planning Board showing the proposed work and that site distances from Bay Pointe Drive onto Onset Avenue can be improved.  
*RESPONSE: See BETA letter, attached.*



**Bay Point Club  
Unit Type/Matrix**

**UNIT TYPES**

	Unit 1(3 bedroom, no garage)						Unit 1B(3 bedroom, garage)					
	sf	Garage	1/2 Baths	Full Baths	Bdrms	Study	sf	Garage	1/2 Baths	Full Baths	Bdrms	Study
Basement		0						1				
1st flr	1091	0	1	1	1		1091	0	1	1		1
2nd flr	774		2	2	2	1	774		2	2	1	1
<b>totals</b>	<b>1865</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1865</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>

	Unit 2(2 bedroom, no garage)						Unit 2B(2 bedroom, garage)					
	sf	Garage	1/2 Baths	Full Baths	Bdrms	Study	sf	Garage	1/2 Baths	Full Baths	Bdrms	Study
Basement		0						1				
1st flr	740	0	1	0	0		740	0	1	0	0	
2nd flr	774		2	2	2	1	774		2	2	1	1
<b>totals</b>	<b>1514</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1514</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>

	Unit 3(2 bedroom, no garage)						Unit 3B(2 bedroom, garage)					
	sf	Garage	1/2 Baths	Full Baths	Bdrms	Study	sf	Garage	1/2 Baths	Full Baths	Bdrms	Study
Basement		0						1				
1st flr	645	0	1	0	0		645	0	1	0	0	
2nd flr	645		2	2	2	1	645		2	2	1	1
<b>totals</b>	<b>1290</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1290</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>

**UNITS PER BUILDING TYPE**

	Unit 1	Unit 1B	Unit 2	Unit 2B	Unit 3	Unit 3B	Overall Units
Building A	0	2	0	2	0	4	8
Building B	0	2	0	2	0	2	6
Building C	0	2	0	2	0	5	9
Building D	2	0	2	0	3	0	7
Building E	2	0	2	0	4	0	8
Building F	2	0	2	0	4	0	8
Building G	2	0	2	0	2	0	6
<b>totals</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>6</b>	<b>13</b>	<b>11</b>	<b>52</b>

December 3, 2021

Mr. Ken Buckland  
Town Planner  
Town of Wareham  
54 Marion Road  
Wareham, MA 02571

**Re: Proposed Residential Development  
Windward Pines at The Bay Pointe Club Phase 4  
Onset Avenue, Wareham, MA  
Responses to Traffic Review Comments**

Dear Mr. Buckland:

BETA Group, Inc. (BETA) is pleased to submit the following responses to traffic review comments received from Charles L. Rowley, PE in his review of the above referenced development project in the Town of Wareham. We offer the following responses specific to his review of our *Traffic Report* noted in his November 30, 2021 letter to address these comments:

1. The report lists 94 units of mixed residential housing as part of the golf course property. This was reported as being in error at the public hearing held on November 22, 2021 and should be 84 units.

**Response: The original proposal for Phases 1 through 3 was for 94 residential units which the original study included for analysis. Since the original submission, the total number of units for Phases 1 through 3 has been approved for a reduced number, 84 units. As such, no adjustment to the analysis completed in the updated study is necessary as the overall trips estimated are conservative.**

2. The report only gives trip generation numbers for the proposed development and does not include the numbers that would be associated with the 84 units of housing in Phases I, II and III, the existing condominiums at the end of Cahoon Road or any of the traffic generated by golf course activities. Total numbers would be more relevant to the amount of traffic anticipated entering and leaving Bay Point Drive.

**Response: The traffic report dated November 15, 2021, is an update to the Traffic Impact Assessment dated June 22, 2015, completed by our office for the original proposal of a 94-unit residential development as part of the golf course property to be completed in three phases. The updated traffic report assesses the potential traffic impacts of the addition of Phase 4 of the proposed residential development to the Phases 1 through 3 and the golf course completed in the original report.**

Therefore, as part of the updated traffic report, the base traffic volumes utilized for analysis at the study intersection of Bay Pointe Drive with Onset Avenue included traffic volumes generated by golf activities and trips generated by Phases 1 through 3, (though Phases 2 and 3 are still under construction). The base traffic volumes at the study intersection were then grown by a conservative annual growth rate of 1%, though Onset Avenue has seen a decline in traffic volumes between 2013 and 2019. To establish a Future 2024 Build condition traffic generated by Phase 4 of the residential development project was added to the expanded base.

For reference to provide an understanding of site trips from the overall development, the table below shows the estimated trips that will be generated by Phases 1 through 4:

**TABLE– Trip Generation Estimate**

Phase	Enter	Exit	Total
<i>AM Peak Hour</i>			
Phase 1 through 3 (84 Units)	14	46	60
Phase 4 ( 52 Units)	6	15	21
<b>TOTAL</b>	<b>20</b>	<b>61</b>	<b>81</b>
<i>PM Peak Hour</i>			
Phase 1 through 3 (84 Units)	50	28	78
Phase 4 ( 52 Units)	17	10	27
<b>TOTAL</b>	<b>67</b>	<b>38</b>	<b>105</b>

- The original traffic volume report from Mass DOT for Onset Avenue is now 8 years old and was taken in August of 2013. Later data was taken in August 2019 after the beginning of the Covid pandemic and may suggest the reason for the numbers being lower than in 2013. It is more realistic to expect traffic volumes to resume and get greater as the concerns from the pandemic are reduced and more normal activity resumes. What would be the expectations if projections ahead 5 or 6 years from 2013 data were included under normal circumstances?

**Response:** The August 2019 record traffic volume data along Onset Avenue obtained from MassDOT as part of the updated traffic study were completed prior to the COVID pandemic, which began in mid-March 2020 when traffic conditions were impacted. As such, the August 2019 record traffic volume data represents typical daily traffic conditions along Onset Avenue and suggests, when comparing with the August 2013 record traffic volume data, traffic volumes along Onset Avenue has seen a decline between 2013 and 2019.

- The only recommendation for improvements at the intersection of Bay Pointe Drive and Onset Avenue is for a painted stop line. It is recommended that any landscaping that may ultimately be done at this intersection include the submittal of a plan to the Planning Board showing the proposed work and that site distances from Bay Pointe Drive onto Onset Avenue can be improved.

**Response:** The installation of a Stop line on the Bay Point Drive southbound approach to Onset Avenue intersection is, at a minimum, recommended but can be supplemented with a Stop sign. The available stopping sight distances at the study intersection are more than the minimum required based on the posted speed limit and the prevailing travel speeds along Onset Avenue, though BETA agrees that sight distances for vehicles entering Onset Avenue

**from Bay Pointe Drive should be considered if landscaping work is proposed at the study intersection.**

Should you have any questions or require additional information or copies of the report, please contact us at your earliest convenience in order to facilitate review of the application.

Very truly yours,  
BETA Group, Inc.



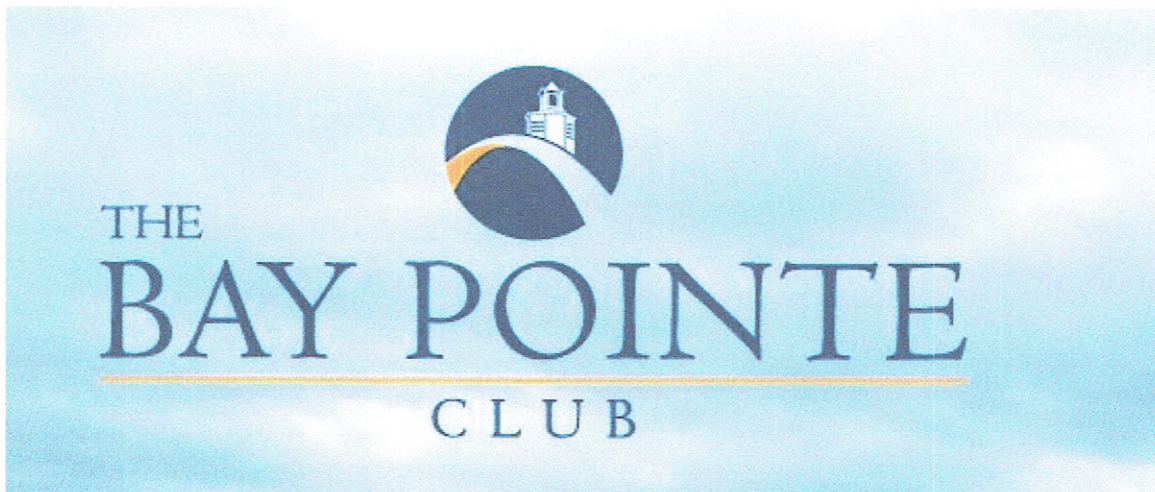
Herman C. Peralta, P.E.  
Project Manager

cc: file



**IMPACT STATEMENT REPORT-CEDA**

**December 8, 2021**



Bay Pointe Club • Wareham • Massachusetts

**Bay Pointe Mixed-Use Development Project-CEDA**

***Prepared For:***

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***Prepared By:***

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## Section 1- INTRODUCTION

These supporting materials have been compiled and prepared to comply with the subdivision regulations, Town of Wareham, Massachusetts for the Definitive Plan Submission of a portion of the proposed development known as Bay Pointe Club Mixed-Use development, herein identified as the CEDA portion. This narrative report provides a general description of the existing physical environment and existing use of the property along with a general description of the use and type of development proposed by the applicant. The presented information and conclusions are based on the best available information at the time of the preparation of this report.

The Bay Pointe Club is a public 18-hole golf course located on the northerly side of Onset Avenue in Wareham, Massachusetts. There is a retail golf pro shop and restaurant located on the facility. There is also a banquet / function hall building that hosts weddings, meetings and private events. The site location is shown on the figures attached below. There is public water onsite, and an existing private sewer pump station onsite that is connected to the public wastewater facility. The sewer commissioners have granted an expansion to the existing sewer service connection for this proposed mixed-use development.

The subject parcel is identified as AP 9, Lot 1004B and is 7.50 acres in size, although a portion of the work also extends onto parcel AP 9, Lot 1004A-1B. Total impact area is 7.66 acres.

Through the following discussions, it will be shown that adverse impacts to the environment or community will not be experienced as a result of the proposed development. This analysis has been structured to address the areas of any potential concerns.



## Section 2- Existing Conditions

### AERIAL MAP:

This aerial map illustrates the existing 18-hole public golf course and shows the irrigation pond is located on the north westerly portion of the property, as well as many other landscape features. The location of the CEDA project is also identified. This portion of the site contains an existing “Pro Shop”, existing parking areas, wooded areas, and a portion of the existing golf course. Access for the site is from the existing Bay Pointe Drive on the north and east sides of the development area.





**USGS TOPOGRAPHY MAP:**

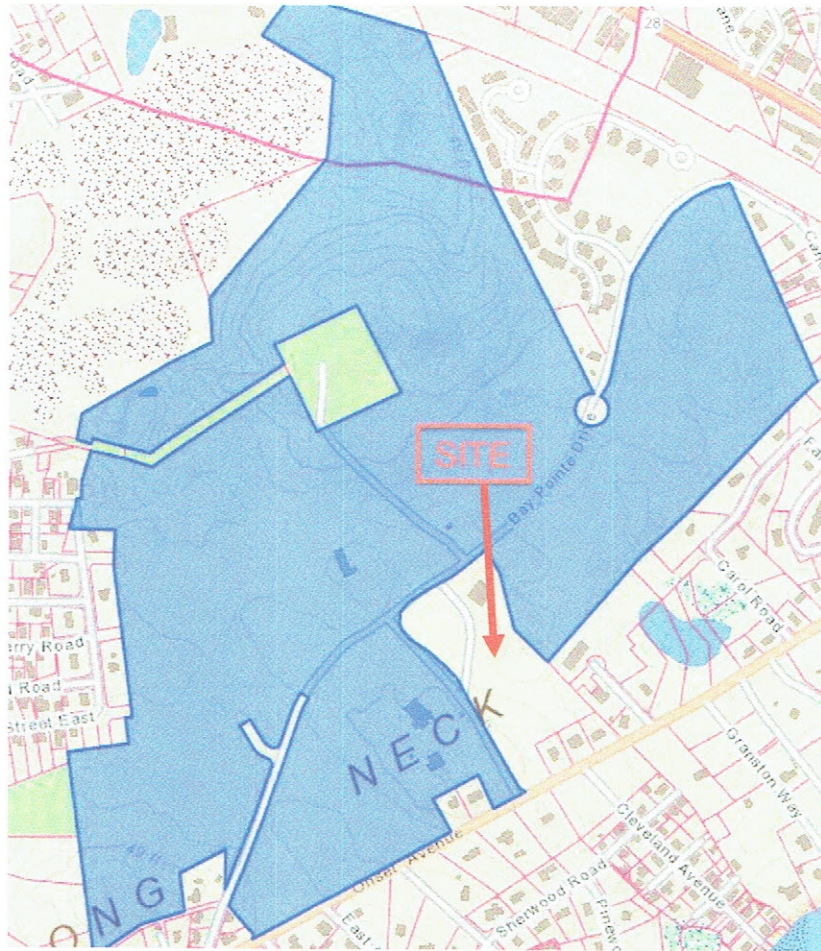
The portion of the overall site that is impacted in this project ranges in elevation from 50 feet to 18 feet. The site generally has moderate to steep slopes ranging from 1% to 25%. Figure 1 indicates the location of the proposed development on a United States Geological Survey Map.



Figure 1

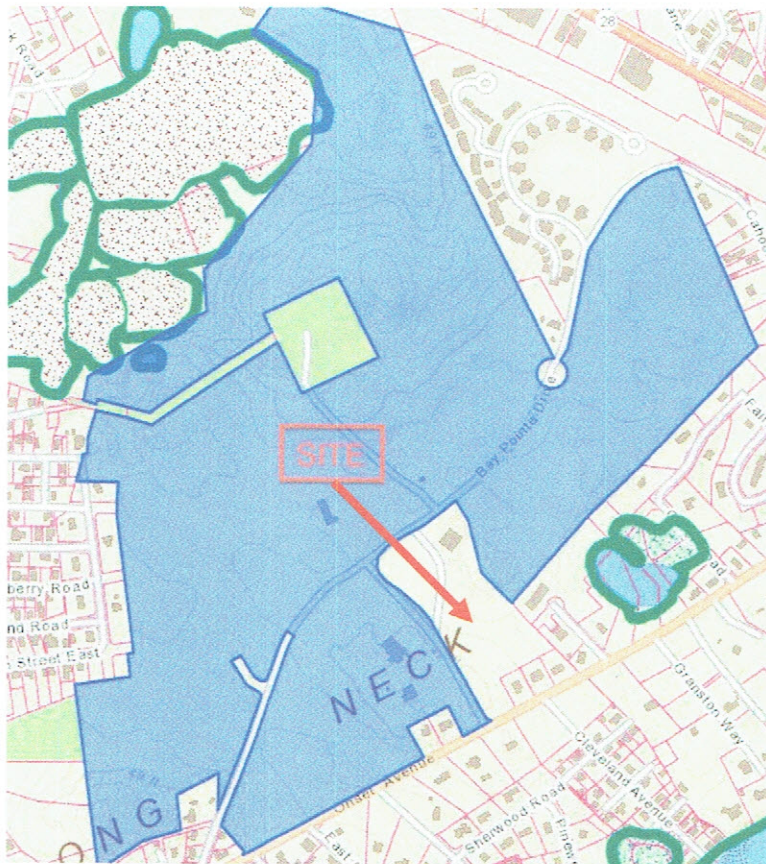
**Ground Water Resources**

The overall Bay Pointe site is NOT located within a wellhead protection. There is a small portion of the property to the north, which is within a Zone II. There will be no development in this area.



**Title V Buffers**

There are no wetlands on the Bay Pointe overall site, except for the existing irrigation pond located on the northwesterly portion of the site. The additional storm water runoff produced from the CEDA development will be used to recharge the aquifer.



**FEMA FLOOD MAPS**

This site is NOT located within any flood zone according to the latest FEMA flood maps. Refer to map numbers 25023C0582K & 25023C0494K.



**Soil Hydrology**

The soils within the development area, based upon the Natural Resource Conservation Service (NRCS) are (637B) Carver -Urban land complex, (480B) Plymouth-Carver complex, (665B) Udipsamments. All of these series consists of very deep, excessively drained sandy soils formed in glaciofluvial deposits of coarse and very coarse sands.



### **Wildlife**

Wetland Strategies, Inc. has already conducted a study of the area. There are no certified vernal pools on the subject site. High priority sites of rare species habitats or exemplary natural communities are also not found on this property. The site of the proposed CEDA development is outside all critical areas for rare species. The only wetland area on the overall project site area is an existing irrigation pond for the golf course, which is located outside of the development area. As a result, no impacts to wetlands or rare species are anticipated.

## **Section 3- PROPOSED CONDITIONS**

### **Proposed Development**

The proposed CEDA development will consist of one one-way roadway/driveway to access two “townhouse” style multifamily buildings, one building which contains eight (8) units, and one building which contains six (6) units, as well as sixteen parking spaces. These building have garages to the rear, and also access the two-way driveway that provides access to the remaining five (5) multifamily buildings, some of which have garages. There are seven buildings with 52 total proposed units. There are 91 separate parking spaces, not including the garage units and their driveways, which provide an additional 46 spaces for a total of 137 parking spaces. Also included in this portion of the overall development is a parking lot for the Pro Shop. There are 88 spaces provided for the shop.

### **Stormwater Management**

The stormwater management system selected is best suited to the site and provides the least disturbance of the site while recharging the aquifer. The system will be sized to mitigate the effects of increased runoff that typically results from the development of a site. The stormwater management system is anticipated to consist of the collection of over land run off into an infiltration basin. The drainage system is designed to mitigate increased storm flows and to provide for water quality in accordance with the regulations of both state and local authorities. The drainage system proposed



is intended to mitigate increased runoff generated from the new construction so that any downstream wetlands, water bodies and neighboring homes will not be impacted. The drainage system proposed will control post development peak flows to levels less than pre-development levels and it will provide for total suspended solids (TSS) removal at the maximum possible rate.

#### **Fire Protection Services**

The Onset Fire Department is located approximately 3/4 mile easterly of the proposed Development. And the Wareham police department is located approximately 5 miles easterly of the site

#### **Town Services**

Road services will be privately maintained through a homeowner's association. However, the trash service will be through the Town.

#### **Zoning Bylaw Section 580.5(2)a-c**

- a) The current project is a phase within a larger development, and provides for another housing option within the mix of the other phases. The character of this phase will be consistent with the phases that have already been approved and constructed.
- b) The current project is a phase within a larger development, and provides for another housing option within the mix of the other phases. The character of this phase will be consistent with the phases that have already been approved and constructed.
- c) No negative environmental concerns are anticipated with this phase.

#### Section 4 - **CONCLUSION**

The drainage collection systems proposed takes full advantage of the natural slopes and contours of the site, and utilize the existing gravelly sandy subsoil parent material. It provides for both peak storm flow mitigation and sediment removal. By reducing post-development storm water flows to a level no greater than the pre-development storm water flows, the primary goal of the proposed drainage system is achieved. Any potential impacts from the proposed development on the abutting properties have been mitigated.

The wastewater disposal system for CEDA will be connected to the existing private pump station and discharged to the adjacent public sewer collection system. The existing pump station onsite has been evaluated, and it was concluded that the additional flow from this development would not have any negative affect on the existing private pump station. As previously mentioned, the sewer commissioners have granted an expansion to the existing sewer service connection for this proposed mixed-use development. The impact to the town will be minimal, as the developer is targeting the “empty-nester” population dwellings that will have a home owners association set up for maintenance to the development. The public-school systems should not be impacted as well, due to the market the developer is targeting.

Principe Engineering, Inc.’s landscape architect reviewed the previous design components for the mixed-use development consisting of the public 18-hole golf course, proposed residential homes, retail pro golf shop, restaurant, and banquet/multi-purpose facility in order to develop a pleasing and complimentary plan for the CEDA portion of the project. This mixed-use development will be a great new addition to the town of Wareham and its current residents.

