

January 22, 2024

Pembroke Planning Board Town Hall 100 Center Street Pembroke, MA 02359

ATTN: Matthew Heins, Planning Board Assistant

RE: 2<sup>nd</sup> AQV Site Plan Review Pembroke County Club Pembroke, Massachusetts

Dear Susan and Board Members:

As requested, Merrill Engineers and Land Surveyors has performed a site inspection and reviewed the submission for consistency with the Pembroke Zoning Bylaws and the Planning Board Rules and Regulations Governing the Issuance of Site Plan Approval for the above-referenced project. The information submitted to this office and reviewed is as follows:

APPLICANT/OWNER Weathervane At Pembroke Country Club, LLC

190 Old Derby Street, Suite 311

Hingham, MA 02043

SITE PLANS: Site Plan Application

Age Qualified Village – Pembroke Country Club Dwelley Street, Hazelwood Drive & West Elm Street

Pembroke, Massachusetts
Engineer: Crocker Design Group

Dated: August 8, 2023, Revised December 11, 2023 (73 Sheets)

DRAINAGE CALCULATIONS: Stormwater Analysis & Report

Age Qualified Village
Pembroke Country Club
Pembroke, Massachusetts
Engineer: Crocker Design Group

Dated: August 8, 2023, Revised December 12, 2023

ADDITIONAL DOCUMENTS: Application for Site Plan Approval – previously filed.

Project Summary Memorandum, dated August 8, 2023 Project Summary Memorandum, dated December 14, 2023 Architectural Plans, July 2023, Revised October 25, 2023

Landscape Submission Plans, Hawk Design, Inc.,

December 15, 2023 (10 Sheets)

Response Letter, Crocker Design Group,

Dated December 12, 2023

The site is located on the westerly side of West Elm Street and Lowell Road, southerly side of Dwelley Street and Milford Drive, and northerly side of Hazelwood Drive and Fairway Lane. The property is located within the Residential-A and Water Resource/Groundwater Protection Zoning Districts and consists of approximately 244 acres. The total upland area is approximately 191 acres. Several properties have been added through the ANR process and as consolidated the site currently consists of the Pembroke Country Club, an 18-hole golf course, associated hospitality facilities, maintenance building, two single-family homes, wetland resource areas and remaining undeveloped land. The property has been noted to have frontage on three ways – West Elm Street, Dwelley Street and Hazelwood Drive. The applicant has obtained an Order of Resource Area Delineation (ORAD) for the review and confirmation of the bordering vegetated wetlands, inland bank to a perennial stream and Riverfront area located on the property and was issued in October of 2021. A portion of the site is located within a Zone II Wellhead Protection District.

The project proposes the construction of an Age-Qualified Cluster Development for 172 dwelling units surrounding the reconfigured 18-hole golf course. The development is comprised of 162 new detached dwelling units, an 8-unit multifamily building and the renovation of two existing dwellings located at 80 West Elm Street and 54 Dwelley Street while preserving over 50% of the site as open space including the existing golf course and undeveloped areas. The project will also include a new clubhouse, maintenance building and guest suite building. The project includes the construction of an internal roadway network with the primary entrance from the existing driveway at 94 West Elm Street through the site to the Dwelley Street entrance/exit. There are two separate neighborhoods accessing from Dwelley Street and Hazelwood Drive with internal access to the site via a multi-use path. The project also includes underground utilities, stormwater management facilities and an onsite wastewater treatment facility to support the development. A proposed subdivision concept plan was developed to help determine the maximum number of dwelling units for the Age-Qualified cluster development. This plan illustrates 172 potential buildable single-family lots.

The following report summarizes our review with respect to the Zoning Bylaw Section V, 13. Age-Qualified Cluster Development Special Permit and Site Plan Review with focus on the site development infrastructure including but not limited to the roadway layout, stormwater management facilities, sewer collection system and associated infrastructure. The format of this report will follow the format and sections outlined in the Zoning Bylaw and the Planning Board Rules and Regulations Governing the Issuance of Site Plan Approval. The report does not include a review of the proposed wastewater treatment system as this will be reviewed and approved through Massachusetts DEP and the Pembroke Board of Health. Additional comments are in **bold text**.

# **ZONING BYLAWS**

### **Summary of Requested Variances**

The age qualified village (residential) use is allowed by special permit. No variances have been requested.

Please provide a description of the Guest Suite Building use. The Guest Suite building includes the pro-shop, event suites and administrative offices. How do the proposed 17-bedroom event suites support the Country Club use?

A summary of uses was provided at the December 18<sup>th</sup> Planning Board meeting and further explained in the Project Summary Memorandum prepared by Drohan Tocchio & Morgan, P.C. dated December 14, 2023.

### Section V. Special Provisions, Standards and Procedures

- 1. <u>Signs:</u> There is an entrance standing sign proposed at the West Elm Street entrance. A sign permit shall be required. Signage information regarding height, size, color, etc. is provided on the Entry Sign Detail, C-8.1. The sign detail illustrates granite stone walls on either side of the sign structure which are not shown on the Layout Plan, C-3.12. The size and location of the entrance sign should be identified on the Layout Plan. **Comment Addressed**
- 4. Off-Street Parking Access & Loading Requirements Please provide a breakdown of parking spaces for each use that is proposed on site. specifically the golf course/club house and function hall and guest suite building to ensure that the 272 parking spaces will accommodate the proposed and existing uses. Please identify the loading areas on the Site Plans. A loading area for the Clubhouse/Function Hall is shown as the driveway down to the basement. There are two retaining walls on either side of the driveway. Please verify that there is enough room for loading services. There is also a basement access door shown on the Architectural Design plans that is not shown on the site plans and would conflict with the proposed retaining wall along the basement drive. There are 280 sparking spaces shown on the plans for the Golf Course and Clubhouse uses. There are 12 additional spaces provided at the proposed meeting/mail building with 9 additional future spaces if needed. There should be at least seven (7) accessible parking spaces provided for the Golf Course/Clubhouse parking area and at least one at the Meeting/Mail Building.
- 7F. <u>Procedure:</u> The approved site plans shall be recorded with the Plymouth County Registry of Deeds within 30 days of the expiration of the appeal period. Proper recording information should be provided on the plans meeting registry requirements. **Comment Addressed**
- 13. Age-Qualified Cluster Development Special Permit:
  - 3. General Requirements, Dimensional Requirements and Development Standards:
    - E. No dwellings, accessory buildings, driveways or roadways shall be located within the 50 ft perimeter buffer, except that the Planning Board may reduce the setback to 15 ft if it is determined to be in the interest of Section V.13. There are a few locations where a driveway, roadway and cart path are located within the 50 ft perimeter buffer: The cart path from Mulligan Drive around golf course hole 8 (C-3.2); the driveway to Units 85 and 86 (C-3.5); the driveway for the Maintenance Shed and the majority of Putter's Run (C3-10). These locations should be reviewed with the Planning Board to determine if these encroachments are acceptable. A waiver has been requested for these locations.
    - F. It is noted that greater than 50% open space is being provided. Please provide the area calculation for the open space. Open Space Plan with calculations has been provided. Open space area has been identified as approximately 64.6%. Comment addressed.
    - J. The proposed dwelling footprint and driveways should be provided on the site plans. This will provide a better understanding of the site layout, grading and drainage conditions proposed. Setbacks from the condominium unit sites to the dwelling should be provided. **Comment addressed.**
    - L. An organization shall be developed to be responsible for the maintenance and repair of the internal roadway infrastructure, utilities, landscaping, snow removal

- etc. It has been indicated that an entity will be established for maintenance of the site.
- M. A deed restriction shall be recorded with each dwelling unit that at least one resident of the dwelling unit be over the age of 55. It has been indicated that a deed restriction shall be part of the condominium documents.
- 5. Conveyance of Open Land:

Please provide documentation for the ownership of the open land. It has been indicated that conveyance documents for the open space shall be provided.

# **RULES AND REGULATIONS GOVERNING SITE PLAN APPROVAL**

# **Summary of Requested Waivers**

The following waiver should be requested:

- 5.6.2 Bituminous Concrete Curbing
- Encroachment within the 50 ft buffer to 15 ft in specific locations as noted.

Should any waivers be requested, we recommend that all waivers that are granted by the Planning Board be specified on the cover sheet of the approved Site Plans.

#### Section IV. Site Plan Content

- 4.5 The Planning Board signature block and approval statements can be provided on the Cover Sheet only. Please add the registry recording information on all sheets. **Please add a signature line and date on Cover Sheet for Town Clerk.**
- 4.7 Proposed Landscape Plans have been provided. A typical home planting plan and Entrance Sketches but not planting details have been provided. Please include a tree list for the street trees, a planting plan for the Clubhouse area and additional planting details for the project. **Comment addressed.**
- The proposed utility services are shown on the plans. Some of the existing utilities are shown on the plans. **Comment addressed.**

The size and material of the existing water main to be connected to should be specified at all connection locations. All connections should indicate gate and tee configuration conforming to the Water Department specification. Please provide Water Department coordination documentation for the watermain relocation proposed along Fairway Landing to Hazelwood Drive. **Comment addressed.** 

There are a few proposed fire hydrants, but the majority of the development does not indicate fire hydrant locations. Please provide all hydrant locations for review.

Comment addressed.

There is an existing Town of Pembroke drainage easement that runs through the site from Fairway Lane to the wetland and pond at the end of Milford Drive. The easement contains a 36" closed drainage system collecting stormwater flow from Fairway Lane and discharging into the wetland resource areas associated with Rocky Run Stream to the north. This easement should be identified on the Site plans to ensure that the existing drainage system is protected and maintained. **Comment addressed.** 

It is indicated that the development shall be supported by a wastewater management facility designed and permitted through a DEP Groundwater Discharge Permit. The proposed sewer collection system has been provided on the plans.

- Gas and electric utilities are proposed. Please indicate that the existing utility pole within the Milligan Drive intersection shall be relocated. **Comment addressed.**
- 4.9 A Zoning Table is presented on the Zoning Plan, Z-1 of the plans as required. Please provide the area calculation for the open land area. Also, please note the closest perimeter setback. The open space area calculations has been added. Please provide the closest perimeter setback of 15 ft as indicated and the specific locations per waiver request.
- 4.10 Schematic Architectural plans have been provided. The Planning Board should consider if this is adequate information. No material list has been provided.
- 4.11 & 13 It is noted that there will be two garage spaces and two driveway spaces for each dwelling unit. The dwelling footprint and driveways should be added to the plan set. A 20 ft driveway setback is noted on the plans but where a sidewalk is proposed, this could create a conflict with a parked vehicle and the sidewalk. Driveways should be extended for this condition. Comment addressed.
  The Clubhouse parking area provides a total of 272 parking spaces. Please provide a breakdown of the uses that will utilize these spaces. Parking space sizing, number of spaces, locations and loading areas should be indicated on the plans. Please indicate where accessible spaces will be provided. There should be a minimum of 7 accessible parking spaces.
- 4.12 A breakdown of the building lot coverage and percentage of paved (impervious) area used for parking, loading, access within the property should be provided. It is indicated that the project will have approximately 29.3 ac total impervious area with approximately 10.9 ac being proposed building. Please provide the building coverage and total impervious coverage on the Zoning Table.
- 4.18 The total square footage and dimensions of the proposed buildings should be provided on plans. General footprints have been shown for all the buildings with approximate footprint dimensions. Comment addressed. Please add the carport overhang for the Clubhouse/Function Hall
- 4.19 We recommend the Site Plan be reviewed with the Water and Fire Departments to confirm the relocation of the watermain from Hazelwood Drive to Milford and confirm hydrant locations throughout the site. It has been indicated that the hydrant location layout has been sent to the Water and Fire Departments for review. Please provide confirmation that the layout is acceptable or if any revisions are requested please update the plan set accordingly.

The existing septic system for #54 Dwelley Street is proposed to be removed. It is assumed that this dwelling shall be connected to the new wastewater facility, but no connection is shown. Please clarify. Clarification on abandonment of the system to be removed should be provided. **Comment addressed.** 

Will there be dumpsters for refuse and recycling for the Country Club facilities? A dumpster location has been provided. It is understood that the dumpster location may change due to use needs. Comment addressed.

The erosion control barrier and construction tracking pad are shown on the plans with details. It seems there are locations for soil stockpiling and construction staging on the plans but are not labeled. Please provide labeling for these areas. Several surface stormwater basins are proposed, we would recommend noting that these basins are not to be utilized for temporary sediment traps and be protected from heavy construction traffic to avoid compromising the soil conditions. **Comment addressed.** 

4.21 A photometric plan has not been provided for the proposed development. **The Planning Board should determine if a photometric plan is necessary for this development.** 

### Section V. Requirements

- 5.1 Landscape Plans have been provided including limited information on the types of street trees, a typical home landscape plan and only schematic sketches of the Country Club area and entrance. The Planning Board should determine if this landscape information is satisfactory. Comment addressed. The sidewalk layout around the clubhouse area on the Landscape Plans conflicts with the Site Plans. Please update the Site Plans with current building footprints and sidewalk layout.
- The location of the proposed lighting is presented within the Landscape Plan set, L1.2. The lighting fixtures are proposed to be LED Lexington decorative with a pole of 14 ft height. Will there be any driveway/walkway or building lighting? Additional information on the lighting fixtures should be provided to ensure proper shielding and dark sky compliance. It is noted that the homes will be provided with typical single family home lighting. Please provide a typical home lighting layout.
- 5.3 Stormwater Management Design Calculations indicate that the overall stormwater management system will attenuate the post development stormwater flows to a level not exceeding the existing conditions. We offer the following comments regarding the drainage design and analysis:
  - We recommend that confirmatory soil testing be performed within Basin 1-B and Basin 10-B to verify soil conditions and groundwater elevations will support the design of an infiltration basin within this location. There is significant excavation proposed within basin 1-B and the adjacent golf course hole #5 of approximately 10 to 20 ft. Confirmatory soil testing prior to construction could be a condition of approval.
  - The proposed conditions stormwater model includes an existing basin 10-A but the existing conditions does not. This basin should be included in the existing conditions model. Comment addressed.
  - The existing West Elm Street driveway includes several catch basins. Will these
    catch basins be retained? It has been indicated that the West Elm Street
    driveway will be retained and if necessary, catch basin rims will be
    adjusted. Comment addressed.
  - Please confirm the existing outlet structures, pipes and inverts between the wetland ponds. The drainage models and the existing conditions information varies. Comment addressed.

- Please provide the home footprints and driveways to the plan set. This will help in understanding the site design with respect to the layout, grading and drainage.
   Comment addressed.
- Please review infiltration basin grading. Many of the infiltration basins do not provide adequate berm access around the basin. There should be at least a 15 ft wide access route including berm width to the forebay areas and outlet control structures and 10 ft minimum access around the basins. The main access to the outlet control structure should not cross the emergency spillway area. Additional spot grades would be helpful along the berm elevations. Stormwater basin grading has been updated although berm and access routes for several basins continue to need review:
  - Basin 2-A Please clarify the retaining wall at the property line and how this will be constructed. The slope of the access route looks to be very steep.
  - o Basin 2-B The berm width should be expanded one foot to 15 ft.
  - o Basin 15-A Please show access route.
  - Basin 2-D Berm width and access route should be provided.
  - Basin 2-E The access route seems too steep. Could this basin be accessed from the cart path?
  - Basin 6-A 15 ft berm width should be maintained to the forebay area and should not cross proposed swales.
  - Basin 7-A Please show access route.
  - Basin 12-A Please provide 15 ft berm along forebay area, behind Building 27.
- Please provide access routes to each basin for maintenance. Partially addressed. Refer to comment above.
- Please review the infiltration basin locations with respect to the wetland areas.
   There should be a 50 ft setback from the wetland area to the back toe of slope to the infiltration basin berm. Comment addressed.
- Please provide forebay sizing calculations. The forebay stone berms within the
  infiltration basins are proposed to be approximately 1 to 2 ft from the top of the
  basin berm. It would be recommended to lower the forebay berm within the
  basin to reduce the possibility of surcharge of the closed drainage system.
   Comment addressed.
- Please provide pretreatment unit (CDS units) water quality sizing. Comment addressed.
- Infiltration basins 2-B, C, D, E and F all overflow towards an existing 24" culvert between ponds Series L and I within the Town's existing drainage easement.
   Please provide supporting documentation that the existing 24" culvert can accommodate the stormwater conditions. It is noted that this portion of the

project is missing on both the Layout and Grading plans and should be added to the plan set. An additional culvert is proposed to accommodate the additional flow. Comment addressed.

- Most basins discharge towards the surrounding wetland areas, but infiltration basin 9-B discharges towards the abutting property's rear yard. An evaluation of this watershed should be provided to ensure that no more stormwater is being directed towards the abutting property. Also, the design may want to consider creating more of a sheet flow condition rather than a point source discharge to minimize any impacts on the abutting property. The basin outlet has been shifted to direct discharge flow towards Clubhouse Drive so to minimize flow towards the abutting property. Comment addressed.
- How is the Maintenance shed driveway pretreated prior to flowing towards the stone trench (Sportsedge) infiltration system? The maintenance shed driveway has been regraded to direct surface stormwater flow towards Weathervane Drive closed drainage system. FES-DR discharges on a slope with no outlet protection. A level spreader outlet should be considered for this outlet to maintain the sheet flow condition. The FES-DR outlet is still located on a steep slope, how would the plunge pool be graded? Will there be an inlet, outlet or inspection ports for this system? Additional information has been provided for the sportsedge design. Further design details shall be determined during construction. Comment partially addressed.
- Please provide supplemental documentation for the Sportsedge subsurface infiltration system and how surface runoff is collected and encourage to drain into the system rather than sheet flow off site. Comment addressed.
- Please provide mounding analysis for all infiltration systems that do not provide 4
  ft or greater separation from seasonal high groundwater. Comment addressed.
- Please provide emergency spillway sizing calculations. Comment addressed.
- Please provide water quality volume and rain garden sizing calculations. The rain garden detail should be updated to match the proposed grading elevations.
   The rain garden elevations were updated but the driveway elevation still needs to be updated. Partially addressed.
- There are several basins with continuous slopes surrounding the basin storage area. Will there be any fencing or other barrier to protect the surrounding homes and/or golf course. It is indicated that the Applicant is proposing to install split rail or chain link fencing along driveways or parking areas. Fencing should be indicated on the site plans. There are areas along the roadway that may require guardrail protection, specifically along Fairway Landing and Weathervane Drive (entrance area to around bend at driving range). Partially addressed.
- Where basins and or larger slopes are proposed close to driveways, parking areas or homes, guardrail or fencing protection should be provided. Refer to comment above, partially addressed.

It is general practice to design sites to comply with Massachusetts DEP Stormwater Management Regulations. The following section describes the 10 Standards for compliance with Stormwater Management Regulations and the status of the submittal relative to each standard.

# <u>Standard 1 – Untreated Stormwater</u>

Rip rap pad sizing has been provided within the Stormwater Report. The sizing information should be added to the Level Spreader/Plunge Pool. Energy Dissipater detail. It is noted that some of the apron sizing maybe larger than required for constructability purposes. **Comment addressed, This standard is met.** 

### <u>Standard 2 – Post Development Peak Discharge Rates</u>

As shown in the Drainage Report submitted by the design engineer this Standard appears to be met. We have requested some minor adjustment in the calculations but anticipate that the changes will not alter the peak rates. **Comment addressed, This standard is met.** 

#### Standard 3 – Recharge to Groundwater

As shown in the Drainage Report submitted, this standard is met.

## Standard 4 – 80% Total Suspended Solids (TSS) Removal

TSS calculations have been submitted demonstrating that a TSS removal rate of 80% is proposed. The DEP Stormwater Management Regulations requires a removal rate of 80% and **this standard has been met.** 

# Standard 5 – Higher Potential Pollutant Loads

This project is not considered a source of higher pollutant loads. This standard is not applicable.

We would note that on the Checklist for Stormwater Report Standard 5 was checked as requiring a NDPES Multi-Sector General Permit. Please verify this requirement. **Comment addressed.** 

#### Standard 6 – Protection of Critical Areas

Based on information presented on MassGIS and the Town of Pembroke GIS web page, the southwest portion of the project site is located with a Zone II Wellhead Protection Area which is considered a Critical Area. For the proposed development within this area, the stormwater facilities have been designed to treat 1.0 inches of runoff for water quality. **This standard is met.** 

#### Standard 7 – Redevelopment Projects

This project is not considered a redevelopment project although it could be considered a mix of new and redevelopment. **This standard is not applicable.** 

#### Standard 8 – Erosion/Sediment Control

Soil Erosion & Sediment Control information has been provided. Please label the temporary sedimentation basins/dewatering areas, soil stockpiling and construction staging on the plans, C-2. There is a reference for a plan C-2.2 but is not provided. Additional inlet protection for any existing catch basins along West Elm St, Dwelley St and Hazelwood Drive near the proposed entrances should be added. The project will likely be constructed in phases. Please provide a construction phasing plan including erosion and sediment controls for each phase. This standard is partially met. **The** 

Demolition & Erosion Control Plan, C2-1 has been updated to provided additional detail for erosion and sediment control during construction. Comment addressed. We would recommend a Construction Phasing Plan be provided to the Town prior to construction.

The project will require to file for a Construction General Permit (CGP) with the US EPA and implement a Stormwater Pollution Prevention Plan (SWPPP). **We recommend a copy of the CGP and SWPPP be provided to the Town prior to the start of construction**.

#### Standard 9 – Operation and Maintenance Plan

An Operation and Maintenance Plan has been provided as required. This standard is partially met.

Deep sump catch basins should be inspected on a quarterly basis to meet the TSS removal rate. The inspection frequency on the inspection checklist should be updated to 4 times per year. **Comment addressed.** 

It is noted that the sediment forebays shall be inspected monthly and cleaned quarterly but the checklist includes the forebay with the infiltration basin maintenance twice per year. **Comment addressed.** 

The Stone infiltration system manufacturers' maintenance guidelines should be included in the O&M plan. **Comment addressed.** 

Please provide maintenance for the rain garden in the O&M plan. **Comment addressed**.

### Standard 10 – Illicit Discharges

An "Illicit Discharge Compliance Statement" meeting the requirements specified in the Stormwater Management Regulations has been submitted but not signed. This standard is partially met. **Comment addressed.** 

- 5.4 Parking and Loading Please identify loading areas for the Country Club facilities. Loading area for the Country Club has been identified as the driveway sloped toward the basement of the Clubhouse/Function Hall with limited space. This loading area should be further evaluated for adequate access and use.
- 5.6 Cape cod berm is proposed throughout the project site. A waiver should be requested to allow bituminous concrete curbing. **A waiver has been requested.**

The existing utility pole, UP29 along Dwelley Street is located within the proposed Mulligan Drive entrance and an existing utility pole to the north of the West Elm Street entrance conflicts with the proposed driveway curbing. Please confirm that these utility poles shall be relocated. **Driveway entrance curbing has been adjusted to avoid conflict with the utility poles.** Comment addressed.

Please provide documentation that the Water Department has reviewed the proposed water distribution system. It is recommended that the analysis performed by Environmental Partners on behalf of the Water Department is provided and any plan revisions necessary are incorporated into the site plans.

# **ADDITIONAL COMMENTS**

- 1. It was previously stated that the internal access drive shall be controlled by a gate system that allows residents and visitors to access the residential portion of the development and the Applicant shall coordinate with the Town Fire and Police departments for a lock box or key. Also, the multi-use path between the pocket neighborhoods shall serve as emergency access connections with fire gates. Please provide information on the location and details for these gated controls. Gate locations are shown on the plans. It is recommended a condition be required to obtain approval from the Fire and Police Department on the gate type/system prior to installation.
- 2. Please provide the easement information at the Hazelwood Drive entrance allowing the proposed driveway on the abutting property, #84 Hazelwood Drive and show on the plans. Please review the proposed curb connections on the cul-de-sac as it looks to extend across the existing driveway. Easement information has been provided on C-3.3. Curb connection at the cul-de-sac has been adjusted. Comment addressed.
- 3. Mulligan Drive intersection curb radius seems to encroach on the abutting property to the west. This intersection may need to be shifted east slightly to minimize the curb radius impact on the abutting property. The Weathervane Drive and Dwelley Street intersection looks incomplete. No curb radii are proposed, and the drive is very close to the westerly property line which may result in encroaching onto the abutting property to the west. Comment addressed.
- 4. Please provide roadway geometry including roadway stationing. Roadway Plan and Profiles should be provided. Comment addressed. Please provide datum elevation for the Weathervane Drive and Eagle Way road profiles.
- 5. The proposed sidewalk is proposed along the roadway with cape cod berm. We would recommend a vertical curb in lieu of the cape cod berm to provide some separation between the sidewalk and the traveled way or setback the sidewalk to provide a 5' wide grass strip between the sidewalk and traveled way. It is indicated that this configuration is similar to the Applicant's Weathervane development in Weymouth.
- 6. On roads that offer a sidewalk, please verify that there is enough length, approx. 20 ft of driveway to provide the proposed parking space without conflicting with the sidewalk. **Comment addressed.**
- 7. Stop signs and any other required directional signage should be provided. Crosswalks should be provided at intersections and at cart path crossings. **Comment addressed. A crosswalk detail should be provided.**
- 8. Please verify the proposed cart path location behind unit #94 as it looks to travel through the wetland area. The cart path also crosses the same wetland area closer to the Tee boxes behind unit #98 but not at the existing crossing. Will this be a new crossing? **Comment addressed.**
- 9. There is limited labeling on the Layout Plans, please provide information on the plans for proposed work such as walkways, patio, decks, retaining walls, building, driveways etc. Specifically, around the Country Club facilities. **Comment addressed.**
- 10. The Grading & Drainage plans should be reviewed for grading conflicts. There are several locations where contours tie into itself rather than existing contours, especially around the basins. The grading at the intersections with Dwelley Street and Hazelwood Drive seems to be incomplete. There is no grading proposed along the new driveway entrance at West Elm Street. **Comment addressed.**

- 11. Please review the roadway grading that encroaches onto the abutting property at 116 Dwelley Street. **Comment addressed.**
- 12. Please review the grading along the proposed cart path behind the driving range and south of Knee Knockers Lane. The grading seems to be step or uneven to provide access to vehicles and pedestrians. Also, there are several locations where the roadway grading should be reviewed for minor cleanup and blending. **Comment addressed.**
- 13. Please label slopes greater than 3:1 and verify proper finished grade conditions and provide protection such as guardrails or fencing when these slopes are near the proposed roadways or sidewalks. There are retaining walls proposed greater than 4 ft in height. Will there be fence or guardrail protection provided? Please provide notation for retaining walls that will be provided with protection on the site plans. Please provide top of wall and bottom of wall elevations for the retaining walls around the Clubhouse/Function Hall and residential building.
- 14. Please review the grading along the cart path as it enters onto Par Place. The proposed swale to the west is intended to drain across the path towards Basin 6-A. Should there be a culvert in this location? Comment addressed. Please provide additional information for the retaining wall that is proposed along this cart path.
- 15. There are several locations where the proposed cart path crosses proposed drainage swales. Please confirm whether this is acceptable or whether a cross culvert should be provided. **Comment addressed.**
- 16. Please provide further details on what will be happening to the existing parking lot. Will it be replaced in its entirety, repaired, and repaved or portions being replaced or repaired etc. It has been indicated that the parking lot will be repaired as needed depending on the extent of the wastewater leaching field improvements. Please provide a note on the Grading Plans indicating that the parking lot will be repaired as needed for the wastewater system and utility improvements.
- 17. How will the two single family homes located at #80 West Elm Street and #54 Dwelley Street be incorporated into the development? The two existing homes are proposed to be renovated and connected to the wastewater system.
- 18. The project proposes work within the 100 ft buffer to the wetland areas with a portion of Fairway Landing proposing work within the 25 ft setback to the wetland areas. The project will require permitting with and approval from the Conservation Commission. It is our understanding that a Notice of Intent application shall be submitted to the Conservation Commission.
- 19. The grassed swale detail has conflicting dimensions, please correct. Concrete sidewalk, Sign, Accessible Parking, Guardrail, and Dumpster Enclosure details etc. have been provided, please locate on the site plans. **Comment addressed.**
- 20. The outlet structure trach rack should be flipped on the basin berm cross section and the basin outlet structure details. **Comment addressed.**
- 21. Please provide a vehicle turn around path for dwelling units 85 and 86. Please provide the vehicle profile used for the vehicle turning movements. **Vehicle turn around path for dwelling units 85 and 86 has been provided but the vehicle profile used has not been provided.**Partially addressed.
- 22. The proposed driveway for dwelling unit 149 drains untreated towards the adjacent wetlands. Treatment of the driveway should be addressed. A rain garden or similar best management practice would possibly address the untreated runoff.

- 23. There are several driveways that are longer than 100 ft. such as dwelling units 146 and 147 etc. Would this driveway configuration lend itself to a turnaround area?
- 24. Please provide missing cul-de-sac radii.
- 25. Please provide a cross walk detail.
- 26. The parking aisles should be a minimum of 24 ft wide. This will only extend the parking area 4 ft. to provide adequate aisle widths.
- 27. Please provide a spot elevation at the entrance to Fairway Landing at the Hazelwood Drive cul-de-sac to clarify that the proposed road will drain towards the proposed catch basins.

We would be happy to discuss these comments with the design engineer and or the applicant at their earliest convenience. Should you have any questions or need additional information, please do not hesitate to contact this office.

Very truly yours,

MERRILL ENGINEERS AND LAND SURVEYORS

borahWKeller

Deborah W. Keller, P.E. Director of Engineering

CC:

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