# UPDATE 3-17-2021

# Site Plan Amendment – Phase 5

**Project Name:** **Beckley Farms**
**Address:** **Beckley Road (MBL 11-2-133-41)**
**Zone:** **OT-2 Zone**
**Applicant/Owner:** **Estates of Berlin, LLC**
**Proposal:** **Active Adult Community Development per BZR XI.AA.**

## PROPOSAL

The Estates of Berlin, LLC is requesting site plan amendment for modifications to the grading plan within Phase 5 of the approved 5-phase active adult community development (aka Beckley Farms) that is currently under development at (MBL 11-2-133-41) Beckley Road.

The applicant has submitted the attached enhanced narrative dated March 2, 2021 which specifically clarified the parameters of the site plan amendment application.

## UPDATE

The Town Engineer has supplied comments dated March 12, 2021.
A response from the applicant's engineer to those comments with updated plans has been received today, March 17, 2021. The response, a Steep Slope Seeding Procedure and full-size print of the Grading and Drainage Plan are distributed with this packet. The remaining sheets will be posted with the meeting materials as a new packet.
Review of the response by the Town Engineer is pending as of this writing.

March 16, 2021

Maureen Giusti, Acting Town Planner
Town of Berlin
240 Kensington Road
Berlin, Connecticut 06037

Re: Beckley Farms – Phase 5 Redesign

This letter is prepared to address the review comments from Michael S. Ahern. P.E. Public Works Director/Town Engineer dated March 12, 2021 received by our office via email.

The review comments are provided in italics font and our response are provided in bold normal font.

*These comments are provided regarding the drawing set (15 sheets in total) last revised July 2, 2020 for this project.*

1. *The retaining proposed wall and retaining mechanically wall systems stabilized and steep vegetated slope slopes on the Site and Grading Plans are not tied to the retaining wall and mechanically stabilized vegetated slope details on sheet DN-6. References to the applicable details should be added so the contractor is clear on what is specified at these locations.*

**The previously approved design included steep areas where the mechanically stabilized slopes where to be installed.**

**For ease of construction, the eastern portion of Phase 5 has been re-graded so that all of the slopes are 2H:1V. A slope seeding mixture and application requirements area attached for your review. This information will be added to the construction details for contractor reference. Also, a note and shading will be added to the Grading and Drainage Plan, GD-1 highlighting the area for the installation of the slope seed mixture. Construction details referencing the mechanically stabilized slope will be removed from the plans.**

2. *The two retaining wall systems along the east side of the property are noted to be designed by others. The wall systems along the entry road to Phase 5 (south of units 113 and 118) are also assumed to fall In this category. As all of these wall systems reach or exceed six feet in height, a design report should be submitted by a CT-licensed Professional Engineer, and relevant specifications and installation instructions included on the construction drawings. In addition to the typical calculations and installation requirements pertaining to the wall systems, the report should include recommendations for the contractor on the installation, stabilization and maximum specified slopes of the adjacent fill sections. If portions of the vegetated slopes shown on Drawing GD-1 are to be mechanically stabilized (per detail on drawing DN-6), these areas should be clearly delineated on the construction drawings and included in the design report.*

**The proposed retaining walls in Phase 5 will be designed by a CT Professional Engineer and a report containing wall specifications and installation instructions will be provided to the Town Engineer for approval prior to construction. The report will include recommendations for the contractor on the installation and stabilization and maximum specified slopes of the fill sections.**

3. *The access road to Phase and 5 (south of Units 113 and 118) should include top and bottom of wall elevations, guard rail fence types and locations, and grading at the base of the northern wall. Related to this, it appears that construction of the road and northern retaining wall will reduce the capacity of the existing detention basin. Please confirm that this reduction in storage volume is accommodated in some manner.*

**Top and bottom of wall elevations and proposed grade contours have been added to the Grading & Drainage Plan, GD-1 along the access drive to Phase 5 of the project.**

**The existing detention basins on the east and west sides of the phase 5 access drive were designed and constructed as part of the phase 2 portion of the project. Each basin contains a concrete outlet structure with outlet orifices and/or a v-notch weir and are interconnected by a 24-inch diameter HDPE drainage pipe. The westerly basin outlets to the north via a 24-inch diameter HDPE pipe which discharges to the inland wetlands. A Vortechs Gross Particle Separator exists in the drainage system prior to discharge into the eastern basin. The separator collects sediment, oils and debris from the stormwater.**

**The proposed design utilizes the existing drainage system, Vortechs separator and detention basin outlet structures. The installation of the proposed retaining wall on the west side of the access drive slightly reduces the storage capacity of the western detention basin. To offset the reduction in storage capacity (approximately 440 cubic feet), the eastern detention basin, which was proposed to be reshaped, will have the eastern end of the basin excavated deeper (approximately 1,000 cubic feet).**

**A wood guiderail had been added along the east and west side of the access drive to phase 5 in the area of the proposed retaining wall. A wood guide rail detail has been added to the construction details. A note has been added to the proposed retaining walls to install a 4-foot high vinyl spilt rail fence on the top of the wall. At the planning & zoning meeting, there was discussion from commission members about the substitution of split rail fence in lieu of chain link fence.**

4. *The proposed underground detention system east of Units 151-154 is at the top of a fill slope which exceeds 20 feet of depth in some areas. As this detention system also provided for infiltration of runoff, this is of concern due to the potential subsurface flow to impact the newly installed slope, We suggest that this also be included in the design report requested in Comment 2, above.*

**The proposed underground stormwater management area is designed to replace the previously approved excavated basin. The stormwater management area will be installed on a firmly compacted base during the construction of the vegetated slope. The stormwater management system consists of interconnected plastic chambers placed on a stone base. Within the base of the stone is a perforated underdrain pipe. The underdrain pipe collects the water contained within the stone base and allows the chamber system to empty out over time. As a measure of safety, 6 mil polyethylene has been added to the construction detail along the bottom of the stone base and along the sides to eliminate the potential for infiltration. As requested in comment number 2, the retaining wall designer will consider the potential impact of the stormwater management area.**

5. *Proposed earthwork and retaining wall construction along the eastern property line east of Units 141-146 totals approximately 450 linear feet. From a constructability perspective, performing this work up to or within a few of the property line would seem to require temporary construction easement from the adjacent property owner (which is the Town). For example, the retaining wall east of Unit 141 is shown with the face of the wall two to three feet from the property line, and is 11 feet high at one point. Construction of this wall without having contractor equipment on the adjacent property appears challenging.*

**The proposed retaining walls along the eastern portion of Phase 5 have been moved ten feet from the property line to provide additional work space for the construction of the walls. The location of the property line will be marked in the field prior to construction so that the contractor knows the limit of construction and location of the property lines.**

6. *Slopes steeper than 2H:1V are proposed in extensive fill sections along the eastern section of the site. Per other comments, if these will be mechanically stabilized, this should be delineated and noted on the drawings. If not, the slopes should be adjusted per Town regulations.*

**The previously approved design included steep areas where the mechanically stabilized slopes where to be installed.**

**For ease of construction, the eastern portion of Phase 5 has been re-graded so that all of the slopes are 2H:1V. The height of some portions of the retaining wall have been adjusted to reflect the change in site grading. A slope seeding mixture and application requirements are attached for your review. This information will be added to the construction details for contractor reference. Also, a note and shading will be added to the Grading and Drainage Plan, GD-1 highlighting the area for the installation of the slope seed mixture. Construction details referencing the mechanically stabilized slope will be removed from the plans.**

**If you have any questions, please contact our office.**

Sincerely,

*John Wagenblatt*

John Wagenblatt, PLS
Principal
LRC Engineering & Surveying, DPC

**TOWN OF BERLIN**
Public Works/Engineering Department
240 Kensington Road • Berlin, CT 06037
**Office** (860) 828-7022 • **Fax** (860) 828-7180

**MEMORANDUM**

**To:** Maureen Giusti, Acting Town Planner

**From:** Michael S. Ahern, P.E., Public Works Director/Town Engineer

**Date:** March 18, 2021 MSA

**Re:** Beckley Farms – Phase 5 Redesign

---

We have reviewed the technical information and revised drawings supplied by the Applicant on March 17, 2021, in response to our March 12, 2021 comments. We take no exception to the information provided, and offer the following for the Planning and Zoning Commission's consideration:

1. The Applicant addressed our concerns regarding steep slopes and constructability in the northeastern portion of Phase 5 by regrading the slopes to 2H:1V, and by moving the proposed retaining wall ten (10) feet inside (west of) the property boundary. This was accomplished by increasing the wall height in certain sections.
2. The Applicant's proposed addition of notes, details, and shading to the final construction drawings to identify how steep slopes will be treated is consistent with our previous comments.
3. We have no objection to the subsequent preparation and submission of the requested retaining wall design report prior to construction; as the Applicant notes, this will include the Design Engineer's evaluation of the proposed underground detention system east of Units 151 – 154.
4. The retaining wall design report should also evaluate the applicability of the following note at the bottom of the Steep Slope Seeding Procedure (on revised Sheet DN-6): "Note: Rip rap generated on site can be used in lieu of the erosion control blanket and seeded at the developer's discretion." The option of using the rip rap approach on slopes above the proposed retaining wall in the northeastern portion of the site appears to be questionable.

Please let me know if you have any questions.

cc: James Horbal, Deputy Director of Public Works