



BARRINGTON PLANNING BOARD MEETING

NEW LOCATION: EARLY CHILDHOOD LEARNING CENTER

77 RAMSDELL LANE

Barrington, NH 03825

Tuesday October 1, 2019

6:30 p.m.

ROLL CALL

Members

James Jennison, Chair
Jeff Brann, Vice Chair
Steve Diamond
Donna Massucci
Andy Knapp ex- officio
Ron Allard
Robert Pimpis

Alternate Member

Rondi Boyer

Town Planner: Marcia Gasses
Code Enforcement Officer: John Huckins
Staff: Barbara Irvine

MINUTES REVIEW AND APPROVAL

1. Approval of the September 17, 2019 meeting minutes.

Without objection the minutes of September 17, 2019 were approved as amended to lines 89 and 93.

ACTION ITEMS CONTINUED FROM September 3, 2019

2. **238-16-V-19-SR (Owner: Drew Pond, LLC)** Request by applicant for a Site Review proposal to construct two private roads each to serve 20 townhouse units off Route 9 with waivers (aka Franklin Pierce Highway) on an 18.02-acre site (Map 238, Lot 16) in the Village District. BY: Chris Berry, Berry Surveying & Engineering; 335 Second Crown Point Road; Barrington, NH 03825.

J. Jennison gave a brief description of the application.

Chris Berry from Berry Surveying & Engineering represented applicant Drew Pond, LLC. Chris explained to the Board the location of the project on Route 9 and that the plans have been reviewed by Dubois & King. Chris explained that they have been working with the ones responsible for the proposed well on site and Chris would like to go over the review from Dubois & King. Chris asked the Board to continue the case for additional time for the plans final review by Dubois & King. J. Brann expressed that he had several questions about the plans and the responses to Dubois & King.

1. We acknowledge that the applicant is requesting a waiver from Subdivision Regulations 12.2.1, Table 1, the maximum 9% road grade requirement for a private driveway. We recommend that the applicant modify the proposed site drive to provide maximum grade on Hanovarian Drive that is less than 9%.

Hanovarian Drive has been modified to a maximum grade of 9%. See Hanovarian Drive Grading Plan & Profile, sheets #15 & #16.

2. We acknowledge that the applicant is requesting a waiver from Subdivision Regulations 12.2.1, Table 1, the minimum tangent length of 100' between reverse curves. DuBois & King has no objections to this request.

No further comment required.

3. We acknowledge that the applicant is requesting a waiver from Subdivision Regulations 12.2.1 Table 1, the minimum shoulder width of 6 feet in a cut and 3 feet in a fill. The waiver request mentions snow storage as the primary driver for the shoulder width requirements in the Road Design standards. In addition to snow storage, these minimum widths assist with ensuring adequate transverse drainage on the roadway and increase the overall lifespan. We recommend that the applicant re-evaluate the design to attempt to meet the requirements of the Subdivision Regulations.

The design has been reviewed with it being determined that using a standard practice of 20' traveled surface with a 2' shoulder is appropriate for this design. Additionally the Guidelines for Geometric Design of Very Low – Volume Local Roads was consulted and Exhibit 1. Guidelines for Total Roadway Width for New Construction of Very-Low Volume Local Roads in Rural Areas is noted as recommending a traveled surface which includes shoulders of 18 feet up to 40 MPH. A low volume road is considered roads with an ADT of less than 400. Each of the proposed roads will have far less than 200 ADT. We find that the proposed cross section of 20' paved surface with 2' shoulders meets and exceeds the national standard.

J. Brann expressed if he understood this correctly that they would meet the national standards and you are asking for a waiver. J. Brann asked if these were going to remain private roads.

Chris explained that they would remain as private roads and read from his comments above. Chris explained to the Board that Dubois & King stated that they do not need the shoulder section which was 6'. Chris explained to the Board that this roadway falls under subdivision regulations, so he picked what regulations are required from this project.

J. Brann expressed after going through the plans that this project was consistent with the shoulder design, erosion control, swales, and rain gardens.

4. We acknowledge that the applicant is requesting a waiver from Subdivision Regulations 12.7, Table 2, the requirement of 2% maximum road grade within 100 feet of an intersection. Due to the regulations of NHDOT, the applicant is proposing a platform on Oldenburg Drive at the intersection with Route 9 that is 3% or less for 75', and 4% for 25'. Due to the fact that this waiver is being requested in order to meet the requirements of NHDOT, DuBois & King has no objections to this request.

No further comment required.

5. We acknowledge that the applicant is requesting a waiver from Subdivision Regulations 12.8.8(4) and 12.8.9 which require no ditches at grades above 8%, or grades 6% exceeding 250-ft developed length. We recommend that the Planning Board make the final decision on these waivers.

No further comment required.

6. We acknowledge that the applicant is requesting a waiver from Site Plan Review Regulations 4.7.7(1), which require a minimum pipe diameter of 15". The drainage report and associated hydraulic model results suggest that the 12" diameter pipes meet the required stormwater design criteria, however, we recommend that diameters are increased to 15 inches to reduce the likelihood of pipes clogging from debris and leaves.

All 12" diameters HDPE culverts on Hanovarian Drive have been replaced with 15" diameter HDPE culverts. A 12" diameter RCP under Oldenburg Drive will remain as the outlet pipe from Rain Garden #103. This is necessary because of issues with cover due to NHDOT intersection requirements.

B. Pimpis asked where the 12" diameters HDPE culverts on Hanovarian Drive were on have been replaced with 15" diameter HDPE culvert where are they on the plan and where the 12" culvert is.

J. Brann explained that they are on sheet 11 of 58 in the right-hand corner.

7. The General Notes on Page 3 of 59 do not indicate the waivers requested in accordance with Site Plan Review Regulations 3.2.10(14).

The notes on page 3 of 59 are associated with the Existing Conditions Plan. The waivers requested for the Site Plan are located on the detail Site Plans, sheets #8-10.

8. Drainage Analysis, W-2 Proposed Watershed Overview (Sheet 6 of 9), revise the soils legend table to include hydrologic soil group as shown in the table on sheet 1 of 9.

The soils legend has been revised and HSG labels have been added accordingly. See W-2 Proposed Watershed Overview, sheet #6.

9. We recommend that the rain gardens are designed to provide a minimum of 1 foot of freeboard in the 50-year storm event.

One foot of freeboard is not a required standard per the Alteration of Terrain regulations. The rain gardens were designed such that, they would treat the necessary flow, while maintaining a modest size. This request would require the Rain Gardens to be unnecessarily large. The Alteration of Terrain regulations require the 50 year event to pass without topping. The current design allows for the 100 year event to pass the pond without topping the designed berm.

J. Brann stated that he knows that the design was done by the quoted AoT regulations. J. Brann explained that they have done the 100- year event in the past but asked where they (Dubois & King) came up with the 1 foot of freeboard.

Chris explained that this comes up every time and explained that this was not a requirement anywhere in the AoT regulations. Chris explained to the Board that this was recommended in the green book published in 1987 that recommended detention ponds at that time and explained that they need to pass the 100-year event.

10. Rain Garden #101, Filtration Practice Design Worksheet: the sediment forebay volume provided is less than 25% of the calculated WQV. Please revise.
The sediment forebay for Rain Garden #101 has been revised to store more than the minimum of 25% WQV. See Rain Garden #101, sheet #17 and associated Filtration Practice Design worksheet.

11. Rain Garden #101's spillway is defined in the Hydrocad model to have width of 25.0 feet. The plans show 15 feet. Please revise these values to match.
The spillway has been reviewed and corrected in HydroCAD to match the plans. See Rain Garden #101, sheet #17.

B. Pimpis what are the designing matches.

Chris explained that the match lines need to match spillway was noted as 25.0 and the model was 15 feet.

12. Rain Garden #102's spillway is defined in the Hydrocad model to have an invert elevation of 209.50'. The plans show 210.00'. Please revise these values to match.
Both the plans and HydroCAD model have been reviewed and the emergency spillway was correctly graded at 209.50. This can be seen in the emergency spillway detail and plan view. An intermediate 209.50 contour has been added in the vicinity of the spillway to remove confusion. See Rain Garden #102, sheet #18.

B. Pimpis asked about the rain garden #102's spillway. It was defined in the HydroCAD model to have an invert elevation of 209.50' and stated that the plan still shows 210.00'.

Chris explained that if the Board noticed that the detail plans get more and more detail, and stated that the detail structures show 209.50'.

B. Pimpis stated that nothing should show 210.00'.

Chris explained that 210.00' was the top of the pot and this would show up.

13. Sheets 17-19 of 59, we recommend that note 1 on the berm detail shown on Sheets R- 101, R-102, R-103 is revised to indicate that the compacted loam material shall meet the low permeability material gradation provided.
This has been added to note #1 of the berm detail for all three plans. See Rain Garden plans, sheets #17-19.

14. Provide infiltration testing results for the test pit associated with Rain Garden #103.
Test Pit #3004B provided similar results to Test Pit #3004. The soil in the vicinity of the practice is Deerfield Loamy Sand, which has a published low Ksat of 6 in/hr from the document "Ksat Values for New Hampshire Soils". Utilizing a factor of safety of 2, the Ksat for the Rain Garden would be 3 in/hr. The provided infiltration rate of 2.79 in/hr is more conservative than the published value and is used for Rain Garden #103.
15. We were unable to determine if the design velocities of the proposed drainage system meet the requirements of Article 4.7.7, Section 2 of the Site Plan Regulations. We recommend that the Applicant include a table on Sheet 4 identifying the minimum and maximum velocities of each drainage pipe.
Pipe velocities are included in the HydroCAD model and can be found there for reference. All pipes meet the 2 FPS required at the 50 year design event.
16. Sheet 5 of 9 of the Watershed plans does not depict existing topography for the entirety of the subcatchments. Update the plan to show the existing topography. We were unable to confirm the watershed delineation.
Existing topography has been provided as part of the resubmission. See sheet #5. Additional off-site topography has been provided as part of this resubmission. See sheet #5.
17. We recommend that the Town of Barrington Fire and Rescue review the proposed vehicle fire turn around hammer heads to confirm that they meet their requirements.
This has been reviewed during a technical meeting which included the Fire Chief.

B. Pimpis asked about the technical review meeting.

Chris explained that he had a meeting with the technical staff before coming to the Planning Board to ensure that they were happy with the design.

A. Knapp asked if there was a letter from the Fire Chief.

Chris explained that he did not have a letter but he would get one.

18. The lighting plan proposed does not meet the recommended site lighting levels provided in Table 7 of Article 4.12.2 of the Site Plan Regulations. We recommend that the applicant revise the lighting design to meet the minimum recommended levels.
Lighting has been revised to be more compliant with the regulations. A waiver from the Table 7 is being requested for a reduction in uniformity ratio (a betterment) and to allow the minimum lumen at the darkest location to be 0.4 where the regulation requires 0.6

J. Brann expressed that the lighting plan was revised to be more compliant with the regulations and asked Chris to explain how this was in complaint.

Chris explained that in the lighting regulations the maximum would be over the maximum amount and the minimum would be 0.2. Chris explained that the hot spots and dark spots in the lighting plan. Chris

explained that when you take the hot spots and dark spots in a lighting plan, he explained that it's a large ratio. Chris explained that they lower the lamps to be closer to the 0.6.

J. Brann asked if he (Chris) was talking about the difference of the lighting levels.

Chris expressed that was correct.

B. Pimpis asked about the watershed plan.

Chris explained that he doesn't normally supply the watershed plan to the Board. Chris explained that the watershed plan was supplied to Dubois & King.

19. We recommend that the Applicant add a note to Sheet 7 of 59 that states the following: "If, during construction, it becomes apparent that deficiencies exist in the approved design drawings, the owner shall be required to correct the deficiencies to meet the requirements of the regulations at no expense to the Town.", in accordance with Article 3.2.10(16) of the Site Plan Regulations.

This note has been added to the Overview Site Plan as note #34. See sheet #7.

20. We recommend that the Applicant add a note to Sheets 20-22 of 59 that states the following: "If, during construction, it becomes apparent that additional erosion control measures are required to stop any erosion on the construction site due to actual site conditions, the Owner shall be required to install the necessary erosion protection at no expense to the Town.", in accordance with Article 3.2.10(17) of the Site Plan Regulations.

This note has been added to the Erosion & Sediment control plans as note #14. See sheets #20-22.

21. We recommend that the Applicant add a note to Sheet 7 of 59 that states the following: "In accordance with Town Regulations and RSA 676:13, all improvements specified on these site plans shall be constructed, completed, inspected and approved by the Town of Barrington prior to the issuance of a certificate of occupancy.", in accordance with Article 3.2.10(19) of the Site Plan Regulations.

This note has been added to the Overview Site Plan as note #35. See sheet #7.

22. The index of drawings indicated that Cross Section Sheets 49 - 51 of 59 are "pending". A portion of the cross sections provided appear to be in draft form. The cross sections could not be reviewed in full. We recommend that the Applicant revise the sections and present them at 1 inch = 5 feet (horizontal and vertical) in accordance with Article 3.1.3 of the Site Plan Regulations.

Full cross-sections for Oldenburg Drive and Hanovarian Drive have been provided at a horizontal scale of 1" = 20' and a vertical scale of 1" = 10'. Cross-sections at the requested scale are unnecessarily large and has not been requested by the Town of Barrington in past projects. A waiver to this requirement has now been requested. The requirement is essentially requiring a 1/5th 1:1 scale of the project sections.

Chris explained that you could draw a cross section at any scale you want. Chris explained the scale and how they measure to the Board. (See above in the BOLD to Dubois & King).

J. Brann asked Chris if he was suggesting that the Board change this in the regulations.

Chris expressed that there are several things that need to be changed in the regulations.

23. We recommend that guardrail is proposed at any location where slopes are proposed greater than 4:1 within the roadway clear zone.

Using the road side design guide published by AASHTO road side barrier is not warranted for slopes of 2:1 up to a vertical distance of 5 feet +/- . We are proposing 3:1 slopes with vertical drops which do not warrant road side barrier.

J. Brann stated that they recommend the guard rails slopes were great than 4:1. J. Brann read the following from above:

slopes of 2:1 up to a vertical distance of 5 feet +/- . We are proposing 3:1 slopes with vertical drops which do not warrant road side barrier.

Chris explained that this does not show up in the regulations.

J. Brann expressed that they are not proposing greater slopes.

Chris explained that they were proposing 3:1 slope.

J. Brann expressed that the slopes were greater, but the numbers are less.

Chris explained it was unit run versus unit rise.

J. Brann asked if you were going out 2' verses 4'.

Chris stated that was correct. Chris explained that if 4:1 slope were enforced, every road in Barrington would have guard rails.

24. We recommend that the applicant provide building renderings showing the front, side and rear view elevations of the proposed building and conform to the Building Design and Materials requirements in accordance with Article 3.7 of the Site Plan Regulations.

Renderings are included as part of this submission and will be sent to the Barrington Planning Board before project approval.

B. Pimpis asked about the building rendering.

Chris explained that he received them today and would supply them at the next meeting.

25. We recommend that the applicant identify the snow storage area for Phase 1 Oldenburg Drive on Sheet 8 of 59 in accordance with Article 4.15.1 of the Site Plan Regulations.

Snow storage leaders have been added to the Site Plans, see sheets #7-10.

26. Sheets 29 - 39. Septic designs for Hanovarian Drive and Oldenburg Drive units have not been included in this submittal. We recommend that the applicant provide the designs on the plans along with certification from the Town of Barrington Health Officer and the

NH DES, and provide the State subdivision approval number on the plans in accordance with Article 4.6.1 of the Site Plan Review Regulations.

Completed septic designs and construction approval numbers will be provided to the Town of Barrington before final project signature.

27. Provide community water supply design information in accordance with Article 4.5.2 of the Site Plan Review Regulations.

Well permit numbers and final water designs will be provided for final project signature. Without a flow rate from the drilled well a final water system cannot be produced.

J. Brann questioned whether there was going to be one or two wells and asked if they didn't know where they were going with that.

Chris explained that they do know where they are going. Chris explained that they know where the well was going and that they would have one well. Chris explained that they have submitted to DES for a preliminary sighting.

J. Brann asked with only one well, what was the recharge rate.

Chris stated that would be determined once they drill. Chris explained that they need to flow for 72 hours.

J. Huckins explained that it depends on the storage system. J. Huckins explained that there are multiple designs.

J. Brann asked about the note that the well system would be done by someone else.

Chris stated that was correct. Chris explained that they can not finalize the design until the well was drilled.

A. Knapp asked if there was going to be a well house.

Chris stated yes.

28. Sheets 40 to 42 of 59: It does not appear that the landscaping provided meets the minimum percentage defined in Article 4.9.7(1) of the Site Plan Regulations.

Oldenburg Drive provides approximately 8,600 Sq. Ft. of parking area and Hanovarian Drive provides approximately 9,550 Sq. Ft. of parking area. These values include the parking areas in front of each unit as well as the overflow parking areas. Using the percentages defined in Article 4.9.7(1)(a)-(c) it was determined that Oldenburg Drive requires 456 Sq. Ft. and Hanovarian Drive requires 538 Sq. Ft. of landscaped area. This is currently met for both situations, as they both provide over 600 Sq. Ft. of landscaped area. See Landscaping Plans, sheets #40-42.

29. The traffic assessment memo provided appears to meet the requirements for Short Traffic Impact Analysis. This project is proposing creation of 40 dwelling units, therefore, we feel that a Full Traffic Impact Analysis is required in accordance with Article 4.14.1 (1). We recommend that the full traffic impact analysis includes the turning movements

associated with Barrington Middle School at Hailey Drive during peak hours. Additionally, it may be prudent that the applicant evaluates the impacts to traffic if only one driveway is provided instead of two drives as currently configured.

A waiver request to this provision has now been requested of the Barrington Planning Board.

J. Brann asked that they should ask questions about the plans before going over the waivers.

J. Jennison asked if he wanted to go over plans before waivers.

J. Brann stated yes, if that was ok with the Board.

J. Brann suggested going over the erosion control plan. J. Brann asked about the maintenance of the rain garden and if these two roads would remain private. J. Brann asked about Rain Gardens 102 & 103 because they are adjacent to a public highway and the developer would maintain these with accordance with the maintenance plan. J. Brann asked about the plans to turn this over to the homeowner's association.

Chris explained that the maintenance agreement would be part of the homeowner's association agreement and recorded at the registry of deeds. Chris explained that he would have the draft documents for the next meeting.

J. Brann asked if this would be in the deeds. J. Brann explained that if the person responsible falls through than the Town can take action. J. Brann asked about performance guarantee/bonding post in two phases.

A. Knapp expressed concern if they sublet the lawn care out and destroys everything.

Chris explained that this would be in the condition of approval and surety would be posted with this in two phases. Chris explained that they would have a spreadsheet with Dubois & King with all the items.

J. Brann explained that a previous notice of decision was changed on a previous application so that it [bonding] was listed in phases. J. Brann asked about the dual line coming out onto Route 9 and who would maintain the striping.

Chris explained that they would add striping and signage.

J. Brann explained that this needs to be somewhere in the maintenance agreement as this was going to be a private road.

A. Knapp expressed that if this was just on the plan that the average homeowner would not catch this.

Chris agreed.

J. Brann asked about on Sheet 1 plan an unnamed detail shows to the left side the community well, and another dark dot shows on the left side of the property the approximate location on an undefined detail.

Chris explained that was the first project itself and the second is an artifact.

J. Brann asked about on Sheet 8 location of the cistern. He assumed it was out of the right of way and the location was approved by the Fire Chief.

Chris explained that the location has not been approved by the Fire Chief.

J. Brann asked if that would be done.

Chris explained that would be done. Because it was over 1,000' from some units, we would need to work out with Chief Walker but putting it along Route 9 it could be used for Town use also.

J. Brann asked if "Note XXX" in Note #2 of L6 on Sheet 58 referenced Note #20 on Sheet 8.

Chris expressed that would be corrected.

J. Brann asked about Sheet #9. What are the two driveway cuts and has existing driveway to be recreated.

Chris explained that was Mr. Drew's driveway and explained that they are putting in an apron to protect the pavement.

J. Brann stated that on Sheet 11 for many of the slopes you have defined the slopes and was able to find the slopes for those not defined on other sheets, but they were not consistent in showing them on the plan.

Chris explained that slope changes. Chris explained that he would define the slopes.

J. Brann asked about Sheets 14 & 15 curbing coming down the slope. On Sheet 15 there is a break in the curbing but Sheets 14 and 22 do not have a break in the curbing.

Chris explained that was a text covering the curb on Sheet 15; there is no break.

J. Brann stated he understood; he couldn't see it [text] on his plan.

R. Allard stated that in the letter there was a typo on #4.

J. Brann explained that on Sheet 21 in the upper right diagram there was temporary rip rap every 15'.

J. Brann read from Note 8 on Sheet 21 the following:

Upon final completion and 85% stabilization, the drainage system is to be cleaned of all debris. Sediment control practices removed and disposed of properly, and annual maintenance performed on all drainage practices.

J. Brann asked if that was when the temporary rip rap would be removed.

Chris stated yes.

A. Knapp asked if there was a grass height.

Chris explained that grass doesn't mean stabilization.

J. Brann asked about on Sheet 40 on the lower leach field; not far away they are going to put in an American elm. J. Brann expressed that was a large tree to be that close to a leach field.

Chris explained that it would be 20' away and they were not concerned.

Requested Waivers:

1. 12.2.1 Table one of the Subdivision Regulations, minimum tangent of 100' between reverse curves.

Proposed roadway with no tangent between reverse curves.

Hanovarian Drive will be constructed off N.H. Route 9 over the existing driveway that provides access to lots 15 & 16-1. An existing access easement is in place between these two lots. This easement will allow the applicant to construct Hanovarian Drive in the proposed location.

Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations. The purpose and intent of the minimum tangent length between reverse curves is to allow for safe vehicular traffic. Although the proposed roadway does not meet the minimum of 100' between reverse curves, safety will not be impeded due to the low traffic volume of the road.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant. Strict conformity to the regulations will pose an unnecessary hardship on the applicant. The proposed road location was designed around an existing wetland and proposed well. Given the close proximity of the wetland and the required location for the well, the road had to be designed as shown. Adding a 100' tangent to Hanovarian Drive would require the applicant to move the well and cause the proposed disturbance to encroach closer to the existing wetlands.

A motion was made by J. Brann and seconded by B.Pimpis to grant the waiver to 12.2.1 100' between reverse curves as not granting the waiver would pose an unnecessary hardship to the applicant and granting the waiver would not be contrary to the spirit and intent of the regulations. The motion carried unanimously.

2. 12.2.1 Table 1 of the Subdivision Regulations, shoulder width of 6 feet in a cut and 3 feet in fill.

Proposed roadway with shoulders of 2 feet throughout.

The applicant is proposing to construct 2, 20 feet wide private roadways, each with a 4' at grade sidewalk. The proposed roadways will have a 2 foot gravel shoulder throughout. The roads were designed so that they would conform to the natural topography of the site in order to limit the disturbance generated by the construction of the roads.

Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The purpose and intent of the minimum shoulder width in fill slopes is to provide vehicles with ample room to pull off the road if necessary and provide snow storage in cut slopes. The majority of the road construction will be in fill sections, which will eliminate the need for snow storage on the shoulders because the plows can push the snow off the road and down the fill slope. Given the low proposed traffic volume generated from each road, vehicles will have ample room to pull over, if needed.

The purpose and intent of the minimum shoulder width in cut slopes is to provide vehicles with ample room to pull off the road if necessary and provide snow storage in cut slopes. There is a combined 450 feet of roadway in a cut section but the cut generated is minor and is on average +/- 1.5'. Given the relatively low cut, 2' shoulders were deemed sufficient for snow storage. Given the low proposed traffic

volume generated from each road, vehicles will have ample room to pull over. In light of the AASHTO Low Volume Design Guide Exhibit 1 stating that 18' including shoulders is sufficient we feel that the current design of 20' paved section with 2' shoulders meets and exceeds the safety requirements.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant

Strict conformity to these regulations would pose an unnecessary hardship on the applicant. The roadway is designed so that there will be the least amount of disturbance possible for the road construction. Requiring the applicant to maintain the minimum shoulder widths would increase the road footprint and greatly increase the overall disturbance generated from the road. In addition, the increased shoulder width will only serve to increase speeds on what is currently design to be a low speed, low volume road.

A motion was made by A. Knapp and seconded by J. Brann to grant the waiver to 12.2.1 Table 1 shoulder width of 6 feet in a cut and 3 feet in fill as not granting the waiver would pose an unnecessary hardship to the applicant and granting the waiver would not be contrary to the spirit and intent of the regulations. The motion carried unanimously.

3. 12.7 Table 2, maximum of 2% of a road grade within 100 feet of an intersection.

Proposed roadway with a platform of 3% or less for 75' and 4% for 25' at Oldenburg Drive.

N.H. Route 9 is a NHDOT controlled roadway. The proposed entrance design was done in order to conform to the regulations of NHDOT which require a road grade of -4% off a DOT controlled roadway, or a continuation of the existing shoulder grade. The proposed roadway was designed at a -3% road grade in order to match the grade coming off the existing shoulder. From there the road will transition into a positive road grade that will not exceed 4% within 100' of the intersection. This proposed sag curve will allow vehicles to come to a natural stop as they approach N.H. Route 9.

Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The intent of the maximum road grade of 2% within an intersection is to allow for the safe approach of vehicles to an intersections. The proposed intersection design will only exceed the maximum road grade by 1% for 75' and 2% for 25'. Although the proposed roadway grade is more than the maximum required, it will have no adverse effect on vehicular safety.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity to these regulations would pose an unnecessary hardship on the applicant and Town. The intersection of proposed Oldenburg Drive and N.H. Route 9 was designed so that it would conform to the NHDOT regulations. Furthermore, the steeper road grade limits the amount of disturbance generated from the proposed road.

A motion was made by J. Brann and seconded by A. Knapp to grant the waiver to 12.7 Table 2, maximum of 2% of a road grade within 100' of an intersection as not granting the waiver would pose an unnecessary hardship to the applicant and granting the waiver would not be contrary to the spirit and intent of the regulations. The motion carried unanimously.

4. 12.8.8(4) & 12.8.9, No ditches at grades above 8%, which require curbing, culverts and basins, or at grades above 6% when the developed length exceeds 250 feet.

Proposed roadway without curbing above 8% grade and ditches with a 9.00% grade for a 100 feet. As discussed with the Planning Board curbing has been added to the steepest section of

The applicant is proposing to construct two private roadways off N.H. Route 9, Oldenburg Drive and Hanovarian Drive. Hanovarian Drive was designed so that it would generate the least amount of disturbance as possible. Given the existing topography of the site, there is a portion of Hanovarian Drive that has a 9.25% road grade with an adjacent swale for less than +/- 250 feet.

Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The intent of regulation 12.8.8 & 12.8.9 is to limit the use of swales along steep slopes in order to achieve stabilization and prevent washouts.

The proposed swales adjacent to Hanovarian Drive will be rip-rap lined so that they are protected from erosion. Furthermore, the adjacent uphill slopes of the swale will lined with a form of rolled erosion control blanket, in order to stabilize the uphill slopes. In addition, after a discussion with the Planning Board an area of curbing has been added to the steepest section of Hanovarian Drive with the largest fill slope to for a better design and construction standard.

The proposed road design now includes curbing along the steep portion of the road with the remainder of the design allowing for open drainage design. This was done as part of the drainage design so that the runoff generated from the road will sheet off into the adjacent swales. These swales will be constructed with bio-media and stone as part of their drainage design, so that the runoff can be treated as it is directed to adjacent rain gardens and treatment cells.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity to these regulations would pose an unnecessary hardship on the applicant and Town. Due to the existing topography and layout of the road, the design options were limited. Requiring the applicant to install curbing and remove the section of the swale in the 9% road, would drastically change the proposed drainage design and will require larger treatment cells and generate more disturbance.

A motion was made by A. Knapp and seconded by J. Brann to grant the waiver to 12.8.8(4) & 12.8.9 as not granting the waiver would pose an unnecessary hardship to the applicant and granting the waiver would not be contrary to the spirit and intent of the regulations. The motion carried unanimously.

5. 4.7.7 (1) minimum pipe diameter of 15” in any drain system.

Proposed drain system with 12” culverts. (One Location)

After a discussion with the Planning Board, this waiver has now been revised to only include one location, at the entrance to Oldenburg Drive. This is required due to cover issues over the pipe at that location. A reinforced concrete 12” pipe is proposed at this location.

Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The intent of regulation 4.7.7(1) with regard to pipe size is to ensure that the proposed drainage system can accommodate the runoff generated from the proposed development. As part of the site design an

intensive drainage analysis was conducted in order to determine the runoff that will be generated from the proposed development. The proposed drainage system was sized so that it would be able to contain the runoff generated from the site. Based on this drainage analysis it was determined that the 12" culvert would be more than sufficient to contain the runoff from the required storm events.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity to these regulations would pose an unnecessary hardship on the applicant. Requiring the applicant to increase the pipe size to 15" would require the applicant to change the slope into the driveway which would make the design non-compliant with NHDOT standards.

A motion was made by R. Boyer and seconded by B. Pimpis to grant the waiver to 4.7.7 (1) minimum pipe diameter of 15" in any drain system as not granting the waiver would pose an unnecessary hardship to the applicant and granting the waiver would not be contrary to the spirit and intent of the regulations. The motion carried unanimously.

6. 4.12.2 Lighting Requirements

Allow a uniformity ratio less than 4:1

Allow a minimum foot candle to be 0.4 where 0.6 is required.

Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The intent of the uniformity ratio is to be provide for even light between the average lumen calculation and the minimum lumen calculation. The lower the uniformity ratio is, the better uniformed the light is. The design provides for less light with a better uniformity ratio within the parking areas. This is directly related to the minimum foot candle. The regulations prescribe a minimum of 0.6 and the design proposes 0.4. 0.2 is typically considered in other communities. The intent of the regulations is to have an even amount of low lit areas. This design provides for that.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

The hardship in this case is that the applicant would be required to choose lamps that through more light with larger lamp heights. This is contrary to the spirit and intent of the ordinance, since the current design provides for a safe level of light.

A motion was made by B. Pimpis and seconded by J. Brann to grant the waiver to 4.12.2 Lighting Requirements as not granting the waiver would pose an unnecessary hardship to the applicant and granting the waiver would not be contrary to the spirit and intent of the regulations. The motion carried unanimously.

7. 3.1.3 Cross Sections

Allow Cross Section to be a horizontal scale 1" = 20' and a vertical scale of 1" = 10'

Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The purpose and intent of the regulation is to provide a construction document that is readable to the contractor as well as others needed to understand its meaning. The requirement of a 1:1 ratio at 5 scale would require 2 or three sections per page. This written requirement may be miss applied by the author.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity to the regulations would require an additional 14 pages of cross sections, making for a prolific waste of paper.

A motion was made by R. Allard and seconded by J. Brann to grant the waiver to 3.1.3 Cross Sections as not granting the waiver would pose an unnecessary hardship to the applicant and granting the waiver would not be contrary to the spirit and intent of the regulations. The motion carried unanimously.

8. 4.14.1 (1)

The threshold for a Full Traffic Impact analysis. The requirement requires a full traffic impact analysis for any project that creates more than 20 or more new multi-family units.

Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

This requirement is not in-line with the NHDOT standard of requiring a full impact analysis based on 1,000 ADT and 100 peak hour trips at any one peak hour. (Noted in Article 4.14.1 (2) The purpose and intent of the regulation is to allow the board an understanding of the impact a project will have on the surrounding network. From a traffic standpoint, this site will operate as two separate sites given the two driveway entrances. This means the turning movements into and out of each driveway will be even lower than if the 40 units were combined. Based on the NHDOT Ms2 during the AM Peak hour 72.7% of the corridor traffic is heading easterly with 27.3% heading westerly. Based on the TEPP LLC generation this means that during the AM peak hour there will be 5.5 trips exiting the site which will be required to make a left turn. During heavy seasonal traffic, these residents will need to wait within the driveway for an opportunity to turn. There is ample queuing availability within each driveway. The afternoon traffic coming to the site will be off peak from the traffic generated by the school, and will be directionally based on the corridor. These turning movements will be primarily right turning into the sites with no restrictions.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity would require the applicant to engage TEPP LLC to conduct a full traffic analysis that will likely not provide the board with any additional information other than which is provided within the short form.

A. Knapp asked about the traffic counts only being done twice a day in the morning and the afternoon.

Chris explained that afternoon was the off peak of the school and that morning was the concern.

A. Knapp agreed.

Chris explained the pattern of the traffic leaving.

J. Brann expressed that he looked at the traffic report, sight distance, and speed limit. J. Brann explained that it seems like the numbers are below those to require a full traffic report.

J. Huckins stated that the right thing to do would be to grant the waiver because of what the impact would be.

R. Boyer asked what the formula was used to figure how many cars per unit.

Chris explained that every 2 years they publish a manual country wide. Chris explained that a single family has a different rating than single family attached housing. Chris explained that a single family had 9.8 trips a day and an attached single family has less.

R. Boyer asked if they have different types of families living in these.

Chris explained that they have different types of families. Chris explained that the type of people are ones that are not interested in buying single family homes.

A. Knapp expressed that it was less about the cars and study, as his concern is if someone was taking a left hand turn out of there and someone from the school was taking a left-hand turn. A. Knapp expressed his concern on the short sight distance.

Chris explained that there was already an entrance and a day care there, and a single-family home.

J. Jennison asked if they performed a study.

Chris stated more left hand traffic turned at an intersection.

A. Knapp expressed his concern of a short distance for a turning lane.

A motion was made by J. Brann and seconded by B. Pimpis to grant the waiver to 4.14.1 (1) as not granting the waiver would pose an unnecessary hardship to the applicant and granting the waiver would not be contrary to the spirit and intent of the regulations. The motion carried unanimously.

A motion was made by A. Knapp and seconded by J. Brann to continue the application until October 15, 2019. The motion carried unanimously.

ACTION ITEMS FOR EXTENSION

3. [251-64-GR/SDAO-17-SRExt \(Steven & Pamela Lenzi Trs Rev Tr\)](#) Request by applicant for a one-year extension to allow the applicant to construct the previously approved facility; deadline set forth in the site plan approval on the case below:

251-64-GR/SDAO-17-SR/Waiver (Owners: Steven F. and Pamela M. Lenzi Revocable Trust)

Request by applicant for Site Review to construct a 150' monopole tower that will structurally accommodate at least 4 wireless broadband telecommunications carriers and associated antennas, electronic equipment and cabling; and fence in the base of the tower to accommodate ground based telecommunications equipment on Bumford Road and a waiver from 3.3. (3) existing topography. (Map 251, Lot 64) in the General Residential (GR) and Stratified Drift Aquifer Overlay Zoning District. By: Varsity Wireless Investors, LLC; 290 Congress Street, 7th Floor; Boston, Ma 02210.

J. Jennison gave a brief description of the application.

Earl Duval from Duval & Klasnick, LLC applicant Varsity Wireless Investors, LLC was there for a one-year extension to construct the previously approved plan. Earl explained that they did go before the Zoning Board of Adjustment and did receive a 2-year extension.

J. Brann asked the applicant if anything has changed.

Earl explained that there have been no changes.

A motion was made by B. Pimpis and seconded by J. Brann to accept the application as complete. The motion carried unanimously.

J. Jennison opened public comment.

J. Jennison explained to the Board that there was a letter received by a neighbor that had health concerns for schools and neighbors (copy of letter in Town folder).

J. Jennison explained to the Board that there have been no changes in zoning or site review since this application.

R. Boyer asked if this was for a one-year extension.

J. Huckins explained that by the Towns regulations that they can only give one year.

A motion was made by J. Brann and seconded by R. Allard to grant the one-year extension.

Vote 7/0

Roll Call:

B. Pimpis_ Yay

J. Brann_ Yay

A. Knapp_ Yay

R. Allard_ Yay

J. Jennison_ Yay

D. Massucci_ Yay

R. Boyer_ Yay

ACTION ITEMS

4. **220-47-RC-19-SR (Mill Pond Investors of Barrington, LLC)** Request by applicant for a Site Review proposal to add an additional 3,651 s.f. firing range to existing structure for commercial recreation at 55 Calef Highway on a 2.83-acre site (Map 220, Lot 47) in the Regional Commercial Zoning District. BY: Ryan Greenhalgh, Groen Construction; 120 Washington Street, Suite 302; Rochester, NH 03839.

J. Jennison gave a brief description on the application.

Buddy Hackett and Devon St. Cyr are owner/partners of Renaissance Firearms located at 55 Calef Highway. Buddy explained that their proposal was to build an indoor shooting range at 55 Calef Highway. Buddy explained that this was an existing building and they were to add an addition to the side of the building. Buddy read Ren Arms history and mission from Page 2 of a supplied document (document in file at Town Hall). Buddy explained to the Board that this past summer they hosted Friday Night Drive-ins (quasi car Show festival event) where the donations went to Barrington Food Pantry,

Strafford County Center for the Homeless, End 68 Hours of Hunger and BACA (Bikers Against Child Abuse). Buddy explained that they would like to build an 8-lane indoor firing range that would be available for shooting sports, firearms instruction and safety training, league shooting, and police training. Buddy explained that they would expand in the second floor of the building for firearms training and safety classes. Buddy explained that they would provide for clean and safe gun handling and operation. Buddy explained that the plan to accomplish a clean and well lit, safe, welcoming, inclusive, and environmentally friendly place. Buddy explained the materials used for the building and location with the outside of the structure with no impact.

Devon explained to the Board that most ranges don't have bullet proof ceiling and he continued to explain the structure of the building.

B. Pimpis asked if it ricochets.

Devon stated no.

A. Knapp asked what if someone falls back and shoots up that creates a ricochet.

Devon explained that there would be 2 ½" of foam that helps with the ricochet. Devon explained that every lane would have cameras.

J. Jennison asked about the lead free in the facility.

Devon explained not really was the truth. Devon explained that they are using a professional EPA certified HVAC filtration system, they would remove 99.97% if all contaminants. Devon explained that the facility would be climate controlled so that people can shoot in the winter and summer.

A. Knapp asked about the recirculation system. You are going to have a time so when you build you HVAC system, the typical building has 5/1 turnover time and plan for double filtration. There needs to be proper cover and pm plan for it.

Devon explained that they would have monitors come in and service them, and with the lead the filters would be taken off site.

Buddy explained that all employees would have lead testing every quarter.

Devon explained the noise abatement. Devon explained that the building would be using ICF (Insulated Concrete Foundation) and would be fully lined with Pepp Foam for noise. (ref: Town file for additional outline of the noise abatement.)

J. Jennison asked if there was going to be a caliber restriction in the range.

Devon stated yes; 50 caliber or below.

R. Boyer asked why they had the picture in their presentation on page 4.

Devon explained that the photo was there to explain that was not who they are. Devon explained the photo was putting a bad face on firearms. Devon explained that other places cost a lot more for shooting inside.

R. Boyer asked what was not currently available.

Devon explained that affordable inside shooting range.

Jennison explained that safety and training is what is lacking. J. Jennison expressed that it was wonderful that they are taking this on.

Buddy explained to the Board that he also has a son in school in Barrington and safety was very important to him for everyone.

Devon explained that traffic outside NHDOT has at 80dB. Devon explained that the range would be quieter than the daily traffic noise and he believed that the Town limit was 75dB.

J. Jennison expressed that he believed that 75 dB being 3' away was the industry standard.

A. Knapp explained that 80dB was when it starts to affect your hearing.

R. Allard stated that OSHA was 90dB.

J. Brann asked about outside the building. You took measurements on the building surface with various weapons with the highest reading outside being 81dB. However, the distance readings were taken with a lower caliber weapon that produced only 60 dB on the surface.

Buddy explained that the surface test outside was to use the loudest weapon that you can, but the distance reading weapon choice was not theirs but the ranges.

A. Knapp expressed to keep in mind that in addition to testing with the loudest weapon, keep in mind multiple weapons firing at the same time.

Devon explained that they have done this from 5 to 6 distances and keep in mind that this would be a completely enclosed building. Devon explained that they would open at 10 a.m. anything; before that would be for Law Enforcement.

J. Jennison asked as far as Site Review, do you meet parking space requirements as well as handicap parking, and has the Fire Chief weighed in as far as access.

Devon explained that a tenant was leaving the building so that would eliminate the paring issue.

J. Huckins informed the Board that recommendations were sent to Fire and Police Chief with no response back.

J. Brann asked if the package that they received was this all the materials.

J. Huckins explained to the Board that there was no drainage or change to the lot.

J. Brann expressed that all lots need to be marked on the plan. J. Brann explained that the monuments were not marked on the plan.

Devon stated if there was anything missing on the drawings, they would be happy to add.

The Board had a lengthy discussion and could not come to a decision as a Board to vote for the application to be complete.

A motion was made by R. Allard and seconded by B. Pimpis to continue the application until November 5, 2019. The motion carried unanimously.

REPORTS FROM OTHER COMMITTEES
UNFINISHED BUSINESS

OTHER BUSINESS THAT MAY PROPERLY COME BEFORE THE BOARD

5. Discussion with Board on when they want Solar discussed.

The Board discussed leaving on the agenda until time was allow review.

6. Facilities and Utilities Chapter of the Master Plan.

Kyle from SCRP sent over the minutes and suggested setting up another meeting in October if possible. B. Irvine would contact Kyle to see what dates are available and if the community could meet.

SETTING OF DATE, TIME AND PLACE OF NEXT MEETING AND ADJOURNMENT

The next meeting will be on October 15, 2019 at 6:30 p.m. at the ECLC 77 Ramsdell Lane.

Without objection the meeting was adjourned at 9:50 p.m.