

**Carlisle Conservation Commission**  
**May 25, 2023**  
**Minutes**

7:05 p.m. Chair Alex Parra called the remote meeting to order. For this meeting, the Conservation Commission convened via Zoom web conference as posted on the town's web site identifying how the public may join.

**Members Present:** Alex Parra (Chair), Dan Wells (Vice Chair), Brian Murphy, Helen Young, George Shepard

**Conservation Staff:** Sylvia Willard, Conservation Administrator; Mary Hopkins, Conservation Assistant

**New and Pending Business/Administrative Reports:**

**Signatory Authorization:** On the motion by Young and seconded by Murphy, it was VOTED to authorize the Administrator to sign documents discussed at this meeting on behalf of the Commission. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**Approval of Bills:** On the motion by Murphy and seconded by Young, it was VOTED to approve the bills as presented. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**Cranberry Bog Dam Repair – Peer Review:** Parra said the Commission will be required to vote to approve the funding if they are going to consider a potential redesign for the dam repair. The alternatives before the Commission include proceeding with the design as is and issuing an OOC or modifying the design, which will then require another review by the Office of Dam Safety (ODS), delaying the project by at least a couple of months.

Willard reported having received a quote from Stamski and McNary in the amount of \$2,500 for a review and potential rework of the design. Murphy expressed concerns with the design provided by Stamski and McNary, including the fact that he does not believe a full risk assessment was done. He suggested the Commission consider engaging with another engineering firm. Wells offered the additional suggestion to obtain a second opinion based on Stamski and McNary's design vs a full redesign if they are not satisfied with the current design. Parra noted this project started out with the recommendations of requirements of the ODS as set forth in their 2015 report, and Stamski and McNary were asked to take those recommendations and produce a plan which implemented those recommendations, which he said he believes they have done. Additionally, Parra is satisfied with the explanation for how they arrived at the design and particularly the overflow from an engineering perspective. Murphy again suggested the Commission consider hiring an outside engineer to review the current design. Wells pointed out that a peer reviewer could not only review the plan and provide their evaluation but could also review the output from the modelling software. Willard suggested that if the Commission wanted to engage a peer reviewer, they could consider hiring Weston & Sampson, the firm that provided previous dam inspections for both the Curve Street and the Cranberry Bog dams.

Present was Chris Spinney of Fiske Street, who said he is not convinced that the Chelmsford riser would not have an effect on the flow. He said Stamski and McNary seem to indicate all of the flow goes to Dam #1; however, his understanding is that Mark Duffy obtained most of his water from Fiske Street, fueling questions about the flow calculations for the watershed presented by Stamski and McNary

Following discussion, the Commission voted as follows: On the motion by Murphy and seconded by Young, it was VOTED to obtain a peer review of the design and the contributing basin from Weston and Sampson to determine whether there may be an alternative design. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**Minutes:** On the motion by Murphy and seconded by Young, it was VOTED to approve the 3/9/2023, 3/30/2023 and 4/13/2023 minutes as submitted. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye. Murphy stated for the record that he had reviewed the meeting recording for the 4/13/2023 meeting.

**Upcoming Meeting Schedule:** July 20; August 10 and 31; September 14

**Town Hall Parking Lot Erosion:** Willard is working with DPW Director James Hall to determine a means of addressing erosion issues resulting from snowplowing.

**7:15 p.m. (DEP 125-1110) Notice of Intent, Continued hearing**

**Applicant: Derek Zanga**

**Project Location: Off South Street: Map 5, Parcel 9, Lot A; Project Description: Construction of a paved driveway and replacement of an existing stone culvert that crosses an intermittent stream with work in the 100-foot Buffer Zone of a Bordering Vegetated Wetland.**

On the motion by Young and seconded by Wells, it was VOTED to continue the hearing at the applicant's request to 6/22/2023 at 7:15 p.m. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**7:17 p.m. (DEP 125-1147) Notice of Intent, Continued Hearing**

**Applicant: Town of Carlisle, MA Conservation Commission**

**Location: 750 Curve Street (Cranberry Bog Conservation Land); Project Description: Work to stabilize a regulated dam, Cranberry Bog Dam #1**

Dan Carr of Stamski and McNary shared a revised plan based on additional data illustrating the distance between the floor of the overflow weir and the top of the existing boards in the cranberry flumes. The top of the board in the western flume is at 190.45, which is the same elevation as the water elevation in this location; the water level and the top of the board in the eastern flashboard are at elevation 190.7 and the water elevation is also at 190.7. Carr explained these are all lower than the proposed bottom of the emergency overflow weir, which is proposed at 190.90, therefore this design would not drain the upstream pond and they are confident the water levels will not be lowered by the original design. Carr reported they also ran calculations for a 6-inch-deep weir as opposed to the current design, as requested at the previous hearing. The results showed the weir would have to be approximately 60 feet wide to handle the anticipated flow. Also, based on their additional modelling investigations, they do not believe the water control structures in Chelmsford would have any meaningful impact on the design.

Murphy expressed his disappointment with the lack of communication after several attempts he made to contact Mr. Carr to discuss issues raised at the previous hearing and to address additional concerns regarding the proposed design. Mr. Carr apologized for the disconnect and explained he had initially been informed by Willard that no further work could be done until additional funding was approved by the Commission. Shortly thereafter, when he was out of the office, Stamski and McNary principal George Dimakarakos authorized the surveyors to obtain the additional information.

Murphy said one of his concerns is how the different complex areas upstream may affect the 100-year storm flow. He said that as he looks at the revised plan, there is a .2-foot freeboard between the existing water level and the level for an overflow. He said that although Mr. Carr may not be aware, the Cranberry Bog Working Group has held numerous discussions about potentially raising the water levels by four inches in both dams and on the Fiske Street side but cannot do so at this time because the dam is too porous. Mr. Carr pointed out that they do not want the water level getting close to the top of the dam to begin with, so there should be a certain amount of freeboard from the water level to the top of the cart path.

Murphy said he had also wanted to discuss with Mr. Carr the potential for relocating the overflow to avoid impacting visitor access and to also avoid resource area impacts in the case of an overflow. Mr. Carr explained the reason the overflow is proposed in this location is because it is the existing low spot in the cart path. Mr. Carr then shared an illustration of the peak flow statistics report for the various flood levels, which illustrates the cubic feet per second for the 100-, 50-, and 25-year storm events. He explained this is based not only on drainage size

but also on expected surface type within the watershed area. This information was then entered into a program that provides expected headwater elevations, expected flow rate through the pipes, and expected overtopping.

Parra requested confirmation that, as he understood it, the calculations are what led to the determination as to what the elevation of the overflow should be. Mr. Carr confirmed it is a balance between the depth and width of the watershed. Parra said that if the current level of the pond that is held back by the dam is not natural, rather it is determined by the elevation of the boards at the flume closest to the overflow, he would presume the calculations of the 100-year storm event do not take into account the fact that water is being held back by the existing boards. Mr. Carr confirmed they do not take into account the elevation of the flashboards because eventually it will reach an equilibrium and the flow rate will remain static.

Parra asked if the calculations would change if the dam were raised by two feet along the entire length of the dam. Carr said that if the pipes remained the same, this would change how much water overtops the dam vs travels through the pipes, which would all be relative to the overflow weir, but it would not change the expected flow rate. Parra asked whether, based upon the calculations and the watershed and in order to meet the design requirements for the 100-year storm, the choice is either increase the entire level of the dam or construct the weir as it is located. Carr said the weir could be more shallow and wider and in a different location as long as the rest of the cart path was at a higher elevation. Murphy asked if the alternative of installing a 6-inch oval concrete pipe vs an overflow was a possibility. Carr said he would need to run the numbers, but he suspects the pipe would have to be extremely large.

Murphy summarized his additional comments and concerns: the project as proposed would require construction of a bridge, which would require maintenance into perpetuity; the proposed rip rap does not address the travel route for equestrian use; the alternative of locating the weir over to the right would remove it from the major flow of traffic and the water that flowed through it would travel downhill vs into the resource area; he would like to receive a profile of the overflow. Wells said as currently designed, the water is going to naturally flow in a straight-line distance, and on the south side of that area the water is going to flow into a densely vegetated marsh/shrub swamp, which can handle storm flow.

With no further comments, Parra asked that the hearing be continued due to the need to address other scheduled agenda items. He said the Commission would be discussing later in the meeting whether to allocate additional funds for the design of the project. On the motion by Murphy and seconded by Wells, it was VOTED to continue the hearing to 6/8/2023 at 7:15 p.m. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

#### **7:54 p.m.(DEP 125-1159) Notice of Intent**

**Applicant: Bryan Duby, Cadyco Revocable Trust**

**Project Location: 0 Bingham Road; Project Description: Clearing a 10-foot-wide path of vegetation within the 100-foot Buffer Zone, north of the onsite Bordering Vegetated Wetland in the vicinity of GC c 13 and GC B34 flags for soil testing. Metal plates to be laid over the BVW extending 10-feet from either side.**

Representing the applicant was Robert Melvin of Stamski and McNary. The location for the metal plates is flagged as is the proposed equipment route to the area to be tested. Willard and Murphy had conducted a site visit following the previous hearing. Murphy said he found the project site to be adequately flagged and the access pathway sited in a suitable location. Parra asked Mr. Melvin if there was a need for stabilization following the testing. Mr. Melvin said they do not believe stabilization will be necessary, as there would be minimal disturbance following the removal of the plates.

On the motion by Murphy and seconded by Young, it was VOTED to close the hearing for DEP 125-1159. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

On the motion by Murphy and seconded by Young, it was VOTED to issue a Standard Order of Conditions, with a Special Condition requiring that the slash/brush shall be stockpiled outside of the 100-foot Buffer Zone. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**8:02 p.m. (DEP 125-1155) Notice of Intent, Ecological Restoration Limited Project, Continued hearing**

**Applicant: Danielle Zimmerman**

**Project Location: 620 Lowell Street, Map 27 Parcel 57A-A; Project Description: Treatment of invasive plant species in a pond.**

James Treacy of TRC Companies was present on behalf of the applicant, who he reported has been out of the country for several weeks. At the previous hearing there was discussion of potentially locating the inlet to the outlet pipe on the pond side. Mr. Treacy has since collaborated with several colleagues and has come to the conclusion that locating and digging up the pipe along the edge of the pond would cause significantly more impact to the resource areas than what the NOI originally proposed. Additionally, he has consulted with the applicant, who confirmed it is rare for the pipe to flow after August 1, even following significant rain events. Mr. Treacy pointed out that the proposed treatment is dosed at the lowest recommended concentration for Procaccor. Mr. Treacy believes that if a large rain event were to occur and it were to migrate, it would have little to no effect for detectable limits, since Procaccor is a selective treatment that specifically targets milfoil leaves by disrupting the photosynthetic process, leaving the native species intact.

Mr. Treacy then proposed the inclusion of additional Conditions that would demonstrate they are making efforts to minimize the chance of residual herbicide migrating into any nearby wetlands as follows: restrict herbicide treatments to be applied on or after August 1, when water levels are lowest and the chance of outlet flow is minimal; provide additional monitoring, specifically in the wetland where the pipe outflows; provide Procaccor rapid-result tests for herbicide in the wetland prior to the application to obtain a baseline reading and again following treatment in the same location to demonstrate the herbicide has not migrated from the treatment area.

Murphy reiterated his previous concerns regarding the potential for the herbicide to leach out into the wetland and said he still believes the pipe should be located and capped on the inflow side. Wells suggested several additional Conditions, including limiting the work to low flow/no flow conditions and requiring notice to the Commission in advance of the start of work; limiting the program to a one-year trial to determine if the work can be done effectively and safely, and if there are no issues, allow them to proceed with treatments the following year.

Parra asked how long the half-life is for the Procaccor. Mr. Treacy said it is dependent upon the amount of air in the pond - in poorly aerated systems such as this pond, the mean average life is 2.8 days; for an aerated system, it is 7 days. Parra suggested including a Condition that there be no treatment unless the pipe is not flowing and there is no rain forecasted for three days following treatment. Shepard offered the suggestion of catching the outfall into a container and circulating it back into the pond, containing it for however many days necessary. Parra asked Mr. Treacy if he wished to investigate recirculating the outfall with the applicant as a reasonable solution. Mr. Treacy agreed to discuss this with the applicant, and he will also determine her availability for the next meeting.

On the motion by Murphy and seconded by Wells, it was VOTED to continue the hearing with the representative's approval to 6/8/2023 at 7:15 p.m. Roll Call Vote: Shepard-aye, Wells-abstained, Murphy-aye, Young-aye, Parra-aye.

**8:20 p.m. (DEP 125-1154) Notice of Intent**

**Applicant: Michael Napier/East Coast Development**

**Project Location: 42 Bingham Road; Project Description: Construction of a driveway with an open bottom box culvert to cross an intermittent stream providing access to a proposed single-family dwelling and deck, a water supply well, elements of a sewage disposal system, a second, and temporary disturbance and reconstruction of an intermittent stream to allow installation of a septic system leaching field. Work is within Bordering Vegetated Wetland and Bank resource areas and within the 100-foot Buffer Zone of a Bordering Vegetated Wetland.**

On the motion by Wells and seconded by Young, it was VOTED to continue the hearing at the applicant's request to 6/8/2023 at 7:45 p.m. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**8:21 p.m. (DEP 125-1140) Notice of Intent, Continued Hearing**

**Applicant: Martha and Kenneth Bedrosian**

**Project Location: 44 Bedford Road; Project Description: Construction of a detached three car garage, installation of utilities, mitigation plantings and paving of an existing dirt driveway with work within the 100-foot Buffer Zone of a Bordering Vegetated Wetland. The applicant has requested the hearing be opened and continued to June 8 without testimony.**

On the motion by Young and seconded by Murphy, it was VOTED to continue the hearing at the applicant's request to 6/8/2023 at 8:15 p.m. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**8:23 p.m. (DEP 125-1152) Notice of Intent, Continued Hearing**

**Applicant: Federal Investment Properties Trust**

**Project Location: 445 East Riding Drive - Lot 1; Project Description: Construction of a single-family dwelling, soil absorption system, associated tree removal and grading.**

Robert Melvin of Stamski and McNary summarized the changes to the revised plan dated 5/17/2023: a proposed Operations and Maintenance Plan for the stormwater controls has been provided as well as a note on the planting schedule limiting the shrubs to native, non-cultivars. Additionally, the previously proposed drip edge has been replaced by a roof drain drywell, which will convey stormwater runoff from approximately one half of the roof area to the drywell through proposed downspouts and pipes. A further revised plan dated 5/25/2023 was provided which provides permanent monumentation at each corner of the limit of work line and includes signage at several locations that prohibits future work beyond the limit of work line.

Parra asked if the turtle barrier fencing has been provided as required by NHESP. Mr. Melvin said the turtle barrier fencing will be constructed according to the siltation barrier detail. MassWildlife will accept either Filtermitt or straw bales backed with staked siltation fencing, with the line to be extended beyond the subject property. Additionally, the plan includes a moveable gate which will be placed at the opening of the driveway, with several options provided by NHESP including an 18-inch corrugated PVC pipe, halved culverts, or a wooden gate. There were no further questions.

On the motion by Murphy and seconded by Young, it was VOTED to close the hearing for DEP 125-1152. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

On the motion by Young and seconded by Murphy, it was VOTED to issue a Standard Order of Conditions with the following Special Conditions: the Commission must be notified if there is a change in the site contractor, all reports provided to NHESP shall also be provided to the Conservation Commission; all Conditions required by NHESP shall be incorporated into the Carlisle Special Conditions and recorded. Roll Call Vote: Shepard-abstain, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**8:39 p.m. (DEP 125-1151) Notice of Intent, Continued Hearing**

**Applicant: Federal Investment Properties Trust**

**Project Location: 445 East Riding Drive - Lot 2; Project Description: Construction of a single-family dwelling, soil absorption system, and associated grading.**

**(DEP 125-1150) Notice of Intent, Continued Hearing**

**Applicant: Federal Investment Properties Trust**

**Project Location: 445 East Riding Drive - Lot 3; Project Description: Demolition of an existing tennis court, construction of a single-family dwelling, soil absorption system, a portion of a driveway and associated grading**

On the motion by Murphy and seconded by Wells, it was VOTED to continue the hearings for DEP 125-1151 and DEP 125-1150 at the applicant's request to 6/8/2023 at 8:00 p.m. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**8:40 p.m. (DEP 125-1158) Notice of Intent**

**Applicant: Colin Moriarty**

**Project Location: 291 Skelton Rd & 0 River & 383 River Road, Map 1, Parcels 1-2,1-7, & 7-1**

**Project Description: After-the-fact filing for completing construction on a common driveway providing access to four single-family lots as approved in the amended OOC for DEP File #125-0893.**

Robert Melvin of Stamski and McNary was present on behalf of the applicant. As background, Mr. Melvin said an OOC under DEP #125-0893 was issued on 4/21/2011, and amended on 10/28/2014, for approval to construct a common driveway which crosses over a perennial stream and BVW utilizing a Geosynthetic Reinforced Soil Integrated Bridge System, installation of a fire cistern and associated well, a rain garden, two infiltration trenches, and associated grading. Construction of the common driveway at binder grade, installation of the GRS Bridge and associated grading have been completed under DEP #125-0893.

The lot is comprised of open fields, woodlands, ponds, wetland vegetation, and the Concord River to the east. There is a perennial stream which exits one of the existing ponds to the west and continues to the property and along the property line to the Concord River. This stream projects a 200-foot Riverfront Area onto a portion of the site. There is also Bordering Vegetated Wetland (BVW) with associated 100-foot Buffer Zone and Land Subject to Flooding. Mr. Melvin noted the project falls under the jurisdiction of NHESP and reported the applicant received approval from NHESP to proceed with the project as proposed under the original OOC.

The current NOI proposes to complete the construction of the proposed common driveway to provide access to four single family lots as approved in the amended OOC under DEP #125- 0893. Currently, the driveway has been constructed at binder grade and the GRS Bridge has been installed, however, this work was completed beyond three years from the date of issuance of the amended OOC and requires further approval from the Conservation Commission. Remaining work proposed to be completed for the common driveway includes widening of the driveway to 12 feet with 2-foot shoulders where it is currently insufficient, construction of an extension for a vehicle turnout, paving the top course of the driveway surface, installation of a fire cistern and associated well, and the construction of a rain garden and two infiltration trenches. Minor grading is also proposed.

Following Mr. Melvin's presentation, the Commission requested that a revised plan be provided with the following updates: specify elements of the plan that differ from the previously-approved plan; highlight elements of the plan that have been completed vs not yet completed; inclusion of a locus map; inclusion/labelling of the entire length of the stockade fencing that runs along the driveway; inclusion of the utility and access easement.

Regarding the CR that exists on Lot 6 that is owned by the Sudbury Valley Trustees and held by the Conservation Commission, Willard reiterated her previous request for some monumentation for the portion of the common driveway that leads out to the Elliot Preserve so that access is maintained into the future.

Present was Carolyn Stein of 121 Skelton Road, who shared the following comments for the Commission's consideration: (1) when the project was before the Planning Board in 2014, a cistern was not going to be required unless additional lots were going to be developed – no additional homes are being built to her knowledge; (2) she does not believe the area which is labeled "extended paving" located at the entrance of the trail to the conservation land was included on the original plan. Mr. Melvin responded by stating the intent of the cistern was to serve additional lots and he agreed to investigate whether it is still necessary given the additional lots are not currently proposed. Regarding the paved turnout area, Mr. Melvin said it is his understanding that this is a Planning Board requirement. He agreed to explore whether the driveway turnout would still be required if serving only two developed lots vs five as originally approved or if it can be moved to a more favorable location.

Also present was Sudbury Valley Trustees Director of Stewardship Laura Mattei, who shared the following questions and comments for the Commission’s consideration: (1) she reiterated Ms. Stein’s comments regarding the turnout and the cistern and hopes they will not be necessary following further consideration; (2) she does not believe the proposed 4-foot wide gravel trail is necessary; (3) she requested clarification regarding the need for the proposed grass pavers shown by the road; (4) she would like to attend the site visit. Mr. Melvin explained the grass pavers, which are comprised of grass reinforced with soil to allow parking, were included in the original plans. Parra said that although the grass pavers may not be within the Commission’s jurisdiction, he suggested that the applicant should consider Ms. Mattei’s comments.

Parra requested that Willard coordinate a site walk with the applicant. Ms. Mattei’s request to attend the site visit will be subject to the applicant’s approval. On the motion by Murphy and seconded by Young, it was VOTED to continue the hearing with the representative’s approval to 6/8/2023 at 8:15 p.m. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**(DEP 125-1060) Request to Amend Orders of Conditions – NOT OPENED**

**Applicant: Darryl Forgione, Massachusetts Department of Conservation and Recreation**

**Project Location: Lowell Street, Map 33, Parcel 4 lot 0**

**Project Description: Retaining a temporary 15” diameter culvert intended to be a temporary stream bypass during a collapsed culvert repair and repair of deteriorating stonewalls installed above the repaired culvert.**

The Order of Conditions for this has project expired, requiring the submission of a new Notice of Intent

**9:10 p.m. DEP (125-1157) Notice of Intent**

**Applicant: Kimberly Gilman**

**Project Location: 400 Brook Street; Project description: Replace an existing, covered porch and front steps with a 10 x 10 enclosed mudroom and front steps.**

Kimberly Gilman shared the plan for the replacement of an existing, covered porch and front steps with a 10-foot x 10-foot enclosed mudroom and front steps, with work within the 100-foot Buffer Zone. The proposed mudroom will be anchored with metal helical posts driven to a depth of six feet below the surface.

Willard reported visiting the property and observing what appeared to be a potential vernal pool which is connected by a culvert to a property across the street. Regarding the proposal, Willard said the proximity to the septic tank and its connection to the home is a concern: the Stamski and McNary plan shows the septic tank in an “approximate location”; the R. Wilson & Associates plan shows the sewer line from the home to the tank, but neither plan shows the entry, tank location and the sewer line all together. She has consulted with the BOH regarding the proximity of the work to the septic line and their recommendation is to include a Condition requiring that the tank and pipe be located by hand digging prior to any work associated with the installation of the helical peers for the entry way.

On the motion by Murphy and seconded by Shepard, it was VOTED to close the hearing for DEP 125-1157.

Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

On the motion by Wells and seconded by Murphy, it was VOTED to issue a Standard Order of Conditions with a Continuing Condition allowing the hand removal of invasive plants located within the 100-foot Buffer Zone. The motion was amended by Young and seconded by Wells to include a Special Condition requiring that the tank and pipe be located by hand digging prior to any work associated with the installation of the helical peers for the entry way. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**9:21 p.m. (DEP (125-1156) Notice of Intent**

**Applicant: Tully Foote, The Woodside Trust**

**Project Location: South Street. Map 5, Lots 54-X & 56-X; Project Description: Reconstruction of a single-family home and appurtenances, a barn and driveway with 2 wetland crossings.**

Present were the applicant Tully Foote and Paula Griffin, who recently purchased the property. Mr. Foote said the proposal is to construct a home with minimal impacts to the wetland resources working with Benjamin Griffith of Normandeau Associates, architect Jacob Lilly, LaBlanc Jones Landscape Architects, and Dan Carr of Stamski and McNary.

Mr. Carr presented the plan and provided an overview of the proposal. The Project Area includes two lots located off South Street, totaling approximately 23.5 acres. The primary elements of the Project include: construction of a primary residential structure and accessory structure; construction of a paved driveway to access the proposed structures, including two open bottom box culverts; construction of a septic system; clearing, grading, and grubbing to accommodate the development; construction of two wetland replication areas to mitigate for impacts to Bordering Vegetated Wetlands (BVWs) along the proposed driveway footprint. Wetland resource areas that will be impacted by the Project are limited to Bordering Vegetated Wetlands, Inland Bank, and portions of their 100-ft Buffer Zones in presently undeveloped areas.

A construction entrance is provided at the beginning portion of the driveway, which closely follows the existing grades and meanders to the south in order to meet the narrowest part of the wetland. There is a proposed pavement bumpout to allow two-way access to the home and a soil stockpile area, both of which are located outside the Buffer Zone. The first wetland crossing includes a 20-foot span open bottom box culvert that runs parallel to the driveway to limit the amount of disturbance within the wetland and is located at the lowest point within the wetland to allow water to naturally flow under the culvert. The associated wetland replication area is proposed at a greater than 1:1 ratio of wetland fill to wetland replication area. The entire work area is surrounded by erosion control where downgradient and siltation fencing where upgradient. The driveway then travels in a straight line to an area outside the BZ which includes another turnout and soil stockpile area located outside the BZ. The design of the second wetland crossing includes a similar design approach as provided for the first wetland crossing: it includes a 20-foot span open bottom box culvert located in one of the narrowest areas of the wetland which provides a three plus foot distance from the bottom of the culvert to the intermittent stream to allow for wildlife passage. The proposed footings for this culvert are located far enough apart from the bank that they can be constructed without disturbing the bank. The design meets or exceeds the Massachusetts Stream Crossing Standards.

The proposed stream crossing was designed as a 20-foot-wide by 20-foot-long open box culvert sitting three to four feet above the stream surface. At this location, the bankfull width is on average 12 feet, the crossing span would be 1.67 times the bankfull width, which exceeds the Optimal Standard identified in the Massachusetts Stream Crossing Standard. The driveway then slopes down to meet existing grades as it travels toward the house, where it turns to avoid two isolated wetlands located on either side of a knoll. The driveway layout was designed to minimize potential impacts to protected Resource Areas on site. Where grades permit, the driveway was placed outside of the regulated Buffer Zone.

The house was sited such that all portions of the structure including the septic system are located outside the Buffer Zone, although there is some grading associated with the septic system. The plan includes a driveway turnaround at the house, which is graded up in order to meet the garage floor elevation. The proposal includes two roof drywells also located outside of the Buffer Zone. Several culverts with rip rap at the outlets are proposed along the driveway in order to divert water under vs over the driveway.

The proposal includes 2,700 sf of wetland fill vs 3,100 sf of wetland replication. There are additional temporary impacts to the wetland to construct the far side of the culvert footing; the proposal includes placing rip rap and a large pipe to allow an excavator to cross the wetland to construct the footing on the far side, backfilling the footing and then returning to the street side of the wetland, where a crane will drop the culvert onto the footings. Parra asked who designed the wetland replication areas. Mr. Carr said the design was a collaboration with Mr. Griffith. Parra asked if they had reviewed the comments contained within the peer review of the prior NOI for this property. Mr. Griffith said the peer reviewer's comments were incorporated as they were working through the design.



Wells said he appreciated the amount of effort that went into the very thoughtful and detailed plan. He asked if they could demonstrate compliance with the Stream Crossing Standards regarding the openness ratio with additional plan detail. In response Mr. Griffith provided additional information and photos of the crossing location, demonstrating there would be no impact to bank. Murphy noted they are providing a 1:1 ratio for wetland replication where the minimum is a 1:1.3 ratio. Mr. Carr will revise the design in order to meet that standard.

Present were abutters Richard and Nancy West of 532 South Street. Mr. West said they are working with the owners and were able to visit the site recently. He then read a brief statement citing his significant concerns regarding the driveway location adjacent to their property line relative to loss of privacy due to the driveway construction and the loss of mature tree buffer. In concluding his statement, he said they would be content with a redesign that immediately redirects the driveway away from the property line upon crossing the wetlands as a simple modification with the least impact on how they utilize their property if the Commission is willing to be flexible regarding construction of the driveway within the wetland Buffer Zone. He presented a sketch of an alternative driveway entry proposal utilizing the 2<sup>nd</sup> break in the stone wall from their property line as the point of entry. He said because Mr. Tully and Ms. Griffin have offered to attempt to address their concerns, they are requesting a continued hearing in order to have the plan revised and for the Commission to obtain an updated peer review.

Present was Patrick Collins who shares the border to the southwest of the subject property. He stated he finds the current design is a vast improvement over that of the previous NOI and said he believes a peer review would be beneficial, as there may be areas where work within the Buffer Zone could be minimized.

The Commission was in favor of obtaining updated peer review and requested that the potential alternative location of the driveway entrance be staked prior to the scheduling of a site visit. On the motion by Murphy and seconded by Young, it was VOTED to continue the hearing with the applicant's approval to 6/22/2023 at 7:30 p.m. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

**Plan Change Request:  
(DEP 125-1062) 274 Heald Road; Applicant: Justin Delva; Project: Removal of 22 trees and an addition to a single-family home. Issued: 2/15/2019.**

The applicant has submitted a request to extend the Order of Conditions, to be taken up on 6/8/2023 and followed with a Request to Amend the OOC.

10:27 p.m. On the motion by Murphy and seconded by Young, it was VOTED to adjourn. Roll Call Vote: Shepard-aye, Wells-aye, Murphy-aye, Young-aye, Parra-aye.

Prepared by: Mary Hopkins

**All supporting materials that have been provided to members of this body can be made available upon request.**