

**INLAND WETLANDS COMMISSION
REGULAR MEETING
VOTING RECORD**

January 10, 2024 @ 7:00 p.m.
Council Chambers, Newtown Municipal Center
3 Primrose Street, Newtown CT

These Minutes are subject to approval by the Inland Wetland Commission

Present: Sharon Salling, Mike McCabe, Scott Jackson, Kendall Horch, Suzanne Guidera

Staff Present: Steve Maguire, Deputy Director of Land Use, Sebastian Velez, Land Use Enforcement Officer, Dawn Fried, Clerk

Ms. Salling opened the meeting at 7:00 p.m.

Ms. Salling made a motion to change the order of the agenda. Mr. McCabe so moved. Mr. Jackson seconded. All in favor.

PENDING APPLICATION

IW Application #23-32 by The Residence at Berkshire, LLC, property located at 296 Berkshire Road, to construct a new roadway with a stream crossing for an 11 single-family cluster-home development.

IW Application #23-32 will be TABLED to the next regularly scheduled IWC meeting on January 24, 2023 at the Community Center, 8 Simpson Street, All-purpose Rm #3 at 7:00 p.m.

PUBLIC HEARING

IW Application #23-31 by Castle Hill Real Estate Holdings, LLC, property located at 20 & 60 Castle Hill Road, to construct a cluster-home community consisting of 117 single family units, community center and associated site improvements.

Mr. McCabe read the legal notice for the record. Ms. Salling welcomed the public and gave an overview of the public hearing guidelines. Ms. Salling stated the public will be heard first.

Public

Eric Thompson, 6 Old Castle Drive – Mr. Thompson stated he hasn't heard the mention of Taunton Pond. He would like confirmation that the property adjacent to the lake is being preserved. He questioned whether the land being put aside would be sufficient enough to prevent damage to Taunton Lake. Mr. Thompson asked if the "hundred-year flood map" is the proper metric.

Charles Zukowski, 4 Cornfield Ridge Road – 1. Mr. Zukowski made reference to a wetland across the street from Castle Hill Road and south of Wetland #2. Mr. Zukowski stated there seems to be extra groundwater being added to that wetland. He asked how the recharging of the groundwater system will be affected. He noted the experts have spoken about the wetlands on the property but not the wetlands off the property and how they will be affected. 2. Mr. Zukowski stated the Nettleton Preserve is also across the street from Castle Hill Road and he would like to know how the wetland and watercourses will be affected. 3. Mr. Zukowski noted according to the before and after maps the watersheds are going to be changed. He asked whether the different amounts of water draining from the top of the hill will have an effect on the water courses further downstream. 4. Mr. Zukowski noted a large overflow pipe coming from the water tank. He is questioning whether the flow from the pipe will still spread into the two watersheds and whether the flow will have a different effect on the two wetlands during an emergency overflow.

Joe Morrissey, 6 King Street – Mr. Morrissey spoke about the ridge overlooking Edmond Town Hall. He would like the boundary to be moved back to preserve the watersheds with a no-build area or no cutting of the trees.

Elaine Breitling, 8 Mt. Pleasant Road – Ms. Breitling has concerns with the runoff from Castle Hill Road onto Johnny Cake Lane. The runoff goes onto her property and behind her property. She stated her property is wet already. She asked what will happen to her property.

Dave Ackert, 6 Cider Mill Road – Mr. Ackert noted there has been an increase in rainfall. He is concerned with the additional runoff from the proposed, impervious surfaces. He questioned whether the wetlands will be able to handle the increased rainwater runoff. Mr. Ackert requested an independent third party peer review.

Casey Ferguson, 4 Knollwood Drive – Ms. Ferguson questioned whether the applicant has been in contact with the Army Corp of Engineers. She believes the wetlands fall under their jurisdiction. She would like confirmation that the Army Corp of Engineers has been contacted. Ms. Ferguson requested an independent third party peer review.

Sherry Bermingham, 42 Main Street – Ms. Bermingham would like confirmation that the previously stated amount of 3,000 truckloads of fill will be dumped onto the property.

Dottie Evans, 1 Reservoir Road - Ms. Evans stated she lives very close to this development. Ms. Evans is concerned with the quality of the water in the wetlands and how it will impact the wildlife that has existed for hundreds of years. Ms. Evans stated if the wetlands are polluted the creatures will not be able to breed and the eggs will die. Ms. Evans requested a 500 foot buffer around the vernal pool and stated she would like to “protect these precious places”. Ms. Evans requested an independent third party peer review.

Jeff Carusone, 90 Taunton Lake Road – Mr. Carusone is concerned with the quality of water and the impacts to the watersheds due to the increased use of salt on the roads and harsh chemicals on the lawns. Mr. Carusone stated he researched “hundred-year” storms and found they are

predicting one “hundred-year” storm every ten years. Mr. Carusone stated he would like additional research done on the potential larger storms and the impact they will have on the watershed areas.

Mark D’Amico, 7 Tory Lane – Mr. D’Amico requested an independent third party peer review. Mr. D’Amico would like a wetland assessment done on 60 Castle Hill Road, even though it will not be disturbed. Mr. D’Amico stated it is still part of the application and it is downhill from 20 Castle Hill Road. Mr. D’Amico didn’t see the delineation of the upland review area. He wants to make sure that the upland review area has been taken into consideration. Mr. D’Amico would like the applicant to research the wildlife and plant matter on the property to ensure there are no protected species.

Robert Meyers, 10 Mt. Pleasant Road – Mr. Meyers lives directly across from the development and stated the lights from the cars will be pointed right into his bedroom. Mr. Meyers asked if the applicant would consider moving the entrance 10 degrees either way. Mr. Meyers spoke about the wetlands behind his house and the salamanders that have been crossing Mt. Pleasant for hundreds of years. Mr. Meyers had concerns with a puddle of oil in his front yard and has concerns with the increased traffic coming from the new development.

Aaron Nezvesky, 13A Phyllis Lane – Mr. Nezvesky has grown up in Newtown and has spent hundreds of hours walking on the property. He is aware of the wetlands, the hydro-soils and the vegetation on the property. He stated the water doesn’t drain very well and the area by the proposed driveway is saturated. Mr. Nezvesky requested an independent third party peer review. Mr. Nezvesky asked whether they will be blasting or crushing rock. He also asked whether rechargers and drywells will be installed on the property. Mr. Nezvesky stated this is undisturbed virgin soil and a dense development can cause major drainage issues. Mr. Nezvesky mentioned Eagles he has seen on the property in the top northern corner. Mr. Nezvesky has concerns with oils from heavy machinery and equipment seeping into the soil. He asked what will happen when the oil goes into the ground. Mr. Nezvesky stated this property is a recharge area. He is concerned with the animals, the wildlife and the drainage that will runoff into the lake and neighboring properties.

Suzan Hurtuk, 29 Wills Road - Ms. Hurtuk requested an independent third party peer review. Ms. Hurtuk stated this is a sensitive area and we have to be careful. She also stated this is a natural resource and is a special place to a lot of animals and humans. Ms. Hurtuk asked how the applicant will enforce the restriction of salt and chemicals.

Emily Kaufman, 2 Knollwood Drive – Ms. Kaufman requested an independent third party peer review. Ms. Kaufman is concerned with the light, noise and vibrations effecting the wetland creatures such as the salamanders, frogs and other amphibians. Ms. Kaufman has seen Eagles on the property in the past year. Ms. Kaufman has concerns with the chemical impacts from runoff, especially the placement of the pool next to the amphibians.

Ms. Salling asked for the public to take a pause in order for the applicant to respond to the questions or to go over new information.

Mr. Todd Ritchie, PE, SLR Consulting, Cheshire, CT, stated he submitted a response letter in regards to the questions from the Commissioners from the previous meeting (see attached).

Ms. Salling pointed out that there were a lot of questions from the public regarding water quality and water treatment. Ms. Salling asked the applicant to speak about those items.

Mr. Ritchie gave an overview of the existing conditions from the last meeting. He stated nothing from 20 Castle Hill Road drains towards 60 Castle Hill Road. He presented a map showing arrows and the direction the water flows. Mr. Ritchie stated they are implementing the necessary stormwater controls and water quality systems in accordance with the CT DEEP Stormwater Quality Manual, local regulations and standard practices. Mr. Ritchie stated the rate of runoff from the property, for all storms including a hundred-year storm, will not increase.

Mr. Ritchie stated there will be an additional “bermed up area” for materials totaling approximately 6,000 cubic yards.

Mr. Ritchie gave an overview of the drainage network that collects the water runoff from the storm drains, roof drains, roadways and yard areas. The stormwater will discharge into catch basins with sumps, which will remove the sediment before being discharged to the stormwater basins. From there the water will be discharged into the hydrodynamic separator which will further treat and polish the stormwater by removing floatables. The water will end up in an open stormwater detention/retention basin which will decrease the water flow. There will not be any recharge or underground infiltration chambers.

Ms. Salling appreciated the description of the drainage system but she pointed out a lot of the questions from the public were regarding water quality, hydrology, and updates of the revised plans. She asked the applicant to address some of the questions asked by the public.

Ms. Horch asked the applicant to explain the crossing at Meadow View Lane. Mr. Ritchie brought up the corresponding slide and gave an overview of the crossing. He stated the fill being removed is included in the environmental report. The filling of wetlands at this location is approximately .02 acres. Ms. Horch asked if they would be digging out the wetlands to get to the existing pipes. Mr. Ritchie stated yes that is correct. Ms. Horch asked what type of material would be used around the pipes. Mr. Ritchie stated “typically you have a bedding material that goes around the pipe and then you have common backfill from that point”.

Ms. Salling asked whether the hundred-year flood map was a proper metric. Mr. Ritchie gave a detail description of the flood plain and pointed out the non-flood hazard areas. He stated the hundred-year flood map isn't the metric they use to design the stormwater management plan. It's a representation of the FEMA map and the flood hazard areas marked on the site or in the vicinity.

Mr. Ritchie stated he wasn't familiar with the Nettleton Preserve but there is a limit of disturbance around the project. During construction a boundary will be established with a swale, a berm, silt fencing and barriers to ensure no water goes in that direction. Once construction is complete the

permanent stormwater system will be in place to capture the water from the roof drains, footing drains and yard drains, which will then discharge into the stormwater basins.

Mr. Ritchie gave an overview of the diagram for the limit of clearing. He stated out of 136 acres there will be 40.8 acres of total disturbance. Seventy percent of the site will remain undisturbed, 30% will be impacted and 62% will be permanent open space.

Mr. Trudell stated out of the 136 acres there will be 85 acres in the conservation easement, which is 62% of the property. The disturbed area is 30% of the property. The construction will be phased. Phase one will affect 13.7 acres, phase two will affect 9.1 acres and phase three will affect 18 acres, which totals 40.8 acres of disturbance. Mr. Trudell emphasized there will not be any clear cutting and the entire site will not be worked on all at once. He stated this is important for the management of the soil and erosion controls.

Mr. Ritchie spoke about the steep slopes and the tree clearing. He pointed out the limit of clearing on the map. He stated the limit of clearing is at the very top of the steep slopes. There will be no work on the steep slopes in the delineated areas. He stated it is not desirable to build on steep slopes.

Ms. Raymond spoke about the hydrology on the property. She stated they have a good understanding of the wetland hydrology, the watershed and the watershed activity. Ms. Raymond ensured the stormwater management system will not divert drainage just to accommodate the development.

Ms. Raymond stated they looked at the culvert crossing at Wetland #4 to ensure they were not affecting the hydrology of the vernal pool. Ms. Raymond described the vernal pool as being the highest functioning wetland with the highest value on the property. Ms. Raymond stated they will not be modifying that system.

Ms. Raymond spoke about the long term maintenance and landscaping plans for the property, which was touched upon at the last meeting. Ms. Raymond noted there were concerns of the lasting effects of fertilizers and pesticides to the hydrology, to the water quality, and to the vernal pool and wetlands on the site. Ms. Raymond emphasized the importance of the designated, permanently protected open space and the additional conservation components. Ms. Raymond also stated there are no proposed lot lines, this will be a communal property. The homeowners will not be taking care of the property. This property will be managed by a company with a centralized management plan. This will create more consistency and less homeowner interaction regarding the dumping of lawn debris or the encroachment on the wetlands. The applicant submitted a Turf and Pest Management Plan (see attached).

Ms. Raymond spoke about the Army Corps of Engineers. She stated the Army Corps of Engineers does not require a permit on this project because it falls under the threshold of 5,000 square feet of wetland disturbance.

Ms. Raymond spoke about the exclusion of 60 Castle Hill in the wetland delineation. She explained there is no proposed activity on 60 Castle Hill Road, only permanent protection, and even though there are existing wetlands on 60 Castle Hill Road, they are not relevant to the development. Ms. Raymond explained they looked at indirect impacts, which are categorized by short-term sedimentation and erosion controls during construction and long-term storm water management. Since the project's stormwater management control plan is regulated the quantity of volume, the peak rates and the quality of the stormwater will be managed.

Mr. Trudell spoke about the conservation easement and the restrictions that will be implemented on the 85 acres of open space. Mr. Trudell stated they are going to further restrict the existing regulations (section 4.05 under open space) that allows for paths, benches, boat racks, storage, etc. Mr. Trudell stated there will be no disturbance whatsoever and these restrictions will be on record with the homeowners association. The document showing the restrictions will be presented to the Borough Zoning Board.

In response to the last meeting, Mr. Ritchie gave an overview of the limit of residential lawn areas on Meadow View Road and the limit of the open space conservation area. (See attached revised plan LA-4 and "Response to Commission" document.)

In response to the last meeting, Mr. Ritchie gave an overview of the earthwork cutting and fill plan. Mr. Ritchie stated there will be a net export of 3,000 truckloads of material taken off the site over a period of time. (See attached "Response to Commission" document.)

Mr. Ritchie stated the applicant does not have to provide additional material regarding the salting of the roads. They have provided a treatment train which is in compliance with the de-icing standards.

Mr. Ritchie stated they did not encounter shallow rock on the property. Any removal of rock will be in accordance with the Town standards and permitting process.

Mr. Ritchie stated they will not be utilizing rechargers and drywells. He stated the techniques and practices that are applicable to the site are outlined in the CT Stormwater Quality Manual.

Ms. Raymond added to Mr. Ritchie's response regarding the salt maintenance plan. Ms. Raymond stated they have had success with non-chloride products such as calcium and magnesium based products. These chemicals provide a de-icing function but without the harmful chloride effects. Ms. Raymond stated they would be amenable to condition these chemicals as part of the maintenance plan.

Ms. Raymond gave a summary of the application. She stated this dense project is allowing for a great deal of open space. There will be less than 4 acres of direct impacts to the wetlands and 12.5 acres, approximately 25%, of indirect impacts to the upland review area. The applicant is looking for authorization of 3 acres of work within the upland review area and small wetland impacts for the crossing and the seep to the east.

Ms. Salling gave the public another opportunity to speak.

Public

Dave Ackert, 6 Cider Mill Road – Mr. Ackert stated he has not heard mention of the quality of the water. What will happen to the surface water after it is impacted by the heat in the summertime? A third party review will add a different perspective to the value of the temperatures and impacts to wildlife and water courses.

Dan Holmes, 2 Spring Road – Mr. Holmes appreciated the public's questions and concerns and thinks they are wonderful points. Mr. Holmes noted the engineers had mentioned there would be no net increase of the flow of water from the existing condition. Mr. Holmes stated he can't imagine that being possible if the water is being shunted into a pipe. Mr. Holmes also questioned if this is the right location for this development in our town and asked if there is a better use. He would like to see the property stay intact for the salamanders, other amphibians and all plant life.

Stephanie Morelli, 75 Castle Hill Road – Ms. Morelli asked how many trees are being cleared and what will happen when the trees won't be there to absorb the water. What impacts will that have on the wetlands?

Patrick Sims, 7A Possum Ridge Road – Mr. Sims asked if the Commission will be reviewing the regulations as to the restrictions of activities to guarantee water quality. Mr. Sims is concerned with the water pollution. Ms. Salling stated restrictions in the open space will be addressed by the P&Z Commission, and does not fall under the purview of the IWC. Mr. Sims reiterated his concern with the water quality and watercourses. Mr. Trudell stated he is not looking to change any regulations or to modify existing regulations. He is looking to restrict the use of the property through the Homeowners association. Mr. Trudell stated he would like to leave the property in its current state, which is purely for preservation. There was a discussion on whether it would be a deeded restriction or an activity restriction. Ms. Raymond stated any additional restrictions will be part of the holistic property management tools. This will ensure homeowners won't add cumulative impacts. Ms. Raymond stated the goal is to have the area permanently protected with no improvements in the future to maintain its inherent quality that exists today.

Eric Thompson, 6 Old Castle Road – Mr. Thompson noted that Ms. Raymond's intent is not to harm the lake but he is skeptical the lake will not be impacted from the surface runoff. He would like someone else to answer the question so there is no conflict of interest.

Dottie Evans, 1 Reservoir Road - Ms. Evans pointed out the positives being preservation of 70% of property and not allowing for disturbance on 60 Castle Hill Road. The negatives being the disturbance in the upland areas and the water issues. Ms. Evans would like the scope of work reduced and an increased buffer added to protect the water courses. Ms. Evans appreciates the hired landscapers so the homeowners can't use pesticides.

Suzan Hurtuk, 29 Wills Road – Ms. Hurtuk stated she knows a lot about these complexes and they are a nightmare. They overuse products like pesticides and salts. Ms. Hurtuk stated unless you go green it's not going to be better.

Mark D'Amico, 7 Tory Lane – Mr. D'Amico stated since there is going to be prolonged disturbance on the land there needs to be "real care" in looking at what the phases do and where the fill is going to be placed. Mr. D'Amico stated a lot of the additional basins will be in close proximity of the wetlands. He asked what impacts will that have on the wetlands. Mr. D'Amico has concerns with the proposed crossing over the wetlands. Mr. D'Amico understand the hydrodynamic separator will catch the particulates, sediment and floatables, but what will happen with the chemicals. Mr. D'Amico stated he doesn't see any preservation, conservation or potential improvements of the wetlands. Mr. D'Amico pointed out this application is dependent on two parcels being viewed as a single parcel to obtain the necessary percentage of conservation. He stated these two parcels need to be looked at and addressed as a single parcel. He would like a wetland analysis done on the entire property. Mr. D'Amico believes this project warrants an independent, unbiased, third party peer review.

Jeff Carusone, 90 Taunton Lake Road – Mr. Carusone stated even if everything goes perfectly what will happen from the density of these homes and the impervious effects to the ground, the effects from the light pollution, and the effects of the noise pollution during the construction. Mr. Carusone stated there has to be a prior study done on the effects of activities of almost 500 people and 250 cars. Mr. Carusone believes there will be a very significant impact to the wetlands.

Joe Morrissey, 6 King Street – Mr. Morrissey noted a slide in the presentation that showed arrows representing the runoff going east towards King Street and behind the Town Hall. Mr. Morrissey stated there will be huge impacts on the existing wetlands on his property and on Edmond Town Hall's property. He asked how the stormwater system is designed, what the correct size for the pipe is and what formulas will be used to prevent impacts on the wetlands behind the Town Hall.

Aaron Nezvesky, 13A Phyllis Lane – Mr. Nezvesky stated a topic that has not been addressed are PFAS. Mr. Nezvesky asked what type of building materials will be used and the impact of the PFAS. Mr. Nezvesky has concerns with the PFAS entering Taunton Lake, scattering around the neighborhoods and going into the wells. Mr. Nezvesky stated within the next few years PFAS will be monitored at water treatment plants and in peoples' wells. Mr. Nezvesky is concerned with the future and the detrimental impacts of PFAS to the ecosystems, bodies of water and wildlife. Mr. Nezvesky is also concerned with the sounds coming from the pickle ball courts and how they will impact the surrounding wildlife.

Ms. Horch asked the applicant what size are the storm basins. Mr. Ritchie stated the basins are sized for a hundred-year storm. Ms. Horch asked how much volume the basins are sized for. Mr. Ritchie stated it would be in our stormwater report. Mr. Ritchie stated if you are looking for the superficial volume of each basin we would have to prepare that for you.

Ms. Horch noted that there is a stormwater basin in the upland review area. The applicant previously stated the basin couldn't be removed due to the grading and storm-drain outlet

elevations. Ms. Horch asked if they considered relocating or removing some of the units to alleviate grading constraints. Mr. Ritchie stated I don't see what the identified impacts are from working in an area that's already been disturbed and farmed and will be restored essentially to the same condition. Mr. Trudell stated there wasn't any impacts identified from that activity, but if that is something the Commission wants to raise we will be happy to further address.

Ms. Guidera is concerned with the direct impacts to the vernal pool. Ms. Guidera is also concerned with the impacts to the wetlands located at the crossing. Ms. Guidera believes this is a high functioning wetland and she would like to know the short-term and long-term effects.

Ms. Guidera asked the applicant whether they have considered any reasonable and prudent alternatives for a different location of the crossing, considering the significant impacts to the wetlands.

Ms. Guidera asked the applicant whether they have considered scaling back the project to avoid the direct impacts to the wetlands.

Ms. Guidera stated that if you are considering both parcels as a whole then a wetlands assessment needs to be done on 60 Castle Hill Road. Ms. Guidera requested a wetland impact study to confirm no negative impacts to the functioning and values of the wetlands on 60 Castle Hill Road.

Ms. Guidera stated she agrees with the public that an independent, peer review should be done. Ms. Guidera wasn't sure if a motion was needed, but she would be in favor.

Mr. McCabe wanted clarification on the erosion and sediment control plans. He asked what soils will be used to construct the added swales and berms and what will be done with those soils after construction. Mr. McCabe also asked what's going to be done with the sediment collected in the temporary basins after construction. Will it be taken offsite or regraded onto the property?

Mr. Ritchie stated each basement will be excavated and those materials will be used for creating the berm. The berm will be temporary until the final grading. The excess materials will be removed from the site. Mr. Ritchie stated permits are required by the State under general construction for the erosion and sediment controls and for the phasing of the property.

Mr. Jackson asked the applicant about the vetting of the contractors and subcontractors. Mr. Jackson asked what processes are in place to ensure none of them have been subject to violations, particularly wetland violations. Mr. Trudell stated he has worked with his contractors for many years and he can attest to the quality of the people he hires and the work they do. Mr. Trudell stated he hasn't had any issues with the Town officials because he runs a clean, tight site. Mr. Trudell stated he does specifically check with the excavators, but not any of the others.

Ms. Raymond responded to Ms. Guidera's questions regarding the vernal pool. Ms. Raymond stated they identified the vernal pool and its special functions. They also identified the portion of the wetland that supports it, which is 1.58 acres of a larger wetland, which 20% is occupied by the vernal pool. The vernal pool is fed by groundwater and supports wood frogs and spotted

salamanders. There is no direct activity proposed within the vernal pool depression and minimal work within 250 feet to the east, which will be a .2 acre area of clearing. Ms. Raymond stated the majority of the forested area that surrounds the vernal pool is permanently protected as a conservation area with no proposed activities. The area to the east that is being developed will be permanently protected with additional fencing.

Ms. Raymond stated there is a wetland crossing 250 feet south of the waterline in the vernal pool. Ms. Raymond stated the crossing is necessary to gain access to that portion of the site. The applicant will be improving the existing crossing for the use of a roadway. The size of the area is approximately 1,000 square feet with a small amount of fill on the south side. The hydrology of the vernal pool is groundwater fed. The applicant is not proposing any backwater or damming with the proposed roadway.

Ms. Guidera understood the applicant is not proposing any direct impacts, she was questioning the indirect impacts and the potential runoff going towards it. Ms. Raymond gave an overview of the drainage configuration. Ms. Raymond stated they want to maintain hydrology and minimize the impacts to the wetlands.

The Commission discussed a third party peer review and the process. Mr. Maguire stated the Commission has the ability to request a third party review. Mr. Maguire stated there are two options for a peer review. One option was a third party engineer review that would look at stormwater and erosion controls. The second option is a third party soil scientist review that would look at the wetland assessment reports. Mr. Maguire pointed out the majority of questions and concerns have been regarding the overall stormwater system and its impacts, which would be an engineer's review.

Mr. Maguire mentioned the delineation of 60 Castle Hill but stated its still part of the application. Mr. Maguire asked the Commission if they would like the applicant to review the 100-foot upland review area for any potential impacts.

Mr. Maguire asked the applicant if they looked at the area across the road on Reservoir.

Ms. Raymond stated no they did not look at 60 Castle Hill Road, the delineation was solely on 20 Castle Hill Road. Ms. Raymond stated there is no drainage that occurs to the west. Ms. Raymond was amenable to reviewing 60 Castle Hill Road and the western area on Reservoir Road by the water tower. Ms. Raymond stated she understands wanting a level of assurance. Mr. Maguire stated that is something the Commission should consider.

Mr. Maguire stated there were several comments made regarding the property management of the turf, salt, snow, and pests. The applicant has submitted a Turf and Pest Management Plan and a Homeowners Association Plan for the Commission to review. Mr. Maguire asked the applicant if these are guidelines or requirements and how can they be enforced. Mr. Trudell stated it can be conditions of approval. Mr. Maguire was concerned with the long term enforcement. Mr. Trudell stated the conditions can be added to the homeowner's declaration so they become something that goes well beyond the completion of the project.

Mr. Maguire reviewed the wetland regulations regarding the timing of the public hearing. He noted the regulations require the public hearing be closed 35 day after opening, which is on January 17, 2024. Mr. Maguire stated in order for the public hearing to remain open the applicant must submit an authorization letter requesting an extension to January 24, 2024.

For the record Mr. Trudell submitted an extension letter requesting an extension to the next IWC meeting on January 24, 2024.

Ms. Salling requested the 100-foot review of 60 Castle Hill Road.

Ms. Salling stated the third party engineer's review seems to be what the public desires. Ms. Salling asked the Commission for their comments. Ms. Horch stated this is over a 50-page plan set and a lot of information. Ms. Horch agreed with obtaining a third party engineer's review.

Ms. Horch moved to recommend a third-party professional engineer peer review of the Castle Hill project. Mr. McCabe seconded. All in favor.

Ms. Salling made a motion to continue the public hearing to the next regularly scheduled IWC meeting on January 24, 2024 at the Community Center, 8 Simpson Street, All-purpose Rm #3 at 7:00 p.m. Mr. McCabe so moved. Ms. Guidera seconded. All in favor.

APPROVAL OF MINUTES

The Commission found no substantive errors. Ms. Horch moved to accept the minutes from December 13, 2023. Ms. Guidera seconded. All in favor. The minutes from December 13, 2023 were approved.

OTHER BUSINESS

Slate of Officers:

Ms. Salling – Chairperson

Mr. Ferris – Vice Chair

Mr. McCabe – Secretary

Ms. Horch moved to accept the slate of officers for the IWC Commission for 2024. Mr. Jackson seconded. All in favor.

ADJOURNMENT

With no additional business, Mr. Jackson moved to adjourn. Ms. Horch seconded. All in favor. The Regular IWC Meeting of January 10, 2024 was adjourned at 9:46 pm.

Respectfully Submitted, Dawn Fried

January 5, 2024

Inland Wetlands Commission
Land Use Agency
Newtown Municipal Offices
3 Primrose Street
Newtown, CT 06470

SLR Project No.: 141.20080.00003

**RE: Responses to Commission Member Public Hearing Comments
IW Application #23-31
Castle Hill Village – Residential Open Space Development
20 & 60 Castle Hill Road
Newtown, Connecticut**

Dear Commission Members,

During our presentation of the above-referenced application to the Inland Wetlands Commission at the public hearing on December 13, 2023, we noted various design comments regarding the application materials that were vocalized by members of the Commission and town staff. This letter serves to document those comments and provide responses (by SLR International Corporation [SLR]) on behalf of the Applicant.

Site plan sheet references are made to the attached revised site plans, dated January 5, 2024.

- C1. Have the water utility and state health department been notified of the project as required due to its location within a watershed?*
- R1. The proposed development is not located within a public drinking water supply watershed (Source: <https://portal.ct.gov/DPH/Drinking-Water/DWS/Public-Water-Supply-Map>) and the public water utility (Aquarion Water Company) has issued a will-serve letter to provide water supply to the development.**
- C2. Detailed project phasing and construction sequencing narratives should be provided.*
- R2. Additional construction-phasing and sequencing narratives have been included on the Title Sheet and Sheet SE.**
- C3. Include discussion of when temporary sediment traps/basins will be converted into permanent stormwater basins in construction sequencing narratives.*
- R3. Conversion of temporary sediment traps/basins to permanent stormwater basins and construction sequencing narratives have been included on Sheet SE.**

- C4. *Provisions should be made for turbidity monitoring of stormwater runoff during construction.*
- R4. **Turbidity monitoring of stormwater runoff during construction will be provided in accordance with requirements of the Connecticut Department of Energy and Environmental Protection (CTDEEP) Construction Stormwater General Permit for the site. Notes referring to the requirement for this permit have been added to the Title Sheet and Sheet SE.**
- C5. *Overflows from temporary sediment traps towards steep slopes should be prevented.*
- R5. **Temporary diversion swales and/or berms are shown continuously along the top of slopes to collect and divert stormwater runoff to designated stabilized discharge locations, which are not located above steep slopes. Overflows from sediment traps will discharge into these diversion channels and will not discharge onto steep slopes. Additional labels have been added to these stormwater diversions on Sheets SE-1 through SE-5 for clarity.**
- C6. *Provide total impacted area for each construction phase and show limits of disturbance for each phase.*
- R6. **Total impacted areas and limits of disturbance for each construction-phase are shown on Sheet SE. The total impacted site area for the project (Phases 1 through 3) is 40.8 acres.**
- C7. *List all parties that should receive sediment and erosion control inspection reports, in addition to keeping report copies onsite.*
- R7. **Parties that will receive sediment and erosion control inspection report copies are listed on Sheet SE. In addition to the developer keeping copies of the reports onsite, the reports will be distributed to the Newtown Land Use Agency and CTDEEP, in accordance with town and state permit requirements.**
- C8. *Level spreaders are shown at locations discharging to steep slopes.*
- R8. **Although the level spreaders were shown located upgradient of ground slopes that are 20% or less (not considered excessive slopes) the level spreaders have been replaced with riprap preformed scour holes to address the concern of the Commission.**
- C9. *Can stormwater basin 120 be relocated out of the 100-foot upland review area?*
- R9. **Stormwater basin 120 cannot be relocated out of the 100-foot upland review area due to storm drain outlet elevation and basin grading limitations.**
- C10. *Provide cross section for proposed 24" pipe culvert at Meadow View Lane including proposed utilities.*
- R10. **A cross section for the proposed 24" pipe culvert has been provided on Sheet SV.**



- C11. *Will there be a change in hydrology impacting the vernal pool from installation of the 24" pipe culvert downstream of the vernal pool?*
- R11. **The hydrology of the vernal pool will not be affected by installation of the 24" pipe culvert downstream of the vernal pool. The pipe culvert will serve as a direct replacement to the existing subsurface stone-filled farm drain at this location and will function similarly to the farm drain.**
- C12. *Why is the proposed culvert under the driveway at Johnnie Cake Lane a 24" pipe when the existing pipe and downstream culvert pipe are 18"?*
- R12. **In reviewing the proposed culvert replacement design, an erroneous survey elevation was used as the basis for the upstream end of the existing pipe culvert. After field checking and obtaining the correct upstream invert elevation for this existing pipe, the proposed culvert was changed to an 18" pipe, realigned for adequate pipe cover, reanalyzed, and determined to meet design requirements. A cross section of the proposed 18" pipe culvert under the proposed driveway at Johnnie Cake Lane is included on Sheet SV.**
- C13. *Where will water from the swimming pool be discharged to?*
- R13. **The discharge of swimming pool water will be conducted in accordance with the CTDEEP General Permit for the Discharge of Swimming Pool Wastewater, which upon the pool water meeting specific chemical criteria, allows for discharge to either a sanitary sewer or to a drainage system which discharges directly to a river or stream. The pool water will either be permitted to discharge to the sanitary sewer system by the Newtown Water Pollution Control Authority or it will enter the onsite storm drainage system, which discharges towards Johnnie Cake Lane, where it will infiltrate into the ground within Basin 130 and if discharged from the basin, it will ultimately be channeled through offsite drainage pipes directly into Tom Brook. Swimming pool water will not be directed toward any onsite wetlands or into the watershed of the onsite vernal pool.**
- C14. *Show limit of maintained residential lawn areas for homes west of Meadow View Lane.*
- R14. **A limit of maintained lawn areas for this area is shown on Sheet LA-4. This line is consistent with the limit of proposed open space in this area (refer to Sheet CP for proposed open space conservation areas) and is very close to the 100-foot upland review area limit from wetlands. Open space medallions on cedar posts are proposed along this line at 100-foot spacing to establish the limit of maintained lawn areas and open space.**
- C15. *Can the site be designed to balance earthwork cutting and filling better?*
- R15. **The site grading is driven by required roadway and individual driveway elevations (maximum 10% and 5% respectively); the desire to preserve the existing barn structure and large beech tree and create a community green area at the high point of the property; and to limit clearing and grading of side slopes into upland review areas. We have identified additional areas to retain excavated material onsite. An additional 5,030 cubic yards (CY) has been retained in the formation of**



an earth berm adjacent to stormwater basin 130 and an additional 1,040 CY has been retained in the formation of an earth berm adjacent to stormwater basin 410, for a total of 6,070 CY of additional soil material to be retained onsite.

The existing ground surface to proposed finished ground surface cut and fill volumes are close to balanced, with a current net cut of 6,400 CY (66,810 CY cut vs. 60,410 CY fill – total fill volume is approximately 10% less than total cut volume). The soil material that will not remain on site consists of excess material from basement excavations and from subgrade excavation and material replacement below roadways and parking areas (75% of total export material) and topsoil that will not be reused (25% of total export material).

C16. Provide plan for easy viewing of proposed tree clearing limits.

R16. Refer to Sheet TC for area of proposed tree clearing areas and limits.

C17. Will the proposed development create a hydrologic disconnect to Wetland #1 north of the proposed stormwater basin discharge?

R17. The proposed development will not reduce the stormwater runoff area contributing to Wetland #1 in areas north of the proposed stormwater basin discharge. In addition, foundation drains from houses upgradient of this wetlands corridor are now shown with independent footing drain pipe discharges to maintain groundwater flow towards the wetlands.

Please feel free to contact us if you have further questions or require additional information.

Regards,

SLR International Corporation



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Enclosures: Site Plans (Revision Date: January 5, 2024)
Drainage Report (Revision Date: January 5, 2024)

cc: George Trudell – Castle Hill Real Estate Holdings, LLC
Thomas Beecher – Collins Hannafin, P.C.



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*OF COUNSEL
**ALSO ADMITTED IN NEW YORK

January 10, 2024

Ms. Sharon Sailing, Chair
NEWTOWN INLAND WETLANDS COMMISSION
3 Primrose Street
Newtown, CT 06470

Re: Inland Wetlands Application #23-31
Property Location: 20 and 60 Castle Hill Road
Applicant: Castle Hill Real Estate Holdings, LLC

Dear Ms. Sailing and Members of the Commission:

I represent Castle Hill Real Estate Holdings, LLC. We hereby grant an extension of the statutory timeframe to close the public hearing to January 24, 2024.

Thank you.

Very truly yours,


Thomas W. Beecher

TWB/cms

Cc: George L. Trudell II

Inland Wetlands Commission
Original Document Received

DATE: 1-10-24
BY: 27

Castle Hill Village



Castle Hill Village Homeowners Association Inc.



ORIGINAL

Turf & Pest Management Plan

LAND USE COMMISSION
ORIGINAL DOCUMENT

Received Date: 11-8-23

Received By: DF



Integrated Pest Management Plan

Castle Hill Village - Residential Open Space Development

Prepared for:

Castle Hill Real Estate Holdings, LLC

48 South Main Street
Newtown, CT 06470

Prepared by:

SLR International Corporation

99 Realty Drive, Cheshire, Connecticut, 06410

SLR Project No.: 20080.00003

November 2023

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1.0 Overview

A preliminary Integrated Pest Management (IPM) Plan has been developed to manage the Castle Hill Village-Residential Open Space Development postconstruction. An IPM Plan utilizes an ecosystem approach to the maintenance of lawns, gardens, and landscape plantings. The plan involves an evaluation of the many factors influencing plant growth on a site and the relationships between them. These factors include climate, site orientation, soil conditions, water availability, insects, diseases, weeds, invasive species, animals, beneficial organisms, and cultural practices in the landscape design. The goal of an IPM Plan is to identify potential problems early and manage them using a variety of control strategies so that damage is limited to acceptable levels. This strategy is preferred over attempting to eliminate pests via indiscriminate use of broad-spectrum pesticides. In this way, environmental impacts to surface water and groundwater resources as well as neighboring plant and animal communities are minimized. An IPM Plan can often reduce overall landscaping costs as well. Landscape activities on the property will be directed by the property manager, who will appoint an accredited and certified landscaper to oversee aspects of landscape care.

Following buildout and revegetation, the project will be inspected by a properly accredited landscaping/pesticide company for the purpose of identifying areas of pest management (e.g., weed, insect, and disease) on the grounds of the facility and developing a site-specific comprehensive IPM Plan. The IPM Plan will utilize all methods of pest control identified herein, which may include modifying cultural practices, monitoring for pest populations, mechanical and biological control, and the judicious use of pesticides. The overall approach of land management on this property will be to utilize natural or organic products first when addressing weed or pest issues. For example, if mugwort (*Artemisia vulgaris*) begins to colonize a planting bed, an application of a natural product such as clove oil or citric acid would be used initially as opposed to a broad-spectrum systemic herbicide such as glyphosate. Also, if possible, pesticides will not be applied on a routine basis. However, pesticides may be used as a tool to maintain pest populations at or below an acceptable level while maintaining plant health and aesthetic quality. The selection of pesticides that may be used will be based on a predetermined hierarchy that will utilize least toxic products as first choice. Whenever practicable, biological controls such as predatory insects, beneficial nematodes, or microbial pesticides will be used. Proper implementation of this program will reduce the volume, toxicity, and frequency of application of pesticides and other chemicals, thereby reducing negative environmental impacts and the risk of potential exposure of building occupants and visitors to the grounds who may be sensitive to their use. The primary objective of the IPM Plan is to maintain the health of a diverse landscape so that plants resist pests and diseases and recuperate successfully from environmental stressors. To accomplish this, a variety of strategies are employed.

The responsibility for the execution of the IPM Plan will be vested with the Homeowner's Association (HOA). The HOA should review the goals and methodologies of the plan with the licensed, contracted landscaper. As a part of the program, there should be periodic testing of soil and surface water/groundwater at the site. The results of these tests should be used to evaluate the success of the IPM Plan at maintaining plant vigor while containing nutrients and pesticide residue. These results may be forwarded to appropriate town agencies for review.



2.0 IPM Program

2.1 Choice of Plant Materials

A key to designing an attractive and low-maintenance landscape that will respond favorably to an IPM approach is to choose appropriate plant materials, which are as follows:

- A mix of hardy native and ornamental species and cultivars, which are well adapted to site conditions
- Disease and pest resistant/tolerant
- Healthy at the time of planting
- Properly planted and maintained

On the subject property, there are already many well-adapted plants on site outside the limit of clearing. For example, the entire wetland buffer will be undisturbed and preserved. The proposed plantings are listed on the site plan, and for the most part, they are low-maintenance and hardy species including both native varieties and ornamentals. Maples, oaks, pines, dogwoods, cherries, pears, azaleas, rhododendrons, etc. are specified. Relatively little area is devoted to lawn, but there will be a few open grassed areas and garden beds along the drives and around the buildings for the use and enjoyment of the residents. This is a low-maintenance alternative to expansive lawns and adds diversity to the landscape, uses less water and fertilizer, and encourages wildlife use. A Turf Plan has been developed to manage those areas of lawn with the fewest amount of resources.

2.2 Turf Plan

Best management practices will be implemented at all times in an effort to maintain turf health and appearance. Turf will be mowed to a 2" to 3" height, or as high as possible, on a *weekly/biweekly* basis. Mowing should be done when the grass is dry to avoid spread of turf diseases. Mower blades should be maintained with sharp cutting edges to avoid excessive wounding and stress of the turf-grass.

Upon implementation of the IPM program and prior to the application of any fertilizer or pesticides, soil samples will be collected by the landscape/pest control technician and analyzed. Soil samples will also be collected and analyzed annually to assess soil fertility and potential of hydrogen (pH). Annual sampling will be performed in late fall or early spring after the frost has left the ground. Amendments will be made to the soil as recommended by the analysis reports. Proper soil pH and fertility will help to prevent many turf-grass diseases and promote plant vigor, thereby reducing the occurrence of insect and weed invasion.

When practicable, organic fertilizers may be used; otherwise, fertilizer with 50 percent slow-release nitrogen shall be utilized. Fertilizer should be applied no later than October 15. Late fall applications of lime will be avoided, if possible, to reduce the risk of **snow mold**. Overfertilization may result in an increase of some plant diseases, more frequent mowing, increased thatch layer, and risk of leachate into groundwater in some circumstances. Proper management of grass clippings is an important part of maintaining the lawn. Grass clippings will remain on the lawn and be allowed to degrade, returning 50 percent of available



nitrogen back to the lawn. This will help to increase the soil organic matter and promote beneficial earthworm activity.

Watering may be done once a week to a depth of 6 inches between the hours of **5:00 a.m. and 8:00 a.m.** The second-best time to water is late evening/early morning after the dew has fallen. Watering in the evening is not recommended on hot, humid nights because it may increase the occurrence of diseases. **Necrotic ring spot and summer patch** may be prevented by keeping the upper soil layers moist.

A thatch layer up to 1/2 to 3/4 inches thick is beneficial. An excessive layer is undesirable because it will block moisture, fertilizers, and/or pesticides from reaching the root zone of the turf. Overdevelopment of thatch can be prevented by reducing fertilizer applications and maintaining proper soil pH. If dethatching is necessary, it will be done mechanically during the spring or late summer (September) when grasses are actively growing and can recover faster. Fertilizer applications should be performed when grasses are actively growing, usually late May/early June and late August/early September. Fertilizer applications will not exceed 2 to 2½ pounds of nitrogen per 1,000 square feet per year unless soil sample analysis reports indicate a necessity to further amend the soil.

Table 1: Turf Insects

Visual inspection of the turf areas will be done monthly, April through September, by the certified supervisor to monitor for evidence of chinch bug, sod webworm, billbug, and/or other destructive turf pests. Additional sampling may be performed to confirm the presence of these pests and/or white grubs.

Applications of insecticide to turf areas will be limited in an effort to preserve populations of beneficial insects and nematodes. Pesticide application will be considered if monitoring indicates the following pest populations or when up to 20 percent damage can be anticipated.

- 1) **White Grubs:** 10 larvae/square foot
- 2) **Chinch Bug:** 30 to 50 nymphs and adults/square foot or when damage is evident
- 3) **Sod Webworms/Cutworms:** areas will be treated only when damage is evident
- 4) **Hyperodes weevil (annual bluegrass weevil):** tolerance
- 5) **Black turfgrass ataenius:** tolerance
- 4) **Ticks:** tolerance

Contact insecticides can be applied to control **Japanese beetle, European chafer, Masked chafer, Oriental beetle** and/or **Asiatic garden beetle, or other beetle species** during late August/early September when larvae are present. Controls may be applied to control **chinch bug, billbug, and sod webworm** when damage is evident. (Damage periods normally occur during hot, dry weather - late June/July/early August.)



Table 2: Disease Management for Turf

Pesticide applications for control of turf diseases will be performed only if evidence of disease has been found, significant areas (**10 to 15 percent of the total turf area**) of permanent damage can be anticipated, and all proper cultural practices have been employed. The landscape manager will evaluate pest control options to determine the appropriate course of action.

Table 3: Weed Control for Turf

A lawn area that is properly managed should produce dense, thick turf-grass, which ideally will help to prevent invasive weed species from getting established. Some weed growth should be anticipated and tolerated to some degree. Widespread applications of broadleaf herbicides will not be performed unless weed species have invaded greater than **25 percent** of the entire turf area and after natural approaches have been deemed unsuitable. Spot applications may be performed to small areas on an as-needed basis.

Nonselective herbicides may be applied as a spot application to control annual and perennial broadleaf weeds in the turf. The same product(s) may be applied when and if a widespread application of pesticides is deemed necessary.

Overseeding the area in late summer/early fall with improved turf-grass and raising the mower height during the growing season will help to prevent crabgrass encroachment. This may be applied as a post emergent crabgrass control only when cultural practices have failed and providing that the area is not widespread. This will prevent problems with soil erosion in areas where the crabgrass has been killed off. Preemergent herbicide may be applied the following season to help prevent redevelopment of crabgrass.

Herbicides may be applied as a spot application to control invasive annual grasses after natural approaches have been deemed unsuitable.

A complete re-evaluation of any area requiring a broad application of pesticide will be performed by a landscape contractor to assess and reimplement proper cultural practices to maintain turf density and vigor.

2.3 Flower Beds and Formal Landscaping

Best management practices will also be followed for the care and management of all flower beds and ornamental plantings. Insect- and disease-resistant plant varieties will be selected for planting in any flower beds and/or formal landscaping areas whenever possible. The landscape/pest control technician will visually inspect plants for insect and/or disease infestation prior to planting. Plants found to have any infestation will be rejected in an effort to eliminate damage on a large scale. Plants will be planted at the proper depth to avoid plant stress. Mulch will be placed in all garden areas and around individual trees and shrubs. Mulch materials will be placed at sufficient depth to reduce weed growth and help to retain moisture. Mulch



placement will also be placed to provide a buffer area to eliminate mechanical damage that may result from use of string trimmers or mechanical edgers.

Foundation plantings and vines will be trimmed at least 12 inches away from the building to eliminate rodent harborage and access to the building and allow for monitoring of rodent activity. The landscape/pest control technician will remove and dispose of dead and dying vegetation from plants and plant beds (*monthly*) to prevent spread of disease. Leaves will also be raked away to prevent accumulation and development of rodent harborage. Branches and plant material will be properly disposed of at the end of each day that work has been performed.

Table 4: Ornamental Insect Control

Visual inspections will be conducted during routine maintenance activities, and pest monitoring traps will be utilized, where appropriate, to indicate the presence of harmful pests. Wherever pest activity is found and if practicable, infested plant(s) or branches will be washed off using a strong stream of water or removed and properly disposed of.

In an effort to preserve beneficial and predatory insects, pesticides will be applied only on an as-needed basis. Application of pesticide may be considered if it is anticipated that pest activity will result in unacceptable levels of damage to ornamental plants. For this facility, up to **15 percent** damage or defoliation to ornamental plants will be considered acceptable.

Pesticide application will be limited to only the infested area(s). General applications of pesticides will not be done. Bioinsecticides, insecticidal soaps, dormant oil, or summer oil will be utilized if possible. The timing of each application will be based first on whether the pest is present and causing damage, the pest life cycle, and at what stage the pest is most vulnerable to pesticides.

Preventive pesticide applications may be performed only to areas where the previous year's monitoring has shown evidence of insect pests that may overwinter on ornamental plants.

Table 5: Weed Control for Flower Beds and Formal Landscaping

Preemergent weed control may be used in annual flower beds and ornamental shrub gardens. Preemergent weed control may also be used in perennial flower gardens where pesticide labeling allows. Post emergent spot applications may also take place.

Where practicable, hand weeding will be performed in flower gardens and areas of ornamental plantings on a limited basis due to labor expenses. Borders and walkways will be edged using a string trimmer or mechanical edger.



Table 6: Disease Management for Flower Beds and Formal Landscaping

Pesticide applications for control of ornamental diseases will be performed if evidence of disease has been found, significant areas (**15 percent or greater**) of permanent damage can be anticipated, and all proper cultural practices have been employed.

Preventive pesticide applications may only be performed when the previous year's monitoring has indicated a likelihood of disease or if certain plant species, prone to disease problems, are present. Preventive applications should be made only to specific problem areas.

The landscape contractor will evaluate pest control options to determine the appropriate course of action.

The landscaping management company will monitor the grounds of the Castle Hill Village at least once monthly April through September. Additional monitoring may be required during peak periods (June through August) to monitor for weeds and diseases. Off-season (October to March) monitoring may also be scheduled on an as-needed basis. All pest problem areas and written recommendations for structural, sanitary, or procedural modifications will be recorded on "**Ornamental & Turf Pesticide Application Record/Monitoring Report**" forms or a substantially similar substitute. These forms will be kept in a file that will be maintained in the property manager's office. Additional records that will be maintained in this file will include a copy of this plan, copies of all soil sample analysis reports, a diagram indicating the placement of all pest monitoring devices, and copies of the pesticide product label information provided at the time of contract by the landscape contractor. The property manager will act as a liaison between the landscaping/pest control company and residents and will be responsible for notifying the appropriate personnel of corrective actions that are needed (e.g., correct drainage and/or runoff problems). It is almost impossible to eliminate all pests from the landscape, so more modest goals are appropriate. Field scouting and insect trapping within the various landscape areas of the property should be conducted by trained professionals looking for evidence of pest outbreaks or disease. These surveys should be part of the routine landscape maintenance program. A typical schedule is once monthly in April, May, September, and October and twice monthly in June, July, and August.

Key issues are the following:

- What pests are present and in what numbers and stages of development?
- What amount and type of damage is being caused or is threatened by pests?
- How much damage is tolerable?
- What is the history of previous infestations at the site? How were those infestations managed? What were the results?
- What natural enemies of the pests, such as parasites, predators, and diseases, are present that may control or limit damage?
- What pest management options are available? How do the advantages and disadvantages compare?



2.4 Chemical Concerns

The IPM Plan is designed to avoid chemical application to the extent possible and to utilize an organic or natural approach first prior to synthetic chemicals. If chemicals are necessary, environmental criteria are used to select the most benign alternative, and chemicals are applied at the lowest effective dose. The following provisions may be considered:

- Maintenance of the Castle Hill Village Residential Open Space Development shall adopt a pest control policy that substantially relies on nonchemical or natural strategies.
- No pesticide applicator employed by the HOA as a contractor or subcontractor for pest control purposes shall apply on the property any pesticide classified as Toxicity Category I or Toxicity Category II by the United States Environmental Protection Agency (EPA) or any pesticide classified as a known, likely, or possible carcinogen by the EPA.

The following exemptions are permitted:

- 1) Pesticides in containerized baits for the purposes of rodent control
- 2) Pesticides classified by the EPA as exempt materials under 40 CFR 152.25
- 3) Biological controls and biological pesticides, such as *Bacillus thuringiensis* or milky spore
- 4) In a situation in which a written declaration has been issued by a public health official that a public emergency requires the temporary use of a particular pesticide during the period of such public emergency
- 5) Low-toxicity pesticides used for the control of vectors capable of transmitting diseases such as the arthropod-borne encephalitis virus

The suitability of each product listed on the following chart for its intended use is the responsibility of the licensed landscape contractor. There are other products available, and more which will become available, to meet the selection criteria of low runoff and leaching potential. Because the EPA periodically reevaluates the health and environmental risks of pesticides, we recommend that the HOA commit to reviewing the IPM Plan with a licensed pesticide applicator on an annual basis to make modifications needed to reflect any changes in regulations and risk assessment.

Examples of recommended, low-toxicity pesticides (2016) are tabulated in the following chart. These chemicals are suitable for the proposed land use and environmental conditions in this region of Connecticut. Other pesticides may be appropriate as well.



2.5 Storage, Use, and Disposal of Chemical Controls

All pesticides are toxic to some degree and pose a risk to the environment. When stored in bulk, this risk increases. There is no plan to store pesticides on the site. Provisions for the safe storage, handling, use, and disposal of pesticides are an important aspect of this IPM program. Federal regulations Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), Federal Food, Drug, and Cosmetic Act (FFDCA) concerning registration and labeling of pesticides provide clear directions and warnings on each container. State regulations regarding noticing requirements provide additional safeguards for residents and neighbors.

Table 7: Recommended, Low-Toxicity Pesticides (2016)

Pesticide	LC50 For Most Sensitive Species (Parts per billion)	Toxicity Ratings (from EPA)
Fungicides		
iprodione	2,250	moderately toxic
myclobutanil	4,200	moderately toxic
metalaxyl/mefenoxam	12,500	slightly toxic
vinclozolin	52,500	slightly toxic
fosetyl-AI	75,800	slightly toxic
propamocarb	235,000	practically nontoxic
Herbicides		
dicamba	28,000	slightly toxic
mecoprop	124,000	slightly toxic
glyphosate	86,000	slightly toxic
Insecticides		
imidacloprid	105,000	practically nontoxic
acephate	730,000	practically nontoxic



The IPM Plan for the property will be administered by a professional landscape firm licensed by the state and with adequate bonding and insurance. The ultimate responsibility for carrying out the IPM Plan is vested with the HOA. The following stipulations are recommended:

- No bulk storage of pesticides will be allowed on the site.
- Pesticides will not be mixed near a wellhead, within 100 feet of any wetland or watercourse, or in close proximity to any unprotected drainage structure.
- Pesticides will not be applied on windy days (over 10 miles per hour [mph]).
- The licensed landscaper is responsible for removing all empty pesticide containers and any unused mixed pesticides from the site and for their safe and proper disposal under applicable local, state, and federal laws.

Much of the information and text contained herein was obtained from the following resources:

Model Integrated Pest Management Plan, Connecticut Department of Environmental Protection, (CTDEEP) November 2016

University of Connecticut IPM at www.hort.uconn.edu/ipm/

EPA: Office of Pesticide Programs, 401 M St., S.W., Washington D.C. 20460

EPA: Citizen's Guide to Pest Control and Pesticide Safety

National IPM Network at www.reeusda.gov/agsys/nipmn/

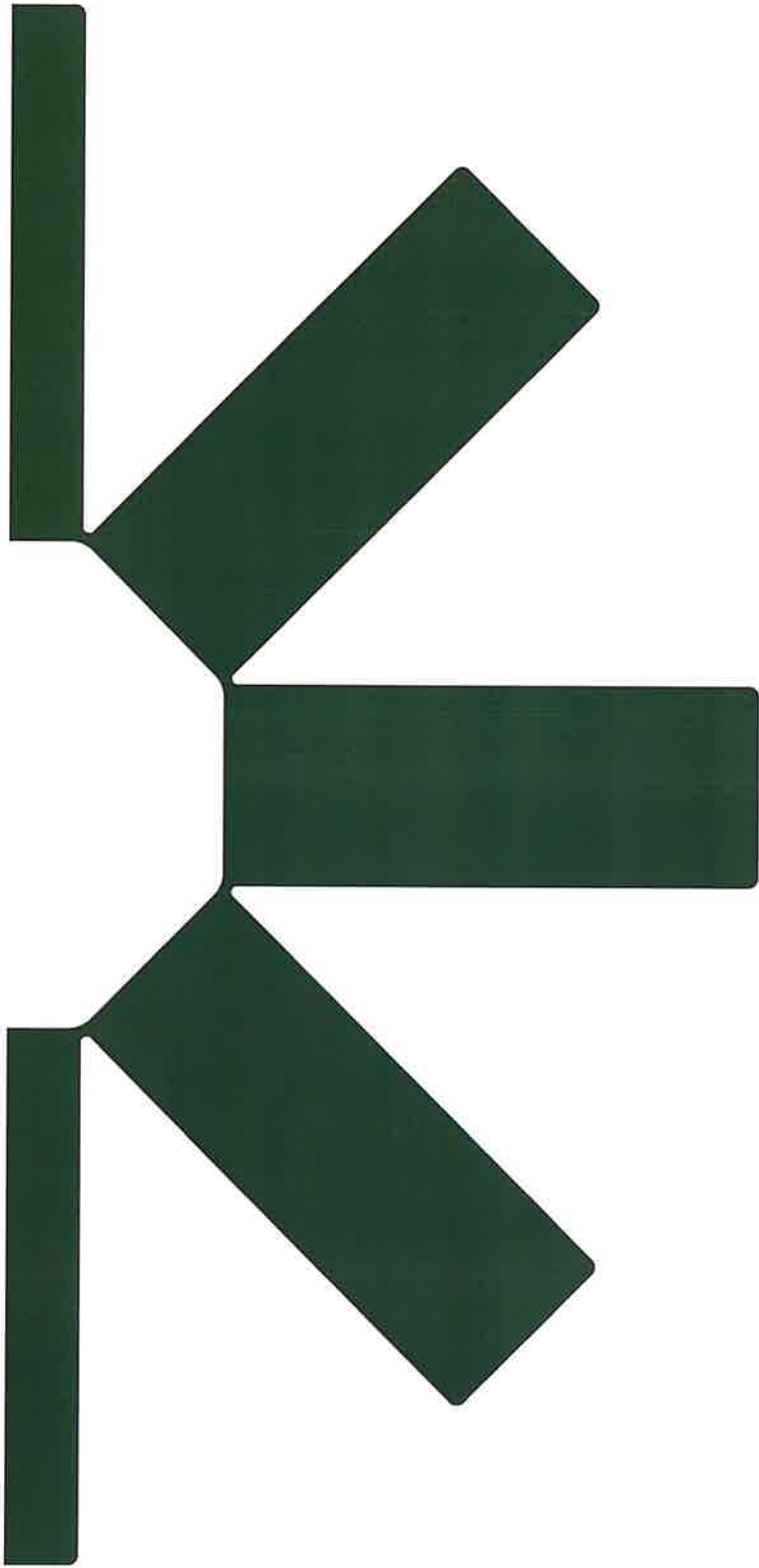
Connecticut Agricultural Experiment Station at www.caes.state.ct.us/

Audubon Cooperative Sanctuary System, Audubon International

National Pesticide Telecommunications Network 1-800-858-7378

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Castle Hill Village



Castle Hill Village Homeowners Association Inc.



ORIGINAL

Site Maintenance Plan

INLAND WETLANDS COMMISSION
ORIGINAL DOCUMENT

Received Date: 11-8-23

Received By: D7

Castle Hill Village Homeowners Association

Operation and Maintenance Plan

Item	Inspection	Schedule
1) All catch basin sumps should be inspected two times per year and sediment removed when it extends to within six inches of the outlet pipe invert, not less than once per year. The sediment shall be disposed of in an approved location.	Twice / Annually	Min. / 1 Annually
2) The forebay of the sediment basin should be inspected twice annually and after any spillage of oil, gas or other contaminant spills in the parking area. Subsequent to contaminant spills, the basin shall be cleaned immediately and the contents disposed of at an approved off-site location. The sediment forebay shall be cleaned when sediment is one foot deep. All material shall be disposed of at an off-site location.	Twice / Annually	Sediment 1ft. Deep
3) The parking lot shall be swept twice annually. Typically, sweeping should occur in the spring, after winter sanding and in the fall, after all leaves have fallen.	Spring / Fall	Twice / Annually
4) A vegetative or improved cover shall be maintained on all earth surfaces to minimize soil erosion. Use of fertilizer should be minimized and applied using prudent application procedures per the Turf and Pest Management Plan.	Routinely	Per Plan
5) <u>Best management practices will be implemented at all times in an effort to maintain turf health and appearance. Turf will be mowed to a 3" to 4" height or as high as possible on a weekly / biweekly basis.</u>		<u>Weekly/Biweekly</u>
6) A log of all inspection and cleaning shall be maintained by the HOA and be available for inspection.		

