



TOWN OF WESTPORT
CONSERVATION COMMISSION
TOWN HALL – 110 MYRTLE AVENUE
WESTPORT, CT 06880
P 203.341.1170 F 203.341.1088

MINUTES
WESTPORT CONSERVATION COMMISSION
SEPTEMBER 23, 2020

The September 23, 2020 Public Hearing of the Westport Conservation Commission was called to order at 7:00 p.m. via Zoom.

ATTENDANCE

Commission Members:

Anna Rycenga, Chair
Paul Davis, Vice-Chair
Tom Carey, Secretary
Stephen Cowherd, Esq.
Paul Lobdell
Robert Corroon, Alternate

Staff Members:

Alicia Mozian, Conservation Department Director
Colin Kelly, Conservation Analyst
Susan Voris, Admin. Asst. II

This is to certify that these minutes and resolutions were filed with the Westport Town Clerk within 7 days of the September 23, 2020 Public Hearing of the Westport Conservation Commission pursuant to Section 1-225 of the Freedom of Information Act.

Alicia Mozian
Conservation Department Director

All members visited the sites in preparation for the meeting.

Nayes: None Abstentions: None Vote: 6:0:0

4. **15 Roosevelt Road:** Request for bond release being held for sediment and erosion controls and plantings as required by Permit #WPL-10626-18

Ms. Mozian stated this was a bond being held for sediment and erosion controls. The site is fully stabilized. She recommended bond release.

Motion: Davis Second: Corroon
Ayes: Davis, Corroon, Carey, Cowherd, Lobdell, Rycenga
Nayes: None Abstentions: None Vote: 6:0:0

5. **79 Newtown Turnpike:** Request for release of remaining bond funds being held for plantings as a condition of Permit #IWW, WPL/E-9964-15

Ms. Mozian stated this is a request for release of the remaining bond monies being held for plantings. The last of the plantings were installed in the fall of 2019. They have been in for a full growing season and are thriving. She recommended bond release.

Motion to release the bond.

Motion: Cowherd Second: Lobdell
Ayes: Cowherd, Lobdell, Carey, Corroon, Davis, Rycenga
Nayes: None Abstentions: None Vote: 6:0:0

6. **9 Stony Point Rd.:** Request by Barr Associates on behalf of Edward and Susan Reilly to legalize an existing boat dock installed between 1985 and 1990.

Ms. Mozian reviewed a request to legalize an existing boat dock installed between 1985 and 1990. She noted the WPLO was adopted in 1980. The dock is about 30 years old. In 2007, the DEEP approved a request to shorten the dock. She noted that in response to a question asked at the field trip she has found out that the float and ramp are not removed during the winter. The property owners indicate that there has not been an issue with freezing in the last 20 years.

Mr. Lobdell asked the purpose of the legalization.

Ms. Mozian stated that normally, a dock would be reviewed by the Conservation Commission pursuant to the WPLO. However, in this case, based on the age of the dock, staff feels they can do a legalization administratively. Under the fee ordinance, there is a penalty that staff would impose for that legalization.

Ms. Rycenga asked if there is evidence in the record related to the freezing in the river.

Ms. Mozian indicated no but it is located in a protected area along the shoreline which may protect it from regular freezing. She reiterated that in 2007, DEEP allowed the reducing of the length of the dock by 20 feet. Any legalization of the dock would have to comply with the conditions of that permit. She stated that staff has spoken with Engineering and they are on board with a legalization.

Ms. Rycenga asked Keith Wilberg, Town Engineer, if he agreed.

Mr. Wilberg agreed.

Motion to allow staff to issue a permit legalizing the existing boat dock.

Motion: Carey Second: Lobdell
Ayes: Carey, Lobdell, Corroon, Cowherd, Davis, Rycenga
Nayes: None Abstentions: None Vote: 6:0:0

7. October meeting schedule

Ms. Mozian and the Commission discussed the potential of having two Special Meetings in October to handle the amount of pending applications. The dates selected were October 14, 2020 and October 28, 2020.

Public Hearing: 7:15 p.m.

- 1. **13 Boxwood Lane:** Application #IWW/M-11050-20 by Douglas & Patricia Brill to amend wetland boundary map #G14.

Patricia Brill, property owner, presented the application. She explained they hired Otto Theall, soil scientist, and he found there were no wetlands on the property.

Mr. Kelly stated Mr. Theall reviewed the site for the property owners. Soil scientist, Aleksandra Moch was retained by the Town to review Mr. Theall's line and she concurred. She did note there are wetlands directly to the north of the property. Mr. Kelly indicated the survey should be updated to reflect the 50-foot upland review area from the off-site wetlands. With no wetlands on the site, there is a 12,335 s.f. reduction in wetlands.

Mr. Davis asked how the Town wetland line was determined.

Mr. Kelly stated it was by remote sensing.

With no comment from the public, the hearing was closed.

Motion:	Lobdell	Second:	Corroon
Ayes:	Lobdell, Corroon, Carey, Cowherd, Davis, Rycenga		
Nayes:	None	Abstentions:	None
		Vote:	6:0:0

Findings
Application #IWW/M 11050-20
13 Boxwood Lane
Public Hearing: September 23, 2020

- 1. **Application Request:** The applicant is requesting to amend wetland map # G14 on Lot #041. Parcel owned by Douglas & Patricia Brill
- 2. **Soil Scientist for Applicant:** Otto Theall, Soil & Wetland Science, LLC
- 3. **Soil Scientist for Town of Westport:** Aleksandra Moch, Soil & Wetland Scientist
- 4. **Plan reviewed:**
 "Zoning Location Survey / "As-Built" Prepared for Douglas A. & Patricia M. Brill 13 Boxwood Lane, Westport, Connecticut", Scale: 1" = 30', dated February 20, 2009 and last revised to August 12, 2020, prepared by Richard W. Plain Land Surveyors LLC
- 5. **Wetlands Description:**
 Soil Investigation Report 13 Boxwood Lane Westport, Connecticut - prepared by Otto R. Theall, Soil & Wetland Science, LLC, dated July 13, 2020, and sketch map.

No **wetland** soils were found on the property.

Non-wetland soils were identified as:

Agawam fine sandy loam (29): This component occurs on valley and outwash plain terrace landforms. The parent material consists of eolian deposits over glaciofluvial deposits derived from schist, granite, and gneiss. The slope ranges from 3 to 8 percent and the runoff class is low. The drainage class is well drained. The flooding frequency for this component is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet.

Udorthents-Urban land complex (306): This component occurs on urban land, cut, fill, or spoil pile landforms.

Ninigret fine sandy loam (701): This moderately well drained soil is found on plains and terraces in stream valleys. The parent material consists of eolian deposits over glaciofluvial deposits derived from schist, granite, and gneiss. This soil has a seasonal high water table at a depth of about 20 inches from late fall until mid-spring. The seasonal high water table is the main limitation of this soil for community development. The water table makes special design and installation of on-site septic systems necessary. Slopes of excavations are commonly unstable. Where outlets are available, footing drains help prevent wet basements. This soil is well suited for cultivated crops and trees, but drainage is needed in some of the farmed areas.

6. Property Description and Facts Relative to the Map Amendment Application:

- The pre-existing house onsite was built in 1960.
- The property is 1.15 acres (50,064 sq. ft.) in size.
- The parcel is located in the Sasco Brook watershed. Sasco Brook is located approximately 1,900 feet to the east from the property, in the Town of Fairfield. This property is not located within the FEMA flood zone.
- The property is not within the Aquifer Protection Overlay Zone.
- Property does not exist within the Coastal Areas Management Zone.
- The Waterway Protection Line Ordinance boundary is not shown. It is established at 15' from the wetland line located offsite.
- The wetland area is 0 sq. ft. as determined by the Richard W. Plain Land Surveyors LLC survey, dated August 12, 2020. The Town of Westport wetland area (per GIS) is ~12,335 sq. ft. this represents a reduction of ~12,335sq. ft. of wetland area.
- The Current Town of Westport Wetland map shows adjacent areas of wetlands to the west, north and east boundaries of the parcel.

7. Discussion:

The Commission finds that the applicant submitted a soils report by Otto R. Theall, dated July 13, 2020, that documents his investigation of the soils on the site. This report states there are no wetlands soils identified on the site. The sketch map identifies the location of non-wetland soil types.

The Commission finds that the Town of Westport retained the services of Aleksandra Moch, Soil & Wetland Scientist, to review the proposed wetland boundary findings. Ms. Moch conducted an on-site investigation on August 28, 2020. Her letter, dated September 2, 2020, supports the findings of Mr. Theall. She also remarks that a wetland soil exists offsite to the north of the property.

The Commission finds that there are no wetlands on the property and therefore remove that designation from the town map. The Commission additionally finds that the survey prepared by Richard W. Plan shall be revised to note the existence of offsite wetlands and show the wetland review area setback of 50' for reference.

Resolution
Application #IWW/M-11050-20
13 Boxwood Lane
Date of Resolution: September 23, 2020

In accordance with Section 8.0 of the Regulations for the Protection and Preservation of Wetlands and Watercourses of Westport, and on the basis of the evidence of record, the Conservation Commission resolves to **APPROVE** Application #IWW/M-11050-20 by Douglas & Patricia Brill to amend the wetland boundary on Map: #G14, Lot: #041 on the property located 13 Boxwood Lane with the following conditions:

1. Conformance to the plans titled:

“Zoning Location Survey / “As-Built” Prepared for Douglas A. & Patricia M. Brill 13 Boxwood Lane, Westport, Connecticut”, Scale: 1” = 30’, dated February 20, 2009 and last revised to August 12, 2020, prepared by Richard W. Plain Land Surveyors LLC

2. The survey prepared by Richard W. Plain shall be revised to note the existence of offsite wetlands and show the wetland review area setback of 50' for reference

This is a conditional approval. Each and every condition is an integral part of the Commission decision. Should any of the conditions, on appeal from this decision, be found to be void or of no legal effect, then this conditional approval is likewise void.

Motion: Carey

Second: Lobdell

Ayes: Carey, Lobdell, Rycenga, Davis, Cowherd, Corroon

Nays: 0

Abstentions: 0

Votes: 6:0:0

- 2. Bayberry Lane Extension Bridge (Bridge No. 04969) over Aspetuck River:** Application #IWW, WPL-11049-20 by Keith Wilberg, Town Engineer on behalf of the Town of Westport to remove the existing two lane bridge over the Aspetuck River and replace it with a new bridge in approximate place and kind. Work is within the upland review area setbacks and the WPLO area of the Aspetuck River.

Keith Wilberg, Town Engineer, presented the application. The bridge is located about 500 feet north of Route 136 (Easton Road). It was built in 1957. Work was done on it in the 1980's. It had serious issues previously and went through emergency repairs and went down to a one-lane bridge. This is a complete bridge replacement.

Ajit Gokhale and Mike Kelley, engineering design consultants retained by the Town, were also present.

Mr. Gokhale, PE, stated there would be 525 s.f. of permanent impact to the wetlands and 695 s.f. of temporary impact to the watercourse. The project length is 400 feet. The span of the bridge is 45 feet. It will be built by pre-stressed concrete box beam. The water and gas lines will be moved downstream during construction. The bridge will not be above the 100-year flood because the bridge span would need to be widened 80 to 90 feet and the road raised 3 to 4 feet. This is impractical given the existing conditions and the abutting properties. The abutments get removed and rebuilt using a piling foundation placed to accommodate a wider span. During construction, a coffer dam will be installed. The new abutments will be done behind the existing abutments and then the existing abutments will be removed. Dewatering tanks will be placed on the northeast and southwest corner of the work. These can be moved as field conditions warrant and determined by the contractor. The 25-year flood will be adjusted slightly on the south side and more so to the north. A pre-construction meeting will determine what trees need to be removed and which can be saved.

Mr. Wilberg noted that during the site walk there was a Black Birch on the southwest corner and a Tulip Tree on the northwest corner that will have to be removed.

Mr. Gokhale reviewed the construction sequence. A turbidity curtain will be installed prior to bridge deck deconstruction. The water and gas companies will relocate lines, then the abutment work will commence, followed by the superstructure work. The old abutment will be removed and finally, the roadway work will be completed. The construction season will be April 1 to November 30, 2021.

Mr. Wilberg discussed permitting. They have received approval from the Flood and Erosion Control Board on September 2, 2020. They are going for a §8-24 from Planning & Zoning on September 24, 2020. Then, they must go the RTM for review under the WPLO. They have not received State approvals yet but have applied for them. The initial National Diversity Database (NDDDB) report showed no designated species but it has since been revised to show the presence of Blue back Herring.

Mike Kelley, PE of AI Engineers, stated that any storm greater than a 5-year storm make the current bridge unpassable. Under proposed conditions, one will be able to pass through a 10-year storm. He added the natural stream bed material will be replaced. The instream work is confined to June to September.

Ms. Rycenga asked where the natural stream bed material will be stockpiled while work was underway.

Mr. Gokhale stated it will be stockpiled in the right-of-way away from the stream and wetland.

Mr. Davis asked about the sides of the bridge.

Mr. Gokhale stated they will have an open railing system. If the bridge does get over-topped, water can flow freely through/over it.

Mr. Lobdell noted that his major in college was structural engineering and therefore found this application of particular interest. He asked if the bridge could be eliminated completely.

Mr. Gokhale stated this is more of Planning issue because it would completely redirect traffic.

Mr. Wilberg stated that more than 625 cars a day cross over the bridge. If that bridge were closed, people in Westport and Weston would most likely object.

Mr. Lobdell asked about the protection of the waterway during construction.

Mr. Gokhale stated this is reliant on the conscientiousness of the contractor. There is a need for a site monitor. He added because they are using pre-cast material, there is minimal in-stream work anticipated.

Ms. Rycenga asked who the site monitor will be.

Mr. Wilberg stated the Town Engineer, the contractor, the design engineer, and the Conservation staff.

Ms. Rycenga asked if polymer sponges or similar will be available on-site in case of a spill.

Mr. Wilberg stated yes.

Mr. Corroon noted the increase in volume of runoff. He asked if this will lead to further erosion downstream at the bend in the river.

Mr. Gokhale stated the 36-inch riprap is proposed on the embankment.

Mr. Kelley noted the whole stream channel has been studied. Now, during a 5 to 10-year storm, the bridge is completely overtopped. By opening it up, more water is allowed in the channel. Their modelling does not show that downstream flow will change.

Mr. Carey asked about flow during construction, when the channel is narrowed.

Mr. Kelley stated analysis was done of 2-year storm as a risk factor they are willing to accept. This is a risk they are willing to accept up to a year.

Mr. Corroon asked for confirmation that no fish habitat will be affected.

Mr. Kelley stated yes.

Ms. Rycenga asked about the estimated completion.

Mr. Gokhale stated they would bid out the job in January 2021 with the completion November 30, 2021.

Mr. Kelly highlighted the recommendation for a site monitor. He discussed looking into relocating the dewatering location to the south side. He stated staff can work with Public Works on a restoration/planting plan.

Ms. Mozian stated she wants to make sure that the restoration plantings maintain the shading to help support the high oxygen levels in stream during warm weather. She indicated she wants a copy of the

- Wetland soils identified include: **Walpole sandy loam** (13), **Rippowam fine sandy loam** (103), and **Fluvaquents-Udifuluents** (109) within the work area. The Walpole soil is a poorly drained soil formed in glacial outwash. The Rippowam and Fluvaquents soils are formed in alluvial sediments deposited by the river.
- The non-wetland soils were identified as Udorthents, Agawam, and Ninigret and Tisbury series soils.
- Flood & Erosion Control Board reviewed this application pursuant to the WPLO on September 2, 2020

7. Previous Permits/Applications filed:

#AA-WPL/E 9520-13: emergency bridge repairs.

Conformance to Section 6 of the Inland Wetlands and Watercourses Regulations

8. 6.1 GENERAL STANDARDS

- a) disturbance and pollution are minimized;
- b) minimize height, width, length of structures are limited to the minimum; dimension to accomplish the intended function;
- c) loss of fish, other beneficial organisms, wildlife and vegetation are prevented;
- d) potable fresh water supplies are protected from dangers of drought, overdraft, pollution, misuse and mismanagement;
- e) maintain conservation, economic, recreational and aesthetic qualities;
- f) consider historical sites

Discussion:

The existing bridge structure consists of a single span. The bridge shows structural issues including deterioration of steel beams and scour around the abutments. The proposed bridge is designed to increase the span to 45' compared to the existing 23 ft. span. The Commission finds that the design to widen the span beyond the streambank is a benefit to establishing natural flow patterns and flow rates through this portion of the river. The proposed bridge reduces the upstream backwater of floodwaters for a 100-year storm event.

The Commission finds that the DEEP Fisheries Division established several conditions to ensure the protection of fish and habitat. The contractors should maintain proper sediment and erosion controls throughout the project to reduce the risk of sediment movement and turbidity that would affect downstream fish habitat. The unconfined in-stream work is limited to July 1 to September 30 timeframe to reduce possible impacts to diadromous fish. The project shall minimize the amount of riprap needed for scour protection and areas of riprap shall be covered with natural streambed material or rounded stone.

The majority of the work for the bridge will be conducted from the existing roadway. Temporary cofferdams are proposed to contain most of the abutment work. A row of silt fencing will be installed around the work site. An area for a dewatering basin is identified on the upstream northeast roadside edge. The Commission finds that the dewatering area shall be relocated to the downstream, southern side of the bridge to reduce the amount of water entering the worksite and allowing for an area beyond the steep slopes to manage runoff.

The Commission finds that a wetland area consisting of 525 sq. ft. is proposed to have permanent impacts as part of this proposal and 695 sq. ft. of waterway area will have temporary impacts during site construction activities. A total of 1,220 sq. ft. of anticipated impacts. Soil stockpile areas shall be within the right-of-way roadway approaches.

9. 6.2 WATER QUALITY

- a) flushing rates, freshwater sources, existing basin characteristics and channel contours will not be adversely altered;
- b) water stagnation will neither be contributed nor caused;
- c) water pollution will not affect fauna, flora, physical or chemical nature of a regulated area, or the propagation and habitats of fish and wildlife, will not result;
- d) pollution of groundwater or a significant aquifer will not result (*groundwater recharge area or Aquifer Protection Overlay Zone*);

- e) all applicable state and local health codes shall be met;
- f) water quality will be maintained or improved in accordance with the standards set by federal, state, and local authority including section 25-54(e) of the Connecticut General Statutes
- g) prevents pollution of surface water

Discussion:

A dewatering basin is provided along the northeastern embankment. The Commission finds that this is a critical portion of the construction activity. The Commission finds that a dewatering basin shall be relocated to the downstream, southern side of the bridge to reduce the amount of water entering the worksite and allow for an area beyond the steep slopes to manage runoff. The Commission finds that a site monitor shall be assigned to conduct weekly sediment and erosion control inspections and provide those reports to the Conservation Office.

Seven trees are highlighted for removal on the downstream, southern side of the bridge. Rip-rap scour protection is proposed along the slope for stabilization. The Commission finds that the application shall restore the vegetative buffer adjacent to the watercourse after bridge installation. Vegetation restoration adjacent to the work area will help to safeguard natural resources by providing additional stormwater runoff filtration prior to discharge into the river. The reduction of water velocities from stormwater runoff allows vegetation to absorb some non-point pollutants such as oils, road sands and salts, fertilizers, or herbicides that may otherwise discharge into the watercourse.

Three leak-offs for stormwater are found in the roadway to the north of the bridge, as indicated on the plans. The Commission finds that the contractor shall improve the condition of these leak-offs to reduce erosion from runoff and consider plantings to aid in biofiltration treatment of stormwater.

10. 6.3 EROSION AND SEDIMENT

- a) temporary erosion control measures shall be utilized during construction and for the stabilization period following construction;
- b) permanent erosion control measures shall be utilized using nonstructural alternatives whenever possible and structural alternatives when avoidable;
- c) existing circulation patterns, water velocity, or exposure to storm and flood conditions shall not be adversely altered;
- d) formation of deposits harmful to aquatic life and or wetlands habitat will not occur;
- e) applicable state, federal and local guidelines shall be met.

Discussion:

Specific erosion control methods are described in the application including silt fencing, temporary cofferdams, and dewatering basin. All erosion and sediment structures should be inspected and maintained on a regular basis. The Commission finds that the applicant shall assign a site monitor to conduct weekly sediment and erosion control inspections and provide those reports to the Conservation Office. The Commission finds that the applicant, the general contractor, site monitor, and Conservation Staff shall meet onsite at the start of the project to review Sediment and Erosion controls and discuss the need for extra measures.

The Commission finds that the dewatering area shall be relocated to the downstream, southern side of the bridge to reduce the amount of water entering the worksite and allowing for an area beyond the steep slopes to manage runoff. Conservation Staff previously approved emergency repairs to the bridge abutment under permit # AA-WPL/E-9520-13 which was carried out in July of 2013. During that time, a suitable dewatering area was identified on the southern embankment of the downstream side of the bridge. The Commission finds that this should be an adequate location once again for a dewatering activities.

11. 6.4 NATURAL HABITAT STANDARDS

- a) critical habitats areas,
- b) the existing biological productivity of any Wetland and Watercourse shall be maintained or improved;
- c) breeding, nesting and or feeding habitats of wildlife will not be significantly altered;
- d) movements and lifestyles of fish and wildlife (plant and aquatic life) will not be significantly affected;

- e) periods of seasonal fish runs and bird migrations shall not be impeded;
- f) conservation or open space easements will be deeded whenever appropriate to protect these natural habitats.

Discussion:

As the area and amount of disturbance adjacent to the watercourse is limited, it is not anticipated to affect habitat. The proposed plan limits the amount of work within the wetlands and watercourse areas including temporary and permanent disturbance. The contractor will be directed to conduct activities from within the travel-way as much as possible in order to complete tasks.

Any unconfined work within the river is restricted to July 1 to September 30 timeframe to protect fish life cycles. All areas should be restored to pre-construction conditions upon completion. The Commission finds that this should assure that plant and aquatic life will not be significantly affected long term.

As stated in the "Preliminary Fisheries Review – Replacement of Bayberry Lane #2 Bridge over the Aspetuck River" From DEEP-Fisheries Division" letter, this reach of the Aspetuck River is stocked annually with trout, and they have targeted this area for restoration for the passage of diadromous fish. The Commission finds that the proposed work should not impact fish habitat and migration if conditions are met.

12. 6.5 DISCHARGE AND RUNOFF

- a) the potential for flood damage on adjacent or adjoining properties will not be increased;
- b) the velocity or volume of flood waters both into and out of Wetlands and Watercourses will not be adversely altered;
- c) the capacity of any wetland or watercourse to transmit or absorb flood waters will not be significantly reduced;
- d) flooding upstream or downstream of the location site will not be significantly increased;
- e) the activity is acceptable to the Flood & Erosion Control Board and or the Town Engineer of the municipality of Westport

Discussion:

The Flood and Erosion Board approved this project at their meeting on September 2, 2020.

Bayberry Lane will continue to be overtopped during a 100-year storm event. The hydraulic analysis for the existing structure shows ~0.6 ft. of upstream backwater for the 100-year Design Discharge. The analysis for proposed replacement shows ~0.1 ft. of upstream backwater for the 100-year Design Discharge. The Commission finds that this proposal will reduce the current backwater related to the bridge and will slightly improve flooding conditions near the bridge. The Commission finds that the proposed bridge should minimize impacts to the capacity of any wetland or watercourse to transmit or absorb flood waters, will not increase flooding and will not adversely affect the velocity of flood waters into and out of the wetlands.

13. 6.6 RECREATIONAL AND PUBLIC USES

- a) access to and use of public recreational and open space facilities, both existing and planned, will not be prevented;
- b) navigable channels and or small craft navigation will not be obstructed;
- c) open space, recreational or other easements will be deeded whenever appropriate to protect these existing or potential recreational or public uses;
- d) wetlands and watercourses held in public trust will not be adversely affected.

Discussion:

The Commission finds that bridge currently provides public use for a secondary thoroughfare in town and for our neighbors to the north entering from Weston. The proposed development will not affect public use beyond the detours required while under construction. The recreational use is minimal.

This stretch of the Aspetuck River lies within a CT DEEP-designated Trout Management Area. Protection of the trout habitat against excess turbidity and sediment, and alteration of natural stream bottom is important. The Commission finds that the plan designs and timing of construction appear to take this into account.

14. CRITERIA TO BE CONSIDERED BY THE COMMISSION

In carrying out the purposes and policies of the IWW regulations for the Town of Westport Section 5.0 and Sections 22a-36 to 22a-45(a,) inclusive, of the Connecticut General Statutes, including matters relating to regulating, permitting and enforcing of the provisions thereof, the Commission shall take into consideration all relevant facts and circumstances, including, but not limited to:

- (a) The environmental impact of the proposed regulated activity on wetlands or watercourses;
- (b) The applicant's purpose for, and any feasible and prudent alternatives to, the proposed regulated activity which alternatives would cause less or no environmental impact to wetlands or watercourses;
- (c) The relationship between the **short-term** and **long-term impacts** of the proposed regulated activity on wetland or watercourses and the maintenance and enhancement of long-term productivity of such wetlands or watercourses.
- (d) Irreversible and irretrievable loss of wetland or watercourse resources which would be caused by the proposed regulated activity, including the extent to which such activity **would foreclose a future ability to protect**, enhance or restore such resource and any mitigation measures which may be considered as a condition of issuing a permit for such activity
- (e) The character and degree of injury to, or interference with, safety, health or reasonable use of property which is caused or threatened by the proposed regulated activity
- (f) Impacts of the proposed regulated activity on wetlands or watercourses outside the area for which the activity is proposed and **future activities** associated with, or reasonably related to, the proposed regulated activity **which are made inevitable** by the proposed regulated activity and which may have an impact on wetlands or watercourses. ; and
- (g) The degree to which the proposed activity is consistent with all applicable goals and policies set forth in Section 1.3 and 1.4 of these Regulations and Section 22a-36 of the Connecticut General Statutes, as amended.

15. Waterway Protection Line Ordinance

Section 148-9 of the Waterway Protection Line Ordinance states that the applicant shall submit information to the Conservation Commission showing that such activity will not cause water pollution, erosion and/or environmentally related hazards to life and property and will not have an adverse impact on the preservation of the natural resources and ecosystem of the waterway, including but not limited to impact on ground and surface water, aquifers, plant and aquatic life, nutrient exchange and supply, thermal energy flow, natural pollution filtration and decomposition, habitat diversity, viability and productivity and the natural rates and processes of erosion and sedimentation.

The Waterway Protection Line boundary exists 15' from the 25-year flood line onsite. The Flood & Erosion Control Board has approved this application on September 2, 2020 with standard conditions.

The Commission finds that they support the Town's efforts to upgrade deteriorating infrastructure for the safety of its citizens. The new bridge's design and placement increases the amount of floodwaters able to pass for a 100-year storm, which in turn, reduces the amount of water that can be backed up. As stated in the "Hydraulic Design Report", the bridge should be passable during a 10-year storm event where it currently is not passable. Additionally, this work is proposed to address structural deficiencies in the bridge and to reduce risk for the public use. The Commission finds that this will not significantly impact resources as they are protected under the Waterway Protection Line Ordinance.

Conservation Commission
TOWN OF WESTPORT
Conditions of Approval
Application # IWW, WPL -11049-20
Bayberry Lane Extension Bridge
Bridge over Aspetuck River (BRG. #04969)
Date of Resolution: September 23, 2020

Project Description: The Town of Westport is requesting to replace an existing bridge, which conveys Bayberry Lane Extension over the Aspetuck River in approximate place and kind. The project is within the watercourse, the wetlands, the upland review area from wetlands, and within the WPLO area of the Aspetuck River.

Owner of Record: Town of Westport

Applicant: Keith Wilberg, Town Engineer

In accordance with Section 6 of the *Regulations for the Protection and Preservation of Wetlands and Watercourses of Westport* and Section 30-93 of the *Waterway Protection Line Ordinance* and on the basis of the evidence of record, the Conservation Commission resolves to **APPROVE** Application #IWW,WPL-11049-20 with the following conditions:

STANDARD CONDITIONS OF APPROVAL

1. Completion of the regulated activity shall be within FIVE (5) years following the date of approval. Any application to renew a permit shall be granted upon request of the permit holder unless the Commission finds there has been a substantial change in circumstances which requires a new permit application or an enforcement action has been undertaken with regard to the regulated activity for which the permit was issued provided no permit may be valid for more than TEN (10) years.
2. Permits are not transferable without the prior written consent of the Conservation Commission.
3. It is the responsibility of the applicant to obtain any other assent, permit or license required by law or regulation of the Government of the United States, State of Connecticut, or of any political subdivision thereof.
4. If an activity also requires zoning or subdivision approval, special permit or special exception under section 8.3(g), 8-3c, or 8-26 of the Connecticut General Statutes, no work pursuant to the wetland permit shall commence until such approval is obtained.
5. If an approval or permit is granted by another Agency and contains conditions affecting wetlands and/or watercourses, the applicant must resubmit the application for further consideration by the Commission for a decision before work on the activity is to take place.
6. The Conservation Department shall be notified at least **forty-eight (48)** hours in advance of the initiation of the regulated activity for inspection of the erosion and sediment controls.
7. All activities for the prevention of erosion, such as silt fences and hay bales shall be under the direct supervision of the site contractor who shall employ the best management practices to control storm water discharges and to prevent erosion and sedimentation to otherwise prevent pollution, impairment, or destruction of wetlands or watercourses. Erosion controls are to be inspected by the applicant or agent weekly and after rains and all deficiencies must be remediated with twenty-four hours of finding them.
8. The applicant shall take all necessary steps to control storm water discharges to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and watercourse.
9. Organic Landscaping practices are recommended as described by the Northeast Organic Farming Association.
10. All plants proposed in regulated areas must be non-invasive and native to North America.
11. Trees to remain are to be protected with tree protection fencing prior to construction commencement.
12. The bottom of all storm water retention structures shall be placed no less than 1 foot above seasonal high groundwater elevation.
13. The applicant shall immediately inform the Conservation Department of problems involving sedimentation, erosion, downstream siltation or any unexpected adverse impacts, which development in the course or are caused by the work.
14. Any material, man-made or natural which is in any way disturbed and/or utilized during the work shall not be deposited in any wetlands or watercourse unless authorized by this permit.
15. A final inspection and submittal of an "as built" survey is required prior to the issuance of a Certificate of Compliance.
16. All on-site dumpsters shall be covered at the end of each workday and or when not in use.

SPECIAL CONDITIONS OF APPROVAL

current driveway leads to a garage at grade but under the main level of the house. It is in a sort of bowl area. The owners have experienced periodic flooding of their basement area during intense rainfall. The existing culverts in Willow Brook are undersized and unmaintained. This ends up directing water to the road and down this owner's driveway. Due to the elevations, up to 2 feet of water ends up in the basement/garage during a 25-year storm event. The proposal is to remove the driveway in its present location, regrade and build a new detached 2-car garage north of the existing driveway as well as relocating the driveway. One of the benefits is that coverage will be reduced by 734 s.f. Encroachment into the 30-foot upland review area will also be eliminated. They will locate a new basement hatchway in the northwest corner of the site for access.

Mr. Pryor stated that anytime a floodplain is filled, there is a need to study the potential impact to area properties. They retained GZA to look at this since GZA recently studied the whole of Willow Brook for the Town. An April 16, 2020 study found no appreciable change in flooding due to filling.

- .01 feet (1/8") to the north of Hockanum Road;
- .05 feet (1/2") to the south of Hockanum Road;
- .08 feet (under 1") at the proposed garage site; and
- Then working downstream, there is no increase at the property line.

Mr. Pryor noted the flagged wetland boundary was approved by the Commission in July 2020. The application was approved by the Flood and Erosion Control Board on September 2, 2020. The next step is Planning & Zoning for an Excavation and Fill Permit. They have no objections to the recommended staff conditions of approval.

Ms. Rycenga asked about the number of yards of fill.

Mr. Pryor stated he has not calculated that yet. He estimated about 200 c.y.

Ms. Rycenga asked if the GZA report was a part of the record.

Mr. Pryor stated yes.

Mr. Kelly shared the report onscreen.

Mr. Lobdell asked what could be done to alleviate the flooding in this neighborhood.

Mr. Pryor stated the 1983 Jackson Study identified replacing the culvert on Weston Road to a bigger size. There were talks with Public Works back in the 1980's during which time it was said that replacement was eminent. However, later discussions have indicated that it is unlikely anytime soon.

Ms. Mozian stated that this portion of Willow Brook was not studied by FEMA. The only thing we have to go by is the Jackson Study. The owners are bringing their house up to flood standards without being compelled to since it is not in a mapped FEMA-flood zone.

Ms. Rycenga asked about the "no rise" requirement in the GZA report.

Mr. Pryor explained the "no rise" requirement relates to a floodplain area of which there is none on this property.

Mr. Kelly asked Mr. Pryor to discuss the drainage.

Mr. Pryor stated Engineering asked what could be done to improve the water quality. The removal of a large amount of impervious driveway is an improvement. Also, the runoff from the new garage will be collected into a level spreader with discharge to plantings prior to discharge to Willow Brook.

Mr. Kelly noted the plantings are mostly groundcover. Staff has found that a more robust planting, other than seed mix is more successful in controlling erosion of the embankment and is more likely not to be continuously mowed before the seed mix reaches full maturity. An erosion control blanket is also recommended. Test pits have not been done yet but will be required by Engineering. He would ask Mr. Pryor to certify that the work is done according to his plan.

- Application #IWW/M 11017-20 adopted new wetland boundary location onsite by the Conservation Commission on July 15, 2020
- The existing house was built in 1957.
- The property is 1.10 acres (47,999 sq. ft.) in size.
- It is located in the Willow Brook watershed and Willow Brook flows from east to west across the rear yard. No FEMA flood zone is associated with this property as it was outside their study area. However, the property has a 100-year flood elevation taken from GZA Geoenvironmental Inc. flood study, dated April 16, 2020. The 25-year flood elevation verified by Keith Wilberg, Town Engineer is 44.1 msl..
- The property is not within the Aquifer Protection Overlay Zone.
- Property does not exist within the Coastal Areas Management Zone.
- The Waterway Protection Line Ordinance boundary is established at 15' from the edge of the 25-year flood line.
- The existing residence has flooded multiple times from stormwater and overflow from Willow Brook.
- The flagged wetland area is 4,987 sq. ft. Wetland soil types found onsite:
 - Aquents (Aq): This soil type generally has less than two (2) feet of fill over naturally occurring poorly or very poorly drained soils, or are located where the naturally occurring wetland soils are no longer identifiable, or the original soil materials have been excavated to the ground water table within twenty (20) inches of the soil surface, have an aquatic moisture regime and can be expected to support hydrophytic vegetation.
 - Raypol silt loam (12): This soil type is nearly level, poorly drained soil found in depressions, on plains and terraces. The soil has a seasonal high water table at a depth of 6 inches from fall until late spring
- Existing driveway = 2,288 sq. ft.
 - Proposed driveway = 933 sq. ft.
 - Proposed garage = 621 sq. ft.
 - Difference of total site coverage pre and post construction = **-734 sq. ft.**
- Flood & Erosion Control Board reviewed and approved this application pursuant to the WPLO on September 2, 2020

Conformance to Section 6 of the Inland Wetlands and Watercourses Regulations

7. 6.1 GENERAL STANDARDS

- a) disturbance and pollution are minimized;
- b) minimize height, width, length of structures are limited to the minimum; dimension to accomplish the intended function;
- c) loss of fish, other beneficial organisms, wildlife and vegetation are prevented;
- d) potable fresh water supplies are protected from dangers of drought, overdraft, pollution, misuse and mismanagement;
- e) maintain conservation, economic, recreational and aesthetic qualities;
- f) consider historical sites

Discussion:

The Commission finds that this property has experienced repetitive flooding over the years with water entering the house by way of the lower-level garage that leads into the basement. The house is located within the 100-yr flood zone of Willow Brook as determined by the GZA Geoenvironmental Inc. flood study of 2020. The Commission finds that the particular characteristics of the house construction, if left untouched, will lead to future flooding conditions during extreme storm events unless changes occur.

The driveway area is essentially within a concave, depressed area bordered by the garage/house to the north, a retaining wall to the west, an earthen berm to the south, and Hockanum Road to the east. The existing driveway slopes from Hockanum Road (elevation ~45.0') down to the garage entrance (elevation 42.78'). An existing area drain for the driveway is located within the paved area at elevation 42.01'. The height of the berm that separates the driveway is elevation 44.0'. The elevation for the brook is ~39.6' measured at the toe-of-slope. The 25-year flood plain elevation is 44.10 and 100-year flood plain elevation is 44.36'

The Commission finds that the applicant proposes to remove the depressed portion of the driveway, fill in the area, and construct a two-bay garage adjacent to the residence at elevation 46.9'. The grading will create a gentle slope from the house to the existing berm effectively removing the 25 and 100-year flood line from intersecting with the residence. The overall impervious coverage for the site would be reduced by 734 sq. ft. The driveway entrance from Hockanum Road will be adjusted slightly and a new parking/turning area is provided.

The application materials show a breezeway connection to the residence on the site plan and, a garage sketch without a breezeway. Discussions among the applicant and the Conservation Department revealed that the owners are not positive whether or not the garage will be detached or attached but were seeking approval for attached as of now. The Commission finds that either condition is acceptable.

8. 6.2 WATER QUALITY

- a) flushing rates, freshwater sources, existing basin characteristics and channel contours will not be adversely altered;
- b) water stagnation will neither be contributed nor caused;
- c) water pollution will not affect fauna, flora, physical or chemical nature of a regulated area, or the propagation and habitats of fish and wildlife, will not result;
- d) pollution of groundwater or a significant aquifer will not result (*groundwater recharge area or Aquifer Protection Overlay Zone*);
- e) all applicable state and local health codes shall be met;
- f) water quality will be maintained or improved in accordance with the standards set by federal, state, and local authority including section 25-54(e) of the Connecticut General Statutes
- g) prevents pollution of surface water

Discussion:

Currently, the surface water from the driveway discharges to an area drain near the southeastern corner of the paved surface. This discharges directly to the watercourse onsite without any treatment for pollutants or providing stormwater storage.

The Commission finds that the proposed project for the addition and associated fill will include a level spreader to disperse the stormwater runoff from the roof leaders of the new addition. The level spreader will discharge to the planted area consisting of New England Soil Erosion Control mix, along the slope/bank of Willow brook.

The water quality classification for Willow Brook (Connecticut Environmental Conditions Online, <http://www.cteco.uconn.edu/>), is Class A water. The Class A designation indicates that this is uncontaminated surface water, is uniformly good to excellent, natural quality and is suitable for use as a public drinking water supply.

9. 6.3 EROSION AND SEDIMENT

- a) temporary erosion control measures shall be utilized during construction and for the stabilization period following construction;
- b) permanent erosion control measures shall be utilized using nonstructural alternatives whenever possible and structural alternatives when avoidable;
- c) existing circulation patterns, water velocity, or exposure to storm and flood conditions shall not be adversely altered;
- d) formation of deposits harmful to aquatic life and or wetlands habitat will not occur;
- e) applicable state, federal and local guidelines shall be met.

Discussion:

Willow Brook's natural drainage pattern flows from east to west on site. Slope disturbance can result in adverse consequences to watercourses. Erosion and sediment from construction sites can impair water supplies, the biological integrity of a waterbody and the local hydrology. The Commission finds that the applicant proposes to add water through a level spreader along the top of the slope adjacent to the watercourse. The proposed area is to be stabilized with herbaceous vegetation and grasses found in the New England Erosion Control Mix. The Commission finds that the use of trees and shrubs growing along streambanks help to bind the soil, giving the banks stability. Additionally,

vegetation slows the movement of floodwater through wetland areas, reducing erosive flow velocities on floodplain. The Commission finds that the applicant shall add more plantings, in addition to the two existing spruce trees in order to add stability and help erosion of the embankment. An erosion control blanket will assist in stabilization, post construction, until the vegetation matures.

Currently the site plan indicates the sediment controls to be silt fence installed at the toe of slope surrounding the project area. Staff recommends adding an additional row of fence along the top of slope during construction to capture any sediment runoff from the work area.

10. 6.4 NATURAL HABITAT STANDARDS

- a) critical habitats areas,
- b) the existing biological productivity of any Wetland and Watercourse shall be maintained or improved;
- c) breeding, nesting and or feeding habitats of wildlife will not be significantly altered;
- d) movements and lifestyles of fish and wildlife (plant and aquatic life) will not be significantly affected;
- e) periods of seasonal fish runs and bird migrations shall not be impeded;
- f) conservation or open space easements will be deeded whenever appropriate to protect these natural habitats.

Discussion:

The Commission finds that the vegetation within the riparian corridor for Willow Brook provides shelter and habitat for wildlife. The existing vegetation within this area helps shade the water to increase oxygen levels and provide cover for both fish and terrestrial animals. Additionally, plantings provide the main source of organic detritus forming the basis of the food chain. The Commission finds that every effort should be made to preserve existing woody vegetation along the streambank.

The property also contains areas that are partially manicured along streamside channel. The Commission finds that the addition of more plantings along the stream bank of Willow Brook to restore a more natural condition and increase existing habitat and shelter for wildlife onsite. The Commission finds that the applicant shall provide a landscape plan that includes more plantings along the northern bank of Willow Brook.

11. 6.5 DISCHARGE AND RUNOFF

- a) the potential for flood damage on adjacent or adjoining properties will not be increased;
- b) the velocity or volume of flood waters both into and out of Wetlands and Watercourses will not be adversely altered;
- c) the capacity of any wetland or watercourse to transmit or absorb flood waters will not be significantly reduced;
- d) flooding upstream or downstream of the location site will not be significantly increased;
- e) the activity is acceptable to the Flood & Erosion Control Board and or the Town Engineer of the municipality of Westport

Discussion:

As stated in the "Stormwater Management Narrative", the applicant proposes to decrease overall impervious areas onsite reducing the amount of stormwater runoff from the property. New runoff from the proposed garage and driveway will be directed from roof leaders and as sheetflow into the 20' long level spreader south of the garage, near the top of slope. The water will be allowed to filter through the planted area leading down to the brook. The Commission finds that the applicant shall provide a landscape plan that includes more plantings along the northern bank of Willow Brook to manage the flow of water and aid with pollutant removal from discharge.

The applicant also provided a report entitled "Draft – Floodplain Modeling for Hockanum Road Westport, CT" from GZA, where it modeled the impact of construction within the 100-year floodplain for Muddy Brook. The conclusion found that the proposed condition will result in "**less than a 0.1 ft increase in water surface elevation**". It also showed negligible impacts to water elevations upstream and downstream of the site. The Commission finds that this proposal is not a significant change to the flood carrying capacity of the stream.

12. 6.6 RECREATIONAL AND PUBLIC USES

- a) access to and use of public recreational and open space facilities, both existing and planned, will not be prevented;
- b) navigable channels and or small craft navigation will not be obstructed;
- c) open space, recreational or other easements will be deeded whenever appropriate to protect these existing or potential recreational or public uses;
- d) wetlands and watercourses held in public trust will not be adversely affected.

Discussion:

The property currently does not provide public or recreational use. The Commission finds that the proposed development will not affect recreational and public uses, navigable channels and/or small craft navigation.

13. CRITERIA TO BE CONSIDERED BY THE COMMISSION

In carrying out the purposes and policies of the IWW regulations for the Town of Westport Section 5.0 and Sections 22a-36 to 22a-45(a,) inclusive, of the Connecticut General Statutes, including matters relating to regulating, permitting and enforcing of the provisions thereof, the Commission shall take into consideration all relevant facts and circumstances, including, but not limited to:

- a) The environmental impact of the proposed regulated activity on wetlands or watercourses;
- b) The applicant's purpose for, and any feasible and prudent alternatives to, the proposed regulated activity which alternatives would cause less or no environmental impact to wetlands or watercourses;
- c) The relationship between the **short-term** and **long-term impacts** of the proposed regulated activity on wetland or watercourses and the maintenance and enhancement of long-term productivity of such wetlands or watercourses.
- d) Irreversible and irretrievable loss of wetland or watercourse resources which would be caused by the proposed regulated activity, including the extent to which such activity **would foreclose a future ability to protect**, enhance or restore such resource and any mitigation measures which may be considered as a condition of issuing a permit for such activity
- e) The character and degree of injury to, or interference with, safety, health or reasonable use of property which is caused or threatened by the proposed regulated activity
- f) Impacts of the proposed regulated activity on wetlands or watercourses outside the area for which the activity is proposed and **future activities** associated with, or reasonably related to, the proposed regulated activity **which are made inevitable** by the proposed regulated activity and which may have an impact on wetlands or watercourses. ; and
- g) The degree to which the proposed activity is consistent with all applicable goals and policies set forth in Section 1.3 and 1.4 of these Regulations and Section 22a-36 of the Connecticut General Statutes, as amended.

14. Waterway Protection Line Ordinance

Section 148-9 of the Waterway Protection Line Ordinance states that the applicant shall submit information to the Conservation Commission showing that such activity will not cause water pollution, erosion and/or environmentally related hazards to life and property and will not have an adverse impact on the preservation of the natural resources and ecosystem of the waterway, including but not limited to impact on ground and surface water, aquifers, plant and aquatic life, nutrient exchange and supply, thermal energy flow, natural pollution filtration and decomposition, habitat diversity, viability and productivity and the natural rates and processes of erosion and sedimentation.

The Waterway Protection Line boundary exists 15' from the 25-year flood line onsite. The Flood & Erosion Control Board has approved this application on September 2, 2020 with standard conditions.

The Commission supports the applicant's effort to reduce the frequency of flooding in the residence. Any erosion of soils and pollutants entering the watercourse should be minimized provided the erosion controls are properly installed and maintained throughout construction. The Commission finds that long-term slope stabilization will occur by the addition of more plantings along the stream bank of Willow Brook and will benefit resources by limiting erosion and provide biofiltration of pollutants from any runoff. The Commission finds that this will not significantly impact resources as they are protected under the Waterway Protection Line Ordinance.

Conservation Commission
TOWN OF WESTPORT
Conditions of Approval
Application # IWW, WPL -11055-20
4 Hockanum Road
Assessor's Map: D13 Tax Lot: 095
Date of Resolution: September 23, 2020

Project Description: Applicant is requesting to re-grade the rear portion of their property adjacent to Willow Brook, to relocate the existing driveway, and to construct a 2-car garage. The work is within the upland review area from wetlands and within the WPLO from Willow Brook

Owner of Record: Andrew S. & Michelle M. Ludel

Applicant: Robert Pryor P.E., Landtech

In accordance with Section 6 of the *Regulations for the Protection and Preservation of Wetlands and Watercourses of Westport* and Section 30-93 of the *Waterway Protection Line Ordinance* and on the basis of the evidence of record, the Conservation Commission resolves to **APPROVE** Application **#IWW,WPL-11055-20** with the following conditions:

STANDARD CONDITIONS OF APPROVAL

1. Completion of the regulated activity shall be within FIVE (5) years following the date of approval. Any application to renew a permit shall be granted upon request of the permit holder unless the Commission finds there has been a substantial change in circumstances which requires a new permit application or an enforcement action has been undertaken with regard to the regulated activity for which the permit was issued provided no permit may be valid for more than TEN (10) years.
2. Permits are not transferable without the prior written consent of the Conservation Commission.
3. It is the responsibility of the applicant to obtain any other assent, permit or license required by law or regulation of the Government of the United States, State of Connecticut, or of any political subdivision thereof.
4. If an activity also requires zoning or subdivision approval, special permit or special exception under section 8.3(g), 8-3c, or 8-26 of the Connecticut General Statutes, no work pursuant to the wetland permit shall commence until such approval is obtained.
5. If an approval or permit is granted by another Agency and contains conditions affecting wetlands and/or watercourses, the applicant must resubmit the application for further consideration by the Commission for a decision before work on the activity is to take place.
6. The Conservation Department shall be notified at least **forty-eight (48)** hours in advance of the initiation of the regulated activity for inspection of the erosion and sediment controls.
7. All activities for the prevention of erosion, such as silt fences and hay bales shall be under the direct supervision of the site contractor who shall employ the best management practices to control storm water discharges and to prevent erosion and sedimentation to otherwise prevent pollution, impairment, or destruction of wetlands or watercourses. Erosion controls are to be inspected by the applicant or agent weekly and after rains and all deficiencies must be remediated with twenty-four hours of finding them.
8. The applicant shall take all necessary steps to control storm water discharges to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and watercourse.
9. Organic Landscaping practices are recommended as described by the Northeast Organic Farming Association.
10. All plants proposed in regulated areas must be non-invasive and native to North America.
11. Trees to remain are to be protected with tree protection fencing prior to construction commencement.
12. The bottom of all storm water retention structures shall be placed no less than 1 foot above seasonal high groundwater elevation.
13. The applicant shall immediately inform the Conservation Department of problems involving sedimentation, erosion, downstream siltation or any unexpected adverse impacts, which development in the course or are caused by the work.
14. Any material, man-made or natural which is in any way disturbed and/or utilized during the work shall not be deposited in any wetlands or watercourse unless authorized by this permit.

15. A final inspection and submittal of an “as built” survey is required prior to the issuance of a Certificate of Compliance.
16. All on-site dumpsters shall be covered at the end of each workday and or when not in use.

SPECIAL CONDITIONS OF APPROVAL

17. Conformance to the plans entitled:
 - a. “Proposed Site Improvements to Alleviate Flooding for Willow Brook prepared for Andrew S. & Michelle M. Ludel 4 Hockanum Road, Westport, CT”, Scale: 1”=20’, dated April 29, 2019 and last revised to June 2, 2020, prepared by Landtech
 - b. “Map of Property prepared for Andrew S. and Michelle M. Ludel 4 Hockanum Road, Westport, Connecticut”, Scale: 1”=20’, dated September 10, 2007, prepared by Hammons LLC
 - c. “Stormwater Management Narrative 4 Hockanum Road Westport, Connecticut Conservation Commission Application”, Dated July 23, 2020, prepared by Landtech
 - d. “Draft – Floodplain Modeling for Hockanum Road Westport, CT” addressed to Robert Pryor, dated April 16, 2020, prepared by GZA Geo Environmental, Inc.
18. Conformance to conditions of the Flood & Erosion Control Board approval of September 2, 2020.
19. A planting plan shall be submitted prior to issuance of a Zoning Permit, for area down slope of the level spreader along the slope that incorporates native perennial herbaceous and woody plantings in addition to the seed mix. Plan shall also include the use of an erosion control blanket.
20. All planting within 20’ from the wetland area shall be installed by hand. Mulching within this area shall be done with organic leaf mulch. Plantings must be installed prior to the issuance of a CCC.
21. The site engineer shall oversee the drainage installation and certify that it is installed correctly prior to the issuance of a CCC. Test Pits must be done to ensure that it is sufficiently designed to be above the groundwater to provide water quality and proper functioning.
22. Erosion controls shall be installed prior to construction commencement just outside the limit of disturbance as shown on the site plan. An additional row of silt fence shall be installed at the edge of the top of slope near the level spreader. Additionally, staked hay bales shall be added to reinforce the silt fence. An erosion control blanket will be needed as part of final slope stabilization.

This is a conditional approval. Each and every condition is an integral part of the Commission decision. Should any of the conditions, on appeal from this decision, be found to be void or of no legal effect, then this conditional approval is likewise void. The applicant may refile another application for review.

This approval may be revoked or suspended if the applicant exceeds the conditions or limitations of this approval, or has secured this application through inaccurate information.

Motion: Lobdell Second: Carey
Ayes: Lobdell, Carey, Rycenga, Davis, Corroon, Cowherd
Nays: 0 Abstentions: 0 Vote: 6:0:0

4. **6 Manitou Court:** Application #WPL-11051-20 by Andy Soumelidis of LandTech on behalf of 6 Manitou Court LLC to elevate and renovate the single family residence along the river and rebuilding of the existing deck and construct an enclosed breezeway connecting to a new addition with an in-ground pool upgradient and outside the WPLO area of the Saugatuck River. The driveway will remain in the same general location. The second single family residence will be demolished. The project will also include a new septic system, filling, grading, terracing, retaining walls and drainage

Andy Soumelidis, PE of LandTech, presented the application. He noted George Desmond, builder; Ruiz Luis, Architect; and Corey Jorgeson, LA of Wesley Stout Associates were also available for questions.

Mr. Soumelidis reviewed the revised and detailed Construction Sequence and Phasing Plan. They would clear cut all the necessary trees but would not stump them until they get to that phase of

construction. The best way to access the property is to go straight down the slope rather than traversing the slope for two reasons. The machine could tip over and in order to create a roadway that traverses the slope, more cutting/filling would be needed to create a level path. They will demolish the existing garage/second dwelling and part of the driveway; install temporary utilities. Then they will install cribbing at low tide to raise the boat house. However, if it is not conducive to be working on the boat house because of high tide, they would work on the barn addition. Therefore, work will be going on simultaneously. Also, a second accessway will be to the north. Once the foundations are in, the area gets back filled and then they will move onto the next phase. Depending on the time of year, either landscaping will take place or erosion control blankets will be installed until the appropriate time to plant comes around. Also, in Phase 1 is the seawall repair/reinforcement work. This phase of earthwork should take about 3 months. Phase 2 is predominately retaining walls, associated grading and drainage. This phase will take approximately 2 months. Phase 3 will be building the retaining wall around the septic system and installing the septic. This phase should be about 2 months. Phase 4 occurs on the northside of the boat house and consists of more retaining walls. This phase will be about 2 months. Phase 5 is the final stage and will be construction of the pervious parking court, driveway and associated drainage. This phase will take about 2 months.

Mr. Soumelidis noted the job trailer, dumpster, and staging area will all be in the vicinity of where Phase 5 is proposed. There will be construction fencing added around the septic to keep machinery from running over it. Pending approvals, they would like to start work this Fall (2020). He noted it would be most likely they would be starting with erosion control blankets but would go back and landscape as weather or seasonal change permits.

Mr. Soumelidis reviewed the Operations and Maintenance Plan. It outlines the maintenance for each structure. In general, inspecting 2 times a year. There are specific requirements for each component. The Operations and Maintenance Plan will be recorded on the Land Records.

Mr. Kelly asked for an overview of how the septic system works.

Mr. Soumelidis stated there is an ejector system in the boat house. The main floor of the boat house goes by gravity. The lower level has an ejector pump that goes up to the main level of the barn addition. The ejector pump has a back up battery. It is also hooked up to the generator and is equipped with an alarm system.

Ms. Mozian asked if there are any enhancement that can be done to improve/protect the habitat.

Mr. Soumelidis stated there was a tidal wetland enhancement plan originally contemplated when the wall was going to be replaced. Now since the wall is not being replaced, this is no longer a part of the application. Also, the raingardens were eliminated per DEEP comments.

Ms. Rycenga asked about dust mitigation measures.

George Desmond stated that during the demolition of the garage and apartment, they will have water on-site and they will hose down to reduce dust.

Atty. Cowherd asked why, since erosion is a concern, they are clear cutting the site.

Mr. Soumelidis stated they will be bringing in a crane and the site is too tight. He indicated it is best to remove the trees while the initial heavy equipment is on-site.

Ms. Mozian read the 3 Flood and Erosion Control Board Special Conditions. She verified the fill for the septic construction occurs during Phase 3.

Mr. Kelly asked about weep holes in the walls.

Mr. Soumelidis stated all walls will have weep holes 4 feet on center.

Mr. Kelly stated the revised plans need to be reviewed by the Health Department prior to issuance of a Zoning permit.

- j) **Building Plans** entitled: "McInerney Residence 6 Manitou Court Westport, CT", Scale 1/4"=1'0", Dated **May 12, 2020** and last revised to **July 21, 2020**, Sheets C-1.0 to A-3.0 (17 pgs), prepared by Robert A. Cardello Architecture + Design
- k) **Connecticut Department of Energy & Environmental Protection, Certificate of Permission**, 6 Manitou Court, 202005391-COP, Dated July 15, 2020
- l) **NDDB Determination** No.: 202003576, Project: Repair and partial replacement of existing masonry seawall at 6 Manitou Court in Westport, Connecticut From Karen Zyko, CT DEEP; to Tom Ryder Landtech, Dated March 10, 2020
- m) **"Seawall Evaluation Memorandum"** To: George Desmond, from: Matthew T Taverna, P.E., GZA Geoenvironmental, Inc., Dated June 25, 2020
- n) **"Geohydrologic Review"** To: George Desmond, from: Anthony Urbano, P.E., GZA Geoenvironmental, Inc., Dated June 25, 2020
- o) **"Operations and Maintenance Plan** Report for 6 Manitou Court Westport, CT prepared for 6 Manitou Court, LLC", Dated September 16, 2020, prepared by Landtech, 4 Pages

3. Property Description:

Total lot area is 56,495 sq. ft. (1.297 ac)

Location of 25-year flood boundary: 9 ft. contour interval. The lower westerly portion of this parcel is below elevation 9.0'. The WPLO is established 15' landward from the 25-year flood boundary of the Saugatuck River.

Property is partially situated in Flood Zones VE (el. 14) as shown on F.I.R.M. Panel 09001C0551G Map revised to July 8, 2013.

Existing Boathouse/Residence- **basement floor elevation 6.9', first floor elevation 14.6'**

Proposed Boathouse/Residence- first floor elevation 21.0', open construction below built to VE flood standard

Existing Site Coverage: 21.9% (10,105 sq. ft.)

Proposed Site Coverage: 21.0% (10,690 sq. ft.), *slope reduction included in calculation*

Westport Weston Health District approval: June 9, 2020

No inland wetlands onsite

- 4. **Aquifer:** Property underlain by Sherwood Island Aquifer, which is a coarse-grained stratified drift aquifer. The property is **NOT** within the Town's wellfield protection zone
- 5. **Coastal Area Management:** The project is within the Coastal Area Management Zone. The coastal resources found onsite include:
 - Coastal Waters and Estuarine Embayments
 - a. The site is located on the eastern bank of the Saugatuck River within the tidal range of the river about 5000 feet upstream of the mouth of the river into Long Island Sound. Coastal waters are those which contain a salinity of at least five hundred parts per million under low flow stream conditions. Modified Bluffs & Escarpments means bluffs or escarpments which have been temporarily stabilized by erosion control structures.
 - b. This site has been modified from a natural physiological state as evident by the existing seawall structure and stone slope that is located on the western portion of the property.

Tidal Wetlands means those areas which border or lie beneath tidal waters and whose surface is at or below an elevation of one foot above local extreme high water; and upon which may grow or be capable of growing vegetation species defined in CGS Section 22a-29(2). The vegetation on this site exists from the face of the seawall to the Saugatuck River.

Coastal Hazard Areas means those land areas inundated during coastal storm events or subject to erosion induced by such events, including flood hazard areas as defined and determined by the National Flood Insurance Act.

6. Vegetation Description

The portion of the property nearest the Saugatuck River (western portion) and seawall consists of manicured lawn on the northern end transitioning into a gravel patio then to an elevated deck towards the southern portion. Some areas are interspersed with the invasive *Phragmites australis*. Beyond this lower section, the site transitions to a steep slope consisting of a mix of mature trees and shrubs with ornamental species surrounding the existing residence. Some disturbed areas of the slope show sign of erosion due to stormwater runoff originating from the existing driveway. Further upslope, beyond the driveway and secondary residence/garage, the property is mostly wooded with ledge outcroppings visible and sign of groundwater seeps or drainage discharge to surface

Soils: The USDA classifies the soils onsite as Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky (73E) which is a well-drained soils complex formed in loamy melt-out till. The USDA Web Soil Survey review of building site development for this soil show the soil's ratings for development as "very limited" for dwellings with basements (and without) and shallow excavations. The reason behind this designation is primarily attributed to the presence of slopes.

7. Previous Permits issued:

WPL/E-9599-13: Remove underground oil storage tank, Install 500-gallon underground propane tank

WPL/E-5265-95: Addition to residence

The Flood and Erosion Control Board **approved** the application at the **September 2, 2020 hearing**.

Special conditions include:

- a) Submission of a temporary grading plan for construction access;
- b) Submission of certification from a professional engineer that the piers and breakaway walls for the boathouse/residence have been installed as designed; and,
- c) A site monitor be retained to provide weekly reports to the Town during the construction process.

The drainage proposal is acceptable to the Engineering Department.

The Application was approved by the Westport Weston Health District on June 9, 2020 for the indoor pool and the proposed septic design. The proposal consists of a 1500-gallon septic tank, 1500-gallon pump chamber and 60' of Eljen Mantis system for the septic fields. An ejector grinder pump is located in the basement of the barn and the pump chamber are both equipped with alarm panels. The ejector pump will also have a backup battery and both will be connected to the generator.

The Application received approvals by the Connecticut Department of Energy and Environment Protection (CT DEEP) on July 15, 2020 (**202005391-COP**) The permit allows for repairs to the seawall including adding weep holes in the ~90' southern section and a geotextile fabric along the rear of ~145' of northern section of seawall. Additionally, it approves the lifting of the existing boathouse on new masonry piers, rebuilding the deck, and retain the existing dock/float. The Applicant also received NDDDB Determination No: 202003576, "Project: Repair and partial replacement of existing masonry seawall at 6 Manitou Court in Westport, Connecticut" on March 10, 2020. The recommendation was to search the immediate areas for diamondback terrapins to protect them from the possibility of being run over or disturbing their habitat area.

8. Waterway Protection Line Ordinance

Section 30-93 of the WPLO ordinance states the following: An applicant shall submit information to the Conservation Commission showing that such activity will not cause water pollution, erosion and other environmentally related hazards to life and property and will not have an adverse impact on the preservation of the natural resources and ecosystems of the waterway, including but not limited to, impact on ground and surface waters, aquifers, plant and aquatic life, nutrient exchange and supply, thermal energy flow, natural pollution filtration and decomposition, habitat diversity, viability and productivity and the natural rates and processes of erosion and sedimentation.

9. Discussion:

The Commission finds that the Connecticut DEEP has issued a Certificate of Permission for both the seawall repairs, erosion stabilization, dock/pier replacement, and for the house lift and pier foundation work. The state has put limitations on work including timing activities to coincide with low tide, limiting site excavations, establishing a work sequence, and setting other site-specific limits for the work required. The applicant is also aware of Diamondback Terrapin in the general area and the work area will be checked each morning for their presence.

The seawall work includes repairs, inclusion of weep holes, removal of backfill and installing geotextile fabric and backfilling within the limits of the Coastal Jurisdiction Line (CJL), which occurs at the face of the seawall. This work lies within the limits of the Waterway Protection Line Ordinance (WPLO) and will be done from the property using land-based equipment and hand tools. Excavated materials will be stored onsite and reused for backfilling. A turbidity curtain will be installed along the seawall at the start of site construction. The Commission finds that the use of a site monitor to oversee excavation activities, monitor sediment and erosion controls, and report any issues related to

the work directly in the WPL will help to ensure that proposed safeguards are in place throughout construction.

The Commission finds that the applicant has submitted a detailed construction sequence (found on Site Plan C-4) wherein it establishes five phases of construction activity. The applicant describes steps to be taken in each phase and describes benchmarks to be reached. The areas of this phase work are also depicted on Site Plan C-0 by shading and boundaries being established.

The applicant proposes to work within the areas of steep slope for the house construction/addition. The Commission finds that the existing slope shows evidence of erosion and a deteriorated condition where extensive vegetation is not established. This is exacerbated by the amount of uncontrolled stormwater runoff from the existing driveway area. The Commission finds that this site's main attribute/characteristic of slope requires special attention during the construction phases. The Commission finds that requiring a site monitor to provide weekly reports noting the condition of sediment and erosion controls and provide actionable items for the contractor to address to ensure the stability of the site.

The Commission finds that the condition of the slope will be further degraded if/when the remaining vegetation, primarily mature trees, are removed and not controlled. The soils will migrate downhill through erosive actions and be deposited within the WPL. The applicant has provided sediment and erosion controls on the proposed site plan that consists of installing silt fence, construction entrance/anti-mud tracking pad and stockpile location. The silt fence locations consist of a double row of silt fence along the seawall at the toe of slope, an intermediary fence across the steep slope section, and another row of silt fence further upslope.

The Commission finds that silt fencing, anti-tracking pad/excavator access, controlled vegetation removal, construction phasing plan represents a plan to control possible erosion onsite. The Commission finds that additional measures provided with this plan following recommendations found within the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. The applicant shall strictly adhere to the construction sequence, limiting areas of exposed soils at one time and keep vegetation or stumps in place as noted. The Commission finds that the Construction Sequence located on the "Addition & Renovation Notes & Details, Sheet C-4" of the proposed site plan is updated to include a detailed sequence. Any diversions from the sequence will require review by the Conservation Department Staff, the site monitor and Engineering Department. Any proposed problems from erosion shall be addressed as soon as possible to limit erosion. Any additional runoff of eroded sediments or uncontrolled stormwater will complicate these construction activities that are directly adjacent to the resource (the Saugatuck River)

The drainage from portions of the new addition, driveway, and pervious parking court are proposed to be collected within the parking court subbase reservoir. The reservoir will be 11" thick of stone with internal confinement berms and is partially wrapped on the edges with an impermeable poly-liner barrier. The reservoir will have a 4" thick layer of open-graded base stone above with an additional 5" thick of porous asphalt as the final top course. The reservoir has been sized to hold the volume of water equal to the first 1" of rainfall to manage the water quality volume. Excess water is piped, as an overflow, into a 6" pipe that drains downslope along the southerly property line. This overflow will be directed into a hydrodynamic vortex separator, the "Hydro International Downstream Defender". This unit will retain sediments and oils from stormwater runoff within the structure and allow stormwater to flow pass. This unit is considered a BMP (Best Management Practice), in addition to the driveway, to treat stormwater from the driveway and parking court. The Commission finds that Conservation staff discussed options with the design engineer and the Engineering Department to address water quality concerns regarding pollutants entering from the parking area. The Commission finds that the routine methods of water quality treatment such as biofiltration swales and raingarden designs would not work within the site characteristics and installation comes with limitations of steep slopes and limited depth to bedrock. The Commission finds that the engineered solution is appropriate for deployment in this area. Both the pervious pavement and hydrodynamic separator's success are reliant on proper functionality. The Commission finds that the owners should be made aware of the proper maintenance of the unit and asphalt and adhere to their upkeep. The Commission finds that the applicant has submitted an operation and maintenance procedure for the drainage structure and pervious driveway. The Conservation Commission requires the "Operation And Maintenance Plan"

shall be recorded on the land records for all future homeowners to be aware of prior to purchase, prior to the issuance of a Conservation Certificate of Compliance.

Beyond the hydrodynamic separator, the stormwater, continues where it joins a 6" pipe originating from the existing catch basin along the driveway. It is subsequently joined by the footing drain of the addition. The terminus of this drainpipe is located at the base of the slope. The water discharges landward of the Coastal Jurisdiction Line (CJL) into an energy dissipator pad located beneath the proposed deck.

The other portions of the stormwater runoff from the proposed addition discharges into the 44' long gravel trench located downhill from the new addition and landscape terracing. This will function as a level spreader to disperse the runoff from the portion of the roof area identified in the drainage analysis. The stormwater from lower "boat house" portion of the site will not be managed and remain untreated as it is in its current condition.

The Commission finds that the "Stormwater Management Report" provides information on management of stormwater onsite. They do not provide storage for the 25-yr storm event due to the site's location in relation to the Saugatuck River. The report shows that the three distinct drainage areas of the proposed construction onsite provide water quality volumes for treatment. The report states this is an improvement for water quality over the current condition.

The Commission finds that there are two areas of concern with the existing groundwater management onsite. One includes a side hill weep noted during onsite inspections of the property. This area is located near the existing shed along the driveway. It shows evidence of groundwater reaching the surface identifiable with the visible "orange" staining of the nearby areas. The air oxidizes the minerals in the water, primarily iron, forming ferric hydroxides, which result in the staining. The other area of concern noting this condition, is along the rear of the existing garage structure where a pipe discharges near the existing fire pit. The same evidence of staining is an indicator of groundwater being collected and discharged to the surface. The Commission finds that the applicant proposes a significant amount of excavations and walls forming terraces onsite. The retaining wall downhill from the septic shows 4" weep holes. The other proposed walls will encounter the groundwater and therefore need footing drains to manage water. The Commission finds that any pipe or weep hole acting as a footing drain (other than what is shown from the addition) shall discharge uphill from the WPLO to allow for management of the groundwater. The Commission finds that the applicant shall address the concerns by showing the location of drains and perforated pipe for each constructed wall and where the discharge will be managed prior to issuance of a Zoning Permit.

The proposed subsurface sewage disposal system (septic system) has been reviewed and approved by the Westport Weston Health District on June 9, 2020. The system is an Eljen Mantis system designed for a five (5) bedroom residence. The system detail shows the select fill required and associated grading and wall needed for construction. Of concern was the location of the septic and proposed walls surrounding the fill needed to raise the bottom of the septic above the **four feet** required to be above ledge. The wall is not to act as a conduit for the effluent. Additionally, the Commission requires the updated plans be reviewed by the Westport Weston Health District prior work commencement. The ejector grinder pump is located in the basement of the barn and the pump chamber are both equipped with alarm panels. The ejector pump will also have a backup battery and both will be connected to the generator.

The Commission finds that the proposed indoor pool depth shall not exceed 4.5 ft. This depth represents the depth of the footings for the building thereby not exceeding the depth of excavation that would normally be needed for a standard pool. This would limit the ledge removal needed onsite as the plans currently show a need for an approximate 10' cut for the eastern foundation wall of the barn structure.

The Commission finds that the application also includes a "Landscape Plan" that proposes plants throughout the site. The selected plants appear to be native, non-invasive species. The collection of plants ranges from herbaceous, to shrub, to trees. A total of 20 trees are proposed, ranging in height from 8' to 30'. These trees, though considerably smaller than the mature trees currently onsite that are scheduled for clearing, are larger selections for landscaping installation projects and will require

the use of heavy equipment to install. The Commission finds that the installations shall be done with care to ensure that all sediment and erosion controls remain in place during planting. The Commission finds that the recommended site monitor should also review plantings until the area is stable.

Conservation Commission
 TOWN OF WESTPORT
Conditions of Approval
Application #WPL-11051-20
Street Address: 6 Manitou Court
Assessor's: Map C05 Lot 039
Date of Resolution: September 23, 2020

Project Description: To elevate and renovate a single-family residence along the river and construct an enclosed breezeway connecting to a new addition with an in-ground pool up-gradient and outside the WPLO. The driveway will remain in the same general location. The second on-site single-family residence will be demolished. The project includes a new septic system, filling, grading, terraced walls and drainage improvements. The existing deck will be rebuilt. The seawall shall be repaired and will remain in the same location and height. The dock will remain. A portion of the work is within the WPLO of the Saugatuck River.

Owner of Record: 6 Manitou Court LLC
Applicant: Andy Soumelidis, Landtech

In accordance with Section 30-93 of the *Waterway Protection Line Ordinance* and on the basis of the evidence of record, the Conservation Commission resolves to **APPROVE** Application #**WPL 11051-20** with the following conditions:

STANDARD CONDITIONS OF APPROVAL

1. It is the responsibility of the applicant to obtain any other assent, permit or license required by law or regulation of the Government of the United States, State of Connecticut, or of any political subdivision thereof.
2. If an activity also requires zoning or subdivision approval, special permit or special exception under section 8.3(g), 8-3c, or 8-26 of the Connecticut General Statutes, no work pursuant to the wetland permit shall commence until such approval is obtained.
3. If an approval or permit is granted by another Agency and contains conditions affecting wetlands and/or watercourses, the applicant must resubmit the application for further consideration by the Commission for a decision before work on the activity is to take place.
4. The Conservation Department shall be notified at least **forty-eight (48) hours** in advance of the initiation of the regulated activity for inspection of the erosion and sediment controls.
5. All activities for the prevention of erosion, such as silt fences and hay bales shall be under the direct supervision of the site contractor who shall employ the best management practices to control storm water discharges and to prevent erosion and sedimentation to otherwise prevent pollution, impairment, or destruction of wetlands or watercourses. Erosion controls are to be inspected by the applicant or agent weekly and after rains and all deficiencies must be remediated with twenty-four hours of finding them.
6. The applicant shall take all necessary steps to control storm water discharges to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and watercourse.
7. Organic Landscaping practices are recommended as described by the Northeast Organic Farming Association.
8. All plants proposed in regulated areas must be non-invasive and native to North America.
9. Trees to remain are to be protected with tree protection fencing prior to construction commencement.
10. The bottom of all storm water retention structures shall be placed no less than 1 foot above seasonal high groundwater elevation.
11. The applicant shall immediately inform the Conservation Department of problems involving sedimentation, erosion, downstream siltation or any unexpected adverse impacts, which development in the course or are caused by the work.

12. Any material, man-made or natural which is in any way disturbed and/or utilized during the work shall not be deposited in any wetlands or watercourse unless authorized by this permit.
13. Any on-site dumpster shall be covered at the end of each workday to prevent debris/litter from inadvertently entering surrounding wetlands and/or watercourses.
14. A final inspection and submittal of an "as built" survey is required prior to the issuance of a Certificate of Compliance.
15. Conformance to the conditions of the Flood and Erosion Control Board of **September 2, 2020**.

SPECIAL CONDITIONS OF APPROVAL

16. Conformance to the plans entitled:
 - a. "Proposed Site Improvements for a Single Family Addition and Renovation – **Demolition Plan**, 6 Manitou Court LLC., 6 Manitou Court, Westport, CT", **Sheet C-0**, Scale: 1"=20', Dated **May 12, 2020** and last revised to **September 16, 2020**, prepared by Landtech
 - b. "Proposed Site Improvements for a Single Family Addition and Renovation – **Layout Plan**, 6 Manitou Court LLC., 6 Manitou Court, Westport, CT", **Sheet C-1**, Scale: 1"=20', Dated **May 12, 2020** and last revised to **August 11, 2020**, prepared by Landtech
 - c. "Proposed Site Improvements for a Single Family Addition and Renovation – **Utility & Grading Plan**, 6 Manitou Court LLC., 6 Manitou Court, Westport, CT" **Sheet C-2**, Scale: 1"=20', Dated **May 12, 2020** and last revised to **August 28, 2020**, prepared by Landtech
 - d. "Proposed Site Improvements for a Single Family Addition and Renovation – **Notes & Details**, 6 Manitou Court LLC., 6 Manitou Court, Westport, CT" **Sheet C-3**, Scale: 1"=20', Dated **May 12, 2020** and last revised to **August 11, 2020**, prepared by Landtech
 - e. "Proposed Site Improvements for a Single Family Addition and Renovation – **Notes & Details**, 6 Manitou Court LLC., 6 Manitou Court, Westport, CT" **Sheet C-4**, Scale: 1"=20', Dated **May 12, 2020** and last revised to **September 16, 2020**, prepared by Landtech
 - f. "Proposed Site Improvements for a Single Family Addition and Renovation – **Illustrative Plan Showing Exempted Grading**, 6 Manitou Court LLC., 6 Manitou Court, Westport, CT" **Sheet C-5**, Scale: 1"=20', Dated **May 12, 2020** and last revised to **August 11, 2020**, prepared by Landtech
 - g. "**Landscape Plan**, 6 Manitou Court, Westport, CT" Scale: 1/16"=1'0", Dated May 14, 2020 and last revised to July 22, 2020, prepared by Wesley Stout Associates, (Sheets: **LP-1.0, LP-1.1, LP-1.2**)
 - h. "**Existing Conditions** Map of Property Prepared for 6 Manitou Court, LLC., 6 Manitou Court, Westport, CT", Scale: 1"=20', Dated March 16, 2020 and last revised to July 23, 2020, prepared by Dennis A. Deilus Land Surveyors
 - i. "**Stormwater Management Report** for 6 Manitou Court Westport, CT", Dated May 12, 2020 last revised to **August 28, 2020**, prepared by Landtech
 - j. **Building Plans** entitled: "McInerney Residence 6 Manitou Court Westport, CT", Scale ¼"=1'0", Dated **May 12, 2020** and last revised to **July 21, 2020**, Sheets C-1.0 to A-3.0 (17 pgs), prepared by Robert A. Cardello Architecture + Design
 - k. **Connecticut Department of Energy & Environmental Protection, Certificate of Permission**, 6 Manitou Court, 202005391-COP, Dated July 15, 2020
 - l. **NDDB Determination** No.: 202003576, Project: Repair and partial replacement of existing masonry seawall at 6 Manitou Court in Westport, Connecticut From Karen Zyko, CT DEEP; to Tom Ryder Landtech, Dated March 10, 2020
 - m. "**Operations and Maintenance Plan** Report for 6 Manitou Court Westport, CT prepared for 6 Manitou Court, LLC", Dated September 16, 2020, prepared by Landtech, 4 Pages
17. Construction shall follow the updated plans with revised sediment and erosion controls incorporating additional measures including addressing potential erosion on the slope, removal of vegetation, and construction access to the water.
18. Conservation Department shall be notified 48 hours prior to the start of construction for inspection of the erosion and sediment control measures.
19. A site monitor shall be retained for the duration of this project's construction and completion. Said monitor shall ensure compliance with the sediment and erosion control plans and construction phasing, including landscape installation. Said monitor shall conduct weekly inspections and after storm events greater than 1 inch with written reports submitted to the Conservation Department on a weekly basis.

