APPLICATION: IW-24-09
INSPECTION DATE: 4/30/2024
TIME: 4:00 pm – 4:50 pm
APPLICANT: Michael Jastremski, Housatonic Valley Association
ADDRESS: Tunnel Road and Kirby Brook Bridge culvert, Washington, CT
REASON FOR APPLICATION: The construction of a 3 step aquatic organism passage stream bed ladder on the western side of the bridge which crosses Kirby Brook on Tunnel Road.
MEMBERS PRESENT: Bob Papsin, Jennifer Anthony-Bogue, Chris Koppel, Joline Audet, Bruce Bennet, Melinda Dubow and Larry Gendron.
OTHERS PRESENT: Michael Jastremski, Director of Watershed Conservation; HVA and Rory Larson, Director of Conservation, Steep Rock Association.
OBSERVATIONS: The site inspection participants met in the parking area at the junction of Tunnel Road and Spring Hill Road, on the eastern edge of the Shepaug river. After introductions, Mr. Jastremski stated that the start of the proposed project would begin with an excavator with treads accessing the Shepaug river at the area where Spring Hill and Tunnel Road converge; on the northeast edge of the river. Mr. Jastremski stated that the ideal time frame, or window, to begin and conduct the work would be from June 30th—September 30th, during what is historically the low water level months. The goal being to limit the disturbance to any and all organic and aquatic life.
Mr. Jastremski stated the excavator would enter the river and travel in the river south, along the northeast edge of the river, to the area where Kirby brook enters the Shepaug river. Participants then proceeded south along Tunnel Road to the bridge which crosses Kirby Brook. Noticeable large felled trees and limbs collected on the upland (eastern) side of the bridge, blocking / restricting one half of the water flow and passage under the bridge.
Participants then walked west across the road and over the wire guard rails and down to the confluence of the Shepaug river and Kirby Brook.
Noticeable rock debris along with silt and soil build up creating a sediment bar below the bridge, extending along the entire northeastern edge of Kirby Brook to the confluence of the Shepaug. This sediment bar effectively limiting the water flow to less than half of the natural stream flow. Also visible, severe scouring on the southern stream bank, with a number of mature tree roots exposed. Mr. Jastremski was asked if Tunnel Road would be closed during the proposed work phase. It was unclear if the road would be closed to traffic and/or to pedestrians.
More information will be needed regarding this.
Mr. Jastremski stated that the structure itself, the bridge, was not being replaced or altered in any way other than the downstream side stream bed of Kirby Brook; from the southwestern edge of the bridge base to the mouth of the Shepaug.
He stated that the material which has collected on the upstream southeast side of the bridge will be removed. It was not stated precisely how all this material and debris would be removed from the stream bed and stream bank.

Mr. Jastremski stated cofer dams would be used to create the work area on the southwestern side of the bridge. Mr. Jastemski stated that a truck would be used to carry the spoils from the sediment bar directly off site. Mr. Jastremski also stated that the soils removed from the sediment bar (rocks and soil) might be repurposed onsite. No precise location noted at this meeting.

Mr. Jastremski stated that the access point for excavator is to be limited to the northeastern edge of the Shepaug at the junction of Spring Hill and Tunnel Road. It would remain active only during the project work phase, and that the equipment to be used will include: a dump truck(s) and an excavator (with treads). More information from contractor needed.

• All soil being removed would be taken directly off site. No stockpiling of materials.
• If spoils and rocks from Kirby brook sediment bar in riverside channel will be repurposed on site, then
• A dewatering site will need to be noted on revised site plans and in the construction sequence along with
• A clearly marked and protected stockpile area to be shown on plans.

Mr. Jastremski was asked if Tunnel Road would be closed during the work phase. It was unclear if the road would be closed to traffic, and to pedestrians.

More information will be needed regarding this.

Commissioners asked for the following:
• Applicant will contact the Connecticut State DEEP Fisheries Department and get a response to the proposed project from a Fisheries Biologist.
• After a start card is submitted and the day that the proposed work is set to begin, the ZEO and Inland Wetlands Chair must be on site. Before the commencement of work.
• Prior to any work starting, Jim Britton, Town Selectman, must be notified.
• Field mark as well as on revised plans for any/all trees in the affected area of the proposed channel that may need to be removed.

Note: Condition of approval:
that tree removal would be minimal.

All exposed stream bank tree roots to be protected during entire phase of work.
• Provide a detailed construction narrative of how all of the phasing will occur.
• Provide a 5-year maintenance plan for all native plantings.

Consider replacing invasive plants (most notable: knotweed) species with native plants. This will need to be included in the construction narrative as well as the 5-year maintenance and planting plan.

• Additional soil erosion control measures throughout area being impacted.
• Additional details needed from the contractor.
• Precise weight of each stream bed footer.
• Condition of all trees along the river and stream to be checked during and after work is done
• Clearly note on plans river bank protection for excavator access to and from site, at Tunnel and Spring Hill Road junction.
• Additional detail is needed for the sequencing of river access / exit.
• Additional information needed for river bed protection from excavator.
• Detail protective measures as to how the machine being used for river / stream work will not carry any contaminants into the river.
  *This includes Plant and spoils material.*
• Detail on plans on how the material from the eastern side of the bridge will be removed.
  All tree and limb debris which is currently blocking the entire right bridge channel.
• Additional construction sequencing needed.
• Detailed plan for additional steps to stop all silt from running down river.
• Additional soil erosion and sediment control measures throughout and on plans.
• Contractor to supply additional details on staging and steps for construction.
• Need the name of contractor(s) being considered for the project. Do the contractors being considered have prior experience working in these specific conditions and circumstances.

**Additional questions:**
Has thought been given to using cofer dams to create a narrow channel for the machine to enter and exit the river, to redirect water flow and create a narrow channel that would be used to get to and from the work site. If so, what material would be used on the river bed to protect all organisms in the bed as well as minimize soil disturbance.
Regarding the proposed steps. Will there be enough water flow in the river during low water periods (June through September historically) to raise the level for aquatic organisms access across the bridge base slabs.
Arguably, during these periods trout are seeking cooler water for protection.
Kirby brook water levels drop during summer months. How will this impact levels and access.
• A detailed sequence of construction - from point of entry to restoration and stabilization
• A list of all machinery to be used.
• And could an excavator with a boom be used, accessing the stream bed from the bridge.
  This would eliminate any / all disturbance within the river.
• If so, a detailed description and precise placement of machine, along with detailed sequencing and narrative.

Participants left the property at 4:50 p.m.
Respectfully submitted,
Larry Gendron
May 2, 2024