

Town of Canaan  
Inland Wetlands/Conservation Commission  
Minutes of Special Meeting  
December 1, 2022

Members Present: Mark Burdick, Felicia Jones, Susan Kelsey

Others Present: Chris Kinsella (Bridge Committee representative)

Meeting was called to order by Chairman Burdick at 4:05 p.m. An application from the Town of Canaan (Henry Todd, First Selectman) for the replacement of bridge No. 021007 on Cobble Road over Wangum Lake Brook was received. Application included plans from Cardinal Engineering Associates. Jones made a motion to waive the application fee due to the applicant being the Town of Canaan; seconded by Burdick; passed unanimously. The application was considered complete; Burdick made a motion to accept application for review; seconded by Jones; passed unanimously.

Members and Kinsella thoroughly reviewed the submitted engineering plans. Several alternatives were presented in the engineering report. Cardinal Engineering recommended a full replacement using twin 137" x 87" polymer coated corrugated metal pipes, without raising the road; said raising of road would add significantly to the total cost of the project. The proposed alternative would increase the hydraulic capacity of flow and would meet current CTDOT standards that said culverts meet 100 year design flow with an additional one foot of freeboard at the roadway lowpoint. Erosion and sedimentation control measures were well addressed, with the exception of the area in vicinity of the dewatering hole. Members also questioned the need for chain link fencing in addition to guard rails. The area of wetlands impacted by this project is .085 acres.

Jones made a motion to approve the application with the following findings and conditions:

**Findings:**

- 1. The proposed activity is a regulated activity as defined by the Inland Wetlands and Watercourses Regulations of the Town of Canaan.**
- 2. The area in which the activity is proposed is located within the Wangum Lake Brook watershed; drainage area of the brook at its crossing at Cobble Road is 6.1 square miles (3,904 acres).**
- 3. The Wangum Lake Brook area upstream and downstream of the culvert/bridge is located in Zone AE (area of 100 year floodplain with determined flood elevation).**
- 4. Cobble Road crosses a wide floodplain and is subject to regular flooding; currently the roadway is overtopped during a 7- year storm.**
- 5. CT design criteria requires replacement structure to meet the 100-year design flow, with one foot of freeboard at the roadway lowpoint for a culvert.**

6. The integrity of this bridge is critical to several residents who need to access portions of their farm via the bridge; existing bridge was constructed in 1955.
7. The area of proposed activity is 10, 890 Sq. Ft. (.25 acres).
8. Total acreage of wetlands within project area is .085 acres; wetlands were delineated on ground and described by Scott D. Stevens, soil scientist and Jennifer L. Beno, biologist/wetland scientist of Soil Science and Environmental Services, Inc. and detailed in report dated October 31, 2022 and made part of application.
9. The south headwall of the bridge has failed and the north headwall is in serious condition with advanced deterioration.
10. The existing culvert is in fair condition with moderate rust below the waterline.
11. Cardinal Engineering recommends a full replacement with twin 137" x 87" polymer coated corrugated metal pipes without raising roadbed; twin culverts will increase hydraulic capacity of culverts.
12. Culverts will be placed one foot into natural streambed material to recreate natural streambed and facilitate fish passage.
13. DEEP Fisheries Division has determined that proposed activity will not impact any fisheries or their habitat.
14. The June 2022 DEEP NDDB Division Map-Canaan shows that project area falls within areas designated as potential habitat for listed species and critical habitat; Environmental Services, Inc. report indicates none were observed in project area.
15. Limits of temporary construction easements are delineated on plans.
16. Detailed erosion and sedimentation measures are included in plan.
17. A temporary coffer dam will be installed both upstream and downstream to temporarily handle water to facilitate placement of culverts. Two temporary 36-inch bypass pipes will be placed on the western side.
18. Submitted plan lacks erosion control measures in area around dewatering basin.
19. Plan calls for chain link fencing in addition to metal beam rails.
20. Proposed activity should not significantly alter the environmental integrity of the Wangum Brook valley.

#### **CONDITIONS:**

1. That the proposal for chain link fencing be reconsidered and eliminated from scope of work if permitted.
2. That erosion control measures in vicinity of dewatering basin be added to proposed plan and followed.
3. That all applicable erosion and sedimentation control measures as detailed in submitted plan be followed.
4. That a contact person be designated for the job; name and phone number to be provided to Canaan (Falls Village) First Selectman prior to start of construction.

- 5. That inspections be made subsequent to any significant weather event occurring during the construction phase.**
- 6. That post-construction inspections of site be adhered to as outlined in the submitted plan.**
- 7. That efforts be made to prevent introduction of invasives (e.g. garlic mustard, Japanese stilt grass, Phragmites) into the wetlands by being selective in choice of introduced soil materials and by ensuring tires on equipment are clean prior to being used on site.**
- 8. All disturbed areas are to be permanently stabilized.**

Motion seconded by Burdick; passed unanimously. Kelsey will issue the permit.

Kelsey made motion to adjourn at 5:15 p.m.; seconded by Burdick; passed unanimously.

Susan J. Kelsey, secretary