

**David W. Burke**  
**WETLANDS RESOURCE SPECIALIST**  
**16 Coburn Rd**  
**Berlin MA**  
978-758-6957

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**Lori Capone, Conservation Coordinator**  
**Sudbury Conservation Offices**  
**275 Old Lancaster Rd**  
**Sudbury MA, 01776**

**Via: Email**

**Ref: BFRT MA DOT Amendment Request for ORAD DEP # 301-1193**

**Dear Ms. Capone:**

At the request of your office and the Chairman of the Sudbury Conservation Commission I have performed a limited review of the request by the Executive Office of Transportation and Construction (Owner per ORAD Document) and Mass Department of Transportation (AKA Mass DOT Applicant) request to amend a recently extended ORAD permit.

The following observations are based on 4 separate field visits the first being on 7-13-20 with you and the Vice Chairman Mr. Henkels, It was quite dry at that time; however, I have also intentionally visited the site during and following heavy rain.

The focus of this portion of the review is that section of the proposed Bruce Freeman Rail Trail located just west of Sudbury Center and immediately east of Peakham Road as depicted on sheets 17-18 on the VHB plan set dated 5-19-16 titled "Proposed Bike Path in the town of Sudbury". I reviewed flags and conditions from station 311 to 322. Also shown on plan as "Wetland 30 and 31".

This limited review is in part in reference to a formal amendment and request by Mass DOT to view this and other sections of the proposed work locus under the Massachusetts Wetlands Protection Act and its pursuant Regs 310 CMR 10:00 and its definitions of wetlands resource areas versus resource areas as described and defined in the Sudbury Wetlands Administrative Bylaws AKA SWAB and pursuant regulations. As we know definitions and description/classification standards do differ between the two laws.

Specifically, in this portion of an ongoing evaluation of the study area Mass DOT has requested that the Town accept, classify and agree to define 3 areas within wetland 30 and 31 which at present are delineated in the field and on plan under Sudbury Bylaw (SWAB) as either Wetlands ( Inland Vegetated Wetland IVW or Isolated Wetlands or ILSF ) or Inland Bank associated with intermittent streams, strictly as defined by the MWPA only.

Mass Dot is contending based upon further review by wetland scientists in April and May of 2020 that much of "Wetland 30" and all of "Wetland 31" while protected under SWAB are not defined as wetlands resource areas under MWPA and are therefore not protected under Commonwealth Wetlands Protection law. These areas are specifically called out on page 3 paragraph 2 by flag series and numbers of the ORAD Amendment Request. They are again described and referenced on page 4 Table 1.

## 2.

While examining Table 1 "Summary of Recommended Resource Area Classification under the MWPA" study areas are called out by flag series WF (Wetlands Flag) 31 Series and or BF (Bank Flag) 30 Series: while helpful I never was able to locate BF30-300-313 on the plan or in the field as referenced o Table 1. It may be simpler to describe the 3 areas of observation as all flags north of the banks of the "Unnamed Tributary to Hop Brook". These are 3 fingerlike projections which flank the rail road tracks and exist immediately adjacent to the rail line, east and west.

Wetland Area 31 WF 31-100 through WF 31-124 (No flag #102) is described as and IVW or Isolated Inland Vegetated Wetland und SWAB. Given the fact that it does not connect to another definable wetlands resource area; it does not "Border" on a waterbody or watercourse and does not have the ability to contain "one quarter acre foot of water to an average depth of 6 inches" (ILSF Def under MWPA); it does not qualify as a wetlands resource area under the MWPA.

The area north of BF 30-32, with an apex flag called out as BF30-31 is identified as an intermittent stream with Inland Bank and Land Under Waterbody (LUWB). BF flags indicated Top of Bank (TOB). In this case although it clearly ties into the "Unnamed Tributary to Hop Brook"; which is clearly an intermittent stream tying two Bordering Vegetated Wetlands together, it is definitely referenced properly as "That portion of an intermittent Stream which is upgradient of all bogs, swamps, wet meadows and marshes' DEP Definition. It does not possess hydric soils within its Banks or upgradient of its Banks. While we do note some jewel weed (*Impatiens capensis*) in and around this area; while protectable under SWAB as an Intermittent Stream of sorts, it is not a stream containing Banks or Bordering Vegetated wetlands under MWPA. Such areas are not afforded protection or Buffer Zones under MWPA.

The third area is shown as Intermittent Stream from BF-30-106 northerly almost to Hudson Rd, BF 30-132 then back south on opposing Bank to BF 30-321 on the northern side of "Unnamed Tributary to The Hop Brook". It is the long thin Intermittent Stream on east side of the tracks. I walked this area thoroughly multiple times and tested soils per usual using hand operated Dutch Auger probing for hydric soils within, or more importantly, outside of the Top of Bank. While I did note some depletion and mid-level 3.5-4-5 chromas within matrix just below A layer I did not encounter hydric soils. As we know hydric versus non hydric soils are the "Best overall indicator of a site's hydrology" (MA DEP). It is particularly important that such an area support hydric soils outside of its Banks which presumably would be supporting wetlands vegetation; such conditions would indicate frequent ponding or saturation by water and would hence create a "Bordering" situation and affording protection. We did not recognize that anywhere. This qualification is compounded by the "Cut" in this area of the rail bed on the south side there is a fairly steep cut, creating the TOB or Top of Bank (First Observable Break in Slope per DEP) as much as 4-5 feet above the Stream bed. Again, while we do see a profusion of jewelweed and poison Ivy, there are also "Dry" plants like tiny oaks and white pines, dewberry, goldenrods, asters and multiflora rose in and around the study areas. The area as described is similar to the "Blind" stream to its west across the tracks. It is a channel that exist entirely upgrade of all other wetlands resource areas; its does not connect two areas; I would submit that in places it may or may not "Move in a definite channel in the ground due to a hydraulic gradient" Stream Definition per DEP.

3.

I looked thoroughly across Hudson Rd to the north where an "Outlet" pipe (See plan) does exist. Conditions there were completely dry, no hydric or aquic conditions to "Connect" to Trib To Hop Brook. While protectable under SWAB this third area is not classified as a wetlands resource area under the MWPA, nor does it have a Buffer Zone.

It is important to remember that this rail bed is certainly a "Highly Altered Area" which has seen heavy use for well over 100 years although abandoned decades ago it still has foot trails flanking the tracks. The rail bed has been excavated and fortified with imported ballast for levelling the track, providing some shock absorption and fire protection. Some of this ballast is ground stone and spent coal it is evident at the surface and below grade to date. It is a low-grade medium for vegetation and fairly well drained and compacted. It can create false indicators and can be difficult to analyze. Further as stated this stretch of track is virtually flat (For a reason) and water barely flows from north to south, it is really "Spilling" towards the Unnamed Trib To Hop Brook. The steep cuts necessary to run the tracks flat also compound analysis but never the less such conditions do exist in the absence of hydric soils which take at least 7 consecutive days of saturation or ponding in the Growing Season to develop.

In closing and as stated and described, SWAB like all bylaws can only make General Law more stringent. The town of Sudbury set and observes a very high standard for wetlands protection; it surpasses State standard and in this case the disparity is evident. It is my professional opinion to concur with Ma DOT assessment of these three areas as described within wetland #30 and Wetland #31.

I look forward to assisting you as needed.  
Sincerely.

*David W Burke*