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July 24, 2012

Kate Faulkner, Chairperson
Dover Conservation Commission
P.O. Box 250
Dover, MA 02030

Re: Bay Colony Rail Trail

Subject: Wetlands Permitting & Construction Opinion

Dear Commissioners:

I am taking this opportunity to follow-up with comments from the site walk I made with the Commission on July 23, 2012. The purpose of the site walk was to review the Bay Colony railway bed in Dover pursuant to possible conversion into a “rail trail.” The following comments pertain to jurisdictional issues regarding Wetland Resource Areas (“WRA”s) under the Massachusetts Wetlands Protection Act (the “Act”) and the Dover Wetlands Protection Bylaw (the “Bylaw”).

General Observations: The Site walk included the entire potential rail trail route, from the Charles River in the north to the Medfield Town Line in the south. The entire route contains an intact train track system, consisting of a bed of stone ballast, with wood railroad ties supporting a single pair of steel rails. The rail bed, including a number of stone box culvert stream crossings and additional similar culverts that appear to be historic cattle crossings, appeared to be structurally sound, with no obvious areas of undermining or erosion.

Portions of the rail bed have become partially vegetated through the stone ballast, and other areas have vegetation that encroaches over the tracks from adjacent areas. Much of this vegetation consists of listed invasive species, including glossy buckthorn (*Rhamnus frangula*), oriental bitter-sweet (*Celastrus orbiculata*), multiflora rose (*Rosa multiflora*), tartarian honeysuckle (*Lonicera tatarica*), winged euonymus (*Euonymus alatus*), and Japanese barberry (*Berberis thunbergii*).

Wetland Resource Areas: During the site walk I evaluated the rail bed for any areas where vegetated wetland and stream WRAs encroached into the rail bed (i.e., the area occupied by the rails, ties and associated stone ballast) and did not note any such areas. It appears that the rail bed could be converted to a +/- 8 foot wide trail surface without direct alteration of vegetated wetland or stream channel. A number of areas were noted where the rail bed falls within the 100 foot Buffer Zone associated with WRAs and within the Riverfront Area WRA. The Riverfront Areas are associated with the Charles River at the northern extent of the potential trail in Dover

and at five (5) additional mapped perennial streams. The rail bed crosses the perennial streams on existing, functional culverts. The work to convert the rail bed to a rail trail can be categorized into five zones of WPA and Bylaw jurisdiction as follows. I provide brief input as to the possible permitting of the rail bed conversion to a trail via the Determination of Applicability (DoA) process:

1. Rail bed outside WRAs and Buffer Zone: No permitting for earthwork under the WPA or Bylaw required. Significant areas in the northern and central segments of the route fall into this category.
2. Rail bed outside WRAs and within outer Buffer Zone with favorable topography (i.e., greater than 50 feet from vegetated wetland and separated from the wetland by a raised berm or wide flat area). Earthwork in these areas is subject to permitting under WPA and Bylaw but a negative determination with minimal conditions may be appropriate.
3. Rail bed outside WRAs and within outer Buffer Zone without favorable topography (i.e., greater than 50 feet from vegetated wetland without a raised berm or wide flat area to separate potential work from the wetland). Earthwork subject to permitting under WPA and Bylaw but a negative determination with conditions requiring erosion controls and stabilization may be appropriate.
4. Rail bed within Riverfront Area (may or may not be within Buffer Zone and may or may not be separated from wetland by a raised berm). Earthwork subject to permitting under WPA and Bylaw but a negative determination with conditions on erosion controls and stabilization may be appropriate.
5. Rail bed outside WRAs and within inner Buffer Zone (i.e., less than 50 feet from jurisdictional wetland which consists of a vegetated and unvegetated drainage swales (jurisdictional streams) running at the edge of rail bed ballast, as well as natural vegetated wetlands). Earthwork subject to permitting under WPA and Bylaw but a negative determination with defined limits of work and detailed conditions on erosion controls, construction methodology and stabilization may be appropriate.

Potential wetlands Permitting Through the Determination of Applicability Process: Use of the DoA process in these areas to approve the project requires a finding by the Commission that any proposed work, including removal of the railroad tracks and ties, followed by the subsequent placement of the trail surface, will not alter the WRAs subject to jurisdiction. In my opinion, this will require, at a minimum, a thorough understanding of the proposed construction methodology, with a work sequence and erosion controls appropriate for the proximity and orientation of WRAs along the route. It may be appropriate to have location-specific construction methodologies for the different project zones identified above.

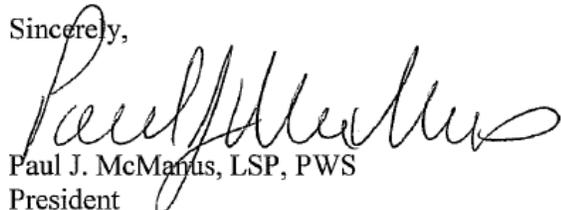
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The Commission should note that there is an exemption from jurisdiction in the WPA Regulations for “unpaved pedestrian walkways for private use” at 310 CMR 10.02(2)(b)1.a. This exemption may not strictly apply to this project if the trail will be for “public use”. The only possible exemption that might be applicable to this project under the Bylaw is an “exception” in the Regulations at 263-2 B.(4) for “overriding public purpose.” That being said, I am of the opinion that a negative determination, with conditions, may be appropriate for this project if the Commission is confident that the project can be constructed without alteration of WRAs. The negative determination would be a written authorization that the Commission could issue after review of a Request for Determination of Applicability (“RDA”) filing. The RDA filing would need to be made by the Rail Trail Committee or similar proponent, with proper public notice. In order to qualify for the negative determination, the project proponents would have to demonstrate (through plans, sketches, methods, protocols, etc.) that the project construction would be adequately controlled so as to not cause alteration of WRAs through erosion, sedimentation, filling with soil, lowering or raising of water tables, etc. At a minimum I recommend the following items be completed, and submitted, by the project proponents as part of the anticipated application process with the Commission:

- ✓ The location of a proposed limit of work/erosion barrier be prominently delineated in the field within Zone 3, 4 & 5 areas described above;
- ✓ A sketch plan on available GIS topographic maps be provided depicting the above work zone areas; and
- ✓ A sequence of work construction protocol be prepared and submitted describing the rail bed to rail trail conversion process from start to finish including project access locations for personnel and equipment, placement and maintenance of erosion barriers, required cutting of vegetation, removal and disposal of existing rails and ties, and descriptions of any required grading and filling.

I hope that this information is helpful to the Commission. Please do not hesitate to contact me if you have any questions concerning this or other matters.

Sincerely,



Paul J. McManus, LSP, PWS
President

Via email