NPT Track 2 Supplemental Q 8, EXHIBIT 5

Deerfield Planner Sylvia von Aulock, 13 April 2017

Planning and Community Concerns

Hi Kate, as discussed, aside from the visual impacts, property value loss, and overall community impact, I have the following quick summary of concerns:

1. Constructions impacts due to trucks and other machinery. Presently there is concern from residents that best management practices aren't being utilized, that wetland BMPs have not been followed. It is recommended that these be strictly adhered to.

2. During construction all SWPPP practices must be utilized and erosion control, wetland protection and temporary stormwater system and natural resource protection is provided and ensured via effective inspection.

3. Communication of all inspections comes through the Planning and Building departments so that questions from the community can be answered at a central location.

4. That natural resource protection is ensured based on a natural resource inventory, so that wetland and terrain restoration results in return to full function and value.

5. Temporary changes in water courses as a result in construction or clearing are mitigated immediately, so that no damage will ensue, and impacts are minimized.

Thanks.

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NPT Track 2 Supplemental Q 9, EXHIBIT 6

NPT Expected Wetland Impacts

- Water quality degradation
- Increased imperviousness
- Wetland fill
- Altered runoff patterns
- Loss of vegetated covers, upland buffers
- Soil compaction
- Chemical pollution (road deicing)
- Increased human activity such as vehicles on access road, wth associated habitat degradation
- Invasive species
- Disruption of animal movements from access road and increased human use
- Herbicide use

Prepared by Frank Mitchell 30 Mar 2017

CONCLUSIONS REGARDING EXPECTED NPT WETLANDS IMPACTS BASED ON FIELD OBSERVATIONS OF 4 SITES IN DEERFIELD, MARCH 30, 2017

Present: Katherine Hartnett, Frank Mitchell (all sites), Erick Berglund, Robert Cote (Site 4)

Sites (see map):

1. West of Thurston Pond Rd. – 3 small stream channels within drainage wetland area

2. East of Thurston Pond Rd. – Vernal pool

3. East of Thurston Pond Rd. - Hartford Brook

4. South of Deerfield Parade – Emergent wetland

COMMON TO ALL SITES:

1) The construction of a proposed access road has the potential to create *long-term* impacts to wetlands along the entire 7+ mile route of the proposed project through Deerfield. Assuming a 50 ft. zone of road, shoulder and associated disturbance, this is over 40 acres of soil laid bare or wetland subject to matting along the proposed NPT route in Deerfield. Unlike the present utility access route, which is vegetated in many areas, a new cleared road with grading and fill as proposed is likely to be a source of erosion, polluted runoff and other impacts to wetland systems that it would intersect for an indeterminable period of time. The proposed access road, constrained by the limits of the existing right of way, would have to cross steep slopes on which it would be very difficult to prevent erosion over time. One such area, at site 4, currently has a serious erosion problem adjacent to Hartford Brook. If degraded sites like this have not been detected and restored by utility managers, what assurance is there that things will be done differently in the proposed project?

2) Wetland impacts likely to occur from nearby road surfaces, mostly long-term:
   - Polluted runoff
   - Wetland fill from eroded sediment (especially important for vernal pools)
   - Soil compaction & increased impervious surface area and associated increase in surface runoff
   - Interruption of sub-surface water flow, especially shallow flow
   - Decreased vegetative cover
   - Disruption of animal movements
   - Increased human activity, unauthorized vehicle use

CONCLUSIONS REGARDING EXPECTED NPT WETLANDS IMPACTS BASED ON FIELD OBSERVATIONS OF 4 SITES IN DEERFIELD, MARCH 30, 2017

3) The NPT maps show only jurisdictional wetlands within the right of way. Almost all of these wetlands extend beyond the ROW. Given that impacts such as impacts from sediment and other polluted runoff can extend beyond the source, the impacts are more substantial in size than would appear from the maps.

4) Access to the ROW has been poorly controlled and has resulted in environmental damage from vehicle use in places. The impacts are not part of utility construction or maintenance, but reflect deficiencies in management and oversight of these lands.

SITE SPECIFIC CONCLUSIONS:

SITE 1: Wetland west of Thurston Pond Rd

This site includes a colony of Purple loosestrife, centered around the part of the wetland area through which vehicles have travelled. Vehicle use has altered the flow within this wetland area and created a deeper water area and areas of bare soil.

SITE 2: Highest Quality Vernal Pool east of Thurston Pond Rd.

The close proximity of the proposed access road immediately next to and uphill of this vernal pool poses a high risk of long-term damage to the wetland.

SITE 3: Hartford Brook

There is a serious erosion problem on a steep slope adjacent to Hartford Brook at the approximate location at which a new access road is proposed. The erosion is the result of past vehicle use.

SITE 4: Emergent Wetland south of Parade

Observed a beaver lodge with signs of recent activity: new mud & branches and recent beaver foraging in adjacent upland north of proposed structure #3132-300. A proposed construction pad appears to extend over or lie next to, this active lodge.

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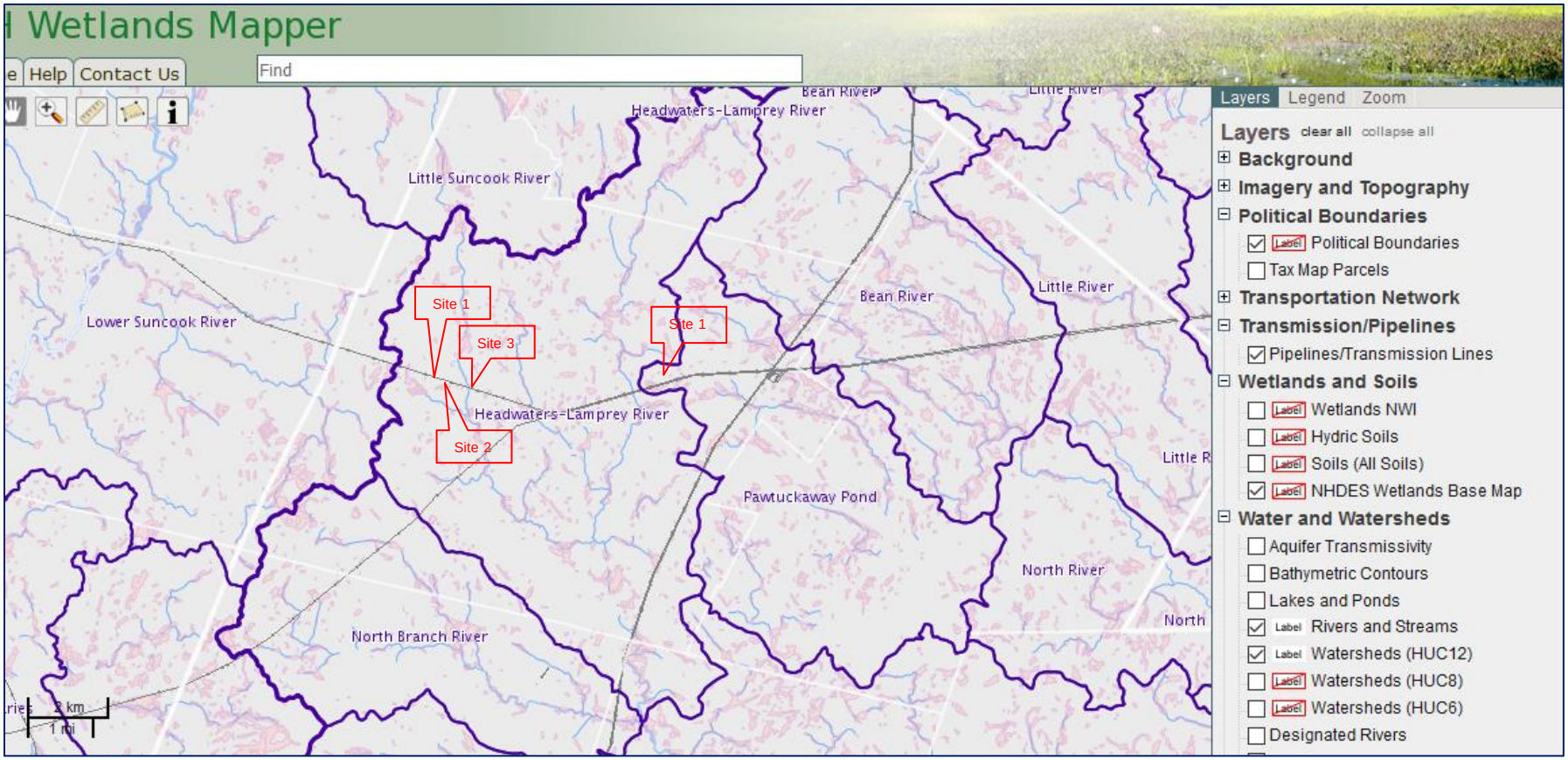
Map of four field sites in Deerfield attached

From 30 Mar 2017

ROWS AND WATERSHEDS, DEERFIELD



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Map of the area west of Thurston Pond Road

Part of the wetland area (the S half of the ROW) we visited is shown as PUBb (small beaver impoundment) in the NWI data), but neither it or the other more obvious wetlands show as hydric soil in GRANIT. Soils data are coarse and these wetlands are small.