Pembroke Conservation Commission

Meeting Minutes April 11, 2016

In attendance: Ammy Heiser, Carol Bertsimas, Brian Mrazik, Ayn Whytemare, Steve Fowler, Mike Crockwell (BOS rep) and David Baril. Also Jenny Manzelli public, Patrick Colburn with Keach-Nordstrom Associates.

1. Call to Order @7:05pm

2. DES Applications and Letters

a. Pembroke Meadows: Patrick Colburn from Keach-Nordstrom Associates. Information about the parcel across from PA which we did a site walk on last month. 33 acres in back undevelopable, from gas line easement to Eversource holding (next to the river), possible conservation land or easement. To be developed in phases. First phases to use road outlet on Broadway, eventually to come out on Pembroke Street with a "Right Only" access. Fire chief had them take out cul-de-sacs. Is requesting a special use permit to use wetland buffer and wetlands as part of plan. Two intermittent streams and area close to Broadway are classified as wetlands. Storm water management also proposed, one to be temporary for building phase. Two others between pipeline and river use both detention pond and above-ground infiltration. PCC expressed concern over long-term maintenance of these areas.

- 1) Want to use wetland buffer for 425 sq.ft. of sidewalk on Ashwood Drive.
- Would also like to dig trench across 17' of wetland for 24" storm water drainage pipe and 8" sewer pipe. (455 sq. ft. direct wetland, 1550 sq. ft. buffer impact)
- 3) Need to cross intermittent stream twice with culvert to create Ashwood Drive. Much bigger impact than the two previous, exact numbers in the plan.

All questions we had were addressed and no objections were presented to the plans as presented. Ayn moved that we encourage them to put the 33 acres into conservation as part of the wetland mitigation. Brian second. All in favor.

ACTION ITEM: Ammy will e-mail Patrick.

b. Pembroke Pines The initial proposal of multi-family development was turned down by the ZBA so new proposal is only to extend golf course with lot-line adjustment.

c. Other

3. Planning Board Applications

a. Other None given

4. Review and Approve Minutes~ March 14th and March 24th Ayn moved to accept Site walk minutes and Carol seconded, all in favor. Ammy moved to accept March minutes and Brian seconded. All in favor.

5. Conservation Lands

a. Annual Monitoring Day on April 2nd: Recap Carol, Ayn and kids did <u>Butterfield</u>. Deer stand on property line. Ayn, Lupin and kids monitored <u>Beacon Hill</u>, second deer stand found. According to Police we can take it down and keep it if they have not gotten written permission. They are supposed to have their name and address on the stand, which we will check for in order to contact them to see if they want to take it down themselves. If not, we will take them.

ACTION ITEM: Ayn will check out the Beacon Hill stand for a name and Carol will look at the Butterfield stand.

b. Beck: Farnum Complaint Ammy and Brian listened to their complaints and helped where they could, but many were beyond our ability to do anything. ACTION ITEM: Brian will write to Kelloway to address Farnum's complaint.

c. White Sands North boundary abuts Pembroke Pines extension. Ammy and Brian picked up 2 bags of garbage. Ayn contacted 7th grade science teacher who agreed to do another "Outdoor Classroom" day on White Sands for garbage pickup in September. We have agreed to pay for their bus transportation.

d. Hillman Grimes and Pritchard have paid next year's fee and will be planting winter rye to help with the soil.

6. Northern Pass Update Answers to the questions we asked previously. Answers attached.

7. Potential Acquisitions:

a. Sixth Range Road Parcel Ammy called Paul Sargent who said he had not been contacted by the town. Believes town was waiting for other sale to establish per acre price, but previous sale fell through.

ACTION ITEM: Mike will check out our offer with the BOS.

b. Northern Pass Parcels: 5 Rivers Easement Ammy has not heard back from Ken Stern (Five Rivers). Northern Pass bought two parcels and want to donate the part that is not in the right of way to Five Rivers. We believe they are looking for our approval before they go forward. Ammy moved, Brian seconded approval. All in favor.

ACTION ITEM: Ammy will get more about this situation by the next meeting.

8. Financial Report

a. Pay NHACC 2016 Dues Carol moved, Brian seconded to spend \$363 for annual dues. All in favor.

9. Other Business

a. NRI We finally have it, one year later. Now we need to get the GIS files onto the town website. David Jodoin will look into it.

b. Other Kevin Krebs is moving and will be stepping down from Planning Board and has resigned from PCC. More will be revealed. Jenny is considering becoming a member, she has been a Spanish teacher at Pembroke Academy and is now home with her 9 month old. Ammy moves, Carol seconded to have Jenny Manzelli join us as a full member. All in favor.

10. Mail and correspondences

Pembroke Conservation Commission Questions Answers are Pembroke specific

Questions for Eversource/Northern Pass:

1. How much wider does the existing Right of Way need to be?

For most of Pembroke, the line will be constructed within the existing ROW boundaries. To meet FAA structure height requirements on the approaches to the Concord Airport, the project acquired easements that expand the existing ROW by 45 feet along an 8,014 foot segment east of Rte. 106. These easements were acquired from willing sellers at a fair market price. No additional ROW expansions are required.

For areas in Pembroke where the ROW was not expanded, existing lines within the ROW will be rebuilt to create space for the new line.

2. What is the construction disturbance (immediate effect)? Overhead vs. burying lines.

Within Pembroke, the line will be constructed overhead within the existing ROW and any construction disturbances will be limited to this area. In general the construction disturbances will be limited to:

- Limited Tree Clearing: Where required, trees/shrubs that are located within the construction zone will be removed and transported off site.
- Access Road Construction: Access to the construction sites will be achieved by utilizing existing roads, developing new roads or by using timber mats. Timber mats may be used in or around wetlands to protect these environmentally sensitive areas. Silt fencing and/or other environmental controls will also be used to stabilize the soil and protect wetlands during construction.
- Construction Work Pads: At each transmission line structure site along the ROW, a work area, called a "crane pad", is required to stage structure components for final on-site assembly and to provide a safe, level work base for the construction equipment used to erect the structure.

Anticipated temporary construction impacts for overhead work include construction and traffic-related noise, site work, clearing of vegetation, installation of erosion control, dust control, excavation, temporary wetland crossings, and other associated construction activities. These activities will comply with Best Management Practices as well as with state and federal permit requirements.

For a hypothetical underground construction, the construction area is not assumed to be within the existing ROW as the existing easements do not provide the rights for such an installation. The lines are assumed to be installed along existing public roadways within previously disturbed areas, limiting the environmental impact. Construction disturbances will be limited to the appropriate road ROW. In general disturbances will be limited to:

- Trenching Activities: A trench will be dug in the disturbed area of the roadway minimizing impacts, wherever possible, to the travelling public. This will involve coordinating activities between trenching operations, trucking of spoils, installation of ductwork, installation of vaults/splice pits and the recovering of the trench.
- Traffic control mechanisms will include flagging, placement of traffic barrels/cones, construction signage, use of jersey barriers, use of temporary traffic controls and use of police details where required.
- Horizontal Directional Drilling: A directional drill work zone will be established on the side of the roadway minimizing impacts, wherever possible, to the travelling public. This work zone will extend backward from the drilling location approximately 100' to 200' depending on the size and complexity of the operation. Traffic control mechanisms will include flagging, placement of traffic barrels/cones, construction signage, use of jersey barriers, use of temporary traffic controls and use of police details where required.

Anticipated temporary construction impacts for underground work include construction and traffic-related noise, site work, installation of erosion control, dust control, excavation, and other associated construction activities. These activities will comply with Best Management Practices as well as with state and federal permit requirements.

3. What are the long-term disturbance issues? What maintenance will need to be done? Overhead vs. burying lines.

Construction of the overhead line within the existing ROW will result in potential long term disturbance issues similar to what is encountered today with the existing ROW. Maintenance of the ROW for the overhead lines will occur as it does today, with periodic mowing of the ROW, inspection of the line via ground and air, removal of danger trees along the edges of the ROW, and any required maintenance or equipment replacement.

All proposed Northern Pass lines are overhead in Pembroke. It should be noted that the current easement rights for the ROW preclude underground construction. The existing overhead facilities in the ROW would be maintained as described above. For underground facilities that are installed in the disturbed areas of roadways, periodic inspection of the splices and general maintenance of the vault/splice pits would be required.

4. What effect will the electric lines have to people living next to or using the area? Overhead vs. burying lines.

The Department of Energy, in its conclusions from the July 21, 2015 DEIS report regarding Northern Pass found:

Electric and magnetic fields "generated by underground portions of the Project would be below accepted limits. Overhead portions of the line, including HVDC and HVAC portions, would generate EMFs which would have no impact outside of the transmission route, and minimal impacts within the transmission route. There is no authoritative evidence that exposure to EMFs could increase or create a public health risk." DEIS, Summary, Section S.9.4, pages S-22 to S-23.

While external electric fields are eliminated with underground construction, magnetic fields are not eliminated by means of underground transmission line construction. The earth provides virtually no shielding for magnetic fields. The most concentrated magnetic fields will be directly over the buried however, magnetic fields from underground transmission lines drop off more rapidly with distance than do magnetic fields from overhead transmission lines.

Additional information on electric and magnetic fields is also available in the Northern Pass application to the New Hampshire Site Evaluation Committee (SEC) in the testimony of Dr. William Bailey and in Appendices 37 and 38.

5. What do areas look like 10 years after? Overhead vs. burying lines.

In 10 years, the ROW will be similar to today's appearance except it will contain an additional line. The ROW will remain clear of high growing species between its boundaries; the open areas will re-vegetate with low growing species.

In 10 years, an underground design within a road ROW will also result in the area remaining similar to its current appearance.

6. Can some wetlands be drilled underneath with a bore?

Typically a "bore" or "Jack and Bore" is used for short distances, such as crossing under a road or rail bed; a horizontal directional drill (HDD) would be a more typical method for crossing under an area such as a wetland.

While bore or HDD are technically sound methods for installing underground facilities, their use is often governed by the amount of area required for set-up operations. In the case of a "bore", pits are required on either side of the area to be crossed. These pits must be large enough for the bore equipment and placed at a depth equal to the depth of the bore under the area to be crossed.

For an HDD operation, there must be sufficient space to set up the drilling operation, construction of the tunnel sleeve and for the cable installation. In addition, space is required to set up areas for containment of the slurry used by the HDD drill.

For both the "bore" and HDD methods, the additional area and disturbances required and the overall increase in cost for the operations can quickly offset the possible benefits from not using an open trench.

7. If we bury the lines, how long will they last? Under what condition would they have to dig them up?

The design life span of an underground cable is approximately 40 years. The possibility exists that the cable system could have a longer life.

The possible reasons to dig up the cable would be to address some type of serious failure, such as a cable fault caused by a material failure or manmade action (unauthorized excavation).

8. Why aren't these being put in existing corridors? (I-93)

The Northern Pass project has presented a viable route consisting of new ROW, existing ROW and the use of state highways for location of underground facilities. The use of the I-93 corridor was reviewed and not selected due to a number of technical, environmental and legal reasons. See the attached comment by Northern Pass to the Department of Energy (DOE) on this issue for more detail on why burial in I-93 is not viable.