



**CITY OF SOMERVILLE, MASSACHUSETTS
CONSERVATION COMMISSION
JOSEPH A. CURTATONE
MAYOR**

MARCH 28, 2017

MINUTES

MEETING AT SOMERVILLE CITY HALL
93 HIGHLAND AVENUE
3RD FLOOR CONFERENCE ROOM
7:00 PM

Meeting notes prepared by Vanessa Boukili, based on a recording of the meeting.

Commission Members in attendance: David Turin, Michael Fager, Mathias Neuber (left at 8:30), Owen Wartella, Jamie Lefkowitz (arrived at 7:15)

Commission Members absent: Rachel Borgatti

Others in Attendance: Gene Crouch (VHB/Spectra), Jon Bonsall (KW/Algonquin), Tammy McGill Hoyt (Algonquin), James Stafford (Spectra/ Enbridge), Ivana Pejatovic (Algonquin), Maria Hartnett (Epsilon), Holly Palmgren (MBTA), Paul Shuman (SGH), Russell Adams (C&C Consulting Engineers), Aladdine Joroff, Phillip Baraona, Rachel Frendenburg, Matt Shuman, Megan Kerns, Amalia Almada, Eline Bakker, Danielle Alexander

Staff: Vanessa Boukili (Conservation Agent)

Mathias Neuber brought the meeting to order at 7:02 followed by introductions.

Unfinished Business (7:05):

- 1) Public Hearing continuation: *Notice of Intent* for Algonquin J-1 System Mystic River Crossing Replacement

Owner: DCR

Applicant: Ivana Pejatovic (Algonquin Gas Transmission)

Representative: Gene Crouch (VHB)

Project Location: Mystic Valley Pkwy along the Mystic River, south of Boston Ave, Somerville

DEP file #287-0057

- Request: Replace existing natural gas pipeline that goes from Somerville into Arlington, and a little bit into Medford. Current pipe has an anomaly and needs to be replaced. Pipe replacement will occur via Horizontal Directional Drilling (HDD).
- Jurisdiction: Bordering Land Subject to Flooding, Riverfront Area

- Documents Presented: (1) Revised site plan showing location and specifications of erosion and sedimentation controls, construction entrance, tree protections, and all staging areas; (2) Algonquin Gas Transmission Erosion and Sedimentation Control Plan; (3) Bentonite specs [Barakade High Yield HDD Msds].
- Presentation (Gene Crouch, Ivana Pejatovic, Jon Bonsall, Tammy McGill Hoyt, James Stafford) and Discussion:
 - HDD drill entry on Somerville side, drill under river and come up on Arlington side. Need space on Somerville side for construction operations and staging.
 - Existing pipe kept in service during the drilling and operation. Will only be cut when the tie in occurs at the end during 7-10 day period. Existing section of pipe will then be filled with grout, capped, and left in place.
 - Bentonite clay mud is used as a drilling fluid, which is pumped through drill string and which cools cutter head, operates cutter head, and brings back cuttings out of the hole.
 - Cuttings go into receiving pit in ground, which will be pumped out on a regular basis. Slurry goes through filtering process that separates cuttings from bentonite solution, which is reused for drilling process. Cuttings will be disposed of offsite. Pit is 10x10x15. Slurry forms wall-cake on the inside of the pit and basically forms its own liner. At end of project, pit is completely cleaned out to virgin soil and all bentonite is disposed of offsite.
 - Drilling hole: 20 feet of fill in Somerville, 537 feet long under the river, and drilling hole is ~1 yard wide. 140 cubic yards of material will be stored and hauled away in covered roll-offs; never stockpiled on the ground.
 - Trench for tie in 186 feet long 5 feet wide, 5 feet deep. Assemble 24" steel pipe outside of trench, and then place it into the trench.
 - Entire worksite will have cyclone chain-link construction fence around it, with a single access gate directly off of Boston Avenue.
 - Much of the site will be covered with timber mats or truck mats, as shown on updated site plans.
 - No trees will be taken down in Somerville, but some limbing will occur. All trees within workspace will be protected and all tree work will be performed by a Massachusetts Certified Arborist. Discussed location of limit of work in regards to location of trees. Anytime there will be excavations or any work that may impact the root system, a Massachusetts Certified Arborist will be on site. Any impact to root system will be addressed immediately.
 - Discussed potential of re-locating dewatering outlet to reduce limit of work. Cannot go any smaller than currently designated workspace. Need space for staging, pipe assembly, pull-back area. In event of inadvertent return (mud coming up in an unexpected location), would need to access to the area between the dewatering outlet and the rest of the worksite.
 - Environmental inspector will be on site full-time at the beginning of the project to set up erosion controls properly. Throughout project environmental inspector will inspect and maintain controls on a daily basis. Towards end of construction, environmental inspector will visit site every other day. In event of a major stormfall event (0.25" of precipitation), environmental will inspect and maintain all erosion controls. Inspector will provide report and photo-log of activity to Ivana or her supervisor on a daily basis. These details are in Algonquin Gas Transmission Erosion and Sedimentation Control Plan.
 - All workers on site go through 45 minute environmental training prior to construction to learn about erosion controls (inspection and maintenance), spill prevention training, and waste management. Training log kept on site, along with environmental sedimentation control plan,

- spill prevention plan, counter measures plan, and waste management plan. Protocols are in compliance with MA state and FERC requirements.
- Potential for dewatering during trenching or tie-in activity, 5-7 or 10 days into construction. Dewatering occurs in filter bag 15x20, which is circled by straw waddles (Option B in Figure WD-3 of site plans).
 - Expected start date: July 2017 (pending permits from cities and state). Three month construction process; pipe must be in service by November 1st.
 - Restoration permits through DCR. Partial restoration will occur in fall; final restoration following spring.
 - Vote: to close the hearing and issue an order of conditions with the following special conditions added to the Commission's standard conditions (motion: Michael, second: Owen, vote: 5:0:0 @ 8:09pm):
 - All reports from Owner's Project Manager (DCR or DCR designated manager) are sent to Conservation Agent.
 - No cutting of tree limbs occurs until Con Com is notified and agrees to limbing. Agent is there for the limbing process. Three limbs already identified for trimming; only one was shown to Agent at pre-hearing site visit. View all three at pre-construction site visit.
 - Prior to start of work, the Applicant must adjust the wording on Note #7 of the Rock Access Pad Construction Specifications (FIGURE RD-2) to state that "Any sediment that is spilled, dropped, washed or tracked onto roadways must be removed by the end of the workday" instead of "as soon as practical." Updated document must be sent to the Conservation Commission before work can begin.
 - Copies of SWPPP inspections, notification of progress and problems, require that any issues identified are corrected within 24 hours.
 - Prior to the start of work, copies of any and all permits from the City of Somerville must be sent to the Conservation Commission.
 - Spill kits on-site and on each piece of equipment. Spills must be contained and reported within 15 minutes. Any spills must be reported to Conservation Commission immediately.

New Business (8:10):

1) Public Hearing: *Notice of Intent* for DCR Mystic River Outfall Maintenance.

Applicant: Nick Gove (DCR)

Representative: Matt Devlin (AECOM)

Project Location: Mystic River State Reservation, Somerville

- At the written request of the Applicant, this Public Hearing was continued until the April 25th, 2017 meeting.

2) Public Hearing: *Notice of Intent* for Charlestown Bus Facility – Shoreline Stabilization and Yard Improvements Project.

Applicant: Holly Palmgren (MBTA Environmental)

Representative: Maria Hartnett (Epsilon Associates)

Project Location: MBTA Charlestown Bus Yard, 80 Alford St., Boston

- Request: Stabilize shoreline and improve coastal resiliency at MTBA Charlestown Bus Facility to ensure that this important facility is protected.
- Jurisdiction: Coastal Beaches, Coastal Banks, Land Subject to Coastal Storm Flowage



- Documents Presented: (1) MBTA Charlestown Bus Facility project NOI and Stormwater Report
- Presentation (Maria Hartnett, Holly Palmgren, Paul Shuman, Russell Adams) and Discussion:
 - Critical public infrastructure facility for transportation - MBTA's largest bus garage. Houses over 230 of their 1000 buses. The buses that come through this facility serve ~29% MBTA's bus riders, or around 99,000 people per day.
 - Site is currently very vulnerable. Shoreline on Boston side is deteriorating sheet pile bulkhead (have already done emergency repairs). Shoreline in Somerville (Engineering Rail Yard) is unprotected and deteriorated. Whole site vulnerable to impacts from rising sea levels and storm damage.
 - Project will stabilize shoreline and provide flood protection for entire site. Also significant storm water improvements (deep sump catch basins, inline proprietary separators, and two new rain gardens in Somerville).
 - Project also includes easement to DCR for multiuse pathway, providing link between Draw 7 park and the bike lanes on Alford Street leading into Sullivan Square.
 - Project received competitive resiliency grant from Federal Transit Administration.
 - Design details: Boston – new raised embankment with rip-rap on lower portion and native planting bioengineering placed ~1 foot above mean high water. Somerville – shoreline cut back by removing fill in engineering rail yard, then rip-rap placed for stabilization and flood cut-off wall built above 100-year flood elevation. Fill cut-back used as partial mitigation. After excavating, revetment will be placed in portion that is protected, and the rest will be left as tidal bottom.
 - Looked at alternatives. Site constraints – 345 kV lines (4 along shoreline), building footprints, and weak and compressible soils. Can't do vertical construction, must use sloped embankment design.
 - Stormwater improvements:
 - 2 outfalls will be replaced, and 1 new one will be constructed (outfalls H, G, H1 on plans). As area may settle overtime, area around outfalls will either be filled and mounded or there will be a rip-rap apron. All outfall structures have tide-gates - belts and suspenders on embankment side as well as outfall sluice gates (cast iron flap gates that close during rising tides).
 - Additional stormwater treatment, beyond what exists today. Two new rain gardens, in Somerville. Also deep sump catch basins and inline separators.
 - Permanent Impacts:
 - Dredging in Somerville for fill removal – 810 cubic yards
 - Coastal Beach where placing the rip-rap – 11,000 square feet; reclaiming 11,800 square feet of beach.
 - Bank – 680 linear feet.
 - Land Under the Ocean - no permanent impacts.
 - Land subject to coastal storm flowage – some paving, and some improvement (grass strip).
 - Improvement: all materials storage will be removed from 100-foot buffer zone.
 - Time of year restrictions: as requested by Marine Fisheries and listed on 401 Water Quality Certification permit from DEP, will follow time of year restriction to avoid in-water work between February 15 and June 30. Most of work in Boston will take place in cofferdam, whereas in Somerville most of work will not be in cofferdam.

- Letter that Somerville Con Com received from Marine Fisheries states time of year restriction from February 15 to July 15. MBTA would be willing to support extending the time of year restriction until July 15th.
- During construction, site will have erosion and sedimentation controls.
- Discussed stormwater management plan. Area of proposed systems is larger than area of existing systems. Catchbasins in Somerville are along roadway. The other open areas don't have catchbasins and don't have runoff – water seeps into the ground. No runoff is visible after rain event.
 - Commissioner Wartella mentioned that they are still catchment areas that are hydrologically part of existing watershed, so must be incorporated into existing HydroCAD model. Also, does not appear to meet Massachusetts Stormwater Standards as many proposed flows are not mitigated compared to existing conditions. Concern with surcharge because current peak flow is lower than under proposed conditions, and thus stormwater proposal is not mitigating peak flow. Need ensure site is drained within 72 hours and water quality units must be sized appropriately. Include exfiltration in the bioretention basin and groundwater-modeling analysis in HydroCAD model.
 - Paul/Russell mentioned that the cutoff wall that will be built will stop all flow out to river; all water will be drained into raingarden.
 - Conservation Commission requested data and details of HydroCAD model and analysis, including calculations that show that the BMPs and the green infrastructure is adequately sized for all of the runoff. Conservation Commission also requests that the City of Somerville Engineering Department review the stormwater management plan.
- Plans for proposed path: MBTA will be giving DCR easement to built path. DCR has money to design and built path, but it is their responsibility. They will come before Commission prior to building path.
 - Condition of path area prior to easement: gravel borrow gradation for fill underneath where path would go, with grass filter strip. DCR can remove gravel to put pavement. Upwards of 5" of settlement expected in the next few years on the Boston side. Until easement goes through, will use pathway for maintenance.
- Proposed timeline of project: install cofferdam by 15 Feb 2018. Complete project summer 2019.
- Location of prior sinkholes - outfalls on Boston side; did some emergency repairs to drainage system.
- Boston Conservation Commission closed hearing and voted to issue OOC; expected to receive it on Apr 5th. Boston Con Com noted that strip of land between path and rip-rap is potential habitat for invasive species like phragmites, and thus they requested a detailed landscaping plan is provided and plan for invasive species management.
- Project does not apply to Riverfront Area resource because project is subject to Chapter 91 approval. There will be no impacts to Land Under Ocean because project involves cutting back fill, resulting in more land under ocean. Similarly, fish run does not apply on Somerville side. Dredging anything below mean high water line requires permit. Disclosed dredge plan to DEP.
- Motion to continue hearing to next meeting on April 25th unanimously approved at 9:08 [motion – Owen, second – Jamie]

Updates (9:09):

1) Commissioner vacancy update



- Recommendation has been given to the mayor. Ultimate selection is made by the Mayor, and approved by the Board of Aldermen.

2) Ongoing projects

- Solitude Lake Management (Matt Salem), Representative for Submersed Vegetation Management OOC (DEP file # 287-0054), submitted an annual report. Would also like to amend OOC to treat a larger area and add the use of Sonar floridone herbicide. Commission agreed allow Amendment Request rather than submitting a new NOI.

3) Action Items:

- All Commissioners – review special conditions template and identify necessary revisions
- Vanessa – find out more about bylaws
- Rachel and Michael – read through bylaws and report back
- Everyone – look at new website and propose changes
- Mathias – contact Matthew about resignation letter

Other Business: (9:18)

- 1) Keolis Commuter Services 2017 Yearly Operational Plan – notification that right of way maps are up on the website. <https://www.fdcerrailroadvegetation.com/somerville>.
- 2) Role of Conservation Commission in CPC Butterfly Garden Project.
 - Commission agreed to look at butterfly garden plan and plant list and ask for expert advice.
- 3) SustainaVille week events (April 22nd – April 28th)

Approval of minutes:

1. Unanimously approved January 24, 2017 minutes at 9:32 [motion – Owen, second – Jamie]
2. Motion to table review of February 28, 2017 minutes unanimously approved at 9:33 [motion – Owen, second – David]

Adjourn

1. Motion to adjourn meeting unanimously approved at 9:33 [motion – David, second – Owen]

List of Meeting Documents:

- Agenda
- Minutes Jan 24th meeting
- Minutes Feb 28th meeting
- Ongoing projects spreadsheet
- Algonquin project NOI (Somerville Con Com file 2017_1; DEP file 287-0057)
- MBTA Charlestown Bus Facility project NOI
- MBTA Charlestown project Stormwater Report
- MBTA Charlestown project stormwater checklist
- Solitude Lake Management 2016 Year-End Report: MysticRiver.16_YER_Sub.Veg.pdf
- Solitude Lake Management Summary of Amendment Request: MysticRiver.17_Somerville_AmendmentRequest.pdf
- SustainaVille week of events schedule

