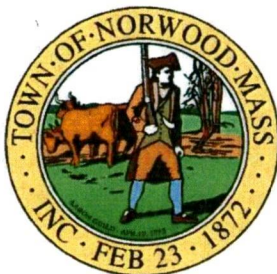


CONSERVATION COMMISSION

STEPHEN WASHBURN, CHAIRMAN
CATHERINE WALSH, VICE CHAIR
CAROLYN ROCKLEN, TREASURER
JOHN GEAR
PETER BAMBER
KELSEY QUINLAN
OLIVIA HAGLUND



ENVIRONMENTAL PLANNER/
CONSERVATION AGENT
HOLLY JONES, MSCI

OFFICE MANAGER/SR. ADMIN. ASST.
LYNN MARCHAND

Norwood Conservation Commission Meeting Minutes April 19, 2023 7:30 P.M.

Present: Stephen Washburn, Catherine Walsh, Carolyn Rocklen, John Gear, Peter Bamber, Kelsey Quinlan, Olivia Haglund (remote)

Also Present: Holly Jones, Environmental Planner/Conservation Agent

The April 19, 2023 meeting was held remotely using Google Meet and in person in Room 24 of Norwood Town Hall. The meeting was called to order by Chairman Stephen Washburn at 7:30 p.m. followed by a roll call.

Public Hearings:

1. Request for Amended Order of Conditions: **Intersection of Prospect and Washington St, DEP File No. 251-0542** Applicant: MassDOT Representative: Taylor Donovan of VHB Group
Description: The request is to amend certain special conditions on the issued Order of Conditions

Ms. Jones gave Commissioners a summary of the minor changes requested and said the amended order was the best pathway to incorporate those changes.

Ms. Donovan, participating remotely, shared her screen and reviewed the changes to the site plan which were part of the amended order request. Ms. Jones and Ms. Donovan confirmed that the land under water was increased by adding more stream bed where it wasn't previously. Ms. Jones indicated that it was a higher impact of land under water but that it was a positive change due to the creation of a wetland resource where previously there was a culvert. Ms. Donovan said the changes were a result of a hydraulics analysis that was conducted. She said a new stone apron was also added to the plan. She noted that it was already included in the temporary impacts. Ms. Courtney Walker from MassDOT read through each of the conditions detailed in the vhb letter dated April 14, 2023 (*reference #11334.01, attached herein to these meeting minutes*)

Mr. Washburn discussed the changes and removal of the "boilerplate" language from the conditions that were not applicable. Mr. Bamber agreed with Mr. Washburn. Ms. Walsh felt that the changes were broad and asked Ms. Jones if she was comfortable with the changes that were articulated. Ms. Jones said she was and that there was no additional impact above what was originally stated, however, she acknowledged that some of the language was vague (minimal sand and salt as an example). She also noted the two years of additional inspections and treatments for invasive species could have an additional impact on wetland resources.

Motion: Mr. Bamber made a motion to close the public hearing, issue an amended order of conditions and to approve the amended plan and conditions as shown.

Mr. Gear seconded the motion.

Motion passed, 6-0-1 by roll call vote. Ms. Walsh abstained.

Certificate of Compliance Request:

1. **59 Puritan Place.** DEP File No. 251-0344, Norwood No. N2004-08

Ms. Jones discussed the ongoing issue with the plaque and that the applicant had put up laminated placards. She stated that something more durable was required. The owner requested another continuance. Ms. Jones recommended giving the applicant the opportunity to comply.

Motion: Mr. Bamber made a motion to continue the public hearing to May 10th.

Mr. Gear seconded the motion. Motion passed unanimously, 7-0 by roll call vote.

Violations:

1. **1 Moderna Way,** report & plan

(The Pare Corp annotated aerial figure and photos/Moderna Restoration Plan 4-19-2023 presentation is attached herein to these meetings minutes)

Environmental scientist, Mr. Steven Anderson, gave a presentation of the proposed Moderna restoration plan. He discussed the initial 1/26/2023 sediment release incident after a 1.5" rain event. An evaluation of the impacts was performed to address the enforcement order that was issued. The calculated impacted area of the bordering vegetative wetland was approximately 2.1 acres. There was turbid water, fine-silt material, a small clogged pipe outlet from an intermittent stream/no water draining from the wetland, one area of accumulated sediment 1" or less. Upon a later inspection he said only a small amount of the fine-silt material had settled; most of it had gone down the intermittent stream and into the drainage system on Upland Road. Noted on the plan was one sediment accumulation which was identified at the outfall. He said that Moderna had the stormwater system cleaned out including the clogged outlet.

He identified a certifiable vernal pool (about .6 acres in area) which was mapped/delineated and he stated that the area was shown on the site plan. Mr. Anderson noted that during the 4 site visits, they identified 20 wood frog egg masses and 13 salamander egg masses.

He said actions taken included the construction project now covered under a NPDES permit, the implementation of a stormwater prevention plan, installation of proper erosion controls, the cleanout of the stormwater system, and was inclusion on the scheduled system maintenance plan. He noted the addition of an outlet. He said Moderna would submit the vernal pool to Natural Heritage. Mr. Anderson stated that Moderna may add a debris screen at the outlet but that it would have to be looked into further as it would need to be designed properly in order to prevent clogging. He said approximately 1000' square feet of sediment would be removed with hand tools.

Commissioners asked questions regarding the areas to be cleaned and the cleaning schedule, algae and nutrient pollution, long term effect on the vernal pool, and monitoring of vernal pool health going forward. Mr. Anderson discussed the pipe flushing and cleaning of catch basins, noted that while algae affects a vernal pool it won't keep it from surviving/thriving, and stated that the cleaning schedule included inspections every 6 months as well as annual cleaning. Ms. Jones said cleaning out the basins removed years of debris helps with reducing nutrient load. She said as long as there was an active OoC, she can inspect. She noted in the future, that the Commission couldn't do any active monitoring unless there was a violation. The Chair asked if Moderna could send the Commission periodic reports. The Moderna representative stated they could monitor it and would be happy to share the information with Commissioners.

Ms. Jones noted the ongoing NEPDES permit for the routine housekeeping of running an industrial business activity and the Stormwater Pollution Prevention Plan. Ms. Jones asked for a timeline for certifying the vernal pool. Mr. Anderson replied that it would be submitted to National Heritage in the late spring/early summer and that the sediment removal would happen

during the dry season, likely the end of summer in Aug/Sept. Ms. Jones said she would like to see both happen sooner as a longer delay would give an opportunity for the sediment to be mobilized. She recommended the end of April for certifying the vernal pool and July for the sediment removal. Mr. Bamber and Mr. Gear concurred with Ms. Jones.

Ms. Jones said one of the plans had been completed and that visible/significant improvements to the stormwater maintenance for all of the projects were noted.

Ms. Jones recommended approving the proposed remediation plan for the violation with the two suggested timeline changes.

Motion: Mr. Gear made a motion to approve as stated by Ms. Jones.

Ms. Rocklen seconded the motion. Motion passed unanimously, 7-0 by roll call vote.

Conservation Commission Business:

**#3 taken out of order and discussed first*

1. Endean Orchard Subcommittee update

Ms. Jones announced that the irrigation system was installed on April 19th, new water lines went into the garden, and that the fence was nearly up. She said a volunteer day would be set up soon and recommended visiting the orchard. She stated that the Community Garden spigots were completed and she expressed thanks to DPW who spent all day carrying loam to top dress the area that was being added and also re-did the parking lot to create additional room.

2. CPC report

Ms. Walsh said they met to review the Town Meeting warrant and the details of what would be presented at the informational sessions.

3. Memorial Bench donation *taken out of order by the Chair *taken out of order

Mr. Riley Adams addressed the Commissioners. For a Bar Mitzvah service project, he wanted to raise money for a memorial bench for the late Aron Greenfield, a Holocaust survivor, to be placed in the Bernie Cooper Park. He and his father said they have some funds. They noted that Mr. Greenfield was friends with Mr. Cooper. He said that they had spoken with Mr. Greenfield's widow and the General Manager, Mr. Mazzucco about the idea; both supported it. Also discussed were the inclusion of a plaque and a possible location overlooking the river. The quote for the bench was \$1700-\$1800 including shipping. Commissioners enthusiastically expressed their support for Mr. Adams proposed idea.

Motion: Mr. Bamber made a motion to accept the donation from Riley Adams of a memorial bench honoring Aron Greenfield with immense gratitude from the Commission. Ms. Walsh seconded the motion. Motion passed unanimously, 7-0 by roll call vote.

4. Soil Characterization at Bernie Cooper Park

Ms. Jones discussed an additional design add-in which would ensure that any hazardous materials or contaminants that might be in the soil at the Bernie Cooper Park would be identified. The two most recent LSP's were confident that work done on site did not show anything that would be overly concerning or reportable to the state but their main concern was across the street. She stated that the Town's consultants recommended soil testing. She said the change order to do the work was just over \$15K and there was \$11,700 remaining in the CPC allocation that was used to purchase the park. She explained that the funds were for design and construction and that CPC allowed allocation of funds for the soil characterization.

Ms. Jones asked Commissioners to consider financing the remaining \$4,500 from the Ellis Pond Dam Management budget. Mr. Bamber asked about the invasive species treatment program. Mr. Jones explained that she did a PO change order which lowered the amount for that contract by only encumbering the amount needed for the rest of FY23. She said that left approximately

\$13K which was after paying for the irrigation. Ms. Walsh commented that this was a design component and consistent with the original CPC authorization. Mr. Bamber discussed the cost if soil has to be removed. Mr. Washburn underscored that remediation is expensive. Discussion was had regarding the complications that could result from contaminated soil but all agreed it was necessary to perform their due-diligence with regards to testing. The Chair said he was looking for a motion to approve the approximate difference of \$4,565 required to perform the soil characterization at the Bernie Cooper Park.

Ms. Olivia Haglund made a motion to approve the approximate difference of \$4,565 required to perform the soil characterization at the Bernie Cooper Park.

Ms. Rocklen seconded the motion.

Motion passed unanimously, 7-0 by roll call vote.

5. Neponset Stormwater Partnership

Ms. Jones provided additional information regarding the Community Water Monitoring Network (CWMN) program and noted that currently there are 8 water quality monitoring stations in Norwood. If the Town upped their membership, it would help NepRWA cover their cost for the testing and Norwood would get some additional services such as following up on hot spots and discharges, extra analysis, a water quality report and a press release. She noted the program runs on a fiscal year schedule so membership would start again in July.

Mr. Washburn spoke favorably of the additional membership level and the "bigger picture" of the large benefits in relation to the cost.

Ms. Jones stated that a quote was received from PARR (dam inspections) for an every 3 year inspection. The cost would be approximately \$3,000 for preparation of the report for the Office of Dam Safety. She said a diver would inspect low level outlets this year for an additional cost (approximately \$6,000).

Discussion was had regarding WPA funds, 5,000 donation fund, and the ability to use the land acquisition management fund. Mr. Washburn suggested reviewing the Conservation budget and next year's budget as a future agenda item in order to make more informed decisions as to what items should come out of which funds.

6. Agent update

Ms. Jones suggested that Commissioners anticipate a long meeting on May 10th due to a controversial subdivision on the agenda. She said the Planning Board had several reviews, inclusive of stormwater and hydrology, and that she would follow up with the Planner for comments pertinent to Conservation. Commissioners expressed an interest in conducting a site visit prior to the hearing.

Ms. Jones made the following announcements:

- This is Commissioner Olivia Haglund's last meeting and she thanked her for her service.
- Sarah Bouchard has been appointed as the new Director of Community Development.
- Earth Day on April 22 and 23; Sat: can pick up trash and remove invasive species at the Bernie Cooper Park 9am – 12 pm. Sun: sign up with Progress Norwood, Earth Day Fair at 11:00 on the Common (at HS if it rains) Ms. Jones & Ms. Rocklen will have a table.
- Ms. Rocklen will be giving a talk at the Norwood Public Library the 25th. -Sustainable Gardening/Native Planting at 7pm on Tuesday -free! Register online.
- Ms. Quinlan and Ms. Jones are applying for Tree City Designation with the Arbor Day Foundation as encouraged by the General Manager and the Sustainability Committee. Tree City Designation: tree planting and care, Arbor Day proclamation, and potential grants.

Adjournment.

Motion: Ms. Haglund made a motion to adjourn.

Ms. Rocklen seconded the motion.

Motion passed unanimously, 7-0 by roll call vote.

The meeting adjourned at approximately 9:17 pm.

Next meeting: May 10, 2022 at 7:30 p.m. via Google Meet & in person.

Respectfully submitted by Lynn Marchand.

4/19/23
Can Com
Min

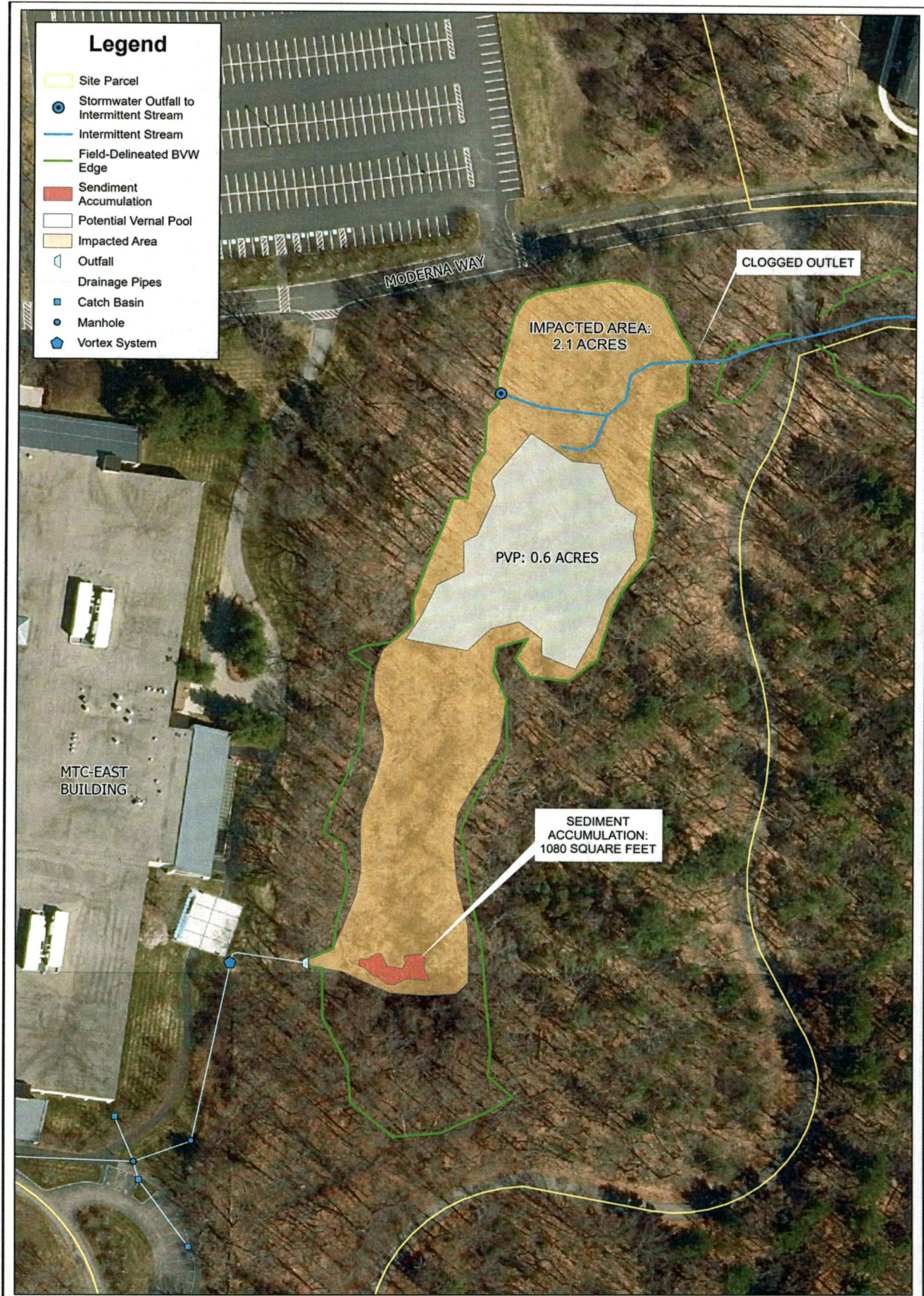




Photo No. 1: View of the 36-inch stormwater outfall from which the sediment was discharged to the wetland.



Photo No. 2: View of the wetland interior on January 26th, the day the sediment release was observed. Facing south from Moderna Way toward Outfall No. 11.



Photo No. 3: View of the wetland from a similar vantage point as Photo 2 on March 16th, 59 days after the sediment release occurred.



Photo No. 4: View of headwall and pipe inlet that drains the wetland and intermittent stream. This inlet clogged and flooded the wetland on January 26th Pare recommends regularly maintaining this inlet and installing a debris rack to prevent regular clogging.



Photo No. 5: View of the southern portion of the wetland that was not impacted by the sediment release as it is upgradient of the outfall location.



Photo No. 6: View of the portion of the wetland impacted by the sediment release. Facing west across the wetland toward the MTC-East building.



Photo No. 7: Leaves in the impacted portion of the wetland. A thin film of sediment is present in areas throughout the impacted portion of the wetland.



Photo No. 8: Area of sediment deposit and organic debris collected at the stormwater outfall discharge point.



Photo No. 9: General view of the potential vernal pool (PVP) facing east from near the western edge of the PVP.



Photo No. 10: View of the eastern end of the vernal pool facing south.





Photo No. 11: View of the impacted portion of the BVW on April 13th facing east toward the wetland interior.



Photo No. 12: General view of the impacted portion of the BVW on April 13th facing north.

4/14/23
ConCom
MIN

April 14, 2023

Ref: 11334.01

Stephen Washburn, Chairperson
Norwood Conservation Commission
Town Hall, 566 Washington Street
Norwood, MA 02062



Re: Intersection Improvements at Route 1A & Upland Road, Washington Street & Prospect Street,
Fulton Street (MassDOT Project #606130)
Minor Modification and Order of Conditions Amendment Request

Dear Chairperson Washburn,

On behalf of the Massachusetts Department of Transportation (MassDOT), Vanasse Hangen Brustlin, Inc. (VHB) respectfully requests that the Conservation Commission review proposed changes to the portion of Plantingfield Brook to be daylighted as part of the project. The modification consists of widening the stream section from 3 feet (originally proposed) to 15 feet, thereby increasing the proposed creation of Land Under Waterbodies and Waterways (LUWW) from 468 sf to 502 sf. Natural streambed material will be placed in the additional areas of LUWW created, and the adjacent upland areas will remain riprap as proposed in the previously submitted Notice of Intent. This change is proposed because of the results from the Hydrologic and Hydraulic (H&H) analysis recently completed by VHB. The proposed changes remain in compliance with the requirements of the Massachusetts Wetland Protection Act (WPA) regulations. MassDOT is exempt from locally established bylaws and regulations, so the Project is therefore not required to be reviewed pursuant to the Town of Norwood's Wetlands Protection Bylaw. An updated plan sheet showing this change is included in this submission.

In addition, VHB respectfully requests that the Conservation Commission review proposed changes to the Final Order of Conditions (OOC) for DEP File #251-0542, which was issued on March 31, 2023.

The proposed changes to the previously issued Order of Conditions are outlined below:

Condition 2: Liability* - The applicant shall indemnify and save harmless the Commonwealth, the Town of Norwood, the Conservation Commission, and its agents against all sites, claims or liabilities of every name and nature arising at any time out of or in consequence of the acts of the Commission or its agents in the performance of the work covered by this Order and/or failure to comply with the terms and conditions of this Order whether by itself or its employees or subcontractors.



Comment: *MassDOT is requesting to have this condition removed because we are unable to comply with this condition, per the following reasons which were provided by our Legal Counsel:*

1. *As a policy matter, MassDOT does not provide indemnification, as such an indemnity would be "a pledge of the credit of the Commonwealth," which MassDOT is not entitled to pledge.*
2. *More specifically to this Condition,*
 - a. *it makes no sense for MassDOT to agree to indemnify the Commonwealth (i.e., itself);*
 - b. *legally, MassDOT cannot, as a matter of law, indemnify the Commission's agents to the extent they are private parties or individuals; and*
 - c. *it is unclear what claim could ever be made against the Commission or the Town arising "out of or in consequence of the acts of the Commission or its agents."*
3. *Finally, to the extent such a claim could be possible, MassDOT would never subject itself to liability for claims arising "out of or in consequence of the acts of the Commission or its agents" or any third party for that matter.*

Condition 10: Oil Spills* - During and after work on this project, there shall be no discharge or spillage of fuel, oil or other pollutants onto any part of the site. The applicant shall take all necessary precautions to prevent the release of pollutants by ignorance, accident or vandalism.

Comment: *MassDOT requests that the condition be revised to remove the words "after work" so the condition applies to construction phase work only instead of in perpetuity because the project location is a public roadway.*

Condition 11: Stormwater System Maintenance Plan – Prior to the start of other construction, the applicant will submit to the Commission for its approval a plan and provision for the maintenance and repair in perpetuity of the stormwater management system. Such plan shall include the name of the entity that will be responsible for the ongoing maintenance.

Comment: *MassDOT requests to have this condition removed because the requested information was already included with the stormwater report.*



Condition 12: Replication Area – Any wetland replication areas shall be constructed as stated/shown in the approved plan prior to any filling of the wetlands. No further work shall proceed until the Commission or its representative has been notified and has inspected the replication area. Once the wetland replication areas are at rough grade to the elevation of the surrounding wetland, the organic soils from the wetland area to be filled shall be placed in the replication areas and brought to the grade of existing wetland. Wetland vegetation must be satisfactorily established in the replication area within two growing seasons.

Comment: *MassDOT requests to have this condition removed because there is no wetland replication associated with the project.*

Condition 15: Invasive Vegetation – Inspect any imported materials to be used in the buffer zone and/or resource areas prior to use in buffer zone/ resource area and implement weeding program to remove any invasive plants after final grades are reached every 6 months for 2 years post project.

Comment: *MassDOT does not have a contract mechanism to implement a weeding program for two years post-construction. We recommend revising the condition to specify that the contractor shall prevent and/or eliminate the introduction of invasive species within the site with the following wording, "Invasive Vegetation – Inspect any imported materials to be used in the buffer zone and/or resource areas prior to use in buffer zone/ resource area. Corrective measures will be taken as necessary to prevent and/or eliminate the introduction of invasive species within the site."*

Condition 16: Vegetation* - Proper landscaping of embankments and run off areas including but not limited to grass, vegetation, and shrubbery shall be established before the project is considered complete. Any replicated wetland must be satisfactorily established within two growing seasons before the project is considered complete.

Comment: *MassDOT requests that the last sentence of Condition 16, "Any replicated wetland must be satisfactorily established within two growing seasons before the project is considered complete," be removed because there is no wetland replication proposed as part of the project.*



Condition 19: Pesticides, Etc. – No pesticides, herbicides, or fertilizers, with the exception of lime, shall be used within the 100 foot buffer zone to a BVW or Bank after completion of the project.

Comment: *MassDOT requests to have this condition removed because it places a permanent restriction on what work can be done in ROW. Furthermore, the use of pesticides or herbicides within the buffer zone may require another filing with the Norwood Conservation Commission if required by the Wetlands Protection Act.*

Condition 20: Sand/Salt – The use of sand and salt on paved surfaces shall be kept to an absolute minimum during the winter months.

Comment: *MassDOT respectfully requests to have this condition removed. It is the responsibility of MassDOT to maintain reasonably safe conditions on State roads and, as such, any winter weather event that could result in the build-up of snow and/or ice on the roadways may warrant the application of deicing chemicals. However, MassDOT follows established Best Management Practices (BMPs) and operational procedures and has implemented a range of strategies statewide to reduce the amount of road salt used and minimize its environmental impact.*

As stated in the WPA under 10.05(4)(a): *A butter notification is not required for projects proposed by the Massachusetts Department of Transportation Highway Division pursuant to St. 1993, c. 472 as approved on January 13, 1994.*

Please advertise this matter for public hearing at the Commission's next scheduled meeting. If you have any questions concerning this submittal or need any additional information, please contact me at 617-607-6310 or tdonovan@vhb.com.

Regards,

Taylor Donovan

Taylor Donovan
Environmental Scientist

CC: DEP Southeast Regional Office
Massachusetts Department of Transportation

Flood Contingency Plan

FLOODPLAIN CONTINGENCY PLAN AT A MINIMUM SHALL INCLUDE:

1. THE CONTRACTOR SHALL MONITOR THE NATIONAL WEATHER SERVICE FORECAST OFFICE (DIRECTED BY NOAA) FOR WEATHER UPDATES. THE CONTRACTOR SHALL INITIATE THIS FLOOD PLAIN CONTINGENCY PLAN WHEN A FLOOD WARNING IS ISSUED BY THE NATIONAL WEATHER SERVICE. WARNINGS ARE ISSUED BY RADIO BROADCAST AND ARE AVAILABLE VIA THE INTERNET AT [HTTP://WWW.NWS.NOAA.GOV](http://www.nws.noaa.gov). THE CONTRACTOR SHALL BE AVAILABLE TO IMPLEMENT THIS FLOOD PLAIN CONTINGENCY PLAN 7 DAYS PER WEEK.
2. ONCE A FLOOD WARNING HAS BEEN ISSUED, THE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION VEHICLES AND EQUIPMENT FROM THE FLOOD PLAIN AREA AS SOON AS IS REASONABLY PRACTICABLE.
3. THE CONTRACTOR SHALL PLACE 6-MIL PLASTIC SHEETING AND CRUSHED STONE BALLAST OVER ANY AREA OF EXPOSED SOIL THAT HAS BEEN DISTURBED WITHIN THE 100-YEAR FLOOD PLAIN.
4. THE CRUSHED STONE BALLAST SHALL BE PLACED AROUND THE PERIMETER AND ACROSS ANY SEAMS IN THE PLASTIC.
5. THE EDGE OF THE PLASTIC SHEETING SHALL BE KEPT INTO THE SURROUNDING SOIL 6 INCHES AND COVERED WITH CRUSHED STONE IN ORDER TO PREVENT FLOOD WATER FROM LIFTING SHEETING.
6. THE CONTRACTOR SHALL PROVIDE ON SITE, PRIOR TO THE START OF DEMOLITION, A MINIMUM OF 5000 SQUARE FEET OF 6-MIL POLYETHYLENE SHEETING, A MINIMUM OF 5000 SQUARE FEET OF 6-MIL POLYETHYLENE CRUSHED STONE BALLAST, AND A MINIMUM OF 5000 SQUARE FEET OF CRUSHED STONE BALLAST WITHIN THE 100-YEAR FLOOD PLAIN IN ADVANCE OF A FLOODING EVENT.
7. THE CONTRACTOR SHALL PROVIDE ON SITE, PRIOR TO THE START OF, TO BE USED FOR BALLAST OVER THE PLASTIC SHEETING USED FOR FLOOD PLAIN PROTECTION.
8. IN THE EVENT OF FLOODING, NO WORK MAY TAKE PLACE IN THE WORK AREA UNTIL FLOODWATERS HAVE BEEN CONTAINED WITHIN THE BANKS OF PLANTING BROOK AT THE SITE AND ANY NECESSARY REPAIRS HAVE BEEN MADE TO THE EROSION CONTROL MEASURES.

Diversion and Control of Water

1. THE CONTRACTOR SHALL ERIGEA A CONTROL OF WATER AND DIVERSION PLAN FOR REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO IMPLEMENTATION. THE PLAN SHALL IDENTIFY PROPOSED MEANS, METHODS, AND PHASING AS REQUIRED TO COMPLETE THE WORK WITHOUT ARTIFICIALLY RESTRICTING FLOW OR WORKING WITHIN THE FLOWING WATER.
2. THE CONTRACTOR SHALL MONITOR WEATHER PATTERNS AND IMPLEMENT NECESSARY MEASURES TO LIMIT UPSTREAM FLOODING, AND PROTECT THE WORK.
3. THE CONTRACTOR SHALL ESTABLISH TEMPORARY COFFERDAMS AS NECESSARY TO PROTECT THE WORK THROUGHOUT CONSTRUCTION.
4. THE CONTRACTOR SHALL PROVIDE TEMPORARY COFFERDAMS WITHIN THE UPSTREAM AREA AND PROVIDE PUMPS OR OTHER MEANS OF Dewatering AS NECESSARY TO MAINTAIN DRY CONDITIONS IN THE DRY BATHYR COFFERDAMS OR EXCAVATIONS OF COFFERDAMS THAT CANNOT BE REMOVED IN THEIR ENTIRETY SHALL NOT BE PERMITTED.
5. ANY NECESSARY INTERFERENCES SHALL BE APPROVED BY MAJORITY AND ENGINEER PRIOR TO INSTALLATION. ALL INTERFERENCES SHALL BE INSTALLED AND PAID FOR ITEM NO. 891.11 CONTROL OF WATER.

Anticipated Construction Phasing

1. CONTROL OF WATER - TEMPORARY HOPE PIPE THROUGH STREAM THROUGH DEMOLITION - REMOVE EXISTING HEADWALL AND CULVERT
2. CONSTRUCTION OF HEADWALL FOR THE TWO 24-INCH CULVERTS
3. PARTIAL CONSTRUCTION OF STREAMBED MATERIAL AND RIPRAP SLOPES
4. CONSTRUCTION OF STREAMBED MATERIAL AND RIPRAP SLOPES
5. FLOW DRY DRY. ONCE TEMPORARY HOPE PIPE HAS BEEN REMOVED.

Land Under Water Impacts

previously 468 SF
revised = 502 SF

THIS AREA WAS ALREADY INCLUDED IN TEMPORARY IMPACTS 1115 23.5 SF

EX BOX CULVERT

TEMPORARY HOPE PIPE THROUGH DEMOLITION FOR TEMPORARY WATER MANAGEMENT

EX CULVERT TO BE REMOVED

EX HEADWALL TO BE REMOVED

PROP RIPRAP

PROP STONE APRON

PROP STREAMBED MATERIAL

PROP EDGE MATERIAL

PROP SOLDIER PILE AND LAGGING WALL

PROP COFFERDAM

FOR CONTROL OF WATER

REFER TO SPECIAL PROVISION 891.11

LIMIT OF BANK

SHO. NO. 1878

BIT. 107

BIT. 108

BIT. 109

BIT. 110

BIT. 111

BIT. 112

BIT. 113

BIT. 114

BIT. 115

BIT. 116

BIT. 117

BIT. 118

BIT. 119

BIT. 120

BIT. 121

BIT. 122

BIT. 123

BIT. 124

BIT. 125

BIT. 126

BIT. 127

BIT. 128

BIT. 129

BIT. 130

BIT. 131

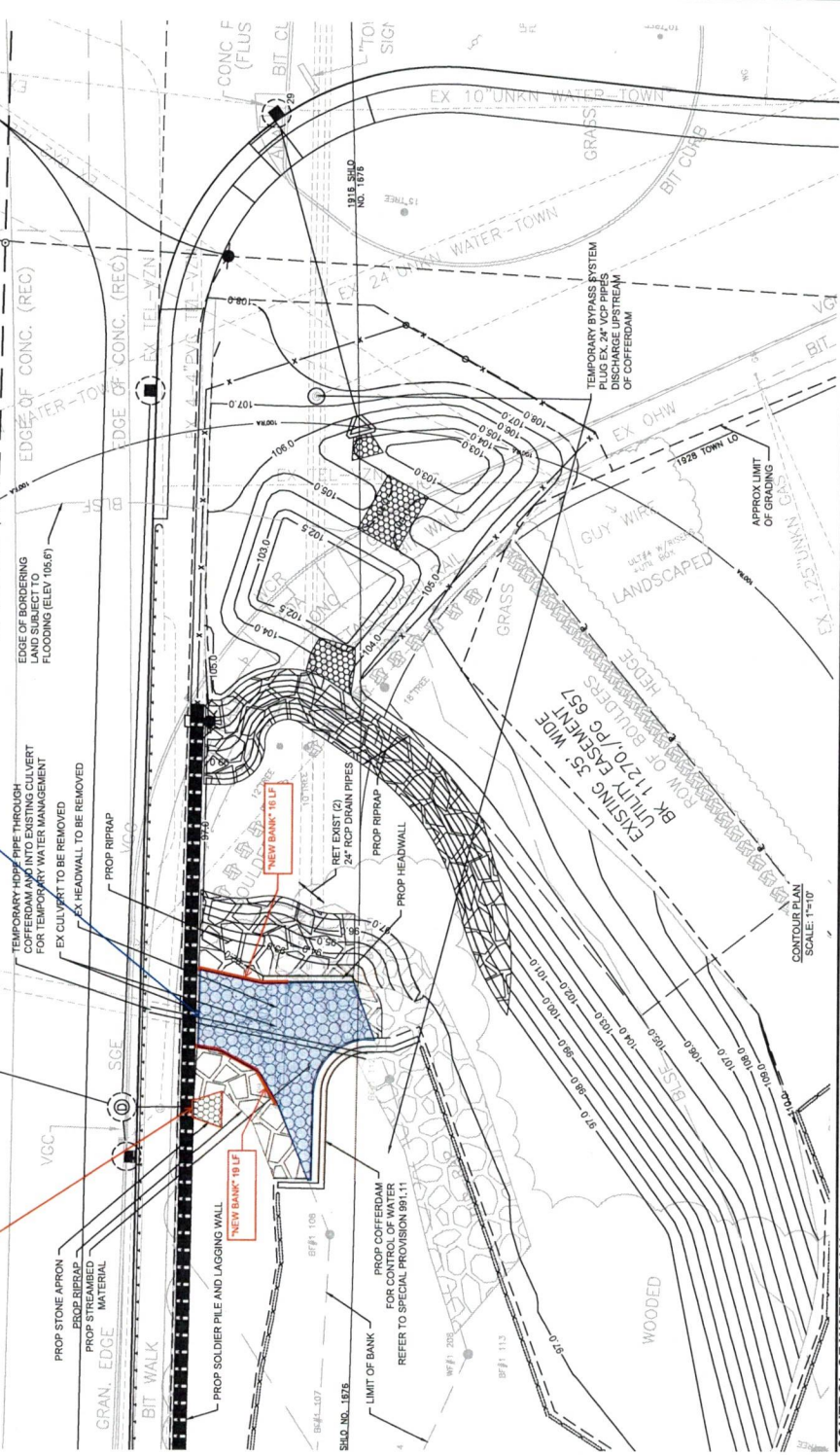
BIT. 132

BIT. 133

NORWOOD
ROUTE 1A AT PROSPECT ST & WASHINGTON ST

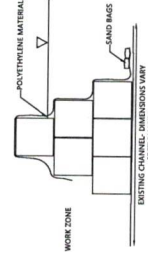
| STATE | MA |
|------------------|-----------|
| PROJECT FILE NO. | 686130 |
| DATE | 10/1/2023 |
| TITLE | 147 |
| TOTAL SHEETS | 147 |

CONSTRUCTION DETAILS



CONTROL OF WATER PLAN

SCALE: NTS



NOTES

1. CONTRACTOR TO DESIGN AND INSTALL COFFER DAM TO PREVENT FLOODING AND PREVENT EROSION OR DAMAGE TO SURROUNDING LAND

COFFERDAM DETAIL

SCALE: NTS