

**EAST LYME INLAND WETLANDS AGENCY
SHOW CAUSE HEARING
Monday, MARCH 9th, 2015
MINUTES**

The East Lyme Inland Wetlands Agency held a Show Cause Hearing on the Cease, Desist & Correct Orders issued to Gateway Development for property located at 286 Flanders Road, Assessor's Map 26.0, Lot #2 and Assessor's Map 31.0, Lot #1 on March 9, 2015 at Town Hall, 108 Pennsylvania Ave., Niantic, CT. Chairman Lozanov opened the Show Cause Hearings and called them to order at 6:06 PM.

PRESENT: Cheryl Lozanov, Chairperson, Chuck Reluga, Vice-Chair, Norm Bender, Keith Hall, Harry Clarke, Joe Mingo

ALSO PRESENT: Attorney Theodore Harris, Representing Gateway
Scott Rabideau, Certified Soil Scientist for Gateway
Ray Gradwell, Gateway Project Manager
Phyllis Berger, Member
Gary Goeschel, Inland Wetlands Agent
Marc Salerno, Ex-Officio, Board of Selectmen
Karen Zmitruk, Recording Secretary

FILED IN EAST LYME
CONNECTICUT
March 17²⁰ 15 AT 11:20 AM/PM
Charles D. ...
EAST LYME TOWN CLERK

ABSENT: No One

Call to Order

Ms. Lozanov called this Show Cause Hearing to order at 6:06 PM and introduced the members seated, Inland Wetlands Agent and Recording Secretary.

Show Cause Hearing

1. **Cease, Desist & Correct Order – Gateway Development for the deposition of sediment into an on-site wetlands and watercourse as a result of the events of February 18, 2015, whereby a large release of potable water occurred on site resulting in the severe washout of the emergency access road into the adjacent wetlands and watercourse on property located at 286 Flanders Road, Assessor's Map #26.0, Lot #2, East Lyme, CT – AND -**

2. **Cease, Desist & Correct Order – Gateway Development for the deposition of sediment into an on-site wetlands as a result of failed erosion and sedimentation controls, and for the placement of fill material within a floodplain and 100-feet of a wetlands and watercourse to raise the roadway profile along a CL&P utility access easement to accommodate the increased level of construction traffic on property located at Flanders Road, Assessor's Map #31.0, Lot #1 East Lyme, CT**

Ms. Lozanov called for comment from the owner or their representative.

Attorney Theodore Harris, place of business 351 Main St., Niantic, CT said that he would turn the hearing over to Scott Rabideau, Certified Soil Scientist with Natural Resource Services, Inc. whom Gateway has engaged to present the events.

Scott Rabideau, PWS/Soil Scientist and Principal with Natural resource Services, Inc. said that he was called on-site and that he also assisted BL Companies with the original wetland permitting. He has previously submitted his resume and has been certified as a soil scientist since 1989. He said that he would address the first Cease, Desist & Correct order and then the second. The first was a discharge from the pump station at 4AM and resulted in sediment deposit of 2'-3'. When he arrived on-site at 10AM he immediately sought double hay bales to be placed to contain the area. The water discharge had melted the snow so it was easy to see the affected area. The area was contained and fill was taken off site to stop further deposition. He said that it had to be removed and that there was no choice other than to act quickly to contain the area. Mr. Goeschel was on-site at 4 pm and was apprised of the situation. All of the sediment removal work was completed within 24 hours of the original breach. Moving forward, they propose to place woody debris in the

vernal pool #10 area for the frogs and salamanders as the ground is not conducive to planting at this time. The site is stabilized and they have a small amount of sediment that will be taken out by hand. He said that he will monitor the area and report back and replanting of lost shrubs will be done by the end of the week. He noted that the failure had occurred during the final testing of the pump station.

Ms. Lozanov asked what they would be doing so that this would not happen again.

Mr. Rabideau said that he had heard that they would be replacing everything inside of it but that is out of his purview. He said that the final issue here was off-site and that there was sediment staining noticed on the snow near the Pattagansett River. They are recommending that testing be done and that if there is 1" or more of sediment they will come back and present how they propose to remediate it to them and the DEEP. He said that his job is to present to them the immediate actions that were taken.

Ms. Lozanov said that she has a concern with the thaw as she feels that it will be rapid and will drop sediment.

Mr. Rabideau said that they could put a turbidity curtain under the water where the sediment would drop out but the water will still be able to get through. He added that nothing else is coming from off-site as it is all contained now.

Mr. Mingo asked how much was removed from the site.

Mr. Rabideau said that it was around 80 to 85 yards of material that was removed from the wetland between February 18 and 19, 2015. (Report attached)

Mr. Bender asked if approved – how soon they could get the curtains up.

Mr. Rabideau said that it could be done by the end of the week.

Mr. Rabideau said that the second Cease, Desist & Correct order has to do with an event in response to a CT DEEP Stormwater Notice of Violation issued on January 14, 2015. He said that he performed the site inspection and field mapping on January 21, 2015. He identified three areas of non-compliance with regard to S & E controls. There was a wood chip berm in place that had failed in two areas and they put hay bales and fencing around the entire area. The sediment is to be removed manually and he will monitor this removal. There was some material added to the top of the CL & P utility road to stabilize it as it is used by heavy equipment. They will have a surveyor profile it to see how much has to be removed. He suggested that this be done in the drier season such as during July. The DEEP will be notified of this. He also noted areas that they had noticed where sediment needs to be removed.

Mr. Goeschel asked about the egress road and long term how it would hold up.

Mr. Rabideau said that if the intent is for such long term use that they will have to present this to them.

Ray Gradwell, Gateway project manager and civil engineer noted that in response to an earlier question that everything in the pump station is being replaced.

Attorney Harris noted that it is obvious that this will be kept open and that they will be reporting back on a regular basis. (Report attached)

Mr. Rabideau said that the check dams, turbidity curtains and core samplings will be worked on.

Mr. Goeschel said that a wetland scientist/soil scientist should be on site throughout this process.

Mr. Hall asked how long the construction time would be.

Attorney Harris said a year to eighteen months.

The members commended them for their prompt response to this unfortunate situation.

Ms. Lozanov closed this Show Cause Hearing at 7:18 PM.

Respectfully submitted,

Karen Zmitruk,
Recording Secretary



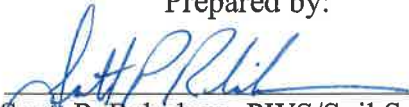
Natural Resource Services, Inc.

Written Narrative Documenting Response
To Sediment Discharge to a Freshwater Wetland

Gateway Commons Development
East Society Road
East Lyme, Connecticut



Prepared for:
Scott Kozuch, Project Manager
Haynes Construction
32 Progress Avenue
Seymour, CT 06483

Prepared by:

Scott P. Rabideau, PWS/Soil Scientist
Principal

February 24, 2015

Introduction

Natural Resource Services, Inc. (NRS) was contacted by David Yetton (KGI Properties) at 8:35 AM on Wednesday, February 18th. Mr. Yetton explained that at 4:00 AM on this day a large release of potable water took place at the site. This release occurred at the facility's water booster pump station located west of the emergency access road. The discharge caused a severe washout of material supporting the access roadway. The material was deposited into the wetland on each side of the road.

As the project's original wetland consultant and soil scientist, Mr. Yetton requested that NRS immediately inspect the site and develop the restoration plan needed to remediate the unauthorized wetland alteration. NRS was able to accommodate Mr. Yetton's request and was on-site by 11:20 AM on February 18th.

The following is intended to document the conditions observed, short-term measures taken to control the sediment discharge, and provide the overall restoration plan needed to fully restore the affected wetland resource.

Conditions Observed Upon Arrival

This report's author, Scott Rabideau, arrived at the site at 11:20 AM. Weather conditions were extreme cold (18-24° F) with partial sunshine throughout the day. There was 12 – 18 inches of snow cover present in all undeveloped portions of the site.

The emergency access road was accessed via the Flanders Road, or western, portion of the development. This allowed immediate visual observation of flow within the Pattagansett River. Water levels within the river, as observed from the bridge along the emergency access roadway, were high, but the water was clear. No visual silt or cloudy coloration was observed in the water column. Silt deposition was seen on the snow cover along the banks of the river.

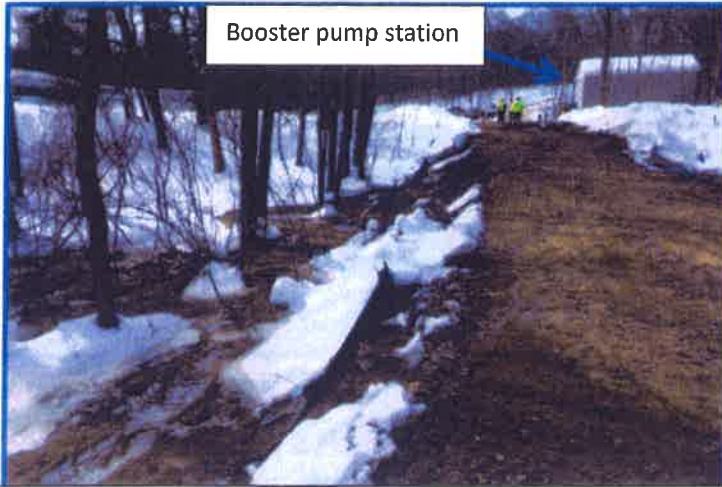


Scour pattern in wetland

Scour patterns were observed throughout the swamp adjacent to the roadway. These patterns were obvious since the water flow from the booster pump station melted the snow cover in its path. Leaf matter was moved and visible silt staining was apparent throughout.

A significant deposition of sediment was observed on both the north and south side of the roadway at a point approximately 300 feet west of

the Pattagansett River. The limit of the sediment plume was mapped using a hand-held GPS unit (Trimble Juno 3B). The scour pattern limits were mapped from the sediment plume to the west bank of the Pattagansett River.



Sediment deposition within wetland on south side of roadway



Sediment deposition within wetland on north side of roadway



Sediment deposition within wetland on south side of roadway



Sediment deposition within wetland on north side of roadway

A briefing with the site contractor took place. NRS was informed that a construction crew and equipment were available to implement any actions deemed appropriate to contain the sediment.

Actions Initiated by NRS

The vast majority of the sediment was contained in a plume within 50 feet from each side of the road. The material was a coarse granular loamy sand. NRS directed the installation of haybales around the perimeter of each sediment plume. The impact area was fully contained with a double row of staked hay by 2:00 PM.



Haybale installation on south side



Haybale installation on north side

Upon completion of the haybale installation, a decision was made by NRS to effectuate the immediate removal of the concentrated sediment deposits on the north side of the roadway which were contained within the erosion control barrier. A rubber track mini-excavator was used to dig sediment out from the haybale limit, casting the material to the center of the affected area. A full-sized excavator with a grading bucket worked from the emergency access road, depositing material into a dump truck. Each load of material was taken from the location and deposited in a stockpile away from all regulated wetlands. This work continued under the direct oversight of NRS.



Mini-excavator removing sediment



Large excavator filling dump truck

At 4:00 PM, Gary Goeschel, Director of Planning and Inland Wetland Agent for the Town of East Lyme arrived at the site. NRS explained the measures taken to contain the sediment and remove the material from the wetland. Mr. Goeschel inspected the entire operation then outlined the actions which he would take on behalf of the East Lyme Inland Wetlands Agency (IWA). He explained that an enforcement order would be issued with a hearing scheduled for some time in March. He recommended that NRS attend that hearing as the wetland consultant/soil scientist engaged by the developer to correct the situation.

All remedial actions ceased at 5:00 PM. The restoration activities resumed the following morning, February 19th at 8:00 AM. NRS arrived on-site at 10:00 AM and oversaw the final removal of all major sediment deposits in both the north and south side impact areas. All work was completed by 2:00 PM, just 24 hours after the start of the wetland restoration effort.



Final sediment removal condition in south side wetland



Final sediment removal condition in north side wetland

Wetland Restoration Plan

The triage work initiated by NRS has resulted in the majority of the sediment deposited in the wetland on the morning of February 18th being removed. Erosion and sedimentation controls are in place to allow for soil stabilization over the next two (2) weeks. There are however two steps needed to complete the restoration of the affected portion of this swamp.

Removal of the sediment resulted in the loss of the shrub layer within each area. In order to replace this lost habitat, the replanting of shrubs is required. A dense planting of Pepperbush (*Clethra alnifolia*), Winterberry (*Ilex verticillata*) and Highbush blueberry (*Vaccinium corymbosum*) should be done prior to March 13, 2015. This early planting date is necessary to avoid a potential conflict with amphibians seeking out the open water component of this wetland for breeding habitat. NRS has prepared a wetland restoration plan which provides you with the plant densities and locations. This plan is found in the appendix section of this report. It is recommended that NRS be on-site to oversee the installation of these restoration shrubs.

The second step required is the manual removal of sediment deposits within the identified scour area. It may be necessary to wait until low ground water conditions before this work can be done. Significant portions of this swamp have standing water during the spring, which will hamper the effort to manually remove small sediment deposits. Further, NRS has documented breeding amphibians in various portions of the swamp, the remediation should not take place during their breeding season. NRS shall endeavor to locate and accurately map all deposits which require removal. Therefore, it is our recommendation that this work take place after July 15, 2015.

Additional Surveys and Monitoring

The effected wetland, especially the north side, was identified by NRS as a potential vernal pool in our 2012 wetland habitat assessment. It is recommended that an amphibian monitoring protocol be developed and implemented for the 2015 amphibian breeding season. This protocol would be developed by NRS and submitted to the IWA for review prior to initiating the study.

It is apparent that release of potable water drained into the Pattagansett River. Mr. Goeschel informed NRS that silt laden snow was observed along the banks of this river by him at off-site locations on the morning of February 18th. NRS recommends that an off-site sediment mapping and sampling protocol be developed to determine if any significant sediment plumes were deposited within the river. This mapping would take place along the reach of the river from the NRS identified scour area to the northern limit of Gordon's Pond. The protocol would be submitted to the East Lyme IWA for review and comment. The Connecticut DEEP would also be contacted prior to initiating any in-water mapping or sampling.

Summation

A release of potable water at the Gateway Commons water booster pump station resulted in a deposition of sediment into a freshwater wetland. NRS was notified of the problem and responded within two (2) hours. Immediate actions were taken to contain the main sediment plume. Upon completion of this task, NRS initiated an action plan to remove the majority of the sediment. The removal of the sediment was completed within 24 hours.

The effected wetland was mapped using a hand-held GPS unit. It is necessary to re-establish shrubs within the area prior to March 13th. The goal is to restore the structure of the shrub layer to allow breeding amphibians to utilize the open water habitat this season. A comprehensive mapping of smaller sediment deposits will be initiated by NRS. Any areas of sediment identified will be removed manually at a point after July 15, 2015.

NRS did not review any conditions within the Pattagansett River, either within the subject property or offsite. It is recommended that a sediment mapping and sampling protocol be developed and submitted to the East Lyme IWA for review and comment. If approved by the IWA, NRS will execute the protocol and provide all parties with the findings.

Legend

- Scour Limit = +/- 5,385 sq ft
- Major Plume Limit = +/- 20,180 sq ft
- Floodway Limit
- Approximate Bank of Pattagansett River
- Haybales

SHEET LAYOUT



GATEWAY COMMONS
 FLANDERS ROAD/ SOCIETY ROAD
 EAST LYME, CONNECTICUT

FOR ILLUSTRATIVE PURPOSES ONLY
 NOT A SURVEY PLAN

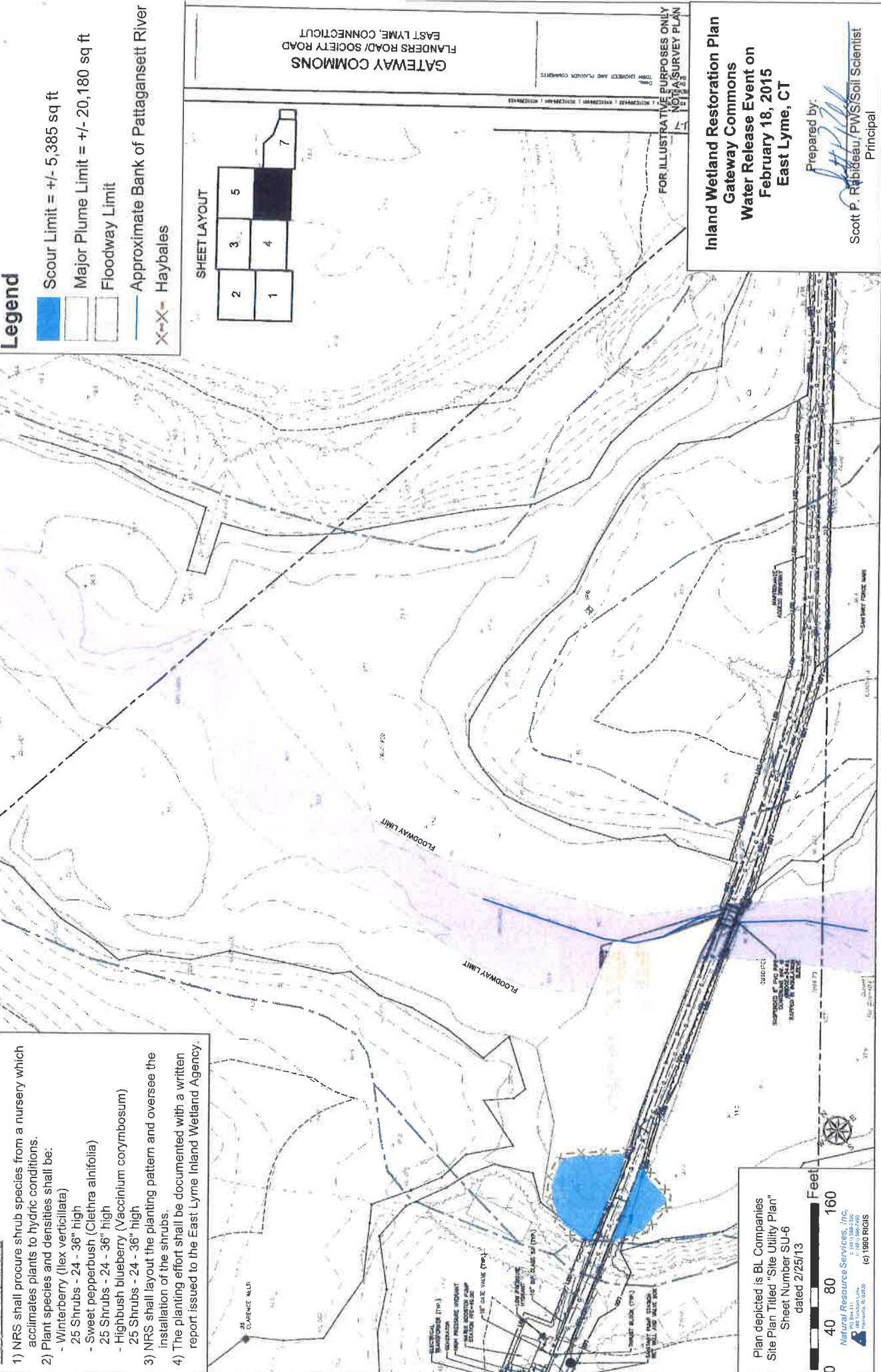
Inland Wetland Restoration Plan
 Gateway Commons
 Water Release Event on
 February 18, 2015
 East Lyme, CT

Prepared by:
 Scott P. Rabreau, PWS/Soil Scientist
 Principal

- 1) NRS shall procure shrub species from a nursery which acclimates plants to hydric conditions.
- 2) Plant species and densities shall be:
 - Winterberry (*Ilex verticillata*)
 - 25 Shrubs - 24 - 36" high
 - Sweet pepperbush (*Clethra alnifolia*)
 - 25 Shrubs - 24 - 36" high
 - Highbush blueberry (*Vaccinium corymbosum*)
 - 25 Shrubs - 24 - 36" high
- 3) NRS shall layout the planting pattern and oversee the installation of the shrubs.
- 4) The planting effort shall be documented with a written report issued to the East Lyme Inland Wetland Agency.

Plan depicted is BL Companies
 Site Plan Titled "Site Utility Plan"
 Sheet Number SU-6
 dated 2/25/13

0 40 80 160 Feet
 Natural Resource Services, Inc.
 180 Tuckaway Lane
 East Lyme, CT 06424
 (860) 339-1200
 (860) 339-1000
 (860) 339-1000
 (c) 1990 NRSIS





Natural Resource Services, Inc.

February 3, 2015

Scott Kozuch, Project Manager
Haynes Construction
32 Progress Avenue
Seymour, CT 06483

RE: Wetland Remediation Plan in Response to CT DEEP
Stormwater Notice of Violation (January 14, 2015)
Gateway Commons
East Lyme, Connecticut

Dear Mr. Kozuch:

Natural Resource Services, Inc. (NRS) has inspected the above referenced property and prepared a wetland remediation plan to address areas of sediment deposition within state regulated freshwater wetlands and the 100 foot upland review area. This work was initiated in response to a CT DEEP Stormwater Notice of Violation issued on January 14, 2015. The site inspection and field mapping were performed by me on January 21, 2015.

Observed Areas of Non-Compliance

I observed four (4) areas within the development where inorganic sediment had breached the established erosion controls and settled within delineated wetlands or upland review area. Each of these areas were mapped using a hand-held GPS unit (Trimble Juno 3B). The data from this mapping was applied to the original development plans prepared by BL Companies.

The first area observed was along the utility easement road currently utilized for construction vehicles. It is apparent that the profile to this accessway was raised to support the level of construction traffic. One area of inorganic sediment deposition in a wetland was observed on the south side of the accessway.

I am also concerned that the near vertical side slope of this accessway will continue to erode. Establishing sedimentation controls at the base of the roadway may help deter further deposition, however, in my opinion that corrective measure must be supplemented. I am recommending that in the short-term the sideslope of this roadway be cut to achieve a 1 to 1

grade. Riprap of sufficient size should then be hand-placed on the slope. This will stabilize the slope and protect the surrounding wetlands for the remainder of the winter and early spring.

At some time between July 1st and August 15, 2015, you must remove the fill placed within this accessway and restore the original grade. The July start date will ensure suitable dry season conditions. It also represents the time after any potential river herring migration in the Pattagansett River has occurred. This work must be performed under the direct oversight of a professional wetland scientist (PWS) or soil scientist.

Sediment deposition was also observed in freshwater wetlands at two other locations within the development. Each of these locations were pointed out to your staff engineer, Ian Rogers, and mapped using the GPS unit. Similarly, deposition found in the 100 foot upland review area of the wetland was identified and mapped.

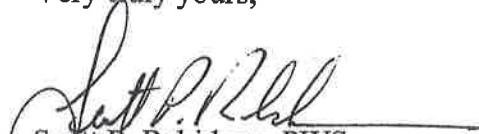
Recommended Remedial Measures

All areas of deposition within the freshwater wetland must be removed, stabilized with new vegetation and allowed to revert to a natural condition. I have developed a remediation plan which includes the required protocols and notes for the restoration work. Three (3) copies of this plan are included with this letter. I will also have an electronic copy forwarded to your office to disseminate as you see fit. This plan also includes notes for the stabilization of the utility access road, and the removal of fill within the roadway to restore the original grade.

I have not forwarded this letter and the enclosed plan to the CT DEEP. The Notice of Violation (NOV) was issued to Haynes Construction as the site contact. Unless you direct me otherwise, it is appropriate for you or your staff to send the remediation plan to the DEEP agent. This should satisfy the NOV comment No. 10.

Do not hesitate to contact me if you have any questions. Natural Resource Services, Inc. is available to provide the PWS/Soil Scientist oversight of the remediation work within the regulated wetlands.

Very truly yours,


Scott P. Rabideau, PWS
Principal/Wetland Biologist

Cc: Ian Rogers, Haynes Construction
David Yetton

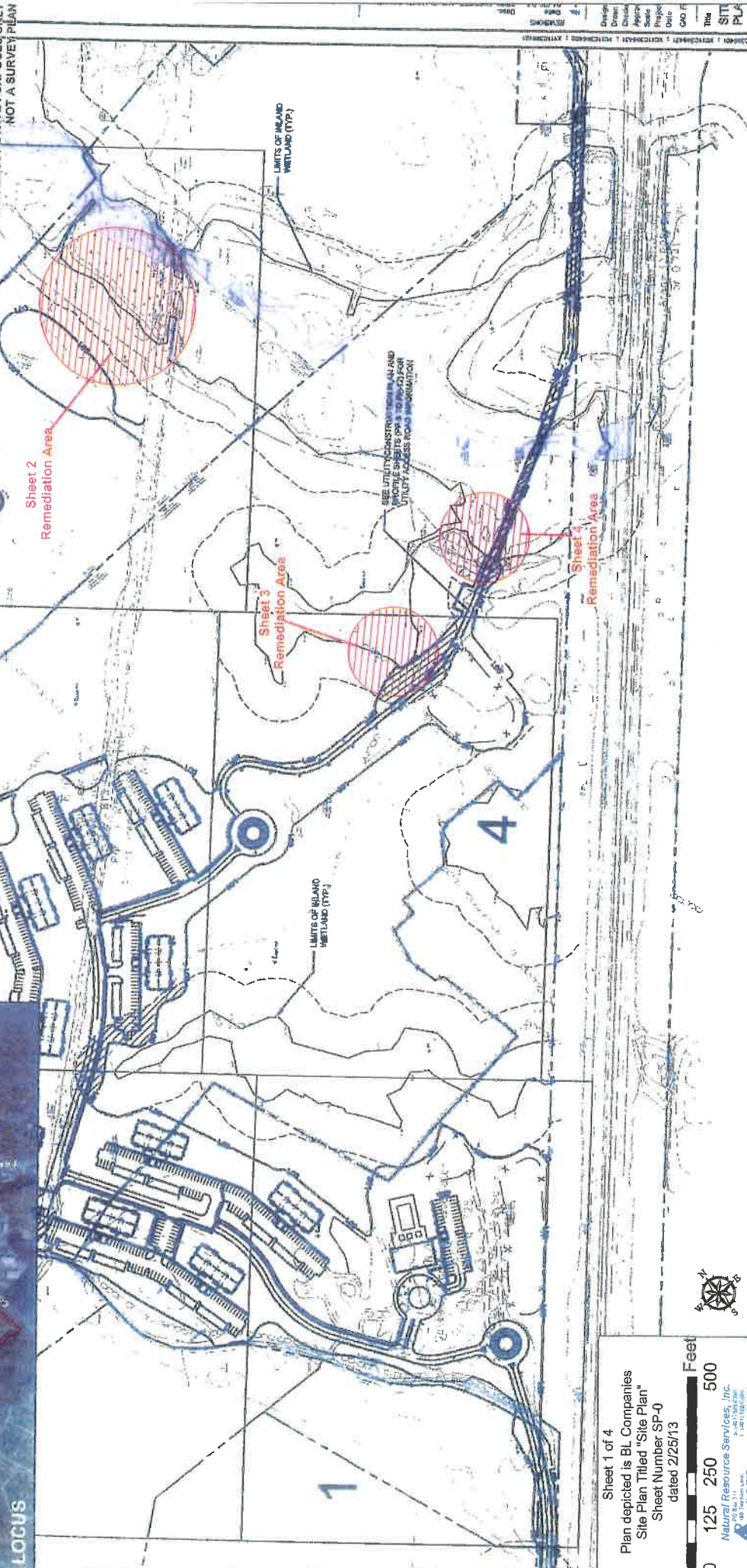
Remediation Plan
in response to CT DEEP
Stormwater Notice of Violation/Construction
Gateway Commons Development
East Lyme, CT
February 3, 2015

Prepared by:

 Scott P. Rabideau, PWS/Soil Scientist
 Principal

2-2-15

FOR ILLUSTRATIVE PURPOSES ONLY
 NOT A SURVEY PLAN



Sheet 1 of 4
 Plan depicted is BL Companies
 Site Plan Titled "Site Plan"
 Sheet Number SP-0
 dated 2/25/13



Natural Resource Services, Inc.
 203-261-7111
 1000 RIGGS
 EAST LIME, CT 06424

Discipline	Author	Date
Drawn	Checked	Apprv
Project	Scale	Date
COO	Proj	PLA

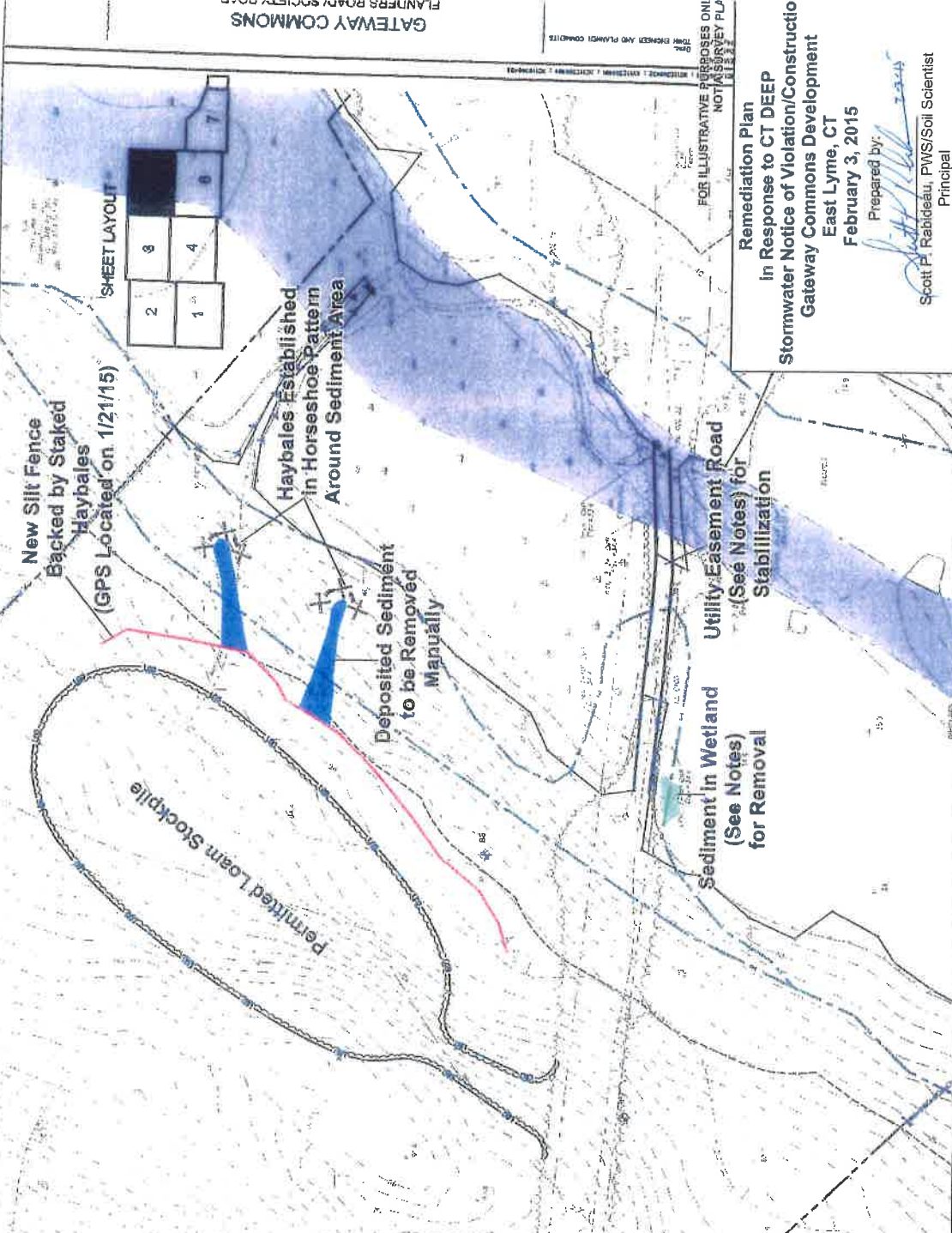
- 1) Prior to any sediment removal, straw wattle or mulch tubes shall be placed around work area.
- 2) All inorganic sediment shall be removed manually (no mechanized equipment) and transported from the wetland and 100 foot upland review area.
- 3) Sediment removal shall occur until normal organic or A-horizon soils are observed.
- 4) PWS/Soil Scientist shall inspect restored wetland to ensure adequate sediment removal has taken place. This inspection shall take place prior to seeding.
- 5) Disturbed areas shall be seeded with a wetland seed mixture (New England Wetmix or equivalent).
- 6) Mulch tubes shall remain in place until the area is fully stabilized with vegetation.
- 7) All sediment removal and seeding must take place before March 31, 2015.
- 8) PWS/Soil Scientist shall perform a final inspection and issue a report of completion. Any areas which have not been restored to the satisfaction of the PWS/Soil Scientist must be reworked under the direction of this monitor. Monitoring report due on or before April 15, 2015.

Notes for Utility Easement Road Stabilization

- 1) It is apparent that the profile of the easement road was raised to support construction vehicles. This has resulted in vertical side slopes which are subject to failure.
- 2) Side slopes shall be cut to meet a 1 to 1 slope.
- 3) Stone rip rap shall be hand-placed along the side slope.
- 4) Side slope stabilization work shall be completed on or before February 12, 2015.
- 5) PWS/Soil Scientist shall inspect the slope after the riprap is installed. Any deficiencies identified by this monitor shall be corrected immediately. Monitoring report on the status of this work due on or before February 19, 2015.
- 6) The road profile shall be restored to original grade at some time between July 1st and August 15, 2015.
- 7) The PWS/Soil Scientist shall be on-site to ensure the fill removal does not result in sediment deposition into the adjacent wetlands.
- 8) The PWS/Soil Scientist shall generate a final compliance report for the CT DEEP on or before August 21, 2015.

Legend

- X-X- Haybales
- Limit of Sedimentation in Wetland
- Limit of Sedimentation in 100 foot Upland Review Area



Remediation Plan
 in Response to CT DEEP
 Stormwater Notice of Violation/Constructio
 Gateway Commons Development
 East Lyme, CT
 February 3, 2015
 Prepared by:
 Scott P. Rabideau, PWS/Soil Scientist
 Principal

Sheet 2 of 4
 Plan depicted is BL Companies
 Site Plan Titled "Site Utility Plan"
 Sheet Number SU-5
 dated 2/25/13

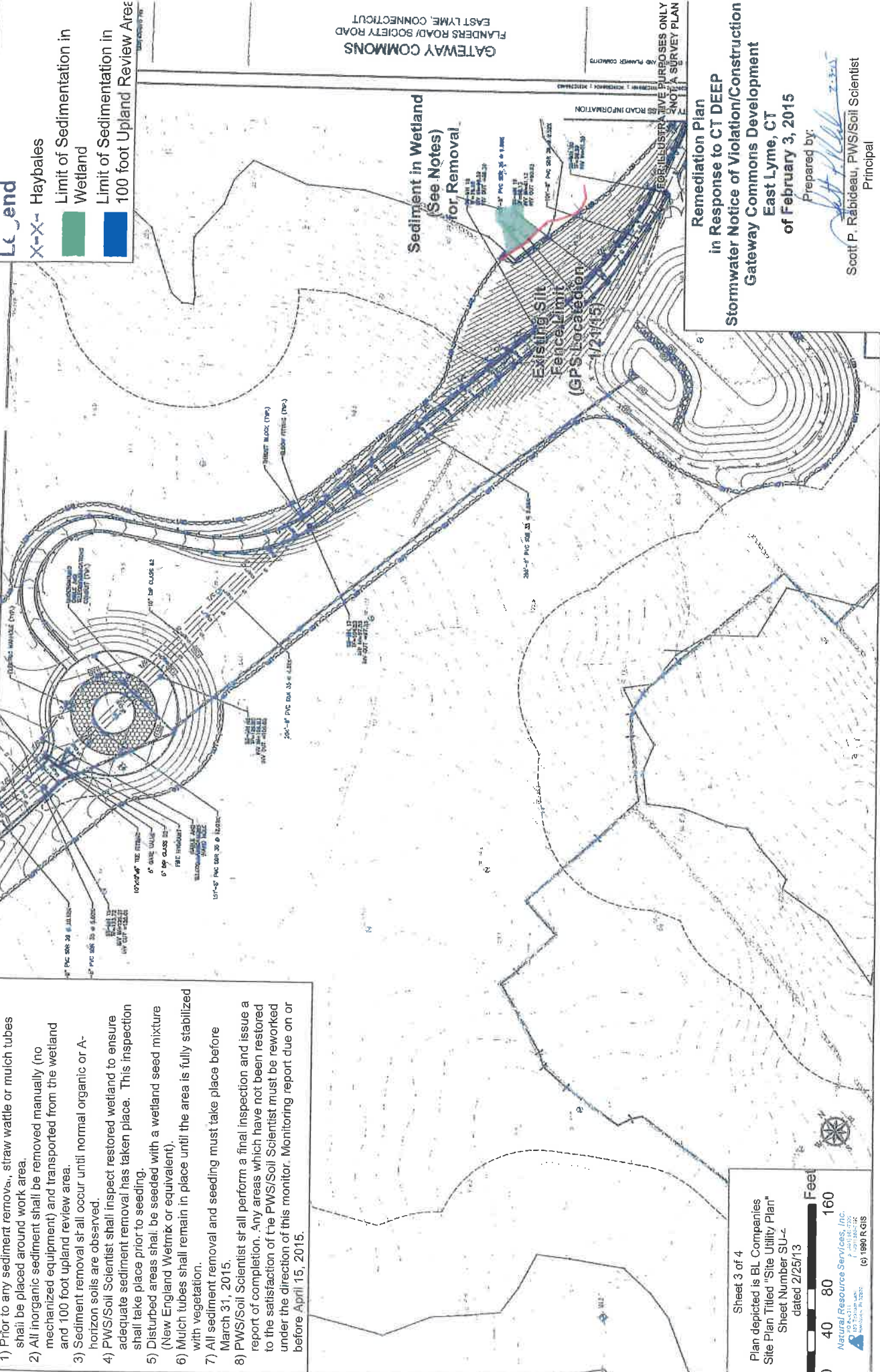
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Natural Resource Services, Inc.
 100 Main Street
 East Lyme, CT 06320
 (860) 429-1100 (3) 1550 8100

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Legend

- X-X- Haybales
- Limit of Sedimentation in Wetland
- Limit of Sedimentation in 100 foot Upland Review Area



Remediation Plan
in Response to CT DEEP
Stormwater Notice of Violation/Construction
Gateway Commons Development
East Lyme, CT
of February 3, 2015

Prepared by:
 Scott P. Rabideau, PWS/Soil Scientist
 Principal

Sheet 3 of 4
 Plan depicted is BL Companies
 Site Plan Titled "Site Utility Plan"
 Sheet Number SU-4
 dated 2/25/13

0 40 80 160 Feet

Natural Resource Services, Inc.
 857 Franklin Ave.
 Westborough, MA 01581
 (508) 853-1234
 (c) 1990 R GIS

GATEWAY COMMONS
 FLANDERS ROAD/ SOCIETY ROAD
 EAST LYME, CONNECTICUT

Sediment in Wetland
 (See Notes)
 for Removal

Existing Silt
 Fence Limit
 (GPS Located
 1/24/15)

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