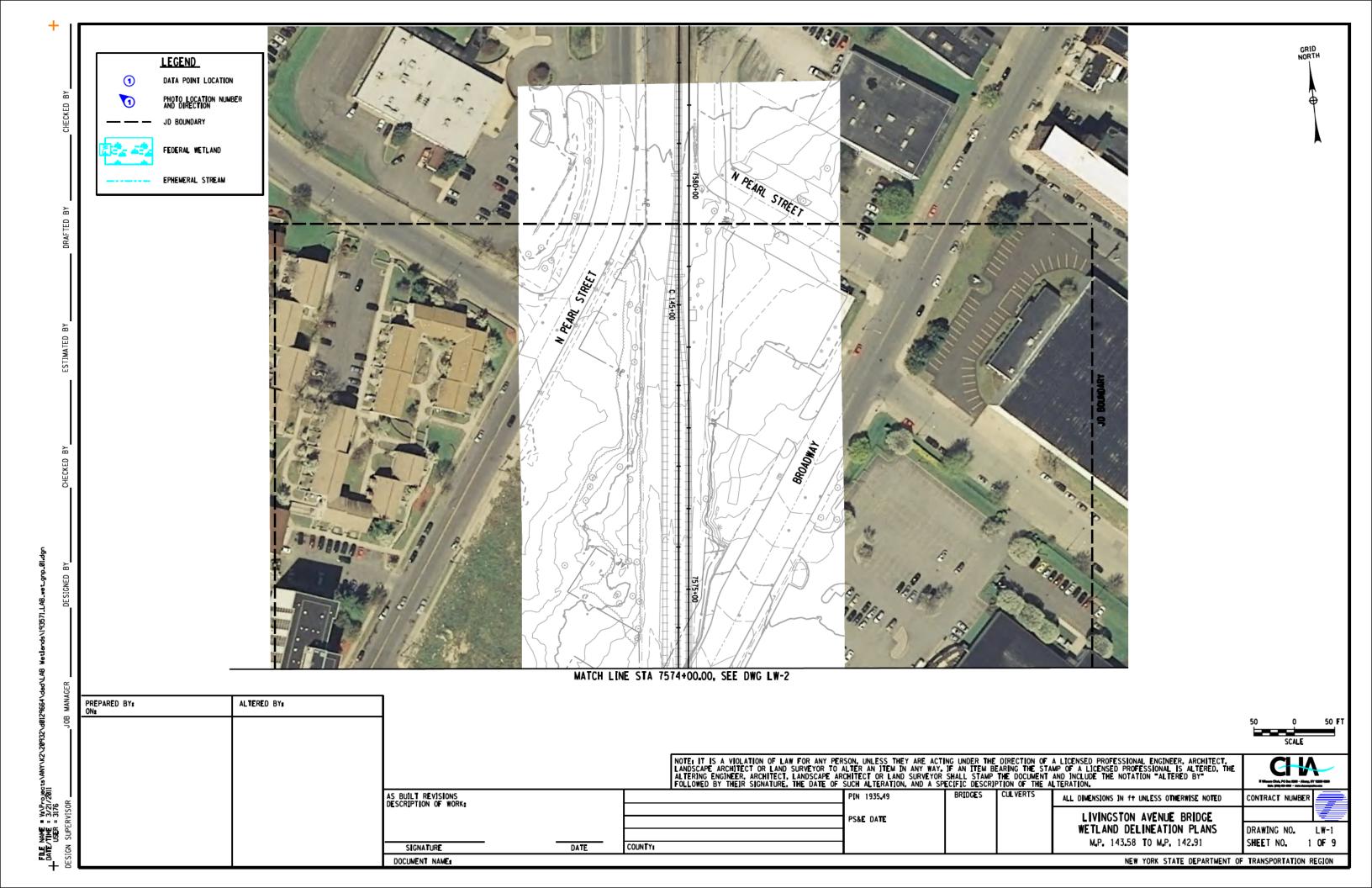
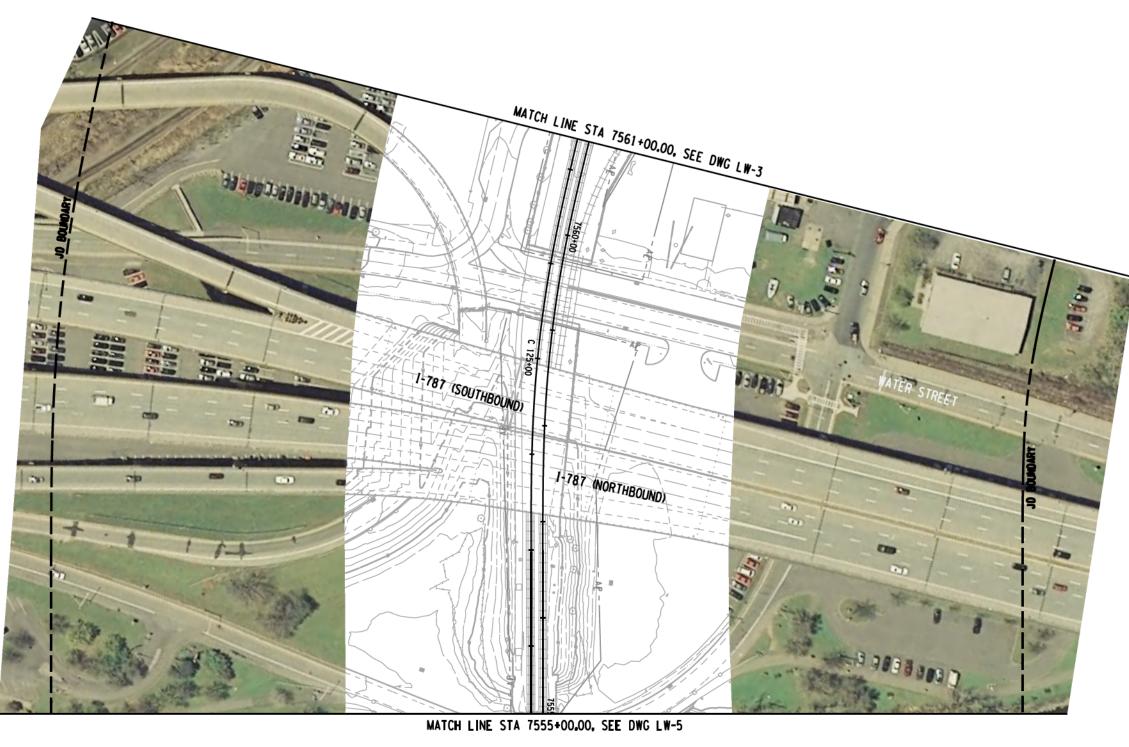
APPENDIX D WETLAND DELINEATION MAP

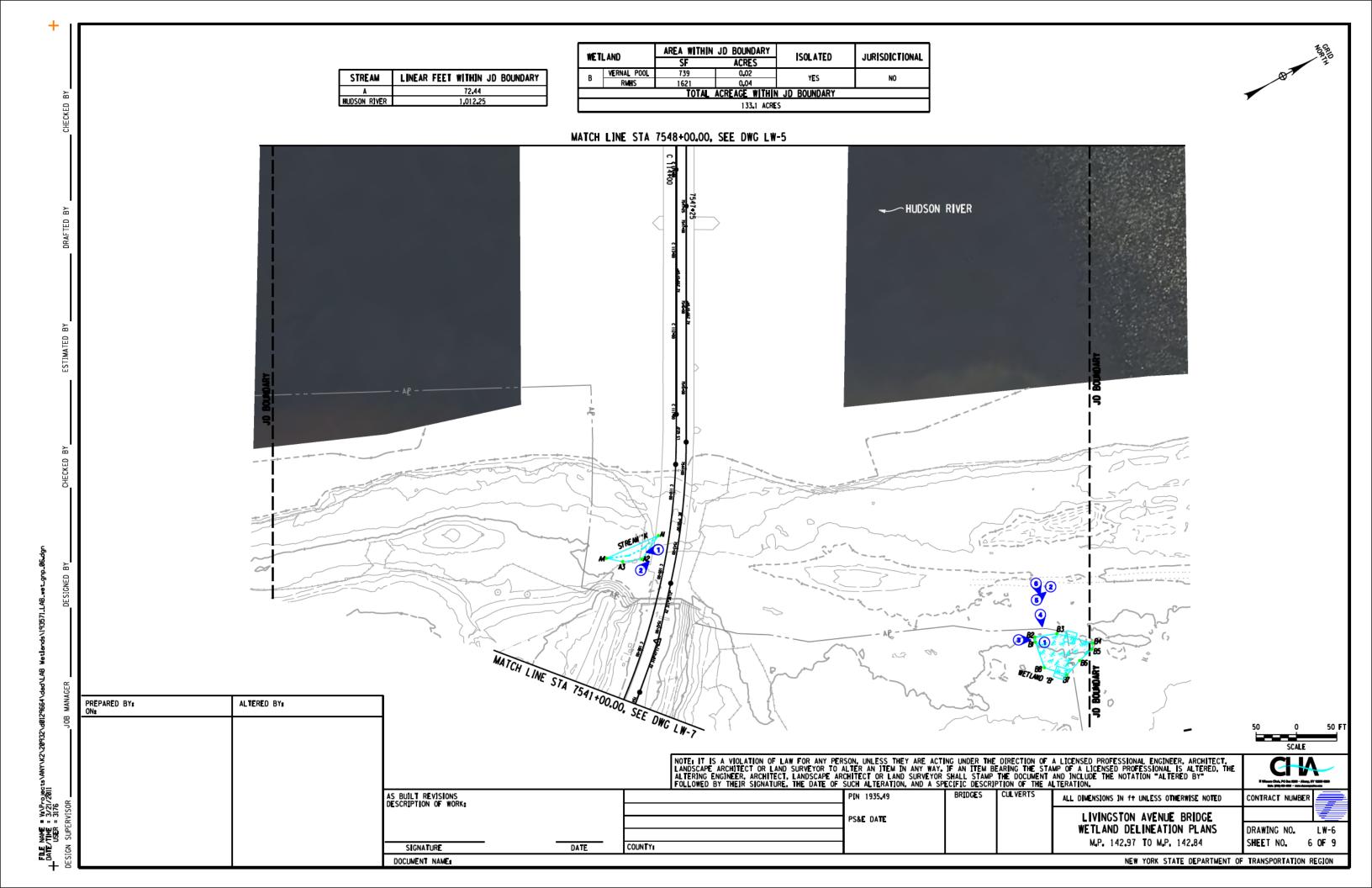


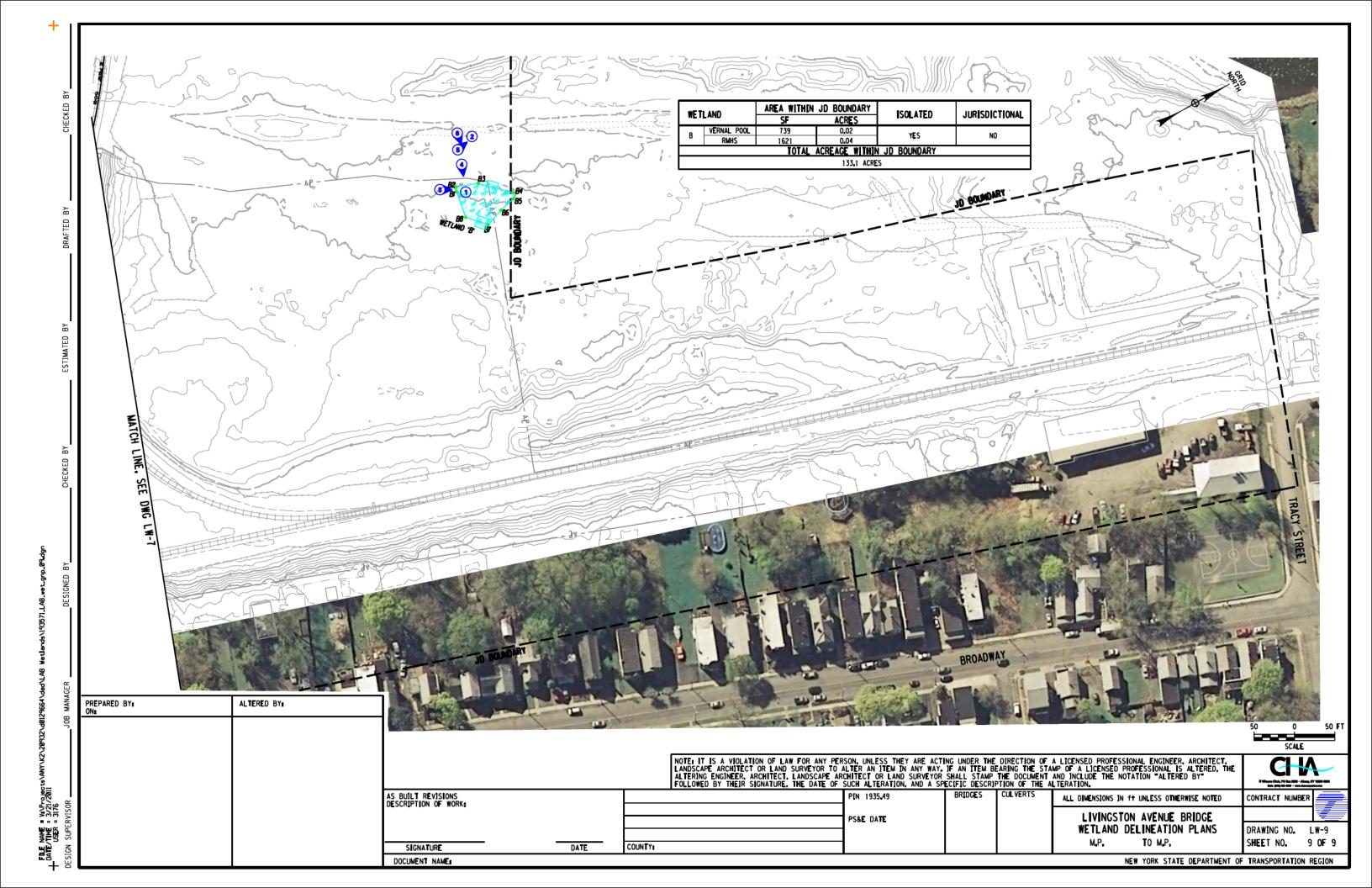
1 787 (SOUTHBOUND) 1-787 (NORTHBOUND) MATCH LINE STA 7555+00.00, SEE DWG LW-5 PREPARED BY: ALTERED BY: NOTE: IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION. AS BUILT REVISIONS DESCRIPTION OF WORK: BRIDGES CULVERTS PIN 1935.49 ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED CONTRACT NUMBER LIVINGSTON AVENUE BRIDGE PS&E DATE WETLAND DELINEATION PLANS DRAWING NO. LW-4 M.P. 143.22 TO M.P. 143.10 SHEET NO. 4 OF 9 SIGNATURE DATE COUNTY NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION DOCUMENT NAME:



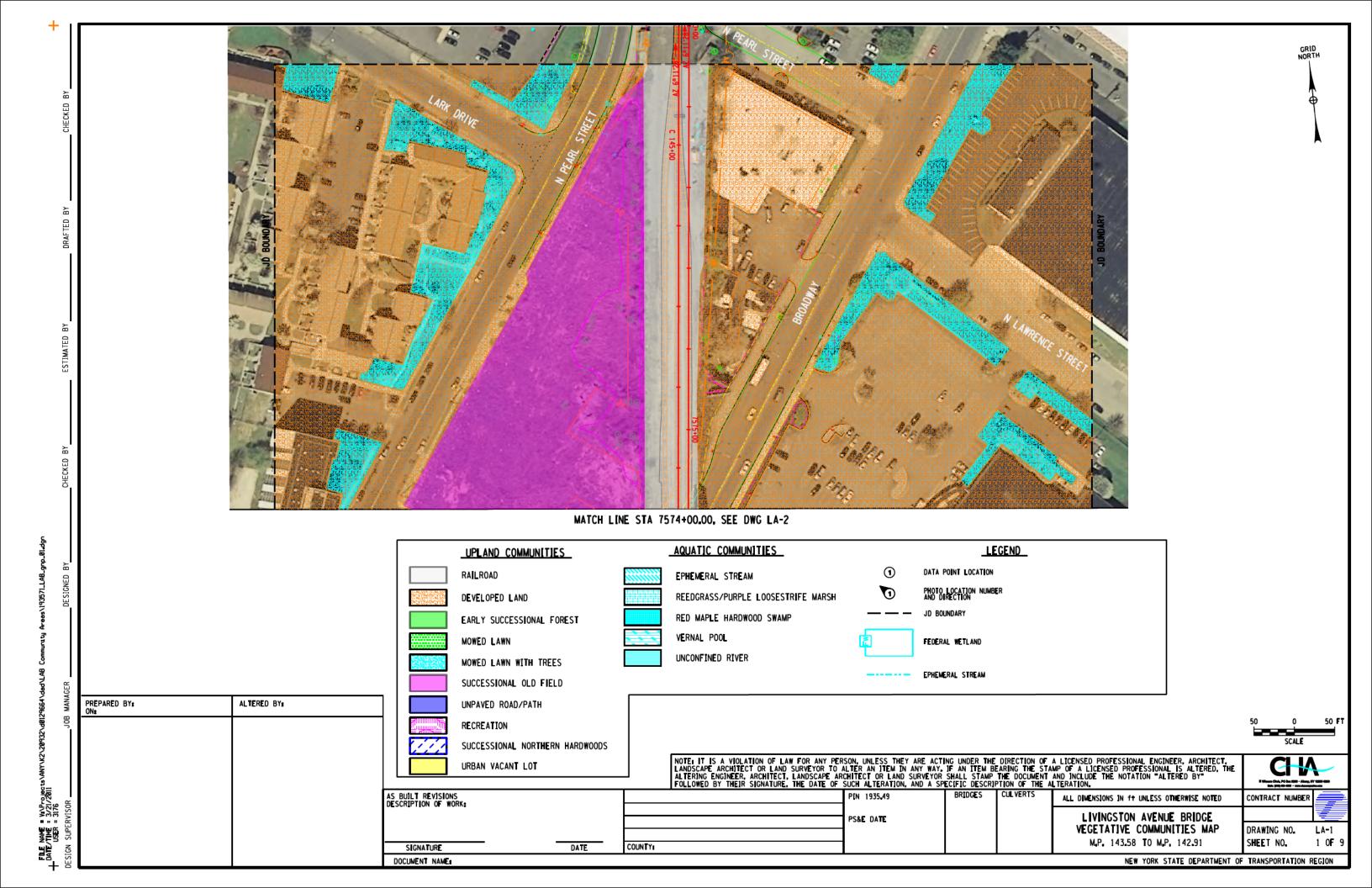


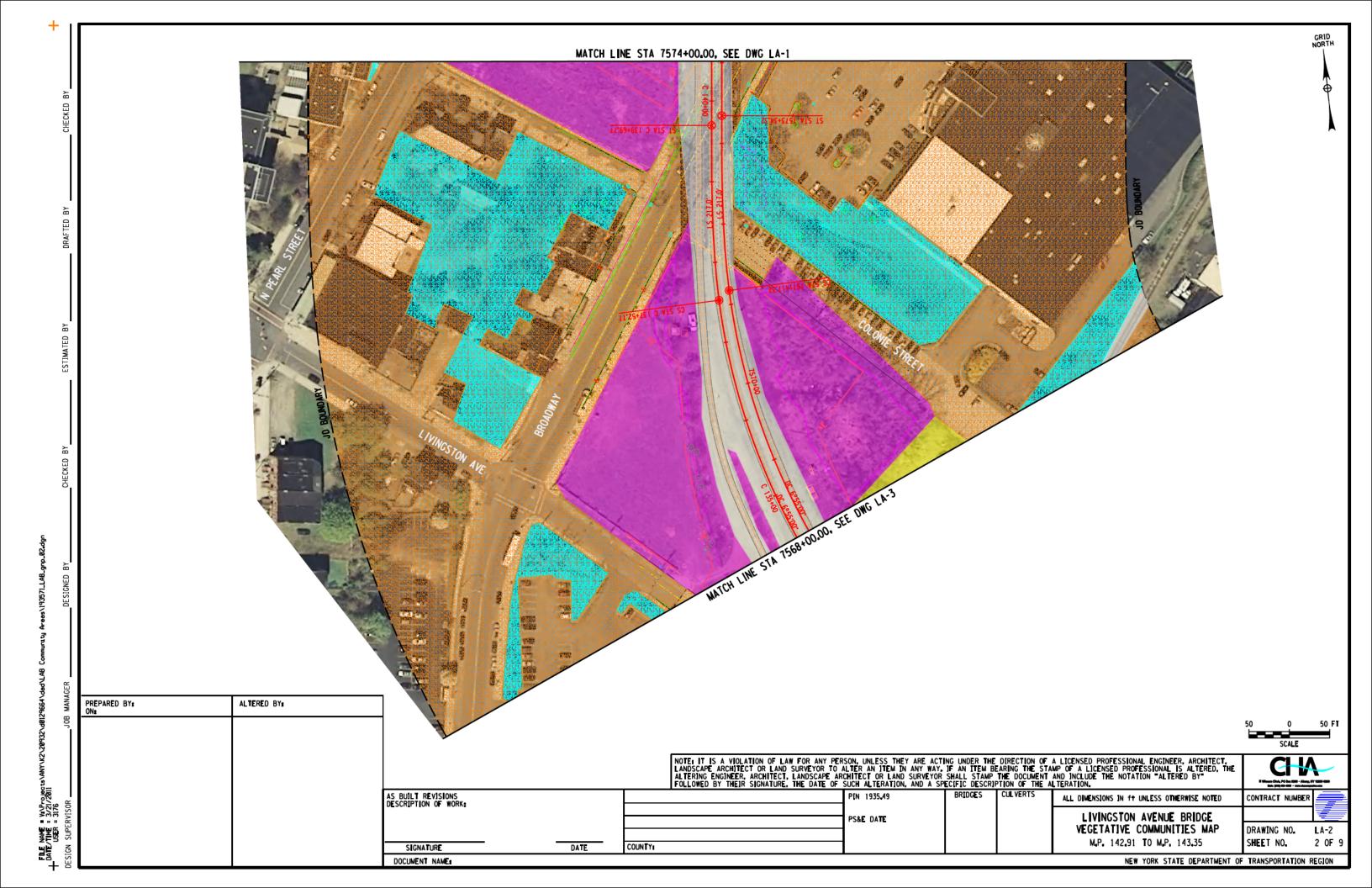
MATCH LINE STA 7555+00.00, SEE DWG LW-4 QUAY STREET **100** HUDSON RIVER MATCH LINE STA 7548+00,00, SEE DWG LW-6 PREPARED BY: ALTERED BY: SCALE NOTE: IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION. AS BUILT REVISIONS DESCRIPTION OF WORK: BRIDGES CULVERTS PIN 1935.49 ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED CONTRACT NUMBER LIVINGSTON AVENUE BRIDGE PS&E DATE WETLAND DELINEATION PLANS DRAWING NO. LW-5 M.P. 143.10 TO M.P. 142.97 SHEET NO. 5 OF 9 SIGNATURE DATE COUNTY NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION DOCUMENT NAME:

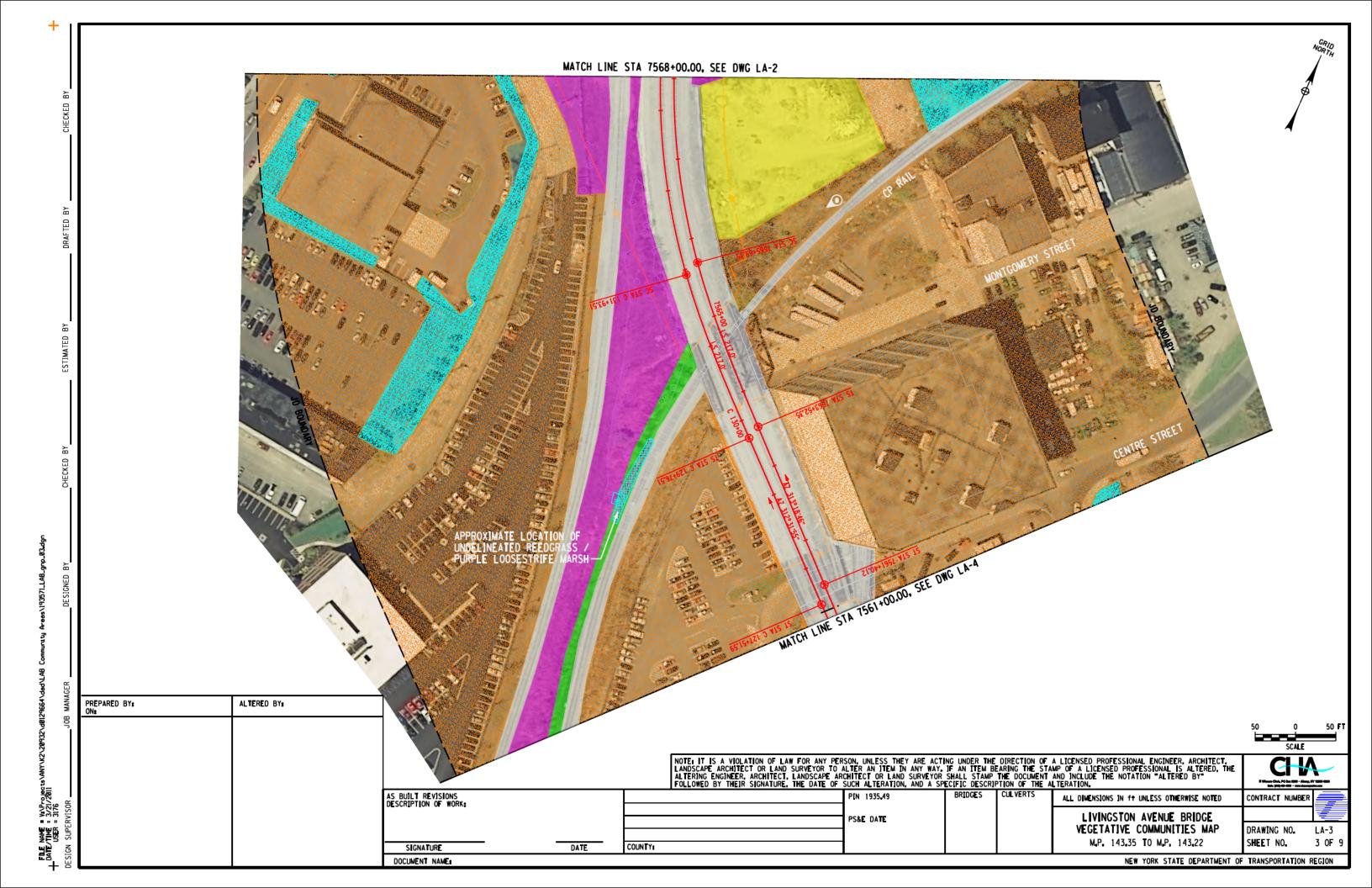




APPENDIX E VEGETATIVE COMMUNITIES MAP







MATCH LINE STA 7555+00.00, SEE DWG LA-4 **400**> HUDSON RIVER MATCH LINE STA 7548+00,00, SEE DWG LA-6 PREPARED BY: ALTERED BY: SCALE NOTE: IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION. AS BUILT REVISIONS DESCRIPTION OF WORK: BRIDGES CULVERTS PIN 1935.49 CONTRACT NUMBER ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED LIVINGSTON AVENUE BRIDGE PS&E DATE VEGETATIVE COMMUNITIES MAP DRAWING NO. LA-5 M.P. 143.10 TO M.P. 142.97 SHEET NO. 5 OF 9 SIGNATURE DATE COUNTY NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION DOCUMENT NAME:

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mty Areas\193571_LAB_gnp_084dgn	DESIGNED BY
FILE NAME = WiProjects/ANY\KZ\20932\d0129664\dod\LAB Community Arees\19357 LAB_gnp_8&dgn - DATE/TIME = 3/21/2011 - USER = 3176	JOB MANAGER
FILE NAME = V*NProjects\AN 	DESIGN SUPERVISOR

MATCH LINE PREPARED BY: ALTERED BY: SCALE NOTE: IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION. AS BUILT REVISIONS DESCRIPTION OF WORK: BRIDGES CULVERTS PIN 1935.49 CONTRACT NUMBER ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED LIVINGSTON AVENUE BRIDGE VEGETATIVE COMMUNITIES MAP PS&E DATE DRAWING NO. LA-8 M.P. 142.55 TO M.P. 142.29 SHEET NO. 8 OF 9 COUNTY SIGNATURE DATE NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION DOCUMENT NAME:

APPENDIX F COORDINATES OF DELINEATED FEATURES

Livingston Avenue Bridge Project

Coordinates of Aquatic Features

Name of Feature	Approximate Coordinates (within the JD Boundary)	
	Beginning point	
Ephemeral Stream A	N 1392451.5212	E 696674.8335
	Ending point	
	N 1392521.4173	E 696681.5358
Wetland B	Center of wetland	
	N 1392889.0703	E 697053.4998
Undelineated reedgrass/purple loosestrife marsh	Center of wetland	
	N 1393596.6653	E 694900.5985
	Beginning point	
Hudson River	N 1393308.8409	E 696365.9367
Hudson River	Ending point	
	N 1392399.0852	E 695919.0291

APPENDIX G RESUMES AND CONTACT INFORMATION

Project Contact Information

Project Sponsor:

NYS Department of Transportation, Region 1 Project Manager: Richard Filkins 328 State Street Schenectady, New York 12305 rfilkins@dot.state.ny.us

Wetland Delineators:

CHA, Inc. III Winners Circle Albany, NY 12205 Phone: 518-453-4500 Fax: 518-453-4773

Christopher Einstein, Principal Planner Email: ceinstein@chacompanies.com

John Greaves, Environmental Scientist Email: igreavesiv@chacompanies.com

Maura Furey, Environmental Scientist mfurey@chacompanies.com

Consultant Project Manager:

CHA, Inc. David Taillon, Principal Engineer VI III Winners Circle Albany, NY 12205

Phone: 518-453-4701 Fax: 518-453-8200

Email: dtaillon@chacompanies.com

Christopher R. Einstein, AICP

Senior Scientist



Mr. Einstein is a Senior Natural Resources Scientist and Planner with 20 years of experience in providing wetland and other ecological services; with particular expertise in regulatory compliance and SEQR & NEPA compliance. He has assisted many large public and private sector clients in successfully obtaining permits and approvals for their projects. Mr. Einstein has worked in sensitive ecosystems and is currently part of a team of scientists working on solutions for landfills that respect the ecology and in the end increase the amount and quality of habitat.

Education

SUNY College of Environmental Science and Forestry, NY/ M.S./ Resource Management/ 1991 SUNY College of Environmental Science and Forestry, NY/ B.S./ Environmental Science/ 1987 Alfred State College, NY/ A.S./ Agricultural & Technical/ 1985

Professional Registration and Activities

American Institute of Certified Planners Society of Wetland Scientists Association of State Wetland Managers American Planning Association

Representative Project Experience Includes:

- Nine-Mile Creek Aqueduct, Restoration of a section of the historic Old Erie Canal for recreational purposes. The project involved federal and state permitting to address impacts to an historically navigable waters of the U.S.
- New York State Dept. of Transportation, NYSDOT Region 1, Slingerlands
 Bypass. Roadway extension and improvements that required the preparation of
 a NEPA EIS and the need to obtain a Section 404 Individual Permit for impacts
 to federal wetlands. This work included wetland delineation, habitat
 assessment, alternatives analysis, and mitigation design.
- Warren County Department of Public Works, Track, bridge & grade crossing improvements. Rehabilitation of 40 miles of the former Adirondack Branch of the Delaware & Hudson Railroad from North Creek to Corinth, NY. Provided ecological assessments and wetland delineation, program development, and environmental (NEPA) documentation.
- Vermont Agency of Transportation, Design Term Agreement for Vermont Surface Transportation Program (STP), National Highway (NH) and Interstate Maintenance (IM) Paving Projects. Provided environmental documentation on natural and social-economic resources in support of NEPA Categorical Exclusions for over 20 Vermont highway sections throughout the State in preparation of repaving and safety improvements.
- Solberg-Hunterdon Airport, Environmental Assessment Study, Phase I.
 Undertook an environmental assessment pursuant to FAA requirements to address runway extensions and safety improvements for reliever airports serving the NYC metropolitan area.
- Albany Port District Commission, Corning Preserve Waterfront Project. Obtained USACE and state permits for the redevelopment of the Corning Preserve. This project has transformed an underutilized city waterfront asset into a major destination location within New York's Capital District. The park now hosts a waterfront promenade with transient boat docking facilities, a 700-seat amphitheater and performance stage, improved pedestrian access and bikeway, a modern visitor's center with interpretive facilities, and improved landscaping and pedestrian amenities. The park is accessible via the newly constructed Hudson River Way Pedestrian Bridge, which links downtown to the waterfront.



- New York State Dept. of Envir. Conservation, Wilcox Lake Wild Forest Area Unit Management Plan. Prepared a comprehensive plan for managing forest preserve lands in the Wilcox Lake area of the Adirondack park. This work included on-site surveys of all trails, campsites, and unique features; structure inventories; review of existing documentation to identify potential for threatened and endangered species; and the establishment of use opportunities and restrictions consistent with the conservation of resources and preservation of the wilderness experience.
- City of Albany Dept. of General Services, Albany Landfill Eastern Expansion. Worked with State and federal agencies to obtain permits to expand an existing landfill adjacent to a sensitive and unique environmental resource known as the Albany Pine Bush. Detailed analysis was conducted for vegetation, soils and hydrology to establish baseline conditions. This also included wildlife surveys to address about 20 species of concern including the federally listed Karner blue butterfly. This work culminated in a restoration plan that will address over 250 acres of land, linking viable Pine Bush communities by restoring degraded lands and restoring the landfill surface to a dry prairie community.
- Gerry Foundation Inc., Bethel Performing Arts Center, master plan assistance, Environmental Impact Statement assistance, visual analysis, environmental investigations, civil engineering and environmental permitting for a Performing Arts Center in Bethel, located at the site of the 1969 Woodstock Festival in Sullivan County New York. This project creates a unique visitor experience through the integration of the site's natural beauty with new distinctive architecture and landscape elements.
- Massachusetts Highway Department, Route 141 over Chicopee River.
 Conducted permitting for reconstruction of a bridge over the Chicopee River.
 This work involved wetland delineation in accordance with the 1987 Corps
 Manual and state guidelines and permitting for encroachment into the floodplain.

Maura E. Furey

Scientist III



Ms. Furey is an environmental scientist III in the Planning and Ecology group. She has worked on a wide verity of projects within her field, including environmental permitting, wetland delineation, threatened and endangered species assessments, and environmental impact analysis for NEPA and other state environmental review processes. She has performed numerous wetland delineations for federal, State and local agencies and private projects and has assisted these clients in obtaining permits and designing appropriate mitigation.

Education

University of Massachusetts at Amherst, MA/B.S./Environmental Science/2005

Professional Registration and Activities

Association of State Wetland Managers NYS Wetland Forum

OSHA Confined Space Entry Awareness

AHA - Heartsaver First Aid and Adult CPT AED

Standard First Aid

Amtrak Safety Training CSX Roadway Safety Training

Representative Project Experience Includes:

Onondaga County Dept. of Transportation, Syracuse-Dewitt Road Reconstruction

CHA completed the preliminary through final design development and contract plan preparation for the reconstruction of 1.3km of a rural arterial roadway. Ms. Furey delineated wetland and stream corridor along this roadways and progressed permitting that involved a unique solution for stream redirection and slope protection using existing native materials within the stream bed and banks.

Ferry Road over Mohawk River Backwater

This project involved the replacement of an existing bridge over a backwater channel of the Mohawk River and adjacent wetland. Ms. Furey assisted in the delineation and characterization of wetland communities and was involved in the preparation of permit documents and mitigation plans.

Jericho Rise Wind Farm

Approximately 6,000 acres of land encompass the Jericho Rise Wind Farm in northern New York. Ms. Furey was part of a team of ecologists that delineated the proposed wind tower sites, access roads, and utility interconnects crossing this vast area. In addition, the team evaluated habitat for threatened and endangered species and inventoried vegetation. Ms. Furey was involved in the initial remote sensing work to identify potential areas of wetlands, conducted field work, collected GPS data, and processed data for reports.

Onondaga County Dept. of Water Environment Protection, Bear Trap-Ley Creek Drainage Study

The Beartrap – Ley Creek Drainage District was formed in 1969 to address persistent flooding, implement drainage improvements, and to provide general watercourse maintenance within the Ley Creek watershed. CHA provided engineering services for the maintenance and revisions to the detention basin as well as the associated permitting to complete the project. Ms. Furey was responsible to evaluating the wetland and stream impacts that would result from maintenance of this system.

Peekskill Landfill Closing & Redevelopment

CHA completed the design to close the Peekskill landfill and prepared plans to develop the landfill with a commercial project. Ms. Furey delineated wetlands along the toe of slope that would be partially impacted by the plans to close the landfill and contain leachate. This project required significant coordination with state and federal agencies and led to one of the first successful jurisdictional challenges under the revised federal jurisdictional guidelines resulting from the Rapanos Supreme Court decision. This was instrumental in preventing delays that would affect funding and the viability of the project.

Lowes of Hornell Wetland Mitigation

CHA conducted a wetland delineation and successfully obtained permits for the construction of a new Lowes store near Hornell, NY. Ms. Furey obtained the required permits and assisted with the design of wetland mitigation that involved a unique method of relocating the existing wetland to another location on the same property.

Wireless Site Evaluations

CHA has performed hundreds of site environmental screenings and wetland delineations for cellular communications facilities throughout the northeast. Ms. Furey was involved in numerous wetland delineations and habitat assessments for threatened and endangered species.

John W. Greaves IV, CWS

Environmental Scientist New Hampshire Certified Wetland Scientist # 247 USFWS Recognized Small Whorled Pogonia Surveyor

Mr. Greaves has over 9 years professional experience in wildlife, vegetation, wetland delineation, ecological inventories, threatened and endangered species surveys, habitat creation, habitat management, wetland mitigation, stream assessments, environmental screenings and environmental permitting. Specialties include identification and natural history of wildlife, vegetation and ecological communities, biodiversity, environmental impact assessment, climate change and environmentally sensitive design.

Education

SUNY Cobleskill, NY/ B.S./ Wildlife Management/ 2001 Hudson Valley Community College, NY/ A.A.S./ Criminal Justice/ 1998

Professional Registration and Activities

NH Certified Wetland Scientist
NYS Wetlands Forum
Society for Conservation Biology
Society of Wetland Scientists
The Wildlife Society
CSX Roadway Safety Training
Amtrak Safety Training
NSC – Standard First Aid, Adult CPR,
Bloodborne Pathogens & AED

Wetland Experience:

- Lowe's Home Centers, Inc., Engineering Services in Hornell Wetland delineation and wetland mitigation design.
- Dutchess County Department of Public Works, Harlem Valley Rail Trail -Phase 4 – Wetland delineation and threatened and endangered species screenings.
- City of Albany, Proposed Landfill Expansion Wetland delineation, ecological inventory and Environmental Impact Statement.
- NYSDOT, Design Services for US Route 219 Wetland delineation, ecological inventory, streams assessment, environmental impact assessment.
- City of Albany, P-4 Wetland Mitigation Wetland mitigation monitoring, wildlife inventories, invasive vegetation management.
- Vermont Agency of Transportation, STP, NH and IM Paving Projects –
 Wetland, stream channels and threatened and endangered species screenings.
- College of William & Mary Department of Capital Outlay, EIR Wetland Delineation Ash Lawn – Wetland delineation and Environmental Impact Report.

Wildlife and Ecology Experience:

- Seneca Meadows, Inc., Mining Permit (Expansion) Bostwick Road –
 Assessment of potential habitat for bog turtle, an endangered species.
- Downtown Airport, Inc., Vineland Downtown Airport, NJ, Aircraft Parking Apron Design – Wetland inventory and threatened and endangered species assessment.
- NYSDOT, Design Services for US Route 219 Wetland delineation, ecological inventory, streams assessment, environmental impact assessment.
- City of Albany, Proposed Landfill Expansion Vegetation and ecological community inventories, wildlife inventory surveys (breeding birds, herpetological trapping, Karner blue butterfly, frosted elfin, butterfly and

nocturnal moth surveys) and Environmental Impact Statement.

- NYSDOT, Design Services for US Route 219 Wetland delineation, ecological inventory, streams assessment, environmental impact assessment.
- City of Albany, P-4 Wetland Mitigation Wetland mitigation monitoring, wildlife inventories, invasive vegetation management.
- Town of Malta, Town-Wide Generic Environmental Impact Statement –
 Ecological inventories and developed guidelines for ecologically-sensitive
 sustainable development.

Permitting Experience:

- Community Energy, Inc., Lempster Wind Farm, NH Wetlands and natural resources expert for the completion of a State of New Hampshire 401 Water Quality Certification.
- Columbia County, NY, Rehab of County Route 7 & 7A Wetland delineation, threatened & endangered species surveys/evaluation and permitting. Obtained NYSDEC Protection of Waters and Freshwater Wetlands General Permit as well as USACE Nationwide Permit 23 – Approved Categorical Exclusions.
- Warren County, NY DPW, Harrington Road Bridge Replacement For this
 project Mr. Greaves obtained authorization under: NYS DEC Article 15
 Protection of Waters and Section 401 Water Quality Certification; USACE,
 Section 404 of the Clean Water Act Nationwide Permit No. 23 Approved
 Categorical Exclusions; Adirondack Park Agency General Permit for Minor
 Regulated Activities in APA-jurisdictional Freshwater Wetlands.

Carbon Footprint Assessment Experience:

- City of Albany, Proposed Landfill Expansion As part of a cumulative impacts analysis for the proposed landfill expansion Mr. Greaves was responsible for calculating the carbon footprint of the current landfill operations and landfill gas emissions and compared that to the carbon footprint that he calculated for the proposed landfill expansion area gas emissions and emissions from operations (i.e. facilities and vehicles). This information was used to identify techniques and technologies that could be incorporated to reduce greenhouse gas (GHG) production from future landfill operations. Mr. Greaves also evaluated how the current recycling programs and the current and proposed landfill gas to energy programs help to reduce the amount of GHG's that enter the atmosphere by, respectively, offsetting the mining of raw materials and product manufacturing and by offsetting electricity production elsewhere.
- Clough, Harbour & Associates, LLP (CHA) As a member of CHA's Go-Green Committee, Mr. Greaves identified and measured the carbon footprint of CHA's offices. The main focus was on energy usage and business-related travel. From there he identified ways to lower the carbon footprint associated with such activities. This information was used as a baseline on which to measure success

of CHA's carbon footprint reduction strategy.

Continuing Education:

- The State University of New Jersey, Rutgers Campus, "Hydric Soils" 2002
- The State University of New Jersey, Rutgers, "Threatened & Endangered Species of Northern New Jersey" - 2003
- Virginia Polytechnic Institute and State University, "Habitat Evaluation Procedures" – 2004
- National Safety Council, "Standard First Aid, Adult CPR & Bloodborne Pathogens Courses" - 2004
- The Practicing Institute of Engineering, Inc., "Safety for the Consulting Engineer" - 2005
- CHA, Inc., "CHA's Project Management Training Program" 2006
- NYS DEC & USFWS, "Volunteer, Indiana Bat Telemetry Study" 2006 & 2007
- Hudsonia, Ltd., "Wetland Habitat Construction and Turtle Conservation" 2007
- Society for College and University Planning, "Making the Business Case: Understanding the Costs and Financial Benefits of Green Building" - 2007
- Hudsonia, Ltd., "Reptile and Amphibian Survey Methods" 2009
- University of New Hampshire, "Advanced Identification of Early Season Grasses" – 2009
- Amtrak, CSX & NS: Roadway Worker Training, "Roadway Worker Protection, Contractor Safety" –2007, 2008, 2009 & 2010
- National Safety Council, "Standard First Aid, Adult CPR & Bloodborne Pathogens Courses" - 2010
- Albany International Airport, "Escort badge" expires 9/30/2012
- NYS DEC, "Volunteer, Wintering Raptor Surveys (short-eared owl/northern harrier)" – 2009, 2010, 2011