



PUBLIC NOTICE

Comment Period Begins: July 30, 2024
Comment Period Ends: August 30, 2024
File Number: NAE-2022-02592
In Reply Refer to: Michael S. Adams
Phone: (802) 872-2893
Email: michael.s.adams@usace.army.mil

The District Engineer, U.S. Army Corps of Engineers, New England District (USACE), has received a permit application, file number NAE-2022-02592, to conduct work in waters of the United States from VT Transco LLC located at 366 Pinnacle Ridge Road in Rutland, Vermont. This work is proposed in the Missisquoi and Mill Rivers, Stevens Brook, six unnamed streams and adjacent wetlands from Sand Hill Road in Georgia to VT Route 78 in Highgate, Vermont. The end point coordinates for the project are Latitude 44.71417° N, Longitude -73.15526° W (Georgia Substation) and Latitude 44.93985° N, Longitude -73.05186° W (Highgate Substation).

The work involves the replacement of the existing 16.6-mile 115 kV K42 transmission line within an existing corridor from the Georgia Substation in Georgia to the Highgate Substation in Highgate, Vermont. The proposed work involves the following:

- a. Installation of the fiber and transmission lines across the Missisquoi River in Highgate. The fiber line will be 44.7' above the ordinary high water mark (OHWM) and the conductor lines will be 51.2' above OHWM under conditions of greatest sag.
- b. The right-of-way (ROW) is currently cleared to a width of approximately 150' and the existing H-frame wood structures are in the center of the ROW. The proposed project will replace the existing K42 line structures predominantly with single pole steel structures about 30' taller, as the three phases of conductors will be in a vertical configuration, while keeping the line energized to minimize customer outages. The new structures will be installed typically 27' east of the existing structures. Approximately 48,702 sq. ft. (1.12 acres) of wetlands and approximately 194 sq. ft. (0.004 acre) of stream bottoms below OHWM will be filled for the construction of permanent access roads and work pads. Approximately 397 sq. ft. (0.009 acre) of temporary fill will be placed below OHWM in conjunction with installation of culverts and construction mats. Approximately 306,620 sq. ft. (7.04 acres) of wetlands will be temporally impacted by the placement of construction mats for access and construction pads around structures. Structure replacement will involve about 135 sq. ft. (0.003 acre) of permanent fill and about 120 sq. ft. (0.003 acre) of temporary impact to wetlands. All temporary fills will be removed from the wetlands and waterways, and the areas will be restored after construction.

The basic project purpose is to upgrade the existing transmission line and to provide adequate and reliable electric service to Chittenden County and northern Vermont.

The work is shown on the enclosed plans, in 53 sheets, titled "Site Location Map" (dated "March 21, 2024"), "Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits" (dated "July 24, 2024"), "Section 10 Location Map" (dated "March 08, 2024"), "CROSSING 1 – MISSISQUOI RIVER LINE K42, STRUCTURE 414-415" (dated "03/12/24"), "Section 10 – Aerial Crossing Clearance" (dated "March 8, 2024") and "PROPOSED GEORGIA – HIGHGATE TYPICAL RIGHT-OF-WAY CROSS SECTION" (dated "May 31, 2023").

The applicant has stated that it has avoided and minimized waterway/wetland impacts to the maximum extent practicable. To compensate for unavoidable impacts to waterways/wetlands, the applicant proposes a one-time payment to the Ducks Unlimited Vermont In-Lieu Fee Program.

AUTHORITY

Permits are required pursuant to:

- ☒ Section 10 of the Rivers and Harbors Act of 1899
- ☒ Section 404 of the Clean Water Act
- ☐ Section 103 of the Marine Protection, Research and Sanctuaries Act.

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The USACE is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. The USACE will consider all comments received to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an environmental assessment and/or an environmental impact statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

NATIONAL HISTORIC PRESERVATION ACT

Based on our initial review of the proposed project, historic properties were identified within the permit area and the area of potential effects. However, the applicant currently proposes to avoid all effects to known historic properties. Additional review and consultation to fulfil requirements under Section 106 of the National Historic Preservation Act of 1966, as amended, will be ongoing as part of the permit review process.

ENDANGERED SPECIES CONSULTATION

The USACE is reviewing the application for the potential impact on federally-listed threatened or endangered species and their designated critical habitat pursuant to section 7 of the Endangered Species Act as amended. Our review will be concluded prior to the final decision.

The following authorizations have been applied for, or have been, or will be obtained:

- ☒ (X) Permit, license or assent from State.
- ☐ () Permit from local wetland agency or conservation commission.
- ☒ (X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

COMMENTS

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. People submitting comments are advised that all comments received will be available for public review in their entirety and will be considered a matter of public record.

Comments should be submitted in writing by the above date. If you have any questions, please contact Michael S. Adams, Regulatory Division, at michael.s.adams@usace.army.mil, (802) 872-2893.

CENAE-R
File No. NAE-2022-02592

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The USACE holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.

Frank J Del Giudice Digitally signed by Frank J Del
Giudice
Date: 2024.07.25 09:38:13 -04'00'

Frank J. Del Giudice
Chief, NH & VT Section
Regulatory Division

Please contact Ms. Tina Chaisson at bettina.m.chaisson@usace.army.mil or (978) 318-8058 if you would like to be removed from our public notice mailing list.

-  HUC12 Watershed Boundary (VCGI)  VHD Stream (VCGI)
 Study Area (VHB)  VSWI (ANR)
 Waterbody (VCGI)  Road (VTrans)

Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Index Sheet

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |

Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

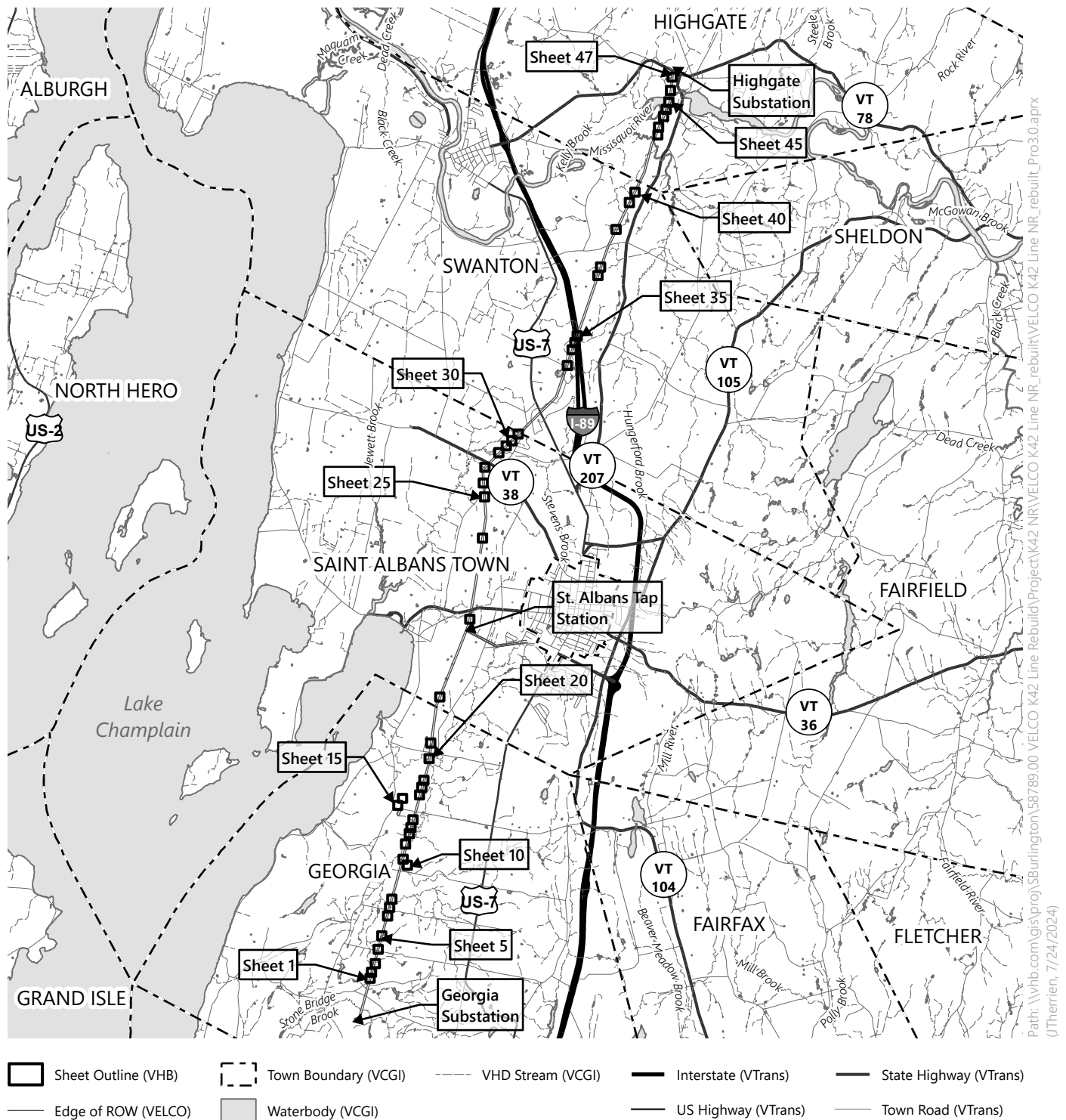


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 1 of 47



VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line

Towns of Georgia, St. Albans, Swanton and Highgate, Vermont

July 24, 2024

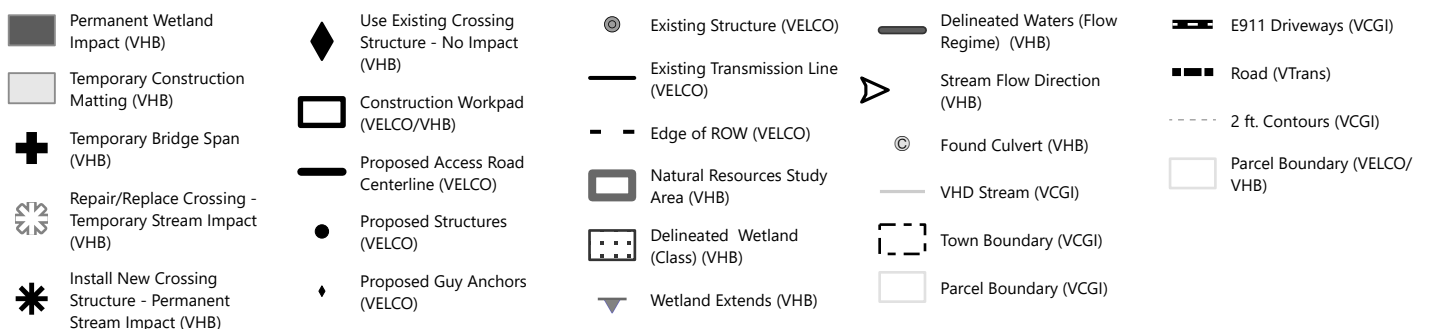
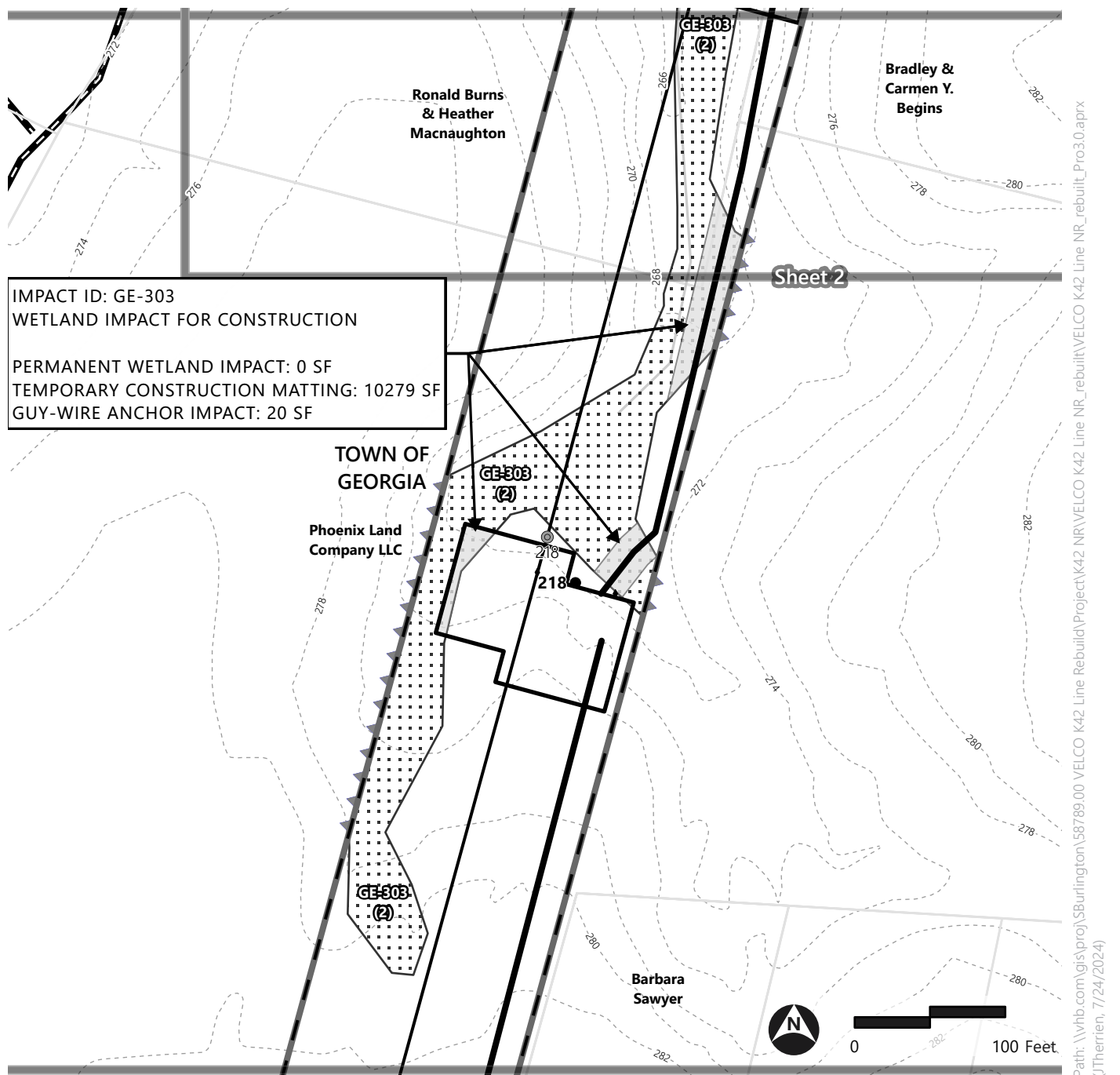


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 2 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

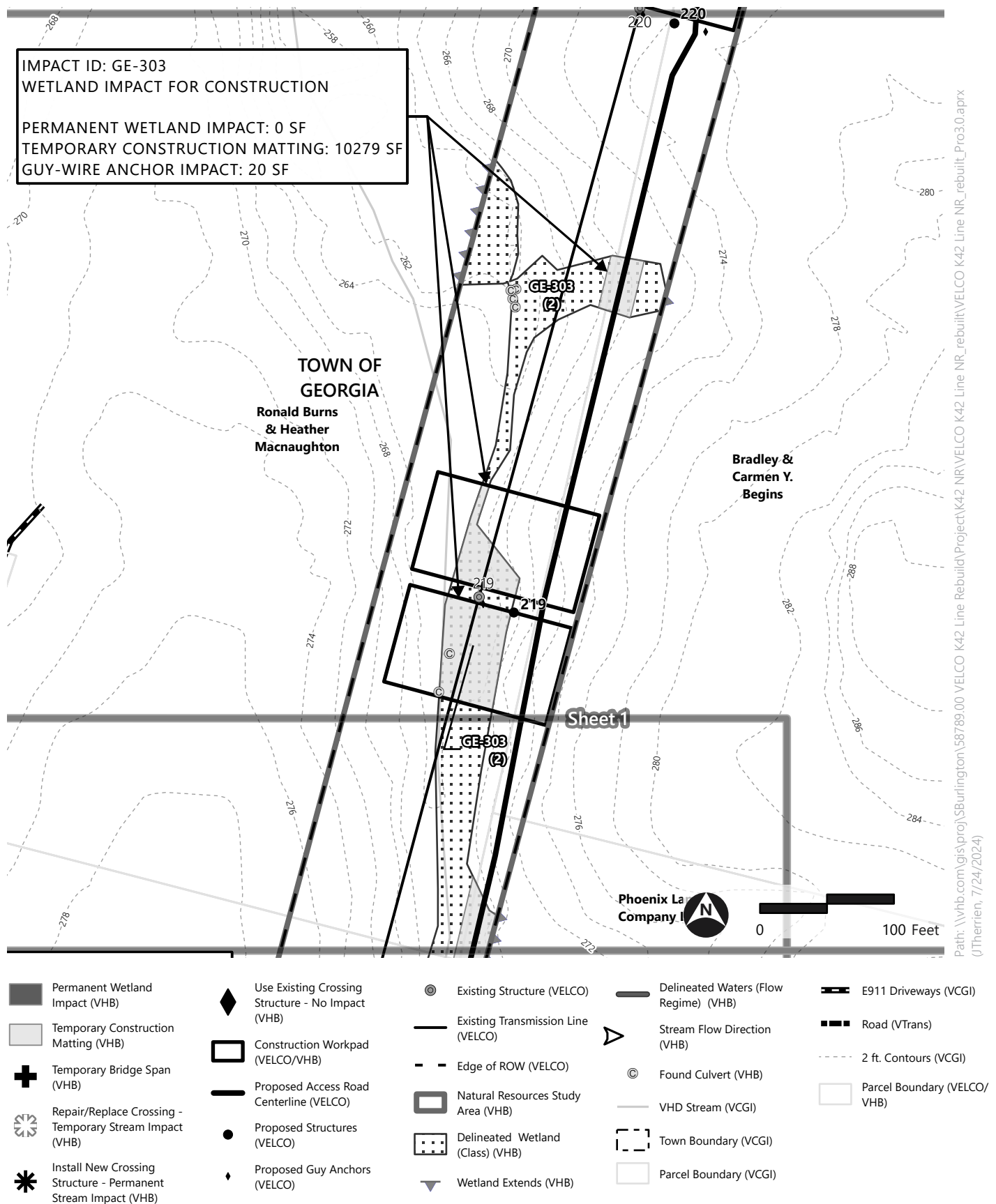


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 3 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

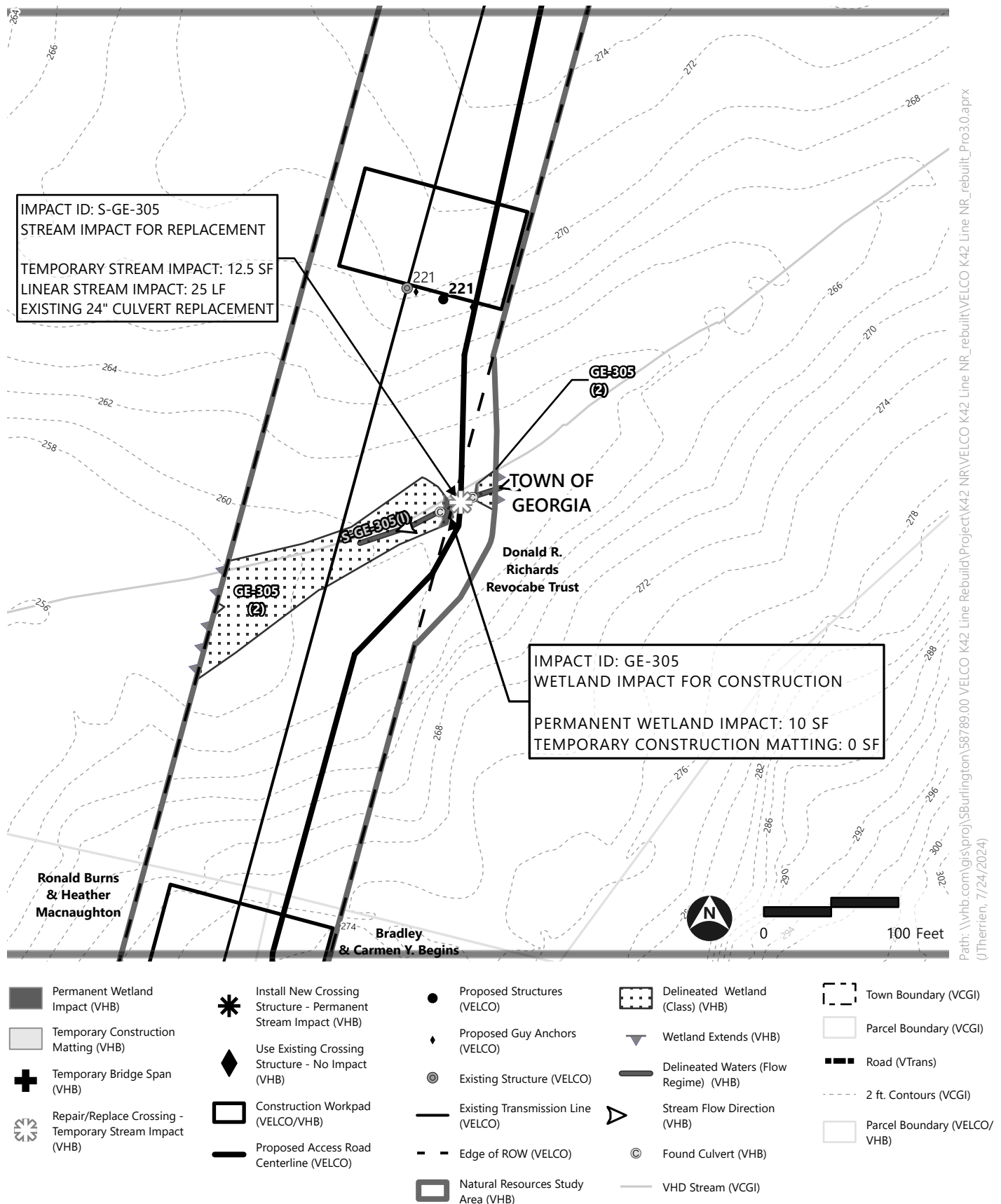


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 4 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



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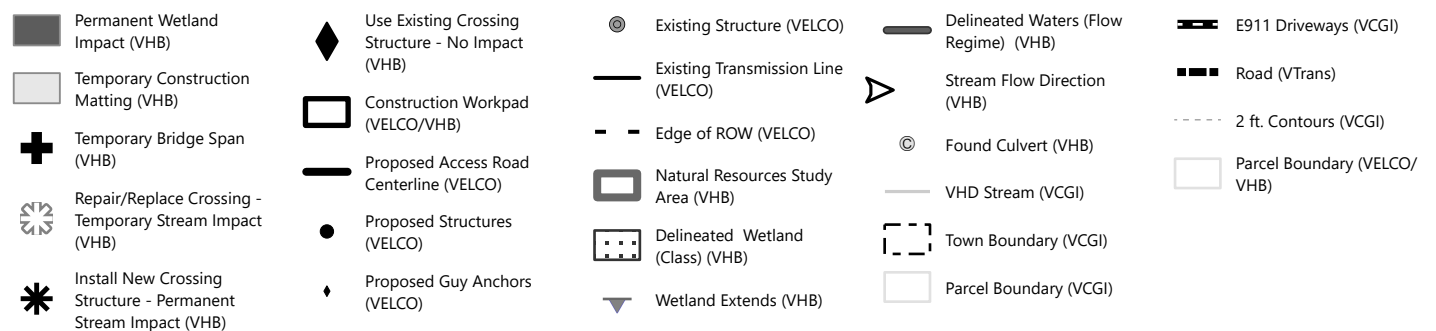
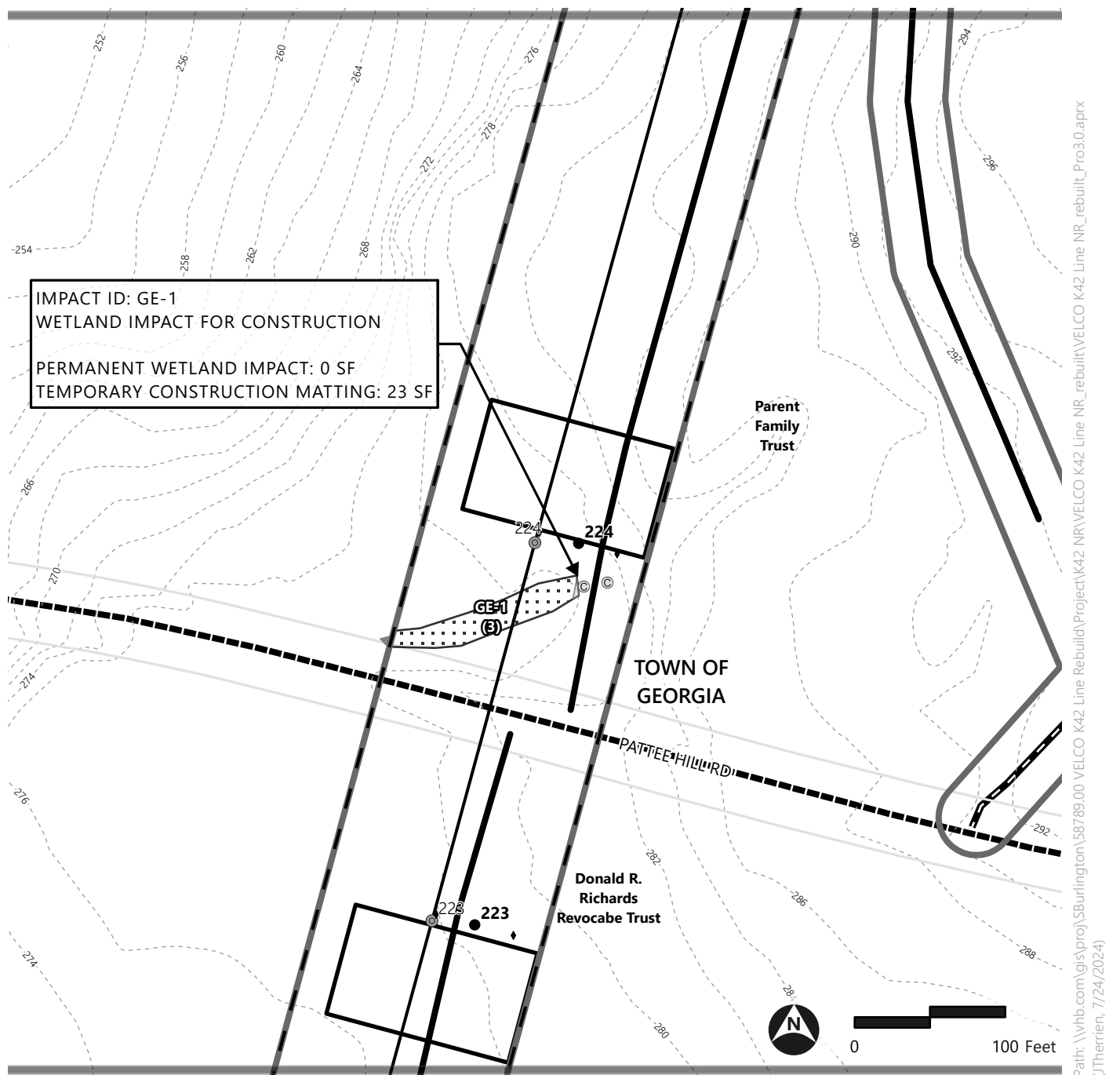


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 5 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

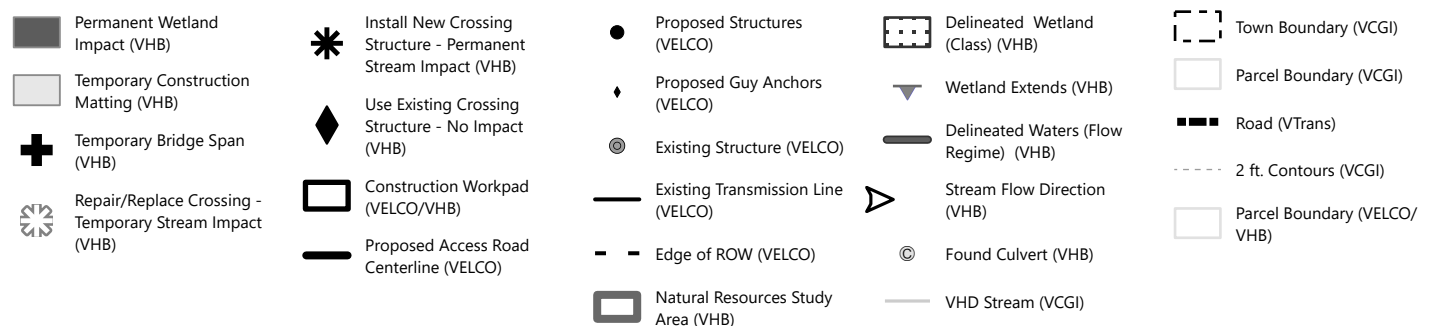
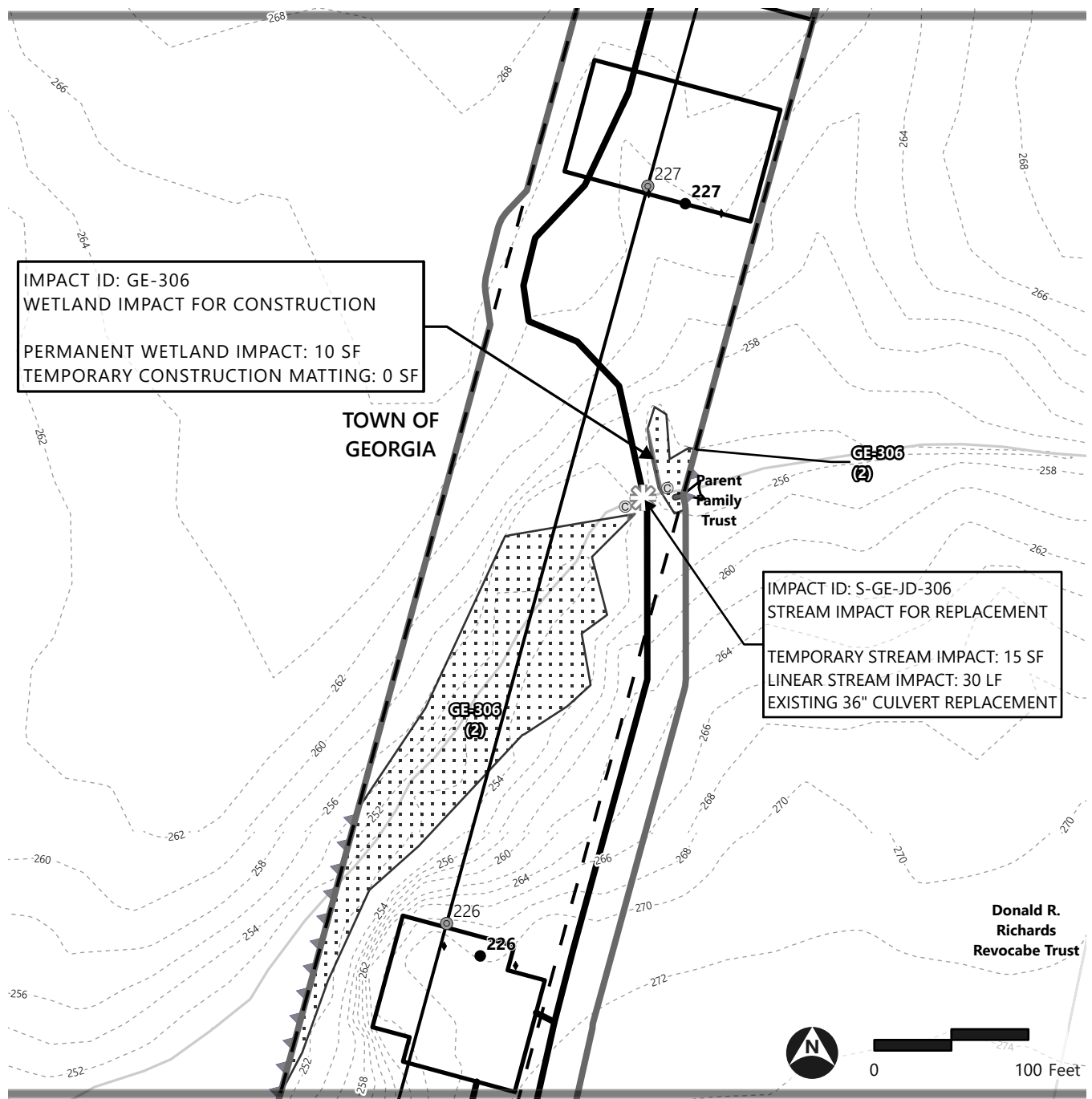
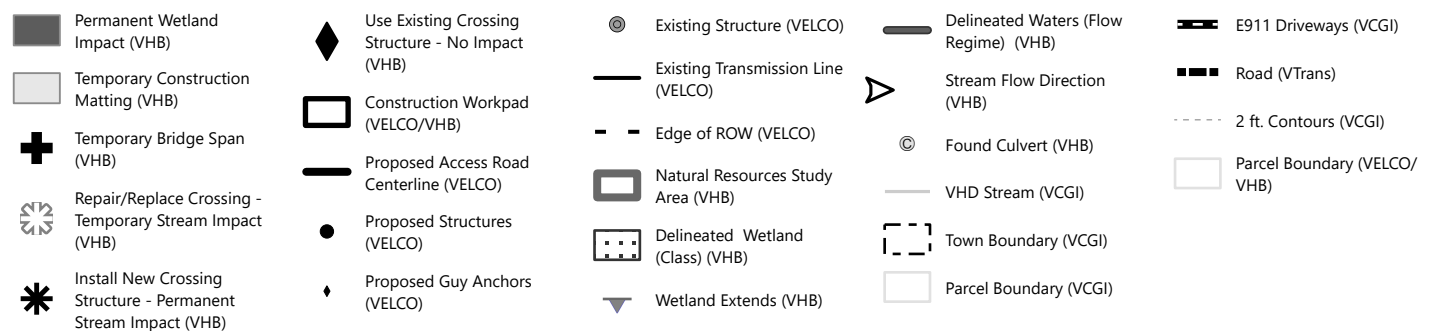
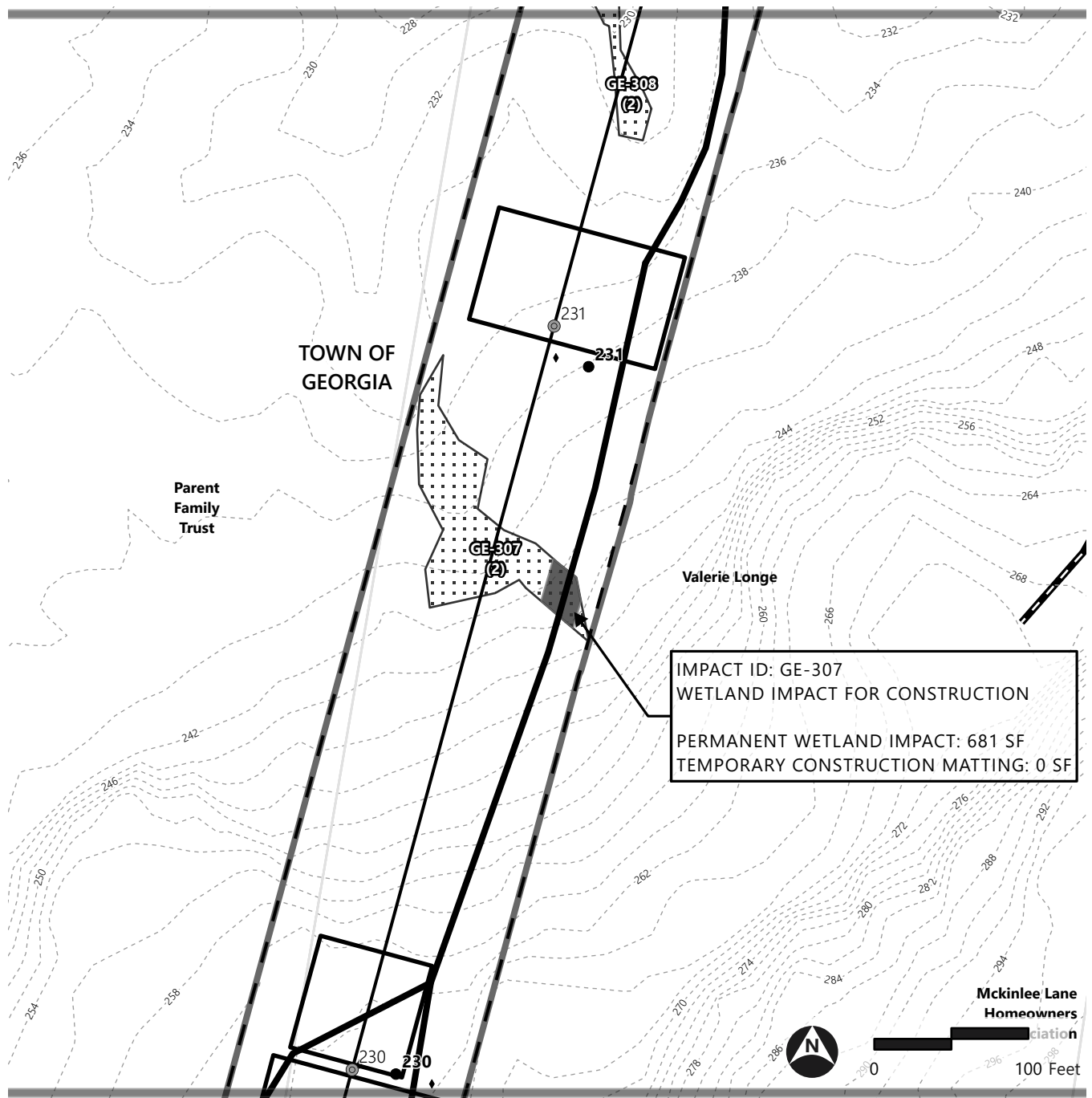


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 6 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024





July 24, 2024

The map displays a topographic view of a section of the Town of Georgia. Key features include:

- Proposed Easements:** Indicated by dashed lines with arrows, labeled **S-GE-1010** and **S-GE-307(P)**. A specific easement area is also labeled **GE-303 (2)**.
- Existing Easements:** Shown as solid lines with arrows, labeled **S-GE-307(P)** and **S-GE-307(2)**.
- Roads:** **REYNOLDS RD** is shown as a dashed line running diagonally across the lower portion of the map.
- Property and Landmarks:**
 - Parent Family Trust** is labeled in the bottom left corner.
 - Jb3 LLC** is labeled near the center-right.
 - Valerie Longe** is labeled near the bottom center.
 - TOWN OF GEORGIA** is labeled in the center-right.
 - McKinlee Lane Homeowners Association** is labeled in the bottom right corner.
- Topographic Features:** Contour lines are shown with elevations ranging from 222 to 232 feet.
- Map Elements:** A north arrow is located in the bottom right, and a scale bar indicates a distance of 0 to 100 feet.

- | | | | | | | | | | |
|---|--|---|---|---|------------------------------------|---|---------------------------------------|---|-----------------------------|
|  | Permanent Wetland Impact (VHB) |  | Use Existing Crossing Structure - No Impact (VHB) |  | Existing Structure (VELCO) |  | Delineated Waters (Flow Regime) (VHB) |  | E911 Driveways (VCGI) |
|  | Temporary Construction Matting (VHB) |  | Construction Workpad (VELCO/VHB) |  | Existing Transmission Line (VELCO) |  | Stream Flow Direction (VHB) |  | Road (VTrans) |
|  | Temporary Bridge Span (VHB) |  | Proposed Access Road Centerline (VELCO) |  | Edge of ROW (VELCO) |  | Found Culvert (VHB) |  | 2 ft. Contours (VCGI) |
|  | Repair/Replace Crossing - Temporary Stream Impact (VHB) |  | Proposed Structures (VELCO) |  | Natural Resources Study Area (VHB) |  | VHD Stream (VCGI) |  | Parcel Boundary (VELCO/VHB) |
|  | Install New Crossing Structure - Permanent Stream Impact (VHB) |  | Proposed Guy Anchors (VELCO) |  | Delineated Wetland (Class) (VHB) |  | Town Boundary (VCGI) |  | Parcel Boundary (VCGI) |
| | | | |  | Wetland Extends (VHB) | | | | |

Sources: VCGI (Vermont Center for Geographic Information - Various Dates); VTTrans (Vermont Agency of Transportation - Various Dates); VELCO (Vermont Electric Power Company - 2022-2024); VHB (Vanasse Hangen Brustlin - 2024)

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JTherrien, 7/24/2024)

Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 8 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

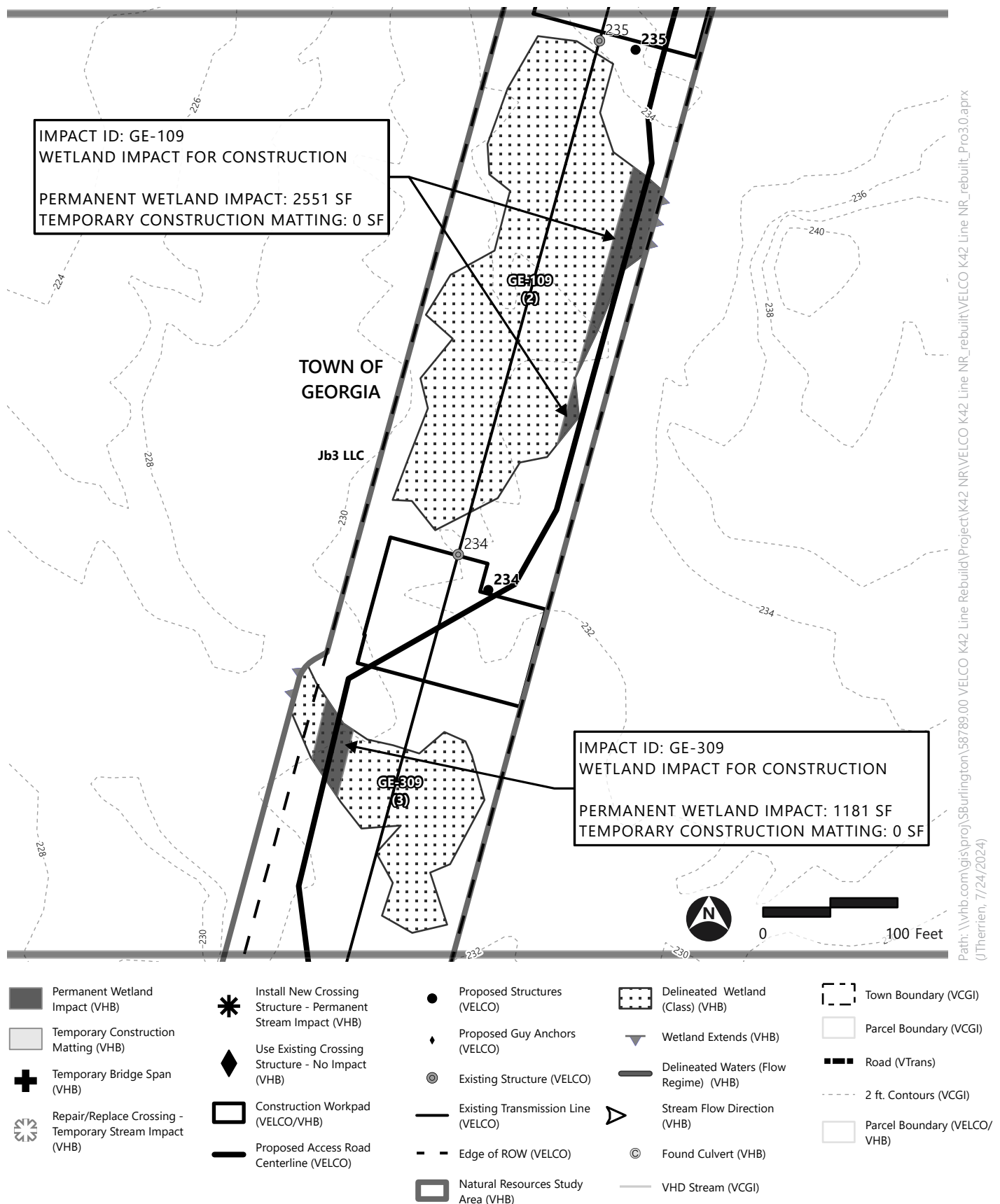


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 9 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

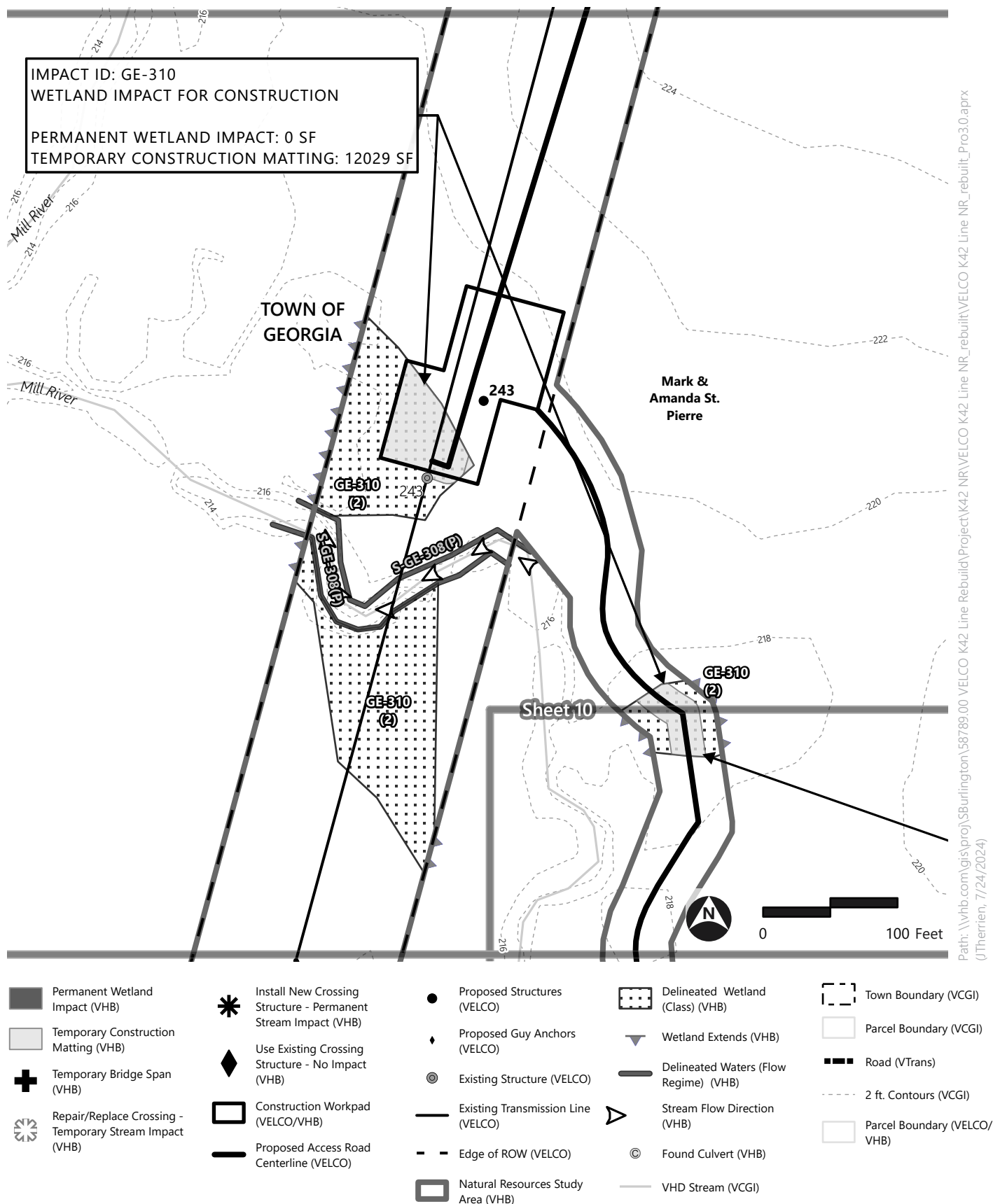


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 10 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

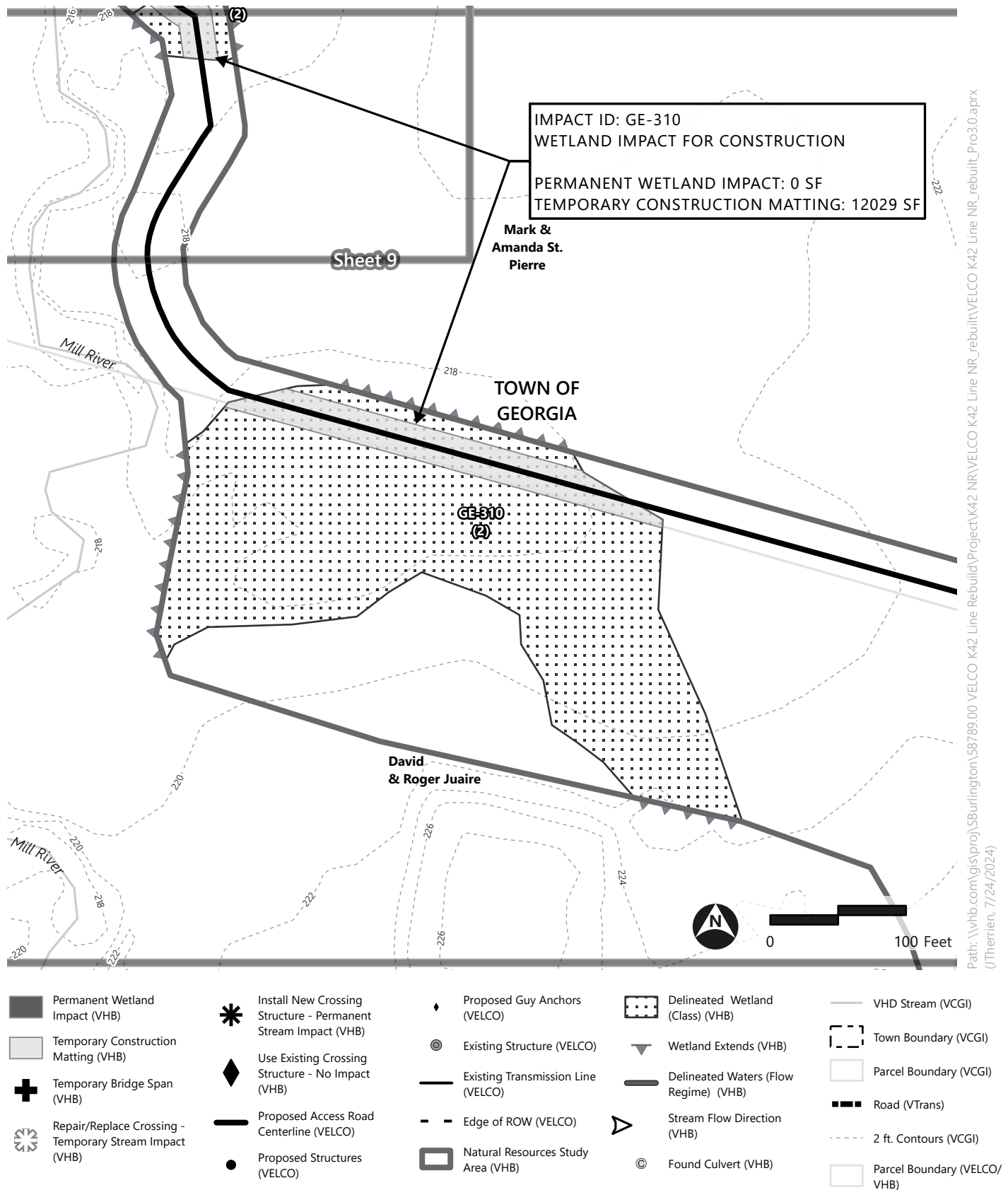


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 11 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

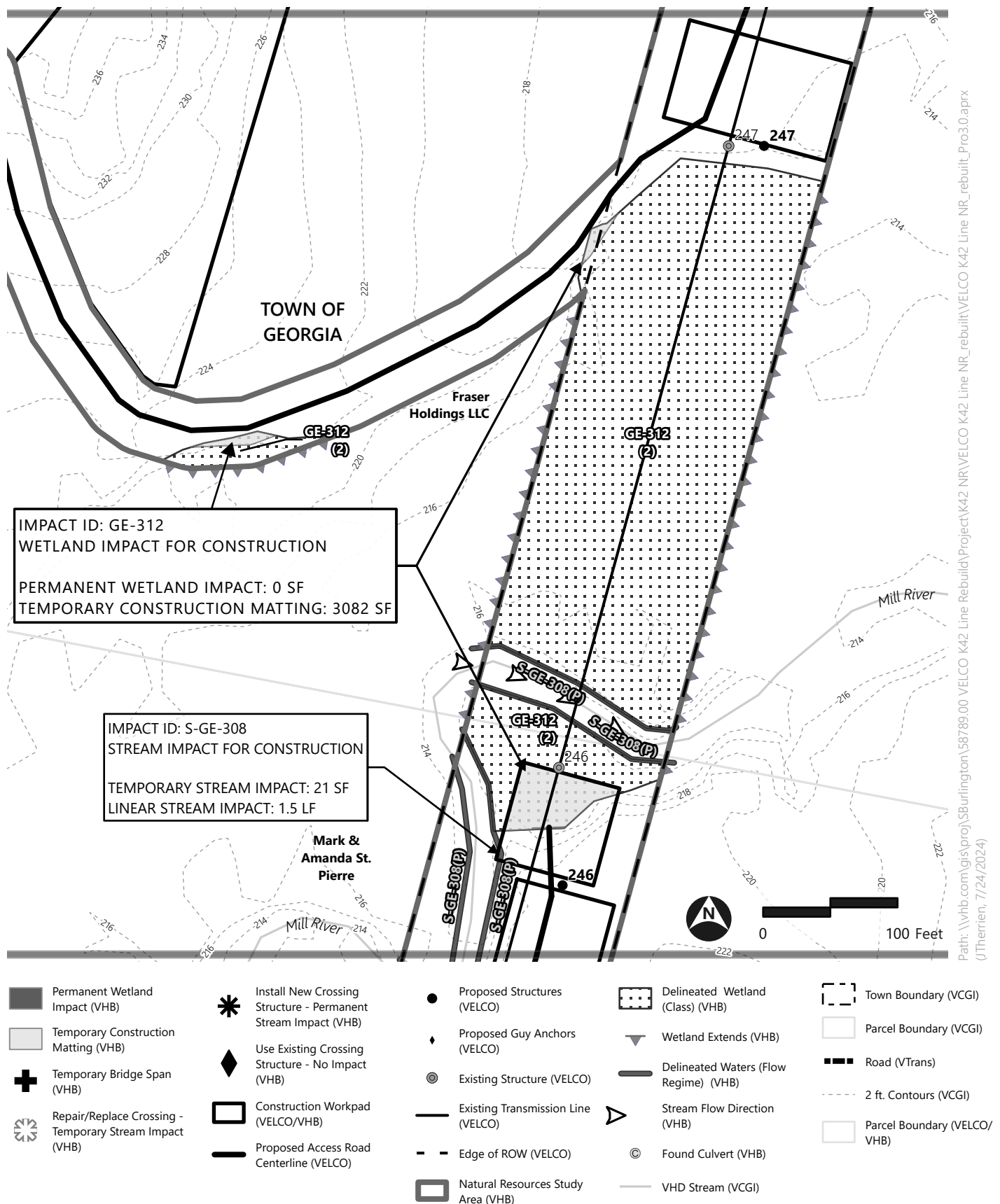


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 12 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

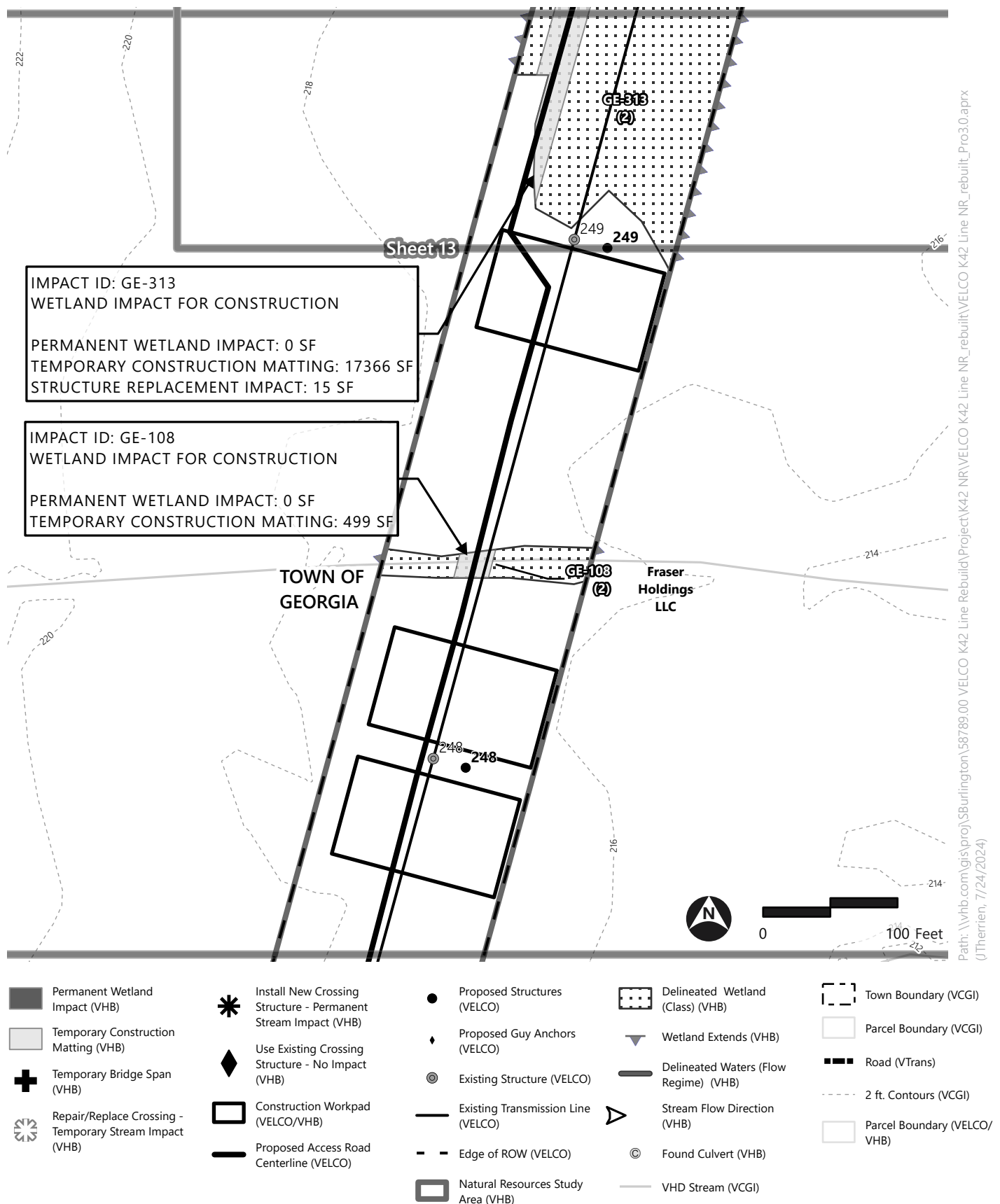


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 13 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

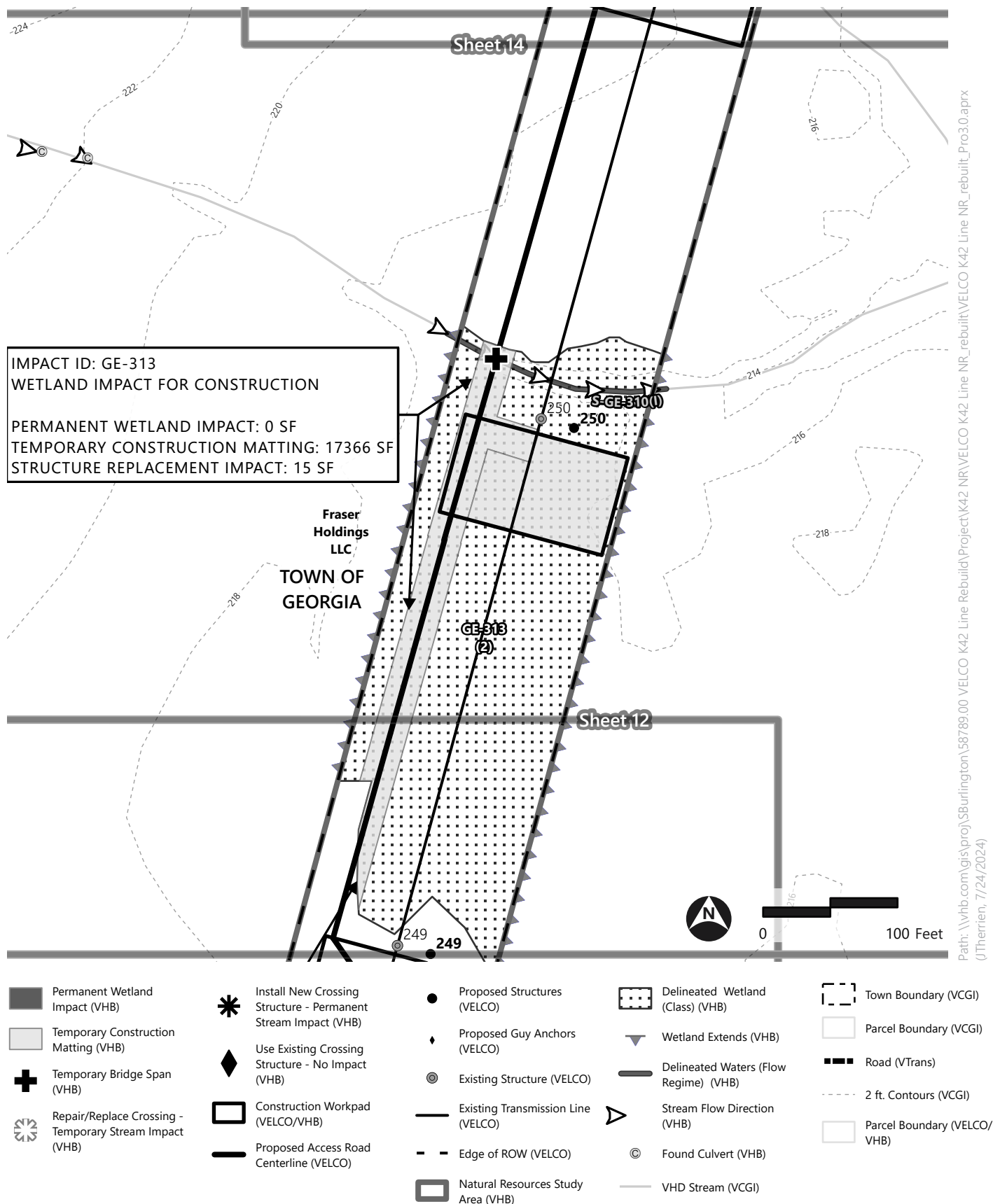


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 14 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

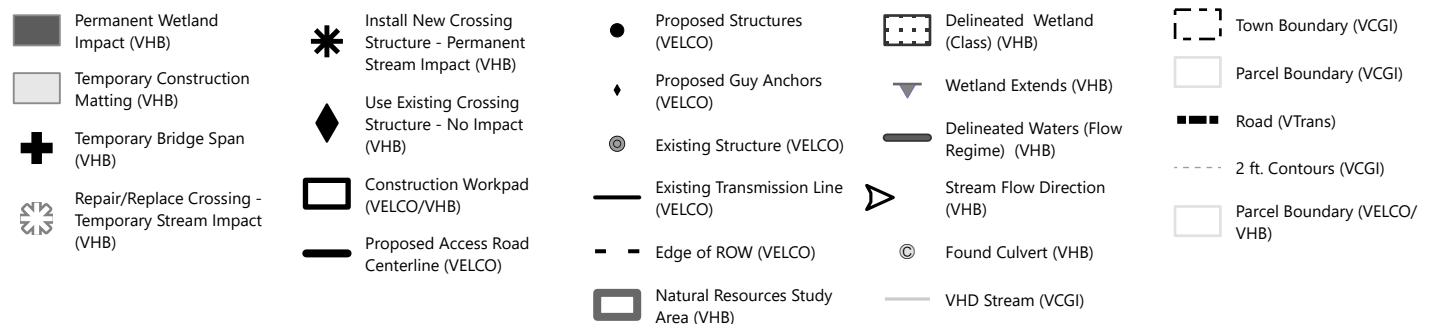
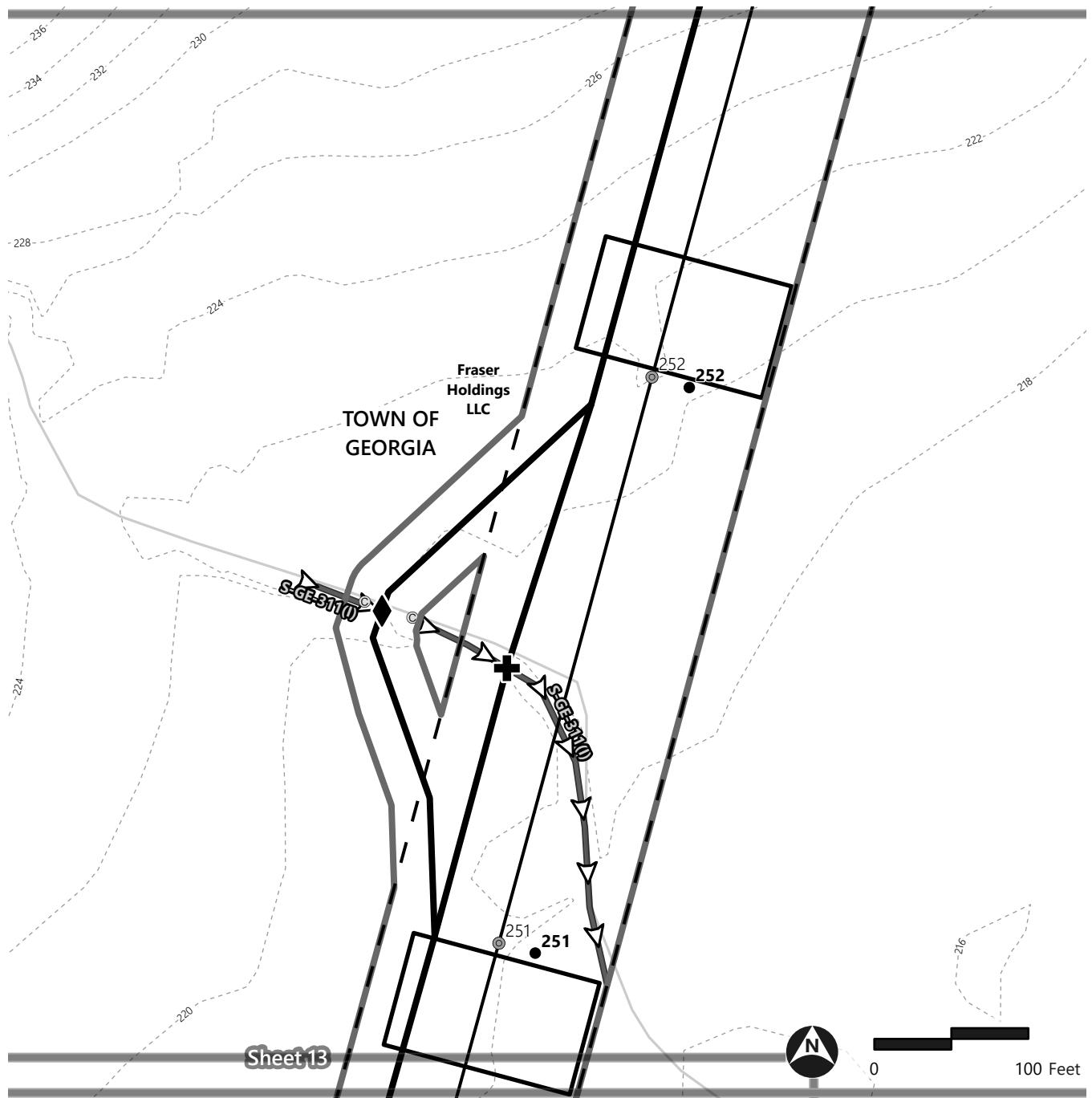
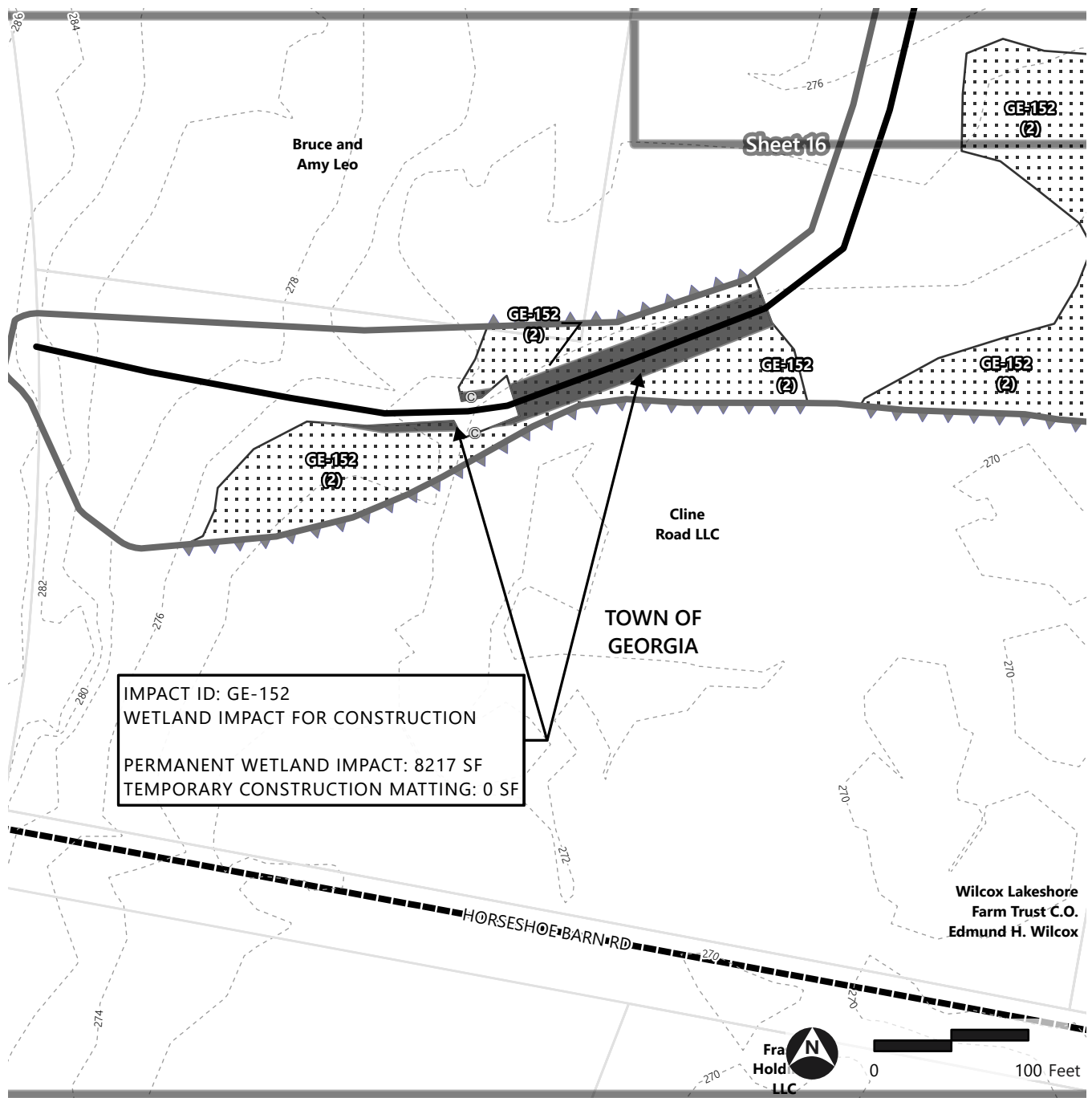


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 15 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024



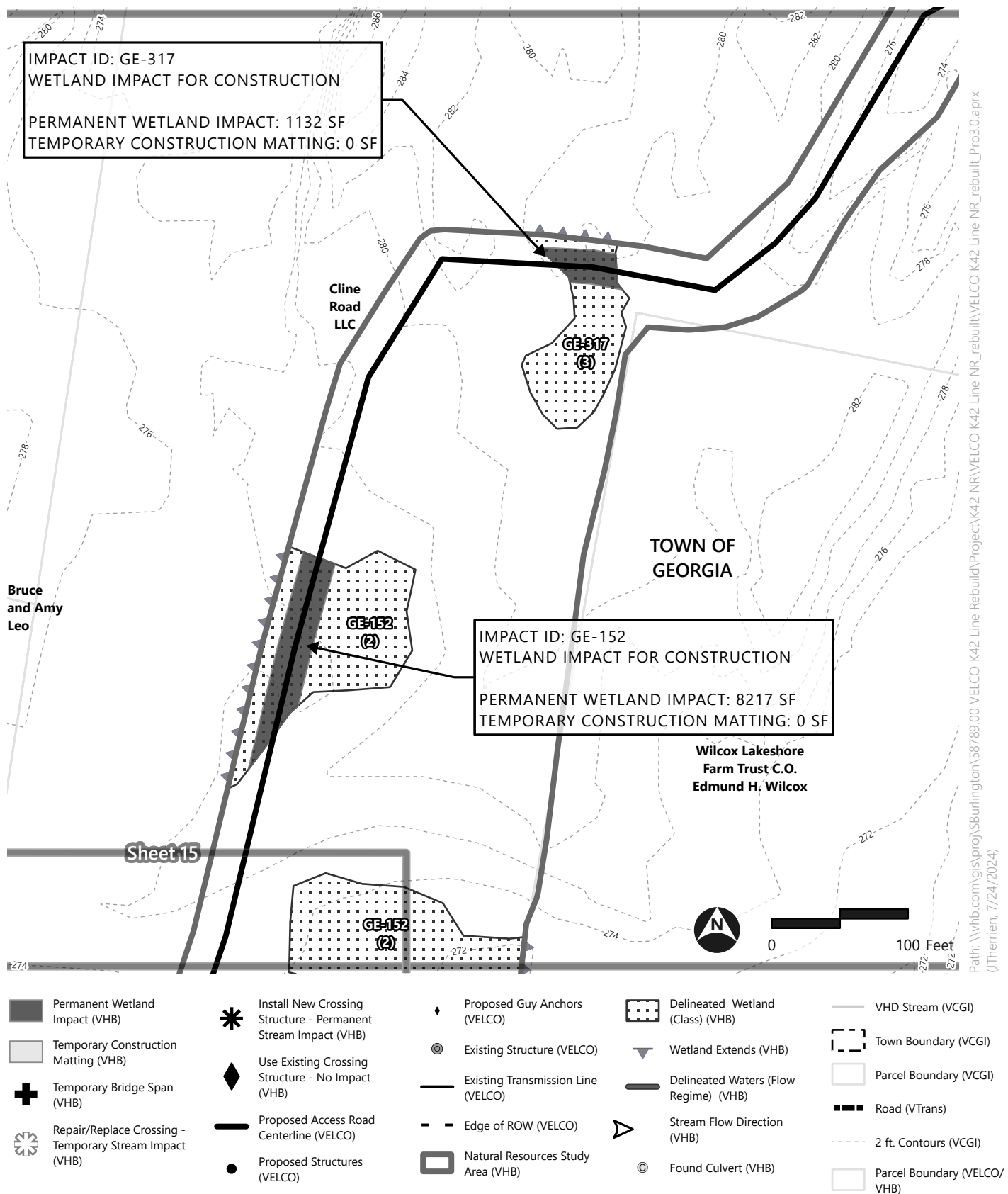
Permanent Wetland Impact (VHB)	Install New Crossing Structure - Permanent Stream Impact (VHB)	Proposed Guy Anchors (VELCO)	Delineated Wetland (Class) (VHB)	VHD Stream (VCGI)
Temporary Construction Matting (VHB)	Use Existing Crossing Structure - No Impact (VHB)	Existing Structure (VELCO)	Wetland Extends (VHB)	Town Boundary (VCGI)
Temporary Bridge Span (VHB)	Proposed Access Road Centerline (VELCO)	Existing Transmission Line (VELCO)	Delineated Waters (Flow Regime) (VHB)	Parcel Boundary (VCGI)
Repair/Replace Crossing - Temporary Stream Impact (VHB)	Proposed Structures (VELCO)	Edge of ROW (VELCO)	Stream Flow Direction (VHB)	Road (VTrans)
		Natural Resources Study Area (VHB)	Found Culvert (VHB)	2 ft. Contours (VCGI)
				Parcel Boundary (VELCO/VHB)

Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 16 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024





July 24, 2024

IMPACT ID: GE-106
WETLAND IMPACT FOR CONSTRUCTION

PERMANENT WETLAND IMPACT: 0 SF
TEMPORARY CONSTRUCTION MATTING: 31645 SF
STRUCTURE REPLACEMENT IMPACT: 15 SF

Cline Road LLC

TOWN OF GEORGIA

GE-106 (2)

Sheet 18

0 100 Feet

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Therrien, 7/24/2024

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Therrien, 7/24/2024)

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|---|---|---|--|---|------------------------------------|---|---------------------------------------|---|-----------------------------|
|  | Permanent Wetland Impact (VHB) |  | Install New Crossing Structure - Permanent Stream Impact (VHB) |  | Proposed Structures (VELCO) |  | Delineated Wetland (Class) (VHB) |  | Town Boundary (VCGI) |
|  | Temporary Construction Matting (VHB) |  | Use Existing Crossing Structure - No Impact (VHB) |  | Proposed Guy Anchors (VELCO) |  | Wetland Extends (VHB) |  | Parcel Boundary (VCGI) |
|  | Temporary Bridge Span (VHB) |  | Use Existing Crossing Structure - No Impact (VHB) |  | Existing Structure (VELCO) |  | Delineated Waters (Flow Regime) (VHB) |  | Road (VTrans) |
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Sources: VCGI (Vermont Center for Geographic Information - Various Dates); VTrans (Vermont Agency of Transportation - Various Dates); VELCO (Vermont Electric Power Company - 2022-2024); VHB (Vanasse Hangen Brustlin - 2024)

Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 18 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

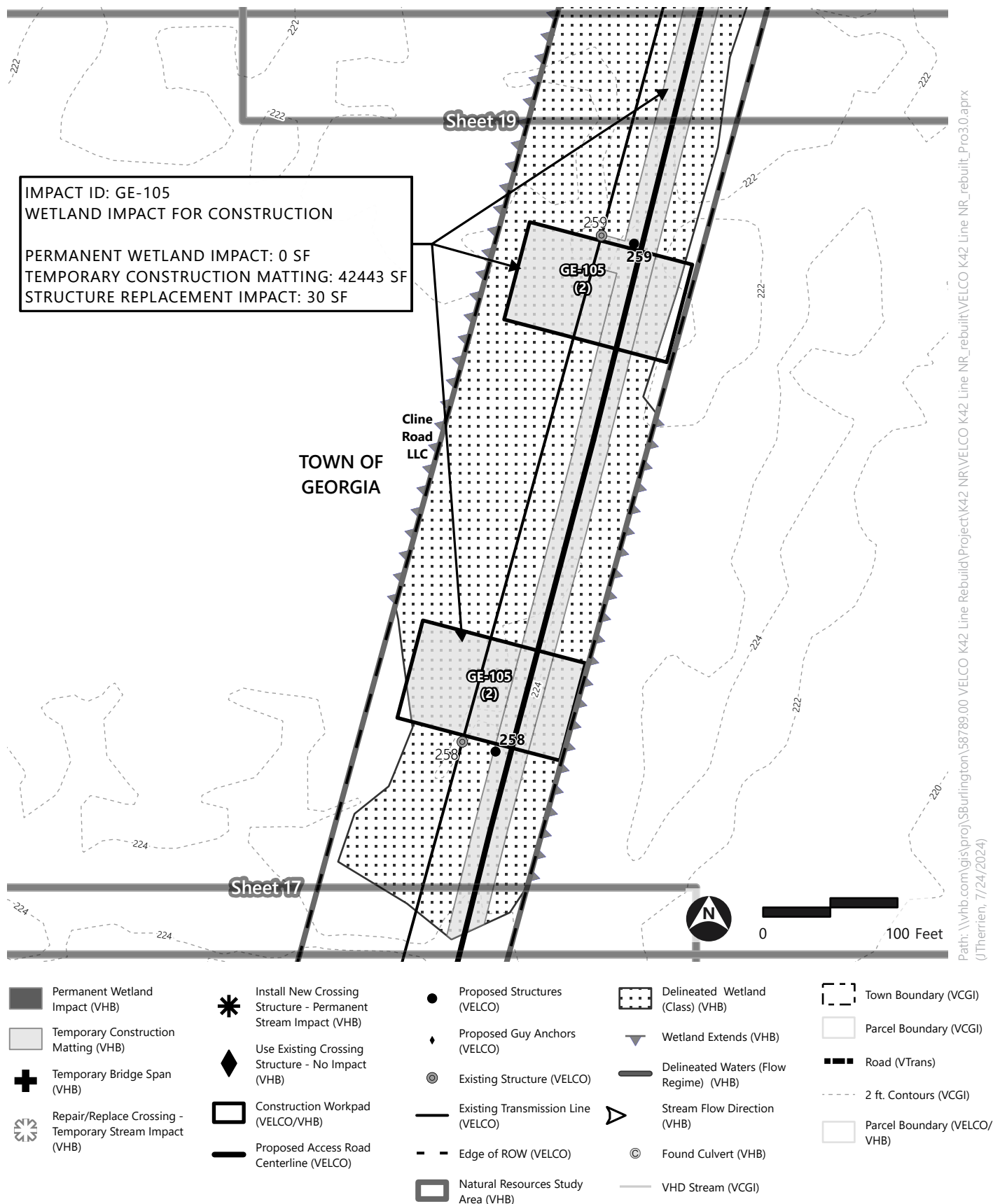


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 19 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

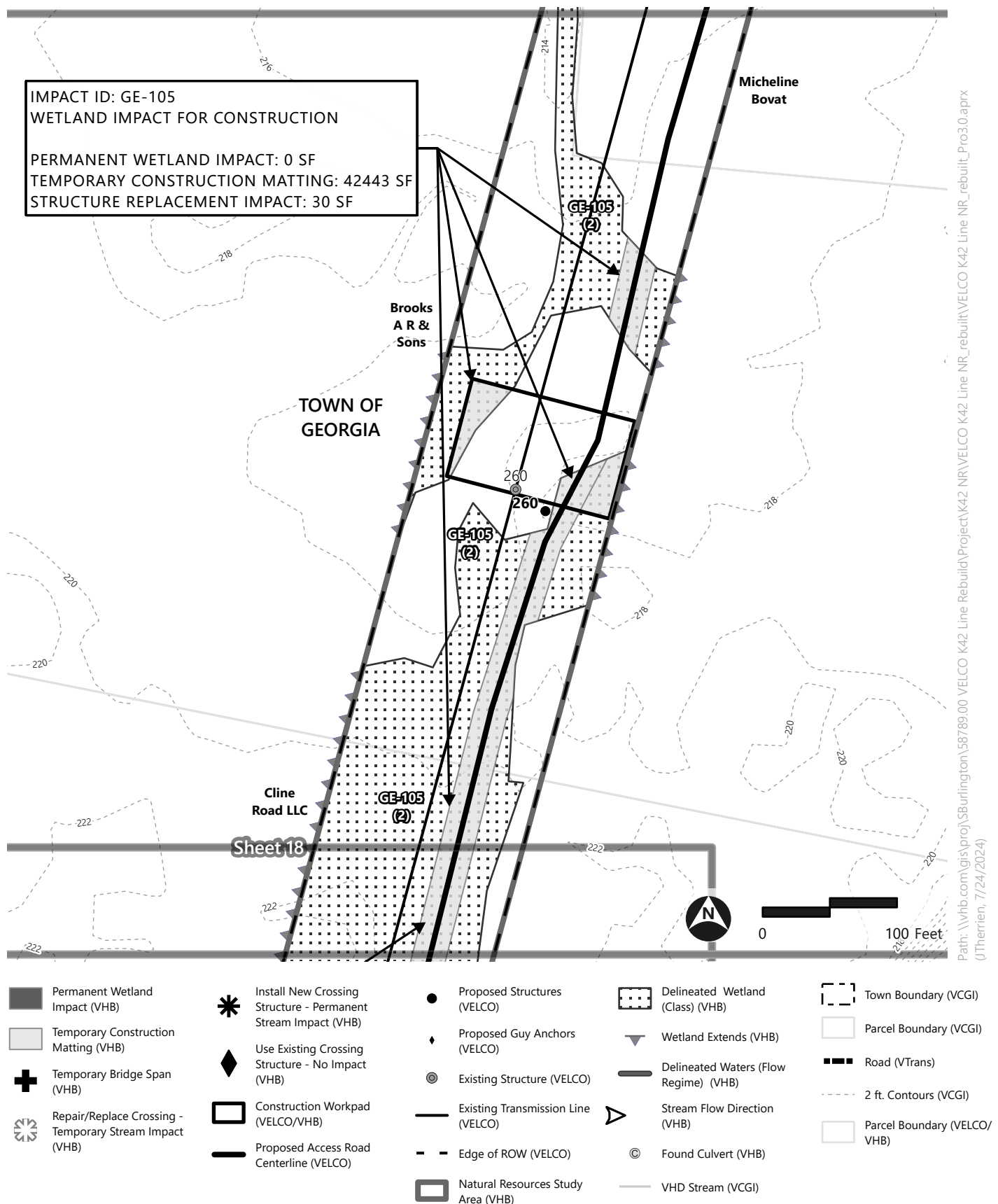


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 20 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

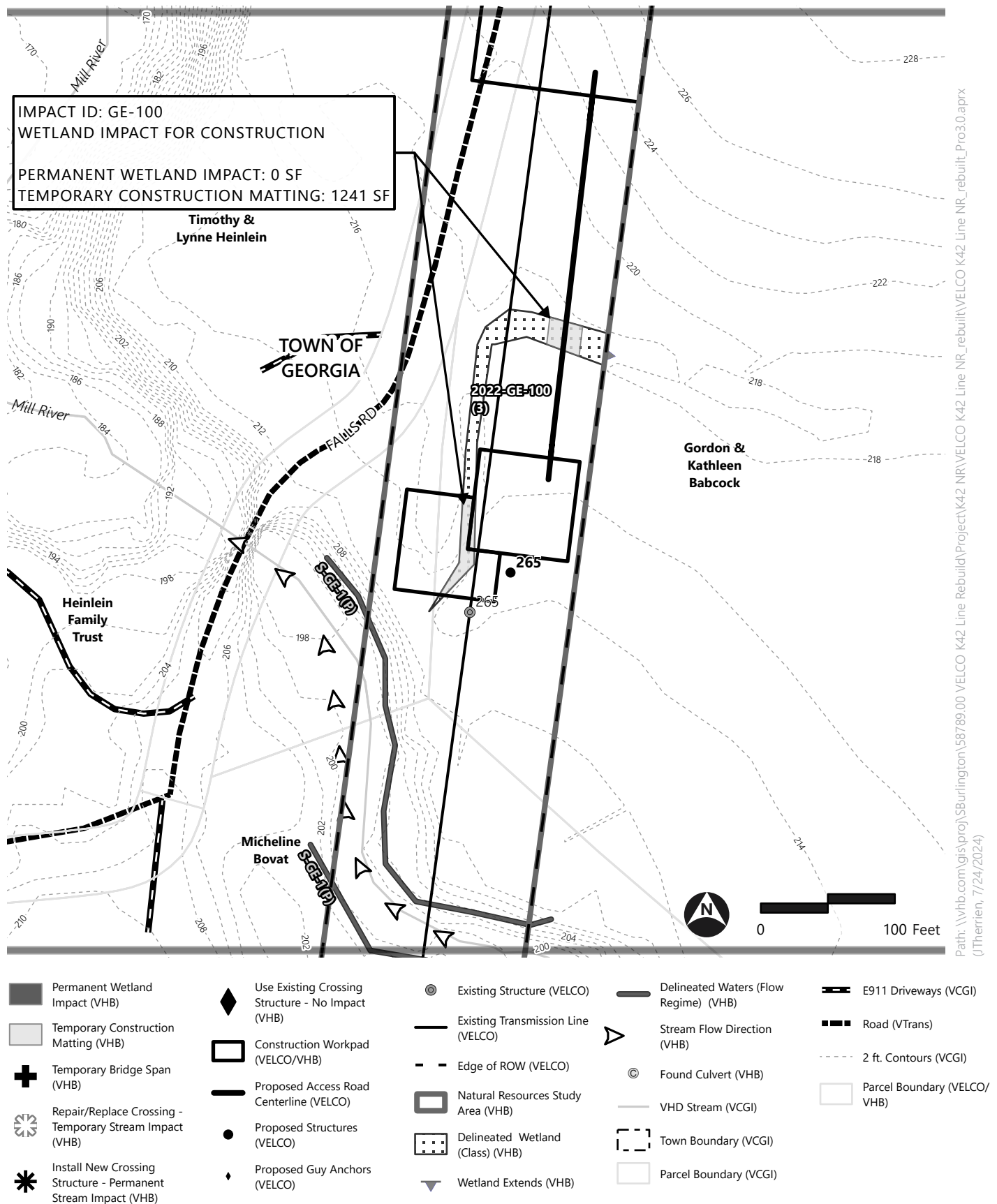


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 21 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

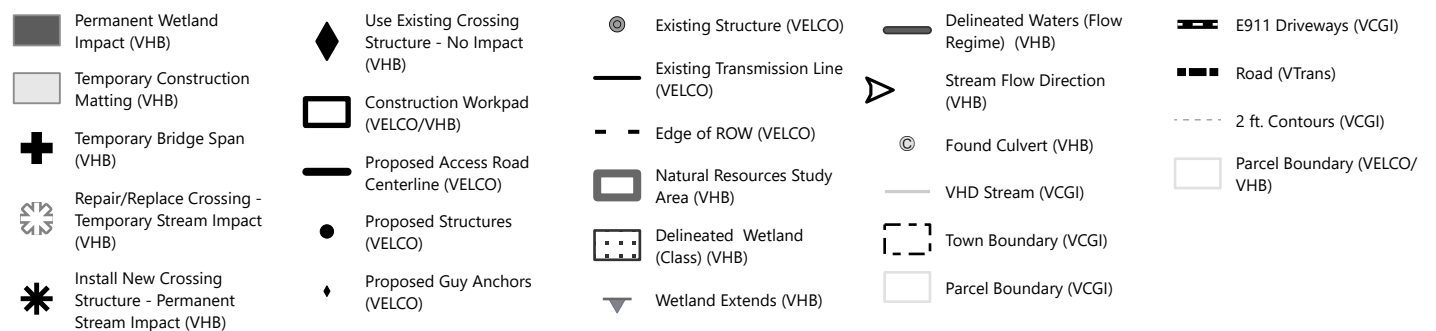
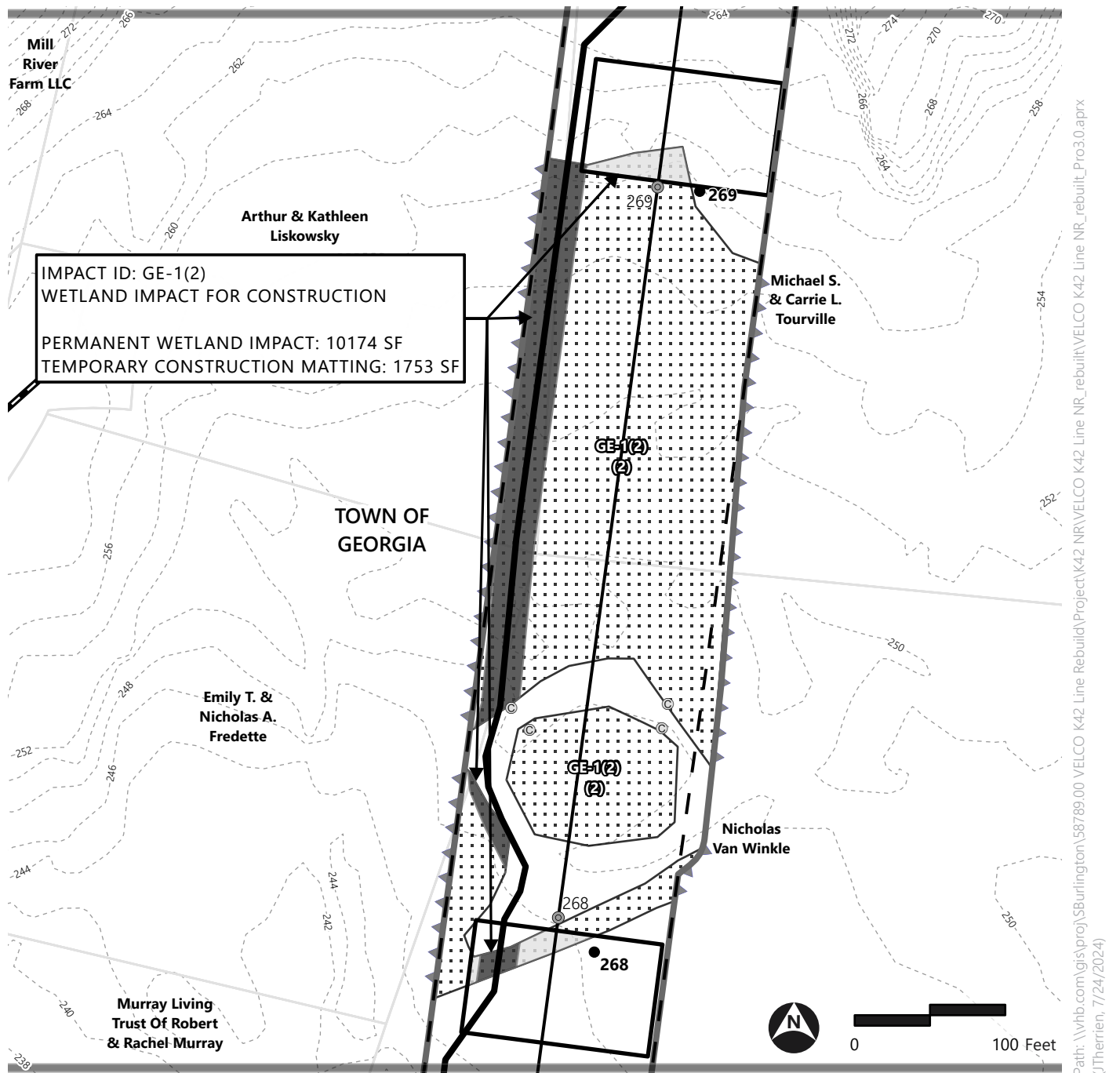
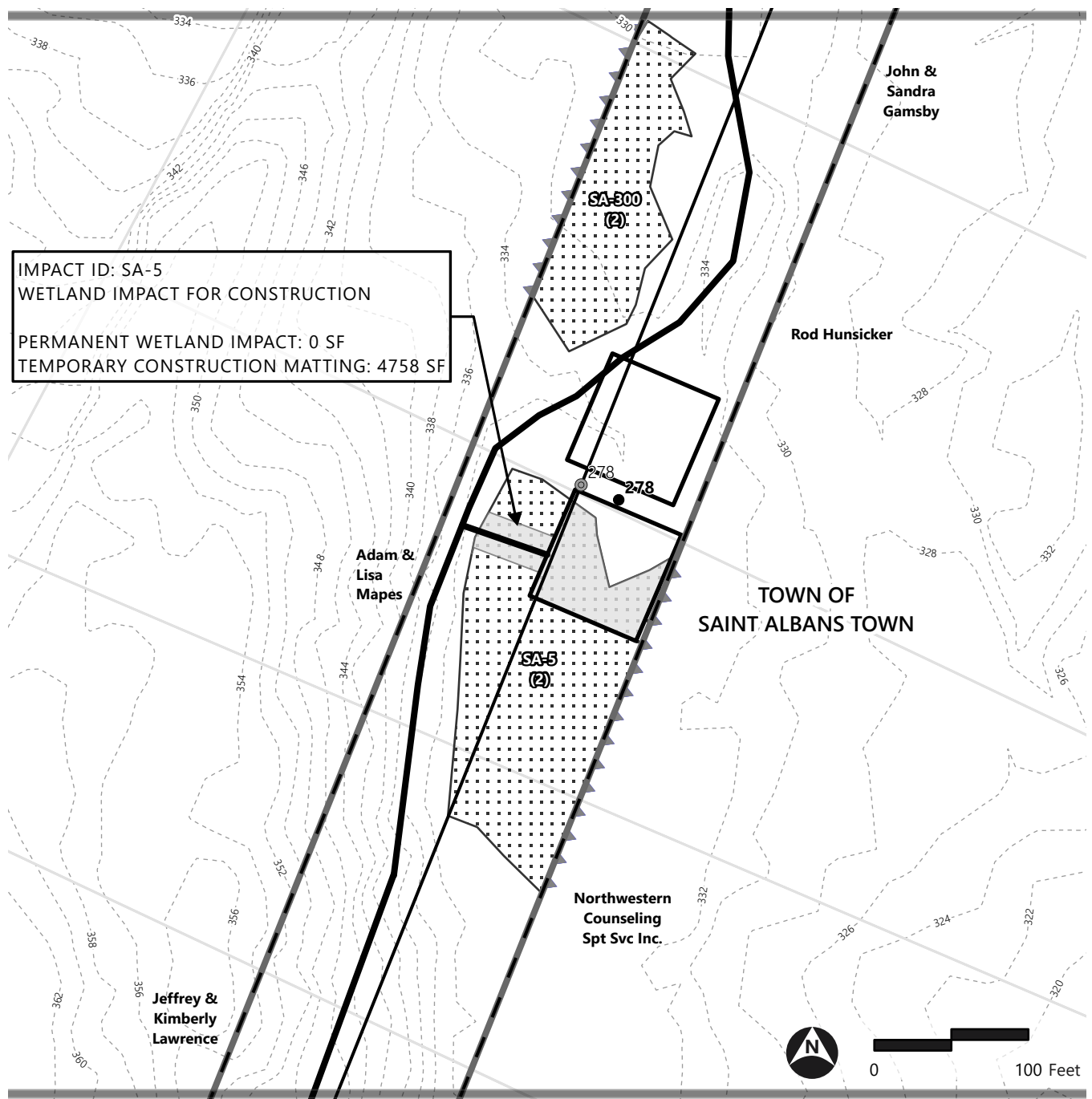


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 22 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024



Path: \\vhb.com\gis\proj\SBurlington\58789.00 VELCO K42 Line Rebuild\VELCO K42 Line NR_rebuild_Pro3.0.aprx
(JTherrien, 7/24/2024)

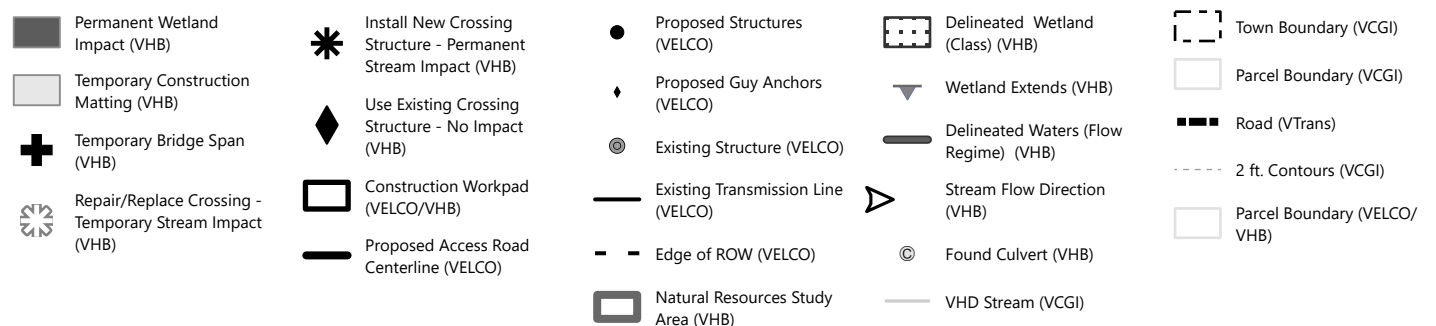
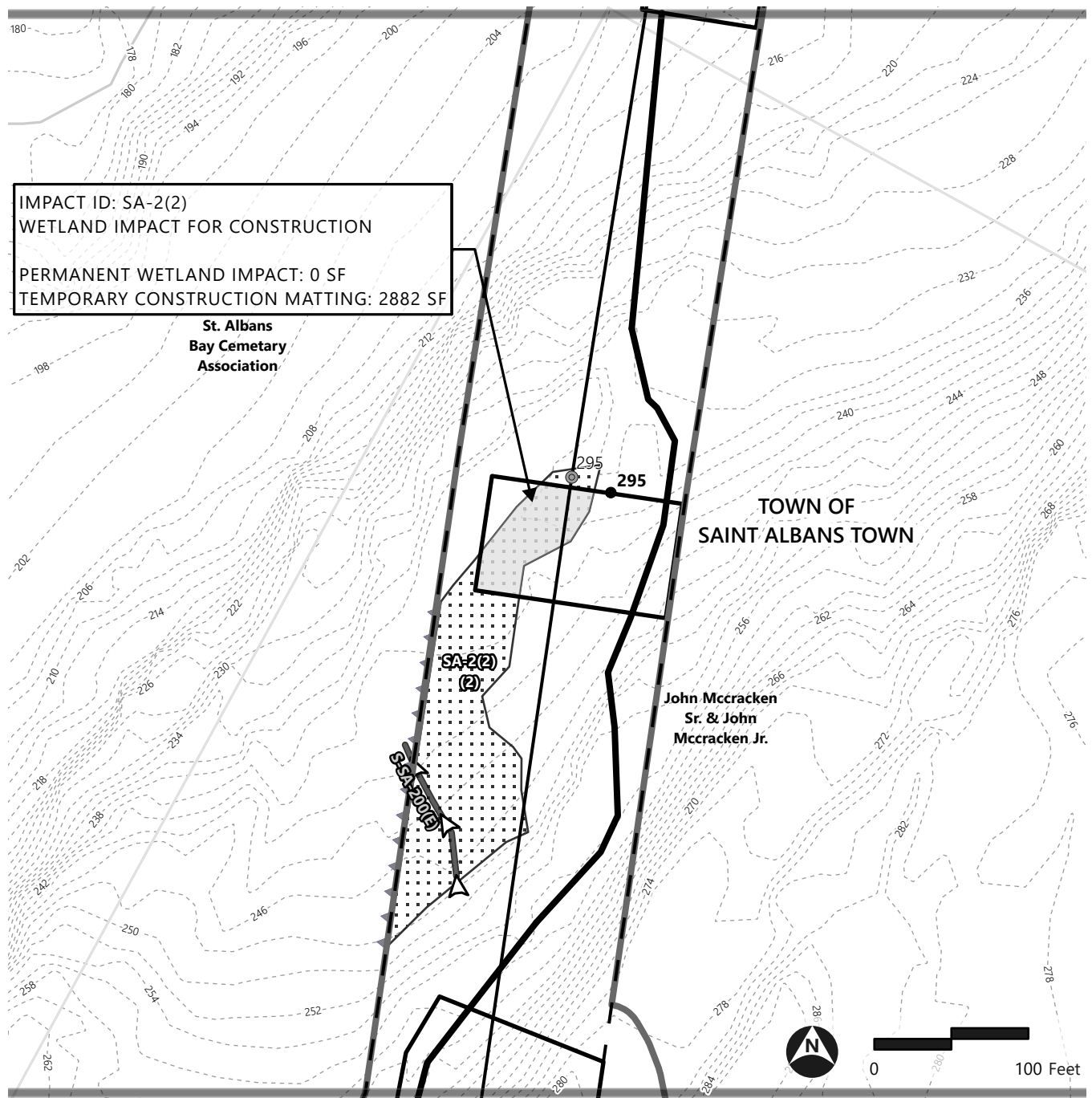
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|---|--|------------------------------------|---------------------------------------|-----------------------------|
| Permanent Wetland Impact (VHB) | Install New Crossing Structure - Permanent Stream Impact (VHB) | Proposed Structures (VELCO) | Delineated Wetland (Class) (VHB) | Town Boundary (VCGI) |
| Temporary Construction Matting (VHB) | Use Existing Crossing Structure - No Impact (VHB) | Proposed Guy Anchors (VELCO) | Wetland Extends (VHB) | Parcel Boundary (VCGI) |
| Temporary Bridge Span (VHB) | Construction Workpad (VELCO/VHB) | Existing Structure (VELCO) | Delineated Waters (Flow Regime) (VHB) | Road (VTrans) |
| Repair/Replace Crossing - Temporary Stream Impact (VHB) | Proposed Access Road Centerline (VELCO) | Existing Transmission Line (VELCO) | Stream Flow Direction (VHB) | 2 ft. Contours (VCGI) |
| | | Edge of ROW (VELCO) | Found Culvert (VHB) | Parcel Boundary (VELCO/VHB) |
| | | Natural Resources Study Area (VHB) | VHD Stream (VCGI) | |

Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 23 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024





July 24, 2024

IMPACT ID: SA-5(2)
WETLAND IMPACT FOR CONSTRUCTION

PERMANENT WETLAND IMPACT: 5510 SF
TEMPORARY CONSTRUCTION MATTING: 6943 SF
STRUCTURE REPLACEMENT IMPACT: 15 SF

SA-5(2)
(2)

SA-5(2)
(2)

Diane Montagne

Eugene M. Lareau Trust

TOWN OF SAINT ALBANS TOWN

0 100 Feet

Path: \\vhb.com\gis\proj\SBurlington\58789.00 VELCO K42 Line Rebuild\Project\K42 NR\VELCO K42 Line NR_rebuild\VELCO K42 Line NR_rebuild_Pro3.0.aprx
therrien, 7/24/2024

Path: \\vnb.com\gis\proj\S Burlington\58789.00 VELCO K42 Line Rebuild\Project\K42 NR\VELCO K42 Line NR_rebuild\Pro3.0.aprx
Therrien, 7/24/2024)

- | | | | | | | | | | |
|---|---|---|--|---|------------------------------------|---|---------------------------------------|---|-----------------------------|
|  | Permanent Wetland Impact (VHB) |  | Install New Crossing Structure - Permanent Stream Impact (VHB) |  | Proposed Structures (VELCO) |  | Delineated Wetland (Class) (VHB) |  | Town Boundary (VCGI) |
|  | Temporary Construction Matting (VHB) |  | Use Existing Crossing Structure - No Impact (VHB) |  | Proposed Guy Anchors (VELCO) |  | Wetland Extends (VHB) |  | Parcel Boundary (VCGI) |
|  | Temporary Bridge Span (VHB) |  | Use Existing Crossing Structure - No Impact (VHB) |  | Existing Structure (VELCO) |  | Delineated Waters (Flow Regime) (VHB) |  | Road (VTrans) |
|  | Repair/Replace Crossing - Temporary Stream Impact (VHB) |  | Construction Workpad (VELCO/VHB) |  | Existing Transmission Line (VELCO) |  | Stream Flow Direction (VHB) |  | 2 ft. Contours (VCGI) |
| | |  | Proposed Access Road Centerline (VELCO) |  | Edge of ROW (VELCO) |  | Found Culvert (VHB) |  | Parcel Boundary (VELCO/VHB) |
| | | | |  | Natural Resources Study Area (VHB) |  | VHD Stream (VCGI) | | |

Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 25 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

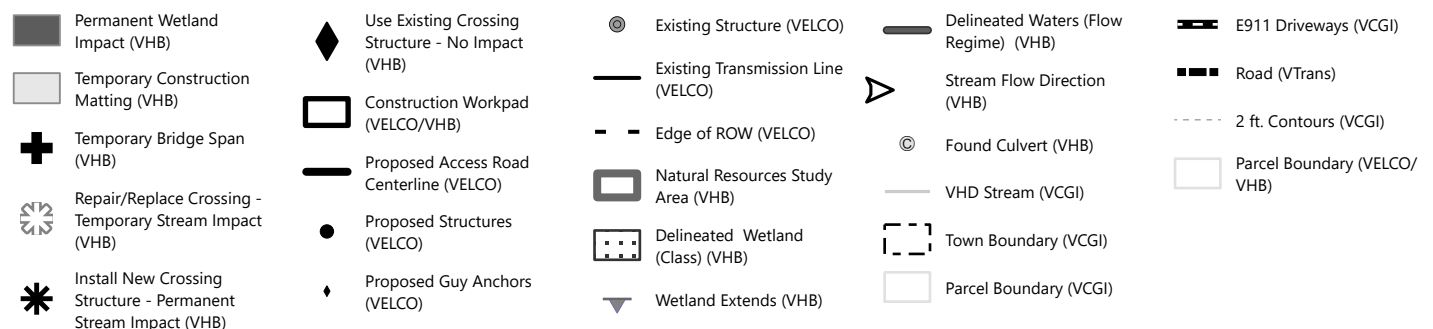
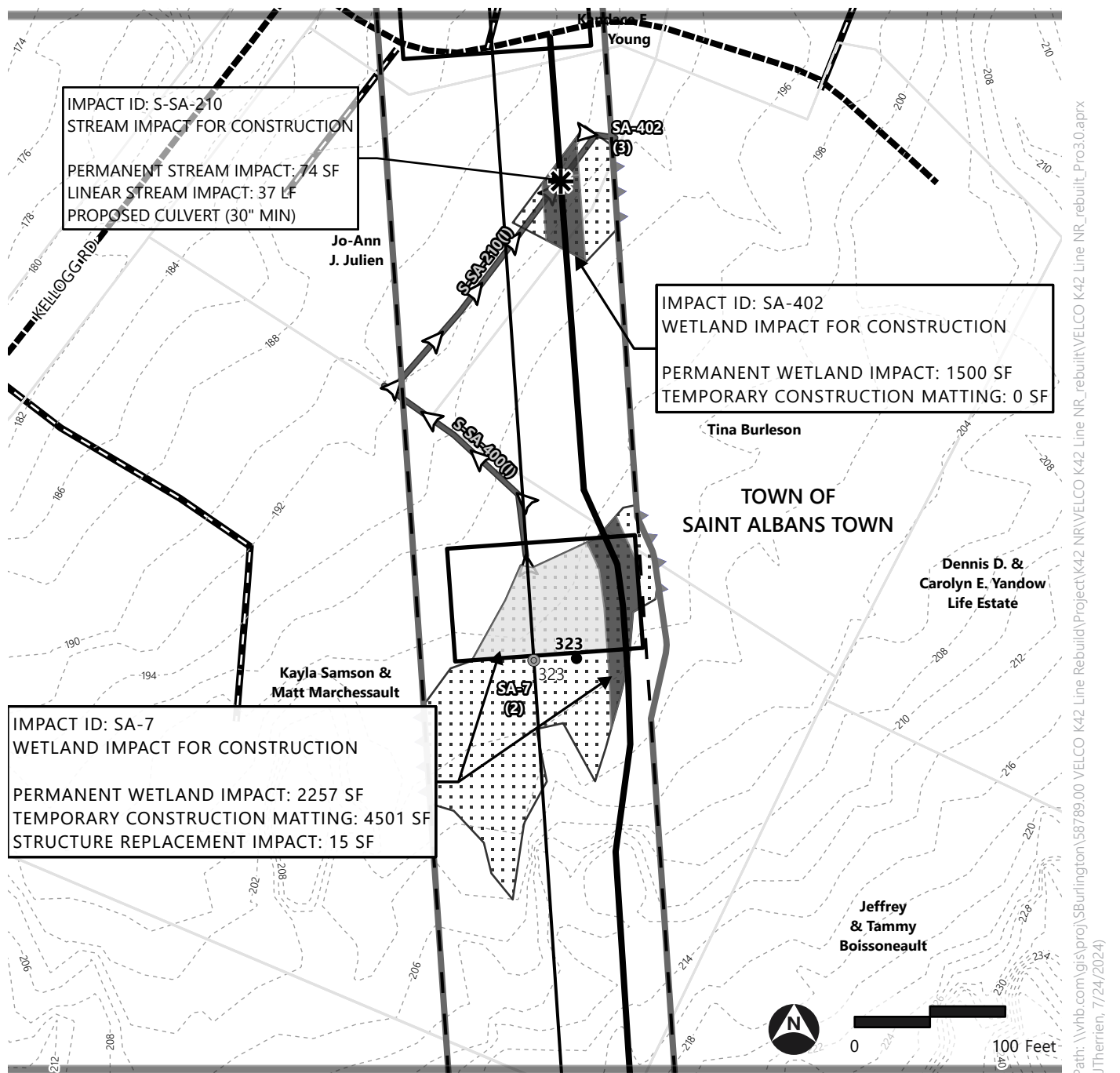


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 26 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

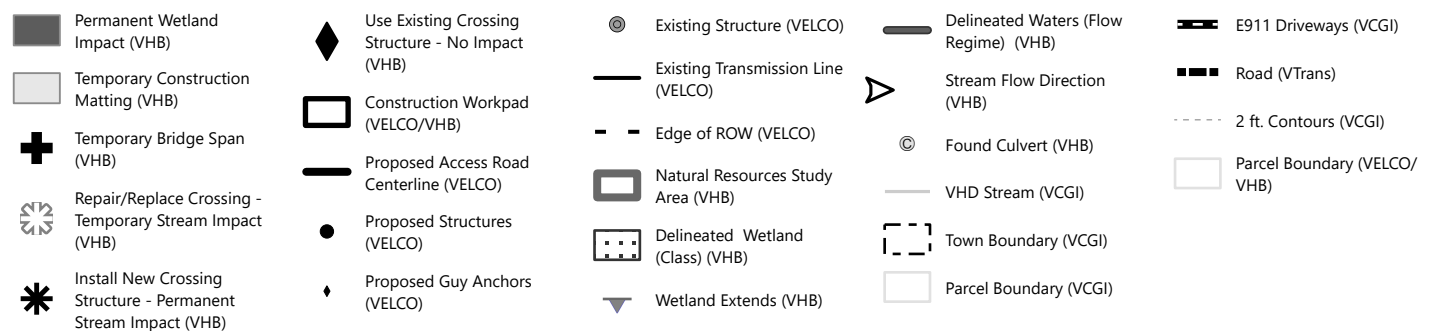
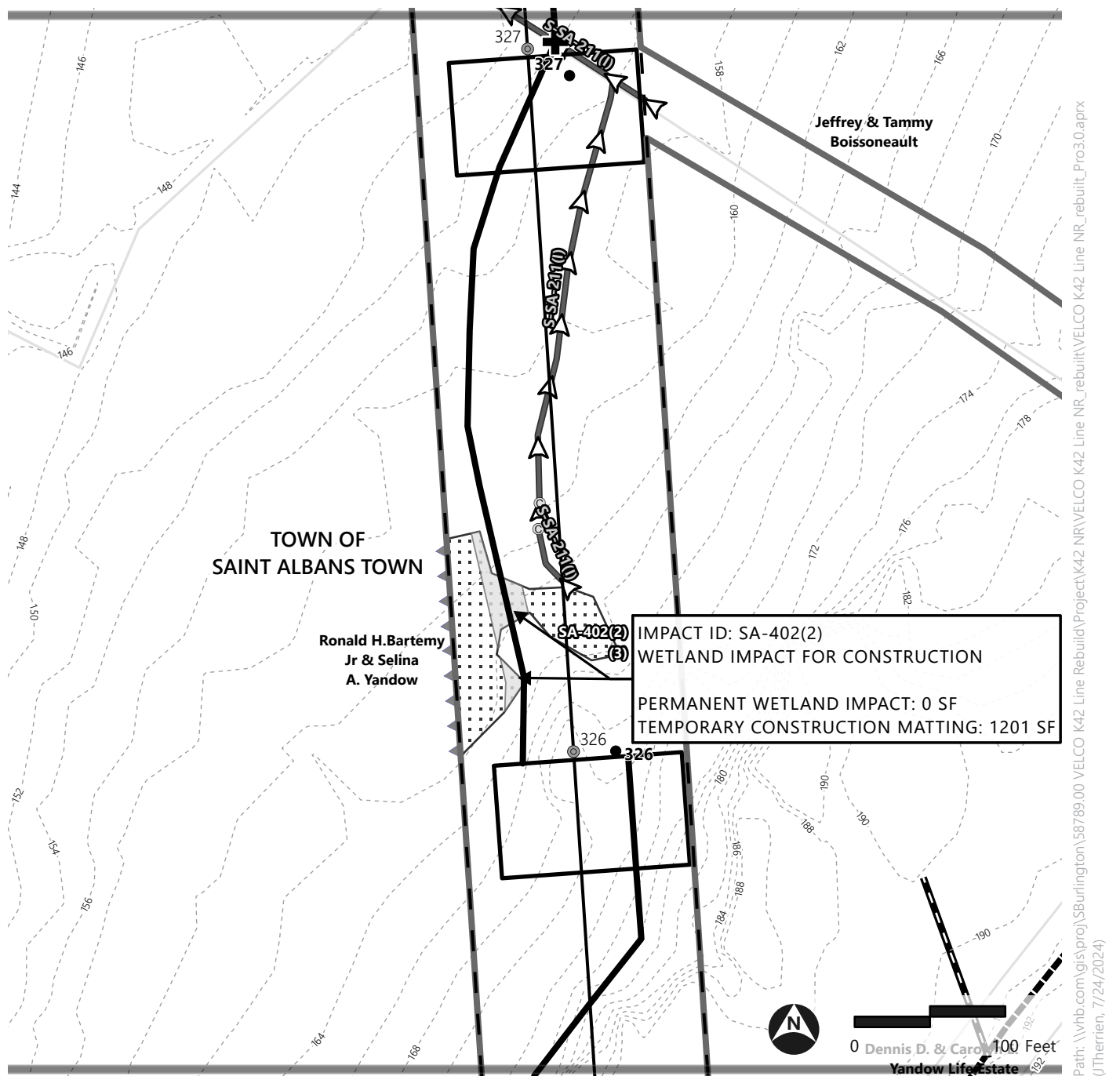
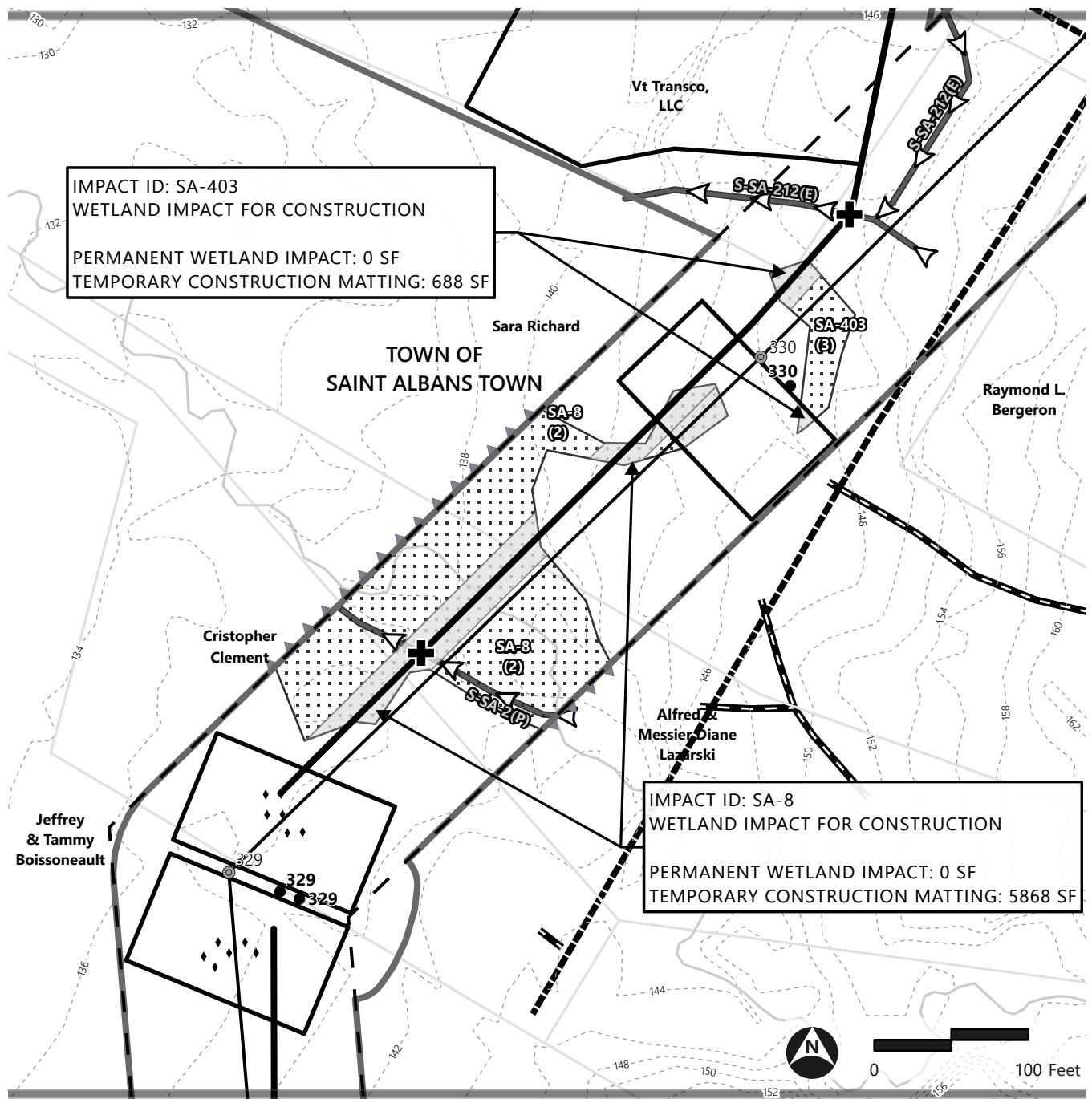


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 27 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024



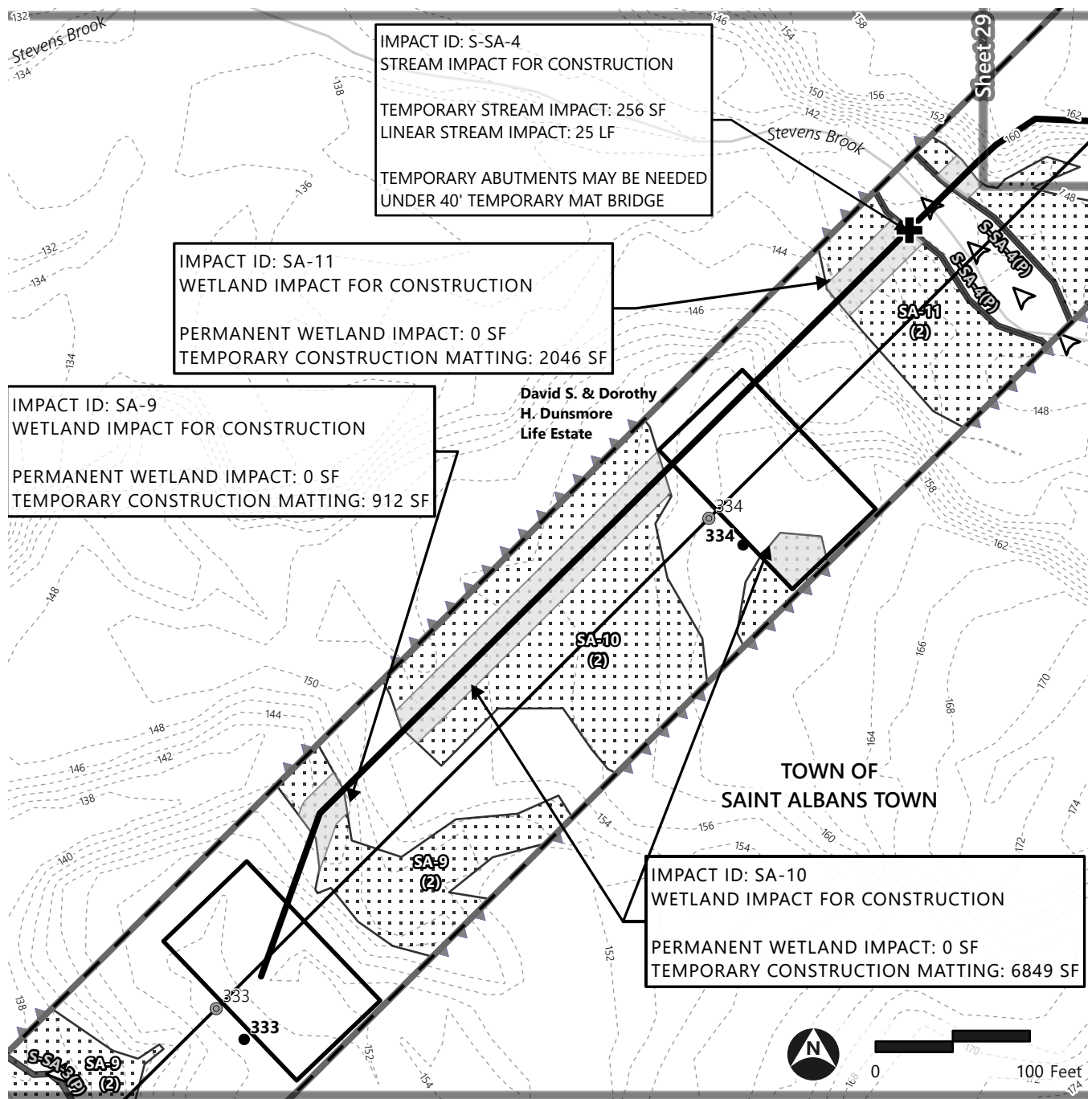
- | | | | | |
|--|---|------------------------------------|---------------------------------------|-----------------------------|
| Permanent Wetland Impact (VHB) | Use Existing Crossing Structure - No Impact (VHB) | Existing Structure (VELCO) | Delineated Waters (Flow Regime) (VHB) | E911 Driveways (VCGI) |
| Temporary Construction Matting (VHB) | Construction Workpad (VELCO/VHB) | Existing Transmission Line (VELCO) | Stream Flow Direction (VHB) | Road (VTrans) |
| Temporary Bridge Span (VHB) | Proposed Access Road Centerline (VELCO) | Edge of ROW (VELCO) | Found Culvert (VHB) | 2 ft. Contours (VCGI) |
| Repair/Replace Crossing - Temporary Stream Impact (VHB) | Proposed Structures (VELCO) | Natural Resources Study Area (VHB) | VHD Stream (VCGI) | Parcel Boundary (VELCO/VHB) |
| Install New Crossing Structure - Permanent Stream Impact (VHB) | Proposed Guy Anchors (VELCO) | Delineated Wetland (Class) (VHB) | Town Boundary (VCGI) | Parcel Boundary (VCGI) |
| | Wetland Extends (VHB) | | | |

Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 28 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024



- | | | | | |
|---|--|------------------------------------|---------------------------------------|-----------------------------|
| Permanent Wetland Impact (VHB) | Install New Crossing Structure - Permanent Stream Impact (VHB) | Proposed Structures (VELCO) | Delineated Wetland (Class) (VHB) | Town Boundary (VCGI) |
| Temporary Construction Matting (VHB) | Use Existing Crossing Structure - No Impact (VHB) | Proposed Guy Anchors (VELCO) | Wetland Extends (VHB) | Parcel Boundary (VCGI) |
| Temporary Bridge Span (VHB) | Construction Workpad (VELCO/VHB) | Existing Structure (VELCO) | Delineated Waters (Flow Regime) (VHB) | Road (VTrans) |
| Repair/Replace Crossing - Temporary Stream Impact (VHB) | Proposed Access Road Centerline (VELCO) | Existing Transmission Line (VELCO) | Stream Flow Direction (VHB) | 2 ft. Contours (VCGI) |
| | | Edge of ROW (VELCO) | Found Culvert (VHB) | Parcel Boundary (VELCO/VHB) |
| | | Natural Resources Study Area (VHB) | VHD Stream (VCGI) | |

Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 29 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

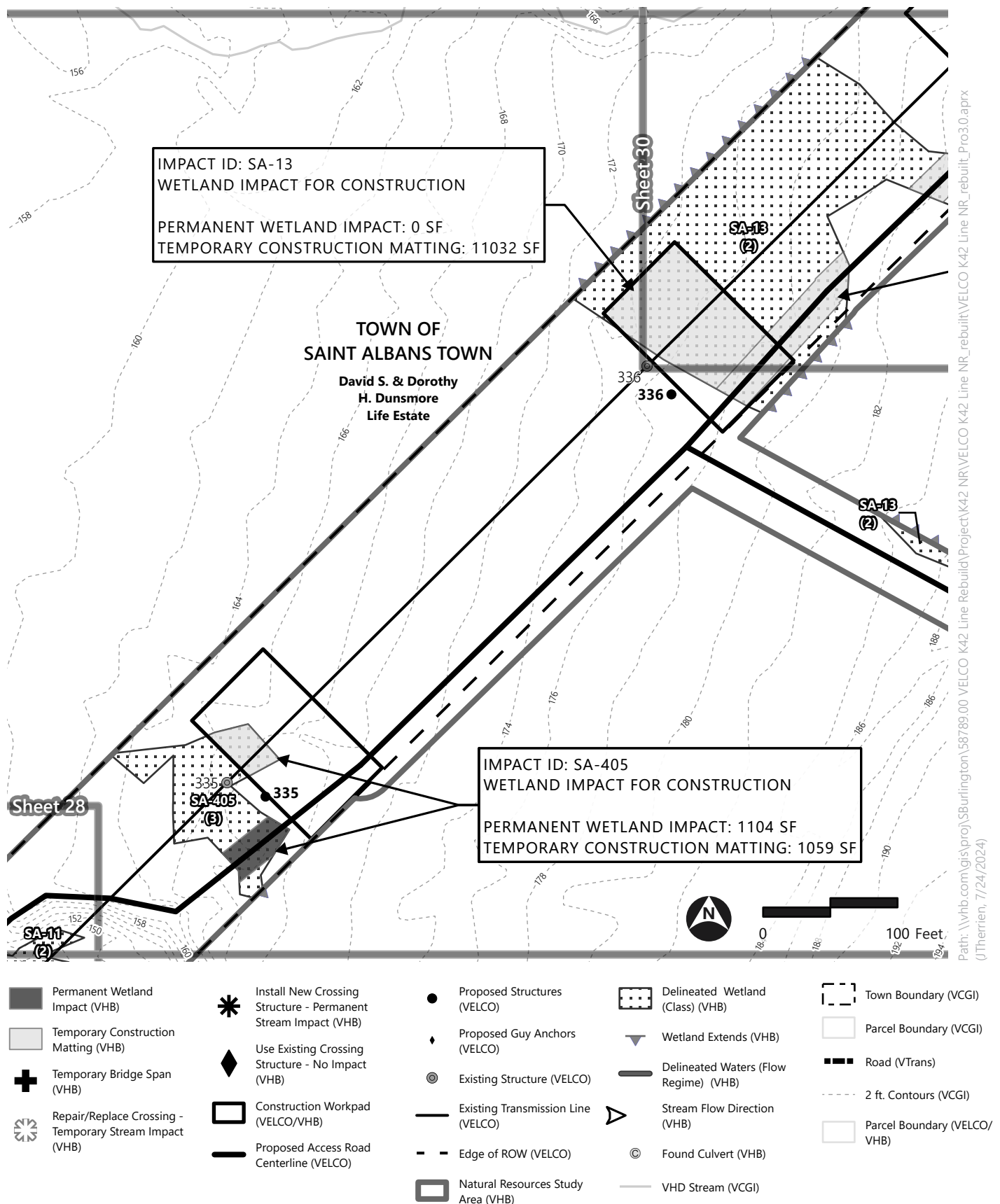


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 30 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

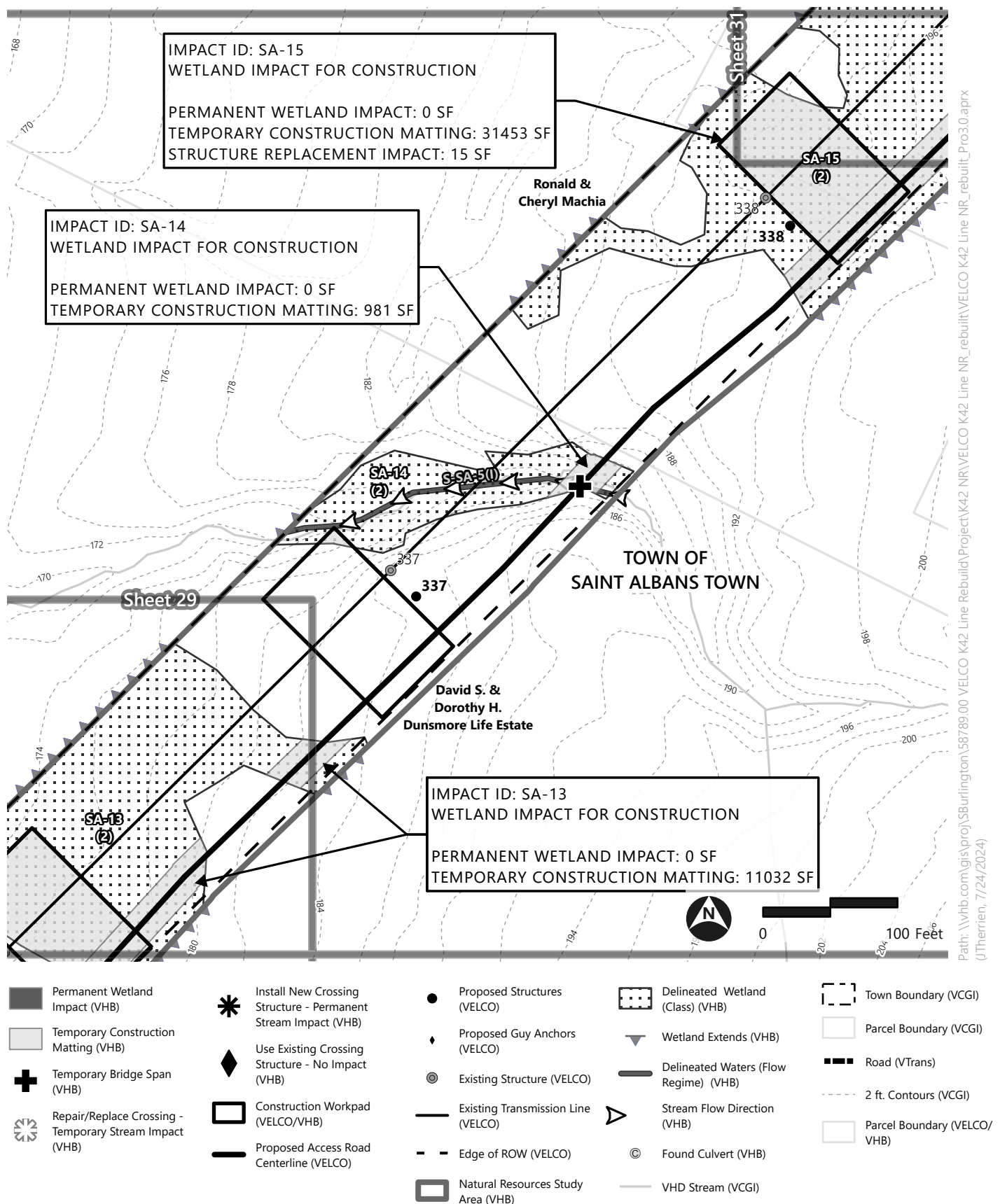


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 31 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

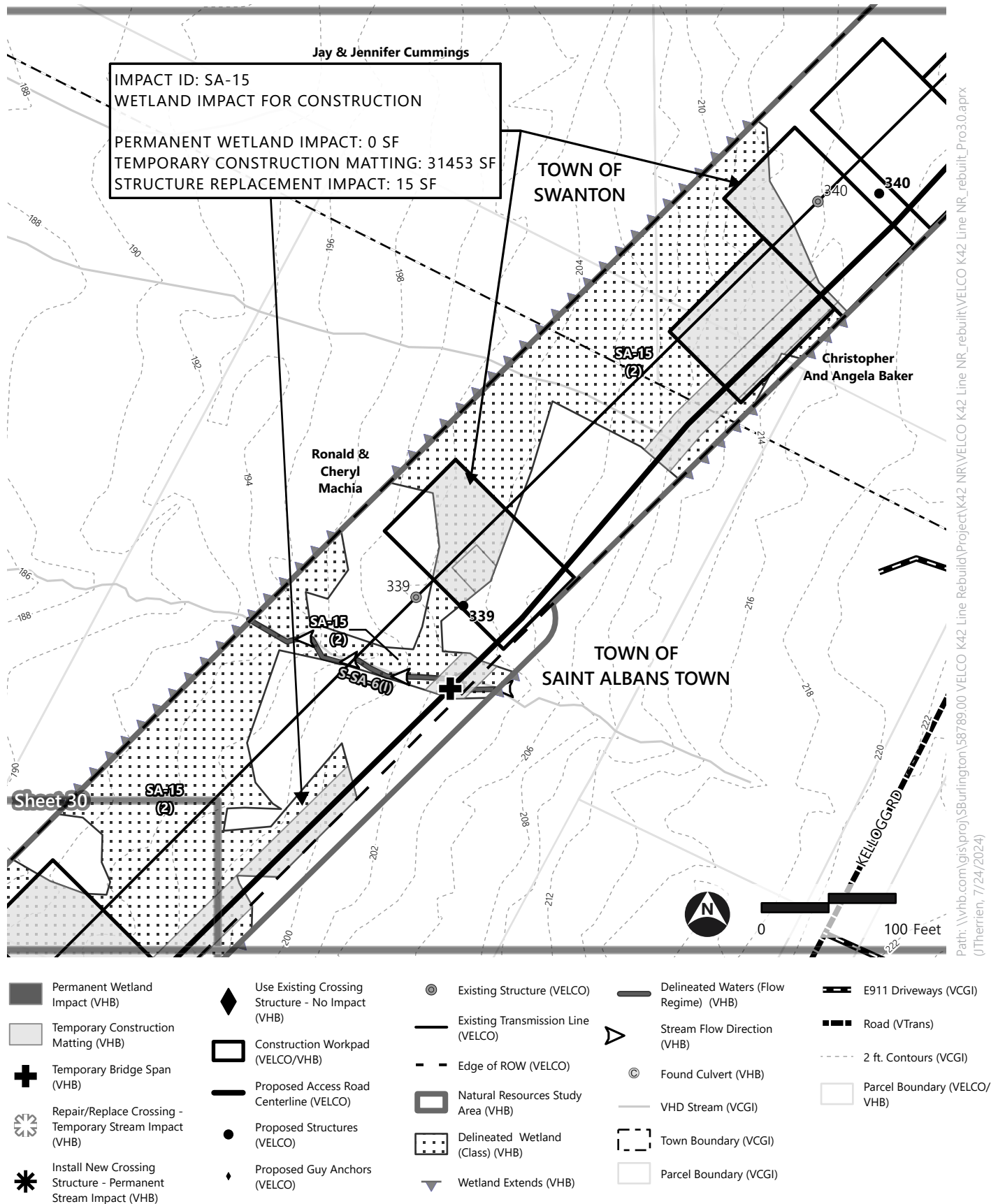


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 32 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

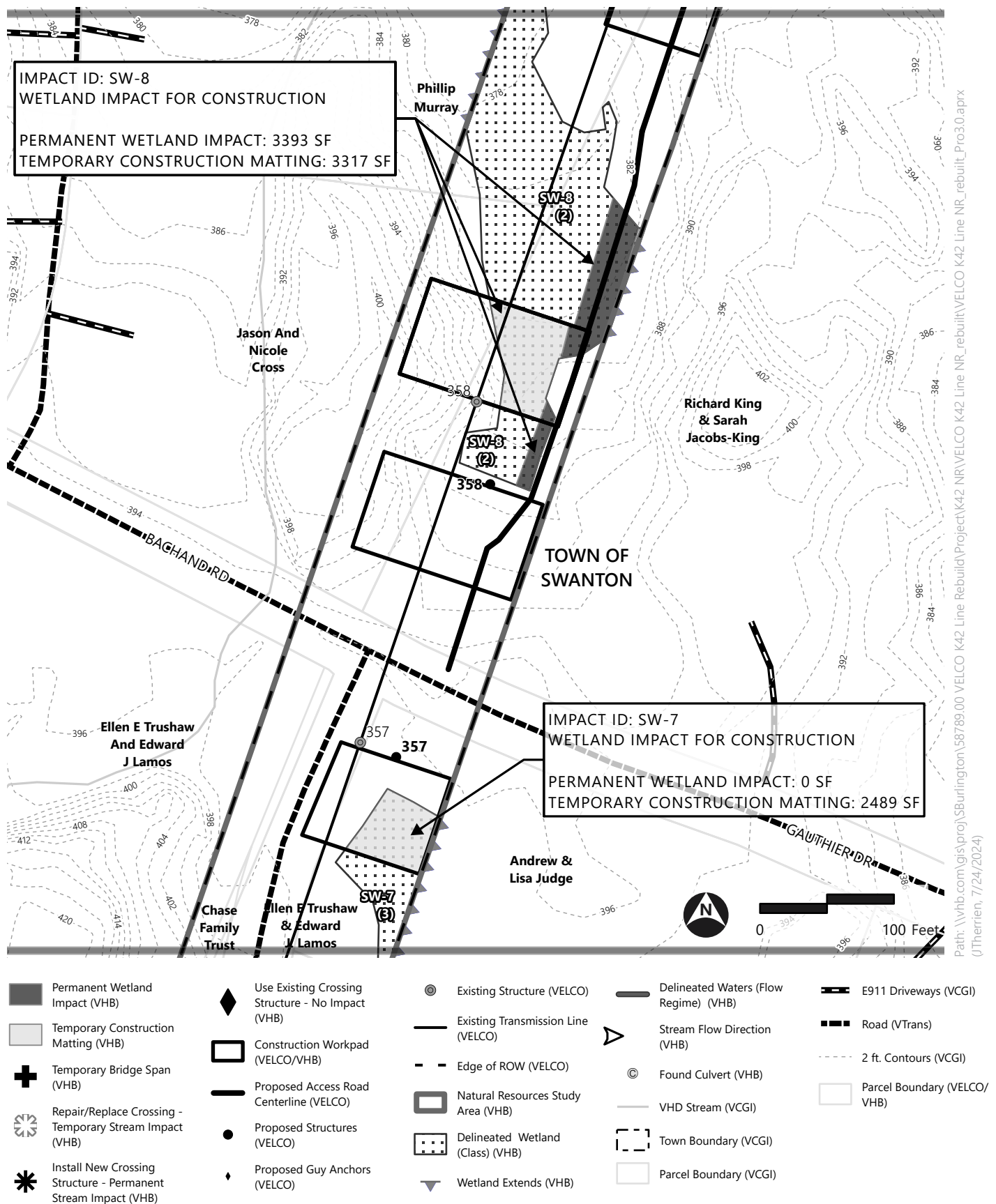


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 33 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |

Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

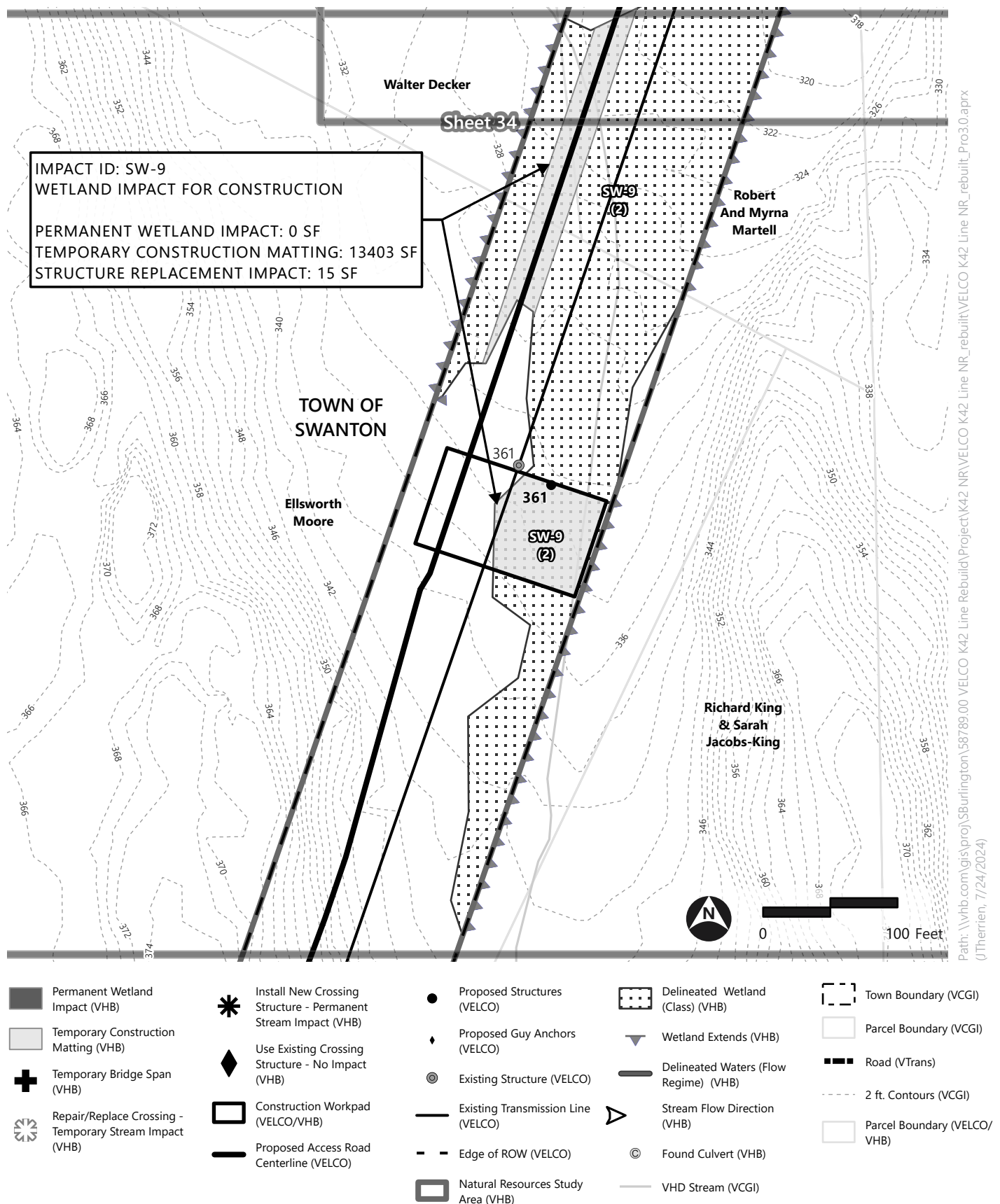


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 34 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

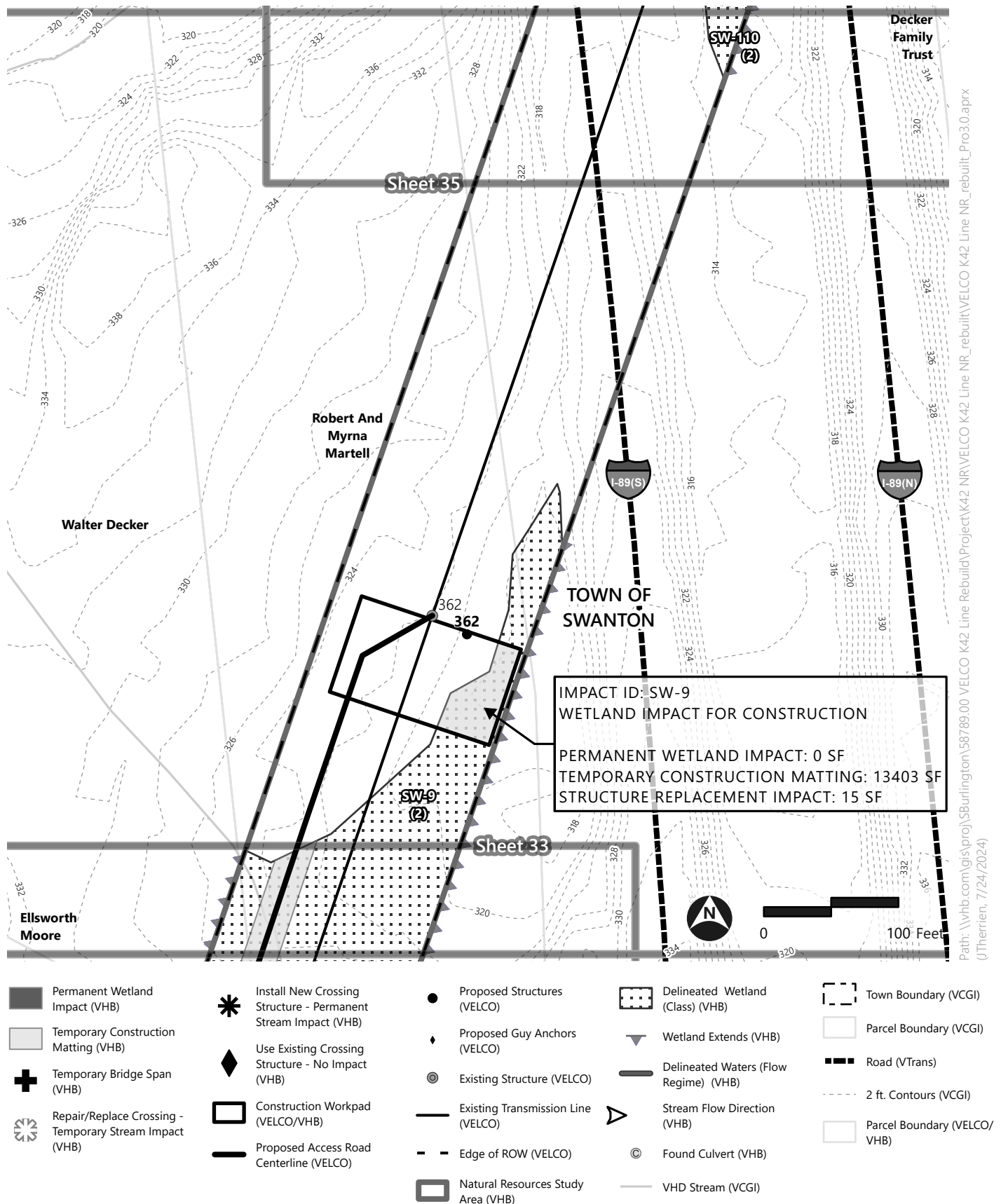
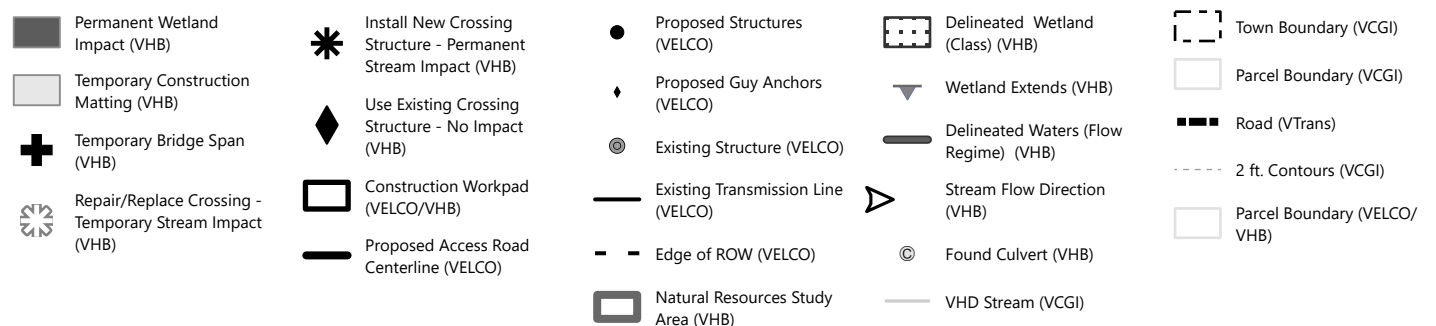
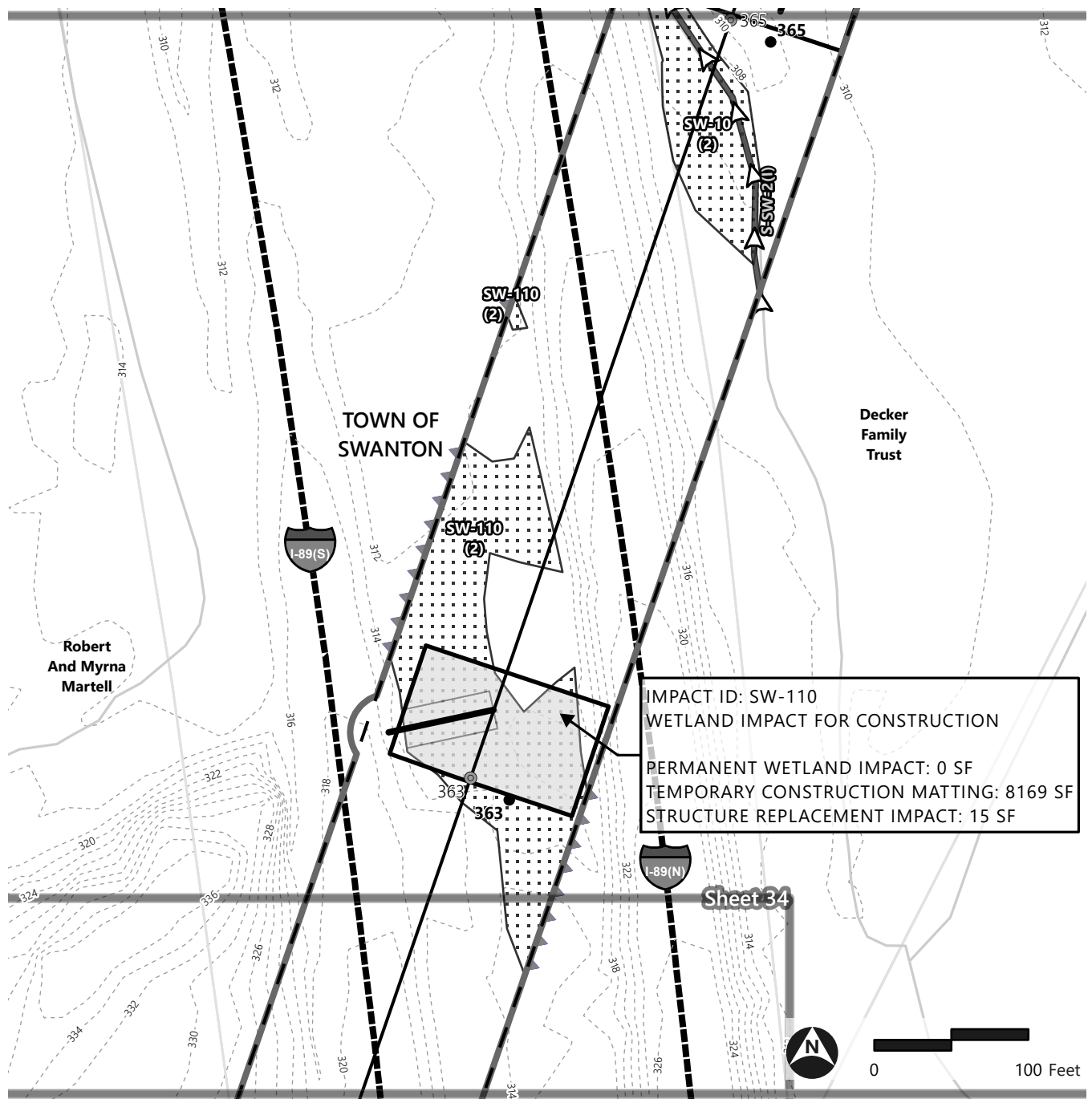


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 35 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024





July 24, 2024

IMPACT ID: SW-13
WETLAND IMPACT FOR CONSTRUCTION

PERMANENT WETLAND IMPACT: 0 SF
TEMPORARY CONSTRUCTION MATTING: 42981 SF
STRUCTURE REPLACEMENT IMPACT: 30 SF

Pleasant Acre Farms Llc C.O. Rene Bourdeau

TOWN OF SWANTON

Legend:

- Permanent Wetland Impact (VHB)** (Dark Gray Fill)
- Temporary Construction Matting (VHB)** (Light Gray Fill)
- Temporary Bridge Span (VHB)** (Black Plus Sign)
- Repair/Replace Crossing - Temporary Stream Impact (VHB)** (Black Star)
- Install New Crossing Structure - Permanent Stream Impact (VHB)** (Black Star)
- Use Existing Crossing Structure - No Impact (VHB)** (Black Diamond)
- Construction Workpad (VELCO/VHB)** (Black Outline)
- Proposed Access Road Centerline (VELCO)** (Black Line)
- Proposed Structures (VELCO)** (Black Circle)
- Proposed Guy Anchors (VELCO)** (Black Diamond)
- Existing Structure (VELCO)** (Black Circle with Center Dot)
- Existing Transmission Line (VELCO)** (Black Line)
- Edge of ROW (VELCO)** (Dashed Black Line)
- Natural Resources Study Area (VHB)** (Gray Outline)
- Delineated Wetland (Class) (VHB)** (Dotted Pattern)
- Wetland Extends (VHB)** (Triangle with Line)
- Delineated Waters (Flow Regime) (VHB)** (Thick Black Line)
- Stream Flow Direction (VHB)** (Open Triangle)
- Found Culvert (VHB)** (Circle with 'C')
- VHD Stream (VCGI)** (Thin Gray Line)
- Town Boundary (VCGI)** (Dashed Gray Line)
- Parcel Boundary (VCGI)** (Thin Gray Line)
- Road (VTrans)** (Thick Black Line)
- 2 ft. Contours (VCGI)** (Dashed Gray Line)
- Parcel Boundary (VELCO VHB)** (Thin Gray Line)

Scale: 0 to 100 Feet

North Arrow: N

Path: \\vhb.com\gis\pro\SBurlington\58789.00 VELCO K42 Line Rebuild\Project\K42 NR\VELCO K42 Line NR_rebuilt\VELCO K42 Line NR_rebuilt_Pro3.0.aprx (JTherrien, 7/24/2024)

Sources: VCGI (Vermont Center for Geographic Information - Various Dates); VTrans (Vermont Agency of Transportation - Various Dates); VELCO (Vermont Electric Power Company - 2022-2024); VHB (Vanasse Hangen Brustlin - 2024)

Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 37 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

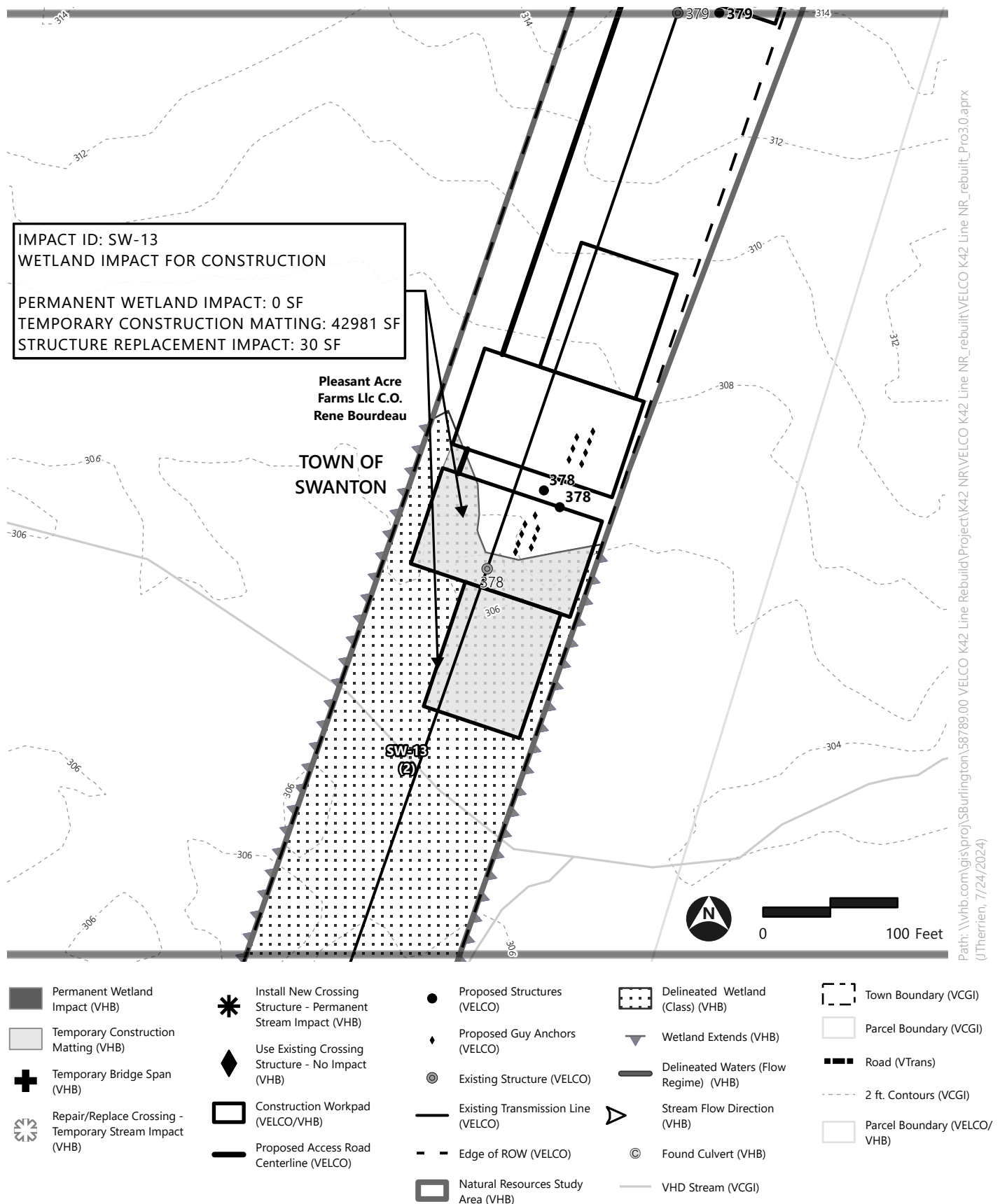


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 38 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

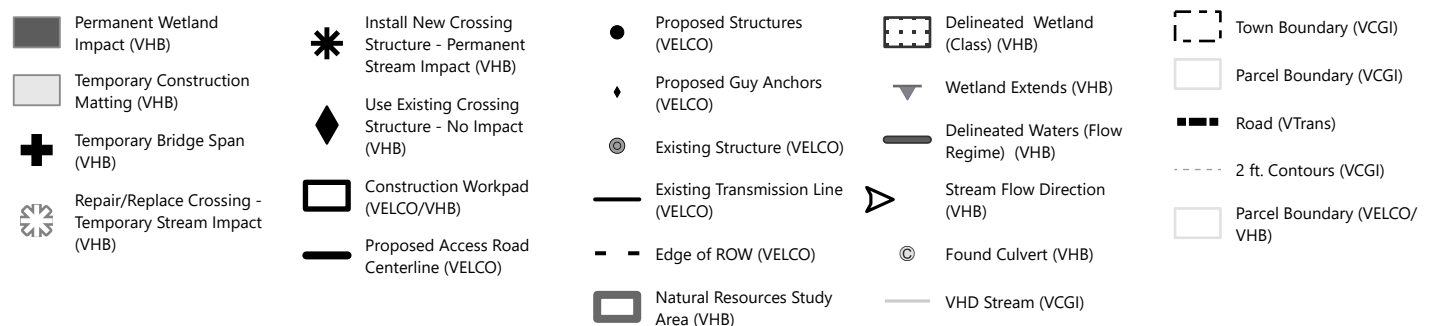
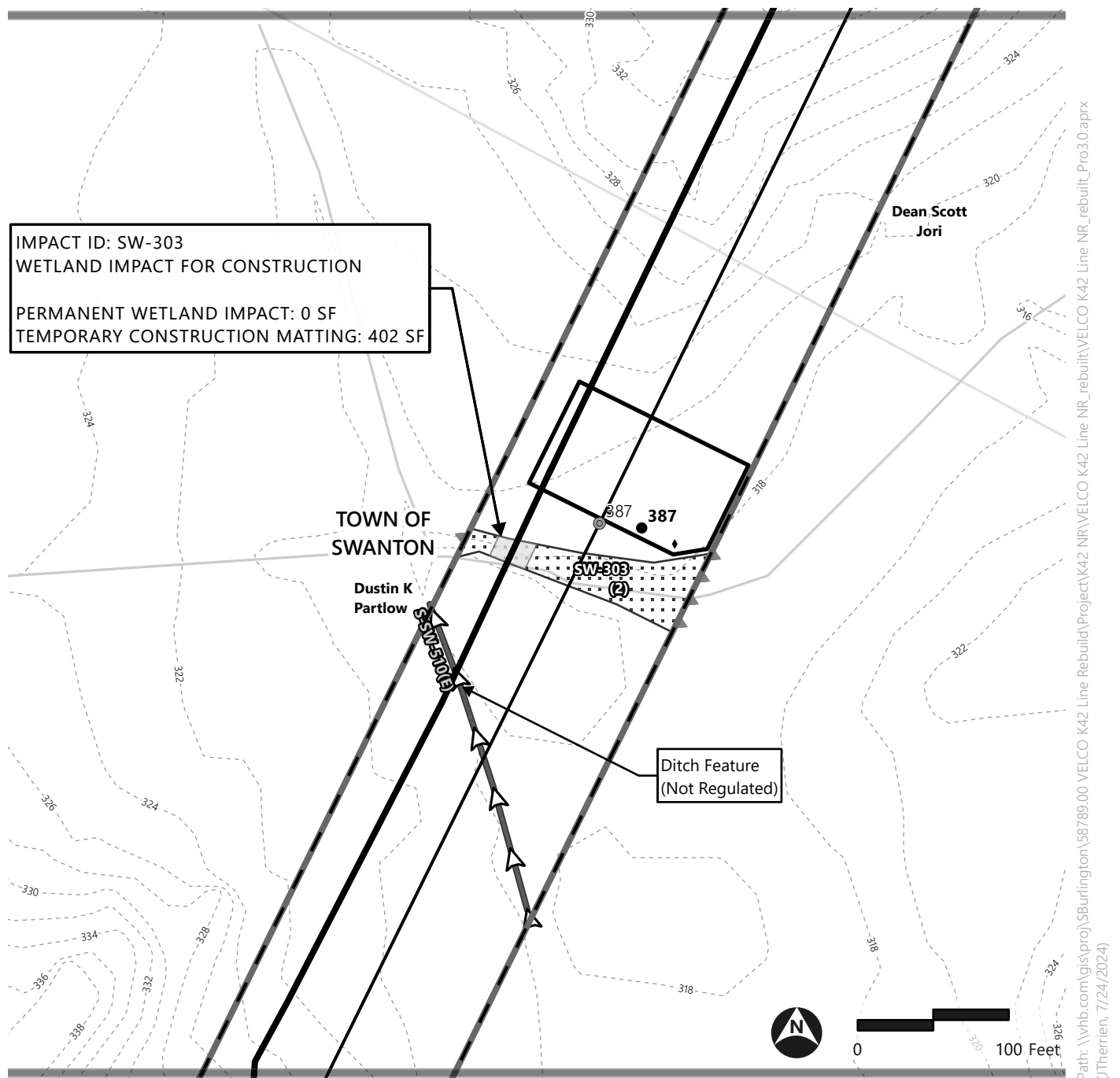


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 39 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

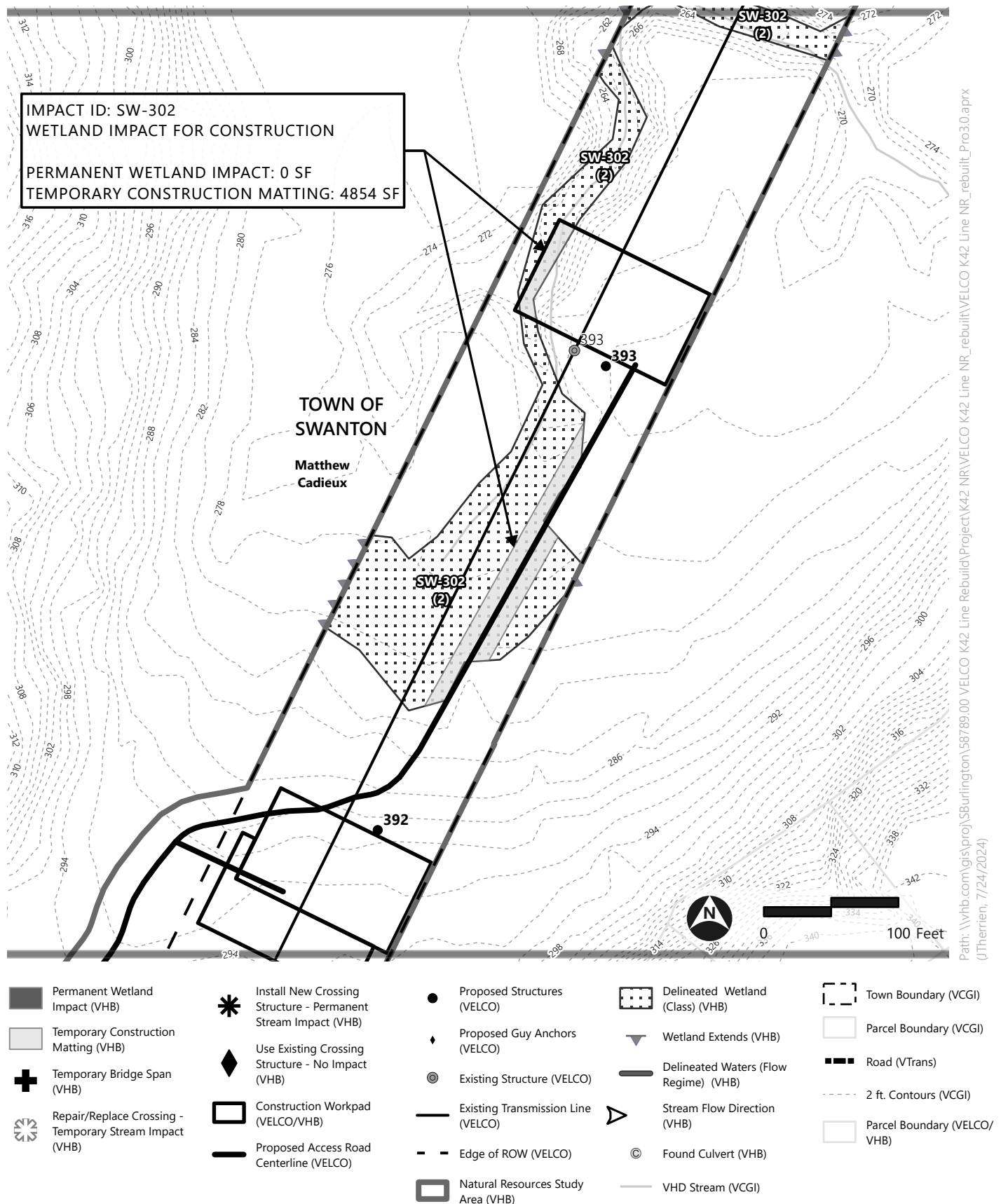


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 40 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

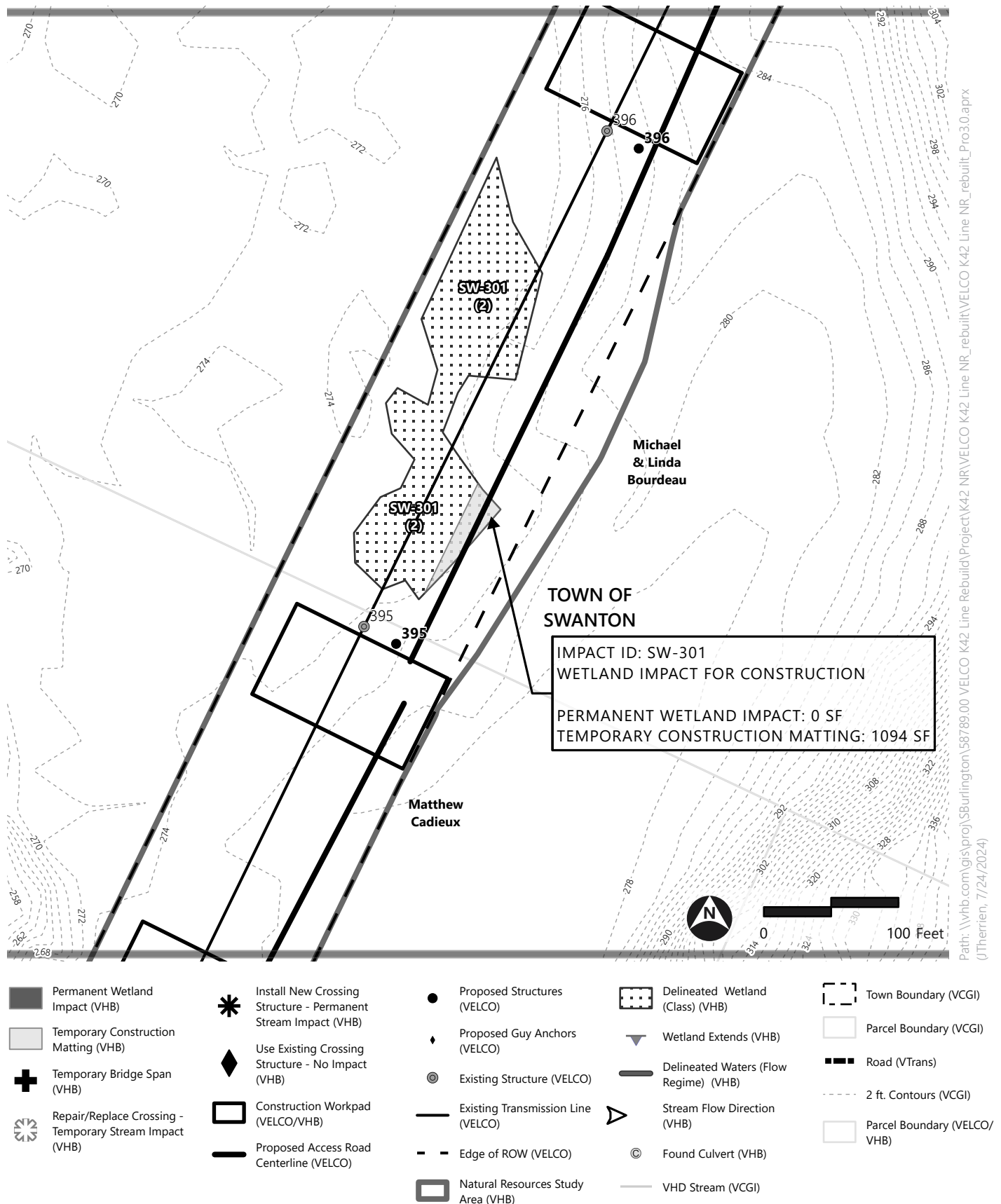


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 41 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

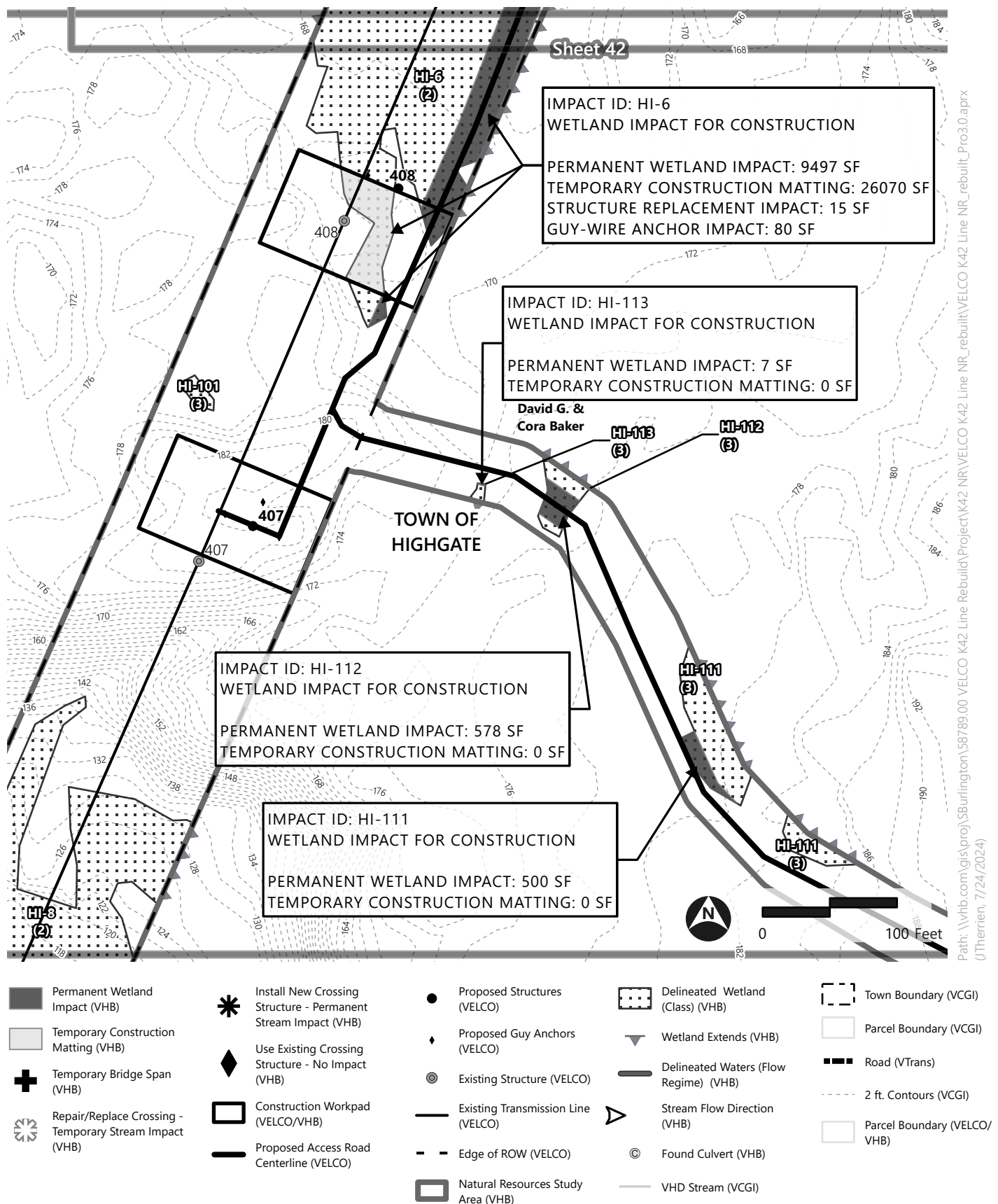


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 42 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

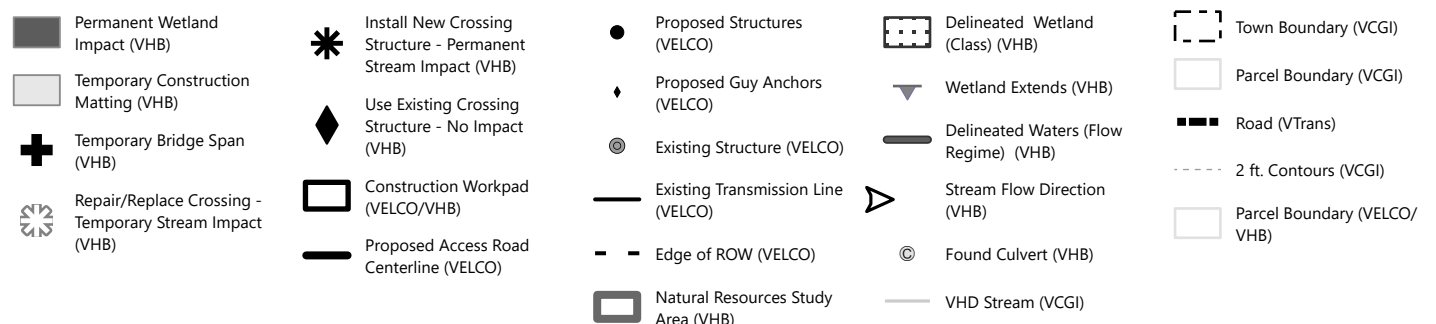
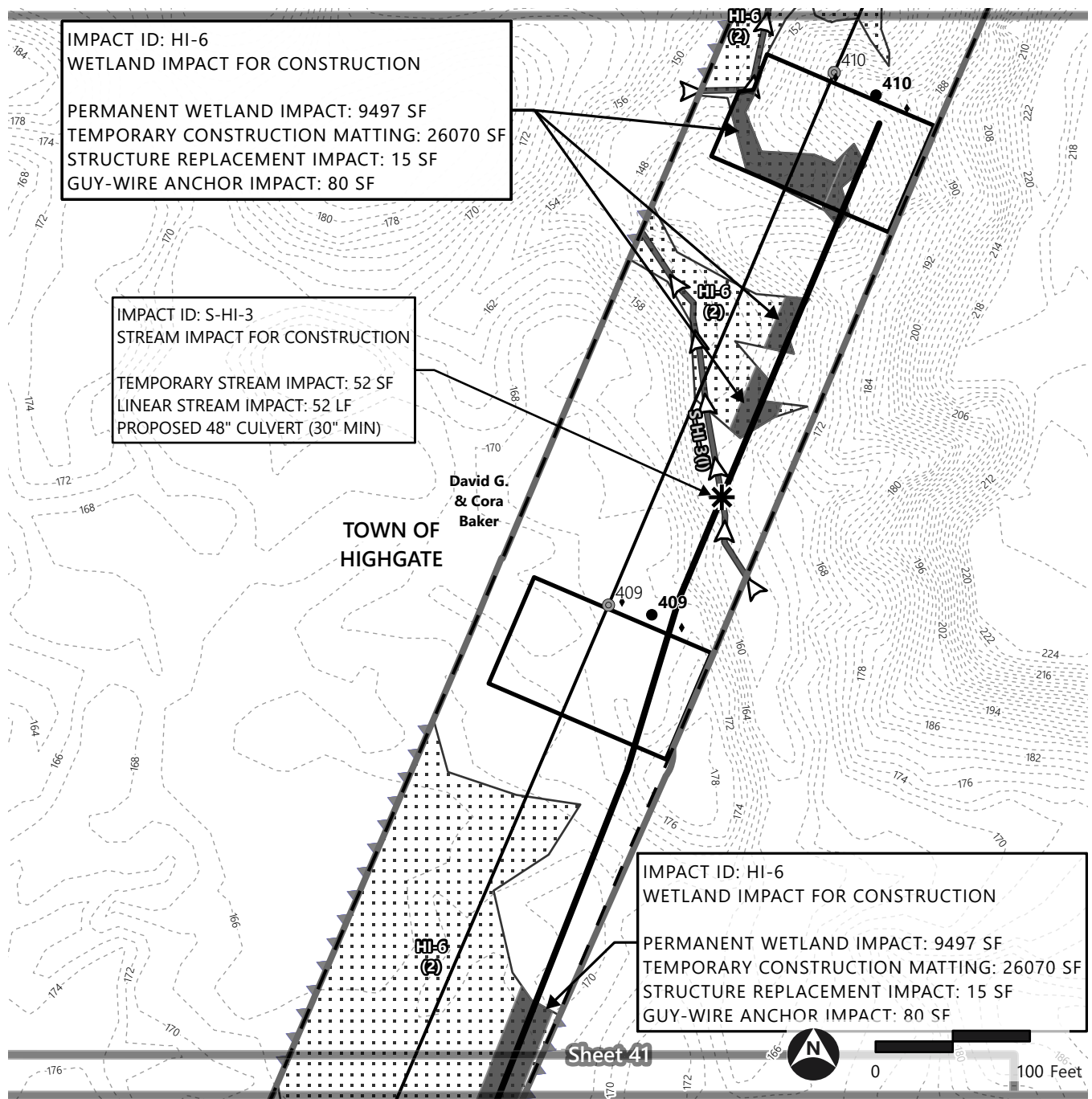


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 43 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

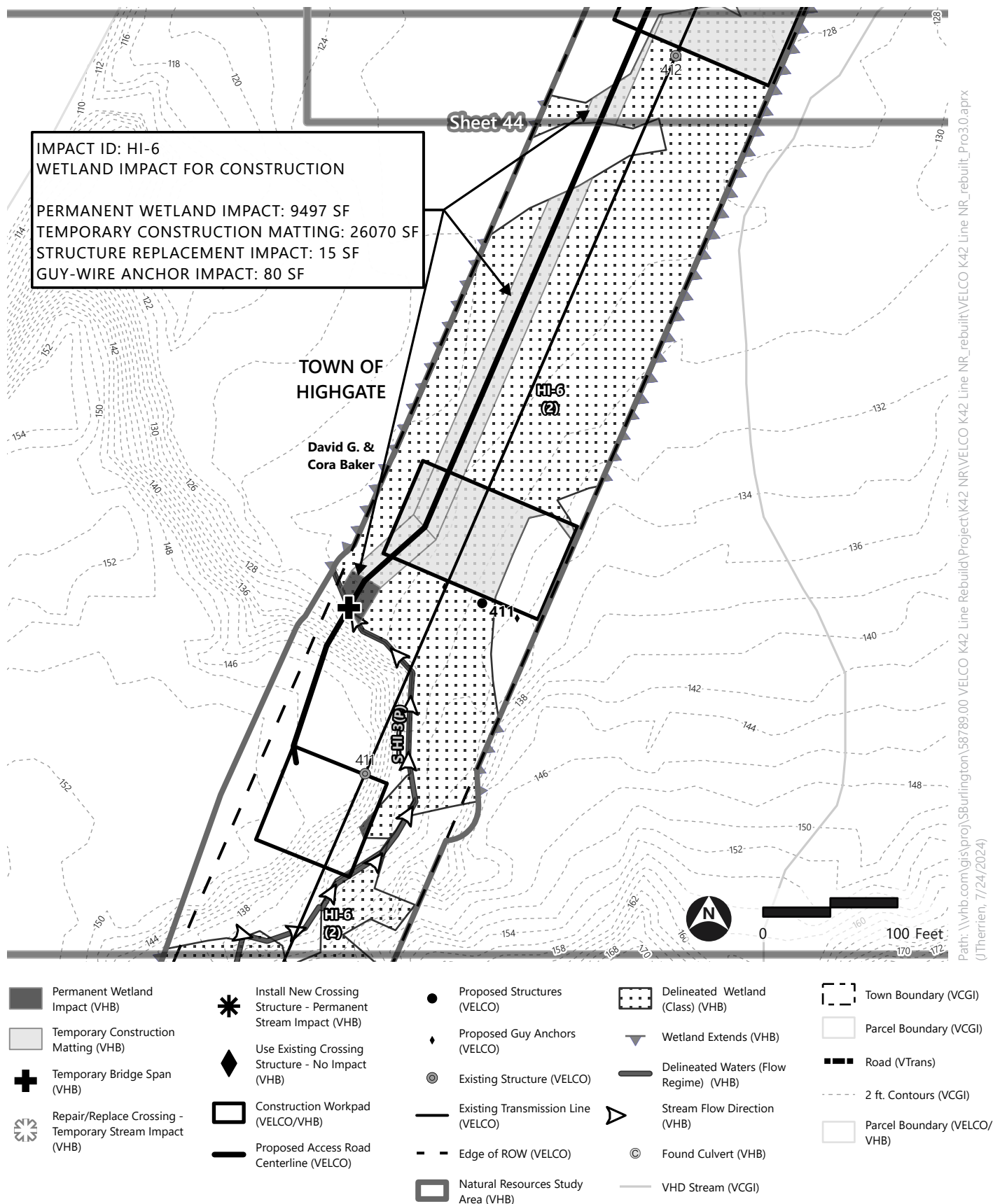


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 44 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

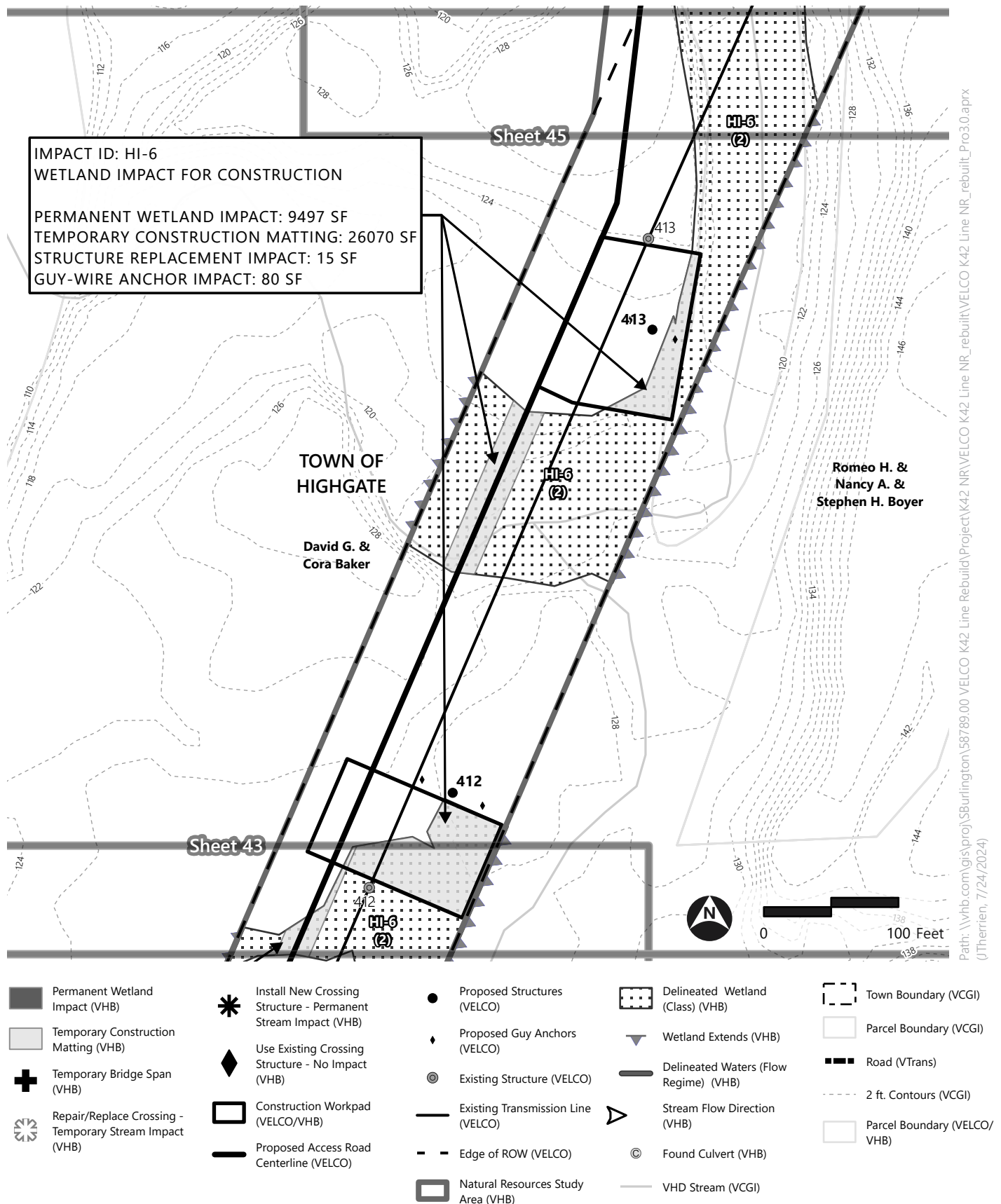


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 45 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

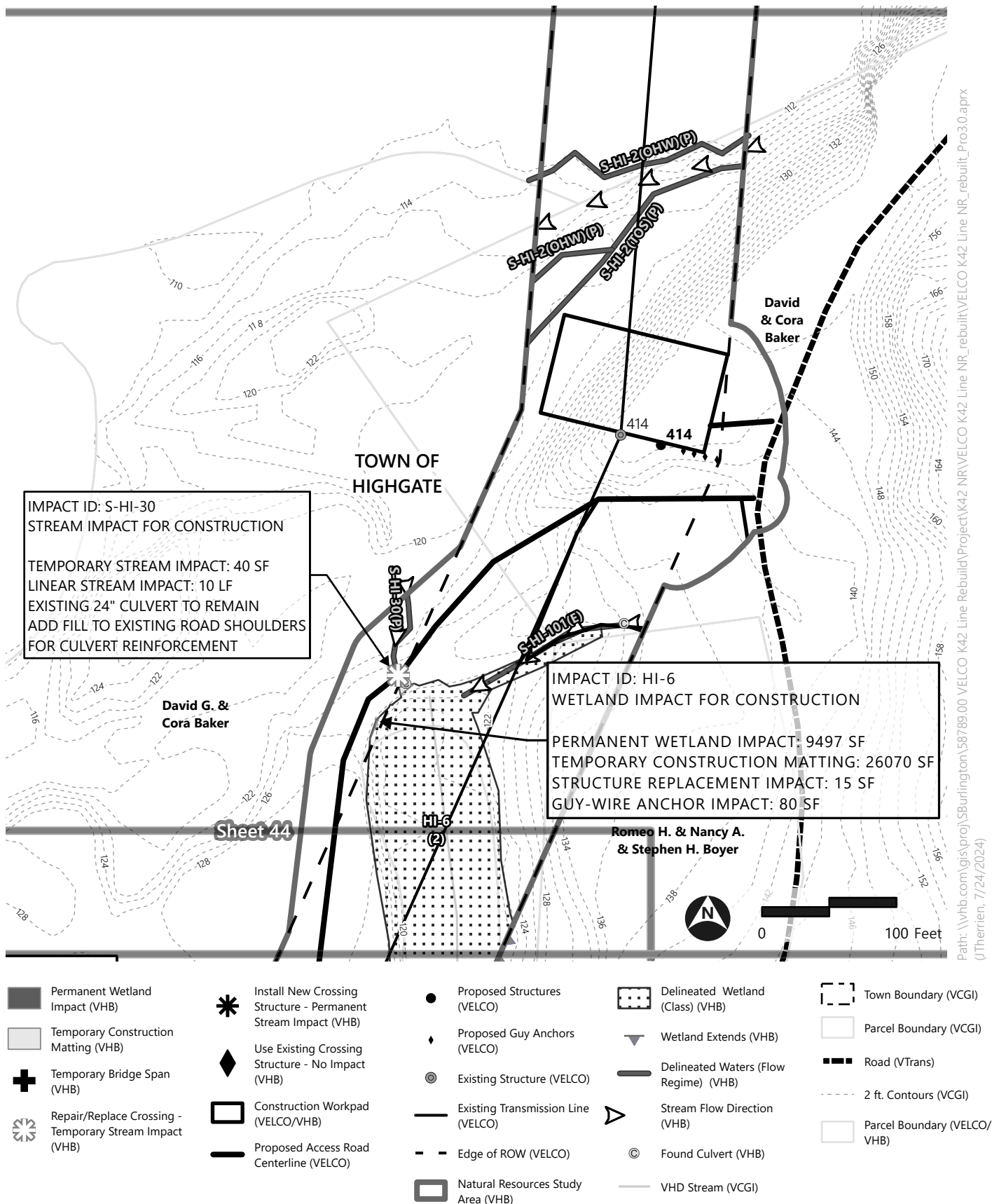


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 46 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024

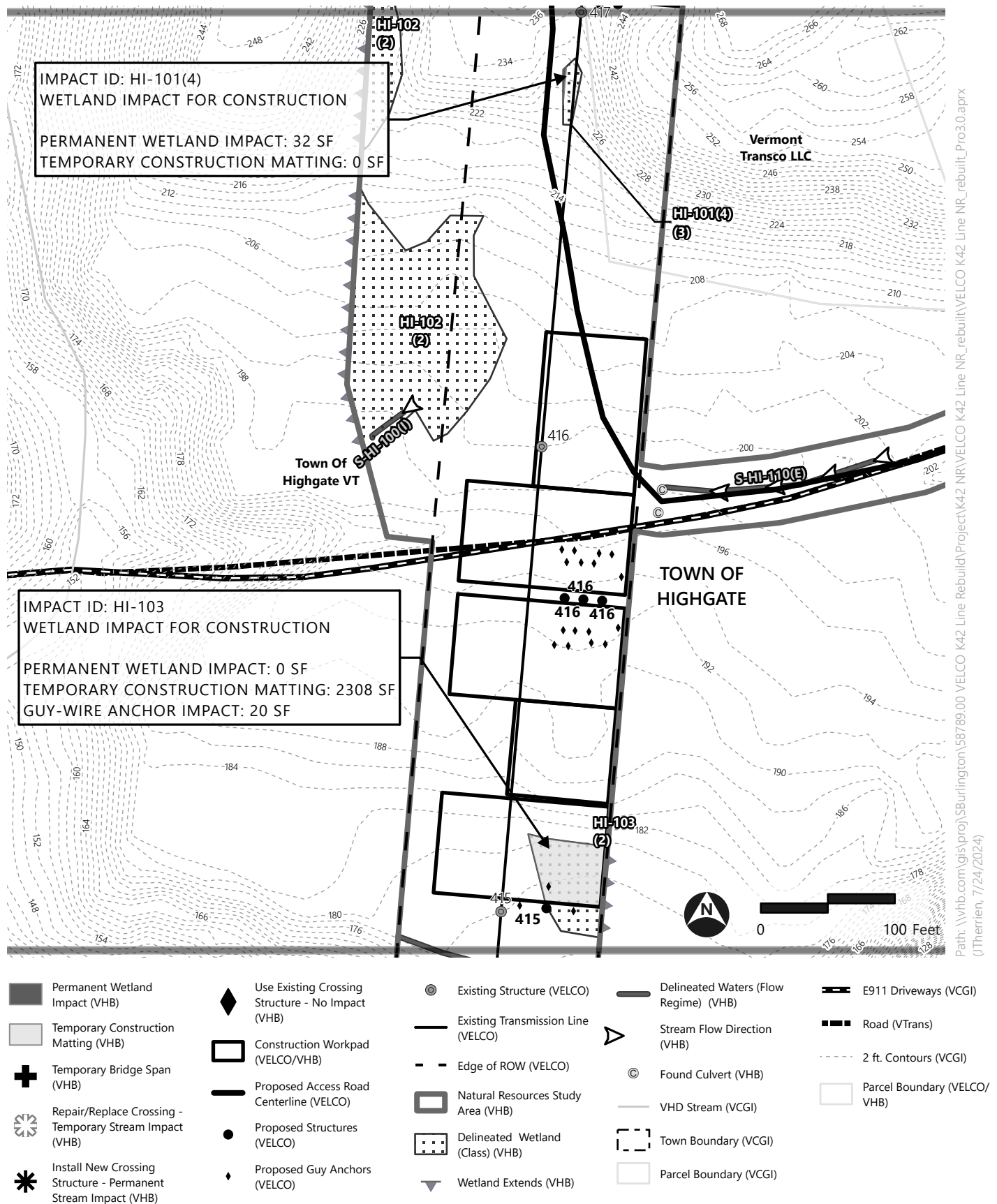
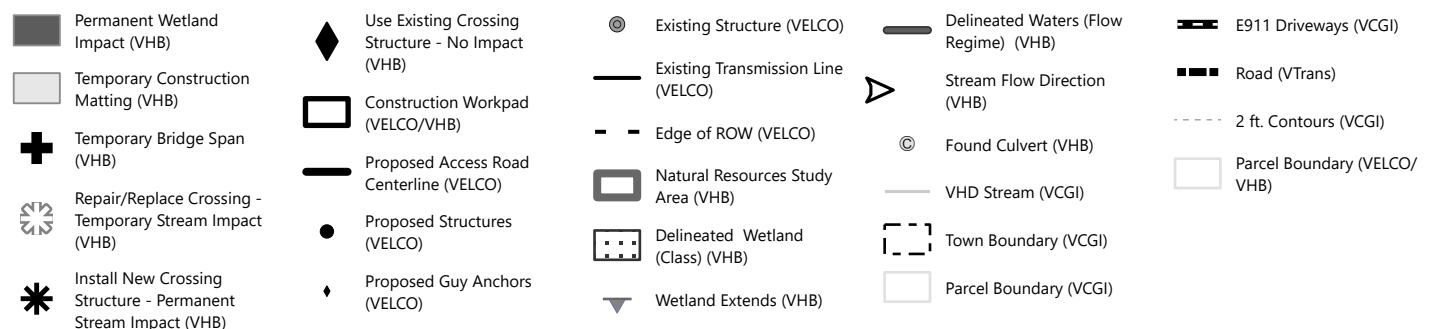
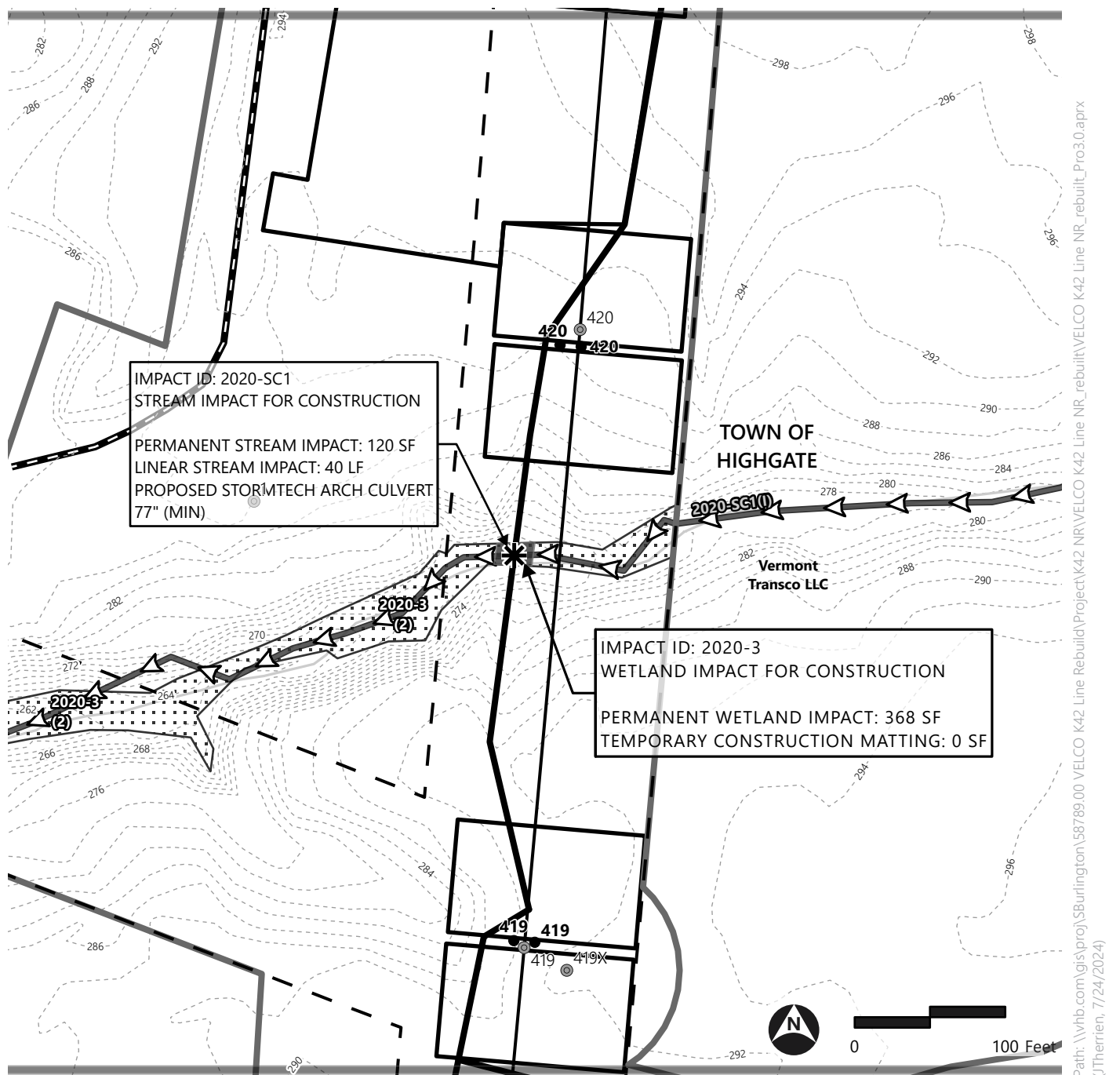


Figure 2.0: USACE Section 404/10 Individual Permit - Impact Exhibits - Sheet 47 of 47

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |
Towns of Georgia, St. Albans, Swanton and Highgate, Vermont



July 24, 2024



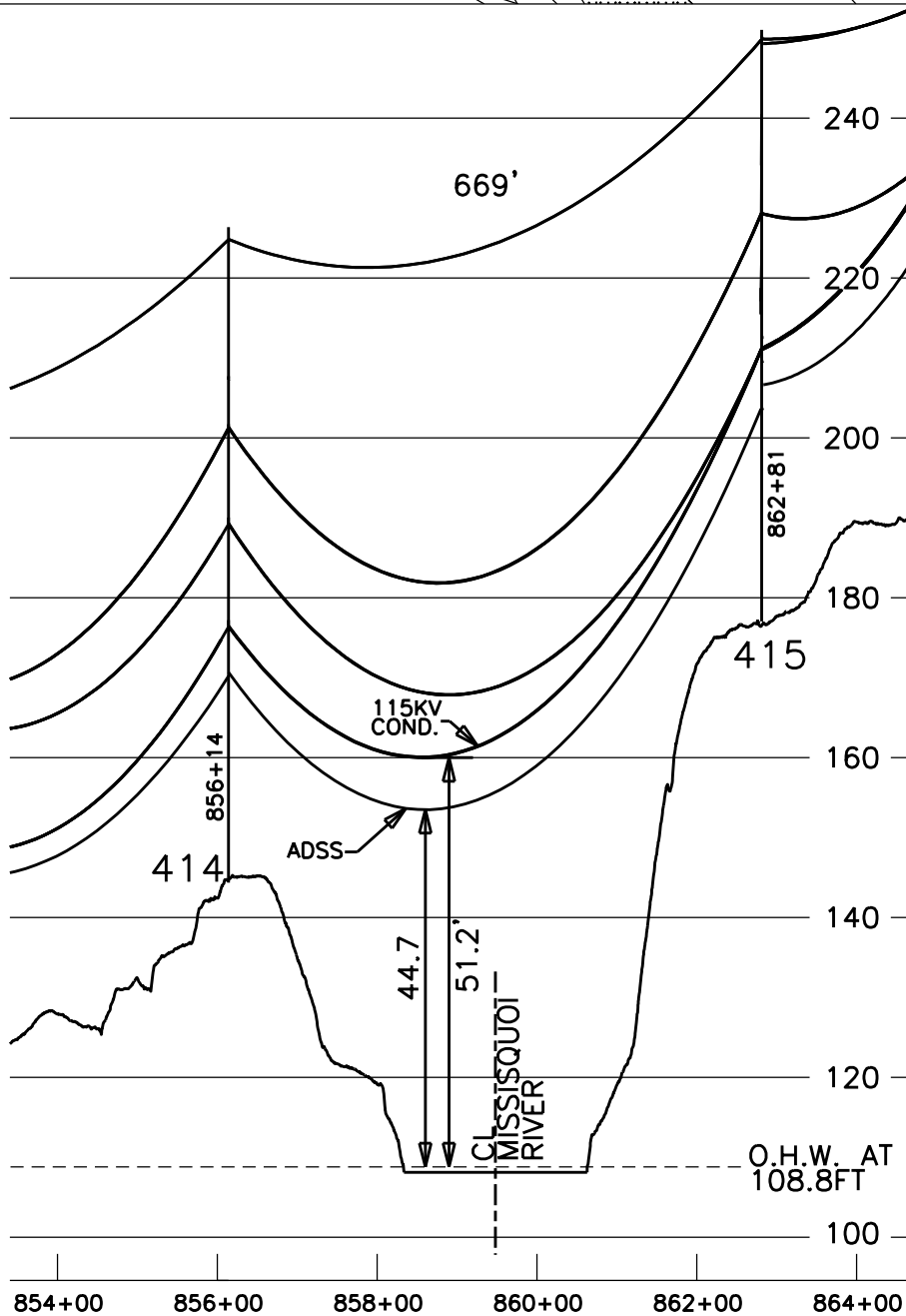
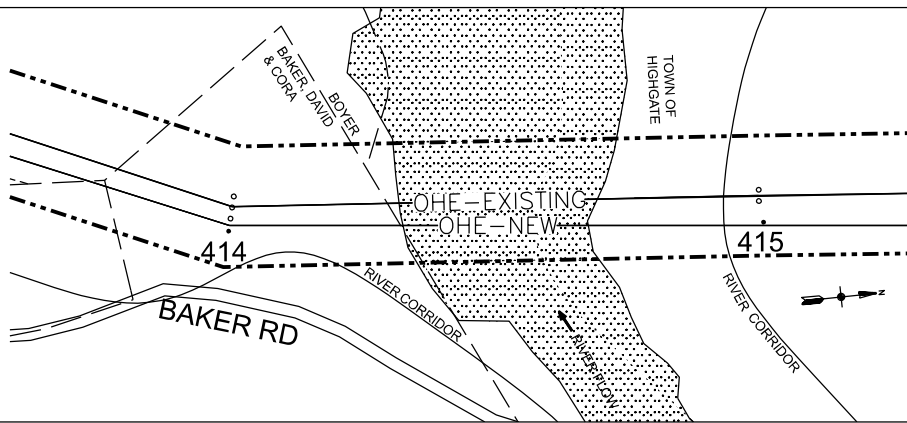
Section 10 Location Map

VELCO Franklin County Line Upgrade Project (FCLU) K-42 115 kV Line |Towns of Georgia, St. Albans, Swanton and Highgate, Vermont

March 08, 2024



Sources: Background Imagery by VCGI (Collected in 2019),
VCGI (Vermont Center for Geographic Information - Various Dates)
ANR (Vermont Agency of Natural Resources - Various Dates),
VTrans (Vermont Agency of Transportation - Various Dates),
VELCO (Various Dates), VHB (2023-2024).



115KV
CONDUCTOR
DISPLAYED AT
MAX SAG,
266° F

ADSS FIBER
DISPLAYED AT
MAX SAG,
32° F, 1/2" ICE

854+00 856+00 858+00 860+00 862+00 864+00

0	3/12/24	GRBW	JJW	FOR SUBMITTAL	
REV	DATE	DR	CK	DESCRIPTION	
		VERMONT ELECTRIC POWER CO., INC. RUTLAND, VERMONT			
		K42 115KV REBUILD			
CROSSING 1 – MISSISQUOI RIVER LINE K42, STRUCTURE 414-415					
SCALE: 1"=20'V		DRAWN BY: GRBW		APPROVED BY:	3/12/24
DATE: 03/12/24		CHECKED BY: JJW		GRBW	DATE
DRAWING NUMBER: PLOT: 1=1		SHEET 1, CROSSING 1			
		0 REV.			

FILE:

PROPRIETARY
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than as expressly authorized by
Vermont Electric Power Company, Inc.

Franklin County Line Upgrade Project
Section 10 - Aerial Crossing Clearance
Missisquoi River
Highgate, Vermont
July 25, 2024

	VT Route 207 - Highgate Road Bridge - Upstream - (Missisquoi River)	I-89 Southbound Bridge - Downstream - (Missisquoi River)	Proposed K42 Fiber Crossing, Structure 414-415	Proposed K42 115kV Conductor Crossing, Structure 414-415	
Low Steel, Concrete or Wood (feet asl)	192.1	136.3	153.5	160	Low Sag Fiber or Conductor (feet asl)
OHW Elevation (feet asl)	110.4	109	108.8	108.8	OHW Elevation (feet asl)¹
Low Steel, Concrete or Wood Above OHW	81.7	27.3	n/a	n/a	n/a
Required Fiber Clearance (feet) per 30 CFR 322.5	n/a	37.3	44.7	n/a	Proposed Fiber Clearance
Required 115 kV Clearance (feet) per 30 CFR 322.5	n/a	47.3	n/a	51.2	Proposed 115 kV Conductor Clearance

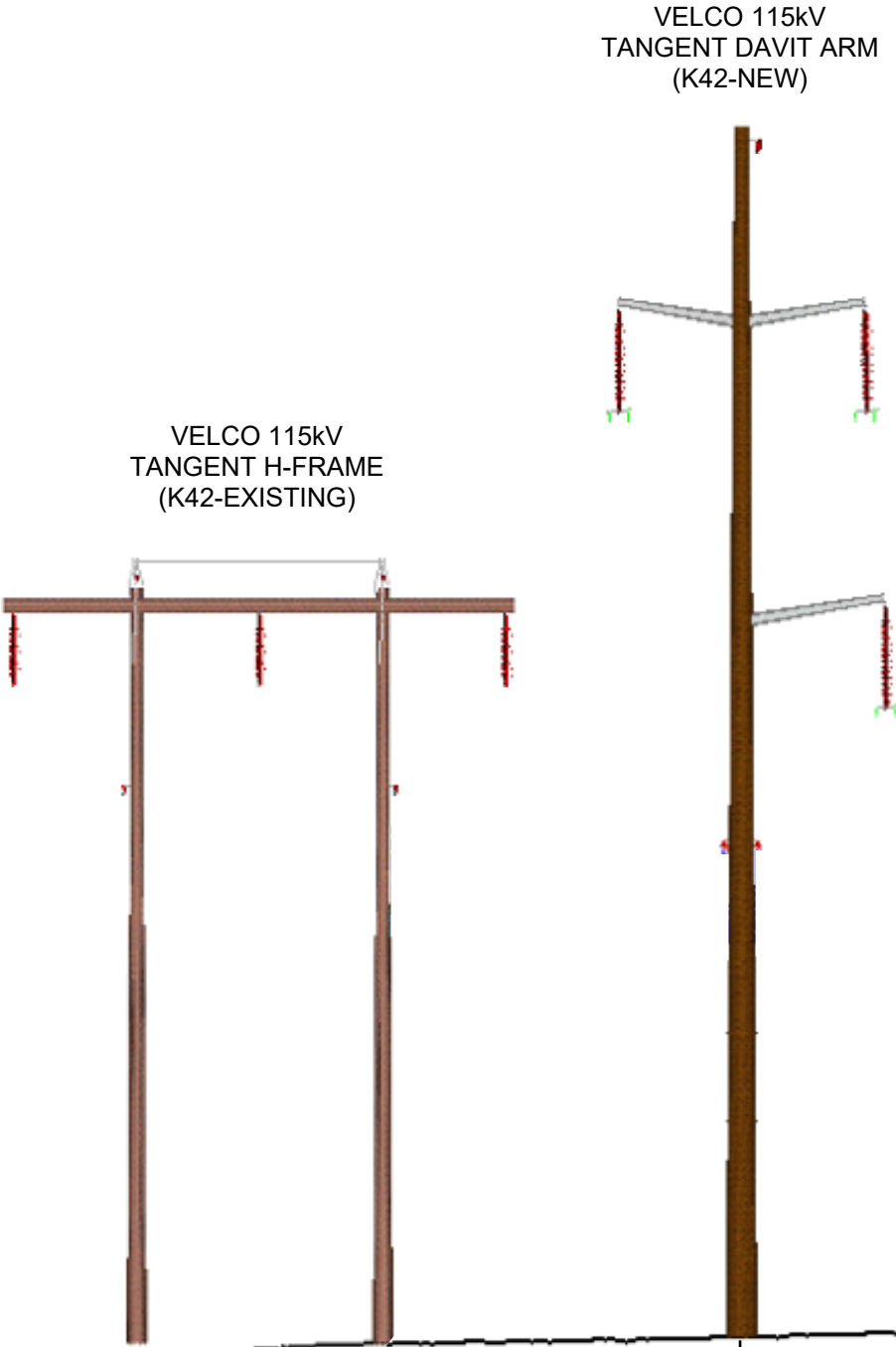
¹Missisquoi River Ordinary High Water elevations, VT Route 207 Bridge and Interstate 89 low steel elevations, obtained from February 28, 2011 Section 10 permit application submitted on behalf of VELCO for a proposed fiber crossing of the Missisquoi River at the same right-of-way crossing (Permit No. NAE-2011-0469).

PROPOSED GEORGIA - HIGHGATE TYPICAL RIGHT-OF-WAY CROSS SECTION
ROW WIDTH: 150FT

NOTE:
1. STRUCTURE HEIGHTS ARE TYPICAL FOR
GENERALLY FLAT TOPOGRAPHY AND ARE
NOT INTENDED TO BE EXACT
REPRESENTATIONS OF THE ACTUAL
DESIGNS. EXISTING LINE STRUCTURE
HEIGHTS GENERALLY RANGE FROM 40-60FT;
PROPOSED LINE STRUCTURE HEIGHTS
GENERALLY RANGE FROM 65-100FT.

2. DIMENSIONS SHOWN ARE TYPICAL AS
ALIGNMENTS VARY WITHIN SEGEMENTS.

3. STRUCTURE DESIGNS AND DIMENSIONS
ARE BASED ON PRELIMINARY DESIGN ONLY
AND MAY CHANGE IN FINAL DESIGN.



ROW

ROW

75 ft

27 ft

48 ft

75 ft

150 ft
VELCO ROW